

SAMSUNG

SAMSUNG FACSIMILE

Msys5100P

SF-5100/5100P

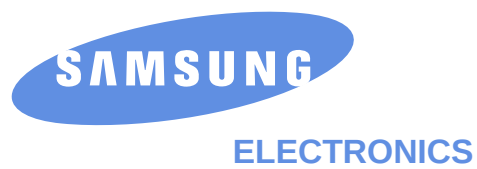
SERVICE *Manual*

FACSIMILE



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1. Precautions

Follow these safety, ESD, and servicing precautions to prevent personal injury and equipment damage.

1-1 Safety Precautions

1. Be sure that all built-in protective devices are in place. Restore any missing protective shields.
2. Make sure there are no cabinet openings through which people- particularly children- might insert fingers or objects and contact dangerous voltages.
3. When re-installing chassis and assemblies, be sure to restore all protective devices, including control knobs and compartment covers.
4. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of this equipment, such as auxiliary connectors, etc. Such alterations and modifications will void the manufacturer's warranty.
5. Components, parts, and wiring that appear to have overheated or are otherwise damaged should be replaced with parts which meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
6. Observe the original lead dress, especially near sharp edges, AC, and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board.
7. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they provide could be lost if a replacement component differs from the original. This holds true, even though the replacement may be rated for higher voltage, wattage, etc.

Components critical for safety are indicated in the parts list with symbols  . Use only replacement components that have the same ratings, especially for flame resistance and dielectric specifications. A replacement part that does not have the same safety characteristics as the original may create shock, fire, or other safety hazards.

1-2 ESD Precautions

Certain semiconductor devices can be easily damaged by static electricity. Such components are commonly called “Electrostatically Sensitive (ES) Devices”, or ESDs. Examples of typical ESDs are: integrated circuits, some field effect transistors, and semiconductor “chip” components. The techniques outlined below should be followed to help reduce the incidence of component damage caused by static electricity.

CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

1. Immediately before handling a semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, employ a commercially available wrist strap device, *which should be removed for your personal safety reasons prior to applying power to the unit under test.*
2. After removing an electrical assembly equipped with ESDs, place the assembly on a conductive surface, such as aluminum or copper foil, or conductive foam, to prevent electrostatic charge buildup in the vicinity of the assembly.
3. Use only a grounded tip soldering iron to solder or desolder ESDs.
4. Use only an “anti-static” solder removal device. Some solder removal devices not classified as “anti-static” can generate electrical charges sufficient to damage ESDs.
5. Do not use Freon-propelled chemicals. When sprayed, these can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective packaging until immediately before installing it. Most replacement ESDs are packaged with all leads shorted together by conductive foam, aluminum foil, or a comparable conductive material.
7. Immediately before removing the protective shorting material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
8. Maintain continuous electrical contact between the ESD and the assembly into which it will be installed, until completely plugged or soldered into the circuit.
9. Minimize bodily motions when handling unpackaged replacement ESDs. Normal motions, such as the brushing together of clothing fabric and lifting one’s foot from a carpeted floor, can generate static electricity sufficient to damage an ESD.

1-3 Lithium Battery Precautions

1. Exercise caution when replacing a Lithium battery. There could be a danger of explosion and subsequent operator injury and/or equipment damage if incorrectly installed.
2. Be sure to replace the battery with the same or equivalent type recommended by the manufacturer.
3. Lithium batteries contain toxic substances and should not be opened, crushed, or burned for disposal.

2. Specification

2-1 Facsimile

Machine type :	Desk Top
Applicable line :	Public Switched Telephone Network (PSTN) or behind PABX
Compatibility :	ITU-T Group 3, ECM
Data coding :	MH / MR / MMR (ECM Mode)
Modem speed :	14400 / 12000 / 9600 / 7200 / 4800 / 2400 bps
Transmission speed :	Approx. 6 sec. (V.M ECM:14.4 kbps)
Effective scanning width :	8.3 inches (210 mm)
Effective printing width :	Letter : 8.2 inches A4 : 202 mm
Scanning method :	Sheet-fed scanning using a Contact Image Sensor (CIS)
Memory : MFP	About 2 MBytes
FAX	1 MByte
Halftone :	64 levels
Printing speed :	6 PPM (Letter size)
Automatic document feeder :	20 pages (20 lb or 75g / m ²)
Documents size :	Width : 148 to 216 mm
	Length : 128 to 356mm (Single Page)
	128 to 297mm (Multi Pages)
	Weight : 50 to 100 g / m ² (Single Page)
	50 to 90 g / m ² (20 Pages)
	75 g / m ² (30 Pages)
One-touch dial :	10 locations
LCD :	16 characters x 1 lines

2-2 SCANNER

Scanning Method :	Sheet-fed scanning by CIS and feeding of the document by a stepping motor	
Resolution		
Horizontal	8 dots / mm (200 dpi)	(CIS Spec.)
Vertical	STANDARD : 3.85 lines / mm (98 Lpi)	
	FINE : 7.7 lines / mm (196 Lpi)	
	SUPER FINE : 11.8 lines / mm (300 Lpi)	
Photo Scale :	256 shades	
Scanning period :	STANDARD : 5 ms / line	
	FINE : 5 ms / line	
	SUPER FINE : 5 ms / line	

2-3 Printer

Print Speed	6 PPM (Letter Size, 5% Character Pattern)	At Copy Mode
Resolution	300 X 300 DPI	
Source of Light	Laser Diode(LSU)	
Print Method	Non-impact Electrophotography,	Laser Beam
Feed Method	Multi-Purpose Feeder and Manual	
Feed Reference	Center Reference Loading	
Paper	Size Normal Paper : A4,Letter,Legal,B5, Executive, A5 Envelope : Normal Envelope Length : 149 ~ 365mm Width : 100 ~ 216mm Weight : For MPF, 60 ~ 90g / m ² For Manual, 60 ~ 163g / m ²	Bin Type
Paper Capacity	MPF : 150 Sheets (based on 75g / m ²) Manual Slot : 1 Sheet (Only SF-5100P)	
Paper Stacker Capacity	Face up : 100 Sheets (75g / m ² , 20 lb)	
Warming up Time		
First Printing Time	Stand-By : 20 Sec Power Save Mode : 30 Sec	
Power Rating	AC 110V ~ 120V ± 15% 50/60Hz ± 3Hz, AC 220V ~ 240V ± 15% 50/60Hz ± 3Hz	
Power Consumption	Avg. 180Wh	
Power Saving Consumption	Avg. 10Wh	Sleep Mode
Certification & Compliance	FCC, UL, CSA, CE, CB	
Acoustic Noise	Standby : Less than 36dB Sleep Mode : Less than 29dB Operating : Less than 50dB	

Toner Cartridge	One-Cartridge type
Expected Life Span	50,000 Sheets
Operating Environment	Temperature : 10 ~ 32°C Humidity : 20 ~ 85%
Storage Environment	Temperature : -20 ~ 40°C Humidity : 10 ~ 95%RH
Weight	Net : Max. 7kg(with Accessory) Gross : Max. 14kg
External Dimension	313(W) X 325(D) x 228(H)mm (without Handset) 376(W) X 361(D) x 336(H)mm (with Handset)
Developer	. Life Span : 5% Pattern, Min. 2,500 / 1,000 Sheets . Developing : Non-magnetic Contact Developing . Charging : Conductive Roller Charging . Density Adjustment : Normal / Economic Mode selectable by the PC driver (Only SF-5100P) . Toner Supply Method : Exchanging Toner Cartridge . New Developer Checkable . Transfer System : Conductive Roller Transfer . Fusing System : Temperature & Pressure . OZONE Emission : Max. 0.1 PPM(8 Hours)

2-4 Quality

Conditions

Paper	Normal Paper	75g / m ²
Environment	Temperature : 20 ~ 25°C Humidity : 40 ~ 60%	

Print Quality

Image Density	Min. 1.3 Min. 1.0(Temperature : 10 ~ 15°C) Max. 0.2	
Background Uniformity	Max. 0.2(Including Continuous Print)	
Fusing	Min. 75% (All Black)	
Start Position	Top : x ± 4.23mm, Side : y ± 4mm	From Left
Skew	Top : Max. ± 1.5mm / 200mm Side : Max. ± 2.0mm / 250mm	
Orthogonality	± 1.0mm	
Horizontal Scan	± 0.6mm / 208mm (Bowed Line Skew : Pattern 1)	
Special Paper Exception	Image Density : Min 1.0 (Envelope) Fusing : Min. 70% (All Black) (Envelope / OHP / Postcard)	
Paper Jam	Less than 1 / 1,000(75g / m ² Paper)	
Paper Curl	First : Less than 16mm (10 Sheets, 75g / m ² Paper) After Cooling : Less than 16mm (10 Sheets, 75g / m ² Paper)	

Reliability

Insulation Resistance	Less than 10 MΩ (at DC 500V)	
Dielectric Strength	AC 1000V (DC 1420V), 10mA	
Ground Continuity	Less than 0.1Ω	
Voltage DIP	Rated Voltage ± 15%	
AC Impulse Noise	AC 1000V 10, 100, 200, 400, 1000ns	Rated Power
Leakage Current	Less than 3.5mA	
Surge	6 KV, 500A / 3 KV, 500A	
OZONE Emission	Less than 0.1 ppm (8 Hours)	
Top Cover Open	Isolating the input power of the LSU, High Voltage Part, and Fuser	
Overcurrent Protect	Fuse inside the SMPS	

Fusing System

Trouble Sensing	.The temperature doesn't rise to the specific temperature in the specific time. .The temperature is too high.	Indicate the Fuser error
Overheat Sensing	240 ~ 250°C (The thermostat cuts off the Fuser from the power.) Thermistor Open Sensing : Without the initial temperature change of the Fuser	

2-5 SMPS (Switching Mode Power Supply)

Input (AC)	AC Input Voltage	European	American
	Minimum	198V	90V
	Typical	230V	120V
	Maximum	264V	135V
	Max. AC Input Current	2.5Amps	3Amps
	Max. Inrush Current	Ap-p (at 20°C)	
Output (DC)	Line Regulation	24V $\pm$ 10%	
		5V $\pm$ 5%	
	Road Regulation	24V $\pm$ 10%	
		5V $\pm$ 5%, -5V $\pm$ 5%	
	Ripple Noise	24V : Peak 300mV	
		-5V : Peak 500mV	
		5V : Peak 500mV	
	Over Current Protect	24V : 2.7A $\pm$ 10% (by Circuit)	
		5V : A $\pm$ 10% (by Circuit)	
	Over Voltage Protect	24V : 33VDC	
		5V : 5.6VDC	

Memo

3. Tech Mode

3-1 To Access TECH Mode

In Tech mode, the technician can perform various tests to isolate the causes of a malfunction, and set the technical option features to customize the machine depending on the user's operation environment.

To access TECH mode, press **SETUP**, #, **1**, **9**, **3**, **4** in sequence, and the LCD displays 'TECH' in the standby mode screen. While in TECH mode, the machine still performs all normal operations. To return to the normal user mode, press **SETUP**, #, **1**, **9**, **3**, **4** in sequence in TECH mode or turn the power off, then back on.

The technical options you have set in TECH mode are not changed unless you clear the machine's memory in TECH mode.

To communicate via direct connection with another fax machine, press **OHD/V.REQ** followed by **Start/Enter**.

3-2 Tech Mode Options

In TECH mode, press **SETUP**, then press ◀ or ▶ until 'TECH MODE' appears in the display. Press **Start/Enter**. The following technical options are available.

Note: If necessary, print System Data List in TECH mode. The list shows all current system data settings including the TECH MODE options. To print the system data list, press **Report/Help**, then press √ or ® until 'SYSTEM DATA' appears in the display, and press **Start/Enter**.

Modem Speed

Default = 14.4 kbps

Select the maximum modem speed of 14400, 12000, 9600, 7200, 4800, or 2400 bps. When the modem speed is set to 14400 or 12000, the Rx speed can be either V.33 or V.17 speed. When it is set to 9600 or 7200, the Rx speed can be either V.29 or V.27ter speed. When set to 4800 or 2400, the Rx speed can any V.27ter speed.

Dialing Mode

Default = Tone

Select the dialing mode according to the user's line status.

Send Fax Level

Default = -12 dBm

You can set the level of the transmission signal. Typically, the Tx level should be under -12 dBm. The level within the range of 1 to -15 dBm is acceptable. Enter the desired value using the number keypad.

RCV Fax Level

Default = -43 dBm

The reception level may be too low due to the cable losses. If it is set to -43 dBm, the reception sensitivity will be between 0 and -43 dBm. If it is set to -48 dBm, the reception sensitivity will be between 0 and -48 dBm.

Flash Time

Default = 600 milliseconds

Set the flash time to 80, 280, or 600 milliseconds.

Pause Time

Default = 3 seconds

It sets the length of the pause time from 1 through 9 seconds, when the pause button is pressed.

Redial Interval

Default = 3 minutes

If the remote machine is busy when the machine sends a fax using automatic dialing, the machine automatically redials the number. Select the time interval between automatic redial attempts. Enter the desired redial interval using the number keypad: 1 - 15 minutes.

Redial Count

Default = 2

Select the number of automatic redial attempts. Enter the desired number using the number keypad: 0 - 5.

DP Make/Break

Default = 40 - 60

Select the dial pulse make and break time: 40-60 or 33-67.

Silence Time

Default = Unlimited

In ANS/FAX mode, after a call is picked up by the answering machine, the machine monitors the line. If a period of silence is detected on the line at any time, the call will be treated as a fax message and the machine begins receiving. Silence detection time is selectable between limited (about 12 seconds) and unlimited time.

When '12 sec' is selected, the machine switches to receiving mode as soon as it detects a period of silence.

When 'Unlimited' is selected, the machine waits until the answering operation is concluded even though a period of silence is detected. After the answering operation is concluded, the machine switches to receiving mode.

Error Rate

When the error rate is about to be over the setting value, the Baud rate automatically lowers up to 2400 bps to make the error rate remain below the setting value.

You can select the rate between 5% and 10%.

3-3 Maintenance Options

In TECH mode, press **SETUP**, then press ◀ or ▶ until 'MAINTENANCE' appears in the display. Press **Start/Enter**. The following technical options are available:

Clean Drum

Use this feature to get rid of the toner remained in the development unit, so you can get a clean printout.

Adjust Shading

Use this feature to correct the white reference of the scanner if you experience bad copy images. When using this feature, a white paper should be used to get clean copy images.

Remote Test

The Remote Test feature can be enabled in order to allow a remote location to call up and run a diagnostic test on your machine. You may be instructed by a service representative to enable this feature.

Notify Toner Low

With this feature enabled, when the toner becomes low, the toner low information will be sent to a specified contact point, for example, the service company. After you access this menu, select **ON**, and when the LCD prompts, enter the name and the number of the contact point, the customer's fax number, the model name, and the serial number.

ROM Test

Use this feature to test the machine's ROM. The result and the software version appear in the LCD display.

CIS Test

This test checks the operation of the Contact Image Sensor (CIS). Each time the number changes by one increment, the average ADC value of CIS prints out.

DRAM Test

Use this feature to test the machine's DRAM. The result appears in the LCD display.

Switch Test

Use this feature to test all keys on the operation control panel. The result is displayed on the LCD window each time you press a key.

Modem Test

Use this feature to test the machine's modem. The modem will send various transmit signals on the telephone line. You can check the following:

- FSK test
- Tones: 1100 Hz, 1650 Hz, 1850 Hz, 2100 Hz
- G3 training: 14400, 12000, 9600, 7200, 4800, 2400 bps

DTMF Test

Use this feature to test the machine's DTMF (Dual Tone Multi Frequency) signal. When you press any key on the number keypad including * and #, you will hear the corresponding key tone.

Toner count

This feature shows the current state of the toner cartridge. After replacing Main board to new one, you should update the information to the new board. See page 00.

- TONER CNT: The total number of the dots used to print up to current time.
- CRU STATE: The page number which the toner cartridge can print.

Printing Info

This feature allows the machine to automatically print various information, like toner count, transfer voltage, fusing temperature and so on, at the bottom of each printed page.

- PAGE TONER CNT: prints the number of dots used to print the page.
- TOTAL TONER CNT: prints the total number of the dots used to print up to current time.
- THV ON DUTY: prints ADC value of transfer voltage.
- THERMISTER: prints ADC value of fusing temperature.
- P: prints the page number.

Program Download

Use this feature to download a new upgraded ROM file from a PC that is connected to the machine with a parallel cable (IEEE 1284).

3-4 Printout Report

In TECH mode, press **Report/Help**, then select the desired list or report by using ◀ or ▶ key, then press **Start/Enter**. The following options are available:

Help

It shows a brief description on the machine's basic functions and commands. Use it as a quick reference guide.

Sent Journal

This journal shows a specific information concerning transmission activities, the time and dates of up to 40 of the most recent transmissions.

Received Journal

This journal shows a specific information concerning reception activities, the time and dates of up to 40 of the most recent receptions.

Phonebook

It lists all telephone numbers that have been stored in the machine.

Sending Confirm

It shows the result of the last send operation.

Schedule Inform

This list shows a specific information on the documents currently stored for delayed transmission. It provides the operation number, starting time, type of operation, etc.

System Data

This list provides a list of the user system data settings and tech mode settings.

Protocol List

This list shows the sequence of the CCITT group 3 T.30 protocol during the most recent sending or receiving operation. Use this list to check for send and receive errors. If a communication error occurs while the machine is in TECH mode, the protocol list will print automatically.

Pattern Print

Using this pattern printout, you can check if the printer mechanism is functioning properly. Examine the pattern and look for a break in the diagonal line. If the diagonal lines are not broken, the printer mechanism is functioning properly.

Shading Print

With this print, you can check the scanning elements of the CIS (Contact Image Sensor).

3-5 Engine Test Mode

The Engine test mode is used to check the operation of the components related to the printer engine. The following test are available.

- MHV ON / OFF
- DEV ON / OFF
- THEVEA(THV-) ON / OFF: tests THV- voltage on / off.
- THV+ REF ON / OFF: tests THV+ voltage on / off.
- THV TRIGGER: tests THV+ trigger.
- MAIN MOTOR ON / OFF
- SOLENOID ON / OFF
- LSU MOTOR CHECK: tests the operation of LSU motor
- HSYNC CHECK: tests the operation of laser diode module of LSU.
- SENSOR CHECK: tests various sensors and switches. ([FD]: Feed sensor, [ET]: Exit sensor, [PE]: Paper empty, [CO]: Cover switch)
- PWM CODE: tests variability of THV- voltage. ([000]: outputs about 5 KVdc, [255]: outputs about 0 Vdc)
- FUSER TEST: tests the temperature of the fuser. When printing, the fuser operates in the temperature set for printing. When the power is turned off and back on, the fuser restores the temperature to default. ([161]: about 150 °C, [143]: about 170 °C)
- TOP MARGIN SET
- BIAS TEST VALUE: tests variability of bias voltage. When printing, the machine operates in the bias voltage set for printing. When the power is turned off and back on, the machine restores the bias voltage to default. ([172]: outputs about 350 Vdc, [196]: outputs about 450 Vdc)
- THV TEST VALUE: When printing, the machine operates in THV+ voltage set for printing. When the power is turned off and back on, the machine restores THV+ voltage to default. ([000]: outputs about 5 KVdc, [255]: outputs about 0 Vdc)

To access the Engine test mode:

1. Press **Setup, #, 1, 9, 3, 1** in sequence.
2. When 'ENGINE TEST?' appears, press **Start/Enter**.
3. Scroll the options by pressing ◀ or ▶ repeatedly find the one you want.
4. Press **Start/Enter** to start the test.
5. Press **Stop** to exit the Engine test mode.

Memo

4. Disassembly and Reassembly

4-1 General Precautions on Disassembly

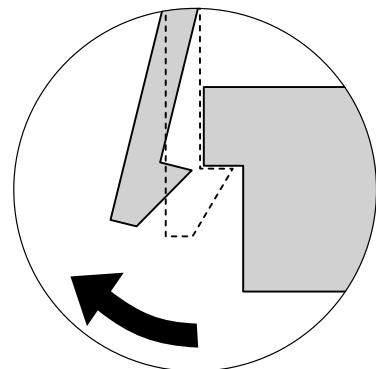
When you disassemble and reassemble components, you must use extreme caution. The close proximity of cables to moving parts makes proper routing a must. If components are removed, any cables disturbed by the procedure must be restored as close as possible to their original positions. Before removing any component from the machine, note the cable routing that will be affected.

Whenever servicing the machine, you must perform as follows:

1. Check to verify that documents are not stored in memory.
2. Be sure to remove the toner cartridge before you disassemble parts.
3. Unplug the power cord.
4. Use a flat and clean surface.
5. Replace only with authorized components.
6. Do not force plastic-material components.
7. Make sure all components are in their proper position.

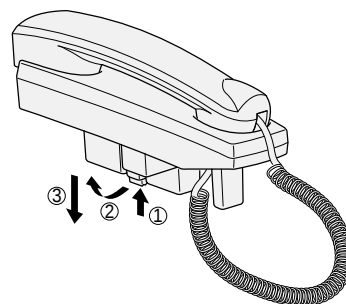
Releasing Plastic Latches

Many of the parts are held in place with plastic latches. The latches break easily; release them carefully. To remove such parts, press the hook end of the latch away from the part to which it is latched.



4-2 Cradle

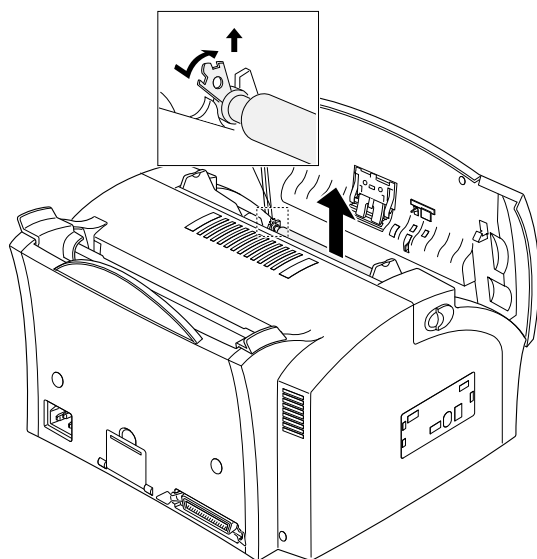
1. Push the lever (①) and remove the cradle as shown below.



4-3 White Roller

1. Open the OPE cover.
2. Push the bushing on the both ends of the roller slightly inward, then rotate it until it reaches the slot. Then lift the roller out.

Note: Check the roller for any dirt. If dirty, wipe it off with soft cloth dampened with water. If the roller is heavily worn, replace it with a new one.

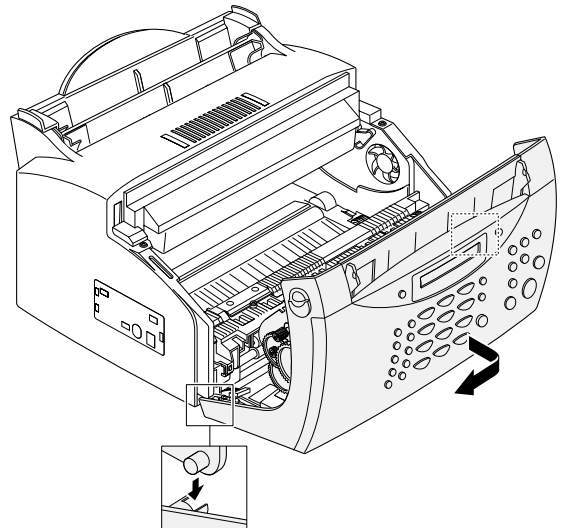


4-4 OPE Cover

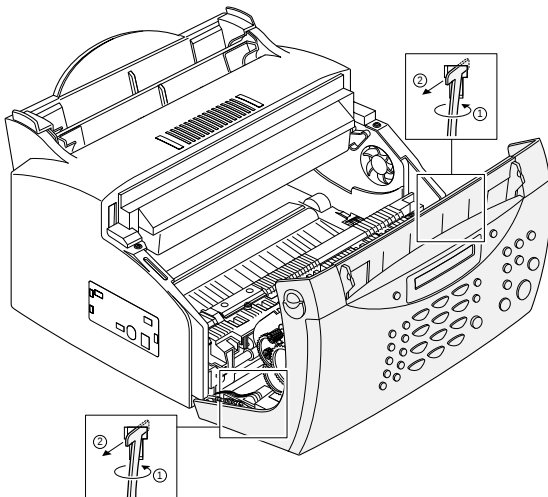
1. Pull the cover release button on both sides of the machine, and open the front cover.



3. Pull the bottom left end of the cover downward to unlatch the front cover unit and remove the cover from the main frame.

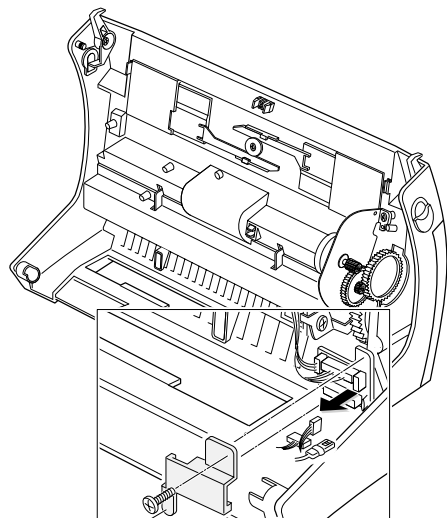


2. Remove two stoppers holding the front cover unit

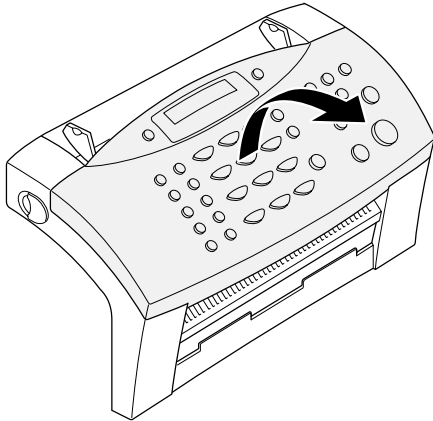


4. Remove two screws securing bracket scan board, then take out the bracket scan board.

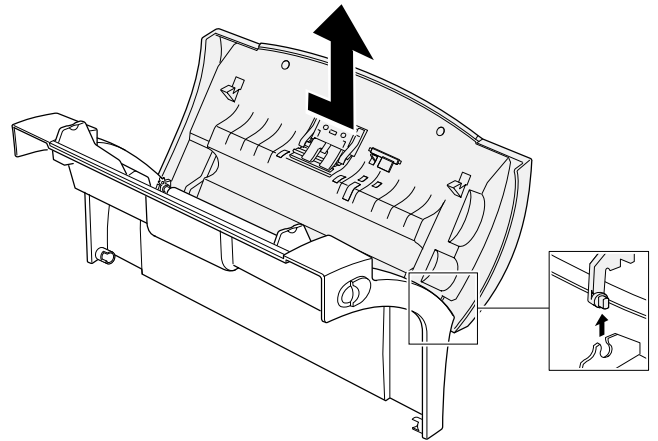
5. Unplug two connectors and one wire from the scan board



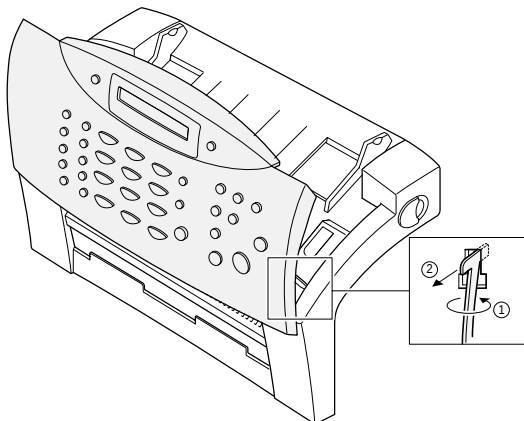
6. Lift the OPE cover.



8. Unlatch the bottom ends, then remove the OPE cover.



7. Remove the stopper holding the OPE cover.

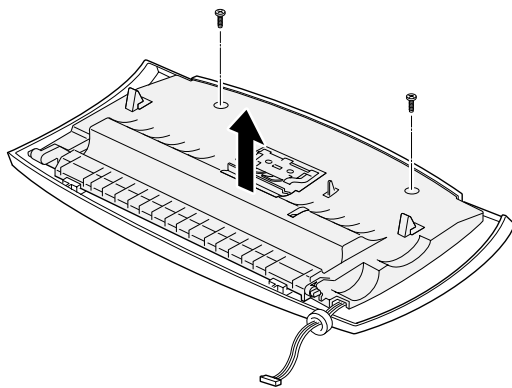


4-5 ADF Rubber

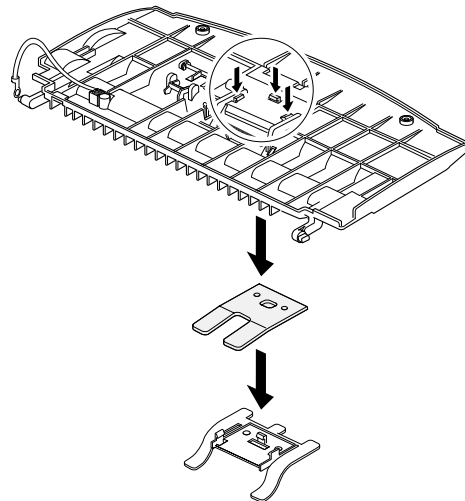
1. Before you remove the ADF rubber, you should remove:

– OPE cover (see page 4-3)

2. Remove two screws and remove scanner upper frame.



3. Push down and release the latches and remove the ADF rubber.



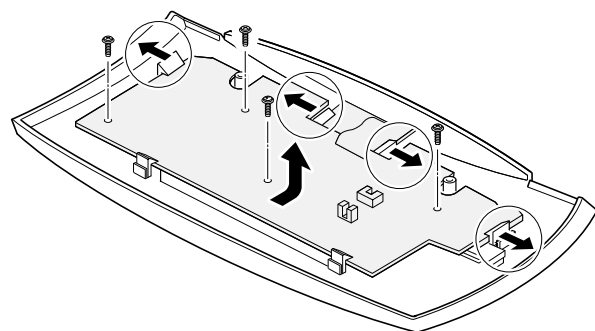
4-6 OPE Board

1. Before you remove the OPE board, you should remove:

– OPE cover (see page 4-3)

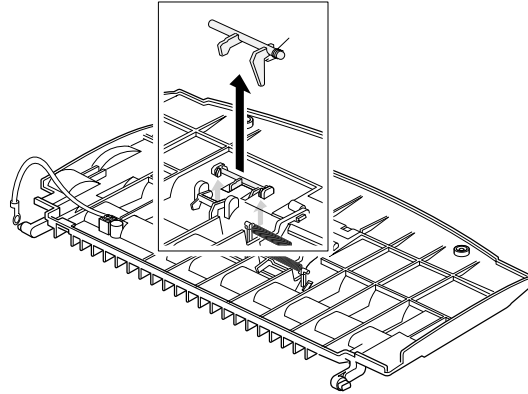
2. Remove four screws securing the OPE board.

3. Release two latches securing the both side of the LCD and the two of four latches securing the board. Then remove the OPE board.



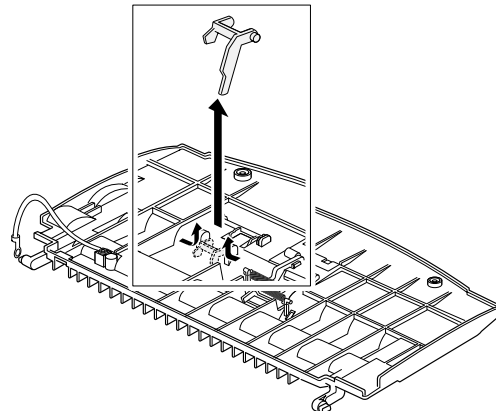
4-7 Lever sensor Doc

1. Unlatch the lever sensor Doc from the scan upper frame and take it out.



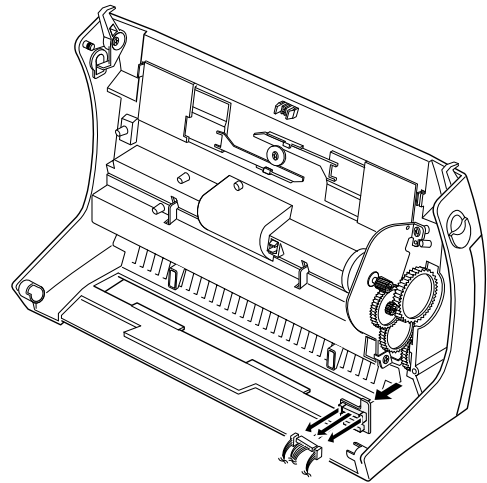
4-8 Lever sensor Scan

1. Push the both sides of Lever sensor Scan inward, then unlatch and take out the sensor Scan from the scan upper frame.



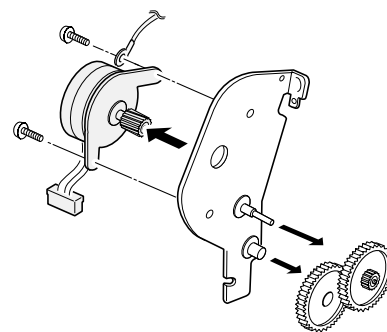
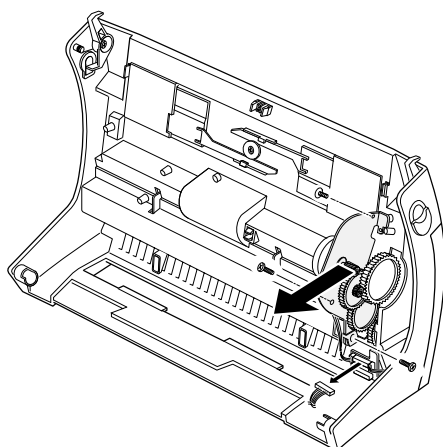
4-9 Scan board

1. Before you remove Scan board, you should remove:
 - Bracket scan board (see page 4-3)
2. Unplug all the connectors from the scan board and remove the board.



4-10 Scan Motor

1. Before you disassemble Scan motor, you should remove:
 - OPE cover (see page 4-3)
 - Bracket scan board (see page 4-3)
2. Unplug one connector from the scan board.
3. Remove three screws, then remove the motor ass'y from the main frame.
4. Take out the gear from the motor ass'y.
5. Remove two screws and remove the motor.

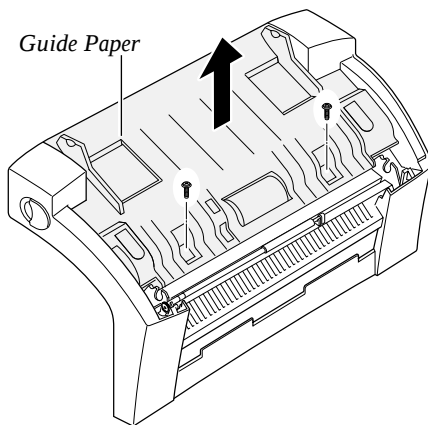


4-11 ADF roller

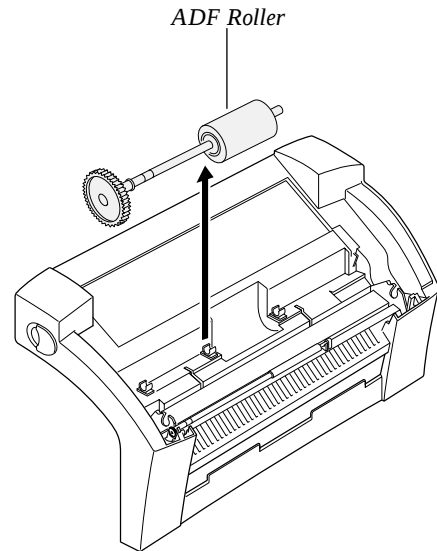
1. Before you remove the ADF roller, you should remove:

- OPE cover (see page 4-3)

2. Remove two screws securing the guide paper and remove the guide paper.

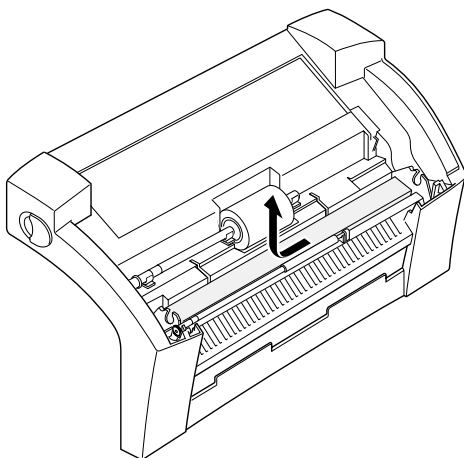


3. Remove ADF roller from the scan front frame.

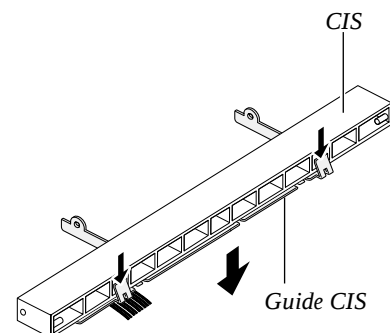


4-12 CIS

1. Push CIS as shown below and lift it to remove from the scan front frame.

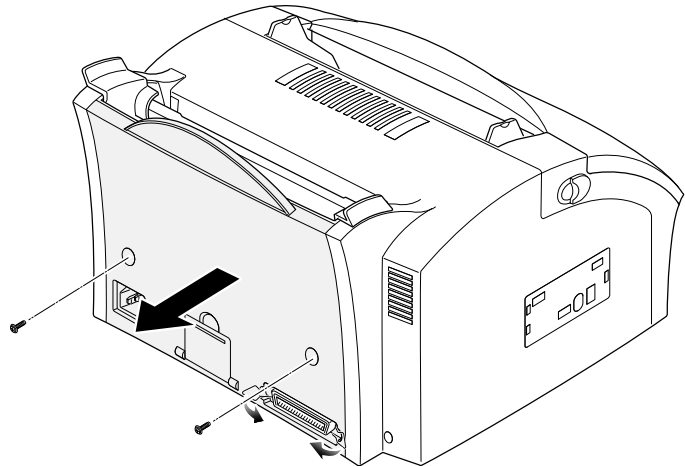


2. Separate the guide CIS from CIS.



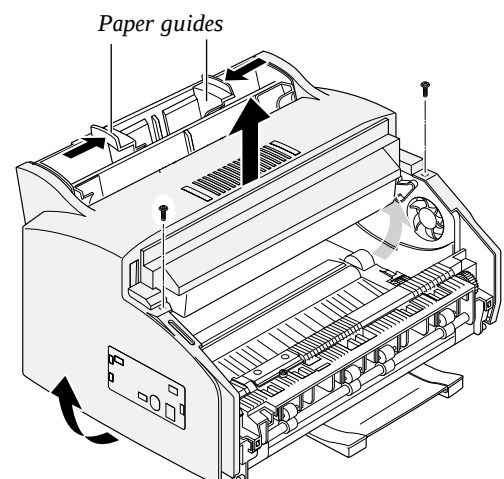
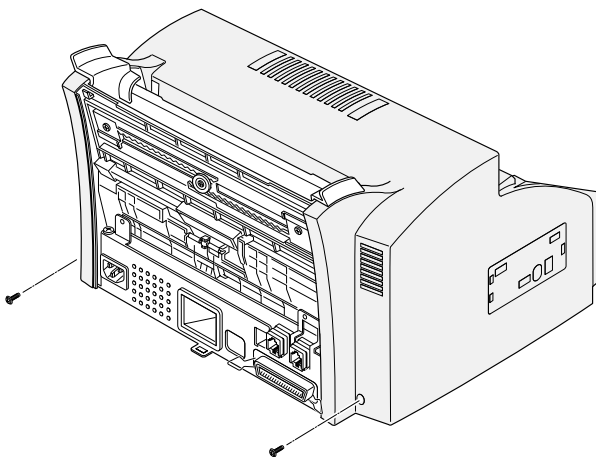
4-13 Rear cover

1. Remove two screws.
2. Push the metal clip on the parallel port down and remove the rear cover from the main frame.



4-14 Top cover

1. Before you remove the ADF roller, you should remove:
 - OPE cover (see page 4-3)
 - Rear cover (see above)
2. Remove two screws securing the top cover from the back side of the machine.
3. Remove two screws and slide the left and right paper guides fully inward. Then spread the bottom of the top cover and lift the cover to remove.

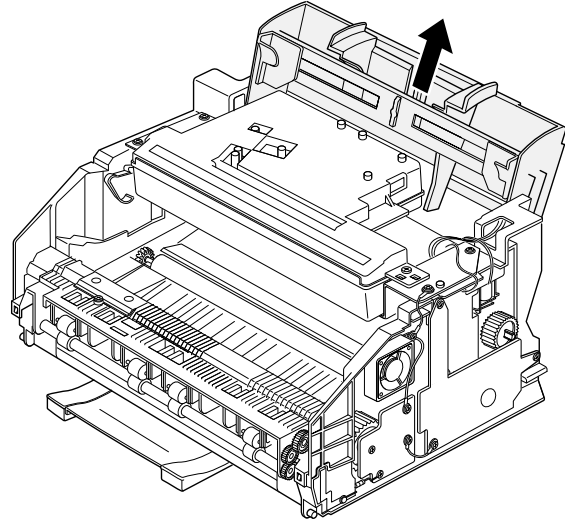


4-15 Tray

1. Before you remove the tray, you should remove:

- OPE cover (see page 4-3)
- Rear cover (see page 4-9)
- Top cover (see page 4-9)

2. Take out the tray from the main frame.

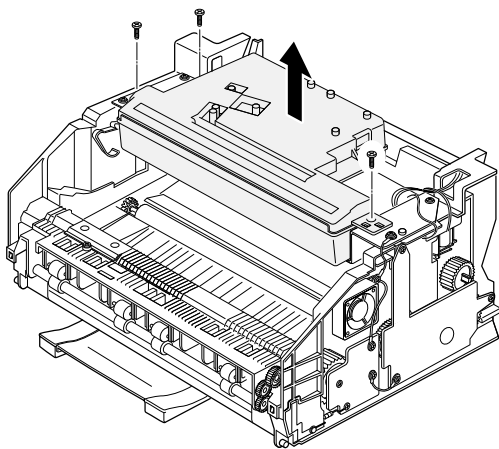


4-16 LSU

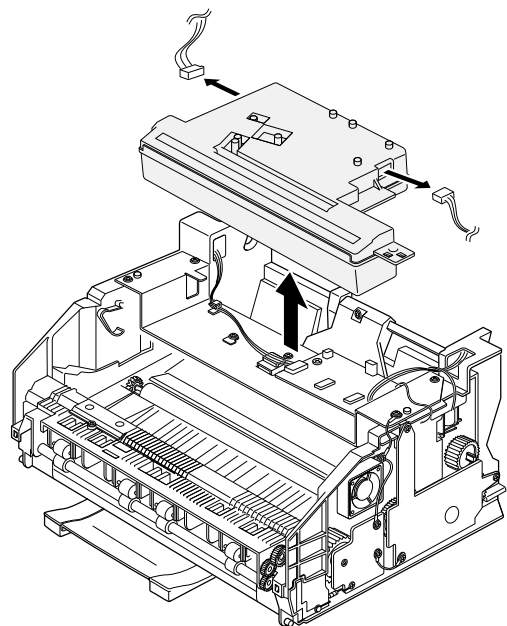
1. Before you remove the LSU, you should remove:

- All covers (see page 4-3, 4-9)

2. Remove three screws securing the LSU.

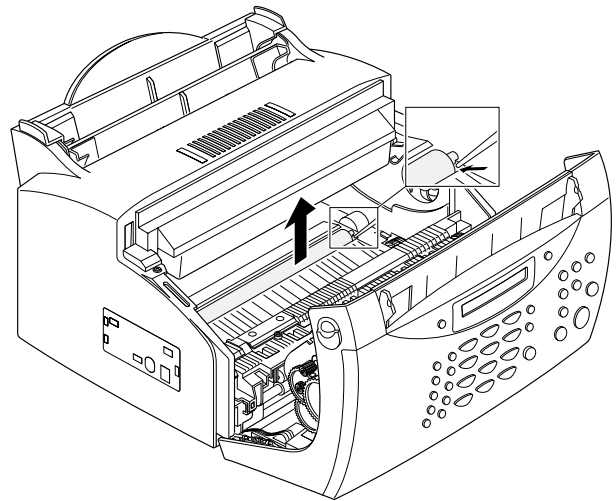


3. Unplug two connectors from the LSU and remove the LSU.



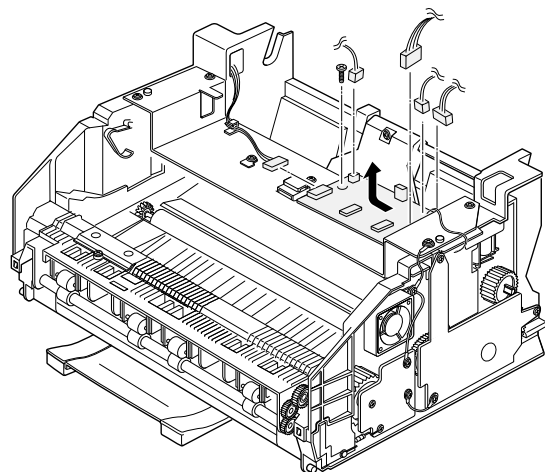
4-17 Transfer roller

1. Pull the cover release button on both sides of the machine, and open the front cover.
2. Lift the transfer roller using a proper tool and take out the roller.



4-18 Engine board

1. Before you remove the Engine board, you should remove:
 - All covers (see page 4-3, 4-9)
 - LSU (see page 4-10)
2. Unplug five connectors and remove one screw from the engine board, then remove the board.

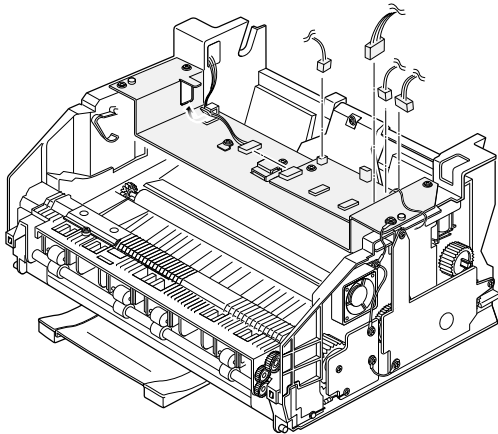


4-19 Pick-up roller ass'y

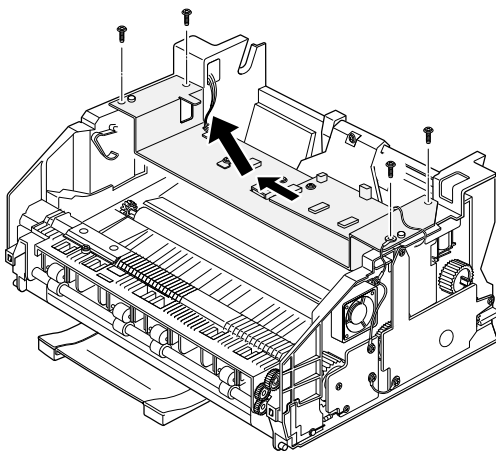
1. Before you remove the pick-up roller ass'y, you should remove:

- All covers (see page 4-3, 4-9)
- LSU (see page 4-10)

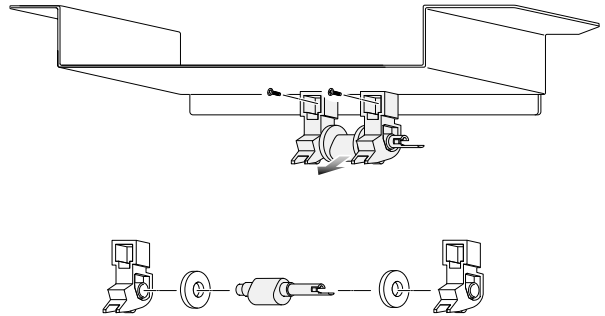
2. Unplug all the connectors from the engine board.



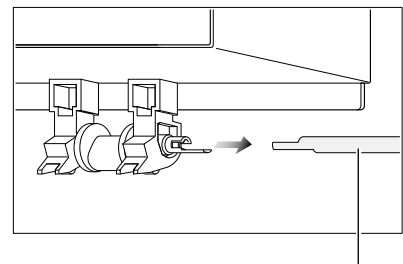
3. Remove four screws securing the plate upper and remove the plate upper as below.



4. Remove two screws and remove the roller from the plate.



Note: When you reassemble the pick-up roller, make sure that the right end of the pick-up roller fits into the pick-up gear shaft.



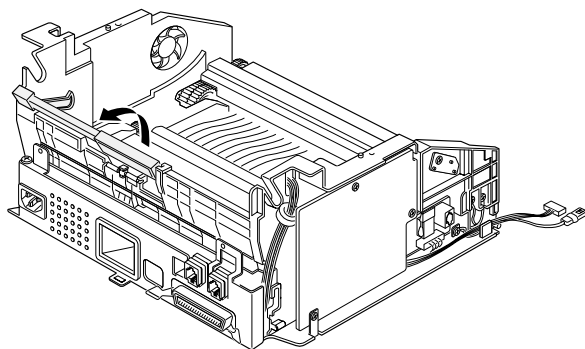
Pick-up gear shaft

4-20 Knock-up ass'y

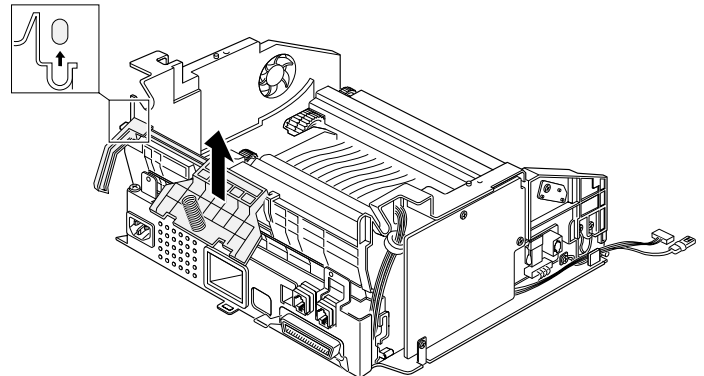
1. Before you remove the knock-up ass'y, you should remove:

- All covers (see page 4-3, 4-9)
- LSU (see page 4-10)
- Plate upper (see page 4-12)

2. Pull the knock-up ass'y fully backward.



3. Remove the knock-up ass'y from the main frame.

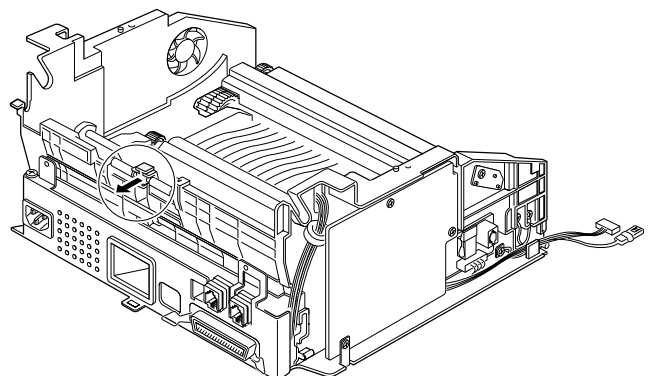


4-21 Cap-pad

1. Before you remove the cap-pad, you should remove:

- All covers (see page 4-3, 4-5)
- LSU (see page 4-10)
- Plate upper (see page 4-12)
- Knock-up ass'y (see above)

2. Take out the cap-pad from the main frame.

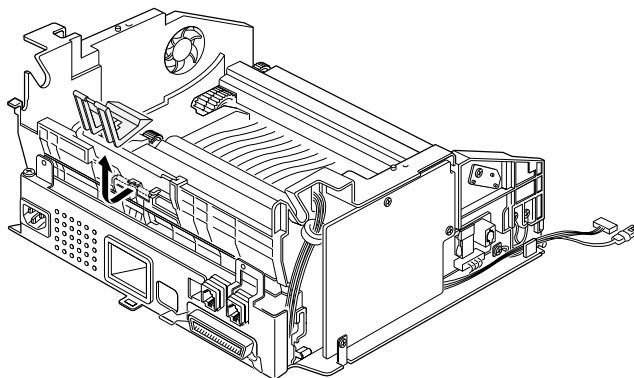


4-22 Holder-pad

1. Before you remove the holder-pad, you should remove:

- All covers (see page 4-3, 4-9)
- LSU (see page 4-10)
- Plate upper (see page 4-12)
- Knock-up ass'y (see page 4-13)
- Cap-Pad (see page 4-13)

2. Remove the holder-pad from the main frame.



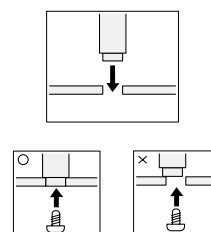
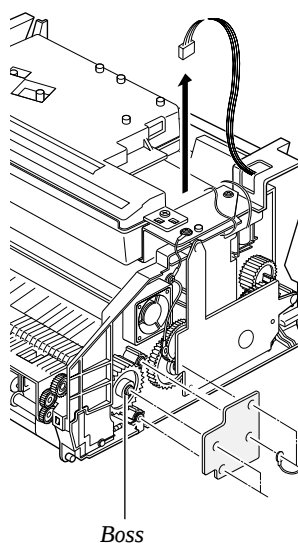
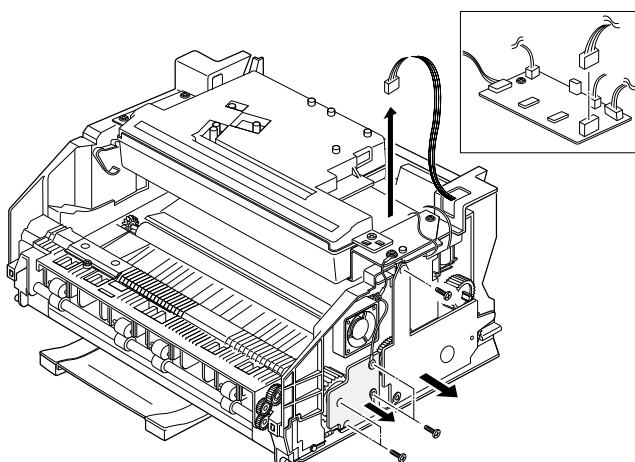
4-23 Motor ass'y

1. Before you remove the motor ass'y, you should remove:

- All covers (see page 4-3, 4-9)

2. Remove five screws securing the motor ass'y and unplug one connector from the engine board, then remove the motor ass'y.

Note: When you reassemble the motor ass'y, make sure that the bosses shown in the figure below fit into the corresponding screw holes on the motor ass'y to allow the screws to be fastened properly.

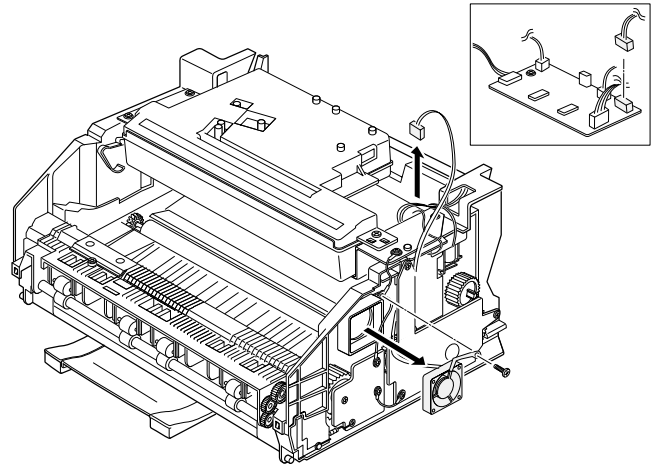


4-24 Fan

1. Before you remove the fan, you should remove:

- All covers (see page 4-0)
- Motor ass'y (see page 4-15)

2. Unplug one connector from the engine board and remove the fan.



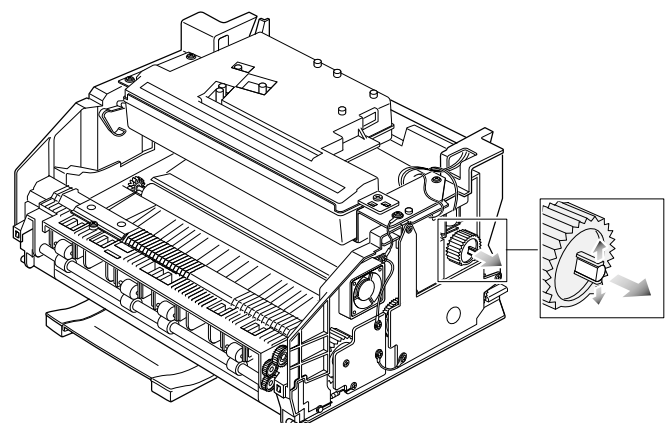
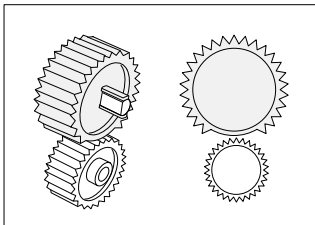
4-25 Gear pick-up ass'y

1. Before you remove the gear pick-up ass'y, you should remove:

- All covers (see page 4-3, 4-9)

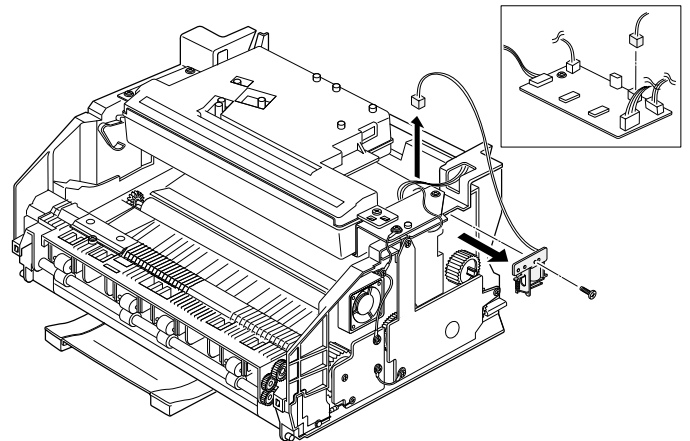
2. Release two snap-fits and remove the gear pick-up ass'y from the main frame.

Note: When reassembling, make sure that the direction of the gear is correct.



4-26 Solenoid

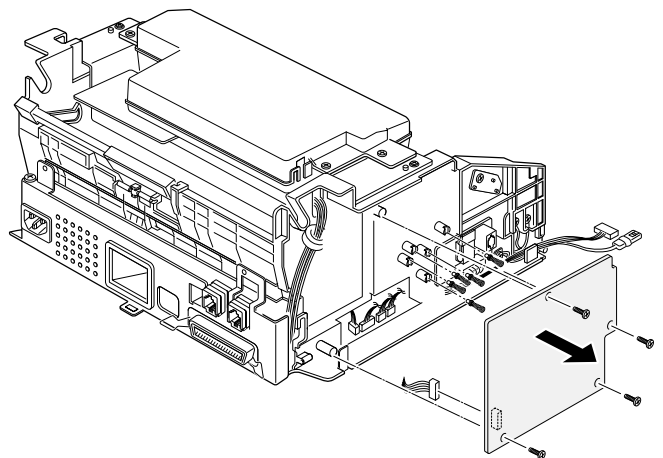
1. Before you remove the solenoid, you should remove:
 - All covers (see page 4-3, 4-9)
2. Unplug one connector from the engine board and remove one screw, then remove the solenoid.



4-27 HVPS board

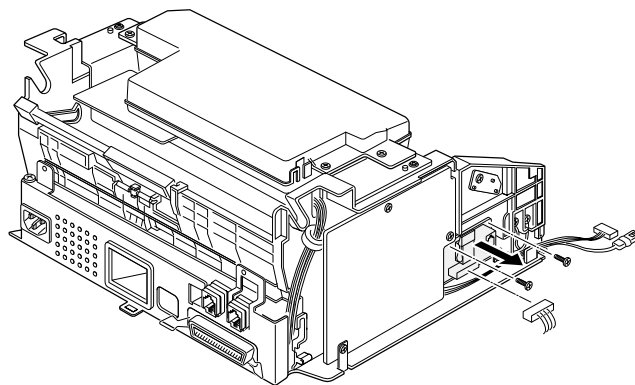
1. Before you remove the HVPS board, you should remove:
 - All covers (see page 4-3, 4-9)
2. Remove three screws and one connector from the HVPS board, then remove the board.

Note: when reassembling, make sure that the terminal is five.



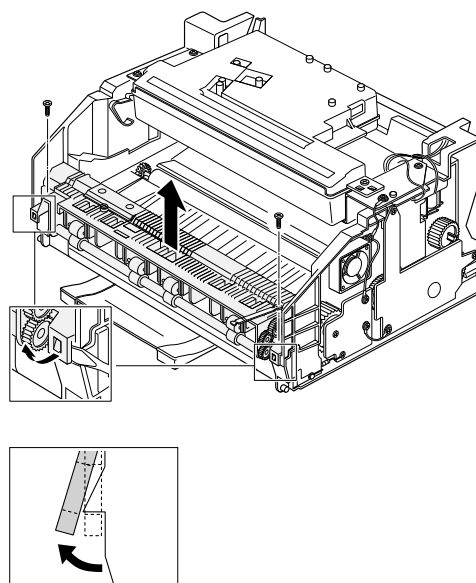
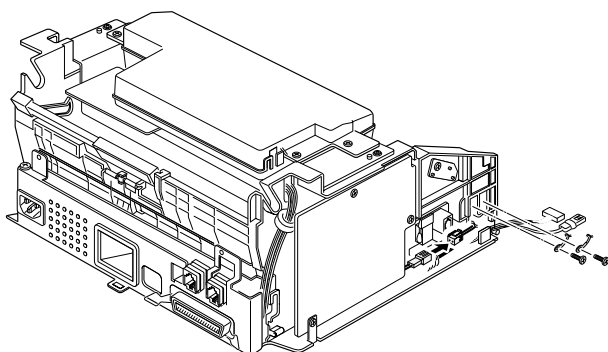
4-28 Hook board

1. Before you remove the hook board, you should remove:
 - All covers (see page 4-3, 4-9)
2. Unplug one connector from the main board and remove two screws, then remove the hook board from the main frame.



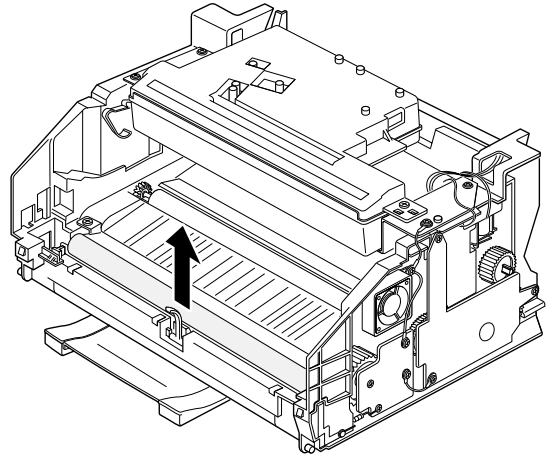
4-29 Fuser ass'y

1. Before you remove the fuser ass'y, you should remove:
 - All covers (see page 4-3, 4-9)
2. Remove four wires after remove two screws from the main frame and one connector from the inter connector.
3. Remove two screws and unlatch the fuser ass'y using a proper tool.



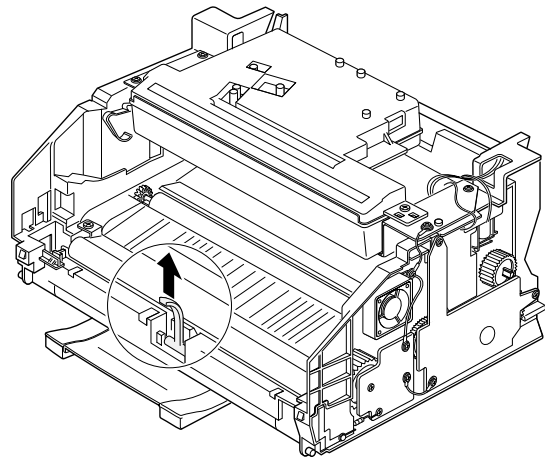
4-30 Pressure roller

1. Before you remove the pressure roller, you should remove:
 - All covers (see page 4-3, 4-9)
 - Fuser ass'y (see page 4-17)
2. Lift and remove the pressure roller from the main frame.



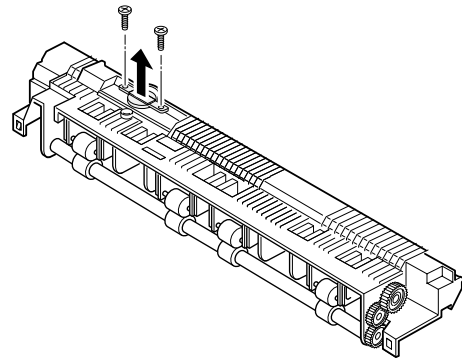
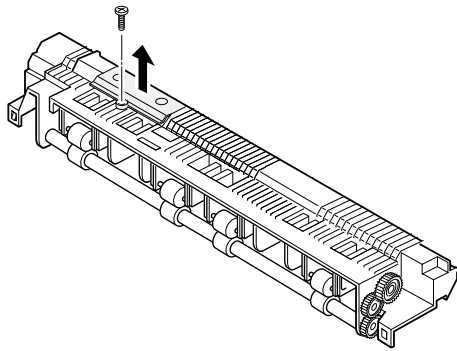
4-31 Actuator-exit

1. Before you remove the actuator-exit, you should remove:
 - All covers (see page 4-3, 4-9)
 - Fuser ass'y (see page 4-17)
2. Lift and remove the actuator-exit from the main frame.



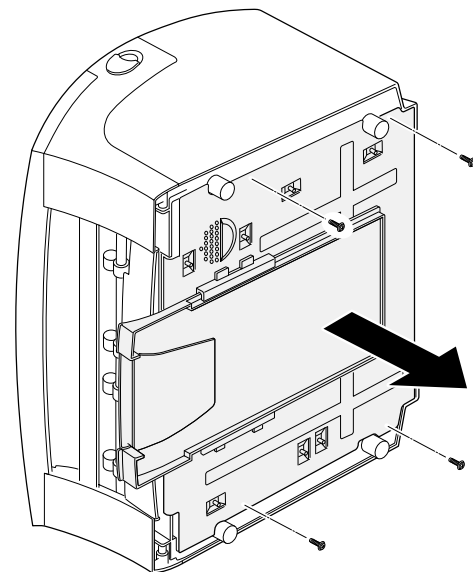
4-32 Thermostat

1. Remove one screw and remove the cover thermostat from the fuser ass'y.
2. Remove two screws and take out thermostat from the fuser ass'y.



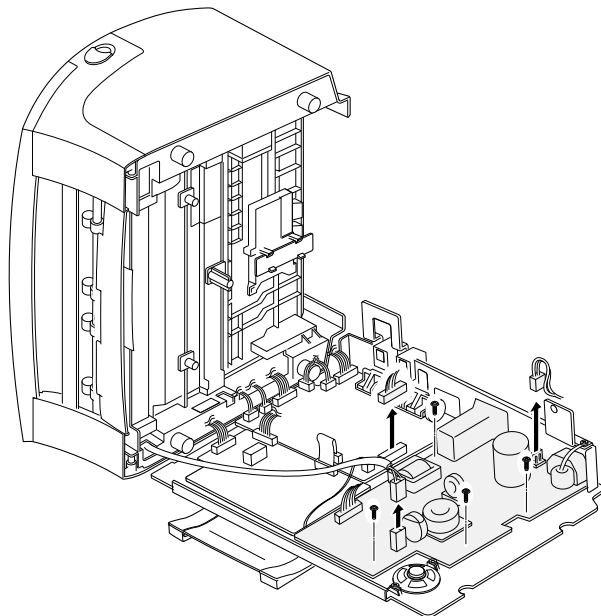
4-33 Shield Engine ass'y

1. Before you remove the shield engine ass'y, you should remove:
 - Rear cover (see page 4-9)
2. Remove four screws securing the shield engine ass'y and remove the shield engine ass'y from the main frame.



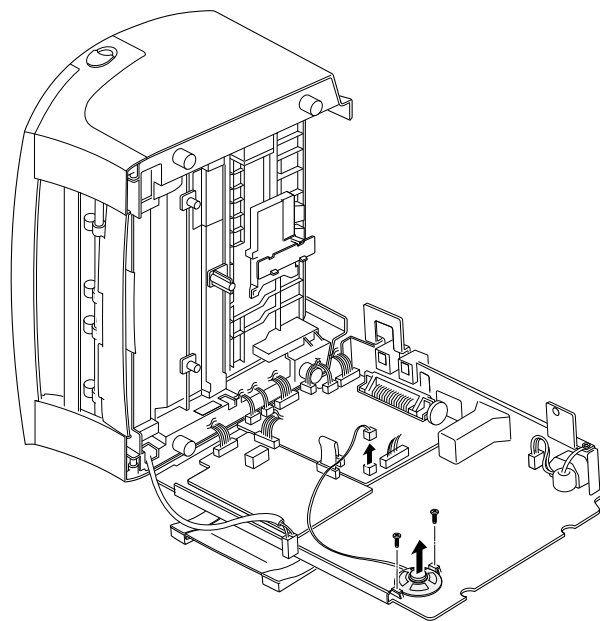
4-34 SMPS board

1. Before you remove the SMPS board, you should remove:
 - Rear cover (see page 4-9)
 - Shield Engine ass'y (see page 4-19)
2. Remove four screws and three connectors, then remove the SMPS board from the main frame.



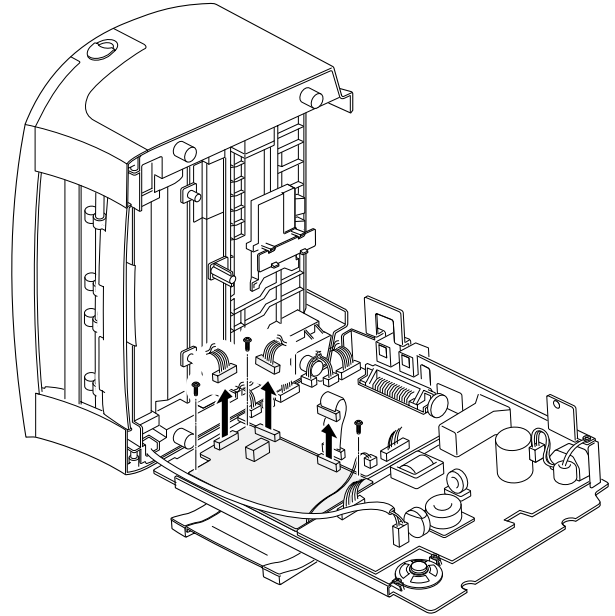
4-35 Speaker

1. Before you remove the speaker, you should remove:
 - Rear cover (see page 4-9)
 - Shield Engine ass'y (see page 4-19)
 - SMPS board (see above)
2. Remove one connector that connects the speaker to the main board and two screws securing the speaker, then remove the speaker.



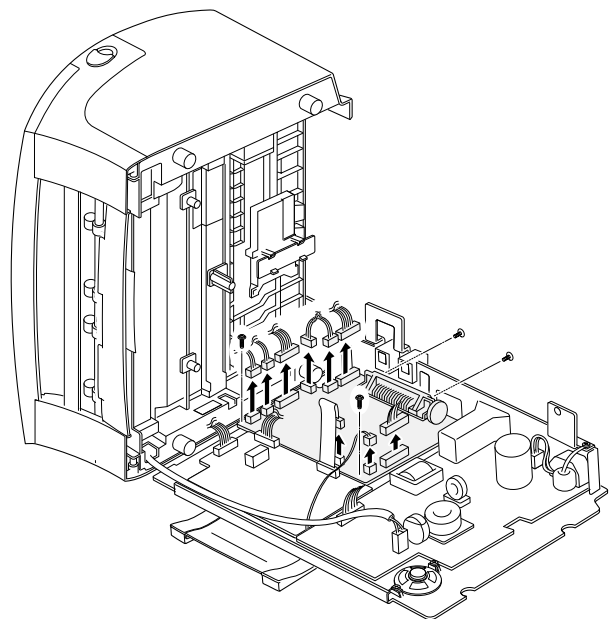
4-36 LIU board

1. Before you remove the LIU board, you should remove:
 - Rear cover (see page 4-9)
 - Shield Engine ass'y (see page 4-19)
2. Remove three screws and three connectors from the LIU board, then remove the board from the main frame.



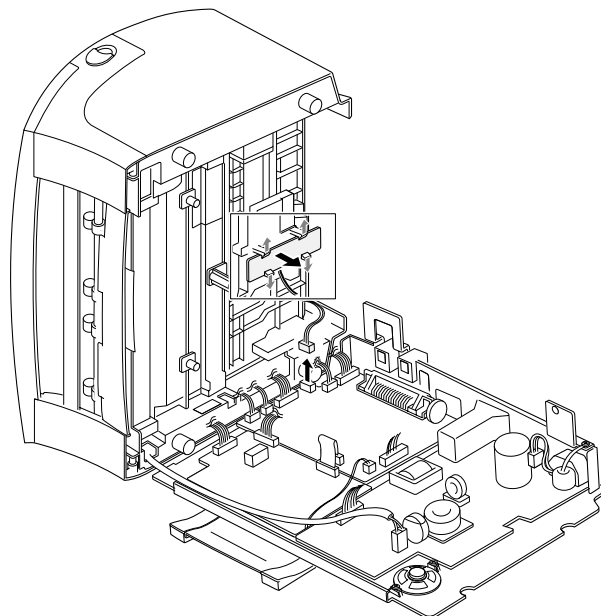
4-37 Main board

1. Before you remove the main board, you should remove:
 - Rear cover (see page 4-9)
 - Shield Engine ass'y (see page 4-19)
2. Remove four screws and all the connectors (9) from the main board, then remove the board.



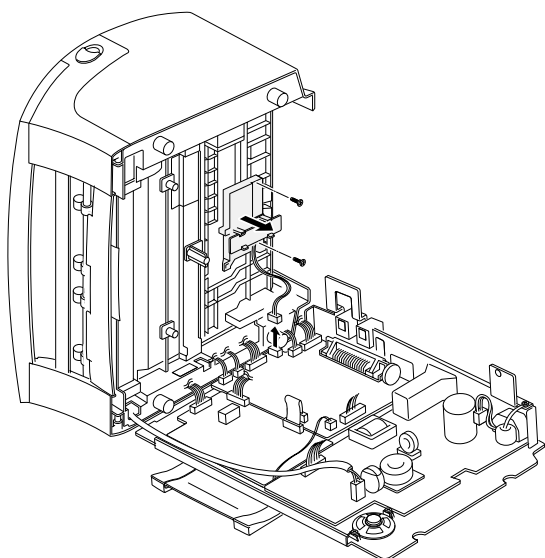
4-38 Sensor board

1. Before you remove the sensor board, you should remove:
 - Rear cover (see page 4-9)
 - Shield Engine ass'y (see page 4-19)
2. Release four snap-fits securing the sensor board and unplug one connector from the main board, then remove the sensor board.

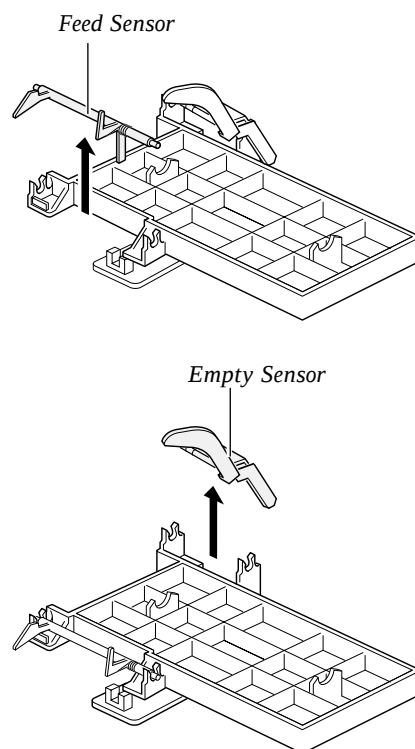


4-39 Actuator Empty/Feeder

1. Before you remove the actuator empty / feeder, you should remove:
 - Rear cover (see page 4-9)
 - Shield Engine ass'y (see page 4-19)
2. Remove one connector from the main board and two screws securing the holder feed ass'y, then remove the holder feeder ass'y.



3. Remove the Feed sensor and the Empty sensor.

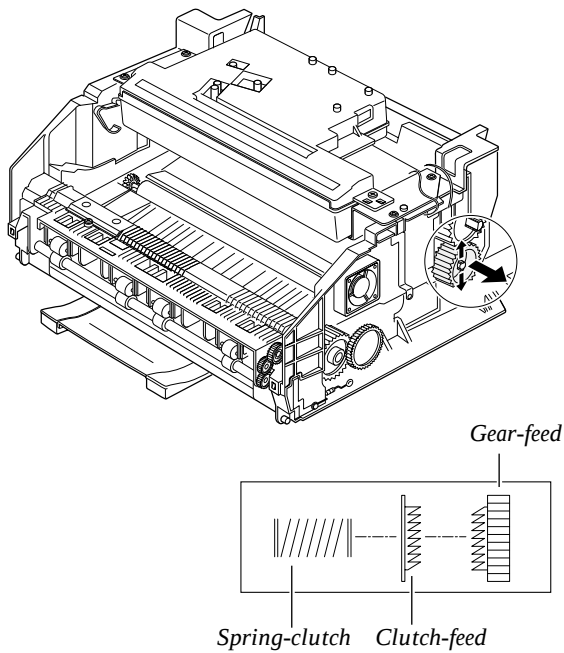


4-40 Roller Feeder

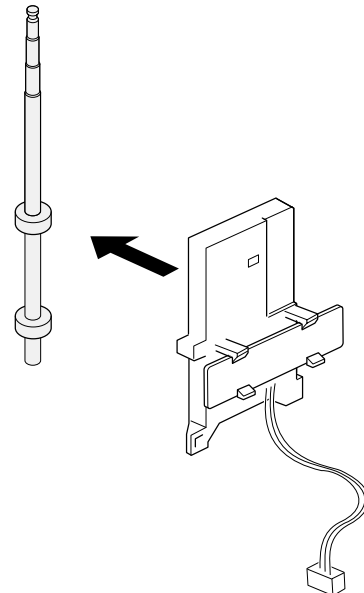
1. Before you remove the actuator empty / feeder, you should remove:

- All covers (see page 4-0)
- Motor ass'y (see page 4-15)

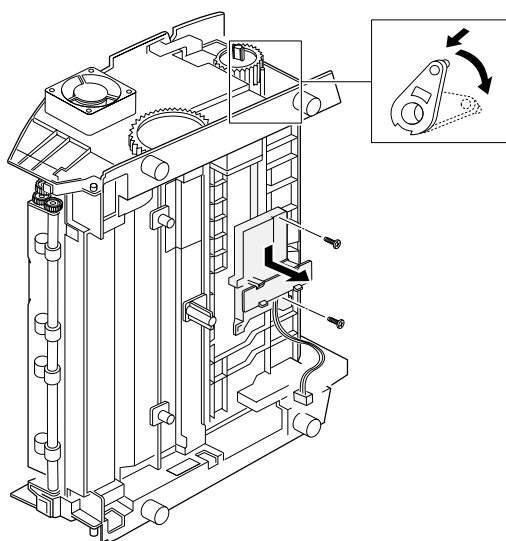
2. Release two snap-fits and remove the gear-feed, clutch-feed, and the spring-clutch.



3. Separate the roller feeder from the holder feeder ass'y.



2. Rotate the pick-up bushing as shown below and remove holder feeder ass'y and roller feeder.



Memo

5. Maintenance & Troubleshooting

5-1 Preventative Maintenance

The cycle period outlined below is a general guideline for maintenance. The example list is for an average usage of 50 transmitted and received documents per day. Environmental conditions and actual use will vary these factors. The cycle period given below is for reference only.

	COMPONENT	CLEANING CYCLE	REPLACEMENT CYCLE	SOLUTION
SCANNER	ADF Rubber	6 Months	5,000 Pages	
	ADF Roller	1 Year	10,000 Pages	
	White Roller	As Needed	10,000 Pages	
	CIS	As Needed		
PRINTER	Cartridge		2,500 Pages	
	Pickup Roller		60,000 Pages	
	Feed Roller		60,000 Pages	
	Transfer Roller		60,000 Pages	
	Fuser		60,000 Pages	
	Driver		60,000 Pages	

5-2 Diagnostics

This section describes methods and procedures to isolate the cause of a malfunction in the machine. This machine displays diagnostic information on the LCD. In addition, it can perform a series of tests that allow the machine to observe individual machine functions.

5-2-1 Error Messages

Error Message	Description	Solution
DOCUMENT JAM	The loaded document has jammed in the feeder.	Clear the document jam.
DOOR OPEN	The top cover is not securely latched.	Press down on the cover until it clicks in place.
FUSER ERROR	There occurs a problem in the fuser unit.	Unplug the power code and plug it back in. If the problem still persists, please call for service.
JAM/NO CARTRIDGE	Recording paper has jammed inside the unit, or the toner cartridge is not installed.	Clear the jam, or install the cartridge
LINE ERROR	Your unit cannot connect with the remote machine, or has lost contact because of a problem on the phone line.	Try again. If failure persists, wait an hour or so for the line to clear, then try again. Or, turn the ECM mode on.
LOAD DOCUMENT	You have attempted to set up a sending operation with no document loaded.	Load a document and try again.
LSU ERROR	There occurs a problem in the LSU (Laser Scanning Unit).	Unplug the power code and plug it back in. If the problem still persists, please call for service.
MEMORY FULL	The memory is full.	Either delete unnecessary documents, or retransmit after more memory becomes available, or split the transmission into more than one operation.
NO ANSWER	The remote machine has not answered after all the redial attempts.	Try again. Make sure the remote machine is operational.
NO. NOT ASSIGNED	The one-touch or speed dial location you tried to use has no number assigned to it.	Dial the number manually with the keypad, or assign a number.

Error Message	Description	Solution
NO PAPER	The recording paper has run out.	Load the recording paper.
OVER HEAT	The printer part in your unit has overheated.	Please wait until it cools down. If you cannot solve the problem, please call for service.
PAPER JAM 0	Recording paper has jammed in the paper feeding area.	Press Stop and clear the jam.
PAPER JAM 2	Jammed paper still remains inside the unit.	Clear the jam.
POLLING ERROR	The remote fax machine you want to poll is not ready to respond to your poll. Or When setting up to poll another fax machine, you have used an incorrect poll code.	The remote operator should know in advance that you are polling and have their fax unit loaded with the original document. Enter the correct poll code.
POWER FAILURE	A power failure has occurred.	If documents have been stored in the memory, a 'Power Failure Report' will be printed automatically when the power is restored.
RECEIVE ERROR	A fax has not been received successfully.	A problem with the facsimile communications has occurred. Ask the sender to try again.
RETRY REDIAL ?	The machine is waiting for a specified time interval to redial a previously busy station.	You can press Start to immediately redial, or Stop to cancel the redial operation.
SEND ERROR	Your fax has not gone through successfully.	A problem with the facsimile communications has occurred. Try again.
TONER EMPTY	The toner cartridge has run out. The machine stops.	Replace with a new toner cartridge.
TONER LOW	The toner is almost empty.	Take out the toner cartridge and gently shake it. Using this way, you can temporarily re-establish the print quality.
WARMING UP	The printer is warming up and is off-line.	Wait until the printer is on-line.

5-2-2 Maintenance List

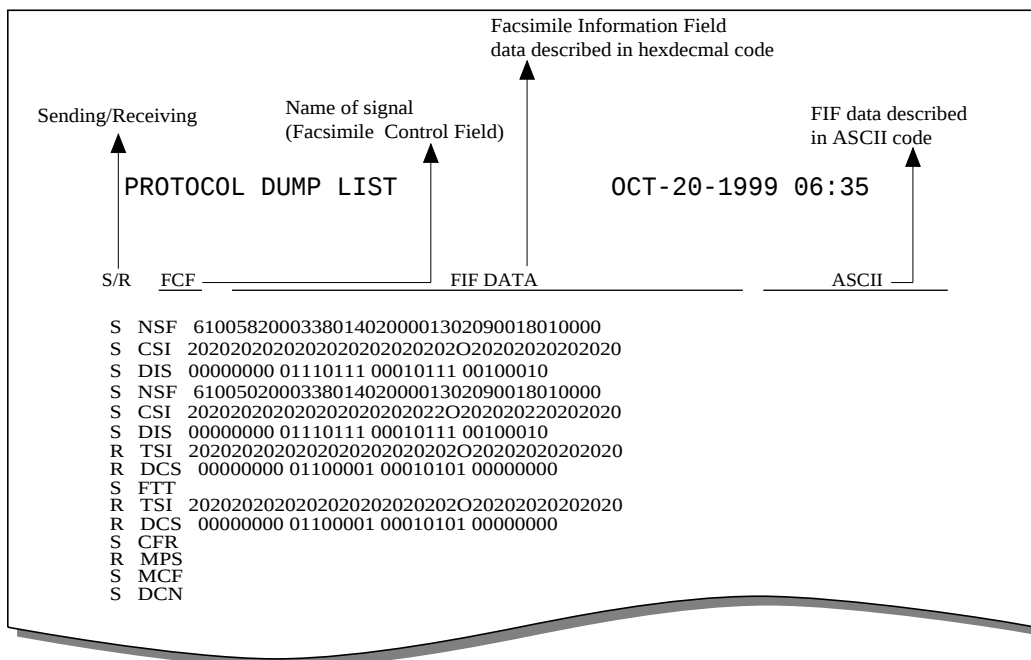
A number of reports can be printed from the fax machine within the test mode. The protocol list all contain detailed information which may be required when contacting technical support.

To printout the protocol list :

1. Get into the Tech mode by pressing **Setup**, **#**, **1**, **9**, **3**, **4**.

2. In Tech mode, press **Report/Help**.
3. Press ◀ or ▶ repeatedly until you find the Protocol List. When you find 'PROTOCOL LIST', press ENTER. SAMPLE OF A PROTOCOL DUMP LIST

SAMPLE OF A PROTOCOL DUMP LIST



5-3 Print Quality

No	Roller	Abnormal image period	Kind of abnormal image
1	OPC Drum	75.4mm	•White spot on black image •Black spot
2	Charge Roller	37.7mm	Black spot
3	Supply Roller	26.8mm	Horizontal density band
4	Develope Roller	31.6mm	Horizontal density band
5	Transfer Roller	47.1mm	Black side contamination/transfer fault
6	Heat Roller	50.1mm	Black spot, White spot
7	Pressure Roller	50.2mm	Black side contamination

5-4 Note for replacing Main board

When you replace the main board to new one, the information on the toner state is cleared. Therefore, you should update the information to the new board by entering the exact value of total toner count and specifying the toner cartridge installed currently is shipped with the machine or new. If not, 'TONER LOW/EMPTY' message may not appear when the toner is run out.

1. In Tech mode, print 'SYSTEM DATA LIST'. The list includes the total toner count and CRU state information.

- TOTAL TONER COUNT: The total number of the dots used to print up to current time.
- CRU STATE: The page number which the toner cartridge can print. (The yield of a new toner cartridge is approximately 2,500 pages and that of the cartridge supplied with the machine is approximately 1.000 pages.)

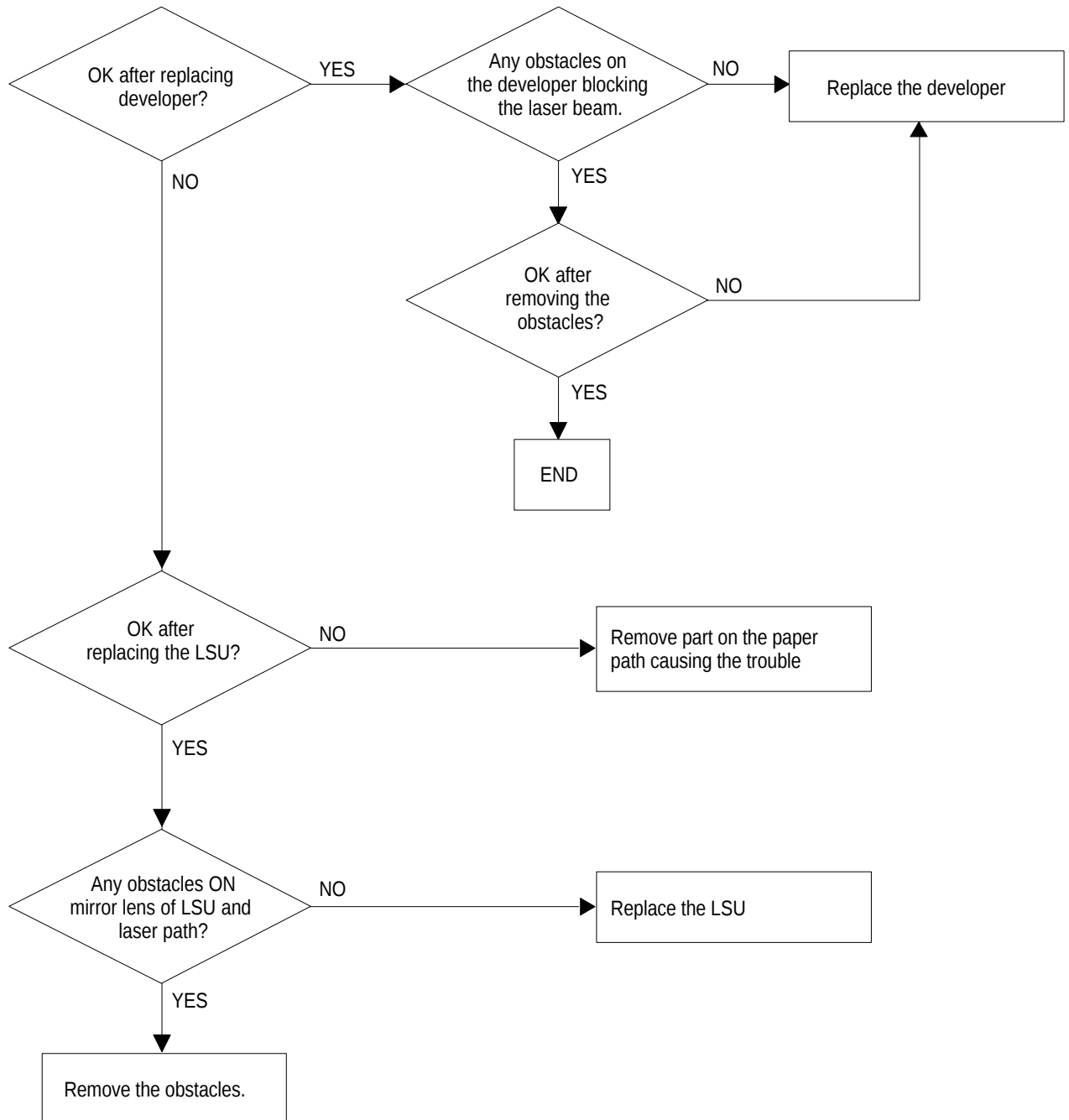
2. Replace Main board.

3. In Tech mode,
 - 3-1) Press **Setup**, and find 'MAINTENANCE' by pressing repeatedly ◀ or ▶, then press **Start/Enter**.
 - 3-2) When 'TONER COUNT' is displayed in LCD, press **Start/Enter**, and enter the value of the total toner count in the system data list.
 - 3-3) When you are prompted to enter CRU STATE, press **Start/Enter**.
 - 3-4) When you see '[1.1000 2.2300]' in LCD, select the value of the CRU state in the system data list.

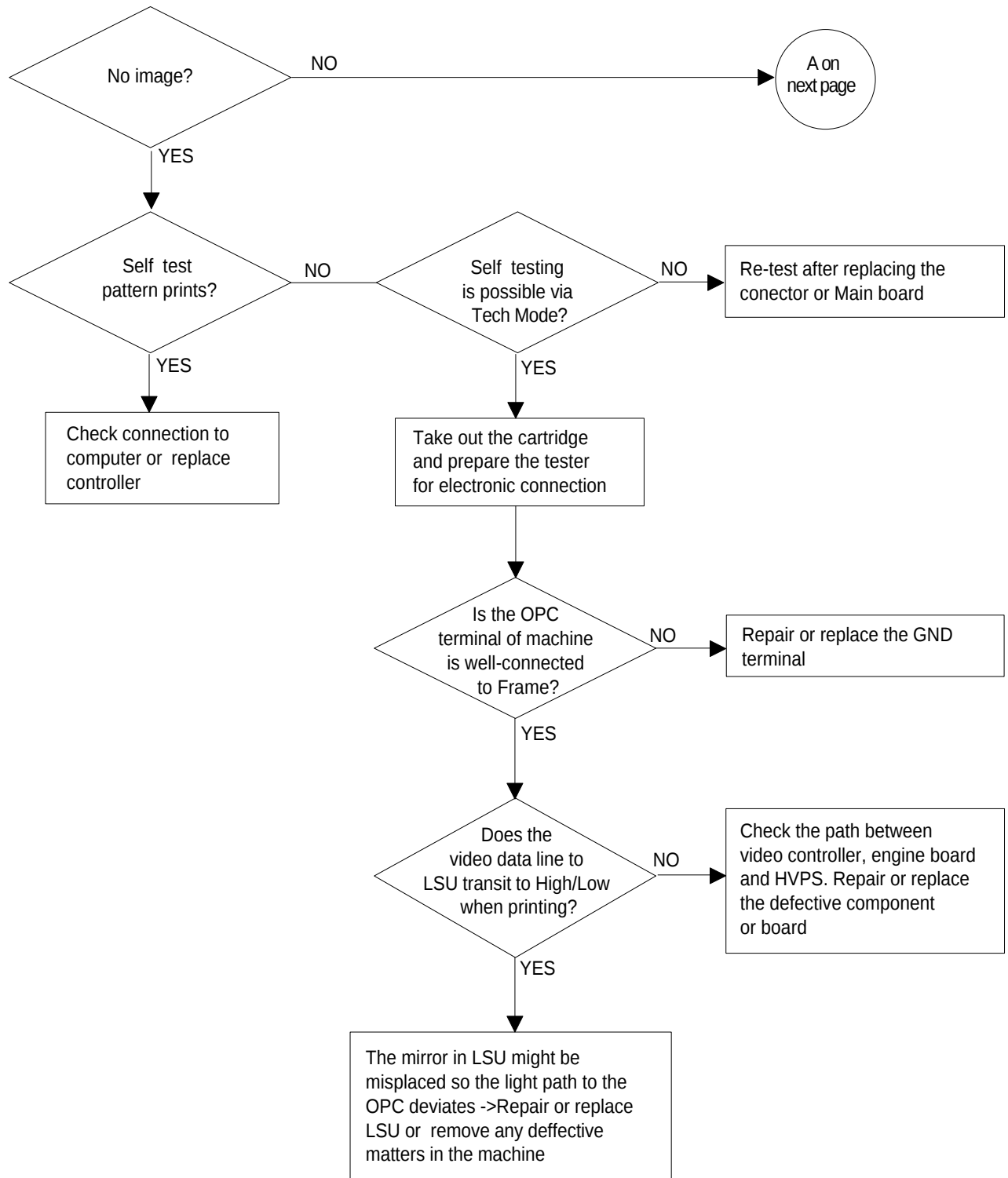
4. In Tech mode, print 'SYSTEM DATA LIST' and make sure that the toner information is updated.

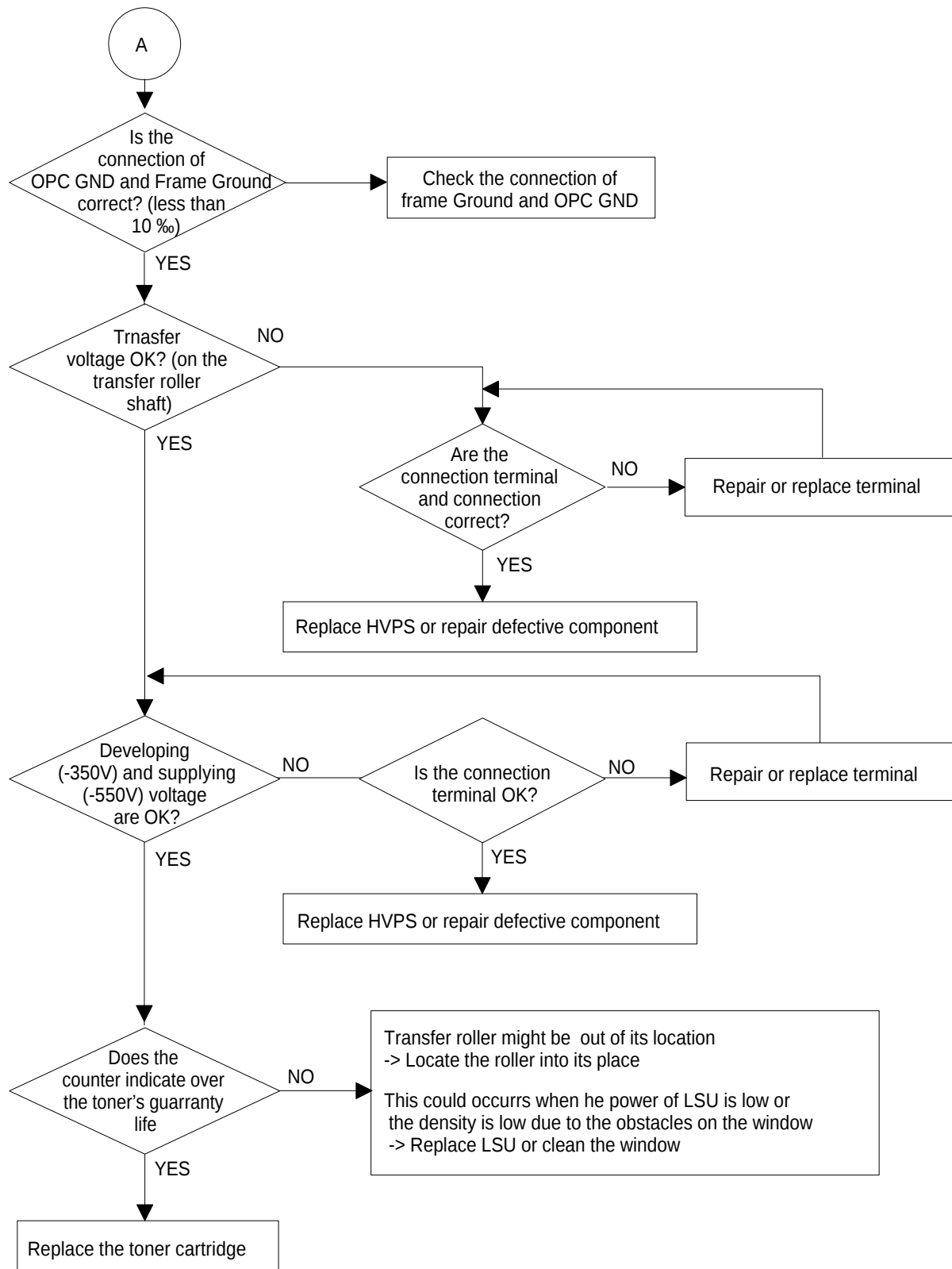
5-5 Troubleshooting Flow Chart

Vertical black line and band

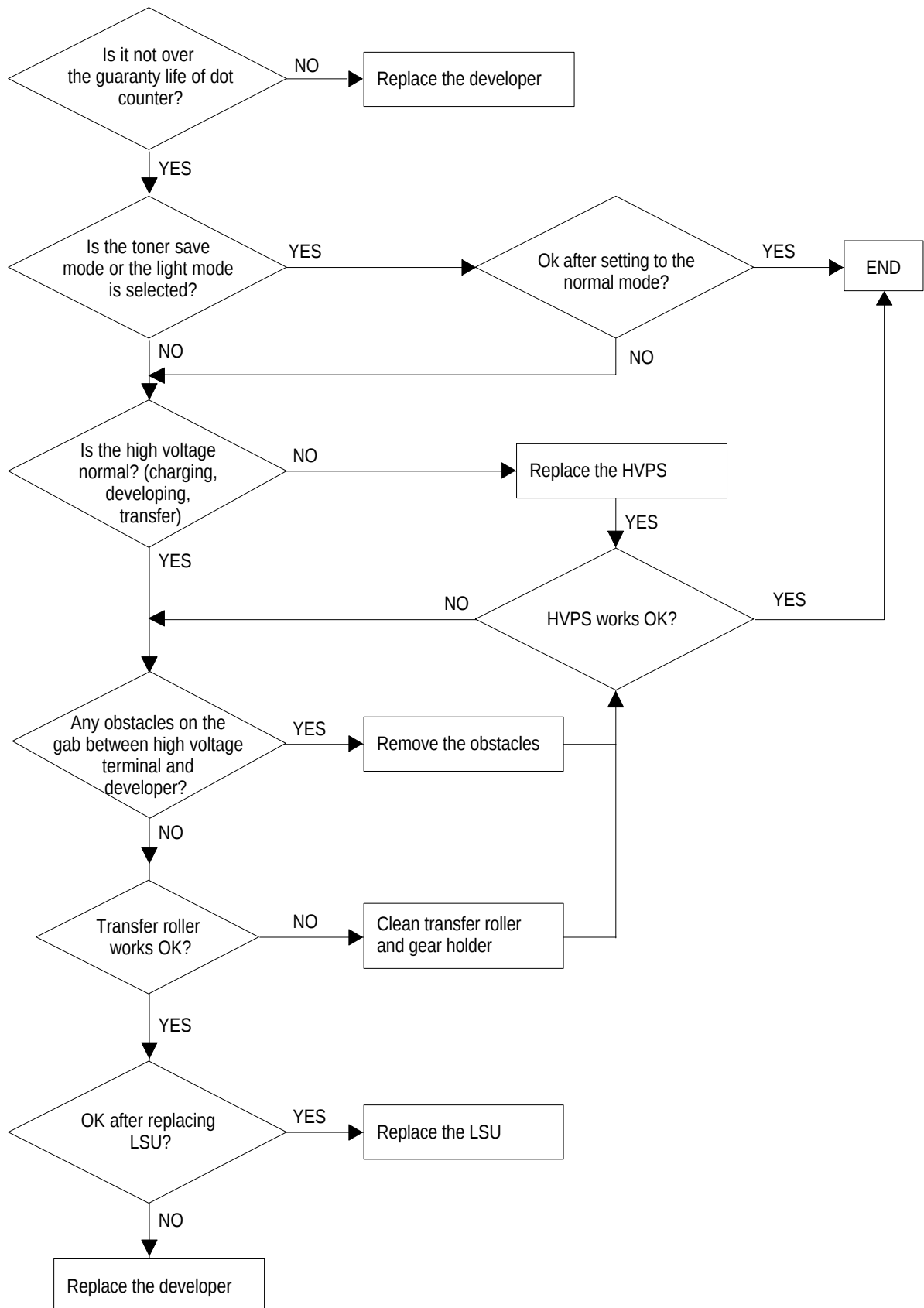


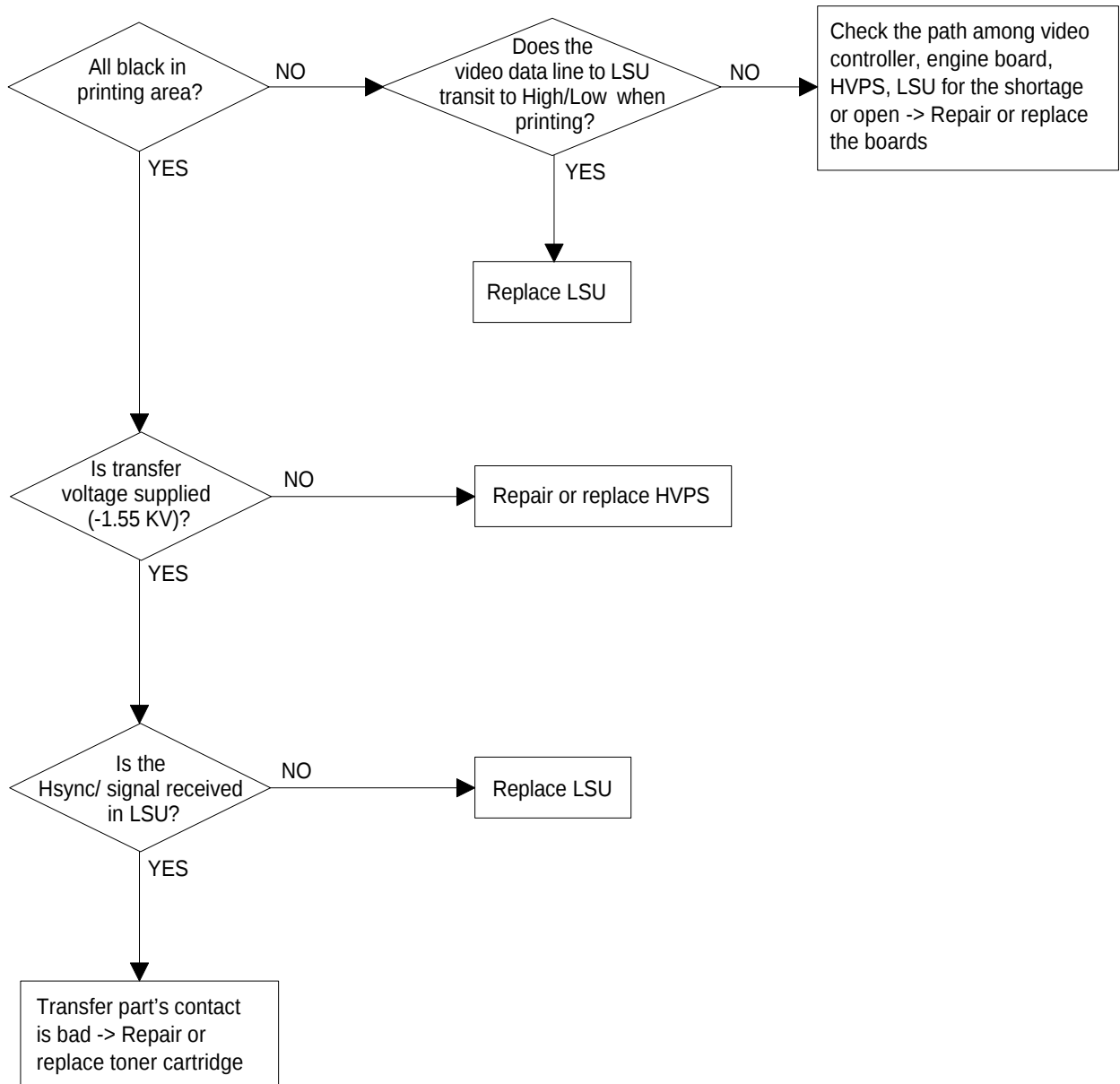
No Image



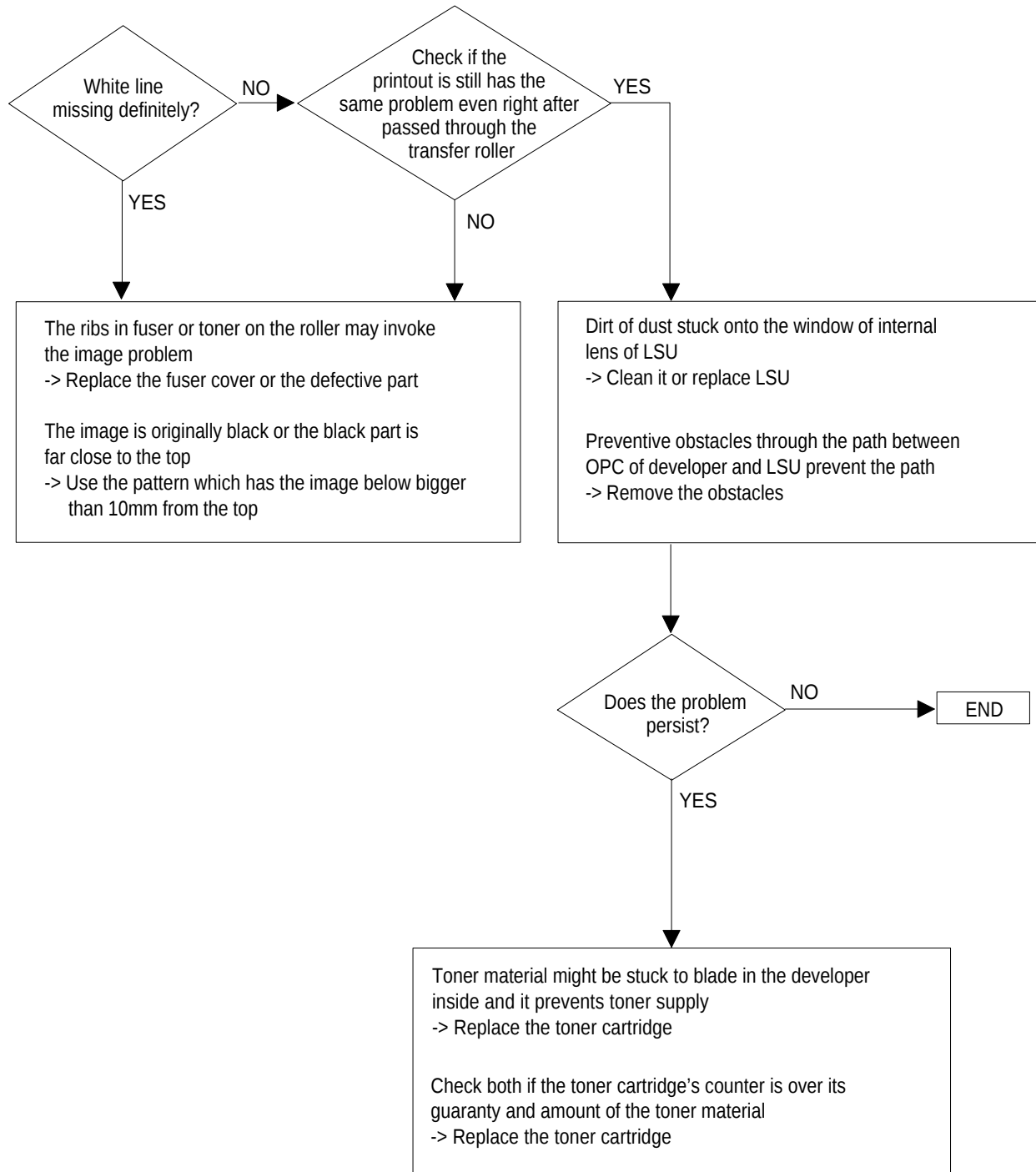


Light image

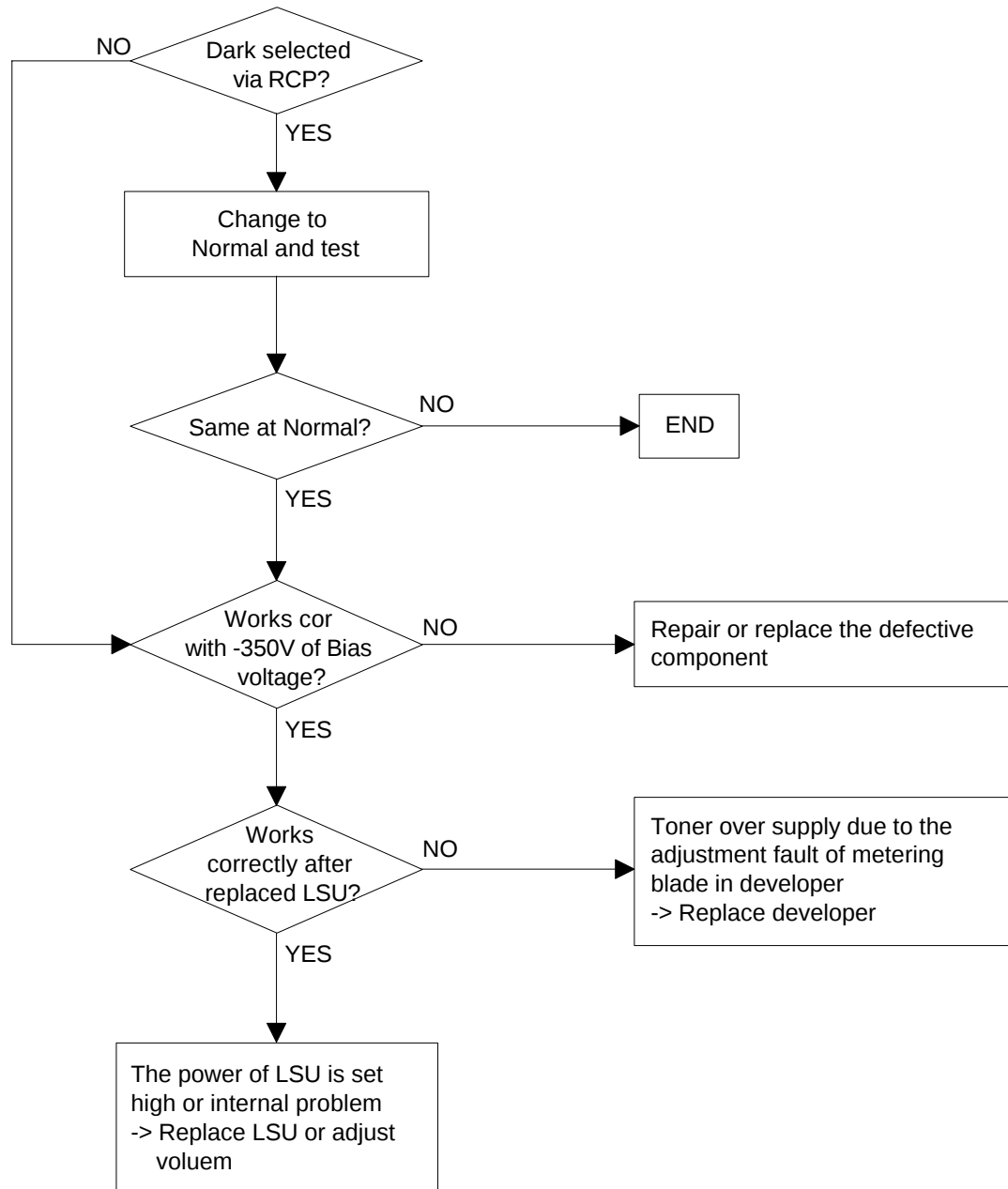


All Black

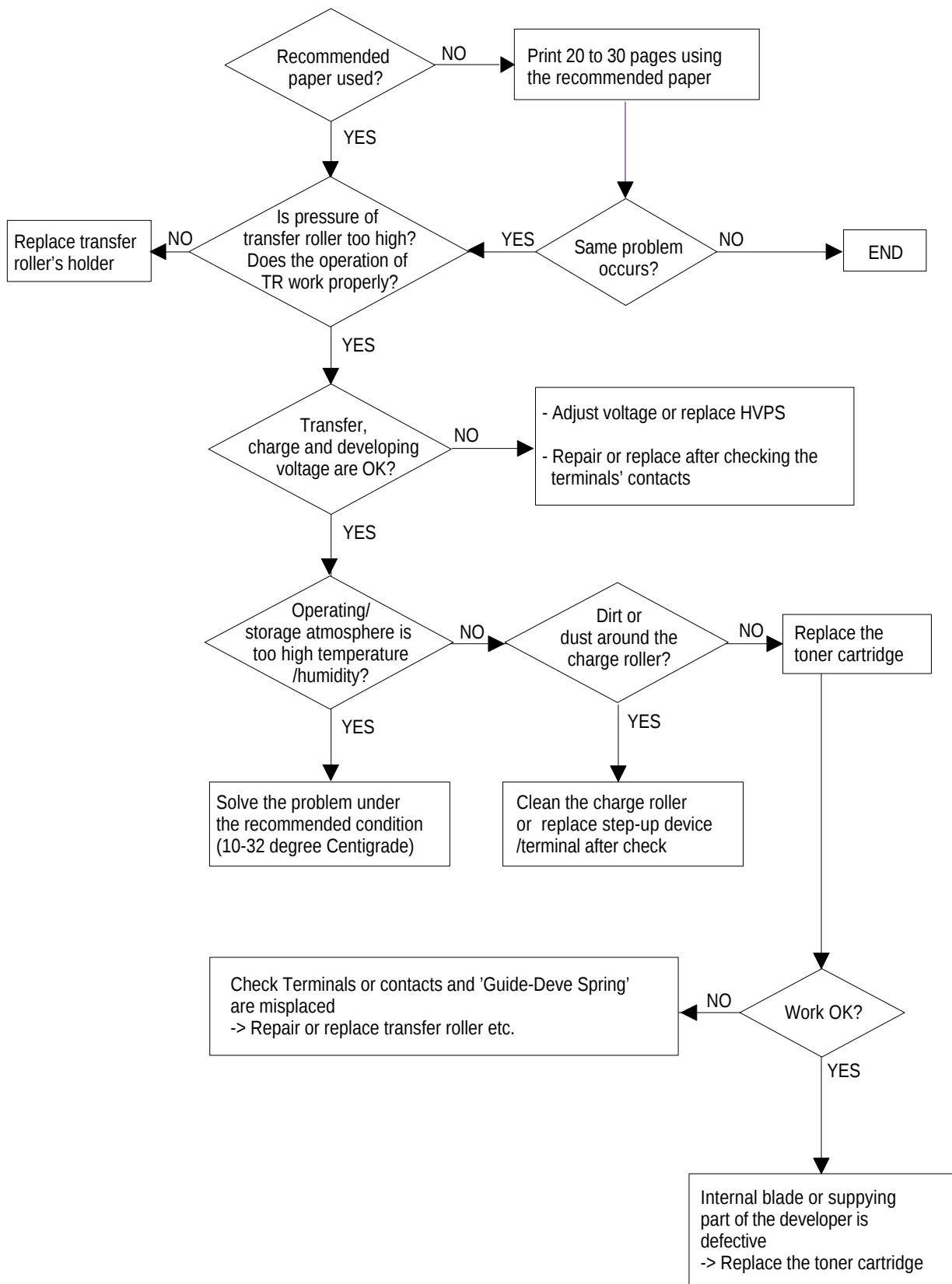
Vertical White Line (Band)



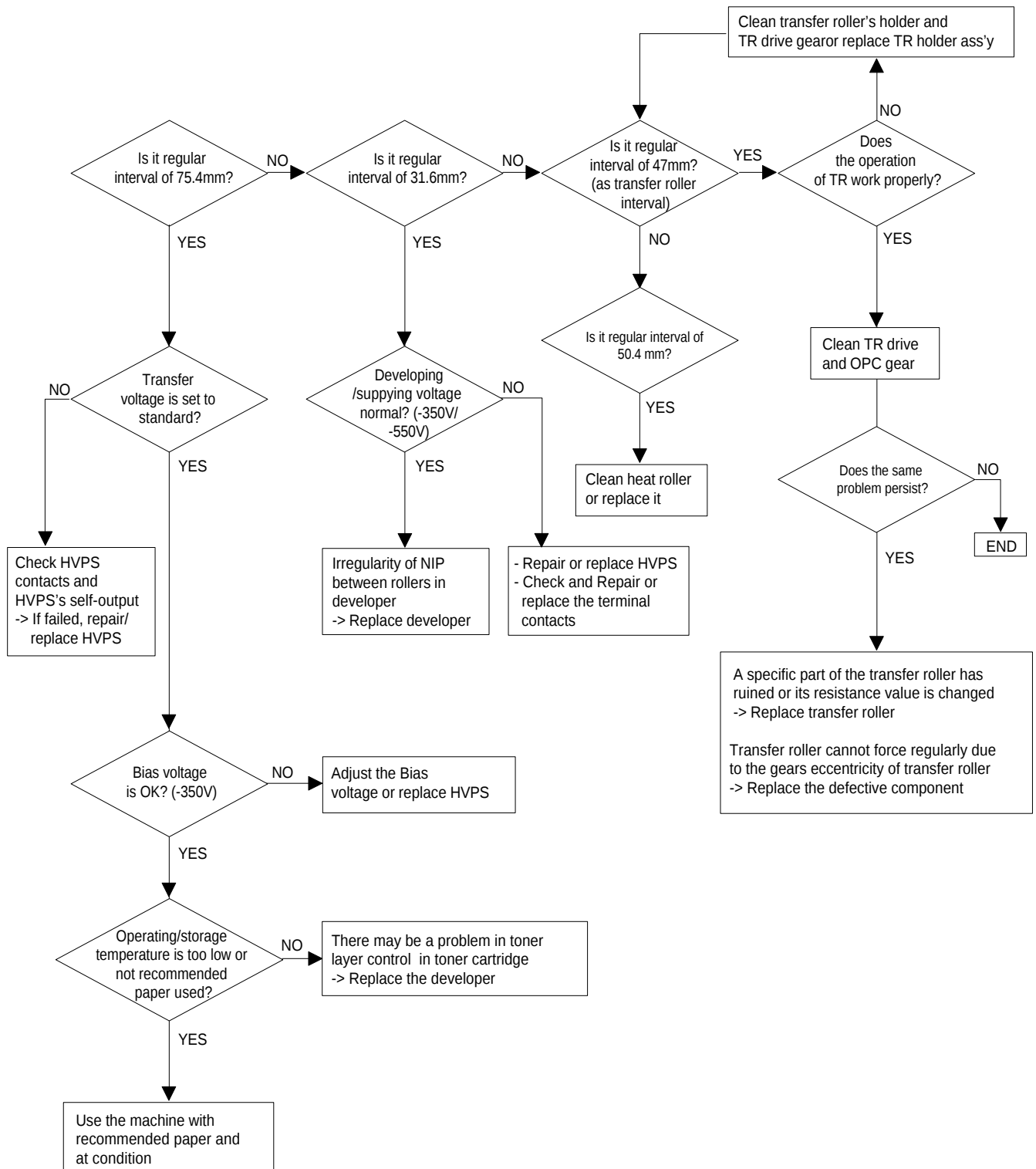
Dark Image



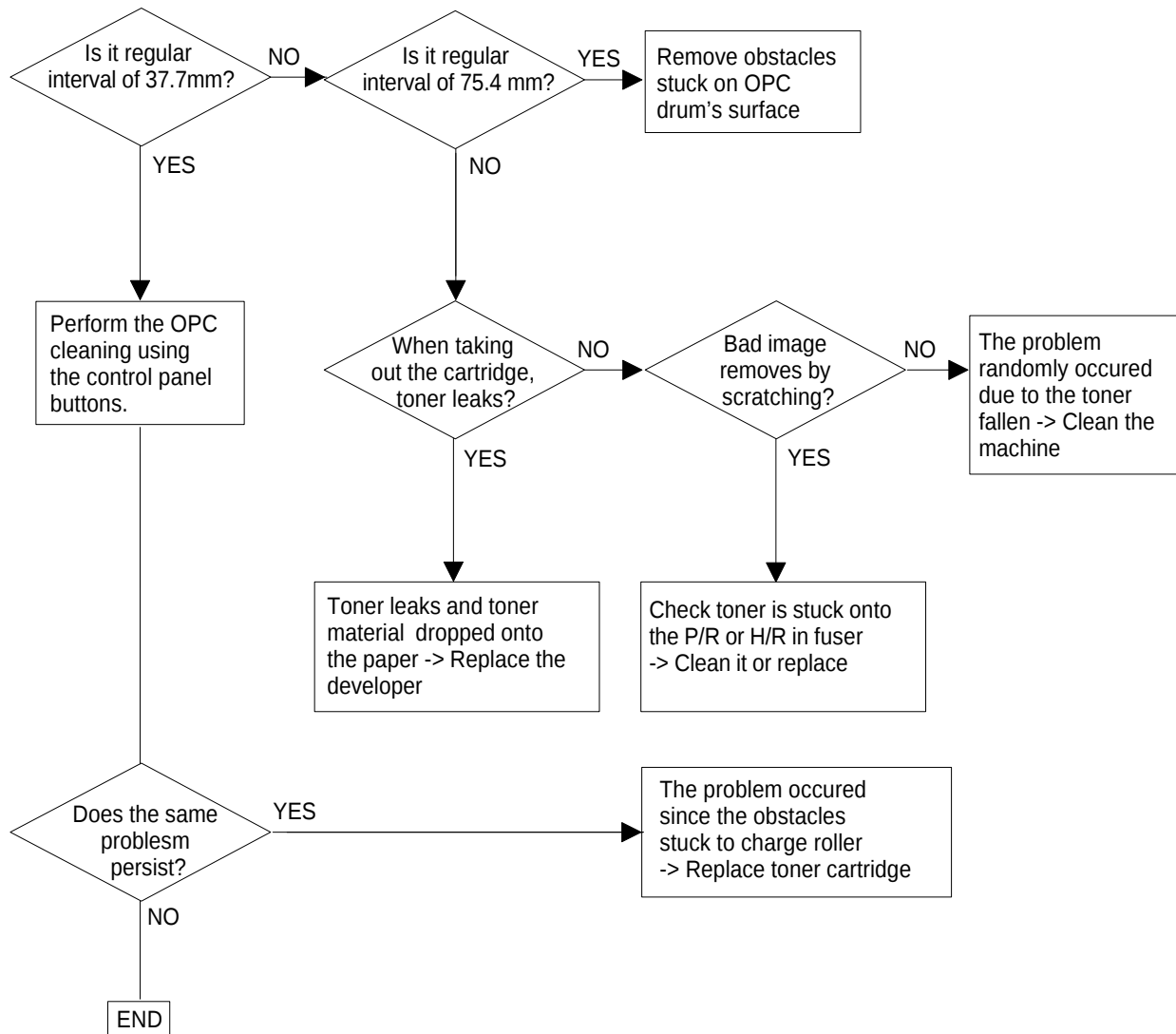
Background



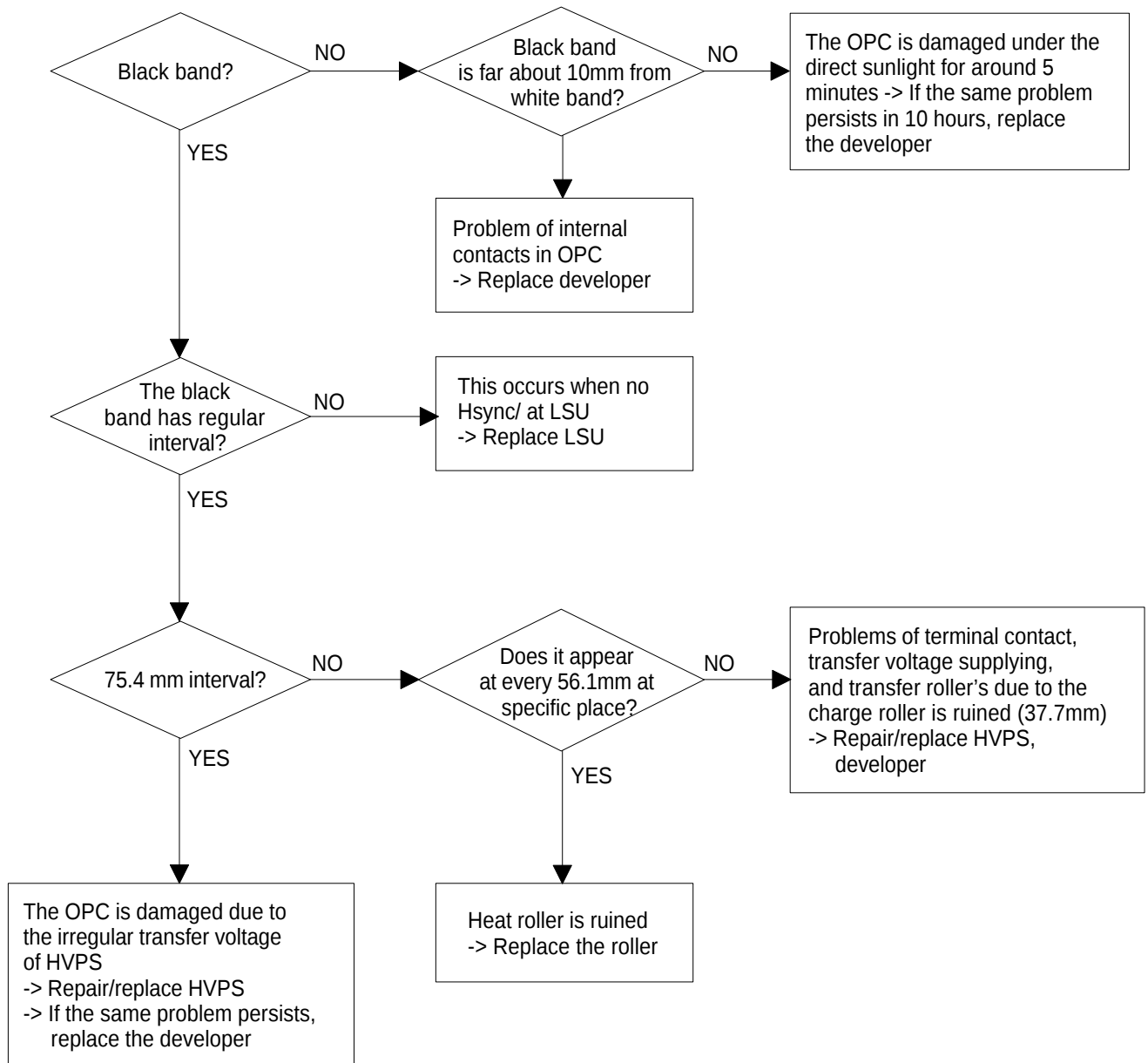
Ghost

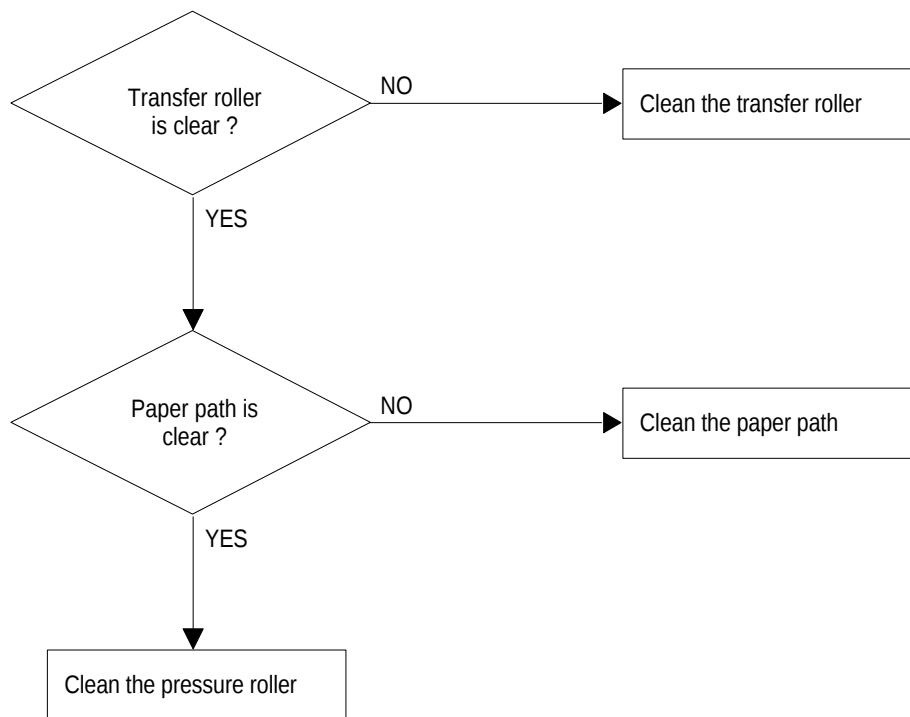


Black Spot

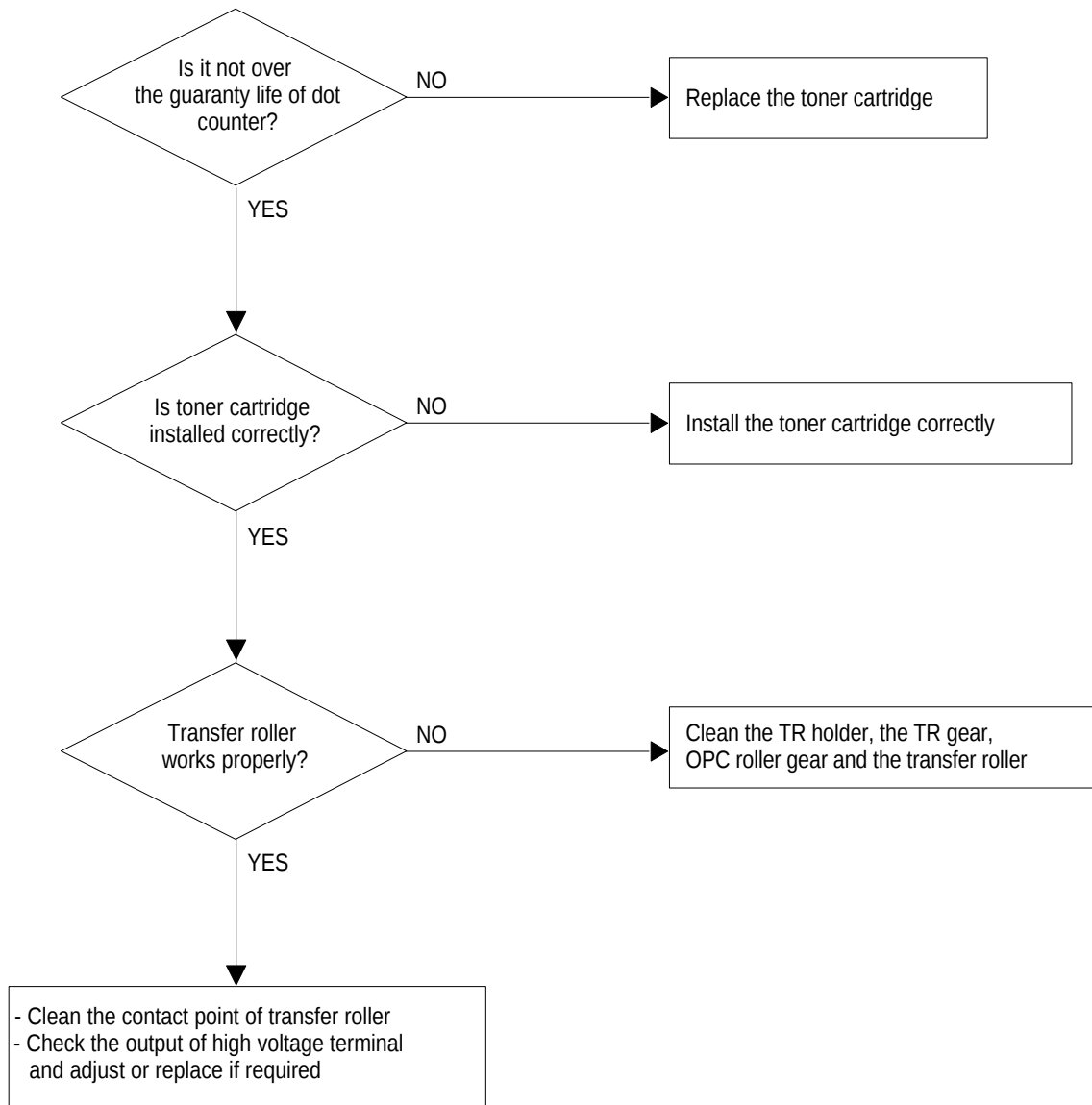


Horizontal Band

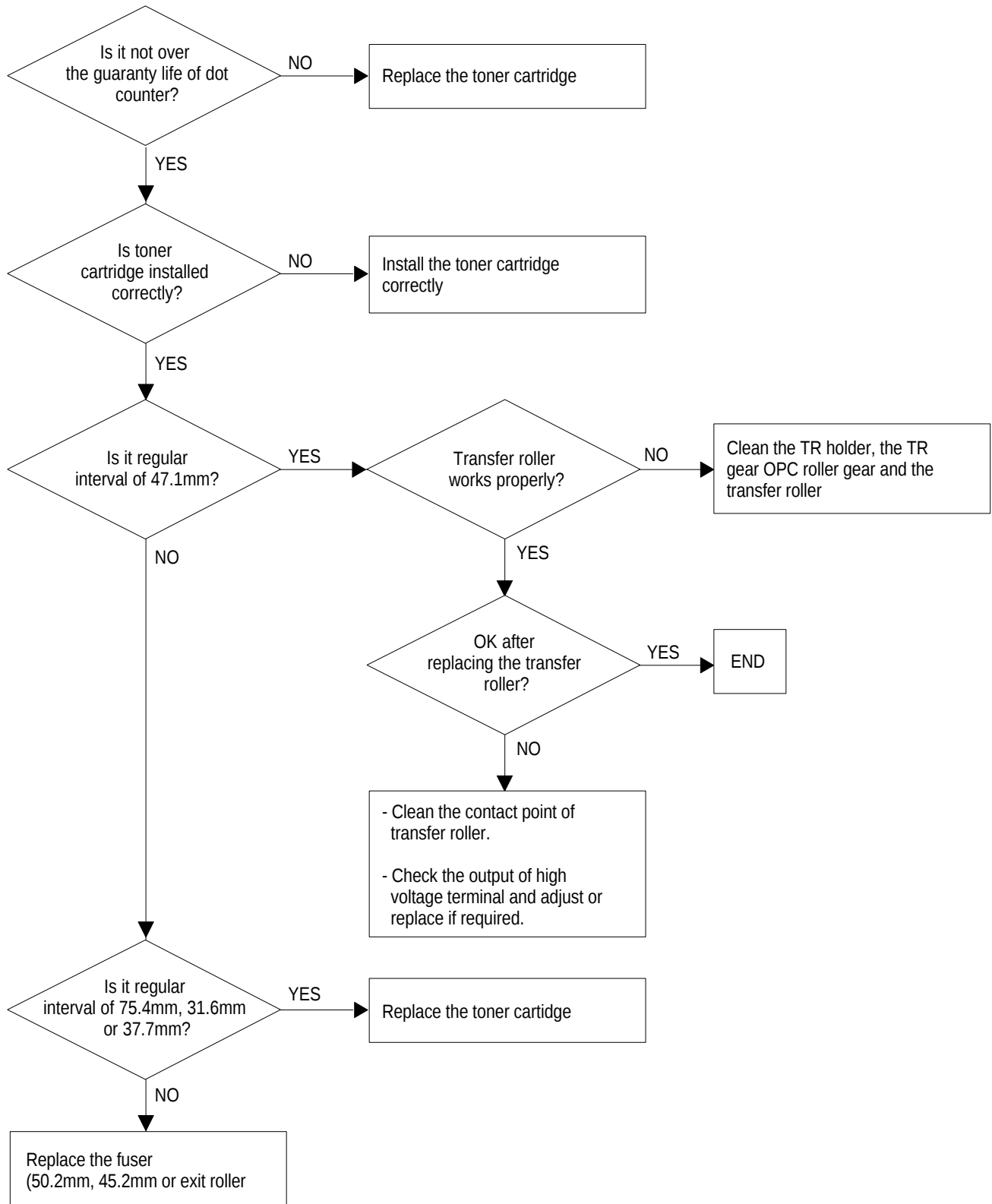


Toner Contaminations on Back of Paper

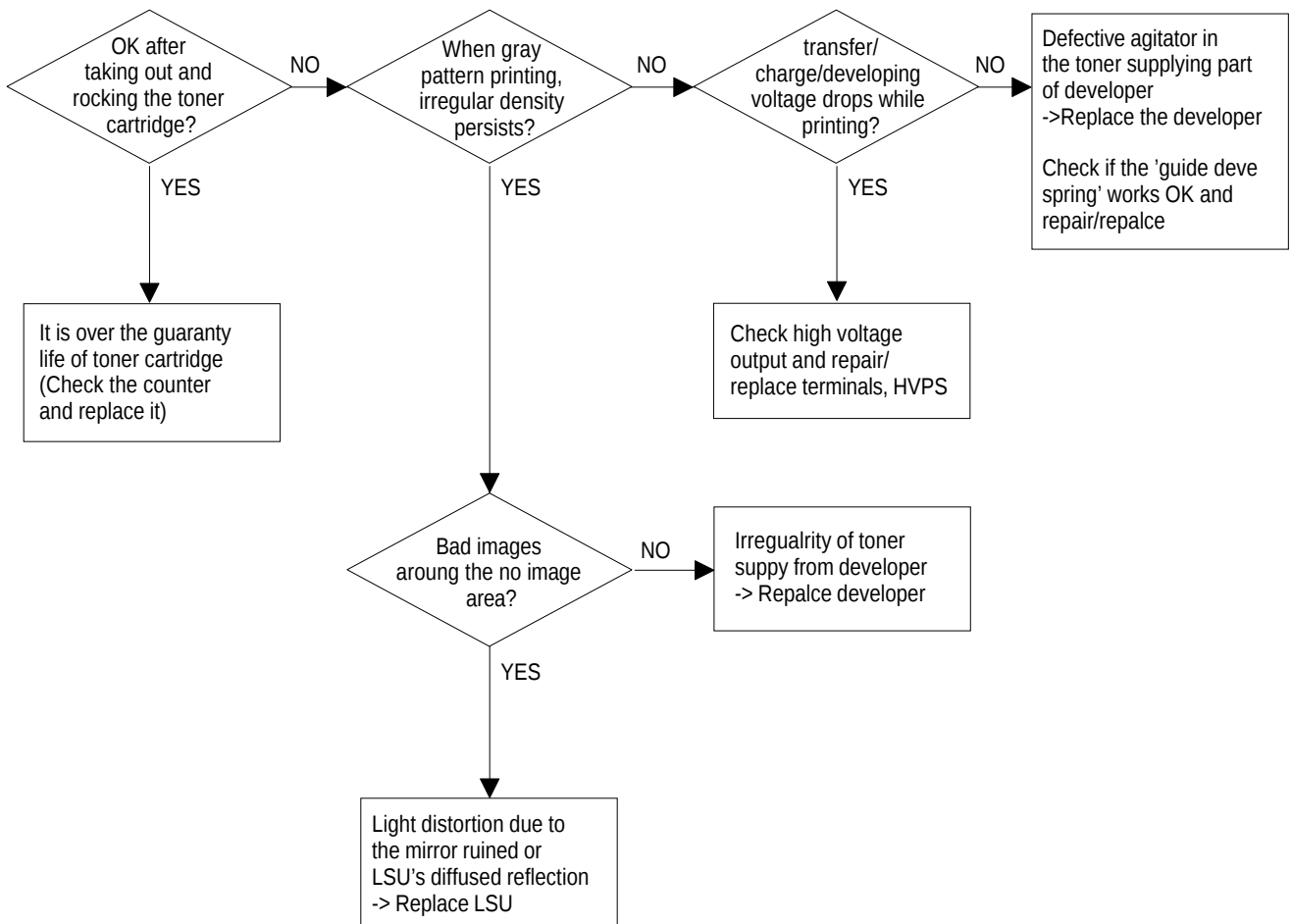
Partial Blank Image (not Periodic)



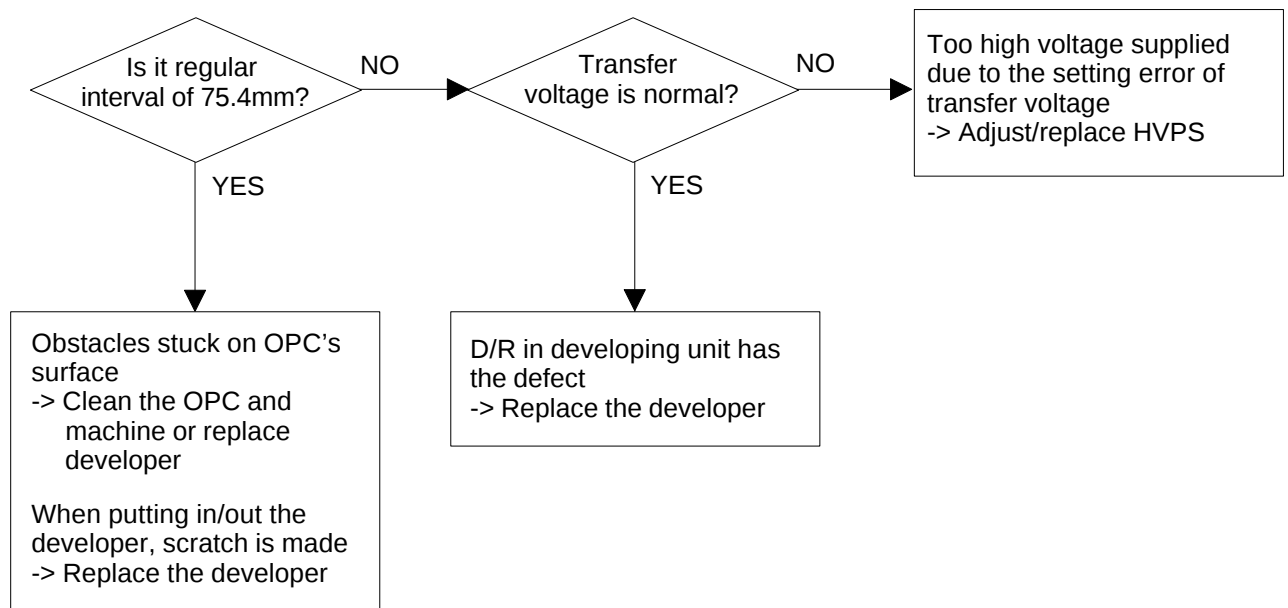
Partial Blank Image (Periodic)

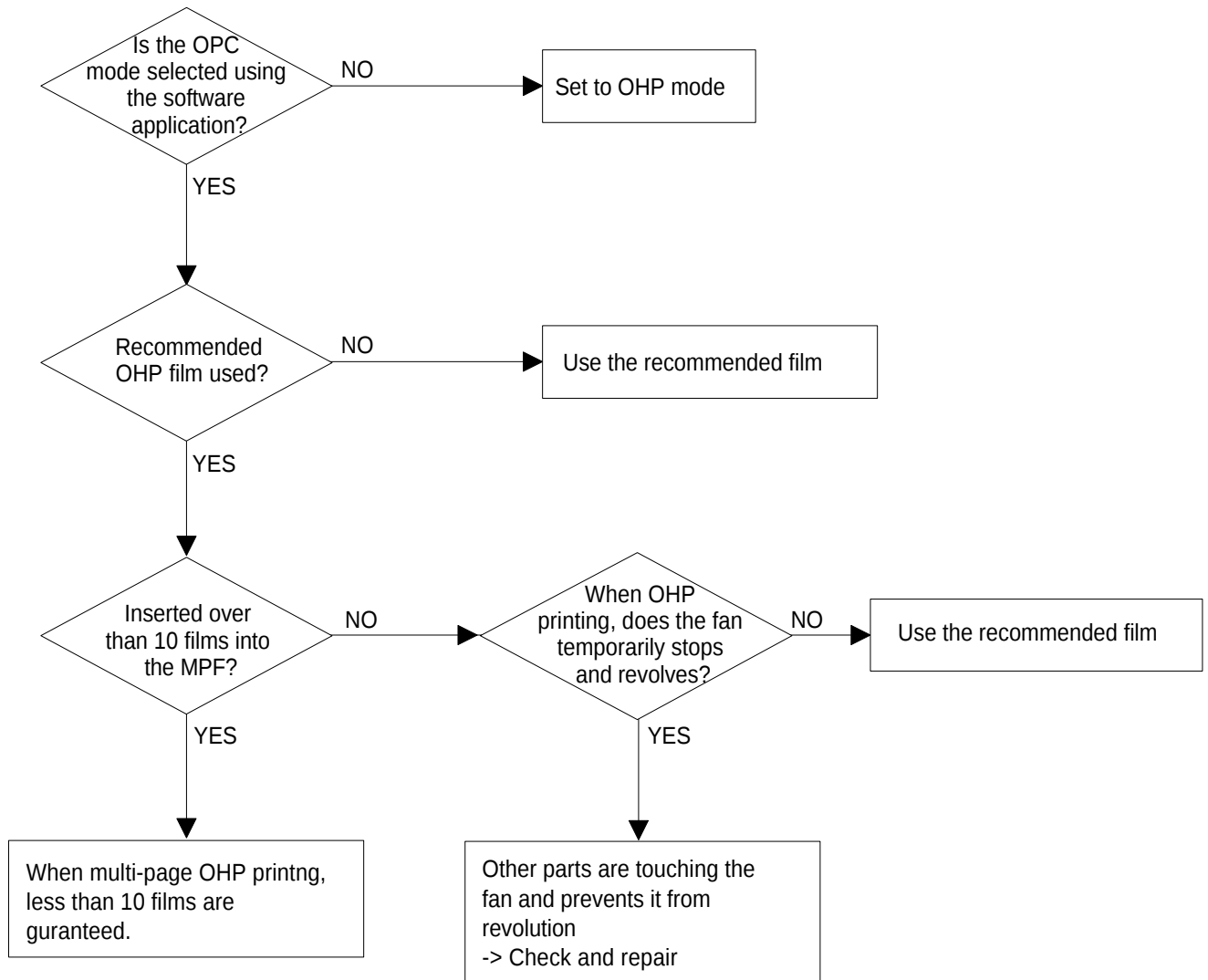


Irregular Density

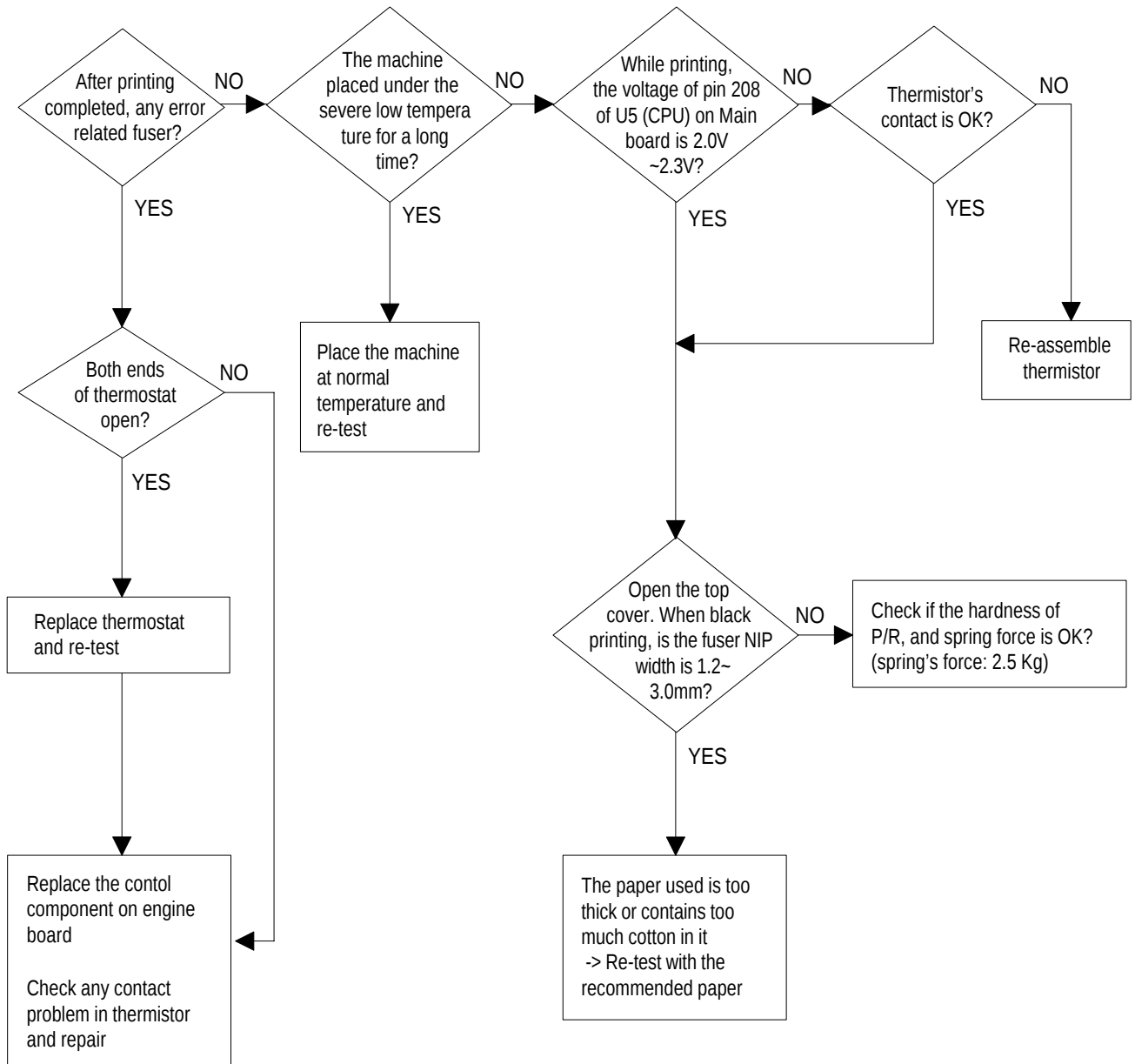


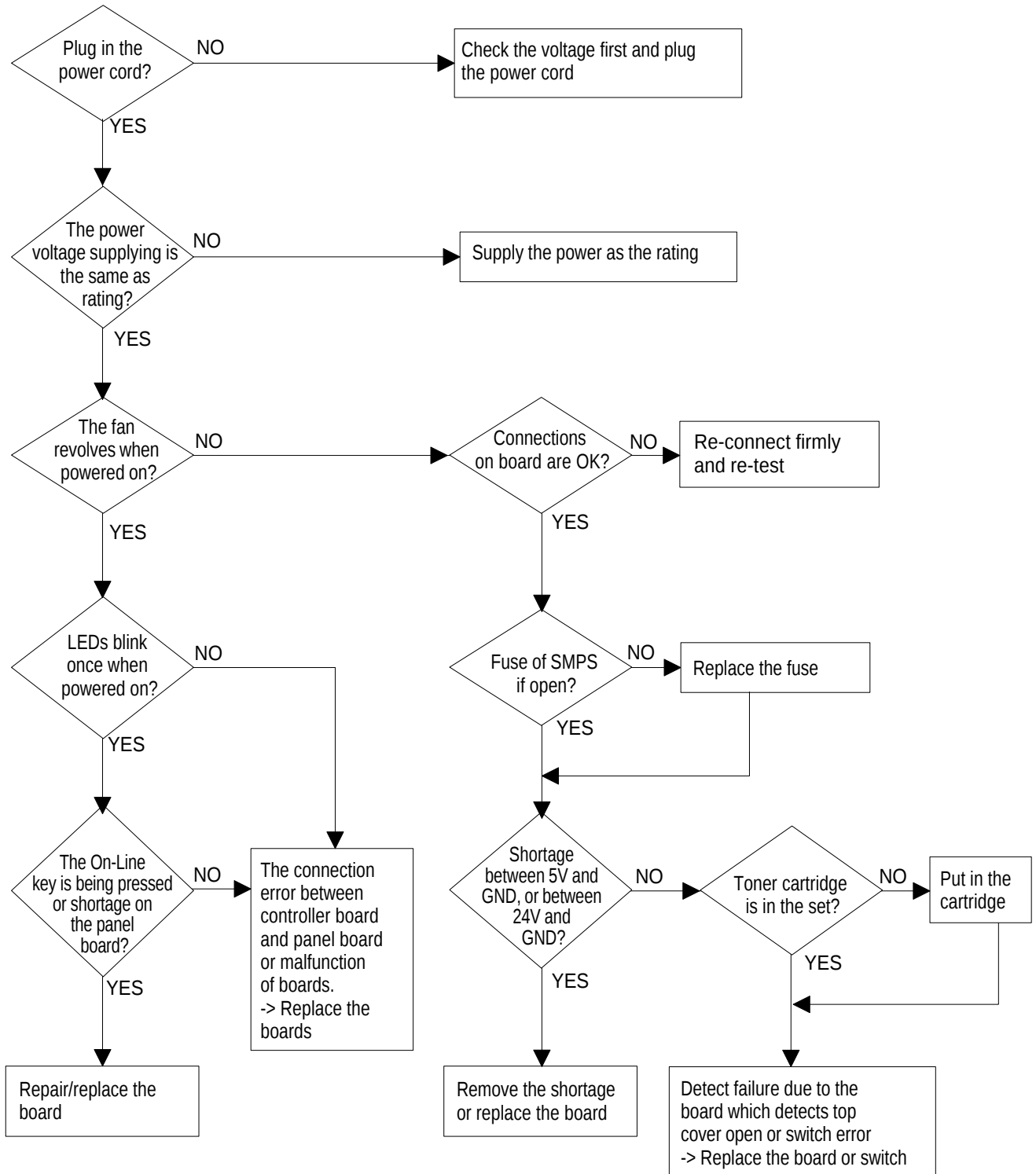
White Spot



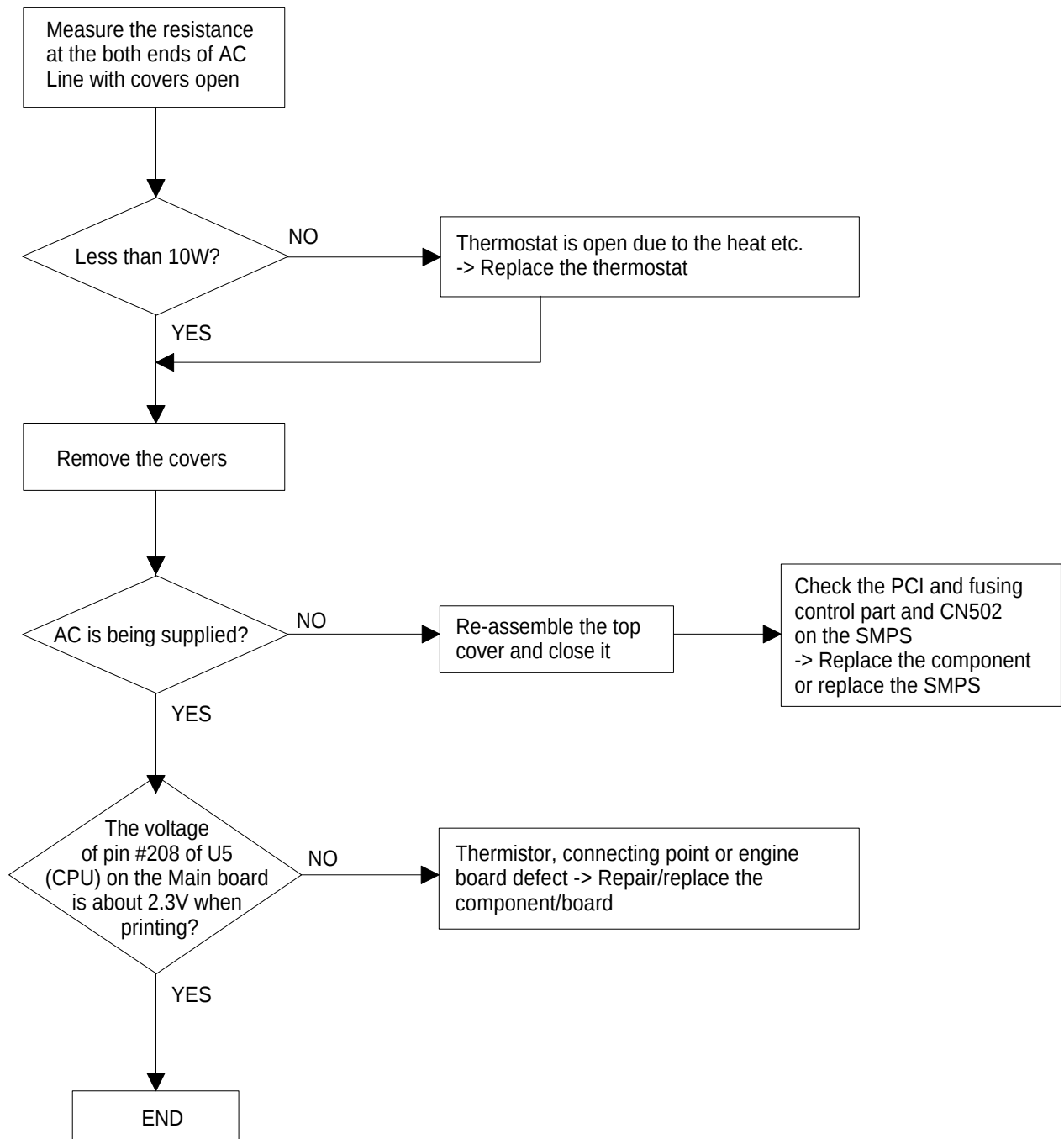
Trembling at the End When OHP Printing

Poor Fusing Grade

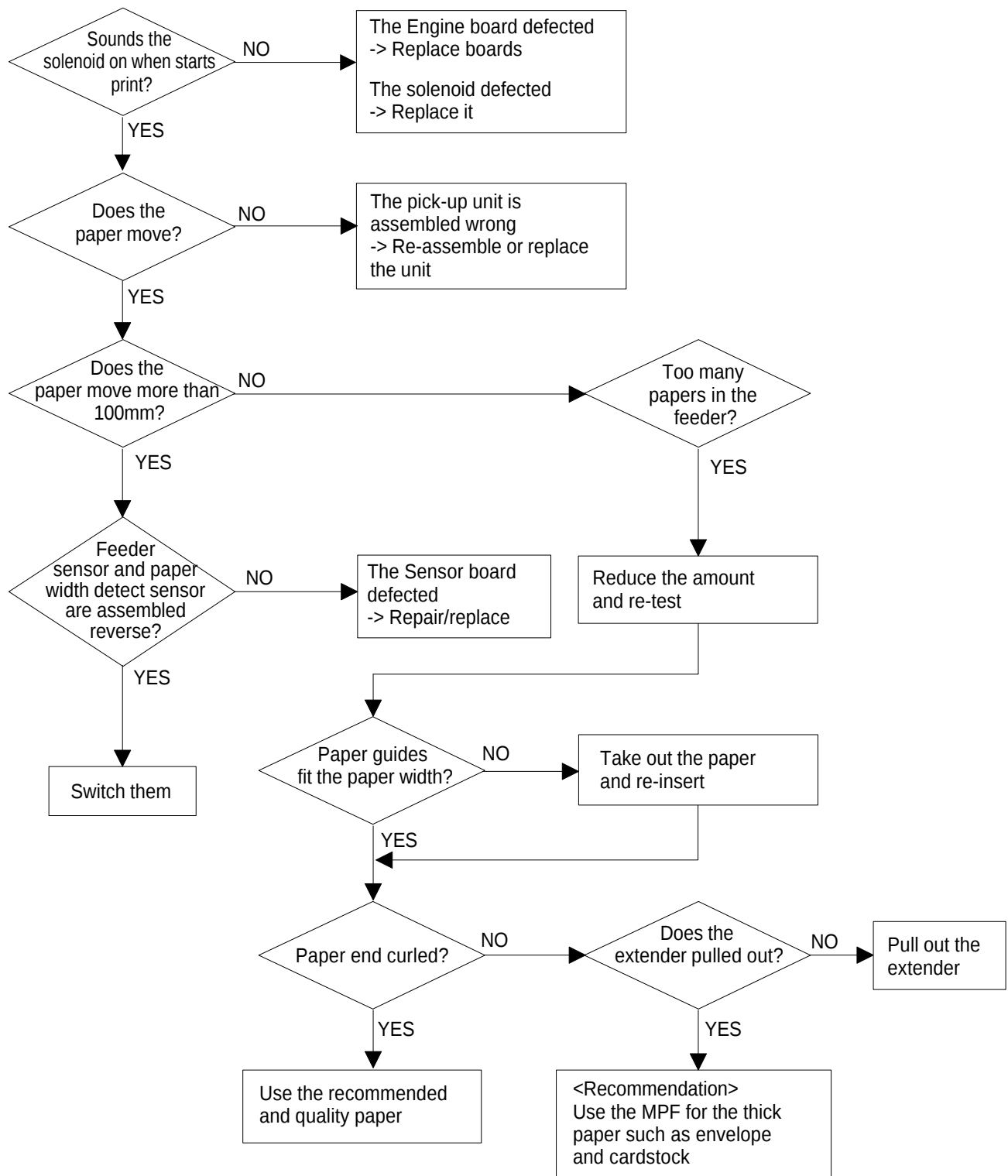


No Power (LCD NO display LED Off)

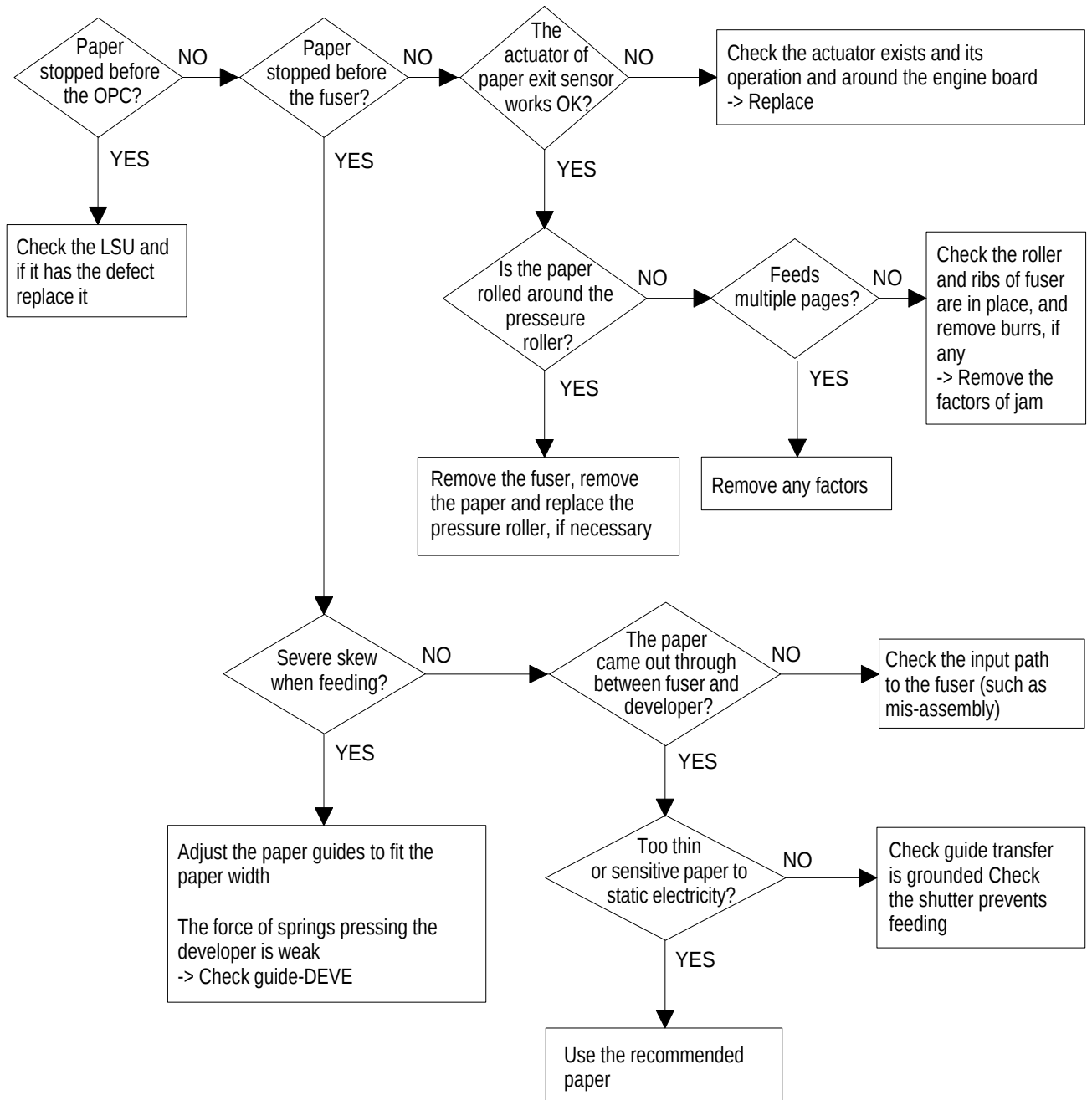
Fuser Error

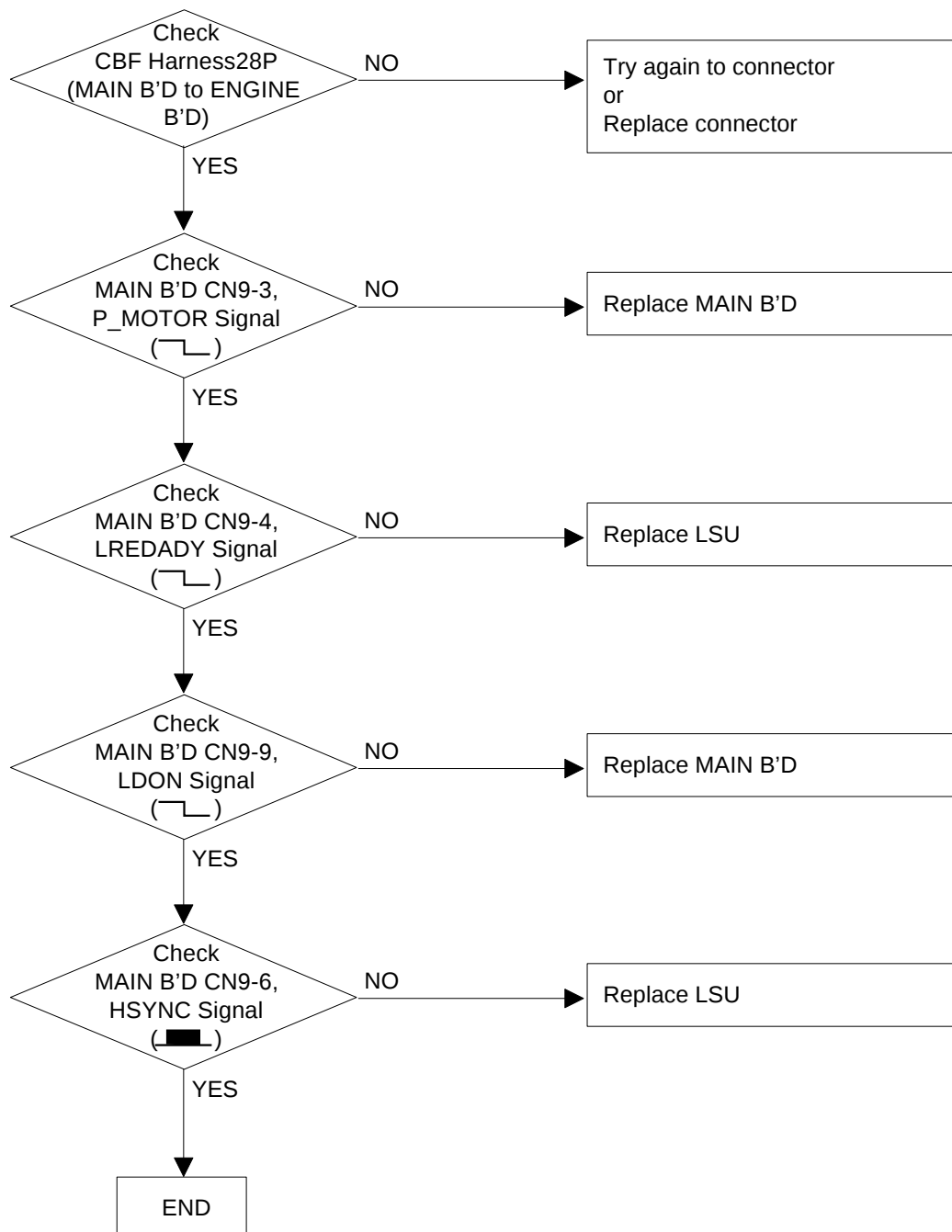


Paper Jam (Mis-feeding)



Paper Jam (Jam1)



LSU Error

Appendix Information

* Please refer to list

BUYER	ELA UOU OPE-FRONT	EMC-TRAY	PBA MAIN-LIU
SF-5100I/XEU	JC96-01685A	JC75-00062A	JC92-01155A
SF-5100PI/XEU	JC96-01685B	JC75-00075A	JC92-01155A
SF-5100I/XAR	JC96-01685L	JC75-00075A	JC92-01192C
SF-5100PI/XAR	JC96-01685D	JC75-00075A	JC92-01192C
SF-5100I/XEG	JC96-01685G	JC75-00062A	JC92-01192D
SF-5100PI/XEG	JC96-01685H	JC75-00075A	JC92-01192D
SF-5100I/XSA	JC96-01685N	JC75-00062A	JC92-01192E
SF-5100PI/XSA	JC96-01685P	JC75-00075A	JC92-01192E
SF-5100I/XEF	JC96-01685L	JC75-00062A	JC92-01192A
SF-5100PI/XEF	JC96-01685M	JC75-00075A	JC92-01192A
SF-5100PI/XAC	JC96-01685Y	JC75-00075A	JC92-01192C
SF-5100I/XIL	JC96-01685J	JC75-00062A	JC92-01192C
SF-5100PI/XIL	JC96-01685K	JC75-00075A	JC92-01192C
SF-5100I/XEP	JC96-01685U	JC75-00062A	JC92-01155A
SF-5100PI/XEP	JC96-01685V	JC75-00075A	JC92-01155A
SF-5100I/XET	JC96-01685Q	JC75-00062A	JC92-01155A
SF-5100PI/XET	JC96-01685R	JC75-00075A	JC92-01155A
SF-5100I/XEC	JC96-01685S	JC75-00062A	JC92-01155A
SF-5100PI/XEC	JC96-01685T	JC75-00075A	JC92-01155A
SF-5100I/EUE	JC96-01685C	JC75-00062A	JC92-01155A
SF-5100PI/EUE	JC96-01685Y	JC75-00075A	JC92-01155A
SF-5100I/TEG	JC96-01685G	JC75-00062A	JC92-01192D
SF-5100PI/TEG	JC96-01685H	JC75-00075A	JC92-01192D
SF-5100I/XIL	JC96-01685J	JC75-00062A	JC92-01192C
SF-5100PI/XIL	JC96-01685K	JC75-00075A	JC92-01192C
SF-5100I/XFA	JC96-01685C	JC75-00062A	JC92-01192C
SF-5100PI/XFA	JC96-01685Y	JC75-00075A	JC92-01192C
SF-5100I/XSG	JC96-01685C	JC75-00062A	JC92-01192C
SF-5100PI/XSG	JC96-01685Y	JC75-00075A	JC92-01192C

6. Exploded Views and Parts Lists

6-1 Main Assembly

6-2 Shield Engine Unit Assembly

6-3 Engine/Frame Lower Assembly

6-4 Fuser Assembly

6-5 RX Drive Unit Assembly

6-6 Holder Feed Unit Assembly

6-7 Plate-Upper Unit Assembly

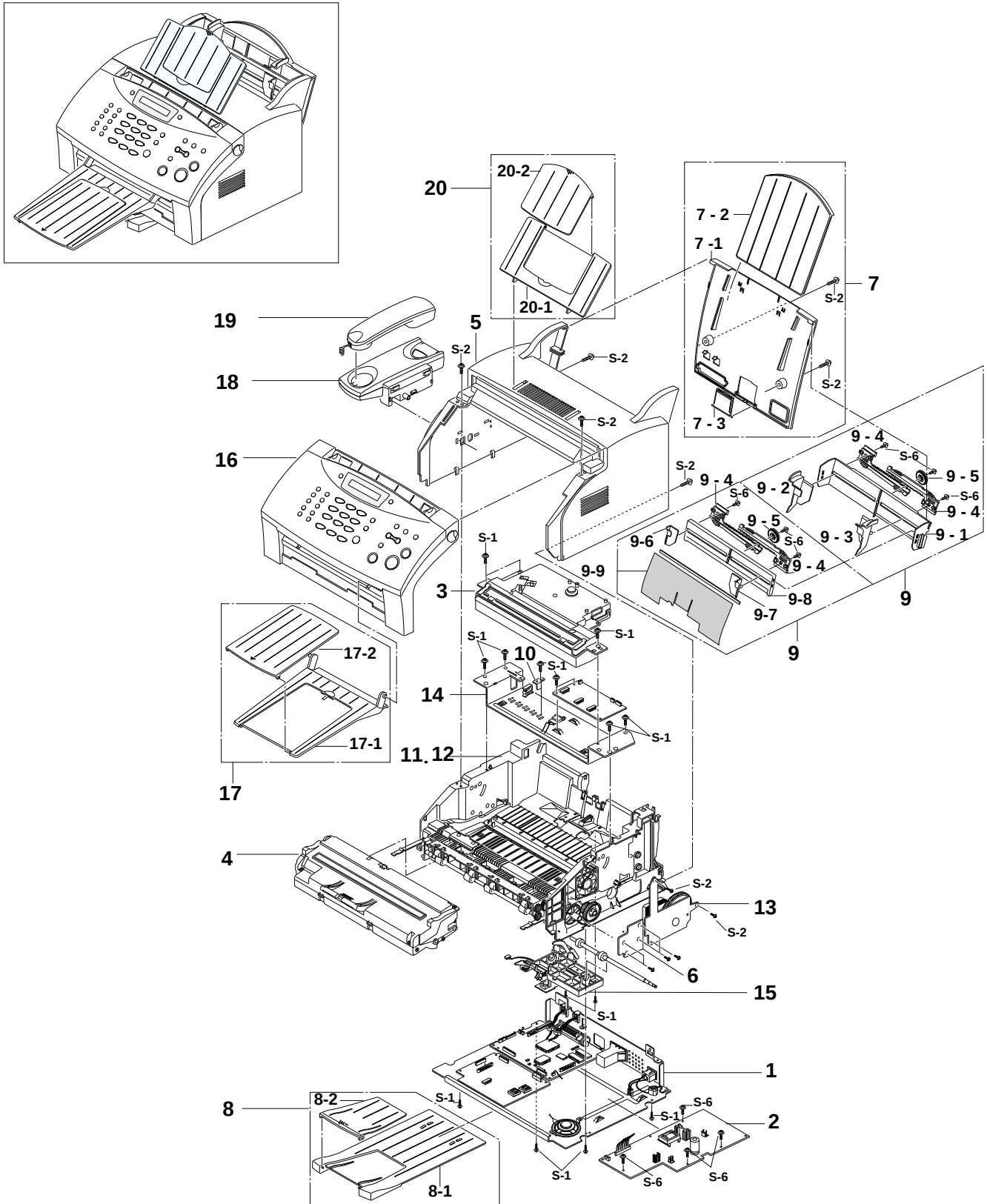
6-8 OPE-Front Unit Assembly

6-9 Cradle Unit Assembly

6-10 Handset Assembly

6-11 Packing Assembly

6-1 Main Assembly

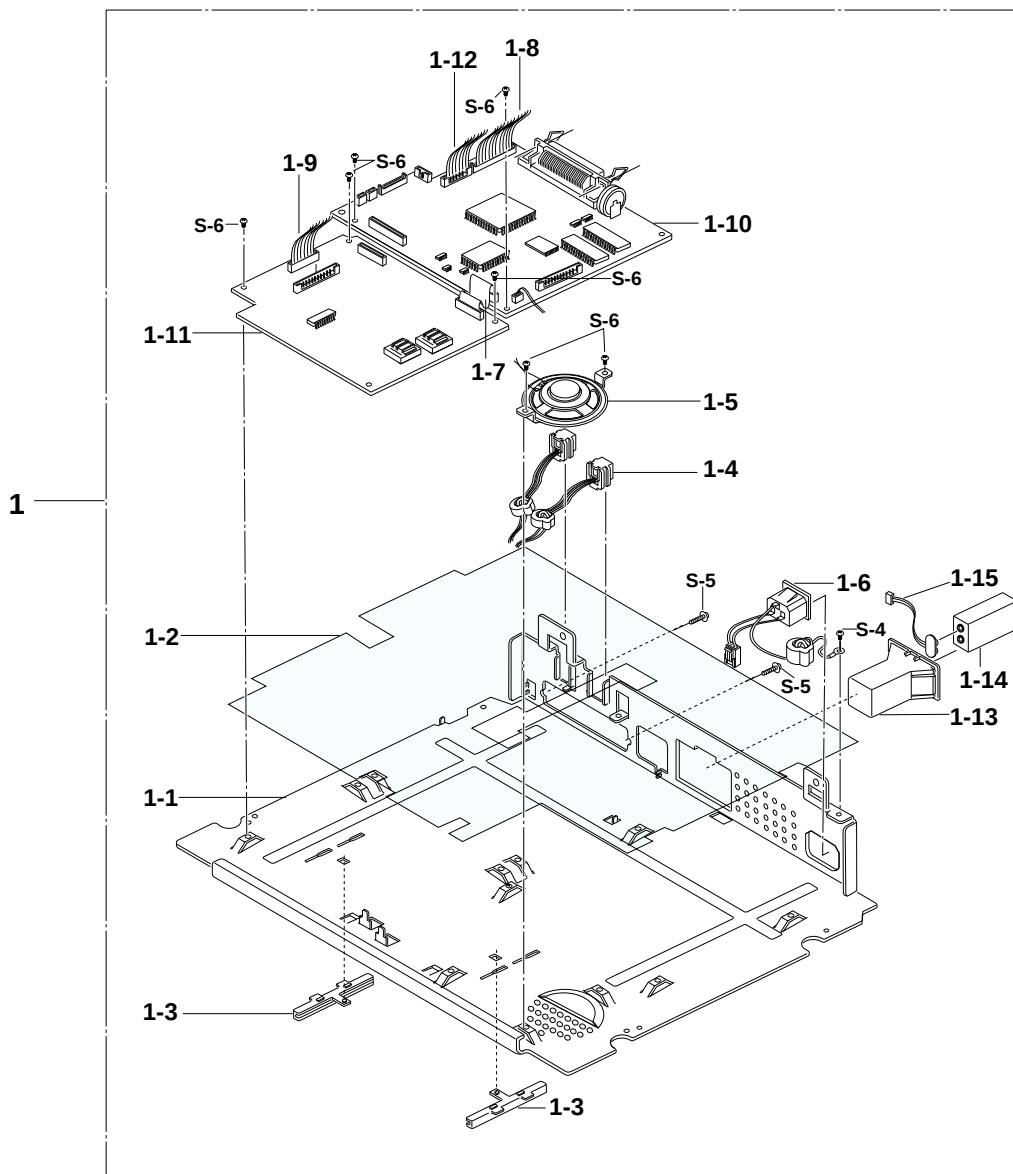
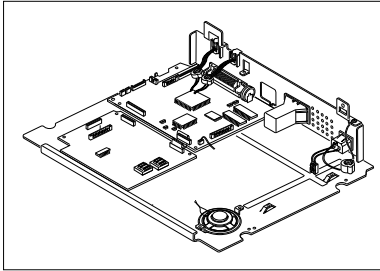


Main Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
1		ELA HOU-SHIELD ENGINE	*	1		
2		PBA-SMPS	JC44-00006A	1	O	For 220V
		PBA-SMPS	JC44-00004A	1	O	For 110V
3		UNIT-LSU	JC59-00002A	1	O	
4		ELA UNIT-DEVE PUBLIC	*	1		
5		PMO-COVER TOP	JC72-00128A	1	O	
6		IRP-BRACKET FUSER DRV	JC70-00108A	1	O	
7		MEC-COVER_REAR	JC75-00059A	1	O	
	7-1	PMO-COVER_REAR	*	1		
	7-2	PMO-TRAY_LARGE	*	1		
	7-3	PMO-COVER_BATT	*	1		
8		MEC-STACKER	JC75-00060A	1	O	
	8-1	PMO-STACKER_MAIN	*	1		
	8-2	PMO-STACKER_SUB	*	1		
9		MEC-TRAY	refer the information	1	O	
	9-1	PMO-TRAY_AUTO	*	1		
	9-2	PMO-ADJUST_AUTO,L	*	1		
	9-3	PMO-ADJUST_AUTO,R	*	1		
	9-4	PMO-GEAR-ADJUST RACK	*	2		
	9-5	PMO-GEAR-PINION	*	1		
	9-8	TRAY MANUAL, PA	*	1		
	S-6	SCREW-TAPTITE	*	3		
9		MEA UNIT-TRAY (P)	refer the information	1	O	
	9-1	PMO-TRAY_AUTO	*	1		
	9-2	PMO-ADJUST_AUTO,L	*	1		
	9-3	PMO-ADJUST_AUTO,R	*	1		
	9-4	PMO-GEAR-ADJUST RACK	*	4		
	9-5	PMO-GEAR-PINION	*	2		
	9-6	PMO-ADJUST MANUAL, L	*	1		
	9-7	PMO-ADJUST MANUAL, R	*	1		
	9-8	TRAY MANUAL, PA	*	1		
	9-9	GUIDE-FILM PAPER	*	1		
	S-6	TAPTITE-SCREW	*	6		
10		IPR-PLATE_CHANNEL	JC70-00058A	1	O	
11		ELA HOU-ENGINE ASS'Y	*	1		
12		ELA HOU-FRAME LOWER	JC96-01686A	1	O	For 110V
		ELA HOU-FRAME LOWER	JC96-01687A	1	O	For 220V
13		MEC-RX DRIVE	JC75-00085A	1	O	
14		MEC-PLATE-UPPER	JC75-00057A	1	O	
15		MEC-HOLDER FEED	JC75-00055A	1	O	
16		ELA HOU OPE-FRONT	refer the information	1	O	
17		MEC-STACKER RX	JC75 00084A	1	O	
18		MEC-CRADLE	JC75-00083A	1	O	
19		ELA HOU-HANDSET	JC96-01629A	1	O	
20		MEA UNIT-CHUTE ASS'Y	JC97-01187E	1	O	
S-1		TAPTITE-SCREW	*	12		
S-2		TAPTITE-SCREW	*	15		
S-6		TAPTITE-SCREW	*	4		

SA : Service Avail

6-2 Shield Engine Unit Assembly



Shield Engine Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
1		ELA UNIT ENGINE ASSY	*	1		
	1-1	IPR-SHIELD-ENGINE	JC70-00037A	1	O	
		IPR-SHIELD-ENGINE	JC70-00037B	1	O	For SF-5100T
	1-2	PCT-INSULATOR SMPS	JC72-00218A	1	O	
	1-3	PMO-GUIDE STACKER	JC72-00171A	2	O	
	1-4	CBF HARNESS-MODULA	JC39-00058A	1	O	
	1-5	ELA M/MEDIO AUD-SPEAKER	JC96-01607A	1	O	
	1-6	POWER-INLET	JC39-40022A	1	O	
	1-7	CABLE-FLAT	3809-001161	1	O	
	1-8	CBF HARNESS-LSU	JC39-00043A	1	O	
	1-9	CBF HARNESS-LIU/HOOK	JC39-00048A	1	O	
	1-10	PBA MAIN-MAIN	JC92-01152A	1	O	
	1-11	PBA MAIN-LIU	refer the information	1	O	
	1-12	CBF HARNESS-MAIN/HVPS	JC39-00047A	1	O	
	1-13	PMO-CASE BATTERY	JC72-00181A	1	O	For SF-5100T
	1-14	BATTERY		1		For SF-5100T
	1-15	CBF HARNESS-BATTERY		1		For SF-5100T
	S-4	SCREW-MACHINE	*	1		
	S-5	SCREW-TAPTITE	*	2		
	S-6	SCREW-TAPTITE	*	7		

SA : Service Avail



Engine/Frame Lower Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
11		ELA HOU-ENGINE ASS'Y	*	1		
	11-1	PBA-HOOK	JC92-01196A	1	O	
	11-2	PBA-ENGINE	JC92-01154A	1	O	
	11-4	PBA-HVPS	JC92-01184A	1	O	
	11-5	CBF-NARNESS THERMISTOR	JC39-00045A	1	O	
	11-6	UNIT-SOLENOID	JC33-0002A	1	O	
	11-7	CBF HARNESS-MAIN/SCAN	JC39-00040A	1	O	
	11-8	MEC-GEAR PICKUP	JC75-00056A	1	O	
	11-8-1	PMO-GEAR_PICKUP,1	*	1		
	11-8-2	PMO-GEAR_PICKUP,2	*	1		
	11-8-3	SPRING-PICKUP,GEAR	*	1		
	11-9	PMO-CAM_PICKUP	*	1		
	11-10	PMO-SHAFT_PICKUP	*	1		
	11-12	PMO-GEAR_FEED	JC72-00115A	1	O	
	11-13	PMO-CLUTCH_FEED	JC72-00116A	1	O	
	11-14	SPRING-CLUTCH	JC61-00012A	1	O	
	11-16	MEC-KNOCKUP ASSY	JC75-00053A	1	O	
	11-16-1	PMO-PLATE_KNOCKUP	*	1		
	11-16-2	PMO-CAM-KNOCKUP	*	1		
	11-16-3	IPR-BAR_KNOCKUP	*	1		
	S-6	SCREW-TAPTITE	*	2		
	11-17	SPRING-KNOCKUP	JC61-00023A	1	O	
	11-18	MEC-HOLDER PAD	JC75-00052A	1	O	
	11-18-1	PMO-HOLDER_PAD	*	1		
	11-18-2	RPR-PAD FRICTION	*	1		
	11-18-3	SPRING-PAD	*	1		
	11-19	PMO-CAP_PAD	JC72-00124A	2	O	
	11-20	MEC-SIDE PAD(R)	JC75-00051A	1	O	
	11-21	MEC-SIDE PAD(L)	JC75-00050A	1	O	
	11-22	PMO-GEAR_TRANSFER	JC72-00179A	1	O	
	11-23	ROLLER-TR(APOLLO)	JC75-00035A	1	O	
	11-24	MEC-TERMINAL	JC75-00049A	5	O	
	11-24-1	TERMINAL	*	1		
	11-24-2	SPRING-HV LARGE	*	2		

SA : Service Avail

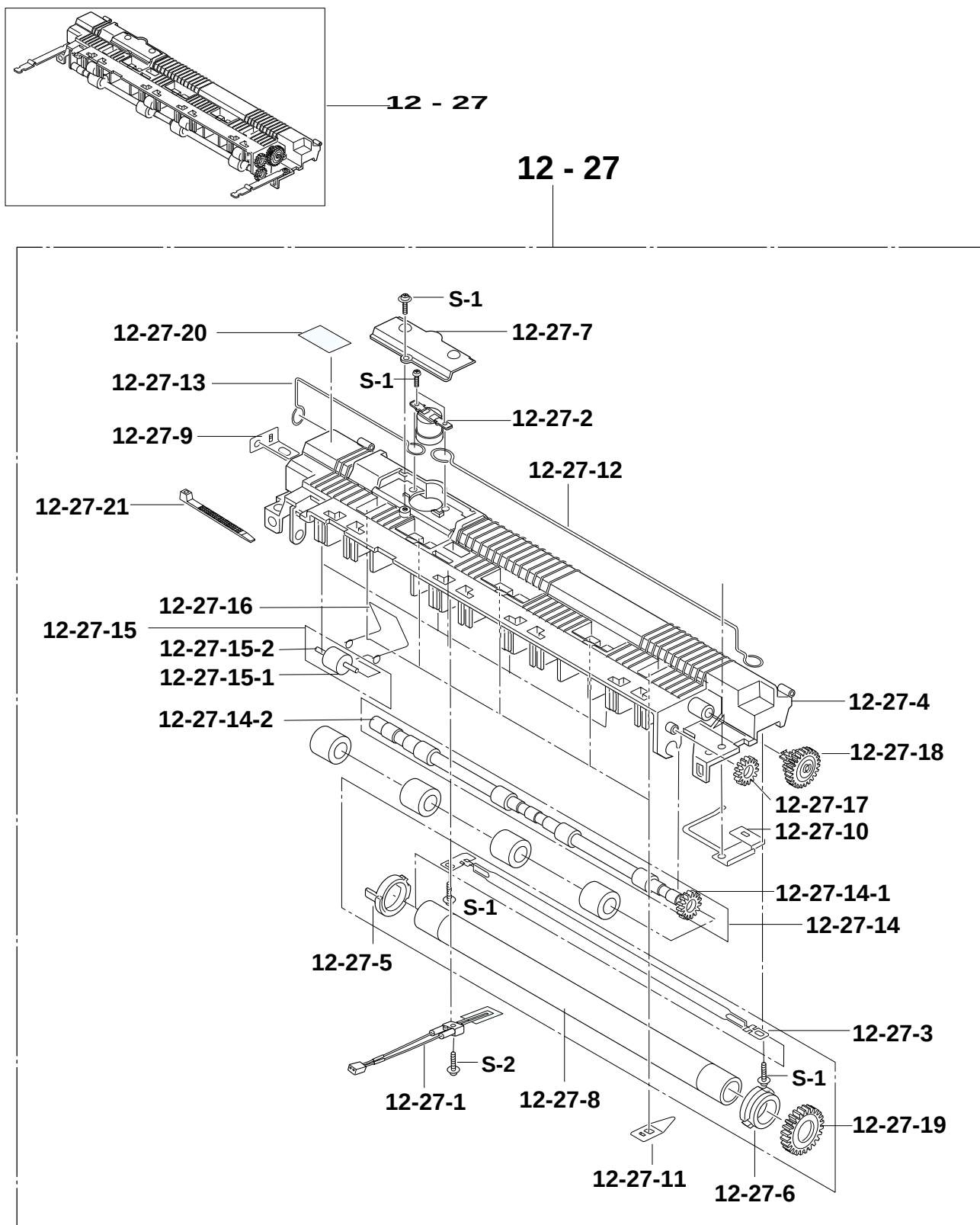
LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
12	11-25	PCT-INSULATOR ENG BD	*	1		
	S-1	SCREW-TAPTITE	*	9		
		ELA HOU-FRAME LOWER	JC96-01687A	1	O	For 220V
		ELA HOU-FRAME LOWER	JC96-01686	1	O	For 110V
	12-1	PMO-MAIN FRAME	*	1		
	12-2	MEA ETC-HOLDER TR L	*	1		
	12-2-1	PMO-HOLDER TR	*	1		
	12-2-2	PMO-BUSHING_TR(L)	*	1		
	12-2-3	SPRING-TR	*	1		
	12-2-4	IPR-PLATE_TR	*	1		
	12-3	MEA ETC-HOLDER TR R	*	1		
	12-2-1	PMO-HOLDER TR	*	1		
	12-3-1	PMO-BUSHING_TR(R)	*	1		
	12-2-3	SPRING-TR	*	1		
	12-4	PMO-CAP PLTE GU/DEV R	JC72-41135A	1	O	
	12-5	PMO-CAP PLTE GU/DEV L	JC72-41173A	1	O	
	12-6	SPRING-GUIDE DEVE	JC61-00038A	2	O	
	12-7	PMO-ACTUATOR_EXIT	*	1		
	12-8	PMO-HOLDER_EXIT	*	1		
	12-9	PMO-BUSHING_TERMINAL	*	1		
	12-10	ELA HOU-OPEN SENSOR	JC96-01584A	1	O	
	12-10-1	IPR-BRKT_SENSOR	*	1		
	12-10-2	SENSOR	*	1		
	12-10-3	CBF-HARNESS COVER	JC39-00041A	1	O	
	S-10	SCREW-TAPTITE	*	1		
	12-11	IPR-GUIDE-TR	*	1		
	12-12	IPR-PLATE-TERMINAL	*	1		
	12-13	IPR-SAW_PLATE	*	1		
	12-14	PCT-FILM SAW	*	1		
	12-16	IPR-EARTH_TRANS	*	1		
	12-17	IPR-GROUND_GUIDE	*	1		
	12-19	IPR-GROUND_HVPS	*	1		
	12-20	IPR-GROUND_FUSER	*	1		
	12-21	IPR-GROUND_DRV	*	1		
	12-22	CBF HARNESS-OPE GND	*	1		

SA : Service Avail

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
13	12-23	MEA ETC-HOLDER PR	*	2		For 110V For 220V
	12-23-1	PMO-HOLDER_PR	*	1		
	12-23-2	BEARING-PR	JC66-10205A	1	O	
	12-23-3	SPRING-PR	*	1		
	12-24	MEC-ROLLER_PRESSURE	JC75-00027A	1	O	
	12-25	PMO-GUIDE_INPUT	*	1		
	12-26	RMO-RUBBER_FOOT	*	2		
	12-27	ELA HOU-FUSER ASS'Y	JC96-01621A	1		
		ELA HOU-FUSER ASS'Y	JC96-01632A	1		
	12-28	CBF-HARNESS FUSER	*	1		
	12-29	PHO-STOPPER EXIT	JC72-41396B	2	O	
	12-30	ELA HOU-MOTOR GND	*	1		
	12-31	PMO-BUSHING SHAFT	JG72-40849A	1	O	
	12-32	FAN-DC	3103-001071	1	O	
	12-33	PMO-GEAR_83/35	JC72-00154A	1	O	
	12-34	SPRING-FU DR	JC61-00016A	1	O	
	12-35	PMO-GEAR_FU_IN 47	JC72-00155A	1	O	
	12-36	PMO-GEAR_FU_OUT 47	JC72-00157A	1	O	
	12-37	MEC-ROLLER FEED	JC75-00054A	1	O	
	12-38	PBA-SENSOR	JC92-01197A	1	O	
	12-39	EMC-HOLDER FEED	JC75-00055A	1	O	
	12-40	CBF-HARNESS	JC39-00064A	1	O	
	12-41	IRP-BRACKET FVSR DRV	JC70-00108A	1	O	
		EL A UNIT-RX DRIVE	JC75-00085AA	1	O	
	S-1	SCREW-TAPTITE	*	10		
	S-2	SCREW-TAPTITE	*	2		

SA : Service Avail

6-4 Fuser Assembly

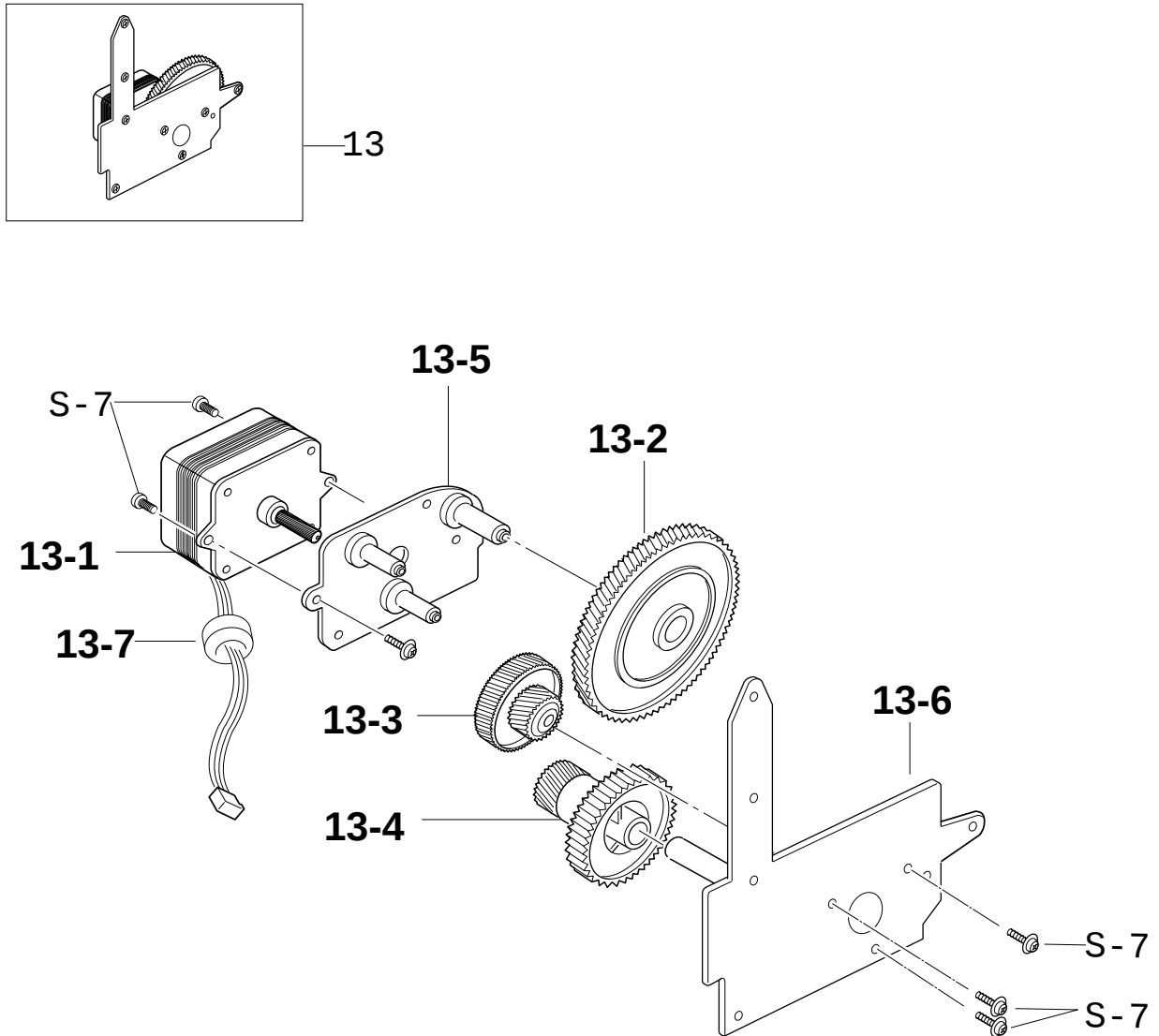


Fuser Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
	12-27	ELA HOU-FUSER ASS'Y	JC96-01618A	1	O	For 110V
		ELA HOU-FUSER ASS'Y	JC96-01632A	1	O	For 220V
	12-27-1	THERMISTOR-NTC	1404-001188	1	O	
	12-27-2	THERMOSTAT-150C	4712-000001	1	O	
	12-27-3	LAMP-HALOGEN	4713-001120	1	O	For 110V
	12-27-3	LAMP-HALOGEN	4713-001121	1	O	For 220V
	12-27-4	PMO-FUSER_UPPER	*	1		
	12-27-5	PMO-BUSHING_HR,L	*	1		
	12-27-6	PMO-BUSHING_HR,R	*	1		
	12-27-7	PMO-COVER_THERMOSTAT	*	1		
	12-27-8	MEC-ROLLER HEAT	JC71-00004A	1	O	
	12-27-9	IPR-ELECTRODE_PLATE	*	1		
	12-27-10	IPR-GROUND_FU	*	1		
	12-27-11	IPR-CLAW_SEPARATOR	*	4		
	12-27-12	ELECTRODE-WIRE,1	*	1		
	12-27-13	ELECTRODE-WIRE,S	*	1		
	12-27-14	MEA ETC-SHAFT EXIT	*	1		
	12-27-14-1	PMO-SHAFT_EXIT(Z15)	*	1		
	12-27-14-2	RMO-RUBBER_EXIT	*	4		
	12-27-15	MEA ETC-ROLLER EXIT	*	1		
	12-27-15-1	MEC-ROLLER EXIT	JC75-00037A	4	O	
	12-27-15-2	IPR-PIN ROLLER EXIT	*	4		
	12-27-16	SPRING-EXIT	*	4		
	12-27-17	PMO-GEAR_EXIT_DRV16	*	1		
	12-27-18	PMO-GEAR_EXIT_IDLE	*	1		
	12-27-19	PMO-GEAR_FUSER,Z29	*	1		
	12-27-20	LABEL HOT	*	1		
	12-27-21	CABLE-TIE	*	1		
	S-1	SCREW TAPTITE	*	5		
	S-2	SCREW TAPTITE	*	1		

SA : Service Avail

6-5 RX Drive Unit Assembly

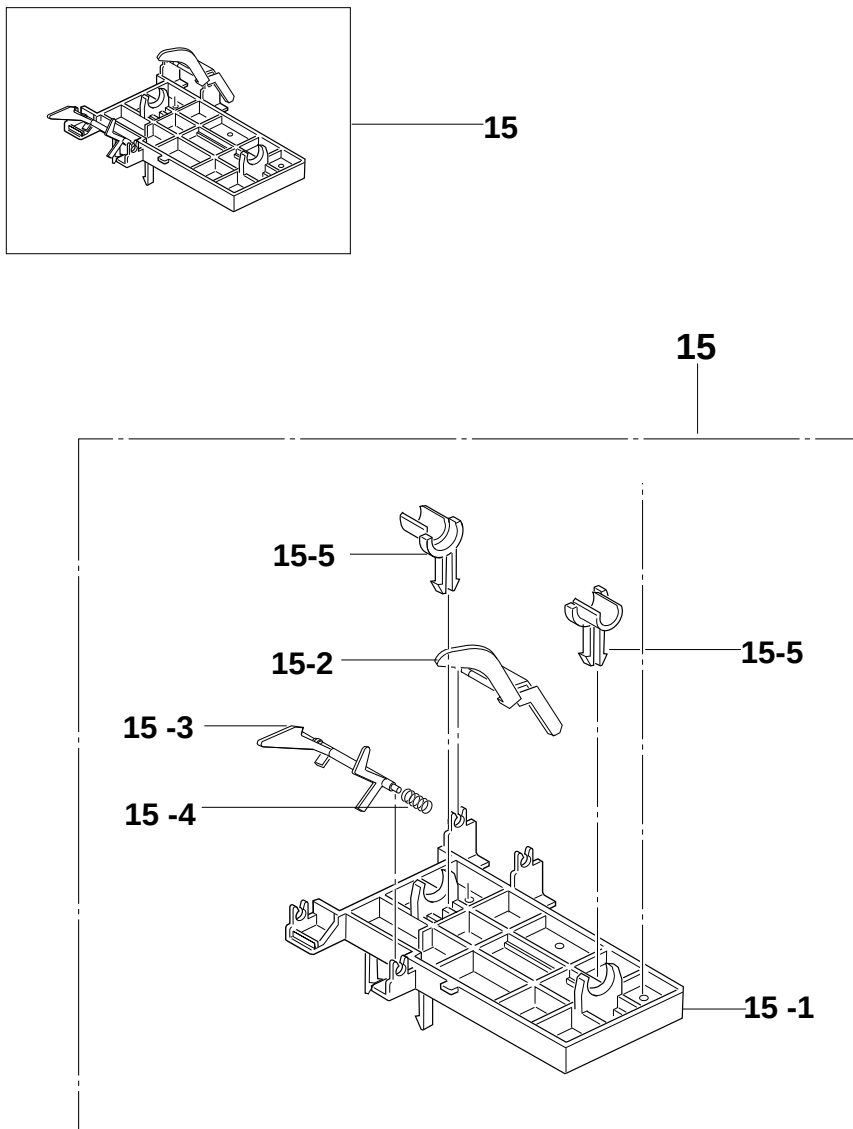


RX Drive Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
13		ELA UNIT-RX DRIVE	JC75-00085A	1	O	
	13-1	MOTOR-STEP	3101-001201	1	O	
	13-2	PMO-GEAR_71/28	*	1		
	13-3	PMO-GEAR_73/22	*	1		
	13-4	PMO-GEAR_132/19	*	1		
	13-5	IPR-BRACKET_MOTOR	*	1		
	13-6	IPR-BRACKET_GEAR	*	1		
	13-7	CORE-FERRITE	*	1		
	S-7	SCREW-MACHINE	*	5		

SA : Service Avail

6-6 Holder Feed Unit Assembly



Holder Feed Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
15		MEC-HOLDER FEED	JC75-00055A	1	O	
	15-1	PMO-HOLDER_FEED	*	1		
	15-2	PMO-ACTUATOR_EMPTY	*	1		
	15-3	PMO-ACTUATOR_FEED	*	1		
	15-4	SPRING-ACT,FEED	*	1		
	15-5	PMO-BUSHING_FEED	*	2		

SA : SVC Avail

6-7 Plate-Upper Unit Assembly

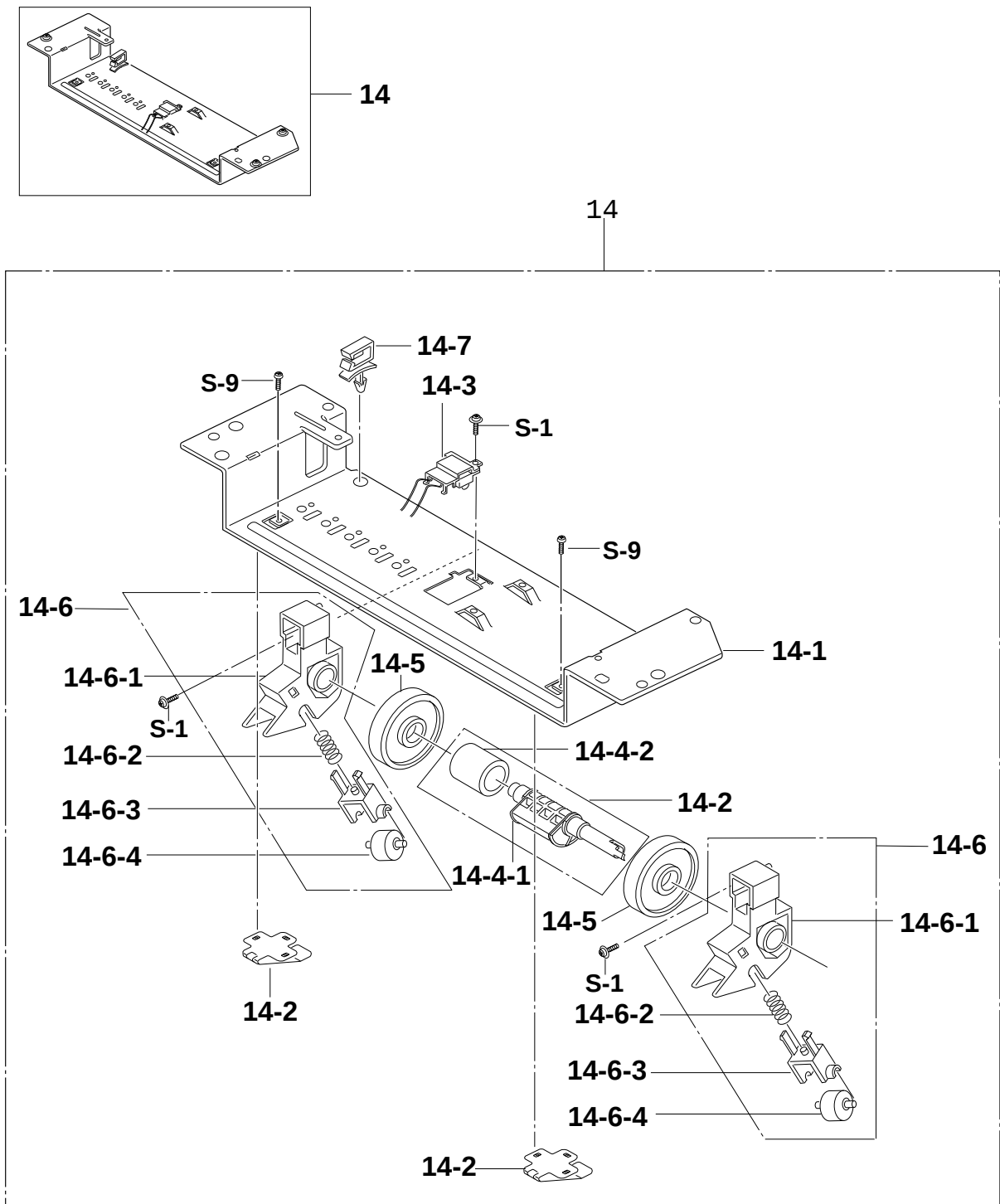
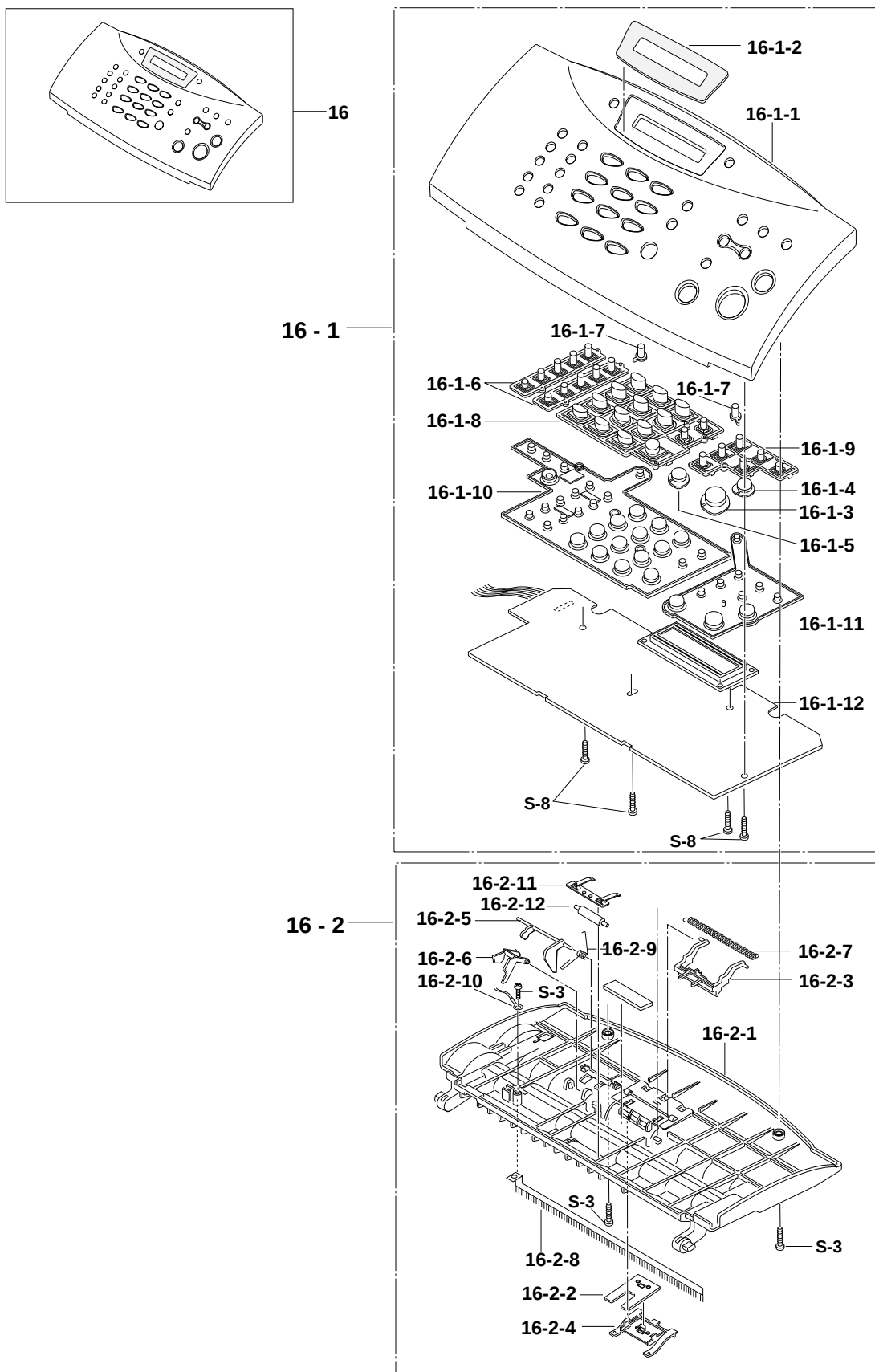


Plate-Upper Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
14		MEC-PLATE-UPPER	JC75-00057A	1	O	
	14-1	IPR-UPPER-PLATE	*	1		
	14-2	IPR-PLATE SPRING	JC70-10223A	2	O	
	14-3	ELA UNIT-FUSE DEVE	JC96-01117A	1	O	
		CBF-HARNESS-2P	*	1		
		IPR-PLATE FUSE DEVE	*	2		
		PMO-CAP PLATE FU L	*	1		
		PMO-CAP PLATE FU U	*	1		
	14-4	MEA ETC-ROLLER PICKUP	*	1		
	14-4-1	PMO-HOUSING_PICKUP	*	1		
	14-4-2	RMO-ROLLER_PICKUP	*	1		
	14-5	PMO-IDLE_PICKUP	*	2		
	14-6	MEA ETC-IDLE FEED	*	2		
	14-6-1	PMO-HOLDER_PICKUP	*	1		
	14-6-2	SPRING-FEED	*	1		
	14-6-3	PMO-HOLDER_IDLE,FEED	*	1		
	14-6-4	IPR-ROLLER_IDLE,FEED	*	1		
	14-7	CABLE CLAMP	*	1		
	S-1	SCREW TAPTITE	*	3		
	S-9	SCREW TAPTITE	*	2		

SA : Service Avail

6-8 OPE Unit Assembly

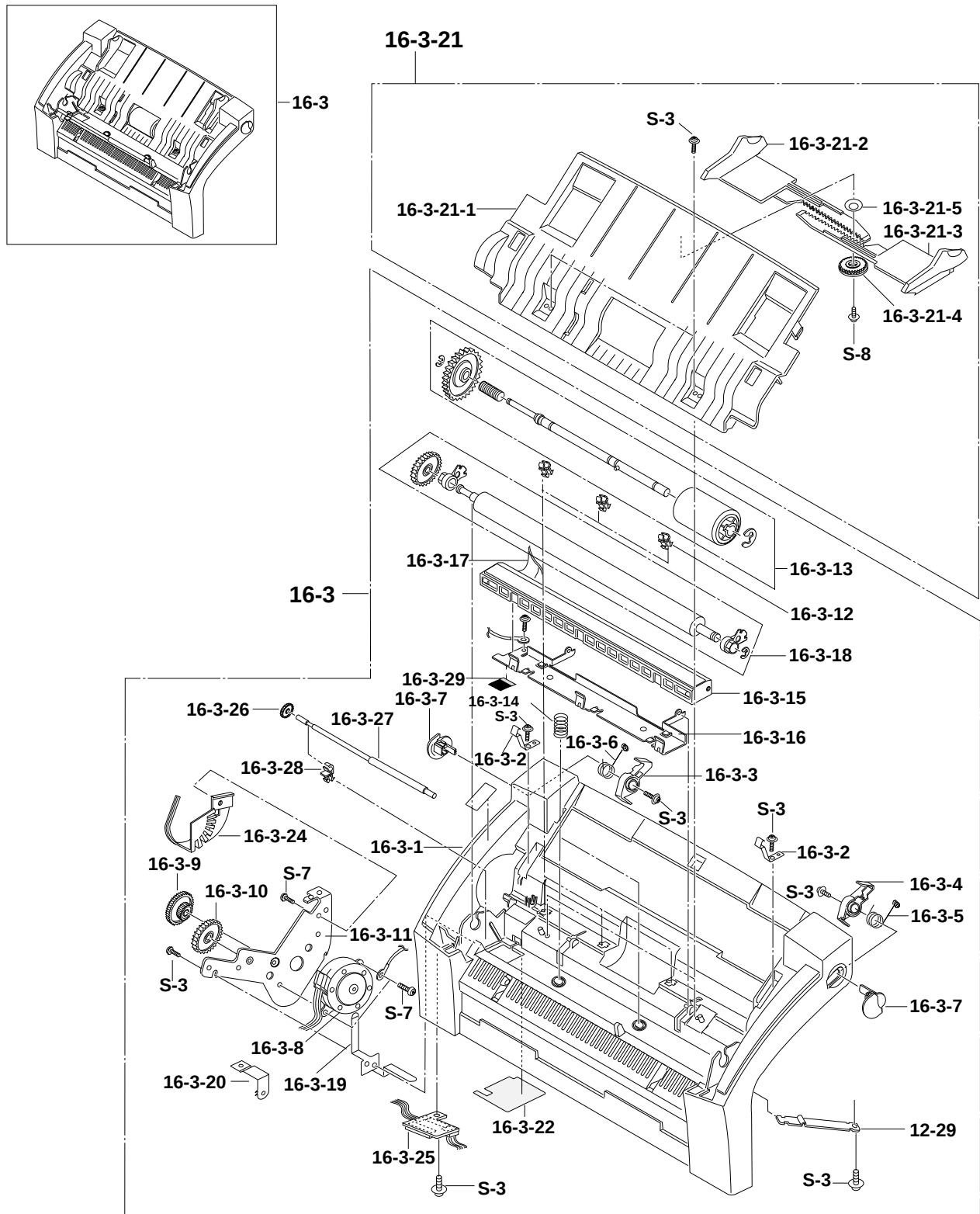


OPE Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	S/A	Remark
16	16-1	ELA HOU OPE-FRONT	refer the information	1	O	
		ELA HOU OPE ASSY	*	1		
		16-1-1 PMO-COVER OPE	*	1		
		16-1-2 PPR-WINDOW_LCD	*	1		
		16-1-3 KEY-START	*	1		
		16-1-4 KEY-COPY	JB72-00102A	1	O	
		16-1-5 KEY-STOP	JB72-00108A	1	O	
		16-1-6 KEY-ONE TOUCH	JC72-00409A	2	O	
		16-1-7 KEY-RESOLUTION	*	2		
		16-1-8 KEY-TEL	JB72-00100A	1	O	
		16-1-9 KEY-FUNCTION	JC72-00410A	1	O	
		16-1-10 RPR-CONTACT-RUBBER(A)	*	1		
		16-1-11 RPR-CONTACT-RUBBER(B)	*	1		
		16-1-12 PBA-MAIN OPE	JC92-01156A	1		
		S-8 SCREW-TAPTITE	*	4		
	16-2	ELA HOU SCAN UPPER	*	1		
		16-2-1 PMO-SCAN UPPER FRAME	*	1		
		16-2-2 RUBBER-ADF	JC73-00032A	1	O	
		16-2-3 SUPPORT-ADF	JG72-40043A	1	O	
		16-2-4 HOLDER-RUBBER	JG72-40044A	1	O	
		16-2-5 LEVER-SENSOR DOC	JB72-41247A	1	O	
		16-2-6 LEVER-SENSOR SCN	*	1		
		16-2-7 SPRING-COIL	JG70-40514A	1	O	
		16-2-8 ANTISTATIC-BRUSH	JB75-00051A	1	O	
		16-2-9 SPRING-SENSOR	*	1		
		16-2-10 CBF-HARNESS SCAN GND	*	1		
		16-2-11 IRP-PLATE PINCH ROLL	*	1		
		16-2-12 PMO-ROLLER PINCH STACKER	*	1		
		S-3 SCREW-TAPTITE	*	1		

SA : Service Avail

OPE Unit Assembly

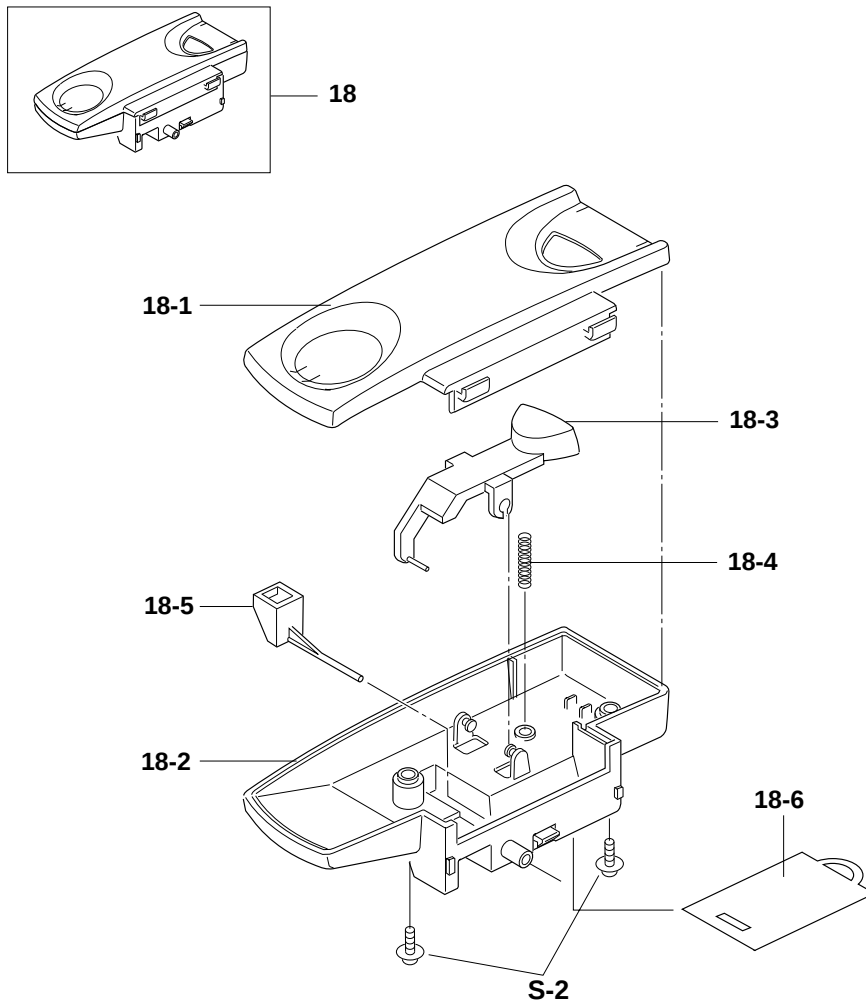


OPE Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
16-3		ELA HOU FRONT ASSY	*	1		
	12-29	STOPPER-EXIT	JC72-41396B	1	O	
	16-3-1	PMO-SCAN FRONT FRAME	*	1		
	16-3-2	LOCKER-TX	JG64-30001A	2	O	
	16-3-3	PMO-OPEN LOCKER L	*	1		
	16-3-4	PMO-OPEN LOCKER R	*	1		
	16-3-5	SPRING-LOCKER R	*	1		
	16-3-6	SPRING-LOCKER L	*	1		
	16-3-7	OPEN-BUTTON	*	2		
	16-3-8	SCAN MOTOR	3101-001203	1	O	
	16-3-9	PMO-GEAR_73/21/13	*	1		
	16-3-10	PMO-GEAR_IDLER-50	*	1		
	16-3-11	IPR-BRACKET_SCAN(0.85V)	*	1		
	16-3-12	PMO-BUSHING SHAFT	*	3		
	16-3-13	ELA HOU-ROLLER ADF	*	1		
	16-3-14	SPRING CIS	*	2		
	16-3-15	CONTACT IMAGE SENSOR	0609-001127	1	O	
	16-3-16	IPR-GUIDE_CIS	*	1		
	16-3-17	CBF HARNESS-SCAN/CIS(200)	JC39-00049A	1	O	
	16-3-18	MEA ETC-ROLLER WHITE	*	1		
	16-3-19	IPR-PLATE_GROUND	*	1		
	16-3-20	IPR-PLATE_GROUND A	*	1		
	16-3-21	ELA ETC GUIDE PAPER	*	1		
	16-3-21-1	PMO-GUIDE PAPER	*	1		
	16-3-21-2	PMO-GUIDE DOC L	*	1		
	16-3-21-3	PMO-GUIDE DOC R	*	1		
	16-3-21-4	PMO-GEAR PINION	JG66-40003A	1	O	
	16-3-21-5	SPRING-COVER	JF70-10616A	1	O	
	16-3-22	PPR-COVER SCAN	*	1		
	16-3-23	LABEL-CLEANING	*	1		
	16-3-24	PMO-COVER-GEAR	*	1		
	16-3-25	PBA-SCAN	*	1		
	16-3-26	GEAR SEACKER(Z20)	*	1		
	16-3-27	EMC-ROLLER STACKER	*	1		
	16-3-28	PMO-BUSHING SHAFT(EXIT)	*	1		
	16-3-29	EMC-BRUSH SHAFT	*	1		
	S-3	SCREW TAPTITE	*	10		
	S-7	SCREW MACHINE	*	3		
	S-8	SCREW TAPTITE	*	1		
	S-7	SCREW-TAPTITE	*	2		

SA : Service Avail

6-9 Cradle Unit Assembly

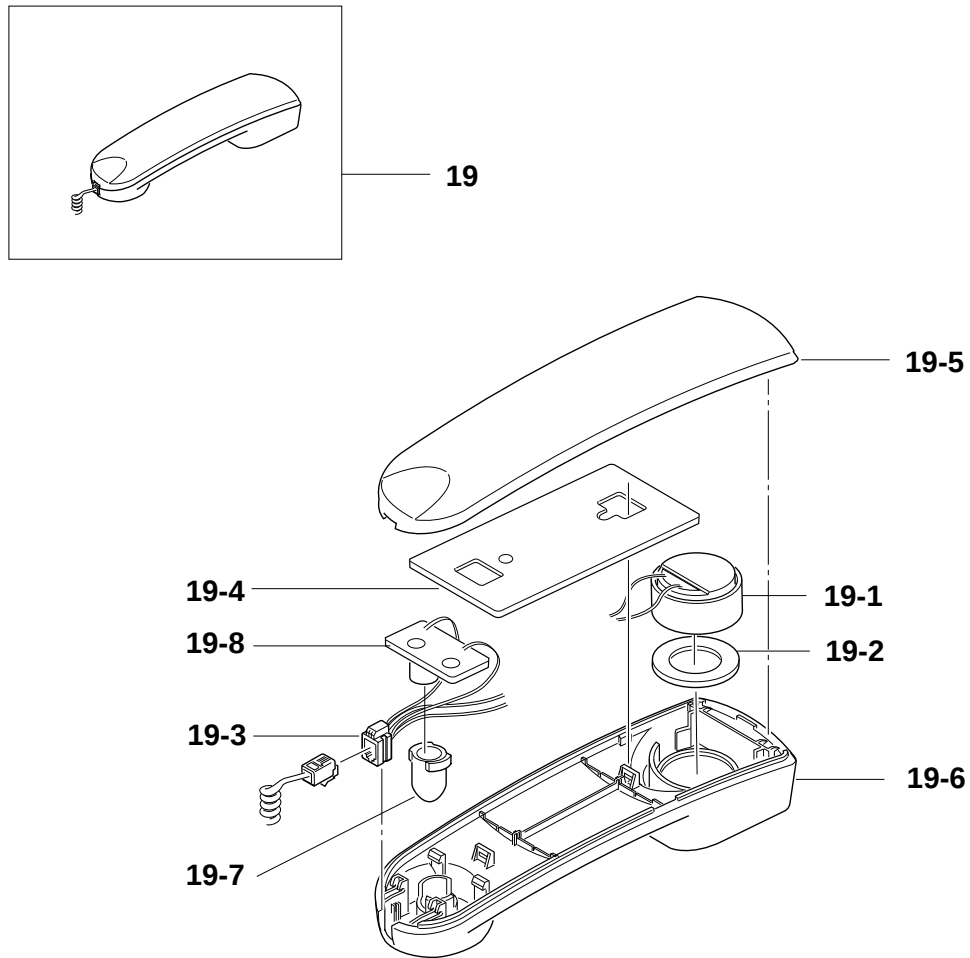


Cradle Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
18		MEC-CRADLE	JC75-00083A	1	O	
	18-1	PMO-CRADLE UPPER	*	1		
	18-2	PMO-CRADLE LOWER	*	1		
	18-3	PMO-BUTTON HOOK	*	1		
	18-4	SPRING-HOOK	*	1		
	18-5	PMO-SLIDE HOOK	*	1		
	18-6	SHEET-ONETOUCH	JC72-00439A	1	O	
	S-2	SCREW-TAPTITE	*	2		

SA : Service Avail

6-10 Handset Assembly

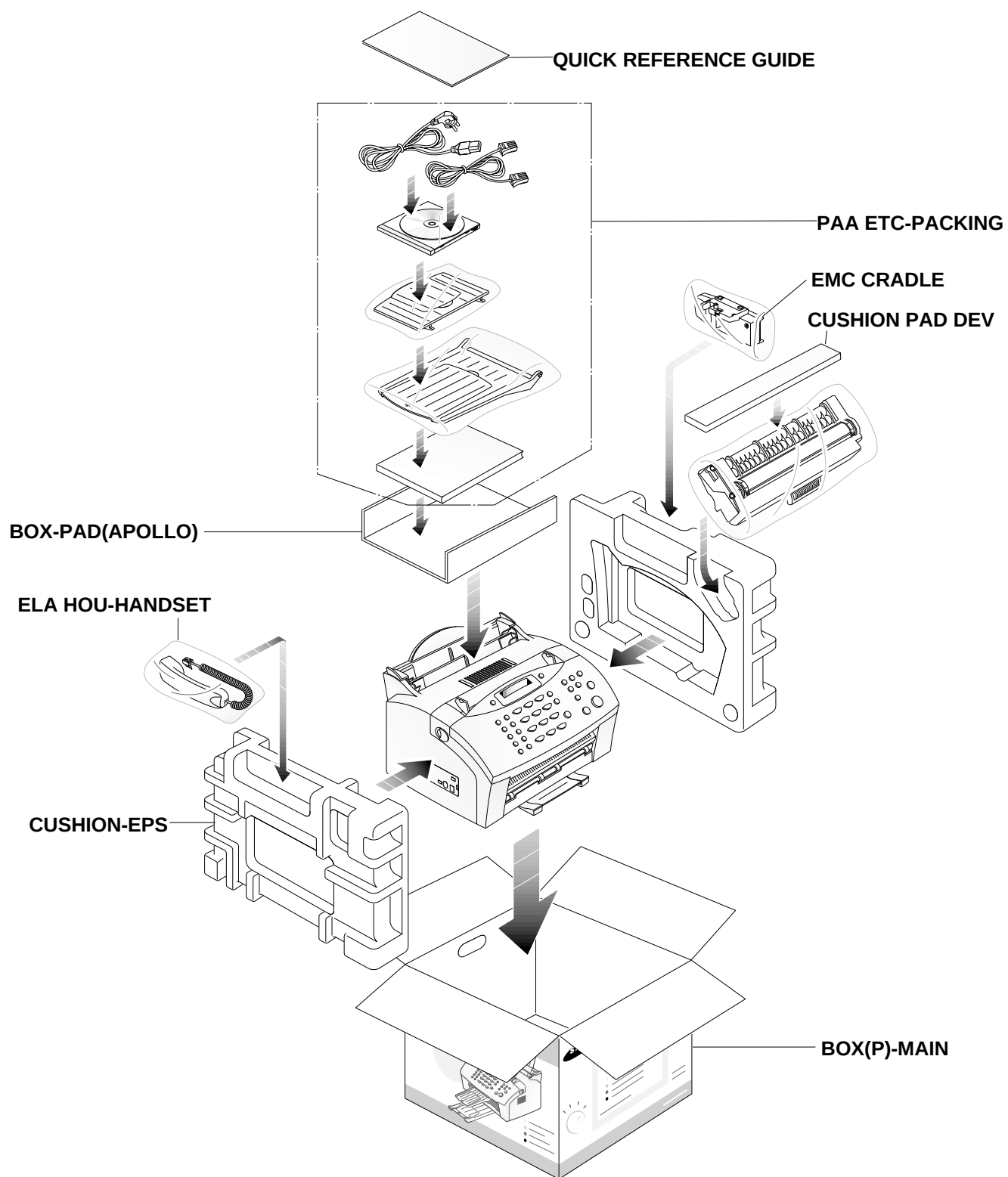


Handset Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
19		HANDSET	JC96-01629A	1	O	
	19-1	AUDIO-RECEIVER	*	1		
	19-2	RING-OP	*	1		
	19-3	CBF HARNESS-HADSET MODULAR	*	1		
	19-4	IPR-WEIGHT BALANCE	*	1		
	19-5	PMO-HANDSET UPPER	*	1		
	19-6	PMO-HANDSET LOWER	*	1		
	19-7	RMO-RUBBER MIC	*	1		
	19-8	PBA SUB ETC-MIC	*	1		

SA : Service Avail

6-11 Packing Assembly



7. Electrical Parts Lists

7-1 Main PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01152A			PBA MAIN-MAIN	
0401-000116	D1	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D3	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D4	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D5	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D6	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D7	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D8	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0404-000112	D2	1	DIODE-SCHOTTKY	"RB420D,25V,100mA,SOT-23,TP"
0501-000279	Q6	1	TR-SMALL SIGNAL	"KSA1182-Y,PNP,150mW,SOT-23,TP,"
0501-000338	Q1	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q3	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q4	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q5	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q7	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000457	Q2	1	TR-SMALL SIGNAL	"MMBT2222A,NPN,225mW,SOT-23,TP,"
0506-001019	Q8	1	TR-ARRAY	"STA471A,NPN,4,4W,SIP-10,ST,200"
0801-001090	U47	1	IC-CMOS LOGIC	"74HC14,SCHMITT INVERTER,SOP,1"
0801-002482	U46	1	IC-CMOS LOGIC	"74LVC07,BUFFER/DRIVER,SOP,14P,150MIL,HEX,TP"
0803-000615	U2	1	IC-TTL	"7407,BUFFER/DRIVER,SOP,14P,150"
0803-001393	U2	1	IC-TTL	"7407,BUFFER/DRIVER,SOP,14P,150"
1001-000170	U6	1	IC-ANALOG SWITCH	"MC14051BD,SPDT CMOS,SOP,16P,15"
1001-000171	U8	1	IC-ANALOG SWITCH	"MC14053BD,SPDT CMOS,SOP,16P,15"
1105-001030	U16	1	IC-DRAM	"416C1200,1Mx16BIT,SOJ,42P,400M"
1105-001030	U17	1	IC-DRAM	"416C1200,1Mx16BIT,SOJ,42P,400M"
1107-001121	U14	1	IC-FLASH MEMORY	"29F800,512Kx16BIT,TSOP,48P,720"
1201-000114	U12	1	IC-AUDIO AMP	"386,SOP,8P,150MIL,SINGLE,26V/m"
1201-000423	U13	1	IC-OP AMP	"4558,SOP,8P,150MIL,DUAL,20V/mV"
1201-000423	U15	1	IC-OP AMP	"4558,SOP,8P,150MIL,DUAL,20V/mV"
1202-000164	U3	1	IC-VOLTAGE COMP.	"393,SOP,8P,150MIL,DUAL,36V,CMO"
1203-000495	U7	1	IC-RESET	"7045,T0-92,3P,-,PLASTIC,4.3/4."
1203-001455	U4	1	IC-POSI.FIXED REG.	"1117,DPAK,3P,265MLI,PLASTIC,3"
1205-001134	U9	1	IC-MODEM	"KS16117Q,QFP,100P,-,PLASTIC,5V"
2001-000015	R156	1	R-CARBON(S)	"0.5OHM,5%,1/2W,AA,TP,2.4X6.4MM"
2001-000015	R157	1	R-CARBON(S)	"0.5OHM,5%,1/2W,AA,TP,2.4X6.4MM"
2007-000026	R171	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R172	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R173	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000027	R151	1	R-CHIP	"300KOHM,5%,1/10W,DA,TP,2012"
2007-000028	R101	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R114	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R39	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R41	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R42	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R50	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R53	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R54	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R73	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R74	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R75	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R87	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R88	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000029	R174	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000029	R204	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000029	R44	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000029	R8	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"

Main PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000068	R155	1	R-CHIP	"470KOHM,5%,1/10W,DA,TP,2012"
2007-000221	R14	1	R-CHIP	"1.2KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R29	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R38	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R77	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R94	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R120	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R145	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R146	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R162	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R192	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R193	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R195	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R196	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R212	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R25	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R30	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R31	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R60	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000300	R10	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R100	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R109	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R111	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R112	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R12	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R138	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R16	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R161	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R175	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R176	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R177	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R178	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R179	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R180	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R181	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R182	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R199	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R200	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R201	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R202	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R203	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R209	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R210	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R211	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R34	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R36	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R4	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R5	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R58	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R62	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R67	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R69	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R71	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R72	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R9	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000304	R7	1	R-CHIP	"10MOHM,5%,1/10W,DA,TP,2012"
2007-000308	R83	1	R-CHIP	"10OHM,5%,1/10W,DA,TP,2012"
2007-000325	R122	1	R-CHIP	"118KOHM,1%,1/10W,DA,TP,2012"
2007-000338	R147	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000355	R153	1	R-CHIP	"12KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R93	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000401	R123	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R131	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R183	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R184	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R185	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R186	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R187	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R188	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R189	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R190	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R206	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R207	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R208	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R55	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000435	R110	1	R-CHIP	"17.4KOHM,1%,1/10W,DA,TP,2012"
2007-000444	R107	1	R-CHIP	"180KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R115	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R18	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R19	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R20	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R21	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R28	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R37	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R45	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R46	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R47	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R59	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R63	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R64	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R79	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R80	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R97	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000493	R15	1	R-CHIP	"2.2KOHM,5%,1/10W,DA,TP,2012"
2007-000532	R154	1	R-CHIP	"200KOHM,5%,1/10W,DA,TP,2012"
2007-000565	R103	1	R-CHIP	"220KOHM,5%,1/10W,DA,TP,2012"
2007-000671	R52	1	R-CHIP	"2KOHM,5%,1/10W,DA,TP,2012"
2007-000730	R139	1	R-CHIP	"300OHM,5%,1/8W,DA,TP,3216"
2007-000766	R68	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000844	R125	1	R-CHIP	"3KOHM,5%,1/10W,DA,TP,2012"
2007-000844	R26	1	R-CHIP	"3KOHM,5%,1/10W,DA,TP,2012"
2007-000844	R78	1	R-CHIP	"3KOHM,5%,1/10W,DA,TP,2012"
2007-000859	R43	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000876	R76	1	R-CHIP	"4.7MOHM,5%,1/10W,DA,TP,2012"
2007-000920	R108	1	R-CHIP	"47.5KOHM,1%,1/10W,DA,TP,2012"
2007-000941	R129	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R149	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R150	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R194	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R163	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R164	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R165	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R166	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R167	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R168	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R169	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R170	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000981	R197	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-000981	R22	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-000981	R33	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-000981	R35	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-001009	R96	1	R-CHIP	"51KOHM,5%,1/10W,DA,TP,2012"
2007-001113	R152	1	R-CHIP	"680KOHM,5%,1/10W,DA,TP,2012"
2007-001208	R133	1	R-CHIP	"82KOHM,5%,1/10W,DA,TP,2012"
2007-001208	R95	1	R-CHIP	"82KOHM,5%,1/10W,DA,TP,2012"
2007-001220	R132	1	R-CHIP	"86.6KOHM,1%,1/10W,DA,TP,2012"
2007-001220	R142	1	R-CHIP	"86.6KOHM,1%,1/10W,DA,TP,2012"
2007-001289	R140	1	R-CHIP	"20OHM,5%,1/4W,DA,TP,3225"
2203-000009	C117	1	"C-CERAMIC,CHIP"	"0.82nF,10%,50V,X7R,TP,2012"
2203-000192	C100	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C106	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C107	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C108	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C11	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C111	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C112	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C113	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C114	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C118	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C119	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C128	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C129	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C147	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C148	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C150	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C156	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C16	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C20	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C21	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C25	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C27	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C28	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C29	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C31	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C39	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C43	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C47	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C48	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C49	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C52	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C56	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C57	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C58	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C59	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C60	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C61	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C62	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C65	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C7	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C73	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C77	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C78	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C83	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2203-000192	C84	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C86	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C87	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C93	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C95	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C97	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C99	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C149	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C32	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C33	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C34	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C4	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C42	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C44	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C45	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C5	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C51	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C53	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C63	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C67	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C141	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C142	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C143	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C144	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C145	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C146	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C15	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C71	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000389	C85	1	"C-CERAMIC,CHIP"	"0.015nF,5%,50V,NP0,TP,2012"
2203-000389	C88	1	"C-CERAMIC,CHIP"	"0.015nF,5%,50V,NP0,TP,2012"
2203-000455	C104	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C12	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C130	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C131	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C132	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C133	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C134	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C135	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C136	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C137	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C138	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C139	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C140	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C151	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C152	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C17	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C18	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C22	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C23	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C24	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C6	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C72	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C90	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000595	C125	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C75	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C76	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C81	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C82	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2203-000595	C94	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000634	C13	1	"C-CERAMIC,CHIP"	"0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C14	1	"C-CERAMIC,CHIP"	"0.022nF,5%,50V,NP0,TP,2012"
2203-000784	C120	1	"C-CERAMIC,CHIP"	"0.33nF,5%,50V,NP0,TP,2012"
2203-000784	C121	1	"C-CERAMIC,CHIP"	"0.33nF,5%,50V,NP0,TP,2012"
2203-000891	C122	1	"C-CERAMIC,CHIP"	"4.7nF,10%,50V,X7R,TP,2012"
2203-000989	C55	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-001058	C124	1	"C-CERAMIC,CHIP"	"0.56nF,5%,50V,NP0,TP,2012"
2203-001143	C74	1	"C-CERAMIC,CHIP"	"68nF,10%,50V,X7R,TP,2012"
2203-001158	C96	1	"C-CERAMIC,CHIP"	"0.068nF,5%,50V,NP0,TP,2012"
2203-002392	C123	1	"C-CERAMIC,CHIP"	"220nF,+80-20%,50V,Y5V,TP,2012"
2203-002392	C80	1	"C-CERAMIC,CHIP"	"220nF,+80-20%,50V,Y5V,TP,2012"
2401-000032	C8	1	C-AL	"100uF,20%,50V,GP,TP,8x12,5mm"
2401-000042	C101	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C115	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C116	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C50	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-001509	C126	1	C-AL	"47uF,20%,16V,GP,TP,5x7mm,5"
2402-000117	C103	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000117	C110	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000117	C46	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000117	C89	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000135	C127	1	"C-AL,SMD"	"22uF,20%,16V,GP,TP,5.3x5.3x5.4"
2402-000135	C91	1	"C-AL,SMD"	"22uF,20%,16V,GP,TP,5.3x5.3x5.4"
2404-000151	C68	1	"C-TA,CHIP"	"1uF,20%,16V,-,TP,3216,-"
2409-001020	C102	1	C-EDL	"1F,5.5V,5V,-,BK,20.5x5,5"
2703-000125	L2	1	INDUCTOR-SMD	"10uH,10%,1.25x2x1.25mm"
2801-003330	OSC3	1	CRYSTAL-UNIT	"38.00053MHz,15ppm,28-AAM,18pF,"
2801-003376	OSC1	1	CRYSTAL-UNIT	"0.032768MHz,20ppm,28-AAY,12.5p"
2902-001011	B1	1	FILTER-LINE	"-, -, -"
2902-001011	B2	1	FILTER-LINE	"-, -, -"
3301-000325	L3	1	CORE-FERRITE BEAD	"AB,3.2x2.5x1.3mm,-,-"
3301-000325	L5	1	CORE-FERRITE BEAD	"AB,3.2x2.5x1.3mm,-,-"
3301-000344	BD1	1	CORE-FERRITE BEAD	"ZZ,3.5x6.5mm,-,-"
3301-000344	BD2	1	CORE-FERRITE BEAD	"ZZ,3.5x6.5mm,-,-"
3301-001084	L6	1	CORE-FERRITE BEAD	"AB,2.0x1.25x0.9mm,-,-"
3301-001084	L7	1	CORE-FERRITE BEAD	"AB,2.0x1.25x0.9mm,-,-"
3301-001084	R205	1	CORE-FERRITE BEAD	"AB,2.0x1.25x0.9mm,-,-"
3702-000118	CN2	1	CONNECTOR-RIBBON	"36P,FEMALE,ANGLE,AU"
3708-001224	CN13	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"
3711-000428	CN14	1	CONNECTOR-HEADER	"3WALL,15P,1R,2mm,STRAIGHT,SN"
3711-000470	CN15	1	CONNECTOR-HEADER	"3WALL,4P,1R,2mm,STRAIGHT,SN"
3711-000517	CN8	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"
3711-002000	CN16	1	CONNECTOR-HEADER	"BOX,18P,2R,2mm,STRAIGHT,SN"
3711-003408	CN12	1	CONNECTOR-HEADER	"BOX,2P,1R,2mm,STRAIGHT,SN"
3711-003968	CN18	1	CONNECTOR-HEADER	"BOX,3P,1R,2.5mm,STRAIGHT,SN"
3711-003969	CN7	1	CONNECTOR-HEADER	"BOX,2P,1R,2.5mm,STRAIGHT,SN"
3711-003981	CN9	1	CONNECTOR-HEADER	"BOX,28P,2R,2mm,STRAIGHT,SN"
JB13-00003A	U5	1	IC ASIC-CHORUS	"SF-3100,KS32C65100,QFP,208P,30.6X30.6X4.1"
0801-002482	U46	1	IC-CMOS LOGIC	74LVC07,BUFFER/DRIVER,SOP,14P,150MIL,HEX, TP,PLASTIC,OPEN-DRAIN,40to+8
JC41-00028A		1	PCB-MAIN	"SF-5100,FR-4,4L,1.6,133*122"

7-2 Engine PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01154A			PBA MAIN-ENGINE	
0402-000129	D3	1	DIODE-RECTIFIER	"1N4003,200V,1A,DO-41,TP"
0402-000129	D4	1	DIODE-RECTIFIER	"1N4003,200V,1A,DO-41,TP"
0501-000010	Q3	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q4	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q6	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0502-000245	Q1	1	TR-POWER	"KSB1151-Y,PNP,1.3W,TO-126,-,16"
1003-001102	U1	1	IC-MOTOR DRIVER	"TEA3718DP,DIP,16P,300MIL,SINGL"
1003-001102	U2	1	IC-MOTOR DRIVER	"TEA3718DP,DIP,16P,300MIL,SINGL"
2001-000290	R23	1	R-CARBON	"10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000331	R14	1	R-CARBON	"12KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000429	R26	1	R-CARBON	"1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000429	R27	1	R-CARBON	"1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000449	R20	1	R-CARBON	"2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000734	R12	1	R-CARBON	"4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R10	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R5	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R6	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R9	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000832	R21	1	R-CARBON	"510OHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000864	R17	1	R-CARBON	"56KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000864	R18	1	R-CARBON	"56KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000995	R28	1	R-CARBON	"820OHM,5%,1/8W,AA,TP,1.8X3.2MM"
2005-000114	R24	1	R-WIRE WOUND	"0.5ohm,2%,1W,AA,TP,4.5x11mm"
2005-000114	R25	1	R-WIRE WOUND	"0.5ohm,2%,1W,AA,TP,4.5x11mm"
2201-000391	C13	1	"C-CERAMIC,DISC"	"22pF,5%,50V,SL,TP,5.0x3.0,5"
2201-000391	C14	1	"C-CERAMIC,DISC"	"22pF,5%,50V,SL,TP,5.0x3.0,5"
2201-001057	C10	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2201-001057	C11	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2201-001057	C12	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2201-001057	C9	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2401-002300	C1	1	C-AL	"47uF,20%,50V,GP,TP,6.3x11,5"
3711-003205	CN6	1	CONNECTOR-HEADER	"BOX,4P,1R,2.0mm,STRAIGHT,SN"
3711-003346	CN7	1	CONNECTOR-HEADER	"BOX,18P,2R,2mm,ANGLE,SN"
3711-003408	CN2	1	CONNECTOR-HEADER	"BOX,2P,1R,2mm,STRAIGHT,SN"
3711-003408	CN4	1	CONNECTOR-HEADER	"BOX,2P,1R,2mm,STRAIGHT,SN"
3711-003968	CN5	1	CONNECTOR-HEADER	"BOX,3P,1R,2.5mm,STRAIGHT,SN"
JC39-40511A	J1	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J10	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J9	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00032A	SF-5100/XEU	1	PCB-ENGINE	"SF-5100,FR-1,1L,1.6,93.2*62"

7-3 OPE PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01207A			PBA MAIN-OPE	
0401-000116	D1	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D2	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D3	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D4	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D5	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0604-001155	U4	1	PHOTO-INTERRUPTER	"TR,-,175MW,DIP,ST"
0604-001164	U5	1	PHOTO-INTERRUPTER	"TR,-,175MW,DIP-4,ST"
0801-001090	U3	1	IC-CMOS LOGIC	"74HC14,SCHMITT INVERTER,SOP,1"
2007-000026	R1	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R1	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R38	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R38	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000033	J1	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J1	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J2	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J2	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000300	R35	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R35	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000401	R18	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R18	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R22	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R22	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000586	R2	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R2	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R3	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R3	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R36	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R36	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R37	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R37	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R39	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R39	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R4	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R4	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R5	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R5	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R6	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R6	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R7	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R7	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R8	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R8	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R9	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R9	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R34	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R34	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2203-000192	C12	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C12	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C21	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C21	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C5	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

OPE PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
2203-000192	C5	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C6	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C6	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000208	C14	1	"C-CERAMIC,CHIP" "100nF,10%,50V,X7R,TP,3216"
2203-000208	C14	1	"C-CERAMIC,CHIP" "100nF,10%,50V,X7R,TP,3216"
2203-000239	C1	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C1	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000634	C18	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C18	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C19	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C19	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C20	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C20	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-001002	C15	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2203-001002	C15	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2203-001002	C16	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2203-001002	C16	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2404-000284	C13	1	"C-TA,CHIP" "10uF,20%,16V,-,TP,3528,-"
2404-000284	C17	1	"C-TA,CHIP" "10uF,20%,16V,-,TP,3528,-"
2802-000185	X1	1	RESONATOR-CERAMIC "7.37MHz,0.5%,TP,10.0x5.0x10.0m"
JB13-00004A	U2	1	IC ASIC-OPE "SF-3100,HT48C5,SSOP,48P,16.18X10.67X2.79"
JC39-00038A	SCAN-OPE	1	CBF HARNESS-SCAN/OPE "SF-5100,#26,UL 1061,150mm,RED+BLUE,-"
JC39-00038A	SCAN-OPE	1	CBF HARNESS-SCAN/OPE "SF-5100,#26,UL 1061,150mm,RED+BLUE,-"
JC41-00030A	SF-5100/XEU	1	PCB-OPE "SF-5100,FR-1,1L,1.6,260.5*115.2"
JF07-20061A	LCD	1	DISPLAY LCD- "SF50,BLK/WHT,16x1,36.0x80."
JG39-41019A	LCD CABLE	1	CBF HARNESS-LCD "SF4400,WIRE,UL2878,40mm,GRY,#2"

7-4 LIU PBA(JC92-01155A)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01155A				
0401-000005	D11	1	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q31	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000242	Q26	1	TR-SMALL SIGNAL	"BC547B,NPN,500mW,TO-92,TP,200"
0501-000500	Q27	1	TR-SMALL SIGNAL	"KSP45,NPN,625mW,TO-92,TP,50-20"
0502-000133	Q10	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q25	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q3	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U12	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR	"-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR	"82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS4	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON	"75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000027	R106	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000499	R99	1	R-CARBON	"200OHM,2%,1/2W,AA,TP,3.3X9MM"
2001-000631	R103	1	R-CARBON	"30KOHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000637	R98	1	R-CARBON	"300OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2003-000538	R105	1	R-METAL OXIDE(S)	"1Kohm,5%,2W,AA,TP,4x12mm"
2004-001773	R104	1	R-METAL	"12ohm,1%,1/4W,AA,TP,2.4x7mm"
2007-000029	R118	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000030	R102	1	R-CHIP	"560OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R117	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R69	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R70	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000290	R42	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R96	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000457	R39	1	R-CHIP	"18KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R100	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000931	R47	1	R-CHIP	"470OHM,5%,1/10W,DA,TP,2012"
2007-000941	R112	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R97	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000947	R107	1	R-CHIP	"47OHM,5%,1/10W,DA,TP,2012"
2007-000981	R108	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-001097	R48	1	R-CHIP	"62KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001201	R41	1	R-CHIP	"820OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C76	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000444	C43	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C45	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C46	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000989	C53	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP"	"330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5mm"
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"
2305-001024	C78	1	"C-FILM,MPEF"	"33nF,10%,250V,BK,10.5x3.5x6.5,"
2401-000026	C56	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"
2401-000486	C77	1	C-AL	"10uF,20%,50V,GP,TP,6.3x7mm,5"
2401-000597	C4	1	C-AL	"1uF,20%,50V,GP,TP,4x7mm,1.5mm"

LIU PBA(JC92-01155A)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2401-000958	C74	1	C-AL	"22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-001775	C67	1	C-AL	"470nF,20%,50V,GP,TP,5x11,5"
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER	"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER	"600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE	"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX	SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU	"SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF-	"SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF-	"SF2900M,3mH,6OHM,-"

7-5 LIU PBA(JC92-01192A)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01192A				1
0401-000005	"D11,D25"	2	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0401-000116	"D26,D27"	2	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000153	"ZD8,ZD9"	2	DIODE-ZENER	"1N4746A,18V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q29	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000242	Q26	1	TR-SMALL SIGNAL	"BC547B,NPN,500mW,TO-92,TP,200"
0501-000500	Q27	1	TR-SMALL SIGNAL	"KSP45,NPN,625mW,TO-92,TP,50-20"
0502-000133	"Q3,Q25"	2	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000108	VAR1	1	VARISTOR	"120V,1200A,9x4.5mm,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000027	R106	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000119	R122	1	R-CARBON	"680OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000631	R103	1	R-CARBON	"30KOHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000637	"R98,R99"	2	R-CARBON	"30OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2003-000538	R105	1	R-METAL OXIDE(S)	"1Kohm,5%,2W,AA,TP,4x12mm"
2004-001773	R104	1	R-METAL	"12ohm,1%,1/4W,AA,TP,2.4x7mm"
2007-000011	R47	1	R-CHIP	"200OHM,1%,1/10W,DA,TP,2012"
2007-000023	R118	1	R-CHIP	"120OHM,5%,1/10W,DA,TP,2012"
2007-000029	"R40,R44"	2	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000030	R102	1	R-CHIP	"560OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R115	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	"R42,R67"	2	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	"R43,R68"	2	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	"R53,R97"	2	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000615	R39	1	R-CHIP	"24KOHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000757	R96	1	R-CHIP	"330KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000947	R107	1	R-CHIP	"47OHM,5%,1/10W,DA,TP,2012"
2007-001092	R41	1	R-CHIP	"620OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION		
2007-001124	R48	1	R-CHIP	"68KOHM,1%,1/10W,DA,TP,2012"	1
2203-000192	"C35,C75"	2	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C76	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"	1
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"	1
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"	1
2203-000455	"C43,C45,C46"	3	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"	1
2203-000802	"C53,C54"	2	"C-CERAMIC,CHIP"	"33nF,10%,50V,X7R,TP,2012"	1
2203-002392	C42	1	"C-CERAMIC,CHIP"	"220nF,+80-20%,50V,Y5V,TP,2012"	1
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5,5m"	1
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"	1
2401-000026	C56	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"	1
2401-000026	C69	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"	1
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"	1
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"	1
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"	1
2401-000649	C67	1	C-AL	"2.2uF,20%,50V,BP,TP,5x11,5"	1
2401-000899	C77	1	C-AL	"22uF,20%,100V,GP,TP,8x11mm,5mm"	1
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"	1
3501-001153	"RE1,RE2"	2	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"	1
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"	1
3711-000411	CN2	1	CONNECTOR-HEADER	"3WALL,12P,1R,2mm,STRAIGHT,SN"	1
3711-000517	CN1	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"	1
4715-001042	ARS1	1	SURGE ABSORBER	"400V,20%,500A,-,TP"	1
JB13-00007A	HIC1	1	HYBRID-IC-DETECTOR	"SF4500,MA91000018S,BULK,6 PIN,27X10mm"	1
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE	"SF-3100,-,30KOHM:30KOHM"	1
JB26-00002A	T2	1	TRANS-MATCHING-FAX	"SF-3100,-,600OHM:600OHM"	1
JC39-40511A	C4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J16	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J17	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J18	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J19	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J20	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J21	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J22	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J23	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J24	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J25	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J26	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J27	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J28	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J29	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J30	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	R87	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC41-00031B	PCB	1	PCB-LIU PCB FRANCE	"SF-5100,1LAYER,1,1.6T,1.6T*105*115"	1
JF27-30055A	L13	1	COIL RF-	"SF2900M,3mH,6OHM,-"	1
JF27-30055A	L14	1	COIL RF-	"SF2900M,3mH,6OHM,-"	1

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01192C			PBA MAIN-LIU	
0401-000005	D11	1	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0502-000133	Q25	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR	"-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR	"82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON	"75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000524	R99	1	R-CARBON	"220OHM,5%,1/2W,AA,TP,3.3X9MM"
2001-000637	R98	1	R-CARBON	"300OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2007-000029	R107	1	R-CHIP	"00OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"00OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"00OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"00OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R96	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R118	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R42	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	"R38,R39"	2	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000822	R47	1	R-CHIP	"390OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R97	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-001009	R48	1	R-CHIP	"51KOHM,5%,1/10W,DA,TP,2012"
2007-001092	R102	1	R-CHIP	"620OHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001201	R41	1	R-CHIP	"820OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000455	"C43,C45,C46"	3	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000609	C66	1	"C-CERAMIC,CHIP"	"22nF,10%,50V,X7R,TP,2012"
2203-000989	C53	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP"	"330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5,5m"
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"
2401-000026	C56	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"
2401-000603	C4	1	C-AL	"1uF,20%,50V,GP,TP,5x11,5"
2401-000958	C74	1	C-AL	"22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-000962	C67	1	C-AL	"22uF,20%,50V,GP,TP,5x11,5"
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER	"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER	"600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE	"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX	"SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R104	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R105	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU	"SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF-	"SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF-	"SF2900M,3mH,6OHM,-"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01192D			PBA MAIN-LIU
0401-000005	D11	1	DIODE-SWITCHING "1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER "1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY "KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY "KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY "KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL "KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL "KSC1008,NPN,800mW,TO-92,TP,120"
0501-000242	Q26	1	TR-SMALL SIGNAL "BC547B,NPN,500mW,TO-92,TP,200"
0501-000500	Q27	1	TR-SMALL SIGNAL "KSP45,NPN,625mW,TO-92,TP,50-20"
0502-000133	Q10	1	TR-POWER "2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q25	1	TR-POWER "2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q3	1	TR-POWER "2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON "VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER "TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER "TR,20-300%,200mW,DIP-4,ST"
0604-000119	U12	1	PHOTO-COUPLER "TR,200-400%,200mW,DIL-4,ST"
0604-000119	U14	1	PHOTO-COUPLER "TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH "TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR "-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR "82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR "470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR "470V,400A,7.5X6MM,TP"
1405-001075	ARS4	1	VARISTOR "470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON "75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000027	R106	1	R-CARBON "100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON "100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000499	R99	1	R-CARBON "200OHM,2%,1/2W,AA,TP,3.3X9MM"
2001-000631	R103	1	R-CARBON "30KOHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000637	R98	1	R-CARBON "300OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE "15Kohm,5%,1W,AA,TP,4.3x12mm"
2003-000538	R105	1	R-METAL OXIDE(S) "1Kohm,5%,2W,AA,TP,4x12mm"
2004-001773	R104	1	R-METAL "12ohm,1%,1/4W,AA,TP,2.4x7mm"
2007-000029	R118	1	R-CHIP "0OHM,5%,1/10W,DA,TP,2012"
2007-000030	R102	1	R-CHIP "560OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP "0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP "0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP "0OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP "1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP "1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R69	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R70	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R42	1	R-CHIP "100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP "100OHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R96	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000457	R39	1	R-CHIP	"18KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R100	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000931	R47	1	R-CHIP	"470OHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R97	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000947	R107	1	R-CHIP	"47OHM,5%,1/10W,DA,TP,2012"
2007-001097	R48	1	R-CHIP	"62KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001201	R41	1	R-CHIP	"820OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C76	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000444	C43	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C45	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C46	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000989	C53	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP"	"330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5,5m"
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"
2305-001024	C78	1	"C-FILM,MPEF"	"33nF,10%,250V,BK,10.5x3.5x6.5,"
2401-000026	C56	1	C-AL	"3.3UF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL	"3.3UF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"
2401-000486	C77	1	C-AL	"10uF,20%,50V,GP,TP,6.3x7mm,5"
2401-000597	C4	1	C-AL	"1uF,20%,50V,GP,TP,4x7mm,1.5mm"
2401-000958	C74	1	C-AL	"22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-001082	C67	1	C-AL	"330nF,20%,50V,GP,TP,5x11,5"
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER "600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX"SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU "SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF- "SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF- "SF2900M,3mH,6OHM,-"

7-8 LIU PBA(JC92-01192E)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01192E				
0401-000005	D11	1	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0502-000133	Q25	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-.40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR	"-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR	"82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON	"75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000524	R98	1	R-CARBON	"220OHM,5%,1/2W,AA,TP,3.3X9MM"
2001-000637	R99	1	R-CARBON	"300OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2007-000029	R118	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000221	R102	1	R-CHIP	"1.2KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R42	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000308	R107	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R97	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000444	R96	1	R-CHIP	"180KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R39	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-001039	R48	1	R-CHIP	"56KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R47	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001155	R41	1	R-CHIP	"750OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
2203-000192	C36	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C76	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP" "10nF,10%,50V,X7R,TP,2012"
2203-000455	"C43,C45,C46"	3	"C-CERAMIC,CHIP" "1nF,5%,50V,NP0,TP,2012"
2203-000989	C53	1	"C-CERAMIC,CHIP" "47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP" "47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP" "330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF" "15nF,10%,250V,TP,9.5x12x4.5,5m"
2305-000505	C63	1	"C-FILM,MPEF" "1uF,10%,250V,BK,6x8.5x14.5,15m"
2305-001024	C78	1	"C-FILM,MPEF" "33nF,10%,250V,BK,10.5x3.5x6.5,"
2401-000026	C56	1	C-AL "3.3uF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL "3.3uF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL "100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL "100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL "10uF,20%,16V,GP,TP,4x7,5"
2401-000603	"C4,C57"	2	C-AL "1uF,20%,50V,GP,TP,5x11,5"
2401-000958	C74	1	C-AL "22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-001775	C67	1	C-AL "470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE "5VDC,200MW,2000MA,2FORMC,4MS,4MS"
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER "600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX"SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R104	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R105	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU "SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF- "SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF- "SF2900M,3mH,6OHM,-"

7-9 SENSOR PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01197A			PBA MAIN-SENSOR
0604-001155	U1	1	PHOTO-INTERRUPTER"TR,-,175MW,DIP,ST"
0604-001155	U2	1	PHOTO-INTERRUPTER"TR,-,175MW,DIP,ST"
2001-000008	R1	1	R-CARBON "15KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000008	R2	1	R-CARBON "15KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000362	R3	1	R-CARBON "150OHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000362	R4	1	R-CARBON "150OHM,5%,1/8W,AA,TP,1.8X3.2MM"
JC39-00039A	CN1	1	CBF HARNESS-MAIN/SENSOR "SF-5100,#26,UL 1061,150mm,RED+BLUE,-"
JC41-00033A	SF-5100/XEU	1	PCB-SENSOR "SF-5100,FR-1,1L,1.6,82*20"

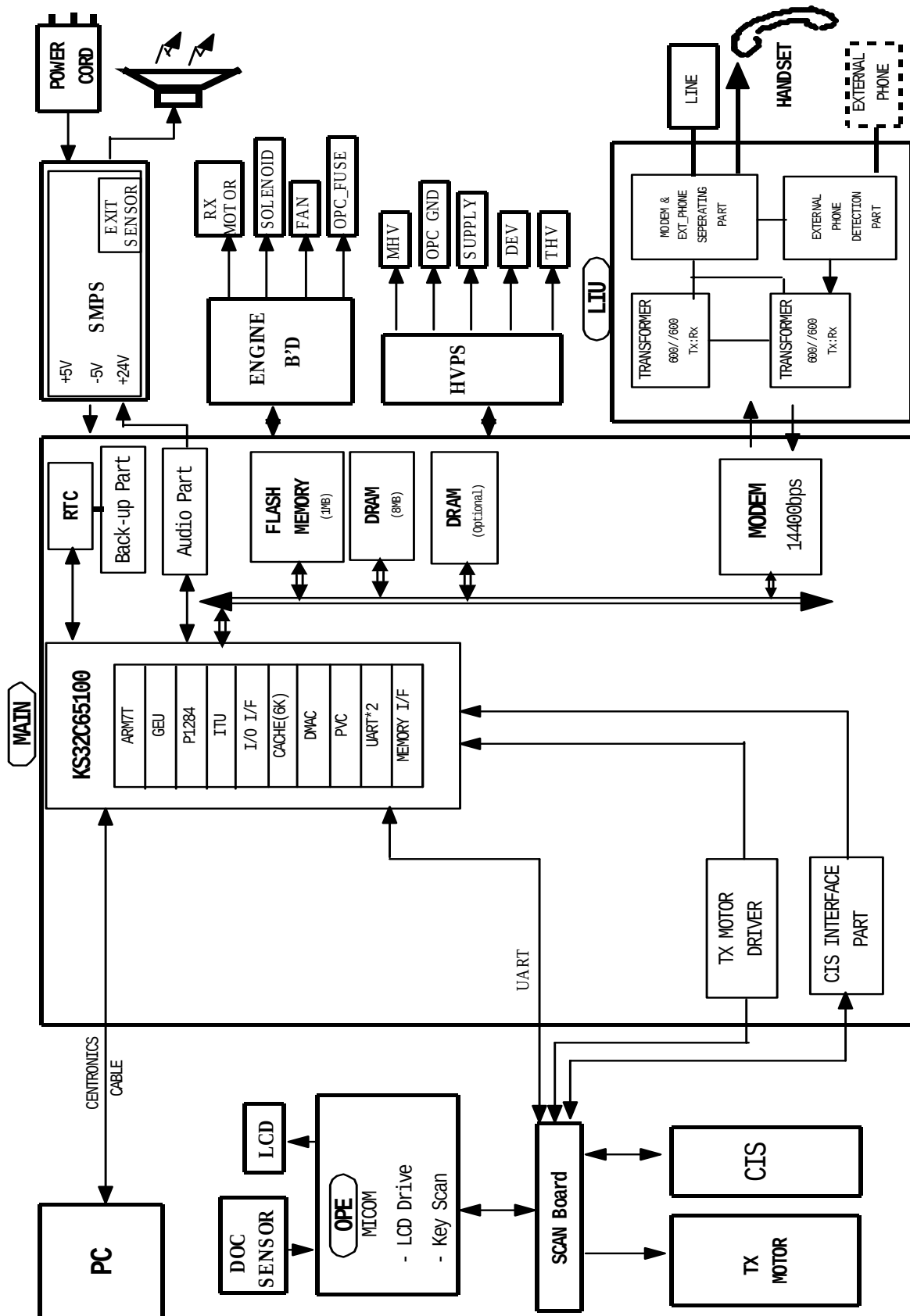
7-10 SCAN PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01212A			PBA MAIN-SCAN
3711-000986	CN3	1	CONNECTOR-HEADER "BOX,5P,1R,1.25mm,STRAIGHT,SN"
3711-000986	CN3	1	CONNECTOR-HEADER "BOX,5P,1R,1.25mm,STRAIGHT,SN"
3711-001063	CN2	1	CONNECTOR-HEADER "BOX,6P,1R,2mm,STRAIGHT,SN"
3711-001063	CN2	1	CONNECTOR-HEADER "BOX,6P,1R,2mm,STRAIGHT,SN"
3711-001070	CN6	1	CONNECTOR-HEADER "BOX,7P,1R,1.25mm,STRAIGHT,SN"
3711-001070	CN6	1	CONNECTOR-HEADER "BOX,7P,1R,1.25mm,STRAIGHT,SN"
3711-003346	CN1	1	CONNECTOR-HEADER "BOX,18P,2R,2mm,ANGLE,SN"
3711-003346	CN1	1	CONNECTOR-HEADER "BOX,18P,2R,2mm,ANGLE,SN"
JC41-00040A	SF-5100/XEU	1	PCB-SCAN "SF-5100,FR4,2L,1.6T,27x30"

7-11 HOOK PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01196A			PBA MAIN-HOOK
3409-001094	HOOK	1	SWITCH-HOOK "48V,200MA,DPDT,1.2MM"
3711-000411	CN2	1	CONNECTOR-HEADER "3WALL,12P,1R,2mm,STRAIGHT,SN"
3722-001034	H/S	1	JACK-MODULAR "6P/2C,0.76mm,AU,GRAY,-"
JC41-00034A	SF-5100/XEU	1	PCB-HOOK "SF-5100,FR-1,1L,1.6,51.2*35.3"

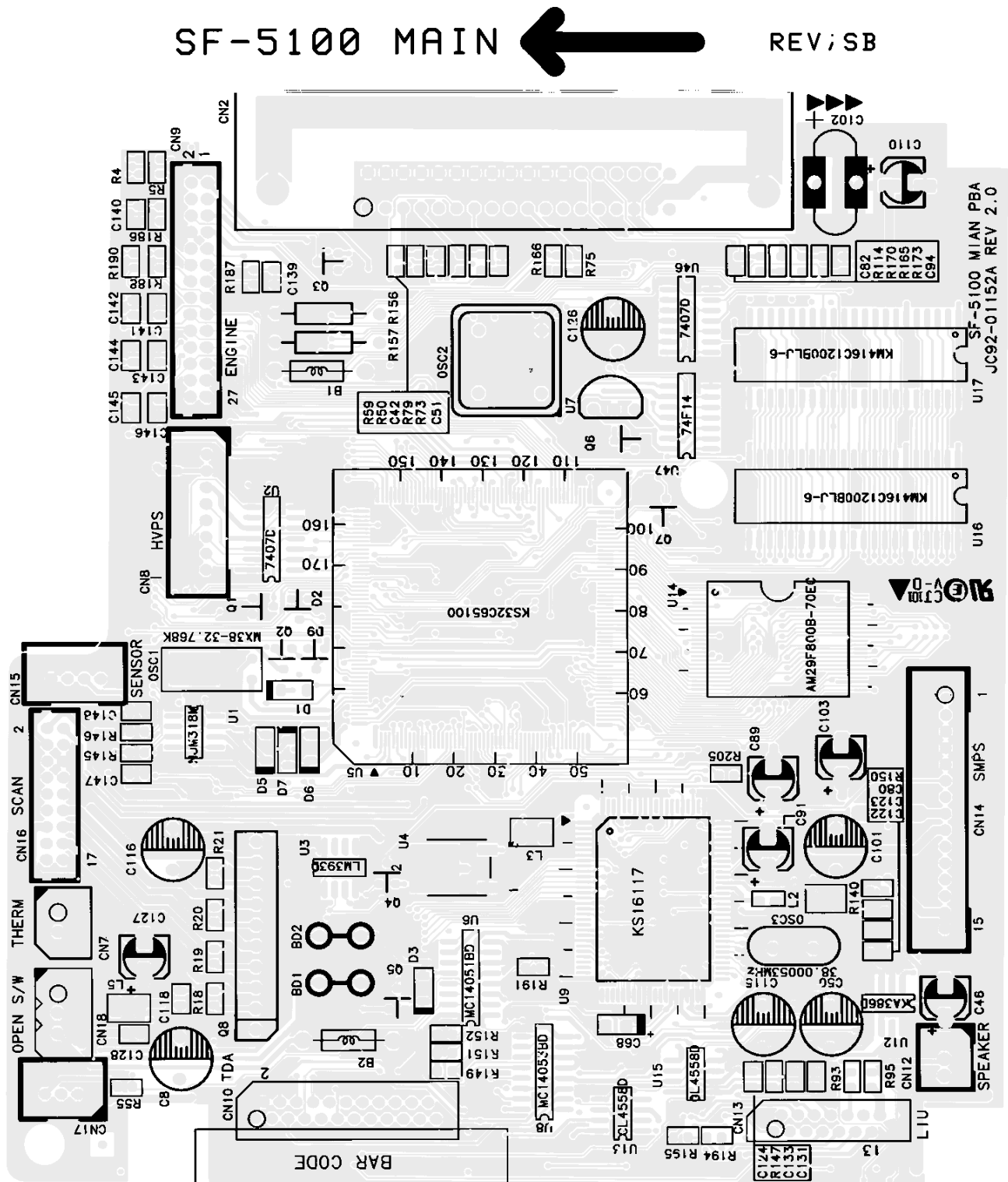
8. Block diagram



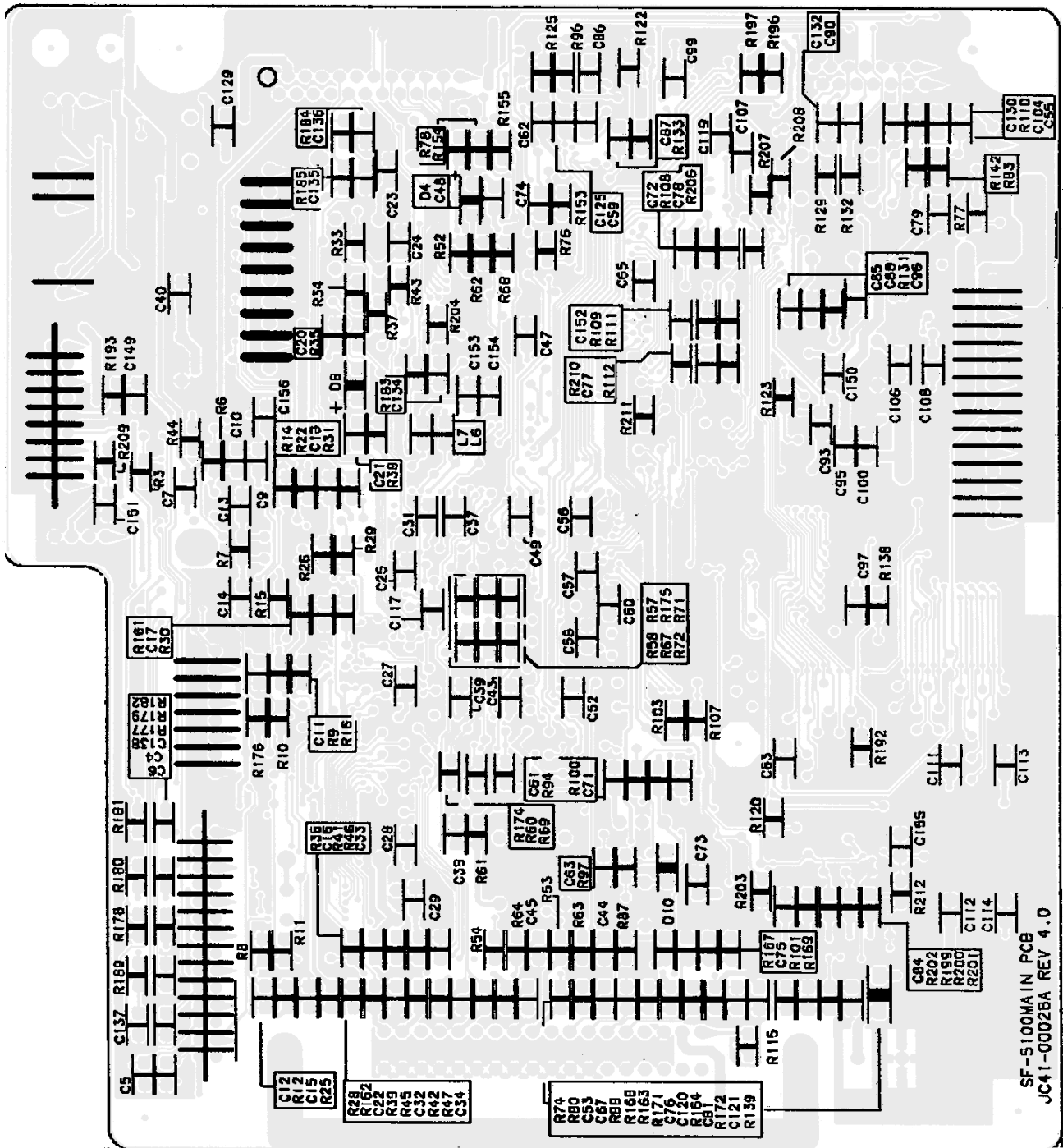
MEMO

10.PCB Diagrams

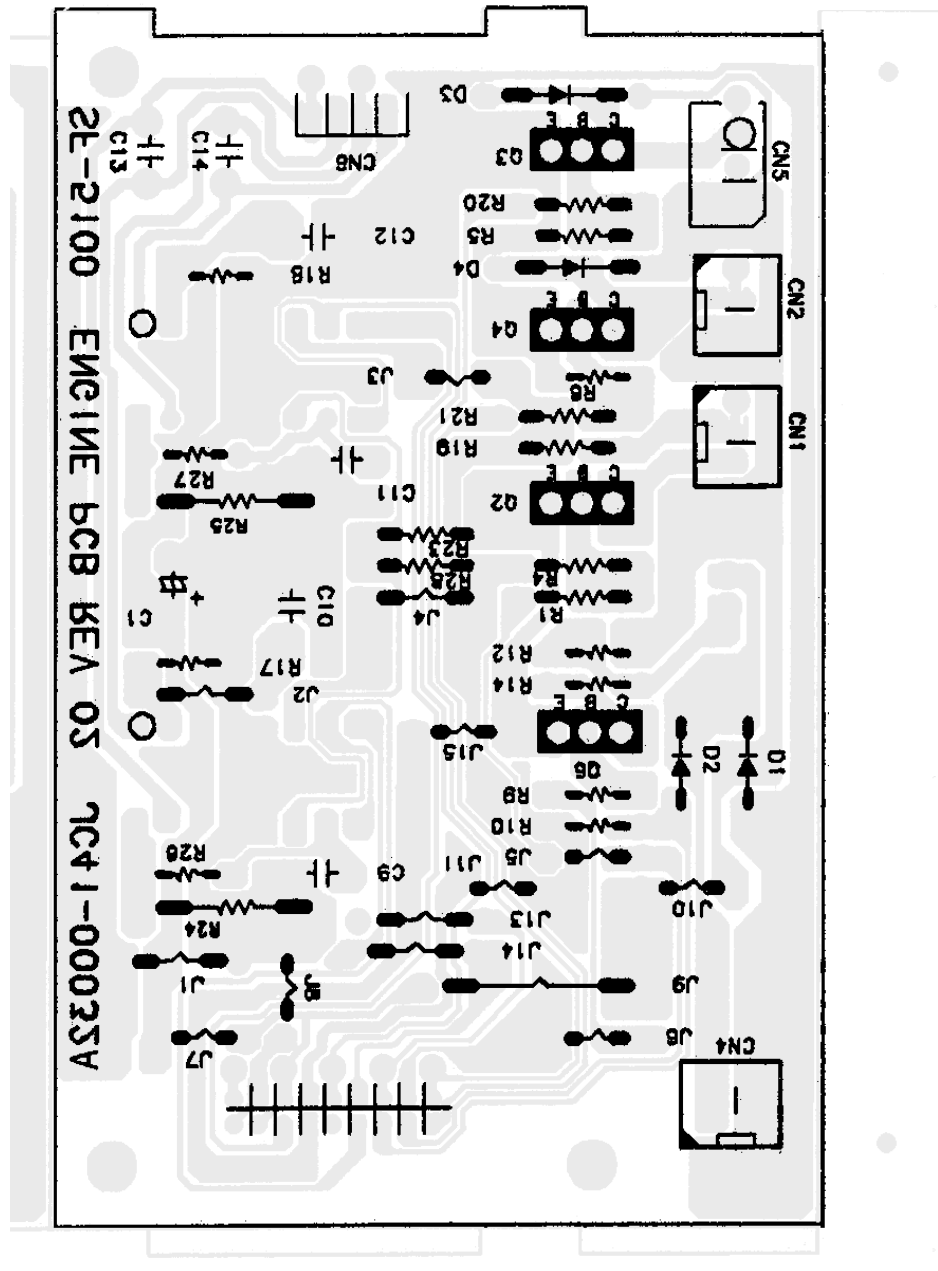
10-1 Main PCB Diagram(Top)



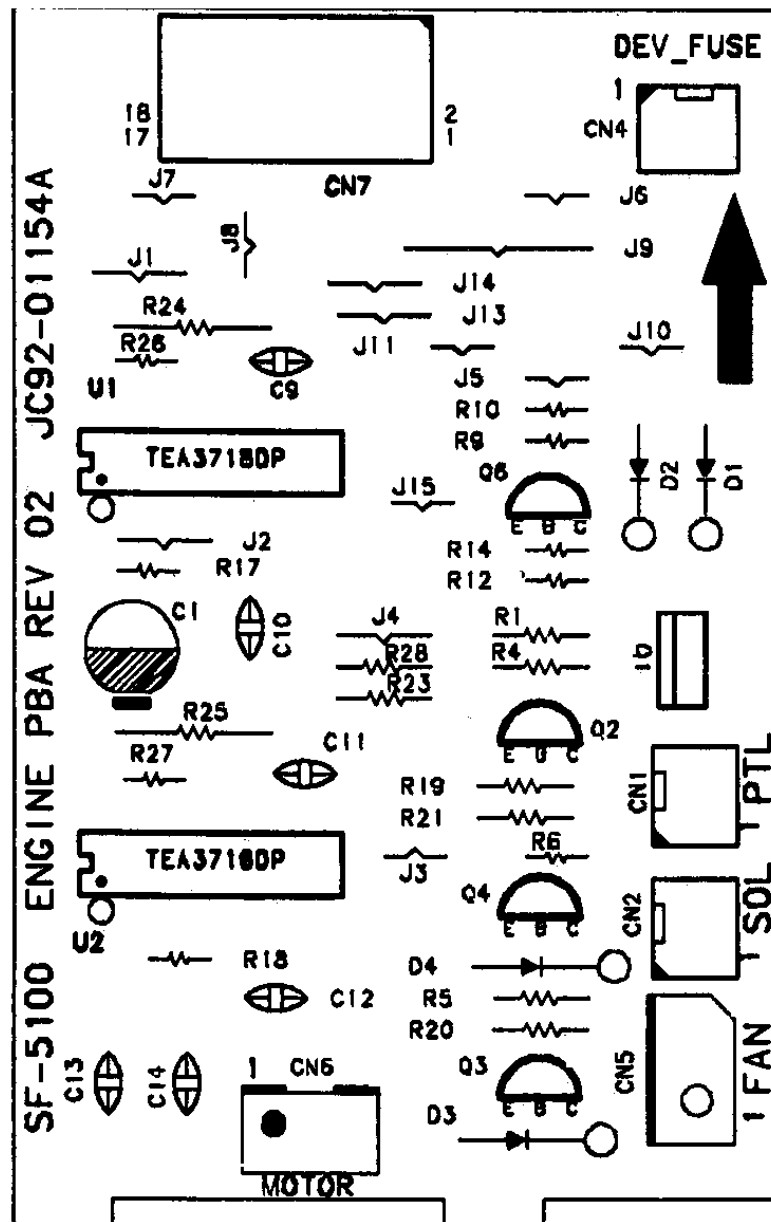
10-2 Main PCB Diagram(Bottom)



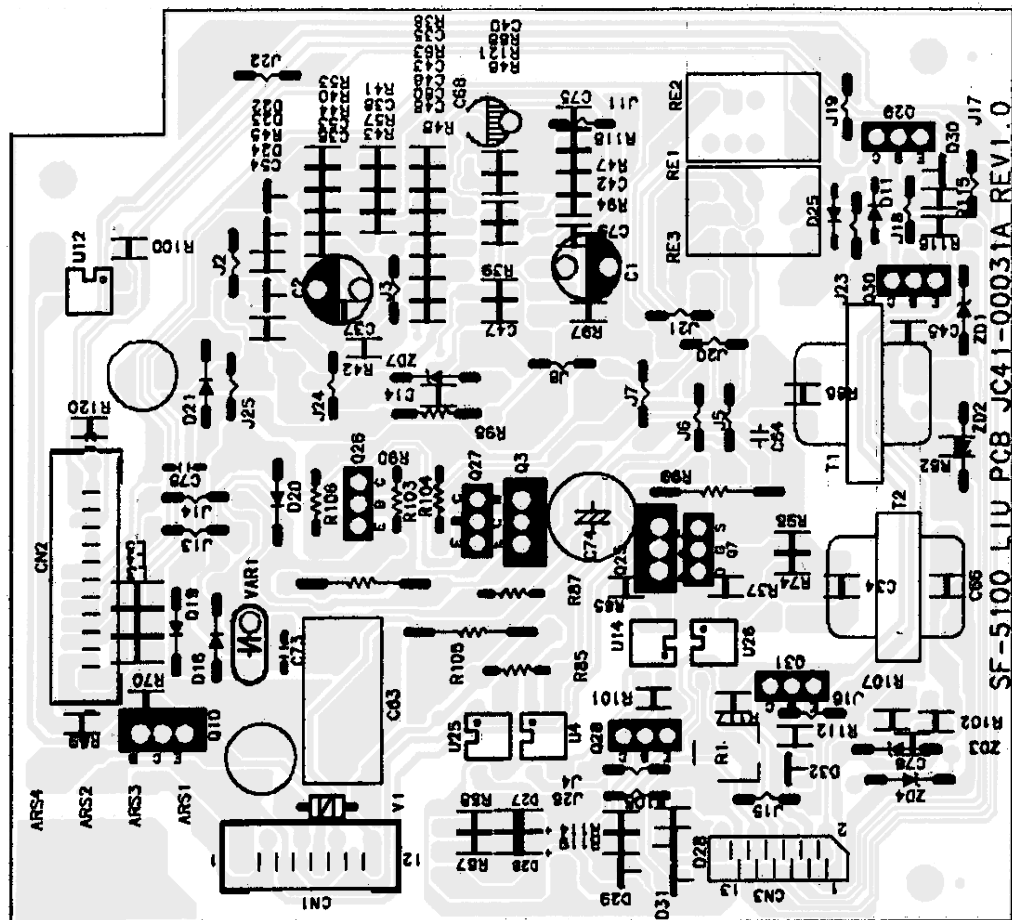
10-3Engine PCB Diagram(Top)



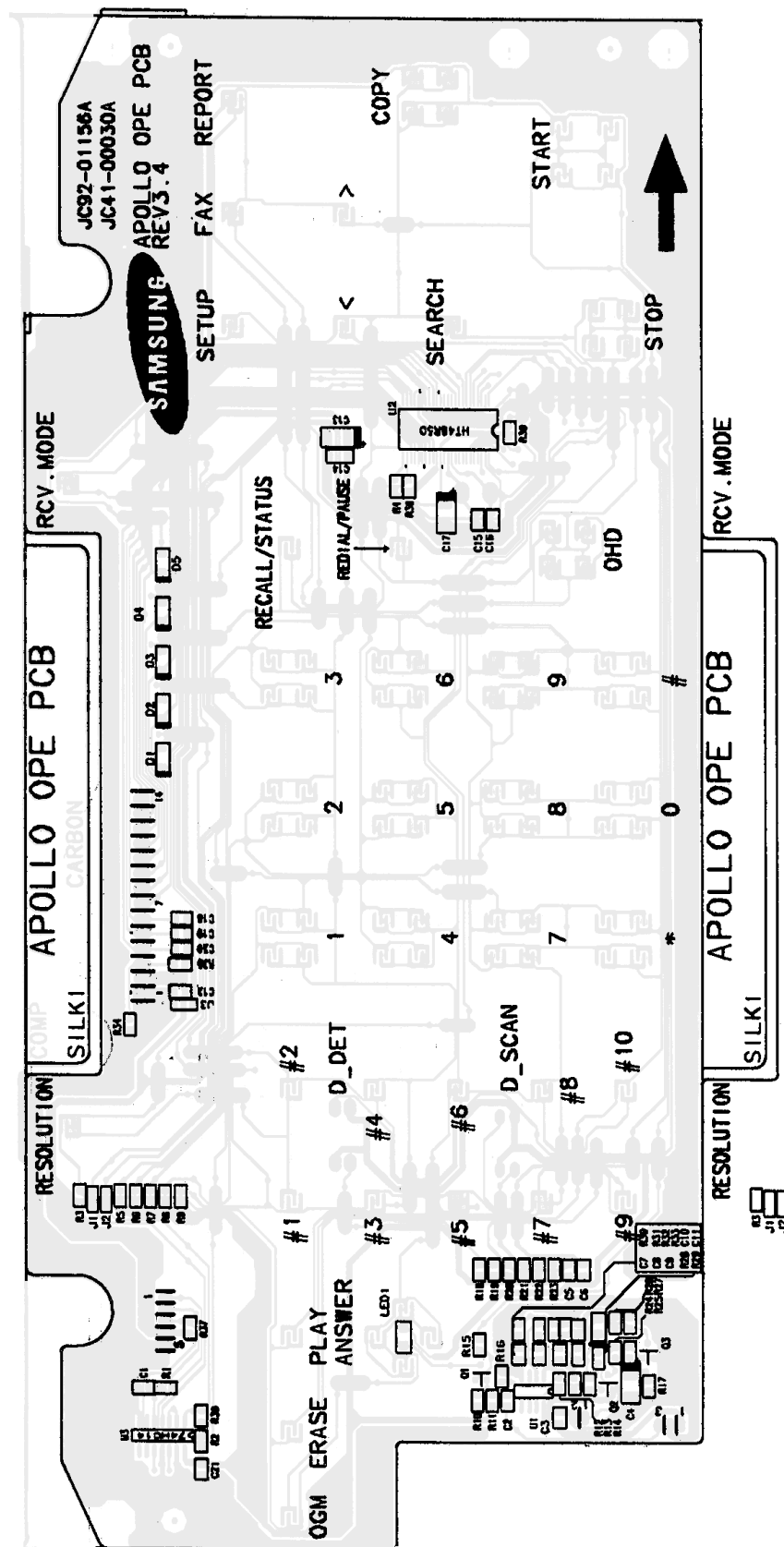
10-4Engine PCB Diagram(Bottom)



10-5LIU PCB Diagram



10-6OPE PCB Diagram



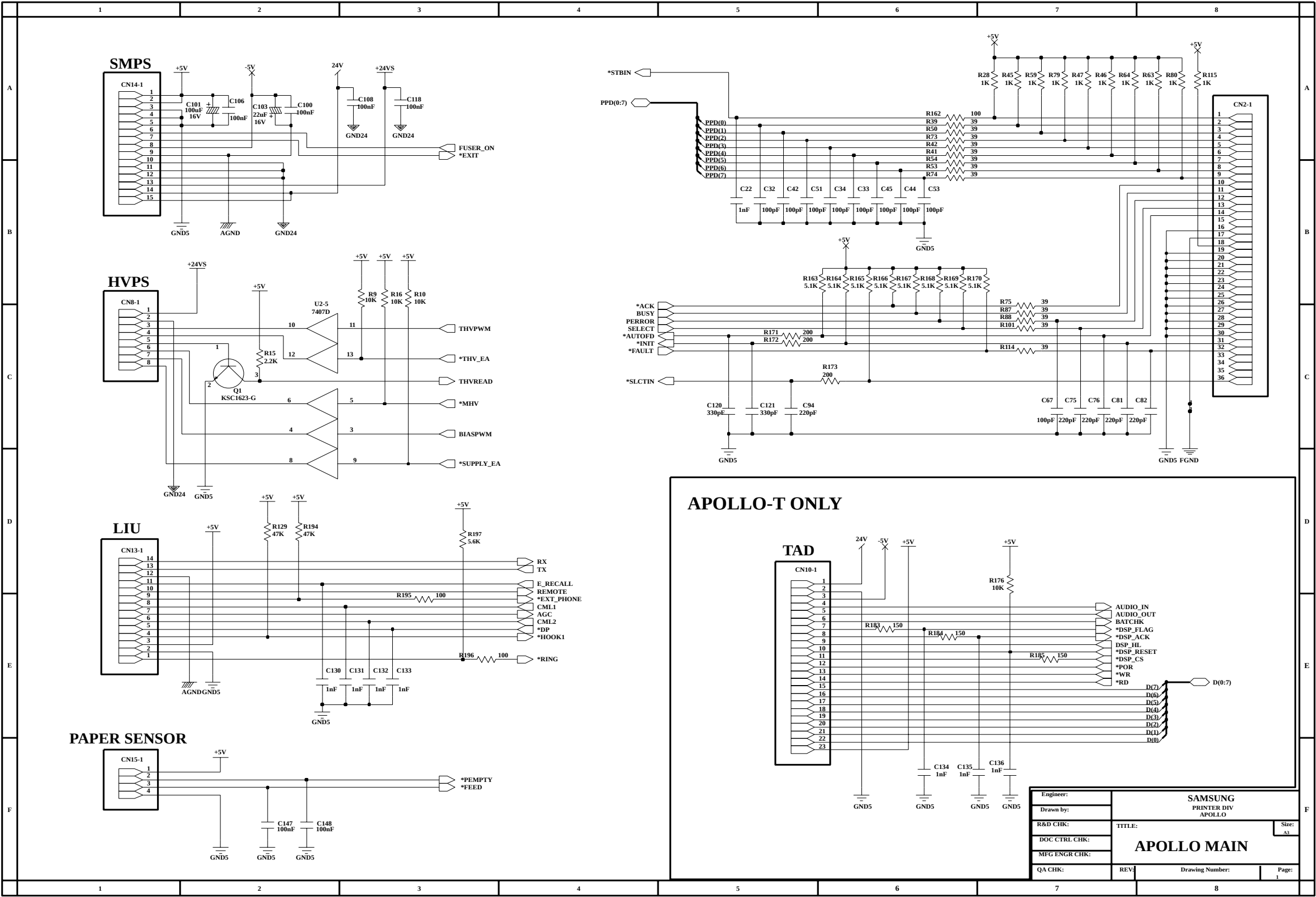
Samsung Electronics

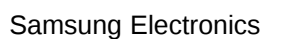


MEMO

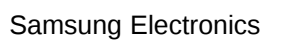
11. Schematic Diagrams

11-1 Main Circuit Diagram

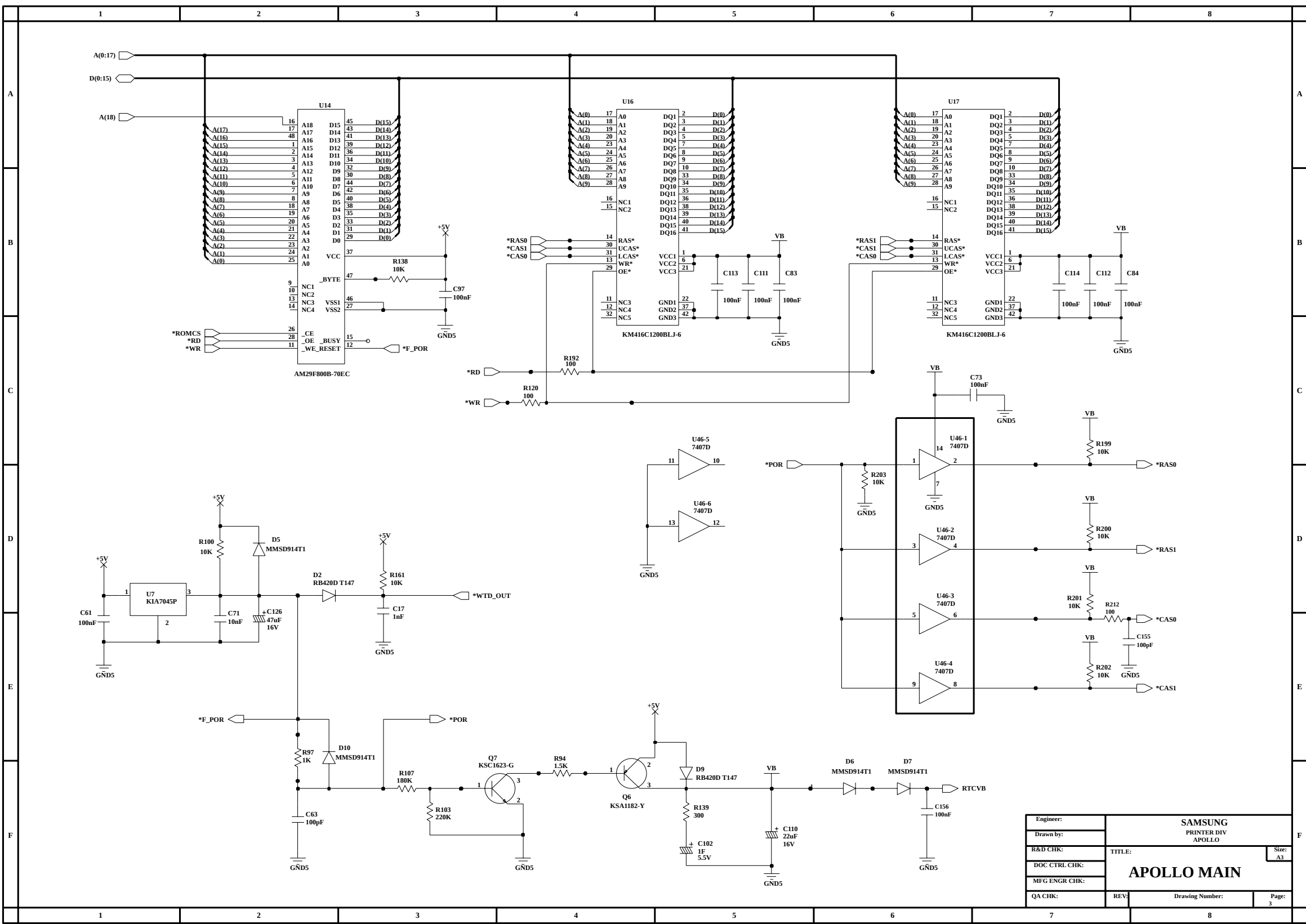






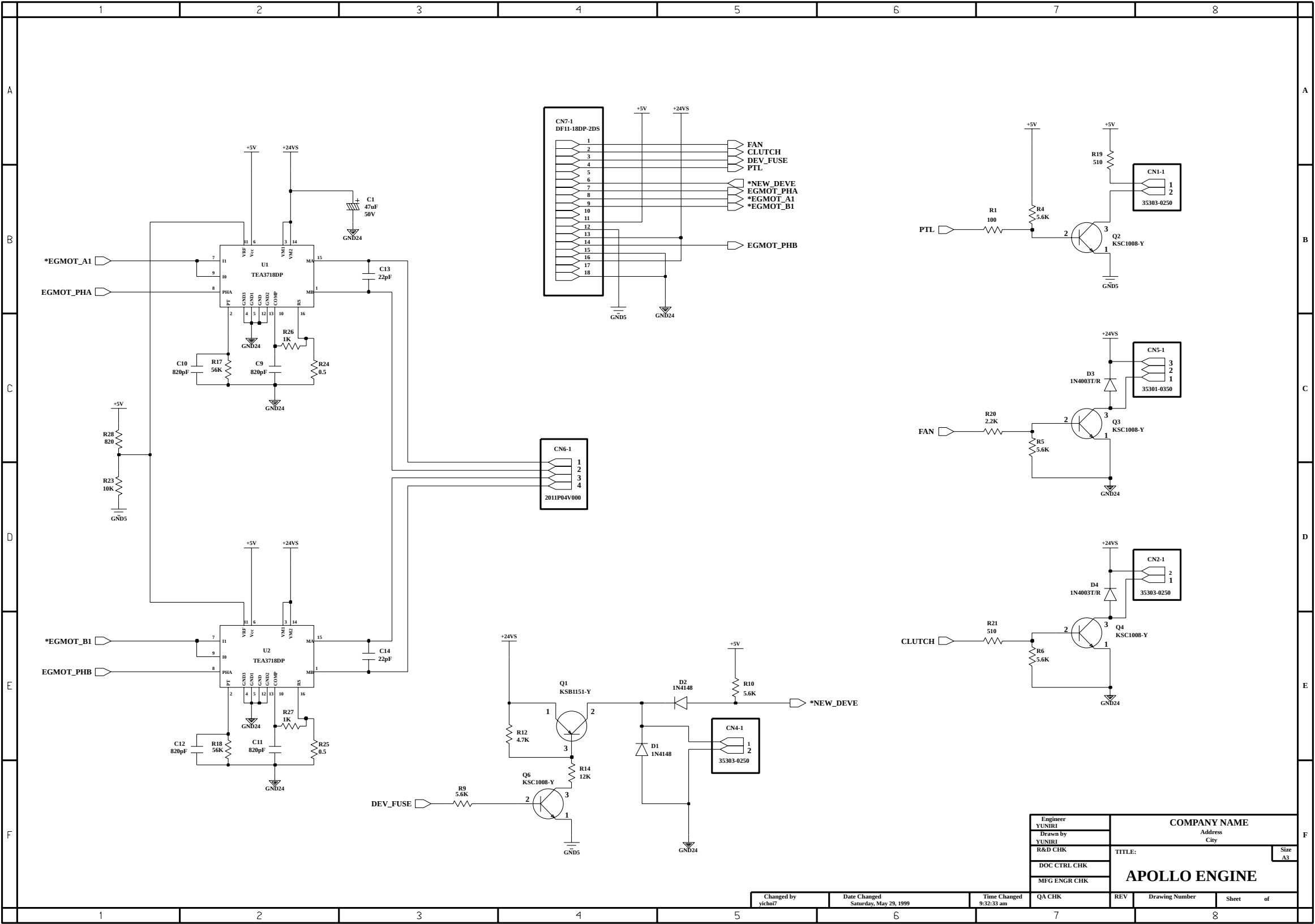


Main Circuit Diagram

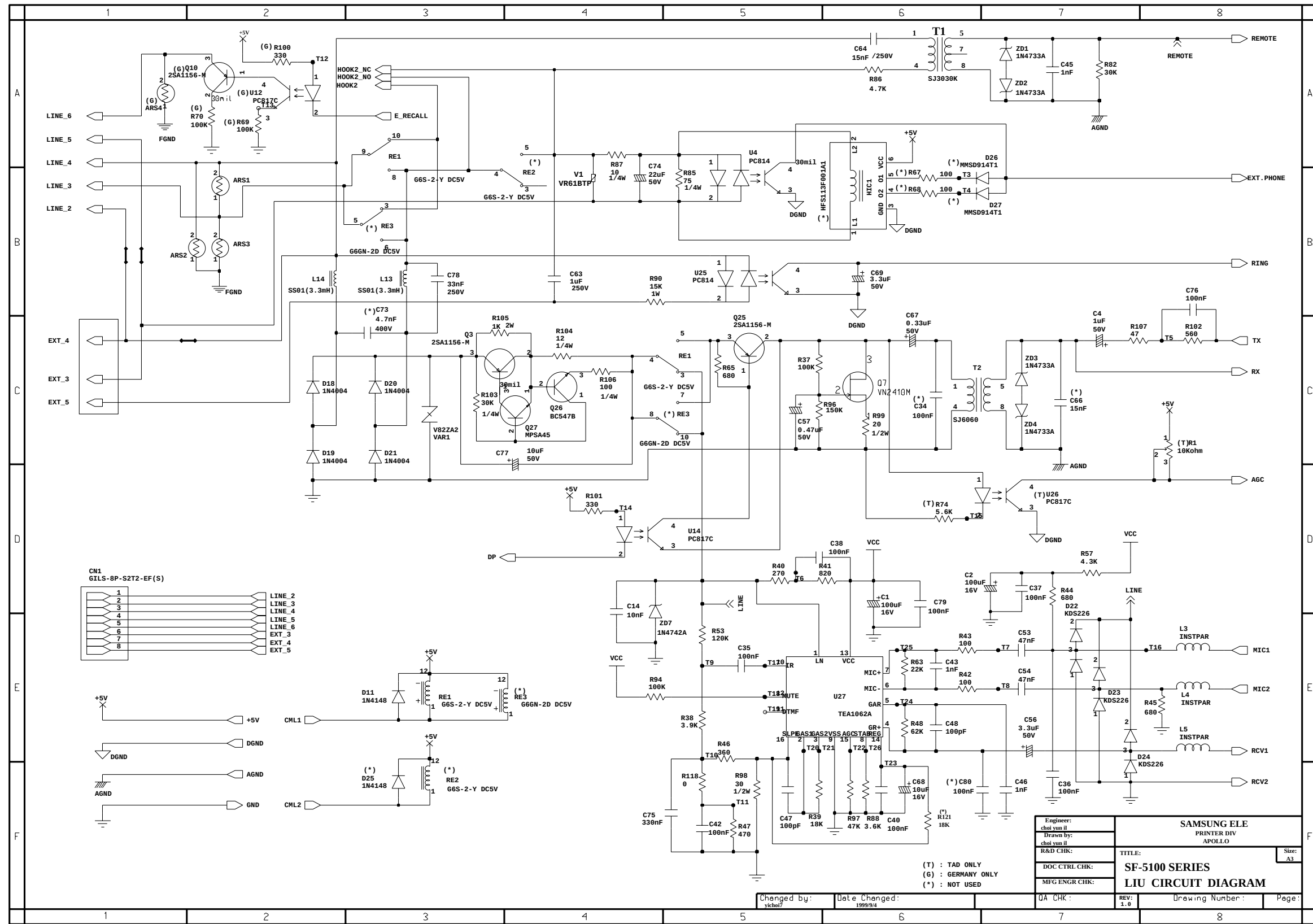


Engineer:	SAMSUNG		
Drawn by:	PRINTER DIV		
R&D CHK:	APOLLO		
DOC CTRL CHK:	TITLE:		
MFG ENGR CHK:	REV:		
QA CHK:	Drawing Number:		
	Page: 3		

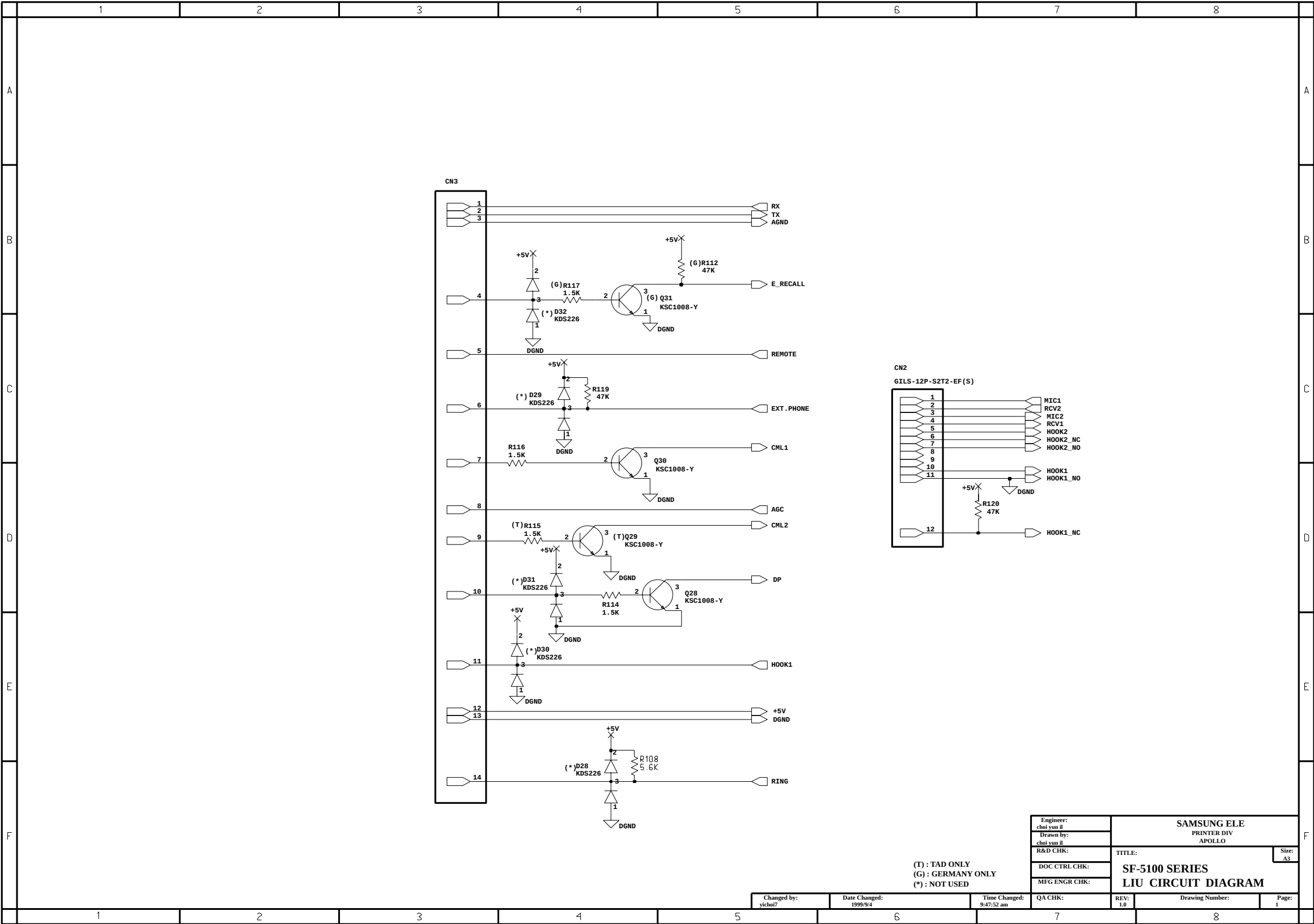
11-2 Engine Circuit Diagram



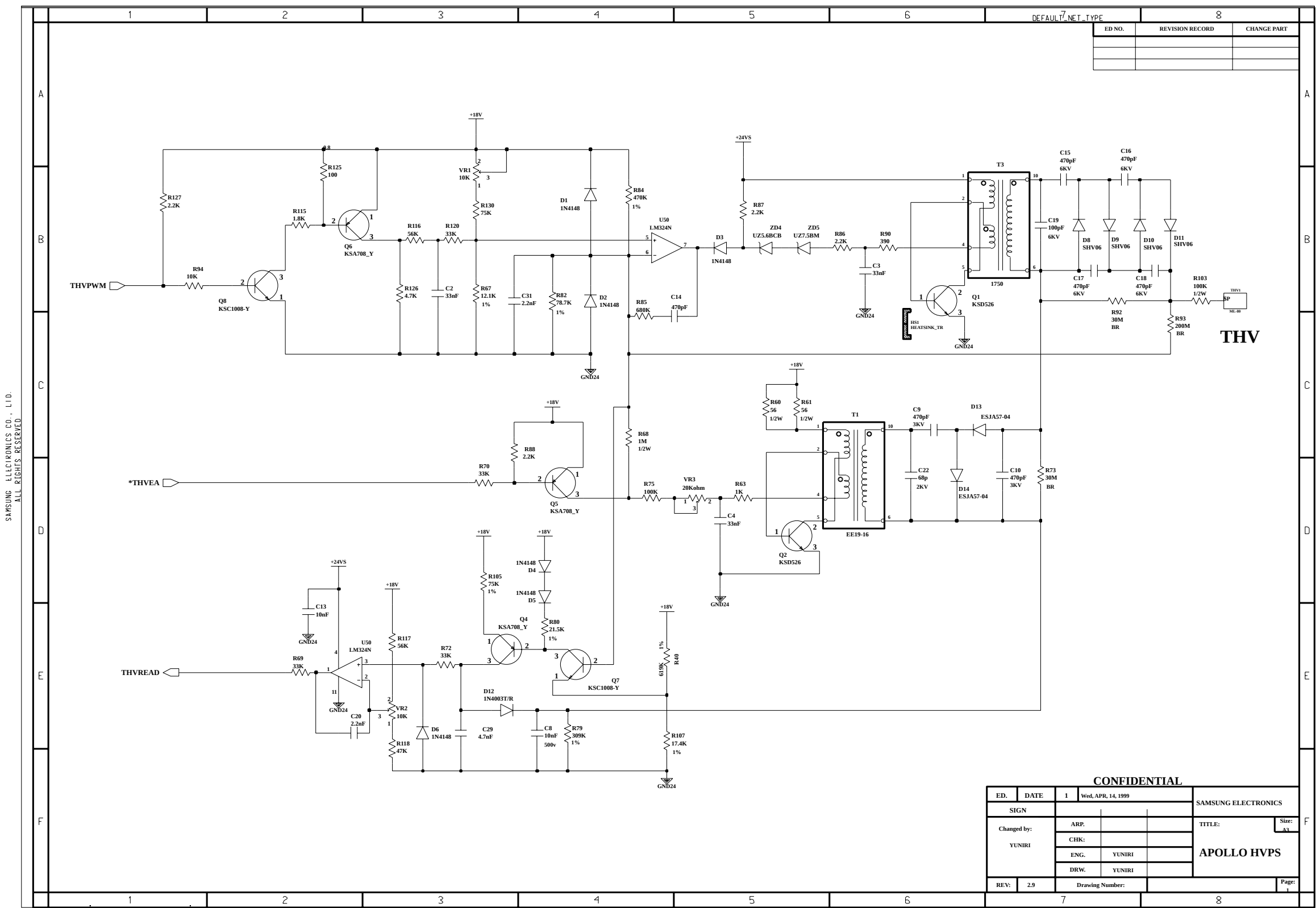
11-3 LIU Circuit Diagram



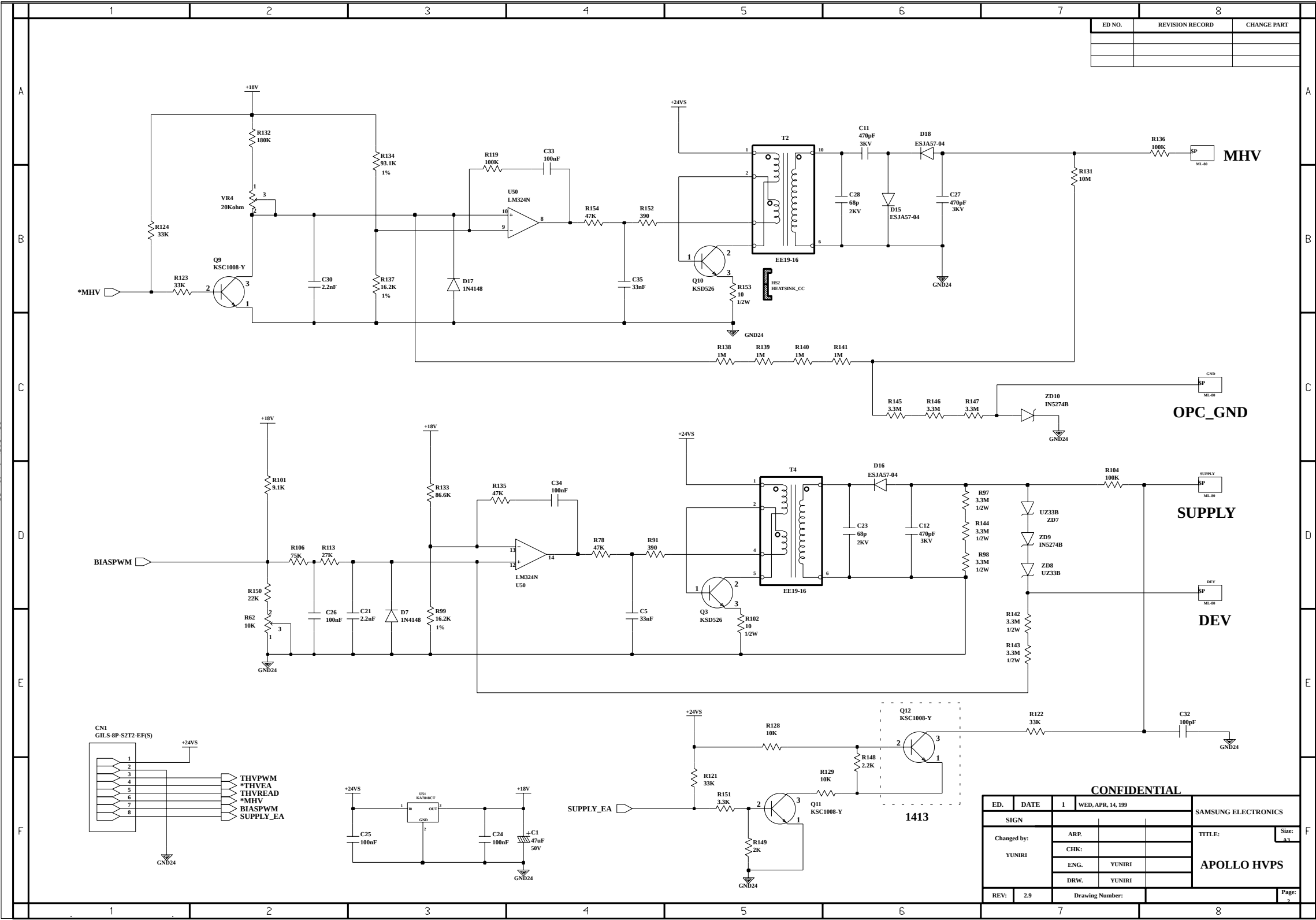
LIU Circuit Diagram



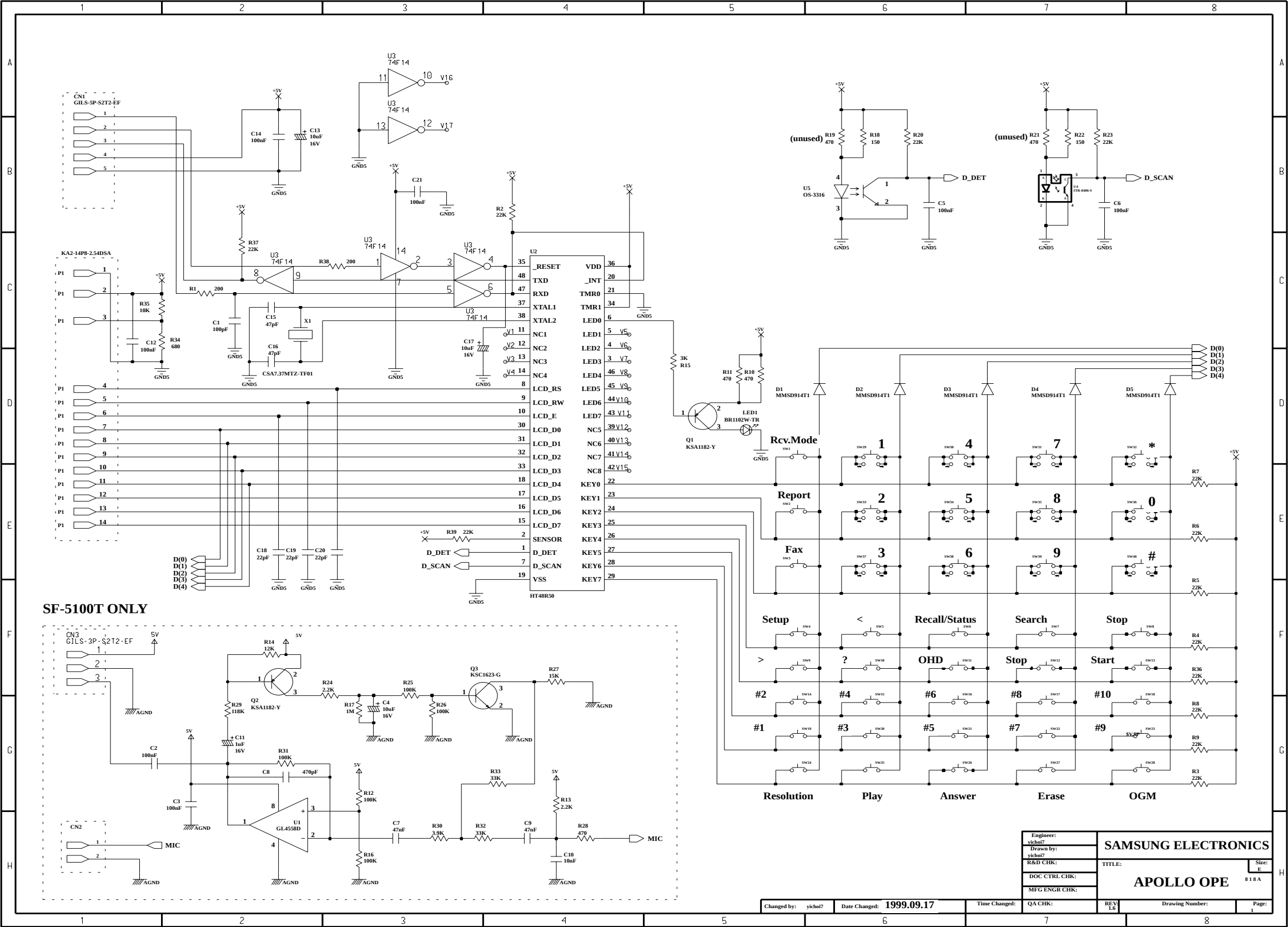
11-4 HVPS Circuit Diagram



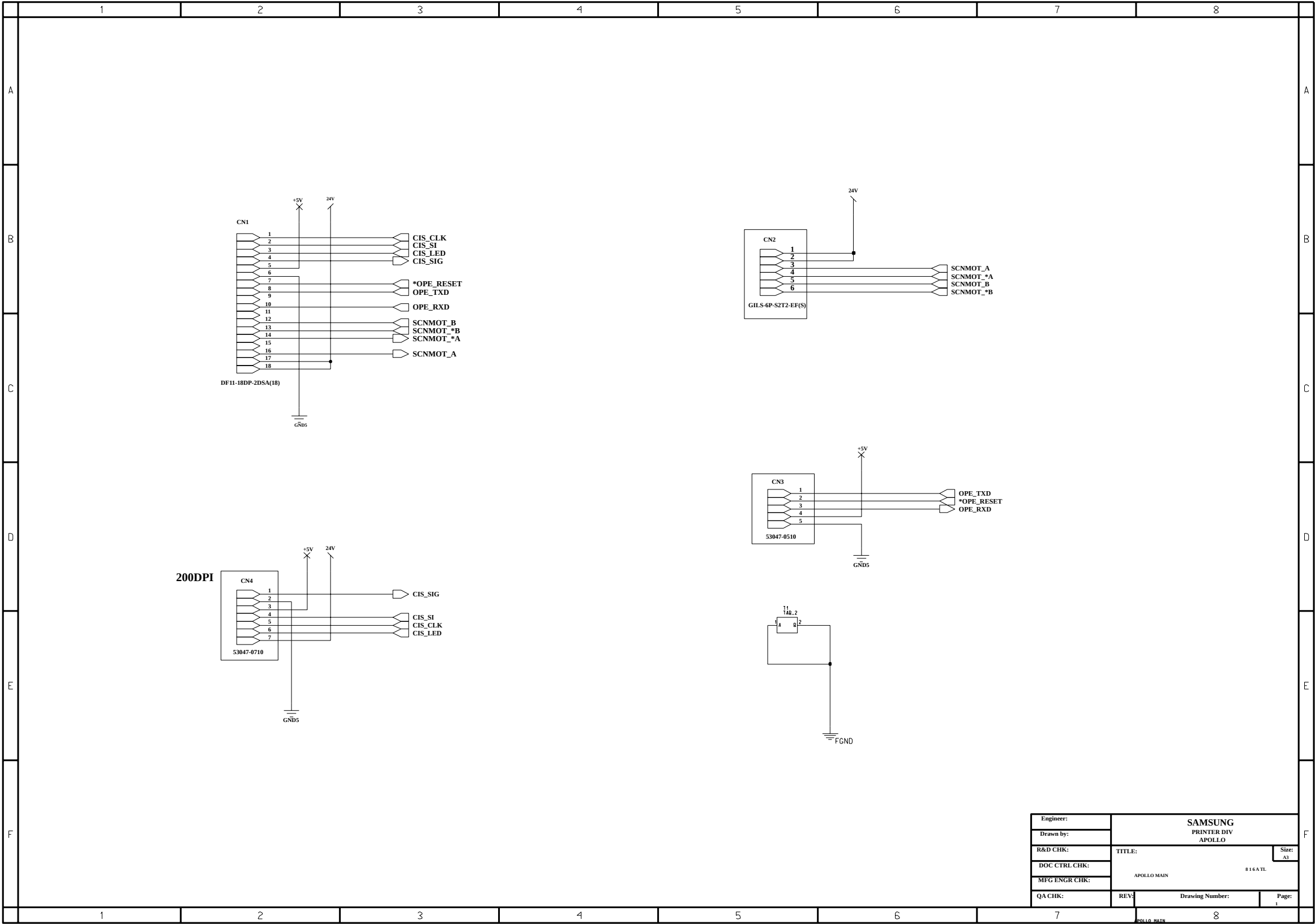
HVPS Circuit Diagram



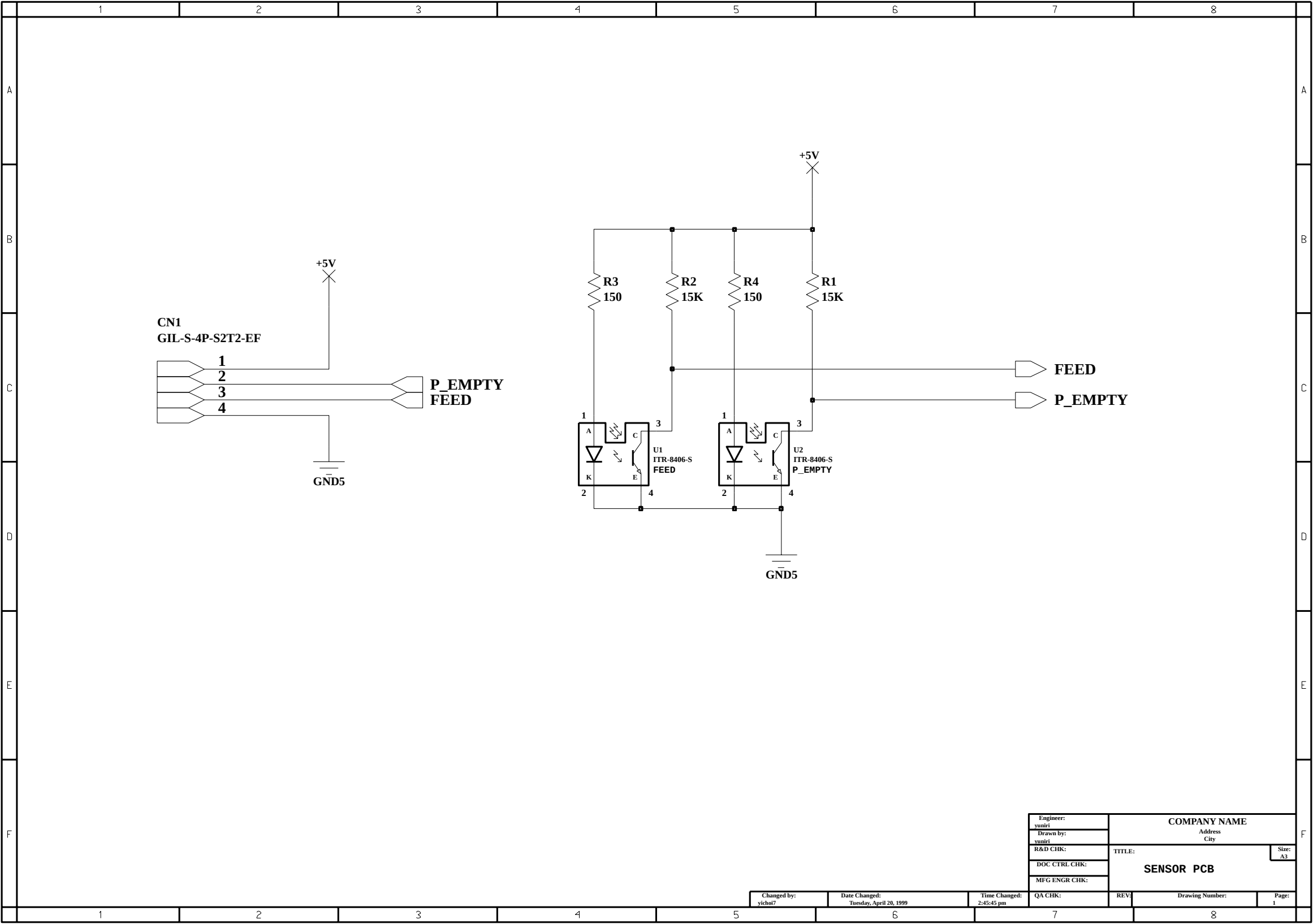
11-5 OPE Circuit Diagram



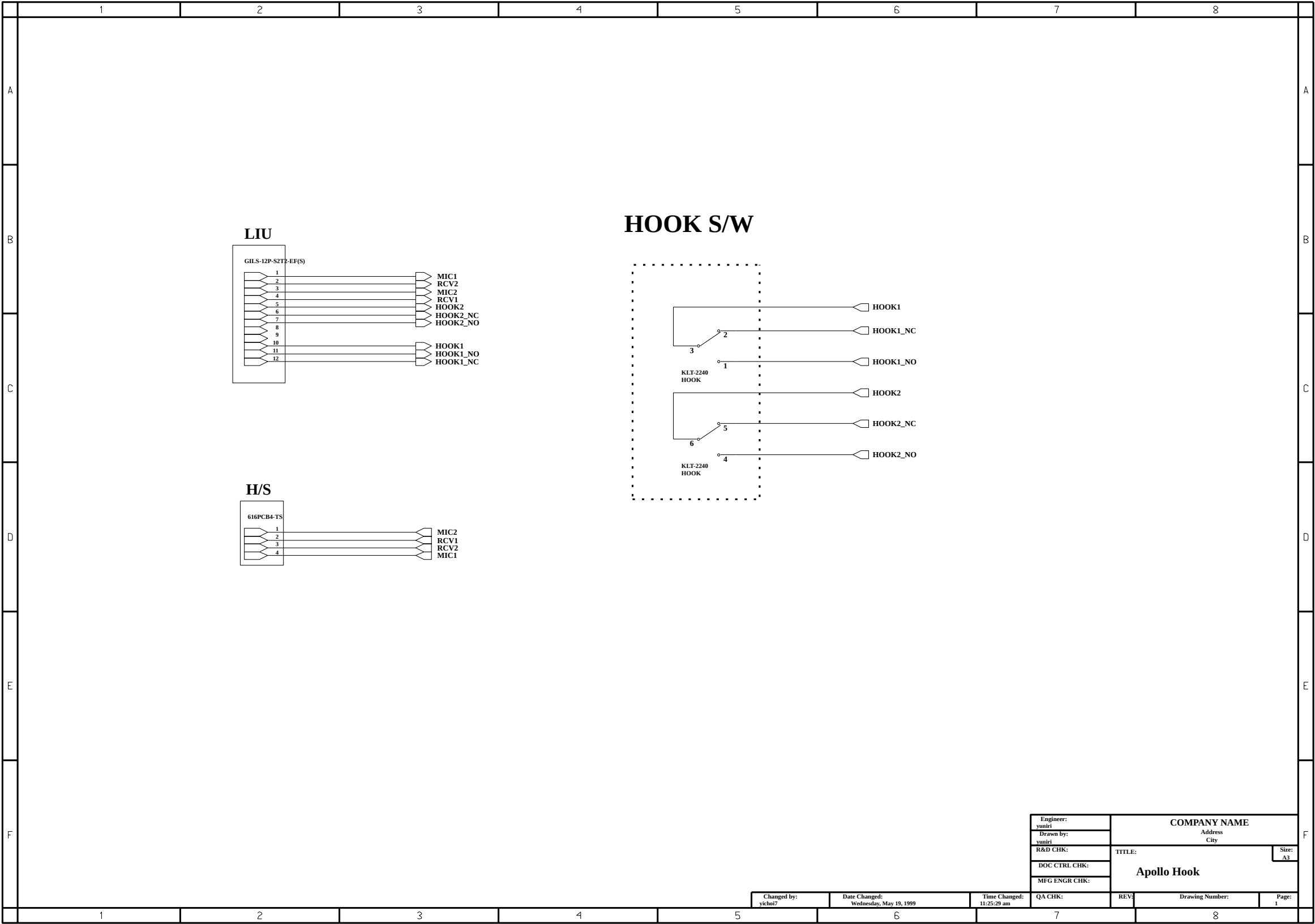
11-6 Scan Circuit Diagram



11-7 Sensor Circuit Diagram



11-8 Hook Circuit Diagram



Appendix Information

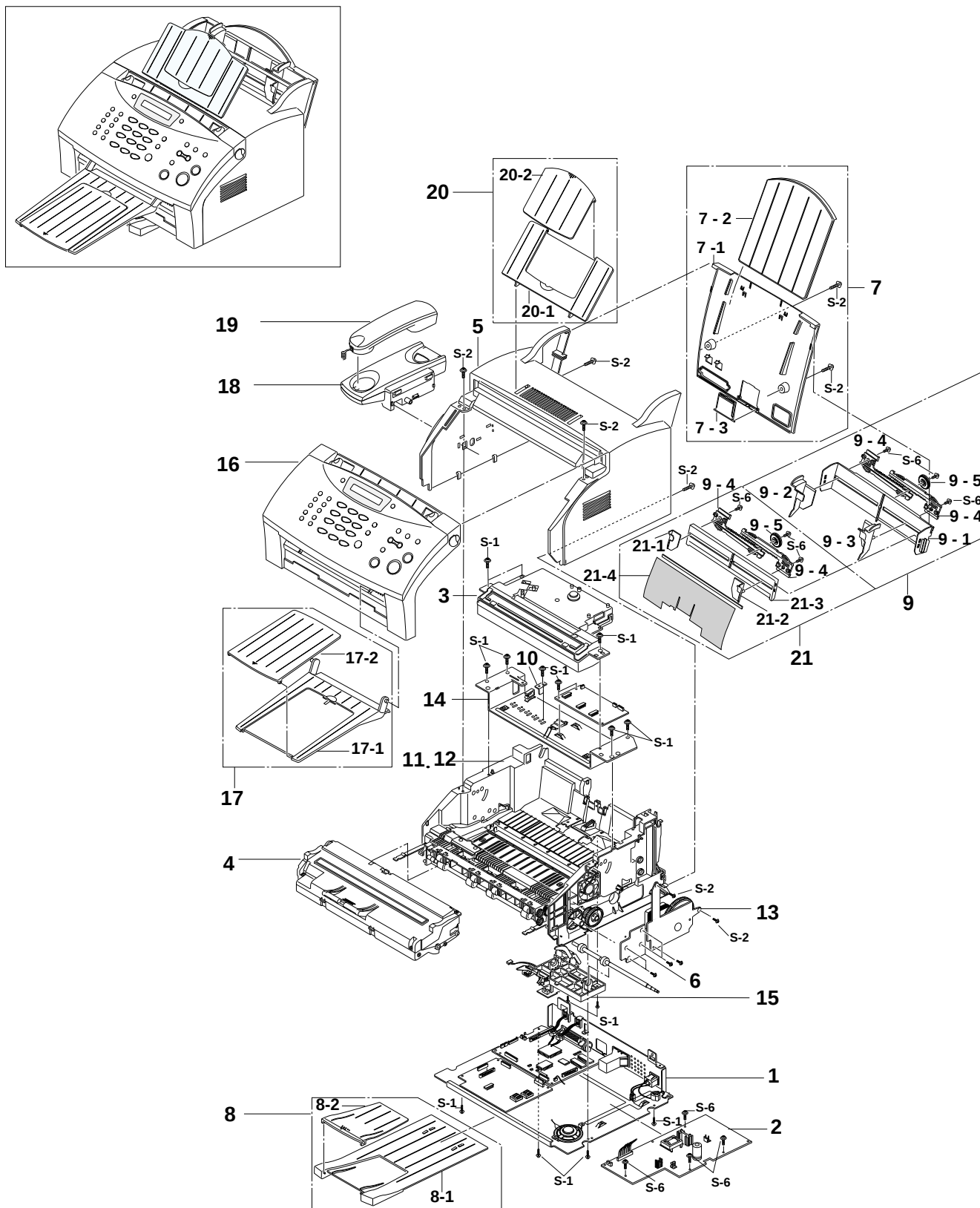
* Please refer to list

BUYER	ELA UOU OPE-FRONT	EMC-TRAY	PBA MAIN-LIU
SF-5100I/XEU	JC96-01685A	JC75-00062A	JC92-01155A
SF-5100PI/XEU	JC96-01685B	JC75-00075A	JC92-01155A
SF-5100I/XAR	JC96-01685L	JC75-00075A	JC92-01192C
SF-5100PI/XAR	JC96-01685D	JC75-00075A	JC92-01192C
SF-5100I/XEG	JC96-01685G	JC75-00062A	JC92-01192D
SF-5100PI/XEG	JC96-01685H	JC75-00075A	JC92-01192D
SF-5100I/XSA	JC96-01685N	JC75-00062A	JC92-01192E
SF-5100PI/XSA	JC96-01685P	JC75-00075A	JC92-01192E
SF-5100I/XEF	JC96-01685L	JC75-00062A	JC92-01192A
SF-5100PI/XEF	JC96-01685M	JC75-00075A	JC92-01192A
SF-5100PI/XAC	JC96-01685Y	JC75-00075A	JC92-01192C
SF-5100I/XIL	JC96-01685J	JC75-00062A	JC92-01192C
SF-5100PI/XIL	JC96-01685K	JC75-00075A	JC92-01192C
SF-5100I/XEP	JC96-01685U	JC75-00062A	JC92-01155A
SF-5100PI/XEP	JC96-01685V	JC75-00075A	JC92-01155A
SF-5100I/XET	JC96-01685Q	JC75-00062A	JC92-01155A
SF-5100PI/XET	JC96-01685R	JC75-00075A	JC92-01155A
SF-5100I/ATG	JC96-01727A	JC75-00062A	JC92-01192F
SF-5100PI/ATG	JC96-01727B	JC75-00075A	JC92-01192F
SF-5100I/ETS	JC96-01685C	JC75-00062A	JC92-01192C
SF-5100PI/ETS	JC96-01685Y	JC75-00075A	JC92-01192C

6. Exploded Views and Parts Lists

- 6-1 Main Assembly**
- 6-2 Shield Engine Unit Assembly**
- 6-3 Engine/Frame Lower Assembly**
- 6-4 Fuser Assembly**
- 6-5 RX Drive Unit Assembly**
- 6-6 Holder Feed Unit Assembly**
- 6-7 Plate-Upper Unit Assembly**
- 6-8 OPE-Front Unit Assembly**
- 6-9 Cradle Unit Assembly**
- 6-10 Handset Assembly**
- 6-11 Packing Assembly**

6-1 Main Assembly

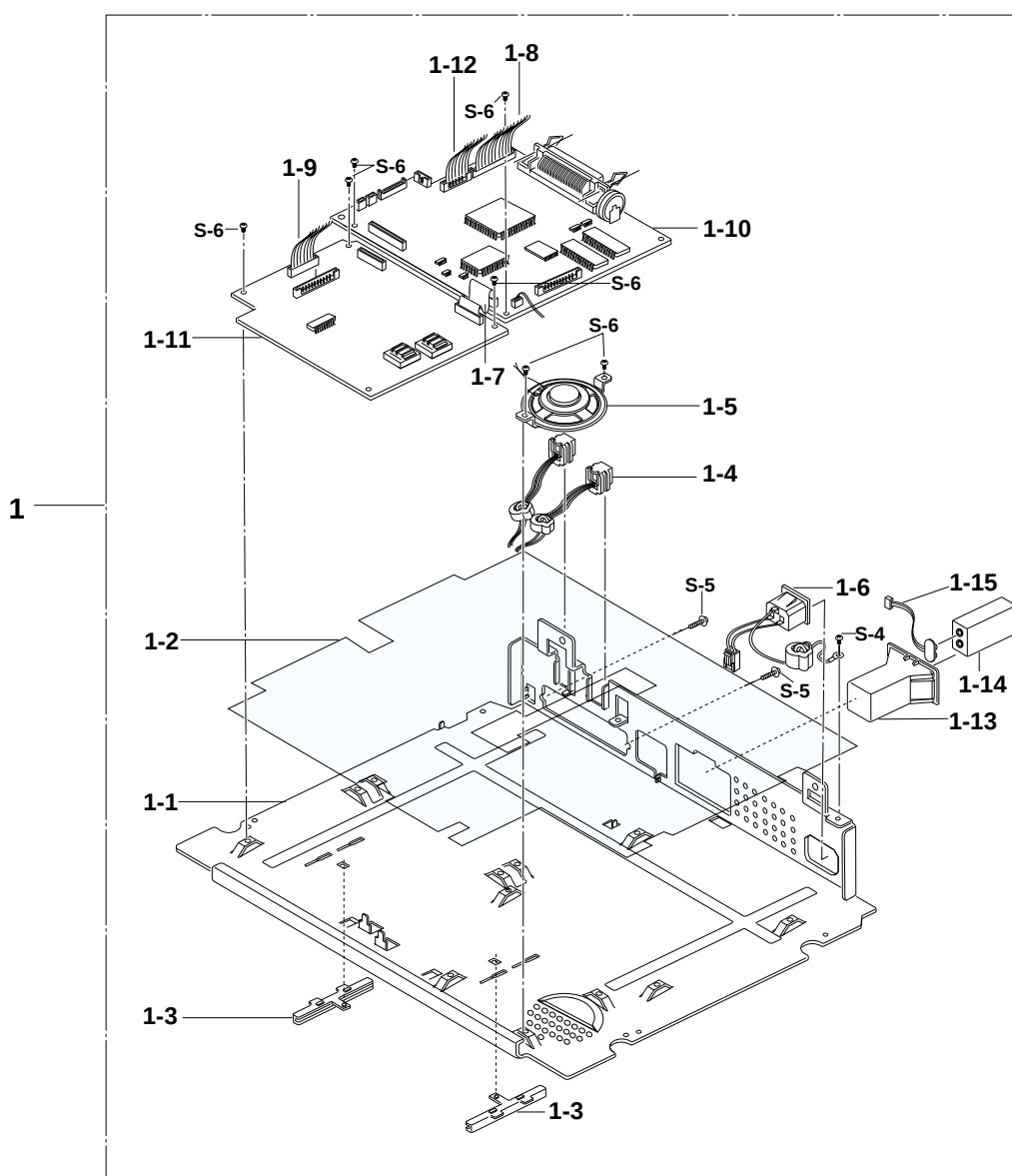
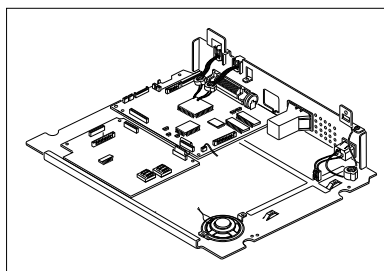


Main Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
1		ELA HOU-SHIELD ENGINE	*	1		
2		PBA-SMPS	JC44-00006A	1	O	For 220V
		PBA-SMPS	JC44-00004A	1	O	For 110V
3		UNIT-LSU	JC59-00002A	1	O	
4		ELA UNIT-DEVE PUBLIC	*	1		
5		PMO-COVER TOP	JC72-00128A	1	O	
6		IRP-BRACKET FUSER DRV	JC70-00108A	1	O	
7		MEC-COVER_REAR	JC75-00059A	1	O	
	7-1	PMO-COVER_REAR	*	1		
	7-2	PMO-TRAY_LARGE	*	1		
	7-3	PMO-COVER_BATT	*	1		
8		MEC-STACKER	JC75-00060A	1	O	
	8-1	PMO-STACKER_MAIN	*	1		
	8-2	PMO-STACKER_SUB	*	1		
9		MEC-TRAY	refer the information	1	O	
	9-1	PMO-TRAY_AUTO	*	1		
	9-2	PMO-ADJUST_AUTO,L	*	1		
	9-3	PMO-ADJUST_AUTO,R	*	1		
	9-4	PMO-GEAR-ADJUST RACK	*	2		
	9-5	PMO-GEAR-PINION	*	1		
	9-8	TRAY MANUAL, PA	*	1		
	S-6	SCREW-TAPTITE	*	3		
9		MEA UNIT-TRAY (P)	refer the information	1	O	
	9-1	PMO-TRAY_AUTO	*	1		
	9-2	PMO-ADJUST_AUTO,L	*	1		
	9-3	PMO-ADJUST_AUTO,R	*	1		
	9-4	PMO-GEAR-ADJUST RACK	*	4		
	9-5	PMO-GEAR-PINION	*	2		
	9-6	PMO-ADJUST MANUAL, L	*	1		
	9-7	PMO-ADJUST MANUAL, R	*	1		
	9-8	TRAY MANUAL, PA	*	1		
	9-9	GUIDE-FILM PAPER	*	1		
	S-6	TAPTITE-SCREW	*	6		
10		IPR-PLATE_CHANNEL	JC70-00058A	1	O	
11		ELA HOU-ENGINE ASS'Y	*	1		
12		ELA HOU-FRAME LOWER	JC96-01686A	1	O	For 110V
		ELA HOU-FRAME LOWER	JC96-01687A	1	O	For 220V
13		MEC-RX DRIVE	JC75-00085A	1	O	
14		MEC-PLATE-UPPER	JC75-00057A	1	O	
15		MEC-HOLDER FEED	JC75-00055A	1	O	
16		ELA HOU OPE-FRONT	refer the information	1	O	
17		MEC-STACKER RX	JC75 00084A	1	O	
18		MEC-CRADLE	JC75-00083A	1	O	
19		ELA HOU-HANDSET	JC96-01629A	1	O	
20		MEA UNIT-CHUTE ASS'Y	JC97-01187E	1	O	
S-1		TAPTITE-SCREW	*	12		
S-2		TAPTITE-SCREW	*	15		
S-6		TAPTITE-SCREW	*	4		

SA : Service Avail

6-2 Shield Engine Unit Assembly

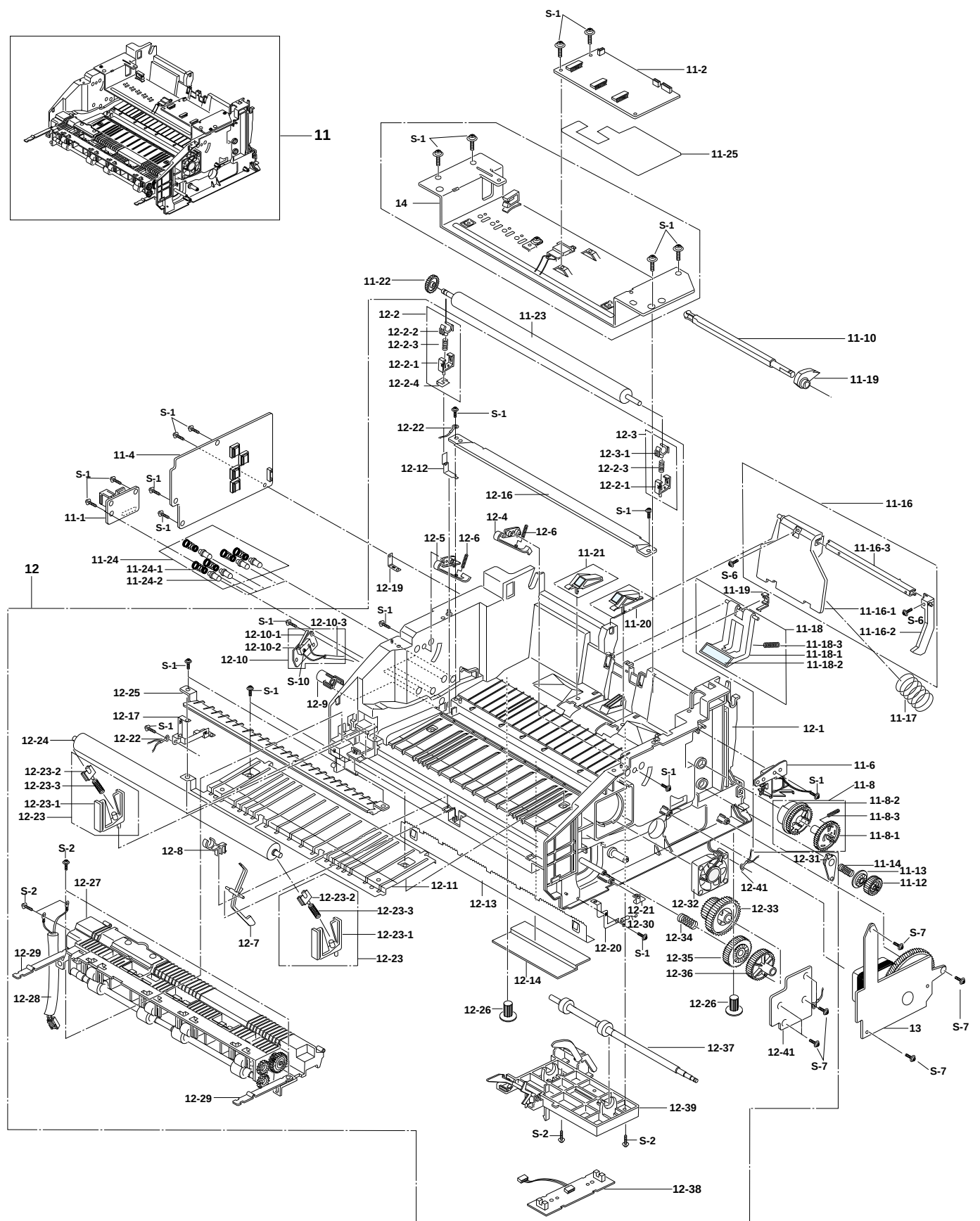


Shield Engine Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
1		ELA UNIT ENGINE ASSY	*	1		
	1-1	IPR-SHIELD-ENGINE	JC70-00037A	1	O	
		IPR-SHIELD-ENGINE	JC70-00037B	1	O	For SF-5100T
	1-2	PCT-INSULATOR SMPS	JC72-00218A	1	O	
	1-3	PMO-GUIDE STACKER	JC72-00171A	2	O	
	1-4	CBF HARNESS-MODULA	JC39-00058A	1	O	
	1-5	ELA M/MEDIO AUD-SPEAKER	JC96-01607A	1	O	
	1-6	POWER-INLET	JC39-40022A	1	O	
	1-7	CABLE-FLAT	3809-001161	1	O	
	1-8	CBF HARNESS-LSU	JC39-00043A	1	O	
	1-9	CBF HARNESS-LIU/HOOK	JC39-00048A	1	O	
	1-10	PBA MAIN-MAIN	JC92-01152A	1	O	
	1-11	PBA MAIN-LIU	refer the information	1	O	
	1-12	CBF HARNESS-MAIN/HVPS	JC39-00047A	1	O	
	1-13	PMO-CASE BATTERY	JC72-00181A	1	O	For SF-5100T
	1-14	BATTERY		1		For SF-5100T
	1-15	CBF HARNESS-BATTERY		1		For SF-5100T
	S-4	SCREW-MACHINE	*	1		
	S-5	SCREW-TAPTITE	*	2		
	S-6	SCREW-TAPTITE	*	7		

SA : Service Avail

6-3 Engine/Frame Lower Assembly



Engine/Frame Lower Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
11		ELA HOU-ENGINE ASS'Y	*	1		
	11-1	PBA-HOOK	JC92-01196A	1	O	
	11-2	PBA-ENGINE	JC92-01154A	1	O	
	11-4	PBA-HVPS	JC92-01184A	1	O	
	11-5	CBF-NARNESS THERMISTOR	JC39-00045A	1	O	
	11-6	UNIT-SOLENOID	JC33-0002A	1	O	
	11-7	CBF HARNESS-MAIN/SCAN	JC39-00040A	1	O	
	11-8	MEC-GEAR PICKUP	JC75-00056A	1	O	
	11-8-1	PMO-GEAR_PICKUP,1	*	1		
	11-8-2	PMO-GEAR_PICKUP,2	*	1		
	11-8-3	SPRING-PICKUP,GEAR	*	1		
	11-9	PMO-CAM_PICKUP	*	1		
	11-10	PMO-SHAFT_PICKUP	*	1		
	11-12	PMO-GEAR_FEED	JC72-00115A	1	O	
	11-13	PMO-CLUTCH_FEED	JC72-00116A	1	O	
	11-14	SPRING-CLUTCH	JC61-00012A	1	O	
	11-16	MEC-KNOCKUP ASSY	JC75-00053A	1	O	
	11-16-1	PMO-PLATE_KNOCKUP	*	1		
	11-16-2	PMO-CAM-KNOCKUP	*	1		
	11-16-3	IPR-BAR_KNOCKUP	*	1		
	S-6	SCREW-TAPTITE	*	2		
	11-17	SPRING-KNOCKUP	JC61-00023A	1	O	
	11-18	MEC-HOLDER PAD	JC75-00052A	1	O	
	11-18-1	PMO-HOLDER_PAD	*	1		
	11-18-2	RPR-PAD FRICTION	*	1		
	11-18-3	SPRING-PAD	*	1		
	11-19	PMO-CAP_PAD	JC72-00124A	2	O	
	11-20	MEC-SIDE PAD(R)	JC75-00051A	1	O	
	11-21	MEC-SIDE PAD(L)	JC75-00050A	1	O	
	11-22	PMO-GEAR_TRANSFER	JC72-00179A	1	O	
	11-23	ROLLER-TR(APOLLO)	JC75-00035A	1	O	
	11-24	MEC-TERMINAL	JC75-00049A	5	O	
	11-24-1	TERMINAL	*	1		
	11-24-2	SPRING-HV LARGE	*	2		

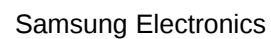
SA : Service Avail

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
12	11-25	PCT-INSULATOR ENG BD	*	1		
	S-1	SCREW-TAPTITE	*	9		
		ELA HOU-FRAME LOWER	JC96-01687A	1	O	For 220V
		ELA HOU-FRAME LOWER	JC96-01686	1	O	For 110V
	12-1	PMO-MAIN FRAME	*	1		
	12-2	MEA ETC-HOLDER TR L	*	1		
	12-2-1	PMO-HOLDER TR	*	1		
	12-2-2	PMO-BUSHING_TR(L)	*	1		
	12-2-3	SPRING-TR	*	1		
	12-2-4	IPR-PLATE_TR	*	1		
	12-3	MEA ETC-HOLDER TR R	*	1		
	12-2-1	PMO-HOLDER TR	*	1		
	12-3-1	PMO-BUSHING_TR(R)	*	1		
	12-2-3	SPRING-TR	*	1		
	12-4	PMO-CAP PLTE GU/DEV R	JC72-41135A	1	O	
	12-5	PMO-CAP PLTE GU/DEV L	JC72-41173A	1	O	
	12-6	SPRING-GUIDE DEVE	JC61-00038A	2	O	
	12-7	PMO-ACTUATOR_EXIT	*	1		
	12-8	PMO-HOLDER_EXIT	*	1		
	12-9	PMO-BUSHING_TERMINAL	*	1		
	12-10	ELA HOU-OPEN SENSOR	JC96-01584A	1	O	
	12-10-1	IPR-BRKT_SENSOR	*	1		
	12-10-2	SENSOR	*	1		
	12-10-3	CBF-HARNESS COVER	JC39-00041A	1	O	
	S-10	SCREW-TAPTITE	*	1		
	12-11	IPR-GUIDE-TR	*	1		
	12-12	IPR-PLATE-TERMINAL	*	1		
	12-13	IPR-SAW_PLATE	*	1		
	12-14	PCT-FILM SAW	*	1		
	12-16	IPR-EARTH_TRANS	*	1		
	12-17	IPR-GROUND_GUIDE	*	1		
	12-19	IPR-GROUND_HVPS	*	1		
	12-20	IPR-GROUND_FUSER	*	1		
	12-21	IPR-GROUND_DRV	*	1		
	12-22	CBF HARNESS-OPE GND	*	1		

SA : Service Avail

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
13	12-23	MEA ETC-HOLDER PR	*	2		For 110V For 220V
	12-23-1	PMO-HOLDER_PR	*	1		
	12-23-2	BEARING-PR	JC66-10205A	1	O	
	12-23-3	SPRING-PR	*	1		
	12-24	MEC-ROLLER_PRESSURE	JC75-00027A	1	O	
	12-25	PMO-GUIDE_INPUT	*	1		
	12-26	RMO-RUBBER_FOOT	*	2		
	12-27	ELA HOU-FUSER ASS'Y	JC96-01621A	1		
		ELA HOU-FUSER ASS'Y	JC96-01622A	1		
	12-28	CBF-HARNESS FUSER	*	1		
	12-29	PHO-STOPPER EXIT	JC72-41396B	2	O	
	12-30	ELA HOU-MOTOR GND	*	1		
	12-31	PMO-BUSHING SHAFT	JG72-40849A	1	O	
	11-32	FAN-DC	3103-001071	1	O	
	11-33	PMO-GEAR_83/35	JC72-00154A	1	O	
	11-34	SPRING-FU DR	JC61-00016A	1	O	
	11-35	PMO-GEAR_FU_IN 47	JC72-00155A	1	O	
	11-36	PMO-GEAR_FU_OUT 47	JC72-00157A	1	O	
	11-37	MEC-ROLLER FEED	JC75-00054A	1	O	
	11-38	PBA-SENSOR	JC92-01197A	1	O	
	11-39	EMC-HOLDER FEED	JC75-00055A	1	O	
	11-40	CBF-HARNESS	JC39-00064A	1	O	
	11-41	IRP-BRACKET FVSR DRV	JC70-00108A	1	O	
		EL A UNIT-RX DRIVE	JC75-00085AA	1	O	
	S-1	SCREW-TAPTITE	*	10		
	S-2	SCREW-TAPTITE	*	2		

SA : Service Avail

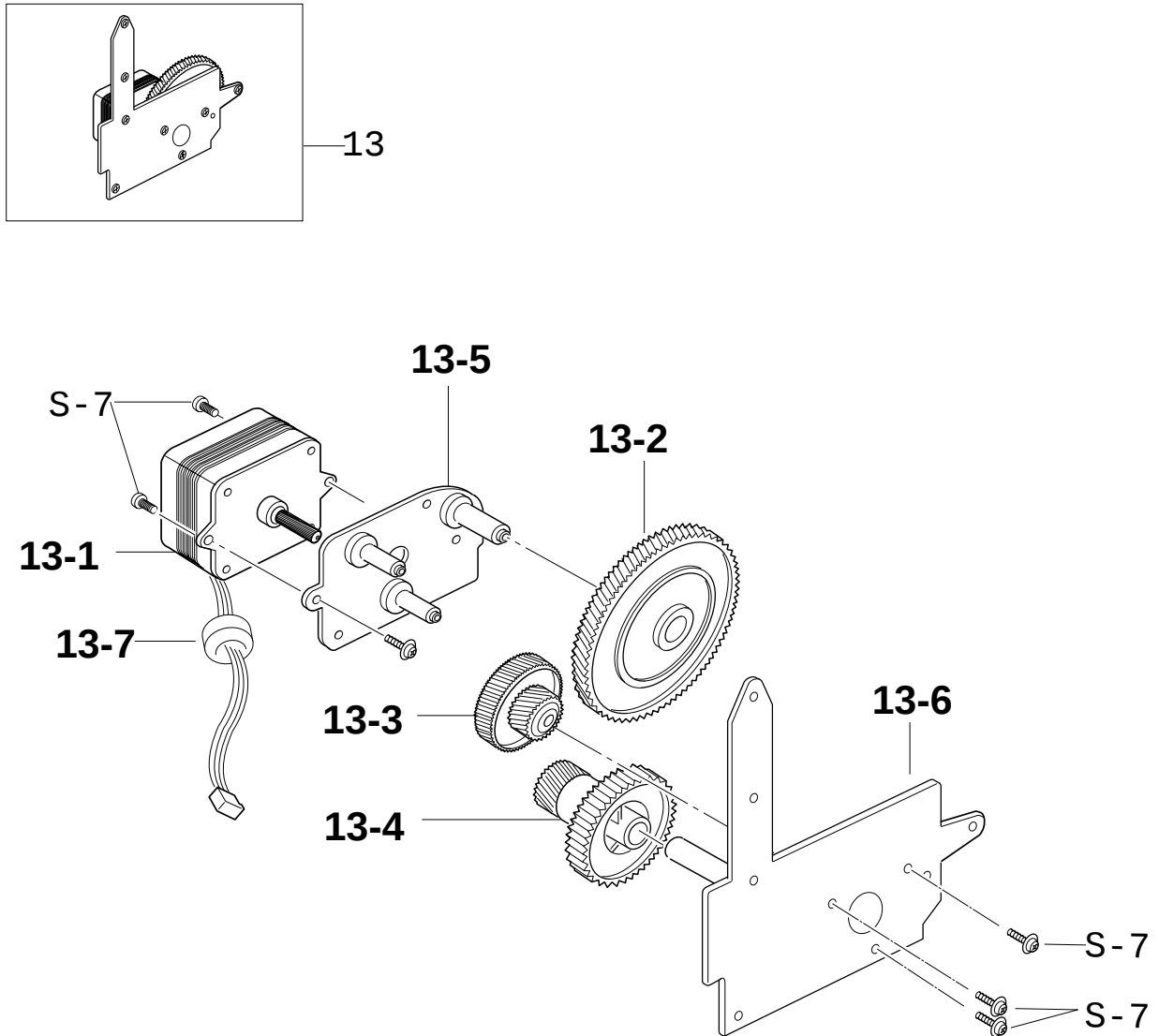


Fuser Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
	12-27	ELA HOU-FUSER ASS'Y	JC96-01618A	1	O	For 110V
		ELA HOU-FUSER ASS'Y	JC96-01632A	1	O	For 220V
	12-27-1	THERMISTOR-NTC	1404-001188	1	O	
	12-27-2	THERMOSTAT-150C	4712-000001	1	O	
	12-27-3	LAMP-HALOGEN	4713-001120	1	O	For 110V
	12-27-3	LAMP-HALOGEN	4713-001121	1	O	For 220V
	12-27-4	PMO-FUSER_UPPER	*	1		
	12-27-5	PMO-BUSHING_HR,L	*	1		
	12-27-6	PMO-BUSHING_HR,R	*	1		
	12-27-7	PMO-COVER_THERMOSTAT	*	1		
	12-27-8	MEC-ROLLER HEAT	JC71-00004A	1	O	
	12-27-9	IPR-ELECTRODE_PLATE	*	1		
	12-27-10	IPR-GROUND_FU	*	1		
	12-27-11	IPR-CLAW_SEPARATOR	*	4		
	12-27-12	ELECTRODE-WIRE,1	*	1		
	12-27-13	ELECTRODE-WIRE,S	*	1		
	12-27-14	MEA ETC-SHAFT EXIT	*	1		
	12-27-14-1	PMO-SHAFT_EXIT(Z15)	*	1		
	12-27-14-2	RMO-RUBBER_EXIT	*	4		
	12-27-15	MEA ETC-ROLLER EXIT	*	1		
	12-27-15-1	MEC-ROLLER EXIT	JC75-00037A	4	O	
	12-27-15-2	IPR-PIN ROLLER EXIT	*	4		
	12-27-16	SPRING-EXIT	*	4		
	12-27-17	PMO-GEAR_EXIT_DRV16	*	1		
	12-27-18	PMO-GEAR_EXIT_IDLE	*	1		
	12-27-19	PMO-GEAR_FUSER,Z29	*	1		
	12-27-20	LABEL HOT	*	1		
	12-27-21	CABLE-TIE	*	1		
	S-1	SCREW TAPTITE	*	5		
	S-2	SCREW TAPTITE	*	1		

SA : Service Avail

6-5 RX Drive Unit Assembly

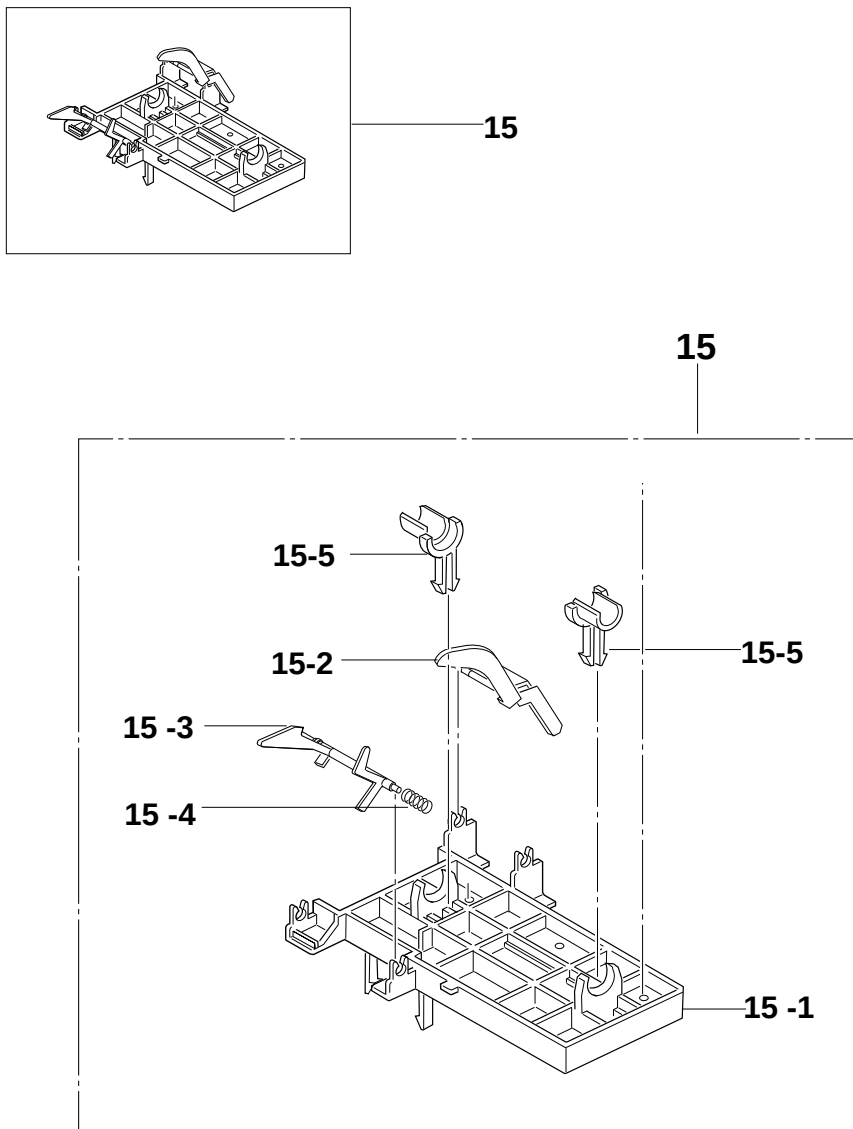


RX Drive Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
13		ELA UNIT-RX DRIVE	JC75-00085A	1	O	
	13-1	MOTOR-STEP	3101-001201	1	O	
	13-2	PMO-GEAR_71/28	*	1		
	13-3	PMO-GEAR_73/22	*	1		
	13-4	PMO-GEAR_132/19	*	1		
	13-5	IPR-BRACKET_MOTOR	*	1		
	13-6	IPR-BRACKET_GEAR	*	1		
	13-7	CORE-FERRITE	*	1		
	S-7	SCREW-MACHINE	*	5		

SA : Service Avail

6-6 Holder Feed Unit Assembly



Holder Feed Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
15		MEC-HOLDER FEED	JC75-00055A	1	O	
	15-1	PMO-HOLDER_FEED	*	1		
	15-2	PMO-ACTUATOR_EMPTY	*	1		
	15-3	PMO-ACTUATOR_FEED	*	1		
	15-4	SPRING-ACT,FEED	*	1		
	15-5	PMO-BUSHING_FEED	*	2		

SA : SVC Avail

6-7 Plate-Upper Unit Assembly

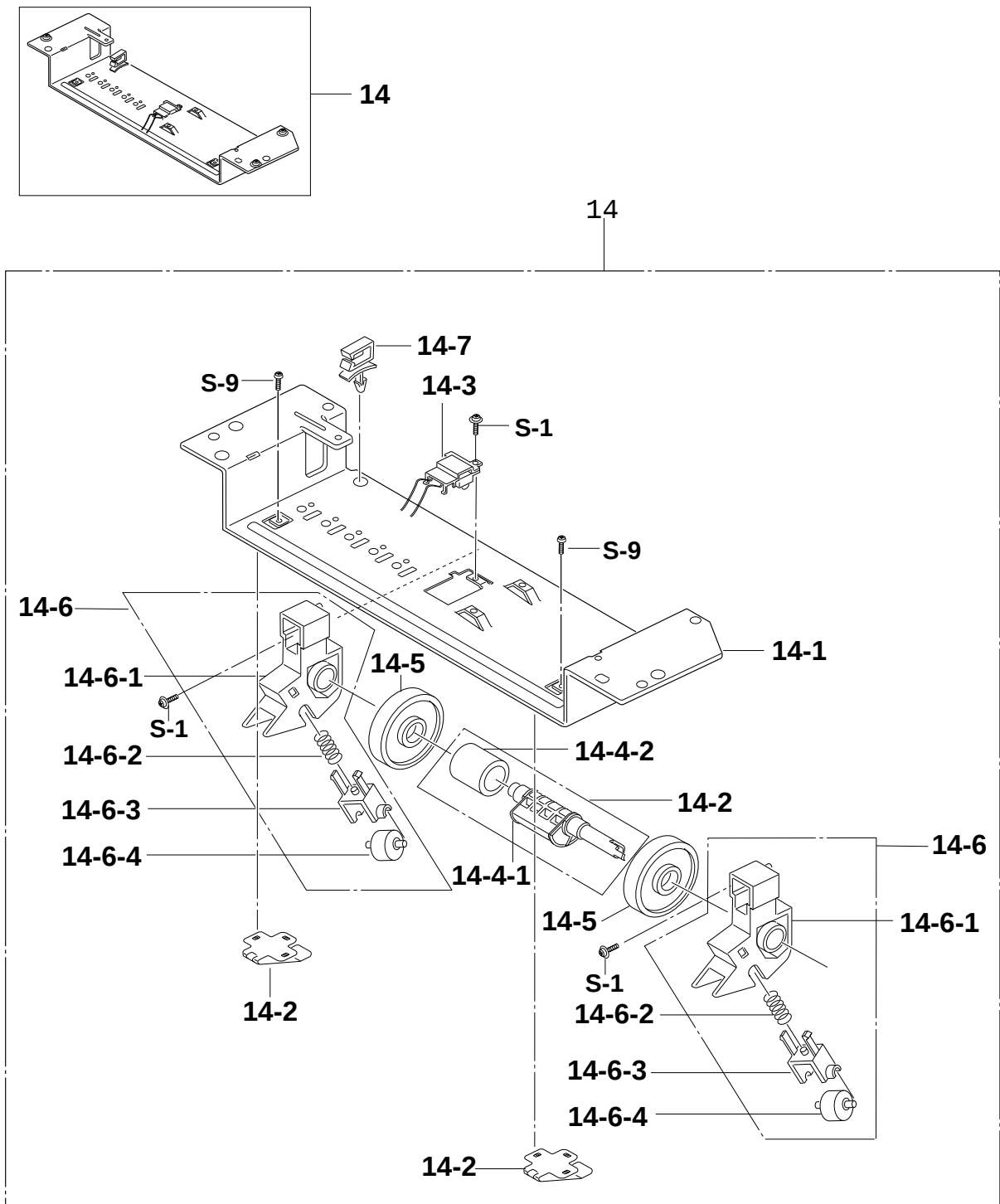
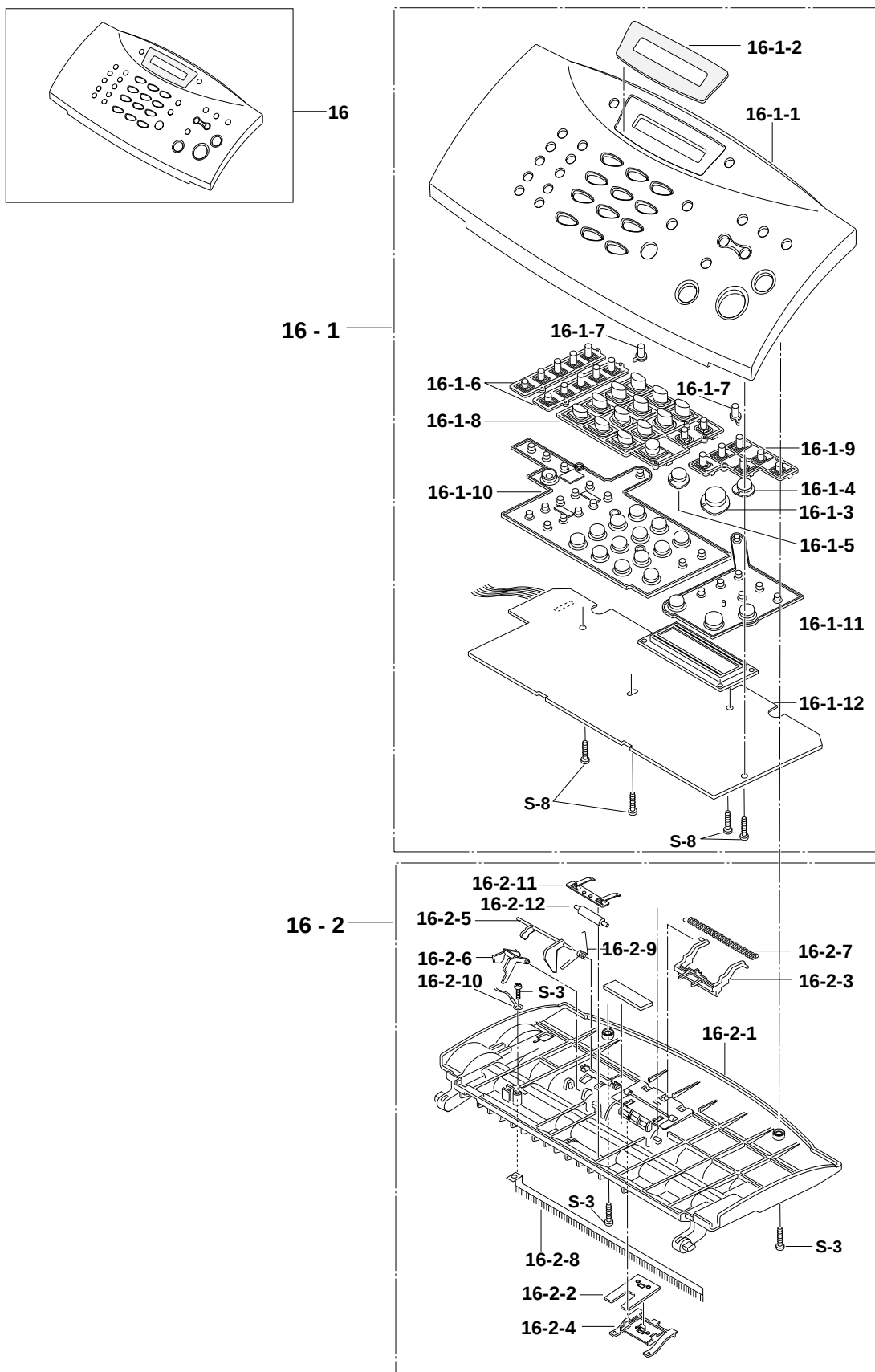


Plate-Upper Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
14		MEC-PLATE-UPPER	JC75-00057A	1	O	
	14-1	IPR-UPPER-PLATE	*	1		
	14-2	IPR-PLATE SPRING	JC70-10223A	2	O	
	14-3	ELA UNIT-FUSE DEVE	JC96-01117A	1	O	
		CBF-HARNESS-2P	*	1		
		IPR-PLATE FUSE DEVE	*	2		
		PMO-CAP PLATE FU L	*	1		
		PMO-CAP PLATE FU U	*	1		
	14-4	MEA ETC-ROLLER PICKUP	*	1		
	14-4-1	PMO-HOUSING_PICKUP	*	1		
	14-4-2	RMO-ROLLER_PICKUP	*	1		
	14-5	PMO-IDLE_PICKUP	*	2		
	14-6	MEA ETC-IDLE FEED	*	2		
	14-6-1	PMO-HOLDER_PICKUP	*	1		
	14-6-2	SPRING-FEED	*	1		
	14-6-3	PMO-HOLDER_IDLE,FEED	*	1		
	14-6-4	IPR-ROLLER_IDLE,FEED	*	1		
	14-7	CABLE CLAMP	*	1		
	S-1	SCREW TAPTITE	*	3		
	S-9	SCREW TAPTITE	*	2		

SA : Service Avail

6-8 OPE Unit Assembly

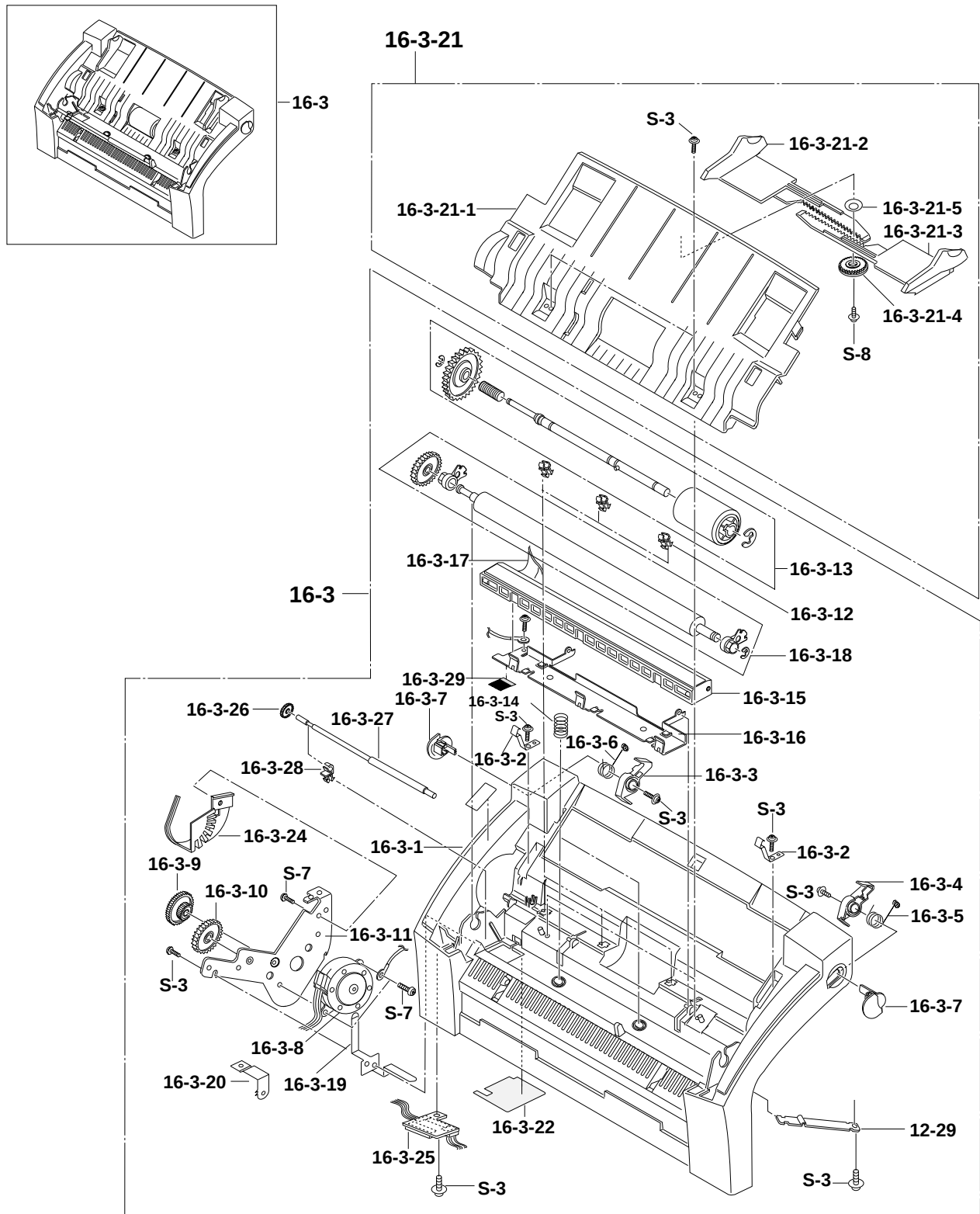


OPE Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	S/A	Remark
16	16-1	ELA HOU OPE-FRONT	refer the information	1	O	
		ELA HOU OPE ASSY	*	1		
		16-1-1 PMO-COVER OPE	*	1		
		16-1-2 PPR-WINDOW_LCD	*	1		
		16-1-3 KEY-START	*	1		
		16-1-4 KEY-COPY	JB72-00102A	1	O	
		16-1-5 KEY-STOP	JB72-00108A	1	O	
		16-1-6 KEY-ONE TOUCH	JC72-00409A	2	O	
		16-1-7 KEY-RESOLUTION	*	2		
		16-1-8 KEY-TEL	JB72-00100A	1	O	
		16-1-9 KEY-FUNCTION	JC72-00410A	1	O	
		16-1-10 RPR-CONTACT-RUBBER(A)	*	1		
		16-1-11 RPR-CONTACT-RUBBER(B)	*	1		
		16-1-12 PBA-MAIN OPE	JC92-01156A	1		
		S-8 SCREW-TAPTITE	*	4		
	16-2	ELA HOU SCAN UPPER	*	1		
		16-2-1 PMO-SCAN UPPER FRAME	*	1		
		16-2-2 RUBBER-ADF	JC73-00032A	1	O	
		16-2-3 SUPPORT-ADF	JG72-40043A	1	O	
		16-2-4 HOLDER-RUBBER	JG72-40044A	1	O	
		16-2-5 LEVER-SENSOR DOC	JB72-41247A	1	O	
		16-2-6 LEVER-SENSOR SCN	*	1		
		16-2-7 SPRING-COIL	JG70-40514A	1	O	
		16-2-8 ANTISTATIC-BRUSH	JB75-00051A	1	O	
		16-2-9 SPRING-SENSOR	*	1		
		16-2-10 CBF-HARNESS SCAN GND	*	1		
		16-2-11 IRP-PLATE PINCH ROLL	*	1		
		16-2-12 PMO-ROLLER PINCH STACKER	*	1		
		S-3 SCREW-TAPTITE	*	1		

SA : Service Avail

OPE Unit Assembly

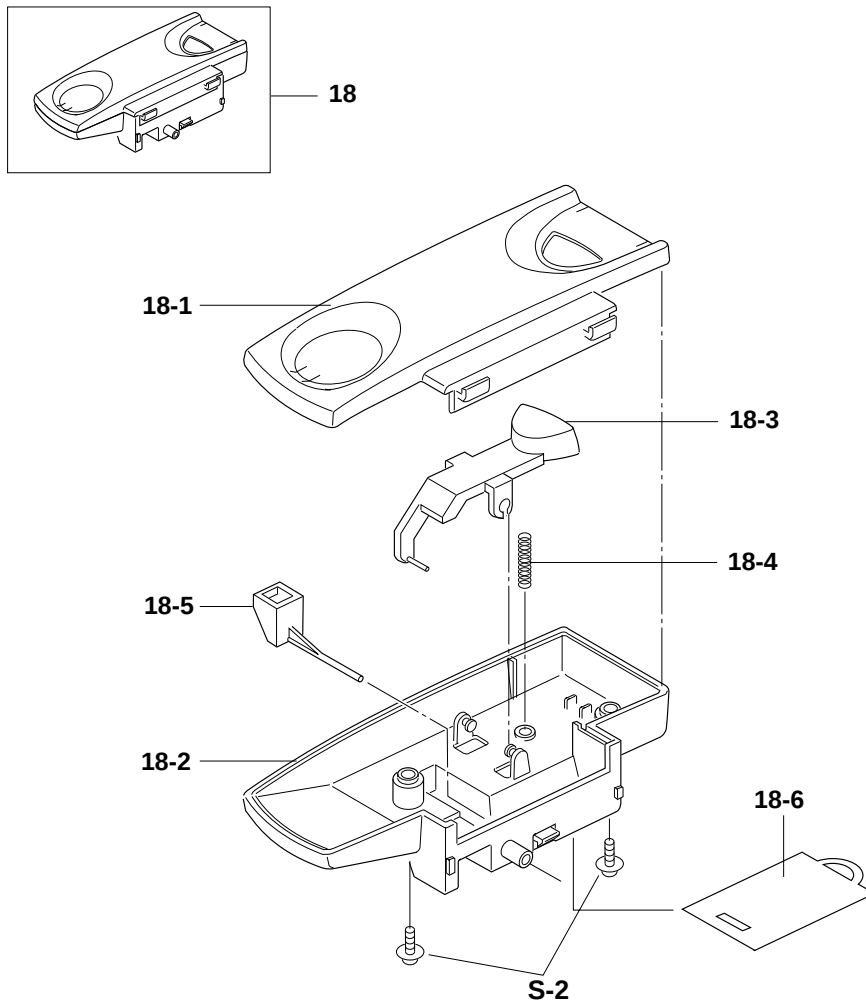


OPE Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
16-3		ELA HOU FRONT ASSY	*	1		
	12-29	STOPPER-EXIT	JC72-41396B	1	O	
	16-3-1	PMO-SCAN FRONT FRAME	*	1		
	16-3-2	LOCKER-TX	JG64-30001A	2	O	
	16-3-3	PMO-OPEN LOCKER L	*	1		
	16-3-4	PMO-OPEN LOCKER R	*	1		
	16-3-5	SPRING-LOCKER R	*	1		
	16-3-6	SPRING-LOCKER L	*	1		
	16-3-7	OPEN-BUTTON	*	2		
	16-3-8	SCAN MOTOR	3101-001203	1	O	
	16-3-9	PMO-GEAR_73/21/13	*	1		
	16-3-10	PMO-GEAR_IDLER-50	*	1		
	16-3-11	IPR-BRACKET_SCAN(0.85V)	*	1		
	16-3-12	PMO-BUSHING SHAFT	*	3		
	16-3-13	ELA HOU-ROLLER ADF	*	1		
	16-3-14	SPRING CIS	*	2		
	16-3-15	CONTACT IMAGE SENSOR	0609-001116	1	O	
	16-3-16	IPR-GUIDE_CIS	*	1		
	16-3-17	CBF HARNESS-SCAN/CIS(200)	JC39-00049A	1	O	
	16-3-18	MEA ETC-ROLLER WHITE	*	1		
	16-3-19	IPR-PLATE_GROUND	*	1		
	16-3-20	IPR-PLATE_GROUND A	*	1		
	16-3-21	ELA ETC GUIDE PAPER	*	1		
	16-3-21-1	PMO-GUIDE PAPER	*	1		
	16-3-21-2	PMO-GUIDE DOC L	*	1		
	16-3-21-3	PMO-GUIDE DOC R	*	1		
	16-3-21-4	PMO-GEAR PINION	JG66-40003A	1	O	
	16-3-21-5	SPRING-COVER	JF70-10616A	1	O	
	16-3-22	PPR-COVER SCAN	*	1		
	16-3-23	LABEL-CLEANING	*	1		
	16-3-24	PMO-COVER-GEAR	*	1		
	16-3-25	PBA-SCAN	*	1		
	16-3-26	GEAR SEACKER(Z20)	*	1		
	16-3-27	EMC-ROLLER STACKER	*	1		
	16-3-28	PMO-BUSHING SHAFT(EXIT)	*	1		
	16-3-29	EMC-BRUSH SHAFT	*	1		
	S-3	SCREW TAPTITE	*	10		
	S-7	SCREW MACHINE	*	3		
	S-8	SCREW TAPTITE	*	1		
	S-7	SCREW-TAPTITE	*	2		

SA : Service Avail

6-9 Cradle Unit Assembly

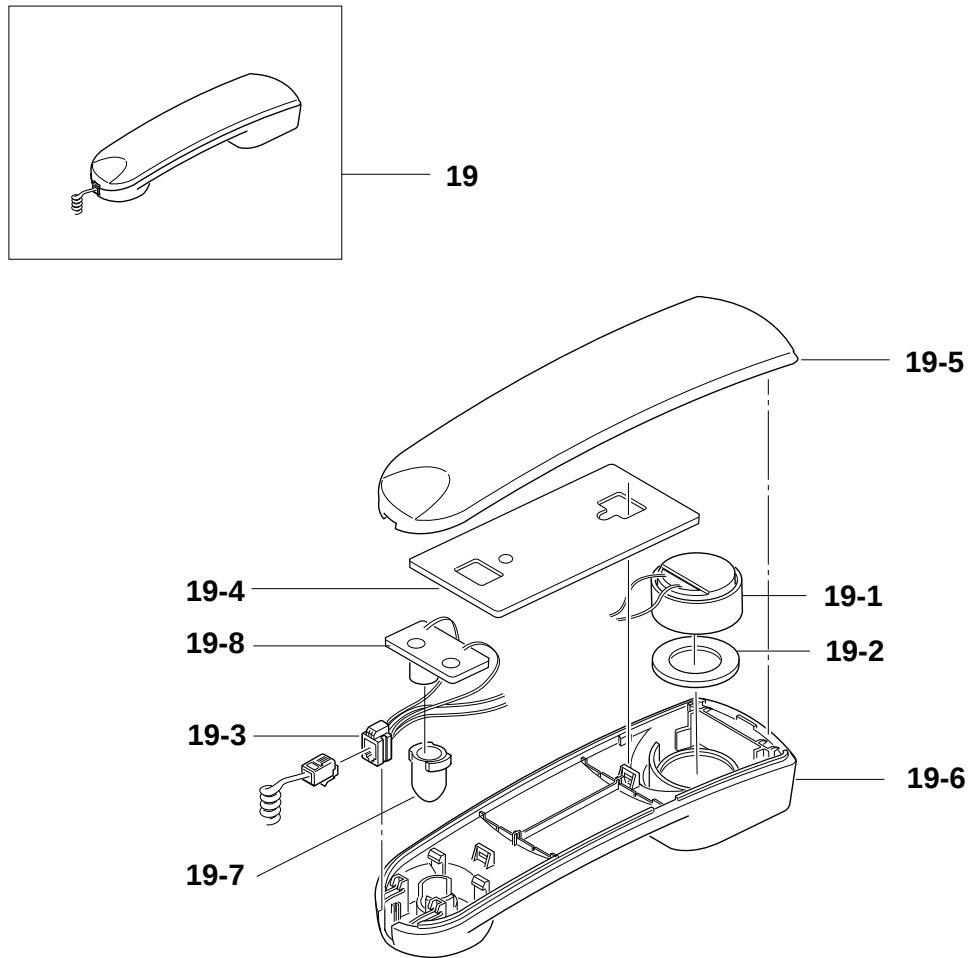


Cradle Unit Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
18		MEC-CRADLE	JC75-00083A	1	O	
	18-1	PMO-CRADLE UPPER	*	1		
	18-2	PMO-CRADLE LOWER	*	1		
	18-3	PMO-BUTTON HOOK	*	1		
	18-4	SPRING-HOOK	*	1		
	18-5	PMO-SLIDE HOOK	*	1		
	18-6	SHEET-ONETOUCH	JC72-00439A	1	O	
	S-2	SCREW-TAPTITE	*	2		

SA : Service Avail

6-10 Handset Assembly

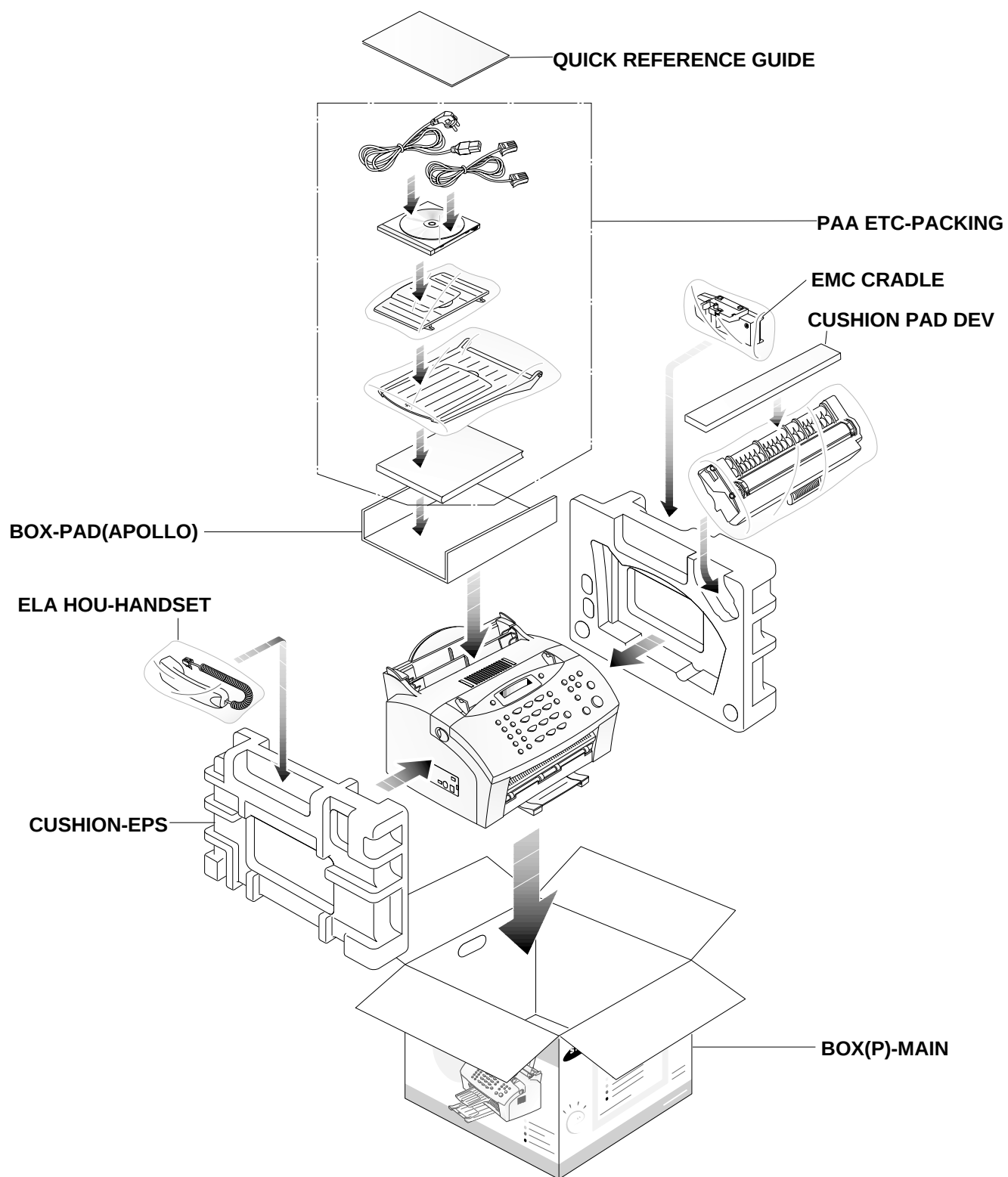


Handset Assembly Parts Lists

LOCATION NO		.Description	CODE NO.	Q'TY	SA	Remark
19		HANDSET	JC96-01629A	1	O	
	19-1	AUDIO-RECEIVER	*	1		
	19-2	RING-OP	*	1		
	19-3	CBF HARNESS-HADSET MODULAR	*	1		
	19-4	IPR-WEIGHT BALANCE	*	1		
	19-5	PMO-HANDSET UPPER	*	1		
	19-6	PMO-HANDSET LOWER	*	1		
	19-7	RMO-RUBBER MIC	*	1		
	19-8	PBA SUB ETC-MIC	*	1		

SA : Service Avail

6-11 Packing Assembly



7. Electrical Parts Lists

7-1 Main PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01152A			PBA MAIN-MAIN	
0401-000116	D1	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D3	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D4	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D5	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D6	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D7	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D8	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0404-000112	D2	1	DIODE-SCHOTTKY	"RB420D,25V,100mA,SOT-23,TP"
0501-000279	Q6	1	TR-SMALL SIGNAL	"KSA1182-Y,PNP,150mW,SOT-23,TP,"
0501-000338	Q1	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q3	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q4	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q5	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000338	Q7	1	TR-SMALL SIGNAL	"2SC2812,NPN,200mW,SOT-23,TP,20"
0501-000457	Q2	1	TR-SMALL SIGNAL	"MMBT2222A,NPN,225mW,SOT-23,TP,"
0506-001019	Q8	1	TR-ARRAY	"STA471A,NPN,4,4W,SIP-10,ST,200"
0801-001090	U47	1	IC-CMOS LOGIC	"74HC14,SCHMITT INVERTER,SOP,1"
0801-002482	U46	1	IC-CMOS LOGIC	"74LVC07,BUFFER/DRIVER,SOP,14P,150MIL,HEX,TP"
0803-000615	U2	1	IC-TTL	"7407,BUFFER/DRIVER,SOP,14P,150"
0803-001393	U2	1	IC-TTL	"7407,BUFFER/DRIVER,SOP,14P,150"
1001-000170	U6	1	IC-ANALOG SWITCH	"MC14051BD,SPDT CMOS,SOP,16P,15"
1001-000171	U8	1	IC-ANALOG SWITCH	"MC14053BD,SPDT CMOS,SOP,16P,15"
1105-001030	U16	1	IC-DRAM	"416C1200,1Mx16BIT,SOJ,42P,400M"
1105-001030	U17	1	IC-DRAM	"416C1200,1Mx16BIT,SOJ,42P,400M"
1107-001121	U14	1	IC-FLASH MEMORY	"29F800,512Kx16BIT,TSOP,48P,720"
1201-000114	U12	1	IC-AUDIO AMP	"386,SOP,8P,150MIL,SINGLE,26V/m"
1201-000423	U13	1	IC-OP AMP	"4558,SOP,8P,150MIL,DUAL,20V/mV"
1201-000423	U15	1	IC-OP AMP	"4558,SOP,8P,150MIL,DUAL,20V/mV"
1202-000164	U3	1	IC-VOLTAGE COMP.	"393,SOP,8P,150MIL,DUAL,36V,CMO"
1203-000495	U7	1	IC-RESET	"7045,T0-92,3P,-,PLASTIC,4.3/4."
1203-001455	U4	1	IC-POSI.FIXED REG.	"1117,DPAK,3P,265MLI,PLASTIC,3"
1205-001134	U9	1	IC-MODEM	"KS16117Q,QFP,100P,-,PLASTIC,5V"
2001-000015	R156	1	R-CARBON(S)	"0.5OHM,5%,1/2W,AA,TP,2.4X6.4MM"
2001-000015	R157	1	R-CARBON(S)	"0.5OHM,5%,1/2W,AA,TP,2.4X6.4MM"
2007-000026	R171	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R172	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R173	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000027	R151	1	R-CHIP	"300KOHM,5%,1/10W,DA,TP,2012"
2007-000028	R101	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R114	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R39	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R41	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R42	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R50	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R53	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R54	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R73	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R74	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R75	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R87	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000028	R88	1	R-CHIP	"39OHM,5%,1/10W,DA,TP,2012"
2007-000029	R174	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000029	R204	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000029	R44	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000029	R8	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"

Main PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000068	R155	1	R-CHIP	"470KOHM,5%,1/10W,DA,TP,2012"
2007-000221	R14	1	R-CHIP	"1.2KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R29	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R38	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R77	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R94	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R120	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R145	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R146	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R162	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R192	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R193	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R195	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R196	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R212	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R25	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R30	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R31	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R60	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000300	R10	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R100	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R109	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R111	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R112	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R12	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R138	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R16	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R161	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R175	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R176	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R177	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R178	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R179	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R180	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R181	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R182	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R199	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R200	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R201	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R202	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R203	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R209	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R210	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R211	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R34	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R36	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R4	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R5	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R58	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R62	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R67	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R69	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R71	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R72	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R9	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000304	R7	1	R-CHIP	"10MOHM,5%,1/10W,DA,TP,2012"
2007-000308	R83	1	R-CHIP	"10OHM,5%,1/10W,DA,TP,2012"
2007-000325	R122	1	R-CHIP	"118KOHM,1%,1/10W,DA,TP,2012"
2007-000338	R147	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000355	R153	1	R-CHIP	"12KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R93	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000401	R123	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R131	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R183	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R184	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R185	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R186	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R187	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R188	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R189	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R190	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R206	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R207	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R208	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R55	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000435	R110	1	R-CHIP	"17.4KOHM,1%,1/10W,DA,TP,2012"
2007-000444	R107	1	R-CHIP	"180KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R115	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R18	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R19	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R20	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R21	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R28	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R37	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R45	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R46	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R47	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R59	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R63	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R64	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R79	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R80	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000468	R97	1	R-CHIP	"1KOHM,5%,1/10W,DA,TP,2012"
2007-000493	R15	1	R-CHIP	"2.2KOHM,5%,1/10W,DA,TP,2012"
2007-000532	R154	1	R-CHIP	"200KOHM,5%,1/10W,DA,TP,2012"
2007-000565	R103	1	R-CHIP	"220KOHM,5%,1/10W,DA,TP,2012"
2007-000671	R52	1	R-CHIP	"2KOHM,5%,1/10W,DA,TP,2012"
2007-000730	R139	1	R-CHIP	"300OHM,5%,1/8W,DA,TP,3216"
2007-000766	R68	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000844	R125	1	R-CHIP	"3KOHM,5%,1/10W,DA,TP,2012"
2007-000844	R26	1	R-CHIP	"3KOHM,5%,1/10W,DA,TP,2012"
2007-000844	R78	1	R-CHIP	"3KOHM,5%,1/10W,DA,TP,2012"
2007-000859	R43	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000876	R76	1	R-CHIP	"4.7MOHM,5%,1/10W,DA,TP,2012"
2007-000920	R108	1	R-CHIP	"47.5KOHM,1%,1/10W,DA,TP,2012"
2007-000941	R129	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R149	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R150	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R194	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R163	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R164	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R165	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R166	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R167	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R168	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R169	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"
2007-000964	R170	1	R-CHIP	"5.1KOHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000981	R197	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-000981	R22	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-000981	R33	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-000981	R35	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-001009	R96	1	R-CHIP	"51KOHM,5%,1/10W,DA,TP,2012"
2007-001113	R152	1	R-CHIP	"680KOHM,5%,1/10W,DA,TP,2012"
2007-001208	R133	1	R-CHIP	"82KOHM,5%,1/10W,DA,TP,2012"
2007-001208	R95	1	R-CHIP	"82KOHM,5%,1/10W,DA,TP,2012"
2007-001220	R132	1	R-CHIP	"86.6KOHM,1%,1/10W,DA,TP,2012"
2007-001220	R142	1	R-CHIP	"86.6KOHM,1%,1/10W,DA,TP,2012"
2007-001289	R140	1	R-CHIP	"20OHM,5%,1/4W,DA,TP,3225"
2203-000009	C117	1	"C-CERAMIC,CHIP"	"0.82nF,10%,50V,X7R,TP,2012"
2203-000192	C100	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C106	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C107	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C108	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C11	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C111	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C112	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C113	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C114	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C118	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C119	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C128	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C129	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C147	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C148	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C150	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C156	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C16	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C20	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C21	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C25	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C27	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C28	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C29	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C31	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C39	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C43	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C47	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C48	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C49	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C52	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C56	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C57	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C58	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C59	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C60	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C61	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C62	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C65	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C7	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C73	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C77	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C78	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C83	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2203-000192	C84	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C86	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C87	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C93	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C95	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C97	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C99	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C149	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C32	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C33	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C34	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C4	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C42	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C44	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C45	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C5	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C51	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C53	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C63	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C67	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C141	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C142	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C143	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C144	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C145	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C146	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C15	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000260	C71	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000389	C85	1	"C-CERAMIC,CHIP"	"0.015nF,5%,50V,NP0,TP,2012"
2203-000389	C88	1	"C-CERAMIC,CHIP"	"0.015nF,5%,50V,NP0,TP,2012"
2203-000455	C104	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C12	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C130	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C131	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C132	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C133	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C134	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C135	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C136	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C137	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C138	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C139	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C140	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C151	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C152	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C17	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C18	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C22	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C23	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C24	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C6	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C72	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000455	C90	1	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000595	C125	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C75	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C76	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C81	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000595	C82	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"

Main PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2203-000595	C94	1	"C-CERAMIC,CHIP"	"0.22nF,5%,50V,NP0,TP,2012"
2203-000634	C13	1	"C-CERAMIC,CHIP"	"0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C14	1	"C-CERAMIC,CHIP"	"0.022nF,5%,50V,NP0,TP,2012"
2203-000784	C120	1	"C-CERAMIC,CHIP"	"0.33nF,5%,50V,NP0,TP,2012"
2203-000784	C121	1	"C-CERAMIC,CHIP"	"0.33nF,5%,50V,NP0,TP,2012"
2203-000891	C122	1	"C-CERAMIC,CHIP"	"4.7nF,10%,50V,X7R,TP,2012"
2203-000989	C55	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-001058	C124	1	"C-CERAMIC,CHIP"	"0.56nF,5%,50V,NP0,TP,2012"
2203-001143	C74	1	"C-CERAMIC,CHIP"	"68nF,10%,50V,X7R,TP,2012"
2203-001158	C96	1	"C-CERAMIC,CHIP"	"0.068nF,5%,50V,NP0,TP,2012"
2203-002392	C123	1	"C-CERAMIC,CHIP"	"220nF,+80-20%,50V,Y5V,TP,2012"
2203-002392	C80	1	"C-CERAMIC,CHIP"	"220nF,+80-20%,50V,Y5V,TP,2012"
2401-000032	C8	1	C-AL	"100uF,20%,50V,GP,TP,8x12,5mm"
2401-000042	C101	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C115	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C116	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C50	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-001509	C126	1	C-AL	"47uF,20%,16V,GP,TP,5x7mm,5"
2402-000117	C103	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000117	C110	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000117	C46	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000117	C89	1	"C-AL,SMD"	"10uF,20%,35V,GP,TP,5.3x5.3x5.4"
2402-000135	C127	1	"C-AL,SMD"	"22uF,20%,16V,GP,TP,5.3x5.3x5.4"
2402-000135	C91	1	"C-AL,SMD"	"22uF,20%,16V,GP,TP,5.3x5.3x5.4"
2404-000151	C68	1	"C-TA,CHIP"	"1uF,20%,16V,-,TP,3216,-"
2409-001020	C102	1	C-EDL	"1F,5.5V,5V,-,BK,20.5x5,5"
2703-000125	L2	1	INDUCTOR-SMD	"10uH,10%,1.25x2x1.25mm"
2801-003330	OSC3	1	CRYSTAL-UNIT	"38.00053MHz,15ppm,28-AAM,18pF,"
2801-003376	OSC1	1	CRYSTAL-UNIT	"0.032768MHz,20ppm,28-AAY,12.5p"
2902-001011	B1	1	FILTER-LINE	"-, -, -"
2902-001011	B2	1	FILTER-LINE	"-, -, -"
3301-000325	L3	1	CORE-FERRITE BEAD	"AB,3.2x2.5x1.3mm,-,-"
3301-000325	L5	1	CORE-FERRITE BEAD	"AB,3.2x2.5x1.3mm,-,-"
3301-000344	BD1	1	CORE-FERRITE BEAD	"ZZ,3.5x6.5mm,-,-"
3301-000344	BD2	1	CORE-FERRITE BEAD	"ZZ,3.5x6.5mm,-,-"
3301-001084	L6	1	CORE-FERRITE BEAD	"AB,2.0x1.25x0.9mm,-,-"
3301-001084	L7	1	CORE-FERRITE BEAD	"AB,2.0x1.25x0.9mm,-,-"
3301-001084	R205	1	CORE-FERRITE BEAD	"AB,2.0x1.25x0.9mm,-,-"
3702-000118	CN2	1	CONNECTOR-RIBBON	"36P,FEMALE,ANGLE,AU"
3708-001224	CN13	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"
3711-000428	CN14	1	CONNECTOR-HEADER	"3WALL,15P,1R,2mm,STRAIGHT,SN"
3711-000470	CN15	1	CONNECTOR-HEADER	"3WALL,4P,1R,2mm,STRAIGHT,SN"
3711-000517	CN8	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"
3711-002000	CN16	1	CONNECTOR-HEADER	"BOX,18P,2R,2mm,STRAIGHT,SN"
3711-003408	CN12	1	CONNECTOR-HEADER	"BOX,2P,1R,2mm,STRAIGHT,SN"
3711-003968	CN18	1	CONNECTOR-HEADER	"BOX,3P,1R,2.5mm,STRAIGHT,SN"
3711-003969	CN7	1	CONNECTOR-HEADER	"BOX,2P,1R,2.5mm,STRAIGHT,SN"
3711-003981	CN9	1	CONNECTOR-HEADER	"BOX,28P,2R,2mm,STRAIGHT,SN"
JB13-00003A	U5	1	IC ASIC-CHORUS	"SF-3100,KS32C65100,QFP,208P,30.6X30.6X4.1"
0801-002482	U46	1	IC-CMOS LOGIC	74LVC07,BUFFER/DRIVER,SOP,14P,150MIL,HEX, TP,PLASTIC,OPEN-DRAIN,40to+8
JC41-00028A		1	PCB-MAIN	"SF-5100,FR-4,4L,1.6,133*122"

7-2 Engine PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01154A			PBA MAIN-ENGINE	
0402-000129	D3	1	DIODE-RECTIFIER	"1N4003,200V,1A,DO-41,TP"
0402-000129	D4	1	DIODE-RECTIFIER	"1N4003,200V,1A,DO-41,TP"
0501-000010	Q3	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q4	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q6	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0502-000245	Q1	1	TR-POWER	"KSB1151-Y,PNP,1.3W,TO-126,-,16"
1003-001102	U1	1	IC-MOTOR DRIVER	"TEA3718DP,DIP,16P,300MIL,SINGL"
1003-001102	U2	1	IC-MOTOR DRIVER	"TEA3718DP,DIP,16P,300MIL,SINGL"
2001-000290	R23	1	R-CARBON	"10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000331	R14	1	R-CARBON	"12KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000429	R26	1	R-CARBON	"1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000429	R27	1	R-CARBON	"1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000449	R20	1	R-CARBON	"2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000734	R12	1	R-CARBON	"4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R10	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R5	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R6	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000812	R9	1	R-CARBON	"5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000832	R21	1	R-CARBON	"510OHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000864	R17	1	R-CARBON	"56KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000864	R18	1	R-CARBON	"56KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000995	R28	1	R-CARBON	"820OHM,5%,1/8W,AA,TP,1.8X3.2MM"
2005-000114	R24	1	R-WIRE WOUND	"0.5ohm,2%,1W,AA,TP,4.5x11mm"
2005-000114	R25	1	R-WIRE WOUND	"0.5ohm,2%,1W,AA,TP,4.5x11mm"
2201-000391	C13	1	"C-CERAMIC,DISC"	"22pF,5%,50V,SL,TP,5.0x3.0,5"
2201-000391	C14	1	"C-CERAMIC,DISC"	"22pF,5%,50V,SL,TP,5.0x3.0,5"
2201-001057	C10	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2201-001057	C11	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2201-001057	C12	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2201-001057	C9	1	"C-CERAMIC,DISC"	"820pF,10%,50V,Y5P,TP,5x3,3"
2401-002300	C1	1	C-AL	"47uF,20%,50V,GP,TP,6.3x11,5"
3711-003205	CN6	1	CONNECTOR-HEADER	"BOX,4P,1R,2.0mm,STRAIGHT,SN"
3711-003346	CN7	1	CONNECTOR-HEADER	"BOX,18P,2R,2mm,ANGLE,SN"
3711-003408	CN2	1	CONNECTOR-HEADER	"BOX,2P,1R,2mm,STRAIGHT,SN"
3711-003408	CN4	1	CONNECTOR-HEADER	"BOX,2P,1R,2mm,STRAIGHT,SN"
3711-003968	CN5	1	CONNECTOR-HEADER	"BOX,3P,1R,2.5mm,STRAIGHT,SN"
JC39-40511A	J1	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J10	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J9	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00032A	SF-5100/XEU	1	PCB-ENGINE	"SF-5100,FR-1,1L,1.6,93.2*62"

7-3 OPE PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01207A			PBA MAIN-OPE	
0401-000116	D1	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D2	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D3	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D4	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0401-000116	D5	1	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0604-001155	U4	1	PHOTO-INTERRUPTER	"TR,-,175MW,DIP,ST"
0604-001164	U5	1	PHOTO-INTERRUPTER	"TR,-,175MW,DIP-4,ST"
0801-001090	U3	1	IC-CMOS LOGIC	"74HC14,SCHMITT INVERTER,SOP,1"
2007-000026	R1	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R1	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R38	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000026	R38	1	R-CHIP	"200OHM,5%,1/10W,DA,TP,2012"
2007-000033	J1	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J1	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J2	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J2	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	J3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000300	R35	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000300	R35	1	R-CHIP	"10KOHM,5%,1/10W,DA,TP,2012"
2007-000401	R18	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R18	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R22	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000401	R22	1	R-CHIP	"150OHM,5%,1/10W,DA,TP,2012"
2007-000586	R2	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R2	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R3	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R3	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R36	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R36	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R37	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R37	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R39	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R39	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R4	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R4	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R5	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R5	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R6	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R6	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R7	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R7	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R8	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R8	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R9	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R9	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R34	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R34	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2203-000192	C12	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C12	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C21	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C21	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C5	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

OPE PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
2203-000192	C5	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C6	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C6	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000208	C14	1	"C-CERAMIC,CHIP" "100nF,10%,50V,X7R,TP,3216"
2203-000208	C14	1	"C-CERAMIC,CHIP" "100nF,10%,50V,X7R,TP,3216"
2203-000239	C1	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C1	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000634	C18	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C18	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C19	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C19	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C20	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-000634	C20	1	"C-CERAMIC,CHIP" "0.022nF,5%,50V,NP0,TP,2012"
2203-001002	C15	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2203-001002	C15	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2203-001002	C16	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2203-001002	C16	1	"C-CERAMIC,CHIP" "0.047nF,5%,50V,NP0,TP,2012"
2404-000284	C13	1	"C-TA,CHIP" "10uF,20%,16V,-,TP,3528,-"
2404-000284	C17	1	"C-TA,CHIP" "10uF,20%,16V,-,TP,3528,-"
2802-000185	X1	1	RESONATOR-CERAMIC "7.37MHz,0.5%,TP,10.0x5.0x10.0m"
JB13-00004A	U2	1	IC ASIC-OPE "SF-3100,HT48C5,SSOP,48P,16.18X10.67X2.79"
JC39-00038A	SCAN-OPE	1	CBF HARNESS-SCAN/OPE "SF-5100,#26,UL 1061,150mm,RED+BLUE,-"
JC39-00038A	SCAN-OPE	1	CBF HARNESS-SCAN/OPE "SF-5100,#26,UL 1061,150mm,RED+BLUE,-"
JC41-00030A	SF-5100/XEU	1	PCB-OPE "SF-5100,FR-1,1L,1.6,260.5*115.2"
JF07-20061A	LCD	1	DISPLAY LCD- "SF50,BLK/WHT,16x1,36.0x80."
JG39-41019A	LCD CABLE	1	CBF HARNESS-LCD "SF4400,WIRE,UL2878,40mm,GRY,#2"

7-4 LIU PBA(JC92-01155A)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01155A				
0401-000005	D11	1	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q31	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000242	Q26	1	TR-SMALL SIGNAL	"BC547B,NPN,500mW,TO-92,TP,200"
0501-000500	Q27	1	TR-SMALL SIGNAL	"KSP45,NPN,625mW,TO-92,TP,50-20"
0502-000133	Q10	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q25	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q3	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U12	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR	"-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR	"82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS4	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON	"75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000027	R106	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000499	R99	1	R-CARBON	"20OHM,2%,1/2W,AA,TP,3.3X9MM"
2001-000631	R103	1	R-CARBON	"30KOHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000637	R98	1	R-CARBON	"30OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2003-000538	R105	1	R-METAL OXIDE(S)	"1Kohm,5%,2W,AA,TP,4x12mm"
2004-001773	R104	1	R-METAL	"12ohm,1%,1/4W,AA,TP,2.4x7mm"
2007-000029	R118	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000030	R102	1	R-CHIP	"560OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R117	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R69	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R70	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000290	R42	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R96	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000457	R39	1	R-CHIP	"18KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R100	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000931	R47	1	R-CHIP	"470OHM,5%,1/10W,DA,TP,2012"
2007-000941	R112	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R97	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000947	R107	1	R-CHIP	"47OHM,5%,1/10W,DA,TP,2012"
2007-000981	R108	1	R-CHIP	"5.6KOHM,5%,1/10W,DA,TP,2012"
2007-001097	R48	1	R-CHIP	"62KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001201	R41	1	R-CHIP	"820OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C76	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000444	C43	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C45	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C46	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000989	C53	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP"	"330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5mm"
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"
2305-001024	C78	1	"C-FILM,MPEF"	"33nF,10%,250V,BK,10.5x3.5x6.5,"
2401-000026	C56	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"
2401-000486	C77	1	C-AL	"10uF,20%,50V,GP,TP,6.3x7mm,5"
2401-000597	C4	1	C-AL	"1uF,20%,50V,GP,TP,4x7mm,1.5mm"

LIU PBA(JC92-01155A)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2401-000958	C74	1	C-AL	"22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-001775	C67	1	C-AL	"470nF,20%,50V,GP,TP,5x11,5"
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER	"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER	"600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE	"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX	SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU	"SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF-	"SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF-	"SF2900M,3mH,6OHM,-"

7-5 LIU PBA(JC92-01192A)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01192A				1
0401-000005	"D11,D25"	2	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0401-000116	"D26,D27"	2	DIODE-SWITCHING	"MMSD914T1,100V,200mA,225mW,4nS"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000153	"ZD8,ZD9"	2	DIODE-ZENER	"1N4746A,18V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q29	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000242	Q26	1	TR-SMALL SIGNAL	"BC547B,NPN,500mW,TO-92,TP,200"
0501-000500	Q27	1	TR-SMALL SIGNAL	"KSP45,NPN,625mW,TO-92,TP,50-20"
0502-000133	"Q3,Q25"	2	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000108	VAR1	1	VARISTOR	"120V,1200A,9x4.5mm,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000027	R106	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000119	R122	1	R-CARBON	"680OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000631	R103	1	R-CARBON	"30KOHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000637	"R98,R99"	2	R-CARBON	"30OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2003-000538	R105	1	R-METAL OXIDE(S)	"1Kohm,5%,2W,AA,TP,4x12mm"
2004-001773	R104	1	R-METAL	"12ohm,1%,1/4W,AA,TP,2.4x7mm"
2007-000011	R47	1	R-CHIP	"200OHM,1%,1/10W,DA,TP,2012"
2007-000023	R118	1	R-CHIP	"120OHM,5%,1/10W,DA,TP,2012"
2007-000029	"R40,R44"	2	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000030	R102	1	R-CHIP	"560OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R115	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	"R42,R67"	2	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	"R43,R68"	2	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	"R53,R97"	2	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000615	R39	1	R-CHIP	"24KOHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000757	R96	1	R-CHIP	"330KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000947	R107	1	R-CHIP	"47OHM,5%,1/10W,DA,TP,2012"
2007-001092	R41	1	R-CHIP	"620OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"

LIU PBA(JC92-01192A)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION		
2007-001124	R48	1	R-CHIP	"68KOHM,1%,1/10W,DA,TP,2012"	1
2203-000192	"C35,C75"	2	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C76	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"	1
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"	1
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"	1
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"	1
2203-000455	"C43,C45,C46"	3	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"	1
2203-000802	"C53,C54"	2	"C-CERAMIC,CHIP"	"33nF,10%,50V,X7R,TP,2012"	1
2203-002392	C42	1	"C-CERAMIC,CHIP"	"220nF,+80-20%,50V,Y5V,TP,2012"	1
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5,5m"	1
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"	1
2401-000026	C56	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"	1
2401-000026	C69	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"	1
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"	1
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"	1
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"	1
2401-000649	C67	1	C-AL	"2.2uF,20%,50V,BP,TP,5x11,5"	1
2401-000899	C77	1	C-AL	"22uF,20%,100V,GP,TP,8x11mm,5mm"	1
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"	1
3501-001153	"RE1,RE2"	2	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"	1
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"	1
3711-000411	CN2	1	CONNECTOR-HEADER	"3WALL,12P,1R,2mm,STRAIGHT,SN"	1
3711-000517	CN1	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"	1
4715-001042	ARS1	1	SURGE ABSORBER	"400V,20%,500A,-,TP"	1
JB13-00007A	HIC1	1	HYBRID-IC-DETECTOR	"SF4500,MA91000018S,BULK,6 PIN,27X10mm"	1
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE	"SF-3100,-,30KOHM:30KOHM"	1
JB26-00002A	T2	1	TRANS-MATCHING-FAX	"SF-3100,-,600OHM:600OHM"	1
JC39-40511A	C4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J16	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J17	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J18	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J19	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J20	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J21	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J22	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J23	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J24	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J25	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J26	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J27	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J28	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J29	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J30	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC39-40511A	R87	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"	1
JC41-00031B	PCB	1	PCB-LIU PCB FRANCE	"SF-5100,1LAYER,1,1.6T,1.6T*105*115"	1
JF27-30055A	L13	1	COIL RF-	"SF2900M,3mH,6OHM,-"	1
JF27-30055A	L14	1	COIL RF-	"SF2900M,3mH,6OHM,-"	1

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01192C			PBA MAIN-LIU	
0401-000005	D11	1	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0502-000133	Q25	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR	"-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR	"82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON	"75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000524	R99	1	R-CARBON	"220OHM,5%,1/2W,AA,TP,3.3X9MM"
2001-000637	R98	1	R-CARBON	"300OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2007-000029	R107	1	R-CHIP	"00OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"00OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"00OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"00OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R96	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R118	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R42	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	"R38,R39"	2	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000822	R47	1	R-CHIP	"390OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R97	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-001009	R48	1	R-CHIP	"51KOHM,5%,1/10W,DA,TP,2012"
2007-001092	R102	1	R-CHIP	"620OHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001201	R41	1	R-CHIP	"820OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000455	"C43,C45,C46"	3	"C-CERAMIC,CHIP"	"1nF,5%,50V,NP0,TP,2012"
2203-000609	C66	1	"C-CERAMIC,CHIP"	"22nF,10%,50V,X7R,TP,2012"
2203-000989	C53	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP"	"330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5,5m"
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"
2401-000026	C56	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL	"3.3uF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"
2401-000603	C4	1	C-AL	"1uF,20%,50V,GP,TP,5x11,5"
2401-000958	C74	1	C-AL	"22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-000962	C67	1	C-AL	"22uF,20%,50V,GP,TP,5x11,5"
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC	"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER	"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER	"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER	"600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE	"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX	"SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R104	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R105	1	CBF HARNESS-	"ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU	"SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF-	"SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF-	"SF2900M,3mH,6OHM,-"

7-7 LIU PBA(JC92-01192D)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01192D			PBA MAIN-LIU
0401-000005	D11	1	DIODE-SWITCHING "1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER "1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER "1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER "1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY "KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY "KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY "KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL "KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL "KSC1008,NPN,800mW,TO-92,TP,120"
0501-000242	Q26	1	TR-SMALL SIGNAL "BC547B,NPN,500mW,TO-92,TP,200"
0501-000500	Q27	1	TR-SMALL SIGNAL "KSP45,NPN,625mW,TO-92,TP,50-20"
0502-000133	Q10	1	TR-POWER "2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q25	1	TR-POWER "2SA1156,PNP,1W,TO-126,-,40-80"
0502-000133	Q3	1	TR-POWER "2SA1156,PNP,1W,TO-126,-,40-80"
0505-000335	Q7	1	FET-SILICON "VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER "TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER "TR,20-300%,200mW,DIP-4,ST"
0604-000119	U12	1	PHOTO-COUPLER "TR,200-400%,200mW,DIL-4,ST"
0604-000119	U14	1	PHOTO-COUPLER "TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH "TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR "-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR "82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR "470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR "470V,400A,7.5X6MM,TP"
1405-001075	ARS4	1	VARISTOR "470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON "75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000027	R106	1	R-CARBON "100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON "100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000499	R99	1	R-CARBON "200OHM,2%,1/2W,AA,TP,3.3X9MM"
2001-000631	R103	1	R-CARBON "30KOHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000637	R98	1	R-CARBON "300OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE "15Kohm,5%,1W,AA,TP,4.3x12mm"
2003-000538	R105	1	R-METAL OXIDE(S) "1Kohm,5%,2W,AA,TP,4x12mm"
2004-001773	R104	1	R-METAL "12ohm,1%,1/4W,AA,TP,2.4x7mm"
2007-000029	R118	1	R-CHIP "0OHM,5%,1/10W,DA,TP,2012"
2007-000030	R102	1	R-CHIP "560OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP "0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP "0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP "0OHM,5%,1/8W,DA,TP,3216"
2007-000241	R114	1	R-CHIP "1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP "1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R69	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R70	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP "100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R42	1	R-CHIP "100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP "100OHM,5%,1/10W,DA,TP,2012"

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SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R96	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000457	R39	1	R-CHIP	"18KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R100	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000931	R47	1	R-CHIP	"470OHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R97	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000947	R107	1	R-CHIP	"47OHM,5%,1/10W,DA,TP,2012"
2007-001097	R48	1	R-CHIP	"62KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001201	R41	1	R-CHIP	"820OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C36	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C76	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP"	"0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP"	"10nF,10%,50V,X7R,TP,2012"
2203-000444	C43	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C45	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000444	C46	1	"C-CERAMIC,CHIP"	"1nF,10%,50V,X7R,TP,2012,-"
2203-000989	C53	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP"	"47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP"	"330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF"	"15nF,10%,250V,TP,9.5x12x4.5,5m"
2305-000505	C63	1	"C-FILM,MPEF"	"1uF,10%,250V,BK,6x8.5x14.5,15m"
2305-001024	C78	1	"C-FILM,MPEF"	"33nF,10%,250V,BK,10.5x3.5x6.5,"
2401-000026	C56	1	C-AL	"3.3UF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL	"3.3UF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL	"100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL	"10uF,20%,16V,GP,TP,4x7,5"
2401-000486	C77	1	C-AL	"10uF,20%,50V,GP,TP,6.3x7mm,5"
2401-000597	C4	1	C-AL	"1uF,20%,50V,GP,TP,4x7mm,1.5mm"
2401-000958	C74	1	C-AL	"22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-001082	C67	1	C-AL	"330nF,20%,50V,GP,TP,5x11,5"
2401-001775	C57	1	C-AL	"470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE	"5VDC,200MW,2000MA,2FORMC,4MS,4MS"

LIU PBA(JC92-01192D)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER "600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX"SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU "SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF- "SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF- "SF2900M,3mH,6OHM,-"

7-8 LIU PBA(JC92-01192E)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION	
JC92-01192E				
0401-000005	D11	1	DIODE-SWITCHING	"1N4148,100V,200MA,DO-35,TP"
0402-000132	D18	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D19	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D20	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0402-000132	D21	1	DIODE-RECTIFIER	"1N4004,400V,1A,DO-41,TP"
0403-000149	ZD7	1	DIODE-ZENER	"1N4742A,12V,5%,1W,DO-41,TP"
0403-000525	ZD1	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD2	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD3	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0403-000525	ZD4	1	DIODE-ZENER	"1N4733A,5.1V,5%,1W,DO-41,TP"
0407-000122	D22	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D23	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0407-000122	D24	1	DIODE-ARRAY	"KDS226,80V,300mA,C2-3,SOT-23,T"
0501-000010	Q28	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0501-000010	Q30	1	TR-SMALL SIGNAL	"KSC1008,NPN,800mW,TO-92,TP,120"
0502-000133	Q25	1	TR-POWER	"2SA1156,PNP,1W,TO-126,-40-80"
0505-000335	Q7	1	FET-SILICON	"VN2410M,N,240V,0.19A,10ohm,7.9"
0604-000118	U25	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000118	U4	1	PHOTO-COUPLER	"TR,20-300%,200mW,DIP-4,ST"
0604-000119	U14	1	PHOTO-COUPLER	"TR,200-400%,200mW,DIL-4,ST"
1204-000252	U27	1	IC-SPEECH	"TEA1062A,DIP,16P,300MIL,PLASTI"
1405-000226	V1	1	VARISTOR	"-,25A,5mm,TP"
1405-001074	VAR1	1	VARISTOR	"82V,400A,7.5X6.0MM,TP"
1405-001075	ARS2	1	VARISTOR	"470V,400A,7.5X6MM,TP"
1405-001075	ARS3	1	VARISTOR	"470V,400A,7.5X6MM,TP"
2001-000025	R85	1	R-CARBON	"75OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000110	R87	1	R-CARBON	"100OHM,5%,1/4W,AA,TP,2.4X6.4MM"
2001-000524	R98	1	R-CARBON	"220OHM,5%,1/2W,AA,TP,3.3X9MM"
2001-000637	R99	1	R-CARBON	"300OHM,5%,1/2W,AA,TP,3.3X9MM"
2003-000178	R90	1	R-METAL OXIDE	"15Kohm,5%,1W,AA,TP,4.3x12mm"
2007-000029	R118	1	R-CHIP	"0OHM,5%,1/10W,DA,TP,2012"
2007-000033	L3	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L4	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000033	L5	1	R-CHIP	"0OHM,5%,1/8W,DA,TP,3216"
2007-000221	R102	1	R-CHIP	"1.2KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R114	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000241	R116	1	R-CHIP	"1.5KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R37	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000282	R94	1	R-CHIP	"100KOHM,5%,1/10W,DA,TP,2012"
2007-000290	R42	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000290	R43	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000308	R107	1	R-CHIP	"100OHM,5%,1/10W,DA,TP,2012"
2007-000338	R53	1	R-CHIP	"120KOHM,5%,1/10W,DA,TP,2012"
2007-000395	R97	1	R-CHIP	"150KOHM,5%,1/10W,DA,TP,2012"
2007-000444	R96	1	R-CHIP	"180KOHM,5%,1/10W,DA,TP,2012"
2007-000586	R63	1	R-CHIP	"22KOHM,5%,1/10W,DA,TP,2012"
2007-000642	R40	1	R-CHIP	"270OHM,5%,1/10W,DA,TP,2012"
2007-000703	R88	1	R-CHIP	"3.6KOHM,5%,1/10W,DA,TP,2012"
2007-000710	R38	1	R-CHIP	"3.9KOHM,5%,1/10W,DA,TP,2012"
2007-000738	R82	1	R-CHIP	"30KOHM,5%,1/10W,DA,TP,2012"
2007-000766	R101	1	R-CHIP	"330OHM,5%,1/10W,DA,TP,2012"
2007-000798	R46	1	R-CHIP	"360OHM,5%,1/10W,DA,TP,2012"
2007-000859	R57	1	R-CHIP	"4.3KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R39	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000872	R86	1	R-CHIP	"4.7KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R119	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-000941	R120	1	R-CHIP	"47KOHM,5%,1/10W,DA,TP,2012"
2007-001039	R48	1	R-CHIP	"56KOHM,5%,1/10W,DA,TP,2012"
2007-001118	R44	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R45	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R47	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001118	R65	1	R-CHIP	"680OHM,5%,1/10W,DA,TP,2012"
2007-001155	R41	1	R-CHIP	"750OHM,5%,1/10W,DA,TP,2012"
2203-000192	C35	1	"C-CERAMIC,CHIP"	"100nF,+80-20%,50V,Y5V,TP,2012,"

LIU PBA(JC92-01192E)

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
2203-000192	C36	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C37	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C38	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C40	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C42	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C76	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000192	C79	1	"C-CERAMIC,CHIP" "100nF,+80-20%,50V,Y5V,TP,2012,"
2203-000239	C47	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000239	C48	1	"C-CERAMIC,CHIP" "0.1nF,5%,50V,NP0,TP,2012"
2203-000260	C14	1	"C-CERAMIC,CHIP" "10nF,10%,50V,X7R,TP,2012"
2203-000455	"C43,C45,C46"	3	"C-CERAMIC,CHIP" "1nF,5%,50V,NP0,TP,2012"
2203-000989	C53	1	"C-CERAMIC,CHIP" "47nF,10%,50V,X7R,TP,2012"
2203-000989	C54	1	"C-CERAMIC,CHIP" "47nF,10%,50V,X7R,TP,2012"
2203-002442	C75	1	"C-CERAMIC,CHIP" "330nF,+80-20%,25V,Y5V,TP,2012"
2301-001027	C64	1	"C-FILM,PEF" "15nF,10%,250V,TP,9.5x12x4.5,5m"
2305-000505	C63	1	"C-FILM,MPEF" "1uF,10%,250V,BK,6x8.5x14.5,15m"
2305-001024	C78	1	"C-FILM,MPEF" "33nF,10%,250V,BK,10.5x3.5x6.5,"
2401-000026	C56	1	C-AL "3.3uF,20%,50V,GP,TP,5X11,5"
2401-000026	C69	1	C-AL "3.3uF,20%,50V,GP,TP,5X11,5"
2401-000042	C1	1	C-AL "100uF,20%,16V,GP,TP,6.3x7,5"
2401-000042	C2	1	C-AL "100uF,20%,16V,GP,TP,6.3x7,5"
2401-000414	C68	1	C-AL "10uF,20%,16V,GP,TP,4x7,5"
2401-000603	"C4,C57"	2	C-AL "1uF,20%,50V,GP,TP,5x11,5"
2401-000958	C74	1	C-AL "22uF,20%,50V,BP,-,10x12.5mm,5m"
2401-001775	C67	1	C-AL "470nF,20%,50V,GP,TP,4x7,5"
3501-001153	RE1	1	RELAY-MINIATURE "5VDC,200MW,2000MA,2FORMC,4MS,4MS"
3708-001224	CN3	1	CONNECTOR-FPC/FC/PIC"14P,1mm,STRAIGHT,SN"
3711-000411	CN2	1	CONNECTOR-HEADER"3WALL,12P,1R,2mm,STRAIGHT,SN"
3711-000517	CN1	1	CONNECTOR-HEADER"3WALL,8P,1R,2mm,STRAIGHT,SN"
4715-001043	ARS1	1	SURGE ABSORBER "600V,20%,500A,-,TP"
JB26-00001A	T1	1	TRANS-MATCHING-REMOTE"SF-3100,-,30KOHM:30KOHM"
JB26-00002A	T2	1	TRANS-MATCHING-FAX"SF-3100,-,600OHM:600OHM"
JC39-40511A	J11	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J13	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J14	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J15	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J16	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J17	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J18	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J19	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J2	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J20	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J21	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J22	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J23	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J24	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J25	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J26	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J3	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J4	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J5	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J6	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J7	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	J8	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R104	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC39-40511A	R105	1	CBF HARNESS- "ML-80,JUMPER,AWG22,52mm,SILVER"
JC41-00031A	SF-5100/XEU	1	PCB-LIU "SF-5100,FR-1,1L,1.6,115*105"
JF27-30055A	L13	1	COIL RF- "SF2900M,3mH,6OHM,-"
JF27-30055A	L14	1	COIL RF- "SF2900M,3mH,6OHM,-"

7-9 SENSOR PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01197A			PBA MAIN-SENSOR
0604-001155	U1	1	PHOTO-INTERRUPTER"TR,-,175MW,DIP,ST"
0604-001155	U2	1	PHOTO-INTERRUPTER"TR,-,175MW,DIP,ST"
2001-000008	R1	1	R-CARBON "15KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000008	R2	1	R-CARBON "15KOHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000362	R3	1	R-CARBON "150OHM,5%,1/8W,AA,TP,1.8X3.2MM"
2001-000362	R4	1	R-CARBON "150OHM,5%,1/8W,AA,TP,1.8X3.2MM"
JC39-00039A	CN1	1	CBF HARNESS-MAIN/SENSOR "SF-5100,#26,UL 1061,150mm,RED+BLUE,-"
JC41-00033A	SF-5100/XEU	1	PCB-SENSOR "SF-5100,FR-1,1L,1.6,82*20"

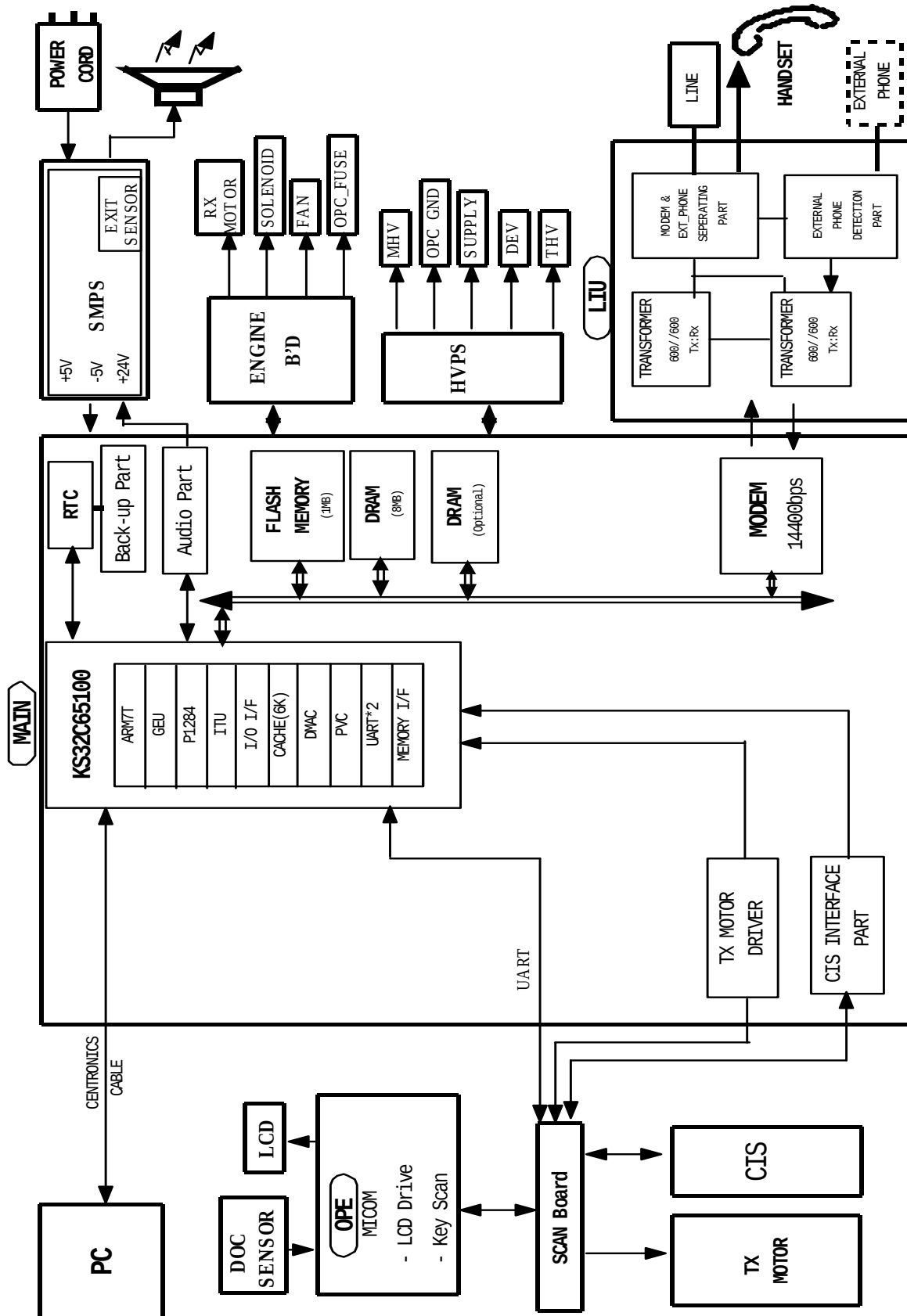
7-10 SCAN PBA

SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01212A			PBA MAIN-SCAN
3711-000986	CN3	1	CONNECTOR-HEADER "BOX,5P,1R,1.25mm,STRAIGHT,SN"
3711-000986	CN3	1	CONNECTOR-HEADER "BOX,5P,1R,1.25mm,STRAIGHT,SN"
3711-001063	CN2	1	CONNECTOR-HEADER "BOX,6P,1R,2mm,STRAIGHT,SN"
3711-001063	CN2	1	CONNECTOR-HEADER "BOX,6P,1R,2mm,STRAIGHT,SN"
3711-001070	CN6	1	CONNECTOR-HEADER "BOX,7P,1R,1.25mm,STRAIGHT,SN"
3711-001070	CN6	1	CONNECTOR-HEADER "BOX,7P,1R,1.25mm,STRAIGHT,SN"
3711-003346	CN1	1	CONNECTOR-HEADER "BOX,18P,2R,2mm,ANGLE,SN"
3711-003346	CN1	1	CONNECTOR-HEADER "BOX,18P,2R,2mm,ANGLE,SN"
JC41-00040A	SF-5100/XEU	1	PCB-SCAN "SF-5100,FR4,2L,1.6T,27x30"

7-11 HOOK PBA

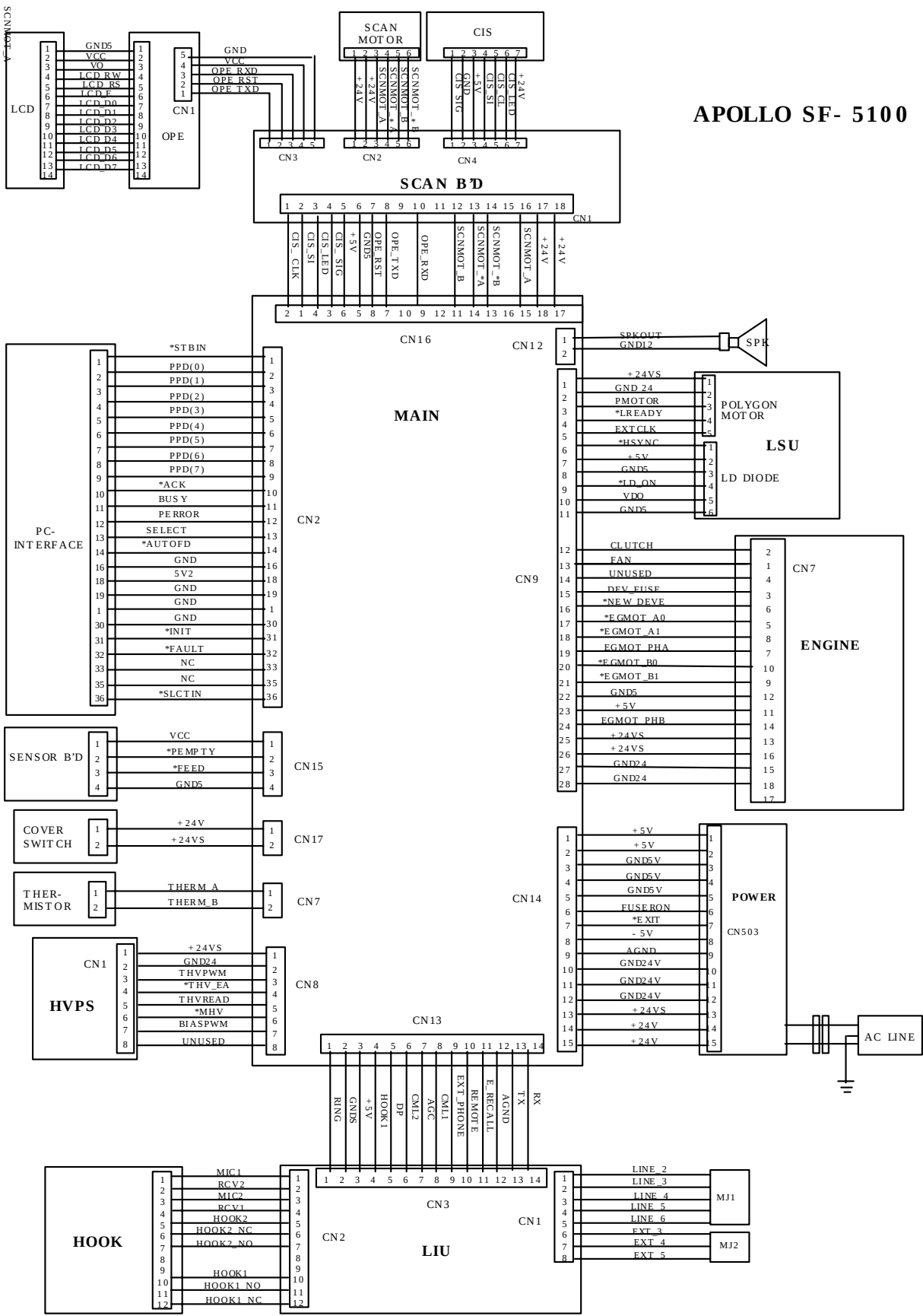
SEC CODE	LOCATION NO.	Q'ty	DESCRIPTION
JC92-01196A			PBA MAIN-HOOK
3409-001094	HOOK	1	SWITCH-HOOK "48V,200MA,DPDT,1.2MM"
3711-000411	CN2	1	CONNECTOR-HEADER "3WALL,12P,1R,2mm,STRAIGHT,SN"
3722-001034	H/S	1	JACK-MODULAR "6P/2C,0.76mm,AU,GRAY,-"
JC41-00034A	SF-5100/XEU	1	PCB-HOOK "SF-5100,FR-1,1L,1.6,51.2*35.3"

8. Block diagram



MEMO

9.Connection diagram

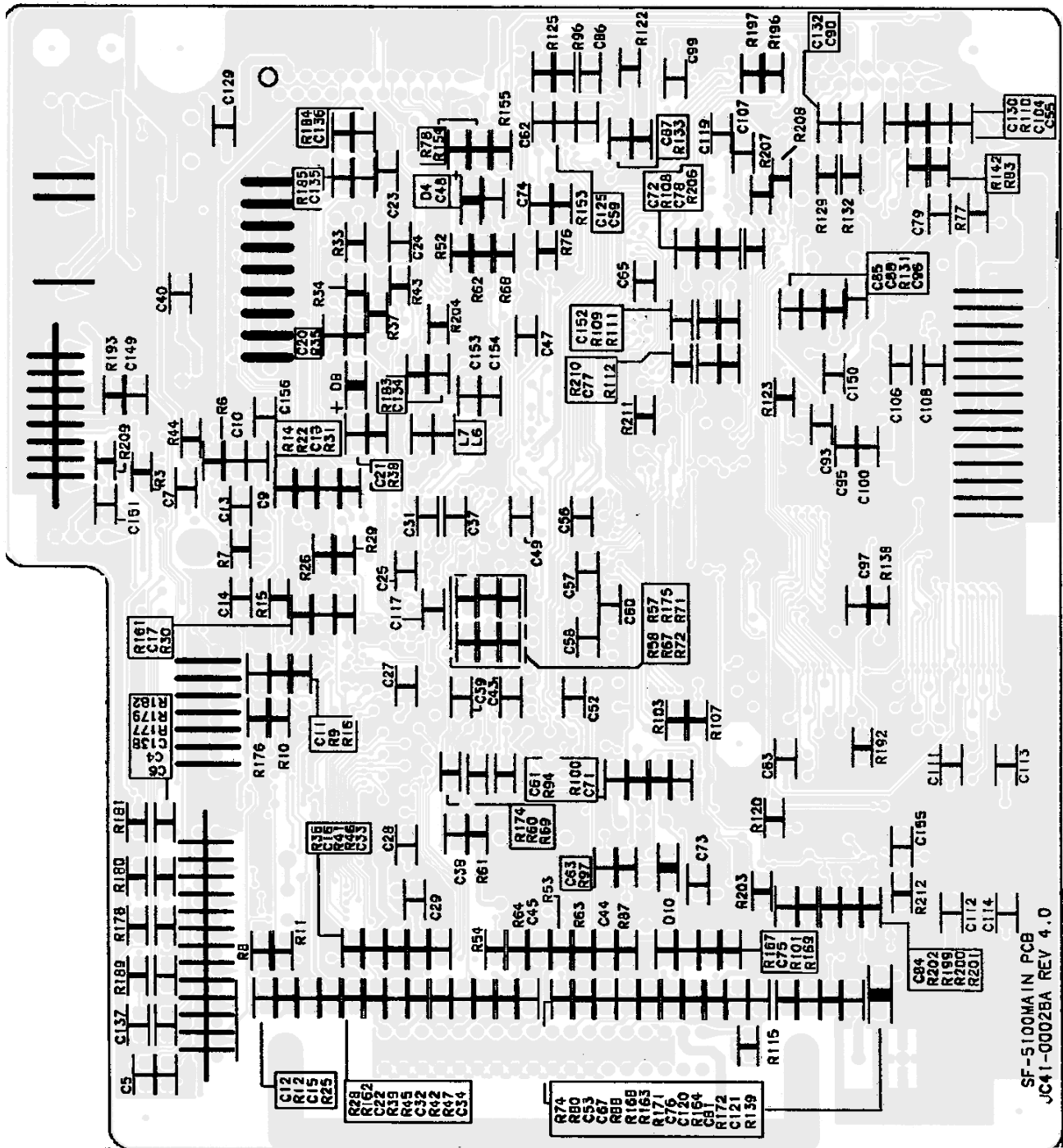


MEMO

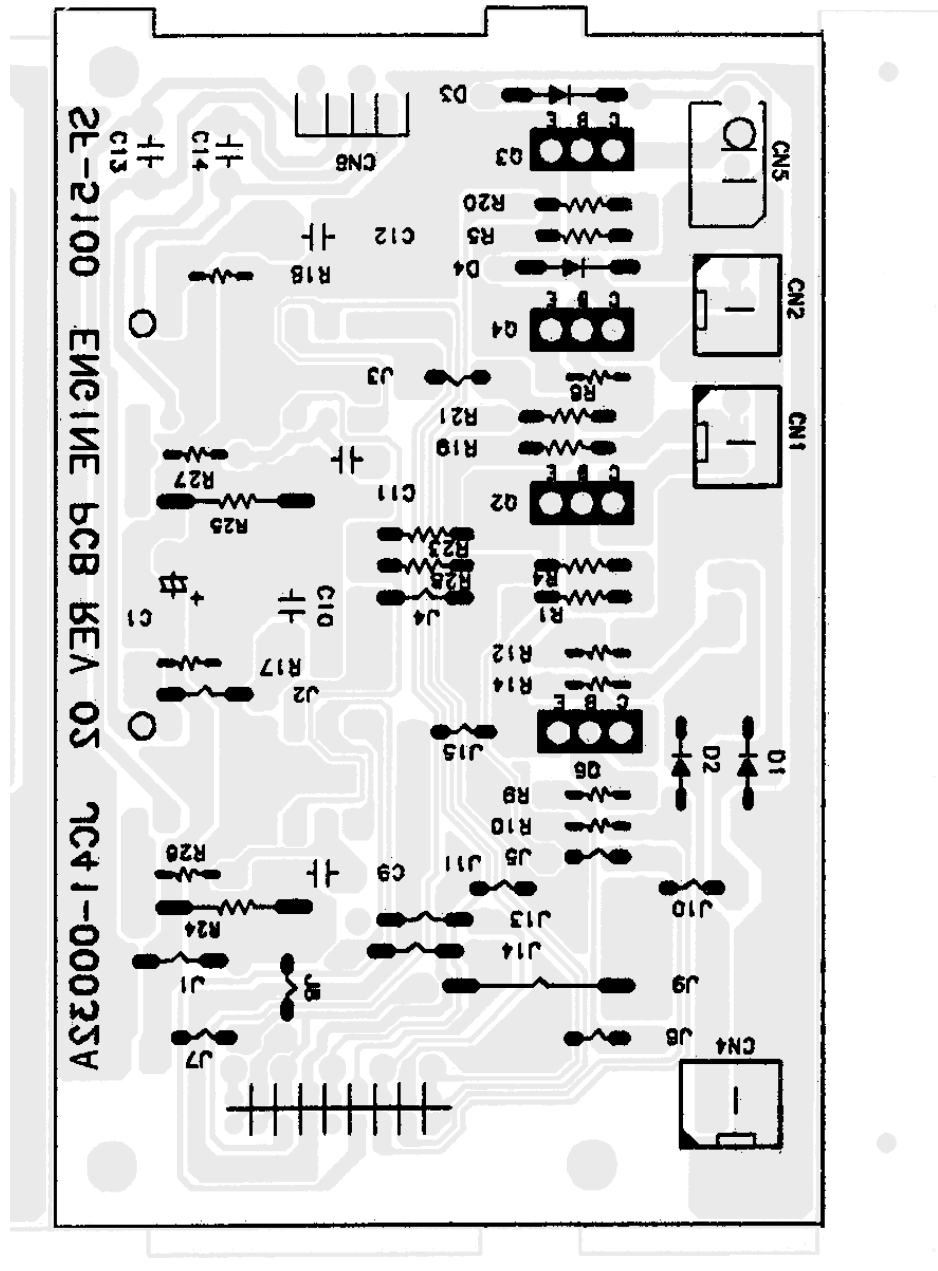
SF-5100 MAIN ← REV/SB



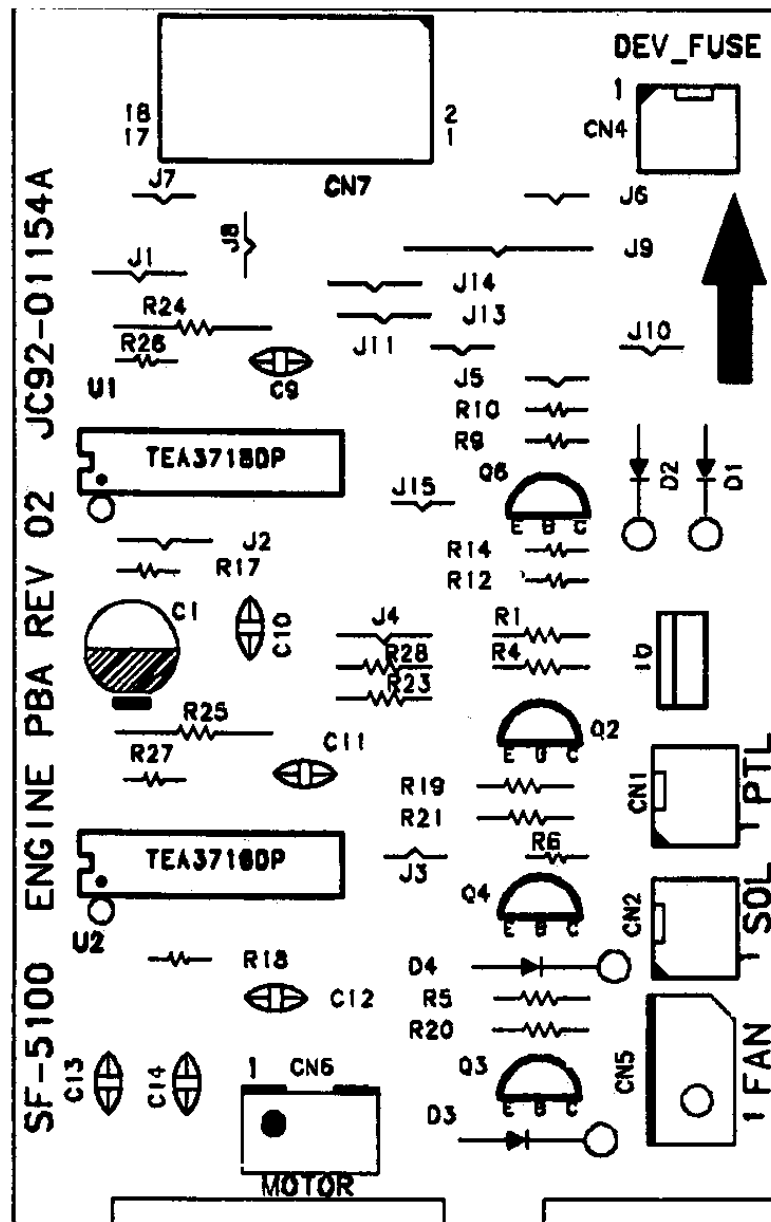
10-2 Main PCB Diagram(Bottom)

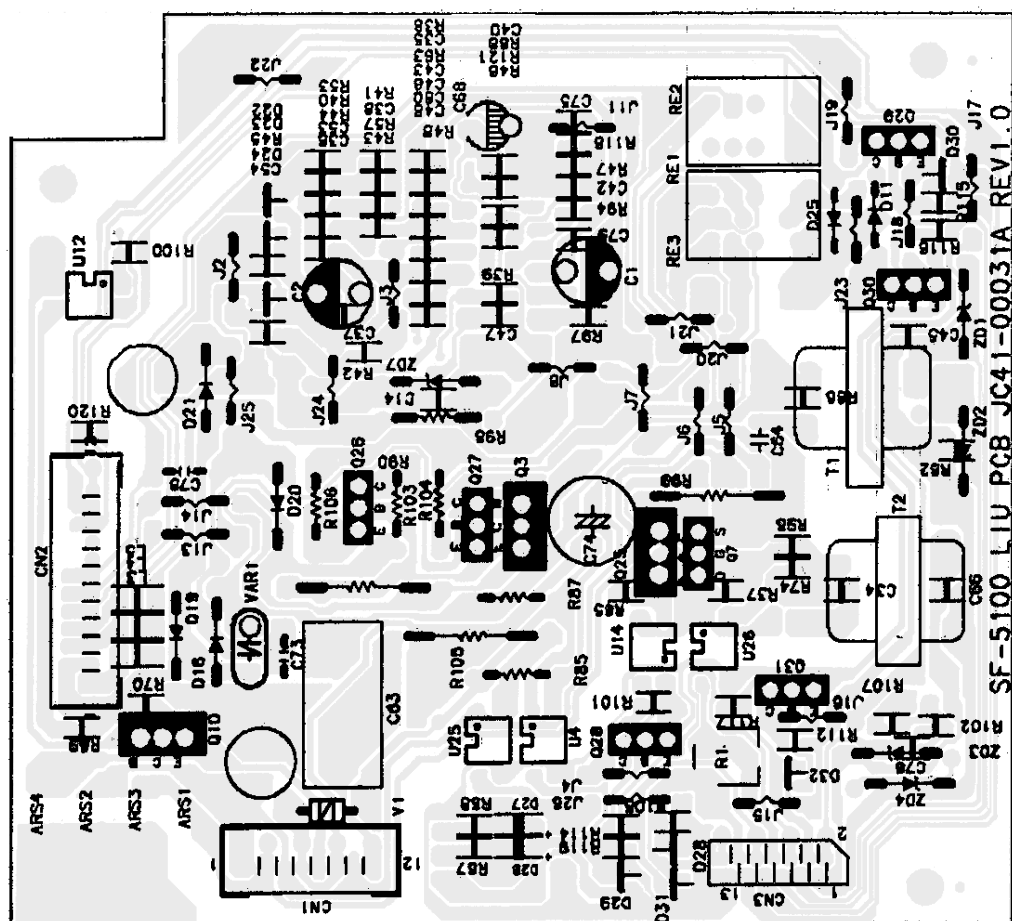


10-3Engine PCB Diagram(Top)



10-4Engine PCB Diagram(Bottom)





10-6OPE PCB Diagram

