

Modelo S-C4.5
Código de máquina: D115/D116
Manual de Servicio

Noviembre, 2010

Advertencias importantes sobre seguridad

Prevención de daños físicos

1. Asegúrese de que el cable de alimentación está desenchufado antes de desmontar o montar piezas de la copiadora o de periféricos.
2. La toma de corriente debe encontrarse cerca de la copiadora y ser de fácil acceso.
3. Tenga en cuenta que algunos componentes de la copiadora y la unidad de bandeja de papel reciben tensión eléctrica incluso cuando el interruptor de alimentación principal está apagado.
4. Si fuera necesario llevar a cabo algún ajuste o reparación en las tapas exteriores desmontadas o abiertas mientras el interruptor principal está encendido, mantenga las manos apartadas de los componentes con alimentación eléctrica o que se accionan mecánicamente.
5. Si se inicia un trabajo antes de que la copiadora complete el periodo de calentamiento o inicialización, mantenga las manos apartadas de los componentes mecánicos o eléctricos hasta que el trabajo haya finalizado. La copiadora empieza a realizar copias en cuanto finaliza el periodo de calentamiento o inicialización.
6. Las piezas metálicas y las piezas internas de la unidad de fusión alcanzan temperaturas muy elevadas durante el funcionamiento de la copiadora. Evite tocar estos componentes con las manos descubiertas.

Condiciones de seguridad sanitarias

El tóner y el revelador no son tóxicos, pero si accidentalmente entran en los ojos, pueden provocar molestias oculares temporales. Trate de eliminarlos con colirio o lavándose los ojos con abundante agua. Si no lo consigue o continúa sintiendo molestias, acuda a un médico.

Cumplimiento de las normas de seguridad eléctricas

La instalación y el mantenimiento de la copiadora y sus periféricos deben estar a cargo de personal de servicio que haya realizado los cursos de formación sobre los modelos en cuestión.

ADVERTENCIA

- Mantenga la máquina alejada de líquidos inflamables, gases y aerosoles. Si no se observan estas precauciones, podría producirse un incendio o una explosión.

Pilas de litio

Una colocación incorrecta de las pilas de litio en la FCU, circuito del controlador y unidad de placa de memoria puede provocar un riesgo de explosión. Sustituya las pilas sólo con el mismo tipo de pilas o un tipo equivalente recomendado por el fabricante. Deseche las pilas usadas de acuerdo con las instrucciones del fabricante.

Eliminación segura y ecológica

1. No quemar las botellas de tóner ni el tóner residual. No quemar las botellas de tóner ni el tóner usado. El polvo de tóner puede incendiarse repentinamente al exponerse al fuego.
2. Deshágase del tóner utilizado, revelador y los fotoconductores orgánicos de acuerdo con las normativas locales. (Estos materiales no son tóxicos.)
3. Deseche las piezas sustituidas de acuerdo con la normativa local vigente.
4. Al mantener baterías de litio utilizadas para deshacerse de ellas más tarde, no ponga más de 100 baterías por caja sellada. Almacenar grandes cantidades o no sellarlas por separado podría causar reacciones químicas y condensación de calor.

Seguridad láser

El organismo norteamericano Center for Devices and Radiological Health (CDRH: Centro de Dispositivos y Salud Radiológica) prohíbe la reparación de unidades ópticas láser fuera de las instalaciones del fabricante. La unidad de carcasa óptica sólo se puede reparar en la fábrica o en un centro que disponga del equipo exigido. El subsistema del láser puede ser sustituido sobre el terreno por un ingeniero cualificado para la asistencia al cliente. El chasis del láser no se puede reparar en las instalaciones finales. Por lo tanto, los ingenieros de asistencia al cliente tienen instrucciones de remitir todos los chasis y subsistemas láser a la fábrica o al almacén cuando sea necesario sustituir el subsistema óptico.

ADVERTENCIA

- El uso de controles o la ejecución de procedimientos o ajustes distintos de los especificados en este lugar pueden dar lugar a una peligrosa exposición a la radiación.

 **ADVERTENCIA PARA LA UNIDAD DE LÁSER**

ADVERTENCIA







- Apague el interruptor principal antes de comenzar a realizar cualquiera de los procedimientos descritos en la sección Unidad de láser. Los rayos láser pueden provocar graves lesiones oculares.

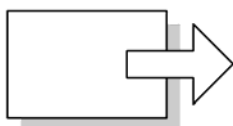
SÍMBOLO DE PRECAUCIÓN:



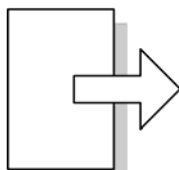
Símbolos y abreviaturas

Este manual utiliza varios símbolos y abreviaturas. Su significado es el siguiente:

	Consultar
	Arandela de sujeción
	Anillo en E
	Tornillo
	Conector
	Abrazadera
SEF	Alimentación a lo largo
LEF	Alimentación a lo ancho
-	Manual de tecnología Core



**Alimentación a lo largo
(SEF)**



**Alimentación a lo ancho
(LEF)**

Precaución, Notas, etc.

Los siguientes mensajes ofrecen información especial:

ADVERTENCIA

- La inobservancia de la información de advertencia podría dar lugar a lesiones graves e incluso a la muerte.

PRECAUCIÓN

- Siga estas instrucciones para garantizar un funcionamiento seguro y evitar lesiones menores.

Nota

- Esta información ofrece sugerencias y consejos sobre la mejor manera de mantener el aparato.

CONTENIDO

Advertencias importantes sobre seguridad.....	1
Prevención de daños físicos.....	1
Condiciones de seguridad sanitarias.....	1
Cumplimiento de las normas de seguridad eléctricas.....	1
Pilas de litio.....	2
Eliminación segura y ecológica.....	2
Seguridad láser.....	2

Símbolos y abreviaturas.....	4
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1. Información del producto

Especificaciones.....	11
Configuración de la máquina.....	12
Equipo principal.....	12
Componentes del sistema.....	13
Aspectos generales.....	14
Disposición de los componentes.....	14
Componentes eléctricos.....	16
Trayecto del papel.....	19
Disposición de los elementos motores.....	20
Orientación para aquellos que están familiarizados con los productos predecesores.....	22

2. Instalación

Precauciones de instalación.....	23
Requisitos de instalación.....	24
Entorno.....	24
Nivel de la máquina.....	24
Requisitos mínimos de espacio operativo.....	25
Requisitos de alimentación.....	26
Copiadora.....	27
Comprobación de accesorios.....	27
Auricular opcional.....	34
Unidad de bandeja de papel (D567).....	37
Comprobación de accesorios.....	37
Procedimiento de instalación.....	37
Calefactor de la unidad de bandeja de papel.....	40

Comprobación de accesorios.....	40
Procedimiento de instalación.....	41
Ranura USB 2.0/SD Tipo B.....	48
Comprobación de accesorios.....	48
Procedimiento de instalación.....	48
Comprobación de la ranura de tarjeta SD/USB.....	54
Asa para la bandeja de papel opcional.....	56
Accesorios.....	56
Opciones del controlador.....	59
Aspectos generales.....	59
Instalación de LAN inalámbrica (IEEE 802.11a/g).....	59
Instalación de IEEE 1284.....	61
Tarjeta VM de tipo L (D467).....	62
Gigabit Ethernet.....	63
Disco duro opcional (D577).....	65

3. Mantenimiento preventivo

Tablas de mantenimiento.....	71
Cómo poner a cero el contador de mantenimiento preventivo.....	72

4. Sustitución y ajuste

Precauciones.....	73
General.....	73
Pilas de litio.....	73
Cable libre de halógeno.....	73
Electricidad estática.....	74
Herramientas especiales y lubricantes.....	75
Tapas exteriores y panel de mandos.....	76
Tapa trasera.....	76
Bandeja de copias.....	76
Panel de mandos y cubiertas superiores.....	77
Puerta derecha.....	78
Bandeja bypass.....	79
Sensor de la tapa del cristal de exposición.....	79
Unidad del escáner.....	80

Cristal de exposición.....	80
Bloque de lentes.....	80
Lámpara de exposición, circuito estabilizador de la lámpara.....	81
Motor del escáner.....	82
Sensor de posición inicial del escáner.....	84
Ajuste de la alineación del escáner.....	84
Fusión.....	86
Unidad de fusión.....	86
Sensor de salida.....	87
Uñas del expulsor del rodillo de calor.....	87
Rodillo de calor y lámpara de fusión.....	88
Termointerruptor y termistor.....	90
Rodillo de presión.....	91
Comprobación de la banda de contacto.....	92
PCU y lámpara de extinción.....	93
PCU.....	93
Lámpara de extinción.....	94
Extractor y motor principal.....	95
Extractor.....	95
Motor principal.....	96
Alimentación del papel.....	97
Rodillo de alimentación de papel y almohadilla de fricción.....	97
Sensor de fin de papel.....	98
Sensor de registro.....	98
Sensor de papel agotado en bypass.....	99
Rodillo de alimentación bypass.....	100
Embrague de alimentación bypass y almohadilla de fricción.....	101
Embragues de registro y alimentación de papel.....	102
Transferencia de imágenes.....	104
Rodillo de transferencia.....	104
Sensor ID y rodillo dúplex.....	105
Placa de descarga.....	106
BICU y circuito del controlador.....	107

BICU.....	107
Circuito del controlador.....	108
Otras sustituciones.....	114
Motor dúplex.....	114
Circuito de alimentación de alta tensión	115
PSU.....	116
Solenoides de liberación de contacto.....	117
Embrague de suministro de tóner.....	117
FCU.....	118
Unidad láser.....	121
Ubicación de la etiqueta de Precaución.....	121
Unidad láser.....	121
Unidad LD y motor del espejo poligonal.....	122
ARDF.....	123
ARDF.....	123
Tapa trasera del DF.....	124
Unidad de alimentación de originales.....	124
Rodillo de separación.....	125
Placa de accionamiento del DF.....	125
Sensor de inversión y presencia de original del DF.....	126
Sensor de registro y salida del DF.....	127
Motor de alimentación del DF.....	128
Motor de transporte del DF.....	129
Embrague de alimentación del DF.....	130
Ajuste del área de imagen de la copia.....	131
Impresión.....	131
Escaneo.....	133
Ajuste de la imagen en el alimentador automático de documentos (DF).....	136
5. Manual de referencia del mantenimiento del sistema	
Programa de servicio.....	139
Tablas SP.....	139
Uso de los modos SP y SSP.....	139
Uso del modo SP.....	142

Carga/descarga de los datos de la NVRAM.....	142
Procedimiento de actualización del firmware.....	143
Impresión del patrón de prueba (SP5-902-001).....	148
Borrado de memoria.....	151
Ajuste de número de máquina (SP5-811-001).....	153
Impresión de SMC (SP5-990).....	153
Análisis de errores del sensor ID (SP2-221).....	154
Tablas de servicios de fax.....	155

6. Localización de averías

Tablas de SC.....	157
Resumen.....	157
Descripciones de los códigos SC del motor.....	158
Descripciones de los códigos SC GW.....	167
Defectos de los componentes eléctricos.....	186
Sensor/switch.....	186
Condiciones de fusibles fundidos.....	187
Presentación de LED de BICU.....	188
Función Guardar tarjeta (Card Save).....	189
Aspectos generales.....	189
Procedimiento.....	189
Guía de solución de problemas del fax.....	192

7. Ahorro de energía

Ahorro de energía.....	193
Modos ahorro de energía.....	193
Eficacia de ahorro de energía.....	194
Ahorro de papel.....	197
Eficacia de la función Dúplex/Combinar.....	197



1. Información del producto

Especificaciones

1

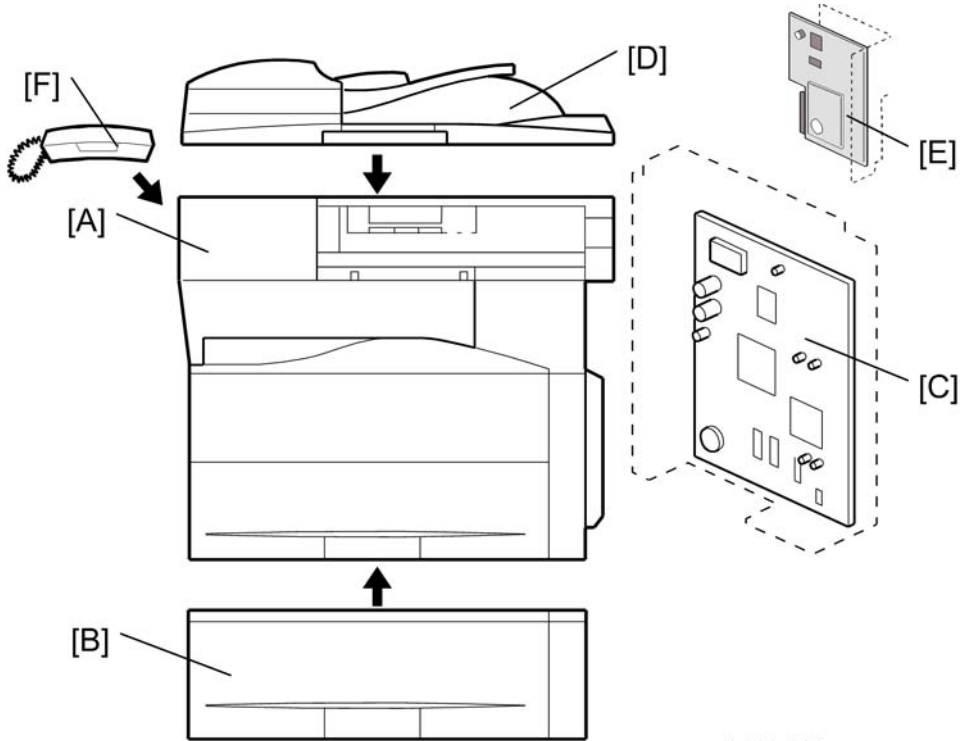
Consulte "Apéndices" para obtener la siguiente información:

- Especificaciones generales
- Formatos de papel admitidos

Configuración de la máquina

1

Equipo principal



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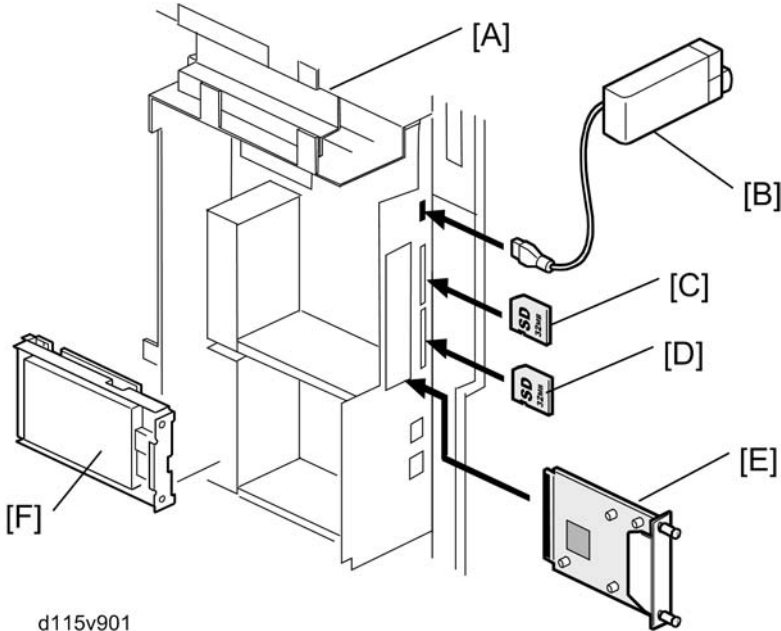
	Componente estándar	Código de la máquina	Notas
1	Copiadora [A]	D115/D116	-
2	Placa del controlador GW [C]	-	Estándar
3	ARDF [D]	-	Estándar
4	Unidad de fax [E]	-	Estándar

	Componentes opcionales	Código de la máquina	Notas
5	Unidad de alimentación de papel, 500 hojas [B]	D567	Se pueden utilizar dos.

6	Auricular [F]	B433	Sólo para Norteamérica
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Componentes del sistema

1



d115v901

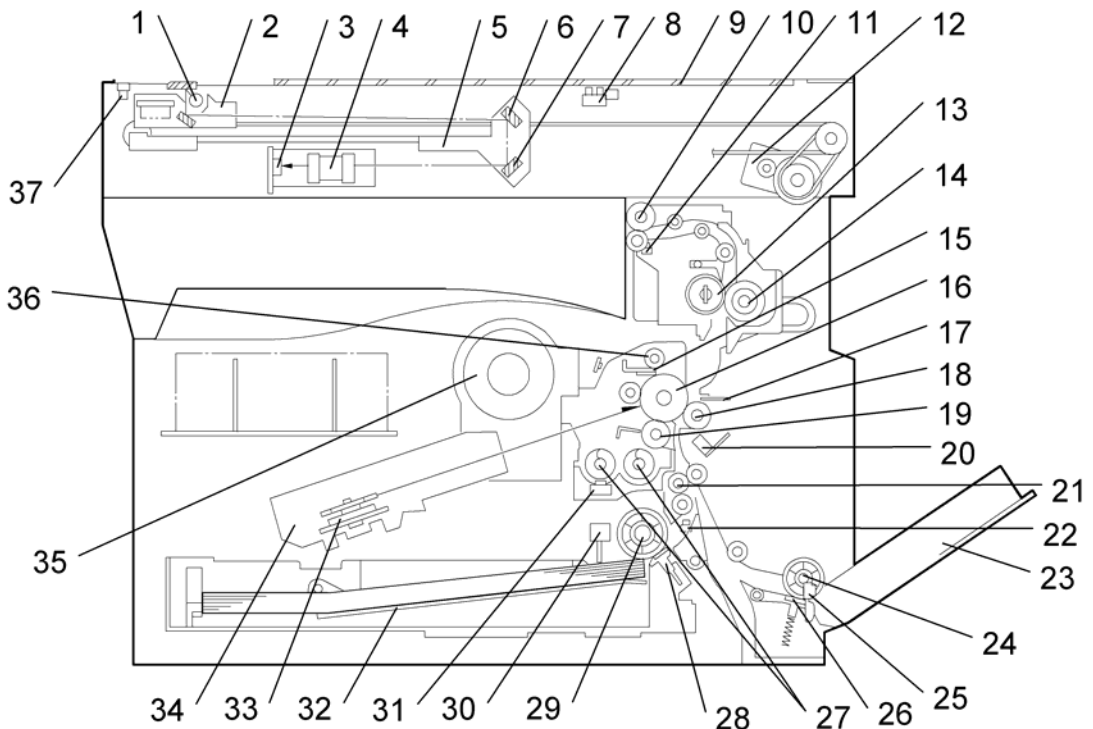
Ítem	Código de la máquina		Notas
Caja del controlador	-	[A]	Estándar
Ranura USB 2.0/SD	D467	[B]	Opcional sólo para D115
Unidad de impresora/ escáner	D468	[C]	Tarjeta SD para la unidad de impresora/ escáner Estándar sólo para D115
Tarjeta VM	D467	[D]	En la ranura 2 para SD (inferior)
IEEE 1284	B679	[E]	Uno de los cuatro
Red LAN inalámbrica	M344	[E]	
Placa Ethernet Gigabit	G874	[E]	
Disco duro con tarjeta de seguridad	D577	[F]	Una la tarjeta de seguridad a la tarjeta SD de la impresora/escáner.

Aspectos generales

1

Disposición de los componentes

Equipo principal

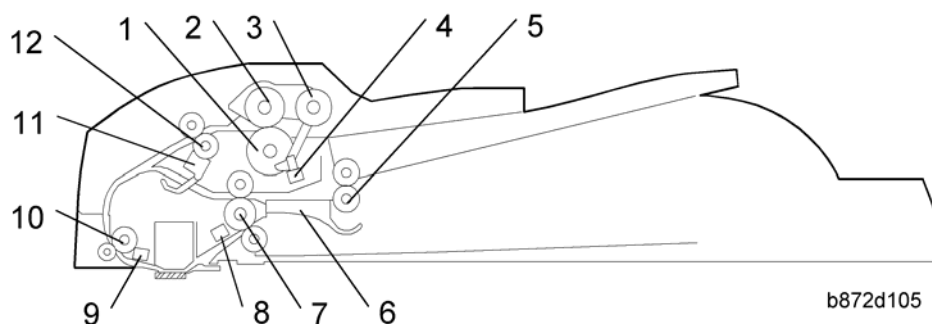


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1. Lámpara de exposición	20. Sensor de densidad de imagen (ID)
2. Primer escáner	21. Rodillo de registro
3. CCD (en la SBU)	22. Sensor de registro
4. Bloque de lentes	23. Bandeja bypass
5. Segundo escáner	24. Rodillo de alimentación de papel bypass
6. Segundo espejo	25. Sensor de papel agotado en bypass
7. Tercer espejo	26. Almohadilla de fricción bypass

8. Sensor de la tapa del cristal de exposición	27. Sinfines de mezclado
9. Cristal de exposición	28. Almohadilla de fricción (principal)
10. Rodillo de salida	29. Rodillo de alimentación de papel
11. Sensor de salida	30. Sensor de fin de papel
12. Motor del escáner	31. Sensor TD (densidad de tóner)
13. Rodillo de calor	32. Placa inferior
14. Rodillo de presión	33. Motor del espejo poligonal
15. Lámina de limpieza	34. Unidad láser
16. Tambor OPC	35. Cartucho de suministro de tóner (o cargador de tolva de tóner)
17. Placa de descarga	36. Sinfín de recogida de tóner
18. Rodillo de transferencia	37. Sensor de posición inicial del escáner
19. Rodillo de revelado	

ARDF

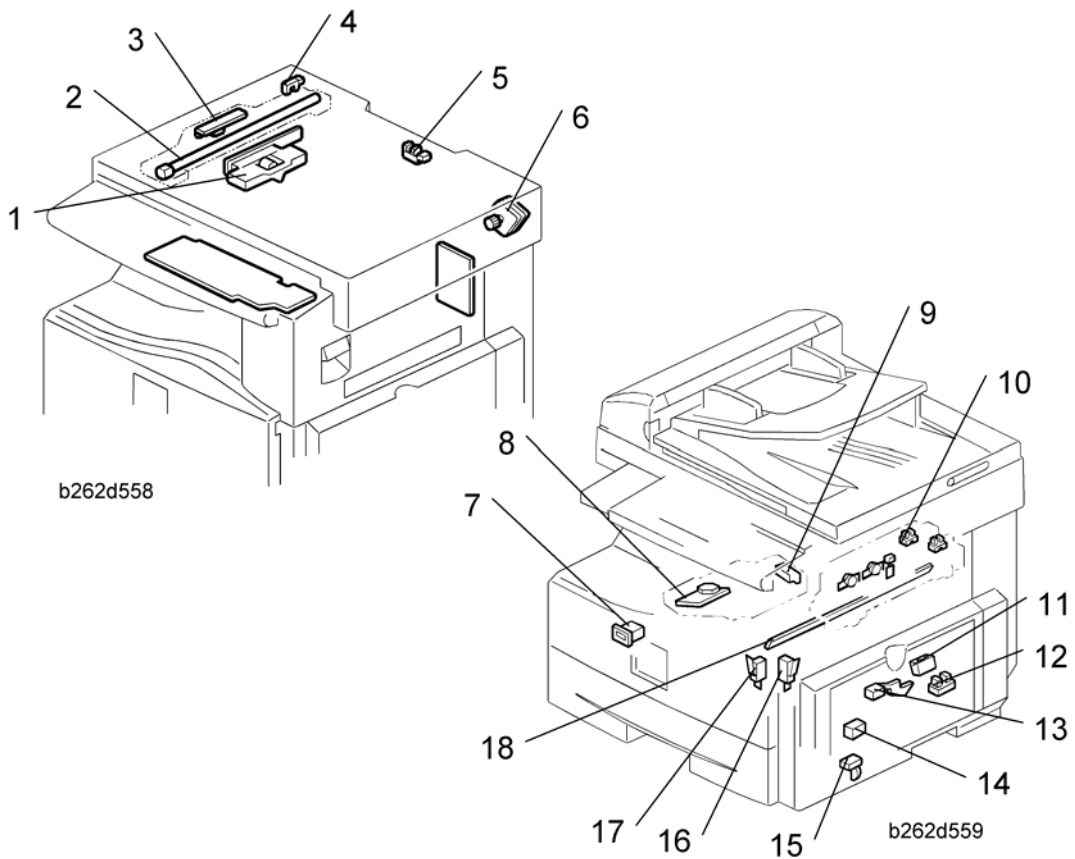


1. Rodillo de separación	7. Rodillo de salida
2. Rodillo de alimentación de papel	8. Sensor de salida
3. Rodillo de captación	9. Sensor de registro
4. Sensor de presencia de original	10. Rodillo de registro

5. Rodillo de inversión	11. Sensor de inversión
6. Compuerta de unión	12. Rodillo de transporte

Componentes eléctricos

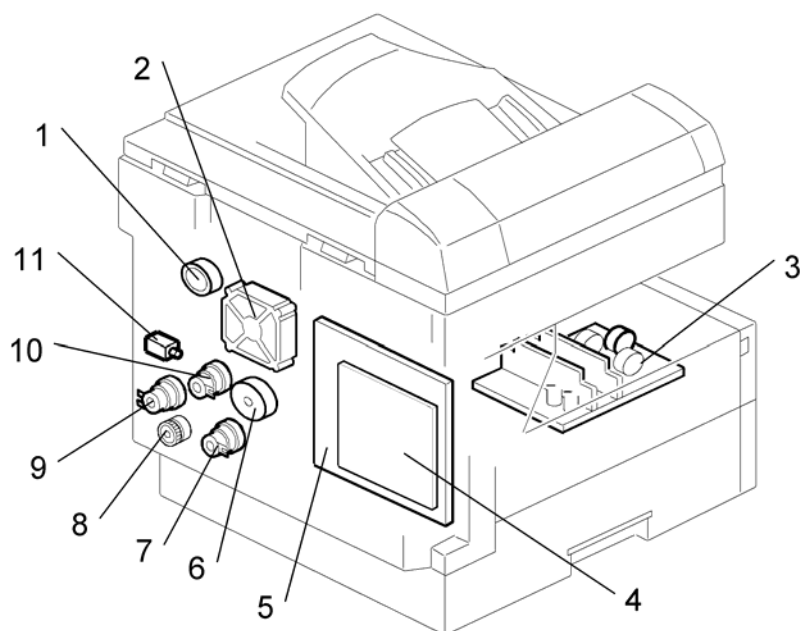
Componentes eléctricos 1



1. Bloque de lentes	11. Sensor de densidad de imagen (ID)
2. Lámpara de exposición	12. Sensor de registro
3. Circuito estabilizador de lámpara	13. Sensor de fin de papel
4. Sensor de posición inicial del escáner	14. Sensor de densidad del tóner

5. Sensor de la tapa del cristal de exposición	15. Sensor de papel agotado en bypass
6. Motor del escáner	16. Conmutador de seguridad de la puerta derecha
7. Contador mecánico	17. Conmutador de seguridad de la puerta frontal
8. Motor del espejo poligonal	18. Lámpara de extinción
9. Unidad LD	19. Circuito de alimentación de alta tensión
10. Sensor de salida	20. Circuito del panel de mandos

Componentes eléctricos 2



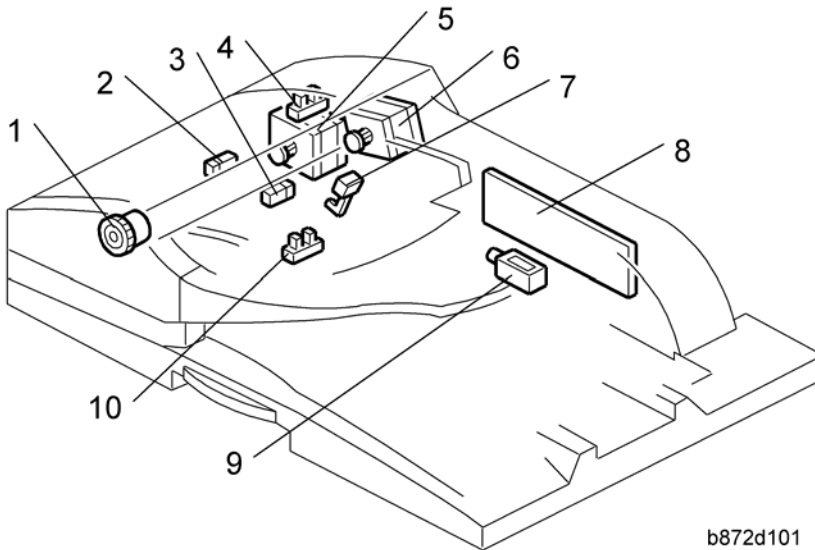
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1. Motor dúplex	7. Embrague de alimentación del papel
2. Extractor	8. Embrague de suministro de tóner
3. PSU	9. Embrague de alimentación bypass
4. Placa del controlador (GW)	10. Embrague de registro
5. BICU	11. Solenoide de fusión

6. Motor principal

1

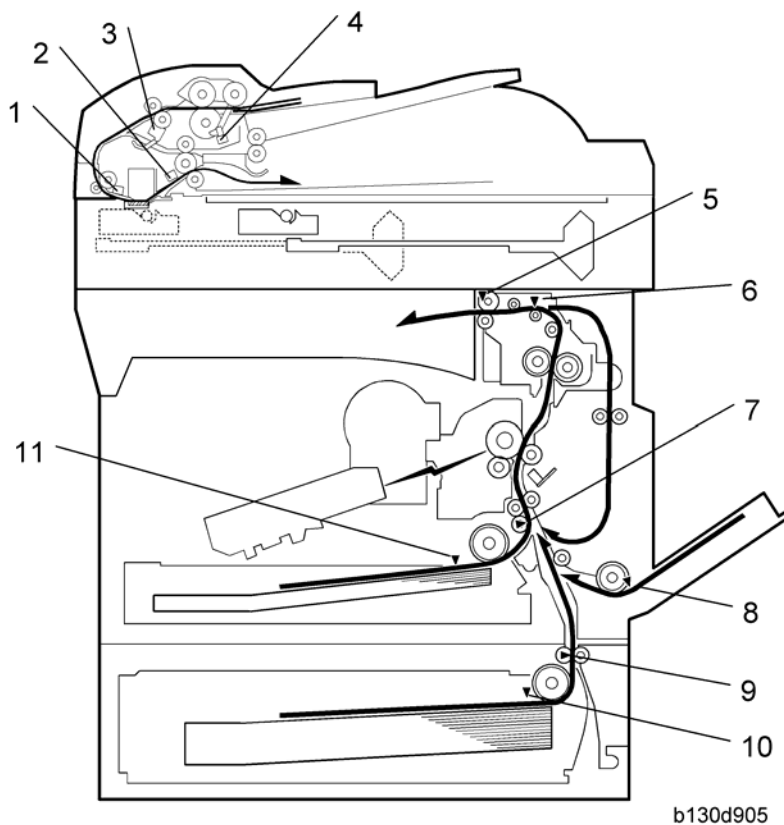
ARDF



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1. Embrague de alimentación del DF	6. Motor de alimentación del DF
2. Sensor de registro	7. Sensor de inversión
3. Sensor de salida	8. Placa de accionamiento del DF
4. Sensor de tapa izquierda	9. Solenoide de compuerta de unión
5. Motor de transporte del DF	10. Sensor de presencia de original

Trayecto del papel



1. Sensor de registro de originales (alimentador de documentos)
2. Sensor de salida (alimentador de documentos)
3. Sensor de inversión (alimentador de documentos)
4. Sensor de ajuste de originales (alimentador de documentos)
5. Sensor de salida
6. Sensor de trayecto del papel
7. Sensor de registro
8. Sensor de fin de papel bypass
9. Sensor de alimentación de papel (bandeja opcional)

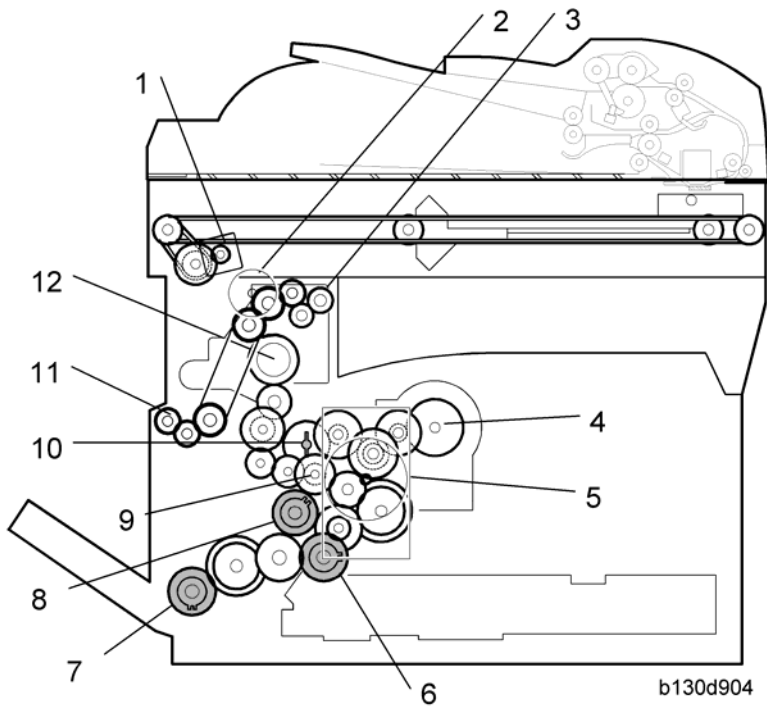
10. Sensor de fin de papel (bandeja opcional)

11. Sensor de fin de papel

1

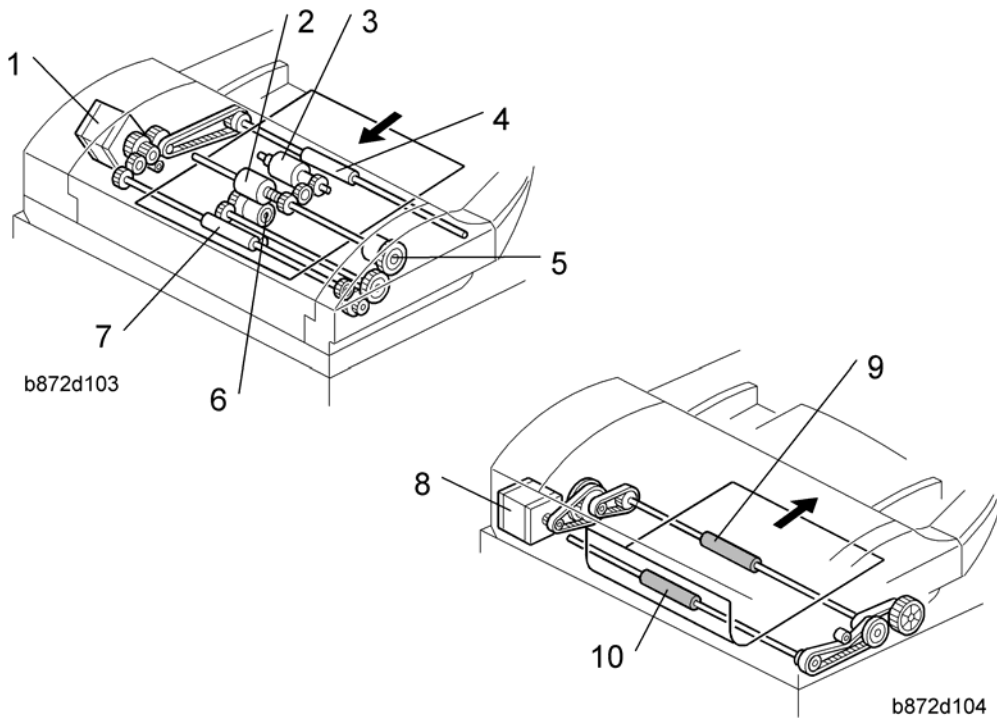
Disposición de los elementos motores

Equipo principal



1. Motor del escáner	7. Embrague de alimentación bypass (bandeja bypass)
2. Motor dúplex	8. Embrague de registro
3. Rodillo de salida	9. Engranaje motriz del revelador
4. Embrague de la botella de tóner	10. Engranaje motriz del tambor
5. Motor principal	11. Engranaje unidireccional (unidad dúplex)
6. Embrague de alimentación del papel	12. Engranaje de accionamiento de fusión

ARDF



- | | |
|------------------------------------|-------------------------------|
| 1. Motor de alimentación del DF | 6. Rodillo de separación |
| 2. Rodillo de alimentación | 7. Rodillo de transporte |
| 3. Rodillo de captación | 8. Motor de transporte del DF |
| 4. Rodillo de inversión | 9. Rodillo de salida |
| 5. Embrague de alimentación del DF | 10. Rodillo de registro |

- Motor de alimentación del DF: Acciona los rodillos de alimentación y separación, captación, transporte e inversión.
- Motor de transporte del DF: Acciona los rodillos de registro y salida.

Orientación para aquellos que están familiarizados con los productos predecesores

La gama de máquinas D115/D116 es el modelo que sucede a la gama de máquinas D068/D069. Si tiene experiencia con la línea anterior, la siguiente información puede servirle de ayuda cuando lea este manual.

Diferencias con los productos anteriores

	D115/D116	D068/D069
Tarjeta de seguridad (cifrado de disco duro y unidad de seguridad de sobrescritura de datos)	Estándar sólo para D115	Opcional sólo para D069
Velocidad de copia	20 cpm: Copia de memoria 16 cpm: ADF 1 a 1	17 ppm: Copia de memoria 16 cpm: ADF 1 a 1

★ Importante

- Las piezas siguientes son exclusivas para D115/D116. Al reemplazar las piezas siguientes, utilice las piezas especificadas para cada modelo. No mezcle las piezas siguientes para D067/D068/D069/D072 y D115/D116. De lo contrario, no se garantiza el funcionamiento de la máquina ni la calidad del resultado.
1. BICU con unidad controladora
 - Si se instala una pieza incorrecta, una imagen no se copia correctamente en la impresión con la copia DF una a una.
 2. Unidad láser (unidad de escritura)
 - Si se instala una pieza incorrecta, la imagen copiada podría quedar demasiado oscura o demasiado clara en la impresión.
 3. Motor de escáner poligonal (parte de la unidad láser)
 - Si se instala una pieza incorrecta, la imagen copiada podría quedar demasiado oscura o demasiado clara en la impresión o podría producirse un SC.
 4. Placa de nombre de modelo
 5. Contador mecánico (S-C4: instalado, S-C4.5: pieza opcional de servicio)

2. Instalación

Precauciones de instalación

PRECAUCIÓN

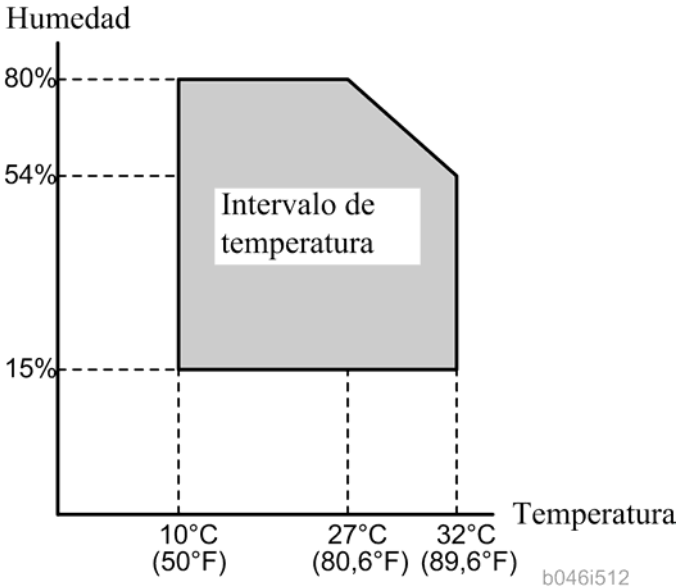
- Antes de instalar una unidad opcional, siga estos pasos:
- Imprima todos los mensajes almacenados en la memoria, las listas de elementos programados por el usuario y la lista de parámetros del sistema.
- Si la máquina tiene una impresora opcional, imprima toda la información que contenga el buffer de la impresora.
- Apague el interruptor principal y desconecte el cable de alimentación, la línea de teléfono y el cable de red.

Requisitos de instalación

Entorno

2

–Cuadro de valores de temperatura y humedad–



- Intervalo de temperatura: 10°C a 32°C (50°F a 89,6°F)
- Intervalo de humedad: 15% a 80% HR
- Iluminación ambiente: menos de 1500 lux (no exponer a la luz solar directa).
- Ventilación: Debe renovarse el aire ambiental como mínimo a razón de tres veces/hora/persona
- Polvo ambiental: menos de 0,1 mg/m³
- No coloque la máquina en lugares en los que pueda estar expuesta a la luz solar directa ni al aire directo (procedente de un ventilador, acondicionador de aire, purificador, etc.).
- No sitúe la máquina en lugares en los que pueda estar expuesta a gases corrosivos.
- Coloque la máquina sobre una superficie resistente y uniforme.
- No coloque la máquina en un lugar donde pueda estar sometida a vibraciones fuertes.

Nivel de la máquina

De delante atrás:	Desnivel máximo de 5 mm (0,2")
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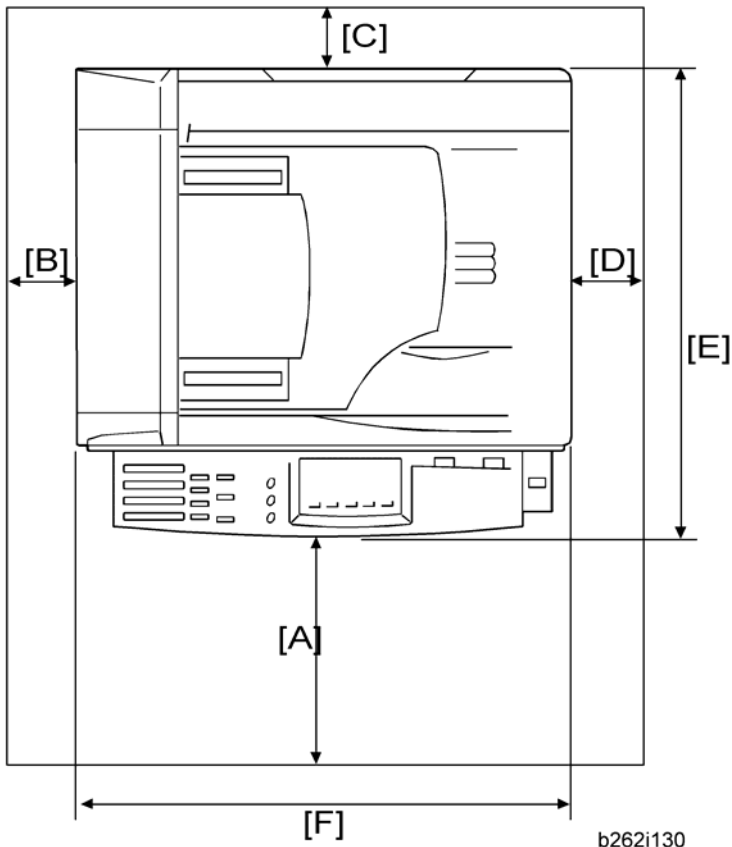
De derecha a izquierda:

Desnivel máximo de 5 mm (0,2")

Requisitos mínimos de espacio operativo

Coloque la máquina cerca de una fuente de alimentación, dejando alrededor el espacio libre que se indica a continuación.

2



A: Delante – 750 mm (29,6")

B: Izquierda – 100 mm (3,9")

C: Detrás – 100 mm (3,9")

D: Derecha – 100 mm (3,9")

E: Profundidad - 450 mm (17,7")

F: Anchura - 485 mm (19,1")

Nota

- El espacio recomendado de 750 mm por delante es suficiente para poder extraer la bandeja de papel. Para que pueda trabajar un operario, se requiere más espacio por delante de la máquina.
- El espacio mínimo real requerido para los lados izquierdo, derecho y trasero es de 10 mm (0,4") por cada uno, pero no quedará espacio para abrir la bandeja bypass, la puerta derecha ni la unidad ARDF.

2

Requisitos de alimentación

⚠ PRECAUCIÓN

- Compruebe que la toma de corriente de la pared esté cerca de la máquina y sea de fácil acceso. Una vez terminada la instalación, asegúrese de que el enchufe se ajusta firmemente a la toma.
- Evite múltiples conexiones en la misma toma de alimentación.
- Compruebe que la máquina esté conectada a tierra.

Tensión de entrada:

Norteamérica:	110 – 120 V, 60 Hz, 8 A
Europa:	220 – 240 V, 50/60 Hz, 4 A

Calidad de imagen garantizada a la tensión nominal de $\pm 10\%$.

Funcionamiento garantizado a la tensión nominal de $\pm 15\%$.

Copiadora

Comprobación de accesorios

Impresora/escáner y modelo de fax (D115)/ modelo de fax (D116)

2

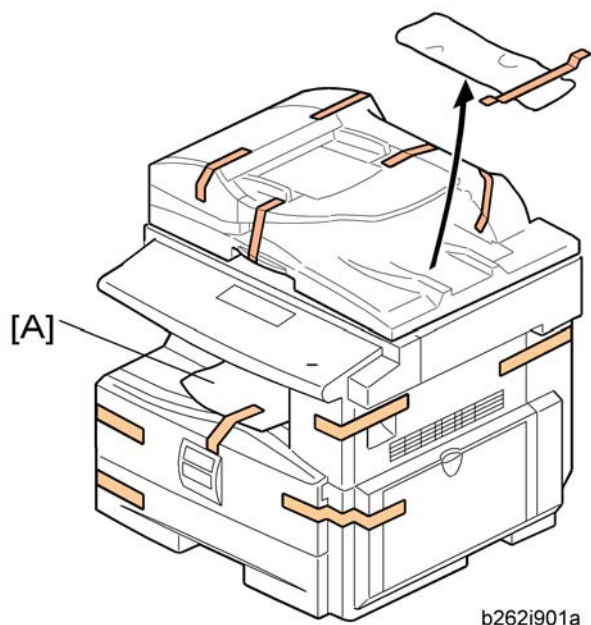
Descripción	Cantidad
NECR (-17)	1
Hoja de seguridad de la UE (-27)	1
Etiqueta adhesiva de tamaño de papel (-17, -27, -29)	1
Instrucciones de uso – Libro (-17, -29)	1 juego
Instrucciones de uso – CD ROM (-17, -29)	1 juego
Soporte del auricular (-17)	1
Tornillo para el soporte del auricular (-17)	2
Cable modular (-17)	1
Cubierta del conector para teléfono (-17)	1
Núcleo de ferrita para la línea de teléfono	1
Núcleo de ferrita (-17, -27, -29)	1
Hoja de precaución EMC (-27)	1
Página - CLUF (Contrato de licencia de usuario final) (-17, -27, -29)	1
Etiqueta adhesiva de precaución (-17, -27, -29)	1

Procedimiento de instalación

PRECAUCIÓN

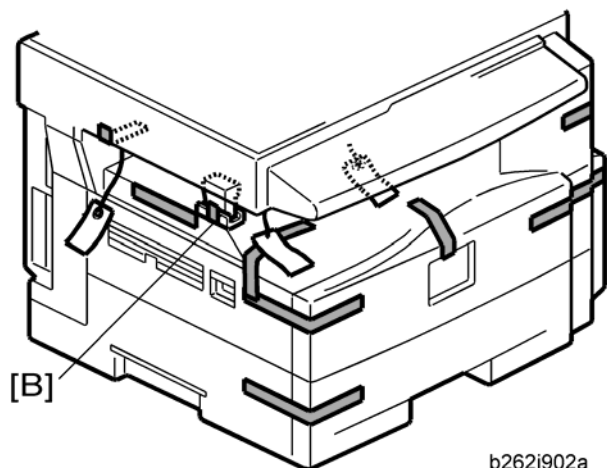
- Asegúrese de que la copiadora está desenchufada durante la instalación.

2



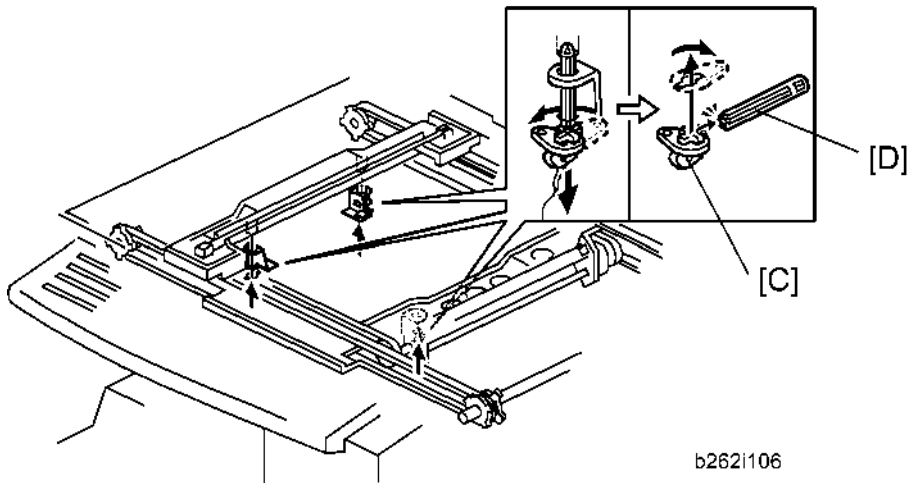
b262i901a

1. Retire todas las tiras de cinta adhesiva.
2. Quite la bolsa [A], SMC y hoja de papel A3 del cristal de exposición.

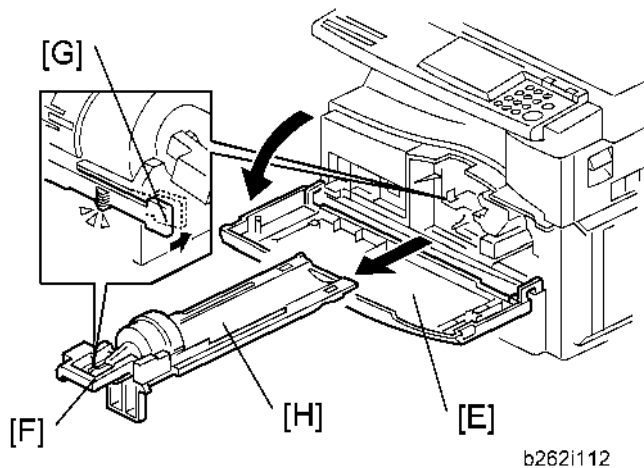


b262i902a

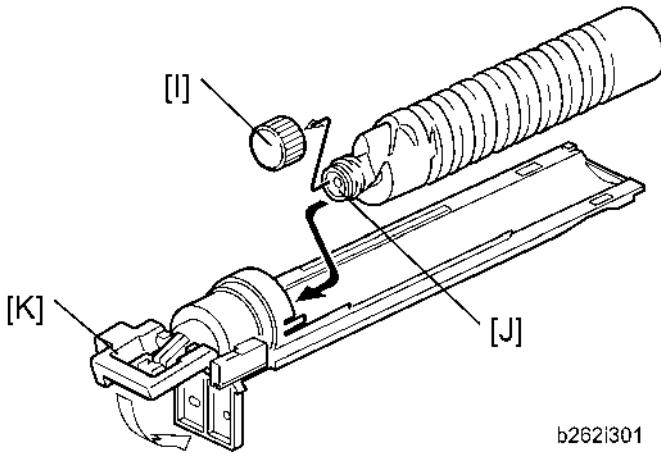
3. Quite la cuña espaciadora [B].



4. Extraiga los tres pasadores de bloqueo del escáner. (Cada pasador tiene una etiqueta). Para ello, agarre el pin por la base [C], gírelo 90 grados y tire de él hacia abajo.
5. Quite las etiquetas de los pins.
6. Separe cada pin de la base [C].
7. Deshágase del pin [D].
8. Vuelva a colocar cada base [C] en su orificio original, girándola 90° para bloquearla en su posición. (Asegúrese de hacerlo con los tres pasadores).



9. Abra la puerta delantera [E].
10. Levante la palanca [F], presione sobre la lengüeta [G] y tire del soporte de botella [H] hasta extraerlo. (No es necesario extraerlo completamente de la máquina).
11. Tome una nueva botella de tóner y agítela varias veces.



12. Retire el tapón exterior [I].

↓ **Nota**

- No quite el tapón interior [J].

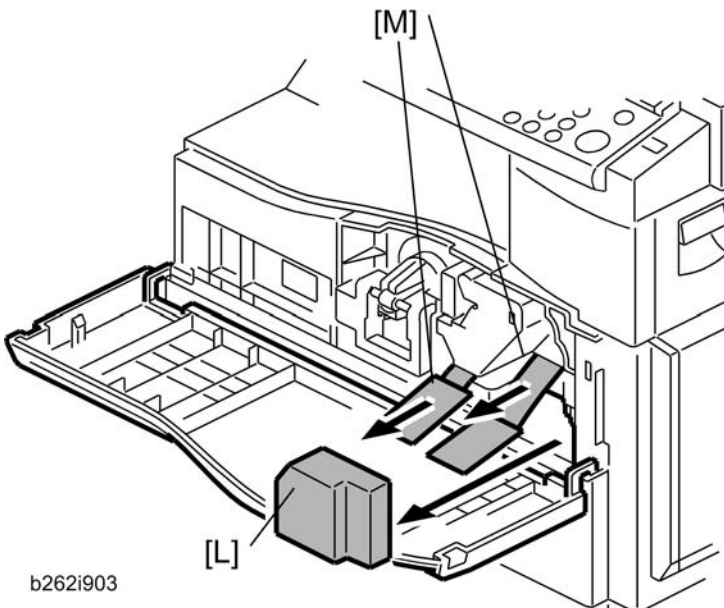
13. Cargue la botella en el soporte.

↓ **Nota**

- No gire a la fuerza la botella de tóner en el soporte. Cuando encienda el interruptor de alimentación, la copiadora pondrá la botella en su sitio

14. Introduzca el soporte de la botella en la máquina.

15. Baje el pestillo [K] para bloquear el soporte.



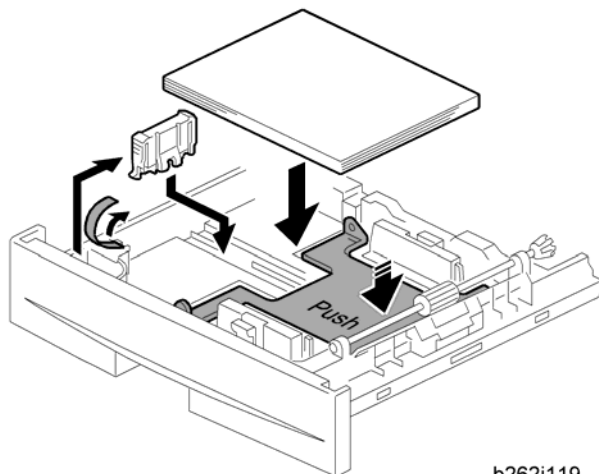
16. Quite la protección [L].

17. Saque las lengüetas [M] de la PCU con una mano, sujetando la PCU con la otra.

Nota

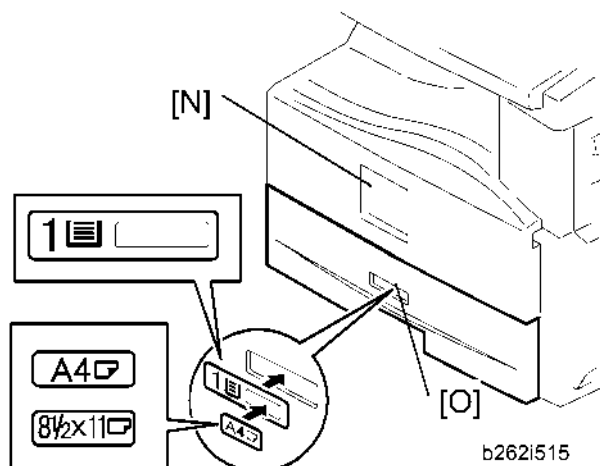
- No tire de ambas lengüetas al mismo tiempo, ya que podría dañar la PCU.

18. Cierre la puerta delantera.



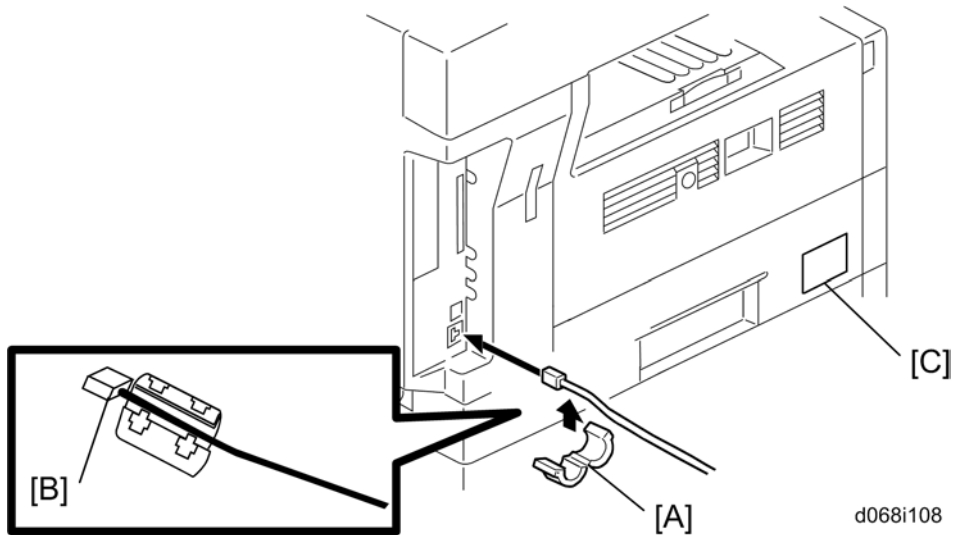
b262i119

19. Saque la bandeja de papel y quite la cinta adhesiva que fija la guía del extremo en el compartimento.
20. Empuje la placa inferior hacia abajo y a continuación cargue el papel.
21. Ajuste las guías laterales. Si carga un papel más pequeño que A4, coloque la guía del extremo en la posición correcta.
22. Introduzca de nuevo la bandeja en la copiadora.



b262i515


23. Pegue la etiqueta adhesiva de la marca correspondiente en el centro de la puerta delantera [N] si es necesario.
24. Pegue en la bandeja de papel [O] la etiqueta adhesiva con el número de bandeja y la etiqueta adhesiva con el tamaño del papel.
25. Instale las unidades opcionales (si procede).



26. Instale el núcleo de ferrita [P] en el cable de red cuando conecte el cable.
27. Conecte el núcleo de ferrita a la línea de teléfono igual que en el paso 26.
28. Conecte la línea de teléfono a la clavija "LINE".

Nota

- El extremo del núcleo de ferrita debe estar a unos 10 cm (4") del extremo del cable.

29. Enchufe la máquina y encienda el interruptor de alimentación.
30. Seleccione el idioma que desea para el panel de mandos ( > Language [Idioma]).

Configuración de la interfaz

Para D115:

1. Inicie el modo SP.
2. Seleccione SP5-985-001 (Ajuste de NIC) y cambie el valor de ajuste a "1" (Encendido).
3. Seleccione SP5-985-001 (Ajuste de USB) y cambie el valor de ajuste a "1" (Activado).
4. Apague y encienda el interruptor principal.

Para D116:

1. Inicie el modo SP.

2. Seleccione SP5-985-001 (Ajuste de NIC) y cambie el valor de ajuste a "0" (Apagado).
3. Seleccione SP5-985-002 (Ajuste de USB) y cambie el valor de ajuste a "0" (Apagado).
4. Apague y encienda el interruptor principal.

Configuración de la copiadora

2

1. Inicie el modo SP.
2. Seleccione SP5-801-001 y ejecute la inicialización.
3. Salga del modo SP y, a continuación, inicie el modo UP.
4. Seleccione "@Remote Service" ("Herramientas de usuario" > "Configuración del sistema" > "Herramientas de administrador" > "Seguridad ampliada" > "@Remote Service") y seleccione "Prohibir".
5. Salga del modo UP y, a continuación, inicie el modo SP.
6. Seleccione SP5-870-003 y ejecute la inicialización para @Remote.
7. Seleccione SP5-907-001 y especifique "Plug & Play".
8. Seleccione SP5-870-001 y ejecute la certificación de escritura para @Remote S.
9. Seleccione SP5-302-002 y especifique la zona horaria.
10. Seleccione SP5-307-001, 003 y 004, y especifique los ajustes de ahorro de energía.
11. Salga del modo SP y apague y encienda el interruptor principal.
12. Inicie el modo UP.
13. Especifique la fecha y la hora con "Configurar fecha" o "Configurar hora" (Herramientas de usuario" > "Configuración del sistema" > "Configurar fecha" o "Configurar hora").
14. Apague y encienda el interruptor principal.
15. Compruebe el funcionamiento.
16. Realice una copia a tamaño completo y compruebe si los registros de extremo a extremo y de borde anterior son correctos. De lo contrario, ajuste los registros.

Configuración del fax

Inicialización de la unidad de fax

Al pulsar por primera vez la tecla de fax tras la instalación, aparecerá en pantalla LCD el mensaje de error "Se ha producido un problema con SRAM / Se ha formateado la SRAM" durante la inicialización del programa de la unidad de fax. Apague y encienda el interruptor principal para borrar el mensaje de la pantalla.

Nota

- Si se produjera otro error después de la inicialización, podría entonces tratarse de un error funcional.
1. Seleccione fax SP1-101-016 y especifique el código de país.
 2. Seleccione fax SP3-101-001 y especifique el centro de servicio.

2

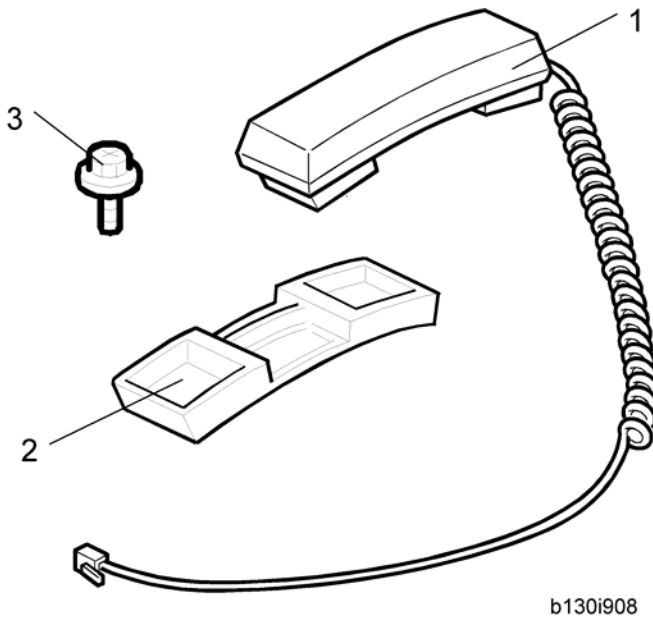
Auricular opcional**Comprobación de accesorios**

Compruebe que tiene los componentes y accesorios.

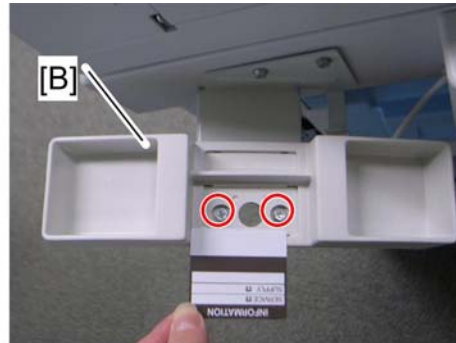
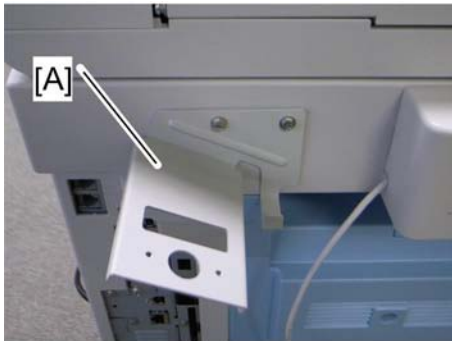
N.º	Descripción	Cantidad
1	Auricular	1
2	Base del auricular	1
3	Tornillos	2
4	Manual del auricular	1

Nota




- El soporte para el auricular no está incluido en el kit del auricular opcional. El soporte se suministra como accesorio de la copiadora.

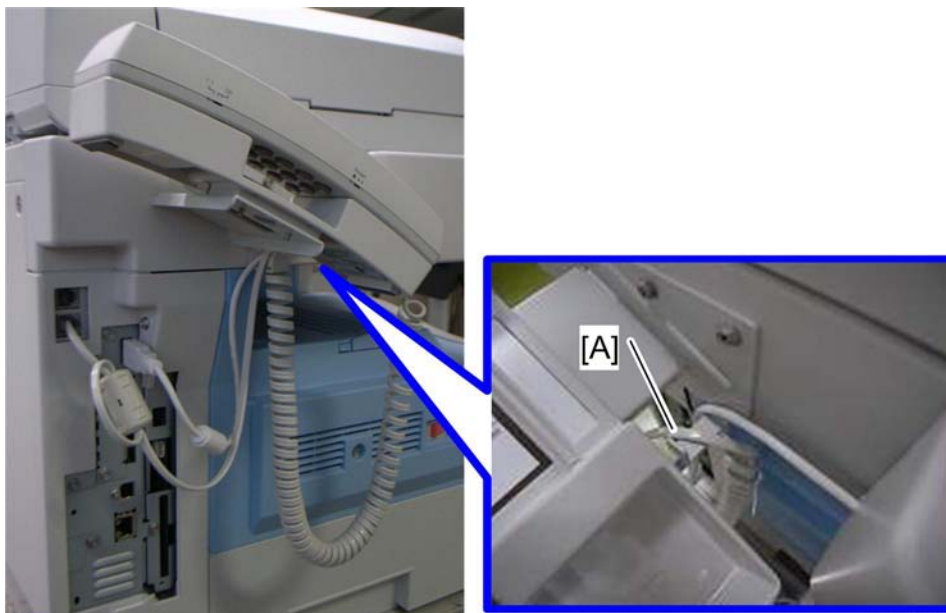


Procedimiento de instalación



d068i011

1. Monte la abrazadera del auricular [A] ( x 2)
2. Retire la etiqueta de la base del auricular [B].
3. Monte la base [B] sobre la abrazadera ( x 2).
4. Monte la base sobre la abrazadera ( x 2).
5. Vuelva a colocar la etiqueta.



d068i013

↓ **Nota**

- La abrazadera es un accesorio de la copiadora.
6. Instale el auricular sobre su base.
 7. Conecte el cable del auricular a la clavija "TEL" y conecte el cable de teléfono [A] como se ha indicado anteriormente.

Unidad de bandeja de papel (D567)

Comprobación de accesorios

Confirme que dispone de todos estos accesorios.

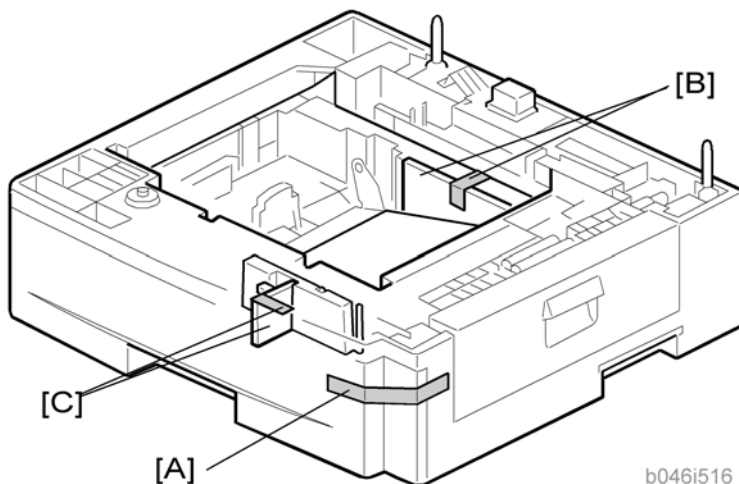
Descripción	Cantidad
1. Etiquetas adhesivas de tamaño de papel	1 hoja
2. Procedimiento de instalación (para el técnico de servicio)	1
3. Procedimiento de instalación (para el usuario)	1
4. Tornillo roscador: M3x10	1
5. Hoja de precaución de EMC	1

2

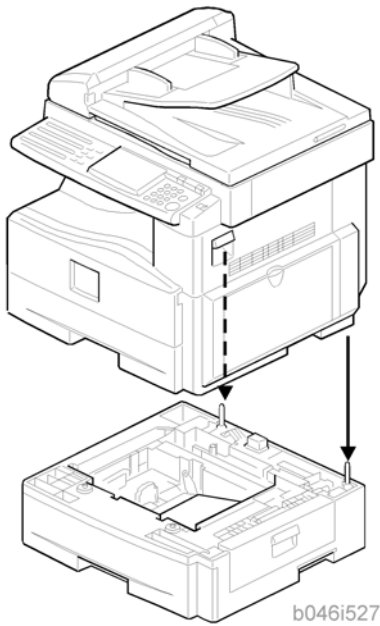
Procedimiento de instalación

⚠ PRECAUCIÓN

- Antes de iniciar este procedimiento, desenchufe el cable de alimentación de la máquina principal.



1. Retire la cinta adhesiva de [A] y la cinta adhesiva y el cartón de [B].
2. Saque un poco la bandeja de papel de la unidad; quite la cinta adhesiva y el cartón de [C] y vuelva a introducir la bandeja.



3. Coloque la máquina sobre la unidad de la bandeja de papel.

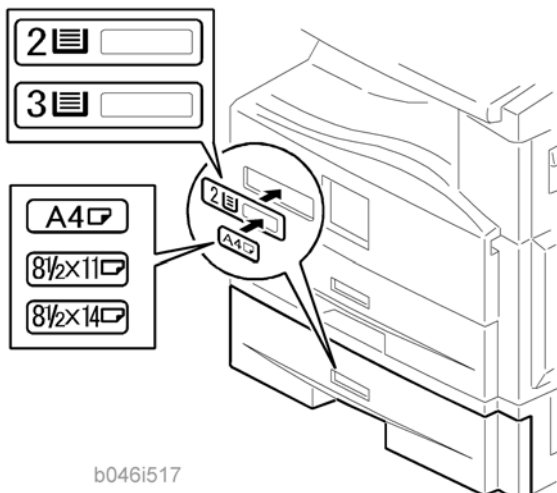
Nota

- Al instalar la segunda unidad de bandeja de papel, colóquela sobre la primera unidad antes de colocar la copiadora sobre la pareja de unidades de bandeja de papel.

4. Quite la bandeja de papel de la unidad de bandeja de papel.

5. Cargue papel en la bandeja. Ajuste las guías laterales y finales según sea necesario. Si va a utilizar papel B4 1/2"x 14", quite la guía final y póngala en el compartimento especial.

6. Vuelva a poner la bandeja de papel en la unidad.



7. Pegue las etiquetas de número de bandeja y de tamaño de papel apropiadas en las posiciones indicadas en la ilustración.

Calefactor de la unidad de bandeja de papel

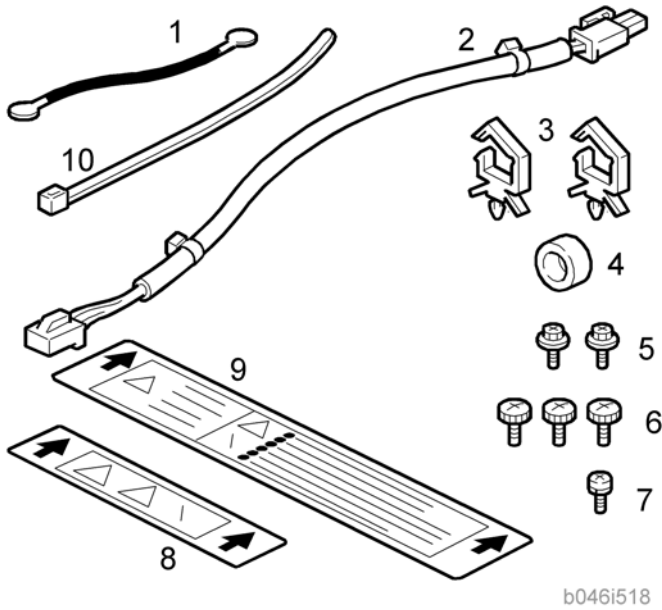
El calefactor de la unidad de bandeja de papel se instala sólo para la primera unidad de bandeja de papel.

2

Comprobación de accesorios

Compruebe que tiene los siguientes accesorios.

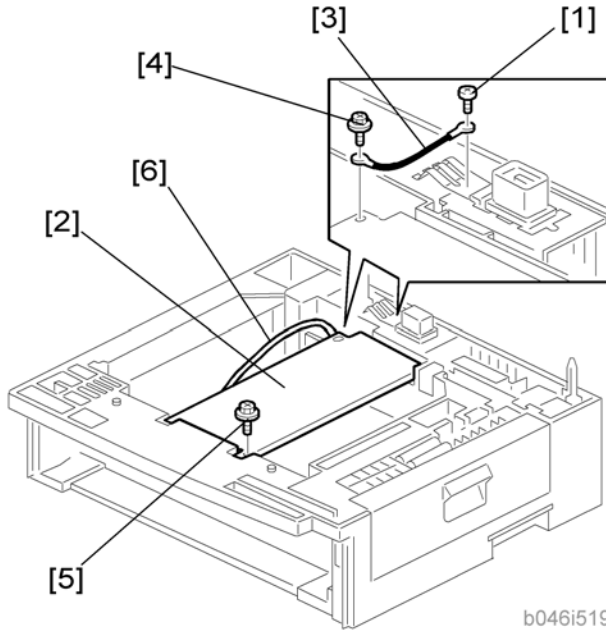
Descripción	Cantidad
1. Cable de tierra	1
2. Mazo de relé	1
3. Abrazaderas	2
4. Núcleo de ferrita	1
5. Tornillos de fijación del calefactor	2
6. Tornillos de fijación de la PTU	3
7. Tornillo de tierra	1
8. Etiqueta adhesiva para la copiadora	1
9. Etiqueta adhesiva de la unidad de papel	1
10. Brida	1




Procedimiento de instalación

⚠️ PRECAUCIÓN

- Antes de iniciar este procedimiento, desenchufe el cable de alimentación de la máquina principal.
1. Quite de la copiadora la unidad de la bandeja de papel si ya está instalada.
 2. Quite las bandejas de papel de la copiadora y de la unidad de la bandeja de papel.

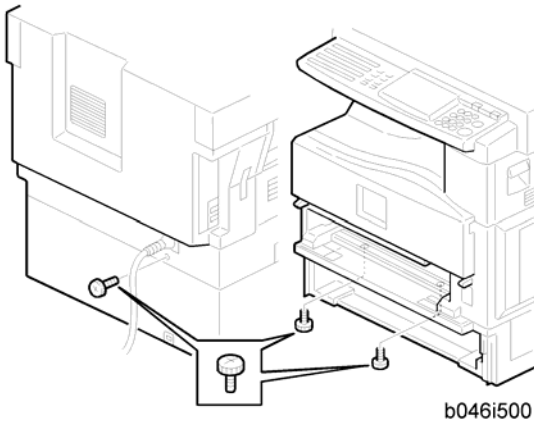


b046i519

3. Quite el tornillo de conexión a tierra [1] de la parte trasera de la unidad de la bandeja de papel.
4. Fije el calefactor [2] y el cable de conexión a tierra suministrado [3] a la unidad de la bandeja de papel ( x 3). El tornillo [1] es el tornillo de conexión a tierra quitado en el paso anterior; los tornillos [4] y [5] son los dos tornillos de fijación del calefactor suministrados.

Nota

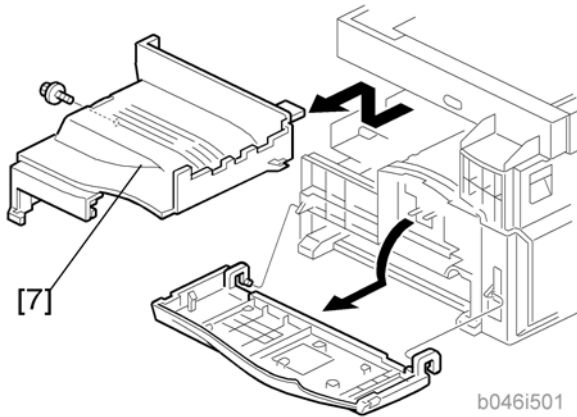
- Asegúrese de colocar el cable de conexión a tierra [3] y el cableado del calefactor [6] de forma que no queden atrapados por la copiadora cuando la coloque sobre la unidad de la bandeja de papel.




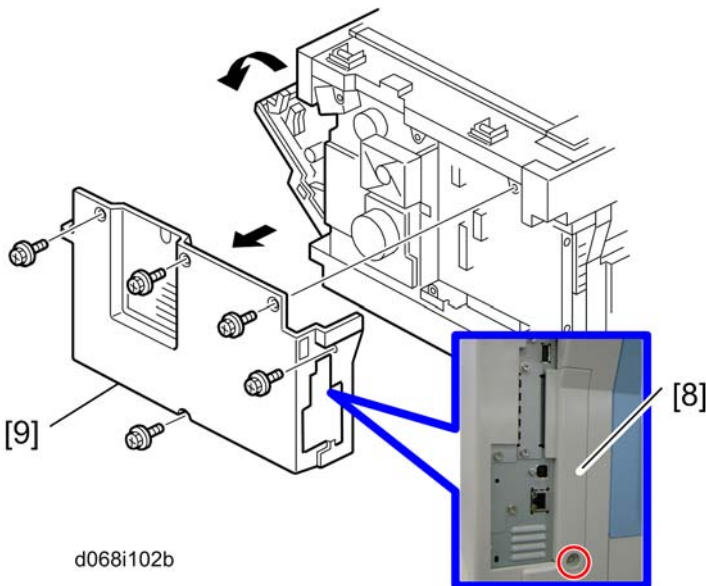
b046i500



5. Coloque la copiadora sobre la unidad de la bandeja de papel.

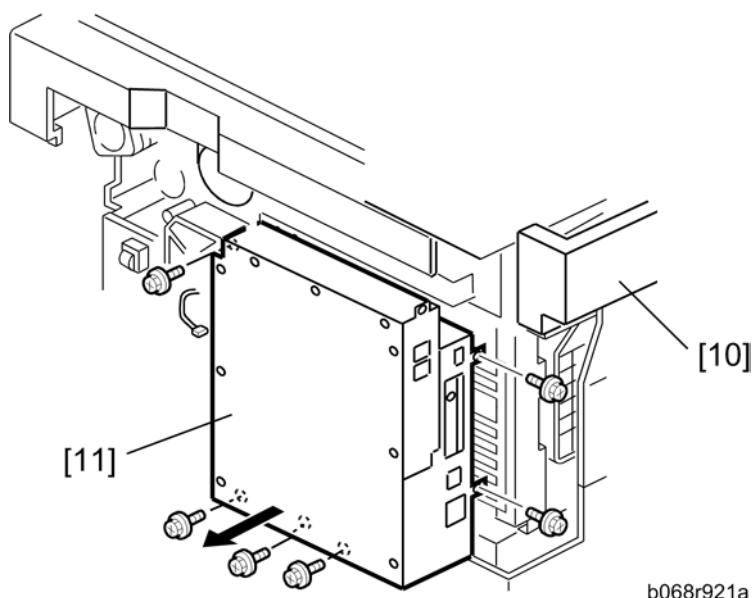
6. Atornille la unidad de la bandeja de papel en su sitio utilizando los tres tornillos de fijación de la PTU suministrados.



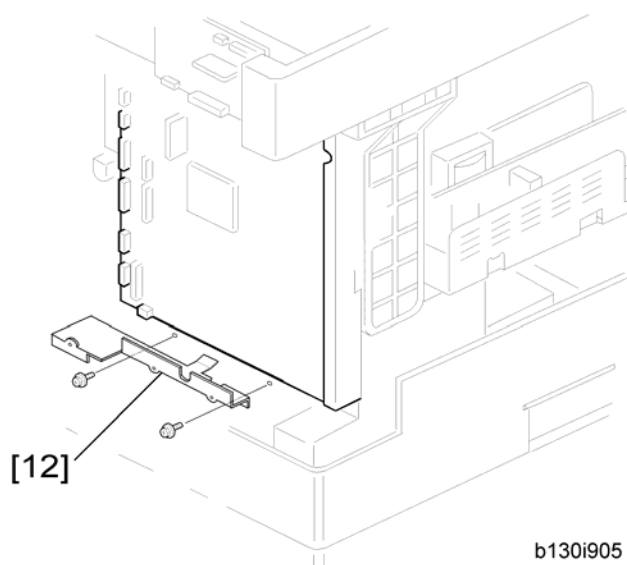
7. Abra la puerta delantera y quite la bandeja de copia [7] ( x1).
8. Cierre la puerta delantera.



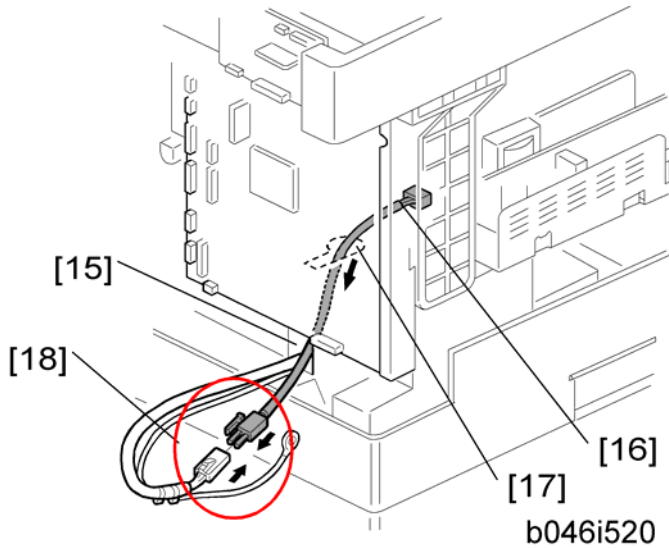
1. Retire la tapa derecha.
2. Retire la cubierta de interface [8] ( x 1).
3. Retire la cubierta trasera [9] ( x 5).



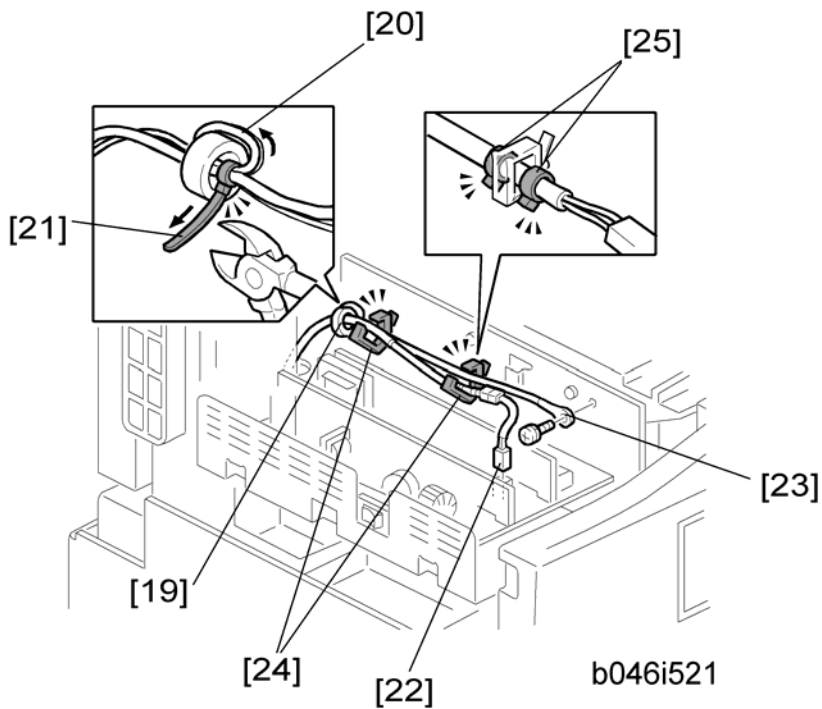
4. Retire la tapa superior izquierda [10].
5. Quite la caja del controlador [11] (🔧 x 1, 🪛 x 6).



6. Retire el soporte [12] (🪛 x 3).



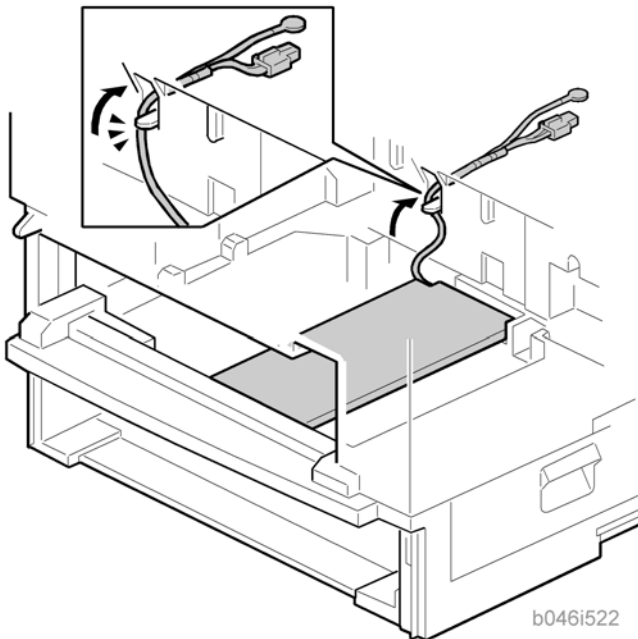
7. Pase el cableado del calefactor por el orificio [15] de la parte trasera de la copidora.
8. Pase el cableado de relé [16] por la abertura [17] (parte trasera de la PSU) y por la abertura [15].
9. Conecte el cableado de relé al cableado del calefactor [18].



10. Vuelva a introducir el cableado de relé en la copidora.

2

11. Coloque el núcleo de ferrita [19] por encima del cableado de relé.
12. Empuje el núcleo de ferrita de forma que quede sobre el cableado del calefactor.
13. Enrolle una vuelta el cableado del calefactor alrededor del núcleo [20].
14. Coloque el núcleo de ferrita en la parte trasera de la copiadora [24], detrás de las abrazaderas traseras.
15. Sujete el núcleo de ferrita con la brida suministrada [21].
16. Corte el trozo de brida sobrante.
17. Conecte el conector del cableado de relé [22] al conector grande de la parte delantera central de la PSU.
18. Atornille el cable de conexión a tierra [23] al soporte de la PSU utilizando el tornillo de conexión a tierra incluido.
19. Fije las abrazaderas [24] al soporte de la PSU.
20. Fije el cableado del calefactor por las abrazaderas.
21. Coloque el cableado de forma que la abrazadera delantera quede entre los dos extremos [25] del cableado.
22. Apriete las abrazaderas.



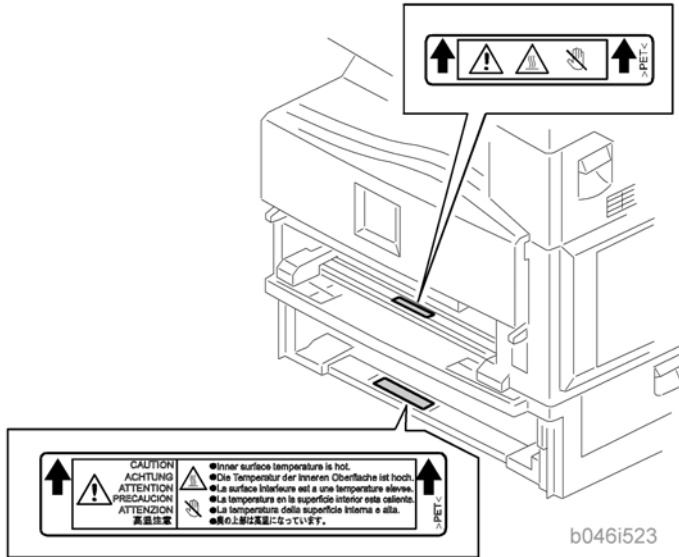
23. Saque el cableado sobrante del calefactor por el orificio de la parte trasera.

↓ **Nota**

- Asegúrese de que el mazo de cables pasa por el lateral de la placa de conexión a tierra en la parte inferior de la apertura. (La parte frontal de la placa de conexión a tierra debe permanecer libre).

24. Disponga el cableado sobrante de forma que quede debajo de la placa de la cubierta de la FCU.

25. Pegue las etiquetas adhesivas de precaución en las posiciones mostradas en la ilustración.



26. Vuelva a montar la copiadora.

27. Enchufe el cable de alimentación y compruebe el funcionamiento.

Ranura USB 2.0/SD Tipo B

Este procedimiento explica cómo instalar la ranura USB 2.0/SD para el modelo SPF (D115).

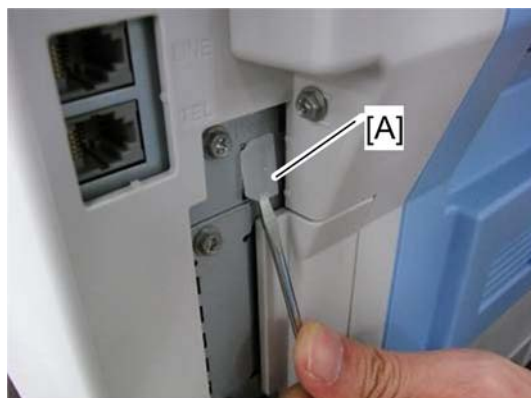
2

Comprobación de accesorios

Compruebe, con la lista siguiente, la cantidad y el estado de los accesorios:

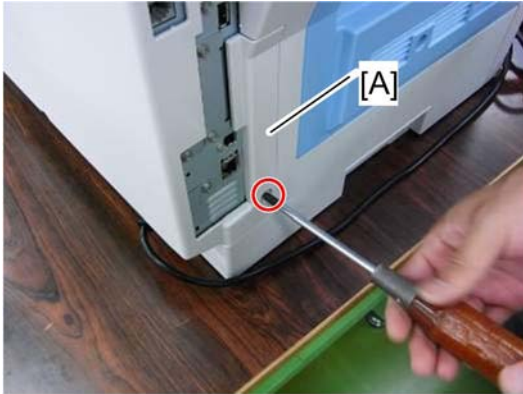
N.º	Descripción	Cantidad
1	Ranura USB 2.0/SD	1
2	Placa de masa	1
3	Cable USB	1
4	Tornillo: M3 x 6 azul	1
5	Tornillo: M3 x 8	2
6	Tornillo:	1
7	Abrazadera	1
8	Etiqueta	1

Procedimiento de instalación



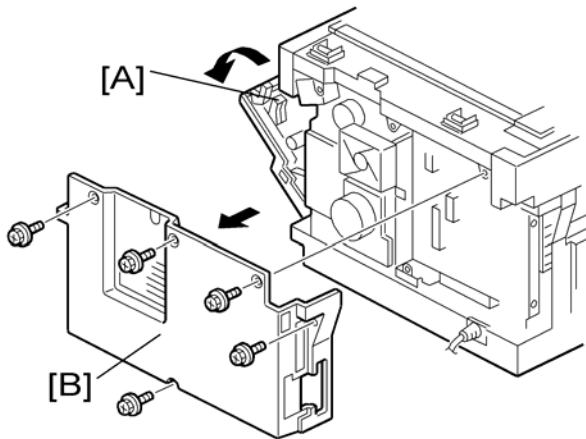
d068i001

1. Retire la tapa del conector USB [A].




d068i002

2. Retire la tapa de la interface [A].



b284i102a

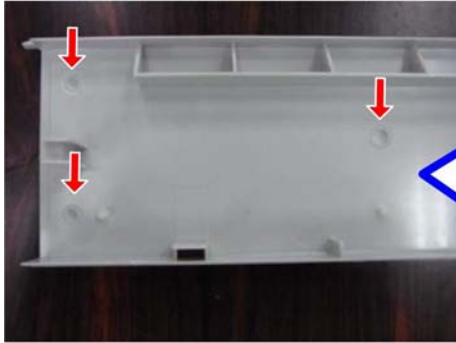
3. Abra la puerta derecha [A].
4. Tapa trasera [B] ( x 5)



d068i003

5. Retire la tapa superior izquierda [A] como se ha indicado anteriormente.

2



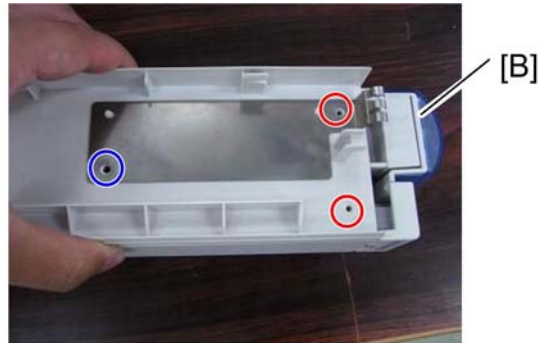
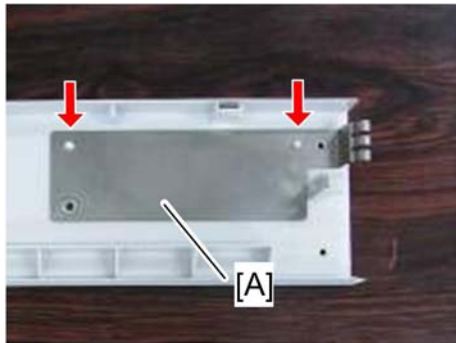
d068i004





6. Realice tres orificios en la tapa superior izquierda con un destornillador como se ha indicado anteriormente.

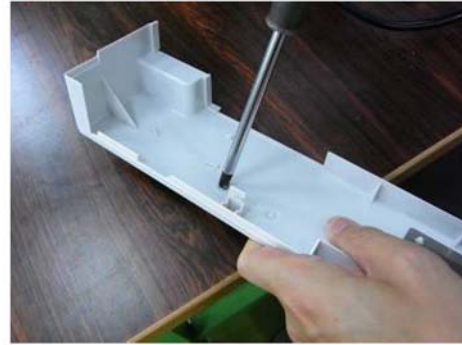
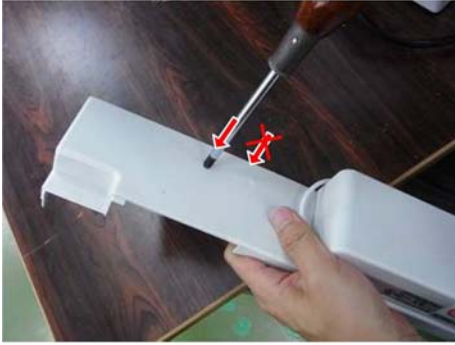
Nota

- Alise los tres orificios en la tapa superior izquierda.



d068i005

7. Conecte la placa de tierra [A]
8. Fije la ranura USB2.0/SD [B] sobre la tapa superior izquierda como se ha indicado anteriormente ( x 1: M3 x 6 azul,  x 2: M3 x 8).



d068i006

9. Realice un orificio para la abrazadera en la tapa superior izquierda con un destornillador como se ha indicado anteriormente.

↓ **Nota**

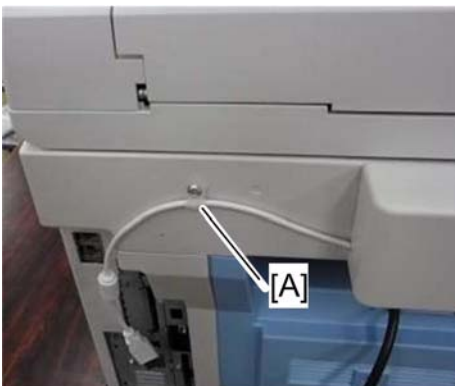
- Alise el orificio en la tapa superior izquierda.



d068i007


10. Coloque la tapa superior izquierda [A] en la unidad principal.

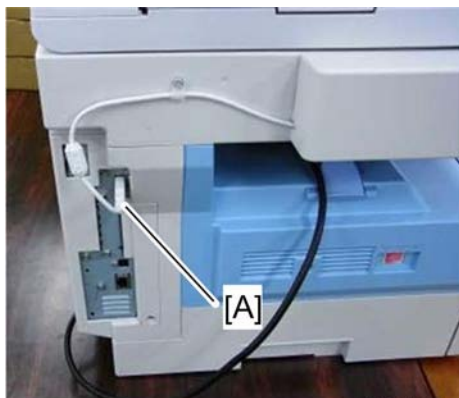
11. Coloque la tapa trasera.



d068i008

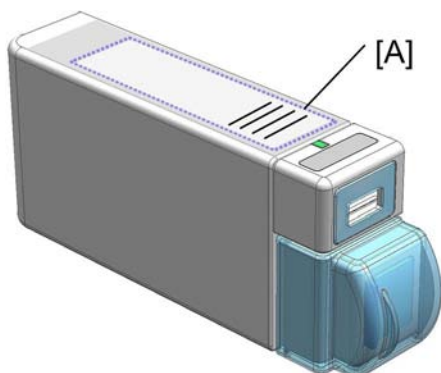
2

12. Coloque la brida del cable [A] en la tapa superior izquierda ( x 1) como se ha indicado anteriormente.



d068i009

13. Conecte el cable USB [A] a USB-A.
14. Coloque la tapa de interface.
15. Enchufe el aparato y encienda el interruptor principal.
16. Entre en modo SP y, a continuación, cambie el ajuste de SP1013-001 de "0" a "1".

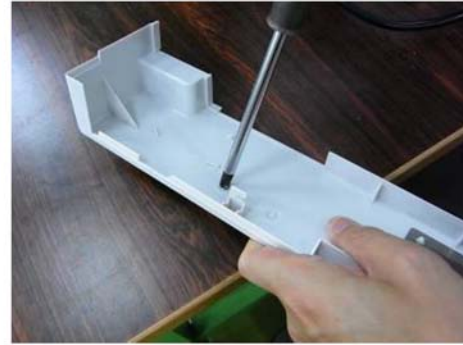
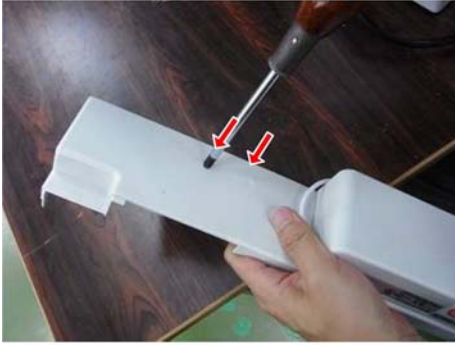


d027i118

17. Pegue la etiqueta adhesiva [A] a la ranura USB2.0/SD como se ha indicado anteriormente.

Al instalar el auricular

1. Siga los pasos 1 - 8 en "Procedimiento de instalación".



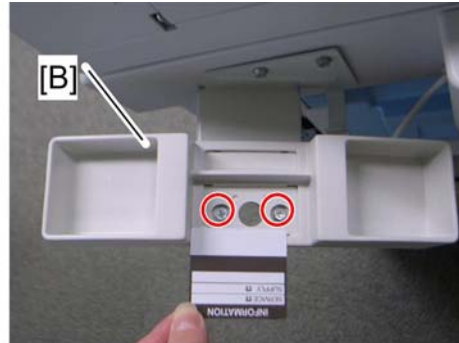
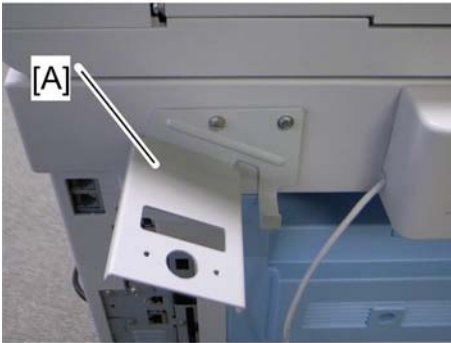
d068i010

2



2. Realice dos orificios en la tapa superior izquierda con un destornillador como se ha indicado anteriormente.

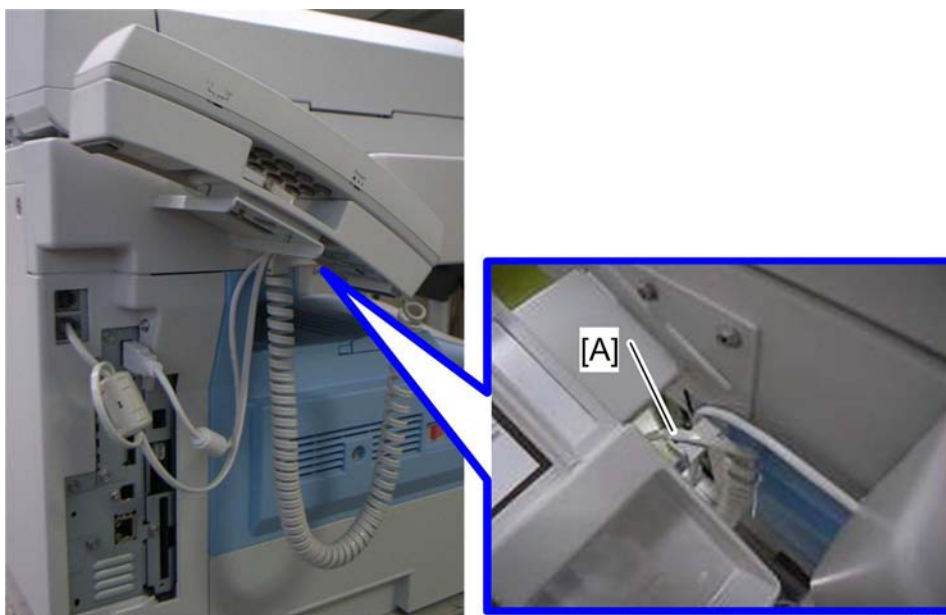
↓ **Nota**

- Alise los orificios de la tapa superior izquierda.



d068i011

3. Monte la abrazadera del auricular [A] ( x 2)
4. Monte la base [B] sobre el soporte del auricular ( x 2)



d068i013

5. Coloque el auricular en su soporte.
6. Conecte el cable del auricular a la clavija "TEL" y conecte el cable de teléfono [A] como se ha indicado anteriormente.
7. Siga los pasos 13 - 17 en "Procedimiento de instalación".

Comprobación de la ranura de tarjeta SD/USB

1. Inserte una tarjeta SD o un dispositivo de memoria USB en la ranura.
Puede conectar sólo un dispositivo de memoria extraíble cada vez.
2. Cierre la tapa de la ranura de la memoria.
Si deja la tapa abierta, la electricidad estática conducida a través de la tarjeta SD insertada podría causar un malfuncionamiento del aparato.
3. Compruebe que los ajustes anteriores se han borrado.
Si aún queda algún ajuste anterior, pulse la tecla [Borrar modos].
4. Coloque un original en el cristal de exposición.
5. Pulse [Almacenar archivo].
6. Pulse [Almacenar en dispositivo de memoria].
7. Pulse [OK].
8. Pulse la tecla [Inicio].
Cuando haya finalizado la escritura, aparecerá un mensaje de confirmación.

9. Pulse [Salir].
10. Extraiga el dispositivo de memoria de la ranura de memoria.
No extraiga el dispositivo de memoria durante el proceso de escritura.

Asa para la bandeja de papel opcional

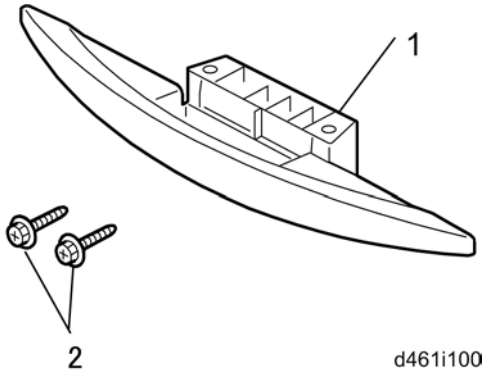
El siguiente procedimiento es para la bandeja de papel o la unidad de bandeja de papel opcional.

2

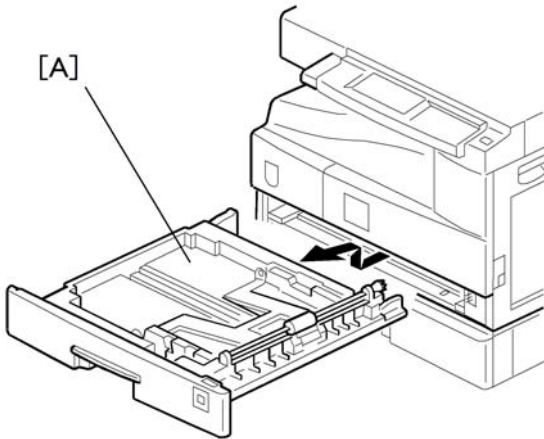
Accesorios

Compruebe los accesorios y sus cantidades comparándolos con la siguiente tabla.

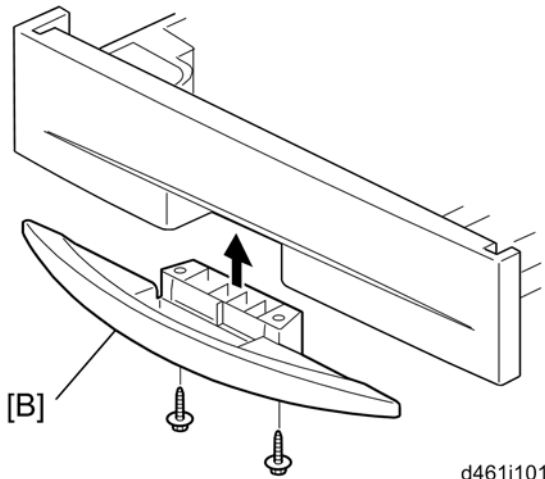
N.º	Descripción	Cantidad
1	Asa	1
2	Tornillo (M3 x 10)	2




Procedimiento de instalación



1. Quite la bandeja de papel [A] de la copiadora principal.



d461i101

2. Gire la bandeja de papel al lado opuesto.
3. Baje el asa de agarre de la bandeja de papel [B] hasta la ranura de la bandeja de papel como se indica a través de la flecha en la ilustración anterior.
4. Monte el asa en la bandeja de papel ( x 2).

Nota

- Para acoplar el asa auxiliar (con dos tornillos en la parte inferior), mantenga presionada el asa por la parte frontal del cajón de papel (y apriete los tornillos) para asegurarse de que haya el menor espacio posible entre la parte posterior del asa y el frontal del cajón del papel.

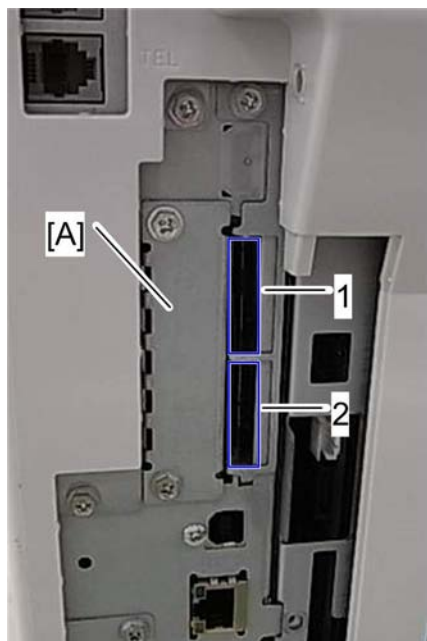
5. Vuelva a colocar la bandeja de papel en la máquina.

Opciones del controlador

Aspectos generales

Este aparato cuenta con ranuras para tarjetas de interface y para tarjetas SD destinadas a conexiones de interface y aplicaciones opcionales.

2



d068i014

Ranura de I/F de tarjeta

- La ranura [A] se usa para una de las conexiones de interface opcionales: (IEEE1284, IEEE802.11a/g (LAN inalámbrica) o Gigabit Ethernet).

Ranura para tarjeta SD

- La ranura [1] se utiliza para las opciones incluidas en las tarjetas SD. La aplicación de la tarjeta SD (impresora/escáner o tarjeta de seguridad) debería instalarse en la ranura 1. Si se desea utilizar más de una aplicación, mueva las aplicaciones a la misma tarjeta SD con SP5873.
- La ranura [2] se utiliza para las opciones incluidas en las tarjetas SD y el servicio técnico. La tarjeta VM debe instalarse en la ranura 2.

Instalación de LAN inalámbrica (IEEE 802.11a/g)

⚠ PRECAUCIÓN

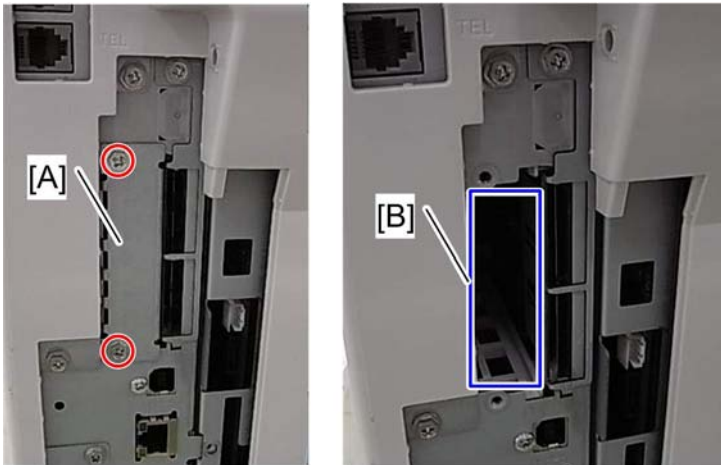
- Antes de iniciar el siguiente procedimiento, desenchufe el cable de alimentación del aparato.

Accesorios



Compruebe los accesorios y sus cantidades comparándolos con la siguiente tabla.

N.º	Descripción	Cantidad
1	Adaptador inalámbrico	1
2	Tarjeta de red LAN inalámbrica	1
3	Tapa de la tarjeta LAN	4
4	Página de precaución	1
5	Etiqueta	1

Procedimiento de instalación



d068i017

1. Retire la tapa de la interface [A] ( x 2).
2. Instale el adaptador inalámbrico en la ranura de I/F [B] ( x 2).
3. Instale la tarjeta de red LAN inalámbrica en el adaptador inalámbrico.
4. Coloque la tapa de la antena sobre la tarjeta de red LAN inalámbrica.
5. Encienda el interruptor de alimentación.
6. Imprima la página de configuración (Herramientas usuario/Contador > Ajustes de impresora > Imprimir lista/prueba) y, a continuación, compruebe que se detecta este dispositivo.

Si la recepción es pobre, es posible que tenga que cambiar el aparato de sitio:

- Asegúrese de que el aparato no está situado cerca de un electrodoméstico o equipo de cualquier tipo que genere campos magnéticos fuertes.

- Ponga el aparato lo más cerca posible del punto de acceso.

Ajustes del modo SP para LAN inalámbrica IEEE 802.11a/g

Se pueden establecer los siguientes comandos SP para 802.11a/g

N.º de SP	Nombre	Función
5840 004	SSID	Utilizado para confirmar la configuración SSID actual.
5840 006	Canales MAX	Establece el intervalo máximo de los valores de canal para el país.
5840 007	Canales MIN	Establece el intervalo mínimo de los valores de canal permitidos para su país.
5840 011	Selección de clave WEP	Utilizado para seleccionar la clave WEP (predeterminado: 00).
5840 018	Comprobación de SSID	Utilizado para confirmar el SSID.
5840 020	Modo WEP	Utilizado para mostrar la longitud máxima de la cadena que se puede usar para la entrada de la clave WEP.

2

Instalación de IEEE 1284

PRECAUCIÓN

- Antes de iniciar el siguiente procedimiento, desenchufe el cable de alimentación del aparato.

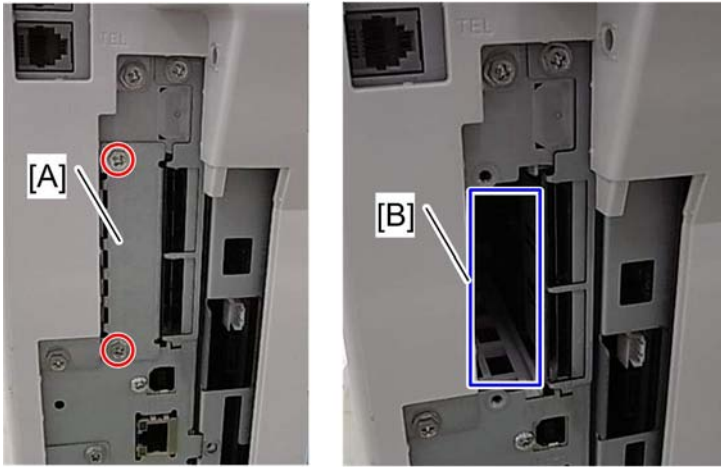
Accesorios

Compruebe los accesorios y sus cantidades comparándolos con la siguiente tabla.



N.º	Descripción	Cantidad
1	Unidad de interface de IEEE 1284	1
2	Hoja de UL	1
3	Página de precaución	1

Procedimiento de instalación

2



d068i017

1. Retire la tapa de la interface [A] ( x 2).
2. Instale la placa de IEEE 1284 en la ranura de I/F [B] ( x 2).
3. Encienda el interruptor de alimentación.
4. Imprima la página de configuración (Herramientas usuario/Contador > Ajustes de impresora > Imprimir lista/prueba) y, a continuación, compruebe que se detecta este dispositivo.

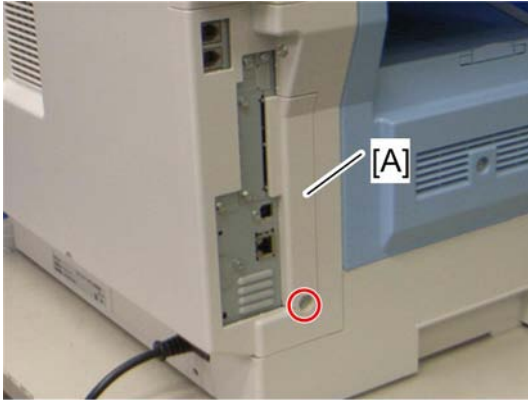
Tarjeta VM de tipo L (D467)

Accesorios


Compruebe los accesorios y sus cantidades comparándolos con la siguiente tabla. Accesorios

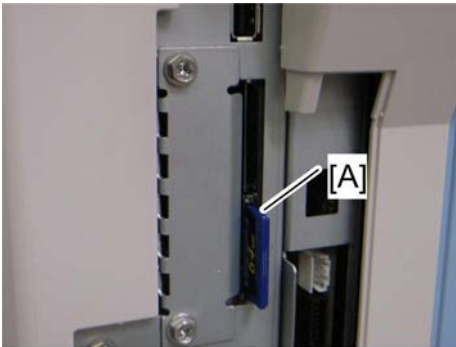
N.º	Descripción	Cantidad
1	Tarjeta VM SD	1
2	Etiqueta	1

Instalación



d115i020

1. Retire la tapa de la interface [A] ( x 1).



d068i019

2. Apague la máquina.
3. Inserte la tarjeta SD [A] en la ranura SD 2 (inferior).

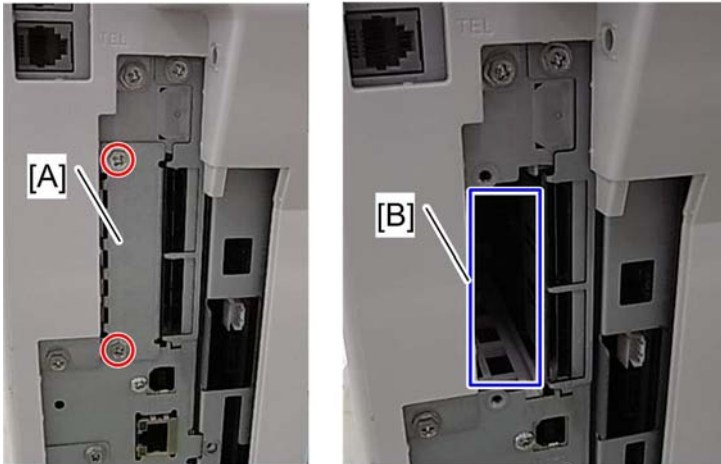
★ Importante

- Esta tarjeta SD debe instalarse en la ranura 2, la ranura inferior.


Gigabit Ethernet

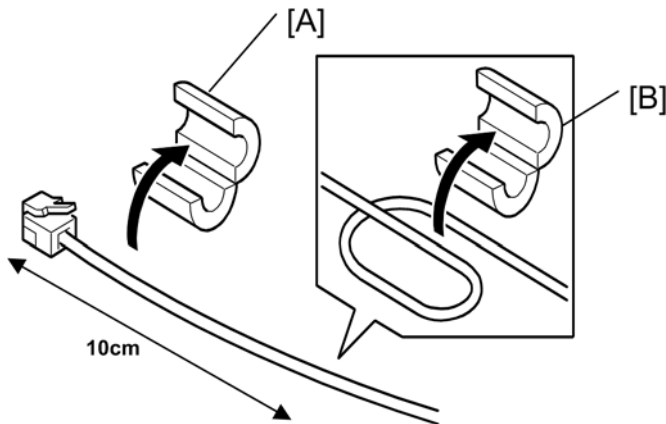
⚠ PRECAUCIÓN

- Antes de realizar el siguiente procedimiento, desenchufe el cable de alimentación de la máquina.



d068i017

1. Retire la tapa de la ranura de interface [A] ( x 2).
2. Instale la placa de Gigabit Ethernet (tornillo moleteado x 2) en la ranura de la tarjeta de interface [B].



d067r113

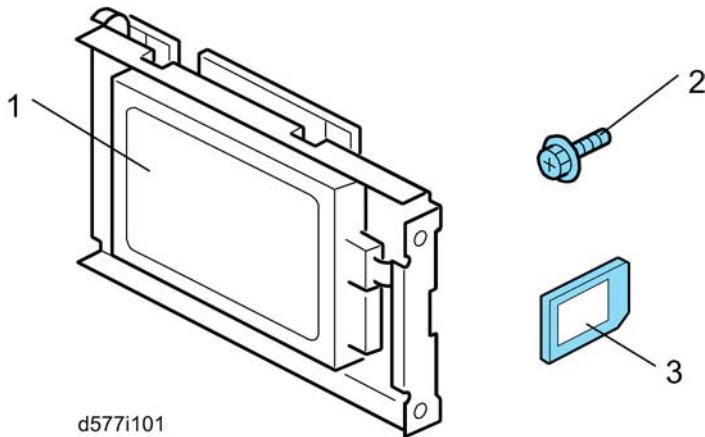
3. Conecte un núcleo de ferrita [A] al cable de interface Ethernet y, a continuación, conecte el otro núcleo de ferrita [B] a unos 10 cm del extremo del cable de interface Ethernet.
4. Conecte el cable de interface Ethernet al puerto Gigabit Ethernet.

Compruebe que el aparato reconoce la opción (consulte "Comprobación de todas las conexiones" al final de esta sección).

Disco duro opcional (D577)

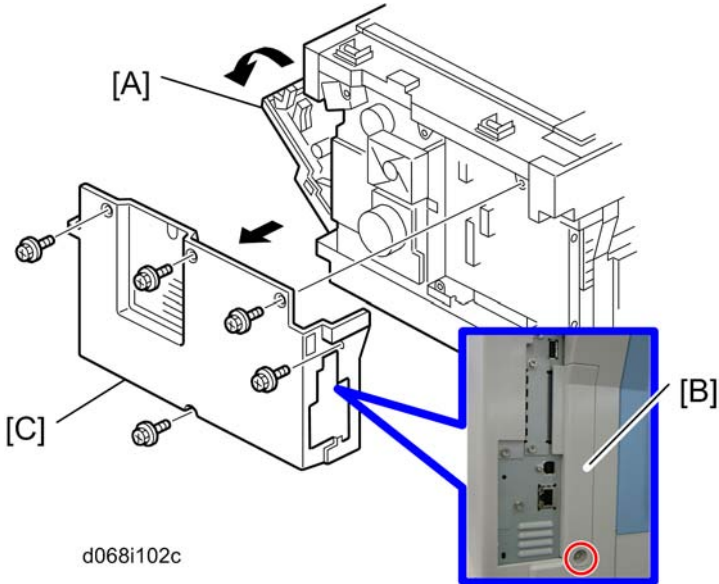
Comprobación de componentes



N.º	Descripción	Cantidad
1	Unidad de disco duro	1
2	Tornillo	3
3	Tarjeta de seguridad	1
-	Hoja de precaución de EMC	1

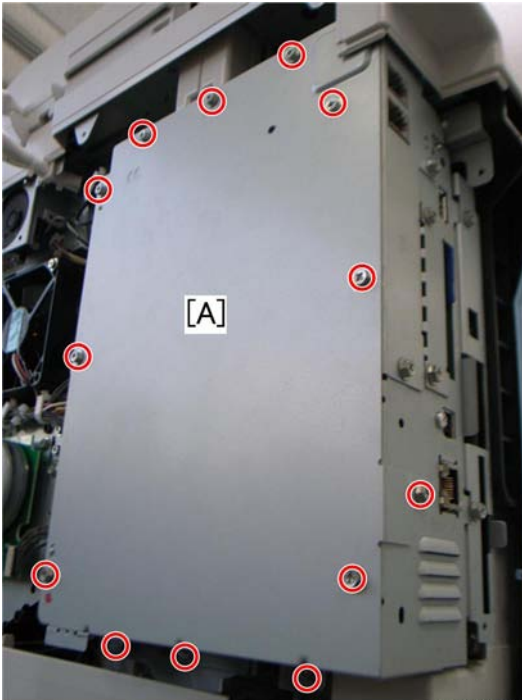


Procedimiento de instalación


2



1. Abra la puerta derecha [A].
2. Tapa de interface [B] ( x 1)
3. Tapa trasera [C] ( x 5)



4. Tapa de la caja del control [A] ( x 13)

5. Retire el tornillo [A] del circuito del controlador.
6. Instale la unidad de disco duro [B] en el circuito del controlador ( x 3).

 **Nota**

- El tornillo [A] se utiliza en este paso.
7. Vuelva a instalar la tapa de la caja del controlador y la tapa trasera en la máquina.

Después de instalar el nuevo disco duro

1. Ejecute **SP5832-001** para formatear el disco duro.
2. Ejecute **SP5832-001** para copiar los datos de sello preestablecido desde el firmware hasta el disco duro.
3. Ejecute **SP5846-040** para copiar la libreta de direcciones en el disco duro desde el circuito del controlador.
4. Ejecute **SP5846-041** para permitir que el usuario acceda a la libreta de direcciones.
5. Apague y encienda el interruptor principal.

Instalación de la tarjeta de seguridad

1. Introduzca la tarjeta de seguridad en la ranura SD.
 - **Para D115**, utilice la ranura 2 (inferior) y una la tarjeta de seguridad con la tarjeta de la impresora/escáner con SP5-873-001. Saque la tarjeta de seguridad de la ranura SD 2

después de eliminar las aplicaciones de seguridad y guarde la tarjeta de seguridad en un lugar seguro.

- **Para D116**, utilice la ranura 1 (superior).

2. Active el modo SP.
3. Introduzca el número de serie de la máquina con SP 5811-001.
4. Entre en modo SP y seleccione "EJECUTAR" con SP5-878-001.
5. Seleccione SP5878-002 y, a continuación, pulse "Ejecutar" en la pantalla.
6. Salga del modo SP después de que aparezca "Completed" (Finalizado) en la pantalla.

2

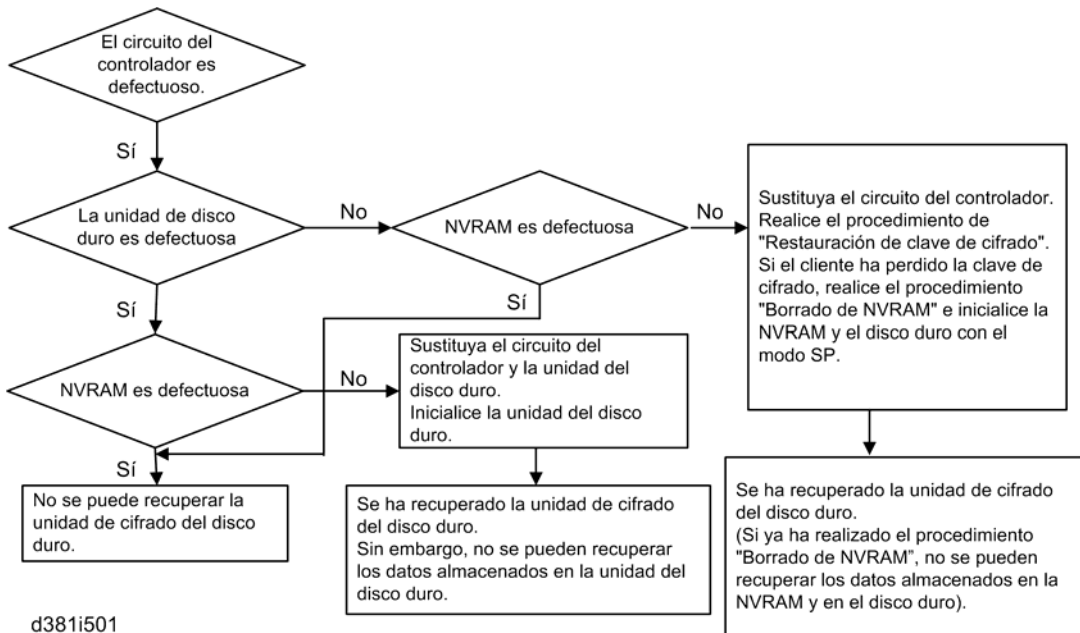
Activación de las aplicaciones de seguridad

1. Asegúrese de que los ajustes siguientes no están configurados en sus valores predeterminados de fábrica:
 - Contraseña de inicio de sesión del supervisor
 - Nombre de inicio de sesión del administrador
 - Contraseña de inicio de sesión del administrador

Si cualquiera de estos ajustes tiene el valor predeterminado de fábrica, indique al cliente que debe cambiarlo para poder realizar el procedimiento de instalación.
2. Compruebe si está activado el ajuste "Autenticación de Admin."
[System Settings] – [Administrator Tools] – [Administrator Authentication Management] - [Admin. Authentication] ([Ajustes del sistema] – [Herramientas del administrador] – [Gestión de autenticación de administrador] – [Autenticación de administrador])
Si este ajuste está en OFF, indique al cliente que debe ponerlo en ON para poder realizar el procedimiento de instalación.
3. Asegúrese de que "Herramientas del administrador" está activado (seleccionado).
[Configuración del sistema] – [Herramientas del administrador] – [Gestión de autenticación del administrador] - [Ajustes disponibles]
Si este ajuste está desactivado (no seleccionado), indique al cliente que debe activarlo (seleccionarlo) para poder realizar el procedimiento de instalación.
4. Consulte el Manual de referencia de seguridad para obtener información sobre la activación de las aplicaciones de seguridad (unidad de cifrado del disco duro y DataOverwriteSecurity).

Recuperación de Cifrado del disco duro de un problema del dispositivo

El siguiente diagrama de flujo muestra la posibilidad de recuperación del Cifrado del disco duro si uno de los dispositivos relacionados con él está defectuoso.



Restauración de la clave de cifrado

Al sustituir el circuito del controlador por un modelo en el que se haya instalado la unidad de cifrado del disco duro, es preciso actualizar la clave de cifrado.

1. Prepare una tarjeta SD que se haya inicializado.
2. Cree la carpeta "restore_key" en la tarjeta SD.
3. Cree un archivo con el nombre "nvram_key.txt" en la carpeta "restore_key" de la tarjeta SD.
4. Pida a un administrador que introduzca la clave de cifrado (impresa anteriormente por el usuario) en el archivo "nvram_key.txt".
5. Retire sólo la unidad de disco duro (HDD).
6. Encienda el interruptor de alimentación.
7. Confirme que el mensaje que aparece en la pantalla LCD le indica que instale la tarjeta SD (guardando la clave de cifrado) en la máquina.
8. Apague el interruptor de alimentación.
9. Inserte la tarjeta SD que contiene la clave de cifrado en la ranura 1.
10. Encienda el interruptor de alimentación principal para que la máquina restablezca automáticamente la clave de cifrado en la memoria flash de la placa del controlador.
11. Apague el interruptor de alimentación principal una vez que la máquina haya vuelto al estado normal.
12. Retire la tarjeta SD de la ranura 1.

13. Vuelva a instalar la unidad de disco duro.

Borrado de la NVRAM

Al sustituir la placa del controlador por un modelo en el que se haya instalado la unidad de cifrado del disco duro y el cliente haya perdido la clave de cifrado, es preciso borrar la NVRAM para recuperar la unidad de cifrado del disco duro.

2

1. Prepare una tarjeta SD que se haya inicializado.
2. Cree la carpeta "restore_key" en la tarjeta SD.
3. Cree un archivo con el nombre "nvram_key.txt" en la carpeta "restore_key" de la tarjeta SD.
4. Introduzca "nvclear" en el archivo "nvram_key.txt".
5. Encienda el interruptor de alimentación.
6. Confirme que el mensaje que aparece en la pantalla LCD le indica que instale la tarjeta SD (guardando la clave de cifrado) en la máquina.
7. Apague el interruptor de alimentación.
8. Inserte la tarjeta SD que contiene "nvclear" en la ranura 1.
9. Encienda el interruptor de alimentación principal para que la máquina restablezca automáticamente la clave de cifrado en la memoria flash de la placa del controlador.
10. Apague el interruptor de alimentación principal una vez que la máquina haya vuelto al estado normal.
11. Retire la tarjeta SD de la ranura 1.
12. Encienda el interruptor de alimentación.
13. Inicialice la NVRAM (SP5801-001) y la unidad de disco duro (SP5832-001) con el modo SP.
14. El usuario debe activar la unidad de cifrado del disco duro con una herramienta del usuario.

3. Mantenimiento preventivo

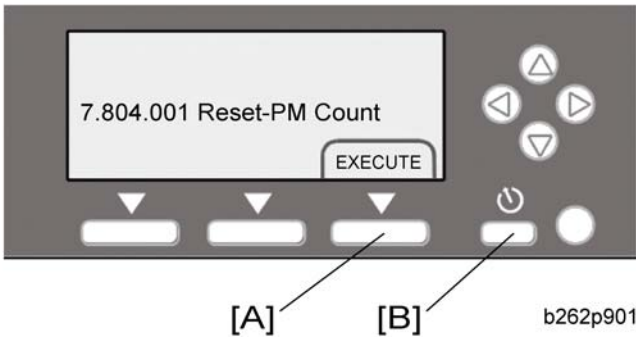
Tablas de mantenimiento

Consulte "Apéndices" para obtener la información siguiente:

- Tablas de mantenimiento preventivo

Cómo poner a cero el contador de mantenimiento preventivo

Reinicie el contador de mantenimiento preventivo después del trabajo de mantenimiento.



1. Active el modo SP.
2. Seleccione SP7-804-001.
3. Pulse la tecla EJECUTAR [A]. Cuando el programa finaliza con normalidad, se muestra el mensaje "Completado". Si el programa no finaliza con normalidad, se muestra un mensaje de error.
4. Pulse la tecla Escape [B] para finalizar el programa.

4. Sustitución y ajuste

Precauciones

General

PRECAUCIÓN

- Antes de la sustitución, apague el interruptor principal y desenchufe la máquina.

Antes de apagar el interruptor principal, compruebe que no hay ningún componente mecánico en funcionamiento. Si apaga el interruptor principal mientras hay componentes mecánicos funcionando, estos pueden pararse fuera de sus posiciones de reposo. El componente en cuestión se dañará si trata de quitarlo cuando no está en la posición de reposo.

4

Pilas de litio

PRECAUCIÓN

- Un cambio incorrecto de las pilas de litio en el controlador o en la unidad de fax supone un riesgo de explosión. Sustituya las pilas sólo con el mismo tipo de pilas o un tipo equivalente recomendado por el fabricante. Deseche las baterías usadas de acuerdo con las instrucciones del fabricante.

Cable libre de halógeno

PRECAUCIÓN

- Tenga especial cuidado cuando manipule cables.

De conformidad con la normativa local, en esta máquina se utilizan cables libres de halógeno. Los cables libres de halógeno son ecológicos pero son menos fuertes que los cables convencionales. Estos cables pueden dañarse en cualquiera de los siguientes casos:

- Cuando el cable se queda atrapado entre objetos duros como abrazaderas, tornillos, placas de circuito impreso y cubiertas exteriores.
- Cuando el cable roza contra un objeto duro como abrazaderas, tornillos, placas de circuito impreso y cubiertas exteriores.
- Cuando el cable es arañado por un objeto duro como abrazaderas, tornillos, placas de circuito impreso, cubiertas exteriores destornilladores o uñas.

Electricidad estática

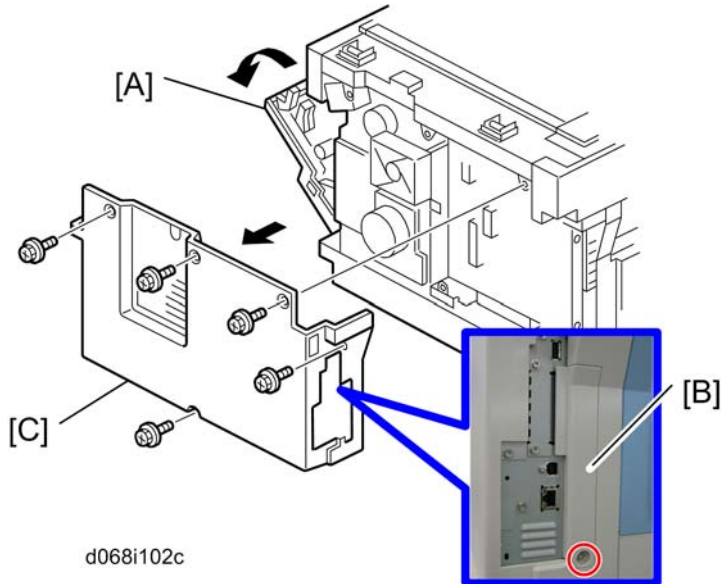
Toque siempre una superficie con conexión a tierra para descargar la electricidad estática de las manos antes de manipular tarjetas SD, placas de circuito impreso o placas de memoria.



Herramientas especiales y lubricantes

Número de pieza	Descripción	Cantidad
A1849501	Herramientas de ajuste del sistema óptico (2 unidades/juego)	1 juego
A2929500	Gráfico de pruebas S5S (10 unidades/juego)	1 juego
VSSM9000	Multímetro digital - Fluke 87	1
N8036701	Tarjeta de memoria flash (4 MB)	1
N8031000	Estuche para la tarjeta de memoria flash	1
A2579300	Grasa Barrierta – S552R	1
52039502	Grasa de silicona 501	1

Tapas exteriores y panel de mandos

Tapa trasera



1. Abra la puerta derecha [A].
2. Tapa de interface [B] ( x 1)
3. Abra la puerta derecha [A].
4. Tapa trasera [C] ( x 5)

Bandeja de copias

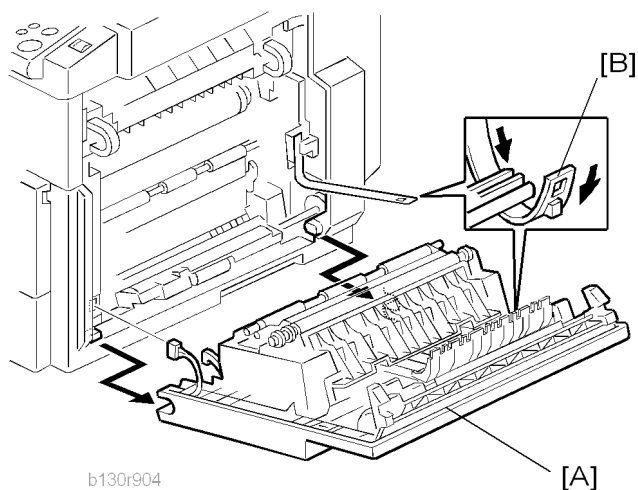
PRECAUCIÓN

- Asegúrese de que los cables que hay debajo de la bandeja de copias están en su sitio antes de volver a montar la copidora. Si quedan atrapados entre la bandeja de copias y la tapa interior, pueden dañarse gravemente.

1. Desinstale el ARDF.
2. Tapa posterior (🔧 Pág.76)
3. Deslice la tapa superior izquierda [A] hacia atrás.
4. Escala trasera [B] (🔧 x 3)
5. Deslice la tapa superior derecha [C] hacia atrás.
6. Tapa delantera izquierda [D] (🔧 x 2)
7. Panel de operaciones [E] (🔧 x 4, 📄 x 1)
8. Tapa delantera derecha [F]

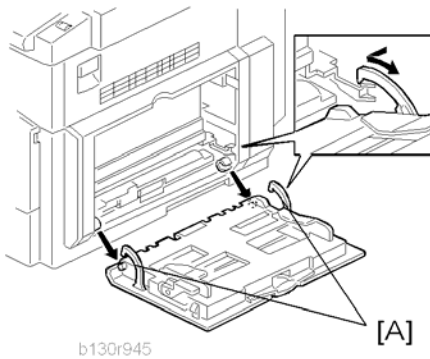
4

Puerta derecha



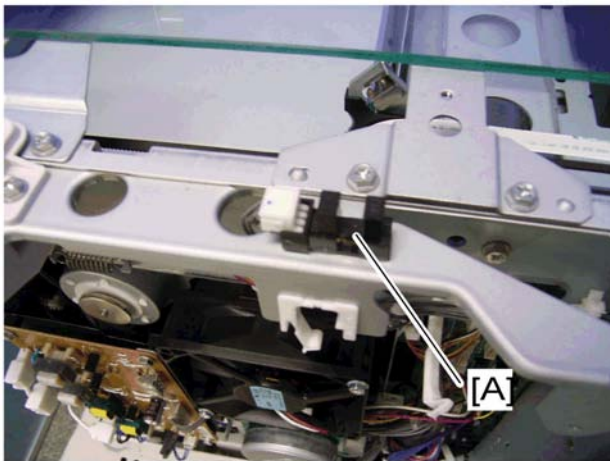
1. Abra la puerta derecha [A].
2. Suelte la brida [B].
3. Puerta derecha (📄 x 1)

Bandeja bypass



1. Empuje hacia dentro las guías tope [A].

Sensor de la tapa del cristal de exposición



b262r505

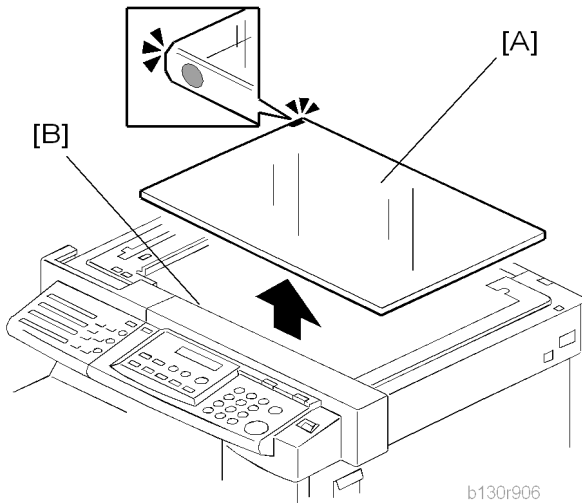
1. Tapa posterior (🔧 Pág.76)
2. Escala posterior (🔧 Pág.77 "Panel de mandos y cubiertas superiores")
3. Sensor de la tapa del cristal de exposición [A] (🔧 x 1, gancho)

Unidad del escáner

Para limpiar espejos y lentes, utilice un cepillo soplador o un algodón humedecido.

Cristal de exposición

Para limpiar el cristal de exposición, utilice alcohol o limpiacristales.



1. Tapa posterior (🔧 Pág.76)
2. Escala posterior, tapa superior derecha (🔧 Pág.77 "Panel de mandos y cubiertas superiores")
3. Cristal de exposición [A].

Reensamblaje

Asegúrese de que la marca del cristal queda en la esquina trasera izquierda y que el borde izquierdo del cristal está alineado con la arista de soporte [B] del bastidor.

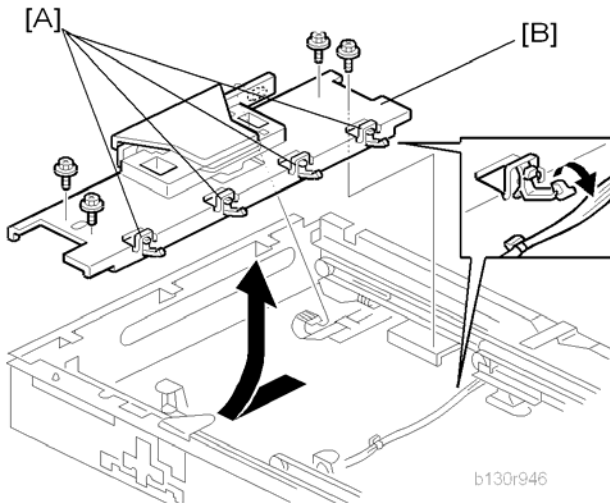
Ajuste

Al sustituir la placa blanca, realice el ajuste automático de escaneo (🔧 SP4-428-001).

Bloque de lentes

⚠️ PRECAUCIÓN

- No desmonte el bloque de lentes. El bloque de lentes se ajusta con precisión antes del envío.
- No toque los tornillos del CCD. El CCD se ajusta con precisión antes del envío.



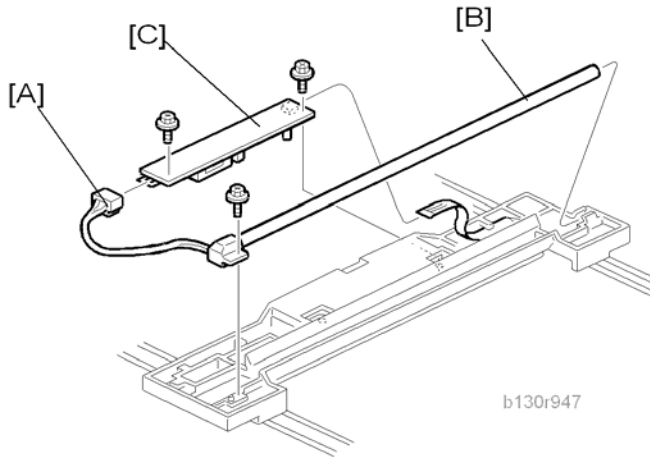
1. Cristal de exposición (■ Pág.80)
2. Tapa frontal izquierda, panel de mandos (■ Pág.77 "Panel de mandos y cubiertas superiores")
3. Suelte el cable de las cuatro abrazaderas [A].
4. Bloque de lentes [B] (🔧 x 4, 1 cable plano)

⬇ **Nota**

- No afloje los tornillos inmovilizados con pintura que mantienen fija la unidad de la lente.
- Tras la instalación de un bloque de lentes nuevo, realice ajustes de copia (■ Pág.131 "Ajuste del área de imagen de la copia").

Lámpara de exposición, circuito estabilizador de la lámpara

No doble el cable de exposición de la lámpara de exposición.

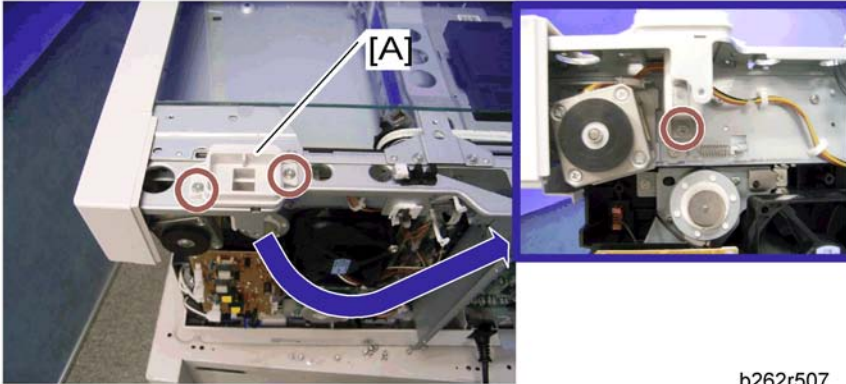


4


1. Cristal de exposición (Pág.80)
2. Tapa frontal izquierda, panel de mandos (Pág.77 "Panel de mandos y cubiertas superiores")
3. Deslice el primer escáner hasta una posición en la que las tapas metálicas no obstaculicen la lámpara ni el escáner.
4. Desenchufe el conector de la lámpara [A].
5. Retire lo siguiente (uno o ambos):
 - Lámpara de exposición [B] (x 1)
 - Circuito estabilizador de la lámpara [C] (x 2, 1 cable plano)

Motor del escáner

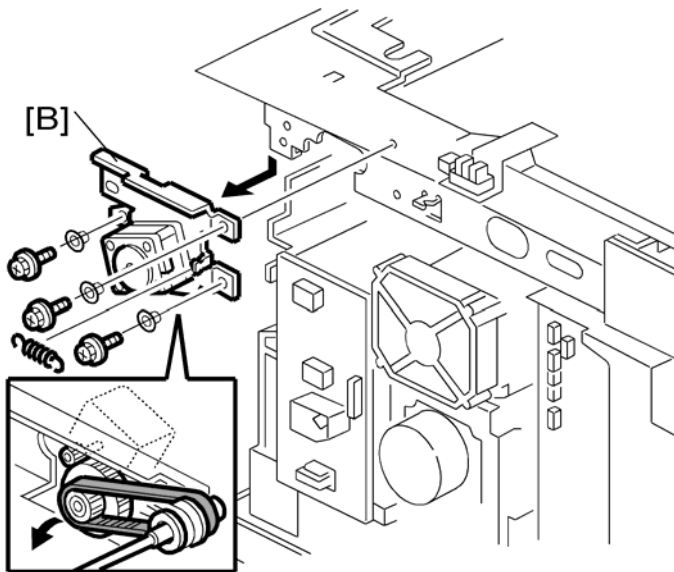
1. Tapa posterior (Pág.76)
2. Escala posterior, tapa superior derecha (Pág.77 "Panel de mandos y cubiertas superiores")



b262r507

3. Retire el refuerzo superior derecho [A] ( x 3).

4



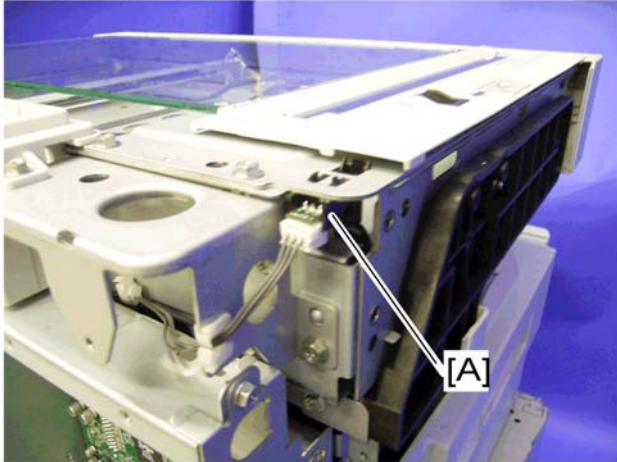
b130r907

4. Motor del escáner [B] ( x 3, 1 resorte, 3 soportes de tornillo,  x 1)

Reinstalación

Al volver a instalar, coloque los tornillos sin apretarlos; después ponga el muelle en su sitio y apriete los tornillos.

Sensor de posición inicial del escáner



b262r506

4

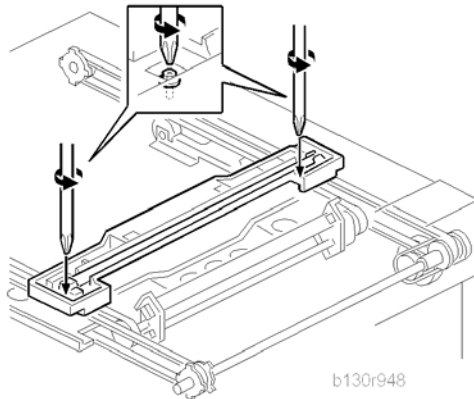
1. Tapa posterior (📄 Pág.76)
2. Tapa frontal izquierda (📄 Pág.77 "Panel de mandos y cubiertas superiores")
3. Sensor de posición de reposo del escáner [A] (📄 x 1, gancho)

⬇ Nota

- Mueva el primer escáner desde la posición de reposo si le resulta difícil quitar el sensor.

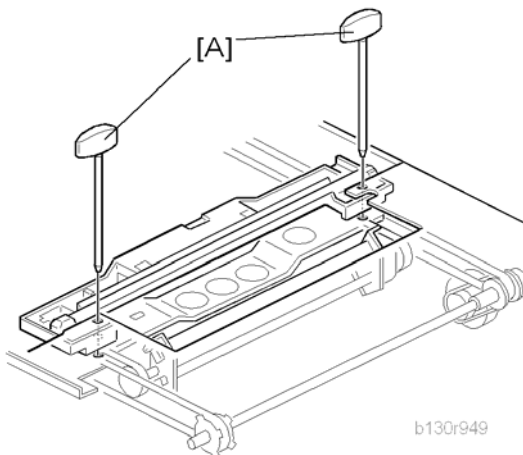
Ajuste de la alineación del escáner

1. Tapa posterior (📄 Pág.76)
2. Escala posterior, tapa superior derecha, tapa frontal izquierda, panel de mandos (📄 Pág.77 "Panel de mandos y cubiertas superiores")
3. Cristal de exposición (📄 Pág.80)
4. Afloje los 2 tornillos que sujetan las correas del primer y segundo escáner.



5. Deslice el primer y segundo escáner de forma que los cuatro elementos siguientes queden más o menos alineados en los lados delantero y trasero:

- El orificio de la tapa de la copiadora
- El orificio en el primer escáner
- El orificio de la esquina derecha del segundo escáner
- El orificio de la base del escáner



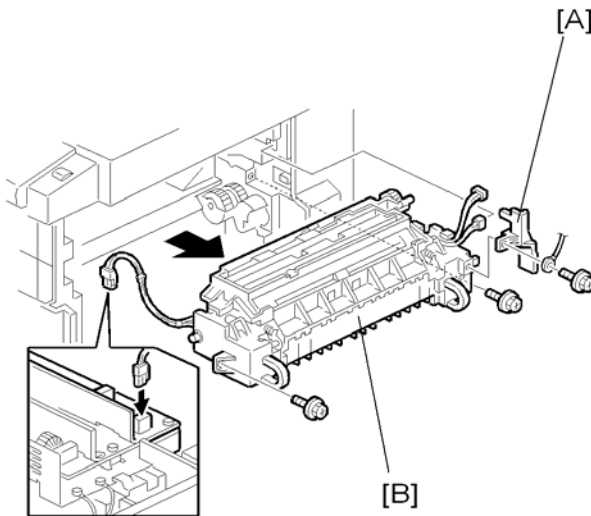
6. Introduzca las dos herramientas de ajuste del sistema óptico [A] y ajuste los escáneres como sea necesario hasta que las herramientas pasen por los cuatro orificios.
7. Apriete los dos tornillos aflojados en el paso 2 anterior, de forma que las correas queden firmemente sujetas en su sitio.
8. Retire las herramientas de ajuste.

Fusión

Unidad de fusión

⚠ PRECAUCIÓN

- Antes de manipular la unidad de fusión, asegúrese de que la unidad está suficientemente fría. La unidad de fusión puede alcanzar temperaturas muy elevadas.



b130r950

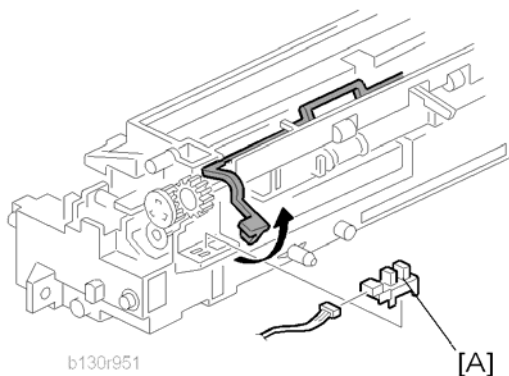
1. Bandeja de copias (📄 Pág.76)
2. Abra la puerta derecha.
3. Tapa del conector [A] (🔧 x 1)

⬇ Nota

- Al reinstalar, fije el cable de conexión a tierra.

4. Unidad de fusión [B] (🔧 x 2, 📄 x 4)

Sensor de salida

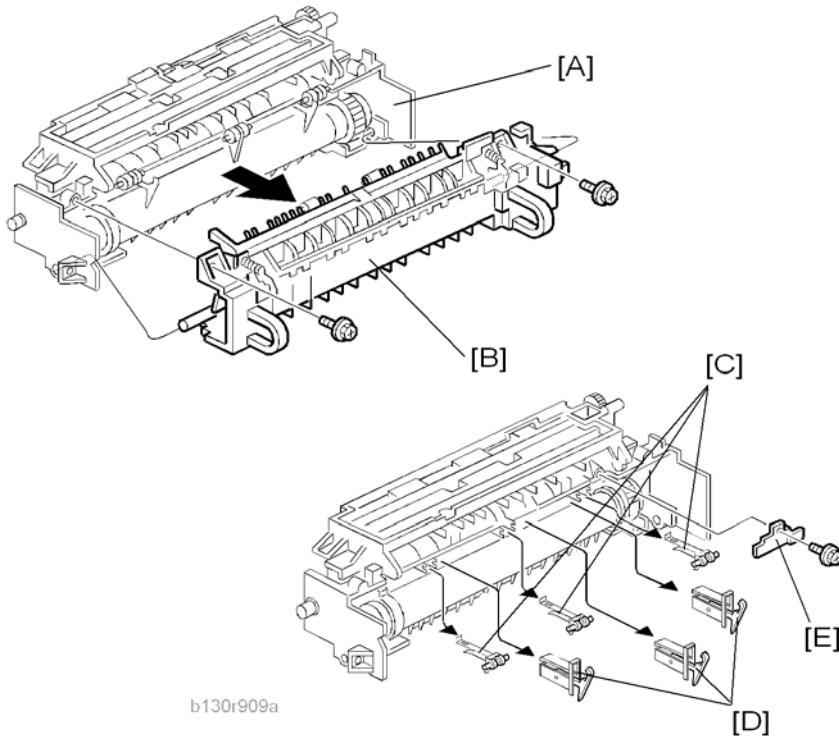


1. Unidad de fusión (📄 Pág.86)
2. Sensor de salida [A] (📄 x 1)

Uñas del expulsor del rodillo de calor

★ Importante

- Tenga cuidado de no dañar las uñas del expulsor del rodillo de calor ni los muelles de tensión.



4

1. Unidad de fusión (🔧 Pág.86)
2. Separe la unidad de fusión en dos secciones: la sección del rodillo de calor [A] y la sección del rodillo de presión [B] (🔧 x 2).
Después de retirar los tornillos, baje hasta la mitad la sección del rodillo de presión y deslícela hacia la parte delantera para separarla.
3. Rodillos de soporte [C]
4. Uñas de expulsión del rodillo de calor [D]

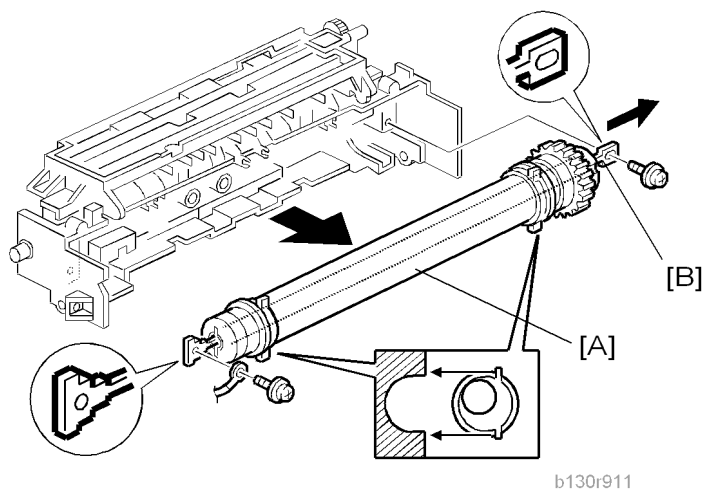
⬇️ **Nota**

- Quite el espaciador [E] (🔧 x 1) si está quitando el conjunto del rodillo de calor (🔧 Pág. 88 "Rodillo de calor y lámpara de fusión").

Rodillo de calor y lámpara de fusión

⚠️ PRECAUCIÓN

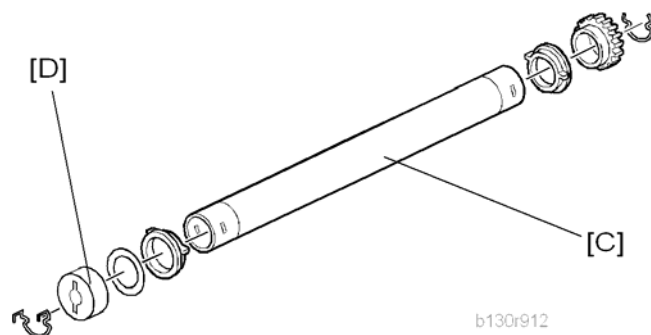
- No toque la lámpara de fusión ni los rodillos con las manos descubiertas.



1. Uñas del expulsor del rodillo de calor y espaciadores (Pág.87)
2. Conjunto del rodillo de calor [A] (x 2)
3. Lámpara de fusión [B].

Nota

- Durante el reensamblaje, compruebe que la dirección de la lámpara de fusión es correcta.



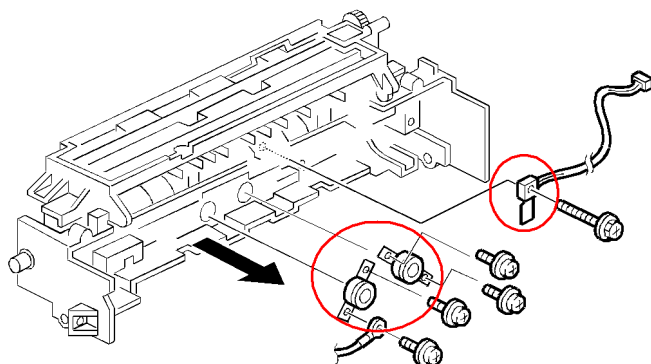
4. Rodillo de calor [C] (2 arandelas en C, 1 espaciador, 1 engranaje, 2 casquillos, 1 tapa [D]).

Reensamblaje

Asegúrese de que:

- La lámpara de fusión está correctamente colocada.
- La lámpara de fusión no toca la parte interna del rodillo de calor.

Termointerruptor y termistor



b130r913

4

1. Conjunto del rodillo de calor (Pág.88 "Rodillo de calor y lámpara de fusión")
2. Termointerruptor (x 2 para cada uno)
3. Termistor (x 1)

Reensamblaje

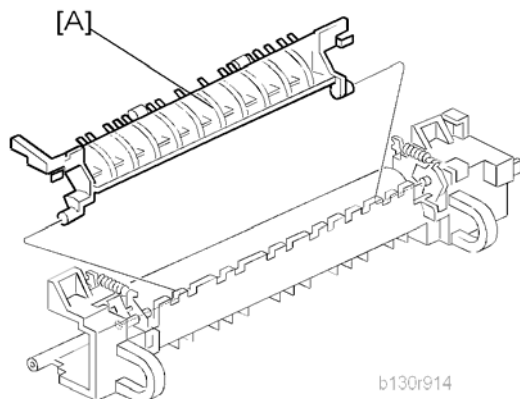
Compruebe lo siguiente:

- Que el termistor está en contacto con el rodillo de calor.
- Que el rodillo de calor gira uniformemente.

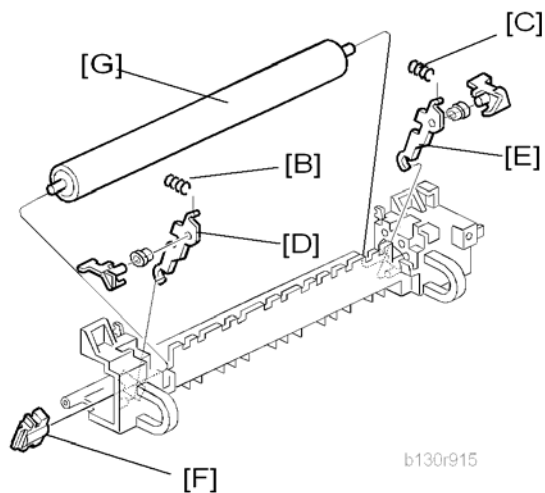
Nota

- No recicle un termointerruptor que ya se ha abierto. Si lo hace, no podremos garantizar su seguridad.

Rodillo de presión






1. Separe la unidad de fusión en dos secciones (► Pág.87).
2. Guía de entrada de fusión [A]



3. Dos muelles [B][C]
4. Dos brazos de presión [D][E]
5. Casquillo [F].
6. Rodillo de presión [G].

Comprobación de la banda de contacto

Podrá comprobar la banda de contacto para ver si la unidad de fusión está en buen estado, especialmente si el rodillo de calor y el rodillo de presión están correctamente instalados.

1. Active el modo SP.
2. Seleccione SP1-109-001.
3. Especifique "1".
4. Pulse la tecla OK.
5. Pulse la tecla . Se activa el modo de copia.
6. Coloque una hoja OHP en la bandeja bypass.
7. Pulse la tecla . La copiadora alimentará la hoja OHP y la detendrá entre el rodillo de calor y el rodillo de presión durante unos 20 segundos.
8. Espere hasta que salga la hoja OHP.
9. Pulse la tecla .
10. Asegúrese de que está seleccionado SP1-109-001.
11. Especifique "0".
12. Pulse la tecla OK.
13. Salga del modo SP.

Verá una línea opaca en la hoja OHP. Es la marca de la banda de contacto. La banda de contacto normal es simétrica respecto de la hoja OHP. Ambos extremos son ligeramente más gruesos que el centro.

Nota

- No hay especificaciones ni normas para la banda de contacto de esta copiadora.

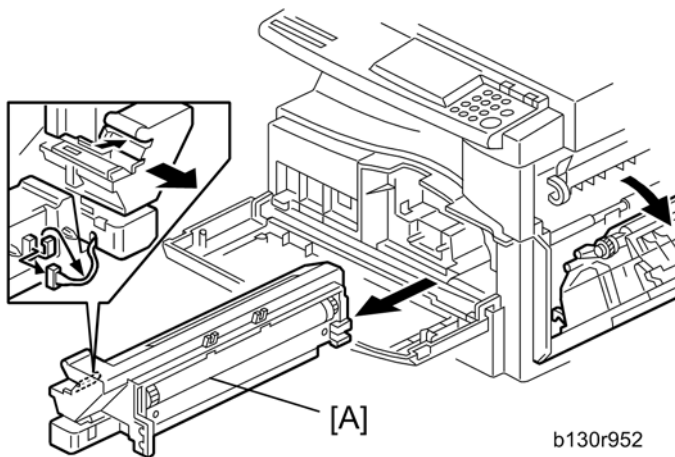
PCU y lámpara de extinción

Al manipular la unidad del fotoconductor (PCU), tenga mucho cuidado:

- No toque el tambor del OPC con las manos descubiertas. Cuando el tambor del OPC esté sucio, límpielo con un paño seco o con un algodón humedecido y después con un paño seco.
- No utilice alcohol ni otros productos químicos para limpiar el tambor del OPC. Estas sustancias dañan la superficie del tambor del OPC
- Guarde las PCU en un lugar fresco y seco.
- No exponga el OPC a ningún gas corrosivo, como el amoníaco.
- No agite una PCU usada. El tóner y el revelador restantes pueden derramarse.
- Deseche las PCU usadas de acuerdo con la normativa local.

4

PCU



1. Abra la puerta derecha.

↓ **Nota**

- La PCU puede quedarse atascada si intenta quitarla mientras la puerta delantera está cerrada.

2. Abra la puerta delantera.
3. Retire el soporte de la botella de tóner.

↓ **Nota**

- Limpie el tóner que se haya derramado por la zona de la botella de tóner y el interior de la puerta delantera.

4. Extraiga la PCU [A] (EJ x 1).

5. Al instalar una nueva PCU, retire la espuma de estireno y las etiquetas (📄 Pág.27 "Copiadora" en el capítulo "Instalación").

Inicialización

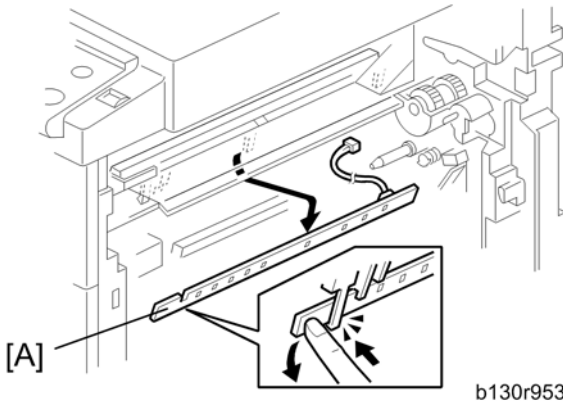
Cuando encienda el interruptor principal, la copiadora inicializará automáticamente la nueva PCU.

Cuando la copiadora esté ejecutando la inicialización, es importante que:

- No apague el interruptor principal.
- No abra ni quite las cubiertas exteriores.

Lámpara de extinción

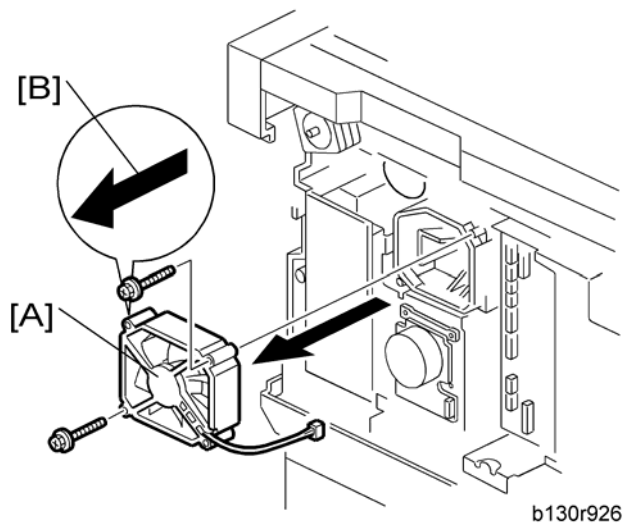
4



1. PCU (📄 Pág.93)
2. Lámpara de extinción [A] (📄 x 1)

Extractor y motor principal

Extractor



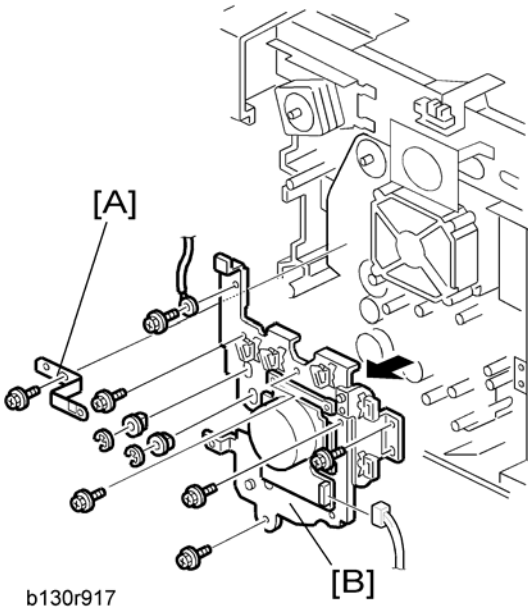
1. Tapa posterior (Pág.76)
2. Extractor [A] (x 2, x 1)

Reensamblaje

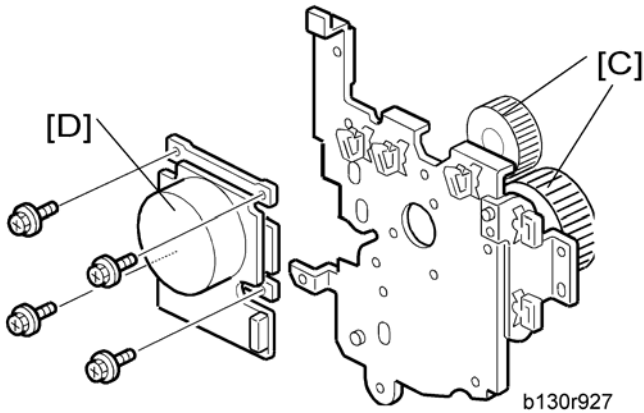
Asegúrese de que la flecha [B] del bastidor está orientada hacia atrás. La flecha indica la dirección del flujo de aire.

Motor principal

4



1. Tapa posterior (■ Pág.76)
2. Placa de alimentación de alta tensión (■ Pág.115)
3. Placa de tierra [A] (🔩 x 1)
4. Motor principal con tapa de engranajes [B] (🔩 x 1, 🛠 x 7, ⚙ x 2, 2 casquillos)



5. Todos los engranajes [C].
6. Motor principal [D] (🔩 x 4)

Reensamblaje

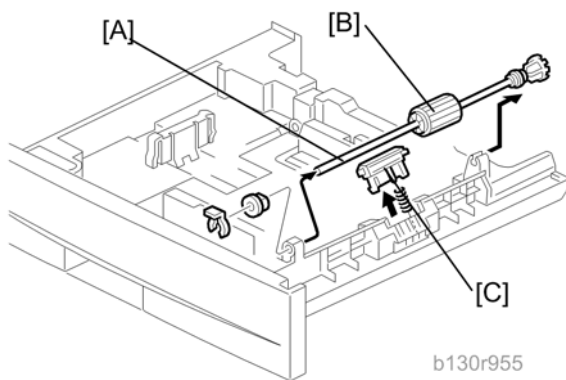
Fije el motor principal antes de fijar los engranajes.

Alimentación del papel

Rodillo de alimentación de papel y almohadilla de fricción

Al manipular la bandeja de papel o el rodillo de alimentación de papel, tenga mucho cuidado:

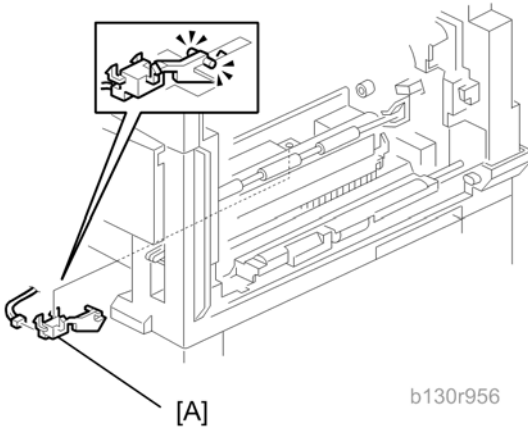
- No toque la superficie de los rodillos de avance de papel.
- Para evitar atascos de papel, ajuste correctamente las guías laterales y de extremo de la bandeja de papel.



1. Bandeja de papel
2. Eje [A] (☞ x 1)
3. Retire lo siguiente (uno o ambos):
 - Rodillo de alimentación de papel [B].
 - Almohadilla de fricción [C].

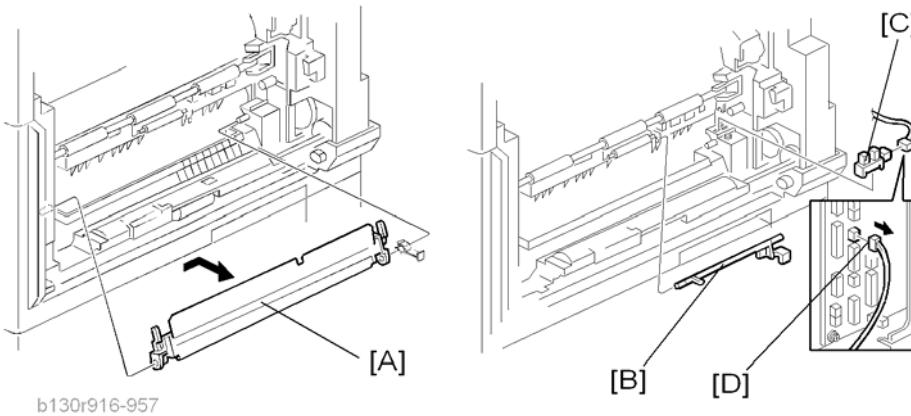
Sensor de fin de papel

4



1. Bandeja de papel
2. Abra la puerta derecha.
3. PCU (Pág.93)
4. Sensor de fin de papel [A] (x 1)

Sensor de registro



1. Bandeja de papel
2. Abra la puerta derecha.
3. Retire la guía de papel [A].

Nota

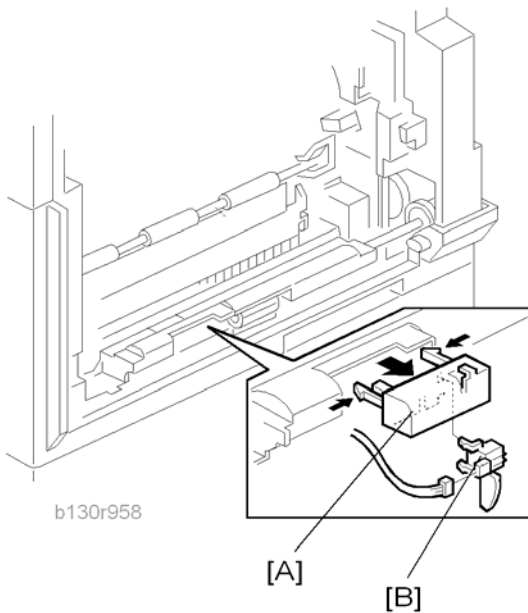
- Retire la guía de papel (pinza x 1) si le resulta difícil quitar el sensor de registro.

4. Detector del sensor de registro [B].
5. Sensor de registro [C] (📄 x 1)

↓ **Nota**

- Desconecte el conector (CN127 [D]) si le resulta difícil quitar el sensor de registro.

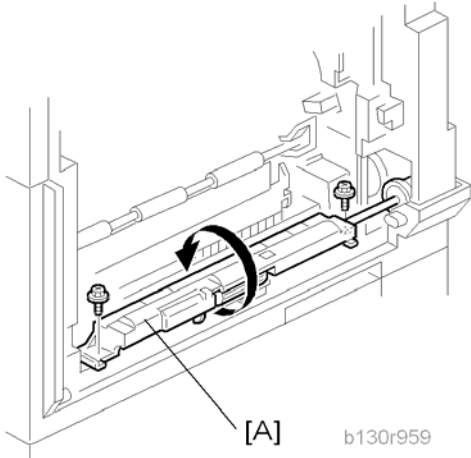
Sensor de papel agotado en bypass



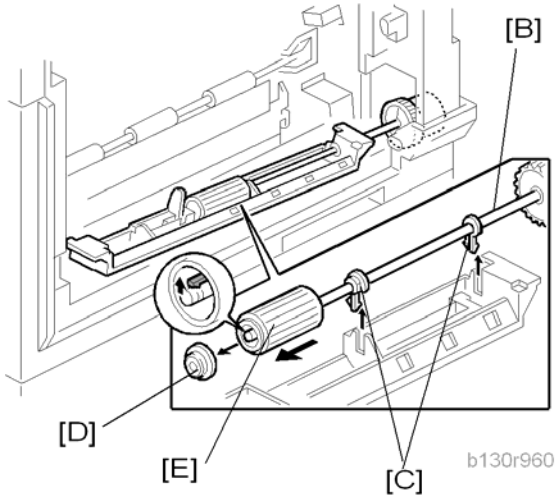
1. Puerta derecha (📄 Pág.78)
2. Compartimento del sensor [A].
3. Sensor de fin de papel bypass [B] (📄 x 1)

Rodillo de alimentación bypass

4

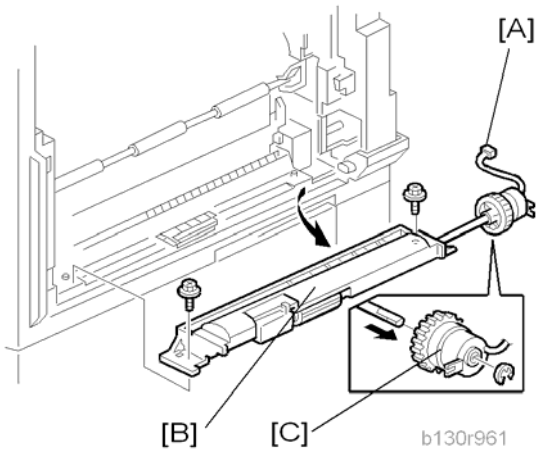


1. Puerta derecha (Pág.78)
2. Dé la vuelta al alojamiento del rodillo de alimentación [A] (x 2).

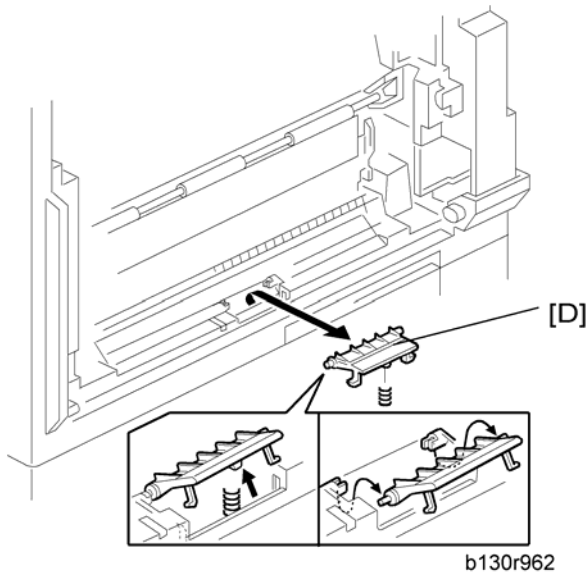


3. Eje del rodillo de alimentación [B] (2 uñas de retención [C], 1 espaciador [D]).
4. Rodillo de alimentación bypass [E].

Embrague de alimentación bypass y almohadilla de fricción

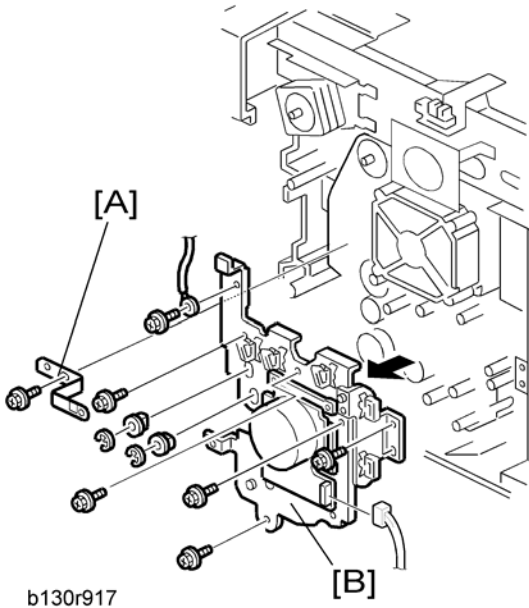


1. Tapa posterior (📄 Pág.76)
2. Puerta derecha (📄 Pág.78)
3. Desconecte el conector del embrague de alimentación bypass [A] (CN93).
4. Alojamiento del rodillo de alimentación bypass [B] (🔩 x 2)
5. Embrague de alimentación bypass [C] (⚙️ x 1)



6. Almohadilla de fricción bypass [D].

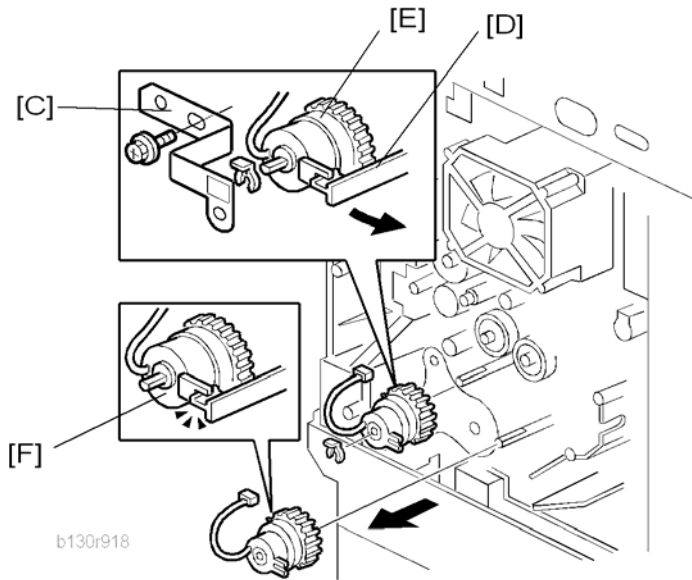
Embragues de registro y alimentación de papel






1. Bandeja de papel
2. Placa de alimentación de alta tensión (Pág.115)
3. Placa de tierra [A] (x 1)
4. Tapa del engranaje [B] (x 1, x 7, x 2, 2 engranajes)

Nota

- No quite el motor principal de la tapa de engranajes.



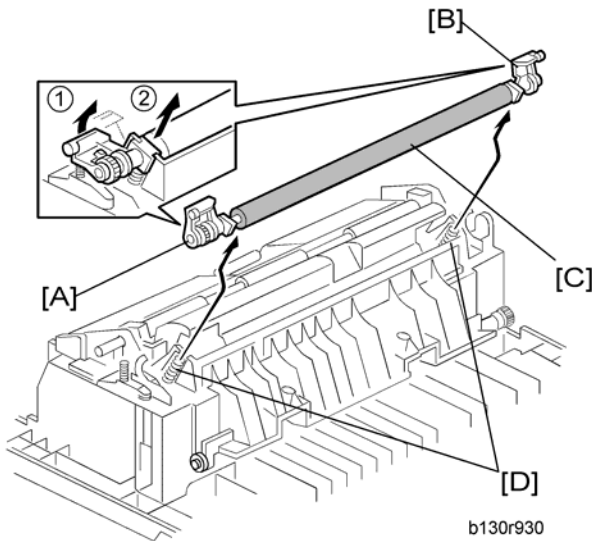
5. Placa de tierra [C] ( x 1)
6. Empuje lentamente el soporte del embrague [D] y quite el embrague de registro ( x 1,  x 1).
7. Embrague de alimentación de papel [F].

Transferencia de imágenes

Rodillo de transferencia

⚠ PRECAUCIÓN

- No toque el rodillo de transferencia con las manos descubiertas.
- No arañe el rodillo de transferencia. El rodillo de transferencia se estropea con facilidad.

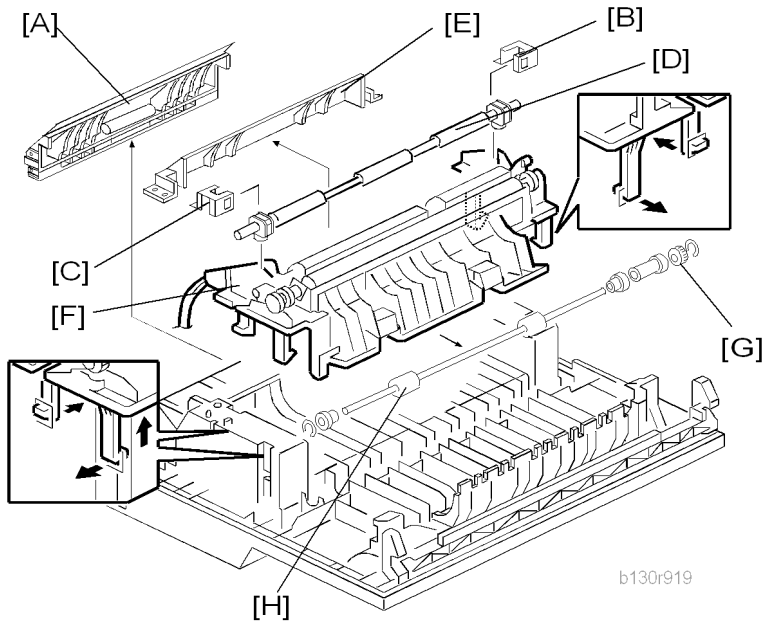


1. Puerta derecha (🔧 Pág.78)
2. Levante las palancas [A] y [B] de los extremos del rodillo de transferencia de imágenes.
3. Suelte el rodillo de transferencia de imágenes [C].

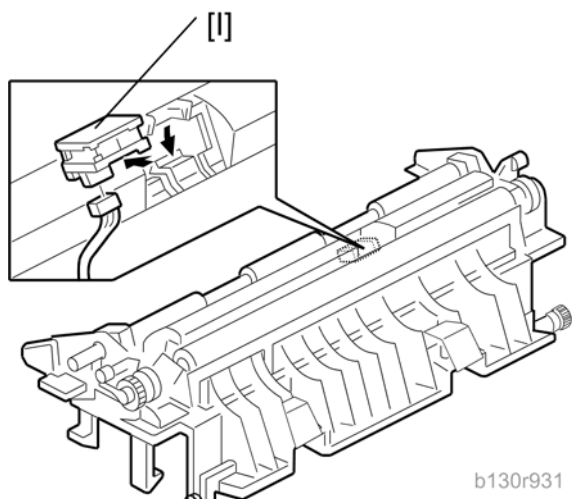
Reensamblaje

Asegúrese de que los muelles [D] están en las posiciones originales.

Sensor ID y rodillo dúplex



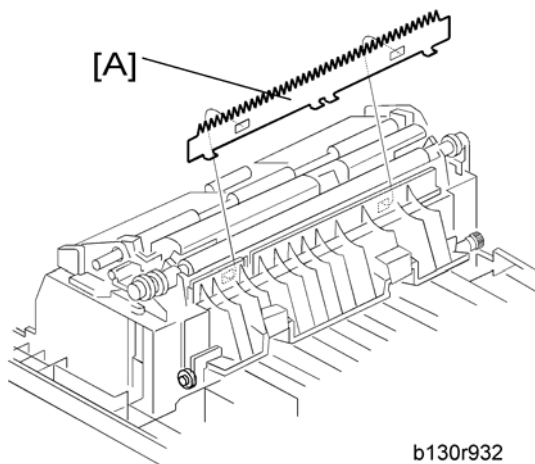
1. Puerta derecha (Pág.78)
2. Guía inferior [A].
3. Soportes del rodillo libre [B][C].
4. Rodillo libre [D].
5. Guía del rodillo [E].
6. Unidad de transferencia [F].
7. Engranaje unidireccional [G] (x 1)
8. Rodillo de dúplex [H] (x 1, 3 casquillos)



b130r931

9. Sensor ID [I] (E x 1)

Placa de descarga



b130r932

1. Puerta derecha (Pág.78)
2. Placa de descarga [A]

BICU y circuito del controlador

⚠️ PRECAUCIÓN

- Antes de la sustitución, apague el interruptor principal y desenchufe la máquina.
- Antes de apagar el interruptor principal, compruebe que no hay ningún componente mecánico en funcionamiento. Si apaga el interruptor principal mientras hay componentes mecánicos funcionando, estos pueden pararse fuera de sus posiciones de reposo. El componente en cuestión se dañará si trata de quitarlo cuando no está en la posición de reposo.

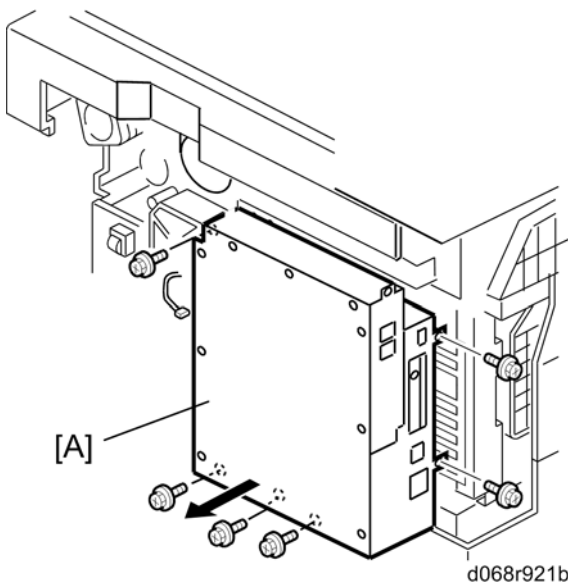
BICU

4

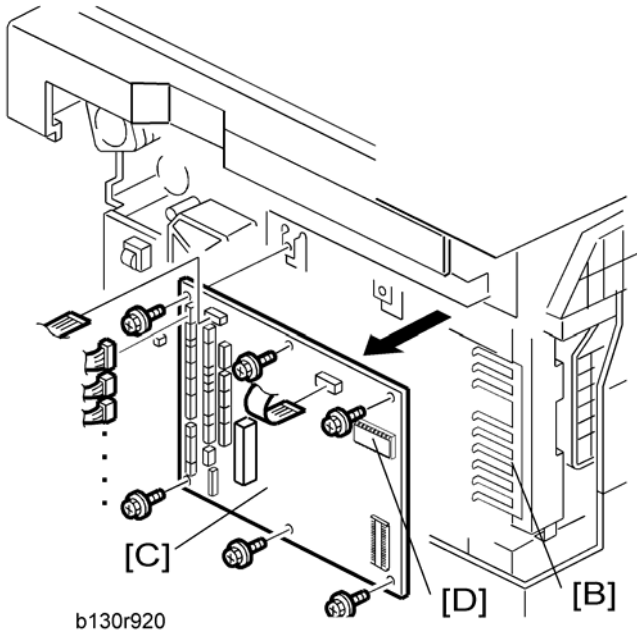
Preparación

- Antes de sustituir la NVRAM, asegúrese de guardar los datos de la NVRAM.
- Guardar desde la NVRAM de BICU a una tarjeta SD (📄 Pág. 142 "Carga/descarga de los datos de la NVRAM" en el "Modo de servicio del sistema" de los apéndices de este manual).

Procedimiento



1. Tapa posterior (📄 Pág.76)
2. Tapa superior izquierda del escáner (📄 Pág.77)
3. Caja del controlador [A] (🔩 x 6, 📦 x 1)



4. Placa de tierra [B] (x 2)
5. BICU [C] (todos , 2 cables planos, x 6)

Nota

- Al sustituir la BICU, quite la NVRAM [D] del circuito. Instale la NVRAM en el circuito nuevo.
6. Cuando haya sustituido la NVRAM, copie en ella los datos guardados.
 - Desde una tarjeta SD a la NVRAM (Pág.142 "Carga/descarga de los datos de la NVRAM" en el "Modo de servicio del sistema" de los apéndices de este manual).

Circuito del controlador

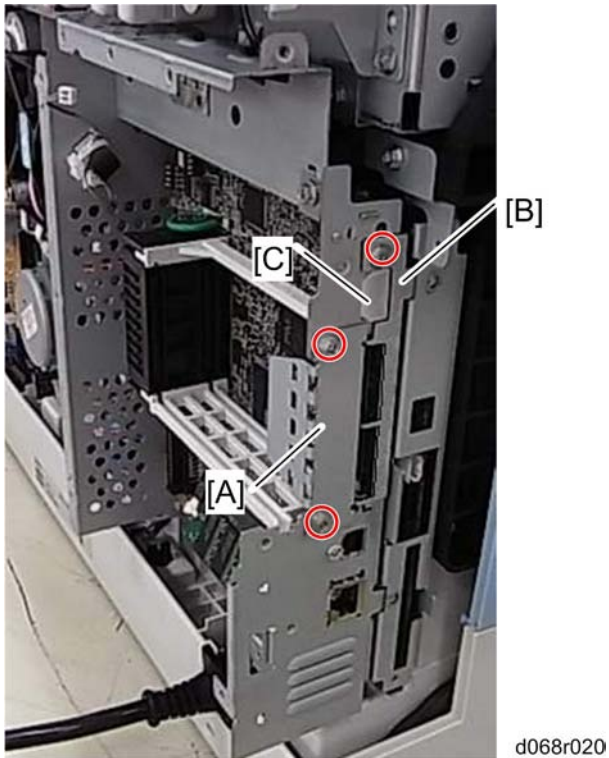
Preparación:

- Antes de sustituir el circuito del controlador, asegúrese de imprimir los datos SMC o guardar los datos de la NVRAM.
- Guardar desde la NVRAM del controlador a una tarjeta SD (Pág.142 "Carga/descarga de los datos de la NVRAM" en el "Modo de servicio del sistema" de los apéndices de este manual).

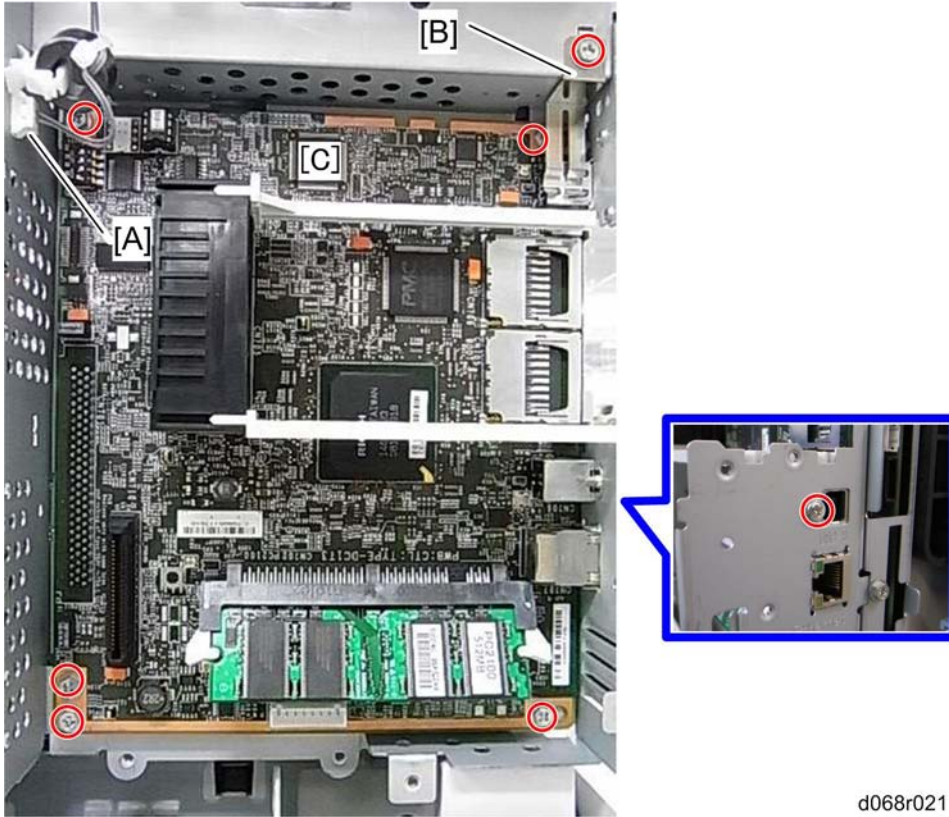
Procedimiento

1. Tapa posterior (Pág.76)
2. Tapa superior izquierda del escáner (Pág.77)



3. FCU (Unidad de control de fax) (🔧 Pág.118)

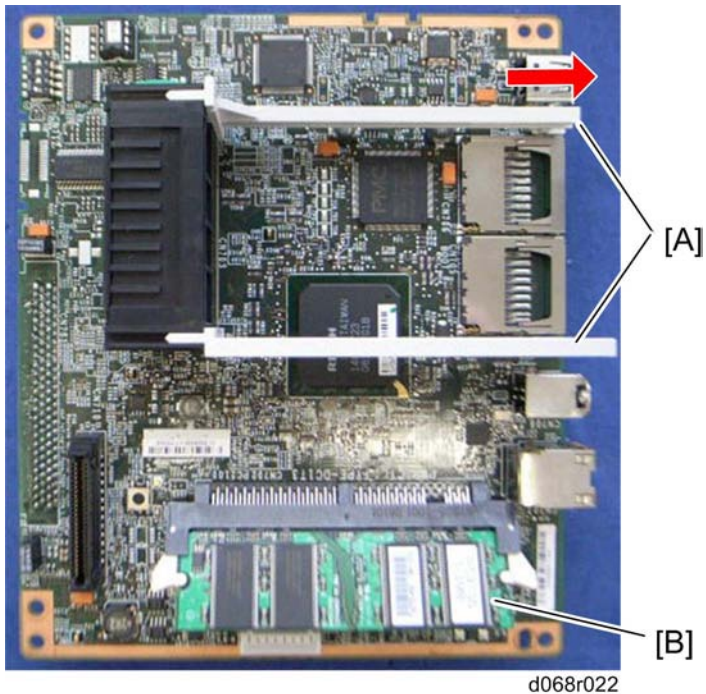


4. Extraiga la tarjeta SD de la impresora/escáner.
5. Retire la tapa de interface [A] (o las opciones de interface si se han instalado) (🔧 x 2).
6. Retire el soporte [B] (🔧 x 1).
7. Retire la tapa de USB [C].



d068r021

8. Retire el conector de relé [A].
9. Retire la placa de tierra [B] ( x 1).
10. Retire el circuito del controlador con las guías [C] ( x 6).



11. Libere los ganchos y, a continuación, extraiga las guías [A].
12. Extraiga la DIMM [B] si está instalada.

Nota

- Al sustituir el circuito del controlador, retire las NVRAM del circuito. Instale las NVRAM en el circuito nuevo.

Cuando instale una nueva placa del controlador

1. Instale la NVRAM de la vieja placa de controlador en una nueva placa de controlador.
1. Instale la nueva placa de controlador en la máquina.
2. Desconecte los cables del disco duro de la placa del controlador, si se ha instalado el disco duro opcional.

Importante

- **Desconectar los cables del disco duro es muy importante. De lo contrario, el disco duro se formatea automáticamente y todos los datos que contiene se pierden debido a la limitación de seguridad.**
3. Monte de nuevo la máquina.
 4. Encienda el interruptor de alimentación principal del aparato.
 - Si no se ha instalado el disco duro opcional, el procedimiento de instalación se ha completado.

- Si se ha instalado el disco duro opcional, vaya al paso siguiente.

5. Apague la alimentación principal de la máquina, y luego conecte los cables del disco duro de nuevo.

Nota

- No olvide imprimir los informes SMC ("Datos del modo SP" y "Datos de registro") antes de sustituir las NVRAM.

⚠ PRECAUCIÓN

- Mantenga alejadas las NVRAM de cualquier objeto que pueda producir electricidad estática. La electricidad estática puede dañar los datos de la NVRAM.
- Asegúrese de que la NVRAM está correctamente instalada en la placa del controlador.

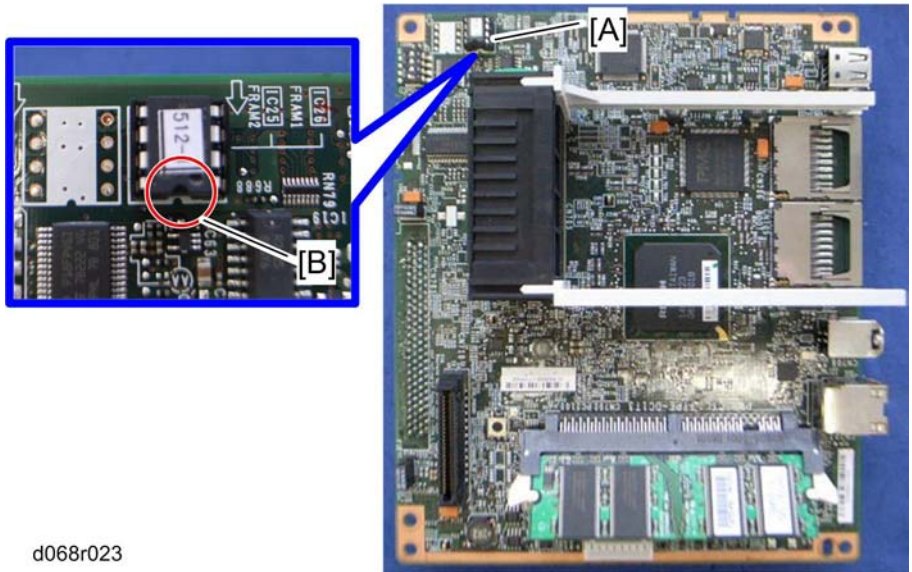
4

Al sustituir la NVRAM del circuito del controlador

1. Desconecte los cables del disco duro de la placa del controlador.

★ Importante

- Desconectar los cables del disco duro es muy importante. De lo contrario, el disco duro se formatea automáticamente y todos los datos que contiene se pierden debido a la limitación de seguridad.



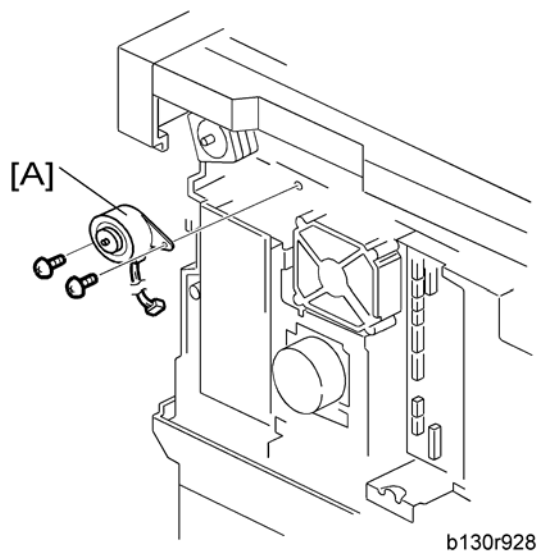
2. Instale una nueva NVRAM en el controlador. Monte de nuevo la máquina.

- Al sustituir la NVRAM [A], asegúrese de que queda correctamente instalada.
- La marca [B] en la NVRAM debería estar orientada hacia abajo (vista desde la parte posterior de la máquina).

3. Extraiga la tarjeta de seguridad o la tarjeta de la impresora/escáner de la ranura SD 1.
4. Instale una nueva tarjeta de seguridad en la ranura SD 1.
5. Encienda el interruptor principal.
6. Se produce un SC995-02.
7. Apague la máquina.
8. Conecte los cables del disco duro a la placa del controlador.
9. Vuelva a ensamblar la máquina, y enciéndala.
10. Haga la autocomprobación del control de proceso
11. Realice el ACC para el programa de aplicación de la copiadora.
12. Realice el ACC para el programa de aplicación de la impresora.
13. Ejecute SP5-878-001 para instalar la aplicación DataOverwriteSecurity.
14. Ejecute SP5878-002 para instalar la aplicación de Cifrado del disco duro.
15. Si es necesario, una todas las aplicaciones en una tarjeta SD en la ranura SD 1 con SP5831-001.
16. Copie los datos antiguos de la NVRAM en la nueva NVRAM con SP5-825 o introduzca los datos SMC en el aparato. (Para obtener más detalles, consulte Pág.142 "Carga/descarga de los datos de la NVRAM" en el "Modo de servicio del sistema" de los apéndices de este manual)

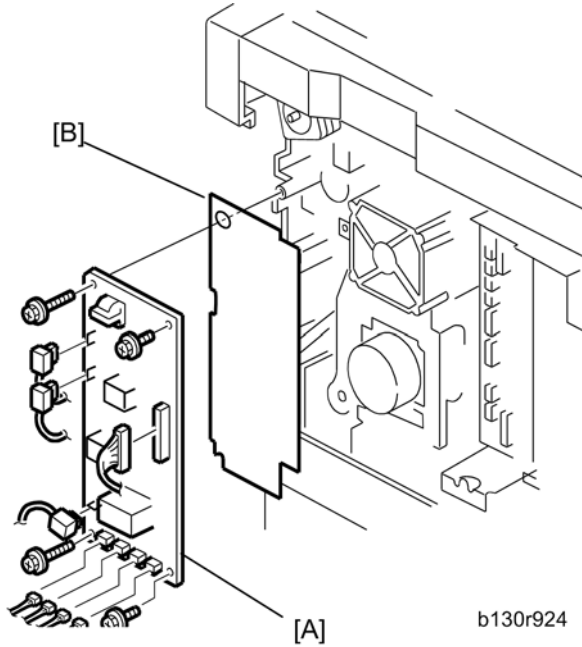
Otras sustituciones

Motor dúplex



1. Tapa posterior (Pág.76)
2. Motor dúplex [A] (x 1, x 2)

Circuito de alimentación de alta tensión



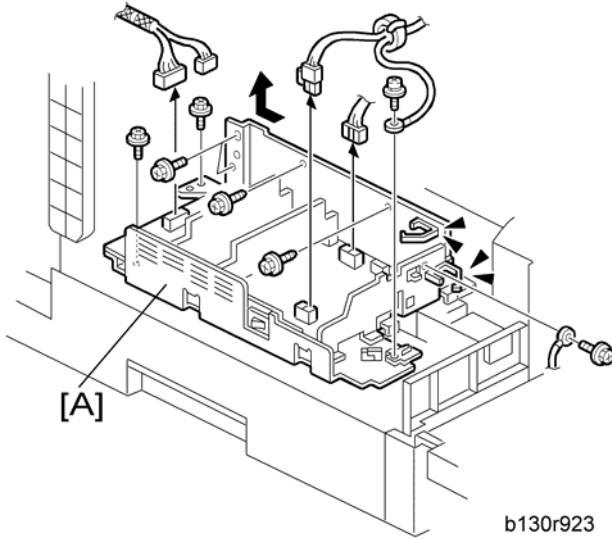
1. Tapa posterior (🔧 Pág.76)
2. Placa de alimentación de alta tensión [A] (todos 🛠️, 🛠️ x 4)

⬇ Nota

- Si va a extraer el solenoide de liberación por contacto, retire el panel de aislamiento [B] (🔧 Pág.117) o la tapa del engranaje (🔧 Pág.102 "Embragues de registro y alimentación de papel").

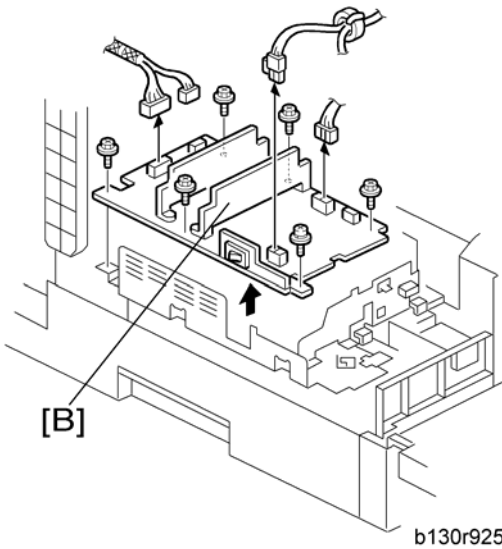
PSU

4



b130r923

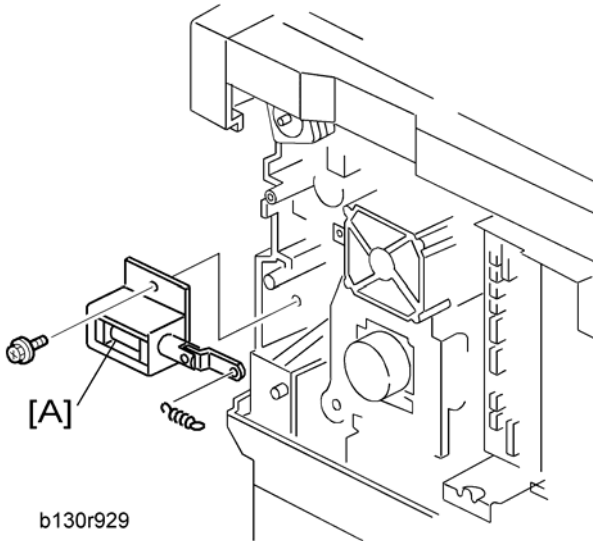
1. Abra la puerta delantera.
2. Bandeja de copias (Pág.76)
3. Conjunto de la PSU [A] (x 4, x 8)



b130r925

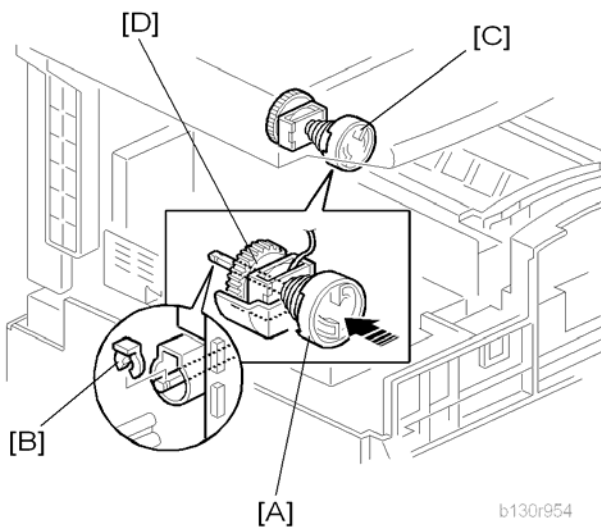
4. PSU [B] (x 4, x 6)

Solenoide de liberación de contacto



1. Tapa posterior (Pág.76)
2. Placa de alimentación de alta tensión (Pág.115)
3. Solenoide de liberación de contacto [A] (1 resorte, x 1)

Embrague de suministro de tóner



1. Soporte de la botella de tóner.

2. Bandeja de copias (Pág.76)
3. Tapa posterior (Pág.76)
4. Desconecte el conector de C19 de la BICU.
5. Empuje el acoplador del embrague [A] hacia el lado trasero, y quite la pinza de sujeción [B] de la parte trasera de la copiadora.
6. Acoplador y muelle [C].
7. Levante el embrague de suministro de tóner [D] y quítelo.

Nota

- Al quitarlo, observe cómo el cable pasa por una abrazadera y también el lugar por donde pasa en la parte trasera de la máquina.

4

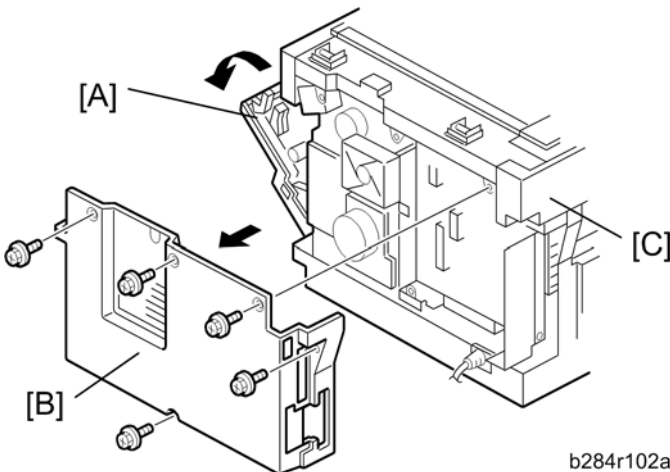
FCU

Pilas de litio


⚠ PRECAUCIÓN

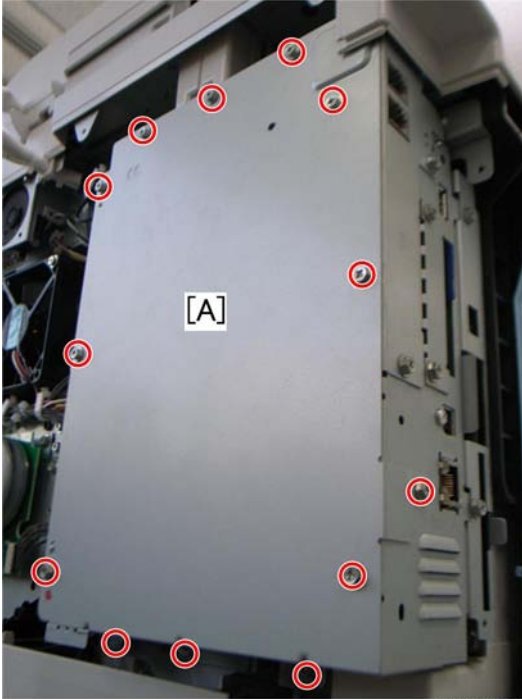
- Un cambio incorrecto de las pilas de litio en el controlador o en la unidad de fax supone un riesgo de explosión. Sustituya las pilas sólo con el mismo tipo de pilas o un tipo equivalente recomendado por el fabricante. Deseche las baterías usadas de acuerdo con las instrucciones del fabricante.

Procedimiento



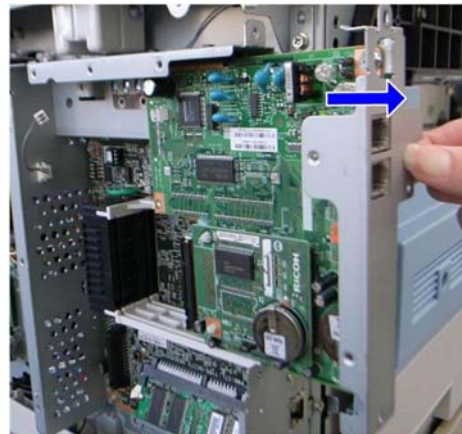
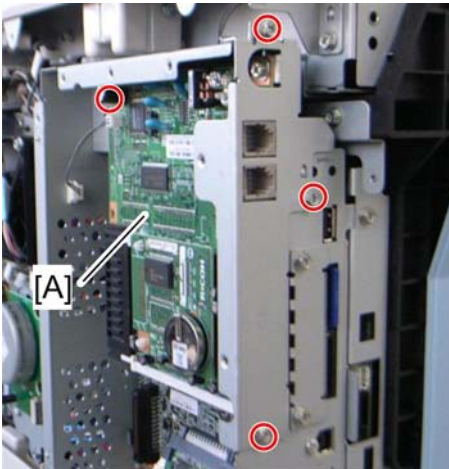
1. Abra la puerta derecha [A].

2. Tapa trasera [B] ( x 5).
3. Tapa superior izquierda del escáner [C]



d068r025

4. Tapa de la caja del control [A] ( x 13)



d068r026

5. FCU [A] ( x 4,  x 1)
6. Cuando sustituya la placa FCU, retire la placa MBU de la FCU anterior e instálela en la nueva FCU.

7. Configure la fecha y la hora correctas con Herramientas de usuario > Configuración del sistema > Configuración del temporizador > Configurar fecha/Configurar hora.

 **Nota**

- No apague el interruptor de la batería (SW1).
- Ejecute SP6-101 en el "Fax SP" para imprimir los parámetros del sistema y comprobar los ajustes.

Unidad láser

⚠️ ADVERTENCIA

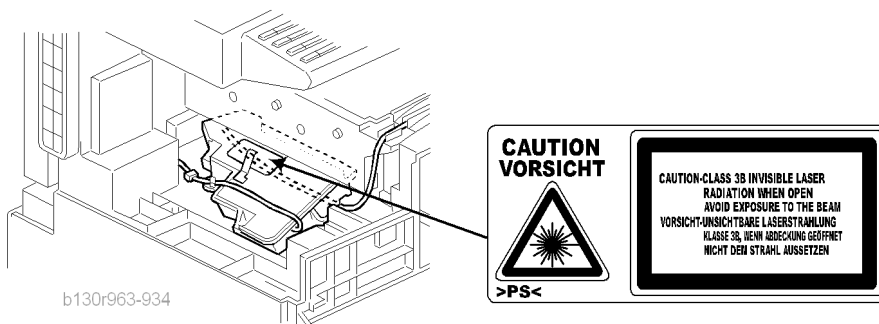
- Antes de la sustitución, apague el interruptor principal y desenchufe la copiadora. El rayo láser puede provocar graves lesiones en la vista.

⚠️ PRECAUCIÓN

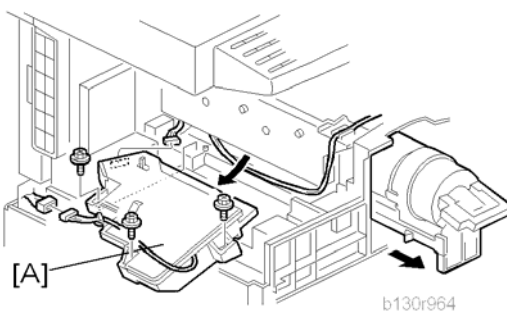
- No toque los tornillos del circuito LD de la unidad LD. No intente ajustar ninguna pieza de la unidad LD. La unidad LD se ajusta con precisión antes del envío.
- No toque el espejo poligonal, el cristal protector ni las lentes con las manos descubiertas.

4

Ubicación de la etiqueta de Precaución

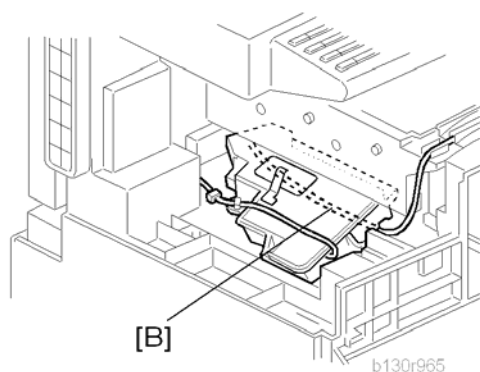


Unidad láser



1. Conjunto de fuente de alimentación eléctrica (PSU) (📄 Pág. 116)
2. Soporte de la botella de tóner.
3. Unidad láser [A] (🔧 x 3, 📄 x 2)

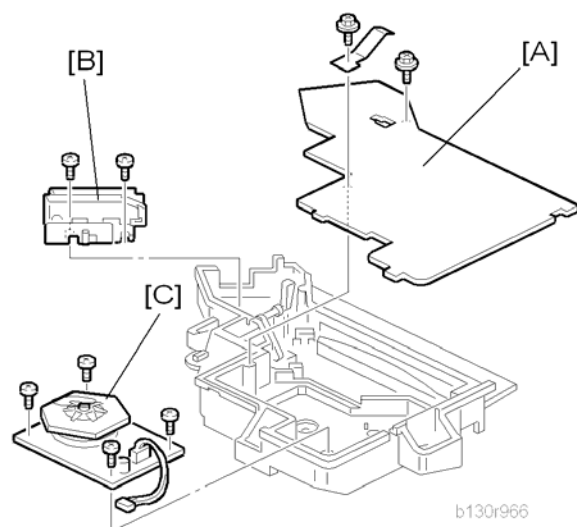
Reensamblaje



4

Asegúrese de que el cable [B] pasa por debajo de la unidad.

Unidad LD y motor del espejo poligonal



1. Unidad láser (📖 Pág.121)
2. Tapa de la unidad láser [A] (🔩 x 2, 1 placa de tierra)
3. Unidad LD [B] (🔩 x 2)
4. Motor del espejo poligonal [C] (🔩 x 4)

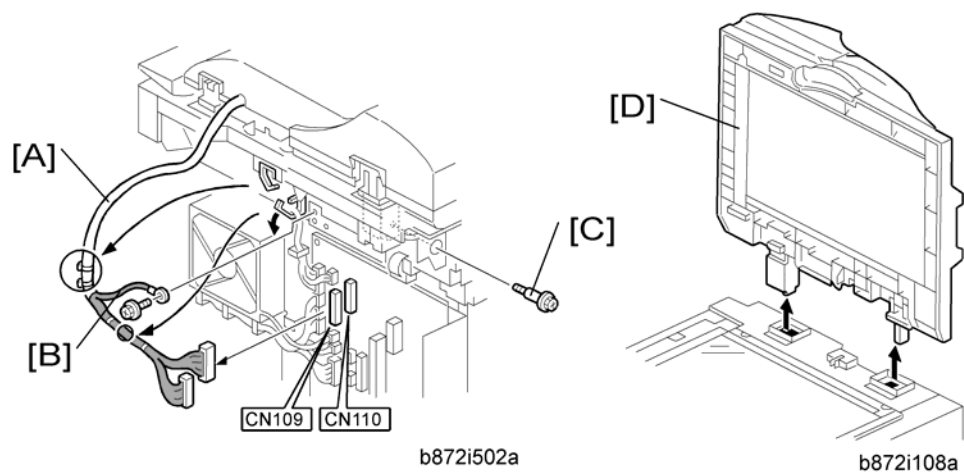
Reensamblaje

Compruebe que el espejo poligonal y la lente toroidal están limpios. El polvo y otras sustancias extrañas pueden afectar al funcionamiento de la unidad LD.

ARDF

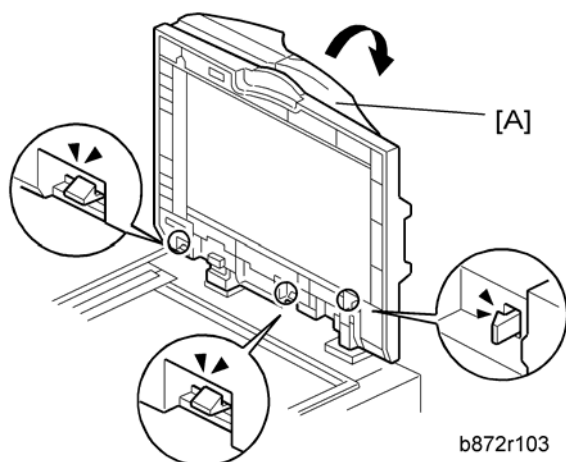
ARDF

1. Tapa posterior (🔧 Pág.76)

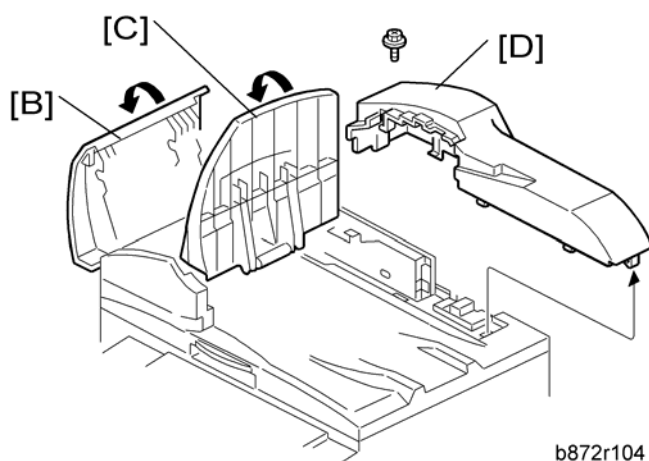



2. Retire los cables de interface del DF [A] (🔌 x 2, ganchos x 2).
3. Retire el cable de tierra [B] (🔧 x 1).
4. Quite el perno [C].
5. Retire el ARDF [D].

Tapa trasera del DF



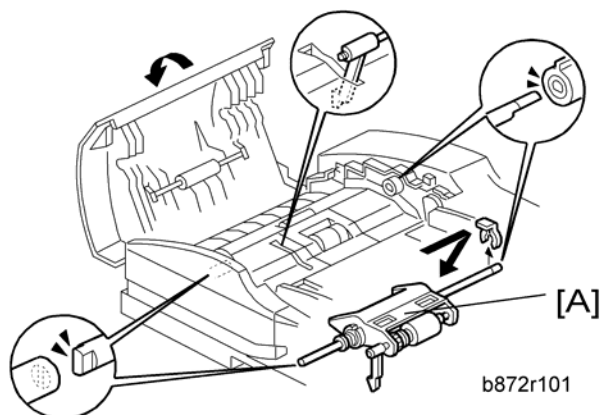
1. Abra el ARDF [A].
2. Suelte los tres ganchos



3. Abra la tapa izquierda del DF [B].
4. Abra la bandeja de originales [C].
5. Cubierta trasera del DF [D] ( x 1, gancho x 4)

Unidad de alimentación de originales

1. Abra la tapa izquierda del DF.

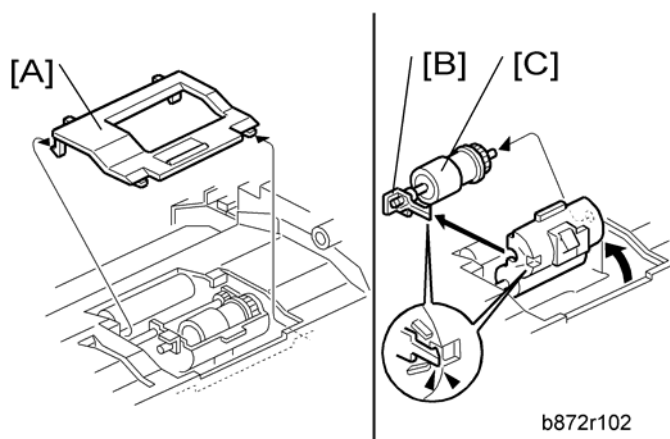


2. Unidad de alimentación de originales [A] (🔧 x 1)

4

Rodillo de separación

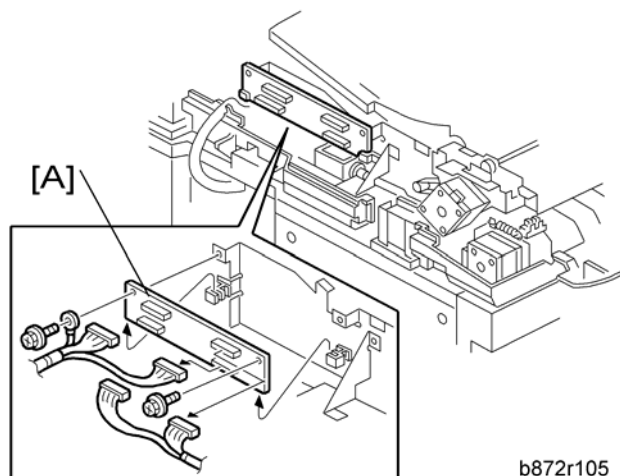
1. Abra la tapa izquierda del DF.
2. Unidad de alimentación de originales (🔧 Pág.124)





3. Tapa del rodillo de separación [A] (gancho x 2)
4. Retén del rodillo de separación [B] (gancho)
5. Rodillo de separación [C]

Placa de accionamiento del DF



1. Tapa posterior del DF (🔧 Pág.124)

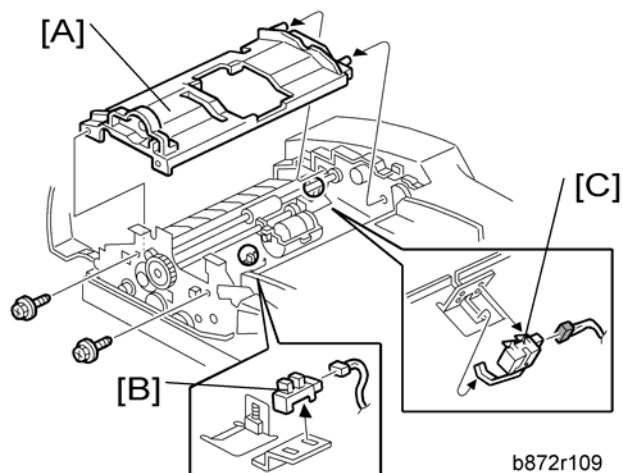


b872r105




2. Placa de accionamiento del DF [A] ( x 2,  x 4, cable de conexión a tierra x 1)

Sensor de inversión y presencia de original del DF

1. Abra la tapa izquierda del DF.
2. Unidad de alimentación de originales ( Pág. 124)
3. Embrague de alimentación del DF ( Pág. 130)

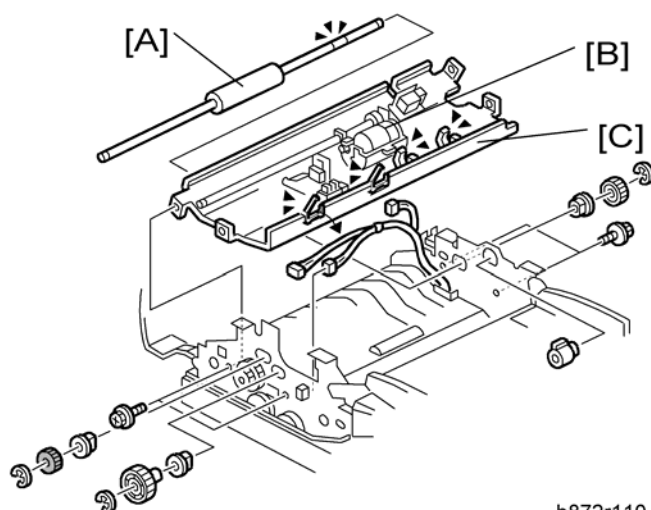


b872r109

4. Placa guía de alimentación de originales [A] ( x 2).
5. Sensor de presencia de original [B] ( x 1, gancho)
6. Sensor de inversión del DF [C] ( x 1, gancho)

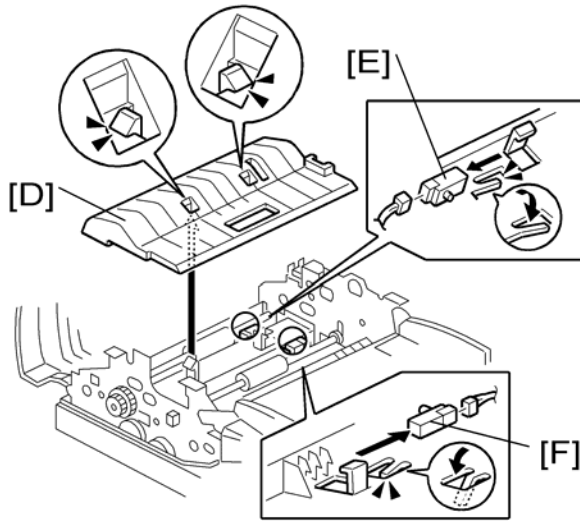
Sensor de registro y salida del DF

1. Abra la tapa izquierda del DF.
2. Unidad de alimentación de originales (🔧 Pág.124)
3. Embrague de alimentación del DF (🔧 Pág.130)
4. Placa guía de alimentación de originales (🔧 Pág.126 "Sensor de inversión y presencia de original del DF")
5. Motor de alimentación del DF (🔧 Pág.128)
6. Motor de transporte del DF (🔧 Pág.129)



b872r110

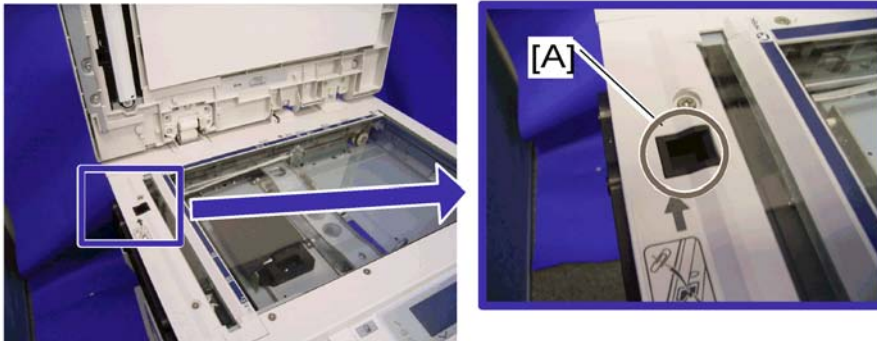
7. Rodillo de transporte del DF [A] (Ⓢ x 2, engranaje x 2, casquillo x 2)
8. Unidad del rodillo de separación del DF [B] (Ⓢ x 2, engranaje x 1, casquillo x 2)
9. Placa de transporte superior de inversión [C] (🔧 x 4, 📄 x 3, 📄 x 4)



b872r111

- 10. Placa de transporte inferior de inversión [D] (gancho x 2)
- 11. Sensor de registro del DF [E] (🔧 x 1, gancho)
- 12. Sensor de salida del DF [F] (🔧 x 1, gancho)

Reflector del sensor de registro del DF

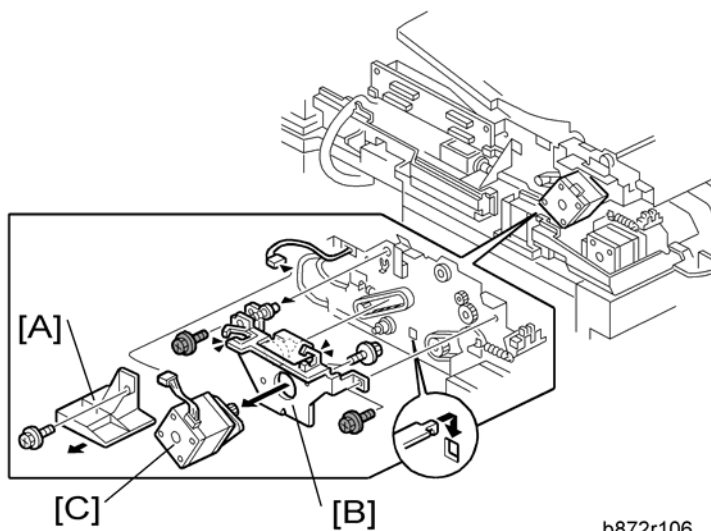


b262r508






Limpie el reflector del sensor de registro de SD [A] si fuera necesario.

Motor de alimentación del DF



- 1. Tapa posterior del DF (🔧 Pág.124)

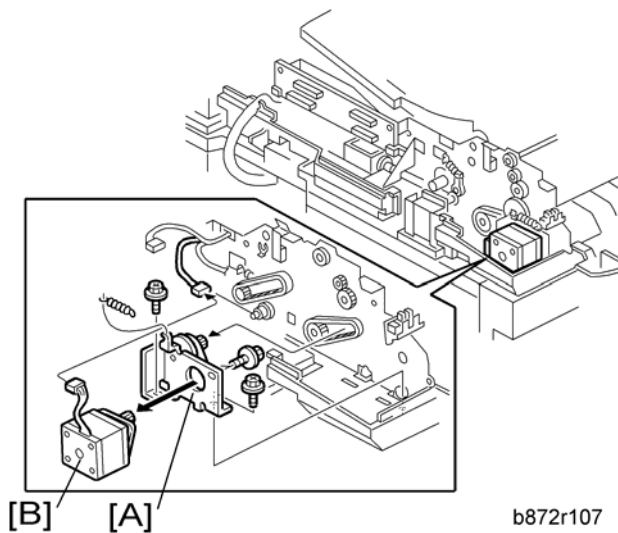


b872r106

2. Tapa interior [A] ( x 1)
3. Motor de alimentación del DF con soporte [B] ( x 2,  x 4,  x 3, correa de sincronización)
4. Motor de alimentación del DF [C] ( x 2)

Motor de transporte del DF

1. Tapa posterior del DF ( Pág.124)
2. Motor de alimentación del DF ( Pág.128)

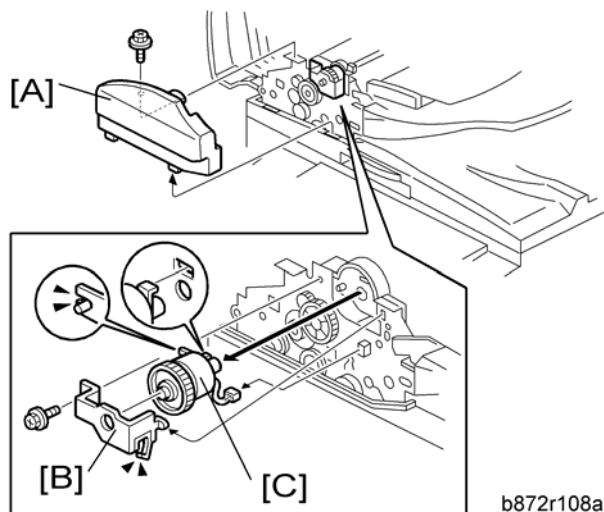


b872r107





3. Motor de transporte del DF con soporte [A] ( x 2, muelle x 1, correa de sincronización)

4. Motor de transporte del DF [B] ( x 2)

Embrague de alimentación del DF



b872r108a

1. Abra la tapa izquierda del DF.
2. Tapa delantera del DF [A] ( x 1)
3. Soporte [B] ( x 1,  x 1)
4. Embrague de alimentación del DF [C] ( x 1)

Ajuste del área de imagen de la copia

Ajuste el área de imagen de la copia en cualquiera de las siguientes condiciones:

1. Tras borrar datos del motor (SP5-801-002 o SP5-998-001).
2. Tras sustituir cualquiera de los siguientes componentes:
 - Primer o segundo escáner.
 - Bloque de lentes
 - Motor del escáner
 - Motor del espejo poligonal.
 - Bandeja de papel

4

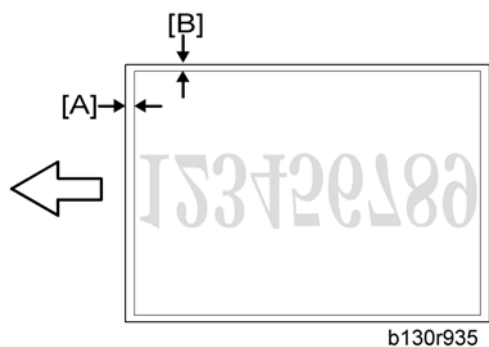
Impresión

Asegúrese de que el papel está correctamente cargado en cada bandeja antes de comenzar el procedimiento de ajuste de esta sección.

Ajuste del registro

Utilice Trimming Area Pattern (Patrón del área de recorte, SP5-902-001 > 10) para hacer el ajuste.

1. Imprima el patrón de pruebas alimentando el papel desde la bandeja normal.
2. Imprima el patrón de pruebas alimentando el papel desde la bandeja bypass.
3. Imprima el papel de pruebas seleccionando la impresión dúplex.



4. Mida la distancia entre el borde anterior del área de la imagen y el borde anterior del papel [A].

Nota

- En el diagrama se muestra el papel en la bandeja de copias. Observe que el papel sale boca abajo.

SP	Especificación
SP1-001-001 (Todas las bandejas)	0 ± 2 mm
SP1-001-002 (Bypass)	0 ± 2 mm
SP1-001-003 (Dúplex)	0 ± 4 mm

- Ajuste el registro del borde anterior (SP1-001).
- Mida la distancia entre el borde lateral del área de la imagen y el borde lateral del papel [B].

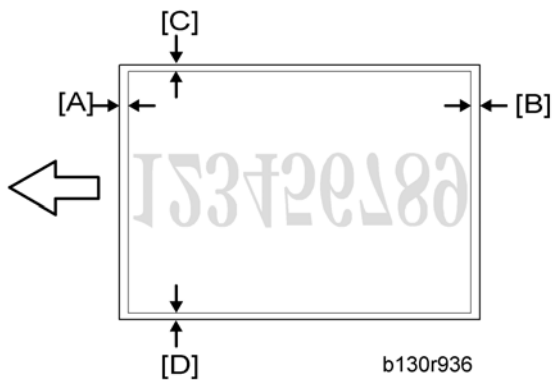
SP	Especificación
SP1-001-001 (Primera bandeja)	0 ± 2 mm
SP1-001-001 (Segunda bandeja)	0 ± 2 mm
SP1-002-005 (Bypass)	0 ± 4 mm
SP1-002-006 (Dúplex)	0 ± 4 mm

- Ajuste el registro de extremo a extremo (SP1-002).
- Especifique "0" (cero) en SP5-902-001 después de terminar el procedimiento de ajuste.

Ajuste del margen en blanco

Utilice Trimming Area Pattern (Patrón del área de recorte, SP5-902-001 > 10) para hacer el ajuste.

- Imprima el patrón de pruebas.



- Mida la distancia entre los cuatro bordes del área de la imagen y los cuatro bordes del papel [A][B][C][D].

Nota

- En el diagrama se muestra el papel en la bandeja de copias. Observe que el papel sale boca abajo.

3. Ajuste el margen en blanco (SP2-101).

SP	Especificación
SP2-101-001 (Borde anterior) [A]	$2 \pm 1,5$ mm
SP2-101-002 (Borde posterior) [B]	$2 +2,5/-1,5$ mm
SP2-101-003 (Lado izquierdo) [C]	$2 \pm 1,5$ mm
SP2-101-004 (Lado derecho) [D]	$2 +2,5/-1,5$ mm

Nota

- El "Lado izquierdo" y el "Lado derecho" corresponden a su mano izquierda y derecha respectivamente según se mira la imagen copiada con el borde anterior hacia arriba.

4. Especifique "0" (cero) en SP5-902-001 después de terminar el procedimiento de ajuste.

Ajuste de la escala de reproducción en el sentido de escaneo principal

Utilice "Grid Pattern (Single Dot)" [Cuadrícula (1 solo punto)] (SP5-902-001 > 5) para hacer el ajuste.

SP	Especificación
SP2-998-001 (Escala repr. ppal.-impresora)	$100 \pm 1\%$

1. Imprima el patrón de pruebas.
2. Mida los lados de los cuadrados. Cada lado debe tener 2,7 mm de largo.
3. Ajuste la escala de reproducción en la dirección de escaneo principal (SP2-998-001: Escala repr. ppal.-impresora).
4. Especifique "0" (cero) en SP5-902-001 después de terminar el procedimiento de ajuste.

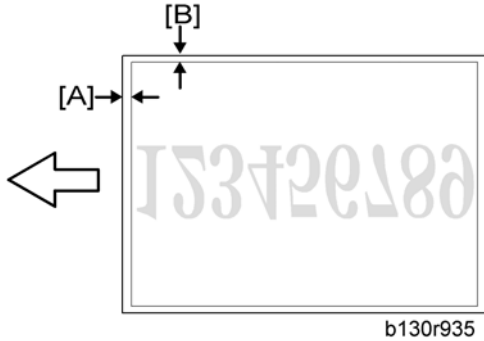
Escaneo

Preparación:

- Antes de ajustar el escaneo, ajuste la impresión (📄 Pág. 131).
- Para ajustar el escaneo, utilice el gráfico de pruebas A4.

Ajuste del registro

1. Coloque el gráfico de pruebas sobre el cristal de exposición. Asegúrese de que el gráfico de pruebas está alineado con las regletas trasera e izquierda del cristal de exposición.
2. Haga una copia.



3. Mida la distancia entre el borde anterior del área de la imagen y el borde anterior del papel [A].

Nota

- En el diagrama se muestra el papel en la bandeja de copias. Observe que el papel sale boca abajo.

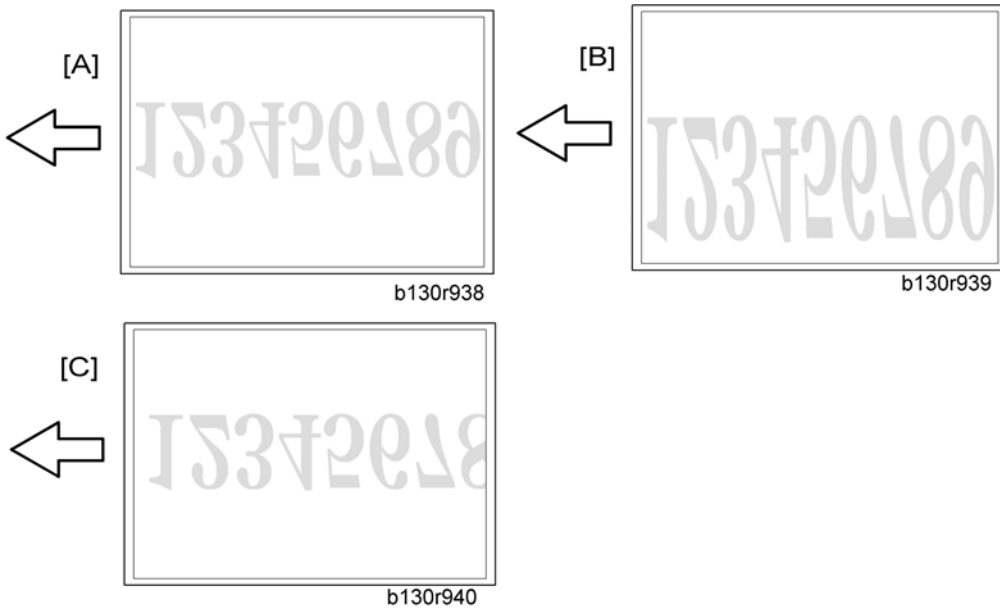
4. Ajuste el registro de escaneo del borde delantero. (SP4-010-001).

SP	Especificación
SP4-010-001 (Reg. escaneo borde anterior)	0 ± 2 mm

5. Mida la distancia entre el borde lateral del área de la imagen y el borde lateral del papel [B].
6. Ajuste el registro de extremo a extremo (SP4-011-001).

SP	Especificación
SP4-011-001 (Reg. escaneo extremo a extremo)	0 ± 2 mm

Ajuste de la escala de reproducción



4

1. Coloque el gráfico de pruebas sobre el cristal de exposición. Asegúrese de que el gráfico de pruebas está alineado con las regletas trasera e izquierda del cristal de exposición.
2. Haga una copia.
3. Compare la copia con el original.
4. Ajuste las escalas de reproducción en los sentidos de escaneo principal y secundario. La imagen original [A] se reproduce en la dirección de escaneo principal [B] o en la dirección de escaneo secundario [C] al especificar un valor mayor.

Nota

- En los diagramas se muestra el papel en la bandeja de copias. Observe que el papel sale boca abajo.

SP	Especificación
SP4-009-001 (Repr. escaneo principal)	± 1.0%
SP4-008-001 (Repr. escaneo secundario)	± 1.0%

Ajuste automático de escaneo

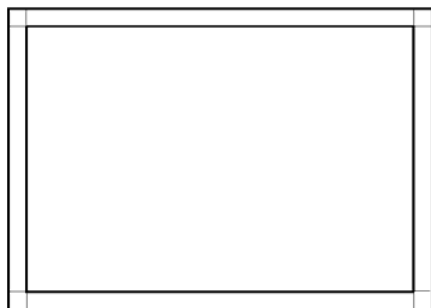
Con este procedimiento se ajusta el nivel de la densidad de blanco estándar. Ajuste la densidad de blanco estándar después de cualquiera de los siguientes trabajos de mantenimiento:

- Sustitución de la placa blanca estándar.
 - Sustitución de la BICU.
 - Sustitución del bloque de lentes.
 - Ejecución de borrado de memoria (SP5-801-002 [modelo básico], SP5-998-001 [otros modelos]).
1. Coloque 10 hojas de nuevo papel A4 sobre el cristal de exposición.
 2. Cierre la tapa del cristal de exposición.
 3. Active el modo SP.
 4. Seleccione el SP4-428 de la copiadora.
 5. Especifique "1" y pulse la tecla OK. La copiadora ajusta automáticamente la densidad de blanco estándar.

Ajuste de la imagen en el alimentador automático de documentos (ADF)

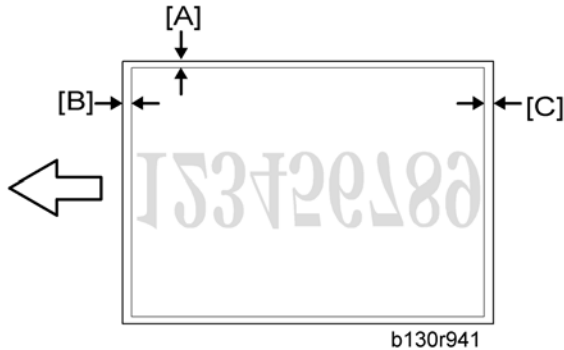
Nota

- Realice el procedimiento de ajuste de esta sección sólo cuando haya un ARDF instalado en la copiadora.



b130r967

1. Haga un gráfico de prueba provisional como se indica en el diagrama anterior. Para ello, utilice el papel "A4/8,5 x 11".
2. Coloque el gráfico de pruebas temporal sobre el ARDF.
3. Haga una copia.



4. Mida la distancia entre el borde lateral del área de la imagen y el borde lateral del papel [A]. (El diagrama muestra el papel sobre la bandeja de copia. Observe que el papel sale boca abajo).
5. Ajuste el registro de extremo a extremo (S to S/Front Regist: SP6-006-001, Registro de extremo a extremo/reverso: SP6-006-004) El área de la imagen se mueve al lado posterior de la copiadora cuando se especifica un valor mayor.
6. Mida la distancia entre el borde anterior del área de la imagen y el borde anterior del papel [B].
7. Ajuste el registro del borde anterior (Leading Regist: (SP6-006-002) [Reg. anterior]. El área de la imagen se mueve al lado derecho de la copiadora cuando se especifica un valor mayor.
8. Mida la distancia entre el borde posterior del área de la imagen y el borde posterior del papel [C].
9. Ajuste el área borrada en el borde posterior (Trailing Erase: (SP6-006-003) [Supresión posterior].
10. Compare la copia con el original.
11. Ajuste la ampliación de subescaneo (SP6-006-005). La especificación es $\pm 1,0\%$.

5. Manual de referencia del mantenimiento del sistema

Programa de servicio

★ Importante

- No permita que el usuario acceda al modo SP ni al modo SSP. Sólo los técnicos de servicio pueden utilizar estos modos. Si una persona que no pertenece al servicio técnico accede al modo SP o al modo SSP, no se garantiza la calidad de la máquina ni su funcionamiento.

Tablas SP

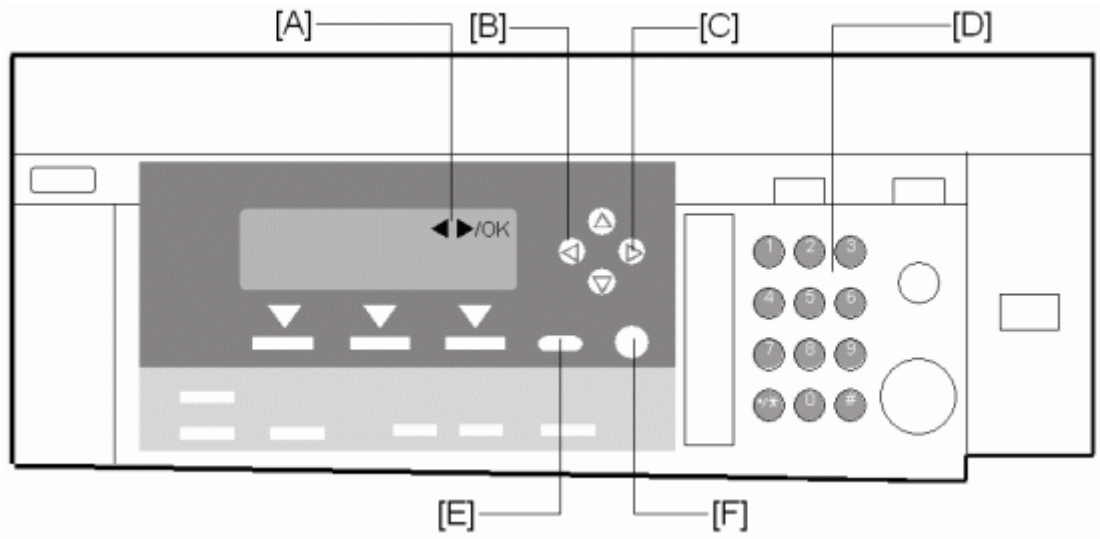
Consulte "Apéndices" para obtener la siguiente información:

- Tablas de modo de programa de servicio

Uso de los modos SP y SSP

Existen los dos modos siguientes:

- Modo SP (Modo de programa de servicio): El modo SP incluye los programas necesarios para el trabajo de mantenimiento estándar.
- Modo SSP (modo SP especial): incluye programas del modo SP y algunos programas especiales. Necesitará algunos conocimientos adicionales para utilizar estos programas especiales. Si desea información detallada, consulte al supervisor.



5

Inicio del modo SP

Para obtener más información, póngase en contacto con su supervisor.

Selección de programas




- Cuando aparezca un signo de subrayado intermitente (o varios), podrá escribir un número desde el teclado numérico [D].
- Cuando aparezca el signo "◀▶ /OK" [A] en la esquina superior derecha, podrá desplazarse por el menú al pulsar la tecla de flecha a la izquierda [B] o la tecla de flecha a la derecha [C]. Para seleccionar un programa, pulse la tecla OK [F].

Especificación de valores

1. Para seleccionar un programa, pulse la tecla OK. Un signo de subrayado intermitente (o varios) indican el valor que desea cambiar. El valor entre paréntesis es el valor predeterminado del menú.
2. Escriba el valor necesario con el teclado numérico. Para cambiar entre valores positivos (más) y negativos (menos), pulse la tecla \ominus .
3. Para confirmar el valor, pulse la tecla OK. Para cancelar el valor, pulse la tecla Escape [E].

Activación del modo de copia

Puede activar el modo copia mientras el modo SP está activo. Cuando lo haga, la copiadora imprimirá imágenes o patrones que le ayudarán a cambiar el ajuste SP.

1. Pulse la tecla . Se activa el modo de copia.
2. Especifique los ajustes de copia y pulse la tecla .
3. Para regresar al modo SP, pulse la tecla .

↓ Nota

- No podrá terminar el modo SP mientras el modo de copia está activado.

Salir de programas/terminar el modo (S)SP

Pulse la tecla  o la tecla Escape para salir del programa. Puede terminar el modo SP si pulsa una de estas teclas varias veces.

Convenciones utilizadas en las tablas:

- Asterisco (*): los ajustes se guardan en la NVRAM. La mayoría recuperan sus valores predeterminados al ejecutar SP5-801-002. CTL indica que los datos se almacenan en la NVRAM del circuito del controlador.
- DFU: el programa es sólo para uso de diseño/fábrica. No cambie los ajustes.
- Corchetes ([]): entre corchetes aparecen el rango de ajuste, el valor predeterminado y el paso mínimo con unidades ([Mínimo a Máximo / **Predeterminado** / Paso]).


Uso del modo SP

Carga/descarga de los datos de la NVRAM

Carga del contenido de la NVRAM en una tarjeta SD

Realice el siguiente procedimiento para cargar la configuración de código SP de la NVRAM a una tarjeta SD.

Nota

- Estos datos deben cargarse siempre en una tarjeta SD antes de sustituir la NVRAM.
1. Antes de apagar el aparato, ejecute SP 5990-1 (Impresión de SMC). Utilice la tecla de flecha para activar el "Bit Switch 4" y utilice la tecla numérica "4" para activar el bit 4.
 2. Apague el interruptor principal de la copiadora.
 3. Retire la tapa de interface ( x 1).
 4. Inserte la tarjeta SD en la ranura de servicio 2 del circuito del controlador. Después, coloque el interruptor principal en posición de encendido.
 5. Ejecute SP 5824-1 (Carga de los datos de la NVRAM) y, a continuación, pulse la tecla "Execute" (Ejecutar).

- Una vez terminada la carga, el archivo se ha copiado en una carpeta de la NVRAM en la tarjeta SD. El archivo se guarda en la ruta de acceso y nombre de archivo:

NVRAM\<<número de serie>.NV

En el ejemplo siguiente, el número de serie es "B0700017":

NVRAM\B0700017.NV

6. A fin de evitar errores durante la descarga, compruebe que ha marcado la tarjeta SD que contiene los datos cargados (guardados) con el número del aparato desde el que se han cargado (guardado) dichos datos.

★ Importante

- Puede cargar (guardar) datos de la NVRAM de más de un aparato en la misma tarjeta SD.
7. Apague el aparato y extraiga la tarjeta SD de la ranura 2.
 8. Monte de nuevo la máquina.

Descarga de una tarjeta SD a la NVRAM

Realice el procedimiento siguiente para descargar (guardar) datos SP de una tarjeta SD a la NVRAM del aparato.

- Si la tarjeta SD que contiene los datos de la NVRAM está dañada o si la conexión entre el controlador y la BICU es defectuosa, la descarga de los datos de la NVRAM puede fallar.
- Si la descarga falla, repita el procedimiento de descarga.
- Si el segundo intento falla, introduzca manualmente los datos de la NVRAM mediante la impresión SMC creada antes de cargar los datos de la NVRAM. (📄 procedimiento anterior)

1. Apague el interruptor principal de la copiadora.
2. Retire la tapa de la interface 2 (🔑 x 1).
3. Inserte la tarjeta SD que contiene los datos de la NVRAM en la ranura 2.
4. Encienda el interruptor principal de la copiadora.
5. Ejecute SP 5825-1 (Descarga de los datos de la NVRAM) y pulse la tecla "Execute" (Ejecutar).
6. Apague el interruptor principal de la copiadora y extraiga la tarjeta SD de la ranura 2.
7. Monte de nuevo la máquina.

⬇ Nota

- Para que los datos de la NVRAM se descarguen satisfactoriamente, es preciso que el número de serie del archivo que está en la tarjeta SD coincida con el de la máquina. Si el número de serie no coincide, la descarga fallará.

Este procedimiento descarga (guarda) los datos siguientes en la NVRAM:

- Recuento total
- Recuento de C/O e I/O

Procedimiento de actualización del firmware

En esta sección se indica cómo actualizar el firmware de la máquina GW (el aparato con la caja del controlador opcional).

Para actualizar el firmware del aparato GW, debe tener descargada la nueva versión del firmware en una tarjeta SD (Secure Digital). La tarjeta SD se inserta en la ranura superior de la parte derecha de la caja del controlador, vista desde la parte trasera de la máquina.

Antes de empezar...

Una tarjeta SD es un dispositivo de precisión. Tenga siempre presentes las siguientes precauciones cuando manipule tarjetas SD:

- Apague siempre el aparato antes de insertar una tarjeta SD. No inserte nunca la tarjeta SD en la ranura con el aparato encendido.
- No saque la tarjeta SD de la ranura de servicio después de encender el aparato.
- Nunca apague el aparato mientras se descarga el firmware de la tarjeta SD.

- Conserve las tarjetas SD en un lugar seguro, donde no queden expuestas a temperatura o humedad elevadas, ni a luz solar directa.
- Manipule las tarjetas SD siempre con cuidado para evitar que se doblen o arañen. Nunca moje las tarjetas SD ni las exponga a otros choques o vibraciones.

Tenga siempre en cuenta los siguientes puntos cuando utilice el programa de actualización de firmware:

- “Cargar” significa enviar datos desde el aparato a la tarjeta SD. “Descargar” significa enviar datos desde la tarjeta SD al aparato.
- Para seleccionar una opción de la pantalla LCD, pulse el botón correspondiente en la pantalla táctil de la LCD, o bien la tecla numérica pertinente en el teclado de 10 teclas del panel de mandos.
- Antes de iniciar el procedimiento de actualización del firmware, asegúrese de que la máquina esté desconectada de la red, a fin de evitar que llegue un trabajo de impresión mientras el firmware se está actualizando.

5

Procedimiento de actualización del firmware

↓ Nota

- Antes de comenzar este procedimiento, confirme qué versión de firmware está actualmente instalada en la máquina con SP7-801-255.

-Preparación de la tarjeta SD-


1. Formatee una tarjeta SD con, por ejemplo, SD Formatter v1.1.
2. Cree una carpeta "romdata" en la tarjeta.
3. Cree las siguientes carpetas dentro de la carpeta "romdata": B121, B620, B622, B658, B681, B685
4. Descargue el firmware del servidor y guarde los archivos en la carpeta con el código de la máquina correspondiente en la tarjeta SD.

Ejemplo:

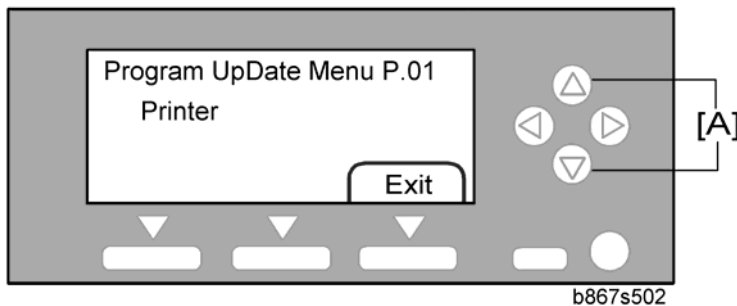
El archivo B1215540B debería guardarse en la carpeta "B121", mientras que los archivos B6585902B, B6585903B y B6585905B deberían guardarse en la carpeta "B658".

-Actualización del firmware-

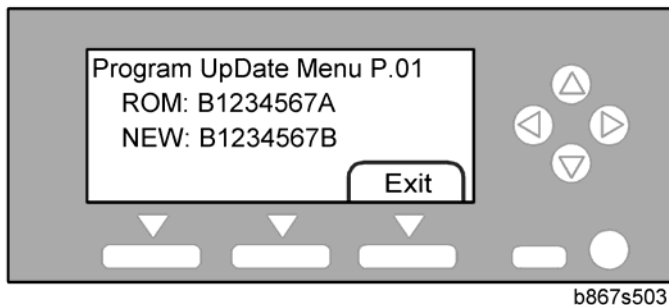
↓ Nota

- No coloque varios programas de firmware de la máquina en la misma tarjeta SD. Copie únicamente el firmware del modelo que desea.
1. Apague el interruptor de alimentación.
 2. Si la máquina está conectada a una red, desconecte el cable de red de la copiadora.
 3. Retire la tapa del conector ( x 1)

4. Con la etiqueta de la tarjeta SD orientada hacia la parte trasera de la máquina, inserte la tarjeta SD en la ranura 2 de la caja del controlador. Inserte lentamente la tarjeta SD en la ranura hasta que encaje en su lugar.
5. Compruebe que la tarjeta SD ha quedado insertada y encajada en su lugar.
(Para extraer la tarjeta SD, empújela para desbloquear el bloqueo por resorte y suéltela; a continuación, la tarjeta saldrá de la ranura.)
6. Encienda el interruptor principal. Después de unos 5 segundos, la pantalla LCD mostrará el mensaje "Please wait..." (Espere). Después, unos 60 segundos más tarde, la pantalla LCD mostrará "Program UpDate Menu P.01" (Menú de actualización de programa P.01) en la primera línea y el nombre del firmware en la segunda línea (por ejemplo, Sistema/Copiar).



7. Pulse la tecla "OK" para seleccionar un módulo.
 - Para desplazarse por los menús, pulse las teclas Δ o ∇ [A].

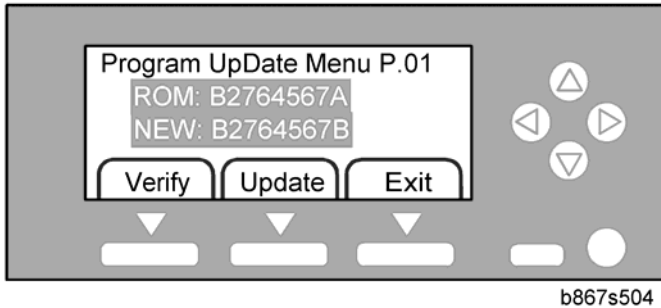


- Para ver la versión de firmware, pulse la tecla derecha. "ROM" es la información acerca del firmware actual. "NEW" es la información acerca del firmware de la tarjeta SD.
- Para volver al menú, pulse la tecla \triangleleft .
- Para seleccionar el módulo, pulse la tecla OK.
- Para desplazarse por el nombre del módulo, el número de serie y la versión, pulse la tecla \triangleleft o \triangleright .
- Si desea instalar el siguiente firmware de forma simultánea, pulse la tecla INICIO. Las teclas de desplazamiento pueden utilizarse para confirmar que se ha seleccionado este firmware (resaltado con un fondo negro).

[Motor, FCU, Escáner, Impresora, Fuente de impresora, Módulo de seguridad]

★ Importante

- Tenga en cuenta que el siguiente firmware no puede actualizarse simultáneamente. El procedimiento de actualización debe repetirse para cada uno de forma individual.
- Sistema/Copiar, ServiceCardNetFile, ServiceCardNIB, ServiceCardFAX, ServiceCardWebSystem.



5

- Al seleccionar un módulo, las líneas de texto se resaltan y se muestran las teclas "Verify" (Verificar) y "Update" (Actualizar).

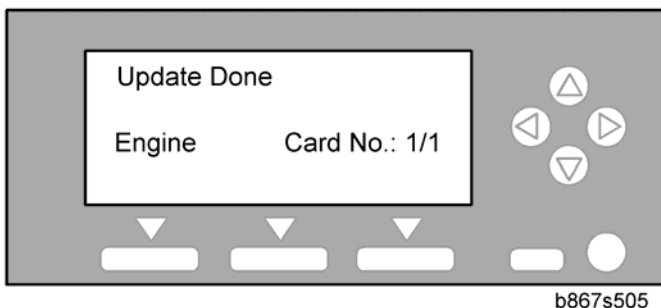
8. Seleccione un módulo y pulse la tecla "Update" (Actualizar).

★ Importante

- **NO pulse la tecla "Verify" (Verificar).**

9. Se inicia el programa de actualización de firmware y aparece el mensaje "Loading" (Cargando).

- La actualización comenzará y tardará varios minutos en completarse. La pantalla LCD mostrará inicialmente, "Updating... * * * -----" (Actualizando...).
- Cuando se ha completado la actualización, la pantalla LCD cambiará a "Update done" (Actualización realizada) o "Updated / Power Off On" (Actualizado /Apague y encienda).

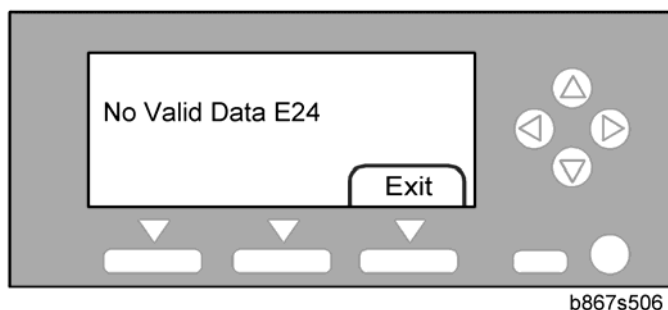


10. Compruebe que aparece el mensaje "Actualización realizada".

-Confirmación-

1. Apague y encienda el interruptor de alimentación.

- La pantalla LCD mostrará "Please wait..." (Espere...) durante 60 segundos, y después volverá a la pantalla "Program UpDate Menu" (Menú de actualización de programa).
2. Repita los pasos 1-8 anteriores hasta que se completen todas las actualizaciones de firmware.
 3. Apague el interruptor principal.
 4. Extraiga la tarjeta SD de la ranura inferior del controlador al presionarla para liberar el bloqueo por resorte.



5

Si se produce un error, se mostrará el código de error. Para obtener una lista informativa de los códigos de error, consulte la siguiente tabla.

Código	Causa	Acción necesaria
E20	Error de asignación de dirección física	<ul style="list-style-type: none"> • Inserte la tarjeta SD correctamente. • Utilice otra tarjeta SD
E22	Error de descompresión	<ul style="list-style-type: none"> • Almacene datos correctos en la tarjeta SD.
E23	Error del programa de actualización	<ul style="list-style-type: none"> • Actualice el programa del controlador. • Sustituya el controlador.
E24	Error de acceso a la tarjeta SD	<ul style="list-style-type: none"> • Inserte la tarjeta SD correctamente. • Utilice otra tarjeta SD.
E31	Inconsistencia de datos descargados*	<ul style="list-style-type: none"> • Inserte la tarjeta SD utilizada cuando se interrumpió el proceso de actualización anterior.
E32	Inconsistencia de datos descargados*	<ul style="list-style-type: none"> • Inserte la tarjeta SD que contiene los datos correctos.
E33	Error de datos de versión	<ul style="list-style-type: none"> • Almacene datos correctos en la tarjeta SD.
E34	Error de datos de local	<ul style="list-style-type: none"> • Almacene datos correctos en la tarjeta SD.
E35	Error de datos del modelo de la máquina	<ul style="list-style-type: none"> • Almacene datos correctos en la tarjeta SD.

Código	Causa	Acción necesaria
E36	Error de datos del módulo	<ul style="list-style-type: none"> Almacene datos correctos en la tarjeta SD.
E40	Error de programa de motor* *	<ul style="list-style-type: none"> Almacene datos correctos en la tarjeta SD. Sustituya la BICU.
E42	Error del programa del panel de mandos*	<ul style="list-style-type: none"> Almacene datos correctos en la tarjeta SD. Sustituya el circuito del panel de mandos.
E44	Error del programa del controlador*	<ul style="list-style-type: none"> Almacene datos correctos en la tarjeta SD. Sustituya la placa del controlador.
E50	Error de autenticación	<ul style="list-style-type: none"> Almacene datos correctos en la tarjeta SD.



5

*Debe reinstalar el programa.

Si se ha interrumpido el programa de actualización de firmware (por ejemplo, por un fallo de alimentación), mantenga la tarjeta SD insertada y vuelva a encender el interruptor principal. El programa de actualización de firmware se reiniciará. Si no lo hace, aparecerá el mensaje "Reboot after Card insert" (Reinicie después de insertar la tarjeta) al encender el interruptor principal.

Impresión del patrón de prueba (SP5-902-001)

Ejecución de la impresión del patrón de prueba

1. Especifique el número del patrón de prueba y pulse la tecla OK.
2. Pulse la tecla de inicio de copia. Se activa el modo de copia.
3. Especifique los ajustes de copia y pulse la tecla .
4. Para regresar al modo SP, pulse la tecla .

Patrones de prueba

Patrones de prueba con VCU	
N.º	Trama
0	(No imprime)
1	Líneas verticales (1 punto)
2	Líneas horizontales (1 punto)

Patrones de prueba con VCU	
3	Líneas verticales (doble punto)
4	Líneas horizontales (doble punto)
5	Cuadrícula (1 punto)
6	Cuadrícula (doble punto)
7	Patrón de puntos alternos
8	Un punto aislado
9	Banda negra (Horizontal)
10	Área de recorte
11	Patrón de rombos (1 punto)
12	Escalas de grises (horizontal)
13	Escalas de grises (vertical)
14	Escalas de grises (vertical/horizontal)
15	Escalas de grises (superposición vertical/horizontal)
16	Escalas de grises con líneas blancas (horizontal)
17	Escalas de grises con líneas blancas (vertical)
18	Escalas de grises con líneas blancas (vertical/horizontal)

Patrones de prueba con IPU	
N.º	Trama
30	Líneas verticales (1 punto)
31	Líneas horizontales (1 punto)
32	Líneas verticales (doble punto)
33	Líneas horizontales (doble punto)
34	Cuatro puntos aislados
35	Cuadrícula (doble punto)

Patrones de prueba con IPU	
36	Banda negra (vertical, 1.024 puntos)
37	Escala de grises (Horizontal) (512 puntos)
38	Escala de grises (Vertical, 256 puntos)
39	Placa ID
40	En cruz
41	Patrón de rombos (paso de 128 puntos)
42	Gradación cuadrada (64 grados)
43	Gradación cuadrada (256 grados)
44	Escalas de grises (Horizontal, anchura de 32 puntos)
45	Escalas de grises (Vertical, anchura de 32 puntos)
47	Placas de escala A4 1 (128 grados)
48	Placas de escala A4 2 (128 grados)
49	Área de recorte (A4)

Patrones de prueba con SBU	
N.º	Trama
51	Cuadrícula (doble punto)
52	Escala de grises 1 (256 grados)
53	Escala de grises 2 (256 grados)

Patrones de prueba con PCI*1	
N.º	Trama
61	S2M: Patrón de cuadrícula
62	S2M: Patrón de Argyle
63	S2M: Patrón de Argyle
64	S2M: Patrón de Argyle + Imagen*2

Patrones de prueba con PCI*1	
65	S2M: Patrón de cuadrícula
66	S2M: Patrón de cuadrícula + Imagen
67	S2M: Patrón de Argyle
68	S2M: Patrón de Argyle + Imagen
69	Motor: Patrón de cuadrícula
70	Motor: Patrón de Argyle

*1: El PCI está disponible para modelos con la caja de controlador.

*2: La imagen original sobre el cristal de exposición se imprime detrás del patrón de prueba.

Borrado de memoria

Máquina GW

La máquina GW (el aparato con la caja del controlador opcional) almacena los datos de motor en la NVRAM de la BICU, y almacena los demás datos de la NVRAM en el controlador opcional. Para distinguir entre los datos del motor y los demás datos, consulte desde SP5-801-003 hasta 015. Este programa de servicio (SP5-801) manipula los datos del controlador. Cualquier otro dato no manipulado por SP5-801 es un dato del motor. Los datos en la NVRAM de la BICU (dato del motor) se borran a través de SP5-998-001 mientras que los datos de la NVRAM del controlador (datos del controlador) se borran a través de SP5-801-xxx (para ver las excepciones, consulte "Excepciones" como se describe a continuación).

Máquina	Dato	NVRAM	Borrado por	Notas
GW	Datos de motor	BICU	SP5-998-001	Cualquier otro dato que no sea un dato del controlador
	Datos de controlador	Controlador	SP5-801-xxx	SCS, IMH, MCS, aplicación de copiadora, aplicación de fax, aplicación de impresora, aplicación de escáner, aplicación de servicio Web/red, NCS, R-Fax, DCS, UCS

Excepciones

SP5-998-001 borra la mayoría de los ajustes y contadores almacenados en la NVRAM de la BICU (los valores vuelven a sus valores predeterminados). Sin embargo, no se borran los siguientes ajustes:

- SP5-807 (Selección de área)
- SP5-811-001 (Introducción del número de serie [Conjunto de códigos])
- SP5-811-003 (Introducción del número de serie [Visualización de código ID2])
- SP5-812-001 (Servicio TEL [Teléfono])
- SP5-812-002 (Servicio TEL [Fax])
- SP5-907 (Plug & Play)
- SP7 (Registro de datos)
- SP8 (Historial)

5

Utilice SP5-998-001 después de sustituir la NVRAM de BICU o cuando los datos de la NVRAM de BICU están corruptos. Cuando el programa finaliza con normalidad, aparece el mensaje "Completed" (Finalizado). Cuando se ha sustituido la NVRAM del controlador o cuando los datos de la NVRAM del controlador están corruptos, utilice SP5-801-001. El mensaje es el mismo que en la máquina básica.

Procedimiento de borrado de memoria

1. Imprima todas las listas de datos de SMC (■ Pág.153 "Impresión de SMC (SP5-990)").
2. Ejecute SP5-998-001.
3. Pulse la tecla OK.
4. Seleccione "Execute" (Ejecutar). Aparecerá el mensaje "Execute?" (¿Ejecutar?) seguido de "Cancel" (Cancelar) y "Execute" (Ejecutar).
5. Seleccione "Execute" (Ejecutar).
6. Cuando el programa ha finalizado normalmente, aparece el mensaje "Completed" (Finalizado). Si el programa ha finalizado de forma anómala, aparece un mensaje de error.
7. Apague y encienda el interruptor principal.
8. Ajuste el registro y ampliación de la impresora y del escáner (* "Ajuste de copia" en la sección "Sustitución y ajuste").
9. Consulte las listas de SMC e introduzca cualquier valor que difiera de los valores de fábrica. Vuelva a comprobar los valores para SP4-901.
10. Ajuste el nivel de blanco estándar (SP4-428).
11. Inicialice el sensor de densidad del tóner (SP 2-214).
12. Compruebe la calidad de las copias y el recorrido del papel.

Ajuste de número de máquina (SP5-811-001)

Especificación de caracteres

SP5-811-001 especifica el número de serie. Para la máquina con el controlador opcional, se utiliza el teclado numérico y el panel de mandos opcional.

Máquina GW

Puede utilizar el teclado numérico para introducir números. Asimismo, puede utilizar el panel de mandos para introducir otros caracteres. Al pulsar la tecla "ABC", la letra cambia de la siguiente manera: A → B → C. Para introducir la misma letra dos veces, por ejemplo "AA", pulse la tecla "ABC", la tecla "Espacio" y la tecla "ABC". Para cambiar entre mayúsculas y minúsculas, pulse la letra "Shift" (Mayús).

5

Número de serie y NVRAM


Los números de serie se guardan en la NVRAM antes de enviar el producto y no se borran. Debe especificar un número de serie después de sustituir la NVRAM.

Impresión de SMC (SP5-990)

Con SP5-990 se obtienen listas de estado de la máquina.

1. Seleccione SP5-990.
2. Seleccione un menú:
 - Máquina GW: 001 Todos (Lista de datos), 002 SP (Lista de datos de modo), 003 Programa de usuario, 004 Datos de registro, 005 Informe de diagnóstico, 006 Valor no predeterminado, 007 Resumen NIB, 008 Registro de archivo Net, 021 Programa de usuario de copiadora, 022 SP de escáner, 023 Programa de usuario de escáner, 040 Impresión de contador de alarma de piezas, 064 Impresión de contador normal, 065 Contador de código de usuario, 066 Contador de operador de clave, 067 Impresión de lista de contacto, 069 Impresión de encabezado1, 071 Impresión de encabezado3, 072 Impresión de lista de grupo, 128 Patrón ACC, 129 Patrón de color de usuario, o 160:Escaneo de patrón ACC

Nota

- La salida del menú "Big Font" (Fuente grande) es adecuada para el fax.
3. Pulse la tecla "Execute" (Ejecutar).
 - Máquina GW: se imprime la lista de estado de la máquina.
 4. Para regresar al modo SP, pulse la tecla .

Análisis de errores del sensor ID (SP2-221)

La calidad de la imagen puede resultar deficiente cuando el sensor ID no funciona correctamente. Sin embargo, no hay ningún código SC que indique el mal funcionamiento del sensor ID; en su lugar, SP2-221 le muestra cierta información sobre el sensor ID. Compruebe esta información cuando la calidad de la imagen no sea muy buena.

En la tabla encontrará la información mostrada con SP2-221 (Análisis de errores del sensor ID).

SP	Condiciones de error	Posible causa	Notas
SP2-221-1 V _{sg} (VG en la pantalla)	$V_{sg} < 2,5V$ o $(V_{sg} - V_{sp}) < 1,00V$	<ul style="list-style-type: none"> • Sensor ID defectuoso • Sensor ID sucio • Tambor sin carga 	-
SP2-221-2 V _{sp} (VP en la pantalla)	$V_{sp} > 2,5V$ o $(V_{sg} - V_{sp}) < 1,00V$	<ul style="list-style-type: none"> • La densidad del tóner es muy baja • No se ha creado el patrón del sensor ID 	-
SP2-221-3 Potencia (PW en la pantalla)	$V_{sg} < 3,5V$ se aplica la potencia máxima (979)	<ul style="list-style-type: none"> • Sensor ID defectuoso • Sensor ID sucio • El tambor no se carga 	Fuente de alimentación de la luz del sensor ID
SP2-221-4 V _{sdp}	No hay condiciones de error		-
SP2-221-5 V _t	$V_t > 4,5V$ o $V_t < 0,2V$	<ul style="list-style-type: none"> • Sensor TD defectuoso 	-
SP2-221-6 V _{ts}	-	-	-

Tablas de servicios de fax

Consulte "Apéndices" para obtener la siguiente información:

- Modo de servicio del sistema de fax
- Bit switches
- Parámetros de la NCU
- Parámetros de transmisión dedicada
- Direcciones RAM de servicio

6. Localización de averías

Tablas de SC

Resumen

Hay cuatro niveles para las condiciones de llamada al servicio técnico.

Nivel	Definición	Procedimiento de restauración
A	Para evitar posibles daños, la máquina no debe utilizarse hasta que el representante de servicio técnico restablezca el código SC.	Active el modo SP y apague y encienda el interruptor principal.
B	Al desconectar y conectar la alimentación principal el código SC vuelve a establecerse si el error ha sido causado por una detección incorrecta del sensor.	Apague y encienda el interruptor de alimentación.
C	La máquina funciona de la manera habitual excepto la unidad relacionada con la llamada de servicio.	Apague y encienda el interruptor de alimentación.
D	Se actualiza el historial de SC. La máquina funciona de la manera habitual.	No se muestra ningún código SC. Sólo se actualiza el historial del SC.

Nota

- Si un problema implica placas del circuito, intente solucionar el problema desconectando y volviendo a conectar todos los conectores antes de decidir la sustitución de una placa de circuito.
- Si el problema implica un bloqueo del motor, compruebe la carga mecánica antes de decidir la sustitución de un motor o sensor.
- Si trabaja con una máquina equipada con fax, la desconexión y conexión de la alimentación puede causar una pérdida de datos almacenados en la memoria.

Descripciones de los códigos SC del motor

Definición Nº		Síntoma	Posible causa
101	B	Error de la lámpara de exposición	
		El escáner ha escaneado la placa blanca, pero no puede detectar el nivel de blanco.	<ul style="list-style-type: none"> • Lámpara de exposición defectuosa • Estabilizador de la lámpara de exposición defectuoso • Conector de la lámpara de exposición defectuoso • Espejo del escáner sucio • Espejo del escáner fuera de posición • Placa de SBU defectuosa • Conector de SBU defectuoso • Bloque de lentes fuera de posición • Posición o anchura de escaneo de placa blanca incorrectos (10 SP4-015)
120	B	Error de posición de inicio del escáner 1	
		El sensor de posición inicial del escáner no detecta que el escáner abandona la posición inicial.	<ul style="list-style-type: none"> • Sensor de posición inicial del escáner defectuoso • Motor de accionamiento del escáner defectuoso • Conector del sensor de posición inicial del escáner defectuoso • Conector del motor de accionamiento del escáner defectuoso • Placa BICU defectuosa

Definición Nº		Síntoma	Posible causa
121	B	Error posición inicial del escáner 2	
		El sensor de posición inicial del escáner no detecta que el escáner vuelve a la posición inicial.	<ul style="list-style-type: none"> • Sensor de posición inicial del escáner defectuoso • Motor de accionamiento del escáner defectuoso • Conector del sensor de posición inicial del escáner defectuoso • Conector del motor de accionamiento del escáner defectuoso • Placa BICU defectuosa
141	B	Error de corrección de nivel de negro de SBU	
		<ul style="list-style-type: none"> • El ajuste automático de SBU no ha podido corregir el nivel de negro tres veces en el ajuste previo a la compensación. • El ajuste automático de SBU no ha podido corregir el nivel de negro diez veces en el ajuste PGA. • El ajuste automático de SBU no ha podido corregir el nivel de negro diez veces en el ajuste de compensación. 	<ul style="list-style-type: none"> • Placa de SBU defectuosa
142	B	Error de corrección de nivel de blanco/negro de SBU	
		El ajuste automático de SBU no ha podido corregir el nivel de blanco diez veces en el ajuste PGA.	<ul style="list-style-type: none"> • Lámpara de exposición defectuosa • Placa blanca sucia • Posición o anchura de escaneo de placa blanca incorrectos (👉 SP4-015) • Placa de SBU defectuosa

Definición Nº		Síntoma	Posible causa
144	B	Error de comunicación entre BICU y SBU	
		La BICU no puede establecer una comunicación correcta con la SBU.	<ul style="list-style-type: none"> • Conexión suelta del cable plano entre la BICU y la SBU. • Cable plano defectuoso entre la BICU y la SBU • BICU defectuosa • SBU defectuosa
145	D	Error de ajuste automático de SBU	
		Los niveles de blanco de la placa blanca y el papel blanco son muy diferentes durante el ajuste automático de escaneo (■ SP4-428-001).	<ul style="list-style-type: none"> • Lámpara de exposición defectuosa • Placa blanca sucia • Posición o anchura de escaneo de placa blanca incorrectos (■ SP4-015) • Placa BICU defectuosa • Placa de SBU defectuosa
193	B	Error de transferencia de imagen	
		Las imágenes escaneadas no se transfieren a la memoria del controlador en un minuto.	<ul style="list-style-type: none"> • Placa BICU defectuosa • Circuito del controlador defectuoso
198	B	Error de direccionamiento de memoria	
		La BICU no recibe el informe de direccionamiento de memoria del controlador en un minuto.	<ul style="list-style-type: none"> • Incoherencia entre el firmware de la BICU y el firmware del controlador • BICU defectuosa • Controlador defectuoso
302	B	Fuga de corriente en el rodillo de carga	
		El módulo de sondeo detecta una fuga del rodillo de carga.	<ul style="list-style-type: none"> • Rodillo de carga defectuoso • Placa de alimentación de alta tensión defectuosa • Mala conexión de la PCU

Definición Nº		Síntoma	Posible causa
320	B	Error del motor del espejo poligonal	
		El motor del espejo poligonal no alcanza la velocidad de funcionamiento antes de 10 segundos. O bien, el motor del espejo poligonal no se ajusta a la velocidad de funcionamiento durante 0,2 segundos después de alcanzar la velocidad de funcionamiento.	<ul style="list-style-type: none"> • Motor del espejo poligonal defectuoso • Conexión suelta entre el motor del espejo poligonal y la BICU • Cable defectuoso entre la BICU y el motor del espejo poligonal • BICU defectuosa
321	B	Error de ausencia de señal de escritura láser (F-GATE)	
		El módulo de sondeo no detecta la señal de escritura láser (F-GATE) después de que el láser cruce 5 mm desde el punto de inicio de la superficie del tambor.	<ul style="list-style-type: none"> • BICU defectuosa • Conexión suelta en el controlador del fax o el controlador de la impresora • Controlador del fax o controlador de la impresora defectuosos
322	B	Error de sincronización del láser	
		El detector de sincronización de escaneo principal no detecta la señal láser durante 0,5 segundos.	<ul style="list-style-type: none"> • Botella de tóner no instalada • Conexión suelta entre la unidad LD y la BICU • Cable defectuoso entre la BICU y la unidad LD • Unidad LD fuera de posición • Unidad LD defectuosa • BICU defectuosa
390	B	Error del sensor TD	
		La BICU detecta que el sensor TD emite tensión extraordinaria (menos de 0,2 V o más de 4,0 V) 10 veces consecutivas.	<ul style="list-style-type: none"> • Sensor de TD defectuoso • Mala conexión de la PCU

Definición N°		Síntoma	Posible causa
391	B	Fuga de polarización de revelado	
		El módulo de sondeo detecta una fuga de polarización de revelado.	<ul style="list-style-type: none"> • Mala conexión de la PCU • Placa de alimentación de alta tensión defectuosa
392	B	Error de inicialización del revelador	
		El sensor de ID no detecta un patrón correcto durante la inicialización del revelador (■ 2-214-001).	<ul style="list-style-type: none"> • Sensor ID defectuoso • Revelador insuficiente • Funcionamiento incorrecto del tambor • Funcionamiento incorrecto del rodillo de revelado • Mala conexión de la PCU • Tensión insuficiente para el rodillo de carga
401	B	Error de fuga del rodillo de transferencia (electrodo positivo)	
		La tensión de retroalimentación del rodillo de transferencia es insuficiente.	<ul style="list-style-type: none"> • Placa de alimentación de alta tensión defectuosa • Mala conexión de la PCU • Instalación incorrecta de la unidad de transferencia o la unidad de separación • Rodillo de transferencia defectuoso
402	B	Error de fuga del rodillo de transferencia (electrodo negativo)	
		La tensión de retroalimentación del rodillo de transferencia es insuficiente.	<ul style="list-style-type: none"> • Placa de alimentación de alta tensión defectuosa • Mala conexión de la PCU • Instalación incorrecta de la unidad de transferencia o la unidad de separación • Rodillo de transferencia defectuoso

Definición Nº		Síntoma	Posible causa
500	B	Error del motor principal	
		El motor principal no alcanza su velocidad de funcionamiento en 0,7 segundos. O bien, el motor principal no se ajusta a su velocidad de funcionamiento durante 0,7 segundos después de alcanzar la velocidad de funcionamiento.	<ul style="list-style-type: none"> • Sobrecarga • Motor principal defectuoso
541	A	Error de apertura del termistor de fusión	
		La temperatura de fusión permanece 20 grados centígrados por debajo de la temperatura especificada.	<ul style="list-style-type: none"> • Termistor defectuoso • Instalación incorrecta del termistor. • Unidad de alimentación defectuosa • Conectores sueltos
542	A	Error de calentamiento de la temperatura de fusión	
		La temperatura de fusión aumenta 7 grados o menos en dos segundos; y esto continúa 5 veces consecutivas. O bien, la temperatura de fusión no se detecta antes de 25 o 35 segundos.	<ul style="list-style-type: none"> • Termistor defectuoso • Instalación incorrecta del termistor. • Lámpara de fusión defectuosa • Unidad de alimentación defectuosa
543	A	Error 1 de sobrecalentamiento de fusión	
		La temperatura de fusión detectada por el termistor es 230°C o superior durante un segundo.	<ul style="list-style-type: none"> • Termistor defectuoso • Unidad de alimentación defectuosa
544	A	Error 2 de sobrecalentamiento de fusión	
		La temperatura de fusión detectada por el circuito de control es 250°C o superior durante un segundo.	<ul style="list-style-type: none"> • Termistor defectuoso • Unidad de alimentación defectuosa

Definición Nº		Síntoma	Posible causa
545	A	Error de sobrecalentamiento de la lámpara de fusión	
		Después de que la temperatura de fusión alcance el objetivo, la lámpara de fusión permanece encendida durante 12 segundos.	<ul style="list-style-type: none"> • Termistor defectuoso • Instalación incorrecta del termistor. • Unidad de alimentación defectuosa
546	A	Temperatura de fusión inestable	
		Mientras la lámpara de fusión está encendida, la temperatura de fusión varía 50°C o más en un segundo; y esto sucede dos veces consecutivas.	<ul style="list-style-type: none"> • Termistor defectuoso • Instalación incorrecta del termistor. • Unidad de alimentación defectuosa
547	B	Funcionamiento incorrecto de señal de cruce cero	
		La señal de cruce cero no se detecta cinco segundos después de conectar el interruptor de alimentación principal. O bien, la señal de cruce cero no se detecta un segundo después de comenzar el funcionamiento.	<ul style="list-style-type: none"> • Unidad de alimentación defectuosa • BICU defectuosa
559	A	Atascos consecutivos de fusión	
		El contador de atascos de papel de la unidad de fusión llega a 3 veces. El contador de atascos de papel se borra si el papel se alimenta correctamente. Este SC sólo se activa cuando SP1 159-001 está configurado en "1" (valor predeterminado "0").	<ul style="list-style-type: none"> • Atasco de papel en la unidad de fusión
590	B	Error del motor del ventilador extractor	
		El motor del ventilador extractor está bloqueado durante cinco segundos.	<ul style="list-style-type: none"> • Conexión suelta del motor del ventilador extractor • Sobrecarga

Definición Nº		Síntoma	Posible causa
760	B	Error 1 de la compuerta de ADF	
		El ADF envía la señal FGATE antes de que se solicite para escanear originales.	<ul style="list-style-type: none"> • Placa de ADF defectuosa • Placa de entrada/salida defectuosa • Conexión suelta
761	B	Compuerta de ADF 2 anómala	
		El ADF no envía la señal FGATE 30 segundos después de que el ADF empiece a escanear.	<ul style="list-style-type: none"> • Conector de ADF defectuoso • Placa de SBU defectuosa
762	B	Compuerta de ADF 3 anómala	
		El ADF continúa enviando la señal FGATE durante más de 60 segundos después de que el ADF empiece a escanear.	<ul style="list-style-type: none"> • Conector de ADF defectuoso • Placa de SBU defectuosa
901	B	Error de contador total mecánico	
		El módulo de sondeo no detecta el contador total mecánico.	<ul style="list-style-type: none"> • Contador total mecánico defectuoso • BICU defectuosa • Conexión suelta
903	B	Error de contador total del motor	
		La suma de comprobación del contador total no es correcta.	<ul style="list-style-type: none"> • NVRAM de la BICU defectuosa
954	B	Error del programa de aplicación de impresora	
		El programa de aplicación de impresora no está preparado cuando es necesario.	<ul style="list-style-type: none"> • Programa de aplicación defectuoso
955	B	Error de transferencia de imagen	
		La BICU solicita al controlador que transfiera datos de imagen; pero el controlador no está preparado.	<ul style="list-style-type: none"> • Programa de aplicación defectuoso

Definición Nº		Síntoma	Posible causa
964	B	Error de estado (unidad de alojamiento de óptica láser)	
		La unidad de alojamiento de óptica no está preparada en 17 segundos después de una solicitud.	<ul style="list-style-type: none"> • Software defectuoso
980	B	Incoherencia entre el controlador y el engine	
		El controlador no es compatible con el engine.	<p>Uno de los siguientes controladores está instalado en el modelo básico:</p> <ul style="list-style-type: none"> • El controlador del modelo MFP • El controlador del modelo copiadora/fax • El controlador del modelo impresora/escáner/copiadora <p>El controlador de la impresora/escáner opcional está instalado en uno de los siguientes modelos:</p> <ul style="list-style-type: none"> • El modelo MFP • El modelo de copiadora/fax • El modelo de impresora/escáner/copiadora
981	B	Error de NVRAM	
		Se ha producido un error durante la comprobación de NVRAM del engine.	<ul style="list-style-type: none"> • NVRAM defectuosa • Conexión suelta entre la BICU y la NVRAM • Instalación incorrecta de la NVRAM • BICU defectuosa

Definición Nº		Síntoma	Posible causa
982	B	Error de localización	
		La información de localización de la ROM no volátil y la NVRAM es diferente (■ SP5-807-001).	<ul style="list-style-type: none"> • Configuración de localización no especificada (El interruptor de alimentación principal se conecta por primera vez después de sustituir la NVRAM). • Configuración de localización incorrecta • NVRAM defectuosa
984	B	Error de transferencia de imagen de impresión	
		Las imágenes de impresión no se transfieren.	<ul style="list-style-type: none"> • Controlador defectuoso • BICU defectuosa • Conexión suelta entre el controlador y la BICU

Descripciones de los códigos SC GW

SC6xx

Definición Nº		Síntoma	Posible causa/Contramedida
632	C	Error 1 del dispositivo de contabilidad de MF	
		La máquina envía una secuencia de datos. → No se devuelve señal de final normal. → Este síntoma ocurre tres veces.	<ul style="list-style-type: none"> • Línea defectuosa o rota entre máquina y dispositivo
633	C	Error 2 del dispositivo de contabilidad de MF	
		La máquina se comunica con el dispositivo de contabilidad. → Se devuelve la señal de desconexión.	<ul style="list-style-type: none"> • Línea defectuosa o rota entre máquina y dispositivo

Definición Nº		Síntoma	Posible causa/Contramedida
634	C	Error 3 del dispositivo de contabilidad de MF	
		El dispositivo de contabilidad informa de un error de RAM de respaldo.	<ul style="list-style-type: none"> Controlador del dispositivo de contabilidad defectuoso Batería defectuosa en el dispositivo de contabilidad
635	C	Error 4 del dispositivo de contabilidad de MF	
		El dispositivo de contabilidad informa de un error de tensión de batería.	<ul style="list-style-type: none"> Controlador del dispositivo de contabilidad defectuoso Batería defectuosa en el dispositivo de contabilidad
636		Error de tarjeta SD	
-001	B	Error de módulo autenticación extendido	
		No hay módulo de autenticación expandido en la máquina. La tarjeta SD o el archivo del módulo de autenticación expandido es defectuoso. No hay módulo DESS en la máquina.	<ol style="list-style-type: none"> Instale la tarjeta SD correcta o el archivo del módulo de autenticación ampliado. Instale el módulo DESS.
-002	B	Error de versión	
		La versión del módulo de autenticación ampliado no es correcta.	<ol style="list-style-type: none"> Instale el archivo correcto del módulo de autenticación ampliado.
650		Error de comunicación del módem de servicio remoto (Cumin-M)	
-001	C	Error de autenticación	
		La autenticación para el RCG-M incrustado falla en una conexión de acceso telefónico.	<ol style="list-style-type: none"> Compruebe y configure el nombre de usuario (SP5816-156) y contraseña (SP5816-157) correctos.
-004	C	Configuración de módem incorrecta	
		Falla el acceso telefónico debido a la configuración incorrecta del módem.	<ol style="list-style-type: none"> Compruebe y configure el comando AT correcto (SP5819-160).

Definición Nº		Síntoma	Posible causa/Contramedida
-005	C	Error de la línea de comunicación	1. Consulte con la compañía telefónica local del usuario.
		La tensión suministrada no es suficiente debido a una línea de comunicación defectuosa o a una conexión defectuosa.	
651		Conexión de acceso telefónico incorrecta	Se produce un error imprevisto cuando el módem (RCG-M) intenta llamar al centro mediante una conexión de acceso telefónico.
-001	D	Program parameter error (Error de parámetro de programa)	<ul style="list-style-type: none"> • Fallo de software. 1. No es necesario realizar ninguna acción debido a que este SC no interfiere en el funcionamiento de la máquina.
-002	D	Program execution error (Error de ejecución de programa)	
670	B	Error de arranque del procesador	<ul style="list-style-type: none"> • Mala conexión entre la BICU y la placa del controlador • BICU defectuosa • Circuito del controlador defectuoso
		Justo después de conectar la alimentación principal o de que la máquina se recupere del modo de desconexión automática, la activación de la señal de engine preparado falla. Justo después de conectar la alimentación principal, el engine no responde.	

Definición N°	Síntoma	Posible causa/Contramedida
672	Error de comunicación entre el controlador y el panel de mandos al inicio	
	Después de encender la máquina, la comunicación entre el controlador y el panel de mandos no comienza o se interrumpe la comunicación después de un arranque normal.	<ul style="list-style-type: none"> • Controlador detenido • Tarjeta del controlador instalada de forma incorrecta • Circuito del controlador defectuoso • Conexión del panel de mandos suelta o defectuosa • Mala conexión de DIMM y placas opcionales de la placa del controlador <p>1. Compruebe la configuración de SP5875-001. Si está configurado en "1 (OFF)", cámbielo a "0 (ON)".</p>

SC8xx

Definición N°	Síntoma	Posible causa/Contramedida
817	Error del monitor	
	Se trata de un error de comprobación de firma de archivos electrónicos y detección de archivos que se produce cuando el cargador de arranque trata de leer el módulo de autodiagnóstico, núcleo del sistema o archivos del sistema base de OS ROM Flash o los elementos de la tarjeta SD de la ranura del controlador son falsos o están dañados.	<ul style="list-style-type: none"> • Datos de OS ROM Flash defectuosos; cambie el firmware del controlador • Datos de tarjeta SD defectuosos; utilice otra tarjeta SD
819	Parada de núcleo	
	Debido a un error de control, se ha producido un desbordamiento de la RAM durante el procesamiento del sistema. Uno de los siguientes mensajes se mostrará en el panel de mandos.	

[5032]	B	Error HAIC-P2	<ul style="list-style-type: none"> Programa del sistema defectuoso Tarjeta del controlador defectuosa Placa opcional defectuosa <ol style="list-style-type: none"> Sustituya el firmware de controlador
[6261]	B	inic cancelada	
[0696e]	B	Error de proceso	
[0766d]	B	Error completo de VM	
[554C]	B	Error USB	
[----]	B	Otros	
820	Error de autodiagnóstico: CPU		
		<ul style="list-style-type: none"> [0001-0015] [000A-000D]: Código de error detallado 	
	B	Durante el programa de control de arranque y autodiagnóstico, no debería producirse ninguna excepción o corte. Si sucede, se define como SC.	<ul style="list-style-type: none"> Dispositivo CPU defectuoso Programa de control de arranque o programa de autodiagnóstico defectuosos <ol style="list-style-type: none"> Sustituya la placa del controlador. Instale de nuevo el firmware del sistema.
		[00FF]: Código de error detallado	
	B	Error de acceso a caché en la CPU	<ul style="list-style-type: none"> CPU defectuosa Bus local defectuoso <ol style="list-style-type: none"> Apague y encienda el interruptor de alimentación. Vuelva a instalar el programa del sistema. Sustituya la placa del controlador.
		[0601, 0602, 0605, 0606, 0607, 0609]: Código de error detallado	
	B	El comando excepcional no funciona aunque se ejecute a propósito.	<ul style="list-style-type: none"> Dispositivos CPU defectuosos <ol style="list-style-type: none"> Sustituya la placa del controlador.

		[060A-060E]: Código de error detallado	
	B	El comando de corte no funciona cuando se ejecuta.	<ul style="list-style-type: none"> • Dispositivos CPU defectuosos • Dispositivos ASIC defectuosos <ol style="list-style-type: none"> 1. Sustituya la placa del controlador.
		[0610]: Código de error detallado	
	B	La desconexión por temporizador no funciona aunque se programe.	<ul style="list-style-type: none"> • Dispositivos CPU defectuosos <ol style="list-style-type: none"> 1. Sustituya la placa del controlador.
		[0612]: Código de error detallado	
	B	Se produce interrupción en ASIC.	<ul style="list-style-type: none"> • ASIC defectuoso • Dispositivos defectuosos en los que ASIC detecta interrupciones. <ol style="list-style-type: none"> 1. Sustituya la placa del controlador.
		[06FF]: Código de error detallado	
	B	La tasa de frecuencia del reloj es diferente del valor prescrito.	<ul style="list-style-type: none"> • Dispositivos CPU defectuosos • Error de datos de bit de modo que se utilizan para inicializar la CPU. <ol style="list-style-type: none"> 1. Sustituya la placa del controlador.
		[0702]: Código de error detallado	
	B	El resultado cuando se ejecuta el programa en la caché de comando es diferente del valor deseado.	<ul style="list-style-type: none"> • Caché de CPU insuficiente • Velocidad de proceso de memoria insuficiente <ol style="list-style-type: none"> 1. Sustituya la placa del controlador. 2. Sustituya el RAM DIMM.
		[0709, 070A]: Código de error detallado	
	B	Aunque escriba los datos en la caché de memoria, los datos se escriben realmente en otra área de memoria (no en la caché).	<ul style="list-style-type: none"> • Dispositivos CPU defectuosos • SPD incorrecto • Error de configuración de modo de arranque <ol style="list-style-type: none"> 1. Sustituya la placa del controlador. 2. Sustituya el RAM DIMM.

	B	[0801, 0804, 0807, 0808, 0809, 80A]: Código de error detallado	
	B	Se produce un error al comprobar el TLB.	<ul style="list-style-type: none"> Dispositivos CPU defectuosos <ol style="list-style-type: none"> Sustituya la placa del controlador.
	B	[4002-4005]: Código de error detallado	
	B	Se produce el error de cálculo en la CPU.	<ul style="list-style-type: none"> CPU defectuosa <ol style="list-style-type: none"> Sustituya la CPU
821	Error de autodiagnóstico: ASIC		
[0B00]	B	Error ASIC	
	B	Se ha producido el error de comprobación escribir y verificar (write-&-verify) en ASIC.	<ul style="list-style-type: none"> Circuito del controlador defectuoso <ol style="list-style-type: none"> Sustituya el controlador.
[0B06]	B	ASIC no detectado	
	B	No se detecta el ASIC de E/S.	<ul style="list-style-type: none"> ASIC (placa del controlador defectuosa) Conexión incorrecta entre North Bridge y PCI I/F. <ol style="list-style-type: none"> Sustituya la placa del controlador.
[0D05]	B	Error de temporizador entre ASIC y CPU	
	B	La CPU comprueba si el temporizador de ASIC funciona correctamente en comparación con el temporizador de la CPU. Si el temporizador de ASIC no funciona en el intervalo especificado, se muestra este código de SC.	<ul style="list-style-type: none"> Problema del firmware del sistema RAM-DIMM defectuoso Controlador defectuoso Instale de nuevo el firmware del sistema del controlador. <ol style="list-style-type: none"> Sustituya el RAM-DIMM. Sustituya la placa del controlador.
[50A1]	B	Error del dispositivo de puente de vídeo (ASIC) 1	
	B	La CPU no detecta el dispositivo de puente de vídeo.	<ul style="list-style-type: none"> I/F defectuosa entre el dispositivo de puente de vídeo y el controlador <ol style="list-style-type: none"> Sustituya el controlador.

[50A2]	B	Error de registro del dispositivo de puente de vídeo (ASIC) 1	
		La CPU detecta el dispositivo de puente de vídeo, pero detecta datos de error procedentes del dispositivo de puente de vídeo.	<ul style="list-style-type: none"> I/F defectuosa entre el dispositivo de puente de vídeo y el controlador <ol style="list-style-type: none"> Sustituya el controlador.
822	Error de autodiagnóstico: HDD (unidad de disco duro)		
	[XXXX]: Código de error detallado		
Cuando se enciende el interruptor principal o se inicia el autodiagnóstico, el disco duro permanece ocupado durante el tiempo especificado o más.			
[3003]	C	Error de fin de tiempo	<ul style="list-style-type: none"> Conexión suelta Disco duro defectuoso Controlador defectuoso <ol style="list-style-type: none"> Compruebe que el disco duro esté correctamente conectado al controlador. Sustituya el disco duro. <ul style="list-style-type: none"> Sustituya el controlador.
[3004]	C	Error de comando.	
823	Error de autodiagnóstico: NIB		
[6101]	C	Error de suma de verificación de la dirección MAC	
		El resultado de la suma de verificación de la dirección MAC no coincide con la suma de verificación almacenada en ROM.	<ul style="list-style-type: none"> Controlador defectuoso <ol style="list-style-type: none"> Sustituya el controlador.
[6104]	C	Error del PHY IC	
		No se reconoce correctamente al PHY IC del controlador.	Igual que SC823-[6101]
[6105]	C	Error del circuito cerrado de PHY IC	
		Se produjo un error durante la prueba de circuito cerrado del PHY IC del controlador.	Igual que SC823-[6101]

824 [1401]	B	Error de autodiagnóstico: NVRAM	
		El controlador no puede reconocer la NVRAM estándar instalada o detecta que la NVRAM es defectuosa.	<ul style="list-style-type: none"> • Conexión suelta • NVRAM estándar defectuosa • Controlador defectuoso <ol style="list-style-type: none"> 1. Compruebe que la NVRAM estándar esté firmemente instalada en el zócalo. 2. Sustituya la NVRAM. 3. Sustituya el controlador.
826	B	Error de autodiagnóstico: RTC/NVRAM opcional	
		[1501]: Error de reloj	
	<ul style="list-style-type: none"> • Se reconoce un dispositivo RTC, y la diferencia entre el dispositivo RTC y la CPU excede el límite definido. • No se reconoce ningún dispositivo RTC. 	<ul style="list-style-type: none"> • RTC defectuoso <ol style="list-style-type: none"> 1. Sustituya el dispositivo RTC. 	
	B	[15FF]: RTC no detectado	
No se detecta el dispositivo RTC.		<ul style="list-style-type: none"> • NVRAM sin RTC instalado • Batería de reserva descargada <ol style="list-style-type: none"> 1. Sustituya la NVRAM con otra NVRAM con un dispositivo RTC. 	
827	Error de autodiagnóstico: RAM		
[0201]	B	Error de verificación	
		Error detectado durante una comprobación de escritura/verificación de la RAM estándar (SDRAM DIMM).	<ul style="list-style-type: none"> • Conexión suelta • SDRAM DIMM defectuoso • Controlador defectuoso <ol style="list-style-type: none"> 1. Sustituya el SDRAM DIMM. 2. Sustituya el controlador.


		Error de memoria residente	
[0202]	B	Los valores SPD en todo el RAM DIMM son incorrectos o ilegibles.	<ul style="list-style-type: none"> RAM DIMM defectuoso SPD ROM defectuosa en RAM DIMM Bus 12C defectuoso <ol style="list-style-type: none"> Sustituya el RAM DIMM.
828	Error de autodiagnóstico: ROM		
		Error de código de recuento de arranque	
[0101]	B	Se comprueba el monitor de arranque y el programa de OS almacenado en la ROM DIMM. Si la suma de verificación del programa es incorrecta, se muestra este código de SC.	<ul style="list-style-type: none"> DIMM de ROM defectuosa Controlador defectuoso <ol style="list-style-type: none"> Sustituya la DIMM de ROM. Sustituya el controlador.
		Error de autodiagnóstico: RAM opcional	
		Compruebe el error para la RAM opcional.	
829	B	[0301] Error de verificación (Ranura 1)	<ul style="list-style-type: none"> Asegúrese de que la RAM residente está instalada en la ranura correcta. Asegúrese de que la RAM opcional está instalada en la ranura correcta (Ranura 0)
		[0302] Error de composición (Ranura 1)	
835	Error de autodiagnóstico: Dispositivo Centronic		
[1102]	C	El conector de bucle de retorno está conectado pero la prueba genera un error.	<ul style="list-style-type: none"> Error del conector IEEE1284 Conector de bucle de retorno Centronic defectuoso <ol style="list-style-type: none"> Sustituya la placa del controlador.
[110C]	C	El conector de bucle de retorno está conectado pero la prueba genera un error.	<ul style="list-style-type: none"> Error de dispositivo ASIC Error del conector IEEE1284 Conector de bucle de retorno Centronic defectuoso <ol style="list-style-type: none"> Sustituya la placa del controlador.

[1120]	C	El conector de bucle de retorno Centronic no está conectado para la prueba de autodiagnóstico detallada.	<ul style="list-style-type: none"> • El conector de bucle de retorno Centronic no está correctamente conectado • Conector de bucle de retorno Centronic defectuoso • Dispositivo ASIC defectuoso <ol style="list-style-type: none"> 1. Sustituya la placa del controlador.
838 [2701]	B	Error de autodiagnóstico: generador del reloj	<ul style="list-style-type: none"> • Generador del reloj defectuoso • Bus I2C defectuoso • Puerto I2C defectuoso en la CPU <ol style="list-style-type: none"> 1. Sustituya la placa del controlador.
		Se ha producido un error de verificación al leer los datos de configuración del generador del reloj por medio del bus I2C.	
839	Error de USB NAND Flash ROM		
[9101]	B	No se puede leer la ID de la USB NAND Flash ROM.	<ul style="list-style-type: none"> • Circuito del controlador defectuoso <ol style="list-style-type: none"> 1. Sustituya la placa del controlador.
[9110]	B	La USB NAND Flash ROM está desconectada.	
853	C	Error de arranque de tarjeta inalámbrica	<ul style="list-style-type: none"> • Conexión suelta entre la tarjeta inalámbrica y la placa de conexión
		La máquina arranca. → La placa de conexión de la tarjeta IEEE802.11b se reconoce. → La tarjeta LAN inalámbrica o la tarjeta Bluetooth no se reconocen.	
854	C	Error de acceso a la tarjeta inalámbrica	<ul style="list-style-type: none"> • Conexión suelta entre la tarjeta inalámbrica y la placa de conexión
		La máquina ha estado leyendo los datos de la tarjeta. → La máquina pierde acceso a la tarjeta; la placa de conexión de la tarjeta LAN inalámbrica o la tarjeta Bluetooth se reconoce.	
855	C	Error de tarjeta inalámbrica	<ul style="list-style-type: none"> • Tarjeta inalámbrica defectuosa
		Se encuentran algunos datos no válidos en la tarjeta.	

856	C	Error de la placa de conexión de la tarjeta inalámbrica	
		Se ha detectado un error en la placa de conexión de la tarjeta LAN inalámbrica o la tarjeta Bluetooth.	<ul style="list-style-type: none"> Placa de conexión de la tarjeta inalámbrica defectuosa
857	C	Error de interfaz USB	
		Se ha detectado un error de interfaz USB.	<ul style="list-style-type: none"> Controlador defectuoso <ol style="list-style-type: none"> Compruebe las conexiones USB y asegúrese de que están correctamente conectadas. Sustituya la placa del controlador.
858	Error de unidad de cifrado de disco duro 1		
	Se produce un error grave cuando los datos se cifran para actualizar una clave de cifrado con la unidad de cifrado de disco duro.		
[0]	A	Error de adquisición de clave de cifrado: El controlador no logra obtener una nueva clave de cifrado.	<ul style="list-style-type: none"> Circuito del controlador defectuoso <ol style="list-style-type: none"> Sustituya la placa del controlador.
[1]		Error de ajuste de clave de cifrado para disco duro: El controlador no logra copiar una nueva clave de cifrado para el disco duro.	<ul style="list-style-type: none"> Chip SATA defectuoso en la placa del controlador <ol style="list-style-type: none"> Sustituya la placa del controlador.
[2]		Error de cifrado de datos NVRAM 1: Se produce un error durante el cifrado de los datos NVRAM.	<ul style="list-style-type: none"> NVRAM defectuosa en la placa del controlador <ol style="list-style-type: none"> Sustituya la NVRAM.
[30]		Error de cifrado de datos NVRAM 2: Se produce un error antes de que se cifren los datos NVRAM.	<ul style="list-style-type: none"> Circuito del controlador defectuoso <ol style="list-style-type: none"> Sustituya la placa del controlador.
[31]		Otro error: Se produce un error grave durante el cifrado de datos.	<ul style="list-style-type: none"> Igual que SC991

859	Error de unidad de cifrado de disco duro 2		
	Se produce un error grave cuando los datos de disco duro se cifran para actualizar una clave de cifrado con la unidad de cifrado de disco duro.		
[8]		<p>Error de comprobación del disco duro</p> <p>El disco duro no está instalado correctamente.</p>	<ul style="list-style-type: none"> No hay ningún disco duro instalado. Disco duro no formateado La clave de cifrado del controlador es diferente de la del disco duro. <ol style="list-style-type: none"> Instale el disco duro correctamente. Inicialice el disco duro.
[9]	C	<p>Interrupción del fluido eléctrico durante el cifrado de datos:</p> <p>No se realizó el cifrado de datos (NVRAM y disco duro).</p>	<ul style="list-style-type: none"> Interrupción del fluido eléctrico durante el cifrado de datos <ol style="list-style-type: none"> Inicialice el disco duro.
[10]		<p>Error de lectura/escritura de datos:</p> <p>El error DMAC se detecta dos veces o más.</p>	<ul style="list-style-type: none"> Igual que SC863
860	Disco duro: error de inicialización		
	B	El controlador detecta que el disco duro falla.	<ul style="list-style-type: none"> Disco duro no inicializado Disco duro defectuoso <ol style="list-style-type: none"> Vuelva a formatear el disco duro. Sustituya el disco duro.
862	Error de número de sector defectuoso		
	B	El número de sectores defectuosos en el disco duro (área de datos de imagen) supera 101.	<ul style="list-style-type: none"> Disco duro defectuoso <ol style="list-style-type: none"> Formatee el disco duro con SP5-832-002. Sustituya el disco duro.
863	Disco duro: error de lectura		
	C	Los datos almacenados en la HDD no pueden leerse correctamente.	<ul style="list-style-type: none"> Disco duro defectuoso Controlador defectuoso <ol style="list-style-type: none"> Sustituya el disco duro. Sustituya el controlador.

864	Disco duro: error de CRC		
	C	La transmisión de datos falla mientras se leen datos o se almacenan datos en la HDD.	<ul style="list-style-type: none"> • Disco duro defectuoso <ol style="list-style-type: none"> 1. Sustituya el disco duro.
865	HDD: Error de acceso		
	C	Se ha detectado un error durante el funcionamiento de la HDD.	<ul style="list-style-type: none"> • Disco duro defectuoso <ol style="list-style-type: none"> 1. Sustituya el disco duro.
866	Error de autenticación de la tarjeta SD		
	C	Se ha detectado un error de licencia digital de una aplicación de la tarjeta SD.	<ul style="list-style-type: none"> • Los datos de la tarjeta SD están dañados. <ol style="list-style-type: none"> 1. Almacene datos correctos en la tarjeta SD.
867	Error de tarjeta SD		
	B	Se ha sacado una tarjeta SD de aplicación de la ranura de arranque mientras una aplicación estaba activada.	<ul style="list-style-type: none"> • Se expulsa una tarjeta SD de aplicación.
868	Error de acceso a la tarjeta SD (-13 a -3: Error de sistema de archivos, otro número: Error de dispositivo)		
	B	Se envía un informe de errores desde el lector de tarjetas SD.	<ul style="list-style-type: none"> • La tarjeta SD no está insertada correctamente • Tarjeta SD defectuosa • Tarjeta del controlador defectuosa <ol style="list-style-type: none"> 1. En caso de error del sistema de archivos, formatee la tarjeta SD en el PC. 2. En caso de error de dispositivo, apague y vuelva a encender el interruptor principal. 3. Extraiga y vuelva a instalar la tarjeta SD. 4. Sustituya la tarjeta SD. 5. Sustituya el controlador.

870	C	Error de datos de la libreta de direcciones	
		Se ha accedido a la libreta de direcciones del disco duro. → Se ha detectado un error en los datos de la libreta de direcciones; no se leen los datos de la libreta de direcciones o no se escriben datos en la libreta de direcciones.	<ul style="list-style-type: none"> • Datos dañados • Disco duro defectuoso • Software del controlador defectuoso <ol style="list-style-type: none"> 1. Sustituya el disco duro (los códigos de usuario y los contadores se recuperan cuando se enciende el interruptor principal si dichos datos están almacenados en Smart Device Monitor for Admin).
		<p> Nota</p> <ul style="list-style-type: none"> • Para eliminar el error, aplique cualquiera de las siguientes medidas: • Formatee la libreta de direcciones con SP5-846-050 (todos los datos de la libreta de direcciones se inicializan, incluidos los códigos de usuario y contadores). 	
876	Error de datos de registro		
	Se detectó un error en la manipulación de los datos de registro al encender o durante el funcionamiento del aparato. Se puede producir debido a que el aparato se ha desconectado mientras se encontraba en funcionamiento.		
-001	C	Error de datos de registro 1	<ul style="list-style-type: none"> • Archivo de datos de registro dañado en el disco duro <ol style="list-style-type: none"> 1. Inicialice el disco duro con SP5832-004.
-002	C	Error de datos de registro 2	<ul style="list-style-type: none"> • No está instalado un módulo de cifrado <ol style="list-style-type: none"> 1. Desactive la configuración de cifrado de registro con SP9730-004 ("0" es off.) 2. Instale el módulo DESS.

-003	C	Error de datos de registro 3	<ul style="list-style-type: none"> Clave de cifrado de registro no válida debido a datos de NVRAM defectuosos <ol style="list-style-type: none"> Inicialice el disco duro con SP5832-004. Desactive la configuración de cifrado de registro con SP9730-004 ("0" es off.)
-004	C	Error de datos de registro 4	<ul style="list-style-type: none"> Función de cifrado de registro inusual debido a datos de NVRAM defectuosos <ol style="list-style-type: none"> Inicialice el disco duro con SP5832-004.
-005	C	Error de datos de registro 5	<ul style="list-style-type: none"> Se ha instalado una NVRAM o unidad de disco duro utilizadas en otro aparato. <ol style="list-style-type: none"> Instale de nuevo la NVRAM o disco duro anteriores. Inicialice el disco duro con SP5832-004.
-099	C	Error de datos de registro 99	<ul style="list-style-type: none"> Otras causas además de las mencionadas <ol style="list-style-type: none"> Consulte a su supervisor.
878	Error de autenticación de TPM		
	C	El firmware del sistema no está autenticado por TPM (chip de seguridad).	<ul style="list-style-type: none"> Actualización incorrecta del firmware del sistema. ROM Flash en la placa del controlador defectuoso <ol style="list-style-type: none"> Sustituya la placa del controlador.
880	Error de convertidor de formato de archivos (MLB)		
	B	Una solicitud de acceso a la MLB no ha recibido respuesta dentro del tiempo especificado.	<ul style="list-style-type: none"> MLB defectuoso

SC9xx

900	B	Error de contador total electrónico	
		El valor del contador total no se ajusta al rango normal.	<ul style="list-style-type: none"> NVRAM defectuosa
920	C	Error de impresora	
		Se ha detectado un error de aplicación que detiene el funcionamiento de la máquina.	<ul style="list-style-type: none"> Software defectuoso <ol style="list-style-type: none"> Recurso de hardware inesperado (por ejemplo, escasez de memoria)
921	C	Error de fuentes de la impresora	
		No se encuentra una fuente necesaria en la tarjeta SD al iniciar la aplicación de la impresora.	<ul style="list-style-type: none"> No se ha encontrado una fuente necesaria en la tarjeta SD. Los datos de la tarjeta SD están dañados. <ol style="list-style-type: none"> Compruebe que la tarjeta SD almacena los datos correctos.
925	C	Error de archivo de red	
		<p>El archivo de administración para archivos de red está dañado; los archivos de red no se leen con normalidad.</p> <p>Archivos de red: Trabajos para imprimir desde Document Server a través de un PC y el software DeskTopBinder</p>	<ul style="list-style-type: none"> Hardware defectuoso Datos dañados Software defectuoso

990	B	Error de ejecución del software	
		<p>El software ha intentado realizar una operación inesperada.</p> <p>Nota</p> <ul style="list-style-type: none"> • Cuando se produce este error, el nombre de archivo, la dirección y los datos se almacenarán en NVRAM. Esta información puede comprobarse con SP7-403. Observe los datos y la situación en la que se produce este SC. A continuación, informe de los datos y las condiciones al centro de control técnico. 	<ul style="list-style-type: none"> • Software defectuoso • Parámetro interno incorrecto • Memoria operativa insuficiente
991	D	Error de continuidad del programa	
		<p>El software ha intentado realizar una operación inesperada. Sin embargo, a diferencia de SC990, el proceso puede continuar ejecutándose.</p>	<ul style="list-style-type: none"> • Sólo con la sesión iniciada; la máquina puede continuar funcionando
992	B	Error indefinido	
		<p>Se ha producido un error no controlado por el sistema (el error no se produce con ningún otro código SC).</p>	<ul style="list-style-type: none"> • Programa de software defectuoso

997	C	Error de selección de función de la aplicación	
		<p>La aplicación seleccionada por la pulsación de la tecla del panel de mandos no se inicia, o bien termina anormalmente.</p>	<ul style="list-style-type: none"> • El software para dicha aplicación está defectuoso • Una opción requerida por la aplicación (RAM, DIMM, placa) no se encuentra instalada. • Anidamiento de direcciones de grupo de fax demasiado complicado <ol style="list-style-type: none"> 1. En caso de un problema de funcionamiento del fax, simplifique el anidamiento de direcciones de grupo del fax.
998	B	Error de inicio de la aplicación	
		<p>Después de encender la máquina, la aplicación no comienza en 60 s. (Ninguna aplicación comienza o finaliza con normalidad).</p>	<ul style="list-style-type: none"> • El software para dicha aplicación está defectuoso • Una opción requerida por la aplicación (RAM, DIMM, placa) no se encuentra instalada. <ol style="list-style-type: none"> 1. Compruebe la configuración de SP5875-001. Si está configurado en "1 (OFF)", cámbielo a "0 (OFF)".

Defectos de los componentes eléctricos

Sensor/switch

Sensores	Conector	Mensaje	Notas
Sensor de registro	CN127	Atasco de papel	-
	SN		
Sensor de fin de papel	CN129	Cargar papel	-
	SN		
Sensor de papel agotado en bypass	CN130	(Ninguno)	La máquina no puede detectar papel en la bandeja bypass.
	SN		
Sensor de trayecto del papel	CN128	Atasco de papel	-
	SN		
Sensor de salida	CN128	Atasco de papel	-
	SN		
Sensor de densidad de imagen (ID)	CN132	(Ninguno)	La calidad de impresión puede empeorar.
	SN		
Sensor de densidad de tóner (TD)	CN123	SC901	El conector se comparte con el contador total mecánico.
	PCU	Restablecer PCU correctamente	-
Sensor de posición inicial del escáner	CN126	SC120	-
	SN	SC120	-
Sensor de la tapa del cristal de exposición	CN126	SC120	-
	SN	(Ninguno)	La copiadora no se calienta al abrir la tapa de la placa.

Sensores	Conector	Mensaje	Notas
Sensor de apertura de la guía de DF	DF CN103	Atasco de papel	-
	SN	(Ninguno)	-
Sensor de presencia de original DF	DF CN103	Atasco de papel	-
	Sensores	(Ninguno)	No se detectan originales.
Sensor de registro de DF	DF CN103	Atasco de papel	-
	SN		Los originales se transportan correctamente.
Sensor de inversión	DF CN103	Atasco de papel	-
	SN	(Ninguno)	-
Sensor de salida	DF CN103	Atasco de papel	-
	SN		-
Switch de la puerta delantera	CN114	Puerta derecha abierta	-
	SW	Puerta frontal/derecha abierta	El mensaje depende del circuito que esté abierto (blanco → frontal; azul → derecho).
Interruptor de puerta derecha	CN114	Puerta derecha abierta	-
	SW	Puerta derecha abierta	-

CNxxx: El conector de la placa de BICU.

DF CNxxx: El conector de la placa de conexión de DF.

SN: El conector del sensor.

SW: El conector del interruptor.

PCU: El conector de la PCU.

Condiciones de fusibles fundidos

Todos estos fusibles se encuentran en la unidad de alimentación.

Fusible	Clasificación		Con interruptor principal conectado
	120 V	220 – 240 V	
FU1	15A/125V	8 A/250 V	No hay respuesta
FU2	5A/125V	2,5A/250 V	No hay respuesta

Presentación de LED de BICU

Número	Función
LED2	El LED2 parpadea con funcionamiento normal.

Función Guardar tarjeta (Card Save)

Aspectos generales

Guardar tarjeta:

- La función Guardar tarjeta se utiliza para guardar los trabajos de impresión recibidos mediante la impresora en una tarjeta SD sin salida de impresión. El modo Guardar tarjeta se alterna utilizando el número de bit 4 del bit switch #1 de la impresora. Guardar tarjeta permanecerá activada hasta que se llene la tarjeta SD, o hasta que se hayan utilizado todos los nombres de archivo.
- Las capturas se almacenan en la tarjeta SD en la carpeta /prt/cardsave. Los nombres de archivo se asignan secuencialmente desde PRT00000.prn a PRT99999.prn. Se creará un archivo adicional con el nombre PRT.CTL. Este archivo contiene una lista de todos los archivos creados en la tarjeta con la función Guardar tarjeta.
- Los archivos anteriormente almacenados en la tarjeta SD se pueden sobrescribir o dejarlos intactos. Guardar tarjeta SD dispone de los elementos de menú "Añadir" y "Nueva".
 - **Guardar tarjeta (Añadir):** anexa archivos a la tarjeta SD. No sobrescribe los archivos existentes. Si la tarjeta se llena o se utilizan todos los nombres de archivos, se visualizará un error en el panel de mandos. Los trabajos posteriores no se almacenarán.
 - **Guardar tarjeta (Nueva):** sobrescribe los archivos en el directorio /prt/cardsave de la tarjeta.

Limitación:

- Guardar tarjeta no se puede utilizar con los comandos de verificación del estado PJJ. Las verificaciones del estado PJJ no funcionarán. Además, es posible que hagan que no se pueda guardar la tarjeta.

Procedimiento

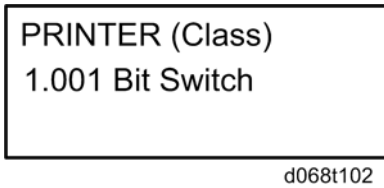
1. Apague el interruptor de alimentación principal.
2. Inserte la tarjeta SD en la ranura de servicio del circuito del controlador. Después, coloque el interruptor principal en posición de encendido.

Nota

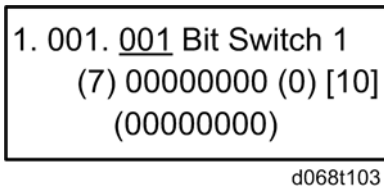
- Para determinar qué ranura es la ranura de servicio, consulte el manual de servicio.

3. Entre en el modo SP.
4. Seleccione "SP de impresora".
5. Seleccione "Modo de servicio" y pulse el botón "OK".

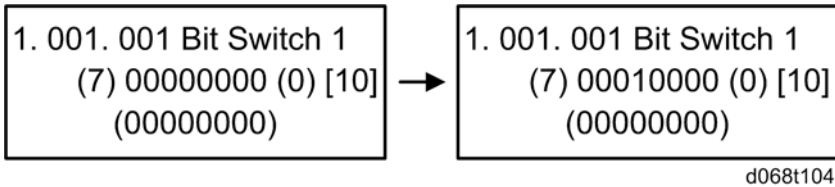
- 6. Seleccione "1.001 Bit Switch" y pulse el botón "OK".



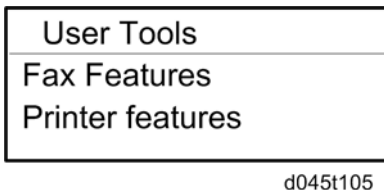
- 7. Pulse el botón "OK" de nuevo.



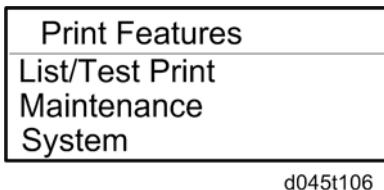
- 8. Utilice la tecla numérica "4" para activar el bit 4. El resultado debe parecerse a: 00010000. Esta función Guardar tarjeta aparecerá en "Imprimir lista/prueba".



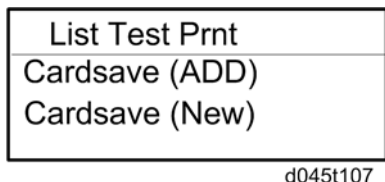
- 9. Pulse varias veces el botón "Escape", para salir del modo SP.
- 10. Pulse el botón "F23".
- 11. Utilice la tecla de flecha y seleccione "Funciones de impresora".



- 12. Utilice la tecla de flecha y seleccione "Imprimir lista/prueba".



- 13. Utilice la tecla de flecha y seleccione "Guardar tarjeta (Añadir) o Guardar tarjeta (Nuevo)".



14. Para activar los ajustes recién creados, seleccione el botón "switch" y después pulse el botón "Retorno" para salir del menú "Imprimir lista/prueba".
15. Envíe un trabajo a la impresora.
16. En cuanto la impresora recibe la información, ésta se almacenará en la tarjeta SD automáticamente sin salida de impresión. No se muestra ningún mensaje en la pantalla que indique que la operación de Guardar tarjeta se haya realizado correctamente.
17. Pulse el botón "Return" (Retorno) para salir del modo Guardar tarjeta.
18. Restablezca la configuración de bit switch a la predeterminada 00000000.
19. Retire la tarjeta SD una vez que se apague el interruptor de alimentación principal.

Mensajes de error

6

Mensajes de error de Guardar tarjeta:

- **Error de inic.:** no se pudo inicializar un proceso de almacenamiento (por ejemplo, detección de tarjeta, cambio a modo de kernel).
- **No se encontró la tarjeta:** no se pudo detectar la tarjeta en la ranura.
- **Sin memoria:** memoria de trabajo insuficiente para procesar el trabajo.
- **Error de escritura:** error al escribir en la tarjeta.
- **Otro error:** se ha producido un error desconocido.

Si se produce un error, pulsar "OK" hará que el dispositivo deseche el trabajo y vuelva el estado en el que esté listo.

Guía de solución de problemas del fax

Consulte "Apéndices" para obtener la siguiente información:

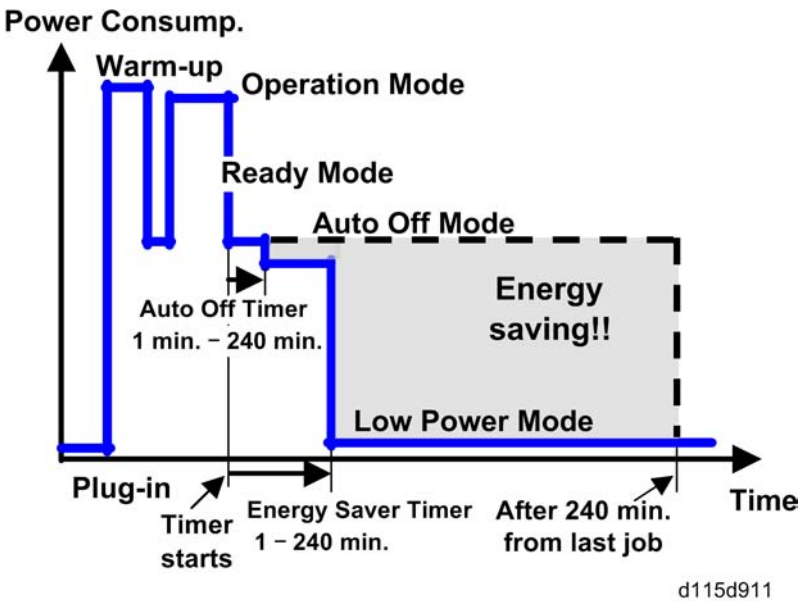
- Códigos de error de fax
- Solución de problemas de IFAX
- Solución de problemas del IP-Fax

7. Ahorro de energía

Ahorro de energía

Modos ahorro de energía

Los clientes deben utilizar los modos de ahorro de energía correctamente para ahorrar energía y proteger el medio ambiente.



El área sombreada en este diagrama representa la cantidad de energía que se ahorra cuando los temporizadores se ajustan a sus valores predeterminados. Si se cambian los temporizadores, la energía ahorrada será diferente. Por ejemplo, si todos los temporizadores se ajustan a 240 min., el área gris desaparecerá y no se ahorrará nada de energía antes de que transcurran los 240 min.

Ajustes de temporizador

El usuario puede ajustar estos temporizadores con User Tools (Herramientas de usuario)[System Settings > Timer Settings (> Ajustes del sistema > Ajustes de temporizador)].

- Temporizador de desconexión automática (1 – 240 min): Desconexión automática/En espera. Ajustes predeterminados: 1 minuto
- Temporizador de ahorro de energía (1 – 240 min): Modo de baja potencia. Ajuste predeterminado: 15 minutos

Normalmente, Auto Off timer < Energy Saver timer (Temporizador de desconexión automática < Temporizador de ahorro de energía). Pero, por ejemplo, si Temporizador de ahorro de energía < o = Temporizador de desconexión automática, la máquina entra inmediatamente en modo de desconexión cuando expira el Temporizador de desconexión automática. Omite el Modo de desconexión automática.

Ejemplo

- Desconexión automática: 1 min.
- Baja potencia: 15 min.

La máquina pasa al modo de baja potencia después de 1 minuto. El Modo Desconexión/En espera no se utiliza.

Recomendación

Se recomienda mantener los ajustes predeterminados.

- Si el cliente quiere cambiar estos ajustes, explíquelo que sus gastos de energía podrían aumentar, con el consiguiente efecto sobre el medio ambiente debido al uso de esa energía extra.
- Si fuera necesario cambiar los ajustes, trate de asegurarse de que el temporizador de desconexión automática no tiene un valor excesivo. Primero pruebe con un valor más pequeño (30 min. por ejemplo) y, si el cliente no está satisfecho, pase a otro mayor (60 min.).
- Si se ajustan todos los temporizadores a su valor máximo, la máquina no empezará a ahorrar energía hasta que hayan transcurrido 240 minutos después del último trabajo. Esto significa que después de que el cliente haya terminado de usar la máquina ese día, se consumirá la energía que podría haberse ahorrado.
- Si cambia los ajustes, la energía consumida puede medirse con SP8941, como se explica a continuación.

Eficacia de ahorro de energía

SP 8941 (Estado de la máquina) mantiene un registro de la cantidad de tiempo que la máquina pasa en cada modo.

- 8941-001: Modo de funcionamiento
- 8941-002: Modo de espera
- Modo panel desactivado
- 8941-004: Modo de baja potencia
- 8941-005: Modo de desconexión/reposo

Con estos datos y los valores de consumo eléctrico de las especificaciones, podemos estimar la cantidad de energía utilizada por la máquina.

Esto sólo debe utilizarse como valor de referencia, porque las especificaciones de consumo eléctrico se miden en un entorno controlado con una alimentación eléctrica constante.

Para obtener una medición exacta en las instalaciones del cliente, debe utilizarse un vatímetro para medir la energía realmente consumida.

Para usar SP8941 con el fin de calcular la energía consumida:

- Al comienzo del periodo de medición, lea los valores de SP8941 001 a 005.
- Al final del periodo de medición, vuelva a leer los valores de SP8941 001 a 005.
- Calcule la cantidad de tiempo pasado en cada modo (reste la primera medición de la última).
- Multiplique el resultado por el consumo eléctrico especificado para cada modo.
- Convierta el resultado a kWh (kilovatios hora)

A continuación se ofrece un ejemplo de cálculo:

Máquina Fecha	Consumo eléctrico (W): Datos: a	SP8941: Estado de la máquina	Hora de inicio: (min.) Datos: b	Hora de fin: (min.) Datos: c	Diferencia entre horas (Datos:b - Datos: c) (min.) Datos: d	Consumo de energía (Datos:a x Datos:d) (Wmin.) Datos: e
① Modo de funcionami ento	1081.8	001: Tiempo de funcionam iento	21089.0	21386.0	297.0	321294.6
② Preparada modo (en espera)	214.0	002: Tiempo de espera	306163.0	308046.0	1883.0	402962.0
③ Modo de ahorro de energía (Panel desactivad o)	214.0	003: Tiempo de ahorro de energía	71386.0	75111.0	3725.0	797150.0

④		004:				
Modo de bajo consumo	153.0	Tiempo de baja potencia	154084.0	156340.0	2256.0	345168.0
⑤		005:				
Modo Desconexión/En espera	7.0	Tiempo de modo de desconexión	508776.0	520377.0	11601.0	81207.0
Tiempo total de datos: d (min.)					19762.0	
Tiempo total de datos: d/60 min. (hora)					329.37	
Consumo eléctrico total de datos: e (Wmin.)						1947781.60
Consumo eléctrico total de datos: e /60 min./1000 W (KWH)						32.46

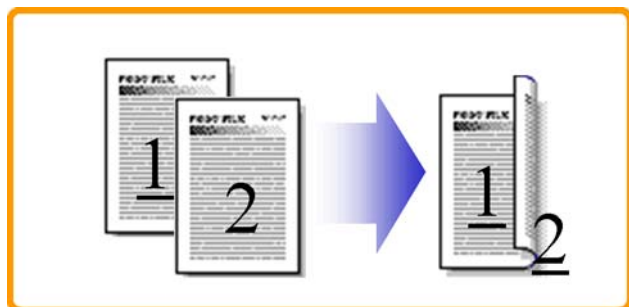
Ahorro de papel

Eficacia de la función Dúplex/Combinar

Las funciones dúplex/combinar reducen la cantidad de papel utilizado. Esto hace que se utilice menos energía en general para la producción del papel, lo que mejora el medio ambiente.

1. Dúplex:

Reduce el volumen de papel a la mitad.



d062d102

7

2. Modo Combinar:

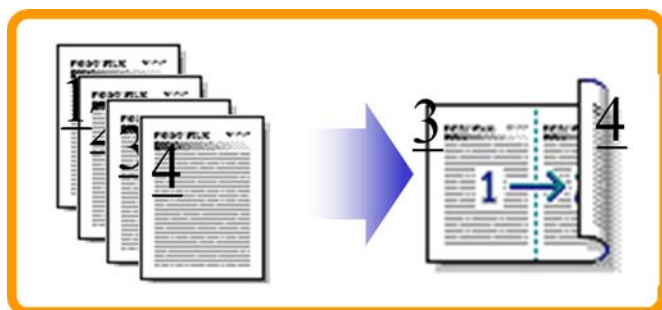
Reduce el volumen de papel a la mitad.



d062d100

3. Dúplex + Combinar

Al utilizar ambas funciones a la vez, puede reducirse tres cuartas partes el volumen de papel.



d062d101

Para comprobar el consumo de papel, consulte el contador de totales y el contador dúplex.

El contador de totales cuenta todas las páginas impresas.

- Por cada página dúplex, el contador de totales suma 2.
- Para un trabajo dúplex de un original de tres páginas, el contador de totales suma 3.

El contador dúplex cuenta las páginas que tienen imágenes en ambos lados.

- Por cada página dúplex, el contador dúplex suma 1.
- Para un trabajo dúplex de un original de tres páginas, el contador dúplex sólo cuenta 1, incluso si se utilizan dos hojas.

7

Recomendación

Explique estas funciones a los clientes para que puedan reducir el uso de papel.

Modelo S-C4.5

- Contador de totales: SP 8581-001
- Contador dúplex: SP 8411-001
- Modo de una cara con Combinar: SP 8421-004
- Modo dúplex con Combinar: SP 8421-005

La siguiente tabla muestra el ahorro de papel y cómo los contadores se incrementan con algunos ejemplos de trabajos de una sola cara y dúplex.

Modo dúplex:

Originales	Hoja simple utilizada	Hojas dúplex utilizadas	Papel ahorrado	Contador total SP8501-001	Contador dúplex Dúplex (SP8411-001)
1	1	1	0	1	0

Originales	Hoja simple utilizada	Hojas dúplex utilizadas	Papel ahorrado	Contador total SP8501-001	Contador dúplex Dúplex (SP8411 001)
2	2	1	1	2	1
3	3	2	1	3	1
4	4	2	2	4	2
5	5	3	2	5	2
10	10	5	5	10	5
20	20	10	10	20	10

Si se utiliza el modo combinado, los contadores de totales y dúplex funcionan de la misma forma que se ha explicado anteriormente. La siguiente tabla muestra el ahorro de papel y cómo los contadores se incrementan con algunos ejemplos de trabajos dúplex/combinados.

Modo 2 en 1:

Originales	Hoja simple utilizada	Hojas dúplex utilizadas	Papel ahorrado	Contador total SP8501-001	Contador dúplex SP8421-004
1	1	1	0	1	1
2	2	1	1	1	1
3	3	2	1	2	2
4	4	2	2	2	2
5	5	3	2	3	2
10	10	5	5	5	5
20	20	10	10	10	10

Dúplex + Modo 2 en 1:

Originales	Hoja simple utilizada	Hojas dúplex utilizadas	Papel ahorrado	Contador total SP8501-001	Contador dúplex SP8421-005
1	1	1	0	1	1
2	2	1	1	1	1

Originales	Hoja simple utilizada	Hojas dúplex utilizadas	Papel ahorrado	Contador total SP8501-001	Contador dúplex SP8421-005
3	3	1	2	2	2
4	4	1	3	2	2
5	5	2	3	3	3
6	6	2	4	3	3
7	7	2	5	4	4
8	8	2	6	4	4
9	9	3	6	5	5
10	10	3	7	5	5
11	11	3	8	6	6
12	12	3	9	6	6

Model S-C4.5
Machine Code: D115/D116

Appendices

26 November, 2010

TABLE OF CONTENTS

1. Appendix: Specifications

Specifications.....	3
Copier.....	3
Printer.....	5
Scanner.....	6
FAX.....	7
ARDF.....	11
Paper Tray Unit.....	12
Supported Paper Sizes.....	13
Original Paper Sizes.....	13
Paper Feed.....	14

2. Appendix: Preventive Maintenance Tables

Maintenance Tables.....	17
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3. Appendix: SP Mode Tables

System Service Mode.....	19
Service Mode Tables.....	19
Input Check (SP5-803).....	117
Output Check (SP5-804).....	119
Printer Service Mode.....	121
Scanner Program Mode Table.....	126

4. Appendix: Fax Troubleshooting Guide

Fax Error Codes.....	129
IFAX Troubleshooting.....	148
IP-Fax Troubleshooting.....	151
IP-Fax Transmission.....	151
IP-Fax Reception.....	154

5. Appendix: Fax Service Program

System Service Mode.....	157
SP1-XXX (Bit Switches).....	157
SP2-XXX (RAM Data).....	158
SP3-XXX (Tel Line Settings).....	158
SP4-XXX (ROM Versions).....	159
SP5-XXX (Initializing).....	159

SP6-XXX (Reports).....	160
SP7-XXX (Test Modes).....	162
Bit Switches.....	163
System Switches.....	163
I-Fax Switches	175
Printer Switches.....	180
Communication Switches.....	185
G3-1 Switches.....	191
IP Fax Switches.....	200
NCU Parameters.....	209
Dedicated Transmission Parameters.....	223
Programming Procedure.....	223
Parameters.....	223
Service RAM Addresses.....	232

1. Appendix: Specifications

Specifications

1

Copier

Configuration:	Desktop
Copy Process:	Laser beam scanning and electro-photographic printing
Originals:	Sheet/Book/Object
Original Size:	Maximum A4 / 8 ¹ / ₂ " x 14" A4 / 8 ¹ / ₂ " x 14" (ARDF)
Copy Paper Size:	Maximum A4 SEF / 8 ¹ / ₂ " x 11" SEF (Copier's paper tray) A4 SEF / 8 ¹ / ₂ " x 14" SEF (Bypass) A4 SEF / 8 ¹ / ₂ " x 14" SEF (Optional paper tray) A4 SEF / 8 ¹ / ₂ " x 14" SEF (Duplex) Minimum A5 LEF / 8 ¹ / ₂ " x 5 ¹ / ₂ " LEF (Copier's paper tray) A6 SEF / 8 ¹ / ₂ " x 5 ¹ / ₂ " (Bypass) A4 SEF / 8 ¹ / ₂ " x 11" SEF (Optional paper tray unit) A4 SEF / 8 ¹ / ₂ " x 11" SEF (Duplex) Custom sizes in the bypass tray: Width: 90 – 216 mm (3.5" – 8.5") Length: 139 – 600mm (5.48" – 23.62")
Copy Paper Weight:	Standard paper tray; optional paper tray: 60 – 90 g/m ² , 16 – 24 lb. Bypass: 60 – 157 g/m ² , 16 – 42 lb. Duplex: 64 – 90 g/m ² , 20 – 24 lb.

		A4 Version	LT Version
Reproduction Ratios:	Enlargement	200%	155%
		141%	129%
	Full Size	100%	100%
	Reduction	93%	93%
71%		78%	
50%		65%	
Zoom:	50% to 200%, in 1% steps		
Power Source:	120 V, 60 Hz or 220 – 240 V, 50/60 Hz		
Power Consumption:	Maximum:	900 W or less (EU), 1000 W or less (NA)	
	Energy Saver:	35 W or less	
	Sleep Mode:	10 W or less	
	Off Mode:	None	
Noise Emission:	Sound Power Level		
	Standby	40 dB(A) or less	
	Operating (copier only)	63 dB(A) or less	
	Operating (full-system)	67 dB(A) or less	
Dimensions (W x D x H)	Copier: 485 x 450 x 371 mm (19.4" x 18" x 14.8") With optional paper tray unit: 485 x 454 x 511 mm (18.4" x 17.7" x 20.1")		
Weight:	29 kg (66 lb.) or less		
Resolution:	600 dpi		
Copying Speed in Multicopy Mode (copies/minute):	Memory Copy: 20 cpm (A4 / 8 ¹ / ₂ " x 11"; 100%) DF 1 to 1: 16cpm		
Warm-up Time:	30 seconds or less (at 20°C [68°F])		

First Copy Time:	7.5 seconds or less Note: Measurement conditions <ul style="list-style-type: none"> • From the ready state, with the polygonal mirror motor spinning. • A4/LT copying • From copier's paper tray • 100% size
Copy Number Input:	Numeric keypad, 1 to 99 (increment, decrement)
Manual Image Density:	5 steps
Auto Off Timer	Default: 1 minute Range: 1 to 240 minutes
Energy Saver Timer:	Default: 1 minute Range: 1 to 240 minutes
Copy Paper Capacity:	Paper Tray: 250 sheets Optional Paper Tray Unit: 500 sheets x 1 Bypass Tray: 100 sheets
Copy-Tray Capacity	250 sheets
Toner Replenishment:	Cartridge replacement (230 g/cartridge)
Toner Yield	7k copies /toner bottle (A4, 6% full black)
Optional Equipment:	Auto reverse document feeder Paper tray unit Anti-condensation heater for paper tray unit

Printer

Resolution:	600 dpi (PCL 6/PCL5e/PS3/RPCS) 300 dpi (PCL5e/PS3) 600 dpi (RPCS (XPS))
Printing speed:	20 cpm (A4, 8 1/2" x 11")

Interface:	USB 2.0 interface, Ethernet interface (100BASE-TX/10BASE-T) IEEE1284 IEEE802.11a/g (Wireless LAN) (option) Gigabit Ethernet (option)
Network protocol:	TCP/IP (IPv4, IPv6), IPX/SPX, AppleTalk, RHPP
Printer language:	PCL PCL5e/XL RPCS (XPS) Adobe PS3/PDF (option)
Resident Fonts:	PCL: 45 fonts 13 International fonts PCL option: OCR, Barcode Adobe PS3/PDF: 136 fonts Summary: 4 Arial
Memory:	640 MB
Operating systems supported by this machine:	Windows 2000/XP/Server 2003/Vista/Server2008 MacOS8.6 to 9, MacOSX10.1 or later
Required network cable:	100BASE-TX/10BASE-T shielded twisted-pair (STP, Category/Type5) cable. Gigabit Ethernet- Category6 cable

Scanner

Scan method	Flatbed scanning
-------------	------------------

Scan speed *1	B/W: 20 pages/ min. [Scan Size: A4 SEF, compression, Resolution 200 dpi] ITU-T No.1 Chart Full Color: 9 pages/ min. [Scan Size: A4 SEF, compression (level3), Resolution 200 dpi] ISO/JIS-SCID N5 Chart
Maximum power consumption	Less than 900 W
Image sensor type	CCD Image Sensor
Scan types	Sheet, book
Interface	Ethernet interface (10BASE-T or 100BASE-TX) IEEE1284 IEEE 802.11a/g (Wireless LAN),
Resolution	B/W: 600 dpi Full color: 300 dpi - 600 dpi
Variable range of scan resolution	Setting range: 100 dpi - 600 dpi

*1 Scanning speeds vary according to machine operating conditions, computer (specifications, network traffic, software, etc.), and original types.

FAX


General

Type:	Desktop type transceiver
Circuit:	PSTN PBX
Connection:	Direct couple

Original Size:	<p>Book (Face down): Maximum Width: 216 mm [8.5 inch]</p> <p>ARDF (Face up): (Single-sided document) Length: 139 - 1200 mm [5.5 - 47.2 inch] Width: 139 - 216 mm [5.5 - 8.5 inch]</p> <p>(Double-sided document) Length: 160 - 356 mm [6.3 - 14.0 inch] Width: 139 - 216 mm [5.5 - 8.5 inch]</p>
Scanning Method:	Flat bed, with CCD
Resolution:	<p>G3 8 x 3.85 lines/mm (Standard) 8 x 7.7 lines/mm (Detail) 8 x 15.4 line/mm (Fine) 200 x 100 dpi (Standard) 200 x 200 dpi (Detail)</p>
Transmission Time:	G3: 3 at 28.8Kbps; Measured with G3 ECM using memory for an ITU-T #1 test document (Slerexe letter) at standard resolution
Data Compression:	MH, MR, MMR, JBIG
Protocol:	Group 3 with ECM
Modulation:	V.34, V.33, V.17 (TCM), V.29 (QAM), V.27ter (G3), V.8, V.21 (G3)
Data Rate:	G3: 33600/31200/28800/26400/24000/21600/ 19200/16800/14400/12000/9600/7200/4800/2400 bps Automatic fallback
I/O Rate:	With ECM: 0 ms/line Without ECM: 2.5, 5, 10, 20, or 40 ms/line

Memory Capacity:	ECM: 128 KB SAF Standard: 4 MB Page Memory: Standard: 4 MB (Print: 2 MB + Scanner: 2 MB)
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IFAX Specifications

Connectivity:	Local area network Ethernet 100base-Tx/10base-T IEEE1394 (IP over 1394) IEEE802.11b (wireless LAN)
Resolution:	Main scan: 400 dpi, 200 dpi Sub scan: 400 dpi, 200 dpi, 100 dpi To use 400 dpi, IFAX SW01 Bit 4 must be set to "1".
Transmission Time:	1 s (through a LAN to the server) Condition: ITU-T #1 test document (Selerexe Letter) MTF correction: OFF TTI: None Resolution: 200 x 100 dpi Communication speed: 10 Mbps Correspondent device: E-mail server Line conditions: No terminal access
Document Size:	Maximum message width is A4/LT. <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;">  Note </div> <ul style="list-style-type: none"> To use B4 and A3 width, IFAX SW00 Bit 1 (B4) and/or Bit 2 (A3) must be set to "1".
E-mail File Format:	Single/multi-part MIME conversion Image: TIFF-F (MH, MR, MMR)

Protocol:	Transmission: SMTP, TCP/IP Reception: POP3, SMTP, IMAP4, TCP/IP
Data Rate:	100 Mbps(100base-Tx) 10 Mbps (10base-T)
Authentication Method:	SMTP-AUTH POP before SMTP A-POP
Remark:	The machine must be set up as an e-mail client before installation. Any client PCs connected to the machine through a LAN must also be e-mail clients, or some features will not work (e.g. Autorouting).

IP-FAX Specifications

Network:	Local Area Network Ethernet/10base-T, 100base-TX IEEE1394 (IP over 1394) IEEE802.11b (wireless LAN)
Scan line density:	8 x 3.85 lines/mm, 200 x 100dpi (standard characters) 8 x 7.7lines/mm, 200 x 200dpi (detailed characters)
Original size:	Maximum A3 or 11"x 17" (DLT)
Maximum scanning size:	Standard: A3, 297mm x 432mm Irregular: 297mm x 1200mm
Transmission protocol:	Recommended: T.38 Annex protocol, TCP, UDP/IP communication
Compatible machines:	IP-Fax compatible machines
IP-Fax transmission function:	Specify IP address and send fax to an IP-Fax compatible fax through a network. Also capable of sending fax from a G3 fax connected to the public telephone lines via a VoIP gateway.

IP-Fax reception function:	Receive a fax sent from an IP-Fax compatible fax through a network. Also capable of receiving fax from a G3 fax connected the public telephone lines via a VoIP gateway.
----------------------------	---

Fax Unit Configuration

Component	Code	No.	Remarks
FCU	-	-	Standard for D115/D116
MBU		-	
Speaker		-	
Handset Type 1018	B433	-	NA only. Common with PG-C1

ARDF

Original Size:	Standard:	A4 to A5; 8 ¹ / ₂ " x 14" to 8 ¹ / ₂ " x 5 ¹ / ₂ "
	Custom (Simplex):	Width: 139 mm to 216 mm Length: 139 mm to 1260 mm
	Custom (Duplex):	Width: 139 mm to 216 mm Length: 160 mm to 356* ¹ mm
	* ¹ : When you use 310 mm or more originals, originals weighing 55k (17 lb. / 64 g/m ²) or less cannot be used in duplex scanning mode.	
Original Weight:	52–105 g/m ² (14–28 lb.)	
Table Capacity:	50 sheets (80 g/m ² , 21 lb.)	
Original Standard Position:	Center	
Separation:	FRR	
Transport:	Roller transport	
Feed Order:	Top first	
Reproduction Range:	50–200%	

Power Source:	24 and 5 Vdc from the copier
Power Consumption:	Operating: 50 W or less On standby: 1.2 W or less
Dimensions (W x D x H):	485 x 360 x 120 mm (19.1" x 14.2" x 4.72")
Weight:	4.9 kg (10.8 lb) (excluding the original table and platen cover)

Paper Tray Unit

Paper Sizes:	A4 SEF, 8½" x 11" SEF, 8½" x 13" SEF, 8½" x 14" SEF
Paper Weight:	60 – 90 g/m ² , 16 – 24 lb.
Tray Capacity:	500 sheets (80 g/m ² , 21 lb.) x 1 tray
Paper Feed System:	Feed roller and friction pad
Power Source:	24 Vdc and 5 Vdc, from copier. If optional tray heater is installed, the copier also supplies Vac (120 Vac or 220 – 240 Vac).
Power Consumption:	Maximum: 15 W (excluding optional tray heater)
Average:	14 W (excluding optional tray heater)
Weight:	Not above 6 kg (13.2. lb.)
Size (W x D x H):	430 x 414 x 140 mm (16.9" x 16.3" x 5.5")

↓ Note

- Two can be installed.

Supported Paper Sizes

Original Paper Sizes

1

The copier and ARDF do not detect original paper sizes. The following table lists the paper sizes that the ARDF can transport.

Paper	Size (W x L)	Book	ARDF	
			Simpl.	Dupl.
A3 SEF	297 x 420 mm	–	–	–
B4 SEF	257 x 364 mm	–	–	–
A4 SEF	210 x 297 mm	X	X	X
A4 LEF	297 x 210 mm	–		
B5 SEF	182 x 257 mm	X	X	X
B5 LEF	257 x 182 mm	–		
A5 SEF	148 x 210 mm	X	X	X
A5 LEF	210 x 148 mm	X	X	
B6 SEF	128 x 182 mm	–		
B6 LEF	182 x 128 mm	–		
A6 SEF	105 x 148 mm	–		
8K SEF	267 x 390 mm	–		
16K SEF	195 x 267 mm	X	X	X
16K LEF	267 x 195 mm	–		
DLT SEF	11.0" x 17.0"	–		
LG SEF	8.5" x 14.0"	X* ¹	X	X* ²
LT SEF	8.5" x 11.0"	X	X	X
LT LEF	11.0" x 8.5"	–		
Executive SEF	7.25" x 10.5"	–	X	X

Paper	Size (W x L)	Book	ARDF	
			Simpl.	Dupl.
HLT SEF	5.5" x 8.5"	X	X	X
HLT LEF	8.5" x 5.5"	X	X	
F/GL (F4) SEF	8.0" x 13.0"	X*1	X	X*2
Foolscap SEF	8.5" x 13.0"	X*1	X	X*2
Folio SEF	8.25" x 13.0"	X*1	X	X*2
Government	8.25" x 14"	X*1	X	X*2
USB4 SEF	10.0" x 14.0"	–		
Eng Quarto SEF	8.0" x 10.0"	–	X	X*2
Eng Quarto LEF	10.0" x 8.0"	–		
Custom:	Width 139-216 mm Length 139-356 mm	–	X*3	X*2, 4

Symbol meanings:

X: Can use

–: Cannot use

*1: Can be used when the ARDF is installed

*2: 55k (17 lb./ 64 g/m²) or less original cannot be used.

*3: Width: 139-216 mm, Length: 139-1260 mm

*4: Width 139-216 mm, Length: 160-356 mm

Paper Feed

The copier and optional paper feed unit do not detect paper sizes. The following table lists the paper sizes that the copier and optional paper feed unit can transport.

Paper	Size (W x L)	Regular	By-pass	Duplex	Optional PFU
A3 SEF	297 x 420 mm	–	–	–	–
B4 SEF	257 x 364 mm	–	–	–	–

Paper	Size (W x L)	Regular	By-pass	Duplex	Optional PFU
A4 SEF	210 x 297 mm	X	X	X	X
A4 LEF	297 x 210 mm	-	-	-	-
B5 SEF	182 x 257 mm	X	X	X	-
B5 LEF	257 x 182 mm	-	-	-	-
A5 SEF	148 x 210 mm	-	X	-	-
A5 LEF	210 x 148 mm	X	X	-	-
B6 SEF	128 x 182 mm	-	-	-	-
B6 LEF	182 x 128 mm	-	-	-	-
A6 SEF	105 x 148 mm	-	-	-	-
8K SEF	267 x 390 mm	-	-	-	-
16K SEF	195 x 267 mm	X	X	X	-
16K LEF	267 x 195 mm	-	-	-	-
DLT SEF	11.0" x 17.0"	-	-	-	-
LG SEF	8.5" x 14.0"	-	X	X	X
LT SEF	8.5" x 11.0"	X	X	X	X
LT LEF	11.0" x 8.5"	-	-	-	-
Executive SEF	7.25" x 10.5"	-	X	-	-
HLT SEF	5.5" x 8.5"	-	X	-	-
HLT LEF	8.5" x 5.5"	X	X	-	-
F/GL (F4) SEF	8.0" x 13.0"	-	X	-	-
Foolscap SEF	8.5" x 13.0"	-	X	X	X
Folio SEF	8.25" x 13.0"	-	X	X	X
Government	8.25" x 14"	-	X	X	X
Com 10 SEF	4.124" x 9.5"	-	X	-	-
Monarch SEF	3.875" x 7.5"	-	X	-	-

Paper	Size (W x L)	Regular	By-pass	Duplex	Optional PFU
C5	162 x 229 mm	-	X	-	-
C6	114 x 162 mm	-	X	-	-
DL Env	110 x 220 mm	-	X	-	-
Custom: Leading edge 90–216 mm Side edge 139–356 mm		-	X	-	-

Symbol meanings:

X: Can transport

-: Cannot transport

2. Appendix: Preventive Maintenance Tables

Maintenance Tables

Reset the PM counter (SP7-804-001) after doing maintenance work.

Key: AN: As necessary, C: Clean, R: Replace, I: Inspect

	Every 45k	Every 90k	AN	NOTE
OPTICS				
Reflector	C		C	Optics cloth
1st mirror	C		C	Optics cloth
2nd mirror	C		C	Optics cloth
3rd mirror	C		C	Optics cloth
Platen cover	C		C	Dry cloth
Exposure glass	C		C	Dry cloth
Toner shield glass	C		C	Dry cloth
DRUM AREA				
PCU	R			Clean toner-bottle holder.
Transfer roller		R		
Discharge plate		R		
PAPER FEED				
Paper feed roller		R	C	Water or alcohol.
Friction pad		R	C	Dry cloth
Bottom-plate pad	C		C	Water or alcohol.
Registration roller	C		C	Water or alcohol.
FUSING UNIT				

	Every 45k	Every 90k	AN	NOTE
Hot roller		R		
Pressure roller		R		
Hot roller bearings		R		
Pressure-roller bushings		I		
Inlet guide		C		
Outlet guide		C		
Hot roller stripper pawls		R		
Thermistor		C		

	Every 90k	AN	NOTE
ARDF			
Separation roller	R	C	Water or alcohol
Pick-up roller	R	C	Water or alcohol
Feed roller	R	C	Water or alcohol
White plate		C	Water or alcohol
DF exposure glass		C	Water
Rollers R0, R1, R2		C	Water or alcohol
Registration sensor reflector		C	Water or alcohol

	Every 120k	AN	NOTE
PAPER TRAY UNIT			
Paper feed roller	R		
Bottom-plate pad		C	Dry cloth
Friction pad	R		

3. Appendix: SP Mode Tables

System Service Mode

Service Mode Tables

SP1-XXX (Feed)

3

1001*	LE Registration	[-9.0 to 9.0 / 0.0 / 0.1 mm/step]
1001 1	All Trays	Adjusts the leading-edge registration (🔧 "Adjusting Copy Image Area" in the section "Replacement and Adjustment").
1001 2	By-pass	
1001 3	Duplex	

1002*	S-to-S Regist	[-9.0 to 9.0 / 0.0 / 0.1 mm/step]
1002 1	1st Tray	Adjusts the side-to-side registration (🔧 "Adjusting Copy Image Area" in the section "Replacement and Adjustment"). SP1-002-001 is applied to all trays. SP1-002-002, 003 and 005 adjusts the difference from SP1-002-001.
1002 2	2nd Tray	
1002 3	3rd Tray	
1002 5	By-pass	
1002 6	Duplex	Adjusts the side-to-side registration of the 2nd side in duplex copying. The 1st side is adjusted by SP1-002-001 through 005.

1003*	Paper Feed Timing	Adjusts the amount of paper buckle on the registration roller.
1003 1	1st tray	[0 to 10 / 5 / 1 mm/step]
1003 3	Bank Trays	[0 to 10 / 5 / 1 mm/step]
1003 4	By-pass	[0 to 10 / 5 / 1 mm/step]
1003 5	Duplex	[0 to 20 / 5 / 1 mm/step]

1103*	Fusing Idling	[0 = No / 1 = Yes]	
1103 1	Enables or disables the contact-release control. The following table lists the results.		
	Setting	0 = No	1 = Yes
	C-R control	Works	Does not work
	Idling time	Shorter	Longer
	Fusing quality	Lower	Higher

1105*	Fusing Temp Adj	
	Adjusts the target fusing temperature. Note that the thermistor is at the center of the hot roller.	
1105 1	Warm Up-Center	[140 to 180 / 160 / 1°C/step]
1105 3	Standby-Center	[140 to 160 / 150 / 1°C/step]
1105 5	Copying-Center	[140 to 180 / 160 / 1°C/step]
1105 7	Low Level 2-Center	[0 to 80 / 60 / 1°C/step]
1105 9	Thick-Center	[140 to 185 / 165 / 1°C/step]

1106	Display Fusing
1106 1	(Center) Displays the fusing temperature.

1107*	Fusing Soft Start DFU	
	Adjusts the number of zero-cross cycles of the fusing lamp AC supply needed to bring the fusing lamp power to 100% while bringing the lamp up to the standby temperature or while copying. Increase this value if the machine is experiencing sudden power dropouts.	
1107 1	Warm Up Soft Start	[0 = 10 times / 1 = 20 times / 2 = 50 times]
1107 2	Other Soft Start	[0 = 10 times / 1 = 20 times / 2 = 50 times / 3 = 1 time]
1107 3	Soft Stop Setting	[0: No / 1 : Yes]

1108*	Set-Fusing Start	[0 = 1 s / 1 = 1.5s / 2 = 2s]
1108 1	Specifies the interval for fusing-temperature control.	

1109	Nip Band Check	
1109 1	Conducts the nip band check (☛ "Adjusting Nip Band" in the section "Replacement and Adjustment").	
1110*	Fan Control Timer	[30 to 60 / 30 / 1 s/step]
1110 1	Specifies the fan control time. The fan motor keeps its operating speed for the specified time before changing the speed or stopping. The fan control timer prevents the exhaust fan from suddenly stopping. This function protects the copier from overheating.	
1159*	Fusing Jam SC	[0 = No / 1 = Yes]
1159 1	Enables or disables consecutive jam detection at the fusing unit. If this SP is set to "1" (default: 0), consecutive fusing jam alarm occurs (SC559) when the machine detects three consecutive paper jams at the fusing unit.	
1902	Display-AC Freq.	
1902 1	Displays the fusing lamp power control frequency (as detected by the zero cross signal generator). The displayed value is 1/5 the actual frequency: 10 and lower = 50 Hz, 11 and higher = 60 Hz.	
1911*	By-pass Envelope	[0 = No / 1 = Yes]
1911 1	The program dedicated to envelope printing runs when you enable this program (SP1-911-001) and you select "Thick Paper" as the paper type of the by-pass tray (☛ > System Settings > Tray Paper Settings > Paper Type: Bypass Tray).	

SP2-XXX (Drum)

2001*	CR Bias Adj	
	Printing	[-2100 to -1500 / -1650 / 1 V/step]
2001 1	Adjusts the voltage applied to the charge roller for printing. The voltage changes automatically as charge-roller voltage control works. The value here is the base value for the charge-roller voltage control.	

2001 2	ID sensor pattern	[0 to 400 / 300 / 1 V/step]
	Adjusts the voltage applied to the charge roller for the ID sensor pattern (as part of charge-roller voltage correction). The charge-roller voltage is obtained by adding SP2-001-002 to the value of SP2-001-001.	

3

2101*	Erase Margin Adj	Adjusts the width of the erased area (▶ "Adjusting Copy Image Area" in the section "Replacement and Adjustment").
2101 1	Leading Edge	[0.0 to 9.0 / 3.0 / 0.1 mm/step] Specification: 2 ± 1.5 mm
2101 2	Trailing Edge	[0.0 to 9.0 / 4.0 / 0.1 mm/step] Specification: 2 +2.5/-1.5 mm
	The rear trailing edge is this value plus 1.2 mm.	
2101 3	Left side	[0.0 to 9.0 / 2.0 / 0.1 mm/step] Specification: 2 ± 1.5 mm
	The rear left edge is this value plus 0.3 mm.	
2101 4	Right side	[0.0 to 9.0 / 2.0 / 0.1 mm/step] Specification: 2 +2.5/-1.5 mm
	The rear right edge is this value plus 0.3 mm.	

2201*	Dv Bias Adj	
2201 1	Printing	[-1500 to -200 / -650 / 1 V/step]
	Adjusts the voltage applied to the development roller for printing. Image density becomes higher when you specify a smaller value (a greater absolute value). Image density becomes lower when you specify a greater value (a smaller absolute value).	
2201 2	ID sensor pattern	[-2 = LL (220 V) / -1 = L (260 V) / 0 = N (300 V) / 1 = H (340 V) / 2 = HH (380 V)]
	Adjusts the voltage applied to the development roller for the ID sensor pattern. The voltage applied is obtained by adding SP2-201-002 to SP2-201-1. The setting affects ID sensor pattern density, which in turn affects the toner supply.	

2213*	Outputs After NE
2213 1	[0 = 50 pages / 1 = 20 sheets] Sets the number of copy/print/fax pages that can be made after toner near-end has been detected. Reduce the number of pages if the user normally makes copies with a high image ratio.

2214	Develpr Initialize
2214 1	Initializes the TD sensor toner supply target voltage and the TD sensor gain value. Execute this SP replacing the developer or the TD sensor.

2221	ID Error Analysis (🖨️ "ID Sensor Error Analysis (SP2-221)")	
2221 1	Vsg	Displays the Vsg value.
2221 2	Vsp	Displays the Vsp value.
2221 3	PWM	Displays the PWM value.
2221 4	Vsdp	Displays the Vsdp value.
2221 5	Vt	Displays the Vt value.
2221 6	Vts	Displays the Vts value.

2301*	Tr Current Adj; (🖨️ "Image Transfer Current").	
2301 1	Normal paper	$[-2 = -4 \mu\text{A} / -1 = -2 \mu\text{A} / 0 = 0 \mu\text{A} / 1 = 2 \mu\text{A} / 2 = +4 \mu\text{A}]$
	Adjusts the current applied to the transfer roller when feeding from a paper tray. Use a high setting if the user normally feeds relatively thick paper (within spec) from a paper tray	
2301 2	Thick/Special	$[-2 = -4 \mu\text{A} / -1 = -2 \mu\text{A} / 0 = 0 \mu\text{A} / 1 = 2 \mu\text{A} / 2 = +4 \mu\text{A}]$
	Adjusts the current applied to the transfer roller when feeding from the by-pass tray. Use a high setting (a) if the user normally feeds relatively thick paper from the by-pass tray, or (b) if waste toner is re-attracted from the drum (which can occur when using transparencies).	

2301 3	Duplex	$[-2 = -4 \mu\text{A} / -1 = -2 \mu\text{A} / 0 = 0 \mu\text{A} / 1 = 2 \mu\text{A} / 2 = +4 \mu\text{A}]$
	Adjusts the current applied to the transfer roller when carrying out a duplex job. Use this SP if there is poor image transfer on the rear side of duplex copies.	
2301 4	Cleaning	$[-10 \text{ to } 1 / -1 / 1 \mu\text{A}/\text{step}]$
	Adjusts the current applied to the transfer roller for roller cleaning. Increase the current if toner remains on the roller after cleaning. (Remaining toner may cause dirty background on the rear side.)	

2802	Forced Develpr Churn	
2802 1	Initializes the developer and checks the TD sensor output (Vt). The machine mixes the developer for 2 minutes while reading and displaying the Vt value. The machine does not initialize the TD sensor output. If the machine has not been used for a long period, prints may have a dirty background. In a case like this, use this SP to mix the developer. The message "Completed" is displayed when the program ends normally.	

2906*	Tailing Crctn	
2906 1	Shift value	$[0.0 \text{ to } 1.0 / 0.0 / 0.1 \text{ mm}/\text{step}]$
	Shifts the image position at the intervals specified by SP2-906-002. When the copier is continuously printing vertical lines (such as in tables), the paper may not separate correctly. This SP can prevent this.	
2906 2	Interval	$[1 \text{ to } 10 / 1 / 1 \text{ page}/\text{step}]$
	Changes the interval of the image position shift specified by SP2-906-001.	

2908	Forced Toner Supp	
2908 1	Supplies the toner to the development unit. The processing stops under either of the following conditions: <ul style="list-style-type: none"> • The toner density in the development unit reaches the standard level. • The processing has continued for two 2 minutes. 	

2915*	Polygon Idling	$[0 = \text{None} / 1 = 15 \text{ s} / 2 = 25 \text{ s}]$
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2915 1	Specifies the polygon mirror motor idling time. The polygon mirror motor starts its operation when an original is set, a key is pressed, or the platen cover or DF is opened. The motor stops if no manual operation is performed for the specified time. When you set "0", the motor does not stop while the copier is in the standby status.	
2921*	Toner Supply Mode	
2921 1	[0 = Sensor 1 / 1 = Sensor 2 (DFU)] Selects the toner supply mode. Keep the default setting as long as the TD sensor is working.	
2922*	Toner Supply Time	[0.1 to 5.0 / 0.6 / 0.1 s/step]
2922 1	Adjusts the toner supply time. The toner supply motor remains on for the specified time. To validate this setting, select "0" in SP2-921-001. Specify a greater value if the user tends to make many copies having high proportions of solid black image areas.	
2926*	Standard Vt	[0.00 to 5.00 / 2.50 / 0.01 V/step] DFU
2926 1	Adjusts Vts (the Vt value for new developer). The TD sensor output is adjusted to this value during the TD sensor initial setting process. This SP is effective only when SP2-921001 is "0", "1", or "2".	
2927*	ID Sensor Control	[0 = No / 1 = Yes]
2927 1	Determines whether the ID sensor signal is referenced or not for the toner density control. Keep the default value in usual operations.	
2928	Toner End Clear	
2928 1	<p>Clears the following messages and counters without supplying the toner:</p> <ul style="list-style-type: none"> • Toner near end message • Toner end message • Toner near end counter • Toner end counter <p>Do not use this SP in usual operations. When the toner in the development unit is abnormally insufficient, the drum may attract the toner carrier to its surface. The toner carrier damages the drum surface..</p>	
2929*	Vref Limits	Adjust the upper or lower Vref limit.

2929 1	Upper	[0.50 to 3.50 / 3.20 / 0.01V/step] DFU
2929 2	Lower	[0.50 to 3.50 / 0.70 / 0.01V/step] DFU
2994*	ID Detect Temp	[30 to 90 / 30 / 1°C/step]
2994 1	Adjusts the temperature threshold. The ID sensor signal is not referenced when the fusing temperature is at the specified level or higher while the copier is recovering or starting up.	
2996*	T Roller Cleaning	[0 = No / 1 = Yes]
2996 1	Cleans or does not clean the transfer roller before each job. Select "1" if the backside of the paper becomes unclean when output. Note that the copier takes a longer time to output the first copy when you select "1". If you select "0", the transfer roller is never cleaned.	
2998*	Main Mag- print	[-0.5 to +0.5 / 0.0 / 0.1%/step]
2998 1	Adjusts the magnification (👉 "Adjusting Copy Image Area" in the section "Replacement and Adjustment"). The specification is 100 ±1.0%.	

SP4-XXX (Scanner)

4008*	SubScan Mag (Scanner)	[-0.9 to +0.9 / 0.0 / 0.1%/step]
4008 1	Adjusts the sub-scan magnification (👉 "Adjusting Copy Image Area" in the section "Replacement and Adjustment").	
4009*	Main Scan Mag (Scanner)	[-0.9 to +0.9 / 0.0 / 0.1%/step]
4009 1	Adjusts the main-scan magnification (👉 "Adjusting Copy Image Area" in the section "Replacement and Adjustment").	
4010*	LE Scan Regist	[-5.0 to +5.0 / 0.0 / 0.1 mm/step]
4010 1	Adjusts the leading edge registration (👉 "Adjusting Copy Image Area" in the section "Replacement and Adjustment").	
4011*	S-to-S Scanner Registration	[-2.0 to +2.0 / 0.0 / 0.1 mm/step]

4011 1	Adjusts the side-to-side registration for scanning in platen mode (▶ "Adjusting Copy Image Area" in the section "Replacement and Adjustment").	
4012*	Scan Erase Margin	[0 to 9.0 / 1.0 / 0.1 mm/step]
4012 1	Leading Edge	Adjusts the scanning margin. Generally, the scanning margin should be as little as possible. To adjust the image area, use SP2-101.
4012 2	Trailing Edge	
4012 3	Left Side	
4012 4	Right Side	
4013	Scanner Free Run	
4013 1	Conducts the scanner free run with the exposure lamp on.	
4015*	White Plate Scan	
4015 1	Start position	[-3.0 to +6.0 / 0.0 / 0.1 mm/step]
	Adjusts the scanning start position on the white plate. The base value is 17.8 mm from the scanner home position. This SP specifies the offset from this base value.	
4015 2	Scanning Length	[-3.0 to +6.0 / 0.0 / 0.1 mm/step]
	Adjusts the distance of the white plate scan. The scan begins from the start position (SP4-015-001) and ends at the specified distance. The base value is 2.0 mm. This SP decides the offset from this base value. Specify 0 (zero) or a larger value.	
4428	Scan Auto Adj	
4428 1	Conducts the automatic scanner adjustment. Use this SP after replacing the white plate (▶ "Scanning" in the section "Replacement and Adjustment").	
4606	SBU Offset-Target	

4607 1	EVEN	<p>[0 to 63 / 10 / 1 /step]</p> <p>Adjusts the target black level for each signal.</p> <p>These are used for offset adjustment in the SBU.</p>
4607 2	ODD	
4607 3	RED	
4607 4	GREEN	
4607 5	BLUE	

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4607	SBU Gain-Target	
4607 1	EVEN	<p>[0 to 255 / 180 / 1 /step]</p> <p>Adjusts the target white level for each signal.</p> <p>These are used for gain adjustment in the SBU.</p>
4607 2	ODD	
4607 3	RED	
4607 4	GREEN	
4607 5	BLUE	

4623	SBU Offset-Result	
4623 1	EVEN	<p>[0 to 255 / 0 / 1 /step]</p> <p>Displays the result value of the offset adjustment in the SBU.</p>
4623 2	ODD	
4623 3	RED	
4623 4	GREEN	
4623 5	BLUE	

4628	SBU Gain-Result	
4628 1	EVEN	<p>[0 to 255 / 0 / 1 /step]</p> <p>Displays the result value of the gain adjustment in the SBU.</p>
4628 2	ODD	
4628 3	RED	
4628 4	GREEN	
4628 5	BLUE	

4640	SBU Offset-Loop	
4640 1	EVEN	[0 to 10 / 0 / 1 /step] Displays the number of the offset adjustment in the SBU.
4640 2	ODD	
4640 3	RED	
4640 4	GREEN	
4640 5	BLUE	

4641	SBU Gain-Loop	
4641 1	EVEN	[0 to 10 / 0 / 1 /step] Displays the number of the gain adjustment in the SBU.
4641 2	ODD	
4641 3	RED	
4641 4	GREEN	
4641 5	BLUE	

4642	SBU Offsetpre-Loop	
4642 1	EVEN	[0 to 3 / 0 / 1 /step] Displays the number of the pre-offset adjustment in the SBU.
4642 2	ODD	
4642 3	RED	
4642 4	GREEN	
4642 5	BLUE	

4646	SBU Adj Error	
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4646 1	Offsetpre-Mono	<p>[0 = Success / 1 = Failure]</p> <p>Displays the result of SBU adjustment.</p>
4646 2	Offsetpre-Color	
4646 3	Offset-Mono	
4646 4	Offset-Color	
4646 5	Gain-Mono	
4646 6	Gain-Color	

4654*	SBU Offset-Adjust	
4654 1	EVEN	<p>[0 to 255 / - / 1 /step]</p> <p>Displays the offset value of the offset adjustment in the SBU.</p>
4654 2	ODD	
4654 3	RED	
4654 4	GREEN	
4654 5	BLUE	

4658*	SBU Gain-Adjust	
4658 1	EVEN	<p>[0 to 511 / - / 1 /step]</p> <p>Displays the gain value of the gain adjustment in the SBU.</p>
4658 2	ODD	
4658 3	RED	
4658 4	GREEN	
4658 5	BLUE	

4685*	Gray Balance-Book	
4685 1	RED	<p>[128 to 383 / 256 / 1 /step]</p> <p>Adjusts the coefficient of the gray balance adjustment for the book scanning.</p>
4685 2	GREEN	
4685 3	BLUE	

4686*	Gray Balance-DF	
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4686 1	RED	[128 to 383 / 256 / 1 /step] Adjusts the coefficient of the gray balance adjustment for the DF scanning.
4686 2	GREEN	
4686 3	BLUE	

4687*	White Balance	
4687 1	Adjust	[222 to 281 / 256 / 1 /step] Adjust the correction value for the white plate adjustment.
4687 2	Result	Displays the current value of the white plate adjustment. If SP4-428 has not been done, this value is "0".

4690	White Peek Init	
4658 1	EVEN	[0 to 255 / - / 1 /step] Displays the white offset value of the pre-offset adjustment in the SBU.
4658 2	ODD	
4658 3	RED	
4658 4	GREEN	
4658 5	BLUE	

4693	Black Ave Init	
4658 1	EVEN	[0 to 255 / - / 1 /step] Displays the black offset value of the pre-offset adjustment in the SBU.
4658 2	ODD	
4658 3	RED	
4658 4	GREEN	
4658 5	BLUE	

4902*	Exposure Lamp ON	[0: OFF / 1: ON]
4902 1	Turns the exposure lamp on or off. To turn on the exposure lamp, specify "1"; to turn it off specify "0".	

4903*	ADS Level	[0 to 255 / 252 / 1/step]
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4903 1	Adjusts the ADS level.	
4904*	ADS Lower Limit	[0 to 255 / 80 / 1/step]
4904 1	Adjusts the ADS lower limit.	
4905*	ADS Area Select	[0 = All / 1 = One]
4905 1	<p>Checks the whole area (0 = All) or the specific areas (1 = One) to adjust the ADS level. The specific areas are as follows:</p> <ul style="list-style-type: none"> • ARDF: ±37.5 mm from the center • Platen Cover: 15 to 90 mm from the left edge 	
4921*	Image Adj Selec	
001	Copy	[0 to 10 / 0 / 1]
	<p>Selects which mode the settings from SP4-922 to SP4-932 are used for.</p> <p>0 = None, 1 = Text 1, 2 = Text 2, 3 = Photo 1, 4 = Photo 2, 5 = Photo 3, 6 = Special 1, 7 = Special 2, 8 = Special 3, 9 = Special 4, 10 = Special 5</p>	
002	Fax	[0 to 5 / 0 / 1]
	<p>Selects which mode the settings from SP4-922 to SP4-932 are used for.</p> <p>0 = None, 1 = Text 1, 2 = Text 2, 3 = Photo 1, 4 = Photo 2, 5 = Special 1</p>	
003	Scanner (Mono)	[0 to 4 / 0 / 1]
	<p>Selects which mode the settings from SP4-922 to SP4-932 are used for.</p> <p>0 = None, 1 = Text 1, 2 = Text 2, 3 = Photo 1, 4 = Photo 2</p>	
004	Scanner (Color)	[0 to 2 / 0 / 1]
	<p>Selects which mode the setting of SP4-935 is used for.</p> <p>0 = None, 1 = Color Text, 2 = Color Photo</p>	
005	Scanner (Gray Scale)	[0 or 1 / 0 / -]
	<p>Selects which mode the setting of SP4-936 is used for.</p> <p>0 = None, 1 = Gray Scale</p>	

4922*	Scanner Gamma	
	Selects "text" or "photo" as the priority output mode. This setting is applied to all image processing modes of SP4-921.	
001	Copy	[0=System default/ 1=Text/ 2=Photo]
002	Fax	
003	Scanner	

4923*	Notch Selection	
	Selects the value of the center ID adjustment notch for the ID adjustment LEDs. <ul style="list-style-type: none"> • Normally the center notch is 3 (range 1-5). If -1 is selected, each notch shifts down (becomes lighter). If +1 is selected, each notch shifts up (becomes darker). • This setting is applied to all image processing modes of SP4-921. 	
001	Copy	[-1 = Light / 0 = Normal / +1 = Dark]
002	Fax	
003	Scanner	

4926*	Texture Removal	
	Adjusts the texture removal level that is used with error diffusion. 0: The default value for each mode is used. Text 1, Photo 2, Special 2, and Special 5 have a default of 3 and Photo 1-3 have a default of 1. 1: No removal applied. 2 to 5: Removal applied at the level specified here. The higher the setting (level), the less clear the image will become (more texture removal). This setting is only applied to the originals in SP4-921.	
001	Copy	[0 to 6 / 0 / 1/step]
002	Fax	
003	Scanner	

4927*	Line Width	
	Adjusts the line width correction algorithm. Positive settings produce thicker lines; negative settings produce thinner lines. This setting is only applied to the originals in SP4-921.	

001	Copy	[-2 to 2 / 0 / 1/step]
002	Fax	
003	Scanner	

4928*	Independent Dot Erase	
	Selects the dot erase level. Higher settings provide greater erasure. This setting is only applied to the originals in SP4-921.	
001	Copy	[-2 to 2 / 0 / 1/step]
002	Fax	
003	Scanner	

4929*	Positive/Negative	[0 = No, 1 = Yes]
	Inverts white and black. This setting is only applied to the originals in SP4-921.	
001	Copy	
002	Fax	

4930*	Sharpness-Edge	[-2 to 2 / 0 / 1/step]
	Adjust the clarity. This setting is only applied to the originals in SP4-921.	
001	Copy	
002	Fax	
003	Scanner	

4931*	Sharpness-Solid	[-2 to 2 / 0 / 1/step]
	Adjust the clarity. This setting is only applied to the originals in SP4-921.	
001	Copy	
002	Fax	
003	Scanner	

4932*	Sharpness-Low ID	[-2 to 2 / 0 / 1/step]
	Adjust the clarity. This setting is only applied to the originals in SP4-921.	
001	Copy	
002	Fax	
003	Scanner	

4935*	Color Image Adjust	
001	Main Scan MTF Level	[0 to 3 / 0 / 1/step]
	Adjust the MTF level for the main scan. This setting is only activated for the specified mode with SP4-921-004. 0: None, 1: Weak, 2: Middle, 3: Strong	
002	Main Scan MTF Strength	[0 to 5 / 0 / 1/step]
	Adjust the MTF strength for the main scan. This setting is only activated for the specified mode with SP4-921-004. 0: 1, 1: 1/32, 2: 1/16, 3: 1/8, 4: 1/4, 5: 1/2	
003	Sub Scan MTF Level	[0 or 1 / 0 / 1/step]
	Turns on or off the MTF for the sub scan. This setting is only activated for the specified mode with SP4-921-004. 0: No, 1: Yes	
004	Sub Scan MTF Strength	[0 to 5 / 0 / 1/step]
	Adjust the MTF strength for the sub scan. This setting is only activated for the specified mode with SP4-921-004. 0: 1, 1: 1/32, 2: 1/16, 3: 1/8, 4: 1/4, 5: 1/2	
005	Smooth Level	[0 to 2 / 0 / 1/step]
	Adjust the smooth level. This setting is only activated for the specified mode with SP4-921-004. 0: None, 1: Weak, 2: Strong	
006	Brightness	[0 to 255 / 128 / 1/step]
	Adjust the brightness level. This setting is only activated for the specified mode with SP4-921-004.	

007	Contrast	[0 to 255 / 128 / 1/step]
	Adjust the contrast level. This setting is only activated for the specified mode with SP4-921-004.	
4936*	Gray Scale Image Adjust	
001	Main Scan MTF Level	[0 to 15 / 0 / 1/step]
	Adjust the MTF level for the main scan. This setting is only activated for the specified mode with SP4-921-004. 0: None, 1: Level 1 to 15: Level 15	
002	Main Scan MTF Strength	[0 to 5 / 0 / 1/step]
	Adjust the MTF strength for the main scan. This setting is only activated for the specified mode with SP4-921-004. 0: 1, 1: 1/32, 2: 1/16, 3: 1/8, 4: 1/4, 5: 1/2	
003	Sub Scan MTF Level	[0 to 13 / 0 / 1/step]
	Adjust the MTF level for the sub scan. This setting is only activated for the specified mode with SP4-921-004. 0: No, 1: Level 1 to 13: Level 13	
004	Sub Scan MTF Strength	[0 to 5 / 0 / 1/step]
	Adjust the MTF strength for the sub scan. This setting is only activated for the specified mode with SP4-921-004. 0: 1, 1: 1/32, 2: 1/16, 3: 1/8, 4: 1/4, 5: 1/2	
005	Smooth Level	[0 to 7 / 0 / 1/step]
	Adjust the smooth level. This setting is only activated for the specified mode with SP4-921-004. 0: None, 1: Level 1 to 7: Level 7	
006	Brightness	[0 to 255 / 128 / 1/step]
	Adjust the brightness level. This setting is only activated for the specified mode with SP4-921-004.	

007	Contrast	[0 to 255 / 128 / 1/step]
	Adjust the contrast level. This setting is only activated for the specified mode with SP4-921-004.	

4941*	White Line Erase	[0 to 2 / 1 / 1/step]
4941 1	<p>Selects the white line erase level.</p> <p>0: None, 1: Weak, 2: Strong</p> <ul style="list-style-type: none"> This setting is effective for all modes. 0: White line erase is not used, and white level correction is used instead. This setting is applied regardless of what mode has been selected in SP4-921. 	

4942*	Black Line Erase	[0 to 3 / 2 / 1/step]
4942 1	<p>Selects the black line erase level. This setting is effective only when originals are scanned by the DF.</p> <p>[0 = No / 1 = Very weak / 2 = Weak / 3 = Strong]</p> <p>This setting is applied regardless of what mode has been selected in SP4-921.</p>	
4943*	WhitePapDetect BiLv	
4943 1	Gray Scale	[0 to 255 / 64 / 1/step]
4943 1	Color2	[0 to 255 / 128 / 1/step]
4943 1	Color3	[0 to 255 / 128 / 1/step]

SP5-XXX (Mode)

5001	All Indicators On	
5001 1	Turns on all LEDs. The LCDs turn on and off every 3 seconds. Press the reset key to end this program.	
5024*	mm/inch Selection	

001	<p>Selects whether mm or inches are used in the display.</p> <p>Note</p> <ul style="list-style-type: none"> After selecting the number, you must turn the main power switch off and on. <p>Europe/Asia model: [0: mm / 1: inch] American model: [0: mm / 1: inch]</p>
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5045*	According Counter		
5045 1	Counter Method		<p>Displays the number of the installed counter. [0 to 2 / 0 / 1 /step] 0: 1 counter (Total) 1: 2 counters (Total and Prints) 2: 2 counters GPC</p>

5055	Display IP address		
001	Display IP address	CTL	<p>Displays or does not display the IP address on the LCD. [0 or 1 / 0 / -] 0: No (Not display), 1: Yes (Display)</p>

5056	Coverage Counter		
001	Coverage Counter	CTL	<p>Displays or does not display the coverage counter on the LCD. [0 or 1 / 0 / -] 0: Not display, 1: Display</p>

5062	Part Replacement		
001	PCU	CTL	<p>Displays or does not display the PCU yield on the LCD. [0 or 1 / 0 / -] 0: Not display, 1: Display</p>

5066	PM Parts Display		
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001	PM Parts Display	CTL	Displays or does not display the PM part button on the LCD. [0 or 1 / 0 / -] 0: Not display, 1: Display
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5067	Part Replacement Ope		
001	PCU	CTL	Selects the service maintenance or user maintenance for PCU. [0 or 1 / 0 / -] 0: Service , 1: User

5113	Optional Counter Type		
001	Opt Cnt Type 1	CTL	This program specifies the counter type. 0: None 1: Key card (RK 3, 4) 2: Key card (down) 3 to 10: (Japan only) 11: Exp. Key card (Add) 12: Exp. Key card (Deduct)
002	Opt Cnt Type 2	CTL	This program specifies the external counter type. 0: None 1: Expansion Device type 1 2: Expansion Device type 2 3: Expansion Device type 3

5114	Optional Counter I/F	CTL	[0: Not installed/ 1: Installed (scanning accounting)]
001	MF Key Card Ext. Japan use		

5118	Disable Copying	CTL	[0: Not disabled/ 1: Disabled]
001	This program disables copying.		

5120*	Clr For Cut Remove	[0=Yes / 1=Standby only / 2=No]
5120 1	<p>Specifies the condition to reset the copy job settings when the key counter is removed.</p> <ul style="list-style-type: none"> • 0: Y = Yes: The settings are cleared when the counter is removed. • 1: StdBy = Standby only: The settings are cleared when the counter is removed at the end of a job. • 2: N = No: The settings are not cleared under either condition. <p>As for duplex copying, the job settings are always preserved regardless of these setting.</p>	

5121*	Counter Up Timing	[0 = Feed In / 1 = Exit]
5121 1	<p>Selects the count-up timing.</p> <ul style="list-style-type: none"> • 0 = Feed: At each paper feed • 1 = Exit: At each paper exit 	

5167	Fax Prnt Cnt Off		
	Enables or disables the automatic print out without an accounting device. This SP is used when the receiving fax is accounted by an external accounting device.		
001	Fax Prnt Cnt Off	CTL	<p>[0 or 1 / 0 / -]</p> <p>0: Automatic printing</p> <p>1: No automatic printing</p>

5169	CE Login		
	If you change the printer bit switches, you must 'log in' to service mode with this SP before you go into the printer SP mode.		
001	CE Login	CTL	<p>[0 or 1 / 0 / -]</p> <p>0: Disabled</p> <p>1: Enabled</p>

5188	Copy NV Version		
001	Copy NV Version	CTL	Displays the NVRAM version in the controller board.

5302	Set Time		
	Adjusts the RTC (real time clock) time setting for the local time zone. Examples: For Japan (+9 GMT), enter 540 (9 hours x 60 min.) DOM: +540 (Tokyo) NA :-300 (New York) EU :+ 60 (Paris) CH :+480 (Peking) TW :+480 (Taipei) AS :+480 (Hong Kong)		
002	Time Difference	CTL #	[-1440 to 1440 / Area / 1 min./step]

5307	Summer Time		
001	ON/OFF	-	[0 or 1 / NA, EU, ASIA / 1 /step] 0: Disabled 1: Enabled NA and EUR: 1, ASIA: 0
	Enables or disables the summer time mode. Note <ul style="list-style-type: none"> Make sure that both SP5-307-3 and -4 are correctly set. Otherwise, this SP is not activated even if this SP is set to "1". 		

003	Start	-	-
	<p>Specifies the start setting for the summer time mode.</p> <p>There are 8 digits in this SP. For months 1 to 9, the "0" cannot be input in the first digit, so the eight-digit setting for -2 or -3 becomes a seven-digit setting.</p> <p>1st and 2nd digits: The month. [1 to 12] 3rd digit: The week of the month. [1 to 5] 4th digit: The day of the week. [0 to 6 = Sunday to Saturday] 5th and 6th digits: The hour. [00 to 23] 7th digit: The length of the advanced time. [0 to 9 / 1 hour /step] 8th digit: The length of the advanced time. [0 to 5 / 10 minutes /step]</p> <p>For example: 3500010 (EU default)</p> <p>The timer is advanced by 1 hour at am 0:00 on the 5th Sunday in March</p> <ul style="list-style-type: none"> • The digits are counted from the left. • Make sure that SP5-307-1 is set to "1". 		
004	End	-	-
	<p>Specifies the end setting for the summer time mode.</p> <p>There are 8 digits in this SP.</p> <p>1st and 2nd digits: The month. [1 to 12] 3rd digit: The week of the month. [0 to 5] 4th digit: The day of the week. [0 to 6 = Sunday to Saturday] 5th and 6th digits: The hour. [00 to 23]</p> <p>The 7th and 8th digits must be set to "00".</p> <ul style="list-style-type: none"> • The digits are counted from the left. • Make sure that SP5-307-1 is set to "1". 		

5401	Access Control		
	When installing the SDK application, SAS (VAS) adjusts the following settings. DFU		
103	DocAcl	CTL	
104	Authentication Time	CTL	[0 to 255 / 0 / 1 /step]

162	Extend Certification	CTL	Selects the log out type for the extend authentication device. Bit 0: Log-out without an IC card. 0: Not allowed (default) 1: Allowed
200	SDK1 Unique ID	CTL	"SDK" is the "software development kit". This data can be converted from SAS (VAS) when installed or uninstalled. (DFU)
201	SDK1 Certification Method	CTL	
210	SDK2 Unique ID	CTL	
211	SDK2 Certification Method	CTL	
220	SDK3 Unique ID	CTL	
221	SDK3 Certification Method	CTL	
230	SDK Cert	CTL	
240	Detail Option	CTL	Enables or disables the log-out confirmation option. Bit0: Log-out confirmation option 0: Enable (default) , 1: Disable Selects the automatic log-out time. Bit1 and 2: Automatic log-out timer reduction 00: 60 seconds (default) , 01:10 seconds, 10: 20seconds, 11: 30 seconds
5404	User Code Clear		
001	Clears the counts for the user codes assigned by the key operator to restrict the use of the machine. Press [Execute] to clear.		
5411	LDAP Certification		

004	Easy Certification
	<p>Determines whether easy LDAP certification is done.</p> <p>[0 to 1/1/1]</p> <p>1: On</p> <p>0: Off</p>
005	Password Null Not Permit
	<p>This SP is referenced only when SP5411-4 is set to "1" (On).</p> <p>[0 to 1/0/1]</p> <p>0: Password NULL not permitted.</p> <p>1: Password NULL permitted.</p>

5413	Lockout Setting
001	Lockout On/Off
	<p>Switches on/off the lock on the local address book account.</p> <p>[0 to 1/0/1]</p> <p>0: Off</p> <p>1: On</p>
002	<p>Lockout Threshold</p> <p>Sets a limit on the frequency of lockouts for account lockouts.</p> <p>[1 to 10/5/1]</p>
003	Cancel On/Off
	<p>Determines whether the system waits the prescribed time for input of a correct user ID and password after an account lockout has occurred.</p> <p>[0 to 1/0/1]</p> <p>0: Off (no wait time, lockout not cancelled)</p> <p>1: On (system waits, cancels lockout if correct user ID and password are entered.)</p>
004	Cancel Time
	<p>Determines the length of time that the system waits for correct input of the user ID and password after a lockout has occurred. This setting is used only if SP5413-3 is set to "1" (on).</p> <p>[1 to 999/60/1 min.]</p>

5414	Access Mitigation
001	Mitigation On/Off
	Switches on/off masking of continuously used IDs and passwords that are identical. [0 to 1/ 0 /1] 0: Off 1: On
002	Mitigation Time
	Sets the length of time for excluding continuous access for identical user IDs and passwords. [0 to 60/ 15 /1 min.]

5415	Password Attack
001	Permissible Number
	Sets the number of attempts to attack the system with random passwords to gain illegal access to the system. [0 to 100/ 30 /1 attempt]
002	Detect Time
	Sets the time limit to stop a password attack once such an attack has been detected. [1 to 10/ 5 /1 sec.]

5416	Access Info
001	User Max Num
	Limits the number of users used by the access exclusion and password attack detection functions. [50 to 200/ 200 /1 users]
002	Password Max Num
	Limits the number of passwords used by the access exclusion and password attack detection functions. [50 to 200/ 200 /1 passwords]

003	Monitor Interval
	Sets the processing time interval for referencing user ID and password information. [1 to 10/ 3 /1 sec.]

5417	Access Attack
001	Permissible Num
	Sets a limit on access attempts when an excessive number of attempts are detected for MFP features. [0 to 500/ 100 /1]
002	Attack Detect Time
	Sets the length of time for monitoring the frequency of access to MFP features. [10 to 30/ 10 /1 sec.]
003	Cert Waite
	Sets the wait time to slow down the speed of certification when an excessive number of access attempts have been detected. [0 to 9/ 3 /1 sec.]
004	Attack Max Num
	Sets a limit on the number of requests received for certification in order to slow down the certification speed when an excessive number of access attempts have been detected. [50 to 200/ 200 /1 attempt]

5420	User Auth
	These settings should be done with the System Administrator. Note: These functions are enabled only after the user access feature has been enabled.
001	Copy
	Determines whether certification is required before a user can use the copy applications. [0 to 1/ 0 /1] 0: On 1: Off

011	DS	
	Determines whether certification is required before a user can use the document server. [0 to 1/0/1] 0: On 1: Off	
021	Fax	
	Determines whether certification is required before a user can use the fax application. [0 to 1/0/1] 0: On 1: Off	
031	Scanner	
	Determines whether certification is required before a user can use the scan applications. [0 to 1/0/1] 0: On 1: Off	
041	Printer	
	Determines whether certification is required before a user can use the printer applications. [0 to 1/0/1] 0: On 1: Off	
051	SDK1	[0 or 1/0/1] 0: ON. 1: OFF Determines whether certification is required before a user can use the SDK application.
061	SDK2	
071	SDK3	

5431	External Auth User	CTL	-
010	Tag		
011	Entry		
012	Group		
020	Mail		

030	Fax
031	Fax Sub
032	Folder
033	Protect Code
034	Sntp Auth
035	Lsap Auth
036	Smb Ftp Fldr Auth
037	Acut Acl
038	Document ACL
040	Cert Crypt

5481	Authentication Error Code
	These SP codes determine how the authentication failures are displayed.
001	System Log Disp
	Determines whether an error code appears in the system log after a user authentication failure occurs. [0 to 1/0/1] 0: Off 1: On
002	Panel Disp
	Determines whether an error code appears on the operation panel after a user authentication failure occurs. [0 to 1/1/1] 1: On 0: Off

5490	MF Keycard Japan Only		
	Job Permit Setting		
	<p>Sets up operation of the machine with a keycard.</p> <p>[0 to 1/0/1]</p> <p>0: Disabled. Cancels operation if no code is input.</p> <p>1: Enabled. Allows operation if another code is input and decrements the counter once for use of the entered code.</p>		

5501	PM Alarm Interval	CTL	-
001	Printout	<p>[0 to 9999 / 0 / 1 /step]</p> <p>0: Alarm off</p> <p>1 to 9999: Alarm goes off when the PM counter reaches the specified value (1 to 9999) x 1000.</p>	
002	ADF	<p>[0 or 1 / 1 / -]</p> <p>0: No alarm sounds</p> <p>1: Alarm sounds after the number of originals passing through the A(R)DF > 10,000</p>	

5504	Jam Alarm	CTL	-
001	<p>Sets the alarm to sound for the specified jam level (document misfeeds are not included).</p> <p>[0 to 3 / 3 / 1 /step]</p> <p>0: Zero (Off), 1: Low (2.5K jams), 2: Medium (3K jams), 3: High (6K jams)</p>		

5505*	Error Alarm		
001	<p>Sets the error alarm level.</p> <p>The error alarm counter counts "1" when any SC is detected. However, the error alarm counter decreases by "1" when any SC is not detected during specified sheets of copies (for example, default 1500 sheets).</p> <p>The error alarm occurs when the SC error alarm counter reaches "5".</p> <p>[0 to 255 / 10 / 100 copies per step]</p>		

5507	Supply Alarm	CTL	-
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001	Paper Size	0: Off, 1: On,
003	Toner	0: Off, 1: On,
005	Drum	0: Off, 1: On,
080	Toner Call Timing	0: Toner is replaced (default) 1: Toner near end or end
128	Interval :Others	[250 to 10000 / 1000 / 1 /step]
132	Interval :A3	
133	Interval :A4	
134	Interval :A5	
141	Interval :B4	
142	Interval :B5	
160	Interval :DLT	
164	Interval :LG	
166	Interval :LT	
172	Interval :HLT	

5508*	Auto Call Setting	CTL	-
001*	Jam Remains	0: Disable, 1: Enable	
	Enables/disables initiating a call for an unattended paper jam.		
002*	Frequent Jams	0: Disable, 1: Enable	
	Enables/disables initiating a call for consecutive paper jams.		
003*	Door Open	0: Disable, 1: Enable	
	Enables/disables initiating a call when the front door remains open.		
011*	Jam Remains: Time	[03 to 30 / 10 / 1 minute /step]	
	Sets the time a jam must remain before it becomes an "unattended paper jam". This setting is enabled only when SP5508 004 is set to 1.		




012*	Freq Jam: # of Time	[02 to 10 / 5 / 1 /step]
	Sets the number of consecutive paper jams required to initiate a call. This setting is enabled only when SP5508 004 is set to 1.	
013*	Door Open: Time	[03 to 30 / 10 / 1 minute/step]
	Sets the length of time the door remains open before the machine initiates a call. This setting is enabled only when SP5508 004 is set to 1.	


5515	SC/Alarm Setting	CTL	-
	With @Remote in use, these SP codes can be set to issue an SC call when an SC error occurs. If this SP is switched off, the SC call is not issued when an SC error occurs.		
001	SC Call	[0 or 1 / 1 / -] 0: Off, 1: On	
002	Service Parts Near End		
003	Service Parts End		
004	User Call		
006	Communication Test		
007	Machine Information		
008	Alarm Notice		
010	Supply Automatic Order		
011	Supply Management Report		
012	Jam/Door Open Call	[0 or 1 / 1 / -] 0: Off, 1: On	


5801	[Memory Clear] Before executing any of these SP codes, print an SMC Report.		
001	All Clear		
	Initializes items SP5801-002 to -014 below. Turn the main power switch off and on after executing this SP.		
003	SCS	-	-
	Clears the system settings.		

004	IMH	-	-
	Clears IMH data. DFU		
005	MCS	-	-
	Clears MCS data. DFU		
006	Copier	-	-
	Clears the copy application settings.		
007	Fax	-	-
	Clears the fax application settings.		
008	Printer	-	-
	Clears the printer application settings.		
009	Scanner	-	-
	Clears the scanner application settings.		
010	GWWS	-	-
	Delete the netfile application management files and thumbnails, and initializes the job login ID.		
011	NCS	-	-
	<p>Initializes the system default and interface settings (IP address also), SmartNetMonitor for Admin, WebImageMonitor settings, and the TELNET settings.</p> <p>Note</p> <ul style="list-style-type: none"> The name of Apple talk is not cleared only if this SP is executed. Turns off and on after executing this SP. 		
012	R-FAX	-	-
	Initializes the job login ID, SmartNetMonitor for Admin, job history, and local storage file numbers.		
014	Clear DCS Setting	-	-
	Initializes the DCS (Delivery Control Service) settings.		
015	Clr UCS Setting	-	-
	Initializes the UCS (User Information Control Service) settings.		

016	MIRS Setting	-	-
	Initializes the MIRS (Machine Information Report Service) settings.		
017	CCS	-	-
	Initializes the CCS (Certification and Charge-control Service) settings.		
018	SRM Memory Clr	-	-
	Initializes the SRM (System Resource Manager) settings.		
019	LCS	-	-
	Initializes the LCS (Log Count Service) settings.		
020	Web Apli	-	-
	Initializes Web application settings.		

5802	Machine Free Run	[0 or 1 / 0 / -] 0: No, 1: Yes
5802 1	Conducts machine free run (including the scanner unit). Set "1" and then press "  " key. Press "  " key again to start "Free Run". When this SP is set to "0", the machine operates normally even "  " key is pressed.	

5803	Input Check	
	 "Input Check" in this chapter.	

5804	Output Check	
	 "Output Check" in this chapter.	

5807*	Area Selection	
5807 1	<p>Selects the display language.</p> <p>2 North America, 3 Europe, 5 Asia, 6 China</p> <p>SP5-807-001 is not cleared by SP5-801-002.</p> <p>NOTE: SC982 is displayed if you specify a language that is inconsistent with your local model.</p>	

5811*	Machine No. Setting	
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001	Code Set
	☛ "Machine No. Setting" in this section.

5812	Service TEL		
001	Telephone	CTL	-
	Sets the telephone number for a service representative. This number is printed on the Counter List, which can be printed with the user's "Counter" menu. This can be up to 20 characters (both numbers and alphabetic characters can be input).		
002	Facsimile	CTL	-
	Sets the fax or telephone number for a service representative. This number is printed on the Counter List. This can be up to 20 characters (both numbers and alphabetic characters can be input).		
003	Supply	CTL	-
	Use this to input the telephone number of your supplier for consumables. Enter the number and press "StringIn" key. Press the "Clear modes" key to delete the telephone number.		
004	Sales	CTL	-
	Use this to input the telephone number of your sales agency. Enter the number and press #. Press the "Clear modes" key to delete the telephone number.		

5816	[NRS Function]	CTL	-
001	I/F Setting	Selects the remote service setting. [0 to 2 / 2 / 1 /step] 0: Remote service off 1: CSS remote service on 2: @Remote service on	

002	CE Call	<p>Performs the CE Call at the start or end of the service. [0 or 1 / 0 / 1 /step]</p> <p>0: Start of the service, 1: End of the service</p> <p>Note</p> <ul style="list-style-type: none"> This SP is activated only when SP 5816-001 is set to "2".
003	Function Flag	<p>Enables or disables the remote service function. [0 or 1 / 0 / 1 /step]</p> <p>0: Disabled, 1: Enabled</p>
007	SSL Disable	<p>Uses or does not use the RCG certification by SSL when calling the RCG. [0 or 1 / 0 / 1 /step]</p> <p>0: Uses the RCG certification 1: Does no use the RCG certification</p>
008	RCG Connect T/O	<p>Specifies the connect timeout interval when calling the RCG. [1 to 90 / 10 / 1 second/step]</p>
009	RCG Write Timeout	<p>Specifies the write timeout interval when calling the RCG. [1 to 100 / 60 / 1 second/step]</p>
010	RCG Read Timeout	<p>Specifies the read timeout interval when calling the RCG. [1 to 100 / 60 / 1 second/step]</p>
011	Port 80	<p>Enables/disables access via port 80 to the SOAP method. [0 or 1 / 0 / -]</p> <p>0: Disabled, 1: Enabled</p>
013	RFU Timing	<p>Selects the timing for the remote firmware updating. [0 or 1 / 0 / -]</p> <p>0: Any status of a target machine 1: Sleep or panel off mode only</p>

022	Install Status
	<p>This SP displays the RCG device installation status.</p> <p>0: RCG device not registered 1: RCG device registered 2: Device registered</p>
023	Connect Mode (N/M)
	<p>This SP displays and selects the embedded RCG connection method.</p> <p>0: Internet connection 1: Dial-up connection</p>
061	NotiTime ExpTime DFU
	Proximity of the expiration of the certification.
062	HTTP Proxy Use
	This SP setting determines if the proxy server is used when the machine communicates with the service center.
063	HTTP Proxy Host
	<p>This SP sets the address of the proxy server used for communication between embedded RCG-N and the gateway. Use this SP to set up or display the customer proxy server address. The address is necessary to set up embedded RCG-N.</p> <p>Note</p> <ul style="list-style-type: none"> The address display is limited to 127 characters. Characters beyond the 127th character are ignored. This address is customer information and is not printed in the SMC report.
064	HTTP Proxy Port
	<p>This SP sets the port number of the proxy server used for communication between embedded RCG N and the gateway. This setting is necessary to set up embedded RCG-N.</p> <p>Note</p> <ul style="list-style-type: none"> This port number is customer information and is not printed in the SMC report.

065	<p>HTTP Proxy Aut Usr</p> <p>This SP sets the HTTP proxy authentication user name.</p> <p>Note</p> <ul style="list-style-type: none">• The length of the name is limited to 31 characters. Any character beyond the 31st character is ignored.• This name is customer information and is not printed in the SMC report.
066	<p>HTTP Proxy Aut Pass</p> <p>This SP sets the HTTP proxy authentication password.</p> <p>Note</p> <ul style="list-style-type: none">• The length of the password is limited to 31 characters. Any character beyond the 31st character is ignored.• This name is customer information and is not printed in the SMC report.

067	Cer Updt Cond	
	Displays the status of the certification update.	
	0	The certification used by embedded RCG is set correctly.
	1	The certification request (setAuthKey) for update has been received from the GW URL and certification is presently being updated.
	2	The certification update is completed and the GW URL is being notified of the successful update.
	3	The certification update failed, and the GW URL is being notified of the failed update.
	4	The period of the certification has expired and a new request for an update is being sent to the GW URL.
	11	A rescue update for certification has been issued and a rescue certification setting is in progress for the rescue GW connection.
	12	The rescue certification setting is completed and the GW URL is being notified of the certification update request.
	13	The notification of the request for certification update has been completed successfully, and the system is waiting for the certification update request from the rescue GW URL
	14	The notification of the certification request has been received from the rescue GW controller, and the certification is being stored.
	15	The certification has been stored, and the GW URL is being notified of the successful completion of this event.
	16	The storing of the certification has failed, and the GW URL is being notified of the failure of this event.
	17	The certification update request has been received from the GW URL, the GW URL was notified of the results of the update after it was completed, but a certification error has been received, and the rescue certification is being recorded.
18	The rescue certification of No. 17 has been recorded, and the GW URL is being notified of the failure of the certification update.	

068	Cer Abnml Cause	
	Displays a number code that describes the reason for the request for update of the certification.	
	0	Normal. There is no request for certification update in progress.
	1	Request for certification update in progress. The current certification has expired.
	2	An SSL error notification has been issued (after the certification has expired).
	3	Notification of shift from a common authentication to an individual certification.
	4	Notification of a common certification without ID2.
	5	Notification that no certification was issued.
069	Cer: Updtt ReqID	
	The ID of the request for certification.	
083	Firm Updating	
	Displays the status of the firmware update.	
085	Firm Up Usr Conf	
	This SP setting determines if the operator can confirm the previous version of the firmware before the firmware update execution. If the option to confirm the previous version is selected, a notification is sent to the system manager and the firmware update is done with the firmware files from the URL.	
086	Firmware Size	
	Allows the service technician to confirm the size of the firmware data files during the firmware update execution.	
087	CERT: Macro Vsn	
	Displays the macro version of the @Remote certification.	
088	CERT: PAC Vsn	
	Displays the PAC version of the @Remote certification.	

089	CERT: ID2 Code
	Displays ID2 for the @Remote certification. Spaces are displayed as underscores (_). Asterisks (*) indicate that no @Remote certification exists.
090	CERT: Subject
	Displays the common name of the @Remote certification subject. CN = the following 17 bytes. Spaces are displayed as underscores (_). Asterisks (*) indicate that no DESS exists.
091	CERT: Seri Num
	Displays serial number for the @Remote certification. Asterisks (*) indicate that no DESS exists.
092	CERT: Issuer
	Displays the common name of the issuer of the @Remote certification. CN = the following 30 bytes. Asterisks (*) indicate that no DESS exists.
093	CERT: St ExpTime
	Displays the start time of the period for which the current @Remote certification is enabled.
094	CERT: End ExpTime
	Displays the end time of the period for which the current @Remote certification is enabled.
150	Ins Country
	<p>Select from the list the name of the country where embedded RCG-M is installed in the machine. After selecting the country, you must also set the following SP codes for embedded RCG-M:</p> <ul style="list-style-type: none"> • SP5816-153 • SP5816-154 • SP5816-161 <p>0: Japan, 1: USA, 2: Canada, 3: UK, 4: Germany, 5: France 6: Italy, 7: Netherlands, 8: Belgium, 9: Luxembourg, 10: Spain</p>

151	<p>Aut Line Detect</p> <p>Press [Execute].</p> <p>Setting this SP classifies the telephone line where embedded RCG-M is connected as either dial-up or push type, so embedded RCG-M can automatically distinguish the number that connects to the outside line.</p> <ul style="list-style-type: none"> • The current progress, success, or failure of this execution can be displayed with SP5816 152. • If the execution succeeded, SP5816 153 will display the result for confirmation and SP5816 154 will display the telephone number for the connection to the outside line.
152	<p>Line Detect Rst</p> <p>Displays a number to show the result of the execution of SP5816 151. Here is a list of what the numbers mean.</p> <p>0: Success</p> <p>1: In progress (no result yet). Please wait.</p> <p>2: Line abnormal</p> <p>3: Cannot detect dial tone automatically</p> <p>4: Line is disconnected</p> <p>5: Insufficient electrical power supply</p> <p>6: Line classification not supported</p> <p>7: Error because fax transmission in progress – ioctl() occurred.</p> <p>8: Other error occurred</p> <p>9: Line classification still in progress. Please wait.</p>
153	<p>Dial/Push Select</p> <p>This SP displays the classification (tone or pulse) of the telephone line to the access point for embedded RCG-M. The number displayed (0 or 1) is the result of the execution of SP5816 151. However, this setting can also be changed manually.</p> <p>[0 to 1 / 0 / 1 /step]</p> <p>0: Tone Dialing Phone</p> <p>1: Pulse Dialing Phone</p> <p>Inside Japan "2" may also be displayed:</p> <p>0: Tone Dialing Phone</p> <p>1: Pulse Dialing Phone 1OPPS</p> <p>2: Pulse Dialing Phone 2OPPS</p>

154	Outline Phone #
	<p>The SP sets the number that switches to PSTN for the outside connection for embedded RCG-M in a system that employs a PBX (internal line).</p> <ul style="list-style-type: none"> • If the execution of SP5816-151 has succeeded and embedded RCG-M has connected to the external line, this SP display is completely blank. • If embedded RCG-M has connected to an internal line, then the number of the connection to the external line is displayed. • If embedded RCG-M has connected to an external line, a comma is displayed with the number. The comma is inserted for a 2 sec. pause. • The number setting for the external line can be entered manually (including commas).
156	Dial Up User
	<p>Use this SP to set a user name for access to remote dial up. Follow these rules when setting a user name:</p> <ul style="list-style-type: none"> • Name length: Up to 32 characters • Spaces and # allowed but the entire entry must be enclosed by double quotation marks ("").
157	Dial Up Password
	<p>Use this SP to set a password for access to remote dial up. Follow these rules when setting a user name:</p> <ul style="list-style-type: none"> • Name length: Up to 32 characters • Spaces and # allowed but the entire entry must be enclosed by double quotation marks ("").
161	Phone Number
	<p>Use this SP to set the telephone number of the line where embedded RCG-M is connected. This number is transmitted to and used by the Call Center to return calls.</p> <p>Limit: 24 numbers (numbers only)</p>
162	Ans Timing Adj
	<p>When the Call Center calls out to a embedded RCG-M modem, it sends a repeating ID tone (*#1#). This SP sets the time the line remains open to send these ID tones after the number of the embedded RCG-M modem is dialed up and connected.</p> <p>[0 to 24/ 1 /1 /step]</p> <p>The actual amount of time is this setting + 2 sec. For example, if you set "2" the line will remain open for 4 sec.</p>

163	<p>Access Point</p> <p>This is the number of the dial-up access point for embedded RCG-M. If no setting is done for this SP code, then a preset value (determined by the country selected) is used.</p> <p>Default: 0</p> <p>Allowed: Up to 16 alphanumeric characters</p>
164	<p>Comm Line</p> <p>This SP sets the connection conditions for the customer. This setting dedicates the line to embedded RCG-M only, or sets the line for sharing between embedded RCG-M and a fax unit.</p> <p>[0 or 1 / 0 / -]</p> <p>0: Line shared by embedded RCG-M/Fax</p> <p>1: Line dedicated to embedded RCG-M only</p> <p>Note</p> <ul style="list-style-type: none"> • If this setting is changed, the copier must be cycled off and on. • SP5816187 determines whether the off-hook button can be used to interrupt an embedded RCG-M transmission in progress to open the line for fax transaction.
173	<p>Modem Serial Number</p> <p>This SP displays the serial number registered for the embedded RCG-M.</p>
174	<p>Lmt Resend Cncl</p> <p>Normally, it is best to allow unlimited time for certification and ID2 update requests, and for the notification that the certification has been completed. However, embedded RCG-M generates charges based on transmission time for the customer, so a limit is placed upon the time allowed for these transactions.</p> <p>If these transactions cannot be completed within the allowed time, do this SP to cancel the time restriction.</p>
186	RCG-C M Debut Bit SW DFU


187	FAX TX Priority
	<p>This SP determines whether pushing the off-hook button will interrupt an embedded RCG-M transmission in progress to open the line for fax transaction. This SP can be used only if SP5816-164 is set to "0".</p> <p>[0 or 1 / 0 / -]</p> <p>0: Disable. Setting the fax unit off-hook does not interrupt a fax transaction in progress. If the off-hook button is pushed during a embedded RCG-M transmission, the button must be pushed again to set the fax unit on-hook after the embedded RCG-M transmission has completed.</p> <p>1: Enable. When embedded RCG-M shares a line with a fax unit, setting the fax unit off-hook will interrupt a embedded RCG-M transmission in progress and open the line for a fax transaction.</p>
200	Polling Man Exc
	Executes the polling test.
201	Instl: Condition
	<p>Displays a number that indicates the status of the @Remote service device.</p> <p>0: Neither the registered device by the external RCG nor embedded RCG device is set.</p> <p>1: The embedded RCG device is being set. Only Box registration is completed. In this status the this unit cannot answer a polling request from the external RCG.</p> <p>2: The embedded RCG device is set. In this status the external RCG unit cannot answer a polling request.</p> <p>3: The registered device by the external RCG is being set. In this status the embedded RCG device cannot be set.</p> <p>4: The registered module by the external RCG has not started.</p>
202	Instl: ID#
	Allows entry of the number of the request needed for the embedded RCG.
203	Instl: Reference
	Executes the inquiry request to the @Remote GateWay URL.


204	Instl: Ref Rslt
	Displays a number that indicates the result of the inquiry executed with SP5816-203.
204	0: Succeeded
	1: Inquiry number error
	2: Registration in progress
	3: Proxy error (proxy enabled)
	4: Proxy error (proxy disabled)
	5: Proxy error (Illegal user name or password)
	6: Communication error
	7: Certification update error
	8: Other error
	9: Inquiry executing
205	Instl: Ref Section
	Displays the result of the notification sent to the device from the GW URL in answer to the inquiry request. Displayed only when the result is registered at the GW URL.
206	Instl: Rgslttn
	Executes Embedded RCG Registration.
207	Instl: Rgslttn Rst
	Displays a number that indicates the registration result.
	0: Succeeded
	2: Registration in progress
	3: Proxy error (proxy enabled)
	4: Proxy error (proxy disabled)
	5: Proxy error (Illegal user name or password)
	6: Communication error
	7: Certification update error
	8: Other error
9: Registration executing	

208	Instl Error Code		
	Displays a number that describes the error code that was issued when either SP5816 204 or SP5816 207 was executed.		
	Cause	Code	Meaning
	Illegal Modem Parameter	-11001	Chat parameter error
		-11002	Chat execution error
		-11003	Unexpected error
	Operation Error, Incorrect Setting	-12002	Inquiry, registration attempted without acquiring device status.
		-12003	Attempted registration without execution of an inquiry and no previous registration.
		-12004	Attempted setting with illegal entries for certification and ID2.
	Error Caused by Response from GW URL	-2385	Attempted dial up overseas without the correct international prefix for the telephone number.
		-2387	Not supported at the Service Center
		-2389	Database out of service
		-2390	Program out of service
		-2391	Two registrations for same device
		-2392	Parameter error
-2393		External RCG not managed	
-2394		Device not managed	
-2395		Box ID for external RCG is illegal	
-2396		Device ID for external RCG is illegal	
-2397		Incorrect ID2 format	
-2398	Incorrect request number format		
209	Instl Clear		
	Releases a machine from its embedded RCG setup.		

250	Print Com Log
	Prints the communication log.

5821	NRS Address	
002	RCG IP Address	Sets the IP address of the RCG (Remote Communication Gate) destination for call processing at the remote service center. [00000000h to FFFFFFFFh / 1 /step]

5824	NVRAM Upload	
5824 1	 "NVRAM Upload/Download" in this section.	

5825	NVRAM Download	
5825 1	 "NVRAM Upload/Download" in this section.	


5828	Network Setting	CTL	
050	1284 Compatibility (Centro)	Enables or disables 1284 Compatibility. [0 or 1 / 1 / 1 / step] 0: Disabled, 1: Enabled	
052	ECP (Centro)	Enables or disables ECP Compatibility. [0 or 1 / 1 / 1 / step] 0: Disabled, 1: Enabled NOTE: This SP is activated only when SP5-828-50 is set to "1".	
065	Job Spooling	Enables/disables Job Spooling. [0 or 1 / 0 / 1 / step] 0: Disabled, 1: Enabled	
066	Job Spooling Clear: Start Time	Treatment of the job when a spooled job exists at power on. 0: ON (Data is cleared) 1: OFF (Automatically printed)	

5828	Network Setting	CTL	
069	Job Spooling (Protocol)	Validates or invalidates the job spooling function for each protocol. 0: Validates 1: Invalidates bit0: LPR bit1: FTP bit2: IPP bit3: SMB bit4: BMLinkS bit5: DIPRINT bit6: (Reserved) bit7: (Reserved)	
090	TELNET (0: OFF 1: ON)	Enables or disables the Telnet protocol. [0 or 1 / 1 / -] 0: Disable, 1: Enable	
091	Web (0: OFF 1: ON)	Enables or disables the Web operation. [0 or 1 / 1 / -] 0: Disable, 1: Enable	
145	Active IPv6 Link		
	This is the IPv6 local address link referenced on the Ethernet or wireless LAN (802.11b) in the format: "Link Local Address" + "Prefix Length" The IPv6 address consists of a total of 128 bits configured in 8 blocks of 16 bits each.		
147	Active IPv6 Status Address 1	These SPs are the IPv6 status addresses (1 to 5) referenced on the Ethernet or wireless LAN (802.11b) in the format: "Status Address" + "Prefix Length" The IPv6 address consists of a total of 128 bits configured in 8 blocks of 16 bits each.	
149	Active IPv6 Status Address 2		
151	Active IPv6 Status Address 3		
153	Active IPv6 Status Address 4		
155	Active IPv6 Status Address 5		

5828	Network Setting	CTL	
156	IPv6 Manual Setting Address		
	<p>This SP is the IPv6 manually set address referenced on Ethernet or wireless LAN (802.11b) in the format: "Manual Set Address" + "Prefix Length" The IPv6 address consists of a total of 128 bits configured in 8 blocks of 16 bits each.</p>		
158	IPv6 Gateway Address		
	<p>This SP is the IPv6 gateway address referenced on Ethernet or wireless LAN (802.11b). The IPv6 address consists of a total of 128 bits configured in 8 blocks of 16 bits each.</p>		
161	IPv6 Stateless Auto Setting		
	<p>Enables/disables the stateless automatic setting for Ethernet/wireless LAN operation. [0 to 1/1/1] 1: Enable 0: Disable</p>		
236	Web Item Invisible		
	<p>Determines whether each item can be set in Websys. [0x0000 to 0xffff/0xffff] Bit 1: NetRICOH Bit2: Vendor for consumables Bit2-15: Reserved</p>		
237	Web Shopping Link Invisible		
	<p>Determines whether the NetRICOH link is displayed on the Websys top page and link page. [0 to 1/1/1] 1: Display 0: No display</p>		

5828	Network Setting	CTL	
238	<p>Web Supplies Link Invisible</p> <p>Determines whether the consumable vendor link is displayed on the Websys top page and link page.</p> <p>[0 to 1/1/1]</p> <p>1: Display</p> <p>0: No display</p>		
239	<p>Web Link 1 Name</p> <p>Determines whether a name entered for "URL1" is displayed on the Websys link page. The name length is limited to 31 characters.</p>		
240	<p>Web Link 1 URL</p> <p>Sets the URL referenced for URL1 linked to the Websys linked page. The link name is limited to 127 characters.</p>		
241	<p>Web Link 1 Visible</p> <p>Determines whether the link for URL1 is displayed on the Websys top page.</p> <p>[0 to 1/1/1]</p> <p>1: Display</p> <p>0: No display</p>		
242	<p>Web Link 2 Name</p> <p>Determines whether a name entered for "URL2" is displayed on the Websys link page. The name length is limited to 31 characters.</p>		
243	<p>Web Link 2 URL</p> <p>Sets the URL referenced for URL2 linked to the Websys linked page. The link name is limited to 127 characters.</p>		
244	<p>Web Link 2 Visible</p> <p>Determines whether the link for URL2 is displayed on the Websys top page.</p> <p>[0 to 1/1/1]</p> <p>1: Display</p> <p>0: No display</p>		

5832	HDD		
	Enter the SP number for the partition to initialize, then press #. When the execution ends, cycle the machine off and on.		
001	HDD Formatting (All)		
002	HDD Formatting (IMH)		
003	Format Thumbnail		
004	Format Job Log		
005	Format Font		
006	Format User Info		
007	Format Rec Mail		
008	Format Sed Mail		
009	Format DFU data		
010	Format All Log		
011	Format Ridoc I/F		

5840	IEEE 802.11		
006	Channel MAX	CTL	[1 to 11 or 13 / 11 or 13 / 1 /step] Europe: 1 to 13, default: 13 NA/ Asia: 1 to 11, default: 11
	Sets the maximum number of channels available for data transmission via wireless LAN. The number of channels available varies according to location. The default settings are set for the maximum end of the range for each area. Adjust the upper 4 bits to set the maximum number of channels. DFU		
<p> Note</p> <ul style="list-style-type: none"> Do not change the setting. 			

007	Channel MIN	CTL	[1 to 11 or 13 / 1 / 1 /step] Europe: 1 to 13 NA/ Asia: 1 to 11
	<p>Sets the minimum number of channels available for data transmission via the wireless LAN. The number of channels available varies according to location. The default settings are set for the minimum end of the range for each area. Adjust the lower 4 bits to set the minimum number of channels. DFU</p> <p>Note</p> <ul style="list-style-type: none"> Do not change the setting. 		
011	WEP Key Select	CTL	[00 to 11 / 00 / 1 binary] 00: Key #1 01: Key #2 (Reserved) 10: Key #3 (Reserved) 11: Key #4 (Reserved)
	Selects the WEP key.		
042	Fragment Thresh	CTL	[256 to 2346 / 2346 / 1]
	<p>Adjusts the fragment threshold for the IEEE802.11 card. This SP is displayed only when the IEEE802.11 card is installed.</p>		
043	11g CTS to Self	CTL	[0 to 1 / 1 / 1] 0: Off, 1: On
	<p>Determines whether the CTS self function is turned on or off. This SP is displayed only when the IEEE802.11 card is installed.</p>		
044	11g Slot Time	CTL	[0 to 1 / 1 / 1] 0: 20μm, 1: 9μm
	Selects the slot time for IEEE802.11.		
045	WPA Debug Lvl	CTL	[0 to 3 / 3 / 1] 1: Info, 2: Warning, 3: Error
	<p>Selects the debug log for WPA authentication application. This SP is displayed only when the IEEE802.11 card is installed.</p>		
5842	GWWS Analysis DFU		

001	Setting 1	CTL	
	<p>This is a debugging tool. It sets the debugging output mode of each Net File process.</p> <p>Default: Bit SW 1000 0000</p>	Bit	Groups
		0	System & other groups (LSB)
		1	Capture related
		2	Certification related
		3	Address book related
		4	Machine management related
		5	Output related (printing, delivery)
		6	Repository related
		7	Debug log output
002	Setting 2	CTL	
	<p>Default: Bit SW 0000 0000</p>	Bit	Groups
		0-6	Not used
		7	<p>Log time stamp setting</p> <p>0: Date/Hour/Minute/Second</p> <p>1: Minute/Second/Msecond</p>

5844	USB		
001	Transfer Rate	CTL	
	<p>Sets the speed for USB data transmission.</p> <p>[Full Speed]</p> <p>[Auto Change]</p>		
002	Vendor ID	CTL	
	<p>Sets the vendor ID:</p> <p>Initial Setting: 0x05A Ricoh Company</p> <p>[0x0000 to 0xFFFF/1] DFU</p>		

003	Product ID	CTL	
	Sets the product ID. [0x0000 to 0xFFFF/1] DFU		
004	Device Release No.	CTL	
	Sets the device release number of the BCD (binary coded decimal) display. [0000 to 9999/1] DFU Enter as a decimal number. NCS converts the number to hexadecimal number recognized as the BCD.		

5845	Delivery Server Setting	CTL	-
	Provides items for delivery server settings.		
001	FTP Port Num	[0 to 65535 / 3670 / 1 /step]	
	Sets the FTP port number used when image files to the Scan Router Server.		
002	Srv IP (Primary)	Range: 000.000.000.000 to 255.255.255.255	
	Use this SP to set the Scan Router Server address. The IP address under the transfer tab can be referenced by the initial system setting.		
003	Retry Interval	[60 to 999 / 300 / 1 second /step]	
	Specifies the interval time for sending the scanned image data to the deliver server or SMTP/FTP/NCP/SMB server after sending error.		
004	No. of Retries	[0 to 99 / 3 / 1 time/step]	
	Specifies the retry times for sending the scanned image data to the deliver server or SMTP/FTP/NCP/SMB server after sending error.		
006	DeliErr DispTime	[0 to 999 / 300 / 1 second /step]	
	Use this setting to determine the length of time the prompt message is displayed when a test error occurs during document transfer with the NetFile application and an external device.		
008	Svr IP (Secondary)	Range: 000.000.000.000 to 255.255.255.255	
	Specifies the IP address assigned to the computer designated to function as the secondary delivery server of Scan Router. This SP allows only the setting of the IP address without reference to the DNS setting.		

009	Deli Svr Model	[0 to 4 / 0 / 1 /step]
	Allows changing the model of the delivery server registered by the I/O device. 0: Unknown, 1: SG1 Provided, 2: SG1 Package, 3: SG2 Provided, 4: SG2 Package	
010	Deli Svr Capabty	[0 to 255 / 0 / 1 /step]
	Bit7 = 1 Comment information exists	Changes the capability of the server that is registered as an I/O device.
	Bit6 = 1 Direct specification of mail address possible	
	Bit5 = 1 Mail RX confirmation setting possible	
	Bit4 = 1 Address book automatic update function exists	
	Bit3 = 1 Fax RX delivery function exists	
	Bit2 = 1 Sender password function exists	
	Bit1 = 1 Function to link MK-1 user and Sender exists	
	Bit0 = 1 Sender specification required (if set to 1, Bit6 is set to "0")	
011	Delivery Svr Cap (Ext)	
	Changes the capability of the server that is registered as an I/O device. Bit7 = 1 Address book usage limitation (Limitation for each authorized user) Bit6 = 1 RDH authorization link Bit5 to 0: Not used	
013	Svr Schm (Primary)	-
	Specifies the scheme of the primary delivery server.	
014	Svr Port Num (Pri)	-
	Specifies the port number of the primary delivery server.	
015	Srv URL Path (Pri)	-
	Specifies the URL path of the primary delivery server.	
016	Svr Schm (Sec)	-
	Specifies the scheme of the secondary delivery server.	

017	Svr Port Num (Sec)	-
	Specifies the port number of the secondary delivery server.	
018	Srv URL Path (Sec)	-
	Specifies the URL path of the secondary delivery server.	
022	Instant Trans Off	[0 or 1 / 1 / -] 0: Disable, 1: Enable
	Enables or disables the prevention function for the continuous data sending.	

5846	UCS Settings	CTL
	Provides items for delivery server settings.	
001	Machine ID (DelSvy)	Displays ID
	Displays the unique device ID in use by the delivery server directory. The value is only displayed and cannot be changed. This ID is created from the NIC MAC or IEEE 1394 EUI. The ID is displayed as either 6-byte or 8-byte binary.	
002	MC ID Clr (DelSvy)	Clears ID
	Clears the unique ID of the device used as the name in the file transfer directory. Execute this SP if the connection of the device to the delivery server is unstable. After clearing the ID, the ID will be established again automatically by cycling the machine off and on.	
003	Maximum Entries	[150 to 999 / 150 / 1 /step]
	Changes the maximum number of entries that UCS can handle. If a value smaller than the present value is set, the UCS managed data is cleared, and the data (excluding user code information) is displayed.	
006	Delsvr Rtry Tmer	[0 to 255 / 0 / 1 /step]
	Sets the interval for retry attempts when the delivery server fails to acquire the delivery server address book.	
007	Delsvr Rtry Tmes	[0 to 255 / 0 / 1 /step]
	Sets the number of retry attempts when the delivery server fails to acquire the delivery server address book.	

008	Delsvr Maxentri	[200 to 999 / 200 / 1/step]
	Sets the maximum number account entries of the delivery server user information managed by UCS.	
010	LDAP Search Tout	[1 to 255 / 60 / 1 /step]
	Sets the length of the timeout for the search of the LDAP server.	
020	WSD Max Entries	[5 to 255 / 250 / 1 /step]
	Sets the maximum entries for the address book of the WSD (SD-scanner)	
021	Folder Auth chg	[0 or 1 / 0 / -]
		0: Login user name 1: address book
041	[AddrB Acl Info] Address Book Access Control List Information	
	This SP must be executed immediately after installation of an HDD unit in a basic machine that previously had no HDD. The first time the machine is powered on with the new HDD installed, the system automatically takes the address book from the NVRAM and writes it onto the new HDD. However, the new address book on the HDD can be accessed only by the system administrator at this stage. Executing this SP by the service technician immediately after power on grants full address book access to all users.	
043	Addr B Media	
	Displays the slot number where an address book data is in.	
047	Ini Local Addr B	Clears the local address book information, including the user code.
048	Ini Deli Addr B	Clears the distribution address book information, except the user code.
049	Ini LDAP Addr B	Clears the LDAP address book information, except the user code.
050	Ini All Addr B	Clears all directory information managed by UCS, including all user codes. Turn the main power switch off and on after executing this SP.
051	Bkup All Addr B	Uploads all directory information to the SD card.
052	Restr All Addr B	Downloads all directory information from the SD card.

053	Clear Backup Info	<p>Deletes the address book data from the SD card in the service slot.</p> <p>Deletes only the files that were uploaded from this machine.</p> <p>This feature does not work if the card is write-protected.</p> <p>Note: After you do this SP, go out of the SP mode, and then turn the power off. Do not remove the SD card until the Power LED stops flashing.</p>
060	Search Option	<p>This SP uses bit switches to set up the fuzzy search options for the UCS local address book.</p> <p>Bit0: Checks both upper/lower case characters</p> <p>Bit1: Japan only</p> <p>Bit2 to 7: Not used</p>
062	Compl Opt1 ⁽¹⁾	<p>Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to upper case and sets the length of the password.</p> <p>[0 to 32 / 0 / 1 /step]</p>
063	Compl Opt2 ⁽¹⁾	<p>Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to lower case and defines the length of the password.</p> <p>[0 to 32 / 0 / 1 /step]</p>
064	Compl Opt3 ⁽¹⁾	<p>Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to numbers and defines the length of the password.</p> <p>[0 to 32 / 0 / 1 /step]</p>
065	Compl Opt4 ⁽¹⁾	<p>Use this SP to set the conditions for password entry to access the local address book. Specifically, this SP limits the password entry to symbols and defines the length of the password.</p> <p>[0 to 32 / 0 / 1 /step]</p>

091	FTP Auth Port Setting	Specifies the FTP port for getting a distribution server address book that is used in the identification mode. [0 to 65535 / 3671 / 1 /step]
094	Encryption Stat	Shows the status of the encryption function for the address book data.

Note (1):

SP5846-062 to SP5846-065 do not normally require adjustment.

These SP modes are enabled only after the system administrator has set up a group password policy to control access to the address book.

3

	Web Service	CTL	-
5848	SP5848-1 sets the 4-bit switch assignment for the access control setting. Setting of 0001 has no effect on access and delivery from Scan Router. ac: Access Control		
002	Ac: Repo (only Lower 4 Bits)	Switches access control on and off. 0000 : No access control 0001 : Denies access to DeskTop Binder.	
004	ac: UD (only Lower 4 bits)		
005	ac: For Cherry (only Lower 4 bits)		
007	ac: Log Fax (Lower 4 bits)		
009	ac: Job Ctrl (Lower 4 bits)		
011	ac: Dev Mng (Lower 4 bits)		
022	ac: Uadmin (Lower 4bits)		
099	DL Image Setting	DFU	
100	Max. Size: DL Image	[1 to 1024/1 K]	

210	Log Type: Job1	Displays the log server settings. These can be adjusted with the Web Image Monitor.
211	Log Type: Job2	
212	Log Type: Access	
213	Primary Srv	
214	Secondary Srv	
215	Start Time	
216	Interval Time	Specifies the transmit interval. [1 to 1000 / 1 / 1 hour/step] This SP is activated only when SP5848-217 is set to "2 (Transmit periodically)".
217	Timing	Selects the transmit timing. [0 to 2 / 0 / 1/step] 0: No Transmit, 1: Transmit one by one 2: Transmit periodically

5849	Installation Date	CTL	
	Displays or prints the installation date of the machine.		
001	Display	The "Counter Clear Day" has been changed to "Installation Date" or "Inst. Date".	
002	Print	Determines whether the installation date is printed on the printout for the total counter. [0 or 1 / 1 / 1/step] 0: Off (No Print), 1: On (Print)	
003	Total Counter	Displays the total counter when the installation date is registered to the machine.	

5851	Bluetooth		
001	Mode	CTL	Sets the operation mode for the Bluetooth Unit. Press either key. 0 :Public, 1: Private

5856	Remote ROM Update		
	Allows the technician to upgrade the firmware using a parallel cable when updating the remote ROM.		
002	Local Port	CTL	[0 or 1 / 0 / 1/step] 0: Disallow 1: Allow

5857	Debug Log Save	CTL	-
001	ON/OFF	0: OFF, 1: ON	
	Switches the debug log feature on and off. The debug log cannot be captured until this feature is switched on.		
002	Target (2: HDD 3: SD)		
	Selects the destination where the debugging information generated by the event selected by SP5858 will be stored if an error is generated [2 to 3 / 1] 2: HDD 3: SD Card		
005	Save to HDD		
	Specifies the decimal key number of the log to be written to the hard disk.		
006	Save to SD Card		
	Specifies the debug log number for saving to an SD card.		
009	HDD to SD Card Latest		
	Takes the most recent 4 MB of the log written to the hard disk and copies them to the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card.		

010	HDD to SD Any
	Takes the log of the specified key from the log on the hard disk and copies it to the SD Card. A unique file name is generated to avoid overwriting existing file names on the SD Card. Up to 4 MB can be copied to an SD Card. 4 MB segments can be copied one by one to each SD Card. This SP does not execute if there is no log on the HDD with no key specified.
011	Erase HDD Debug Data
	Erases all debug logs on the HDD
012	Erase SD Debug
	Erases SD debug logs in the SD card. Turn off and on after executing this SP.
013	Dsply-SD Space
	Displays the remaining space in the SD card.
014	SD to SD Latest (Latest 4 MB)
	Saves the debug log (latest 4 MB) in memory to the SD card. A unique file name is generated to avoid overwriting existing file names on the SD card. Up to 4MB can be copied to the SD card. 4 MB segments can be copied one by one to the SD card.
015	SD to SD Any (Latest 4 MB Any Key)
	Saves the specified debug log (with SP5-857-006) in memory to the SD card. A unique file name is generated to avoid overwriting existing file names on the SD card. Up to 4MB can be copied to the SD card. 4 MB segments can be copied one by one to the SD card.
016	Make HDD Debug
	This SP creates a 32 MB file to store a log on the HDD.
017	Make SD Debug
	Executes the making of a file (4MB) for saving debug logs.

5858	Debug Log Save: SC	CTL	-
	<p>These SPs select the content of the debugging information to be saved to the destination selected by SP5857-2.</p> <p>SP5858-3 stores one SC specified by number. Refer to the chapter "Trouble Shooting" for a list of SC error codes.</p>		
001	Engine SC	<p>Turns the save function on/off for SC codes generated by copier engine errors.</p> <p>[0 or 1 / 0 / 1 / step]</p> <p>0: OFF, 1: ON</p>	
002	Controller SC	<p>Turns the save function on/off for SC codes generated by GW controller errors.</p> <p>[0 or 1 / 0 / 1 / step]</p> <p>0: OFF, 1: ON</p>	
003	Any SC	<p>[0 to 65535 / 0 / 1 / step]</p>	
004	Jam	<p>Turns the save function on/off for jam errors.</p> <p>[0 or 1 / 0 / 1 / step]</p> <p>0: OFF, 1: ON</p>	

5859	Debug Log Save Key	CTL	-
001	Key 1	<p>These SPs allow you to set up to 10 keys for log files for functions that use common memory on the controller board.</p> <p>[-9999999 to 9999999 / 0 / -]</p>	
002	Key 2		
003	Key 3		
004	Key 4		
005	Key 5		
006	Key 6		
007	Key 7		
008	Key 8		
009	Key 9		
010	Key 10		

5860	SMTP/POP3/IMAP4	CTL	-
020	Par Mail Rec Tout	[1 to 168 / 72 / 1 hour/step]	
	Sets the amount of time to wait before saving mail that breaks up during reception. The received mail is discarded if the remaining portion of the mail is not received during this prescribed time.		
021	MDN Res RFC2298	[0 to 1 / 1 / -]	
	Determines whether RFC2298 compliance is switched on for MDN reply mail. 0: No, 1: Yes		
022	SMTP Aut Field Rep	[0 to 1 / 0 / -]	
	Determines whether the FROM item of the mail header is switched to the validated account after the SMTP server is validated. 0: No. "From" item not switched. 1: Yes. "From" item switched.		
025	SMTP Aut. Direct Set	[0 or 1 / 0 / -]	
	Selects the authentication method for SMPT. Bit switch: <ul style="list-style-type: none"> • Bit 0: LOGIN • Bit 1: PLAIN • Bit 2: CRAM MD5 • Bit 3: DIGEST MD5 • Bit 4 to 7: Not used <div style="border: 1px solid blue; border-radius: 10px; padding: 2px; display: inline-block;"> Note </div> <ul style="list-style-type: none"> • This SP is activated only when SMTP authorization is enabled by UP mode. 		
026	S/MINE Header		

5866	E-mail Report		
001	Report Validity	-	[0 or 1 / 0 / -] 0: Enabled, 1: Disabled
	Enables or disables the E-mail alert function.		
005	Add Date Field	CTL	[0 or 1 / 0 / -] 0: Not add, 1: Add
	Adds or does not add the date field to the header of the alert mail.		

5869	RAM Disk Setting		
001	Mail Function	GWINIT	[0 or 1 / 0 / -] 0: ON, 1: OFF
	Turns on or off the e-mail function.		


5870	Common Key Info Writing		
001	Writing	CTL	Writes to flash ROM the common proof for validating the device for @Remote specifications.
003	Initialize	CTL	Formats the common proof area of the flash ROM. FA

5873	SD Card Appli Move		
001	Move Exec	This SP copies the application programs from the original SD card in SD card slot 3 to an SD card in SD card slot 2.	
002	Undo Exec	This SP copies back the application programs from an SD card in the SD Card Slot 3 to the original SD card in the SD card slot 2. Use this menu when you have mistakenly copied some programs by using "Move Exec" (SP5873-1).	

5875	SC Auto Reboot		
001	Reboot Mode	CTL	Enables or disables the automatic reboot function when an SC error occurs. [0 or 1 / 0 / -] 0: The machine reboots automatically when the machine issues an SC error and logs the SC error code. If the same SC occurs again, the machine does not reboot. 1: The machine does not reboot when an SC error occurs. The reboot is not executed for Type A, B or C SC codes.

002	Reboot Method	CTL	Selects the reboot method for SC. [0 or 1 / 0 / -] 0: Manual reboot, 1: Automatic reboot
5878	Option Setup		
001	Data Overwrite Security	-	Enables the Data Overwrite Security unit. Press "EXECUTE" on the operation panel. Then turn the machine off and on.
002	Encryption Option	-	
5881	Delete Fixed Sent		
001	Delete Fixed Sent	-	Deletes the fixed form sentence.
5885	Set WIM Function		
200	Detect Mem Leak		
201	DocSvr Timeout		
5887	SD GetCounter SSP		
001	This SP saves the counter list of the machine to an SD card in the slot 3. The folder of "SD_COUNTER" must be made in an SD card for this SP.		
5888*	Person Info Prot		
	Selects the protection level for logs. [0 to 1 / 0 / 1] 0: No authentication, No protection for logs 1: No authentication, Protected logs (an administrator can see the logs)		
5893	[SDK Apli Cnt Name]	*CTL	-
	Displays the counter name of each SDK application.		
001	SDK-1		
002	SDK-2		
003	SDK-3		

004	SDK-4
005	SDK-5
006	SDK-6

5902	Test Pattern Print
5902 1	 "Test Pattern Print" in this section.

5907*	Plug & Play
5907 1	Selects the brand name and production name for the Plug and Play function. These names are stored in the NVRAM. When the NVRAM data is corrupted, select these names once again. Use the right-arrow or left-arrow key to scroll through the list of brand names. To select a brand name, press the OK key. An asterisk (*) indicates which manufacture is currently selected.

5912*	PCU Alarm Counter	[0 to 255 / 45 / 1/step]
5912 1	Printout	Specifies the PCU alarm level. The PCU alarm is issued when the following condition is met: $PAC \times 1000 \geq PCUC$ where PAC is the value specified in this SP and PCUC is the PCU counter. When you specify 0 (zero), the PCU alarm is deactivated.

5913	Switch Permission
002	Print Application Sets the length of time to elapse before allowing another application to take control of the display when the application currently controlling the display is not operating because a key has not been pressed. [3 to 30 / 3 / 1 second/step]

5974	Cherry Server
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001	<p>Selects which version of the Scan Router application program, "Light" or "Full (Professional)", is installed.</p> <p>[0 to 1 / 0 / 1 /step]</p> <p>0: Light version (supplied with this machine)</p> <p>1: Full version (optional)</p>
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5985	Device Setting	
	The NIC and USB support features are built into the GW controller. Use this SP to enable and disable these features. In order to use the NIC and USB functions built into the controller board, these SP codes must be set to "1".	
001	On Board NIC	<p>[0 to 2 / 0 / 1 /step]</p> <p>0: OFF, 1: ON, 2: ON: Limited</p> <p>When the "Function limitation" is set, "On board NIC" is limited only for the @Remote or LDAP/NT authentication.</p> <div style="border: 1px solid #0070C0; border-radius: 10px; padding: 2px; display: inline-block; margin-bottom: 5px;"> ↓ Note </div> <ul style="list-style-type: none"> Other network applications than @Remote or LDAP/NT authentication are not available when this SP is set to "2". Even if you can change the initial settings of those network applications, settings may not actually work.
002	On Board USB	<p>[0 or 1 / 0 / 1/step]</p> <p>0: OFF, 1: ON</p>

	SP Print Mode	SMC Print
5990	In the SP mode, press Copy Window to move to the copy screen, select the paper size, then press Start. Select A4/LT (Sideways) or larger to ensure that all the information prints. Press SP Window to return to the SP mode, select the desired print, and press "EXECUTE".	
001	All (Data List)	
002	SP (Mode Data List)	
003	User Program	
004	Logging Data	
005	Diagnostic Report	
006	Non-Default (Prints only SPs set to values other than defaults.)	

007	NIB Summary
021	Copier UP
022	Scanner SP
023	Scanner UP

5998	Engine Memory Clear
001	See the section "Memory Clear" in this chapter.

SP6-XXX (Peripherals)

6006*	ADF Adjustment (☞ "DF Image Adjustment" in the "Adjusting Copy Image Area") NOTE: Available menus depend on the machine model and its configuration.	
001	StoS/Front Regist	[-5.0 to +5.0 / 0.0 / 0.1 mm/step]
	Adjusts the side-to-side registration for the front side of the original, for ARDF mode. Use the  key to select "+" or "-" before entering the value	
002	Leading Regist	[-5.0 to +5.0 / 0.0 / 0.1 mm/step]
	Adjusts the leading edge registration for ARDF mode. Use the  key to select "+" or "-" before entering the value.	
003	Trailing Erase	[-3.0 to +3.0 / -1.5 / 0.1 mm/step]
	Adjusts the trailing edge erase margin for ARDF mode. Use the  key to select "+" or "-" before entering the value.	
004	S to S/ Rear Regist	[-5.0 to +5.0 / 0.0 / 0.1 mm/step]
	Adjusts the side-to-side registration for the 2nd side of the original, for ARDF mode. Use the  key to select "+" or "-" before entering the value	
005	Sub-scan Magnif	[-0.9 to +0.9 / 0.0 / 0.1 %/step]
	Adjusts the sub-scan magnification for the ARDF.	
006	Origin Curl Adj	[0 = No / 1 = Yes]
	Turns on or off the skew correction at 2nd side scanning. This SP is activated only when the duplex mode is selected.	

007	Skew Correction	[-20 to +20 / 0.0 / 1 mm/step]
	Adjusts the original buckle for the skew correction at 2ns side scanning. This SP is activated only when SP6-006-006 is set to "1 (Yes)".	

6009	ADF Free Run	
001	Duplex Mode	
	Performs an ARDF free run in duplex scanning mode. Press "ON" to start; press "OFF" to stop.	
003	Simplex Mode	
	Performs an ARDF free run at simplex scanning mode. Press "ON" to start; press "OFF" to stop.	

6910*	ADF Shading Time	[0 to 60 / 30 / 1 s/step]
001	Adjusts the interval used for the shading processing in the ARDF mode. Light and heat in the room may affect the scanner response. Reduce this setting if copy quality indicates that the white level is drifting during ARDF copy jobs.	

6930*	ADF Hole Setting	[0 or 1 / 0 / -] 0: No, 1: Yes
001	Enables or disables the ADF hole setting. When "1: Yes" is selected, the machine prevents feed jams of the punched originals in the ARDF.	

SP7-XXX (Data Log)

7001*	Total Operation	
001	Displays the total operation time (total drum rotation time).	

7401*	Total SC Counter	[0 to 9999 / 0 / 1/step]
001	Displays how many times SC codes are generated.	

7403*	SC History	
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001	Latest	Displays the most recent 10 service calls.
002	Latest 1	
003	Latest 2	
004	Latest 3	
005	Latest 4	
006	Latest 5	
007	Latest 6	
008	Latest 7	
009	Latest 8	
010	Latest 9	

7502*	Counter–Paper Jam	[0 to 9999 / 0 / 1/step]
001	Displays the total number of copy paper jams.	

7503*	Counter–Orgn Jam	[0 to 9999 / 0 / 1/step]
001	Displays the total number of original jams,	

7504*	Paper Jam/Loc	[0 to 9999 / 0 / 1/step]
	Displays the total number of the paper jams classified by timing and location.	
001	At power on	
	Paper jam occurs at power on.	
010	Regist NoFeed: OFF	
	Paper does not reach the registration sensor (from a paper tray).	
011	1 Vertical SN: OFF	
	Paper does not reach the relay sensor.	
012	1 Vertical SN: ON	
	Paper is caught at the relay sensor.	

021	Vertical SN: OFF
	Paper does not reach the vertical transport sensor.
022	Vertical SN: ON
	Paper is caught at the vertical transport sensor.
050	Regist Bypass: OFF
	Paper does not reach the registration sensor (from the by-pass tray).
060	Regist Duplex: OFF
	Paper does not reach the registration sensor during reverse-side printing (for duplex printing).
070	Regist SN: ON
	Paper is caught at the registration sensor.
120	1 Exit SN: ON
	Paper is caught at the exit sensor (previous page).
121	Exit SN: OFF
	Paper does not reach the exit sensor.
122	2 Exit SN: ON
	Paper is caught at the exit sensor.
123	Dup Inverter: OFF
	Paper does not reach the duplex inverter sensor (from the registration roller).
125	Dup Inverter: ON
	Paper is caught at the duplex inverter sensor.

7505	Original Jam Location	
	Displays the total number of original jams by location. These jams occur when the original does not activate the sensors.	
	Note	
		<ul style="list-style-type: none"> • Lag. Jam occurs when the paper remains at the sensor for longer than the prescribed time. • Late: Jam occurs because paper fails to arrive at the prescribed time.
210	Regist SN: OFF	
211	Regist SN: ON	
212	Paper Exit SN: OFF	
213	Paper Exit SN: ON	
214	Inverter: OFF	
215	Inverter: ON	

7506	[Paper Jam/ Size] Jam Counter: Paper Size	
006	A5 LEF	CTL Displays the number of jams according to the paper size. [0 to 9999 / 0 / 1 sheet/step]
044	HLT LEF	
133	A4 SEF	
134	A5 SEF	
142	B5 SEF	
164	LG SEF	
166	LT SEF	
172	HLT SEF	
255	Others	

7507*	Dsply-P Jam Hist
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001	Latest	Displays the copy jam history (the most recent 10 jams) Sample Display: CODE:007 SIZE:05h TOTAL:0000334 DATE: Mon Mar 15 11:44:50 2000 where: CODE is the SP7504-*** number (see above). SIZE is the ASAP paper size code in hex. TOTAL is the total jam error count (SP7502) DATE is the date the jams occurred.			
002	Latest 1				
003	Latest 2				
004	Latest 3				
005	Latest 4				
006	Latest 5				
007	Latest 6				
008	Latest 7				
009	Latest 8				
010	Latest 9				
Size	Code	Size	Code	Size	Code
A4 (S)	05	A3 (L)	84	DLT (L)	A0
A5 (S)	06	A4 (L)	85	LG (L)	A4
B5 (S)	0E	A5 (L)	86	LT (L)	A6
LT (S)	26	B4 (L)	8D	HLT (L)	AC
HLT (S)	2C	B5 (L)	8E	Others	FF
7508*	Dsply-O Jam History				

001	Lastest	<p>Displays the original jam history (the most recent 10 jams).</p> <p>Sample Display:</p> <p>CODE:007</p> <p>SIZE:05h</p> <p>TOTAL:0000334</p> <p>DATE: Mon Mar 15 11:44:50 2000</p> <p>where:</p> <p>CODE is the SP7505*** number (see above.</p> <p>SIZE is the ASAP paper size code in hex.</p> <p>TOTAL is the total error count (SP7503)</p> <p>DATE is the date the jams occurred.</p>
002	Last 1	
003	Last 2	
004	Last 3	
005	Last 4	
006	Last 5	
007	Last 6	
008	Last 7	
009	Last 8	
010	Last 9	

7624	Part Replacement	
001	PCU	
	Selects the PM maintenance for PCU.	

7801	Memory/Version/PN	
255	-	
	Displays the he part number and version of all ROMs in the machine	

7803*	PM Counter	
001	Paper	Displays the PM counter.

7804	PM Count Reset	
001	Paper	
	Resets the PM counter (SP7-803-001). When the program ends normally, the message "Completed" is displayed.	

7807	Reset-SC/Jam	
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001	Resets the SC, paper, original, and total jam counters. When the program ends normally, the message "Completed" is displayed. SP7-807-1 does not reset the following logs: SP7-507 (Display-Paper Jam History) and SP7-508 (Display-Original Jam History).		
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7826	MF Error Counter Japan Only		
	Displays the number of counts requested of the card/key counter.		
001	Error Total	A request for the count total failed at power on. This error will occur if the device is installed but disconnected.	
002	Error Staple	The request for a staple count failed at power on. This error will occur if the device is installed but disconnected.	

7827	MF Error Counter Clear		
	Press Execute to reset to 0 the values of SP7826. Japan Only		

7832*	Display-Self-Diag		
001	Displays the SC codes and the number of their occurrences. Each number is in the range of 0 to 9999.		

7836	[Resident Memory]		
	Displays the contents of the memory on the controller board.		

7901	Assert Info		
	Records the location where a problem is detected in the program. The data stored in this SP is used for problem analysis. DFU		
001	File Name	-	-
002	Number of Lines	-	-
003	Location	-	-

7991*	Dsply-Info Count		
	Displays the total operating time or the total number of operations. The time is displayed in the following format: day: hour: minute: second.		

003	Dsply-ID S Work
	The total of the time when the ID sensor is working.
004	Dsply-Dev Counter
	The total number of paper outputs.
005	Dsply-ID Er Count
	The total number of ID-sensor errors.

7992*	Reset-Info Count
004	Reset-Dev Count
	Clears the development counter (SP7-991-004).
005	Reset-ID Er Count
	Clears the ID sensor error counter (SP7-991-005).

SP8-XXX (History)

Most of the SPs in this group are prefixed with a letter that indicates the mode of operation (the mode of operation is referred to as an "application"). Before reading the Group 8 Service Table, make sure that you understand what these prefixes mean.

Prefixes	What it means	
T:	Total: (Grand Total).	Grand total of the items counted for all applications (C, F, P, etc.)..
C:	Copy application.	Totals (pages, jobs, etc.) executed for each application when the job was not stored on the document server.
F:	Fax application.	
P:	Print application.	
S:	Scan application.	
O:	Other applications (external network applications, for example)	Refers to network applications such as Web Image Monitor. Utilities developed with the SDK (Software Development Kit) will also be counted with this group in the future.

The Group 8 SP codes are limited to 17 characters, forced by the necessity of displaying them on the small LCDs of printers and faxes that also use these SPs. Read over the list of abbreviations below and refer to it again if you see the name of an SP that you do not understand.

Key for Abbreviations

Abbreviation	What it means
/	"By", e.g. "T:Jobs/Apl" = Total Jobs "by" Application
>	More (2> "2 or more", 4> "4 or more")
AddBook	Address Book
Apl	Application
B/W	Black & White
Bk	Black
C	Cyan
ColCr	Color Create
ColMode	Color Mode
Comb	Combine
Comp	Compression
Deliv	Delivery
DesApl	Designated Application. The application (Copy, Fax, Scan, Print) used to store the job on the document server, for example.
Dev Counter	Development Count, no. of pages developed.
Dup, Duplex	Duplex, printing on both sides
Emul	Emulation
FC	Full Color
FIN	Post-print processing, i.e. finishing (punching, stapling, etc.)
Full Bleed	No Margins
GenCopy	Generation Copy Mode

Abbreviation	What it means
GPC	Get Print Counter. For jobs 10 pages or less, this counter does not count up. For jobs larger than 10 pages, this counter counts up by the number that is in excess of 10 (e.g., for an 11-page job, the counter counts up $11-10=1$)
IFax	Internet Fax
ImgEdt	Image Edit performed on the original with the copier GUI, e.g. border removal, adding stamps, page numbers, etc.
K	Black (YMCK)
LS	Local Storage. Refers to the document server.
LSize	Large (paper) Size
Mag	Magnification
MC	One color (monochrome)
NRS	NRS (@Remote), which allows a service center to monitor machines remotely. "@Remote" is used overseas; "CSS" is used in Japan.
Org	Original for scanning
OrgJam	Original Jam
Palm 2	Print Job Manager/Desk Top Editor: A pair of utilities that allows print jobs to be distributed evenly among the printers on the network, and allows files to be moved around, combined, and converted to different formats.
PC	Personal Computer
PGS	Pages. A page is the total scanned surface of the original. Duplex pages count as two pages, and A3 simplex count as two pages if the A3/DLT counter SP is switched ON.
PJob	Print Jobs
Ppr	Paper
PrtJam	Printer (plotter) Jam
PrtPGS	Print Pages
R	Red (Toner Remaining). Applies to the wide format model A2 only. This machine is under development and currently not available.

Abbreviation	What it means
RCG	Remote Communication Gate
Rez	Resolution
SC	Service Code (Error SC code displayed)
Scn	Scan
Sim, Simplex	Simplex, printing on 1 side.
S-to-Email	Scan-to-E-mail
SMC	SMC report printed with SP5990. All of the Group 8 counters are recorded in the SMC report.
Svr	Server
TonEnd	Toner End
TonSave	Toner Save
TXJob	Send, Transmission
YMC	Yellow, Magenta, Cyan
YMCK	Yellow, Magenta, Cyan, Black

Note

- All of the Group 8 SPs are reset with SP5 801 1 Memory All Clear.

8 191	T:Total Scan PGS	CTL	These SPs count the pages scanned by each application that uses the scanner to scan images. [0 to 999999999 / 0 / 1]
8 192	C:Total Scan PGS	CTL	
8 193	F:Total Scan PGS	CTL	
8 195	S:Total Scan PGS	CTL	

- SP 8 191 to 8 196 count the number of scanned sides of pages, not the number of physical pages.
- These counters do not count reading user stamp data, or reading color charts to adjust color.
- Previews done with a scanner driver are not counted.
- A count is done only after all images of a job have been scanned.
- Scans made in SP mode are not counted.

Examples

- If 3 B5 pages and 1 A3 page are scanned with the scanner application but not stored, the S: count is 4.
- If both sides of 3 A4 sheets are copied and stored to the document server using the Store File button in the Copy mode window, the C: count is 6 and the L: count is 6.
- If both sides of 3 A4 sheets are copied but not stored, the C: count is 6.
- If you enter document server mode then scan 6 pages, the L: count is 6.

8 201	T:LSize Scan PGS	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count the total number of large pages input with the scanner for scan and copy jobs. Large size paper (A3/DLT) scanned for fax transmission is not counted.</p> <p>Note</p> <ul style="list-style-type: none"> • These counters are displayed in the SMC Report, and in the User Tools display. 		
8 203	F:LSize Scan PGS	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count the number of large pages scanned by original type for Fax jobs.</p>		
8 205	S:LSize Scan PGS	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count the total number of large pages input with the scanner for scan jobs only. Large size paper (A3/DLT) scanned for fax transmission are not counted.</p> <p>Note</p> <ul style="list-style-type: none"> • These counters are displayed in the SMC Report, and in the User Tools display. 		
8 221	ADF Org Feeds	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count the number of pages fed through the ADF for front and back side scanning.</p>		
001	Front	<p>Number of front sides fed for scanning:</p> <p>With an ADF/ARDF that can scan both sides simultaneously, the Front side count is the same as the number of pages fed for either simplex or duplex scanning.</p> <p>With an ADF/ARDF that cannot scan both sides simultaneously, the Front side count is the same as the number of pages fed for duplex front side scanning. (The front side is determined by which side the user loads face up.)</p>	

002	Back	<p>Number of rear sides fed for scanning:</p> <p>With an ADF/ARDF that can scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex scanning.</p> <p>With an ADF/ARDF that cannot scan both sides simultaneously, the Back count is the same as the number of pages fed for duplex rear-side scanning.</p>
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- When 1 sheet is fed for duplex scanning the Front count is 1 and the Back count is 1.
- If a jam occurs during the job, recovery processing is not counted to avoid double counting. Also, the pages are not counted if the jam occurs before the first sheet is output.

8 281	T:Scan PGS/TWAIN	CTL	<p>These SPs count the number of pages scanned using a TWAIN driver. These counters reveal how the TWAIN driver is used for delivery functions.</p> <p>[0 to 99999999 / 0 / 1]</p> <p>Note</p> <ul style="list-style-type: none"> • At the present time, these counters perform identical counts.
8 285	S:Scan PGS/TWAIN	CTL	

8 291	T:Scan PGS/Stamp	CTL	<p>These SPs count the number of pages stamped with the stamp in the ADF unit.</p> <p>[0 to 99999999 / 0 / 1]</p>
8 293	F:Scan PGS/Stamp	CTL	
8 295	S:Scan PGS/Stamp	CTL	


8 301	T:Scan PGS/Size	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count by size the total number of pages scanned by all applications. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-441].</p>		
8 302	C:Scan PGS/Size	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count by size the total number of pages scanned by the Copy application. Use these totals to compare original page size (scanning) and output (printing) page size [SP 8-442].</p>		

8 303	F:Scan PGS/Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by size the total number of pages scanned by the Fax application. Use these totals to compare original page size (scanning) and output page size [SP 8-443].		
8 305	S:Scan PGS/Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by size the total number of pages scanned by the Scan application. Use these totals to compare original page size (scanning) and output page size [SP 8-445].		
001	A3		
002	A4		
003	A5		
004	B4		
005	B5		
006	DLT		
007	LG		
008	LT		
009	HLT		
010	Full Bleed		
254	Other (Standard)		
255	Other (Custom)		

8 381	T:Total PrtPGS	CTL	These SPs count the number of pages printed by the customer. The counter for the application used for storing the pages increments. [0 to 99999999 / 0 / 1]
8 382	C:Total PrtPGS	CTL	
8 383	F:Total PrtPGS	CTL	
8 384	P:Total PrtPGS	CTL	
8 385	S:Total PrtPGS	CTL	
8 387	O:Total PrtPGS	CTL	

- When the A3/DLT double count function is switched on with SP5104, 1 A3/DLT page is counted as 2.

- When several documents are merged for a print job, the number of pages stored is counted for the application that stored them.
 - These counters are used primarily to calculate charges on use of the machine, so the following pages are not counted as printed pages:
 - Blank pages in a duplex printing job.
 - Blank pages inserted as document covers, chapter title sheets, and slip sheets.
 - Reports printed to confirm counts.
- All reports done in the service mode (service summaries, engine maintenance reports, etc.)
- Test prints for machine image adjustment.
- Error notification reports.
- Partially printed pages as the result of a copier jam.

8 391	LSize PrtPGS	CTL	[0 to 99999999 / 0 / 1]
	These SPs count pages printed on paper sizes A3/DLT and larger.  Note <ul style="list-style-type: none"> • In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine. 		
8 411	Prints/Duplex	CTL	This SP counts the amount of paper (front/back counted as 1 page) used for duplex printing. Last pages printed only on one side are not counted. [0 to 99999999 / 0 / 1]
8 421	T:PrtPGS/Dup Comb	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by binding and combine, and n-Up settings the number of pages processed for printing. This is the total for all applications.		
8 422	C:PrtPGS/Dup Comb	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by binding and combining, and n-Up settings the number of pages processed for printing by the copier application.		
8 423	F:PrtPGS/Dup Comb	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by binding and combining, and n-Up settings the number of pages processed for printing by the fax application.		

8 424	P:PrtPGS/Dup Comb	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by binding and combining, and n-Up settings the number of pages processed for printing by the printer application.		
8 425	S:PrtPGS/Dup Comb	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by binding and combining, and n-Up settings the number of pages processed for printing by the scanner application.		
8 427	O:PrtPGS/Dup Comb	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by binding and combining, and n-Up settings the number of pages processed for printing by Other applications		
001	Simplex> Duplex	-	
002	Duplex> Duplex	-	
003	Book> Duplex	-	
004	Simplex Combine	-	
005	Duplex Combine	-	
006	2>	2 pages on 1 side (2-Up)	
007	4>	4 pages on 1 side (4-Up)	
008	6>	6 pages on 1 side (6-Up)	
009	8>	8 pages on 1 side (8-Up)	
010	9>	9 pages on 1 side (9-Up)	
011	16>	16 pages on 1 side (16-Up)	
012	Booklet	-	
013	Magazine	-	

- These counts (SP8-421 to SP8-427) are especially useful for customers who need to improve their compliance with ISO standards for the reduction of paper consumption.
- Pages that are only partially printed with the n-Up functions are counted as 1 page.
- Here is a summary of how the counters work for Booklet and Magazine modes:

Booklet	Magazine
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Original Pages	Count	Original Pages	Count
1	1	1	1
2	2	2	2
3	2	3	2
4	2	4	2
5	3	5	4
6	4	6	4
7	4	7	4
8	4	8	4

8 441	T:PrtPGS/Ppr Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by print paper size the number of pages printed by all applications.		
8 442	C:PrtPGS/Ppr Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by print paper size the number of pages printed by the copy application.		
8 443	F:PrtPGS/Ppr Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by print paper size the number of pages printed by the fax application.		
8 444	P:PrtPGS/Ppr Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by print paper size the number of pages printed by the printer application.		
8 445	S:PrtPGS/Ppr Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by print paper size the number of pages printed by the scanner application.		
8 447	O:PrtPGS/Ppr Size	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by print paper size the number of pages printed by Other applications.		

001	A3	
002	A4	
003	A5	
004	B4	
005	B5	
006	DLT	
007	LG	
008	LT	
009	HLT	
010	Full Bleed	
254	Other (Standard)	-
255	Other (Custom)	-

- These counters do not distinguish between LEF and SEF.

8 451	PrtPGS/Ppr Tray	CTL	[0 to 99999999 / 0 / 1]
	These SPs count the number of sheets fed from each paper feed station.		
001	Bypass	Bypass Tray	
002	Tray 1	Copier	
003	Tray 2	Copier	
004	Tray 3	Copier	
005	Tray 4	Currently not used.	
006	Tray 5	Currently not used.	
007	Tray 6	Currently not used.	
008	Tray 7	Currently not used.	
009	Tray 8	Currently not used.	
010	Tray 9	Currently not used.	

011	Tray 10	Currently not used.
012	Tray 11	Currently not used.
013	Tray 12	Currently not used.
014	Tray 13	Currently not used.
015	Tray 14	Currently not used.
016	Tray 15	Currently not used.

8 461	T:PrtPGS/Ppr Type	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count by paper type the number pages printed by all applications.</p> <ul style="list-style-type: none"> • These counters are not the same as the PM counter. The PM counter is based on feed timing to accurately measure the service life of the feed rollers. However, these counts are based on output timing. • Blank sheets (covers, chapter covers, slip sheets) are also counted. • During duplex printing, pages printed on both sides count as 1, and a page printed on one side counts as 1. 		
8 462	C:PrtPGS/Ppr Type	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count by paper type the number pages printed by the copy application.</p>		
8 463	F:PrtPGS/Ppr Type	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count by paper type the number pages printed by the fax application.</p>		
8 464	P:PrtPGS/Ppr Type	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count by paper type the number pages printed by the printer application.</p>		
001	Normal		
002	Recycled		
003	Special		
004	Thick		
005	Normal (Back)		
006	Thick (Back)		
007	OHP		

008	Other		
8 521	T:PrtPGS/FIN	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by finishing mode the total number of pages printed by all applications.		
8 522	C:PrtPGS/FIN	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by finishing mode the total number of pages printed by the Copy application.		
8 523	F:PrtPGS/FIN	CTL	[0 to 99999999 / 0 / 1]
	<p>These SPs count by finishing mode the total number of pages printed by the Fax application.</p> <p>Note</p> <ul style="list-style-type: none"> Print finishing options for received faxes are currently not available. 		
8 524	P:PrtPGS/FIN	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by finishing mode the total number of pages printed by the Print application.		
8 525	S:PrtPGS/FIN	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by finishing mode the total number of pages printed by the Scanner application.		
001	Sort		
002	Stack		
003	Staple		
004	Booklet		
005	Z-Fold		
006	Punch		
007	Other		

Note

- If stapling is selected for finishing and the stack is too large for stapling, the unstapled pages are still counted.
- The counts for staple finishing are based on output to the staple tray, so jam recoveries are counted.

8 581	T:Counter	CTL	[0 to 99999999 / 0 / 1]
	This SP counts the total output broken down by color output, regardless of the application used. In addition to being displayed in the SMC Report, these counters are also displayed in the User Tools display on the copy machine.		
001	Total		

3

8 591	O:Counter	CTL	[0 to 99999999 / 0 / 1]
8 591 1	A3/DLT	These SPs count the totals for A3/DLT paper use, number of duplex pages printed, and the number of staples used. These totals are for Other (O:) applications only.	
8 591 2	Duplex		

8 601	Cvg Counter	CTL	[0 to 99999999 / 0 / 1]
8 601 1	Cvg: BW %	Displays the total coverage of each mode.	
8 601 11	Cvg: BW Pages	Displays the number of the printouts in each mode.	

8 631	T:FAX TX PGS	CTL	[0 to 99999999 / 0 / 1]
	This SP counts by color mode the number of pages sent by fax to a telephone number.		
8 633	F:FAX TX PGS	CTL	[0 to 99999999 / 0 / 1]
	This SP counts by color mode the number of pages sent by fax to a telephone number.		
001	B/W		

- If a document has color and black-and-white pages mixed, the pages are counted separately as B/W or Color.
- At the present time, this feature is provided for the Fax application only so SP8631 and SP8633 are the same.
- The counts include error pages.
- If a document is sent to more than one destination with a Group transmission, the count is done for each destination.
- Polling transmissions are counted but polling RX are not.
- Relay, memory, and confidential mailbox transmissions and are counted for each destination.

8 641	T:IFAX TX PGS	CTL	[0 to 99999999 / 0 / 1]
	This SP counts by color mode the number of pages sent by fax to as fax images using I-Fax.		
8 643	F:IFAX TX PGS	CTL	[0 to 99999999 / 0 / 1]
	This SP counts by color mode the number of pages sent by Fax as fax images using I-Fax.		
001	B/W		

3

- If a document has color and black-and-white pages mixed, the pages are counted separately as B/W or Color.
- At the present time, this feature is provided for the Fax application only so SP8641 and SP8643 are the same.
- The counts include error pages.
- If a document is sent to more than one destination with a Group transmission, the count is done for each destination.
- Polling transmissions are counted but polling RX are not.
- Relay, memory, and confidential mailbox transmissions and are counted for each destination.

8 651	T:S-to-Email PGS	CTL	[0 to 99999999 / 0 / 1]
	This SP counts by color mode the total number of pages attached to an e-mail for both the Scan and document server applications.		
8 655	S:S-to-Email PGS	CTL	[0 to 99999999 / 0 / 1]
	This SP counts by color mode the total number of pages attached to an e-mail for the Scan application only.		
001	B/W		
002	Color		

↓ Note

- The count for B/W and Color pages is done after the document is stored on the HDD. If the job is cancelled before it is stored, the pages are not counted.
- If Scan-to-Email is used to send a 10-page document to 5 addresses, the count is 10 (the pages are sent to the same SMTP server together).
- If Scan-to-PC is used to send a 10-page document to 5 folders, the count is 50 (the document is sent to each destination of the SMB/FTP server).

- Due to restrictions on some devices, if Scan-to-Email is used to send a 10-page document to a large number of destinations, the count may be divided and counted separately. For example, if a 10-page document is sent to 200 addresses, the count is 10 for the first 100 destinations and the count is also 10 for the second 100 destinations, for a total of 20.

8 661	T:Deliv PGS/Svr	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by color mode the total number of pages sent to a Scan Router server by both Scan and LS applications.		
8 665	S:Deliv PGS/Svr	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by color mode the total number of pages sent to a Scan Router server by the Scan application.		
001	B/W		
002	Color		

Note

- The B/W and Color counts are done after the document is stored on the HDD of the Scan Router server.
- If the job is canceled before storage on the Scan Router server finishes, the count is not done.
- The count is executed even if there is confirmation of the arrival at the Scan Router server.

8 671	T:Deliv PGS/PC	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by color mode the total number of pages sent to a folder on a PC (Scan-to-PC) with the Scan and LS applications.		
8 675	S:Deliv PGS/PC	CTL	[0 to 99999999 / 0 / 1]
	These SPs count by color mode the total number of pages sent with Scan-to-PC with the Scan application.		
001	B/W		
002	Color		

Note

- Print jobs done with Web Image Monitor and Desk Top Binder are added to the count.
- If several documents are merged for sending, the number of pages stored are counted for the application that stored them.

- When several documents are sent by a Fax broadcast, the F: count is done for the number of pages sent to each destination.

8 681	T:PCFAX TXPGS	CTL	These SPs count the number of pages sent by PC Fax. These SPs are provided for the Fax application only, so the counts for SP8-681 and SP8-683 are the same. [0 to 99999999 / 0 / 1]
8 683	F:PCFAX TXPGS	CTL	

- This counts pages sent from a PC using a PC fax application, from the PC through the copier to the destination.
- When sending the same message to more than one place using broadcasting, the pages are only counted once. (For example, a 10-page fax is sent to location A and location B. The counter goes up by 10, not 20.)

	TX PGS/Port	CTL	[0 to 99999999 / 0 / 1]
8 701	These SPs count the number of pages sent by the physical port used to send them. For example, if a 3-page original is sent to 4 destinations via ISDN G4, the count for ISDN (G3, G4) is 12.		
001	PSTN-1	-	
002	PSTN-2	-	
003	PSTN-3	-	
004	ISDN (G3,G4)	-	
005	Network	-	

8 711	T:Scan PGS/Comp	CTL	[0 to 99999999 / 0 / 1]
8 715	S:Scan PGS/Comp	CTL	[0 to 99999999 / 0 / 1]
	These SPs count the number of pages sent by each compression mode.		
-001	JPEG/JPEG2000	-	
-002	TIFF M/S (Multi/Single)	-	
-003	PDF	-	
-004	Other	-	

8741	RX PGS/Port	[0 to 9999999 / 0 / 1]
	These SPs count the number of pages received by the physical port used to receive them.	
001	PSTN-1	
002	PSTN-2	
003	PSTN-3	
004	ISDN (G3,G4)	
005	Network	

8771	Dev Counter	CTL	[0 to 99999999 / 0 / 1]
	This SP counts the total number of developed images.		
001	Total		

8781	Toner Botol Info.	*BICU	[0 to 99999999 / 0 / 1]
	This SP counts the total number of developed images.		
001	Total		

8801	Toner Remain	CTL	[0 to 100 / 0 / 1]
	<p>This SP displays the percent of toner remaining for each color. This SP allows the user to check the toner supply at any time.</p> <p>Note</p> <ul style="list-style-type: none"> This precise method of measuring remaining toner supply (1% steps) is better than other machines on the market that can only measure in increments of 10 (10% steps). 		
001	K		

8851	Cvr Cnt:0-10%	*BICU	[0 to 99999999 / 0 / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is from 0% to 10%.		
011	0-2%:Bk		

021	3-4%: Bk
031	5-7%: Bk
041	8-10%: Bk

8 861	Cvr Cnt: 11-20%	*BICU	[0 to 99999999/ 0 / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is from 11% to 20%.		
001	Bk		

8 871	Cvr Cnt: 21-30%	*BICU	[0 to 99999999/ 0 / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is from 21% to 30%.		
001	Bk		

8 881	Cvr Cnt: 31%-	*BICU	[0 to 99999999/ 0 / 1]
	These SPs display the number of scanned sheets on which the coverage of each color is 31% or higher.		
001	Bk		

8 891	Page/Toner Bottle	*BICU	[0 to 99999999/ 0 / 1]
	This SP displays the number of sheets output by the scan application.		
001	Bk		

8 901	Page/Toner k Prev1	*BICU	[0 to 99999999/ 0 / 1]
	This SP displays the number of sheets output by the scan application with the previously replaced units.		
001	Bk		

8 911	Page/Toner k Prev2	*BICU	[0 to 99999999 / 0 / 1]
	This SP displays the number of sheets output by the scan application with the unit replaced before the previously replaced unit (two steps back from the current unit).		
001	Bk		

8 921	Cvr Cnt/Total	*BICU	
001	Coverage(%): BK	[0 to 2147483647 / 0 / 1] These SPs display the total coverage percentage of sheets output by the machine.	
011	Coverage/P: Bk	[0 to 99999999 / 0 / 1] These SPs display the total coverage pages output by the machine.	

8 941	Machine Status	CTL	[0 to 99999999 / 0 / 1]
	These SPs count the amount of time the machine spends in each operation mode. These SPs are useful for customers who need to investigate machine operation for improvement of their compliance with ISO Standards.		
001	Operation Time	Engine operation time. Does not include time while controller is saving data to HDD (while engine is not operating).	
002	Standby Time	Engine not operating. Includes time while controller saves data to HDD. Does not include time spent in Energy Save, Low Power, or Off modes.	
003	Energy Save Time	Includes time while the machine is performing background printing.	
004	Low Power Time	Includes time in Energy Save mode with Engine on. Includes time while machine is performing background printing.	
005	Off Mode Time	Includes time while machine is performing background printing. Does not include time machine remains powered off with the power switches.	
006	SC	Total down time due to SC errors.	
007	PrtJam	Total down time due to paper jams during printing.	
008	OrgJam	Total down time due to original jams during scanning.	

009	Supply PM Unit End	Total down time due to toner end.
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8 999	AdominCounter	CTL	[0 to 99999999 / 0 / 1]
	Displays the user setting counter for administrator.		
001	Total	-	
003	Copy: BW	-	
007	Printer: BW	-	
010	FaxP: BW	-	
013	Duplex	-	
015	Cvr: BW %	-	
017	Cvr: BW Pages	-	
101	SedTtl: FC		
102	SendTtl: BW	-	
103	FaxSend	-	
104	FaxSend: BW		
105	FaxSend: BW	-	

Input Check (SP5-803)

Conducting Input Check

1. Select SP5-803.
2. Select the number (see the table below) corresponding to the component.
3. Select "Execute." The copy mode is activated.
4. The sign "01H" or "00H" is displayed (see the table below).

Input Check Table

Num.	Sensor/Switch	1h	0h
001	Safety SW	Open	Closed
003	Right Cover SW	Open	Closed
006	Upper Relay S	Paper detected	Not detected
007	Lower Relay S	Paper detected	Not detected
009	Regist Sensor	Paper detected	Not detected
010	Exit Sensor	Paper detected	Not detected
011	Duplex Inverter S	Paper detected	Not detected
014	By-pass PE S	Paper detected	Not detected
016	Upper PE S	Paper detected	Not detected
017	BK-Upper PE S	Paper detected	Not detected
020	BK-Lower PE S	Paper detected	Not detected
027	PCU Set Signal	Installed	Not installed
028	BK type	*	*
030	Duplex Installed	Installed	Not installed
032	Main M Lock	Locked	Not locked
033	Polygon M Lock	Locked	Not locked
035	Total CO Install	Installed	Not installed
036	Key CO Install	Installed	Not installed
037	L-Synchronization	Detected	Not detected
039	DF-Cover Open S	Open	Closed
040	DF-Original Set S	Paper detected	Not detected
041	DF-Registration S	Paper detected	Not detected
042	DF-Exit S	Paper detected	Not detected

Num.	Sensor/Switch	1h	0h
044	DF-Reverse S	Paper detected	Not detected
045	Platen Cover S	Open	Closed
050	Fan Motor Lock (High speed)	High speed	Low speed or stop
052	Front Cover SW	Open	Closed
053	HP Sensor	Detected	Not detected
055	BK-UpperCover SW	Open	Closed
056	BK-LowerCover SW	Open	Closed

* Available Paper Feed Unit

00	None
30	1-tray paper feed unit

Output Check (SP5-804)

Conducting Output Check

CAUTION

- To prevent mechanical or electrical damage, do not keep an electrical component on for a long time.
- Select SP5-804.
 - Select the number (see the table below) corresponding to the component.
 - Select "ON."
 - To stop the operation, select "OFF."

Output Check Table

Num.	Component
001	Main M- Fwd
002	Main M- Rev


Num.	Component
003	Quenching Lamp
004	Toner Sup CL
005	Fan M- High
006	Fan M- Low
007	Registration CL
008	By-pass Feed CL
009	Upper Feed CL
010	BK-Upper Feed CL
015	BK-Lower Feed CL
020	Duplex Inv M- Rev
021	Duplex Inv M- Fwd
024	Duplex Inv M- Hold
026	Polygon M
027	Polygon M/LD
028	LD
029	DF-Feed M
030	DF-Transport M
031	DF-Feed CL
034	DF-Gate SOL (Junction Gate Solenoid)
038	Fusing SOL

When checking Fan Motor High (005) or Fan Motor Low (006) note the following:

- These motors may not respond when the fusing temperature is high.
- Selecting "ON" checks that one of these motors normally operates. Selecting "OFF" turns off the motor that you have started by selecting "ON." However, this does not guarantee that the motor normally stops during normal operation.

Printer Service Mode

Service Mode Table

1001	Bit Switch			
001	Bit Switch 1		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	No I/O Timeout	0: Disable	1: Enable
		Enables/Disables MFP I/O Timeouts. Enabled: The MFP I/O Timeout setting will have no affect. I/O Timeouts will never occur.		
	bit 4	SD Card Save Mode	0: Disable	1: Enable
		Enabled: Print jobs will be saved to an SD Card in the GW SD slot ( "Card Save Function" in the service tables of Field Service Manual).		
	bit 5	DFU	-	-
	bit 6	DFU	-	-
bit 7	[RPCS,PCL]: Printable area frame border	0: Disable	1: Enable	
	Enable: The machine prints all RPCS and PCL jobs with a border on the edges of the printable area.			
1001	Bit Switch			

002	Bit Switch 2		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	Applying a collate Type	Shift Collate	Normal Collate
	<p>A collation type (shift or normal) will be applied to all jobs that do not already have a 'Collate Type' configured.</p> <p>Note</p> <ul style="list-style-type: none"> If #5-0 is enabled, this Bit Switch has no effect. 			
	bit 3	[PCL5e/c,PS]: PDL Auto Switching	0: Enable	1: Disable
	<p>Disabled: The MFPs ability to change the PDL processor mid-job.</p> <p>Some host systems submit jobs that contain both PS and PCL5e/c. If Auto PDL switching is disabled, these jobs will not be printed properly.</p>			
	bit 4	DFU	-	-
	bit 5	DFU	-	-
bit 6	DFU	-	-	
bit 7	DFU	-	-	
1001	Bit Switch			

003	Bit Switch 3		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	[PCL5e/c]: Legacy HP compatibility	0: Disable	1: Enable
		Enabled: Uses the same left margin as older HP models such as HP4000/HP8000. In other words, the left margin defined in the job (usually "<ESC>*r0A") will be changed to "<ESC>*r1A"		
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1001	Bit Switch		
004	Bit Switch 4 DFU	-	-

1001	Bit Switch		
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005	Bit Switch 5		0	1
	bit 0	DFU	-	-
	bit 1	Multiple copies if a paper size or type mismatch occurs	Disabled (single copy)	Enabled (multiple)
		If a paper size or type mismatch occurs during the printing of multiple copies, only a single copy is output by default. Using this BitSw, the device can be configured to print all copies even if a paper mismatch occurs.		
	bit 2	DFU	-	-
	bit 3	[PS] PS Criteria	Pattern3	Pattern1
		Change the number of PS criterion used by the PS interpreter to determine whether a job is PS data or not. Pattern3: includes most PS commands. Pattern1: A small number of PS tags and headers		
	bit 4	Increase max number of the stored jobs to 1000 jobs.	Disable (100)	Enable (1000)
		Enabled: Changes the maximum number of jobs that can be stored on the HDD via Job Type settings to 1000. The default is 100.		
	bit 5	DFU	-	-
bit 6	Method for determining the image rotation for the edge to bring on	Disable	Enable	
	Enabled: The image rotation will be performed as they were in the specifications of older models for the binding of pages of mixed orientation jobs. The old models are below: -PCL-: Pre-04A models			
bit 7	Letterhead mode printing	Disable	Enable (Duplex)	
	Routes all pages through the duplex unit. If this is disabled, simplex pages or the last page of an odd-paged duplex job, are not routed through the duplex unit. This could result in problems with letterhead / pre-printed pages.			

1001	Bit Switch		
006	Bit Switch 6 DFU	-	-


1001	Bit Switch		
007	Bit Switch 7 DFU	-	-

1001	Bit Switch			
008	Bit Switch 8		0	1
	bit 0	DFU	-	-
	bit 1	DFU	-	-
	bit 2	DFU	-	-
	bit 3	DFU	-	-
	bit 4	DFU	-	-
	bit 5	DFU	-	-
	bit 6	DFU	-	-
	bit 7	DFU	-	-

1003	Clear Setting	Not used
1004	Print Summary	Prints the service summary sheet (An error log is printed in addition to the configuration page).
1005	Display Version	Displays the version of the controller firmware.
1006	Sample/Locked print	0: Link with Doc., 1: On Enables and disables the document server. When you select "0" the document server is enabled or disables in accordance with copy service mode SP5-967. When you select "1" the document server is enabled regardless of service mode SP5-967.

SP Modes Related to Printer Controller

The following SP modes are located in the copier SP mode. Refer to section 5.1 of the main unit service manual.

SP No.	Description	Function and Setting
5801	Memory All Clear	Resets data for process control and all software counters, and returns all modes and adjustments to their defaults values.  Section "Memory Clear" in this chapter for details.
5907	Plug & Play	Selects the brand name and the production name for Windows Plug & Play. This information is stored in NVRAM.
7832	Detailed Display of Self-Diagnostics	Displays the controller self-diagnostic result.

Scanner Program Mode Table

Service Table Key

Notation	What it means
[range / default / step]	Example: [-9 to +9 / +3.0 / 0.1 mm step]. The setting can be adjusted in the range ± 9 , value reset to +3.0 after an NVRAM reset, and the value can be changed in 0.1 mm steps with each key press.
<i>italics</i>	Comments added for your reference.
*	This value is stored in NVRAM. After a RAM reset, the default value (factory setting) is restored.
DFU	Denotes "Design or Factory Use". Do not change this value.

SP1	Mode Number		Function and [Setting]
1001 *	5	Scan NV Version	Displays the scanner NV version. This shows as following: Function name _ Model name _ Version

1004*	1	Compression Type	Selects the compression type for binary picture processing. [1: MH, 2: MR, 3: MMR]
1005*	1	Erase Margin	Creates an erase margin for all edges of the scanned image. If the machine has scanned the edge of the original, create a margin. [0 to 5 / 0mm / 1mm step]
1009*	1	Remote Scan disable	Enables or disables the network TWAIN scanner function. 0: enable, 1: disable
1012	1	User Info Release	Clears or does not clear a user information after a job. [0 or 1 / 1 / -] 0: Not clear, 1: Clear
1013	1	Multi Media Func	Display or not display a "Scan To Multi Media" function. [0 or 1 / 1 / -] 0: OFF, 1: ON

SP	Number/Name	Function and [Setting]
Compression level (grayscale or full color)		
<p>These SP codes set the compression ratio for the grayscale or full color processing mode that can be selected with the notch settings on the operation panel.</p> <p>Range: 5 (lowest ratio) ↔ 95 (highest ratio)</p>		
Comp1: 5-95 1 (Middle I-Qual)	[5 to 95 / 20 / 1/step]	
Comp2: 5-95 2 (High I-Qual)	[5 to 95 / 40 / 1/step]	

SP	Number/Name	Function and [Setting]
Comp3: 3-95 (Low I-Qual)	[5 to 95 / 65 /1/step]	
Comp4: 4-95 (Highest I-Qual)	[5 to 95 / 80 /1/step]	
Comp5: 5-95 (Lowest I-Qual)	[5 to 95 / 95 /1/step]	

For the settings of the image quality, see the copier SP-mode table.

4. Appendix: Fax Troubleshooting Guide

Fax Error Codes

- If an error code occurs, retry the communication. If the same problem occurs, try to fix the problem as suggested below. Note that some error codes appear only in the error code display and on the service report.

Code	Meaning	Suggested Cause/Action
0-00	DIS/NSF not detected within 40 s of Start being pressed	<ul style="list-style-type: none"> • Check the line connection. • The machine at the other end may be incompatible. • Replace the NCU or FCU. • Check for DIS/NSF with an oscilloscope. • If the rx signal is weak, there may be a bad line.
0-01	DCN received unexpectedly	<ul style="list-style-type: none"> • The other party is out of paper or has a jammed printer. • The other party pressed Stop during communication.
0-03	Incompatible modem at the other end	The other terminal is incompatible.
0-04	CFR or FTT not received after modem training	<ul style="list-style-type: none"> • Check the line connection. • Try changing the tx level and/or cable equalizer settings. • Replace the FCU. • The other terminal may be faulty; try sending to another machine. • If the rx signal is weak or defective, there may be a bad line. <p>Cross reference</p> <p>Tx level - NCU Parameter 01 (PSTN)</p> <p>Cable equalizer - G3 Switch 07 (PSTN)</p> <p>Dedicated Tx parameters in Service Program Mode</p>

Code	Meaning	Suggested Cause/Action
0-05	Modem training fails even G3 shifts down to 2400 bps.	<ul style="list-style-type: none"> • Check the line connection. • Try adjusting the tx level and/or cable equalizer. • Replace the FCU. • Check for line problems. <p>Cross reference See error code 0-04.</p>
0-06	The other terminal did not reply to DCS	<ul style="list-style-type: none"> • Check the line connection. • Try adjusting the tx level and/or cable equalizer settings. • Replace the NCU or FCU. • The other end may be defective or incompatible; try sending to another machine. • Check for line problems. <p>Cross reference See error code 0-04.</p>
0-07	No post-message response from the other end after a page was sent	<ul style="list-style-type: none"> • Check the line connection. • Replace the NCU or FCU. • The other end may have jammed or run out of paper. • The other end user may have disconnected the call. • Check for a bad line. • The other end may be defective; try sending to another machine.

Code	Meaning	Suggested Cause/Action
0-08	The other end sent RTN or PIN after receiving a page, because there were too many errors	<ul style="list-style-type: none"> • Check the line connection. • Replace the NCU or FCU. • The other end may have jammed, or run out of paper or memory space. • Try adjusting the tx level and/or cable equalizer settings. • The other end may have a defective modem/NCU/FCU; try sending to another machine. • Check for line problems and noise. <p>Cross reference</p> <ul style="list-style-type: none"> • Tx level - NCU Parameter 01 (PSTN) • Cable equalizer - G3 Switch 07 (PSTN) • Dedicated Tx parameters in Service Program Mode
0-14	Non-standard post message response code received	<ul style="list-style-type: none"> • Incompatible or defective remote terminal; try sending to another machine. • Noisy line: resend. • Try adjusting the tx level and/or cable equalizer settings. • Replace the NCU or FCU. <p>Cross reference</p> <p>See error code 0-08.</p>
0-15	The other terminal is not capable of specific functions.	<p>The other terminal is not capable of accepting the following functions, or the other terminal's memory is full.</p> <ul style="list-style-type: none"> • Confidential rx • Transfer function • SEP/SUB/PWD/SID

Code	Meaning	Suggested Cause/Action
0-16	CFR or FTT not detected after modem training in confidential or transfer mode	<ul style="list-style-type: none"> • Check the line connection. • Replace the NCU or FCU. • Try adjusting the tx level and/or cable equalizer settings. • The other end may have disconnected, or it may be defective; try calling another machine. • If the rx signal level is too low, there may be a line problem. <p>Cross reference See error code 0-08.</p>
0-20	Facsimile data not received within 6 s of retraining	<ul style="list-style-type: none"> • Check the line connection. • Replace the NCU or FCU. • Check for line problems. • Try calling another fax machine. • Try adjusting the reconstruction time for the first line and/or rx cable equalizer setting. <p>Cross reference Reconstruction time - G3 Switch 0A, bit 6 Rx cable equalizer - G3 Switch 07 (PSTN)</p>
0-21	EOL signal (end-of-line) from the other end not received within 5 s of the previous EOL signal	<ul style="list-style-type: none"> • Check the connections between the FCU, NCU, & line. • Check for line noise or other line problems. • Replace the NCU or FCU. • The remote machine may be defective or may have disconnected. <p>Cross reference Maximum interval between EOLs and between ECM frames - G3 Bit Switch 0A, bit 4</p>

Code	Meaning	Suggested Cause/Action
0-22	The signal from the other end was interrupted for more than the acceptable modem carrier drop time (default: 200 ms)	<ul style="list-style-type: none"> • Check the line connection. • Replace the NCU or FCU. • Defective remote terminal. • Check for line noise or other line problems. • Try adjusting the acceptable modem carrier drop time. <p>Cross reference Acceptable modem carrier drop time - G3 Switch 0A, bits 0 and 1</p>
0-23	Too many errors during reception	<ul style="list-style-type: none"> • Check the line connection. • Replace the NCU or FCU. • Defective remote terminal. • Check for line noise or other line problems. • Try asking the other end to adjust their tx level. • Try adjusting the rx cable equalizer setting and/or rx error criteria. <p>Cross reference Rx cable equalizer - G3 Switch 07 (PSTN) Rx error criteria - Communication Switch 02, bits 0 and 1</p>
0-30	The other terminal did not reply to NSS(A) in AI short protocol mode	<ul style="list-style-type: none"> • Check the line connection. • Try adjusting the tx level and/or cable equalizer settings. • The other terminal may not be compatible. <p>Cross reference Dedicated tx parameters - Section 4</p>
0-32	The other terminal sent a DCS, which contained functions that the receiving machine cannot handle.	<ul style="list-style-type: none"> • Check the protocol dump list. • Ask the other party to contact the manufacturer.
0-33	The data reception (not ECM) is not completed within 10 minutes.	<ul style="list-style-type: none"> • Check the line connection. • The other terminal may have a defective modem/NCU/FCU.

Code	Meaning	Suggested Cause/Action
0-52	Polarity changed during communication	<ul style="list-style-type: none"> • Check the line connection. Retry communication.
0-55	FCU does not detect the SG3.	<ul style="list-style-type: none"> • FCU firmware or board defective. • SG3 firmware or board defective.
0-56	The stored message data exceeds the capacity of the mailbox in the SG3.	<ul style="list-style-type: none"> • SG3 firmware or board defective.
0-70	The communication mode specified in CM/JM was not available (V.8 calling and called terminal)	<ul style="list-style-type: none"> • The other terminal did not have a compatible communication mode (e.g., the other terminal was a V.34 data modem and not a fax modem.) • A polling tx file was not ready at the other terminal when polling rx was initiated from the calling terminal.
0-74	The calling terminal fell back to T.30 mode, because it could not detect ANSam after sending CI.	<ul style="list-style-type: none"> • The calling terminal could not detect ANSam due to noise, etc. • ANSam was too short to detect. • Check the line connection and condition. • Try making a call to another V.8/V.34 fax.
0-75	The called terminal fell back to T.30 mode, because it could not detect a CM in response to ANSam (ANSam timeout).	<ul style="list-style-type: none"> • The terminal could not detect ANSam. • Check the line connection and condition. • Try receiving a call from another V.8/V.34 fax.
0-76	The calling terminal fell back to T.30 mode, because it could not detect a JM in response to CM (CM timeout).	<ul style="list-style-type: none"> • The called terminal could not detect a CM due to noise, etc. • Check the line connection and condition. • Try making a call to another V.8/V.34 fax.
0-77	The called terminal fell back to T.30 mode, because it could not detect a CJ in response to JM (JM timeout).	<ul style="list-style-type: none"> • The calling terminal could not detect a JM due to noise, etc. • A network that has narrow bandwidth cannot pass JM to the other end. • Check the line connection and condition. • Try receiving a call from another V.8/V.34 fax.

Code	Meaning	Suggested Cause/Action
0-79	The called terminal detected CI while waiting for a V.21 signal.	<ul style="list-style-type: none"> • Check for line noise or other line problems. • If this error occurs, the called terminal falls back to T.30 mode.
0-80	The line was disconnected due to a timeout in V.34 phase 2 – line probing.	<ul style="list-style-type: none"> • The guard timer expired while starting these phases. Serious noise, narrow bandwidth, or low signal level can cause these errors.
0-81	The line was disconnected due to a timeout in V.34 phase 3 – equalizer training.	<p>If these errors happen at the transmitting terminal:</p> <ul style="list-style-type: none"> • Try making a call at a later time. • Try using V.17 or a slower modem using dedicated tx parameters.
0-82	The line was disconnected due to a timeout in the V.34 phase 4 – control channel start-up.	<ul style="list-style-type: none"> • Try increasing the tx level. • Try adjusting the tx cable equalizer setting.
0-83	The line was disconnected due to a timeout in the V.34 control channel restart sequence.	<p>If these errors happen at the receiving terminal:</p> <ul style="list-style-type: none"> • Try adjusting the rx cable equalizer setting. • Try increasing the tx level. • Try using V.17 or a slower modem if the same error is frequent when receiving from multiple senders.
0-84	The line was disconnected due to abnormal signaling in V.34 phase 4 – control channel start-up.	<ul style="list-style-type: none"> • The signal did not stop within 10 s. • Turn off the machine, then turn it back on. • If the same error is frequent, replace the FCU.
0-85	The line was disconnected due to abnormal signaling in V.34 control channel restart.	<ul style="list-style-type: none"> • The signal did not stop within 10 s. • Turn off the machine, then turn it back on. • If the same error is frequent, replace the FCU.
0-86	The line was disconnected because the other terminal requested a data rate using MPh that was not available in the currently selected symbol rate.	<ul style="list-style-type: none"> • The other terminal was incompatible. • Ask the other party to contact the manufacturer.

Code	Meaning	Suggested Cause/Action
0-87	The control channel started after an unsuccessful primary channel.	<ul style="list-style-type: none"> The receiving terminal restarted the control channel because data reception in the primary channel was not successful. This does not result in an error communication.
0-88	The line was disconnected because PPR was transmitted/ received 9 (default) times within the same ECM frame.	<ul style="list-style-type: none"> Try using a lower data rate at the start. Try adjusting the cable equalizer setting.
2-11	Only one V.21 connection flag was received	<ul style="list-style-type: none"> Replace the FCU.
2-12	Modem clock irregularity	<ul style="list-style-type: none"> Replace the FCU.
2-13	Modem initialization error	<ul style="list-style-type: none"> Turn off the machine, then turn it back on. Update the modem ROM. Replace the FCU.
2-23	JBIG compression or reconstruction error	<ul style="list-style-type: none"> Turn off the machine, then turn it back on.
2-24	JBIG ASIC error	<ul style="list-style-type: none"> Turn off the machine, then turn it back on.
2-25	JBIG data reconstruction error (BIH error)	<ul style="list-style-type: none"> JBIG data error Check the sender's JBIG function. Update the MBU ROM.
2-26	JBIG data reconstruction error (Float marker error)	
2-27	JBIG data reconstruction error (End marker error)	
2-28	JBIG data reconstruction error (Timeout)	
2-29	JBIG trailing edge maker error	<ul style="list-style-type: none"> FCU defective Check the destination device.
2-50	The machine resets itself for a fatal FCU system error	<ul style="list-style-type: none"> If this is frequent, update the ROM, or replace the FCU.

Code	Meaning	Suggested Cause/Action
2-51	The machine resets itself because of a fatal communication error	<ul style="list-style-type: none"> If this is frequent, update the ROM, or replace the FCU.
2-53	Snd msg() in the manual task is an error because the mailbox for the operation task is full.	<ul style="list-style-type: none"> The user did the same operation many times, and this gave too much load to the machine.
4-01	Line current was cut	<ul style="list-style-type: none"> Check the line connector. Check for line problems. Replace the FCU or the NCU.
4-10	Communication failed because of an ID Code mismatch (Closed Network) or Tel. No./CSI mismatch (Protection against Wrong Connections)	<ul style="list-style-type: none"> Get the ID Codes the same and/or the CSIs programmed correctly, then resend. The machine at the other end may be defective.
5-10	DCR timer expired	<ul style="list-style-type: none"> Replace the FCU.
5-20	Storage impossible because of a lack of memory	<ul style="list-style-type: none"> Temporary memory shortage. Test the SAF memory.
5-21	Memory overflow	
5-23	Print data error when printing a substitute rx or confidential rx message	<ul style="list-style-type: none"> Test the SAF memory. Ask the other end to resend the message.
5-25	SAF file access error	<ul style="list-style-type: none"> Replace an SD card or HDD. Replace the FCU.
6-00	G3 ECM - T1 time out during reception of facsimile data	<ul style="list-style-type: none"> Try adjusting the rx cable equalizer. Replace the FCU.
6-01	G3 ECM - no V.21 signal was received	
6-02	G3 ECM - EOR was received	
6-04	G3 ECM - RTC not detected	<ul style="list-style-type: none"> Check the line connection. Check for a bad line or defective remote terminal. Replace the FCU.

Code	Meaning	Suggested Cause/Action
6-05	G3 ECM - facsimile data frame not received within 18 s of CFR, but there was no line fail	<ul style="list-style-type: none"> • Check the line connection. • Check for a bad line or defective remote terminal. • Replace the FCU. • Try adjusting the rx cable equalizer <p>Cross reference</p> <ul style="list-style-type: none"> • Rx cable equalizer - G3 Switch 07 (PSTN)
6-06	G3 ECM - coding/decoding error	<ul style="list-style-type: none"> • Defective FCU. • The other terminal may be defective.
6-08	G3 ECM - PIP/PIN received in reply to PPS.NULL	<ul style="list-style-type: none"> • The other end pressed Stop during communication. • The other terminal may be defective.
6-09	G3 ECM - ERR received	<ul style="list-style-type: none"> • Check for a noisy line. • Adjust the tx levels of the communicating machines. • See code 6-05.
6-10	G3 ECM - error frames still received at the other end after all communication attempts at 2400 bps	<ul style="list-style-type: none"> • Check for line noise. • Adjust the tx level (use NCU parameter 01 or the dedicated tx parameter for that address). • Check the line connection. • Defective remote terminal.
6-21	V.21 flag detected during high speed modem communication	<ul style="list-style-type: none"> • The other terminal may be defective or incompatible.
6-22	The machine resets the sequence because of an abnormal handshake in the V.34 control channel	<ul style="list-style-type: none"> • Check for line noise. • If the same error occurs frequently, replace the FCU. • Defective remote terminal.
6-99	V.21 signal not stopped within 6 s	<ul style="list-style-type: none"> • Replace the FCU.
13-17	SIP user name registration error	<ul style="list-style-type: none"> • Double registration of the SIP user name. • Capacity for user-name registration in the SIP server is not sufficient.

Code	Meaning	Suggested Cause/Action
13-18	SIP server access error	<ul style="list-style-type: none"> • Incorrect initial setting for the SIP server. • Defective SIP server.
13-24	SIP authentication password error	<ul style="list-style-type: none"> • The input password for the authentication does not match the password registered in the SIP server.
14-00	SMTP Send Error	<ul style="list-style-type: none"> • Error occurred during sending to the SMTP server. Occurs for any error other than 14-01 to 16. For example, the mail address of the system administrator is not registered.
14-01	SMTP Connection Failed	<ul style="list-style-type: none"> • Failed to connect to the SMTP server (timeout) because the server could not be found. • The PC is not ready to transfer files. • SMTP server not functioning correctly. • The DNS IP address is not registered. • Network not operating correctly. • Destination folder selection not correct.
14-02	No Service by SMTP Service (421)	<ul style="list-style-type: none"> • SMTP server operating incorrectly, or the destination for direct SMTP sending is not correct. • Contact the system administrator and check that the SMTP server has the correct settings and operates correctly. • Contact the system administrator for direct SMTP sending and check the sending destination.

Code	Meaning	Suggested Cause/Action
14-03	Access to SMTP Server Denied (450)	<ul style="list-style-type: none"> Failed to access the SMTP server because the access is denied. SMTP server operating incorrectly. Contact the system administrator to determine if there is a problem with the SMTP server and to check that the SMTP server settings are correct. Folder send destination is incorrect. Contact the system administrator to determine that the SMTP server settings and path to the server are correct. Device settings incorrect. Confirm that the user name and password settings are correct. Direct SMTP destination incorrect. Contact the system administrator to determine if there is a problem at the destination at that the settings at the destination are correct.
14-04	Access to SMTP Server Denied (550)	<ul style="list-style-type: none"> SMTP server operating incorrectly Direct SMTP sending not operating correctly
14-05	SMTP Server HDD Full (452)	<ul style="list-style-type: none"> Failed to access the SMTP server because the HDD on the server is full. Insufficient free space on the HDD of the SMTP server. Contact the system administrator and check the amount of space remaining on the SMTP server HDD. Insufficient free space on the HDD where the destination folder is located. Contact the system administrator and check the amount of space remaining on the HDD where the target folder is located. Insufficient free space on the HDD at the target destination for SMTP direct sending. Contact the system administrator and check the amount of space remaining on the target HDD.
14-06	User Not Found on SMTP Server (551)	<ul style="list-style-type: none"> The designated user does not exist. The designated user does not exist on the SMTP server. The designated address is not for use with direct SMTP sending.

Code	Meaning	Suggested Cause/Action
14-07	Data Send to SMTP Server Failed (4XX)	<ul style="list-style-type: none"> Failed to access the SMTP server because the transmission failed. PC not operating correctly. SMTP server operating incorrectly Network not operating correctly. Destination folder setting incorrect. Direct SMTP sending not operating correctly.
14-08	Data Send to SMTP Server Failed (5XX)	<ul style="list-style-type: none"> Failed to access the SMTP server because the transmission failed. SMTP server operating incorrectly Destination folder setting incorrect. Direct SMTP sending not operating correctly. Software application error.
14-09	Authorization Failed for Sending to SMTP Server	<ul style="list-style-type: none"> POP-Before-SMTP or SMTP authorization failed. Incorrect setting for file transfer
14-10	Addresses Exceeded	<ul style="list-style-type: none"> Number of broadcast addresses exceeded the limit for the SMTP server.
14-11	Buffer Full	<ul style="list-style-type: none"> The send buffer is full so the transmission could not be completed. Buffer is full due to using Scan-to-Email while the buffer is being used send mail at the same time.
14-12	Data Size Too Large	<ul style="list-style-type: none"> Transmission was cancelled because the detected size of the file was too large.
14-13	Send Cancelled	<ul style="list-style-type: none"> Processing is interrupted because the user pressed Stop.
14-14	Security Locked File Error	<ul style="list-style-type: none"> Update the software because of the defective software.
14-15	Mail Data Error	<ul style="list-style-type: none"> The transmitting a mail is interrupted via DCS due to the incorrect data. Update the software because of the defective software.

Code	Meaning	Suggested Cause/Action
14-16	Maximum Division Number Error	<ul style="list-style-type: none"> When a mail is divided for the mail transmission and the division number of a mail are more than the specified number, the mail transmission is interrupted. Update the software because of the defective software.
14-17	Incorrect Ticket	<ul style="list-style-type: none"> Update the software because of the defective software.
14-18	Access to MCS File Error	<ul style="list-style-type: none"> The access to MCS file is denied due to the no permission of access. Update the software because of the defective software.
14-30	MCS File Creation Failed	<p>Failed to create the MCS file because:</p> <ul style="list-style-type: none"> The number of files created with other applications on the Document Server has exceeded the limit. HDD is full or not operating correctly. Software error.
14-31	UFS File Creation Failed	<p>UFS file could not be created:</p> <ul style="list-style-type: none"> Not enough space in UFS area to handle both Scan-to-Email and IFAX transmission. HDD full or not operating correctly. Software error.
14-32	Cancelled the Mail Due to Error Detected by NFAX	<ul style="list-style-type: none"> Error detected with NFAX and send was cancelled due to a software error.
14-33	No Mail Address For the Machine	<ul style="list-style-type: none"> Neither the mail address of the machine nor the mail address of the network administrator is registered.
14-34	Address designated in the domain for SMTP sending does not exist	<ul style="list-style-type: none"> Operational error in normal mail sending or direct SMTP sending. Check the address selected in the address book for SMTP sending. Check the domain selection.

Code	Meaning	Suggested Cause/Action
14-50	Mail Job Task Error	Due to an FCU mail job task error, the send was cancelled: <ul style="list-style-type: none"> • Address book was being edited during creation of the notification mail. • Software error.
14-51	UCS Destination Download Error	Not even one return notification can be downloaded: <ul style="list-style-type: none"> • The address book was being edited. • The number for the specified destination does not exist (it was deleted or edited after the job was created).
14-60	Send Cancel Failed	<ul style="list-style-type: none"> • The cancel operation by the user failed to cancel the send operation.
14-61	Notification Mail Send Failed for All Destinations	<ul style="list-style-type: none"> • All addresses for return notification mail failed.
14-62	Transmission Error due to the existence of zero line page	<ul style="list-style-type: none"> • When the 0 line page exists in received pages with G3 communication, the transmission is interrupted.
15-01	POP3/IMAP4 Server Not Registered	<ul style="list-style-type: none"> • At startup, the system detected that the IP address of the POP3/IMAP4 server has not been registered in the machine.
15-02	POP3/IMAP4 Mail Account Information Not Registered	<ul style="list-style-type: none"> • The POP3/IMAP4 mail account has not been registered.
15-03	Mail Address Not Registered	<ul style="list-style-type: none"> • The mail address has not been registered.
15-10	DCS Mail Receive Error	<ul style="list-style-type: none"> • Error other than 15-11 to 15-18.
15-11	Connection Error	The DNS or POP3/IMAP4 server could not be found: <ul style="list-style-type: none"> • The IP address for DNS or POP3/IMAP4 server is not stored in the machine. • The DNS IP address is not registered. • Network not operating correctly.
15-12	Authorization Error	POP3/IMAP4 send authorization failed: <ul style="list-style-type: none"> • Incorrect IFAX user name or password. • Access was attempted by another device, such as the PC. • POP3/IMAP4 settings incorrect.

Code	Meaning	Suggested Cause/Action
15-13	Receive Buffer Full	<ul style="list-style-type: none"> Occurs only during manual reception. Transmission cannot be received due to insufficient buffer space. The buffer is being used for mail send or Scan-to-Email.
15-14	Mail Header Format Error	<ul style="list-style-type: none"> The mail header is not standard format. For example, the Date line description is incorrect.
15-15	Mail Divide Error	<ul style="list-style-type: none"> The e-mail is not in standard format. There is no boundary between parts of the e-mail, including the header.
15-16	Mail Size Receive Error	<ul style="list-style-type: none"> The mail cannot be received because it is too large.
15-17	Receive Timeout	<ul style="list-style-type: none"> May occur during manual receiving only because the network is not operating correctly.
15-18	Incomplete Mail Received	<ul style="list-style-type: none"> Only one portion of the mail was received.
15-31	Final Destination for Transfer Request Reception Format Error	<ul style="list-style-type: none"> The format of the final destination for the transfer request was incorrect.
15-39	Send/Delivery Destination Error	<p>The transmission cannot be delivered to the final destination:</p> <ul style="list-style-type: none"> Destination file format is incorrect. Could not create the destination for the file transmission.
15-41	SMTP Receive Error	<ul style="list-style-type: none"> Reception rejected because the transaction exceeded the limit for the "Auth. E-mail RX" setting.
15-42	Off Ramp Gateway Error	<ul style="list-style-type: none"> The delivery destination address was specified with Off Ramp Gateway OFF.
15-43	Address Format Error	<ul style="list-style-type: none"> Format error in the address of the Off Ramp Gateway.
15-44	Addresses Over	<ul style="list-style-type: none"> The number of addresses for the Off Ramp Gateway exceeded the limit of 30.
15-61	Attachment File Format Error	<ul style="list-style-type: none"> The attached file is not TIFF format.

Code	Meaning	Suggested Cause/Action
15-62	TIFF File Compatibility Error	<p>Could not receive transmission due to:</p> <ul style="list-style-type: none"> • Resolution error • Image of resolution greater than 200 dpi without extended memory. • Resolution is not supported. • Page size error • The page size was larger than A3. • Compression error • File was compressed with other than MH, MR, or MMR.
15-63	TIFF Parameter Error	<p>The TIFF file sent as the attachment could not be received because the TIFF header is incorrect:</p> <ul style="list-style-type: none"> • The TIFF file attachment is a type not supported. • The TIFF file attachment is corrupted. • Software error.
15-64	TIFF Decompression Error	<p>The file received as an attachment caused the TIFF decompression error:</p> <ul style="list-style-type: none"> • The TIFF format of the attachment is corrupted. • Software error.
15-71	Not Binary Image Data	<ul style="list-style-type: none"> • The file could not be received because the attachment was not binary image data.
15-73	MDN Status Error	<ul style="list-style-type: none"> • Could not find the Disposition line in the header of the Return Receipt, or there is a problem with the firmware.
15-74	MDN Message ID Error	<ul style="list-style-type: none"> • Could not find the Original Message ID line in the header of the Return Receipt, or there is a problem with the firmware.
15-80	Mail Job Task Read Error	<ul style="list-style-type: none"> • Could not receive the transmission because the destination buffer is full and the destination could not be created (this error may occur when receiving a transfer request or a request for notification of reception).

Code	Meaning	Suggested Cause/Action
15-81	Repeated Destination Registration Error	<ul style="list-style-type: none"> • Could not repeat receive the transmission because the destination buffer is full and the destination could not be created (this error may occur when receiving a transfer request or a request for notification of reception).
15-91	Send Registration Error	<p>Could not receive the file for transfer to the final destination:</p> <ul style="list-style-type: none"> • The format of the final destination or the transfer destination is incorrect. • Destinations are full so the final and transfer destinations could not be created.
15-92	Memory Overflow	<ul style="list-style-type: none"> • Transmission could not be received because memory overflowed during the transaction.
15-93	Memory Access Error	<ul style="list-style-type: none"> • Transaction could not complete due to a malfunction of SAF memory.
15-94	Incorrect ID Code	<ul style="list-style-type: none"> • The machine rejected an incoming e-mail for transfer request, because the ID code in the incoming e-mail did not match the ID code registered in the machine.
15-95	Transfer Station Function	<ul style="list-style-type: none"> • The machine rejected an incoming e-mail for transfer because the transfer function was unavailable.
22-00	Original length exceeded the maximum scan length	<ul style="list-style-type: none"> • Divide the original into more than one page. • Check the resolution used for scanning. Lower the scan resolution if possible. • Add optional page memory.
22-01	Memory overflow while receiving	<ul style="list-style-type: none"> • Wait for the files in the queue to be sent. • Delete unnecessary files from memory. • Transfer the substitute reception files to an another fax machine, if the machine's printer is busy or out of order. • Add an optional SAF memory card or hard disk.
22-02	Tx or rx job stalled due to line disconnection at the other end	<ul style="list-style-type: none"> • The job started normally but did not finish normally; data may or may not have been received fully. • Restart the machine.

Code	Meaning	Suggested Cause/Action
22-04	The machine cannot store received data in the SAF	<ul style="list-style-type: none"> • Update the ROM • Replace the FCU.
22-05	No G3 parameter confirmation answer	<ul style="list-style-type: none"> • Defective FCU board or firmware.
23-00	Data read timeout during construction	<ul style="list-style-type: none"> • Restart the machine. • Replace the FCU.
25-00	The machine software resets itself after a fatal transmission error occurred	<ul style="list-style-type: none"> • Update the ROM • Replace the FCU.
F0-xx	V.34 modem error	<ul style="list-style-type: none"> • Replace the FCU.
F6-xx	SG3 modem error	<ul style="list-style-type: none"> • Update the SG3 modem ROM. • Replace the SG3 board. • Check for line noise or other line problems. • Try communicating another V.8/V.34 fax.

IFAX Troubleshooting

- Use the following procedures to determine whether the machine or another part of the network is causing the problem.

4

Communication Route	Item	Action [Remarks]
General LAN	1. Connection with the LAN	<ul style="list-style-type: none"> • Check that the LAN cable is connected to the machine. • Check that the LEDs on the hub are lit.
	2. LAN activity	<ul style="list-style-type: none"> • Check that other devices connected to the LAN can communicate through the LAN.
Between IFAX and PC	1. Network settings on the PC	<ul style="list-style-type: none"> • Check the network settings on the PC. <p>[Is the IP address registered in the TCP/IP properties in the network setup correct?</p> <ul style="list-style-type: none"> • Check the IP address with the administrator of the network.]
	2. Check that PC can connect with the machine	<ul style="list-style-type: none"> • Use the "ping" command on the PC to contact the machine. <p>[At the MS-DOS prompt, type ping then the IP address of the machine, then press Enter.]</p>
	3. LAN settings in the machine	<ul style="list-style-type: none"> • Check the LAN parameters • Check if there is an IP address conflict with other PCs. <p>[Use the "Network" function in the User Tools. If there is an IP address conflict, inform the administrator.]</p>
Between machine and e-mail server	LAN settings in the machine	<ul style="list-style-type: none"> • Check the LAN parameters • Check if there is an IP address conflict with other PCs. <p>[Use the "Network" function in the User Tools. If there is an IP address conflict, inform the administrator.]</p>

Communication Route	Item	Action [Remarks]
Between machine and e-mail server	1. E-mail account on the server	<ul style="list-style-type: none"> • Make sure that the machine can log into the e-mail server. • Check that the account and password stored in the server are the same as in the machine. [Ask the administrator to check.]
	2. E-mail server	<ul style="list-style-type: none"> • Make sure that the client devices which have an account in the server can send/receive e-mail. [Ask the administrator to check. Send a test e-mail with the machine's own number as the destination. The machine receives the returned e-mail if the communication is performed successfully.]
Between e-mail server and internet	1. E-mail account on the Server	<ul style="list-style-type: none"> • Make sure that the PC can log into the e-mail server. • Check that the account and password stored in the server are the same as in the machine. [Ask the administrator to check.]
	2. E-mail server	<ul style="list-style-type: none"> • Make sure that the client devices which have an account in the server can send/receive e-mail. [Ask the administrator to check. Send a test e-mail with the machine's own number as the destination. The machine receives the returned e-mail if the communication is performed successfully.]
	3. Destination e-mail address	<ul style="list-style-type: none"> • Make sure that the e-mail address is actually used. • Check that the e-mail address contains no incorrect characters such as spaces.
Between e-mail server and internet	Router settings	<ul style="list-style-type: none"> • Use the "ping" command to contact the router. • Check that other devices connected to the router can send data over the router. [Ask the administrator of the server to check.]

Communication Route	Item	Action [Remarks]
Between e-mail server and internet	Error message by e-mail from the network of the destination.	<ul style="list-style-type: none">• Check whether e-mail can be sent to another address on the same network, using the application e-mail software.• Check the error e-mail message. [Inform the administrator of the LAN.]

IP-Fax Troubleshooting

IP-Fax Transmission

Cannot send by IP Address/Host Name

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Specified IP address/host name correct?	Check the IP address/host name.
3	Firewall/NAT is installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
4	Transmission sent manually?	Manual sending not supported.
5	IP address of local machine registered?	Register the IP address.
6	Remote terminal port number setting other than 1720?	Send by specifying the port number.
7	Specified port number correct?	Confirm the port number of the remote fax.
8	DNS server registered when host name specified?	Contact the network administrator.
9	Remote fax a T.38 terminal?	Check whether the remote fax is a T38 terminal.
10	Remote fax switched off or busy?	Check that the remote fax is switched on.
11	Network bandwidth too narrow?	Request the network administrator to increase the bandwidth.
		Raise the delay level. IPFAX SW 01 Bit 0 to 3
		IP-Fax bandwidth is the same as the DCS speed. Set IP-Fax SW00 Bit 6 to 1.
12	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.

Cannot send via VoIP Gateway

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	VoIP Gateway T.38 standard?	Contact the network administrator.
3	VoIP Gateway installed correctly?	Contact the network administrator.
4	VoIP Gateway power switched on?	Contact the network administrator.
5	Is the IP address/host name of the specified Gateway correct?	Check the IP address/host name.
6	Number of the specified fax correct?	Check the remote fax number.
7	Firewall/NAT is installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
8	Transmission sent manually?	Manual sending not supported.
9	IP address of local fax registered?	Register the IP address.
10	DNS registered when host name specified?	Contact the network administrator.
11	Remote fax a G3 fax?	Check that the remote fax is a G3 fax.
12	G3 fax is connected to VoIP gateway?	Check that G3 fax is connected.
13	Remote G3 fax turned on?	Check that G3 fax is switched on.
14	Network bandwidth too narrow?	Request the network administrator to increase the bandwidth.
		Raise the network delay level. IPFAX SW 01 Bit 0 to 3
		IP-Fax bandwidth is the same as the DCS speed. Set IP-Fax SW00 Bit 6 to 1.

Cannot send by Alias Fax number.

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.

2	Number of specified Alias fax correct?	Confirm the Alias of the remote fax. Error Code: 13-14
3	Firewall/NAT installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
4	Transmission sent manually?	Manual sending not supported.
5	Gatekeeper installed correctly?	Contact the network administrator.
6	Gatekeeper power switched on?	Contact the network administrator.
7	IP address/host name of Gatekeeper correct?	Check the IP address/host name.
8	DNS server registered when Gatekeeper host name specified?	Contact the network administrator.
9	Enable H.323 SW is set to on?	Check the settings. See User Parameter SW 34 Bit 0
10	IP address of local fax registered?	Register the IP address of the local fax.
11	Alias number of local fax registered?	Register the Alias number of the local fax.
12	Remote fax registered in Gatekeeper?	Contact the network administrator.
13	Remote fax a T.38 terminal?	Check whether the remote fax is a T38 terminal.
14	Remote fax switched off or busy?	Contact the network administrator.
15	Network bandwidth too narrow?	Request the system administrator to increase the bandwidth.
		Raise the delay level. IPFAX SW 01 Bit 0 to 3
		Lower the modem transmission baud rate. IPFAX SW 05
16	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.

IP-Fax Reception

Cannot receive by IP Address/Host name.




Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT is installed?	Cannot breach the firewall. Send by using another method (Fax, Internet Fax)
3	IP address of local fax registered?	Register the IP address.
4	Port number specified at remote sender fax (if required)?	Request the sender to specify the port number.
5	Specified port number correct (if required)?	Request the sender to check the port number.
6	DNS server registered when host name specified on sender side?	<p>Contact the network administrator.</p> <p>Note</p> <ul style="list-style-type: none"> The sender machine displays this error code if the sender fax is a Ricoh model.
7	Network bandwidth too narrow?	Request the system administrator to increase the bandwidth.
		<p>Lower the start modem reception baud rate on the receiving side.</p> <p>IPFAX SW06</p>
8	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.

Cannot receive by VoIP Gateway.

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT is installed?	Cannot breach the firewall. Request the remote fax to send by using another method (Fax, Internet Fax)

3	VoIP Gateway installed correctly?	Contact the network administrator.
4	VoIP Gateway power switched on?	Contact the network administrator.
5	IP address/host name of specified VoIP Gateway correct on sender's side?	Request the remote fax to check the IP address/host name.
6	DNS server registered when host name specified on sender side?	Contact the network administrator.
7	Network bandwidth too narrow?	Request the network administrator to increase the bandwidth.
8	G3 fax connected?	Check that G3 fax is connected.
9	G3 fax power switched on?	Check that G3 fax is switched on.

Cannot receive by Alias Fax number.

Check Point		Action
1	LAN cable connected?	Check the LAN cable connection.
2	Firewall/NAT is installed?	Cannot the breach firewall. Request the remote fax to send by using another method (Fax, Internet Fax)
3	Gatekeeper installed correctly?	Contact the network administrator.  Note <ul style="list-style-type: none"> The sender machine displays this error code when the sender fax is a Ricoh model.
4	Power to Gatekeeper switched on?	Contact the network administrator.  Note <ul style="list-style-type: none"> The sender machine displays this error code when the sender fax is a Ricoh model.
5	IP address/host name of Gatekeeper correct on the sender's side?	Request the sender to check the IP address/host name.  Note <ul style="list-style-type: none"> The sender machine displays this error code when the sender fax is a Ricoh model.







6	DNS server registered when Gatekeeper host name specified on sender's side?	<p>Contact the network administrator.</p> <p>Note</p> <ul style="list-style-type: none"> The sender machine displays this error code when the sender fax is a Ricoh model.
7	Enable H.323 SW is set to on?	<p>Request the sender to check the settings.</p> <p>User Parameter SW 34 Bit 0</p> <p>Note</p> <ul style="list-style-type: none"> Only if the remote sender fax is a Ricoh fax.
8	Local fax IP address registered?	Register the IP address.
9	Local fax Alias number registered?	Register the Alias number.
10	Network bandwidth too narrow?	Request the system administrator to increase the bandwidth.
		<p>Lower the start modem reception baud rate on the receiving side.</p> <p>IPFAX SW06</p>
11	Remote fax cancelled transmission?	Check whether the remote fax cancelled the transmission.
12	Local fax registered in Gatekeeper?	<p>Contact the network administrator.</p> <p>Note</p> <ul style="list-style-type: none"> The sender machine displays this error code when the sender fax is a Ricoh model.

5. Appendix: Fax Service Program

System Service Mode

SP1-XXX (Bit Switches)

 "Bit Switches"

1	Mode No.		Function
101	System Switch		
	001 – 032	00 – 1F	Change the bit switches for system settings for the fax option  "Bit Switches"
102	Ifax Switch		
	001 – 016	00 – 0F	Change the bit switches for internet fax settings for the fax option  "Bit Switches"
103	Printer Switch		
	001 – 016	00 – 0F	Change the bit switches for printer settings for the fax option  "Bit Switches"
104	Communication Switch		
	001 – 032	00 – 1F	Change the bit switches for communication settings for the fax option  "Bit Switches"
105	G3-1 Switch		
	001 – 016	00 – 0F	Change the bit switches for the protocol settings of the standard G3 board  "Bit Switches"
111	IP fax Switch		
	001 – 016	00 – 0F	Change the bit switches for optional IP fax parameters  "Bit Switches"

SP2-XXX (RAM Data)

2	Mode No.		Function
101	RAM Read/Write		
	001		Change RAM data for the fax board directly. (☛ "Service RAM Addresses")
102	Memory Dump		
	001	G3-1 Memory Dump	Print out RAM data for the fax board. (☛ "Service RAM Addresses")
103	G3-1 NCU Parameters		
	001 – 023	CC, 01 – 22	NCU parameter settings for the standard G3 board. (☛ "NCU Parameters")

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SP3-XXX (Tel Line Settings)

3	Mode No.		Function
101	Service Station		
	001	Fax Number	Enter the fax number of the service station.
102	Serial Number		
	000		Enter the fax unit's serial number.
103	PSTN-1 Port Settings		
	001	Select Line	Select the line type setting for the G3-1 line. If the machine is installed on a PABX line, select "PABX", "PABX(GND)" or "PABX(FLASH)".
	002	PSTN Access Number	Enter the PSTN access number for the G3-1 line.
	003	Memory Lock Disabled	If the customer does not want to receive transmissions using Memory Lock on this line, turn this SP on.

107	IPFAX Port Settings		
	001	H323 Port	-
	002	SIP Port	-
	003	RAS Port	-
	004	Gatekeeper port	-
	005	T.38 Port	-
	006	SIP Server Port	-
	007	IPFAX Protocol Priority	Select "H323" or "SIP".
201	FAX SW		
	001 – 032	00 – 1F	-

SP4-XXX (ROM Versions)

4	Mode No.		Function
101	002 – 007	FCU ROM Version	Displays the FCU ROM version.
102	002 – 065	Error Codes	Displays the latest 64 fax error codes.
103	002 – 004	G3-1 ROM Version	Displays the G3-1 modem version.

SP5-XXX (Initializing)

5	Mode No.	Function
101	Initialize SRAM	
	001	Initializes the bit switches and user parameters, user data in the SRAM, files in the SAF memory, and clock.
102	Erase All Files	
	001	Erases all files stored in the SAF memory.

103	Reset Bit Switches	
	001	Resets the bit switches and user parameters.
104	Factory setting	
	001	Resets the bit switches and user parameters, user data in the SRAM and files in the SAF memory.
105	Reset All Bit Switches	
	001	Initializes all the current bit switch settings.
106	Reset Security Bit Switches	
	001	Initializes only the security bit switches. If you select automatic output/display for the user parameter switches, the security settings are initialized.

SP6-XXX (Reports)

6	Mode No.		Function
101	System Parameter List		
	001	-	Touch the "ON" button to print the system parameter list.
102	Service Monitor		
	001	-	Touch the "ON" button to print the service monitor report.
103	G3 Protocol Dump List		
	001	G3-1 (All Communications)	Prints the protocol dump list of all communications for the G3-1 line.
	002	G3-1 (1 Communication)	Prints the protocol dump list of the last communication for the G3-1 line.

105	All Files print out		
	001	-	<p>Prints out all the user files in the SAF memory, including confidential messages.</p> <p>Note</p> <ul style="list-style-type: none"> Do not use this function, unless the customer is having trouble printing confidential messages or recovering files stored using the memory lock feature.
106	Journal Print out		
	001	All Journals	The machine prints all the communication records on the report.
	002	Specified Date	The machine prints all communication records after the specified date.
107	Log List Print out		
	001	All log files	These log print out functions are for designer use only.
	002	Printer	
	003	SC/TRAP Stored	
	004	Decompression	
	005	Scanner	
	006	JOB/SAF	
	007	Reconstruction	
	008	JBIG	
	009	G3CCU	
	010	Fax Job	
	011	CCU	
	012	Scanner Condition	

108	IP Protocol Dump List		
	001	All Communications	Prints the protocol dump list of all communications for the IP fax line.
	002	1 Communication	Prints the protocol dump list of the last communication for the IP fax line.

SP7-XXX (Test Modes)

These are the test modes for PTT approval.

7	Function
101	G3-1 Modem Tests
102	G3-1 DTMF Tests
103	Ringer Test
104	G3-1 V34 (S2400baud)
105	G3-1 V34 (S2800baud)
106	G3-1 V34 (S3000baud)
107	G3-1 V34 (S3200baud)
108	G3-1 V34 (S3429baud)
109	Message Test

Bit Switches

WARNING

- Do not adjust a bit switch or use a setting that is described as "Not used", as this may cause the machine to malfunction or to operate in a manner that is not accepted by local regulations. Such bits are for use only in other areas, such as Japan.

Note

- Default settings for bit switches are not listed in this manual. Refer to the System Parameter List printed by the machine.

System Switches

System Switch 00 [SP No. 1-101-001]		
No	FUNCTION	COMMENTS
0	Dedicated transmission parameter programming 0: Disabled, 1: Enabled	Set this bit to 1 before changing any dedicated transmission parameters. Reset this bit to 0 after programming dedicated transmission parameters.
1	Not used	Do not change
2	Technical data printout on the Journal 0: Disabled 1: Enabled	1: Instead of the personal name, the following data are listed on the Journal for each G3 communication.

	<p>e.g. 0000 (1) // 32 (2) V34 (3) // 288 (4) // 264 (5) // L0100 (6) 03 (7) 04 (8)</p> <p>(1): EQM value (Line quality data). A larger number means more errors.</p> <p>(2): Symbol rate (V.34 only)</p> <p>(3): Final modem type used</p> <p>(4): Starting data rate (for example, 288 means 28.8 kbps)</p> <p>(5): Final data rate</p> <p>(6): Rx level (refer to the note after this table for how to read the rx level)</p> <p>(7): Total number of error lines that occurred during non-ECM reception.</p> <p>(8): Total number of burst error lines that occurred during non-ECM reception.</p> <p>Note</p> <ul style="list-style-type: none"> EQM and rx level are fixed at "FFFF" in tx mode. The seventh and eighth numbers are fixed at "00" for transmission records and ECM reception records. 	
	<p>Rx level calculation</p> <p>Example: 0000 // 32 V34 // 288/264 // L 01 00 03 04</p> <p>The four-digit hexadecimal value (N) after "L" indicates the rx level.</p> <p>The high byte is given first, followed by the low byte. Divide the decimal value of N by -16 to get the rx level.</p> <p>In the above example, the decimal value of N (= 0100 [H]) is 256.</p> <p>So, the actual rx level is $256 / -16 = -16$ dB</p>	
3	Not used	Do not change this setting.
4	Line error mark print 0: OFF, 1: ON (print)	When "1" is selected, a line error mark is printed on the printout if a line error occurs during reception.
5	G3/G4 communication parameter display 0: Disabled 1: Enabled	This is a fault-finding aid. The LCD shows the key parameters (see below). This is normally disabled because it cancels the CSI display for the user. Be sure to reset this bit to 0 after testing.
6	Protocol dump list output after each communication 0: Off 1: On	This is only used for communication troubleshooting. It shows the content of the transmitted facsimile protocol signals. Always reset this bit to 0 after finishing testing. If system switch 09 bit 6 is at "1", the list is only printed if there was an error during the communication.

7	Not used	Do not change the setting.
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System Switch 01 - Not used (Do not change the factory settings.)

System Switch 02 [SP No. 1-101-003]

No	FUNCTION	COMMENTS
0-1	Not used	Do not change these settings.
2	Force after transmission stall 0: Off 1: On	With this setting on, the machine resets itself automatically if a transmission stalls and fails to complete the job.
3-5	Not used	Do not change these settings.
6-7	Memory read/write by RDS Bit 7: 0, Bit 6: 0 Always disabled Bit 7: 0, Bit 6: 1 User selectable Bit 7: 1, Bit 6: 0 User selectable Bit 7: 1, Bit 6: 1 Always enabled	(0,0): All RDS systems are always locked out. (0,1), (1,0): Normally, RDS systems are locked out, but the user can temporarily switch RDS on to allow RDS operations to take place. RDS will automatically be locked out again after a certain time, which is stored in System Switch 03. Note that if an RDS operation takes place, RDS will not switch off until this time limit has expired. (1,1): At any time, an RDS system can access the machine.

System Switch 03 [SP No. 1-101-004]

No	FUNCTION	COMMENTS
0-7	Length of time that RDS is temporarily switched on when bits 6 and 7 of System Switch 02 are set to "User selectable"	00 - 99 hours (BCD). This setting is only valid if bits 6 and 7 of System Switch 02 are set to "User selectable". The default setting is 24 hours.

System Switch 04 [SP No. 1-101-005]

No	FUNCTION	COMMENTS
0-2	Not used	Do not change these settings.
3	Printing dedicated tx parameters on Quick/Speed Dial Lists 0: Disabled 1: Enabled	1: Each Quick/Speed dial number on the list is printed with the dedicated tx parameters (10 bytes each). The first 10 bytes of data are the programmed dedicated tx parameters; 34 bytes of data are printed (the other 24 bytes have no use for service technicians).
4-7	Not used	Do not change these settings.

System Switch 05 - Not used (Do not change the factory settings.)

System Switch 06 - Not used (Do not change the factory settings.)

System Switch 07 - Not used (Do not change the factory settings.)

System Switch 08 - Not used (Do not change the factory settings.)

System Switch 09 [SP No. 1-101-010]

No	FUNCTION	COMMENTS
0	Not used	Do not change these settings.
1	Inclusion of communications on the Journal when no image data was exchanged. 0: Disabled 1: Enabled	0: Communications that reached phase C (message tx/rx) of the T.30 protocol are listed on the Journal. 1: Communications that reached phase A (call setup) of T.30 protocol are listed on the Journal. This will include telephone calls.
2	Automatic error report printout 0: Disabled 1: Enabled	0: Error reports will not be printed. 1: Error reports will be printed automatically after failed communications.
3	Printing of the error code on the error report 0: No 1: Yes	1: Error codes are printed on the error reports.
4	Not used	Do not change this setting.

5	Power failure report 0: Disabled 1: Enabled	1: A power failure report will be automatically printed after the power is switched on if a fax message disappeared from the memory when the power was turned off last.
6	Conditions for printing the protocol dump list 0: Print for all communications 1: Print only when there is a communication error	This switch becomes effective only when system switch 00 bit 6 is set to 1. 1: Set this bit to 1 when you wish to print a protocol dump list only for communications with errors.
7	Priority given to various types of remote terminal ID when printing reports 0: RTI > CSI > Dial label > Tel. Number 1: Dial label > Tel. number > RTI > CSI	This bit determines which set of priorities the machine uses when listing remote terminal names on reports. Dial Label: The name stored, by the user, for the Quick/Speed Dial number.

System Switch 0A [SP No. 1-101-011]

No	FUNCTION	COMMENTS
0-3	Not used	Do not change these settings.
4	Dialing on the ten-key pad when the external telephone is off-hook 0: Disabled 1: Enabled	0: Prevents dialing from the ten-key pad while the external telephone is off-hook. Use this setting when the external telephone is not by the machine, or if a wireless telephone is connected as an external telephone. 1: The user can dial on the machine's ten-key pad when the handset is off-hook.
5	On hook dial 0: Disabled 1: Enabled	0: On hook dial is disabled.
6-7	Not used	Do not change the factory settings.

System Switch 0B - Not used (Do not change the factory settings.)

System Switch 0C - Not used (Do not change the factory settings.)

System Switch 0D - Not used (Do not change the factory settings.)

System Switch OE [SP No. 1-101-015]		
No	FUNCTION	COMMENTS
0-1	Not used	Do not change the settings.
2	Not used	This machine does not have the capture function.
3	Action when the external handset goes off-hook 0: Manual tx and rx operation 1: Memory tx and rx operation (the display remains the same)	0: Manual tx and rx are possible while the external handset is off-hook. However, memory tx is not possible. 1: The display stays in standby mode even when the external handset is used, so that other people can use the machine for memory tx operation. Note that manual tx and rx are not possible with this setting.
4-7	Not used	Do not change these settings.

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System Switch OF [SP No. 1-101-016]		
No	FUNCTION	COMMENTS

0-7	Country/area code for functional settings (Hex)		<p>This country/area code determines the factory settings of bit switches and RAM addresses. However, it has no effect on the NCU parameter settings and communication parameter RAM addresses.</p> <p>Cross reference</p> <p>NCU country code: SP No. 2-103-001 for G3-1</p>
	00: France	11: USA	
	01: Germany	12: Asia	
	02: UK	13: Japan	
	03: Italy	14: Hong Kong	
	04: Austria	15: South Africa	
	05: Belgium	16: Australia	
	06: Denmark	17: New Zealand	
	07: Finland	18: Singapore	
	08: Ireland	19: Malaysia	
	09: Norway	1A: China	
	0A: Sweden	1B: Taiwan	
	0B: Switz.	1C: Korea	
	0C: Portugal	20: Turkey	
	0D: Holland	21: Greece	
	0E: Spain	22: Hungary	
0F: Israel	23: Czech		
10: ---	24: Poland		

System Switch 10 [SP No. 1-101-017]

No	FUNCTION	COMMENTS
0-7	Threshold memory level for parallel memory transmission	<p>Threshold = N x 128 KB + 256 KB</p> <p>N can be between 00 - FF(H)</p> <p>Default setting: 02(H) = 512 KB</p>

System Switch 11 [SP No. 1-101-018]

No	FUNCTION	COMMENTS
0	TTI printing position 0: Superimposed on the page data 1: Printed before the data leading edge	Change this bit to 1 if the TTI overprints information that the customer considers to be important (G3 transmissions).
1	Not used	Japan Only
2-7	Not used	Do not change the factory settings.

System Switch 12 [SP No. 1-101-019]

No	FUNCTION	COMMENTS
0-7	TTI printing position in the main scan direction	TTI: 08 to 92 (BCD) mm Input even numbers only. This setting determines the print start position for the TTI from the left edge of the paper. If the TTI is moved too far to the right, it may overwrite the file number which is on the top right of the page. On an A4 page, if the TTI is moved over by more than 50 mm, it may overwrite the page number.

System Switch 13 - Not used (do not change these settings)

System Switch 14 - Not used (do not change these settings)

System Switch 15 [SP No. 1-101-022]

No	FUNCTION	COMMENTS
0	Not used	Do not change the settings.
1	Going into the Energy Saver mode automatically 0: Enabled 1: Disabled	1: The machine will restart from the Energy Saver mode quickly, because the +5V power supply is active even in the Energy Saver mode.
2-3	Not used	Do not change these settings.

4-5	<p>Interval for preventing the machine from entering Energy Saver mode if there is a pending transmission file.</p> <p>Bit 5: 0, Bit 4: 0 1 min</p> <p>Bit 5: 0, Bit 4: 1 30 min</p> <p>Bit 5: 1, Bit 4: 0 1 hour</p> <p>Bit 5: 1, Bit 4: 1 24 hours</p>	<p>If there is a file waiting for transmission, the machine does not go to Energy Saver mode during the selected period. After transmitting the file, if there is no file waiting for transmission, the machine goes to the Energy Saver mode.</p>
6-7	Not used	Do not change

System Switch 16 [SP No. 1-101-023]

No	FUNCTION	COMMENTS
0	<p>Parallel Broadcasting</p> <p>0: Disabled</p> <p>1: Enabled</p>	1: The machine sends messages simultaneously using all available ports during broadcasting.
1-7	Not used	Do not change these settings.

System Switch 17 - Not used (do not change these settings)

System Switch 18 - Not used (do not change these settings)

System Switch 19 [SP No. 1-101-026]

No	FUNCTION	COMMENTS
0-6	Not used	Do not change the settings.
7	<p>Special Original mode</p> <p>0: Disabled</p> <p>1: Enabled</p>	1: If the customer frequently wishes to transmit a form or letterhead which has a colored or printed background, change this bit to "1". "Original 1" and "Original 2" can be selected in addition to the "Text", "Text/Photo" and "Photo" modes.

System Switch 1A - Not used (do not change these settings)

System Switch 1B [SP No. 1-101-028]

In this switch setting, there is a limitation. Do not select the same image quality in two modes.

e.g) these setting combination is not allowed:

[Bit1: 0, Bit 0: 1 = **Text**] [Bit3: 0, Bit 2:0 = Photo/ Diffusion]

[Bit 6: 0, Bit 5: 0, Bit 4: 0 = **Text**]

No.	FUNCTION				COMMENTS
0-1	Image Quality in Text mode Bit 1: 0, Bit 0: 0 = Text/ Sharp Bit 1: 0, Bit 0: 1 = Text				This setting determines the desirable scanning image quality when the text mode is selected with the operation panel.
2-3	Image Quality in Photo mode Bit 3: 0, Bit 2: 0 = Photo/ Diffusion Bit 3: 0, Bit 2: 1 = Photo/ Dithering				This setting determines the desirable scanning image quality when the photo mode is selected with the operation panel.
4-6	Image Quality in Special Original mode				This setting determines the desirable scanning image quality when the special original mode is selected with the operation panel.
	Bit 6	Bit 5	Bit 4	Mode	
	0	0	0	Text	
	0	0	1	Text/ Sharp	
	0	1	0	Photo/ Diffusion	
	0	1	1	Photo/ Dithering	
	1	0	0	Dropout color	
1	0	1	-		
7	Not used				Do not change these settings.

System Switch 1C - Not used (do not change these settings)

System Switch 1D [SP No. 1-101-030]

No	FUNCTION	COMMENTS
0	RTI/CSI/CPS code display 0: Enable 1: Disable	0: RTI, CSI, CPS codes are displayed on the top line of the LCD panel during communication. 1: Codes are switched off (no display)
1	Not used	Do not change this setting.
2	Destination telephone number display limitation 0: OFF, 1: ON	When "1" is selected, the destination telephone number display is limited and redial is disabled.
3	Operation selection without PIN code registered 0: Transmission interrupted 1: No interrupted transmission	0: When "0" is selected without PIN code registration, transmission is interrupted and an alert message shows on the LCD.
4-7	Not used	Do not change these settings.

System Switch 1E [SP No. 1-101-031]

No	FUNCTION	COMMENTS
0	Communication after the Journal data storage area has become full 0: Impossible 1: Possible	0: When this switch is on and the journal history becomes full, the next report prints. If the journal history is not deleted, the next transmission cannot be received. This prevents overwriting communication records before the machine can print them. 1: If the buffer memory of the communication records for the Journal is full, fax communications are still possible. But the machine will overwrite the oldest communication records. Note: This setting is effective only when Automatic Journal printout is enabled but the machine cannot print the report (e.g., no paper).
1	Action when the SAF memory has become full during scanning 0: The current page is erased. 1: The entire file is erased.	0: If the SAF memory becomes full during scanning, the successfully scanned pages are transmitted. 1: If the SAF memory becomes full during scanning, the file is erased and no pages are transmitted. This bit switch is ignored for parallel memory transmission.

2	RTI/CSI display priority 0: RTI 1: CSI	This bit determines which identifier, RTI or CSI, is displayed on the LCD while the machine is communicating in G3 non-standard mode.
3	File No. printing 0: Enabled 1: Disabled	1: File numbers are not printed on any reports.
4	Action when authorized reception is enabled but authorized RTIs/CSIs are not yet programmed 0: All fax reception is disabled 1: Faxes can be received if the sender has an RTI or CSI	If authorized reception is enabled but the user has stored no acceptable sender RTIs or CSIs, the machine will not be able to receive any fax messages. If the customer wishes to receive messages from any sender that includes an RTI or CSI, and to block messages from senders that do not include an RTI or CSI, change this bit to "1", then enable Authorized Reception. Otherwise, keep this bit at "0 (default setting)".
5-7	Not used	Do not change the settings

System Switch 1F [SP No. 1-101-032]		
No	FUNCTION	COMMENTS
0	Not used	Do not change the settings.
1	Report printout after an original jam during SAF storage or if the SAF memory fills up 0: Enabled 1: Disabled	0: When an original jams, or the SAF memory overflows during scanning, a report will be printed. Change this bit to "1" if the customer does not want to have a report in these cases. Memory tx – Memory storage report Parallel memory tx – Transmission result report
2	Not used	Do not change the settings.
3	Received fax print start timing (G3 reception) 0: After receiving each page 1: After receiving all pages	0: The machine prints each page immediately after the machine receives it. 1: The machine prints the complete message after the machine receives all the pages in the memory.
4-6	Not used	Do not change the factory settings.

7	<p>Action when a fax SC has occurred</p> <p>0: Automatic reset</p> <p>1: Fax unit stops</p>	<p>0: When the fax unit detects a fax SC code other than SC1201 and SC1207, the fax unit automatically resets itself.</p> <p>1: When the fax unit detects any fax SC code, the fax unit stops.</p> <p>Cross Reference</p> <p>Fax SC codes - See "Troubleshooting"</p>
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I-fax Switches

I-fax Switch 00 - Not used (do not change the settings) [SP No. 1-102-001]

I-fax Switch 01 [SP No. 1-102-002]

No	FUNCTION	COMMENTS
	Original Line Resolution of TX Attachment File	These settings set the maximum resolution of the original that the destination can receive.
0	200x100 Standard	<p>0: Not selected</p> <p>1: Selected</p> <p>If more than one of these three bits is set to "1", the higher resolution has priority. For example, if both Bit 0 and Bit 2 are set to "1" then the resolution is set for "Bit 2 200 x 400."</p>
1	200x200 Detail	
2	200x400 Fine	
3	300 x 300 Reserve	
4	400 x 400 Super Fine	
5	600 x 600 Reserve	
6	Reserve	

	mm/inch
7	<p>This setting selects mm/inch conversion for mail transmission.</p> <p>0: Off (No conversion), 1: On (Conversion)</p> <p>When on (set to "1"), the machine converts millimeters to inches for sending mail. There is no switch for converting inches to millimeters.</p> <p>Unlike G3 fax transmissions which can negotiate between sender and receiver to determine the setting, mail cannot negotiate between terminals; the mm/inch selection is determined by the sender fax.</p> <p>When this switch is Off (0):</p> <p>Images scanned in inches are sent in inches.</p> <p>Images scanned in mm are sent in mm.</p> <p>Images received in inches are transmitted in inches.</p> <p>Images received in mm are transmitted in mm.</p> <p>When this switch is On (1):</p> <p>Images scanned in inches are sent in inches.</p> <p>Images scanned in mm are converted to inches.</p> <p>Images received in inches are transmitted in inches.</p> <p>Images received in mm are converted to inches.</p>

I-fax Switch 02 [SP No. 1-102-003]		
No	FUNCTION	COMMENTS
0	RX Text Mail Header Processing	<p>This setting determines whether the header information is printed with text e-mails when they are received.</p> <p>0: Prints only text mail.</p> <p>1: Prints mail header information attached to text mail.</p> <p>When a text mail is received with this switch On (1), the "From" address and "Subject" address are printed as header information.</p> <p>When a mail with only binary data is received (a TIFF-F file, for example), this setting is ignored and no header is printed.</p>

1	<p>Output from Attached Document at E-mail TX Error</p> <p>This setting determines whether only the first page or all pages of an e-mail attachment are printed at the sending station when a transmission error occurs. This allows the customer to see which documents have not reached their intended destinations if sent to the wrong e-mail addresses, for example.</p> <p>0: Prints 1st page only. 1: Prints all pages.</p>
2-3	<p>Text String for Return Receipt</p> <p>This setting determines the text string output for the Return Receipt that confirms the transmission was received normally at the destination.</p> <p>00: "Dispatched" Sends from PC mail a request for a Return Receipt. Receives the Return Receipt with "dispatched" in the 2nd part: Disposition: Automatic-action/MDN-send automatically; dispatched The "dispatched" string is included in the Subject string.</p> <p>01: "Displayed" Sends from PC mail a request for a Return Receipt. Receives the Return Receipt with "displayed" in the 2nd part: Disposition: Automatic-action/MDN-send automatically; displayed The "displayed" string is included in the Subject string.</p> <p>10: Reserved 11: Reserved</p> <p>A mail requesting a Return Receipt sent from an IFAX with this switch set to "00" (for "dispatched") received by Microsoft Outlook 2000 may cause an error. If any setting other than "displayed" (01) causes a problem, change the setting to "01" to enable normal sending of the Return Receipt.</p>
4	<p>Media accept feature</p> <p>This setting adds or does not add the media accept feature to the answer mail to confirm a reception.</p> <p>0: Does not add the media accept feature to the answer mail 1: Adds the media accept feature to the answer mail.</p> <p>Use this bit switch if a problem occurs when the machine receives an answer mail, which contains the media accept feature field.</p>

5-6	Not Used
7	Image Resolution of RX Text Mail
	<p>This setting determines the image resolution of the received mail.</p> <p>0: 200 x 200 1: 400 x 400</p> <p>The "1" setting requires installation of the Function Upgrade Card in order to have enough SAF (Store and Forward) memory to receive images at 400 x 400 resolution.</p>

I-fax Switch 03 - Not used (do not change the settings) [SP No. 1-102-004]

I-fax Switch 04 [SP No. 1-102-005]

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No	FUNCTION	COMMENTS
0	Subject for Delivery TX/Memory Transfer	<p>This setting determines whether the RTI/CSI registered on this machine or the RTI/CSI of the originator is used in the subject lines of transferred documents.</p> <p>0: Puts the RTI/CSI of the originator in the Subject line. If this is used, either the RTI or CSI is used. Only one of these can be received for use in the subject line.</p> <p>1: Puts the RTI/CSI registered on this machine in the Subject line.</p> <p>When this switch is used to transfer and deliver mail to a PC, the information in the Subject line that indicates where the transmission originated can be used to determine automatically the destination folder for each e-mail.</p>
1	<p>Subject corresponding to mail post database</p> <p>0: Standard subject 1: Mail post database subject</p> <p>The standard subject is replaced by the mail post database subject in the following three cases:</p> <p>1) When the service technician sets the service (software) switch. 2) When memory sending, delivery specified by F code or SMTP reception is done. 3) With relay broadcasting (1st stage without the Schmidt 4 function).</p>	<p>Note</p> <ul style="list-style-type: none"> This switch does not apply for condition 3) when the RX system is set up for memory sending, delivery by F-code, sending with SMTP RX and when operators are using FOL (to prevent problems when receiving transmissions).

2-7	Not Used
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I-fax Switch 05 [SP No. 1-102-006]

No	FUNCTION	COMMENTS
0	Mail Addresses of SMTP Broadcast Recipients	
	<p>Determines whether the e-mail addresses of the destinations that receive transmissions broadcasted using SMTP protocol are recorded in the Journal.</p> <p>For example:</p> <p>"1st destination + Total number of destinations: 9" in the Journal indicates a broadcast to 9 destinations.</p> <p>0: Not recorded</p> <p>1: Recorded</p>	
1	I-Fax Automatic Re-dial Setting	Determines whether the I-fax automatically redials when an error occurs.
	0: OFF 1: ON	
2-7	Not used	

I-fax Switch 06 - Not used (do not change the settings) [SP No. 1-102-007]

I-fax Switch 07 - Not used (do not change the settings) [SP No. 1-102-008]

I-fax Switch 08 [SP No. 1-102-009]

No	FUNCTION	COMMENTS
0-7	Memory Threshold for POP Mail Reception	
	<p>This setting determines the amount of SAF (Store and Forward) memory. (SAF stores fax messages to send later for transmission to more than one location, and also holds incoming messages if they cannot be printed.) When the amount of SAF memory available falls below this setting, mail can no longer be received; received mail is then stored on the mail server.</p> <p>00-FF (0 to 1024 KB: HEX)</p> <p>Note</p> <ul style="list-style-type: none"> The hexadecimal number you enter is multiplied by 4 KB to determine the amount of memory. 	

I-fax Switch 09 [SP No. 1-102-010]		
No	FUNCTION	COMMENTS
0-3	Not used	Do not change the settings
4-7	Restrict TX Retries	This setting determines the number of retries when connection and transmission fails due to errors. 01-F (1-15 Hex)

I-fax Switch 0A - Not used (do not change the settings) [SP No. 1-102-011]		
I-fax Switch 0B - Not used (do not change the settings) [SP No. 1-102-012]		
I-fax Switch 0C - Not used (do not change the settings) [SP No. 1-102-013]		
I-fax Switch 0D - Not used (do not change the settings) [SP No. 1-102-014]		
I-fax Switch 0E - Not used (do not change the settings) [SP No. 1-102-015]		

I-fax Switch 0F [SP No. 1-102-016]		
No	FUNCTION	COMMENTS
0	Delivery Method for SMTP RX Files	This setting determines whether files received with SMTP protocol are delivered or output immediately. 0: Off. Files received via SMTP are output immediately without delivery. 1: On. Files received via SMTP are delivered immediately to their destinations.
1-7	Not used	

Printer Switches

Printer Switch 00 [SP No. 1-103-001]		
No	FUNCTION	COMMENTS

0	Select page separation marks 0: Off 1: On	<p>0: If a 2 page RX transmission is split, [*] is printed in the bottom right corner of the 1st page and only a [2] is printed in the upper right corner of the 2nd page.</p> <p>1: If a 2 page RX transmission is split into two pages, for example, [*] [2] is printed in the bottom right corner of the 1st page and only a [2] is printed in the upper right corner of the 2nd page.</p> <p>Note</p> <ul style="list-style-type: none"> This helps the user to identify pages that have been split because the size of the paper is smaller than the size of the document received. (When A5 is used to print an A4 size document, for example.)
1	Repetition of data when the received page is longer than the printer paper 0: Off 1: On	<p>1: Default. 10 mm of the trailing edge of the previous page are repeated at the top of the next page.</p> <p>0: The next page continues from where the previous page stopped without any repeated text.</p>
2	Prints the date and time on received fax messages 0: Disabled 1: Enabled	<p>This switch is only effective when user parameter 02 - bit 2 (printing the received date and time on received fax messages) is enabled.</p> <p>1: The machine prints the received and printed date and time at the bottom of each received page.</p>
3-7	Not used	Do not change the settings.

Printer Switch 01 - Not used (do not change the settings) [SP No. 1-103-002]

Printer Switch 02 [SP No. 1-103-003]

No	FUNCTION	COMMENTS
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0	1st paper feed station usage for fax printing 0: Enabled 1: Disabled	0: The paper feed station can be used to print fax messages and reports. 1: The specified paper feed station will not be used for printing fax messages and reports.
1	2nd paper feed station usage for fax printing 0: Enabled 1: Disabled	<p>Note</p> <ul style="list-style-type: none"> Do not disable usage for a paper feed station which has been specified by User Parameter Switch 0F (15), or which is used for the Specified Cassette Selection feature.
2-7	Not used	Do not change the settings.

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Printer Switch 03 [SP No. 1-103-004]

No	FUNCTION	COMMENTS
0	Length reduction of received data 0: Disabled 1: Enabled	0: Incoming pages are printed without length reduction. (Page separation threshold: Printer Switch 03, bits 4 to 7) 1: Incoming page length is reduced when printing. (Maximum reducible length: Printer Switches 04, bits 0 to 4)
1-3	Not used	Do not change the settings
4-7	Page separation setting when sub scan compression is forbidden 00-0F (0-15 mm: Hex) Default: 6 mm	Page separation threshold (with reduction disabled with switch 03-0 above). For example, if this setting is set to "10", and A4 is the selected paper size: If the received document is 10 mm or less longer than A4, then the 10 mm are cut and only 1 page prints. If the received document is 10 mm longer than A4, then the document is split into 2 pages.

Printer Switch 04 SP No. 1-103-005

No	FUNCTION	COMMENTS
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0-4	Maximum reducible length when length reduction is enabled with switch 03-0 above. $\langle \text{Maximum reducible length} \rangle = \langle \text{Paper length} \rangle + (N \times 5\text{mm})$ "N" is the decimal value of the binary setting of bits 0 to 4.					
	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Setting
	0	0	0	0	0	0 mm
	0	0	0	0	1	5 mm
	0	0	1	0	0	20 mm
	1	1	1	1	1	155 mm
For A5 sideways and B5 sideways paper $\langle \text{Maximum reducible length} \rangle = \langle \text{Paper length} \rangle + 0.75 \times (N \times 5\text{mm})$						
5-6	Length of the duplicated image on the next page, when page separation has taken place. Bit 6: 0, Bit 5: 0 = 4 mm Bit 6: 1, Bit 5: 0 = 10 mm Bit 6: 0, Bit 5: 1 = 15 mm Bit 6: 1, Bit 5: 1 = Not used					
7	Not used.		Do not change the setting.			

Printer Switch 05 - Not used (do not change the settings)

Printer Switch 06 [SP No. 1-103-007]

No	FUNCTION	COMMENTS
0	Printing while a paper cassette is pulled out, when the Just Size Printing feature is enabled. 0: Printing will not start 1: Printing will start if another cassette has a suitable size of paper, based on the paper size selection priority tables.	Cross reference Just size printing on/off – User switch 05, bit 5
1-7	Not used.	Do not change the settings.

Printer Switch 07 [SP No. 1-103-008]		
No	FUNCTION	COMMENTS
0-3	Not used.	Do not change the settings.
4	List of destinations in the Communication Failure Report for broadcasting 0: All destinations 1: Only destinations where communication failure occurred	1: Only destinations where communication failure occurred are printed on the Communication Failure Report.
5-7	Not used.	Do not change the settings.

Printer Switch 08 - Not used (do not change the settings) [SP No. 1-103-009]
Printer Switch 09 - Not used (do not change the settings) [SP No. 1-103-010]
Printer Switch 0A - Not used (do not change the settings) [SP No. 1-103-011]
Printer Switch 0B - Not used (do not change the settings) [SP No. 1-103-012]
Printer Switch 0C - Not used (do not change the settings) [SP No. 1-103-013]
Printer Switch 0D - Not used (do not change the settings) [SP No. 1-103-014]

Printer Switch 0E [SP No. 1-103-015]		
No	FUNCTION	COMMENTS
0	Paper size selection priority 0: Width 1: Length	0: A paper size that has the same width as the received data is selected first. 1: A paper size which has enough length to print all the received lines without reduction is selected first.
1	Paper size selected for printing A4 width fax data 0: 8.5" x 11" size 1: A4 size	This switch determines which paper size is selected for printing A4 width fax data, when the machine has both A4 and 8.5" x 11" size paper.

2	Page separation 0: Enabled 1: Disabled	1: If all paper sizes in the machine require page separation to print a received fax message, the machine does not print the message (Substitute Reception is used). After a larger size of paper is set in a cassette, the machine automatically prints the fax message.
3-4	Printing the sample image on reports Bit 4: 0, Bit 3: 0 = The upper half only Bit 4: 0, Bit 3: 1 = 50% reduction in sub-scan only Bit 4: 1, Bit 3: 0 = Same size Bit 4: 1, Bit 3: 1 = Not used	"Same size" means the sample image is printed at 100%, even if page separation occurs. User Parameter Switch 19 (13H) bit 4 must be set to "0" to enable this switch. Refer to Detailed Section Descriptions for more on this feature.
5-6	Not used	Do not change the settings.
7	Equalizing the reduction ratio among separated pages (Page Separation) 0: Enabled 1: Disabled	0: When page separation has taken place, all the pages are reduced with the same reduction ratio. 1: Only the last page is reduced to fit the selected paper size when page separation has taken place. Other pages are printed without reduction.

Printer Switch 0F [SP No. 1-103-016]

No	FUNCTION	COMMENTS
0-1	Smoothing feature Bit 1: 0 Bit 0: 0 = Disabled Bit 1: 0 Bit 0: 1 = Disabled Bit 1: 1 Bit 0: 0 = Enabled Bit 1: 1 Bit 0: 1 = Not used	(0, 0) (0, 1): Disable smoothing if the machine receives halftone images from other manufacturers fax machines frequently.
2-7	Not used	Do not change the settings.

Communication Switches**Communication Switch 00 [SP No. 1-104-001]**

No	FUNCTION	COMMENTS
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0-1	<p>Compression modes available in receive mode</p> <p>Bit 1: 0 Bit 0: 0 = MH only</p> <p>Bit 1: 0 Bit 0: 1 = MH/MR</p> <p>Bit 1: 1 Bit 0: 0 = MH/MR/MMR</p> <p>Bit 1: 1 Bit 0: 1 = MH/MR/MMR/JBIG</p>	<p>These bits determine the compression capabilities to be declared in phase B (handshaking) of the T.30 protocol.</p>
2-3	<p>Compression modes available in transmit mode</p> <p>Bit 3: 0 Bit 2: 0 = MH only</p> <p>Bit 3: 0 Bit 2: 1 = MH/MR</p> <p>Bit 3: 1 Bit 2: 0 = MH/MR/MMR</p> <p>Bit 3: 1 Bit 2: 1 = MH/MR/MMR/JBIG</p>	<p>These bits determine the compression capabilities to be used in the transmission and to be declared in phase B (handshaking) of the T.30 protocol.</p>
4	Not used	Do not change the settings.
5	<p>JBIG compression method: Reception</p> <p>0: Only basic supported</p> <p>1: Basic and optional both supported</p>	Change the setting when communication problems occur using JBIG compression.
6	<p>JBIG compression method: Transmission</p> <p>0: Basic mode priority</p> <p>1: Optional mode priority</p>	Change the setting when communication problems occur using JBIG compression.
7	Not used	Do not change the settings.

Communication Switch 01 [SP No. 1-104-002]		
No	FUNCTION	COMMENTS
0	<p>ECM</p> <p>0: Off 1: On</p>	<p>If this bit is set to 0, ECM is switched off for all communications.</p> <p>In addition, V.8 protocol and JBIG compression are switched off automatically.</p>
1-5	Not used	Do not change the setting.

6-7	<p>Maximum printable page length available</p> <p>Bit 7: 0 Bit 6: 0 = No limit</p> <p>Bit 7: 0 Bit 6: 1 = B4 (364 mm)</p> <p>Bit 7: 1 Bit 6: 0 = A4 (297 mm)</p> <p>Bit 7: 1 Bit 6: 1 = Not used</p>	The setting determined by these bits is informed to the transmitting terminal in the pre-message protocol exchange (in the DIS/NSF frames).
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Communication Switch 02 [SP No. 1-104-003]

No	FUNCTION	COMMENTS
0	G3 Burst error threshold 0: Low 1: High	If there are more consecutive error lines in the received page than the threshold, the machine will send a negative response. The Low and High threshold values depend on the sub-scan resolution, and are as follows.
		100 dpi 6(L) → 12(H)
		200 dpi 12(L) → 24(H)
		300 dpi 18(L) → 36(H)
		400 dpi 24(L) → 48(H)
1	Acceptable total error line ratio 0: 5% 1: 10%	If the error line ratio for a page exceeds the acceptable ratio, RTN will be sent to the other end.
2	Treatment of pages received with errors during G3 reception 0: Deleted from memory without printing 1: Printed	0: Pages received with errors are not printed.
3	Hang-up decision when a negative code (RTN or PIN) is received during G3 immediate transmission 0: No hang-up, 1: Hang-up	0: The next page will be sent even if RTN or PIN is received. 1: The machine will send DCN and hang up if it receives RTN or PIN. This bit is ignored for memory transmissions or if ECM is being used.
4-7	Not used	Do not change the settings.

Communication Switch 03 [SP No. 1-104-004]

No	FUNCTION	COMMENTS
0-7	Maximum number of page retransmissions in a G3 memory transmission	00 - FF (Hex) times. This setting is not used if ECM is switched on. Default setting - 03(H)

Communication Switch 04 - Not used (do not change the settings)

Communication Switch 05 - Not used (do not change the settings)

Communication Switch 06 - Not used (do not change the settings)

Communication Switch 07 - Not used (do not change the settings)

Communication Switch 08 - Not used (do not change the settings)

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Communication Switch 09 [SP No. 1-104-010]

No	FUNCTION	COMMENTS
0-7	I-Fax dial interval setting	Adjusts the interval of the I-fax dialing. The interval of I-fax dialing is calculated by following formula. [Interval time = specified value with this switch x 2 sec]

Communication Switch 0A [SP No. 1-104-011]

No	FUNCTION	COMMENTS
0	Point of resumption of memory transmission upon redialing 0: From the error page 1: From page 1	0: The transmission begins from the page where transmission failed the previous time. 1: Transmission begins from the first page, using normal memory transmission.
1-7	Not used	Do not change the settings.

Communication Switch 0B – Not used (do not change the settings)

Communication Switch 0C – Not used (do not change the settings)

Communication Switch 0D [SP No. 1-104-014]

No	FUNCTION	COMMENTS
0-7	The available memory threshold, below which ringing detection (and therefore reception into memory) is disabled	00 to FF (Hex), unit = 4 kbytes (e.g., 06(H) = 24 kbytes) One page is about 24 kbytes. The machine refers to this setting before each fax reception. If the amount of remaining memory is below this threshold, the machine cannot receive any fax messages. If this setting is kept at 0, the machine will detect ringing signals and go into receive mode even if there is no memory available. This will result in communication failure.

Communication Switch 0E [SP No. 1-104-015]

No	FUNCTION	COMMENTS
0-7	Minimum interval between automatic dialing attempts	06 to FF (Hex), unit = 2 s (e.g., 06(H) = 12 s) This value is the minimum time that the machine waits before it dials the next destination.

Communication Switch 0F – Not used (do not change the settings.)

Communication Switch 10 [SP No. 1-104-017]

No	FUNCTION	COMMENTS
0-7	Memory transmission: Maximum number of dialing attempts to the same destination	01 – FE (Hex) times

Communication Switch 11 – Not used (do not change the settings.)

Communication Switch 12 [SP No. 1-104-019]

No	FUNCTION	COMMENTS
0-7	Memory transmission: Interval between dialing attempts to the same destination	01 – FF (Hex) minutes

Communication Switch 13 – Not used (do not change the settings.)

Communication Switch 14 [SP No. 1-104-021]

No	FUNCTION	COMMENTS
0	Inch-to-mm conversion during transmission 0: Disabled 1: Enabled	0: In immediate transmission, data scanned in inch format are transmitted without conversion. In memory transmission, data stored in the SAF memory in mm format are transmitted without conversion. Note: When storing the scanned data into SAF memory, the fax unit always converts the data into mm format. 1: The machine converts the scanned data or stored data in the SAF memory to the format which was specified in the set-up protocol (DIS/NSF) before transmission.
1-5	Not used	Do not change the factory settings.
6-7	Available unit of resolution in which fax messages are received Bit 7: 0, Bit 6: 0 = mm Bit 7: 0, Bit 6: 1 = inch Bit 7: 1, Bit 6: 0 = mm and inch (default) Bit 7: 1, Bit 6: 1 = Not used	For the best performance, do not change the factory settings. The setting determined by these bits is informed to the transmitting terminal in the pre-message protocol exchange (in the DIS/NSF frames).

Communication Switch 15 – Not used (do not change the settings)

Communication Switch 16 – Not used (do not change the settings)

Communication Switch 17 – Not used (do not change the settings)

Communication Switch 18 - Not used (do not change the settings)

Communication Switch 19 - Not used (do not change the settings)

Communication Switch 1A - Not used (do not change the settings)

Communication Switch 1B [SP No. 1-104-028]

No	FUNCTION	COMMENTS
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0-7	Extension access code (0 to 7) to turn V.8 protocol On/Off 0: On 1: Off	If the PABX does not support V.8/V.34 protocol procedure, set this bit to "1" to disable V.8. Example: If "0" is the PSTN access code, set bit 0 to 1. When the machine detects "0" as the first dialed number, it automatically disables V.8 protocol. (Alternatively, if "3" is the PSTN access code, set bit 3 to 1.)
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Communication Switch 1C [SP No. 1-104-029]

No	FUNCTION	COMMENTS
0-1	Extension access code (8 and 9) to turn V.8 protocol On/Off 0: On 1: Off	Refer to communication switch 1B. Example: If "8" is the PSTN access code, set bit 0 to 1. When the machine detects "8" as the first dialed number, it automatically disables V.8 protocol. (If "9" is the PSTN access code, use bit 1.)
2-7	Not used	Do not change the settings.

Communication Switch 1D - Not used (do not change the settings)

Communication Switch 1E - Not used (do not change the settings)

Communication Switch 1F - Not used (do not change the settings)

G3-1 Switches

G3 Switch 00 [SP No. 1-105-001]

No	FUNCTION	COMMENTS
0-1	Monitor speaker during communication (tx and rx) Bit 1: 0, Bit 0: 0 = Disabled Bit 1: 0, Bit 0: 1 = Up to Phase B Bit 1: 1, Bit 0: 0 = All the time Bit 1: 1, Bit 0: 1 = Reserved	(0, 0): The monitor speaker is disabled all through the communication. (0, 1): The monitor speaker is on up to phase B in the T.30 protocol. (1, 0): Used for testing. The monitor speaker is on all through the communication. Make sure that you reset these bits after testing.

2	Monitor speaker during memory transmission 0: Disabled 1: Enabled	1: The monitor speaker is enabled during memory transmission.
3-7	Not used	Do not change the settings.

G3 Switch 01 [SP No. 1-105-002]

No	FUNCTION	COMMENTS
0-3	Not used	Do not change the settings.
4	DIS frame length 0: 10 bytes 1: 4 bytes	1: The bytes in the DIS frame after the 4th byte will not be transmitted (set to 1 if there are communication problems with PC-based faxes which cannot receive the extended DIS frames).
5	Not used	Do not change the setting.
6	Forbid CED/AMsam output 0: Off 1: On (Forbid output)	Do not change this setting (Default: 0: Off), unless communication problem is caused by a CED or ANSam transmission.
7	Not used	Do not change the setting.

G3 Switch 02 [SP No. 1-105-003]

No	FUNCTION	COMMENTS
0	G3 protocol mode used 0: Standard and non-standard 1: Standard only	Change this bit to 1 only when the other end can only communicate with machines that send T.30-standard frames only. 1: Disables NSF/NSS signals (these are used in non-standard mode communication)
1-6	Not used	Do not change the settings.
7	Short preamble 0: Disabled 1: Enabled	Refer to Appendix B in the Group 3 Facsimile Manual for details about Short Preamble.

G3 Switch 03 [SP No. 1-105-004]

No	FUNCTION	COMMENTS
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0	DIS detection number (Echo countermeasure) 0: 1 1: 2	0: The machine will hang up if it receives the same DIS frame twice. 1: Before sending DCS, the machine will wait for the second DIS which is caused by echo on the line.
1	Not Used	Do not change the settings.
2	V.8 protocol 0: Disabled 1: Enabled	0: V.8/V.34 communications will not be possible. Note: Do not set to 0 unless the line condition is always bad enough to slow down the data rate to 14.4 kbps or lower.
3	ECM frame size 0: 256 bytes 1: 64 bytes	Keep this bit at "0" in most cases.
4	CTC transmission conditions 0: After one PPR signal received 1: After four PPR signals received (ITU-T standard)	0: When using ECM in non-standard (NSF/NSS) mode, the machine sends a CTC to drop back the modem rate after receiving a PPR, if the following condition is met in communications at 14.4, 12.0, 9.6, and 7.2 kbps. $\sqrt{N_{\text{Transmit}} \leq N_{\text{Resend}}}$ NTransmit- Number of transmitted frames NResend- Number of frames to be retransmitted 1: When using ECM, the machine sends a CTC to drop back the modem rate after receiving four PPRs. PPR, CTC: These are ECM protocol signals. This bit is not effective in V.34 communications.
5	Modem rate used for the next page after receiving a negative code (RTN or PIN) 0: No change 1: Fallback	1: The machine's tx modem rate will fall back before sending the next page if a negative code is received. This bit is ignored if ECM is being used.
6	Not Used	Do not change the settings

7	Select detection of reverse polarity in ringing 0: Off 1: On	This switch is used to prevent reverse polarity in ringing on the phone line (applied to PSTN-G3 ringing). Do not change this setting 0: No detection ⇒ Outside Japan 1: Detection ⇒ Inside Japan only
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G3 Switch 04 [SP No. 1-105-005]

No	FUNCTION	COMMENTS
0-3	Training error detection threshold	0 - F (Hex); 0 - 15 bits If the number of error bits in the received TCF is below this threshold, the machine informs the sender that training has succeeded.
4-7	Not used	Do not change the settings.

G3 Switch 05 [SP No. 1-105-006]

No	FUNCTION	COMMENTS

0-3	Initial Tx modem rate					<p>These bits set the initial starting modem rate for transmission.</p> <p>Use the dedicated transmission parameters if you need to change this for specific receivers.</p> <p>If a modem rate 14.4 kbps or slower is selected, V.8 protocol should be disabled manually.</p> <p>Cross reference V.8 protocol on/off - G3 switch 03, bit2</p>
	Bit 3	Bit 2	Bit 1	Bit 0	bps	
	0	0	0	1	2.4k	
	0	0	1	0	4.8k	
	0	0	1	1	7.2k	
	0	1	0	0	9.6k	
	0	1	0	1	12.0k	
	0	1	1	0	14.4k	
	0	1	1	1	16.8k	
	1	0	0	0	19.2k	
	1	0	0	1	21.6k	
	1	0	1	0	24.0k	
	1	0	1	1	26.4k	
	1	1	0	0	28.8k	
	1	1	0	1	31.2k	
1	1	1	0	33.6k		
Other settings - Not used						
4-5	<p>Initial modem type for 9.6 k or 7.2 kbps.</p> <p>Bit 5: 0, Bit 4: 0 = V.29</p> <p>Bit 5: 0, Bit 4: 1 = V.17</p> <p>Bit 5: 1, Bit 4: 0 = V.34</p> <p>Bit 5: 1, Bit 4: 1 = Reserved</p>					<p>These bits set the initial modem type for 9.6 and 7.2 kbps, if the initial modem rate is set at these speeds.</p>
6-7	Not used					Do not change the settings.

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G3 Switch 06 [SP No. 1-105-007]		
No	FUNCTION	COMMENTS

5

Initial Rx modem rate					<ul style="list-style-type: none"> • These bits set the initial starting modem rate for reception. • Use a lower setting if high speeds pose problems during reception. • If a modem rate 14.4 kbps or slower is selected, V.8 protocol should be disabled manually. <p>Cross reference: V.8 protocol on/off - G3 switch 03, bit2</p>
Bit 3	Bit 2	Bit 1	Bit 0	bps	
0	0	0	1	2.4k	
0	0	1	0	4.8k	
0	0	1	1	7.2k	
0	1	0	0	9.6k	
0	1	0	1	12.0k	
0	1	1	0	14.4k	
0	1	1	1	16.8k	
1	0	0	0	19.2k	
1	0	0	1	21.6k	
1	0	1	0	24.0k	
1	0	1	1	26.4k	
1	1	0	0	28.8k	
1	1	0	1	31.2k	
1	1	1	0	33.6k	
Other settings - Not used					

		Modem types available for reception				Setting	<ul style="list-style-type: none"> The setting of these bits is used to inform the transmitting terminal of the available modem type for the machine in receive mode. If V.34 is not selected, V.8 protocol must be disabled manually. <p>Cross reference: V.8 protocol on/off - G3 switch 03, bit2</p>
		Bit 7	Bit 6	Bit 5	Bit 4		
4-7		0	0	0	1	V.27ter	
		0	0	1	0	V.27ter, V.29	
		0	0	1	1	V.27ter, V.29, V.33	
		0	1	0	0	V.27ter, V.29, V.17/V.33	
		0	1	0	1	V.27ter, V.29, V.17/V.33, V.34	
		Other settings - Not used					

G3 Switch 07 [SP No. 1-105-008]

No	FUNCTION	COMMENTS
0-1	PSTN cable equalizer (tx mode: Internal) Bit 1: 0, Bit 0: 0 = None Bit 1: 0, Bit 0: 1 = Low Bit 1: 1, Bit 0: 0 = Medium Bit 1: 1, Bit 0: 1 = High	Use a higher setting if there is signal loss at higher frequencies because of the length of wire between the modem and the telephone exchange. Use the dedicated transmission parameters for specific receivers. Also, try using the cable equalizer if one or more of the following symptoms occurs. Communication error Modem rate fallback occurs frequently. <div style="border: 1px solid black; border-radius: 10px; padding: 2px; display: inline-block;">  Note </div> <ul style="list-style-type: none"> This setting is not effective in V.34 communications.

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2-3	<p>PSTN cable equalizer (rx mode: Internal)</p> <p>Bit 3: 0, Bit 2: 0 = None</p> <p>Bit 3: 0, Bit 2: 1 = Low</p> <p>Bit 3: 1, Bit 2: 0 = Medium</p> <p>Bit 3: 1, Bit 2: 1 = High</p>	<p>Use a higher setting if there is signal loss at higher frequencies because of the length of wire between the modem and the telephone exchange.</p> <p>Also, try using the cable equalizer if one or more of the following symptoms occurs.</p> <p>Communication error with error codes such as 0-20, 0-23, etc.</p> <p>Modem rate fallback occurs frequently.</p> <p>Note</p> <ul style="list-style-type: none"> This setting is not effective in V.34 communication.
4	<p>PSTN cable equalizer (V.8/V.17 rx mode: External)</p> <p>0: Disabled</p> <p>1: Enabled</p>	<p>Keep this bit at "1".</p>
5	Not used	Do not change the settings.
6	<p>Parameter selection for dial tone detection</p> <p>0: Normal parameter</p> <p>1: Specific parameter</p>	<p>0: This uses the fixed table in the ROM for dial tone detection.</p> <p>1: This uses the specific parameter adjusted with SRAM (69ECBEH - 69ECDEH). Select this if the dial tone cannot be detected when the "Normal parameter: 0" is selected.</p>
7	Not used	Do not change the settings.

G3 Switch 08 - **Not used** (do not change the settings)

G3 Switch 09 - **Not used** (do not change the settings)

G3 Switch 0A [SP No. 1-105-011]

No	FUNCTION	COMMENTS
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0-1	<p>Maximum allowable carrier drop during image data reception</p> <p>Bit 1: 0, Bit 0: 0 = 200</p> <p>Bit 1: 0, Bit 0: 1 = 400</p> <p>Bit 1: 1, Bit 0: 0 = 800</p> <p>Bit 1: 1, Bit 0: 1 = Reserved</p>	<p>These bits set the acceptable modem carrier drop time.</p> <p>Try using a longer setting if error code 0-22 is frequent.</p>
2	<p>Select cancellation of high-speed RX if carrier signal lost while receiving</p> <p>0: Off</p> <p>1: On</p>	<p>This switch setting determines if high-speed receiving ends if the carrier signal is lost when receiving during non-ECM mode</p>
3	Not used	Do not change the settings
4	<p>Maximum allowable frame interval during image data reception.</p> <p>0: 5 s 1: 13 s</p>	<p>This bit set the maximum interval between EOL (end-of-line) signals and the maximum interval between ECM frames from the other end.</p> <p>Try using a longer setting if error code 0-21 is frequent.</p>
5	Not used	Do not change the settings.
6	<p>Reconstruction time for the first line in receive mode</p> <p>0: 6 s 1: 12 s</p>	<p>When the sending terminal is controlled by a computer, there may be a delay in receiving page data after the local machine accepts set-up data and sends CFR. This is outside the T.30 recommendation. But, if this delay occurs, set this bit to 1 to give the sending machine more time to send data.</p> <p>Refer to error code 0-20.</p> <p>ITU-T T.30 recommendation: The first line should come within 5 s of CFR.</p>
7	Not used	Do not change the settings.

G3 Switch 0B Not used (do not change the settings).

G3 Switch 0C Not used (do not change the settings).

G3 Switch 0D Not used (do not change the settings).

G3 Switch 0E [SP No 1-105-015]

0-7	Set CNG send time interval Some machines on the receiving side may not be able to automatically switch the 3-second CNG interval.	
	High order bit	3000-2250ms: 3000-50xNms 3000 – 50 x Nms 0F (3000 ms) < N < FF (2250 ms)
	Low order bit	00-0E(3000-3700ms: 3000+50xNms 3000 – 50 x Nms 0F (3000 ms) < N < 0F (3700 ms)

G3 Switch 0F [SP No. 1-105-016]

No	FUNCTION	COMMENTS
0	Alarm when an error occurred in Phase C or later 0: Disabled 1: Enabled	If the customer wants to hear an alarm after each error communication, change this bit to "1".
1	Alarm when the handset is off-hook at the end of communication 0: Disabled 1: Enabled	If the customer wants to hear an alarm if the handset is off-hook at the end of fax communication, change this bit to "1".
2-3	Not used	Do not change the settings.
4	Sidaa manual calibration setting 0: Off 1: On	1: manually calibrates for communication with a line, whose current change occurs such as an optical fiber line.
5-6	Not used	Do not change the settings.

IP Fax Switches

IP Fax Switch 00 [SP No. 1-111-001]

No.	FUNCTION	COMMENTS
0	Not used	Do not change this setting.

1	IP Fax Transport 0: TCP, 1: UDP	Selects TCP or UDP protocol for IP-Fax
2	IP Fax single port selection 0: OFF, 1: ON (enable)	Selects single data port.
3	IP Fax double ports (single data port) selection 0: OFF, 1: ON (enable)	Selects whether IP-Fax uses a double port.
4	IP Fax Gatekeeper 0: OFF, 1: ON (enable)	Enables/disables the communication via the gatekeeper for IP-Fax.
5	IP Fax T30 bit signal reverse 0: LSB first, 1: MSB first	Reverses the T30 bit signal.
6	IP Fax max bit rate setting 0: Not affected, 1: Affected	When "0" is selected, the max bit rate does not affect the value of the DIS/DCS. When "1" is selected, the max bit rate affects the value of the DIS/DCS.
7	IP Fax received telephone number confirmation 0: No confirmation, 1: Confirmation	When "0" is selected, fax data is received without checking the telephone number. When "1" is selected, fax data is received only when confirming that the telephone number from the sender matches the registered telephone number in this machine. If this confirmation fails, the line is disconnected.

IP-Fax Switch 01

No.	FUNCTION	COMMENTS
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0-3	Select IP FAX Delay Level					<p>Raise the level by selecting a higher setting if too many transmission errors are occurring on the network.</p> <p>If TCP/UDP is enabled on the network, raise this setting on the T.30 machine. Increasing the delay time allows the recovery of more lost packets.</p> <p>If only UDP is enabled, increase the number of redundant packets.</p> <p>Level 1 to 2: 3 Redundant packets Level 3: 4 Redundant packets</p>
	Bit3	Bit2	Bit1	Bit0	Setting	
	0	0	0	0	Level 0	
	0	0	0	1	Level 1	
	0	0	1	0	Level 2	
	0	0	1	1	Level 3	
4-7	IP Fax preamble wait time setting					<p>Selects the preamble wait time. [00 to 0f]</p> <p>There are 16 values in this 4-bit binary switch combination.</p> <p>Waiting time: set value level x 100 ms Max: 0f (1500 ms) Min: 00 (No wait time) The default is "0000" (00H).</p>

IP Fax Switch 02 [SP No. 1-111-003]		
No.	FUNCTION	COMMENTS
0	<p>IP Fax bit signal reverse setting</p> <p>0: Maker code setting</p> <p>1: Internal bit switch setting</p>	<p>When "0" is selected, the bit signal reverse method is decided by the maker code.</p> <p>When "1" is selected, the bit signal reverse method is decided by the internal bit switch.</p> <p>(When communicating between IP Fax devices, LSB first is selected.)</p>
1	<p>IP Fax transmission speed setting</p> <p>0: Modem speed</p> <p>1: No limitation</p>	<p>Selects the transmit speed for IP Fax communication.</p>
2	<p>SIP transport setting</p> <p>0: TCP</p> <p>1: UDP</p>	<p>This bit switch sets the transport that has priority for receiving IP Fax data.</p> <p>This function is activated only when the sender has both TCP and UDP.</p>

3	CCM connection 0: No CCM connection 1: CCM connection	When "1" is selected, only the connection call message with H.323 or no tunneled H.245 is transmitted via CCM.
4	Message reception selection from non-registered SIP server 0: Answer 1: Not answer	0: This answers the INVITE message from the SIP server not registered for the machine. 1: This does not receive the INVITE message from the SIP server not registered for the machine and send a refusal message.
5	ECM communication setting 0: No limit for image compression 1: Limit for image compression	0: This does not limit the type of the image compression with ECM communication. 1: When the other end machine is Cisco, this permits the image compression other than JBIG or MMR with ECM communication.
6-7	Not used	Do not change these settings.

IP Fax Switch 03 [SP No. 1-111-004]		
No.	FUNCTION	COMMENTS
0	Effective field limitation for G3 standard function information 0: OFF, 1: 4byte (DIS)	Limits the effective field for standard G3 function information.
1	Switching between G3 standard and G3 non standard 0: Enable switching 1: G3 standard only	Enables/disables switching between G3 standard and G3 non-standard.
2	Not used.	Do not change this setting.
3	ECM frame size selection at transmitting 0: 256byte, 1: 64byte	Selects the ECM frame size for sending.
4	DIS detection times for echo prevention 0: 1 time, 1: 2 times	Sets the number of times for DIS to detect echoes.

5	CTC transmission selection 0: PPRx1 1: PPRx4	When "0" is selected, the transmission condition is decided by error frame numbers. When "1" is selected, the transmission condition is based on the ITU-T method.
6	Shift down setting at receiving negative code 0: OFF, 1: ON	Selects whether to shift down when negative codes are received.
7	Not used	Do not change this setting.

IP Fax Switch 04 [SP No. 1-111-005]

No.	FUNCTION	COMMENTS
0	TCF error threshold	Sets the TCF error threshold level. [00 to 0f] The default is "1111" (0fH).
1		
2		
3		
4-7	Not used	Do not change these settings.

IP Fax Switch 05 [SP No. 1-111-006]

No.	FUNCTION	COMMENTS
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0-3	Modem bit rate setting for transmission Sets the modem bit rate for transmission. The default is "0110" (14.4K bps).				
	Bit 4	Bit 3	Bit 2	Bit 1	
	0	0	0	1	2400 bps
	0	0	1	1	4800 bps
	0	0	1	1	7200 bps
	0	1	0	0	9600 bps
	0	1	0	1	12.0 Kbps
	0	1	1	0	14.4 Kbps
	0	1	1	1	16.8 Kbps
	1	0	0	0	19.2 Kbps
	1	0	0	1	21.6 Kbps
	1	0	1	0	24.0 Kbps
	1	0	1	1	26.4 Kbps
	1	1	0	0	28.8 Kbps
1	1	0	1	31.2 Kbps	
1	1	1	0	33.6 Kbps	
4-5	Modem setting for transmission Sets the modem for transmission. The default is "00" (V29). Bit 5: 0, Bit 4: 0 = V29 Bit 5: 0, Bit 4: 1 = V17 Bit 5: 1, Bit 4: 0 = V34* Bit 5: 1, Bit 4: 1 = Not used *V34 is not supported for IP-Fax communication.				
6-7	Not used		Do not change these settings.		

IP Fax Switch 06 [SP No. 1-111-007]

No.	FUNCTION			COMMENTS	
0-3	Modem bit rate setting for reception Sets the modem bit rate for reception. The default is "0110" (14.4K bps).				
	Bit 3	Bit 2	Bit 1	Bit 0	
	0	0	0	1	2400 bps
	0	0	1	0	4800 bps
	0	0	1	1	7200 bps
	0	1	0	0	9600 bps
	0	1	0	1	12.0 Kbps
	0	1	1	0	14.4 Kbps
	0	1	1	1	16.8 Kbps
	1	0	0	0	19.2 Kbps
	1	0	0	1	21.6 Kbps
	1	0	1	0	24.0 Kbps
	1	0	1	1	26.4 Kbps
	1	1	0	0	28.8 Kbps
	1	1	0	1	31.2 Kbps
	1	1	1	0	33.6 Kbps

4-7	Modem setting for reception Sets the modem type for reception. The default is "0100" (V27ter, V29, V17).				
	Bit 7	Bit 6	Bit 5	Bit 4	
	0	0	0	1	V27ter
	0	0	1	0	V27ter, V29
	0	0	1	1	V27ter, V29, V33 (invalid)
	0	1	0	0	V27ter, V29, V17
	0	1	0	1	V27ter, V29, V17, V34*
*V34 is not supported for IP-Fax communication.					

IP Fax Switch 07 [SP No. 1-111-008]		
No.	FUNCTION	COMMENTS
0	TSI information 0: Not added, 1: Added	Adds or does not add TSI information to NSS(S).
1	DCN transmission setting at T1 timeout 0: Not transmitted, 1: Transmitted	Transmits or does not transmit DCN at T1 timeout.
2	Not used	Do not change this setting.
3	Hang up setting at DIS reception disabled 0: No hang up 1: Hang up after transmitting DCN	Sets whether the machine disconnects after DIS reception.
4	Number of times for training 0: 1 time, 1: 2 times	Selects the number of times training is done at the same bit rate.
5	Space CSI transmission setting at no CSI registration 0: Not transmitted, 1: Transmitted	When "0" is selected, frame data is enabled. When "1" is selected, the transmitted data is all spaces.

6-7	Not used	Do not change these settings.
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IP Fax Switch 08 [SP No. 1-111-009]

No.	FUNCTION	COMMENTS
0-1	<p>T1 timer adjustment Adjusts the T1 timer. The default is "00" (35 seconds).</p> <p>Bit 1: 0, Bit 0: 0 = 35 sec Bit 1: 0, Bit 0: 1 = 40 sec Bit 1: 1, Bit 0: 0 = 50 sec Bit 1: 1, Bit 0: 1 = 60 sec</p>	-
2-3	<p>T4 timer adjustment Adjust the T4 timer. The default is "00" (3 seconds).</p> <p>Bit 3: 0, Bit 2: 0 = 3 sec Bit 3: 0, Bit 2: 1 = 3.5 sec Bit 3: 1, Bit 2: 0 = 4 sec Bit 3: 1, Bit 2: 1 = 5 sec</p>	-
4-5	<p>T0 timer adjustment Bit 5: 0, Bit 4: 0 = 75 sec Bit 5: 0, Bit 4: 1 = 120 sec Bit 5: 1, Bit 4: 0 = 180 sec Bit 5: 1, Bit 4: 1 = 240 sec</p>	<p>Adjusts the fail safe timer. This timer sets the interval between "setup" data transmission and T.38 phase decision. If your destination return is late on the network or G3 fax return is late, adjust the longer interval timer.</p> <p>The default is "00" (75 seconds).</p>
6-7	Not used	Do not change these settings.

NCU Parameters

- The following tables give the RAM addresses and the parameter calculation units that the machine uses for ringing signal detection and automatic dialing. The factory settings for each country are also given. Most of these must be changed by RAM read/write (SP2-102), but some can be changed using NCU Parameter programming (SP2-103); if SP2-103 can be used, this will be indicated in the Remarks column. The RAM is programmed in hex code unless (BCD) is included in the Unit column.

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Address	Function					
680500	Country/Area code for NCU parameters					
	Use the Hex value to program the country/area code directly into this address, or use the decimal value to program it using SP2-103-001					
	Country /Area	Decimal	Hex	Country /Area	Decimal	Hex
	France	00	00	USA	17	11
	Germany	01	01	Asia	18	12
	UK	02	02	Hong Kong	20	14
	Italy	03	03	South Africa	21	15
	Austria	04	04	Australia	22	16
	Belgium	05	05	New Zealand	26	17
	Denmark	06	06	Singapore	24	18
	Finland	07	07	Malaysia	25	19
	Ireland	08	08	China	26	1A
	Norway	09	09	Taiwan	27	1B
	Sweden	10	0A	Korea	28	1C
	Switzerland	11	0B	Turkey	32	20
	Portugal	12	0C	Greece	33	21
	Holland	13	0D	Hungary	34	22
Spain	14	0E	Czech	35	23	
Israel	15	0F	Poland	36	24	

Address	Function	Unit	Remarks
680501	Line current detection time	20 ms	Line current detection is disabled. Line current is not detected if 680501 contains FF.
680502	Line current wait time		
680503	Line current drop detect time		

Address	Function	Unit	Remarks
680504	PSTN dial tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680505	PSTN dial tone frequency upper limit (low byte)		
680506	PSTN dial tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680507	PSTN dial tone frequency lower limit (low byte)		
680508	PSTN dial tone detection time	20 ms	If 680508 contains FF(H), the machine pauses for the pause time (address 68050D / 68050E). Italy: See Note 2.
680509	PSTN dial tone reset time (LOW)		
68050A	PSTN dial tone reset time (HIGH)		
68050B	PSTN dial tone continuous tone time		
68050C	PSTN dial tone permissible drop time		
68050D	PSTN wait interval (LOW)		
68050E	PSTN wait interval (HIGH)	-	
68050F	PSTN ring-back tone detection time	20 ms	Detection is disabled if this contains FF.
680510	PSTN ring-back tone off detection time	20 ms	-
680511	PSTN detection time for silent period after ring-back tone detected (LOW)	20 ms	-
680512	PSTN detection time for silent period after ring-back tone detected (HIGH)	20 ms	-
680513	PSTN busy tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680514	PSTN busy tone frequency upper limit (low byte)		

Address	Function	Unit	Remarks
680515	PSTN busy tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680516	PSTN busy tone frequency lower limit (low byte)		
680517	PABX dial tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680518	PABX dial tone frequency upper limit (low byte)		
680519	PABX dial tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
68051A	PABX dial tone frequency lower limit (low byte)		
68051B	PABX dial tone detection time	20 ms	If 68051B contains FF, the machine pauses for the pause time (680520 / 680521).
68051C	PABX dial tone reset time (LOW)		
68051D	PABX dial tone reset time (HIGH)		
68051E	PABX dial tone continuous tone time		
68051F	PABX dial tone permissible drop time		
680520	PABX wait interval (LOW)		
680521	PABX wait interval (HIGH)	-	
680522	PABX ringback tone detection time	20 ms	If both addresses contain FF (H), tone detection is disabled.
680523	PABX ringback tone off detection time	20 ms	
680524	PABX detection time for silent period after ringback tone detected (LOW)	20 ms	If both addresses contain FF (H), tone detection is disabled.
680525	PABX detection time for silent period after ringback tone detected (HIGH)	20 ms	

Address	Function	Unit	Remarks
680526	PABX busy tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680527	PABX busy tone frequency upper limit (low byte)		
680528	PABX busy tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680529	PABX busy tone frequency lower limit (low byte)		
68052A	Busy tone ON time: range 1	20 ms	-
68052B	Busy tone OFF time: range 1		
68052C	Busy tone ON time: range 2		
68052D	Busy tone OFF time: range 2		
68052E	Busy tone ON time: range 3	20 ms	
68052F	Busy tone OFF time: range 3		
680530	Busy tone ON time: range 4		
680531	Busy tone OFF time: range 4		
680532	Busy tone continuous tone detection time		
680533	<p>Busy tone signal state time tolerance for all ranges, and number of cycles required for detection (a setting of 4 cycles means that ON-OFF-ON or OFF-ON-OFF must be detected twice).</p> <p>Tolerance (\pm)</p> <p>Bit 1: 0, Bit 0: 0 = 75% Bits 2 and 3 must always be kept at 0.</p> <p>Bit 1: 0, Bit 0: 0 = 50% Bits 2 and 3 must always be kept at 0.</p> <p>Bit 1: 0, Bit 0: 0 = 25%</p> <p>Bit 1: 0, Bit 0: 0 = 12.5%</p> <p>Bits 7, 6, 5, 4 - number of cycles required for cadence detection</p>		

Address	Function	Unit	Remarks
680534	International dial tone frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680535	International dial tone frequency upper limit (low byte)		
680536	International dial tone frequency lower limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680537	International dial tone frequency lower limit (low byte)		
680538	International dial tone detection time	20 ms	If 680538 contains FF, the machine pauses for the pause time (68053D / 68053E). Belgium: See Note 2.
680539	International dial tone reset time (LOW)		
68053A	International dial tone reset time (HIGH)		
68053B	International dial tone continuous tone time		
68053C	International dial tone permissible drop time		
68053D	International dial wait interval (LOW)		
68053E	International dial wait interval (HIGH)		
68053F	Country dial tone upper frequency limit (HIGH)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
680540	Country dial tone upper frequency limit (LOW)		
680541	Country dial tone lower frequency limit (HIGH)		If both addresses contain FF (H), tone detection is disabled.
680542	Country dial tone lower frequency limit (LOW)		
680543	Country dial tone detection time	20 ms	If 680543 contains FF, the machine pauses for the pause time (680548 / 680549).
680544	Country dial tone reset time (LOW)		
680545	Country dial tone reset time (HIGH)		
680546	Country dial tone continuous tone time	-	-

Address	Function	Unit	Remarks
680547	Country dial tone permissible drop time	20 ms	-
680548	Country dial wait interval (LOW)		
680549	Country dial wait interval (HIGH)		
68054A	Time between opening or closing the DO relay and opening the OHDI relay	1 ms	See Notes 3, 6 and 8. SP2-103-012 (parameter 11).
68054B	Break time for pulse dialing	1 ms	See Note 3. SP2-103-013 (parameter 12).
68054C	Make time for pulse dialing	1 ms	See Note 3. SP2-103-014 (parameter 13).
68054D	Time between final OHDI relay closure and DO relay opening or closing	1 ms	See Notes 3, 6 and 8. SP2-103-015 (parameter 14). This parameter is only valid in Europe.
68054E	Minimum pause between dialed digits (pulse dial mode)	20 ms	See Note 3 and 8. SP2-103-016 (parameter 15).
68054F	Time waited when a pause is entered at the operation panel		SP2-103-017 (parameter 16). See Note 3.
680550	DTMF tone on time	1 ms	SP2-103-018 (parameter 17).
680551	DTMF tone off time		SP2-103-019 (parameter 18).
680552	Tone attenuation level of DTMF signals while dialing	-N x 0.5 –3.5 dBm	SP2-103-020 (parameter 19). See Note 5.

Address	Function	Unit	Remarks
680553	Tone attenuation value difference between high frequency tone and low frequency tone in DTMF signals	-dBm x 0.5	SP2-103-021 (parameter 20). The setting must be less than -5dBm, and should not exceed the setting at 680552h above. See Note 5.
680554	PSTN: DTMF tone attenuation level after dialling	-N x 0.5 -3.5 dBm	SP2-103-022 (parameter 21). See Note 5.
680555	ISDN: DTMF tone attenuation level after dialling	-dBm x 0.5	See Note 5
680556	Not used	-	Do not change the settings.
680557	Time between 68054Dh (NCU parameter 14) and 68054Eh (NCU parameter 15)	1 ms	This parameter takes effect when the country code is set to France.
680558	Not used	-	Do not change the setting.
680559	Grounding time (ground start mode)	20 ms	The Gs relay is closed for this interval.
68055A	Break time (flash start mode)	1 ms	The OHDI relay is open for this interval.
68055B	International dial access code (High)	BCD	For a code of 100: 68055B - F1 68055C - 00
68055C	International dial access code (Low)		
68055D	PSTN access pause time	20 ms	This time is waited for each pause input after the PSTN access code. If this address contains FF[H], the pause time stored in address 68054F is used. Do not set a number more than 7 in the UK.

Address	Function	Unit	Remarks
68055E	Progress tone detection level, and cadence detection enable flags		Bit 7: 0, Bit 6: 0, Bit 5: 0 = -25.0 dBm Bit 7: 0, Bit 6: 0, Bit 5: 1 = -35.0 dBm Bit 7: 0, Bit 6: 1, Bit 5: 0 = -30.0 dBm Bit 7: 1, Bit 6: 0, Bit 5: 0 = -40.0 dBm Bit 7: 1, Bit 6: 1, Bit 5: 0 = -49.0 dBm Bits 2, 0 - See Note 2.
68055F To 680564	Not used	-	Do not change the settings.
680565	Long distance call prefix (HIGH)	BCD	For a code of 0: 680565 - FF 680566 - FF
680566	Long distance call prefix (LOW)	BCD	
680567 to 680571	Not used	-	Do not change the settings.
680572	Acceptable ringing signal frequency: range 1, upper limit	1000/ N (Hz).	SP2-103-003 (parameter 02).
680573	Acceptable ringing signal frequency: range 1, lower limit		SP2-103-004 (parameter 03).
680574	Acceptable ringing signal frequency: range 2, upper limit		SP2-103-005 (parameter 04).
680575	Acceptable ringing signal frequency: range 2, lower limit		SP2-103-006 (parameter 05).
680576	Number of rings until a call is detected	1	SP2-103-007 (parameter 06). The setting must not be zero.
680577	Minimum required length of the first ring	20 ms	See Note 4. SP2-103-008 (parameter 07).

Address	Function	Unit	Remarks
680578	Minimum required length of the second and subsequent rings	20 ms	SP2-103-009 (parameter 08).
680579	Ringing signal detection reset time (LOW)	20 ms	SP2-103-010 (parameter 09).
68057A	Ringing signal detection reset time (HIGH)		SP2-103-011 (parameter 10).
68057B to 680580	Not used	-	Do not change the settings.
680581	Interval between dialing the last digit and switching the Oh relay over to the external telephone when dialing from the operation panel in handset mode.	20 ms	Factory setting: 500 ms
680582	Bits 0 and 1 - Handset off-hook detection time Bit 1:0, Bit 0: 0 = 200 ms Bit 1:0, Bit 0: 1 = 800 ms Other Not used Bits 2 and 3 - Handset on-hook detection time Bit 3: 0, Bit 2: 0 = 200 ms Bit 3: 0, Bit 2: 1 = 800 ms Other Not used Bits 4 to 7 - Not used	-	-
680583 To 6805A0	Not used	-	Do not change the settings.
6805A1	Acceptable CED detection frequency upper limit (high byte)	BCD (Hz)	If both addresses contain FF (H), tone detection is disabled.
6805A2	Acceptable CED detection frequency upper limit (low byte)		

Address	Function	Unit	Remarks
6805A3	Acceptable CED detection frequency lower limit (high byte)	BCD (Hz)	If both addresses contain FF (H), tone detection is disabled.
6805A4	Acceptable CED detection frequency lower limit (low byte)		
6805A5	CED detection time	20 ms ± 20 ms	Factory setting: 200 ms
6805A6	Acceptable CNG detection frequency upper limit (high byte)	BCD (Hz)	If both addresses contain FF (H), tone detection is disabled.
6805A7	Acceptable CNG detection frequency upper limit (low byte)		
6805A8	Acceptable CNG detection frequency lower limit (high byte)	BCD (Hz)	If both addresses contain FF (H), tone detection is disabled.
6805A9	Acceptable CNG detection frequency lower limit (low byte)		
6805AA	Not used	-	Do not change the setting.
6805AB	CNG on time	20 ms	Factory setting: 500 ms
6805AC	CNG off time	20 ms	Factory setting: 3000 ms
6805AD	Number of CNG cycles required for detection	-	The data is coded in the same way as address 680533.
6805AE	Not used	-	Do not change the settings.
6805AF	Acceptable AI short protocol tone (800Hz) detection frequency upper limit (high byte)	Hz (BCD)	If both addresses contain FF (H), tone detection is disabled.
6805B0	Acceptable AI short protocol tone (800Hz) detection frequency upper limit (low byte)		
6805B1	Acceptable AI short protocol tone (800Hz) detection frequency lower limit (high byte)	Hz(BCD)	If both addresses contain FF (H), tone detection is disabled.
6805B2	Acceptable AI short protocol tone (800Hz) detection frequency lower limit (low byte)		

Address	Function	Unit	Remarks
6805B3	Detection time for 800 Hz AI short protocol tone	20 ms	Factory setting: 360 ms
6805B4	PSTN: Tx level from the modem	-N - 3 dBm	SP2-103-002 (parameter 01).
6805B5	PSTN: 1100 Hz tone transmission level	- N 6805B4 - 0.5N 6805B5 -3.5 (dB) See Note 7.	
6805B6	PSTN: 2100 Hz tone transmission level	- N6805B4 - 0.5N 6805B6 -3 (dB) See Note 7.	
6805B7	PABX: Tx level from the modem	- dBm	
6805B8	PABX: 1100 Hz tone transmission level	- N 6805B7 - 0.5N 6805B8 (dB)	
6805B9	PABX: 2100 Hz tone transmission level	- N 6805B7 - 0.5N 6805B9 (dB)	
6805BD	Modem turn-on level (incoming signal detection level)	-37-0.5N (dBm)	
6805BE to 6805C6	Not used	-	Do not change the settings.
6805C7	Bits 0 to 3 – Not used Bit 4 = V.34 protocol dump 0: Simple, 1: Detailed (default) Bits 5 to 7 – Not used.		
6805C8 to 6805D9	Not used	-	Do not change the settings.
6805DA	T.30 T1 timer	1 s	
6805E0 bit 3	Maximum wait time for post message	0: 12 s 1: 30 s	1: Maximum wait time for post message (EOP/EOM/MPS) can be changed to 30 s. Change this bit to "1" if communication errors occur frequently during V.17 reception.

Address	Function	Unit		Remarks	
6805E4	Bit 2 sets the level of the call signal, Bit 3 sets the call signal impedance	Bit 2	0	RT=0 (Low)	-
			1	RT=1 (High)	
		Bit 3	0	RZ=0 (High)	
			1	RZ=1 (Composite)	
6805E5	Bit 0 sets the ring detection method, Bit 1 sets the ring detection method when fixed.	Bit 0	0	Auto	If any setting is changed, select a setting that is higher than the default setting.
			1	Fixed	
		Bit 1	0	Use RDTP	
			1	Use RDTN	
	Bits 2 to 7: Not used				

NOTES

- If a setting is not required, store FF in the address.
- Italy and Belgium only
RAM address 68055E: the lower four bits have the following meaning.
Bit 2 - 1: International dial tone cadence detection enabled (Belgium)
Bit 1 - Not used
Bit 0 - 1: PSTN dial tone cadence detection enabled (Italy)
If bit 0 or bit 2 is set to 1, the functions of the following RAM addresses are changed.
680508 (if bit 0 = 1) or 680538 (if bit 2 = 1): tolerance for on or off state duration (%), and number of cycles required for detection, coded as in address 680533.
68050B (if bit 0 = 1) or 68053B (if bit 2 = 1): on time, hex code (unit = 20 ms)
68050C (if bit 0 = 1) or 68053C (if bit 2 = 1): off time, hex code (unit = 20 ms)
- Pulse dial parameters (addresses 68054A to 68054F) are the values for 10 pps. If 20 pps is used, the machine automatically compensates.
- The first ring may not be detected until 1 to 2.5 wavelengths after the time specified by this parameter.
- The calculated level must be between 0 and 10.
The attenuation levels calculated from RAM data are:
High frequency tone:
 - $0.5 \times N_{680552/680554} - 3.5$ dBm

- $-0.5 \times N_{680555}$ dBm

Low frequency tone:

- $-0.5 \times (N_{680552/680554} + N_{680553}) - 3.5$ dBm
- $-0.5 \times (N_{680555} + N_{680553})$ dBm

Note

- N_{680552} , for example, means the value stored in address 680552(H)
6. 68054A: Europe - Between Ds opening and Di opening, France - Between Ds closing and Di opening
68054D: Europe - Between Ds closing and Di closing, France - Between Ds opening and Di closing
 7. Tone signals which frequency is lower than 1500Hz (e.g., 800Hz tone for AI short protocol) refer to the setting at 6805B5h. Tones which frequency is higher than 1500Hz refer to the setting at 6805B6h.
 8. 68054A, 68054D, 68054E: The actual inter-digit pause (pulse dial mode) is the sum of the period specified by the RAM addresses 68054A, 68054D, and 68054E.

Dedicated Transmission Parameters

There are two sets of transmission parameters: Fax and E-mail

Each Quick Dial Key and Speed Dial Code has eight bytes of programmable parameters allocated to it. If transmissions to a particular machine often experience problems, store that terminal's fax number as a Quick Dial or Speed Dial, and adjust the parameters allocated to that number.

The programming procedure will be explained first. Then, the eight bytes will be described.

Programming Procedure

1. Set the bit 0 of System Bit Switch 00 to 1.
2. Enter Address Book Management mode ([User Tools]> System Settings> Administrator Tools > Address Book Management).
3. Select the address book that you want to program.
4. Press the "Dest." Key to enter the fax and e-mail parameter settings.
5. For the fax parameter, select "Fax Settings", for the E-mail parameter, select "E-mail Settings".
6. Press the "OK" key, and then press "Start" key. Make sure that the LED of the Start button lights green.
7. The settings for the switch 00 are now displayed. Press the bit number that you wish to change.
8. To scroll through the parameter switches, either:
9. Select the next switch: press "Next" or Select the previous switch: "Prev." until the correct switch is displayed. Then go back to step 6.
10. After the setting is changed, press "OK" key.
11. After finishing, reset bit 0 of System Bit Switch 00 to 0.

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Parameters

Fax Parameters

The initial settings of the following fax parameters are all FF(H) - all the parameters are disabled.

Switch 00
FUNCTION AND COMMENTS

ITU-T T1 time (for PSTN G3 mode)

If the connection time to a particular terminal is longer than the NCU parameter setting, adjust this byte. The T1 time is the value stored in this byte (in hex code), multiplied by 1 second.

Range:

0 to 120 s (00h to 78h)

FFh - The local NCU parameter factory setting is used.

Do not program a value between 79h and FEh.

Switch 01

No	FUNCTION						COMMENTS
0-4	Tx level						If communication with a particular remote terminal often contains errors, the signal level may be inappropriate. Adjust the Tx level for communications with that terminal until the results are better. If the setting is "Disabled", the NCU parameter 01 setting is used. Note • Do not use settings other than listed on the left.
	Bit4	Bit3	Bit2	Bit1	Bit0		
	0	0	0	0	0	0	
	0	0	0	0	1	-1	
	0	0	0	1	0	-2	
	0	0	0	1	1	-3	
	0	0	1	0	0	-4	
	↓	↓	↓	↓	↓	↓	
	0	1	1	1	1	-15	
	1	1	1	1	1	Disabled	

5-7	<p>Cable equalizer</p> <p>Bit 7: 0, Bit 6: 0, Bit 5: 0 = None</p> <p>Bit 7: 0, Bit 6: 0, Bit 5: 1 = Low</p> <p>Bit 7: 0, Bit 6: 1, Bit 5: 0 = Medium</p> <p>Bit 7: 0, Bit 6: 1, Bit 5: 1 = High</p> <p>Bit 7: 1, Bit 6: 1, Bit 5: 1 = Disabled</p>	<p>Use a higher setting if there is signal loss at higher frequencies because of the length of wire between the modem and the telephone exchange when calling the number stored in this Quick/Speed Dial.</p> <p>Also, try using the cable equalizer if one or more of the following symptoms occurs.</p> <p>Communication error with error codes such as 0-20, 0-23, etc.</p> <p>Modem rate fallback occurs frequently.</p> <p>Note</p> <ul style="list-style-type: none"> Do not use settings other than listed on the left. <p>If the setting is "Disabled", the bit switch setting is used.</p>
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Switch 02		
No	FUNCTION	COMMENTS

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		Initial Tx modem rate					<p>If training with a particular remote terminal always takes too long, the initial modem rate may be too high. Reduce the initial Tx modem rate using these bits.</p> <p>For the settings 14.4 or kbps slower, Switch 04 bit 4 must be changed to 0.</p> <p>Note</p> <ul style="list-style-type: none"> Do not use settings other than listed on the left. If the setting is "Disabled", the bit switch setting is used.
		Bit3	Bit2	Bit1	Bit0	bps	
0-3		0	0	0	0	Not used	
		0	0	0	1	2400	
		0	0	1	0	4800	
		0	0	1	1	7200	
		0	1	0	0	9600	
		0	1	0	1	12000	
		0	1	1	0	14400	
		0	1	1	1	16800	
		1	0	0	0	19200	
		1	0	0	1	21600	
		1	0	1	0	24000	
		1	0	1	1	26400	
		1	1	0	0	28800	
		1	1	0	1	31200	
		1	1	1	0	33600	
	1	1	1	1	Disabled		
		Other settings: Not used					
4-7	Not used						Do not change the settings.

Switch 03		
No	FUNCTION	COMMENTS

0-1	Inch-mm conversion before tx Bit 1: 0, Bit 0: 0 = Inch-mm conversion available Bit 1: 0, Bit 0: 1 = Inch only Bit 1: 1, Bit 0: 0 = Not used Bit 1: 1, Bit 0: 1 = Disabled	The machine uses inch-based resolutions for scanning. If "inch only" is selected, the printed copy may be slightly distorted at the other end if that machine uses mm-based resolutions. If the setting is "Disabled", the bit switch setting is used.
2-3	DIS/NSF detection method Bit 3: 0, Bit 2: 0 = First DIS or NSF Bit 3: 0, Bit 2: 1 = Second DIS or NSF Bit 3: 1, Bit 2: 0 = Not used Bit 3: 1, Bit 2: 1 = Disabled	(0, 1): Use this setting if echoes on the line are interfering with the set-up protocol at the start of transmission. The machine will then wait for the second DIS or NSF before sending DCS or NSS. If the setting is "Disabled", the bit switch setting is used.
4	V.8 protocol 0: Off 1: Disabled	If transmissions to a specific destination always end at a lower modem rate (14,400 bps or lower), disable V.8 protocol so as not to use V.34 protocol. 0: V.34 communication will not be possible. If the setting is "Disabled", the bit switch setting is used.
5	Compression modes available in transmit mode 0: MH only 1: Disabled	This bit determines the capabilities that are informed to the other terminal during transmission. If the setting is "Disabled", the bit switch setting is used.
6-7	ECM during transmission Bit 7: 0, Bit 6: 0 = Off Bit 7: 0, Bit 6: 1 = On Bit 7: 1, Bit 6: 0 = Not used Bit 7: 1, Bit 6: 1 = Disabled	For example, if ECM is switched on but is not wanted when sending to a particular terminal, use the (0, 0) setting. Note <ul style="list-style-type: none"> V.8/V.34 protocol and JBIG compression are automatically disabled if ECM is disabled. If the setting is "Disabled", the bit switch setting is used.

Switch 04 - Not used (do not change the settings)

Switch 05 - Not used (do not change the settings)

Switch 06 - Not used (do not change the settings)

Switch 07 - Not used (do not change the settings)

Switch 08 - Not used (do not change the settings)

Switch 09 - Not used (do not change the settings)

E-mail Parameters

The initial settings of the following e-mail parameters are all "0" (all parameters disabled).

Switch 00

No	FUNCTION	COMMENTS
0	MH Compression mode for e-mail attachments 0: Off 1: On	Switches MH compression on and off for files attached to e-mails for sending.
1	MR Compression mode for e-mail attachments 0: Off 1: On	Switches MR compression on and off for files attached to e-mails for sending.
2	MMR Compression mode for e-mail attachments 0: Off 1: On	Switches MMR compression on and off for files attached to e-mails for sending.
3-6	Not used	Do not change these settings.
7	Designates the bits to reference for compression method of e-mail attachments 0: Registered (Bit 0 to 6) 1: No registration.	The "0" selection (default) references the settings for Bits 00, 01, 02 above. The "1" selection ignores the selections of Bits 00, 01, 02.

Switch 01

No	FUNCTION	COMMENTS
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0	Original width of e-mail attachment: A4 0: Off 1: On	Sets the original width of the e-mail attachment as A4.
1	Original width of e-mail attachment: B4 0: Off 1: On	Sets the original width of the e-mail attachment as B4.
2	Original width of e-mail attachment: A3 0: Off 1: On	Sets the original width of the e-mail attachment as A3.
3-6	Not used	Do not change these settings.
7	Designates the bits to reference for original size of e-mail attachments 0: Registered (Bit 0 to 6) 1: No registration.	The "0" selection (default) references the settings for Bits 00, 01, 02 above. The "1" selection ignores the selections of Bits 00, 01, 02.

Switch 02		
No	FUNCTION	COMMENTS
0	Line resolution of e-mail attachment: 200 x 100 0: Off 1: On	Sets the line resolution of the e-mail attachment as 200 x 100.
1	Line resolution of e-mail attachment: 200 x 200 0: Off 1: On	Sets the line resolution of the e-mail attachment as 200 x 200.

5

2	Line resolution of e-mail attachment: 200 x 400 0: Off 1: On	Sets the line resolution of the e-mail attachment as 200 x 400.
3	Not used	Do not change these settings.
4	Line resolution of e-mail attachment: 400 x 400 0: Off 1: On	Sets the line resolution of the e-mail attachment as 400 x 400.
5-6	Not used	Do not change these settings.
7	Designates the bits to reference for original size of e-mail attachments 0: Registered (Bit 0 to 6) 1: No registration.	The "0" selection (default) references the settings for Bits 00, 01, 02, 04 above. The "1" selection ignores the selections of Bits 00, 01, 02, 04.

Switch 03 - Not used (do not change the settings)

Switch 04

No	FUNCTION	COMMENTS
0	Full mode address selection 0: Full mode address 1: No full mode (simple mode)	If the other ends have the addresses, which have the full mode function flag ("0"), this machine determines them as full mode standard machines. <ul style="list-style-type: none"> • This machine attaches the "demand of reception confirmation" to a message when transmitting. • This machine updates the reception capability to the address book when receiving.
1-7	Not used	Do not change these settings.

Switch 05

No	FUNCTION	COMMENTS
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0	Direct transmission selection to SMTP server 0: ON 1: OFF	Allows or does not allow the direct transmission to SMTP server.
1-7	Not used	Do not change these settings.

Switch 06 - Not used (do not change the settings)

Switch 07 - Not used (do not change the settings)

Switch 08 - Not used (do not change the settings)

Switch 09 - Not used (do not change the settings)

Service RAM Addresses

CAUTION

- Do not change the settings which are marked as "Not used" or "Read only."

680000(H) - Machine code

680001 to 680004(H) - ROM version (Read only)

680001(H) - Revision number (BCD)

680002(H) - Year (BCD)

680003(H) - Month (BCD)

680004(H) - Day (BCD)

680005(H) - Machine code 2 (check ram2)

680006 to 680015(H) - Machine's serial number (16 digits - ASCII)

680016(H) - Language code

Bit0: Japanese, Bit1: English (UK), Bit2: English (USA), Bit3: French,

Bit4: German, Bit5: Spanish, Bit6: Italian, Bit7: Dutch, Bit8: Swedish,

Bit9: Norwegian, Bit10: Danish, Bit11: Finnish, Bit12: Czech,

Bit13: Hungarian, Bit14: Polish, Bit15: Portuguese, Bit16: Russian,

Bit17: Traditional Chinese, Bit18: Simplified Chinese, Bit19: Hangul

680018(H) - Total program checksum (low)

680019(H) - Total program checksum (high)

680020 to 68003F(H) - System bit switches

680050 to 68005F(H) - Printer bit switches

680060 to 68007F(H) - Communication bit switches

680080 to 68008F(H) - G3 bit switches

680090 to 68009F(H) - G3-2 bit switches: Not used

6800A0 to 6800AF(H) - G3-3 bit switches: Not used

6800D0(H) - User parameter switch 00 (SWUER_00) : Not used

6800D1(H) - User parameter switch 01 (SWUSR_01) : Not used

6800D2(H) - User parameter switch 02 (SWUSR_02)

Bit 0: Forwarding mark printing on forwarded messages

0: OFF, 1: ON (Print)

Bit 1: Center mark printing on received copies

(This switch is not printed on the user parameter list.)

0: OFF, 1: ON (Print)

Bit 2: Reception time printing

(This switch is not printed on the user parameter list.)

0: OFF, 1: ON (Print)

Bit 3: TSI print on received messages 0: OFF, 1: ON (Print)

Bit 4: Checkered mark printing

(This switch is not printed on the user parameter list.)

0: OFF, 1: ON (Print)

Bit 5: Not used

Bit 6: Not used

Bit 7: Not used

6800D3(H) - User parameter switch 03 (SWUSR_03: Automatic report printout)

Bit 0: Transmission result report (memory transmissions) 0: Off, 1: On

Bit 1: Not used

Bit 2: Memory storage report 0: Off, 1: On

Bit 3: Polling reserve report (polling reception) 0: Off, 1: On

Bit 4: Polling result report (polling reception) 0: Off, 1: On

Bit 5: Transmission result report (immediate transmissions) 0: Off, 1: On

Bit 6: Not used

Bit 7: Journal 0: Off, 1: On

6800D4(H) - User parameter switch 04 (SWUSR_04: Automatic report printout)

Bit 0: Not used

Bit 1: Automatic communication failure report and transfer result report output 0: Off, 1: On

Bits 2 to 3: Not used

Bit 4: Indicates the parties 0: Not indicated, 1: Indicated

Bit 5: Include sender's name on reports 0: Off, 1: On

Bit 6: Not used

Bit 7: Inclusion of a sample image on reports 0: Off, 1: On

6800D5(H) - User parameter switch 05 (SWUSR_05)

Bit 0: Substitute reception when the base copier is in an SC condition

0: Enabled, 1: Disabled

Bits 1 and 2: Condition for substitute rx when the machine cannot print messages (Paper end, toner end, jam, and during night mode)

Bit 2: 0, Bit 1: 0 = The machine receives all the fax messages.

Bit 2: 0, Bit 1: 1 = The machine receives the fax messages with RTI or CSI.

Bit 2: 1, Bit 1: 0 = The machine receives the fax messages with the same ID code.

Bit 2: 1, Bit 1: 1 = The machine does not receive anything.

Bits 3 and 4: Not used

Bit 5: Just size printing 0: Off, 1: On

Bit 6: Not used

Bit 7: Add paper display when a cassette is empty 0: Off, 1: On

6800D6(H) - User parameter switch 06 (SWUSR_06): Not used

6800D7(H) - User parameter switch 07 (SWUSR_07)

Bits 0 and 1: Not used

Bit 2: Parallel memory transmission 0: Off, 1: On

Bits 3 to 7: Not used

6800D8(H) - User parameter switch 08 (SWUSR_08)

Bits 0 and 1: Not used.

Bit 2: Authorized reception

0: Only faxes from senders whose RTIs/CSIs are specified for this feature are accepted.

1: Only faxes from senders whose RTIs/CSIs are not specified for this feature are accepted.

Bits 3 to 7: Not used.

6800D9(H) - User parameter switch 09 (SWUSR_09): Not used

6800DA(H) - User parameter switch 10 (SWUSR_0A)

Bits 0 to 2: Not used

Bit 3: Page reduction 0: Off, 1: On

Bits 4 and 5: Not used

Bit 6: Use both e-mail notification and printed reports to confirm the transmission results 0: Off, 1: On

Bit 7: Not used

6800DB(H) - User parameter switch 11 (SWUSR_0B)

Bits 0 and 1: Not used

Bit 2: White original detection 0: Off, 1: On (alarm and alert message on the LCD)

Bits 3 and 4: Not used

Bit 6: Printout of messages received while acting as a forwarding station 0: Off, 1: On

Bit 7: Not used

6800DC(H) - User parameter switch 12 (SWUSR_0C): Not used

6800DD(H) - User parameter switch 13 (SWUSR_OD): Not used

6800DE(H) - User parameter switch 14 (SWUSR_OE)

Bit 0: Message printout while the machine is in Night Printing mode 0: On, 1: Off

Bit 1: Maximum document length detection 0: Double letter, 1: Longer than double-letter (well log) – up to 1,200 mm

Bit 2: Not used

Bit 3: Fax mode settings, such as resolution, before a mode key (Copy/Fax/Printer/Scanner) is pressed 0: Not cleared, 1: Cleared

Bits 4 to 7: Not used

6800DF(H) - User parameter switch 15 (SWUSR_OF)

(This switch is not printed on the user parameter list.)

Bits 0, 1 and 2: Cassette for fax printout

Bit 2: 0, Bit 1: 0, Bit 0: 1 = 1st paper feed station

Bit 2: 0, Bit 1: 1, Bit 0: 0 = 2nd paper feed station

Bit 2: 0, Bit 1: 1, Bit 0: 1 = 3rd paper feed station

Bit 2: 1, Bit 1: 0, Bit 0: 0 = 4th paper feed station

Bit 2: 1, Bit 1: 0, Bit 0: 1 = LCT

Other settings Not used

Bits 3 and 4: Not used

Bit 5: Using the cassette specified by bits 0, 1 and 2 above only 0: On, 1: Off

Bits 6 and 7: Not used

6800E0(H) – User parameter switch 16 (SWUSR_10)

(This switch is not printed on the user parameter list.)

Bits 0 and 1: Not used

Bit 2: Paper size selection priority for an A4 size fax message when A4/LT size paper is not available. 0: A3 has priority, 1: B4 has priority

Bits 3 to 7: Not used

6800E1(H) – User parameter switch 17 (SWUSR_11)

Bits 0 and 1: Not used

Bit 2: Inclusion of the "Add" button when a sequence of Quick/Speed dials is selected for broadcasting 0: Not needed, 1: Needed

Bit 3: Not used

Bit 4: Reconfirmation of an address before press "Start" key. 0: Not displayed, 1: Displayed

Bits 5 and 6: Not used

Bit 7: Press "Start" key without an original when using the on hook dial or the external telephone,
 0: displays "Cannot detect original size". 1: Receives fax messages.

6800E2(H) - User parameter switch 18 (SWUSR_12)

Bit 0: TTI date 0: Off, 1: On

Bit 1: TTI sender 0: Off, 1: On

Bit 2: TTI file number 0: Off, 1: On

Bit 3: TTI page number 0: Off, 1: On

Bits 4 to 7: Not used

6800E3(H) - User parameter switch 19 (SWUSR_13)

Bit 0: Not used

Bit 1: Journal format

0: The Journal is separated into transmissions and receptions

1: The Journal is separated into G3-1, G3-2, and G3-3 communications

Bit 2: Not used

Bit 3: 90° image rotation during B5 portrait Tx (This switch is not printed on the user parameter list.) 0: Off, 1: On

Bit 4: Reduction of sample images on reports to 50% in the main scan and sub-scan directions. (This switch is not printed on the user parameter list.) 0: Technician adjustment (printer switch OE bits 3 and 4), 1: 50% reduction

Bit 5: Use of A5 size paper for reports (This switch is not printed on the user parameter list.) 0: Off, 1: On

Bits 6 and 7: Not used

6800E4(H) - User parameter switch 20 (SWUSR_14)

Bit 0: Automatic printing of the LAN fax result report 0: Off, 1: On

Bit 1: Not used.

Bits 2 to 5: Store documents in memory which could not be printed from PC fax (LAN fax) driver

Bit 5	Bit 4	Bit 3	Bit 2	Setting
0	0	0	0	0 min.
0	0	0	1	1 min.
↓	↓	↓	↓	↓
1	1	1	0	14 min.
1	1	1	1	15 min.

Bits 6 and 7: Not used.

6800E5(H) - User parameter switch 21 (SWUSR_15)

Bit 0: Print results of sending reception notice request message 0: Disabled (print only when error occurs), 1: Enabled

Bit 1: Respond to e-mail reception acknowledgment request 0: Disabled, 1: Enabled

Bit 2: Not used

Bit 3: File format for forwarded folders 0: TIFF, 1:PDF

Bit 4: Transmit Journal by E-mail 0: Disabled, 1: Enabled

Bit 5: Not used

Bit 6: Network error display 0: Displayed, 1: Not displayed

Bit 7: Transmit error mail notification 0: Enabled, 1: Disabled

6800E6(H) - User parameter switch 22 (SWUSR_16)

(This switch is not printed on the user parameter list.)

Bit 0: Dial tone detection (PSTN 1) 0: Disabled, 1: Enabled

Bits 1 to 3: Not used

Bits 4 to 7: Setting the number of times of address input using numeric key 0: Off, 1 to 15: On

6800E7(H) - User parameter switch 23 (SWUSR_17): Not used

6800E8(H) - User parameter switch 24 (SWUSR_18): Not used

6800E9(H) - User parameter switch 25 (SWUSR_19)

Bits 0 to 3: Not used

Bit 4: RDS operation 0: Not acceptable, 1: Acceptable for the limit specified by system switch 03

Note

- This bit is only effective when RDS operation can be selected by the user (see system switch 02).

Bits 5 to 7: Not used

6800EA(H) and 6800EB(H) - User parameter switches 26 and 27 (SWUSR_1A and 1B): Not used

6800EC(H) - User parameter switch 28 (SWUSR_1C)

- Ringing times setting in the TEL line priority mode: 00 to 99 (BCD)

6800ED(H) - User parameter switch 29 (SWUSR_1D): Not used

6800EE(H) and 6800EF(H) - User parameter switches 30 and 31 (SWUSR_1E and 1F): Not used

6800F0(H) - User parameter switch 32 (SWUSR_20)

Bit 0: Quotation priority for a destination when there is no destination of the specified type

0: Paper output priority = Priority order: 1. IP-fax destination, 2. Fax Number, 3. E-mail address, 4. Folder

1: Electric putout order = Priority order: 1. E-mail address, 2. Folder, 3. IP-fax destination, 4. Fax number

Bits 1 to 7: Not used

6800F1(H) - User parameter switch 33 (SWUSR_21): Not used

6800F2(H) - User parameter switch 34 (SWUSR_22)

Bit 0: Gatekeeper server used with IP-Fax 0: Disabled, 1: Enabled

Bit 1: SIP server used with IP-Fax 0: Disabled, 1: Enabled

Bits 2 to 7: Not used

680100 to 68010F(H) - G4 Parameter Switches – Not used

680110 to 68012F(H) - G4 Internal Switches – Not used

680130 to 68016F(H) - Service Switches (SCU) – Not used

680170 to 68017F(H) - IFAX Switches

680180 to 68018F(H) - IP-FAX Switches

680190 to 6801AF(H) - Service station's fax number (SP3-101)

6801B0 to 6801B9(H) - Own fax PABX extension number

6801BA to 6801C3(H) - Own fax number (PSTN) – Not used

6801C4 to 6801D7(H) - Own fax number (ISDN G4) – Not used

6801D8 to 6801E3(H) - The first subscriber number (ISDN G3) – Not used

6801E4 to 6801EF(H) - The second subscriber number (ISDN G3) – Not used

6801F0 to 6801FB(H) - The first subscriber number (ISDN G4) – Not used

6801FC to 680207(H) - The second subscriber number (ISDN G4) – Not used

680208 to 68021B(H) - PSTN-1 RTI (Max. 20 characters - ASCII) - See the following note.

68021C to 68022F(H) - PSTN-2 RTI (Max. 20 characters - ASCII) - Not used

680230 to 680246(H) - PSTN-3 RTI (Max. 20 characters - ASCII) - Not used

680247 to 680286(H) - TTI 1 (Max. 64 characters - ASCII) - See the following note.

680287 to 6802C6(H) - TTI 2 (Max. 64 characters - ASCII) - Not used

6802C7 to 680306(H) - TTI 3 (Max. 64 characters - ASCII) - Not used

680307 to 68031A(H) - PSTN-1 CSI (Max. 20 characters - ASCII)

68031B to 68032E(H) - PSTN-2 CSI (Max.20 characters - ASCII) - Not used

68032F to 680342(H) - PSTN-3 CSI (Max.20 characters - ASCII) - Not used

680343(H) - Number of PSTN-1 CSI characters (Hex)

680344(H) - Number of PSTN-2 CSI characters (Hex) - Not used

680345(H) Number of PSTN-3 CSI characters (Hex) - Not used

Note

- If the number of characters is less than the maximum (20 for RTI, 64 for TTI), add a stop code (00[H]) after the last character.

680370(H) ID for transmission and reception (Read only – Do not change the settings)

680374 to 680375(H) - Envelopment ID for the envelopment reception (BCD)

680380 to 680387(H) - Last power off time (Read only)

680380(H) - 01(H) - 24-hour clock, 00(H) - 12-hour clock (AM), 02(H) - 12-hour clock (PM)

680381(H) - Year (BCD)

680382(H) - Month (BCD)

680383(H) - Day (BCD)

680384(H) – Hour

680385(H) – Minute

680386(H) – Second

680387(H) - 00: Monday, 01: Tuesday, 02: Wednesday, ///, 06: Sunday

680394(H) - Optional equipment – Not used

680395(H) - Optional equipment (Read only – Do not change the settings)

Bits 0 to 3: Not used

Bit 4: G3-2 0: Not installed, 1: Installed

Bit 5: G3-3 0: Not installed, 1: Installed

Bit 6 and 7: Not used

680401 to 68040D – Not used

680410(H) - G3-1 Modem ROM version (Read only)

680412(H) - G3-2 Modem ROM version – Not used

680414(H) - G3-3 Modem ROM version – Not used

680420(H) - Number of multiple sets print (Read only)

680476(H) - Time for economy transmission – Not used

68048C(H) - Dial in (BCD)

680492(H) - Transmission monitor volume 00 - 07(H)

680493(H) - Reception monitor volume 00 - 07(H)

680494(H) - On-hook monitor volume 00 - 07(H)

680495(H) - Dialing monitor volume 00 - 07(H)

680496(H) - Buzzer volume 00 - 07(H)

680497(H) - Beeper volume 00 - 07(H)

6804A8(H) - Machine code (Check ram 4)

6804D2(H) - Serial number (Max. 8 characters ASCII)

685E6C to 685E6F(H) - Transmission counter (HEX)

- 685E70 to 685E73(H)** - Reception counter (HEX)
- 685EDC to 685EDF(H)** - E-mail transmission counter (HEX)
- 685EE0 to 685EE3(H)** - E-mail reception counter (HEX)
- 688E8E to 68918D(H)** - SIP server address (Read only)
- 688E8E(H) - Proxy server - Main (Max. 128 characters - ASCII)
- 688F0E(H) - Proxy server - Sub (Max. 128 characters - ASCII)
- 688F8E(H) - Redirect server - Main (Max. 128 characters - ASCII)
- 68900E(H) - Redirect server - Sub (Max. 128 characters - ASCII)
- 68908E(H) - Registrar server - Main (Max. 128 characters - ASCII)
- 68910E(H) - Registrar server - Sub (Max. 128 characters - ASCII)
- 68918E(H)** - Gatekeeper server address - Main (Max. 128 characters - ASCII)
- 68920E(H)** - Gatekeeper server address - Sub (Max. 128 characters - ASCII)
- 68928E(H)** - Arias Number (Max. 128 characters - ASCII)
- 68930E(H)** - SIP user name (Max. 128 characters - ASCII)
- 68938E(H)** - SIP authentication password (Max. 128 characters - ASCII)
- 68938E(H)** - **SIP digest authentication password** (Max. 128 characters - ASCII)
- 68940E(H)** - Gateway address information (Max. 7100 characters - ASCII)
- 68AFCA(H)** - Stand-by port number for H.232 connection
- 68AFCCH)** - Stand-by port number for SIP connection
- 68AFCE(H)** - RAS port number
- 68AFD0(H)** - Gatekeeper port number
- 68AFD2(H)** - Port number of data waiting for T.38
- 68AFD4(H)** - Port number of SIP server
- 68AFD6(H)** - Priority for SIP and H.323 0: H.323, 1: SIP
- 68AFD7(H)** - SIP function 0: Disabled, 1: Enabled
- 68AFD8(H)** - H.323 function 0: Disabled, 1: Enabled
- 68AFD9(H)** - **SIP digest authentication function** 0: Disabled, 1: Enabled
- 68AFDA(H)** - **IP-Fax backup data** 00 - 600 (H)
- 69ECBE(H) - 69ECDE(H)** - **Dial tone detection parameter** (Max. 11 x 3 lines)

This initializes following order. [0x04, 0x40, 0x03, 0x60, 0x64, 0xf4, 0x01, 0x64, 0x04, 0xc8, 0x00]