Multi laser disc player LDP600WS/00B

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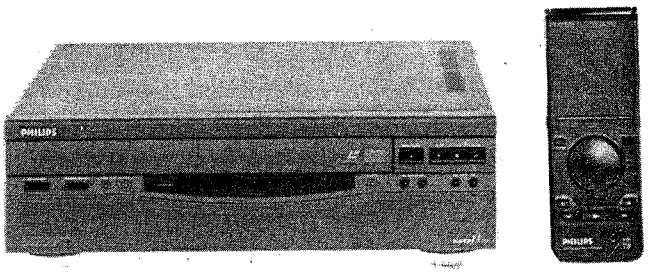

ServiceManual

THE LDP600WS IS A MATCHLINE MULTI LASER DISC PLAYER

- Plays all Laser Disc, CD Video and CD-Audio discs.
- World-system PAL/NTSC operation.
- Exceptional video fidelity.
- High-performance Bitstream audio D/A conversion.
- Enhanced remote control with variable-speed search.
- Favourite Track Selection F.T.S.
- 20 track or chapter programming.
- Two pairs of audio and video outputs.
- High-quality inverse LCD display.
- Personal presets.
- Trade mode for dealer demonstrations.

INTRODUCTION DATE: B-PERIODE 1991

The optical pick-up assy is operating according the 3-beam tracking principle.

Type number	: KHS-130A
Code number	: 4822 691 30237
Remote control	: RC600LDP
Code number	: 4822 218 10412
Loading assy complete	: 4822 691 30261

Remark

The last pages of this manual are containing additional safety instructions and Handling procedures for ESD-sensitive components.

(S)
Varning!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betakta ej strålen.

(DK)
Advarsel!
Usynlig laserstråling ved abning når sikkerhedsafbrydere er une af funktion. Undgå udsaettelse for stråling.

(SF)
Varoitus!
Laite sisältaa laserdiodin, joka lähettää näkymätöntä silmille vaarallista lasersäteilyä.

(GB)
Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

CLASS 1 LASER PRODUCT
3122 110 03420

Pour votre sécurité, ces documents soivent être utilisés par des spécialistes agrées, seuls habilités à réparer votre appareil en panne.

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PHILIPS

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I. CAUTION

LASER NOTE:

DANGER – Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.
CAUTION – Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION – The use of optical instruments with this product will increase eye hazard.

LASER BEAM RADIATION SPOT

Laser Diode Properties
Material: Ga-Al-As
Wavelength: 770 – 800 mm (25°C)
Laser Output: Continuous Wave max. 0.4 mW

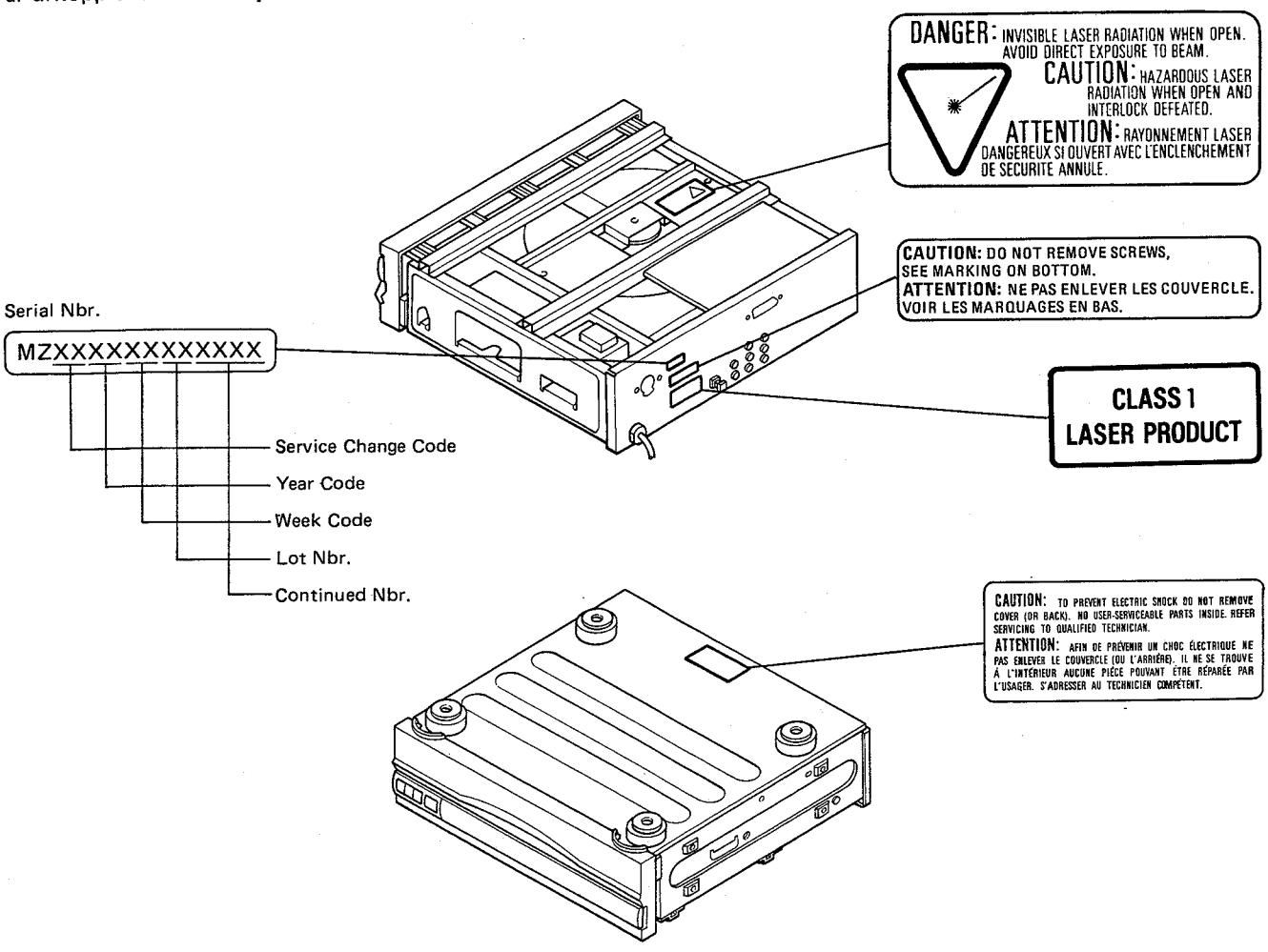
Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

Varo!
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

Varning!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

ESD

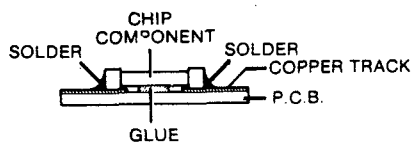
All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

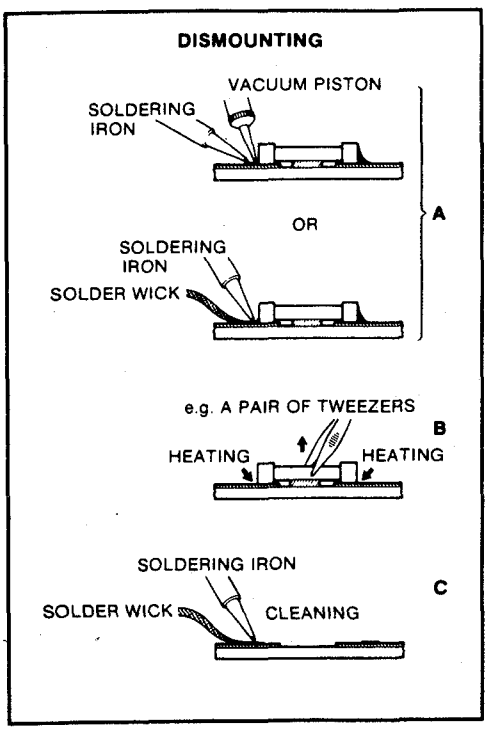


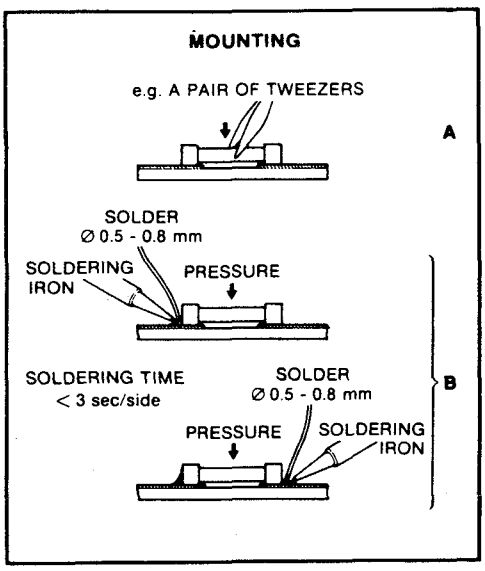
MOUNTING SMD'S

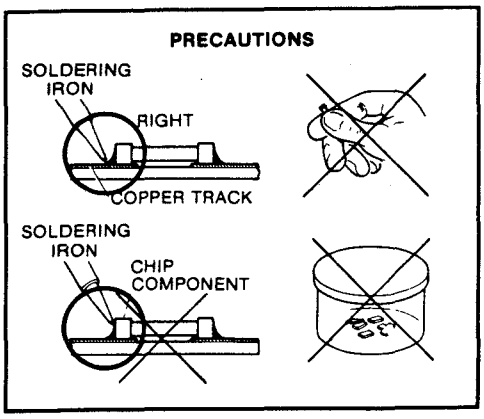
CAUTION: AFTER REMOVING CHIP TYPE COMPONENTS, DO NOT REUSE THEM.

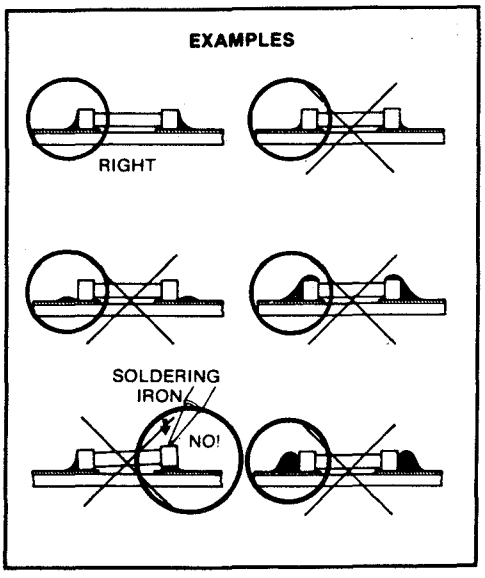
Chip devices are not heatproof and shockproof. Use caution when handling them.











II. SPECIFICATIONS

• FORMAT

System (or Type):	Optical videodisc system complies with MCA/Philips specifications
Usable disc: (PAL only)	8 cm CD: 20 Min. 12 cm CD: 70 Min. CDV single: Video 6 Min. Audio 20 Min. 30 cm LD (CLV) disc: 60 Min./side 30 cm LD (CAV) disc: 36 Min./side 20 cm LD (CLV) disc: 20 Min./side 20 cm LD (CAV) disc: 16 Min./side
Usable disc: (NTSC Only)	8 cm CD: 20 Min. 12 cm CD: 70 Min. CDV single: Video 5 Min. Audio 20 Min. 30 cm LD (CLV) disc: 60 Min./side 30 cm LD (CAV) disc: 30 Min./side 20 cm LD (CLV) disc: 20 Min./side 20 cm LD (CAV) disc: 14 Min./side

• CONNECTIONS:

Video:	
Video Output:	1 Vp-p (75-ohms load, sync. negative) cinch connector
A/V Euroconnector:	Full scart
Audio:	
Analog output:	200 mVeff (1 kHz, 40%),
Digital output:	200 mVeff (1 kHz, –20 dB)

Stereo or 2-channel individual, stereo sockets.

Digital signal characteristics	
Frequency response:	20 Hz to 20 kHz ±0.2 dB
Signal-to-noise ratio:	96 dB
Dynamic range:	96 dB
Distortion rate:	0.003% (1 kHz, –20 dB)
Digital signal output:	Optical x 1

• GENERAL

Power requirements:	110 V/120 V/220 V/240 V AC, 50/60 Hz
Power consumption:	59 W
Weight:	12 kg
Dimensions (W x H x D):	420 x 135 x 404 mm
Operational temperature:	+5°C to 35°C.
Humidity range:	5 to 90% (No condensation)
Safety requirements	IEC 65 (BS415 for U.K.)

• ACCESSORIES

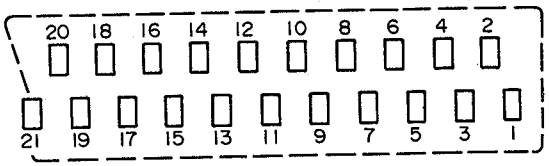
Remote control Transmitter
Size "AA" battery x 2
Scart cable x 1
Audio cable x 1
Video cable x 1

• OTHERS

Auto audio digital output: When playing discs having a digitally-recorded audio signal, audio reproduction circuit is automatically changed to the audio digital circuit.

Specifications and design subject to change without notice.

Euroconnector pin assignments



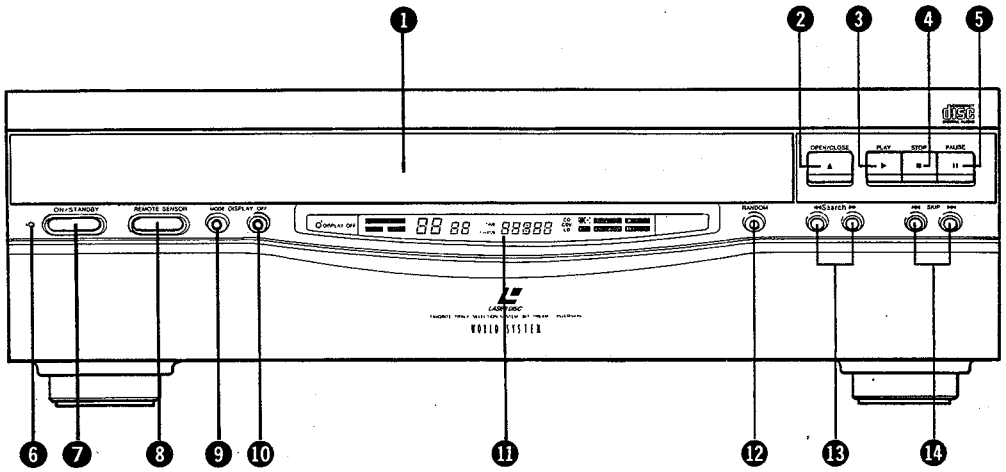
- Pin 1: audio out (right)
- Pin 2: not connected
- Pin 3: audio out (left)
- Pin 4: audio earth
- Pin 5: blue earth
- Pin 6: not connected
- Pin 7: blue out
- Pin 8: player status
- Pin 9: green earth
- Pin 10: not connected
- Pin 11: green out
- Pin 12: not connected
- Pin 13: red earth
- Pin 14: not connected
- Pin 15: red out
- Pin 16: not connected
- Pin 17: CVBS earth
- Pin 18: RGB status earth
- Pin 19: CVBS out/RGB synch
- Pin 20: not connected
- Pin 21: socket earth

The right is reserved to change data if necessary

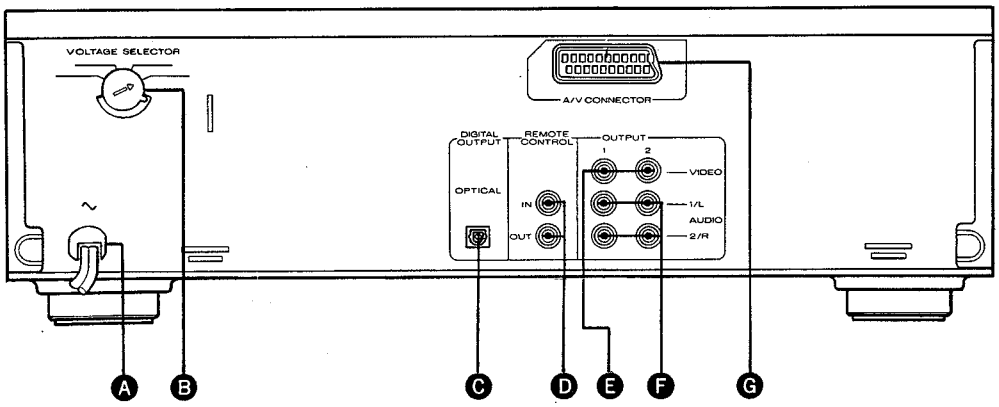
This CD Video player complies with radio interference requirements as laid down in EC regulations.

III. CONNECTION AND CONTROLS

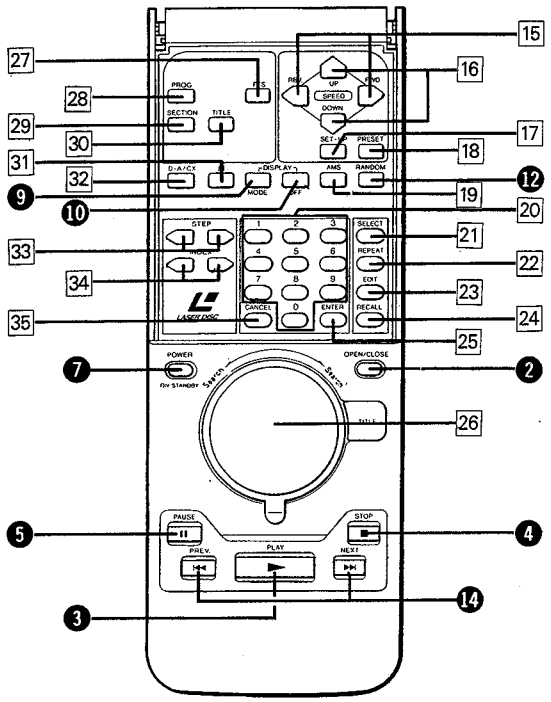
Front panel



Rear panel



Remote Control



❶ DISC TRAY

Place a disc on the tray.

The tray slides out by pressing the OPEN/CLOSE (▲) button on the player or by pressing the OPEN/CLOSE on the remote control transmitter.

❷ OPEN/CLOSE (▲) BUTTON

Press this button to open and close the disc tray.

When this button is pressed with the disc placed on the tray, the disc tray close, and the TOTAL TRACK/CHAP and TOTAL TIME appear on the display of the player while the TOTAL TRACK/CHAP. TOTAL TIME and music calendar are displayed on the monitor screen, then the player enters the stop mode.

However, if an LD with no TOC is loaded, playback will start automatically.

When this button is pressed during play, disc rotation stops and the disc tray will open. When this botton is pressed with the disc tray open, the disc tray closes.

While the disc tray is the opening or closing the CD, CDV or LD indicator flashes.

❸ PLAY (▶) BUTTON
When this button is pressed after placing a disc on the disc tray, the disc slides into the player and play starts.
– Pressing this button in Stop mode starts play.
– Pressing this button during play moves the play position to the beginning of the chapter or track being played, and re-starts play from there.
– Pressing this button can also start program play.
– Pressing this button during playback in a mode other than normal Play mode causes normal Play mode to resume.

❹ STOP (■) BUTTON
When this button is pressed during play, the disc rotation stops.
In the Stop mode, when more than 10 minutes have elapsed, the player enters the Standby mode automatically.

❺ PAUSE (▮▮) BUTTON
When this button is pressed during Play mode, play is stopped temporarily. To resume play, press the PLAY button, or the PAUSE button again.

❻ STANDBY INDICATOR
When the AC cord is plugged into an AC outlet, the player enters the Standby mode (Normal status: If the disc tray is opened, it will be closed.), and this indicator lights.
When the STANDBY button is pressed, the indicator lights to show that the unit is in the Standby mode. It will go out when the power is turned ON.

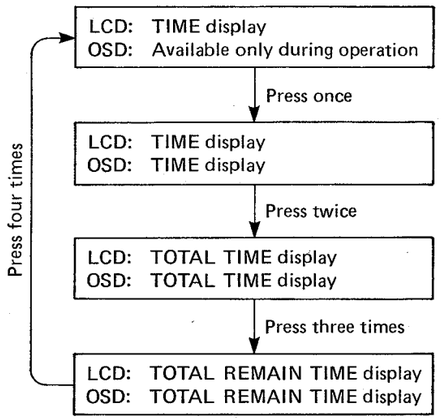
❼ ON/STANDBY BUTTON
When this button is pressed, the player enters the Standby mode and the STANDBY indicator lights up. (All the data stored in the memory are then erased.)
Pressing this Button and any of the OPEN/CLOSE (▲), PLAY (▶), STOP (■), PAUSE (▮▮), SKIP (⏮ , ⏭) buttons turns the power on.

Note: In the Stand-By mode, no operations other than the above are possible.

❽ REMOTE SENSOR
This is the receiver for the signal transmitted from the remote control transmitter.

❾ DISPLAY MODE BUTTON
This button is used to changed the contents of the Liquid Crystal Display (LCD) on the player and On-Screen Display (OSD) on the monitor screen.

Note: This function is effective only when Display ON/OFF is ON.



Displayed contents differ depending on the disc being played.

❿ DISPLAY ON/OFF BUTTON
This button is used to cancel the Liquid Crystal Display (LCD) on the player.

⓫ MULTI-FUNCTION DISPLAY

⓬ RANDOM BUTTON
Press this button to start random play.
(Effective only for CD, CDV-Single, and LD disc with TOC)

⓭ SEARCH BUTTONS
When one of these buttons is pressed and held down during Play mode, the player searches forward or backward.

▶▶ : Forward search.
◀◀ : Backward search.

The search speed varies in two steps. It is low for the first two seconds after the button is pressed, and then becomes high.

⓮ SKIP (⏮ / ⏭) BUTTONS
Press one of these buttons to skip to the beginning of a chapter or track.

⏭: When this button is pressed during Play mode, the beginning of the next chapter or track is detected.
When it is kept pressed, the chapter or track number is advanced continuously.

⏮: When this button is pressed during Play mode, the beginning of the current chapter or track is detected.
When it is kept pressed, the chapter or track number is reversed continuously.

Ⓐ MAINS CORD

Ⓑ VOLTAGE SELECTOR

Ⓒ OPTICAL DIGITAL OUTPUT

Ⓓ REMOTE CONTROL IN/OUT

Ⓔ AUDIO OUTPUT 1, 2 L/R

Ⓕ VIDEO OUTPUT 1, 2

Ⓖ A/V CONNECTOR

Remote control

Any other button than given below serves the same operation as does its corresponding one of a CDV player.

[15] PLAY (REV./FWD) BUTTONS [CAV]
With these cuttons you can determine the direction of play. You must then press on the REV./FWD keys to raise of lower the default speed of 1/4. This ranges from three times the normal speed to one frame per three seconds.

[16] SPEED (UP/DOWN) SET BUTTONS [CAV]
When the power is switched ON the initial speed is 1/4 the normal speed.
With these buttons the speed can be raised or lowered in eight steps after first pressing one of the SPEED REV/FWD buttons.

[17] SET-UP BUTTON

[18] PRESET BUTTON

[19] AMS (Auto Music Scan) BUTTON
Press this button to start AMS play, or when entering the program for AMS play.

[20] NUMBERED BUTTONS
Use these buttons when searching or programming chapters or tracks.

[21] SELECT BUTTON
Press this button to recall the specific position you want to view and/or listen to (search operation).

[22] REPEAT BUTTON
Use this button for repeat play.

[23] EDIT BUTTON
With this function, an interval of four seconds will be left between tracks during play. It is convenient when recording from a disc to tape.
Press this button when entering the edit program.

[24] RECALL BUTTON
Press this button to check the programmed contents.

[25] ENTER BUTTON
Press this button to enter a program for programmed play.

[26] SHUTTLE RING
When the shuttle ring is turned in the clockwise direction (to the right), the disc is fast-forwarded at twice the normal speed, 5-times the normal speed, 10-times the normal speed, or at high speed, depending on how far the ring is turned.
When the shuttle ring is turned in the counterclockwise direction (to the left), the disc is fast-reversed at twice the normal speed, 5-times the normal speed, 10-times the normal speed, or at high speed, depending on how far the ring is turned.

[27] FTS BUTTON
This function allows you to store a program for each of your discs in semipermanent memory.

[28] PROGRAM BUTTON
This button is used to program the desired chapters or tracks in a desired order (programmed play).

[29] SECTION BUTTON
Use this button for a block repeat between points A and B. To stop the process, press the Cancel button.

[30] TITLE BUTTON

[31] I-II BUTTON (LD)
If you wish to listen to only one audio channel, as in the case of a bilingual disc, press the I-II button to select the desired channel. Each press switches the selected channels as follows: 1/L → 2/R → 1/L and 2/R (stereo) → 1/L → ....

[32] D-A/CX BUTTON
- The D-A/CX button allows to toggle between the digital sound and analog sound.
- Press the D-A/CX button on the remote control transmitter so that the CX indicator lights up.
  The CX system helps improve the audio S/N (Signal to Noise) ratio and expand its dynamic range.

[33] STEP (REV./FWD) BUTTONS [CAV]
Press one of these buttons to freeze the picture. After this, each press of a button moves the pause frame step by step in either direction.
To cancel the pause picture, press the PLAY (▶) button.

[34] INDEX (,) BUTTONS
Press one of these buttons to activate an index skip operation with a CD or CDV on which the index numbers have been recorded.

[35] CANCEL BUTTON
Use this button in the following cases.
– To cancel repeat play.
– To correct an entry made using the numeric buttons (only during programming). When this button is pressed again, the program mode will be cancelled.
– To cancel Programmed play.
– To cancel random play.
– To cancel A-B repeat.

IV. DISASSEMBLY PROCEDURES

A. TRAY ASSEMBLY REPLACEMENT PROCEDURES

DISMANTLING THE TRAY ASSEMBLY

1. Remove the top cover by extracting screws (A).
2. Insert the power plug into a power outlet, press the OPEN button to open the disc tray, then unplug the power plug.

Note: If tray assembly will not open, then perform the MANUAL TRAY OPENING PROCEDURES.

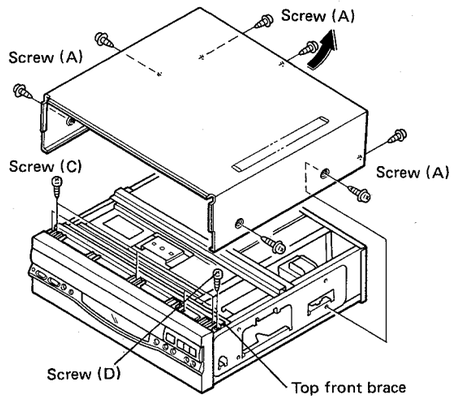


Fig. 1

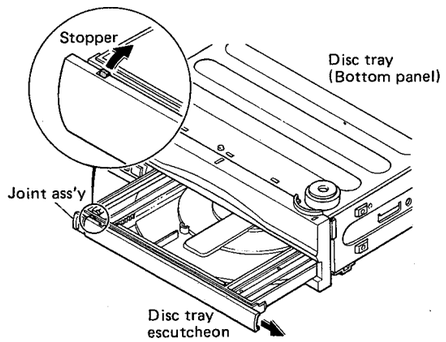


Fig. 2

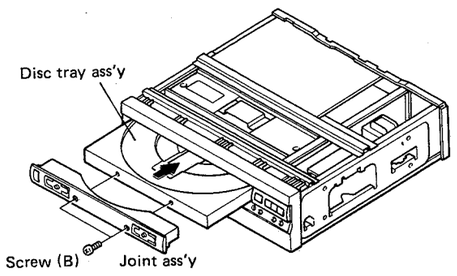


Fig. 3

3. Place the unit upside down, and remove the disc tray escutcheon by sliding it toward the right while pushing the stopper on the left end of the joint ass'y of disc tray using tweezers or a screwdriver. (Fig. 2)
4. Place the unit back to the normal position. Remove the joint ass'y from the disc tray by removing screws (B), and close the disc tray. (Fig. 3)
5. Remove the front panel by removing screws (C), and place the front panel, with the control keys facing upward, on a position so that it is not hit when the disc tray is opened. (Figs. 1 and 4)
6. Remove the top front brace by removing screws (D). (Fig. 1)

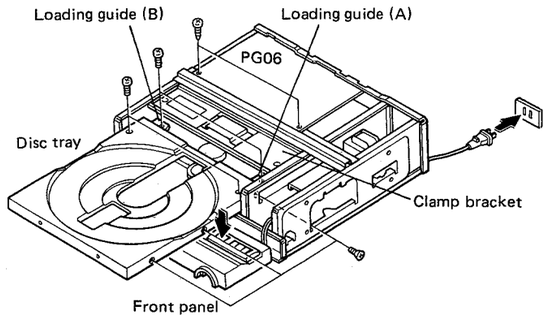


Fig. 4

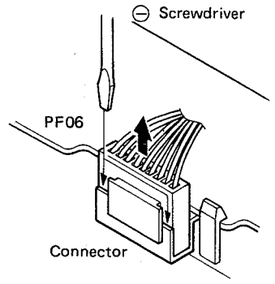


Fig. 5

7. Open the disc tray with the same procedure as step 2.

Note: When disconnecting the connectors (JF01, JF02) on the front assembly (PF06), draw out the connectors, undoing the stopper with a straight-edge screwdriver inserted as indicated by arrows in Fig. 5.

8. Remove the retaining screws from the loading guides (A) (B), and take out the disc tray together with the loading guides. (Figs. 4 and 6)

Note: The left loading guide (B) is not fixed on the tray. Therefore, when taking the tray out, be careful that the loading guide (B) is not disengaged from the tray.
Should the loading guide become disengaged, set it in position so that the shaft of the Loading gear assembly is parallel with the disc tray edge. (Figs. 7 and 8)

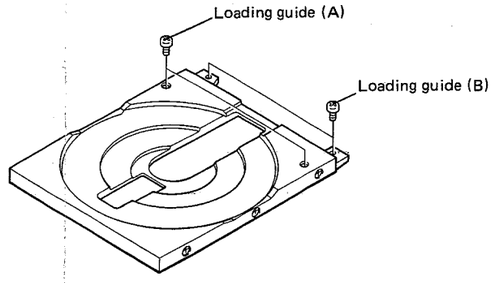


Fig. 6

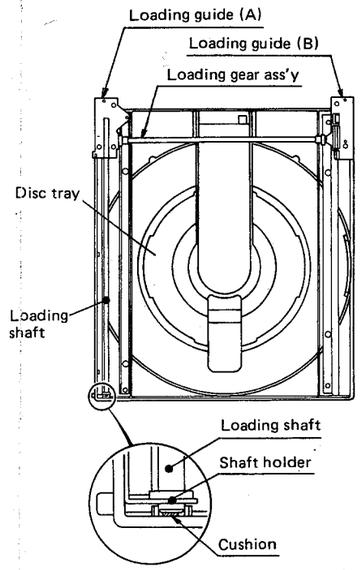


Fig. 7

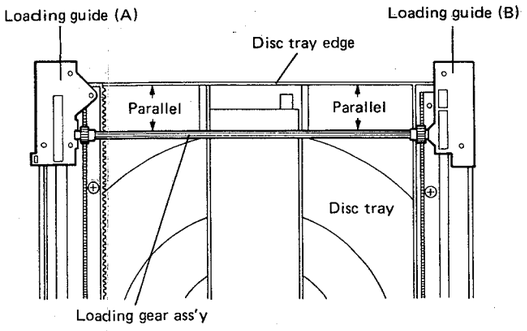


Fig. 8

B. MANUAL TRAY OPENING PROCEDURES

1. Remove the bottom plate. (Fig. 9)
2. Remove the fixing screws of the main assembly (P506) and the terminal fixing screws of the rear panel. (Fig. 9)
3. Remove the fixing clampers of the system control assembly (PU06).
4. Turn the gear (B) clockwise by inserting your finger through the rectangular hole on the side of the loading motor; the turntable will move down and the disc tray will open. (Fig. 10) When the disc tray comes out a little, it can be opened with your hand.

Note: Be careful not to deform the gear teeth, for this will cause abnormal noise during operation.

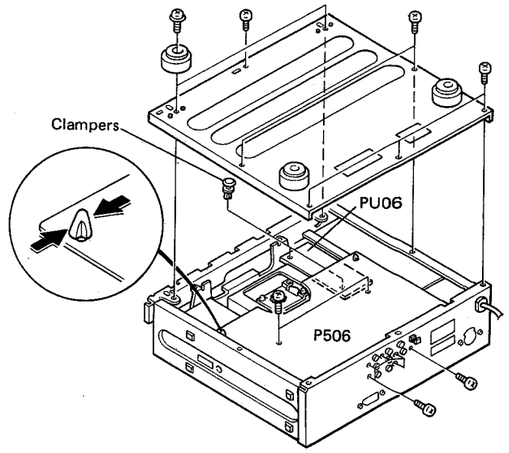


Fig. 9

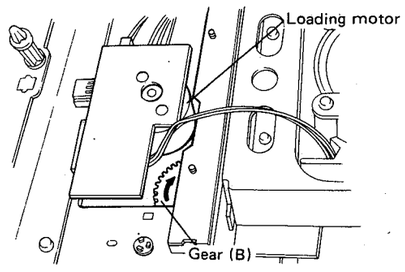


Fig. 10

C. ATTACHING THE TRAY ASSEMBLY

1. Turn the control cam clockwise until it stops. (Fig. 11)
2. Check that the marks (A) and the marks (B) are aligned properly.
   - If the marks (A) are not aligned properly, refer to "ATTACHING THE CONTROL CAM".
   - If the marks (B) are not aligned properly, remove the gear (A) and align them. Once the marks (B) are aligned, replace gear (A).

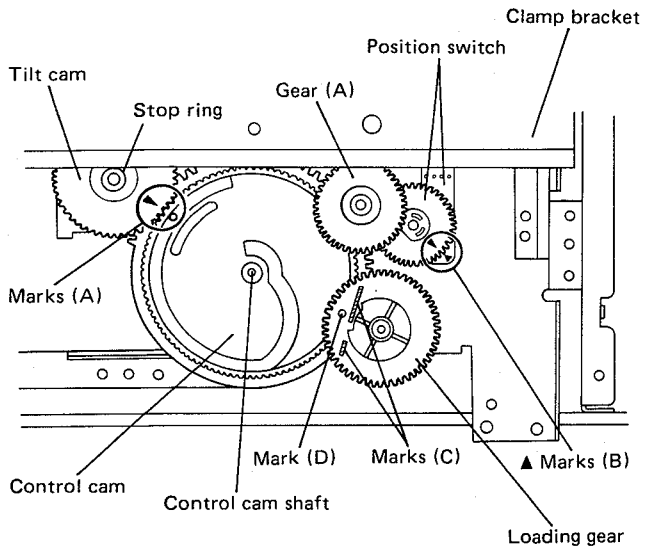


Fig. 11

3. Turn the control cam counterclockwise until it stops.
4. Set the loading gear so that the marks (C) on it are parallel with the front chassis or clamp bracket. (Fig. 12)

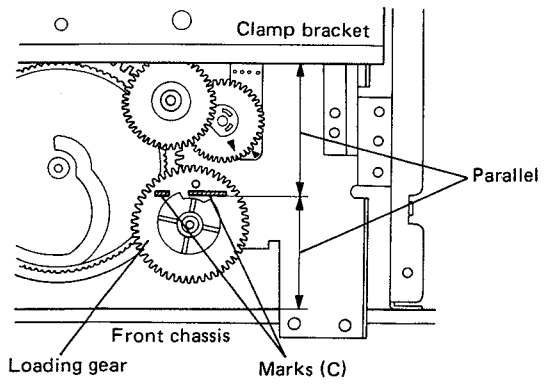


Fig. 12

5. With the loading guides (A) & (B) fully extended, mount the disc tray and loading guides on the chassis. (Fig. 13)
6. Check that the disc tray is inserted in parallel with the chassis.

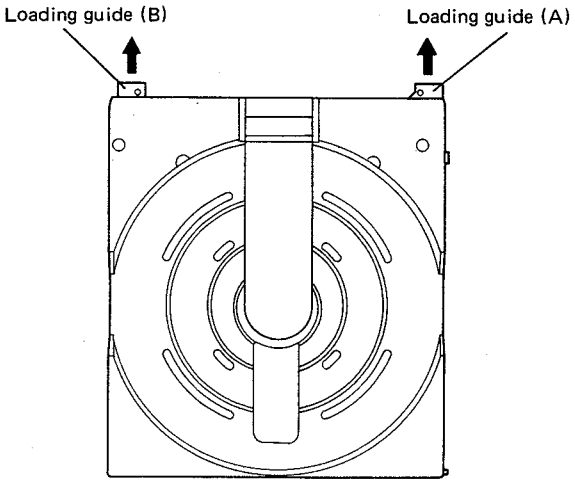


Fig. 13

7. With the disc tray in the fully open position, check that the marks (C) on the loading gear are parallel with the rear edge of the disc tray. (Fig. 14)

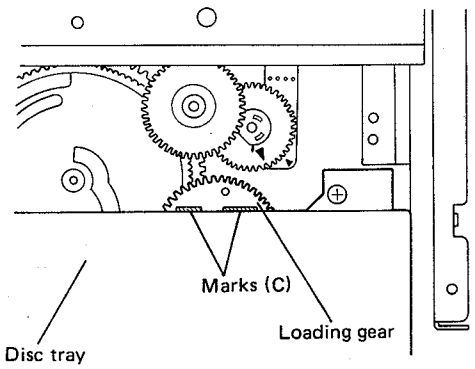


Fig. 14

8. Attach the loading guides (A) & (B) with screws (Figs. 4, 6), and push the disc tray into the loaded position.
9. Perform steps 1 through 6 of "DISMANTLING THE TRAY ASSEMBLY" in reverse order.

D. ATTACHING THE CONTROL CAM

In case you have removed the control cam, attach it following the procedure below.

1. Set the slide base drive shaft to the closest position to the control cam shaft. (Fig. 15)

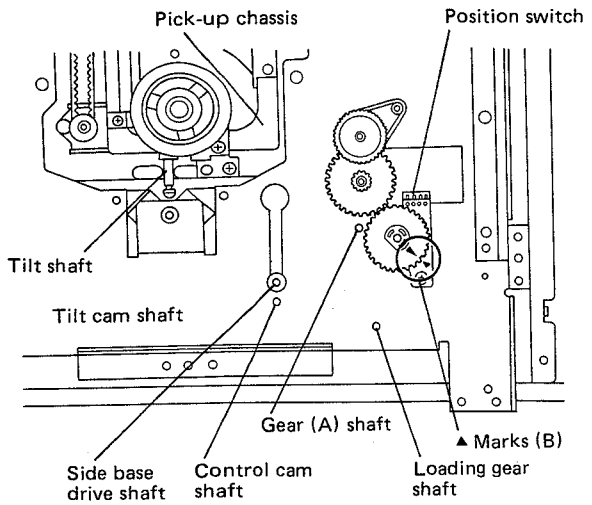


Fig. 15

2. Mount the control cam by passing the control cam's shaft through the hole on the center of the control cam and placing the slide base drive shaft into the guide groove on the back of the control cam, and secure the control cam with the washer. (Fig. 16)
   In case it is difficult to insert the slide base drive shaft into the guide groove, move the slide base drive shaft back by 0.5 to 1 mm from the control cam shaft.
3. Turn the control cam clockwise until it stops. Retain the control cam in this position until the tilt cam, gear (A) and loading gear have been mounted. (Fig. 16)
4. Holding the tilt cam so that its mark points to the tilt shaft, mount the tilt cam by passing the tilt cam shaft through the cam hole. Then, lower the tilt cam to a position with which the tilt cam gear does not engage with the control cam gear, and turn the tilt cam counterclockwise until it stops. (Fig. 16)
   Check that the tilt shaft is inserted into the guide groove on the tilt cam.

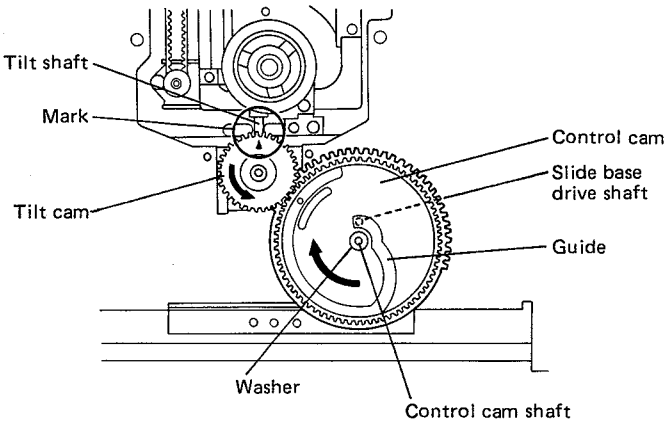


Fig. 16

5. Align the mark (A) on the control cam with the mark (A) on the tilt cam, and mount the E-clip on the tilt shaft. (Fig. 11) When the tilt cam is attached, the control cam may rotate counterclockwise due to the weight of the pick-up chassis. Return the control cam by turning it clockwise until it stops.
6. Align the mark (B) on the position switch as shown in Fig. 11 or Fig. 15.
7. Attach the gear (A) and mount the retaining ring. (Fig. 11)
8. Attach the loading gear so that its mark (D) points to the control cam shaft and mount the retaining ring. (Fig. 11)
9. Attach the tray assembly.

E. PICK-UP ASSEMBLY REPLACEMENT PROCEDURES

Use an ESD wrist strap when working around the unit, especially the LASER assembly.

1. Remove the top cover. (Fig. 1)
2. Insert the power plug into a power outlet, press the OPEN button to open the disc tray, then unplug the power plug.

Note: If tray assembly will not open then perform the MANUAL TRAY OPENING PROCEDURES.

3. Remove the RGB assembly (PG06). (Fig. 18)
4. Remove the fixing screws of the clamp bracket at both of its ends. (Fig. 17)
5. Force open the clamp bracket with a pointed instrument inserted between the clamp bracket (right side) and the mechanism chassis. Then, release the clamp bracket from a stopper (protrusion) of the mechanism chassis. (Fig. 17)
6. Force open the clamp bracket at its left side by hand, the release the clamp bracket from a stopper of the mechanism chassis, and detach it from the unit. (Fig. 17)

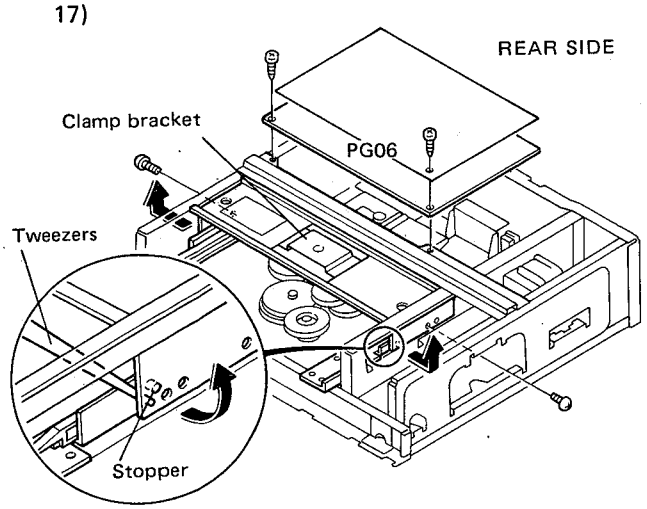


Fig. 17

7. Turn the slide motor drive gear with your finger to move the PICK-UP assembly until you can see it. (Fig. 18)
8. On the pick-up side, unlock the connector of the flexible wire by sliding the lock in the direction of the arrow, and disconnect the flexible wire. (Fig. 18)

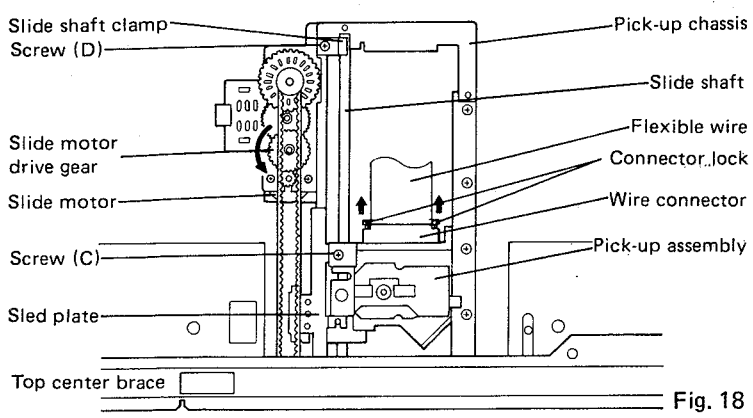


Fig. 18

9. Loosen the screw (E) which retains the slide shaft clamp from the center, (Fig. 19)
10. Remove the screw (C) which retains the sled plate and the screw (D) which retains the slide shaft clamp from the rear side. (Fig. 18)

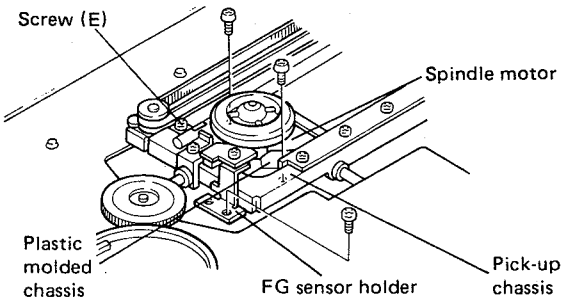


Fig. 19

11. Take out the slide shaft and PICK-UP assembly. (Fig. 20)
12. Replace with the new PICK-UP assembly, and reassemble the parts by reversing the procedure above.

Note: Be careful not to deform the pickup chassis during removal or installation.

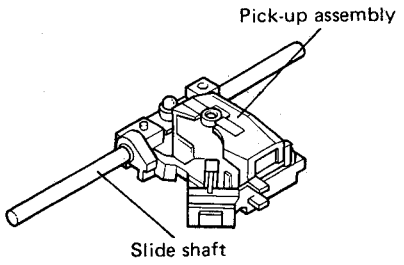


Fig. 20

Note: When the optical chassis 032M (see exploded view 2) in the service manual page 103) is deformed or damaged or when the plastic molded chassis 058M is broken, the complete mechanism has to be exchanged.
The reason for this is; The optical chassis and the plastic molded chassis are matched together with a special factory alignment method.
And cannot carried out by service.
The code number for this complete mechanism is: 4822 691 30261.

F. SPINDLE MOTOR REPLACEMENT PROCEDURES

1. Perform steps 1 through 6 of "PICK-UP ASSEMBLY REPLACEMENT PROCEDURES."
2. Rotate the slide motor drive gear, and move the pick-up assembly to the rear panel side to permit the insertion of a hexagon wrench. (Fig. 18)
3. Loosen the hexagon socket head screw using a hexagon wrench, then draw out the turntable from the spindle motor shaft. (Fig. 21)
4. Remove the screws (F) installing the spindle motor to the plastic molded chassis. (Fig. 21)
5. Turn over the unit, then detach the bottom plate, the main assembly (P506) and system control assembly (PU06). (Fig. 9)
6. Disconnect CN1 on the loading motor assembly. (Fig. 22)
7. Remove the screws (G), then detach the guard plate and the spindle motor. (Fig. 22)
8. Replace the spindle motor with a new one, and reassemble by performing the above steps in reverse order.

Note: When installing the turntable to the spindle motor, follow the next "TURNTABLE INSTALLATION PROCEDURES."

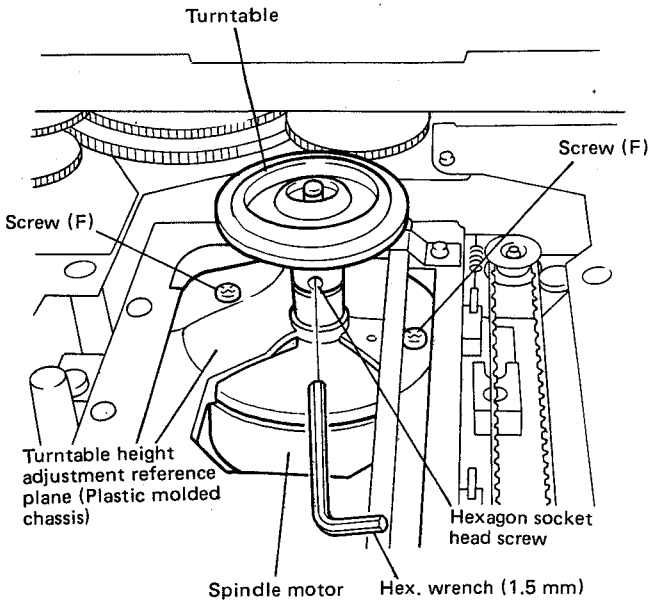


Fig. 21

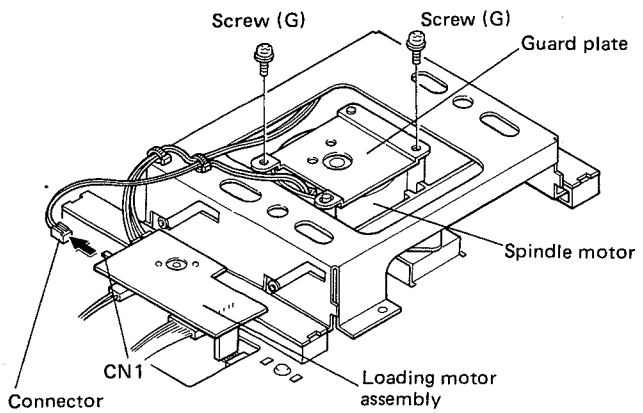


Fig. 22

G. TURNTABLE INSTALLATION PROCEDURES

1. Perform steps 4 through 8 of "SPINDLE MOTOR REPLACEMENT PROCEDURES" in reverse order, and fix the spindle motor to the plastic molded chassis by screws (F).
2. After full insertion of the turntable to the spindle motor shaft, keep the turntable 2–3 mm away from the bearing of the spindle motor shaft and tighten the hexagon socket head screw temporarily. (Fig. 23)
3. Place the turntable height adjusting device in close contact with the upper surface of the turntable in such a manner that its leg section comes above the height adjustment reference plane of the plastic molded chassis. (Figs. 21 and 24)
4. Loosen the hexagon socket head screw, and lower the turntable until the leg section of the height adjustment device comes into contact with the reference plane. Then, retighten the hexagon socket head screw securely. (Fig. 24)
5. Perform steps 1 through 6 of "PICK-UP ASSEMBLY REPLACEMENT PROCEDURES" in reverse order.

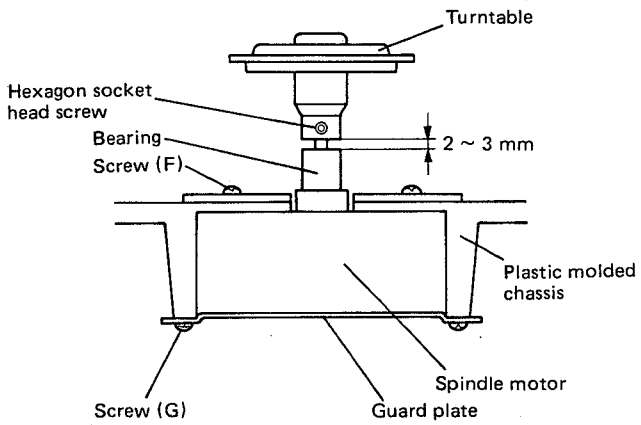


Fig. 23

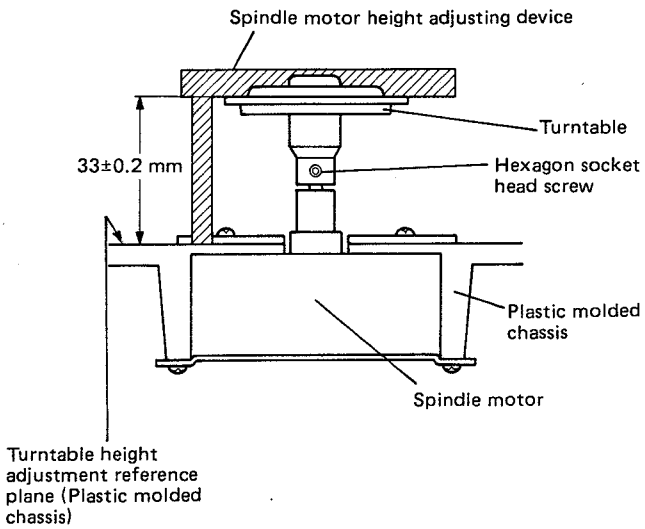


Fig. 24

V. ADJUSTMENT PROCEDURES

FIXTURES AND INSTRUMENTS REQUIRED FOR ADJUSTMENTS

- Small screwdriver
- Small Phillips head screwdriver
- Hexagon wrench (1.5 mm)
- Dual-trace oscilloscope (with delay)
  Voltage range : 0.001 ~ 50 V/div.
  Frequency range : DC ~ 50 MHz
  Probes : 10:1, 1:1
- AF generator
- Frequency counter
  Frequency range: 0 ~ 50 MHz, 8 digit readout
- LD test disc (PAL: IMS 1.0) (4822 397 30207)
- LD test disc (NTSC: MZ001) (4822 397 30244)
- CD test disc (Philips 5A) (4822 397 30096)
- Spindle motor height adjusting device (4822 395 80389)
- Service test stand (4822 395 90896)
- Extension cables
  24P, Pick-up ass'y ~ J101 (P106) (4822 321 61124)
  3P, J281 (P106) ~ J501 (P506) (4822 321 61071)
  5P, J303 (P306) ~ J313 (P506) (4822 321 61337)
  6P, J301 (P306) ~ 4P, J311 (P506)/3P, J953 (P926) (4822 321 61338)

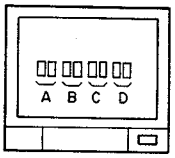
A. ADJUSTMENT PREPARATIONS AND PRECAUTIONS

1. **Player settings**
   When adjusting the player, stand the set with the power transformer side down or place the set on the Service Test Stand, and open the MAIN assembly before starting adjustment.
2. **Opening the tracking servo**
   The tracking servo can be opened and closed during test mode controlled by microcomputer.
   (For details, refer to "Test Mode Operation".)
3. **Test discs**
   These adjustments use the NTSC test disc (MZ001) or PAL test disc (IMS 1.0). Before adjustments, check item "Test disc" and use a proper test disc.
4. **Oscilloscope**
   Unless specified otherwise, all oscilloscope settings shown in the connection diagrams are values obtained by using a 10:1 probe.

B. TEST MODE OPERATION

1. **How to enter Test mode:**
   Press and hold the PLAY and PAUSE keys simultaneously, and plug the AC power cord into the power outlet.
   At this time, the player functions as it normally does.
   But the RANDOM key does not operate. (The EDIT key and PROGRAM key are equipped on the remote control unit.)
2. **Operation**
   When the unit enters the Test mode, the picture on the TV monitor screen changes to the Test mode picture, where the internal information of the Main μ-COM is displayed.
   Except for the Main μ-COM internal information display mode, the Test mode operations can be controlled by the numeric keys of the Remote Control unit.

- Main μ-COM internal information display mode:
  The internal information of the Main μ-COM is displayed on the TV monitor display.



Part A: The internal operation mode of the Main μ-COM is displayed in 2 digits.
00 ..... Park mode 06 ..... Play mode
02 ..... Open mode 0A ..... Skip mode
04 ..... Set-up mode

Part B: The operation mode of the Slider motor servo is displayed in 2 digits.
80 ..... Slider motor servo; Closed
81 ..... Slider motor servo; High speed
8E ..... Slider motor servo; Open
00 ..... Slider motor servo; OFF
Tracking servo; OFF

Part C and D: Part C and D respectively represent the control status as follows.

Part C

Control / Display	LD/CD	TILT servo	SCAN	Focus
90	CD	OFF	REV	OFF
91	LD	OFF	REV	OFF
92	CD	ON	REV	OFF
93	LD	ON	REV	OFF
94	CD	OFF	FWD	OFF
95	LD	OFF	FWD	OFF
96	CD	ON	FWD	OFF
97	LD	ON	FWD	OFF
98	CD	OFF	REV	ON
99	LD	OFF	REV	ON
9A	CD	ON	REV	ON
9B	LD	ON	REV	ON
9C	CD	OFF	FWD	ON
9D	LD	OFF	FWD	ON
9E	CD	ON	FWD	ON
9F	LD	ON	FWD	ON

Part D

Control / Display	Tracking	T-count Divider
A0	CLOSE	1/1
A1	CLOSE	1/1
A2	CLOSE	1/1
A3	CLOSE	1/1
A4	OPEN	1/1
A5	OPEN	1/1
A6	OPEN	1/1
A7	OPEN	1/1
A8	CLOSE	1/256
A9	CLOSE	1/256
AA	CLOSE	1/256
AB	CLOSE	1/256
AC	OPEN	1/256
AD	OPEN	1/256
AE	OPEN	1/256
AF	OPEN	1/256

C. SET-UP KEY FUNCTION MODE

Load a disc normally before entering the Test mode. Press the RANDOM key to access the Set-Up Key Function mode when operating in the Test mode. The screen will then display an "M" at the beginning of the 8 displayed digits. Part A of the display will change to "04" indicating that the unit is in the Set-Up mode. Use the numeric keys [0] through [6], on the Remote Control unit, to access the various functions listed.

1. Key function

[0] key:
The focusing operation can be switched ON/OFF.
Each press of the [0] key alternately toggles focusing ON/OFF. Only in STOP mode.

[1] key:
The tilt servo can be switched ON/OFF.
Each press of the [1] key alternately toggles tilt servo ON/OFF. Only in PLAY mode.

[2] key:
The forward search can be switched ON/OFF.
Each press of the [2] key alternately toggles forward search ON/OFF. In STOP mode and in PLAY mode, when the tracking servo is OFF.
Remark:
When the outer most slider position is reached, the player goes to the OPEN mode and test mode is terminated.

[3] key:
The reverse search can be switched ON/OFF.
Each press of the [3] key alternately toggles reverse search ON/OFF. In STOP mode and in PLAY mode, when the tracking servo is OFF.
Remark:
When the inner most slider position is reached, the player goes to the OPEN mode and test mode is terminated.

[4] key:
The tracking servo can be switched ON/OFF.
Eacy press of the [4] key alternately toggles tracking servo ON/OFF.

[5] key:
The spindle servo can be switched ON.
In order to turn off the spindle motor, press the RANDOM key to make the letter "M" disappear, then press the STOP key. If necessary to access the Set-Up Key Function mode again, press the RANDOM key and display an "M", then start.

[6] key:
LCD (Multi-function display) check mode's automatic sequence when [6] key is first pressed is described below:
(1) All LCD segments light up (1 sec.)
(2) The LCD numeric display section lights up (all digits are displayed together, then "0" to "9" and "–" are displayed in sequence).
(3) The function indicators and mode indicators on the LCD go ON/OFF one by one in sequence.
(4) Repeat steps (1) to (3).
Each press of the [6] key toggles the LCD check mode ON/OFF alternately.

2. How to terminate Test mode

Press the RANDOM key to make the letter "M" disappear then press the OPEN key.

D. SERVO ASSEMBLY ADJUSTMENTS

IMPORTANT NOTE:

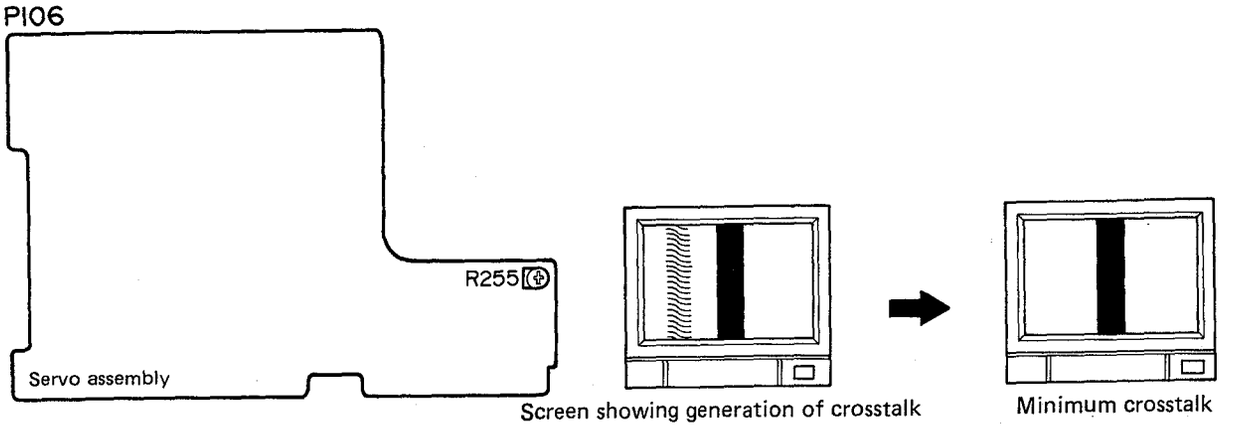
The following Servo adjustments can be performed separately.
Procedure D-7 and D-8
When one of items D-1 to D-6 for servo adjustment has been performed, perform items D-1 to D-6 for servo adjustment again.

D-1 Tilt Balance Adjustment

- Purpose: To adjust the electrical offset of tilt servo by means of the Tilt Balance Control (R255)
- Symptoms indicating need for adjustment: Crosstalk

• Measuring instruments and fixtures	• TV monitor
• Measuring position	• Player video output terminals
• Test disc and player mode	• LD test disc (NTSC) #115
• Adjustment position	• Servo assembly P106, Tilt Balance Control (R255)

Connection diagram



Adjustment Procedure

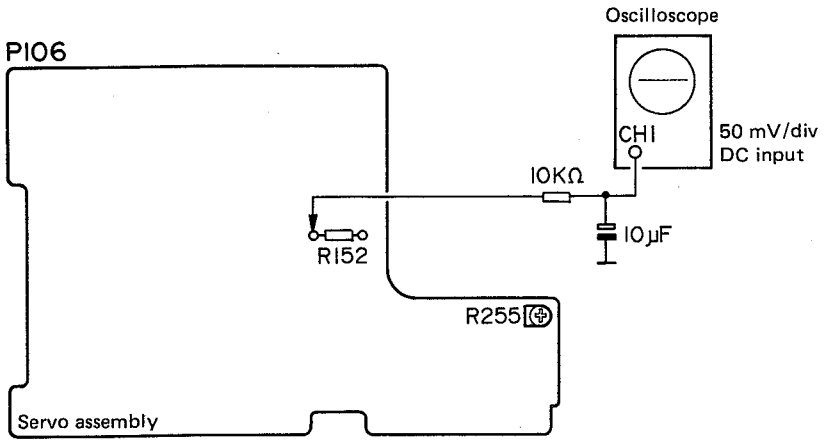
1. Play an LD test disc, and search to frame #115.
2. Turn R255 on the servo assembly board clockwise so that a crosstalk appears on the left side of the monitor screen.
3. Then, turn R255 counterclockwise gradually until the crosstalk at the left side of the screen disappears, then stop turning. (Pay attention not to exceed the point where the crosstalk just goes out.)

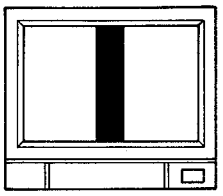
D-2 Tilt levelness check and adjustment

- Purpose: Make the tilt chassis be flat against the non-warped disc.
- Symptoms indicating need for adjustment: When a warped disc is loaded, the distance between the disc and the pickup cover becomes insufficient.

• Measuring instruments and fixtures	• Resistors (10 kΩ) • Capacitor (10 μF) • TV monitor
• Measuring position	• Read of R152 on Servo assembly • Player video output terminals
• Test disc and player mode	• LD test disc (NTSC) #115 and #45565
• Adjustment position	• Servo assembly P106, Tilt Balance Control (R255)

Connection diagram





Minimum crosstalk

Adjustment procedure

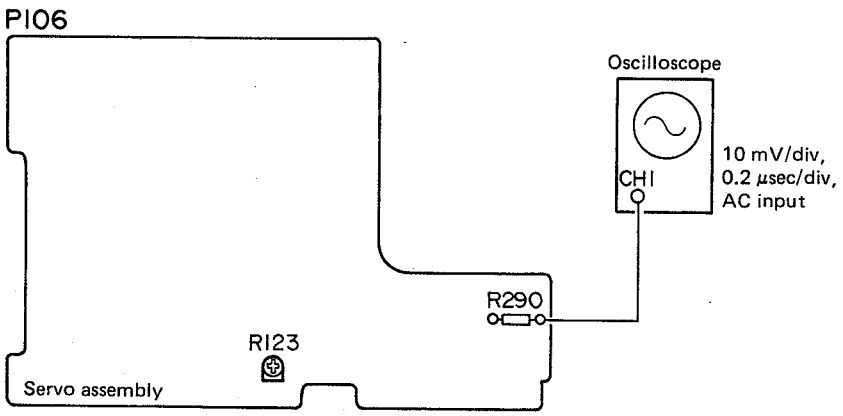
1. Play the LD test disc and search the frame #115. (Check that there is no warp on the disc beforehand.)
2. Connect the resistor, capacitor and an oscilloscope to the lead wire of R152 on the servo assembly board, as shown in the diagram.
3. Measure the DC voltage when the frame #115 is being played.
4. Then search the frame #45565.
5. At this time, measure the DC voltage and check that the difference from that of #115 is within ±10 mV.
6. If the measured value is out of standard, adjust R255 so that the DC voltage at #45565 becomes ±10 mV, using the DC voltage at #115 as a reference.
7. Search the frame #115 and check that the crosstalk does not appear on the monitor screen. If the crosstalk appears, perform the operation in item D-1. "Tile Balance Adjustment" again.

D-3 LD Focus (FOCS) Error Balance Adjustment

- Purpose: To ensure that the FOCS servo maintains the objective lens at the optimum distance from disc during LD playback.
- Symptoms indicating need for adjustment: Crosstalk.

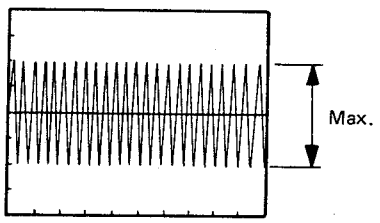
• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• Lead of R290 on Servo assembly (RF signal)
• Test disc and player mode	• LD test disc (NTSC) #15,000 (TRKG servo: closed)
• Adjustment position	• Servo assembly P106, LD Focus Balance Control (R123)

Connection diagram



Adjustment Procedure

1. Play an LD test disc and search to frame #15,000.
2. Connect the oscilloscope to the lead of R290 on the Servo assembly and observe the RF signal.
3. Adjust R123 on the Servo assembly to obtain maximum RF signal amplitude. (Fig. 25.)



RF Signal

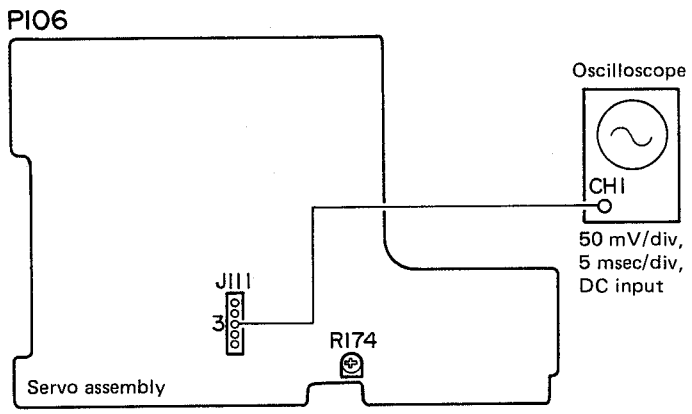
Fig. 25

D-4 Tracking (TRKG) Balance Adjustment

- Purpose: Adjust TRKG servo offset voltage to 0V.
- Symptoms indicating need for adjustment: Improper tracking (Jumping, Skipping etc.)

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• Servo assembly J111-3 (TRKG error)
• Test disc and player mode	• LD test disc (NTSC) #16,000 • Test mode (TRKG servo open), Refer to "Test Mode Operation".
• Adjustment position	• Servo assembly P106, Tracking Balance Control (R174)

Connection diagrams



Adjustment Procedure

1. Access Test Mode and Play an LD test disc.
2. Press the DISPLAY key to display the frame No. on the TV screen.
3. Move the pick-up to frame #16,000 by scanning or searching using unit's key's.
4. Open the TRKG servo.
5. Connect the oscilloscope to J111-3 of the Servo assembly and observe the waveform.
6. Align the oscilloscope GND with the center of the oscilloscope screen.
7. Adjust R174 in the Servo assembly to a position where the positive and negative halves of the TRKG error waveform are equal. (See Photo 1.)

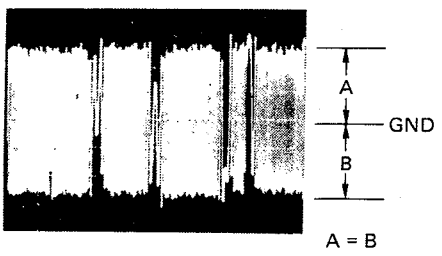


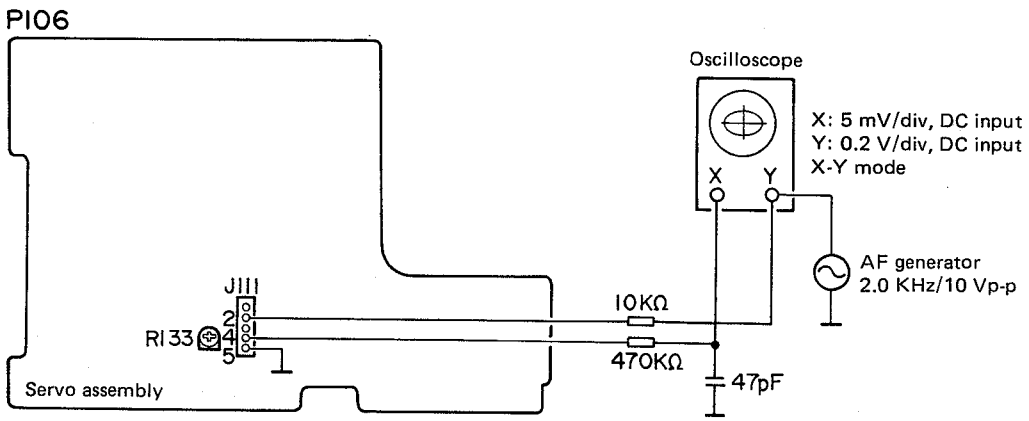
Photo 1.

D-5 FOCS Servo Loop Gain Adjustment

- Purpose: Adjustment of FOCS servo loop gain to the optimum value.
- Symptoms indicating need for adjustment: Degraded playability

• Measuring instruments and fixtures	• Oscilloscope • Resistors (10 kΩ, 470 kΩ) • Capacitor (47 pF) • AF generator
• Measuring position	• Servo assembly J111-4 (FOCS error), J111-2 (FOCS gain)
• Test disc and player mode	• LD test disc (NTSC) #16,000 (TRKG servo: closed)
• Adjustment position	• Servo assembly P106, Focus Gain Control (R133)

Connection diagram



Adjustment Procedure

1. Connect the resistors, capacitor, AF generator and oscilloscope to J111 on the Servo assembly as shown in the diagram.
2. Set the AF generator output to 2.0 kHz/10 Vp-p.
3. Put the oscilloscope into X-Y mode, and observe the Lissajous figures.
4. Adjust R133 on the Servo assembly until the Lissajous figures become symmetrical along the respective X and Y axes of the oscilloscope. (Photo 2.)

   Note: If the disc surface is scratched, the waveforms cannot be read due to noise. Be sure to use a disc which is not damaged.

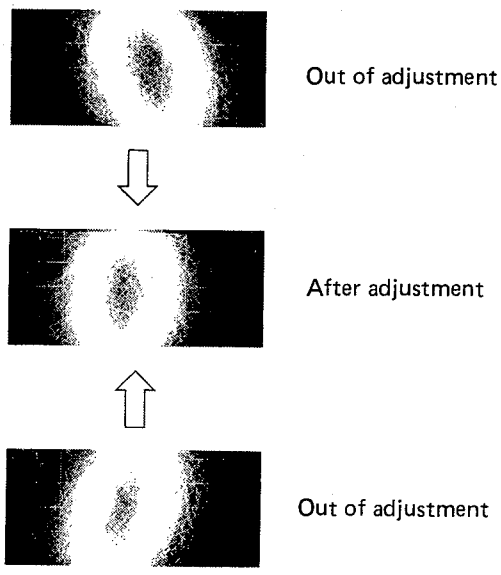


Photo 2.

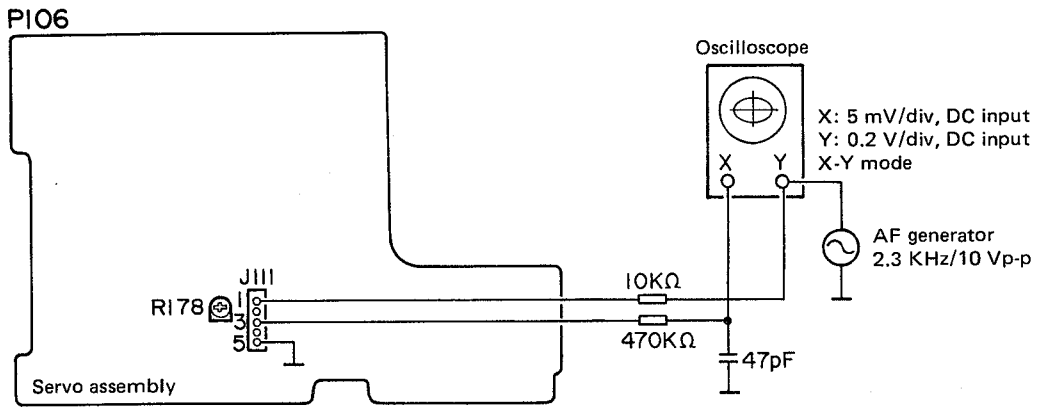
D-6 TRKG Servo Loop Gain Adjustment

- Purpose: Adjustment of TRKG servo loop gain to the optimum value.
- Symptoms indicating need for adjustment: Degraded playability

If the disc surface is scratched, the waveforms cannot be read due to noise. Be sure to use a disc which is not damaged.

• Measuring instruments and fixtures	• Oscilloscope • Resistors (10 kΩ, 470 kΩ) • Capacitor (47 pF) • AF generator
• Measuring position	• Servo assembly J111-1 (TRKG error), J111-3 (TRKG gain)
• Test disc and player mode	• LD test disc (NTSC) #16,000 (TRKG servo: closed)
• Adjustment position	• Servo assembly P106, Tracking Gain Control (R178)

Connection diagram



Adjustment Procedure

1. Play an LD test disc and serch to frame #16,000.
2. Connect the resistor, AF generators, capacitor and oscilloscope to J111 on the Servo assembly as shown in the diagram.
3. Set the AF generator output to 2.3 kHz/10 Vp-p.
4. Put the oscilloscope into X-Y mode, and observe the Lissajous figures.
5. Adjust R178 on the Servo assembly until the Lissajous figures become symmetrical along their respective X and Y axes of the oscilloscope. (Photo 3.)

   Note: If the disc surface is scratched, the waveforms cannot be read due to noise. Be sure to use a disc which is not damaged.

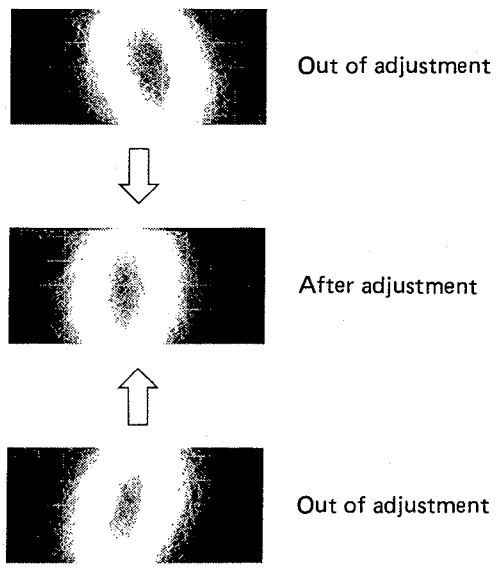


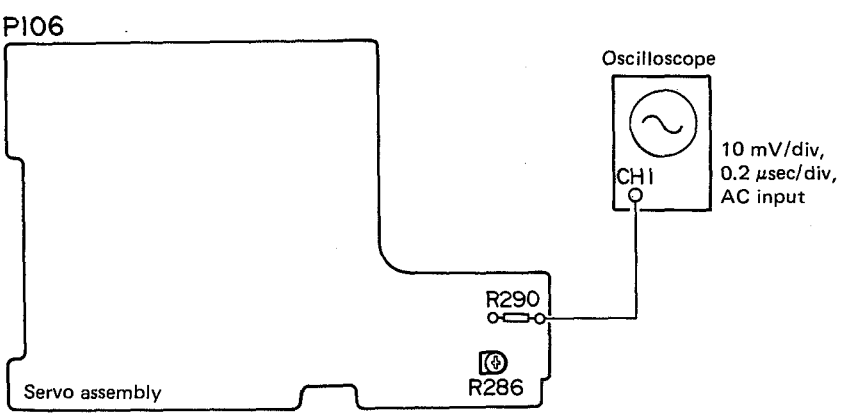
Photo 3.

D-7 RF Gain Adjustment

- Purpose: Adjustment of RF signal amplitude to the optimum value.
- Symptoms indicating need for adjustment: Frequent drop-out

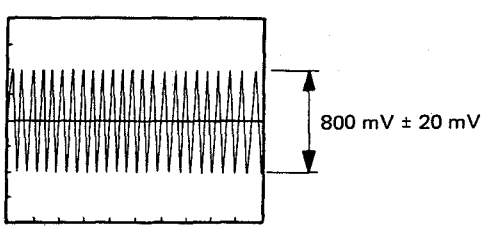
• Measuring instruments and fixtures • Measuring position • Test disc and player mode • Adjustment position	• Oscilloscope • Lead of R290 on Servo assembly (RF signal) • LD test disc (NTSC) #15,000 (TRKG servo: closed) (For LD test disc (PAL) RF = 1.2V ± 50 mV) • Servo assembly P106, RF Gain Control (R286)

Connection diagram



Adjustment Procedure

1. Play an LD test disc and search to frame #15,000.
2. Connect the oscilloscope to the lead of R290 on the Servo assembly and observe the RF signal.
3. Adjust R286 on the Servo assembly to obtain an RF signal amplitude of 800 mV ± 20 mV. (Fig. 26.)



RF Signal

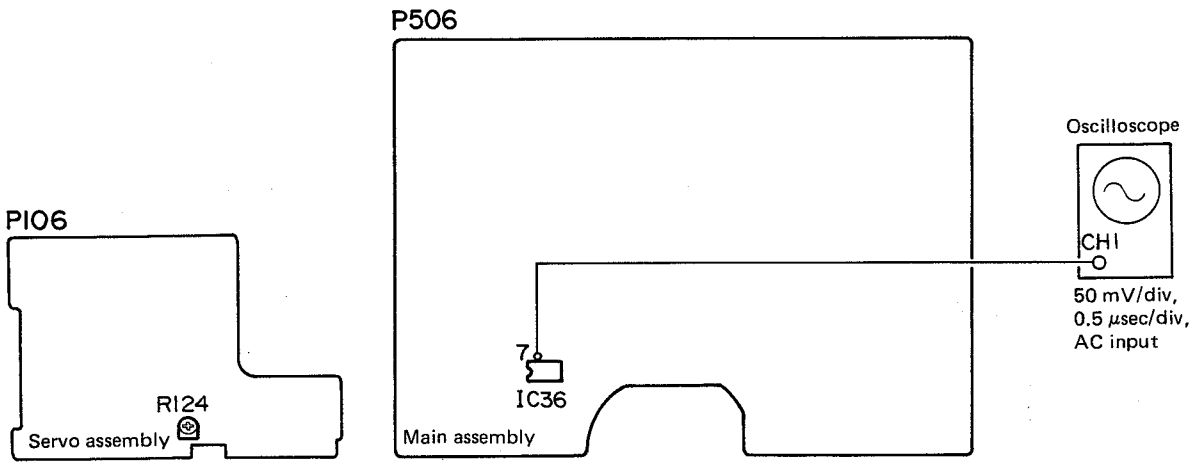
Fig. 26

D-8 CD FOCS Error Balance Adjustment

- Purpose: To ensure that the FOCS maintains the objective lens at the optimum distance from the disc during CD playback.
- Symptoms indicating need for adjustment: Noise in CD playback sound

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• Main assembly P506, IC36 pin 7
• Test disc and player mode	• CD test disc (Philips 5A)
• Adjustment position	• Servo assembly P106, CD Focus Balance Control (R124)

Connection diagrams



Adjustment Procedure

1. Play a CD test disc.
2. Connect the oscilloscope to pin 7 of IC36 on the Main assembly, and observe the EFM signal (eye pattern).
3. Adjust R124 on the Servo assembly until the EFM signal reaches maximum amplitude. (Photo 4.)

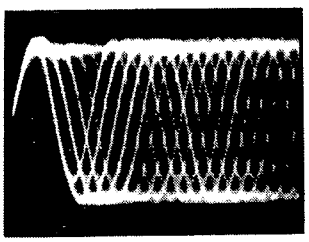


Photo 4. EFM signal

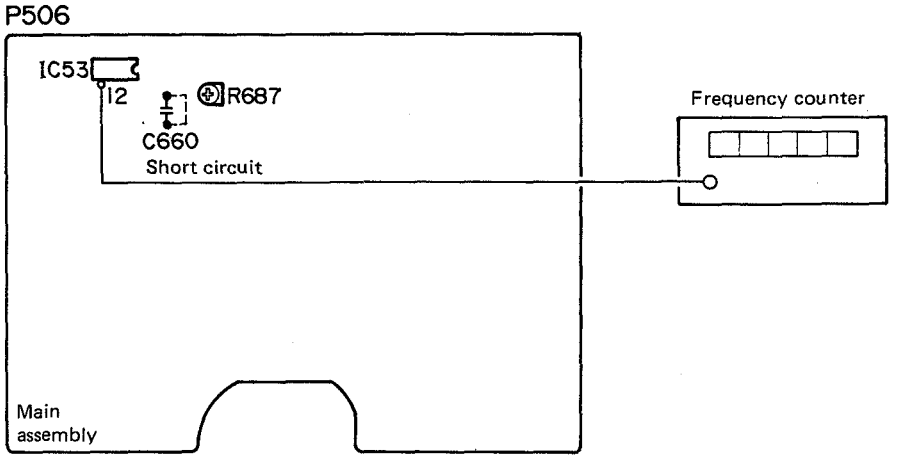
E. MAIN ASSEMBLY ADJUSTMENTS

E-1 VCO Center Frequency Adjustment (Video)

- Purpose: Optimization of the CCD delay time for time base error compensation purposes.
- Symptoms indicating need for adjustment: Color lock failure. Slow color lock after a search.

• Measuring instruments and fixtures	• Frequency counter
• Measuring position	• Main assembly P506, IC53 pin 12
• Test disc and player mode	• Turn ON the power switch only after the shorting jumper across C660 has been installed.
• Adjustment position	• Main assembly P506, VCO Center Frequency Control (R687)

Connection diagram



Adjustment Procedure

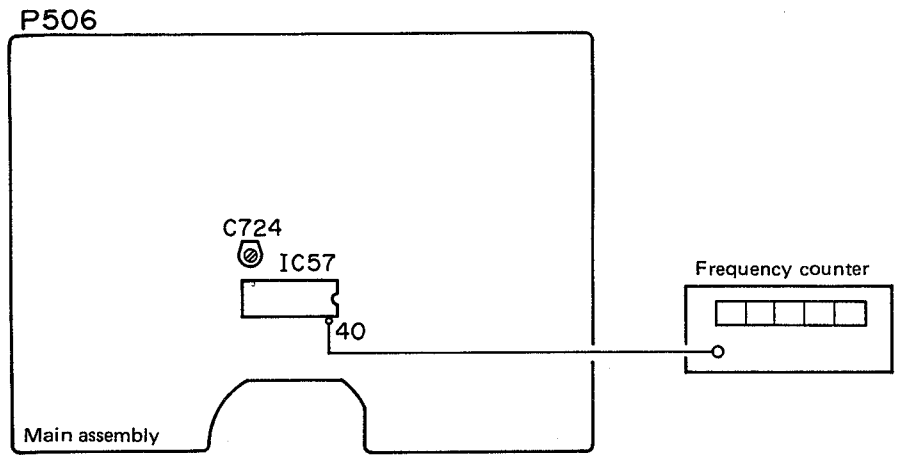
1. Turn ON power only after the shorting jumper across C660 has been installed.
2. Connect a frequency counter to the pin 12 of IC53 on the main assembly.
3. Adjust R687 so that VCO oscillates at 16.6 MHz ±0.3 MHz.
4. Turn OFF the power switch and remove shorting jumper from C660.

E-2 7.15909 MHz Adjustment (Video)

- Purpose: NTSC Reference clock frequency adjustment (7.15909 MHz)
- Symptoms indicating need for adjustment: Color aberration, spindle servo lock failure

• Measuring instruments and fixtures	• Frequency counter
• Measuring position	• Main assembly P506, IC57 pin 40
• Test disc and player mode	• LD test disc (NTSC)
• Adjustment position	• Main assembly P506, 7.15909 MHz Control (C724)

Connection diagram



Adjustment Procedure

1. Play the NTSC disc and stop (to enter the NTSC mode). Then connect the frequency counter to pin 40 of IC57 of the Main assembly.
2. Adjust C724 on the Video assembly until the reference clock frequency reads 7.15909 MHz ± 10 Hz.

Important note:

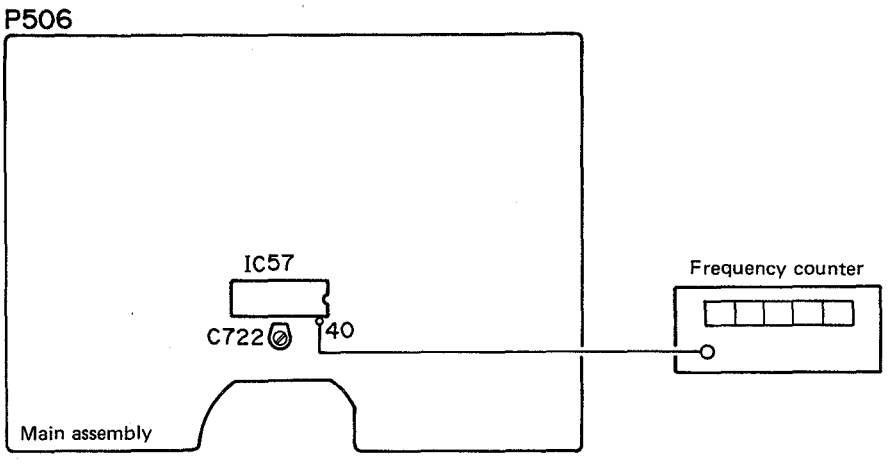
When this adjustment has been made, be sure to perform item E-6 (still pulse signal level adjustment) and item E-7 (VPS adjustment).

E-3 7.5000 MHz Adjustment (Video)

- Purpose: PAL Reference clock frequency adjustment (7.5000 MHz)
- Symptoms indicating need for adjustment: Color aberration, spindle servo lock failure

• Measuring instruments and fixtures	• Frequency counter
• Measuring position	• Main assembly P506, IC57 pin 40
• Test disc and player mode	• LD test disc (PAL)
• Adjustment position	• Main assembly P506, 7.5000 MHz Control (C722)

Connection diagram



Adjustment Procedure

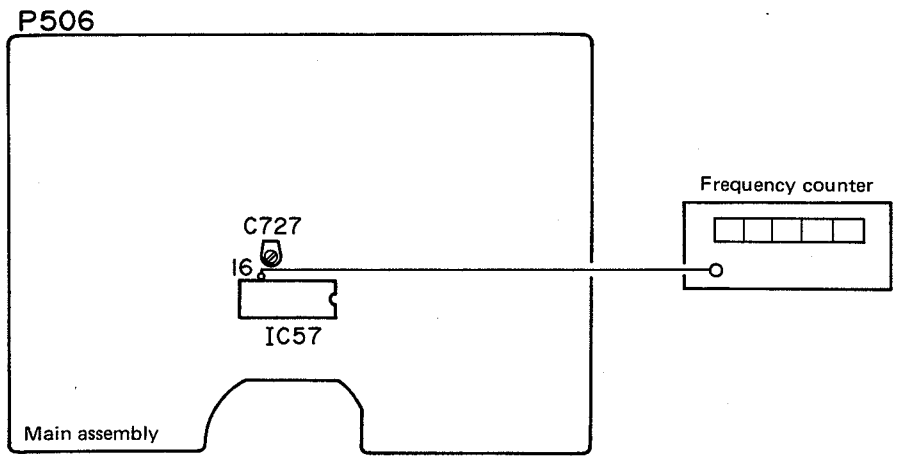
1. Play the PAL disc and stop (to enter the PAL mode). Then connect the frequency counter to pin 40 of IC57 of the Main assembly.
2. Adjust C722 on the Video assembly until the reference clock frequency reads 7.5000 MHz ± 10 Hz.

E-4 8.86724 MHz Adjustment (Video)

- Purpose: PAL Reference clock frequency adjustment 8.86724 MHz)
- Symptoms indicating need for adjustment: Images are not colored.

• Measuring instruments and fixtures	• Frequency counter
• Measuring position	• Main assembly P506, IC57 pin 16
• Test disc and player mode	• LD test disc (PAL)
• Adjustment position	• Main assembly P506, 8.86724 MHz Control (C727)

Connection diagram



Adjustment Procedure

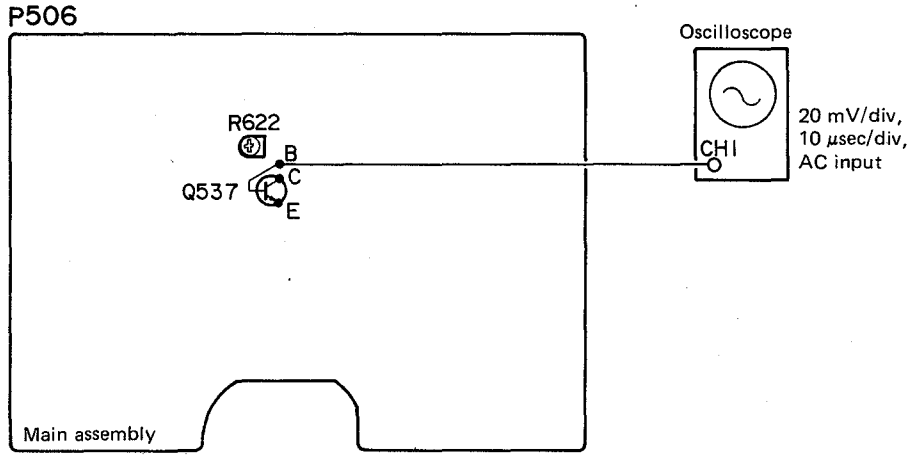
1. Play the PAL disc and stop (to enter the PAL mode). Then connect the frequency counter to pin 16 of IC57 of the Main assembly.
2. Adjust C727 on the Video assembly until the reference clock frequency reads 8.86724 MHz ± 10 Hz.

E-5 Residual Chroma Level Adjustment (Video) Q537 (base)

- Purpose: To minimize the residual chroma level of the Y signal of the Y/C separator used in the noise reduction circuit.
- Symptoms indicating need for adjustment: Color tone errors or color blur in reproduced images.

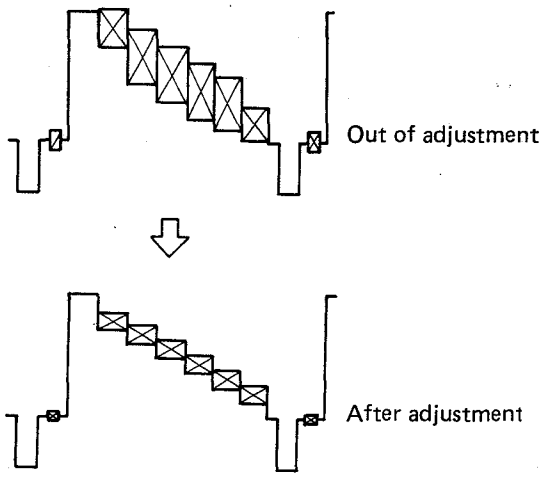
• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• Main assembly P506, Q537 (base)
• Test disc and player mode	• LD test disc (NTSC) #5,701 (#5,701)
• Adjustment position	• Main assembly P506, Chroma Level Control (R622)

Connection diagram



Adjustment Procedure

1. Play the NTSC test disc, search to frame #5,701 (#5,701) and display its still image.
2. Adjust R622 on the Main assembly to minimize the chroma level.

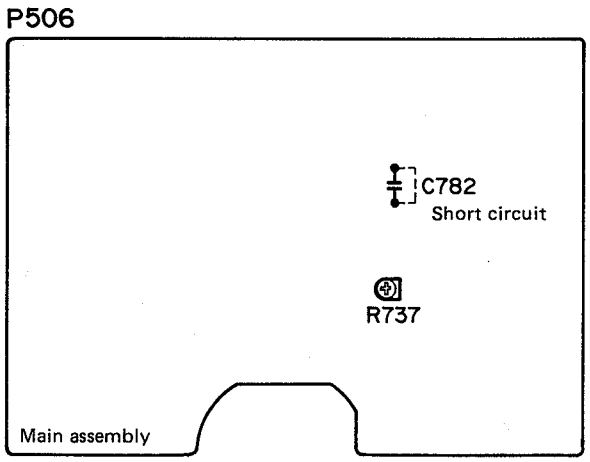


E-6 Still Pulse Signal Level Adjustment (Video)

- Purpose: To adjust the amount of pulses to be injected into the TBC error signal during still operation with a CAV disc.
- Symptoms indicating need for adjustment: Flickers appear on the screen during still operation with a CAV disc.

• Measuring instruments and fixtures • Measuring position • Test disc and player mode • Adjustment position	• TV monitor • Adjust while watching the monitor screen. • LD test disc (NTSC) #7,201 • Turn ON the power switch after the shorting jumper across C782 has been installed. • Main assembly P506, Still Pulse Level Control (R737)

Connection diagram



Adjustment Procedure

1. Turn ON the power switch after the shorting jumper across C782 has been installed.
2. Play an LD test disc and search to frame #7,201 (#26,101).
3. Adjust R737 on the Main assembly to minimize magenta screen color flickers (Streaking).
4. Turn OFF the power switch and remove shorting jumper from C782.

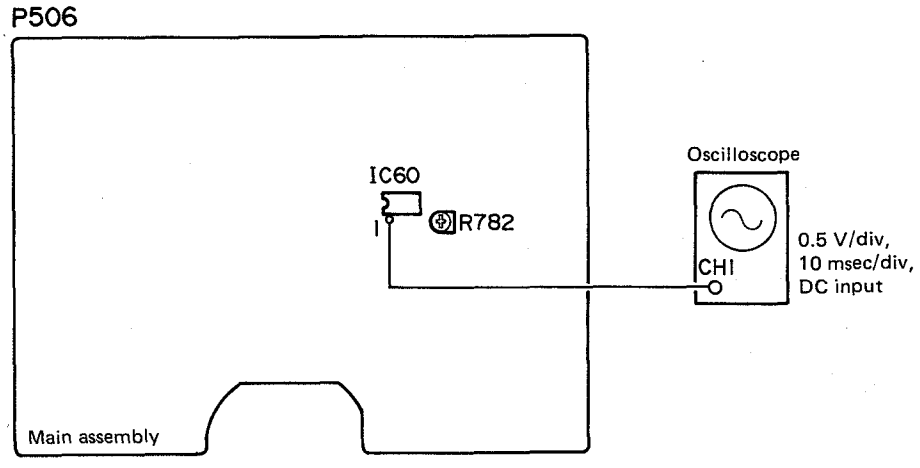
Important notice:
After this adjustment, be sure to perform item E-7 (VPS adjustment).

E-7 VPS (Video Phase Shifter) Adjustment (Video)

- Purpose: To reduce color flicker in video output.
- Symptoms indicating need for adjustment: Flickers are observed on still images of CAV disc.

• Measuring instruments and fixtures	• Oscilloscope • TV monitor
• Measuring position	• Main assembly P506, IC60 pin 1
• Test disc and player mode	• LD test disc (NTSC) #7,201
• Adjustment position	• Main assembly P506, VPS Bias Control (R782)

Connection diagram



Adjustment Procedure

1. Play the LD test disc and search to frame #7,201.
2. Observe IC60 pin 1 on an oscilloscope, and adjust R782 so that the square waves on the oscilloscope screen form a continuous line (Photo 5).

Important note:

If color flicker is still noticeable after the adjustment above, perform item E-6 (Still pulse signal level adjustment).

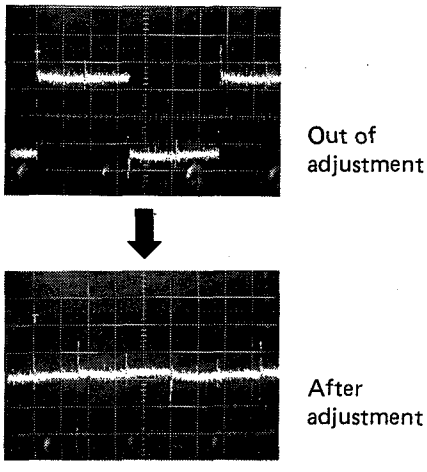


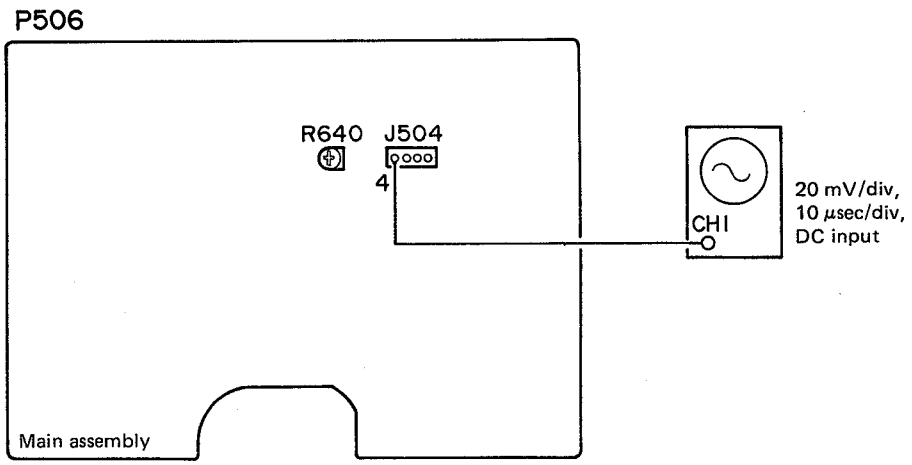
Photo 5.

E-8 Output Video Level Adjustment (Video)

- Purpose: Adjustment of the amplitude of the output video signal (from sync-tip to 100% white) to 1.0 Vp-p.
- Symptoms indicating need for adjustment: Screen too bright or too dark.

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• Main assembly J504-4
• Test disc and player mode	• LD test disc (NTSC) #19,801
• Adjustment position	• Main assembly P506, Output Video Level Control (R640)

Connection diagrams



Adjustment Procedure

1. Play an LD test disc and search to frame #19,801. (#19,801)
2. Connect the oscilloscope to J504-4 of the Main assembly, and observe the playback video signal waveform. form.
3. Adjust R640 on the Main assembly until the amplitude from the sync-tip to the white peak of the playback video signal waveform reaches 1.0 Vp-p ± 5%. (Photo 5.)

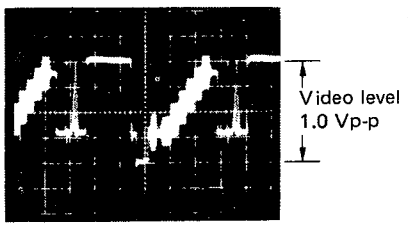


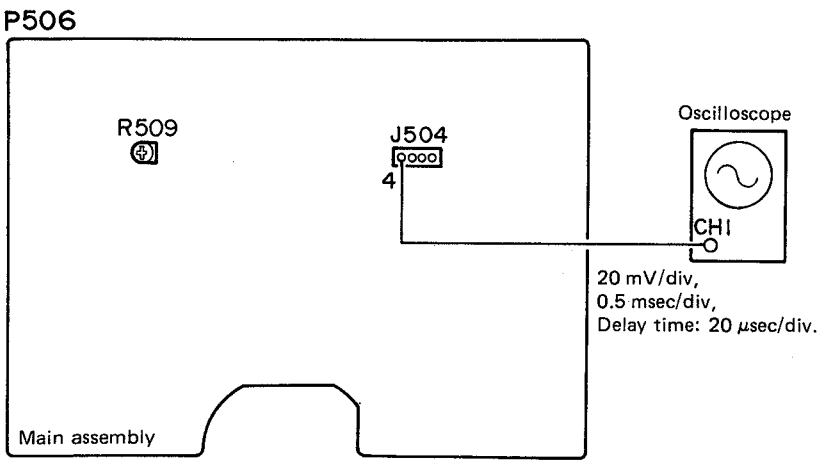
Photo 6.

E-9 1H Delayed Video Level Adjustment-NTSC (Video)

- Purpose: Adjustment of the amplitude of the 1H delayed video signal to the same amplitude as the main video signal.
- Symptoms indicating need for adjustment: Considerable white drop-out and H displacement (horizontal lines on the screen) when 1H level is large, and considerable black drop-out when 1H level is small.

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• Main assembly J504-4
• Test disc and player mode	• LD test disc (NTSC) #38,000
• Adjustment position	• Main assembly P506, 1H Delayed Video Level Control-NTSC (R509)

Connection diagram



[How to prepare a dropout disc]

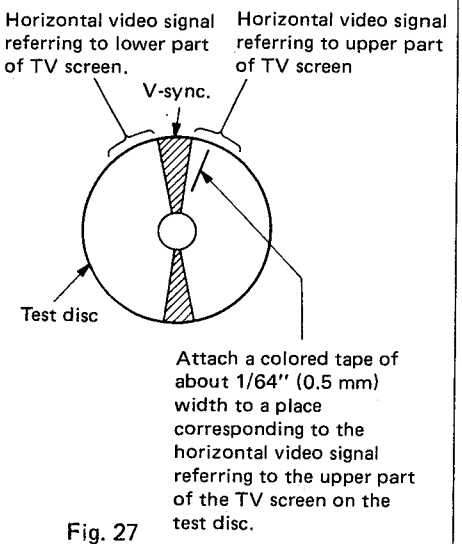


Fig. 27

Adjustment Procedure

1. Play an LD test disc and search to the 100% white screen.
   Example: Frame #38,000.
2. Connect an oscilloscope to J504-4 of the Main assembly and observe the video waveform. In this case, applying a trigger from the V-sync. (TV-V) within the oscilloscope and also using a time delay, seek out the horizontal video signal of which dropout occurs.
3. Adjust R509 so that the dropout video level becomes the same as video signal level.

Note: When dropout is not discovered even by searching to the 100% white screen of the test disc, you can make a dropout disc as shown in Fig. 28.

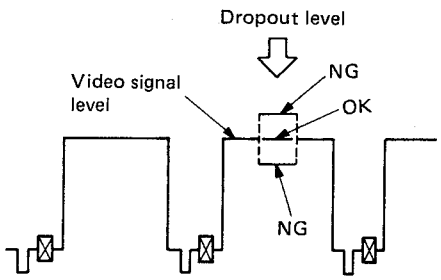


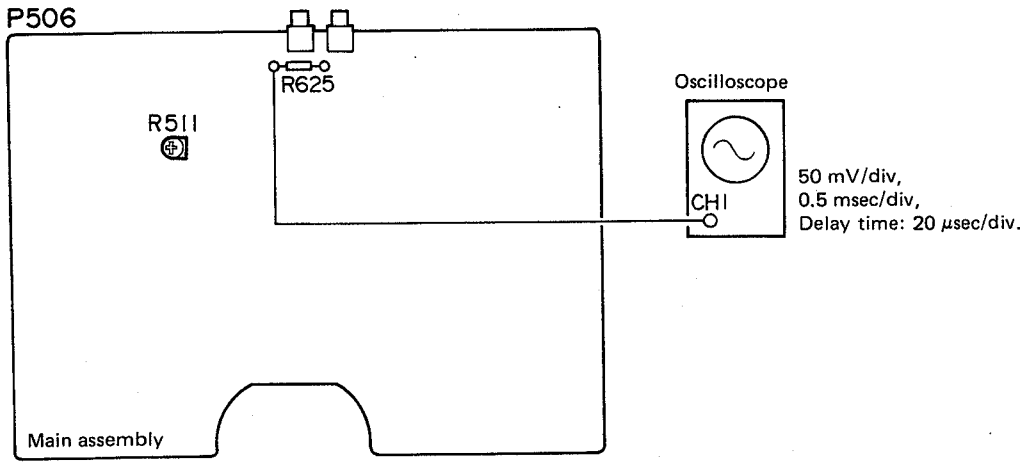
Fig. 28

E-10 1H Delayed Video Level Adjustment-PAL (Video)

- Purpose: Adjustment of the amplitude of the 1H delayed video signal to the same amplitude as the main video signal.
- Symptoms indicating need for adjustment: Considerable white drop-out and H displacement (horizontal lines on the screen) when 1H level is large, and considerable black drop-out when 1H level is small.

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• Main assembly J504-4
• Test disc and player mode	• LD test disc (PAL) #23,850
• Adjustment position	• Main assembly P506, 1H Delayed Video Level Control-PAL (R511)

Connection diagram



Adjustment Procedure

1. Play an LD test disc and search the frame #23,850.
2. Connect an oscilloscope to J504-4 and observe the video waveform. In this case, applying a trigger from the V-sync. (TV-V) within the oscilloscope and also using a time delay, seek out the horizontal video signal of which dropout occurs.
3. Adjust R511 so that the amplitude of the dropout video signal becomes as same as that of the video signal without dropout. (Fig. 29)

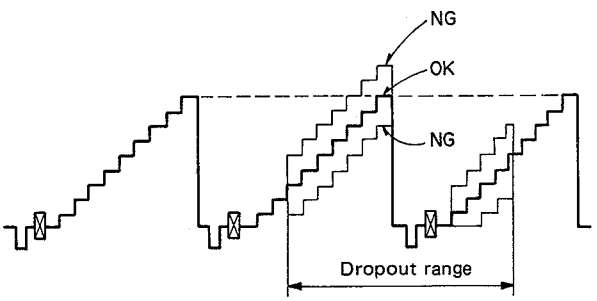


Fig. 29

F. RGB ASSEMBLY ADJUSTMENTS

IMPORTANT NOTE:

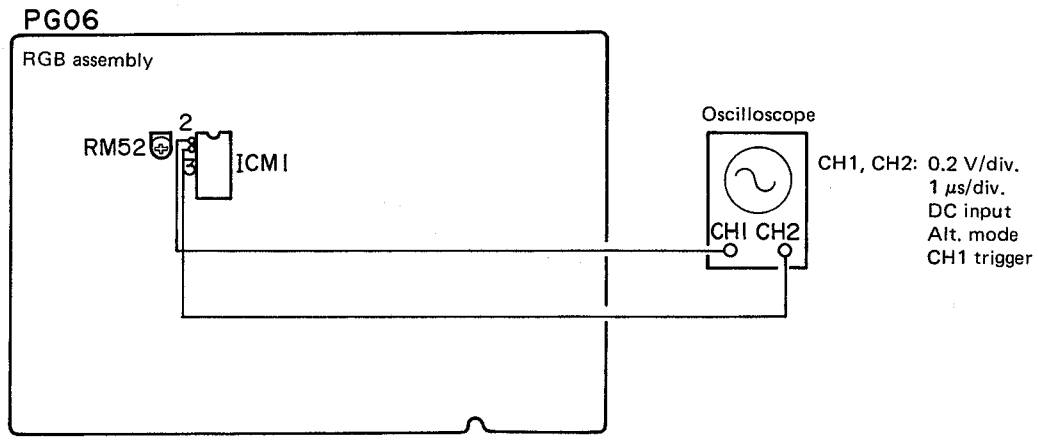
Adjust in the order of item number. In case any of adjustment items F-2 to F-5 is done in the RGB adjustment, be sure also to perform all adjustments after that item until item F-5. Also, in case any of adjustment items F-6 to F-9 is done, perform all adjustments after that item until item F-9.

F-1 BF (burst flag) Position Adjustment

- Purpose: Adjustment of burst flag to color burst position
- Symptoms indicating need for adjustment: Color noise. Image not color.

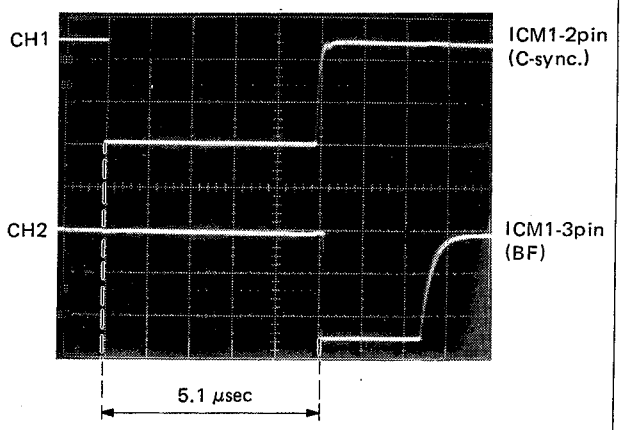
• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• RGB assembly PG06, ICM1 pin 2 and pin 3
• Test disc and player mode	• Playing LD test disc (NTSC)
• Adjustment position	• RGB assembly PG06, BF Position Control (RM52)

Connection diagram



Adjustment Procedure

1. Play a LD disc.
2. Connect the CH1 of the oscilloscope to the pin 2 (C-sync.) of ICM1 and connect the CH2 to the pin 3 (BF) of ICM1.
3. Observe both wave forms of CH1 and CH2 simultaneously. Adjust RM52 so that the time length between the point when the C-sync, wave reaches the bottom and the point when the BF wave reaches the bottom is 5.1 μ seconds.

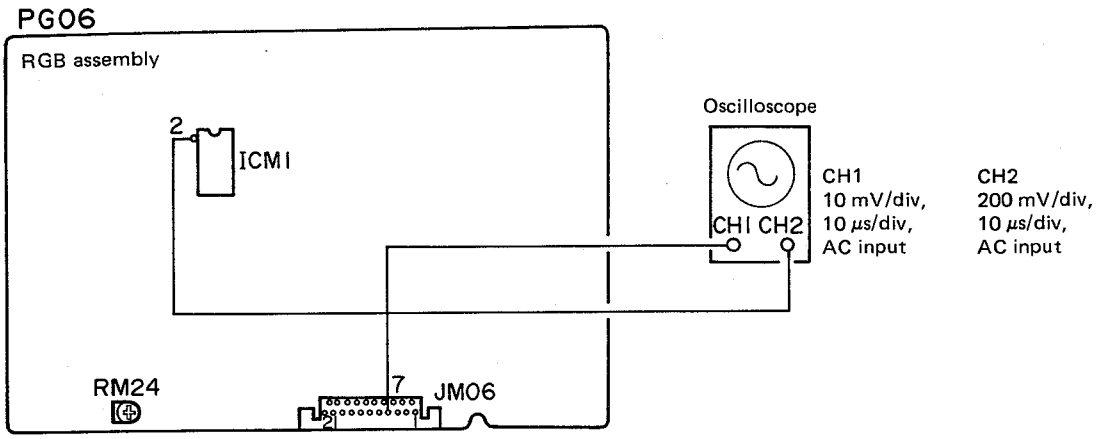


F-2 Luminance Amplifier Level Adjustment-NTSC

- Purpose: Output level adjustment
- Symptoms indicating need for adjustment: Screen being too dark or too bright.

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• RGB assembly PG06, JM06-7, ICM1 pin 2
• Test disc and player mode	• LD test disc (NTSC) Chapter 7
• Adjustment position	• RGB assembly PG06, Luminance Level Control (RM24)

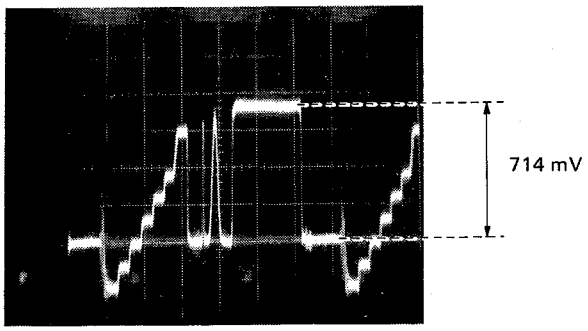
Connection diagram



Adjustment Procedure

1. Play the LD test disc and search for the chapter 7.
2. Connect the oscilloscope as shown in the diagram, trigger at CH2 and observe the B signal.
3. Adjust RM24 on RGB assembly so that the amplitude of B signal during playback is 714 mVp-p ± 5%.

Note: The RGB output terminal be connected the monitor TV in which the RGB output terminal is terminated to a 75Ω resistor.
If a monitor TV without RGB terminal is used, terminate the B output terminal (7 pin of JM06) with a 75Ω resistor.

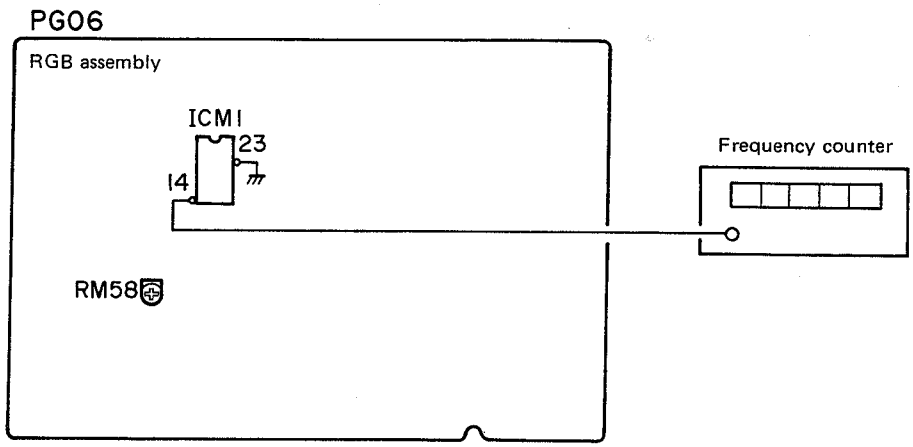


F-3 VCXO Adjustment of RGB Decoder-NTSC

- Purpose: Adjustment of free-run frequency of RGB decoder
- Symptoms indicating need for adjustment: Color uneven. Coloring difficult after search.

• Measuring instruments and fixtures	• Frequency counter
• Measuring position	• RGB assembly PG06, ICM1 pin 14
• Test disc and player mode	• LD test disc (NTSC)
• Adjustment position	• RGB assembly PG06, VCXO Adjust Control (RM58)

Connection diagram



Adjustment Procedure

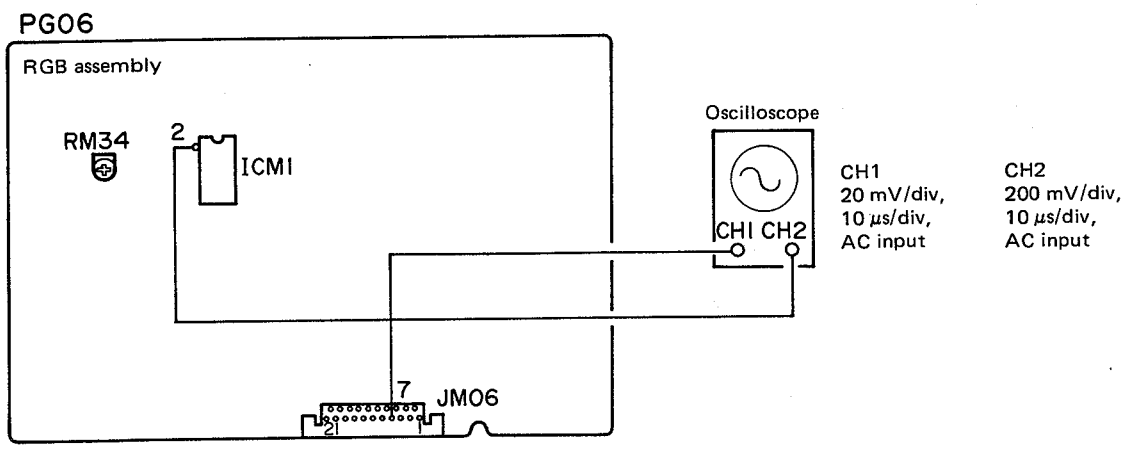
1. Ground ICM1 pin 23.
2. Play the NTSC disc and stop. Then connect the frequency counter to ICM1 pin 14 of the RGB assembly.
3. Adjust RM58 so that the frequency counter reads 3.5795 MHz ± 200 Hz.

F-4 Chroma Amplifier Level Adjustment-NTSC

- Purpose: Chroma level adjustment
- Symptoms indicating need for adjustment: Colors are too pale or deep.

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• RGB assembly PG06, JM06-7, ICM1 pin 2
• Test disc and player mode	• LD test disc (NTSC) Chapter 12
• Adjustment position	• RGB assembly PG06, Chroma Level Control (RM34)

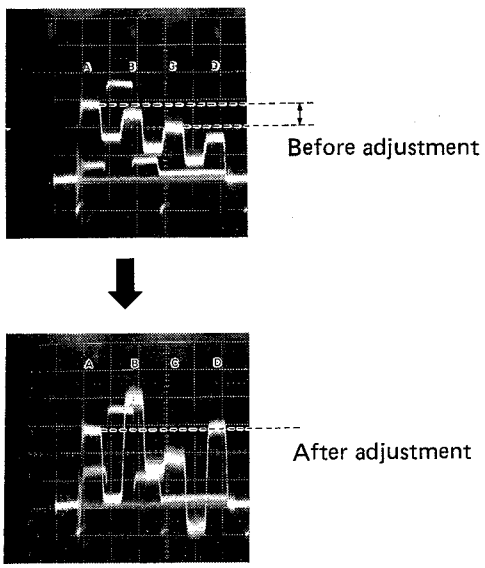
Connection diagram



Adjustment Procedure

1. Play the LD test disc and search for the chapter 12.
2. Connect the oscilloscope as shown in the diagram, trigger at CH2 and observe the B signal.
3. Adjust RM34 of the RGB assembly so that the levels of sections "A" and "D" on the reproduced B signal waveform are equal. Repeat this adjustment and the adjustment of item F-5 alternately until all of the levels of A, B, C and D become equal.

Note: The RGB output terminal be connected the monitor TV in which the RGB output terminal is terminated to a 75Ω resistor.
If a monitor TV without RGB terminal is used, terminate the B output terminal (7 pin of JM06) with a 75Ω resistor.

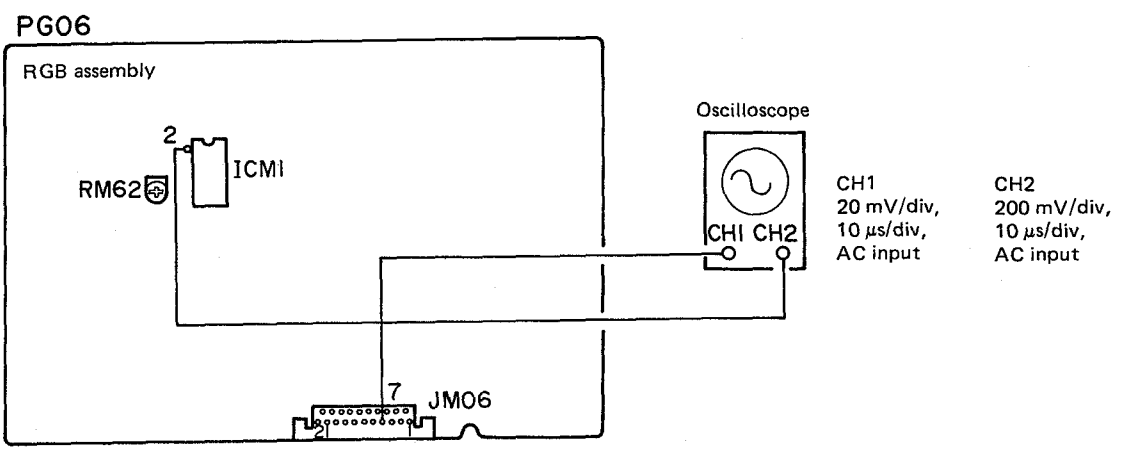


F-5 Hue Adjustment-NTSC

- Purpose: Alignment of hue in NTSC disc playback.
- Symptoms indicating need for adjustment: Hue is not aligned properly.

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• RGB assembly PG06, JM06-7, ICM1 pin 2
• Test disc and player mode	• LD test disc (NTSC) Chapter 12
• Adjustment position	• RGB assembly PG06, Hue Control (RM62)

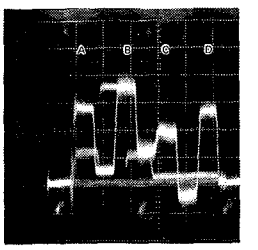
Connection diagram



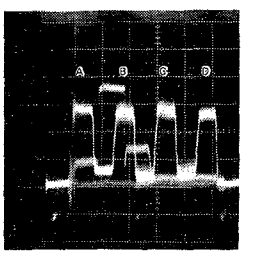
Adjustment Procedure

1. Play the LD test disc and search for the chapter 12.
2. Connect the oscilloscope as shown in the diagram, trigger at CH2 and observe the B signal.
3. Adjust RM62 of the RGB assembly so that the levels of sections "A", "B", "C" and "D" on the reproduced B signal waveform are equal.
   Repeat adjustment items F-4 and F-5 alternately until all of these levels become equal.

Note: The RGB output terminal be connected the monitor TV in which the RGB output terminal is terminated to a 75Ω resistor.
If a monitor TV without RGB terminal is used, terminate the B output terminal (7 pin of JM06) with a 75Ω resistor.



Before adjustment



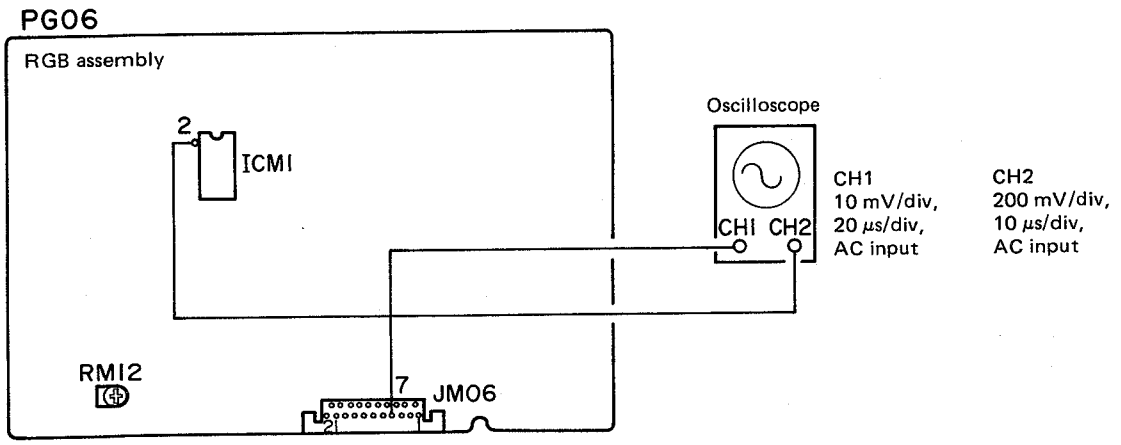
After adjustment

F-6 Luminance Amplifier Level Adjustment-PAL

- Purpose: Output level adjustment
- Symptoms indicating need for adjustment: Screen being too dark or too bright.

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• RGB assembly PG06, JM06-7, ICM1 pin 2
• Test disc and player mode	• LD test disc (PAL) #1,200
• Adjustment position	• RGB assembly PG06, Luminance Level Control (RM12)

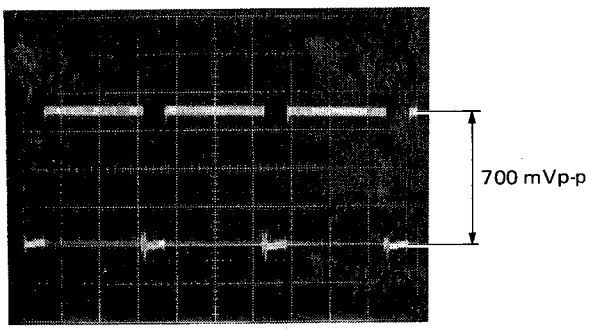
Connection diagram



Adjustment Procedure

1. Play the LD test disc and search for the frame 1,200.
2. Connect the oscilloscope as shown in the diagram, trigger at CH2 and observe the B signal.
3. Adjust RM12 on RGB assembly so that the amplitude of B signal during playback is 700 mVp-p ± 5%.

Note: The RGB output terminal be connected the monitor TV in which the RGB output terminal is terminated to a 75Ω resistor.
If a monitor TV without RGB terminal is used, terminate the B output terminal (7 pin of JM06) with a 75Ω resistor.

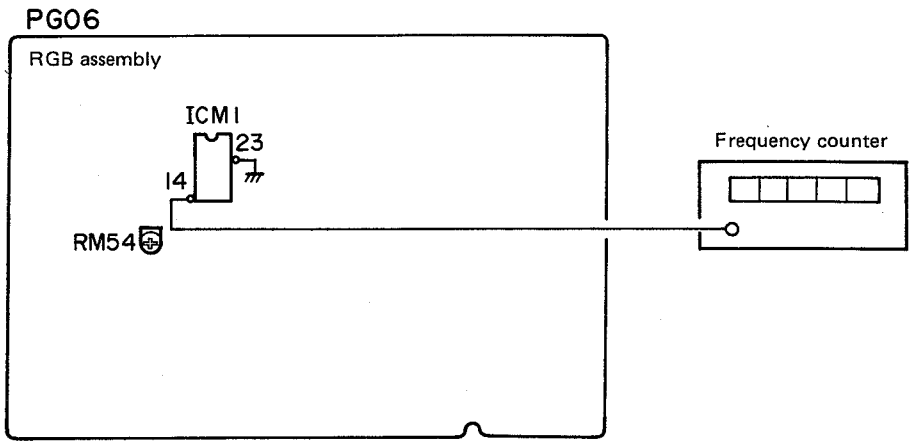


F-7 VCXO Adjustment of RGB Decoder-PAL

- Purpose: Adjustment of free-run frequency of RGB decoder
- Symptoms indicating need for adjustment: Color uneven. Coloring difficult after search.

• Measuring instruments and fixtures	• Frequency counter
• Measuring position	• RGB assembly PG06, ICM1 pin 14
• Test disc and player mode	• LD test disc (PAL)
• Adjustment position	• RGB assembly PG06, VCXO Adjust Control (RM54)

Connection diagram



Adjustment Procedure

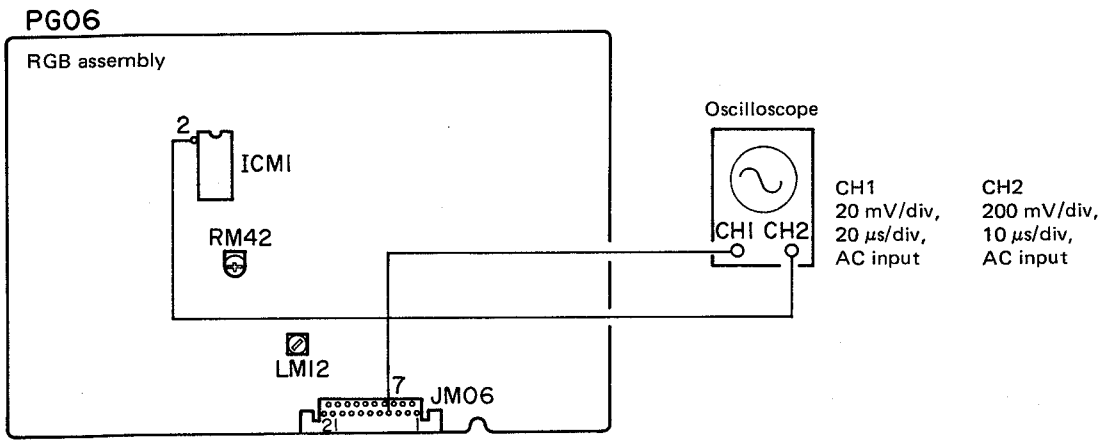
1. Ground ICM1 pin 23.
2. Play the PAL disc and stop. Then connect the frequency counter to ICM1 pin 14 of the RGB assembly.
3. Adjust RM54 so that the frequency counter reads 4.433600 MHz ± 200 Hz.

F-8 1H Delay Chroma Level Adjustment-PAL

- Purpose: Adjustment of chroma level output with 1H delay
- Symptoms indicating need for adjustment: Flicker being obvious

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• RGB assembly PG06, JM06-7, ICM1 pin 2
• Test disc and player mode	• LD test disc (PAL) #260
• Adjustment position	• RGB assembly PG06, 1H Delay Level Control (RM42), (LM12)

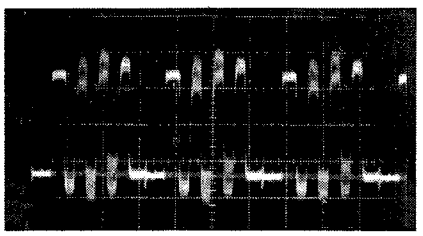
Connection diagram



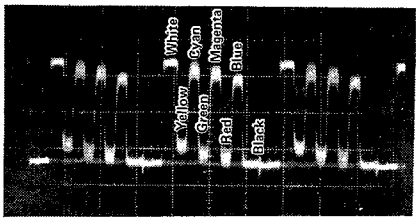
Adjustment Procedure

1. Play the LD test disc and search for the frame #260.
2. Connect the oscilloscope as shown in the diagram, trigger at CH2 and observe the B signal.
3. First adjust R42 to minimize the amplitudes observed on the upper and lower parts of waveforms, then adjust LM12.
   When adjusting LM12, be careful not to damage the core.

Note: The RGB output terminal be connected the monitor TV in which the RGB output terminal is terminated to a 75Ω resistor.
If a monitor TV without RGB terminal is used, terminate the B output terminal (7 pin of JM06) with a 75Ω resistor.



Before adjustment



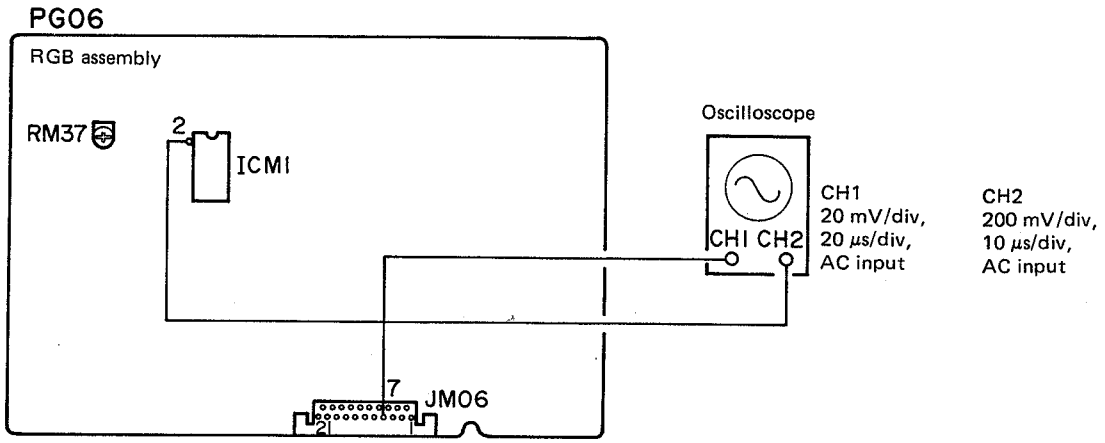
After adjustment

F-9 Chroma Amplifier Level Adjustment-PAL

- Purpose: Adjustment of Chroma level
- Symptoms indicating need for adjustment: Colors are too pale or deep

• Measuring instruments and fixtures	• Oscilloscope
• Measuring position	• RGB assembly PG06, JM06-7, ICM1 pin 2
• Test disc and player mode	• LD test disc (PAL) #260
• Adjustment position	• RGB assembly PG06, Chroma Level Control (RM37)

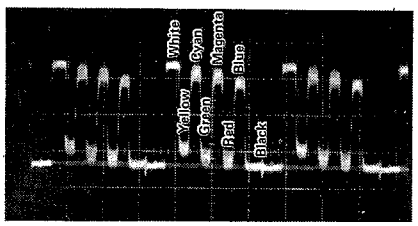
Connection diagram



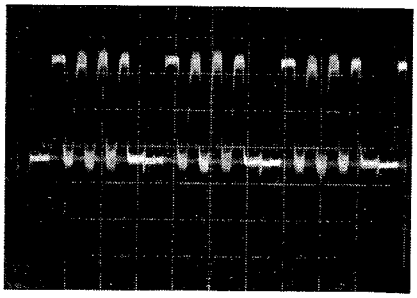
Adjustment Procedure

1. Play the LD test disc and search for the frame #260.
2. Connect the oscilloscope as shown in the diagram, trigger at CH2 and observe the B signal.
3. Adjust RM37 so that the each color level of B signal in playback is the same.

Note: The RGB output terminal be connected the monitor TV in which the RGB output terminal is terminated to a 75Ω resistor.
If a monitor TV without RGB terminal is used, terminate the B output terminal (7 pin of JM06) with a 75Ω resistor.



Before adjustment



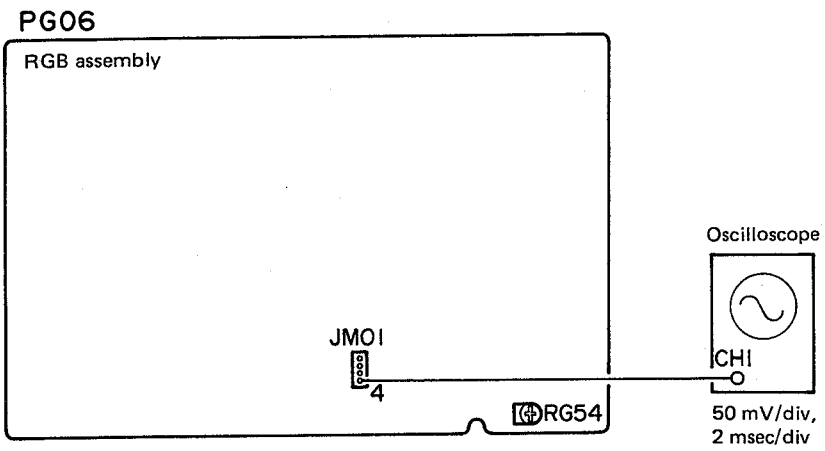
After adjustment

F-10 Color Beat (Interference) Cancel Adjustment

- Purpose: Adjusting the delay time of the chroma signal applied to the main video signal.
- Symptoms indicating need for adjustment: Beat (interference) is noticeable in color image.

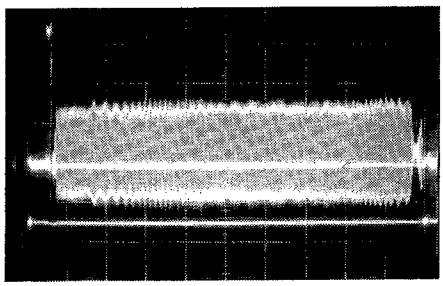
• Measuring instruments and fixtures	• TV monitor • Oscilloscope
• Measuring position	• RGB assembly PG06, JM01-4
• Test disc and player mode	• LD test disc (NTSC) Chapter 16
• Adjustment position	• RGB assembly PG06, Delay Time Control (RG54)

Connection diagram

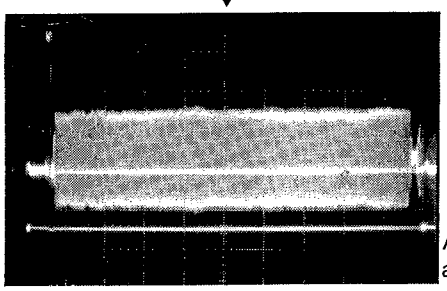


Adjustment Procedure

1. Play an LD test disc, search to chapter 16 and still.
2. Connect an oscilloscope to JM01-4 on the Main assembly and trigger with the V-sync.
3. Adjust RG54 in the RGB assembly so that the V-sweep waveform displayed in the oscilloscope becomes float.



Before adjustment



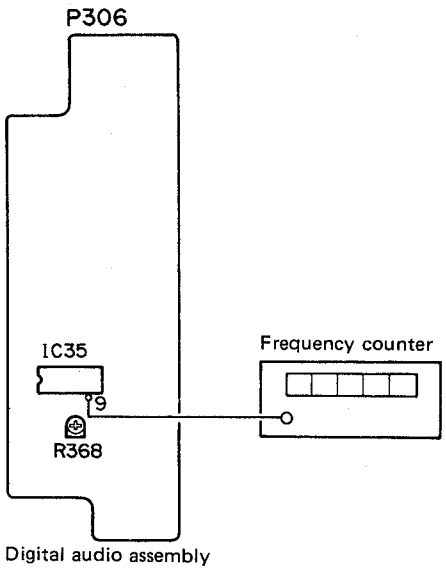
After adjustment

G. DIGITAL AUDIO ASSEMBLY ADJUSTMENT
G-1 VCXO Adjustment (Digital Audio)

- Purpose: Adjusts the CD system clock to 11.2896 MHz.
- Symptoms indicating need for adjustment: Digital sound is interrupted.

• Measuring instruments and fixtures	• Frequency counter.
• Measuring position	• Digital audio assembly IC35 pin 9
• Test disc and player mode	• CD test disc (PHILIPS 5A)
• Adjustment position	• Digital audio assembly P306, VCXO Adjust Control (R368)

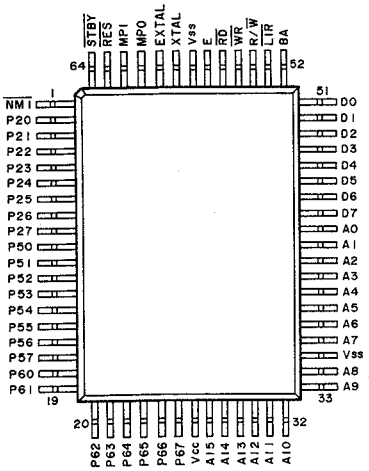
Connection diagram

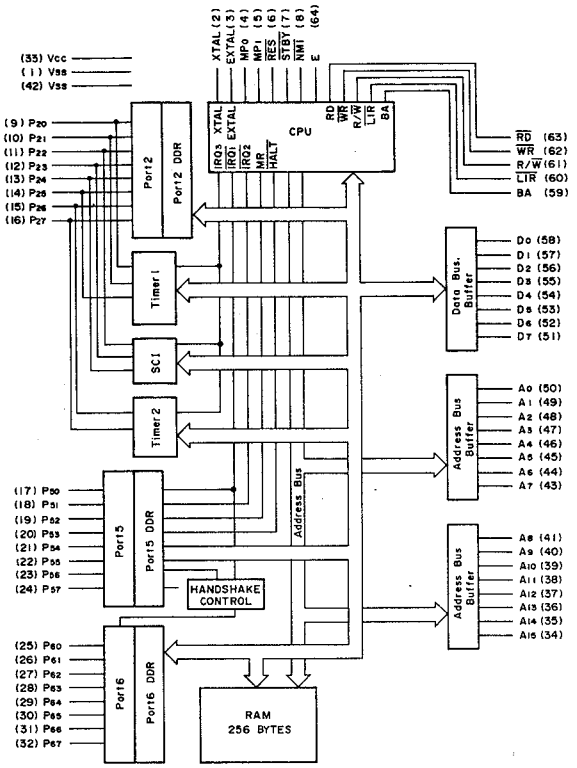


Adjustment Procedure
1. Play the CD (5A).
2. Adjust R368 on the Digital audio assembly to set the reference clock to 11.2896 MHz ± 100 Hz.

VI. μ-COM DATA

IC71: HD63B03YF (PU06-System control PCB)
(8 bit μ-COM)

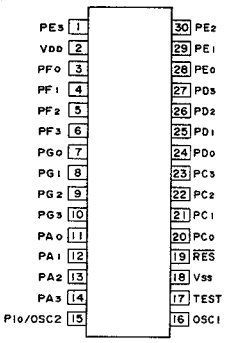


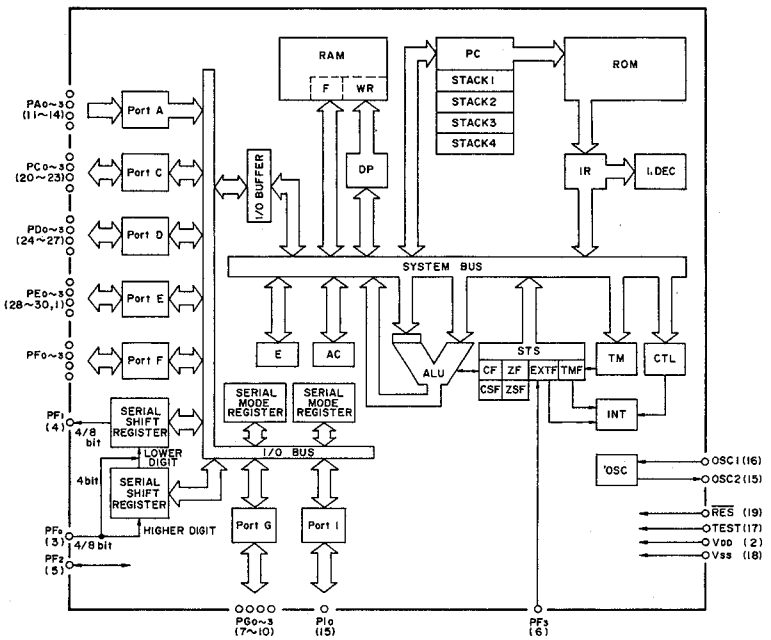


Pin No.	Pin Name	I/O	Function
1	$\overline{NMI}$	I	+5V
2	P20 ($\overline{FLOCK}$)	I	Focus Lock
3	P21 ($\overline{CD}$)	O	LD/CD Select
4	P22 (SCLK)	O	Serial Data Clock
5	P23 ($\overline{SDATAIN}$)	I	Serial Data Input
6	P24 ($\overline{SDATAOUT}$)	O	Serial Data Output
7	P25 ($\overline{LDON}$)	O	Laser Diode ON/OFF
8	P26 (FTS SCAN)	O	FTS Scanning
9	P27 (T-CROSS)	I	Tracking Cross
10	P50 (V-SYNC)	I	Vertical Synchronization
11	P51 (FG)	I	Spindle Frequency Generator
12	P52 (JTRG)	O	Jump Trigger
13	P53 ($\overline{STB2}$)	O	Strobe 2
14	P54 ($\overline{ACK}$)	I	Acknowledge
15	P55 ($\overline{IRQ}$)	I	Interrupt Request
16	P56 (SCOR)	I	Sub Code Sync.
17	P57 ($\overline{ATN2}$)	I	Attention 2
18	P60 (D0)	I/O	μ-Com. Data Bus
19	P61 (D1)	I/O	
20	P62 (D2)	I/O	
21	P63 (D3)	I/O	
22	P64 (D4)	I/O	
23	P65 (D5)	I/O	
24	P66 ($\overline{STB1}$)	O	Strobe 1
25	P67 ($\overline{ATN1}$)	O	Attention 1
26	VCC	–	+5V
27	A15	O	Address
28	A14	O	
29	A13	O	
30	A12	O	
31	A11	O	
32	A10	O	

Pin No.	Pin Name	I/O	Function
33	A9	O	Address
34	A8	O	
35	VSS	–	GND
36	A7	O	Address
37	A6	O	
38	A5	O	
39	A4	O	
40	A3	O	
41	A2	O	
42	A1	O	
43	A0	O	
44	D7	I/O	Expander Data Bus
45	D6	I/O	
46	D5	I/O	
47	D4	I/O	
48	D3	I/O	
49	D2	I/O	
50	D1	I/O	
51	D0	I/O	
52	BA	–	Not Used
53	$\overline{LIR}$	–	Not Used
54	R/$\overline{W}$	O	Read/Write
55	$\overline{WR}$	O	Write
56	$\overline{RD}$	–	Not Used
57	E	O	System Clock
58	VSS	–	GND
59	XTAL	–	Clock (4 MHz)
60	EXTAL	I	
61	MP0	I	+5V
62	MP1	I	0V
63	$\overline{RES}$	I	Reset
64	$\overline{STBY}$	I	+5V

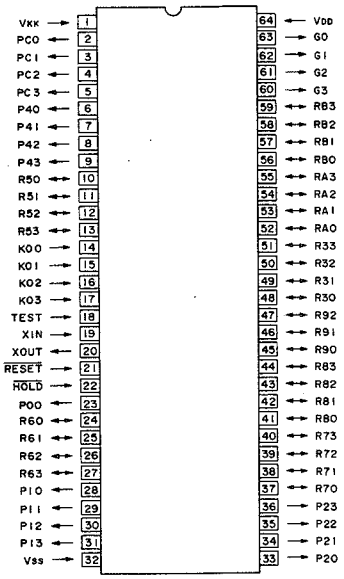
IC31: LC6543H (P306-Digital audio PCB)
(4 bit μ-COM)

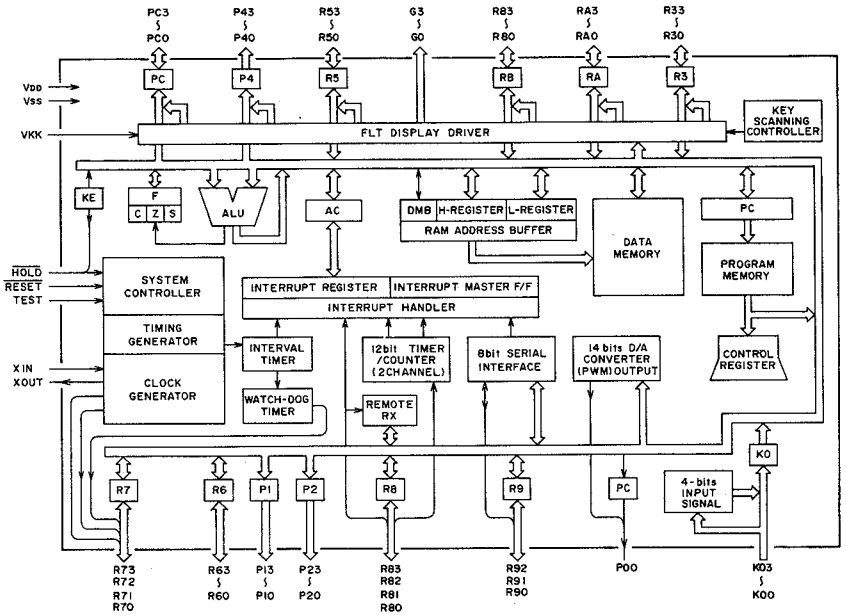




Pin No.	Pin Name	I/O	Function	Pin No.	Pin Name	I/O	Function
1	PE3 (SCOR)	O	Sub Code Sync.	16	OSC1	I	X'tal In
2	VDD	—	+5V	17	TEST	—	Not Used
3	PF0 (QDATA)	I	Q-Data	18	VSS	—	GND
4	PF1 (QRA)	I/O	Q-ch, Request and ACK	19	$\overline{RES}$	I	Reset
5	PF2 (QCL)	O	Q-clock	20	PC0	—	Not Used
6	PF3 ($\overline{ATN2}$)	I	Attention 2	21	PC1 ($\overline{ACK}$)	O	Acknowledge
7	PG0 (D0)	I/O	μ-Com. Data Bus	22	PC2	—	Not Used
8	PG1 (D1)	I/O		23	PC3 ($\overline{STB2}$)	I	Strobe 2
9	PG2 (D2)	I/O		24	PD0 (A/$\overline{D}$)	O	Analog/Digital Select
10	PG3 (D3)	I/O		25	PD1 (RSEL)	O	R-ch Select
11	PA0 (D4)	I/O		26	PD2 (LSEL)	O	L-ch Select
12	PA1 (D5)	I/O		27	PD3 (LD/$\overline{CD}$)	O	LD/CD Select
13	PA2 ($\overline{CRI}$)	O	Counter Reset Inhibit	28	PE0 (MUTE)	O	Mute
14	PA3 ($\overline{SSM}$)	O	Start/Stop Motor Input	29	PE1 ($\overline{ATT}$)	O	Attenuation
15	PI0/OSC2	O	X'tal Out	30	PE2 (CDROM)	O	CD-ROM

IC99: TMP47C670 (PF06-Front PCB)
(4 bit μ-COM)

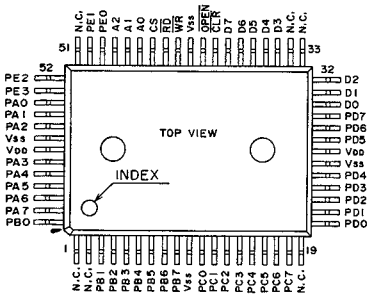


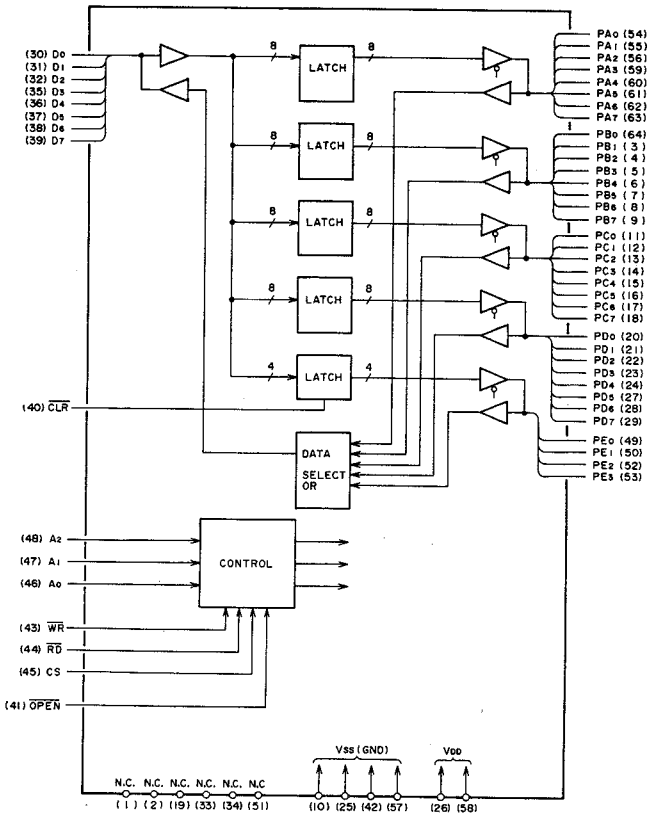


Pin No.	Pin Name	I/O	Function
1	VKK	—	−33V
2	PC0	—	Not Used
3	PC1	—	Not Used
4	PC2	—	Not Used
5	PC3	—	Not Used
6	P40	—	Not Used
7	P41	—	Not Used
8	P42	—	Not Used
9	P43	—	Not Used
10	R50	—	Not Used
11	R51	—	Not Used
12	R52	I	FTD Select
13	R53	I	FTS Select
14	K00	I	Key in 0
15	K01	I	Key in 1
16	K02	I	Key in 2
17	K03	I	Key in 3
18	TEST	I	Test
19	XIN	I	X'tal In
20	XOUT	O	X'tal Out
21	RESET	I	Reset
22	HOLD	—	Not Used
23	P00	O	Reset-U (Main μ-Com.)
24	R60	I/O	D0 (μ-Com. Data Bus)
25	R61	I/O	D1 (μ-Com. Data Bus)
26	R62	I/O	D2 (μ-Com. Data Bus)
27	R63	I/O	D3 (μ-Com. Data Bus)
28	P10	O	Key Out 4
29	P11	O	Key Out 5
30	P12	O	Key Out 6
31	P13	O	Key Out 7
32	VSS	—	GND

Pin No.	Pin Name	I/O	Function
33	P20	—	Not Used
34	P21	—	Not Used
35	P22	—	Not Used
36	P23	—	Not Used
37	R70	O	Power Standby
38	R71 ($\overline{WT0}$)	O	Watch-dog
39	R72	I/O	D4 (μ-Com. Data Bus)
40	R73	I/O	D5 (μ-Com. Data Bus)
41	R80	I	IR Receiver
42	R81	I	FTD Select
43	R82	—	Not Used
44	R83	I	Mode Select
45	R90	—	Not Used
46	R91	—	Not Used
47	R92	—	Not Used
48	R30	O	Acknowledge
49	R31	I	Strobe 2
50	R32	I	Attention 2
51	R33	—	Not Used
52	RA0	—	Not Used
53	RA1	—	Not Used
54	RA2	—	Not Used
55	RA3	—	Not Used
56	RB0	—	Not Used
57	RB1	—	Not Used
58	RB2	—	Not Used
59	RB3	—	Not Used
60	G3	—	Not Used
61	G2	—	Not Used
62	G1	—	Not Used
63	G0	—	Not Used
64	VDD	—	+5V

IC78: CXD1095Q (PU06-System control PCB) (Expander)





Pin No.	Pin Name	I/O	Function
1	N.C.	—	Not Used
2	N.C.	—	Not Used
3	PB1 (ROTC1)	O	Rotary Encoder Control 1
4	PB2	—	Not Used
5	PB3 (MOTRES)	O	Motor Reset
6	PB4 (ANTSW)	O	Antenna Switch
7	PB5 (CHRSTB)	O	Character Strobe
8	PB6 (INTVID)	O	Internal Video
9	PB7 (TOGL)	O	Trick Play Toggle
10	VSS (GND)	—	GND
11	PC0 (LMOT1)	O	Loading Motor Control 1
12	PC1 (LMOT2)	O	Loading Motor Control 2
13	PC2 ($\overline{CX}$)	O	CX ON/OFF
14	PC3 (N/$\overline{P}$)	O	NTSC/PAL
15	PC4 (ANA-MUTE)	O	Analog Mute
16	PC5 (SCAN)	O	Scan Control
17	PC6 (CE)	O	Chip Enable (LCD Driver)
18	PC7 ($\overline{INH}$)	O	Inhibit (LCD Driver)
19	N.C.	—	Not Used
20	PD0 (B0)	O	Video Disc/Reference
21	PD1	—	Not Used
22	PD2 (T/$\overline{M}$)	O	Through/Memory
23	PD3 (WRE)	O	Write Enable
24	PD4 (CLR-BACK)	O	Color Back
25	VSS	—	GND
26	VDD	—	+5V
27	PD5 (CDV)	O	CDV Select
28	PD6 (S/$\overline{P}$)	O	Search/Play Select
29	PD7 (SW)	O	H-sync/Tracking Cross Select
30	D0	I/O	Expander Data Bus
31	D1	I/O	
32	D2	I/O	

Pin No.	Pin Name	I/O	Function
33	N.C.	—	Not Used
34	N.C.	—	
35	D3	I/O	Expander Data Bus
36	D4	I/O	
37	D5	I/O	
38	D6	I/O	
39	D7	I/O	
40	$\overline{CLR}$ (VDD)	—	+5V
41	$\overline{OPEN}$ (RES)	I	Reset
42	VSS	—	GND
43	$\overline{WR}$	I	Write
44	$\overline{RD}$	I	Read
45	CS	I	Chip Select
46	A0	I	Address
47	A1	I	
48	A2	I	
49	PE0 (CAV/$\overline{CLV}$)	O	CAV/CLV Select
50	PE1 (LATCH)	O	Latch
51	N.C.	—	Not Used
52	PE2 (RNW)	O	Read/Write Select
53	PE3 (ERF)	I	Error Flag
54	PA0 (POS1)	I	Position Sensor 1
55	PA1 (POS2)	I	Position Sensor 2
56	PA2	—	Not Used
57	VSS	—	GND
58	VDD	—	+5V
59	PA3 (PARK)	I	Park Switch Input
60	PA4 (ROTB)	I	Rotary Encoder Input B
61	PA5 (ROTA)	I	Rotary Encoder Input A
62	PA6 (CHRBUSY)	I	Character Busy
63	PA7 (DSENS)	I	Disc Sensor Input
64	PB0 (ROTC2)	O	Rotary Encoder Control 2

VII. ABBREVIATION LIST

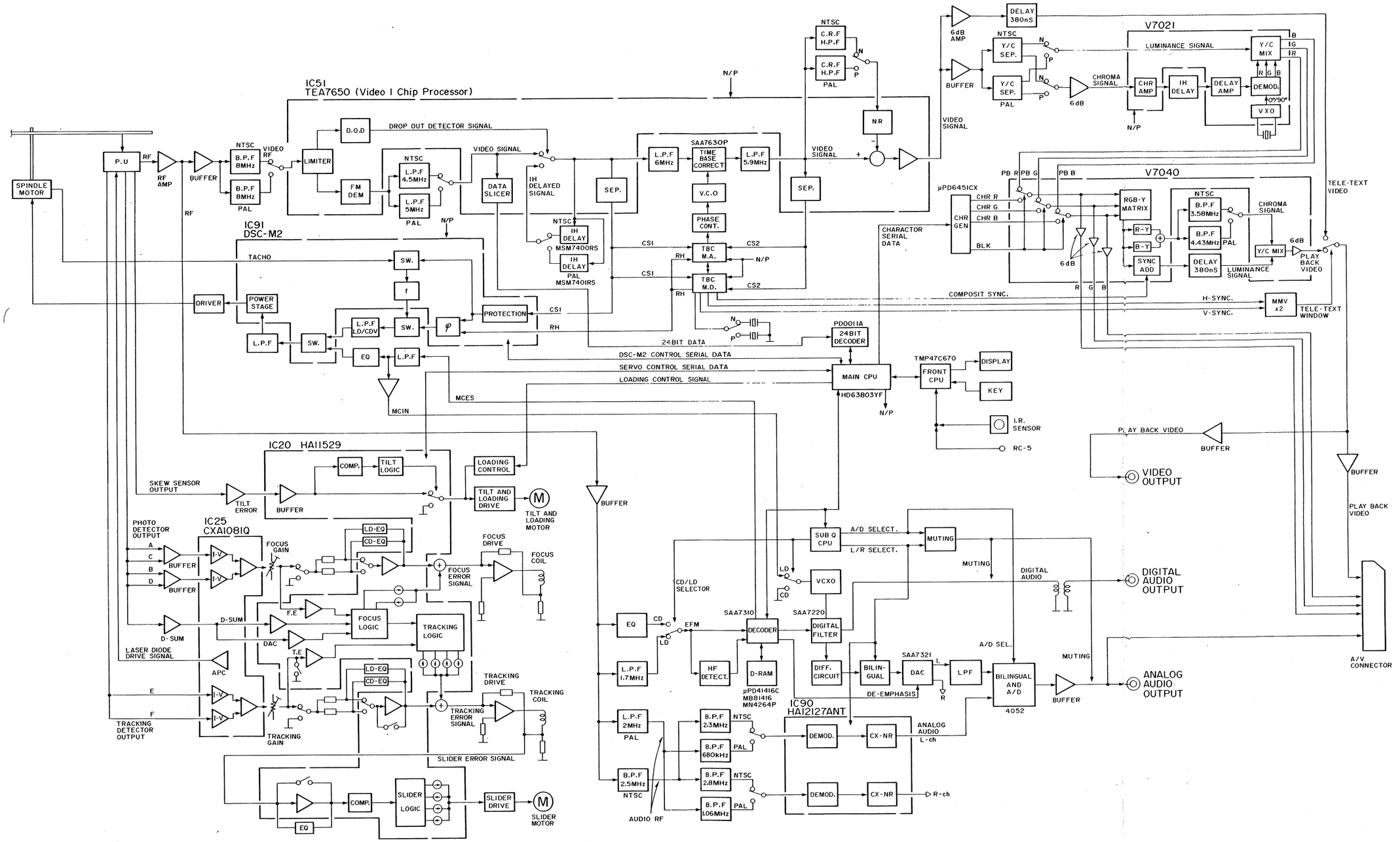
24DATA	24-bits Data
A/D	Analog/Digital Select
A-AUDIO	Analog Audio
AC	Accumulator
ACC	Automatic Color Control
ACK	Acknowledge
ACK	Automatic Color Killer
ADD, SUB SW	Addition, Subtraction Switch
ALT PLS	Line Alternate Pulse
AM	Additional Mute
ANTSW	Antenna Switch
AOL	L-ch Output
AOR	R-ch Output
APC	Automatic Power Controller
APC	Automatic Phase Control
ASY	Automatic Asymmetry Control
ATN	Attention
ATSB	Attenuation
ATT	Attenuate
B.P.F	Band-pass Filter
B.R.F	Band-rejection Filter
B&W	Black & White
BA	Bus Available
BCK	Bit Clock
BF	Burst Flag
BINPC	Input a B Color Signal from Personal Computer
BINTV	Input a B Color Signal from TV
BLK PLS	Blanking Pulse
BO	Data Bus
BSET	Brake Current Setting
BULDET	Burst Limiter and Detector
BUS CON	Bus Control
B/W	Black and White
C IN (OUT)	Chroma Signal Input (Output)
C SYNC	Composite Sync.
CAS	Column Address Select
CAV	Constant Angular Velocity
CAV/CLV	CAV/CLV Select
CB	Color Burst
CCD 453 ST	CCD 453 Stage
CD	Compact Disc
CD/LD	CD/LD Select
CDO	Capacitor Down
CDROM	CD-ROM
CDV	Compact Disc Video
CE	Chip Enable
CHR SEP	Chroma Separator
CHRBUSY	Character Busy
CHRCLK	Character Generator Clock
CHRDAT	Character Data
CHRDATA	Character Data
CHROUT	Chroma Output
CHRSTB	Character Strobe
CIRC	Cross-Interleaved Reed-Solomon Code
CLAB	Clock
CLBD	Clock
CLK	Clock Input
CLP	Clamp
CLR	Clear
CLV	Constant Linear Velocity
COMP	Clock Duty Defect
COMP	Comparator
COMPAR	Comparator
CPU	Central Processing Unit
C.R.F	Croma Rejection Filter
CRI	Counter Reset Inhibit
CS	Chip Select
CSI	Composite Sync.
CSYNC	Composite Sync.
CTL	Control Register
CUP	Capacitor Up
CV	Composite Video Signal
CVBS	Composite Video Burst Signal
CWB1,2	External Loop Filter
CX	CX Noise Reduction
CX-NR	CX Noise Reduction
D.O.D	Drop-out Detector
D-OUT	Digital Output
D-RAM	Dynamic Random Access Memory
D-SUM	Detector Sum Level
D1,2	2-bits Setting for The Commutation Block
DAAB	Data
DABD	Data
DAC	Detector Sum AC
DAN	Drive-A, Negative
DAP	Drive-A, Positive
DATA REQ	24-bits Data Request
DBN	Drive-B, Negative
DBP	Drive-B, Positive
DDR	Data Direction Register
DEEM	De-emphasis Output
DEM	Demodulator
DEMO L	L-Channel Demodulator
DEMO R	R-Channel Demodulator
DEMOD	Demodulator
DET	Detector
DIN	Serial Data Input
DINT	Data Interpolated Input
DL AMP	Delay Line Amp.
DLA IN	Delay Line Amp. Input
DOB	Drop-out Not Input
DOS	Drop-out Sense
DOUT	Data Output
DP	Data Pointer
DREQ	Data Request
DRQ	24-bits Data Request
DSENSE	Disc Sensor Input
E	System Clock
E	E-Register
EFAB	Error Flag
EFAS	Error Flag A-Chip (Decoder) to Servo
EFL	Enable Frequency Loop
EFM	8-14 Modulation
EI	E-Amp. Input
EO	E-Amp. Output
EQ	Equalizer
ERF	Error Flag
ESTOP	Emergency Stop
ETL	Enable Tacho Loop
EXTAL	External Clock Input
F44	Clock Output (f-sub)
F75	Clock Input (7.5MHz)
F75	System Clock
F88	Clock Output (2 x f-sub)
FB	Feedback

FCD	Focus Error Amp. CD Input
FE	Focus Error
FEBIAS	Focus Error Bias
FEG	Focus Error Gain Amp. Input
FEGA	Focus Error Gain Amp. Output
FF	Flip Flop
FG	Spindle Frequency Generator
FIAT	Burst Fiat
FL	Focus Lock
FLD	Focus Error Amp. LD Input
FLOCK	Focus Lock
FM DEM	FM Demodulator
FOCS	Focus
FOCS-D	Focus Drive
FOCS-R	Focus Return
FOK	Focus OK
FOST	Focus Error Amp. Offset Adjust
FPO	Focus OP-Amp. Output
FSC	Sub-carrier Frequency
FTD	Fluorescent Tube Display
FTSSCAN	FTS (Favorite Track Selection) Scanning
f	Frequency
G0 – 12	Digit 0 – 12
GEN	Generator
GINPC	Input a G Color Signal from Personal Computer
GINTV	Input a G Color Signal from TV
H PLS	Horizontal Pulse
H.P.F	High-pass Filter
H-SYNC	Horizontal Synchronizing Signal
HALF PICT	Half Picture
HALL A (B,C)	Input from Hall Motor
HFD	High-Frequency Detector
HFI	High-Frequency Input
HOR	Horizontal Sync.
I/O	Input/Output
I-V	Current/Voltage Converter
INIT	Reset Input
INJ	Injection Current Setting
INSW	Inside Switch
INT	Interrupt
INTVID	Internal Video
INV	Inverter
IR SENSOR	Infrared Sensor
IREF	Current Reference
IRQ	Interrupt Request
ISET	Internal Current Setting
J-TRG	Jump Trigger
JUMP	Jump Trigger Input
KEYIN0	Key In, 0
L.P.F	Low-pass Filter
L-MOT	Loading Motor Control
LD	Laser Diode
LD	Laser Disc
LDON	Laser Diode ON/OFF
LE	Latch Enable
LIM	Limiter
LIR	Load Instruction Register
LSEL	Left Channel Select
M.A	Measurement Analog
M.D	Measurement Digital
MCES	Motor Control Error Signal
MCIN	Motor Control Error Signal Input
MECHA SW	Mechanism Switch
MEPIB	Measurement Point In The Burst
MFE	Motor Frequency Error
MH	Protected Horizontal Sync.
MIRR	Mirror Comparator Output
MIX-A	Mix Audio Signal
MIXAUD	Mix Audio Signal
MOTRES	Motor Reset
MP0	Mode Program 0
MP1	Mode Program 1
MPE	Motor Phase Error
MPLL	Motor in Frequency Control Range
MS	Multi-Standard Input
MSC	Motor Speed Control
MTF	Modulation Transfer Function
MUSB	Mute
MV	Protected Vertical Sync.
NR	Noise Reduction
N/P	NTSC/PAL
O.S.D	On-screen Display
OC	Oscillator Control Input
ODEN	Output Disable
OE	Output Enable
OSC	Oscillator
OSP	Over Speed Detection
OUTM	Comparator 3 Output
OUTP	Comparator 2 Output
P.U	Pickup
P/B DOBM	Digital Audio Output
P/N	P-Sub/N-Sub for Laser Diode
P/N	PAL/NTSC
P/S	Play/Still
PARK	Park Switch Input
PC	Personal Computer
PD	Photo Diode
PD	Phase Detector Output
PHLOCK	Phase Lock
PLN	PAL/NTSC Selection Input
PLN	PAL/NTSC Selection
PLOCK	Phase Locked Loop
PLOCK	Motor Phase Lock Signal
POS	Position Sensor
POSCNT	Position Control
POWSTB	Power Stand-by
PR1 – 4	Tacho Pulse Divider
PRE-FIFO	Pre Fast In Fast Out
PRES	Preset
PWM	Pulse Width Modulation
Q-DATA	Q-Channel Data
QCL	Q-Channel Clock
QRA	Q-Channel Request Input/Acknowledge Output
R/W	Read/Write Select
R/W	Read/Write
RAMP	Adjust for Ramp of Up-Down Signal
RAS	Row Address Select
RC DECODE	Remote Control Code Decode
RD	Read
REF0 – 6	7-bits Reference Rotation Speed
REFN	Reference Selection
REG	Regulator
RESETu	Reset of u-processor
REV	Reverse Speed Detection
RF-	RF Summing Amp.-Input

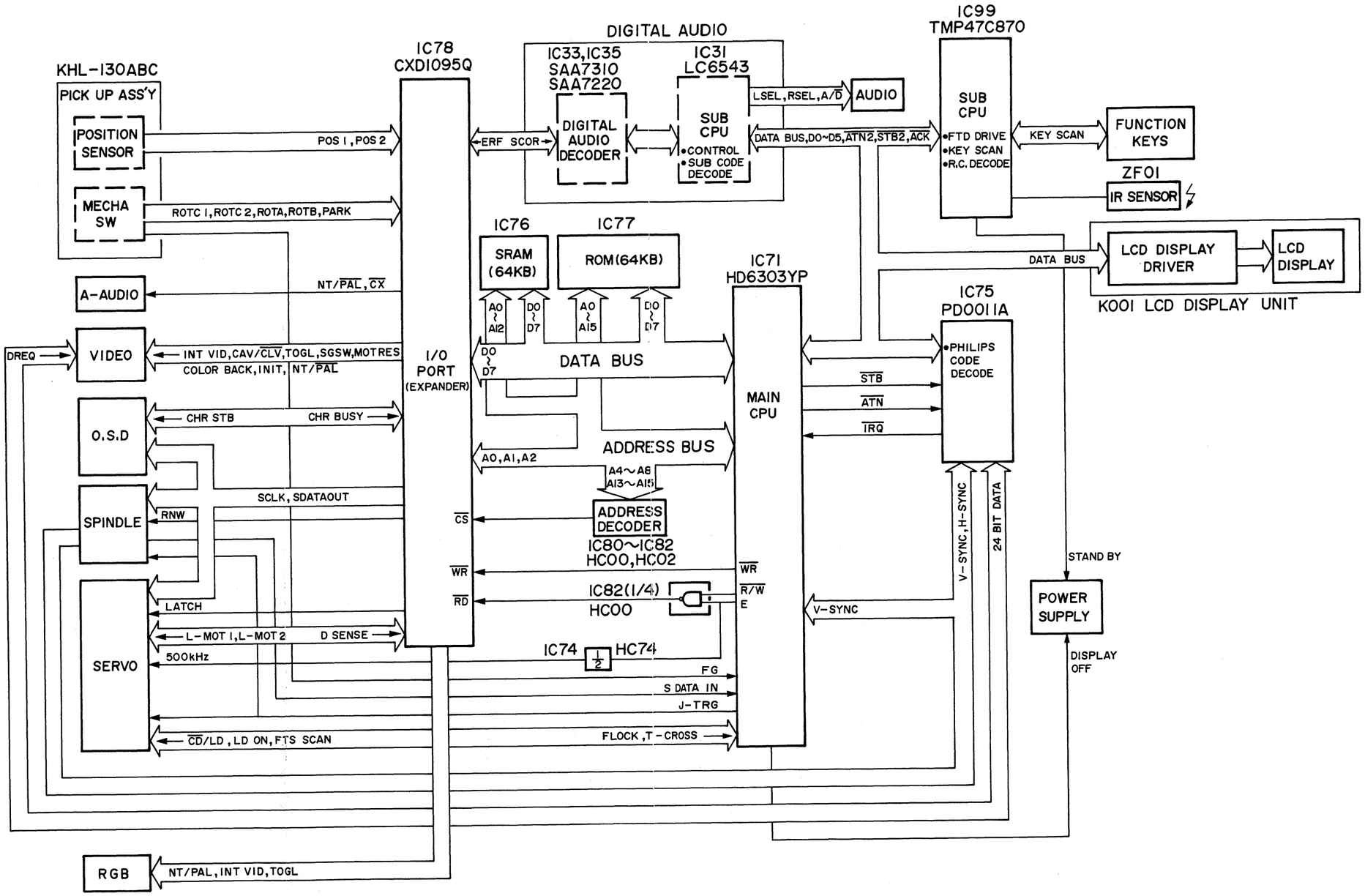
RF0	RF Summing Amp. Output
RFA	RF (Audio)
RFAV	RF (Audio/Video)
RH	Reference Horizontal
RH1	Horizontal Line Video Reference Signal
RINPC	Input an R Color Signal from Personal Computer
RINTV	Input an R Color Signal from TV
RLS	Radial Loop Switch
RNW	Read/Write Select
ROM	Read Only Memory
ROTA	Rotary Encoder Input A
ROTB	Rotary Encoder Input B
ROTC	Rotary Encoder Control
RSEL	Right Channel Select
RST	Reset
S/H	Sawtooth and Sample and Hold
S/P	Still/Play
S-COMP	Slider Comparator
S-TERMINAL	Super Video Output Terminal
S-VIDEO	Super Video
S1 – S6	Analog Switch
SBK	Set Burst Key
SC	Sub-carrier
SCA	A/V Connector, Audio Output
SCAB	Sub-coding Clock
SCI	Serial Clock Input
SCKN	Data-Clock Input
SCLK	Serial Data Clock
SCOR	Sub-code Synchronization
SDAB	Sub-coding Data
SDATA	Serial Data
SDATAIN	Serial Data Input
SDATAOUT	Serial Data Output
SDC	Sandcastle
SDR	Slider Drive Signal
SEG a – j	Segment a – j
SEP	Synchronizing Signal Separator
SGSW	Signal Generator Switch
SI	Selects Superimposition
SLD-DRV	Slide Motor Drive
SLP	Slope Setting
SLPI	Slider OP-Amp. Input
SLPO	Slider OP-Amp. Output
SP	Set Plateau Key
SSM	Start/Stop Motor Input
ST	Scan Trigger Pulse
STB	Strobe
STBSW	Standby Switch
STBY	System Stand-by
STS	Status Register
SUB Q	Sub-code Q-Data
SW1 – 4	System Select Switch
SWAB	Sub-coding Word Clock Output
SWT	Internal Clock Divided by 256
T-CROSS	Tracking Cross
T&L-DRV	Tilt & Loading Motor Drive
TADC	Tacho Input for DC Motor
TBC	Time Base Corrector
TBCERR	Time Base Correction Error
TC	Time Constant
TCD	Tracking Error Amp. CD Input
TCNT	Track Count
TD1,2	2-bits to Set The Slope of The Current Limiter
TDR	Tracking Brake Drive Output
TE	Tracking Error
TGS	Tracking Gain Switching
THRU VIDEO	Through Video
TIDR	Tilt Drive Signal
TIPI	Tilt OP-Amp. Input
TIPO	Tilt OP-Amp. Output
TLD	Tracking Error Amp. LD Input
TM	Timer
TO1,2	Current Limiter (Accelerate or Brake)
TOC	Table of Contents
TOGL	Trick Play Toggle
TOK	Tacho-OK Signal
TP ADJ	Adjust The Burst Flag Position
TPO	Tracking OP-Amp. Output
TRKG	Tracking
TRKG-D	Tracking Drive
TRKG-R	Tracking Return
TSET	Tilt Comparator Setting
TSTB	Test Control Input
UPDN	Lens Up-Down Output
V.C.O	Voltage Controlled Oscillator
V-SYNC	Vertical Synchronizing Signal
VBL	Back Level
VBLK	Vertical Blanking Signal
VCAL	Voltage Controlled Amplifier, L-ch
VCAR	Voltage Controlled Amplifier, R-ch
VCL	Character Level
VCXO	Voltage Controlled X'tal Oscillator
VDC/2	Reference Voltage Capacitor Pad
VDD/2	Reference Voltage Capacitor Pad
VDDA	Supply Voltage (Analog)
VER	Vertical Sync.
VHLF	Half-Luminance Input Color Encoder
VID IN	Video Input
VIDMOD	Video Modulator
VIDOUT	Video Signal to Output Connector
VIDEO RGB	Video Signal to RGB Circuit
VIDSCA	Video Signal to A/V Connector
VIDY/C	Video Y/C Signal
VMON	Character Monitor Terminal
VOB	Voltage Auto Bias
VP	Supply Voltage
VREF	Reference Voltage Output
VSSA	Analog Ground
VVL	Video Level
VXO	Voltage Controlled X'tal Oscillator
WM	Window for Measuring
WR	Write
WS	Word Select
WSAB	Word Select
WSBD	Word Select
WTO	Watch-dog Timer Output
XSYS	System Clock Output
XTAL	Crystal Oscillator
Y IN (OUT)	Y Signal Input (Output)
YH	Y Signal Halftone
YMIX	Y Signal Mix
YS	Y Signal Superimpose
ZRPM	Zero Rotation Detection
φ	Phase

VIII. BLOCK DIAGRAMS

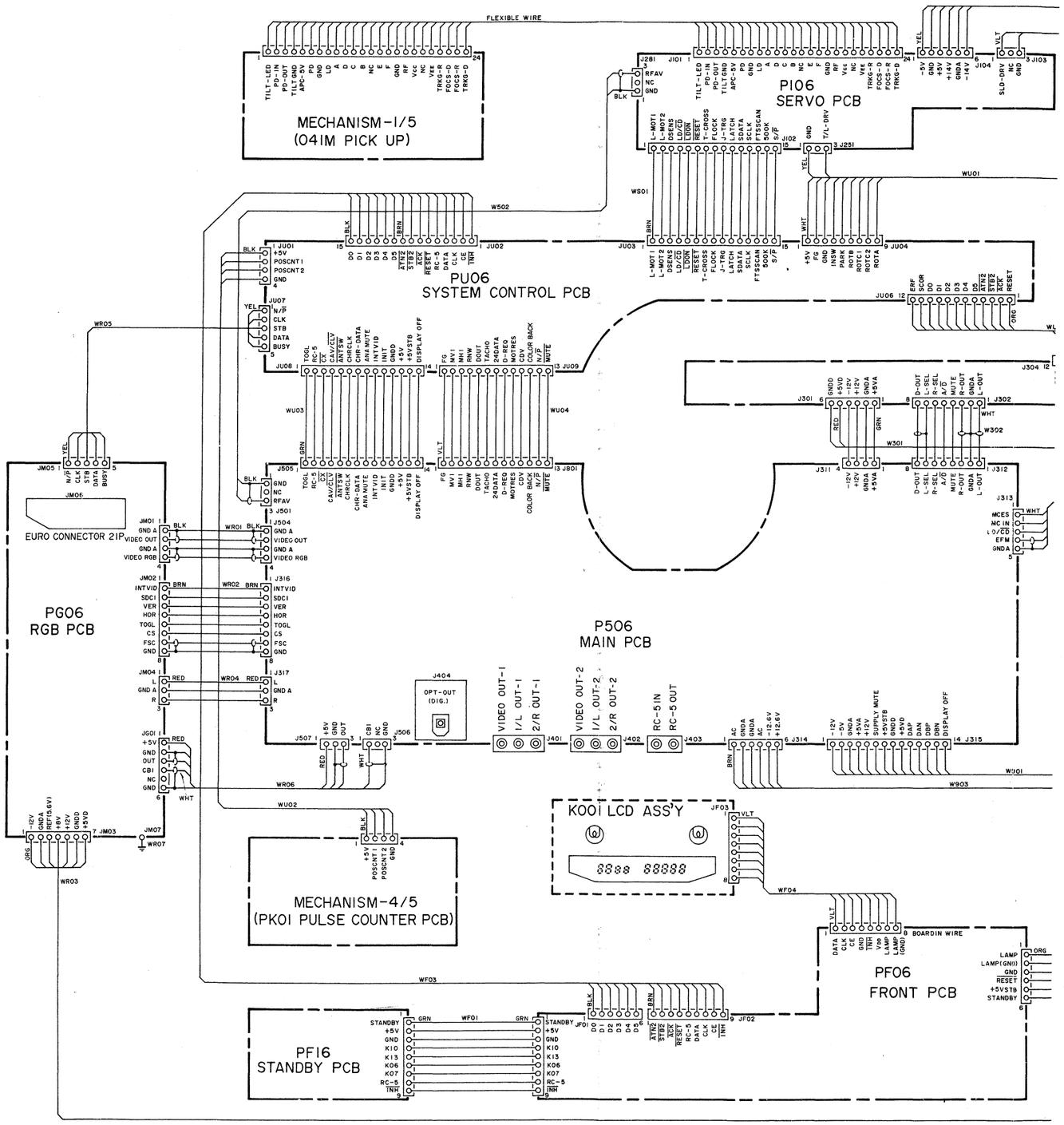
A. CIRCUIT BLOCK DIAGRAM

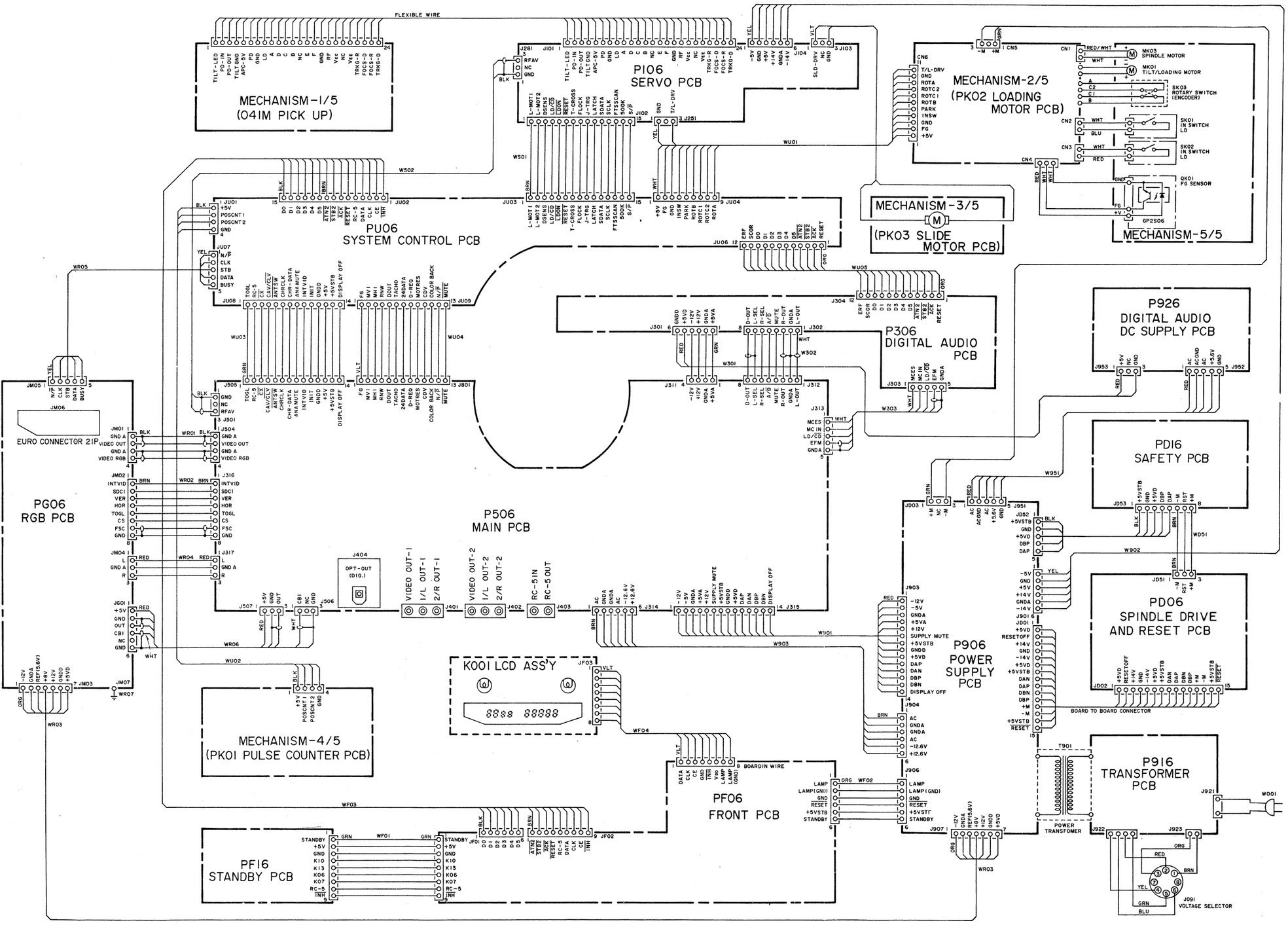


B. SYSTEM CONTROL BLOCK DIAGRAM



IX. WIRING DIAGRAM



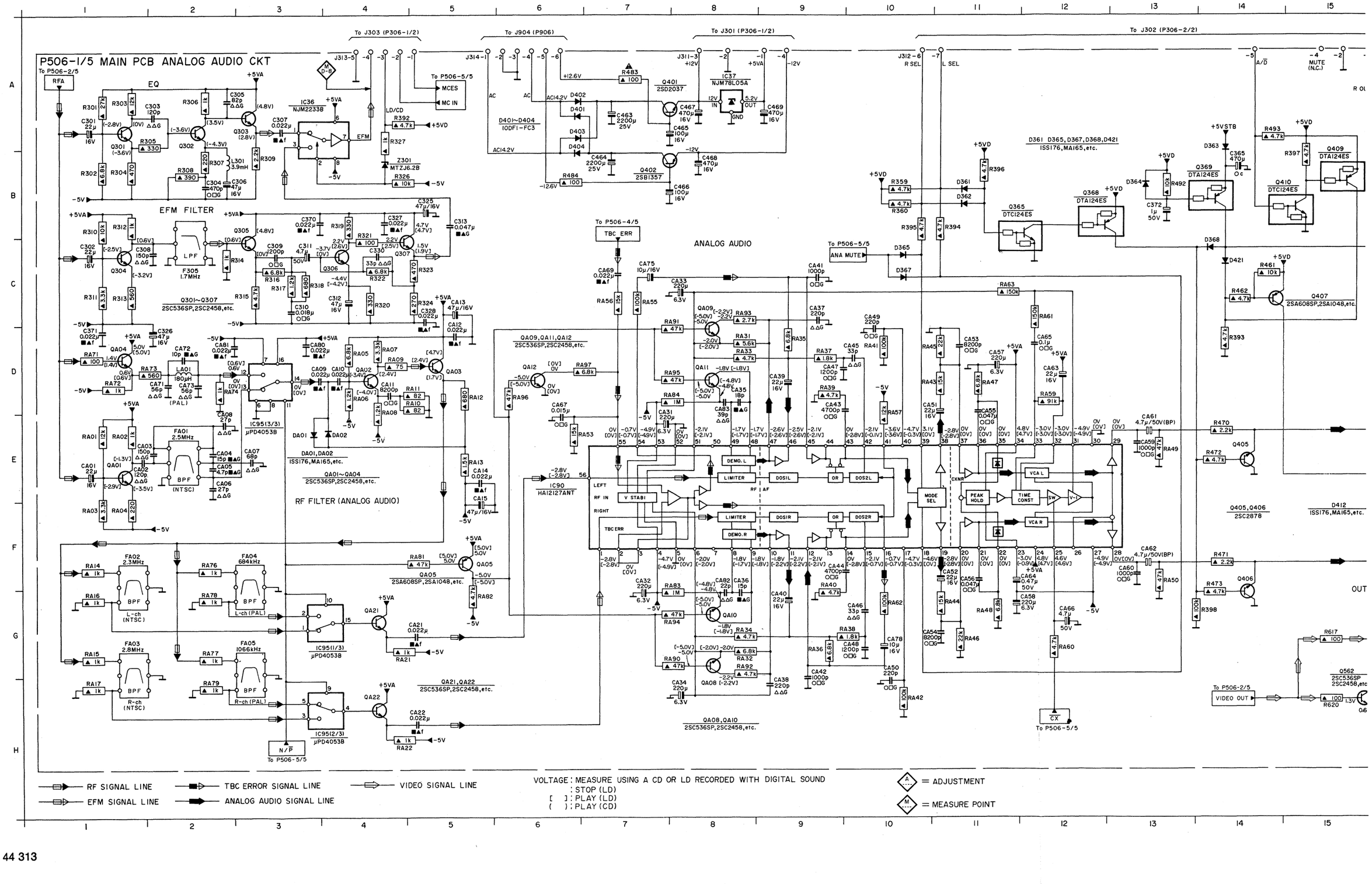

MECHANISM-1/5
(041M PICK UP)
PI06
SERVO PCB
MECHANISM-2/5
(PK02 LOADING
MOTOR PCB)
MK03
SPINDLE MOTOR
MK01
TILT/LOADING MOTOR
SK03
ROTARY SWITCH
(ENCODER)
SK01
IN SWITCH
LD
SK02
IN SWITCH
LD
GK01
FG SENSOR
MECHANISM-5/5
MECHANISM-3/5
(PK03 SLIDE
MOTOR PCB)
PU06
SYSTEM CONTROL PCB
P306
DIGITAL AUDIO
PCB
P926
DIGITAL AUDIO
DC SUPPLY PCB
PD16
SAFETY PCB
PD06
SPINDLE DRIVE
AND RESET PCB
BOARD TO BOARD CONNECTOR
P916
TRANSFORMER
PCB
POWER
TRANSFOMER
J091
VOLTAGE SELECTOR
P906
POWER
SUPPLY
PCB
P506
MAIN PCB
PG06
RGB PCB
EURO CONNECTOR 21P
K001 LCD ASS'Y
MECHANISM-4/5
(PK01 PULSE COUNTER PCB)
PF06
FRONT PCB
PF16
STANDBY PCB
FLEXIBLE WIRE
BOARDIN WIRE
OPT-OUT
(DIG.)
VIDEO OUT-1
I/L OUT-1
2/R OUT-1
VIDEO OUT-2
I/L OUT-2
2/R OUT-2
RC-5 IN
RC-5 OUT

CS 44 312

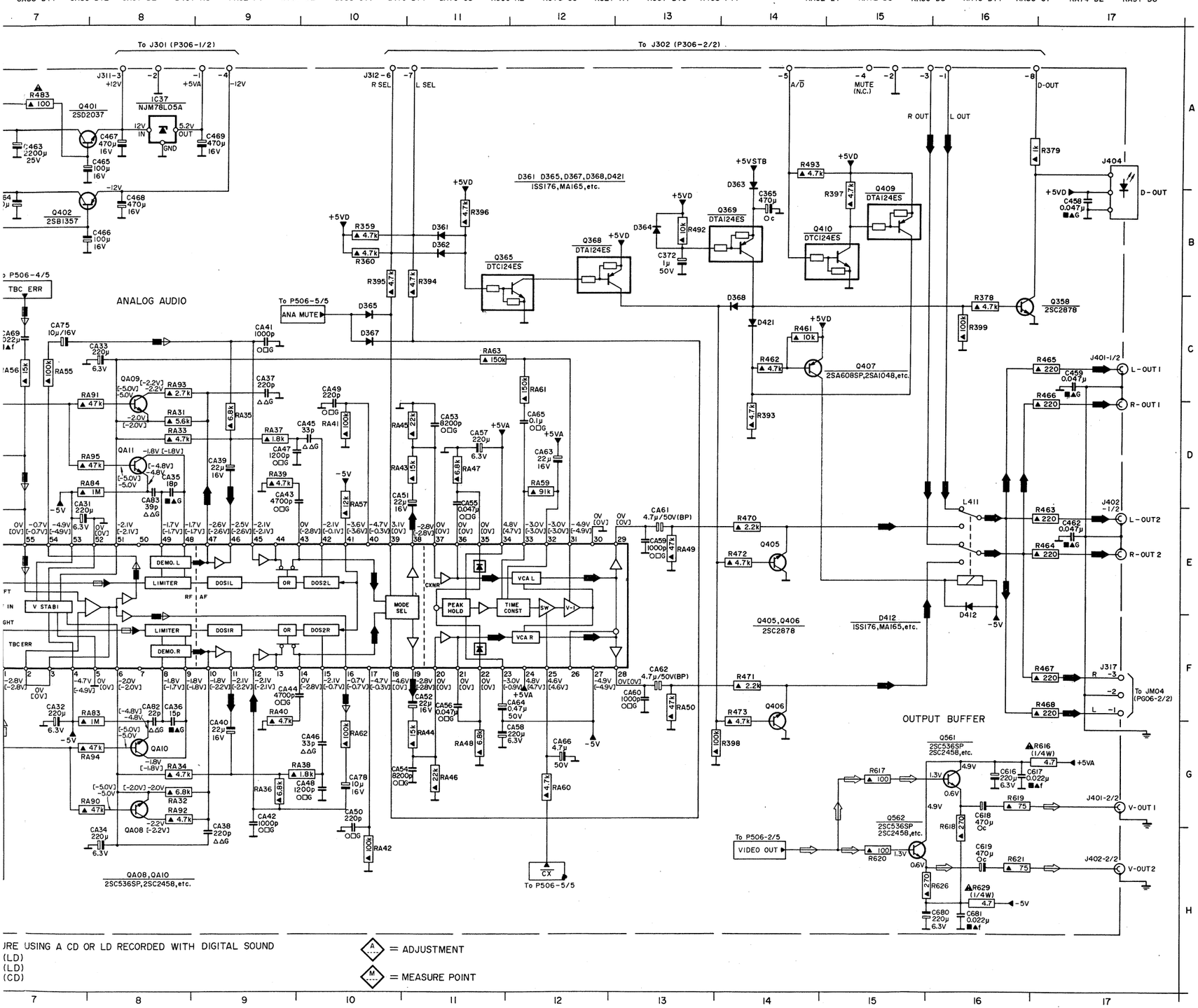
X. SCHEMATIC DIAGRAMS AND P.C.BOARDS

A. P506 MAIN ANALOG AUDIO SCHEMATIC DIAGRAM

C301 A1 C302 C1 C303 A2 C304 B2 C305 A2 C306 B2 C307 A3 C308 C2 C309 C3 C310 C3
C311 C3 C312 C4 C313 B5 C325 B5 C326 D2 C327 B4 C328 C5 C330 C4 C365 B14 C370 B3
C371 D1 C372 B13 C458 B17 C459 C17 C462 E17 C463 A7 C464 B7 C465 A8 C466 B8 C467 A8
C468 B8 C469 A9 C616 G16 C617 G16 C618 G16 C619 H16 C680 H16 C681 H16 CA01 E1 CA02 E1
CA03 E1 CA04 E2 CA05 E2 CA06 E2 CA07 E3 CA08 E2 CA09 D3 CA10 D4 CA11 D4 CA12 D5
CA13 C5 CA14 E5 CA15 E5 CA21 G5 CA22 H5 CA31 E7 CA32 F7 CA33 C8 CA34 H8 CA35 D8
CA36 F8 CA37 C9 CA38 H9 CA39 D8 CA40 G9 CA41 C9 CA42 G9 CA43 D9 CA44 F9 CA45 D10
CA46 G10 CA47 D9 CA48 G10 CA49 C10 CA50 G10 CA51 D11 CA52 F11 CA53 D11 CA54 G11 CA55 D11
CA56 F11 CA57 D11 CA58 G12 CA59 F13 CA60 F13 CA61 E13 CA62 F13 CA63 D12 CA64 F12 CA65 D12
CA66 G12 CA67 D6 CA69 C7 CA71 D2 CA72 D2 CA73 D2 CA75 C7 CA78 G10 CA80 D3 CA81 D2
CA82 F8 CA83 D8 D361 B11 D362 B11 D363 A14 D364 B13 D365 C10 D367 C10 D368 C14 D401 A6
D402 A6 D403 A6 D404 A6 D412 E16 D421 C14 DA01 E3 DA02 E4 F305 C2 FA01 E2 FA02 F1
FA03 G1 FA04 F3 FA05 G3 IC36 A3 IC37 A8 IC90 E6 IC95 E3 IC95 G4 IC95 H4 L301 B2
L411 E16 LA01 D2 Q301 A1 Q302 A2 Q303 A3 Q304 C1 Q305 B3 Q306 C4 Q307 C4 Q358 C17
Q365 B11 Q368 B12 Q369 B14 Q401 A7 Q402 B7 Q405 E14 Q406 F14 Q407 C15 Q409 B15 Q410 B14
Q561 G16 Q562 G15 QA01 E1 QA02 D4 QA03 D5 QA04 D1 QA05 F5 QA08 H6 QA09 C8 QA10 G8
QA11 D8 QA12 D6 QA21 G4 QA22 H4 R301 A1 R302 B1 R303 A1 R304 B1 R305 A2 R306 A2
R307 B2 R308 B2 R309 B3 R310 B1 R311 C1 R312 B1 R313 C1 R314 C2 R315 C3 R316 C3
R317 C3 R318 C3 R319 B4 R320 C4 R321 B4 R322 C4 R323 B5 R324 B5 R326 B4 R327 A4
R355 B10 R360 B10 R378 C16 R379 A17 R392 A4 R393 D14 R394 B11 R395 B10 R396 B11
R398 G14 R399 C16 R461 C14 R462 C14 R463 E17 R464 E17 R465 C17 R466 C17 R467 F17
R468 F17 R470 E14 R471 F14 R472 E14 R473 F14 R483 A7 R484 B6 R492 B16 R493 A14
R616 G17 R617 G15 R618 G16 R619 G16 R620 H15 R621 H16 R626 H16 R629 H16 RA01 E1
RA02 E1 RA03 F1 RA04 F1 RA05 D4 RA06 D4 RA07 D4 RA08 D4 RA09 D4 RA10 D5 RA11 D5
RA12 D5



CA46 G10 CA47 D9 CA48 G10 CA49 C10 CA50 G10 CA51 D11 CA52 F11 CA53 D11 CA54 G11 CA55 D11
CA56 F11 CA57 D11 CA58 G12 CA59 E13 CA60 F13 CA61 E13 CA62 F13 CA63 D12 CA64 F12 CA65 D12
CA66 G12 CA67 D6 CA69 C7 CA71 D2 CA72 D2 CA73 D2 CA75 C7 CA78 G10 CA80 D3 CA81 D2
CA82 F8 CA83 D8 D361 B11 D362 B11 D363 A14 D364 B13 D365 C10 D367 C10 D368 C14 D401 A6
D402 A6 D403 A6 D404 A6 D412 E16 D421 C14 DA01 E3 DA02 E4 F305 C2 FA01 E2 FA02 F1
FA03 G1 FA04 F3 FA05 G3 IC36 A3 IC37 A8 IC90 E6 IC95 E3 IC95 G4 IC95 H4 L301 B2
L411 E16 LA01 D2 Q301 A1 Q302 A2 Q303 A3 Q304 C1 Q305 B3 Q306 C4 Q307 C4 Q358 C17
Q365 B11 Q368 B12 Q369 B14 Q401 A7 Q402 B7 Q405 E14 Q406 F14 Q407 C15 Q409 B15 Q410 B14
Q561 G16 Q562 G15 QA01 E1 QA02 D4 QA03 D5 QA04 D1 QA05 F5 QA08 H8 QA09 C8 QA10 G8
QA11 D8 QA12 D6 QA21 G4 QA22 H4 R301 A1 R302 B1 R303 A1 R304 B1 R305 A2 R306 A2
R307 B2 R308 B2 R309 B3 R310 B1 R311 C1 R312 B1 R313 C1 R314 C2 R315 C3 R316 C3
R317 C3 R318 C3 R319 B4 R320 C4 R321 B4 R322 C4 R323 B5 R324 B5 R326 B4 R327 A4
R355 B10 R360 B10 R378 C16 R379 A17 R392 A4 R393 D14 R394 B11 R395 B10 R396 B11 R397 B15
R398 G14 R399 C16 R461 C14 R462 C14 R463 E17 R464 E17 R465 C17 R466 C17 R467 F17 R468 F17
R470 E14 R471 F14 R472 E14 R473 F14 R483 A7 R484 B6 R492 B16 R493 A14
R616 G17 R617 G15 R618 G16 R619 G16 R620 H15 R621 H16 R626 H16 R629 H16 RA01 E1 RA02 E1
RA03 F1 RA04 F1 RA05 D4 RA06 D4 RA07 D4 RA08 D4 RA09 D4 RA10 D5 RA11 D5 RA12 D5
RA13 E5 RA14 F1 RA15 G1 RA16 G1 RA17 H1 RA21 G4 RA22 H4 RA31 D8 RA32 G8 RA33 D8
RA34 G8 RA35 D9 RA36 G9 RA37 D9 RA38 G10 RA39 D9 RA40 F9 RA41 D10 RA42 H10 RA43 D11
RA44 G11 RA45 D11 RA46 G11 RA47 D11 RA48 G11 RA49 E13 RA50 F13 RA53 E6 RA55 C7 RA56 C7
RA57 D10 RA59 D12 RA60 G12 RA61 C12 RA62 G10 RA63 C11 RA71 D1 RA72 D1 RA73 D2 RA74 D2
RA76 F2 RA77 G2 RA78 G2 RA79 H2 RA81 F5 RA82 G5 RA83 F8 RA90 G8 RA91 D8
RA92 G8 RA93 C8 RA94 G8 RA95 D6 RA96 D6 RA97 D6 Z301 B4



JRE USING A CD OR LD RECORDED WITH DIGITAL SOUND
(LD)
(LD)
(CD)

A = ADJUSTMENT

M = MEASURE POINT

B. P506 MAIN VIDEO-A SCHEMATIC DIAGRAM

C501 E6 C502 E6 C503 F6 C504 G4 C505 G4 C506 F4 C507 F5 C508 E4 C509 E4 C510 E4
C511 E5 C512 E5 C513 E5 C514 E5 C515 E6 C516 E4 C517 F4 C518 G4 C519 F4 C520 G5
C521 G2 C523 H2 C524 G5 C525 G5 C526 E6 C527 F7 C528 F7 C529 E7 C530 E7 C531 E7
C533 A7 C534 B7 C535 B7 C536 A8 C537 B8 C540 C9 C541 C8 C542 D8 C543 D9 C544 A7
C545 A7 C546 A13 C547 B13 C548 B15 C549 C16 C566 C9 C588 D10 C591 A13 C592 C14 C593 C14
C594 C14 C596 A15 C597 B16 C598 C12 C600 H14 C601 H14 C602 G15 C603 H15 C605 H14 C606 H14
C609 H15 C610 G14 C620 G12 C622 G13 C625 G14 C643 F12 C644 H8 C645 G9 C646 G7 C647 G8
C648 G9 C649 G8 C650 H7 C651 G10 C657 H10 C658 H11 C671 D12 C672 D12 C673 E12 C674 E12
C675 E12 C676 E12 C679 A13 C682 G11 C683 G11 C601 B11 C602 B11 C603 A11 C604 A11 C605 A3 C606 A3
C607 C3 C608 C4 C610 B2 C611 B3 C612 B3 C613 A4 C614 B4 C616 C7 C617 C7 C618 A4
CG22 B9 CG23 A11 CG24 B11 D761 G16 F501 A7 F502 B7 F503 A13 IC51 D8 IC55 A3 IC62 G15
IC63 C15 IC65 B8 LG16 B11 L501 G4 L502 G4 L503 G5 L504 E4 L505 E4 L506 E5 L507 E5
L508 E5 L509 G5 L510 G5 L511 G6 L512 G7 L513 B7 L514 A7 L517 A12 L518 A14 L519 B15
L520 H16 L526 C14 L527 C14 L529 A16 L530 C13 L542 H10 L543 H10 Q501 G3 Q502 E6 Q503 G3
Q504
Q505
Q506
Q507
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Q509
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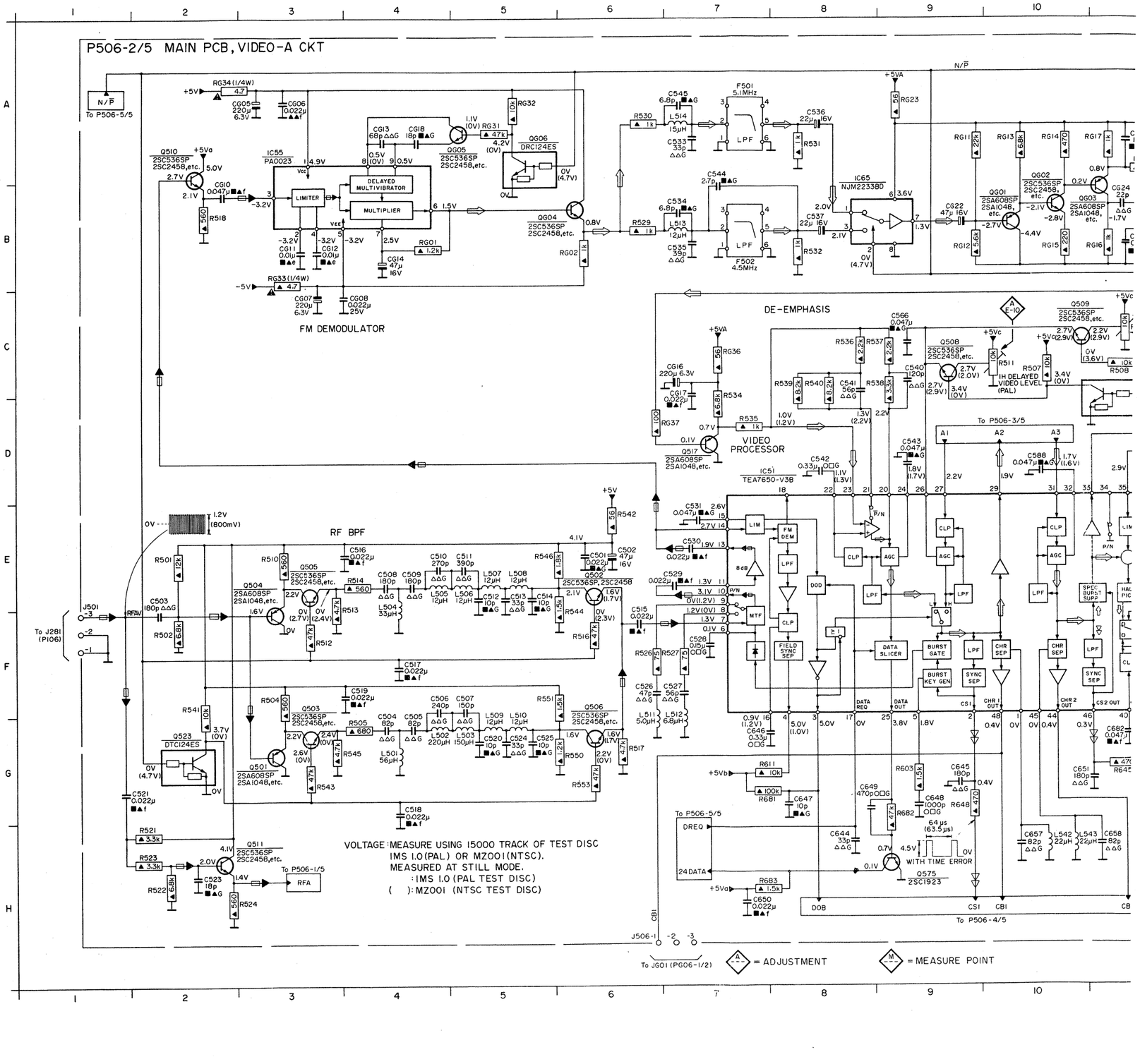
Q517
Q523



AM

C501 E6 C502 E6 C503 E2 C504 G4 C505 G4 C506 F4 C507 F5 C508 E4 C509 E4 C510 E4
C511 E5 C512 E5 C513 E5 C514 E5 C515 F6 C516 E4 C517 F4 C518 G4 C519 F4 C520 G5
C521 G2 C523 H2 C524 G5 C525 G5 C526 F6 C527 F7 C528 F7 C529 E7 C530 E7 C531 E7
C533 A7 C534 B7 C535 B7 C536 A8 C537 B8 C540 C9 C541 C8 C542 D8 C543 D9 C544 A7
C545 A7 C546 A13 C547 B13 C548 B15 C549 C16 C566 C9 C588 D10 C591 A13 C592 C14 C593 C14
C594 C14 C596 A15 C597 B16 C598 C12 C600 H14 C601 H14 C602 G15 C603 H15 C605 H14 C606 H14
C609 H15 C610 G14 C620 G12 C622 G13 C625 G14 C643 F12 C658 H11 C671 D12 C672 D12 C674 E12
C648 G9 C649 G8 C650 H7 C651 G10 C657 H10 C672 D12 C673 E12 C674 E12
C675 E12 C676 E12 C679 A13 C682 B2 C683 A3 C686 A3
CG07 C3 CG08 C4 CG10 B2 CG11 B3 CG12 B3 CG13 A4 CG14 B4 CG16 C7 CG17 C7 CG18 A4
CG22 B9 CG23 A11 CG24 B11 D781 G16 F501 A7 F502 B7 F503 A13 IC51 D8 IC55 A3 IC62 G15
IC63 C15 IC65 B8 LG16 B11 L501 G4 L502 G4 L503 G5 L504 E4 L505 E4 L506 E5 L507 E5
L508 E5 L509 G5 L510 G5 L511 G6 L512 G7 L513 B7 L514 A7 L517 A12 L518 A14 L519 B15
L520 H16 L526 C14 L527 C14 L529 A16 L530 C13 L542 H10 L543 H10 Q501 G3 Q502 E6 Q503 G3
Q504 E3 Q505 E3 Q506 G6 Q508 C9 Q509 C10 Q510 A2 Q511 H3 Q512 D11 Q513 B12 Q514 B14
Q515 D16 Q517 D7 Q523 G2 Q524 G12 Q525 G13 Q532 G13 Q536 C14 Q537 A15 Q539 C12 Q540 D12
Q541 C13 Q546 H15 Q547 G14 Q575 H9 Q601 F12 Q601 B10 Q602 B10 Q603 B11 Q604 B5 Q605 A5
Q606 A5 Q667 B11 R501 E2 R502 F2 R504 F3 R505 G4 R507 C10 R508 C11 R509 C11 R510 E3
R511 C10 R512 F3 R513 E4 R514 E4 R516 F6 R517 G6 R518 B2 R519 D13 R520 E12 R521 H2
R522 H2 R523 H2 R524 H3 R526 F6 R527 F7 R529 B6 R530 A6 R531 A8 R532 B8 R534 C7
R535 D7 R536 C6 R537 C9 R538 C9 R539 C8 R540 C8 R541 F2 R542 E6 R543 G3 R544 E6
R545 G4 R546 E5 R550 G6 R551 F5 R553 G6 R582 C14 R583 A15 R584 B16 R588 C12 R589 D13
R590 C13 R591 C13 R594 A13 R595 C15 R597 C14 R601 H15 R602 G15 R603 G9 R604 H14 R611 G7
R613 B12 R614 A13 R615 B13 R622 B12 R623 A14 R624 A14 R625 A15 R627 B15 R630 H16 R631 H15
R632 H15 R635 H14 R637 G12 R638 H12 R639 G12 R640 G12 R641 G13 R642 G13 R643 F14 R644 C16
R645 G11 R646 D16 R647 C16 R648 G9 R650 E13 R678 E13 R680 B10 R681 G7 R682 G9 R683 H7 R601 B4
RG02 B6 RG11 A9 RG31 A5 RG32 A5 RG33 B3 RG34 A2 RG35 B12 RG36 C7 RG37 D7
RG23 A9 RG14 A10 RG15 B10 RG16 B11 RG17 A11 RG18 A11 RG22 B12

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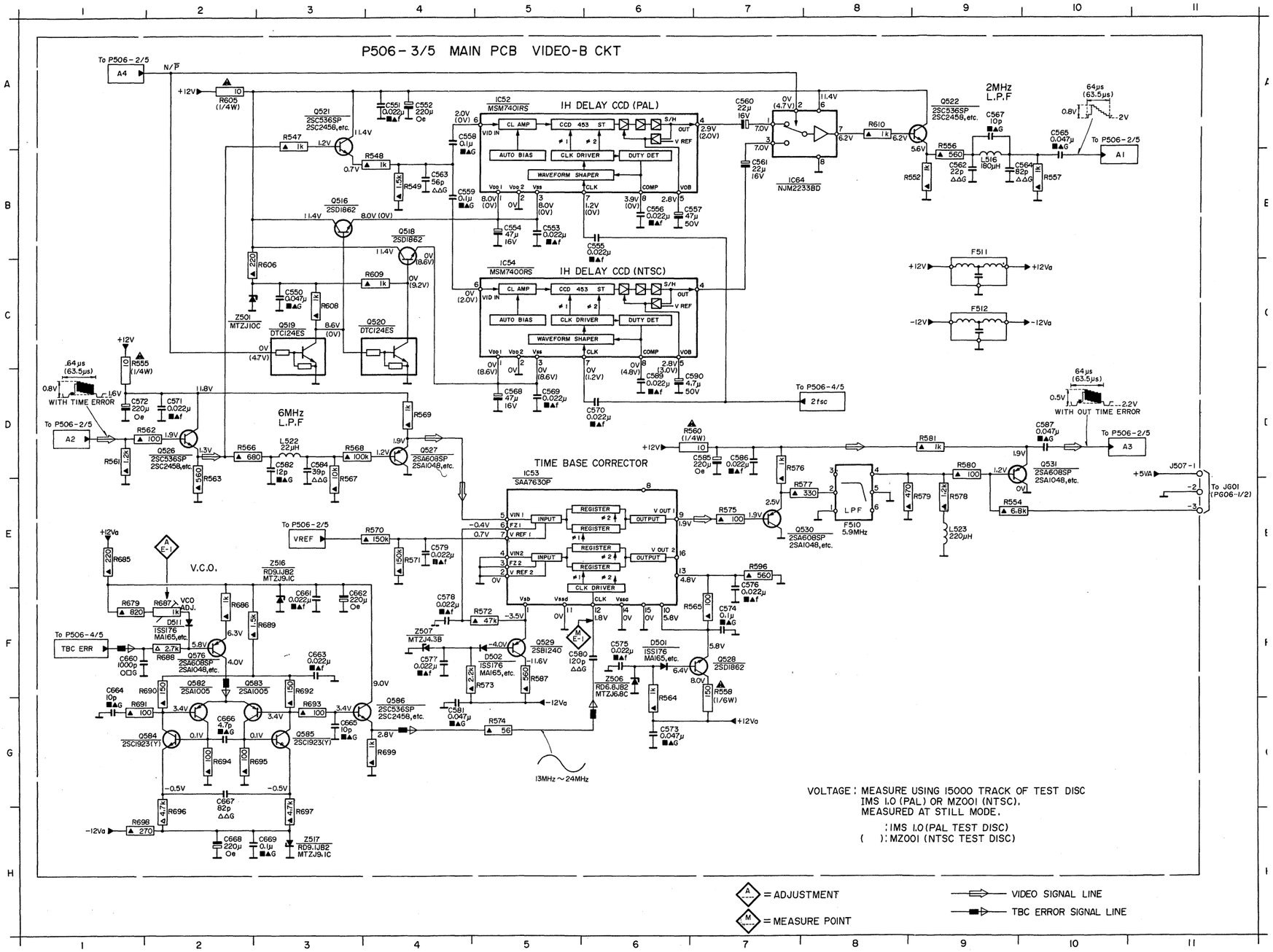
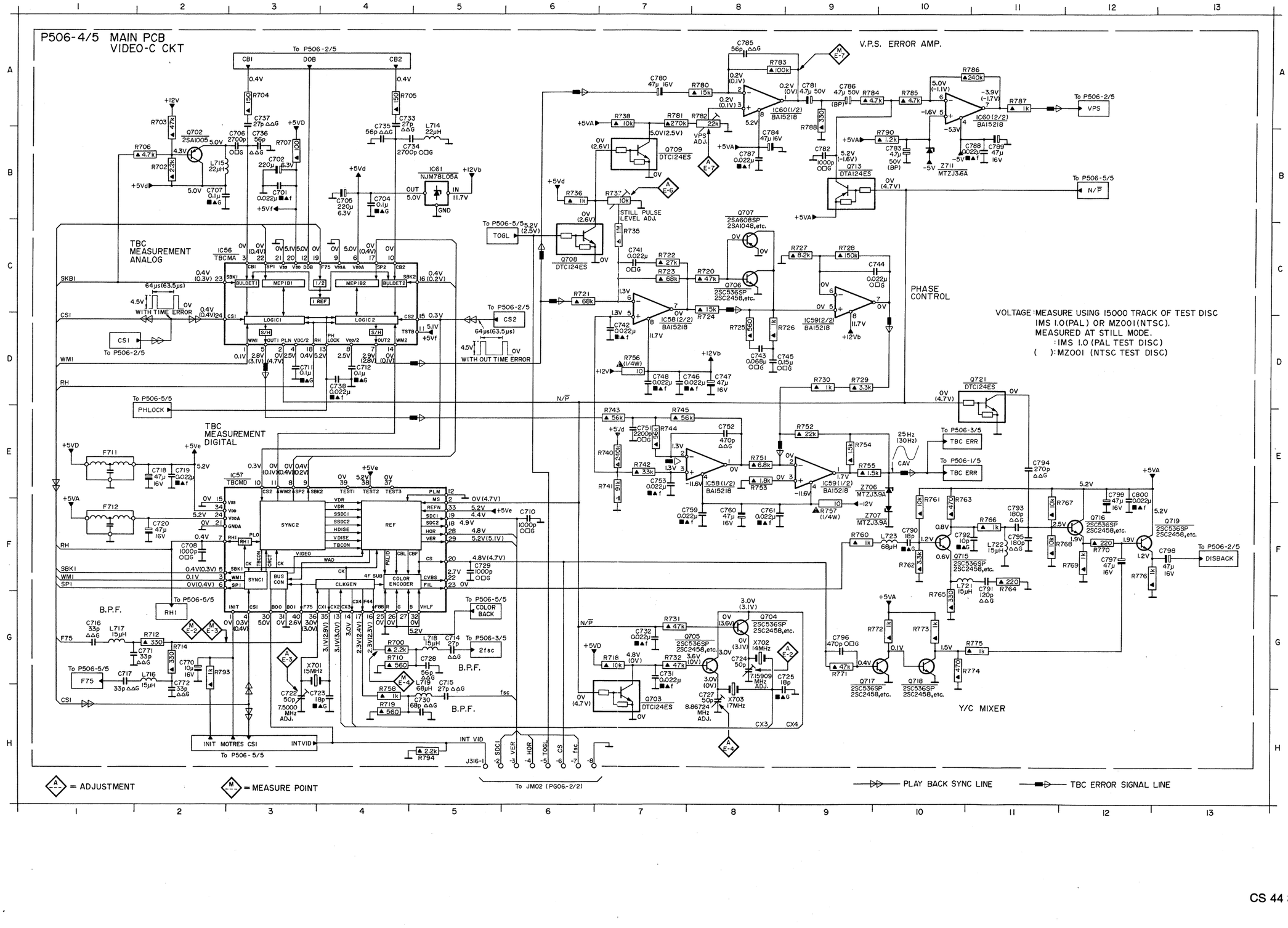
C. P506 MAIN VIDEO-B SCHEMATIC DIAGRAM

C550 C3 C551 A4 C552 A4 C553 B5 C554 B5 C555 B6 C556 B6 C557 B6 C558 A4 C559 B4
C560 A7 C561 B7 C562 B9 C563 B4 C564 B9 C565 A10 C566 A9 C567 D5 C569 D5 C570 D6
C571 D2 C572 D1 C573 G6 C574 F7 C575 F6 C576 E7 C577 F4 C578 F4 C579 E4 C580 F6
C581 G4 C582 D3 C584 D3 C585 D7 C586 D7 C587 D10 C589 D6 C590 D6 C660 F1 C661 F3
C662 F3 C663 F3 C664 F1 C665 G3 C666 G2 C667 G2 C668 H2 C669 H3 D501 F6 D502 F5
D511 F2 P510 E8 F511 C9 F512 C9 IC52 A5 IC53 E5 IC54 C5 IC64 B7 L516 B9 L522 D3
L523 E9 Q516 B3 Q518 B4 Q519 C3 Q520 C4 Q521 A3 Q522 A9 Q526 D2 Q527 D4 Q528 F7
Q529 F5 Q530 E7 Q531 D10 Q576 F2 Q582 F2 Q583 F2 Q584 G3 Q585 G3 Q586 G4 R547 A3
R548 B4 R549 B4 R552 B9 R554 E9 R555 C1 R556 B9 R557 B10 R558 F7 R560 D7 R561 D1
R562 D1 R563 D2 R564 G6 R565 F7 R566 D2 R567 D3 R568 D3 R569 D4 R570 E4 R571 E4
R572 F5 R573 F5 R574 G5 R575 E7 R576 D7 R577 E7 R578 E9 R579 E9 R580 D9 R581 D9
R587 F5 R596 E7 R605 A2 R606 C3 R608 C3 R609 C4 R610 A8 R679 F1 R685 E1 R686 F2
R687 F2 R688 F2 R689 F3 R690 F2 R691 G1 R692 F3 R693 G3 R694 G2 R695 G2 R696 H2
R697 H3 R698 H2 Z501 C2 Z506 F6 Z507 F4 Z516 E3 Z517 H3



D. P506 MAIN VIDEO-C SCHEMATIC DIAGRAM

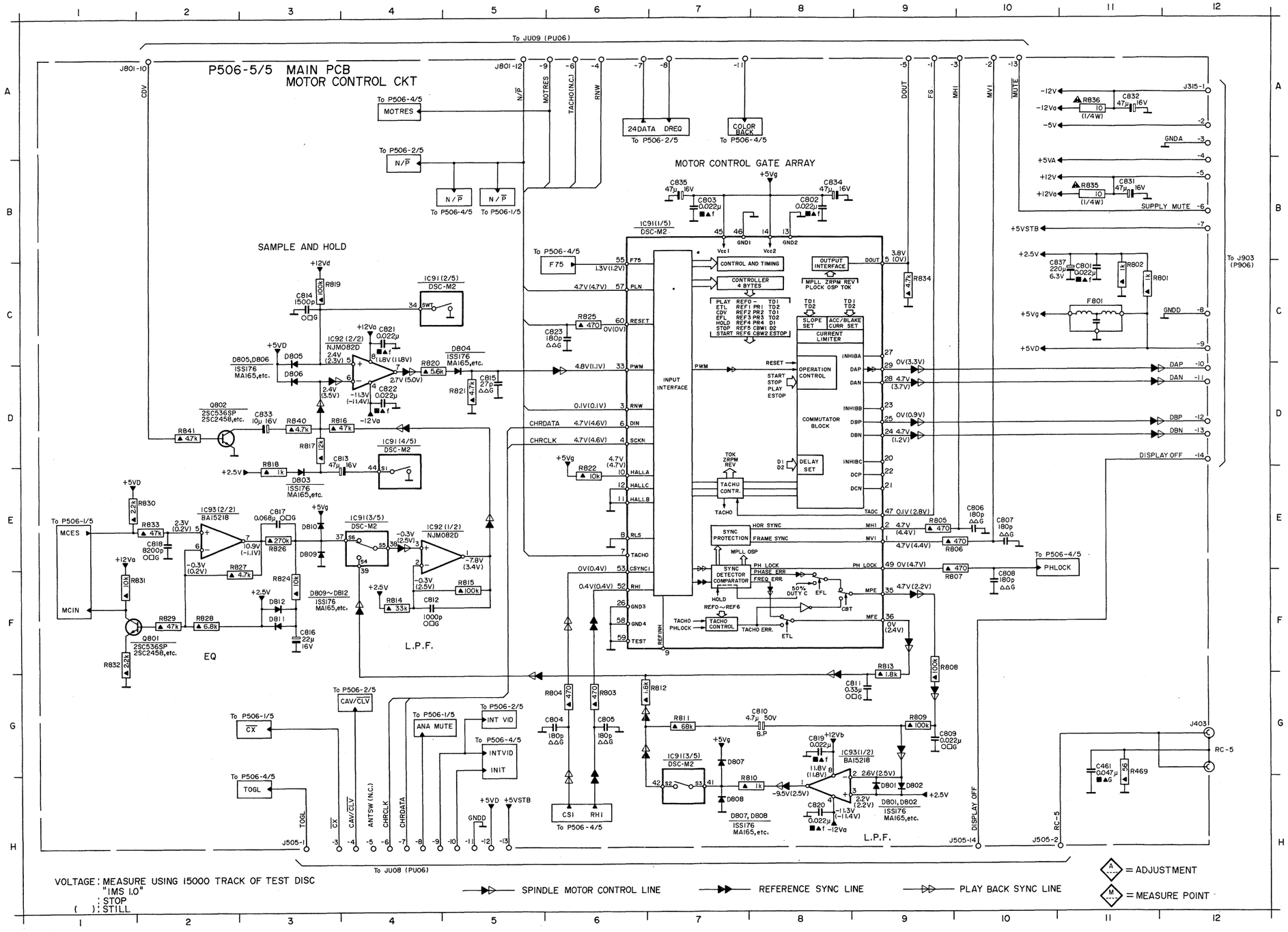
C701 B3 C702 B3 C704 B4 C705 B4 C706 B3 C707 B2 C708 F2 C710 F6 C711 D3 C712 D4
C714 G5 C715 H5 C716 G1 C717 G1 C718 E2 C719 E2 C720 F2 C722 H3 C723 H4 C724 G8
C725 G9 C727 H8 C728 G5 C729 F5 C730 H5 C731 G7 C732 G7 C733 A4 C734 B4 C735 B4
C736 B3 C737 C3 C738 D4 C741 C7 C742 D7 C743 D8 C744 C9 C745 D8 C746 D7 C747 D8
C748 D7 C751 E7 C752 E8 C753 E7 C759 F8 C760 F8 C761 F8 C770 G2 C771 G2 C772 G2
C780 A7 C781 A9 C782 A10 C783 B10 C784 B8 C785 A8 C786 A9 C787 B8 C788 B11 C789 B11
C790 F10 C791 F11 C792 F11 C793 F11 C794 E11 C795 F11 C796 G9 C797 F12 C798 F13 C799 E12
C800 E12 F711 E1 F712 F1 IC56 C3 IC57 E5 IC58 D7 IC58 E8 IC59 D9 IC59 E9 IC60 A8
IC60 A11 IC61 B5 L714 B5 L715 B2 L716 G2 L717 G1 L718 G5 L719 H5 L721 F10 L722 F11
L723 F10 Q702 B2 Q703 H7 Q704 G8 Q705 G8 Q706 C8 Q707 C8 Q708 C6 Q709 B7 Q713 B9
Q715 F10 Q716 F12 Q717 G10 Q718 G10 Q719 F13 Q721 D11 R700 G4 R702 B2 R703 A2 R704 A3
R705 A4 R706 B2 R707 B3 R710 G4 R711 G2 R712 G2 R713 G2 R714 G2 R717 G2 R718 G7
R719 H4 R720 C8 R721 C6
R722 C7 R723 C7 R724 D8 R725 D8 R726 D8 R727 C9 R728 C9 R729 D9 R730 D9 R731 G7
R732 G7 R735 G7 R736 E7 R737 B7 R738 A7 R740 E7 R741 E7 R742 E7 R743 E7 R744 E7
R745 E7 R751 E8 R752 E9 R753 E8 R754 E9 R755 E9 R756 D7 R757 F9 R758 H4 R760 F9
R761 F10 R762 F10 R763 F10 R764 F11 R765 G10 R766 F11 R767 F11 R768 F11 R769 F12
R770 F12
R771 G9 R772 G10 R773 G10 R774 G11 R775 G11 R776 F12 R780 A8 R781 A7 R782 A8
R783 A8 R784 A9 R785 A10 R786 A10 R787 A11 R788 A9 R790 B10 R793 G2 R794 H5
X701 G3 X702 G8 X703 H8 Z706 E10 Z707 E10 Z711 B10



CS 44 316

E. P506 MAIN MOTOR CONTROL SCHEMATIC DIAGRAM

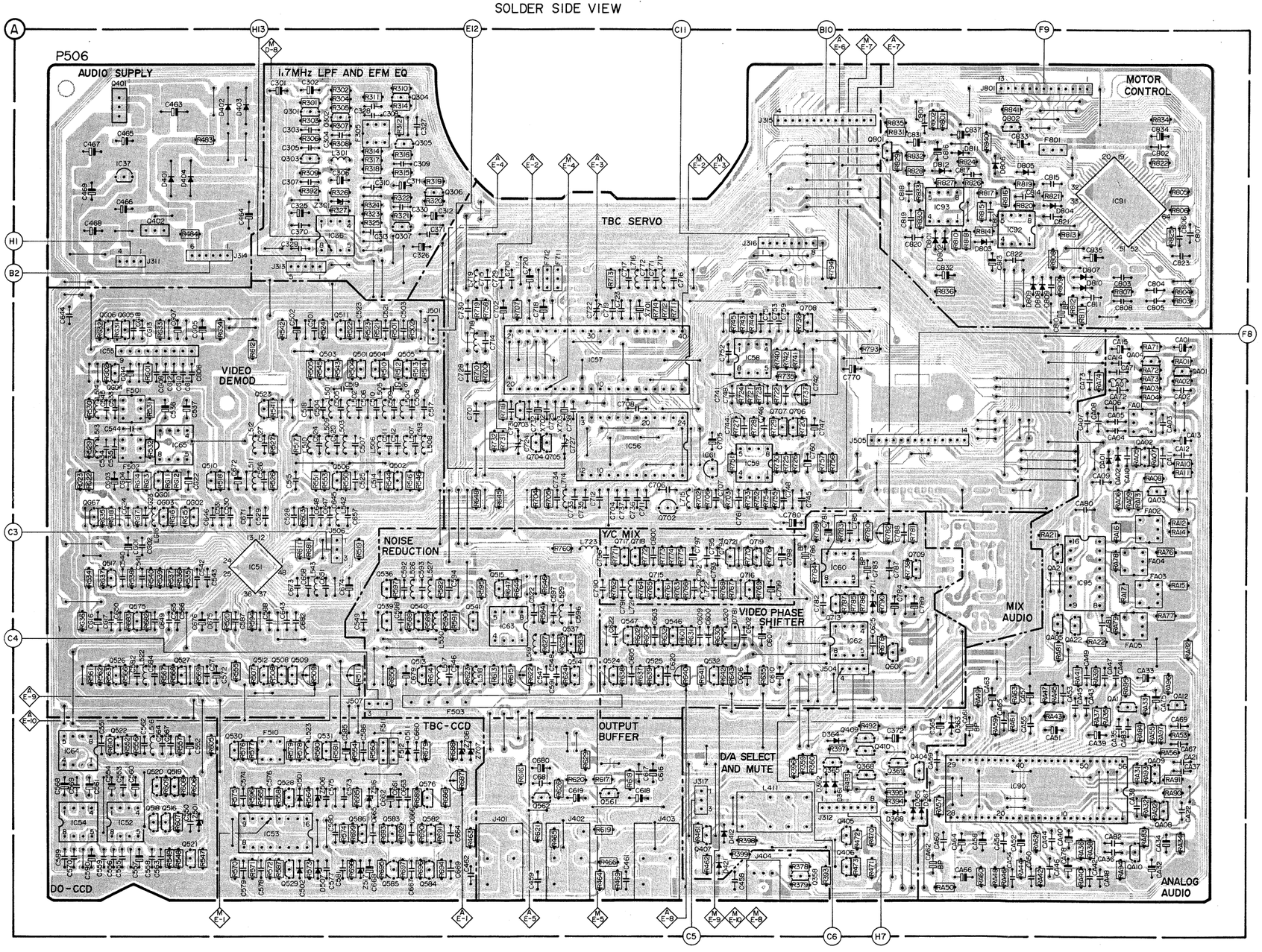
C461 G11 C810 G8 C820 H8 D801 H9 D811 F3 IC93 E2 R806 E9 R816 D3 R827 F2 R840 D3
C801 C11 C811 G9 C821 C3 D802 H9 D812 F3 IC93 G8 R807 F9 R817 D3 R828 F2 R841 D2
C802 B8 C812 F4 C822 D4 D803 E3 F801 C11 Q801 F2 R808 F9 R818 D3 R829 F2
C803 B7 C813 D4 C823 C6 D804 C5 IC91 B7 Q802 D2 R809 G9 R819 C3 R830 E2
C804 G6 C814 C3 C831 B11 D805 C3 IC91 C4 R469 G11 R810 H7 R820 D4 R831 F1
C805 G6 C815 D5 C832 A11 D806 C3 IC91 D4 R801 C11 R811 G7 R821 D5 R832 F1
C806 C10 C816 F3 C833 D3 D807 G7 IC91 E4 R802 C11 R812 G7 R822 E6 R833 E2
C807 C10 C817 E3 C834 B8 D808 H7 IC91 G7 R803 G6 R813 F9 R824 F3 R834 C9
C808 F10 C818 E2 C835 B7 D809 E3 IC92 C3 R804 G6 R814 F4 R825 C6 R835 B11
C809 G9 C819 G8 C837 C11 D810 E3 IC92 E4 R805 E9 R815 F5 R826 E3 R836 A11



F. P506 MAIN PCB

R	R623 R631~R633 R484 R483 R634 R612 R542 R392 R301~R309 R310~R318 R319~R327 R719 R758 R718 R707 R711~R714 R721~R724 R743~R745 R740~R742 R794 R835 R802 R801 R840 R841 R819~R821 R811~R813 R808 R809 R807 R834 R822 R803~R806	R
	R529~R532 R602 R601 R518 R520 R555 R541 R527 R526 R517 R505 R545 R543 R504 R510 R521~R524 R501 R502 R710 R700 R648 R645 R732 R731 R704 R705 R771~R775 R761~R766 R702 R706 R703 R735 R720 R736 R737 R793 R826~R833 R836 R810 R824 R814~R818 RA21 RA22 RA71~RA74 R825 RA01~RA04	
	R622 R534 R637 R635 R535~R540 R611~R618 R594 R611 R603 R681 R551 R553 R550 R519 R544 R516 R546 R512~R514 R595 R647 R644 R584 R646 R760 R583 R602 R604 R601 R630~R632 R767~R770 R776 R725~R730 R751~R757 R780~R788 R790 RA81 RA76~RA79 RA15~RA17 RA05~RA14	
	R636 R561~R563 R683 R682 R566~R569 R576~R581 R507~R509 R575 R596 R565 R558 R564 R511 R650 R597 R588~R591 R582 R614 R623 R613 R615 R622 R627 R625 R624 R617~R620 R637~R639 R640~R643 R635 R396 R359 R360 R379 R493 R678 RA42~RA48 RA31~RA34 RA95~RA97 RA53 RA82	
	R610 R552 R556 R557 R547~R549 R605~R609 R587 R570~R573 R574 R685 R554 R560 R679 R686~R699 R463 R616 R621 R465 R626 R629 R464 R466 R469 R461 R462 R399 R398 R379 R378 R393 R470~R473 R492 R395 R394 R457 RA50 RA49 RA59~RA63 RA35~RA41 RA84 RA83 RA90~RA94 RA55 RA56	
C	C589 C590 C465~C469 C618 C605~C608 C463 C646 C672 C671 C325 C502 C501 C301~C307 C328 C330 C327 C730 C715 C710 C720 C718 C722 C719 C723 C717 C772 C771 C716 C741 C748 C751~C753 C759 C742 C770 C831 C801 C837 C833 C814 C815 C821 C809~C811 C835 CA81 C834 C802	C
	C644 C545 C544 C601~C604 C610~C614 C526~C531 C464 C329 C370 C523 C313 C521 C503 C306 C312 C728 C714 C702 C738 C727 C733~C737 C712 C704 C711 C706 C705 C744 C746 C745 C760 C747 C818~C820 C832 C816 C817 C812 C813 C822 CA71~CA73 CA14 CA15 C803~C808 C823	
	C616 C533~C535 C624 C623 C536 C537 C622 C540~C543 C515 C504~C507 C524 C520 C508~C513 C516~C519 C326 C371 C731 C732 C725 C522 C597 C596 C796 C791 C708 C800 C797 C707 C761 C780 C786 C781 C785 C783 C787 C788 C789 CA80 CA04~CA10 CA11~CA13 CA01~CA03	
	C582 C584 C649 C565 C566 C676 C675 C571 C572 C643 C682 C648 C647 C645 C657 C525 C514 C585 C586 C549 C592 C594 C546 C701 C724 C547 C591 C548 C790 C622 C605 C603 C620 C792 C793 C795 C799 C798 C782 C625 C784 C372 C365 CA59~CA66 CA39~CA49 CA35 CA83 CA33 CA69 CA67 CA21 CA37	
	C617 C650 C568~C570 C550~C561 C567 C562~C564 C587 C588 C673 C658 C651 C674 C577~C581 C573~C576 C598 C679 C660 C669 C462 C459 C681 C680 C619 C461 C616 C618 C609 C600 C458 C606 C602 C601 C610 CA50~CA58 CA78 CA36 CA82 CA38 CA32 CA34 CA75 CA22	
IC-Q	Q604~Q606 Q401 IC37 Q402 IC65 Q510 IC51 Q523 Q301~Q303 IC36 Q304~Q307 Q515 Q703~Q705 IC57 IC56 Q702 IC58 Q708 IC60 Q801 IC93 Q802 QA21 IC95 IC91 QA01~QA04	IC-Q
	Q667 IC55 Q575 Q501 Q603 Q602 Q512 Q508 Q509 Q511 Q501 Q506 Q540 Q513 Q541 IC63 Q537 Q717 Q718 Q715 Q721 Q719 IC59 Q707 Q706 Q713 IC62 Q410 Q601 Q709 IC92 QA05 QA22	
	IC64 IC54 Q517 Q526 IC52 Q516 Q527 Q518~Q522 Q530 IC53 Q529 Q528 Q531 Q582~Q586 Q576 Q562 Q514 Q561 Q524 Q547 Q525 Q546 Q407 Q532 Q716 Q358 Q365 Q405 Q406 Q409 Q368 Q369 Q404 IC90 QA08~QA12	
D-Z	D401 D404 D402 D403 Z301 D781 D364 Z711 D801 D802 D812 D811 D803 D804~D806 D807~D810	D-Z
	Z501 D501 D502 Z506 Z507 Z517 Z516 D511 Z706 Z707 D421 D412 D362 D361 D368 D365 D367 D363 DA01 DA02	
F-K-L-X	L514 L513 F501 F502 L512 L511 L510 L509 L501~L503 L301 F305 L504~L506 L507 L508 L719 L718 X702 X703 F712 F711 L716 X701 L717 F801 LA01 FA01~FA05	F-K-L-X
	L522 L616 L516 F510 L523 L543 L542 F511 F512 L526 L527 L530 L517 F503 L518 L519 L529 L714 L723 L721 L722 L520 L411	

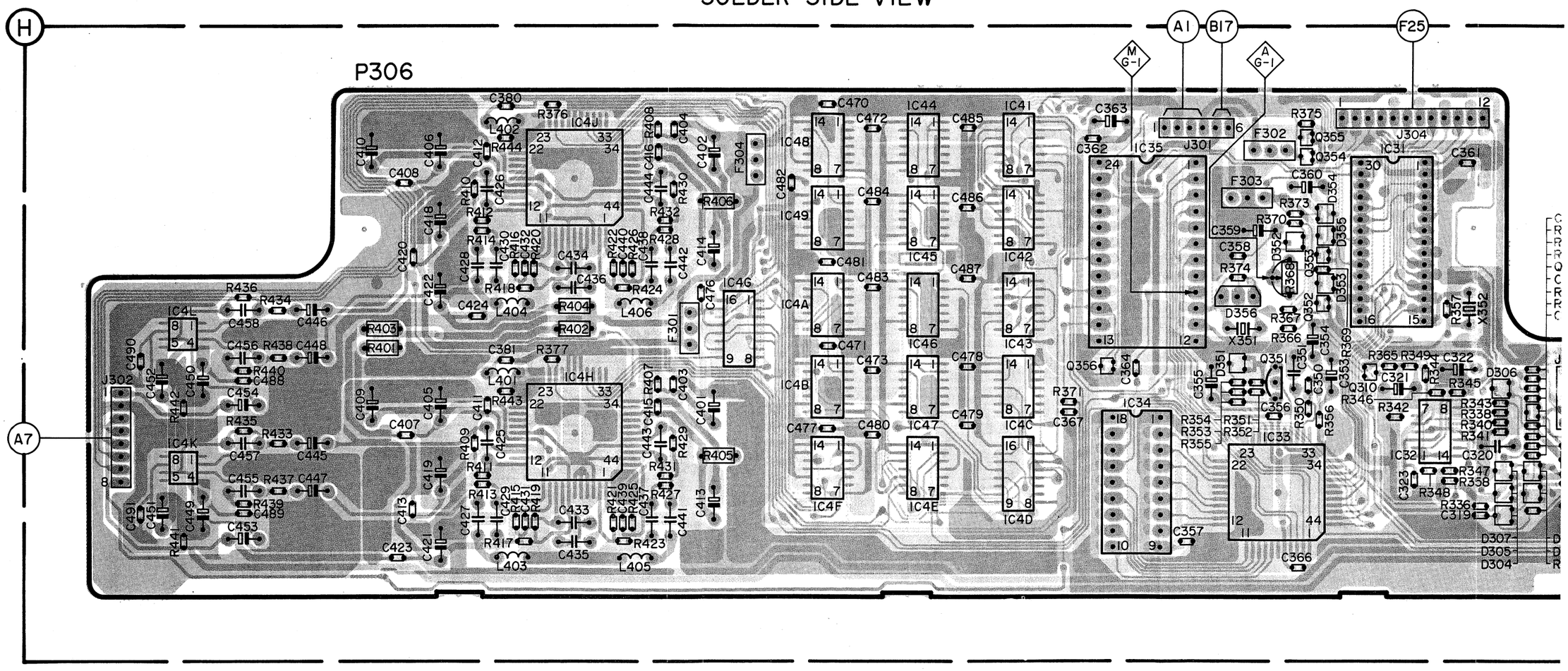
SOLDER SIDE VIEW



G. P306 DIGITAL AUDIO PCB

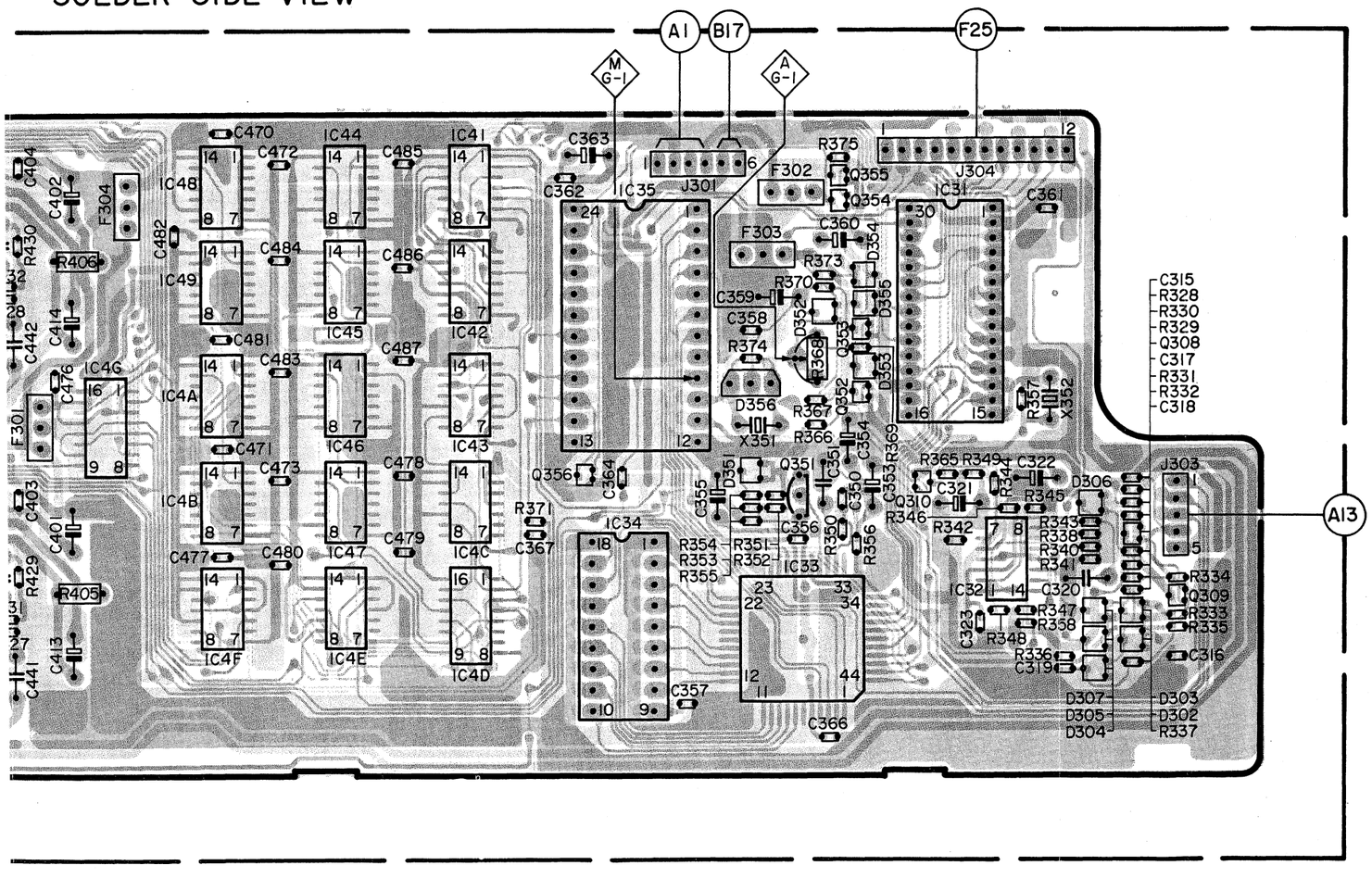
R	R444 R376 R408 R406 R374 R370 R373 R375 R369 R344 R357 R345 F R442 R433~R440 R403 R401 R409~R414 R377 R404 R402 R421~R426 R427~R432 R371 R367 R366 R365 R349 R343 R338 R340 R341 R441 R443 R415~R420 R407 R405 R351~R355 R350 R356 R346 R342 R348 R336 R337 R
C	C405~C410 C412 C380 C416 C401~C404 C482 C470~C473 C485~C487 C362 C363 C359 C358 C360 C361 C315 C490 C449~C452 C488 C445~C448 C418~C423 C411 C381 C433~C436 C415 C414 C481 C484 C483 C478 C364 C355 C351 C354 C353 C321 C322 C491 C453~C458 C489 C413 C424~C432 C437~C444 C413 C477 C480 C479 C367 C357 C356 C366 C350 C323 C319 C320
Q-IC	IC4L IC4J IC4G IC48 IC49 IC44~IC47 IC41~IC43 IC35 Q351 Q352~Q355 IC31 IC4K IC4H IC4A IC4B IC4F IC4E IC4C IC4D Q356 IC34 IC33 Q310 IC32 Q
D	D351 D356 D352~D355 D302~D30
F-L-X	L401~L404 L406 L405 F301 F304 F303 X351 F302 X352

SOLDER SIDE VIEW



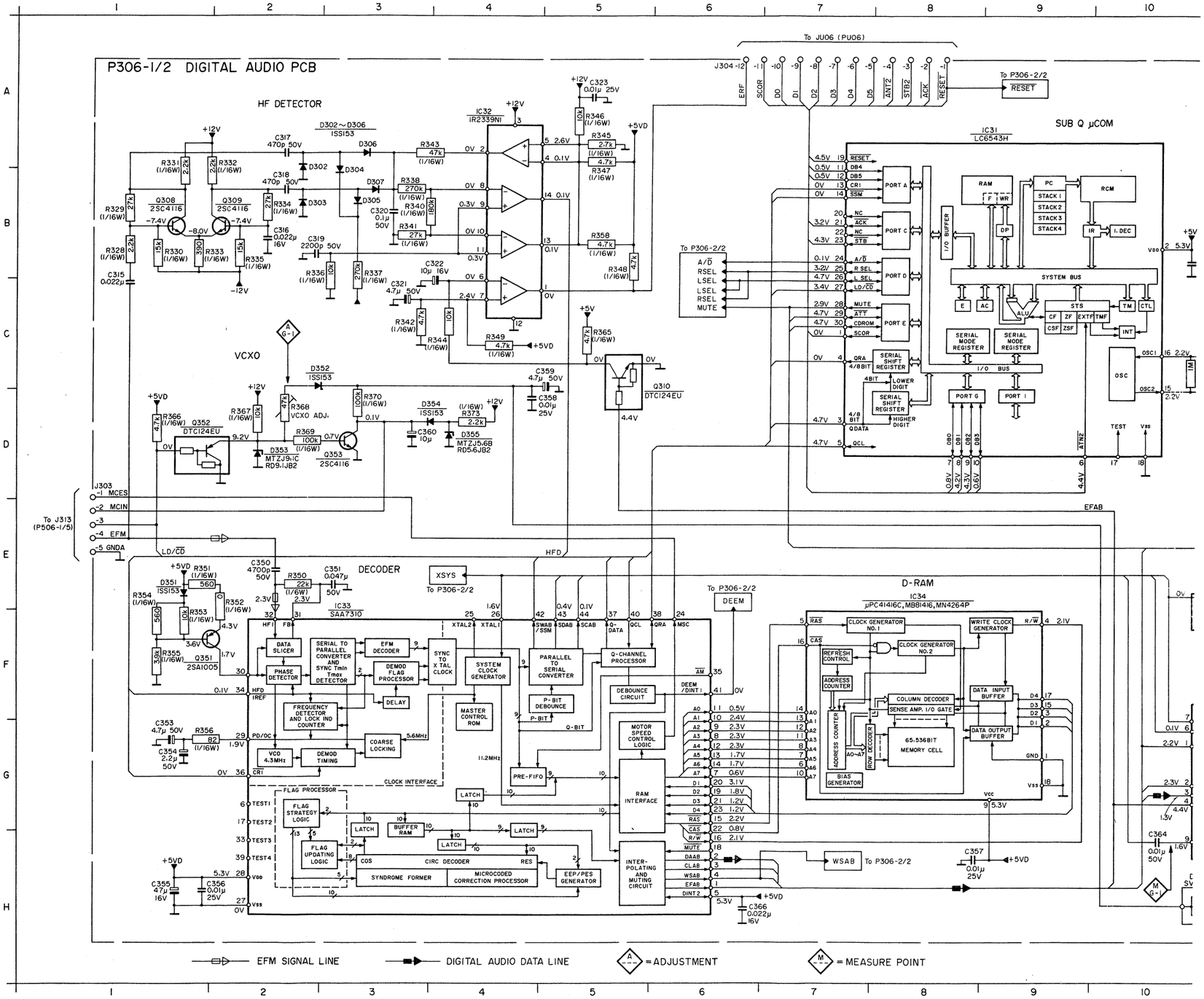
08 R406	R374 R370 R373 R375 R369 R344 R357 R345 R328~R332	R
421~R426 R427~R432 R371	R367 R366 R365 R349 R343 R338 R340 R341 R347 R358	
07 R405	R351~R355 R350 R356 R346 R342 R348 R336 R337 R333~R335	
16 C401~C404 C482 C470~C473 C485~C487 C362 C363	C359 C358 C360 C361 C315 C317 C318	C
15 C414 C481 C484 C483 C478 C364	C355 C351 C354 C353 C321 C322	
144 C413 C477 C480 C479 C367	C357 C356 C366 C350 C323 C319 C320 C316	
IC4G IC48 IC49 IC44~IC47 IC41~IC43 IC35	Q351 Q352~Q355 IC31	Q-IC
IC4A IC4B IC4F IC4E IC4C IC4D Q356 IC34	IC33 Q310 IC32 Q308 Q309	
	D351 D356 D352~D355 D302~D307	D
405 F301 F304	F303 X351 F302 X352	F-L-X

SOLDER SIDE VIEW



H. P306 DIGITAL AUDIO SCHEMATIC DIAGRAMS

C315 B1 C316 B2 C317 A2 C318 B2 C319 B2 C320 B3 C321 C3 C322 B4 C323 A5 C350 E2 C351 E3 C353 G1 C354 G1 C355 H1 C356 H2 C357 H6 C358 D5 C359 C5 C360 D3 C361 B10 C362 H12 C363 H13 C364 H10 C366 H6 D302 A2 D305 B2 D304 B3 D305 B3 D306 A3 D307 B3 D351 E1 D352 C2 D353 D2 D354 D3 D355 D4 D356 H10 F301 A14 F302 B14 F303 B14 F304 C14 IC31 A9 IC32 A4 IC33 E3 IC34 E6 IC35 F13 Q308 B1 Q309 B2 Q310 C6 Q351 F1 Q352 D1 Q353 D3 Q354 F11 Q355 F12 Q356 F13 R328 B1 R329 B1 R330 B1 R331 A1 R332 A2 R333 B1 R334 B2 R335 B2 R336 B2 R337 B3 R338 B3 R340 B3 R341 B3 R342 C3 R343 A5 R344 C4 R345 A5 R346 A5 R347 B5 R348 B5 R349 C4 R350 E2 R351 E1 R352 E2 R353 F1 R354 E1 R355 F1 R356 G1 R357 C10 R358 B5 R365 C5 R366 D1 R367 D2 R368 D2 R369 D2 R370 D3 R371 G13 R373 D4 R374 H11 R375 E12 X351 H11 X352 D11



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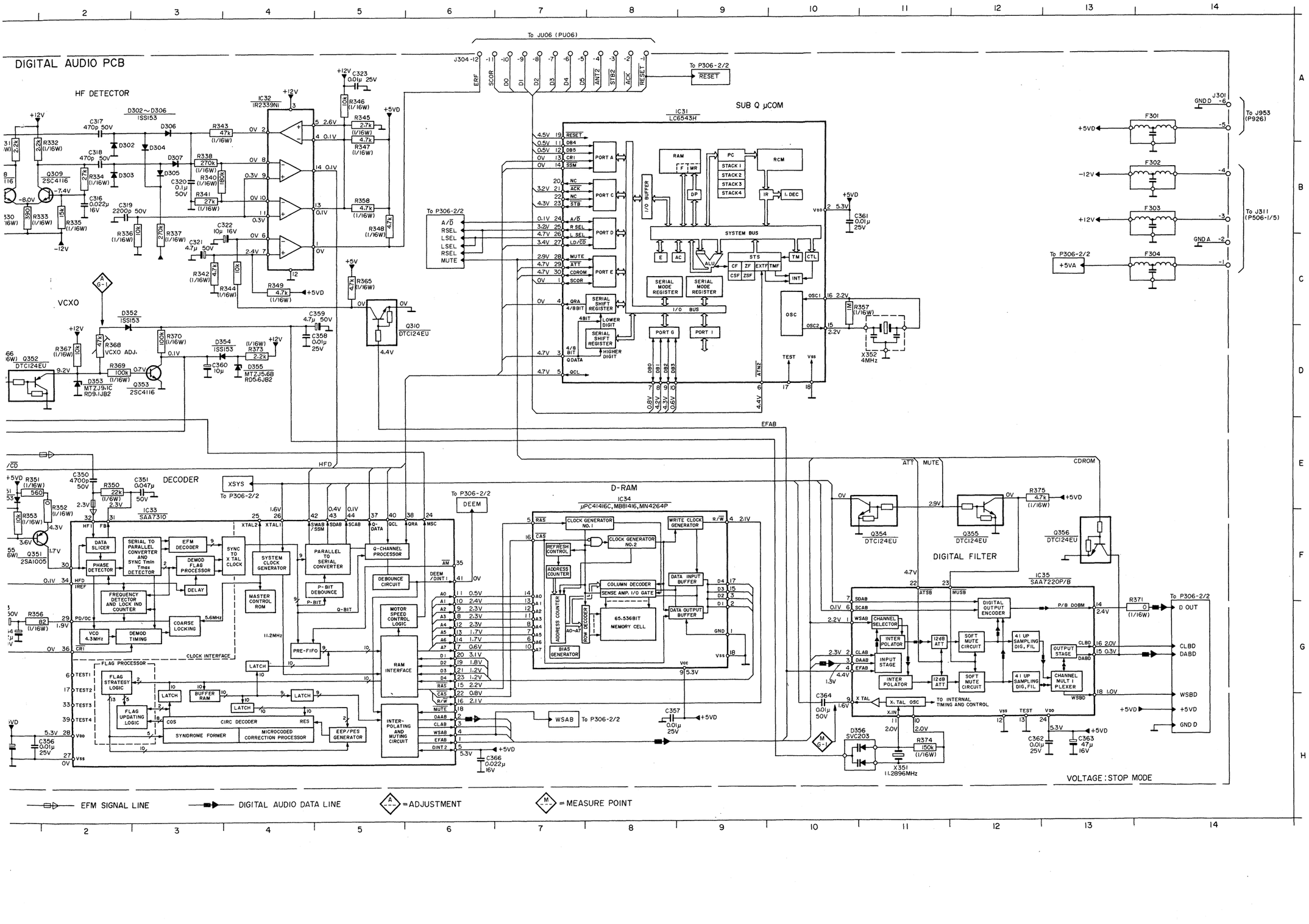
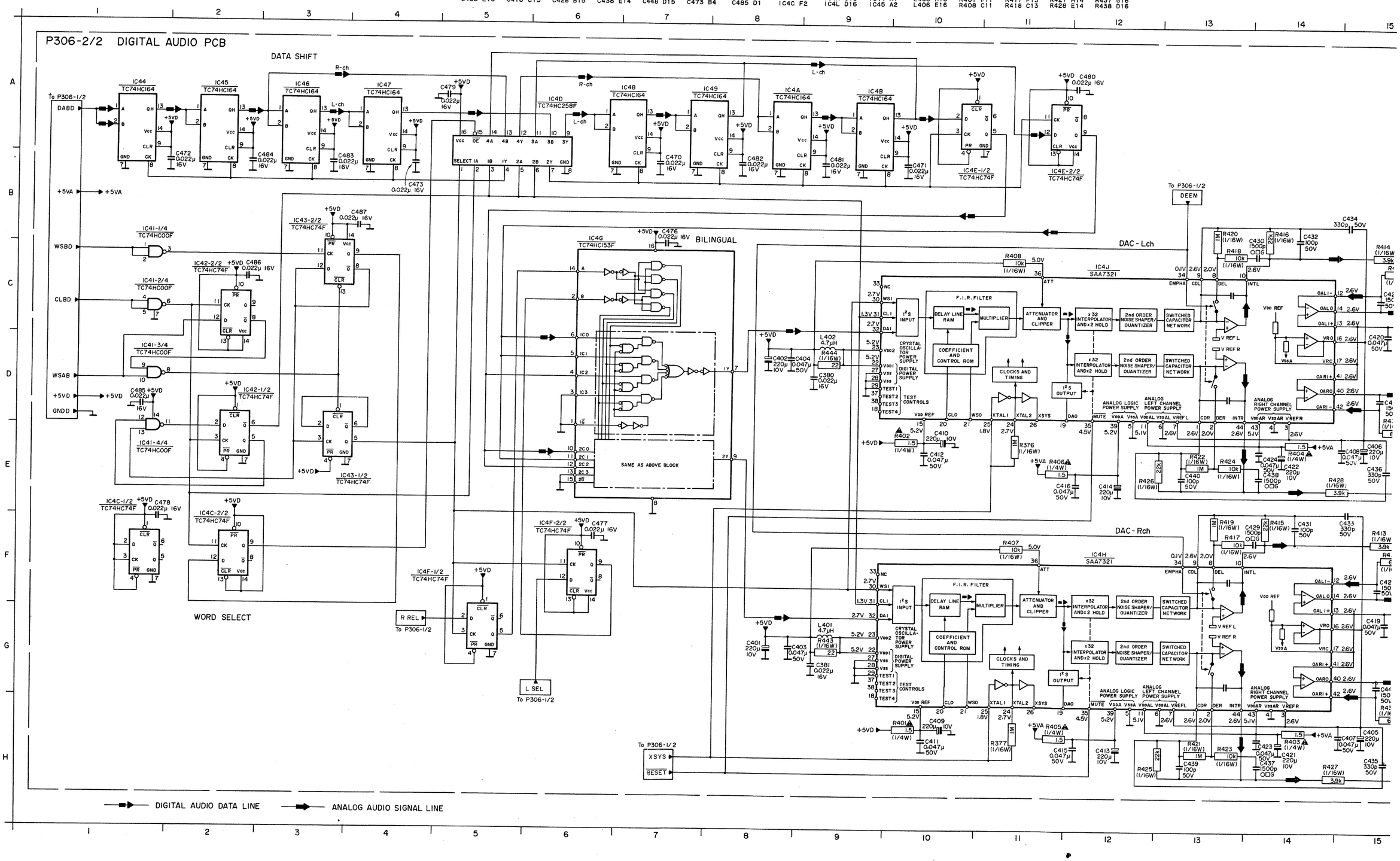
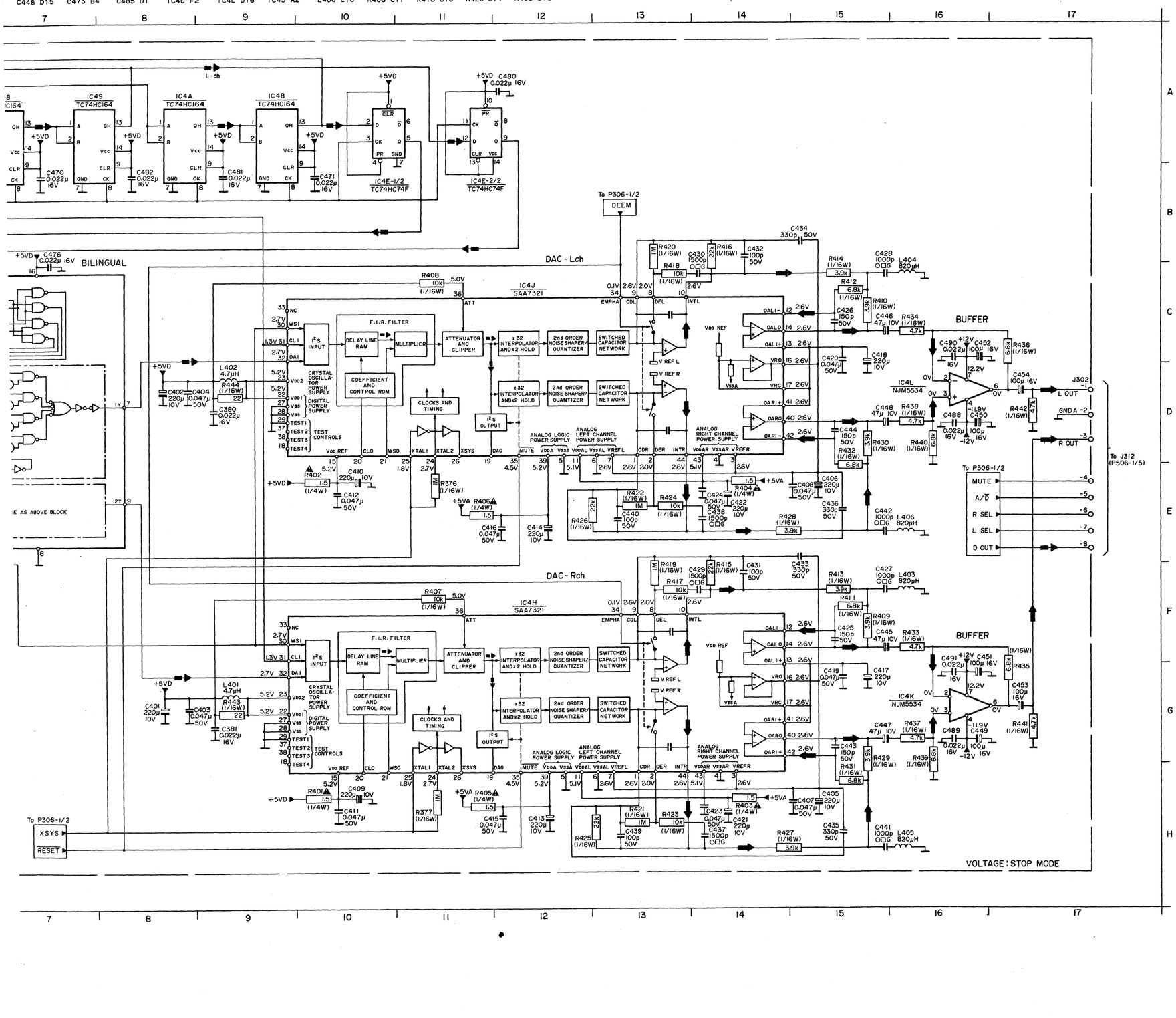


CS 44 320

C380 D9 C381 G9 C401 B8 C402 D8 C403 G9 C404 D9 C405 H15 C406 E15 C407 H15 C408 E15 C409 H10 C410 E10 C411 H10 C412 E10 C413 H12 C414 E12 C415 H11 C416 E11 C417 G15 C418 C15 C419 G15 C420 C15 C421 H14 C422 E14 C423 H14 C424 E14 C425 F15 C426 C15 C427 F15 C428 B15 C429 F14 C430 B14 C431 F14 C432 B14 C433 F15 C434 B15 C435 H15 C436 E15 C437 H14 C438 E14 C439 H13 C440 E13 C441 H15 C442 E15 C443 G15 C444 D15 C445 F15 C446 C15 C447 G15 C448 D15 C449 G16 C450 D16 C451 F16 C452 C16 C453 G17 C454 D17 C470 B7 C471 B10 C472 B2 C473 B4 C476 B7 C477 F6 C478 E1 C479 A5 C480 A12 C481 B9 C482 B8 C483 B3 C484 B3 C485 D1 IC4A A8 IC4B A9 IC4C E1 IC4C F2 IC4D A6 IC4E B10 IC4E B11 IC4F F4 IC4F F6 IC4G E6 IC4H F12 IC4J G12 IC4K G16 IC4L D16 IC41 B1 IC41 C1 IC41 D1 IC41 E1 IC42 C2 IC42 D2 IC43 B3 IC43 E4 IC44 A1 IC45 A2 IC46 A3 IC47 A4 IC48 A7 IC49 A7 L401 G9 L402 D9 L403 F13 L404 B16 L405 H16 L406 E16 R376 E11 R377 H11 R401 H10 R402 E10 R403 H14 R404 E14 R405 H11 R406 E11 R407 F11 R408 C11 R409 F15 R410 C15 R411 F15 R412 C15 R413 F16 R414 B15 R415 F14 R416 B14 R417 F13 R418 C13 R419 F13 R420 B13 R421 H13 R422 E13 R423 H13 R424 E13 R425 H12 R426 E12 R427 H14 R428 E14 R429 G15 R430 D15 R431 H15 R432 D15 R433 F16 R434 C16 R435 G17 R436 C17 R437 G16 R438 D16 R439 G16 R440 D16 R441 G17 R442 D17 R443 G9 R444 D9

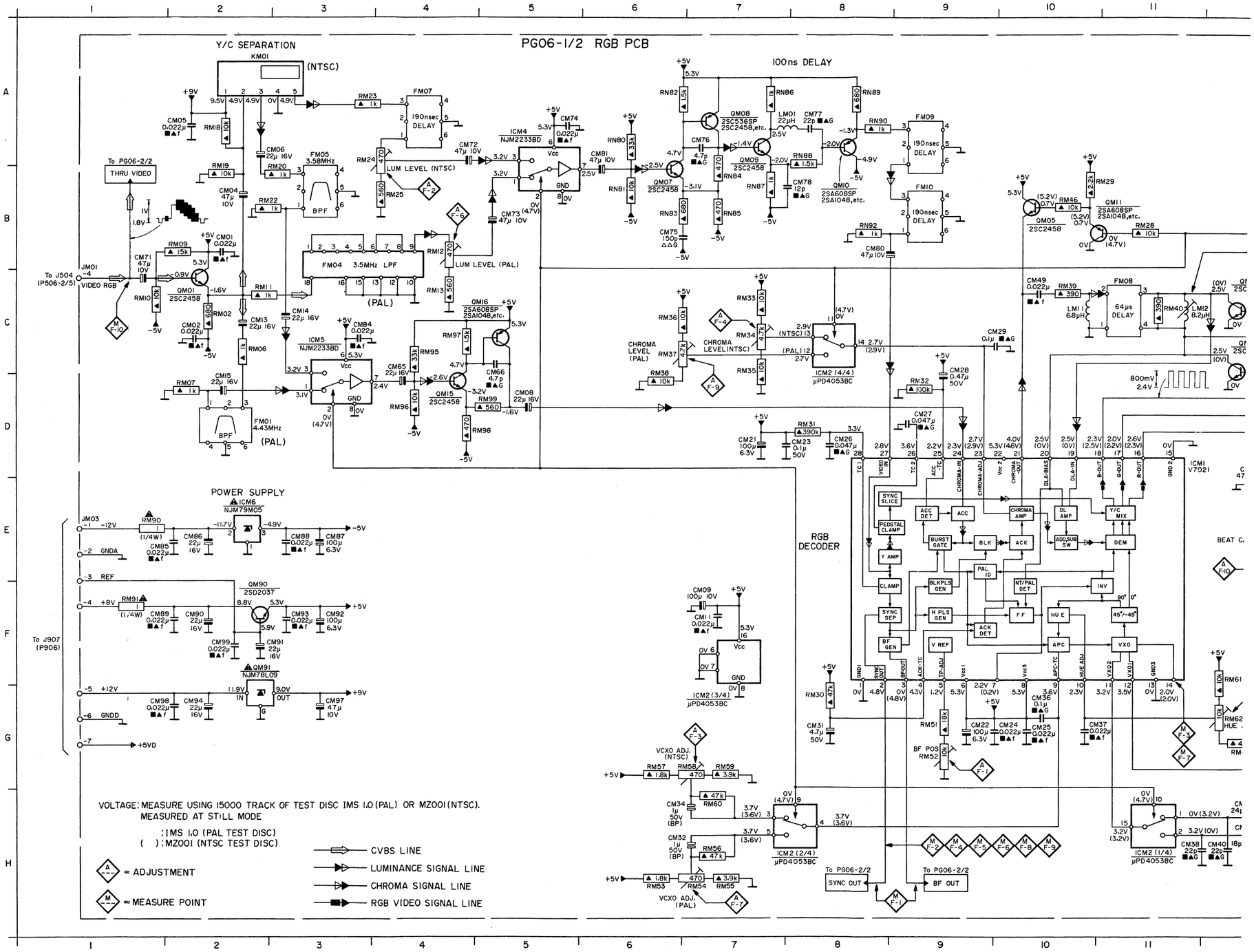


C439 H13	C449 G16	C476 B7	C486 C2	IC4D A6	IC41 B1	IC46 A3	R376 E11	R409 F15	R419 F13	R429 G15	R439 G16
C440 E13	C450 D16	C477 F6	C487 B4	IC4E B10	IC41 C1	IC47 A4	R377 H11	R410 C15	R420 B13	R430 D15	R440 D16
C441 H15	C451 F16	C478 E1	C488 D16	IC4E B11	IC41 D1	IC48 A7	R401 H10	R411 F15	R421 H13	R431 H15	R441 G17
C442 E15	C452 C16	C479 A5	C489 G16	IC4F F4	IC41 E1	IC49 A7	R402 E10	R412 C15	R422 E13	R432 D15	R442 D17
C443 G15	C453 G17	C480 A12	C490 C16	IC4F F6	IC42 C2	L401 G9	R403 H14	R413 F15	R423 H13	R433 F16	R443 G9
C444 D15	C454 D17	C481 B9	C491 F16	IC4G B6	IC42 D2	L402 D9	R404 E14	R414 B15	R424 E13	R434 C16	R444 D9
C445 F15	C470 B7	C482 B8	IC4A A8	IC4H F12	IC43 B5	L403 F13	R405 H11	R415 F14	R425 H12	R435 G17	
C446 C15	C471 B10	C483 B3	IC4B A9	IC4J C12	IC43 E4	L404 B16	R406 E11	R416 B14	R426 E12	R436 C17	
C447 G15	C472 B2	C484 B3	IC4C E1	IC4K G16	IC44 A1	L405 H16	R407 F11	R417 F13	R427 H14	R437 G16	
C448 D15	C473 B4	C485 D1	IC4C F2	IC4L D16	IC45 A2	L406 E16	R408 C11	R418 C13	R428 E14	R438 D16	



I. PG06 RGB SCHEMATIC DIAGRAMS

CG51 E12 CG52 E12 CG53 E13 CG55 D12 CG56 E12 CM01 B2 CM02 C2 CM04 B2 CM05 A2 CM06 A2 CM08 D5 CM09 F7 CM11 F7 CM13 C2 CM14 C3 CM15 D2 CM21 D7 CM22 D9 CM23 D8 CM24 G10 CM25 G10 CM26 D8 CM27 D9 CM28 C9 CM29 C9 CM31 G8 CM32 H6 CM34 H6 CM36 G10 CM37 G10 CM38 H11 CM39 H12 CM40 H12 CM42 H12 CM49 C10 CM50 C13 CM65 D4 CM66 C5 CM71 B1 CM72 A2 CM73 B5 CM74 A5 CM75 B6 CM76 A7 CM77 A8 CM80 B8 CM81 A6 CM84 C3 CM85 E1 CM86 E2 CM87 E5 CM88 E3 CM89 F1 CM90 F2 CM91 F3 CM92 F3 CM93 F3 CM94 G2 CM97 G3 CM98 G1 CM99 F2 FM01 D2 FM04 B3 FM05 A3 FM07 A4 FM08 C11 FM09 A9 FM10 B9 ICM1 D11 ICM2 C8 ICM2 G7 ICM2 H8 ICM2 H11 ICM4 A5 ICM5 C3 ICM6 E2 KM01 A2 LM01 A7 LM11 C10 LM12 C11 QG51 E13 QM01 C2 QM03 C12 QM04 C12 QM05 B10 QM07 B6 QM08 A7 QM09 A7 QM10 B8 QM11 B11 QM15 D4 QM16 C5 QM90 F2 QM91 F2 RG51 E13 RG52 F13 RG53 F12 RG54 E12 RM02 C2 RM06 C2 RM07 D2 RM09 B2 RM10 C1 RM11 C2 RM12 B4 RM13 C4 RM18 A2 RM19 B2 RM20 B3 RM22 B2 RM23 A3 RM24 A3 RM25 B4 RM28 B11 RM29 B10 RM30 G8 RM31 D8 RM32 D9 RM33 C7 RM34 C7 RM35 C6 RM36 C6 RM37 C6 RM38 D6 RM39 C10 RM40 C11 RM41 C13 RM42 C13 RM43 C13 RM44 C12 RM45 C12 RM46 B10 RM51 G9 RM52 G9 RM53 H6 RM54 H7 RM55 H7 RM56 H7 RM57 G6 RM58 G7 RM59 G7 RM60 H7 RM61 F12 RM62 G12 RM63 G12 RM64 H13 RM82 B6 RM83 A6 RM84 B6 RM85 B7 RM86 A7 RM87 B7 RM88 A8 RM89 A8 RM90 A8 RM91 A6 RM92 B8 RM95 C4 RM96 D4 RM97 C4 RM98 D5 RM99 D5 RN80 A6 RN81 A6 RN82 B6 RN83 A6 RN84 B6 RN85 B7 RN86 A7 RN87 B7 RN88 A8 RN89 A8 RN90 A8 RN92 B8 XM01 H12 XM02 H12



CG51 E12
CG52 E12
CG53 E13
CG55 D12
CG56 E12
CM01 B2
CM02 C2
CM04 B2
CM05 A2
CM06 A2
CM08 D5
CM09 F7
CM11 F7
CM13 C2
CM14 C3
CM15 D2
CM21 D7
CM23 G9
CM23 D8
CM24 G10
CM25 G10
CM26 D8
CM27 D9
CM28 C9
CM29 C9
CM31 G8
CM32 H6
CM34 H6
CM36 G10
CM37 G10
CM38 H11
CM39 H12
CM40 H12
CM42 H12
CM49 C10
CM50 C13
CM65 D4
CM66 C5
CM71 B1
CM72 A2
CM73 B5
CM74 A5
CM75 B6
CM76 A7
CM77 A8
CM78 B8
CM80 B8
CM81 A6
CM84 C3
CM85 E1
CM86 E2
CM87 E3
CM88 E3
CM89 F1
CM90 F2
CM91 F3
CM92 F3
CM93 F3
CM94 G2
CM97 G3
CM98 G1
CM99 F2
FM01 D2
FM04 B3
FM05 A3
FM07 A4
FM08 C11
FM09 A9
FM10 B9
ICM1 D11
ICM2 C8
ICM2 G7
ICM2 H8
ICM2 H11
ICM4 A5
ICM5 C3
ICM6 E2
KM01 A2
LM01 A7
LM11 C10
LM12 C11
QG51 E13
QM01 C2
QM05 B10
QM07 B6
QM08 A7
QM09 A7
QM10 B8
QM11 B11
QM15 D4
QM16 C5
QM90 F2
QM91 F2
RG51 E13
RG52 F13
RG53 F12
RG54 E12
RM02 C2
RM06 C2
RM07 D2
RM09 B2
RM10 C1
RM11 C2
RM12 B4
RM13 C4
RM18 A2
RM19 B2
RM20 B3
RM22 B2
RM23 A3
RM24 A3
RM25 B4
RM27 B11
RM28 B10
RM29 C10
RM30 G8
RM31 D8
RM32 D9
RM33 C7
RM34 C7
RM35 C7
RM36 C6
RM37 C6
RM38 D6
RM39 C10
RM40 C11
RM41 C13
RM42 C13
RM43 C13
RM44 C12
RM45 G12
RM46 B10
RM51 F12
RM52 G9
RM53 H6
RM54 H7
RM55 H7
RM56 H7
RM57 G6
RM58 G7
RM59 G7
RM60 H7
RM61 F12
RM64 H13
RM90 E1
RM91 F1
RN80 A6
RN81 A6
RN82 B6
RN83 B7
RN84 B7
RN85 B7
RN86 A7
RN87 B7
RN88 A8
RN89 A8
RN90 A8
RN92 A8
RN93 A6
RN94 B6
RN95 B7
RN96 C4
RN97 C4
RN98 C4
RN99 D5
RN80 A6
RN81 A6
RN82 B6
XM01 H12
XM02 H12

1 2 3 4 5 6 7 8 9 10 11 12 13

A B C D E F G H

PG06-1/2 RGB PCB

Y/C SEPARATION

KM01 (NTSC)

9.5V 4.9V 4.9V 0V 4.9V

+9V

CM05 0.022µ ■▲f
RM18 ▲ 10k
CM06 22µ 16V
RM19 ▲ 10k
RM20 ▲ 1k
CM04 47µ 10V
RM22 ▲ 1k
FM05 3.58MHz BPF
RM24 470
RM25 560
LUM LEVEL (NTSC)
A F-2
CM72 47µ 10V
3.2V
ICM4 NJM2233BD
Vcc GND
5.3V
CM74 0.022µ ■▲f
0V 8
CM73 47µ 10V (4.7V)
A F-6
LUM LEVEL (PAL)
RM12 ▲ 10k
RM13 560
FM04 3.5MHz LPF
(PAL)
To PG06-2/2 THRU VIDEO
M F-10
JM01 -4 VIDEO RGB
CM71 47µ 10V
QM01 2SC2458
RM09 ▲ 15k
CM01 0.022µ ■▲f
RM10 ▲ 10k
RM11 ▲ 1k
RM02 680
CM02 0.022µ ■▲f
CM13 22µ 16V
RM06
CM14 22µ 16V
ICM5 NJM2233BD
CM84 0.022µ ■▲f
5.3V
RM07 ▲ 1k
CM15 22µ 16V
FM01 4.43MHz BPF
(PAL)
RM95 33k
CM65 22µ 16V
RM96 10k
QM15 2SC2458
RM97 ▲ 1.5k
CM66 4.7p ■▲G
RM99 560
RM98 470
CM08 22µ 16V
QM16 2SA608SP 2SA1048,etc.
RM16 ▲ 10k
RM17 ▲ 1k
RM33 ▲ 10k
RM34 4.7k
RM35 ▲ 10k
RM36 ▲ 10k
RM37 4.7k
RM38 ▲ 10k
CHROMA LEVEL (PAL)
CHROMA LEVEL (NTSC)
A F-4
A F-9
2.9V (NTSC) 13
(PAL) 12 2.7V
14 2.7V (2.9V)
ICM2 (4/4) µPD4053BC
CM29 0.1µ ■▲G
RM32 ▲ 100k
CM28 0.47µ 50V
CM27 0.047µ ■▲G
RM31 ▲ 390k
CM21 100µ 6.3V
CM23 0.1µ 50V
CM26 0.047µ ■▲G
3.3V
2.8V 3.6V 2.2V 2.3V 2.7V 5.3V 4.0V 2.5V 2.5V 2.3V 2.0V 2.6V 0V
27 26 25 24 23 22 21 20 19 18 17 16 15
VIDEO IN TC-1 TC-2 ACC TC CHROMA-IN CHROMA-ADJ CHROMA-OUT Vcc-2 DLA-BIAS DLA-IN B-OUT G-OUT R-OUT GND-2
ICM1 V7021
SYNC SLICE
PEDSTAL CLAMP
ACC DET
ACC
CHROMA AMP
DL AMP
Y/C MIX
BURST GATE
BLK
ACK
ADD,SUB SW
DEM
Y AMP
CLAMP
PAL ID
BLKPLS GEN
NT/PAL DET
INV
SYNC SEP
H PLS GEN
ACK DET
FF
HU E
45°/-45°
90° 0°
BF GEN
V REF
APC
VXO
GND1 SYNC OUT BFOUT ADJC-TC TP-ADJ Vcc1 Vcc3 APC-TC HUE ADJ VXO2 VXO1 GND3
0V 4.8V 0V (4.8V) 4.3V 1.2V 5.3V 2.2V 7 (0.2V) 5.3V 3.6V 2.3V 3.2V 3.5V 0V 2.0V (2.0V)
RM30 ▲ 47k
CM31 4.7µ 50V
RM51 ▲ 18k
BF POS RM52 ▲ 10k
A F-1
CM22 100µ 6.3V
CM24 0.022µ ■▲f
CM36 0.1µ ■▲G
CM25 0.022µ ■▲f
CM37 0.022µ ■▲f
M F-3
M F-7
RM61 ▲ 10k
RM62 HUE ADJ.(NTSC) ▲ 10k
A F-5
RM63 ▲ 4.7k
RM64 ▲ 15k
CM42 24p ■▲G
XM01 4.43MHz
CM39 18p ■▲G
XM02 3.58MHz
CM38 22p ■▲G
CM40 22p ■▲G
ICM2 (1/4) µPD4053BC
OV (3.2V)
3.2V (0V)
15 3.2V (3.2V)
OV (4.7V) 10
To PG06-2/2 B-OUT G-OUT R-OUT
To PG06-2/2 N/F
CM49 0.022µ ■▲f
RM39 ▲ 390
FM08 64µs DELAY
LM11 6.8µH
LM12 8.2µH
RM40 ▲ 390
QM04 2SC2458
RM45 ▲ 47k
QM03 2SC2458
RM44 ▲ 47k
RM41 ▲ 2.7k
RM42 470
CM50 RM43 0.1µ ■▲f ▲ 2.2k
IH DELAY (PAL)
A F-8
800mV 2.4V
CG55 47µ 50V
CG56 0.022µ ■▲f
CG51 2p ▲▲G
JG01 -1 +5V
-2 GND
RG51 ▲ 2.2k
-3 OUT
CG53 ▲ 6.8k
BEAT CANCEL RG54 100k
4.5V 2.3V CBI -4
1.8V QG51 2SC536SP 2SC2458,etc.
-5
CG52 0.022µ ▲▲G
RG52 ▲ 5.6k
RG53 ▲ 2.7k
GND -6
PHASE SHIFT
To J507 (P506-3/5)
To J506 (P506-2/5)

100ns DELAY

+5V 5.3V
RN82 ▲ 1.5k
RN86 ▲ 1k
RN89 ▲ 680
QM08 2SC536SP 2SC2458,etc.
LM01 22µH
CM77 22p ■▲G
-1.3V
RN90 ▲ 1k
FM09 190nsec DELAY
CM76 4.7p ■▲G
-1.4V
2.5V
QM09 2SC2458
-2.0V
RN88 ▲ 1.5k
-4.9V
QM10 2SA608SP 2SA1048,etc.
RN84
RN87 ▲ 1k
CM78 12p ■▲G
-5V
RN92 ▲ 1k
FM10 190nsec DELAY
CM80 47µ 10V
RN80 ▲ 33k
RN81 ▲ 10k
2.5V
4.7V
QM07 2SC2458
-3.1V
RN83 680
CM75 150p ▲▲G
RN85 ▲ 470

POWER SUPPLY

ICM6 NJM79M05
JM03 -1 -12V
RM90 (1/4W)
-11.7V
-4.9V
-5V
CM86 22µ 16V
CM85 0.022µ ■▲f
CM88 0.022µ ■▲f
CM87 100µ 6.3V
-2 GNDA
-3 REF
-4 +8V
RM91 (1/4W)
QM90 2SD2037
8.8V
5.3V
+5V
CM89 0.022µ ■▲f
CM90 22µ 16V
CM93 0.022µ ■▲f
CM92 100µ 6.3V
5.9V
CM99 0.022µ ■▲f
CM91 22µ 16V
QM91 NJM78L09
-5 +12V
11.9V
9.0V
+9V
CM98 0.022µ ■▲f
CM94 22µ 16V
1N
OUT
CM97 47µ 10V
-6 GNDD
-7 +5VD

RGB DECODER

SYNC SLICE
PEDSTAL CLAMP
ACC DET
ACC
CHROMA AMP
DL AMP
Y/C MIX
BURST GATE
BLK
ACK
ADD,SUB SW
DEM
Y AMP
CLAMP
PAL ID
BLKPLS GEN
NT/PAL DET
INV
SYNC SEP
H PLS GEN
ACK DET
FF
HU E
45°/-45°
90° 0°
BF GEN
V REF
APC
VXO

CM09 100µ 10V
CM11 0.022µ ■▲f
5.3V 16
Vcc
0V 6
0V 7
GND
0V 8
ICM2 (3/4) µPD4053BC

VCXO ADJ. (NTSC)
A F-3
+5V
RM57 ▲ 1.8k
RM58 470
RM59 ▲ 3.9k
▲ 47k RM60
CM34 1µ 50V (BP)
3.7V (3.6V)
CM32 1µ 50V (BP)
RM56 ▲ 47k
RM53 ▲ 1.8k
RM54 470
RM55 ▲ 3.9k
VCXO ADJ. (PAL)
A F-7
0V (4.7V) 9
3.7V (3.6V) 3
4
5
ICM2 (2/4) µPD4053BC
M F-2 M F-4 M F-5 M F-6 M F-8 M F-9
To PG06-2/2 SYNC OUT
M F-1
To PG06-2/2 BF OUT

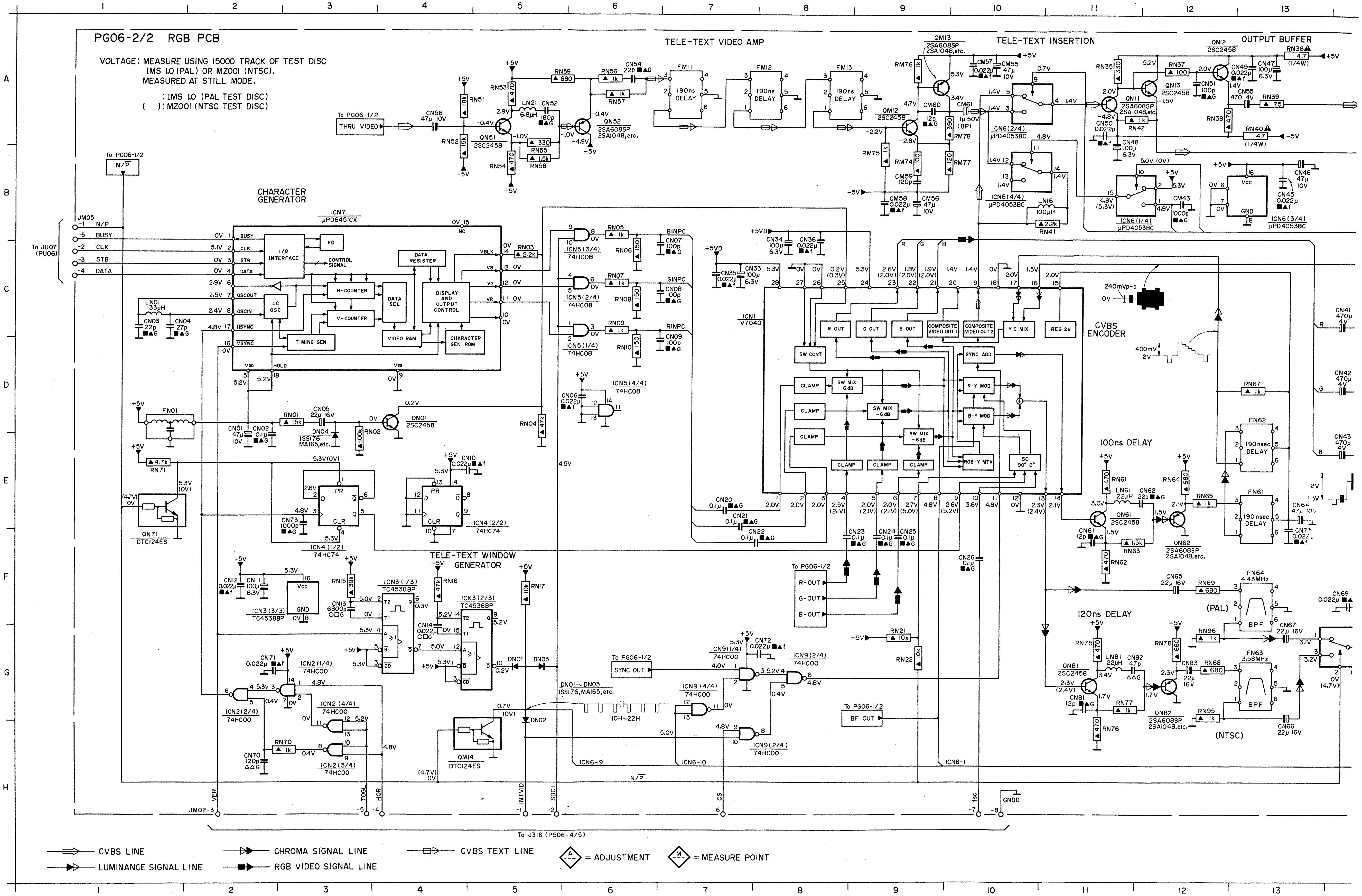
VOLTAGE: MEASURE USING 15000 TRACK OF TEST DISC IMS 1.0 (PAL) OR MZ001 (NTSC).
MEASURED AT STILL MODE
: IMS 1.0 (PAL TEST DISC)
( ): MZ001 (NTSC TEST DISC)

A --- = ADJUSTMENT
M --- = MEASURE POINT

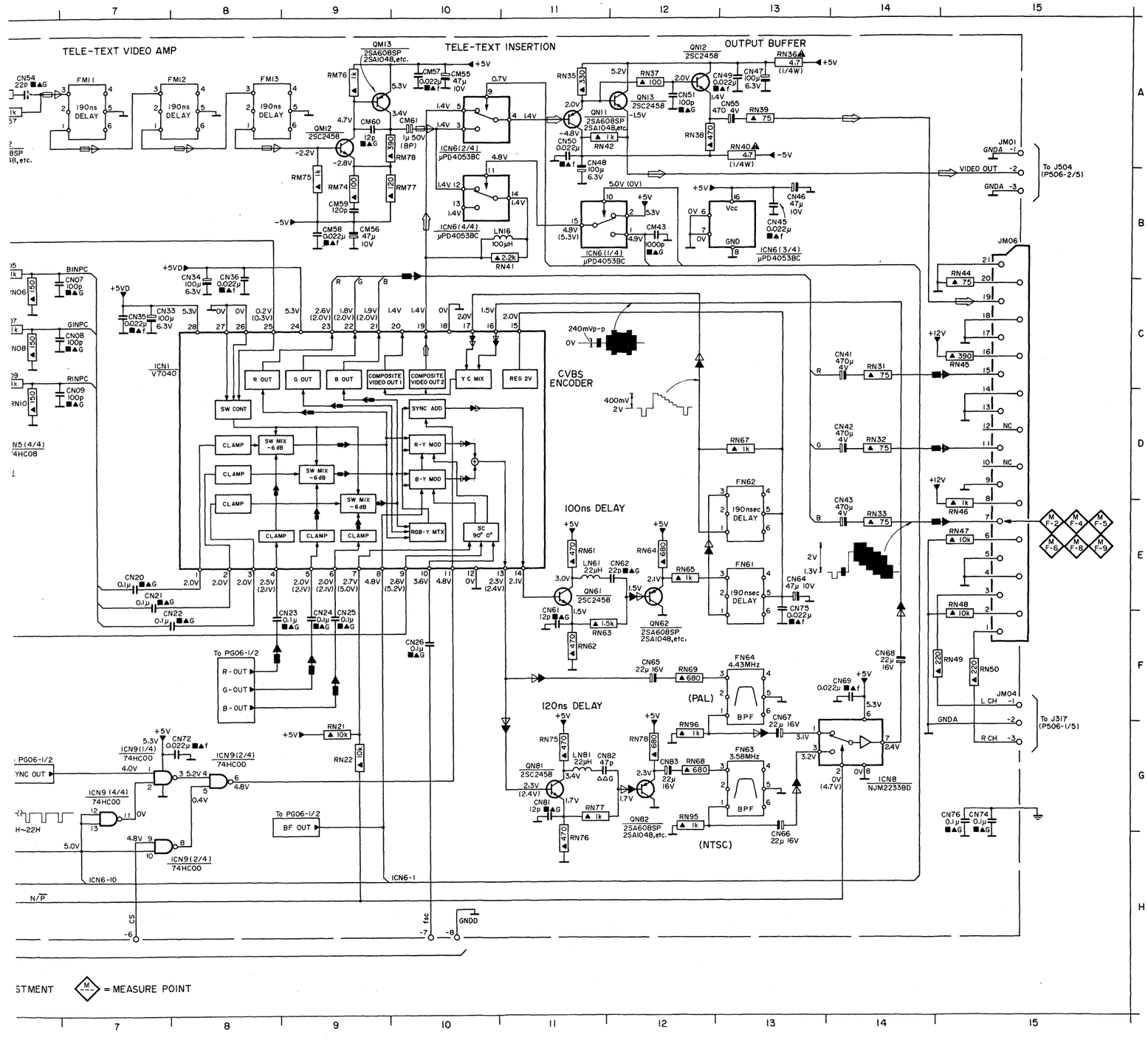
CVBS LINE
LUMINANCE SIGNAL LINE
CHROMA SIGNAL LINE
RGB VIDEO SIGNAL LINE

CS 44 322

CM43 B12	CN03 C1	CN13 F3	CN33 C7	CN48 A11	CN64 E13	CN74 G15	FM11 A7	ICN2 G3	ICN6 A10	LN16 B11	QN13 A12	RM76 A9	RN08 C6	RN33 E14	RN45 C15	RN55 B5	RN67 D13	RN96 G12
CM55 A10	CN04 C1	CN14 G4	CN34 B8	CN49 A13	CN65 F12	CN75 E13	FM12 A8	ICN2 H3	ICN6 B10	LN21 A5	QN51 A5	RM77 B10	RN09 C6	RN35 A11	RN46 E15	RN56 A6	RN68 G12	
CM56 B9	CN05 D3	CN20 E7	CN35 C7	CN50 A11	CN66 H13	CN76 G15	FM13 A8	ICN3 F2	ICN6 B11	LN61 E11	QN52 A6	RM78 A10	RN10 D6	RN36 A13	RN47 E15	RN57 A6	RN69 F12	
CM57 A10	CN06 D6	CN21 E7	CN36 B8	CN51 A12	CN67 G13	CN81 G11	FN01 D1	ICN3 F4	ICN6 B13	LN81 G11	QN61 E11	RN01 D3	RN15 F3	RN37 A12	RN48 E15	RN58 B5	RN70 H3	
CM58 B9	CN07 C7	CN22 F8	CN41 C14	CN52 A5	CN68 F14	CN82 G11	FN61 E13	ICN3 F5	ICN7 B3	QM12 A9	QN62 F12	RN02 D3	RN16 F4	RN38 A12	RN49 F15	RN59 A5	RN71 E1	
CM59 B9	CN08 C7	CN23 F9	CN42 D14	CN54 A6	CN69 F14	CN83 G12	FN62 D13	ICN4 F3	ICN8 G14	QM13 A9	QN71 F1	RN03 C5	RN17 F5	RN39 A13	RN50 F15	RN61 E11	RN75 G11	
CM60 A9	CN09 D7	CN24 F9	CN43 E14	CN55 A13	CN70 H2	DN01 G5	FN63 G13	ICN4 E5	ICN9 G7	QM14 H4	QN81 G11	RN04 D5	RN21 G9	RN40 A13	RN51 A5	RN62 F11	RN76 H11	
CM61 A10	CN10 E4	CN25 F9	CN45 B13	CN56 A4	CN71 G2	DN02 G5	FN64 F13	ICN5 B6	ICN9 G8	QN01 D4	QN82 G12	RN05 B6	RN22 G9	RN41 B11	RN52 A4	RN63 F11	RN77 G11	
CN01 D2	CN11 F2	CN26 F10	CN46 B13	CN61 F11	CN72 G8	DN03 G5	ICN1 C7	ICN5 C6	ICN9 H8	QN11 A11	RM74 B9	RN06 C6	RN31 C14	RN42 A11	RN53 A5	RN64 E12	RN78 G12	
CN02 D2	CN12 F2		CN47 A13	CN62 E12	CN73 E3	DN04 D3	ICN2 G2	ICN5 D6	LN01 C1	QN12 A12	RM75 B9	RN07 C6	RN32 D14	RN44 B15	RN54 B5	RN65 E12	RN95 G12	



E13	CN74 G15	FM11 A7	ICN2 G3	ICN6 A10	LN16 B11	QN13 A12	RM76 A9	RN08 C6	RN33 E14	RN45 C15	RN55 B5	RN67 D13	RN96 G12						
H12	CN75 E13	FM12 A8	ICN2 H3	ICN6 B10	LN21 A5	QN51 A6	RM77 B10	RN09 C6	RN35 A11	RN46 E15	RN56 A6	RN68 G12							
H13	CN76 G15	FM13 A8	ICN5 F2	ICN6 B11	LN61 E11	QN52 A6	RM78 A10	RN10 D6	RN36 A13	RN47 E15	RN57 A6	RN69 F12							
H13	CN81 G11	FN01 D1	ICN3 F4	ICN6 B13	LN81 G11	QN61 E11	RN01 D3	RN15 F3	RN37 A12	RN48 E15	RN58 B5	RN70 H3							
H14	CN82 G11	FN61 E13	ICN3 F5	ICN7 B3	QM12 A9	QN62 F12	RN02 D3	RN36 A12	RN49 F15	RN59 A5	RN71 E1								
H14	CN83 G12	FN62 D13	ICN4 F3	ICN8 G14	QM13 A9	QN71 F1	RN03 C5	RN17 F5	RN39 A13	RN50 F15	RN61 E11	RN75 G11							
H42	DN01 G5	FN63 G13	ICN4 E5	ICN9 G7	QM14 H4	QN81 G11	RN04 D5	RN21 G9	RN40 A13	RN51 A5	RN62 F11	RN76 H11							
H32	DN02 G5	FN64 F13	ICN5 B6	ICN9 G8	QN01 D4	QN82 G12	RN05 B6	RN22 G9	RN41 B11	RN52 A4	RN63 F11	RN77 G11							
H38	DN03 G5	ICN1 C7	ICN5 C6	ICN9 H8	QN11 A11	RM74 B9	RN06 C6	RN31 C14	RN42 A11	RN53 A5	RN64 E12	RN78 G12							
H33	DN04 D3	ICN2 G2	ICN5 D6	LN01 C1	QN12 A12	RM75 B9	RN07 C6	RN32 D14	RN44 B15	RN54 B5	RN65 E12	RN95 G12							

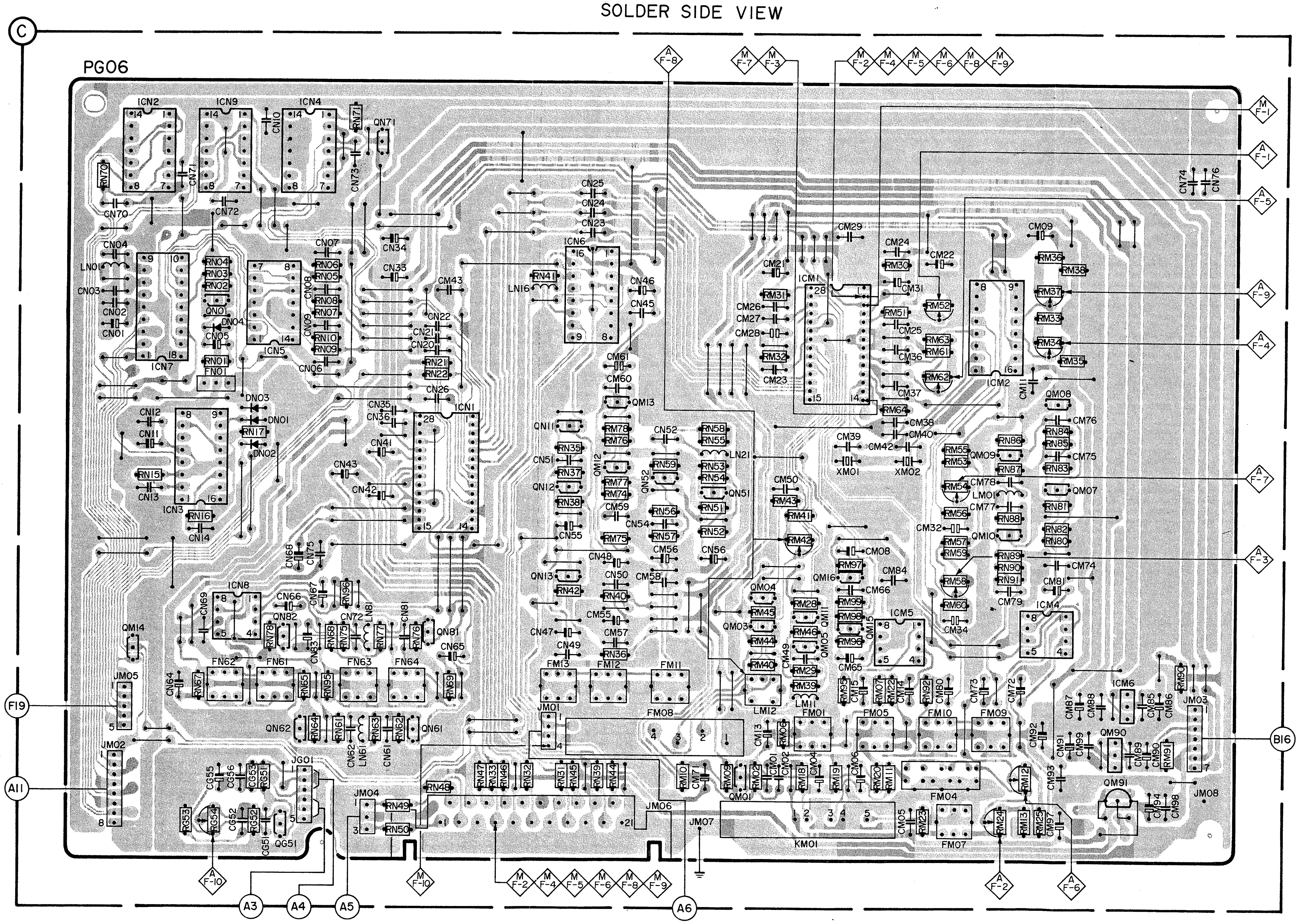


ST MENT = MEASURE POINT

J. PG06 RGB PCB

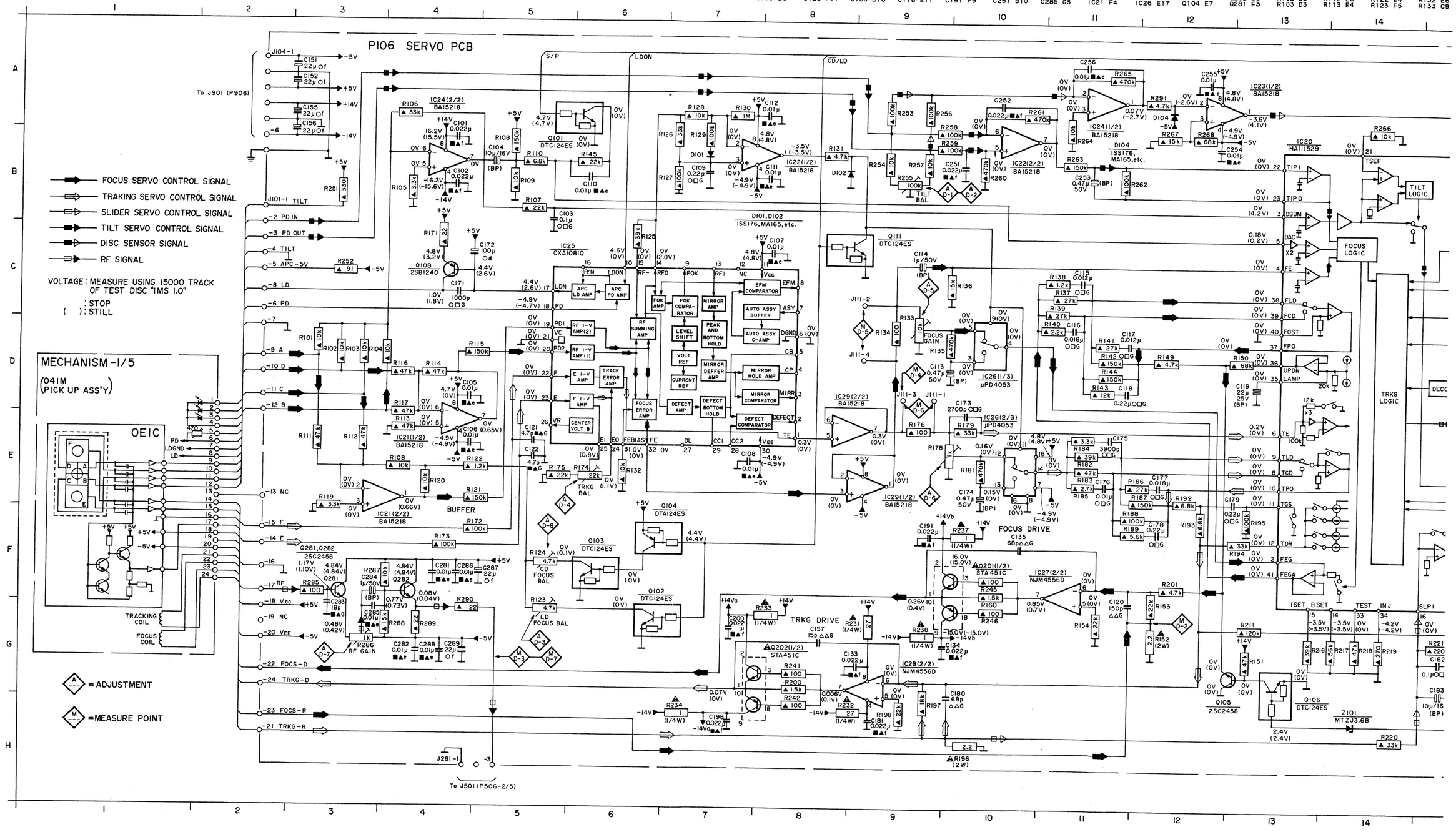
R	RN70 RN01~RN04 RN05~RN10 RN71 RN21 RN22 RN41 RM31 RM32 RM30 RM51 RM52 RM33~RM38	R
R	RN15~RN17 RN96 RN35 RN37 RN38 RM74~RM78 RN51~RN59 RM41~RM43 RM61~RM64 RM53~RM60 RN86~RN91 RN80~RN85	R
R	RN67 RN78 RN68 RN75~RN77 RN69 RN42 RN40 RN36 RM40 RM44~RM46 RM28 RM29 RM39 RM95~RM99 RM90	R
R	RG51~RG54 RN61~RN65 RN95 RN48~RN50 RN44~RN47 RN31~RN33 RN39 RM10 RM09 RM02 RM06 RM18~RM20 RM07 RM22 RM11 RN92 RM23~RM25 RM12 RM13 RM91	R
C	CN70~CN72 CN10 CN73 CN34 CN33 CM43 CN23~CN25 CN46 CN45 CM26~CM28 CM21 CM23 CM29 CM24 CM31 CM25 CM09 CN74 CN76	C
C	CN01~CN04 CN11~CN14 CN05 CN06~CN09 CN35 CN36 CN20~CN22 CN26 CN51 CN55 CM59~CM61 CN52 CN54 CN56 CM50 CM36~CM40 CM42 CM32 CM78 CM77 CM11 RM74~RM76	C
C	CN64 CN69 CN66~CN68 CN75 CN41~CN43 CN47 CN48 CM58 CM56 CM13 CM49 CM65 CM66 CM08 CM84 CM34 CM79 CM81	C
C	CG55 CG56 CG51~CG53 CN83 CN72 CN62 CN61 CN81 CN65 CN49 CN50 CM55 CM57 CM71 CM01 CM02 CM04~CM06 CM15 CM14 CM80 CM73 CM72 CM85~CM94 CM97~CM99	C
Q-IC	ICN2 ICN7 QN01 ICN9 ICN5 ICN4 QN71 ICN6 ICM1 ICM2	Q-IC
Q-IC	ICN3 QN82 QN81 ICN1 QN11~QN13 QM12 QM13 QN52 QN51 QM16 QM09 QM10 QM08 QM07	Q-IC
Q-IC	QM14 ICN8 QN62 QG51 QN61 QM01 QM03~QM05 QM11 QM15 ICM5 ICM4 QM90 QM91 ICM6	Q-IC
D-Z	DN04 DN01~DN03	D-Z
F	FN01 FN61~FN64 FM11~FM13 FM08 FM01 FM05 FM10 FM04 FM07 FM09	F
K-L-X	LN01 LN61 LN81 LN16 LN21 LM12 LM11 KM01 XM01 XM02 LM01	K-L-X

SOLDER SIDE VIEW



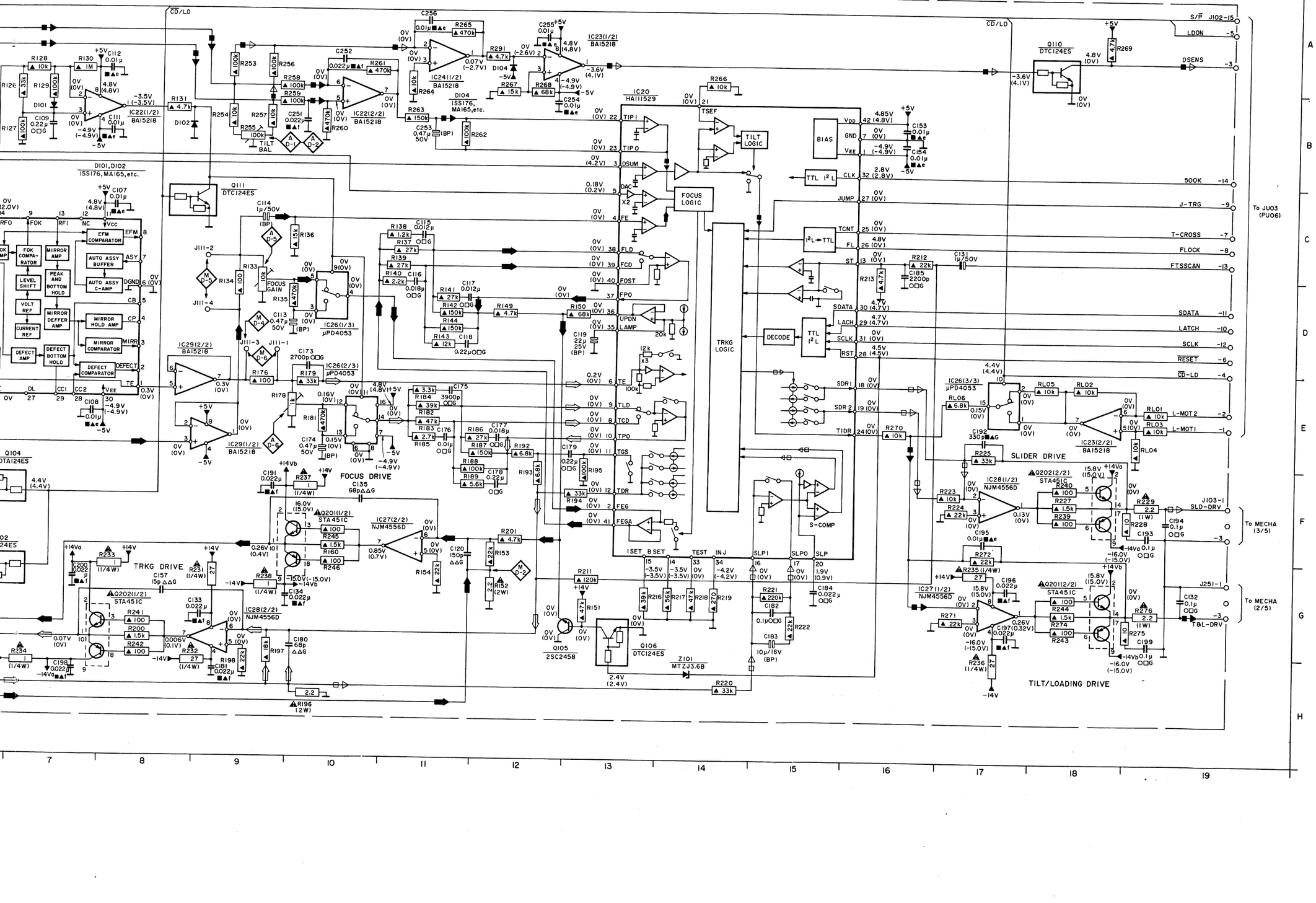
K. PI06 SERVO/MECHANISM PICK-UP ASS'Y SCHEMATIC DIAGRAM

C101 A4 C102 B4 C103 B5 C104 B5 C105 D4 C106 E4 C107 C6 C108 E7 C109 B7 C110 B6 C111 B8 C112 A8 C113 D9 C114 C9 C115 C11 C116 D11 C117 D11 C118 D11 C119 D13 C120 F11 C121 E5 C122 E5 C131 C17 C132 G19 C133 G9 C134 G10 C135 F10 C151 A3 C152 A3 C153 B16 C154 B16 C155 A3 C156 A3 C157 G8 C171 C4 C172 C5 C173 D10 C174 E10 C175 E11 C176 E11 C177 E12 C178 E12 C179 E13 C180 G10 C181 H9 C182 G15 C183 G15 C184 G15 C185 C16 C191 F9 C192 E17 C193 F19 C194 F19 C195 F17 C196 G17 C197 G17 C198 H8 C199 G19 C200 G7 C251 B10 C252 A10 C253 B11 C254 B12 C255 A12 C256 A11 C281 F4 C282 G4 C283 G3 C284 G3 C285 G5 C286 F4 C287 F5 C288 G4 C289 G4 D101 B7 D102 B8 D104 A12 IC20 B13 IC21 E4 IC21 F4 IC22 B8 IC22 B10 IC23 A13 IC23 E18 IC24 A4 IC24 A11 IC25 C5 IC26 D10 IC26 E10 IC26 E17 IC27 F11 IC27 G17 IC28 F17 IC28 G9 IC29 D8 IC29 E9 Q101 B5 Q102 F6 Q103 F6 Q104 E7 Q105 G12 Q106 G13 Q108 C4 Q110 A18 Q111 C9 Q201 F10 Q201 G18 Q202 F18 Q202 G8 Q281 F3 Q282 F4 RL01 E19 RL02 E18 RL03 E19 RL04 E19 RL05 E18 RL06 E17 R101 D3 R102 D3 R103 D3 R104 D3 R105 B4 R106 A4 R107 B5 R108 B5 R109 B5 R110 B5 R111 E3 R112 E3 R113 E4 R114 D4 R115 D4 R116 D4 R117 D4 R118 E4 R119 E3 R120 E4 R121 E4 R122 E4 R123 F5 R124 F5 R125 C6 R126 B6 R127 B6 R128 A7 R129 B7 R130 A7 R131 B8 R132 E6 R133 C9



CS 44 325

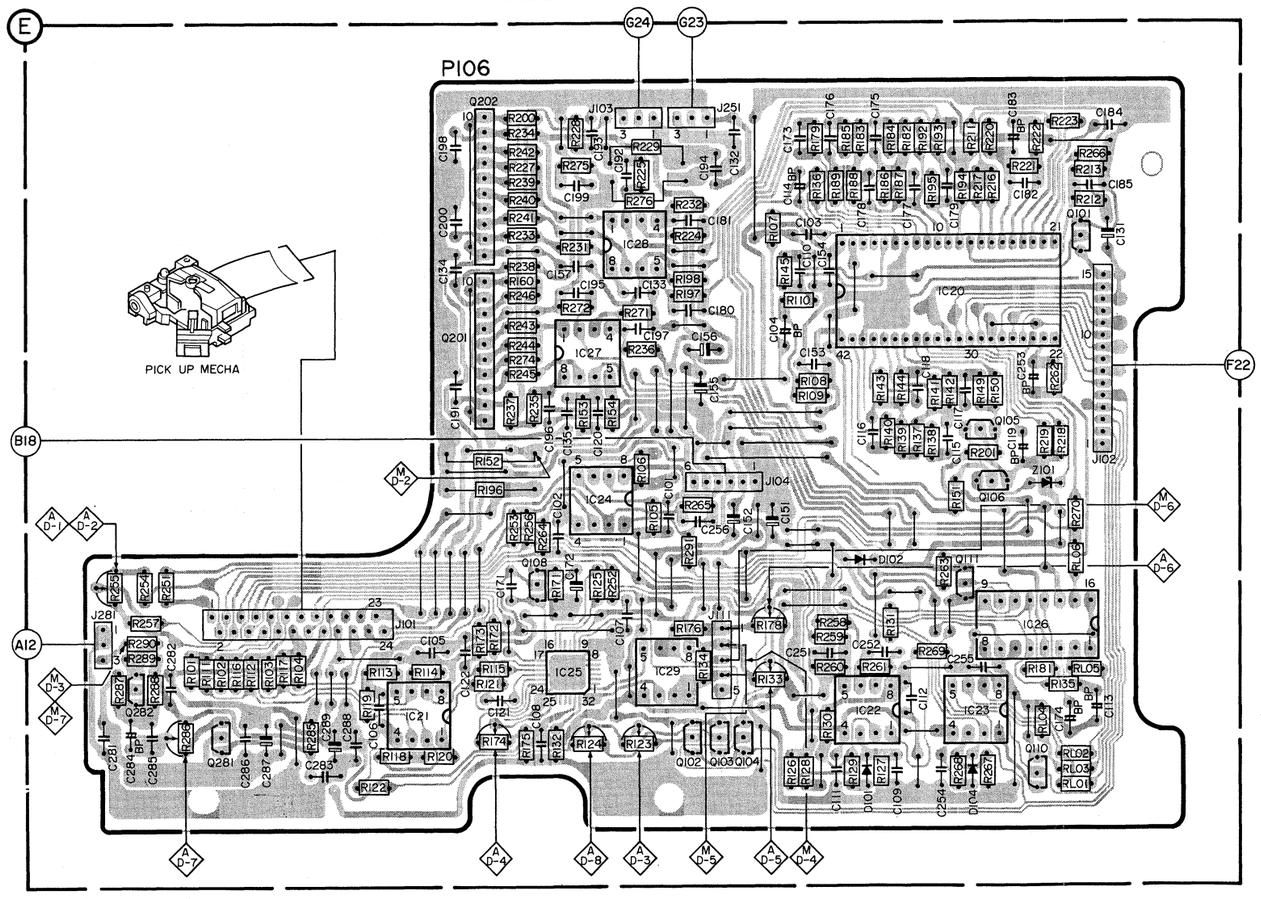
C101 A4 C102 B4 C103 B5 C104 B5 C105 D4 C106 E4 C107 C8 C108 E7 C109 B7 C110 B6
C111 B8 C112 A8 C113 D9 C114 C9 C115 C11 C116 D11 C117 D11 C118 D11 C119 D13 C120 F11
C121 E5 C122 E5 C131 C17 C132 G19 C133 G9 C134 G10 C135 F10 C151 A3 C152 A3 C153 B16
C154 B16 C155 A3 C156 A3 C157 G8 C171 C4 C172 C5 C173 D10 C174 D10 C175 E11 C176 E11
C177 E12 C178 F12 C179 E13 C180 G10 C181 H9 C182 G15 C183 G15 C184 G15 C185 C16 C191 F9
C192 E17 C193 F19 C194 F19 C195 F17 C196 G17 C197 G17 C198 H8 C199 G19 C200 G7 C251 B10
C252 A10 C253 B11 C254 B12 C255 A12 C256 A11 C261 F4 C282 G4 C283 G3 C284 G3 C285 G3
C286 F4 C287 F5 C288 G4 C289 G4 D101 B7 D102 B8 D104 A12 IC20 B13 IC21 F4
IC22 B8 IC22 B10 IC23 A13 IC23 E18 IC24 A4 IC24 A11 IC25 C5 IC26 D10 IC26 E10 IC26 E17
IC27 F11 IC27 G17 IC28 F17 IC28 G9 IC29 D8 IC29 E9 Q101 B5 Q102 F6 Q103 F6 Q104 E7
Q105 G12 Q106 G13 Q108 C4 Q110 A18 Q111 C9 Q201 F10 Q201 G18 Q202 G8 Q202 F18 Q281 F5
Q282 F4 RL01 E19 RL02 E18 RL03 E19 RL04 E19 RL05 E18 RL06 E17 R101 D3 R102 D3 R103 D3
R104 D3 R105 B4 R106 A4 R107 B5 R108 B5 R109 B5 R110 B5 R111 E3 R113 E4
R114 D4 R115 D4 R116 D4 R117 D4 R118 E4 R119 E3 R120 E4 R121 E4 R122 E4 R123 F5
R124 F5 R125 C6 R126 B6 R127 B6 R128 A7 R129 B7 R130 A7 R131 B8 R132 E6 R133 C9
R134 D9 R135 D9 R136 C10 R137 C11 R138 C11 R139 G13 R140 C11 R141 C11 R142 G12 R153 F12
R144 D11 R145 B6 R149 D12 R150 D13 R151 G13 R152 G12 R153 F12 R154 G11 R160 F10 R171 C4
R172 F4 R173 F4 R174 E6 R175 E5 R176 E9 R178 E9 R179 E10 R181 E10 R182 E11 R183 E11
R184 E11 R185 E11 R186 E12 R187 E12 R188 F11 R189 F11 R192 E12 R193 F12 R194 F13 R195 F13
R196 H10 R197 H9 R198 H9 R200 G8 R201 F12 R211 G13 R212 C16 R213 C16 R216 G13 R217 G14
R218 G14 R219 G14 R220 H14 R221 G15 R222 G15 R223 F17 R224 F17 R225 E17 R227 F18 R228 F19
R229 F19 R231 G9 R232 H8 R233 G8 R234 H7 R235 G17 R236 H17 R237 F10 R238 G9 R239 F18
R240 F18 R241 G8 R242 G8 R243 G18 R244 G18 R245 A9 R246 A9 R251 B3 R252 C3 R253 A9
R254 B9 R255 B9 R256 A9 R257 B9 R258 A9 R259 B9 R260 B10 R261 A10 R262 B11 R263 B11
R264 B11 R265 A11 R266 A14 R267 A12 R268 A12 R269 A18 R270 E16 R271 G17 R272 F17 R274 G18
R275 G19 R276 G19 R285 F3 R286 G3 R287 F3 R288 G4 R289 G4 R290 G4 R291 A12 Z101 H14



L. PI06 SERVO PCB

R	R200 R233~R235 R275 R228 R229 R225 R276 R232 R224 R179 RI82~RI89 R192~R195 R211 R220~R223 R266 R213 R227 R237~R246 R231 R272 R271 R236 R198 R197 RI07~RI10 RI45 RI36~RI44 R217 R216 R219 R262 R218 R212 R255 R257 R254 R251 RI01~ RI04 R285 RI13~RI15 RI52~RI54 RI60 R274 RI06 RI05 R291 R265 RI76 RI34 RI78 R258~R261 R201 RI49~RI51 RI81 R270 R287~R290 R286 RIII RI16 RI12 RI17 RI18~RI22 RI96 RI71~RI75 R253 R256 R264 RI32 RI23~RI25 R252 RI33 RI26~RI30 R263 R267~R269 RI35 RL01~RL06	R
C	CI98 CI34 CI57 CI99 CI92~CI97 CI81 CI80 CI32 CI73 CII0 CI03 CI75~CI79 CI82~CI85 CI31 C282 C289 C288 CI06 C200 CI91 CI35 CI20 CI33 CI56 CI55 CI04 CII4 CI53 CI54 CII5~CII9 C253 C281 C284 C285 C286 C287 C283 CI05 CI22 CI21 CI71 CI02 CI08 CI72 CI07 CI01 C256 CI52 CI51 C251 CIII C252 CI09 CII2 C254 C255 CI74 CII3	C
Q - IC	Q202 IC27 IC28 IC20 Q106 Q105 IC26 Q101 Q282 Q281 IC21 Q201 Q108 IC25 IC24 IC29 Q102~Q104 IC22 QIII IC23 QII0	Q - IC
D - Z	DI01 DI02 DI04 ZI01	D - Z

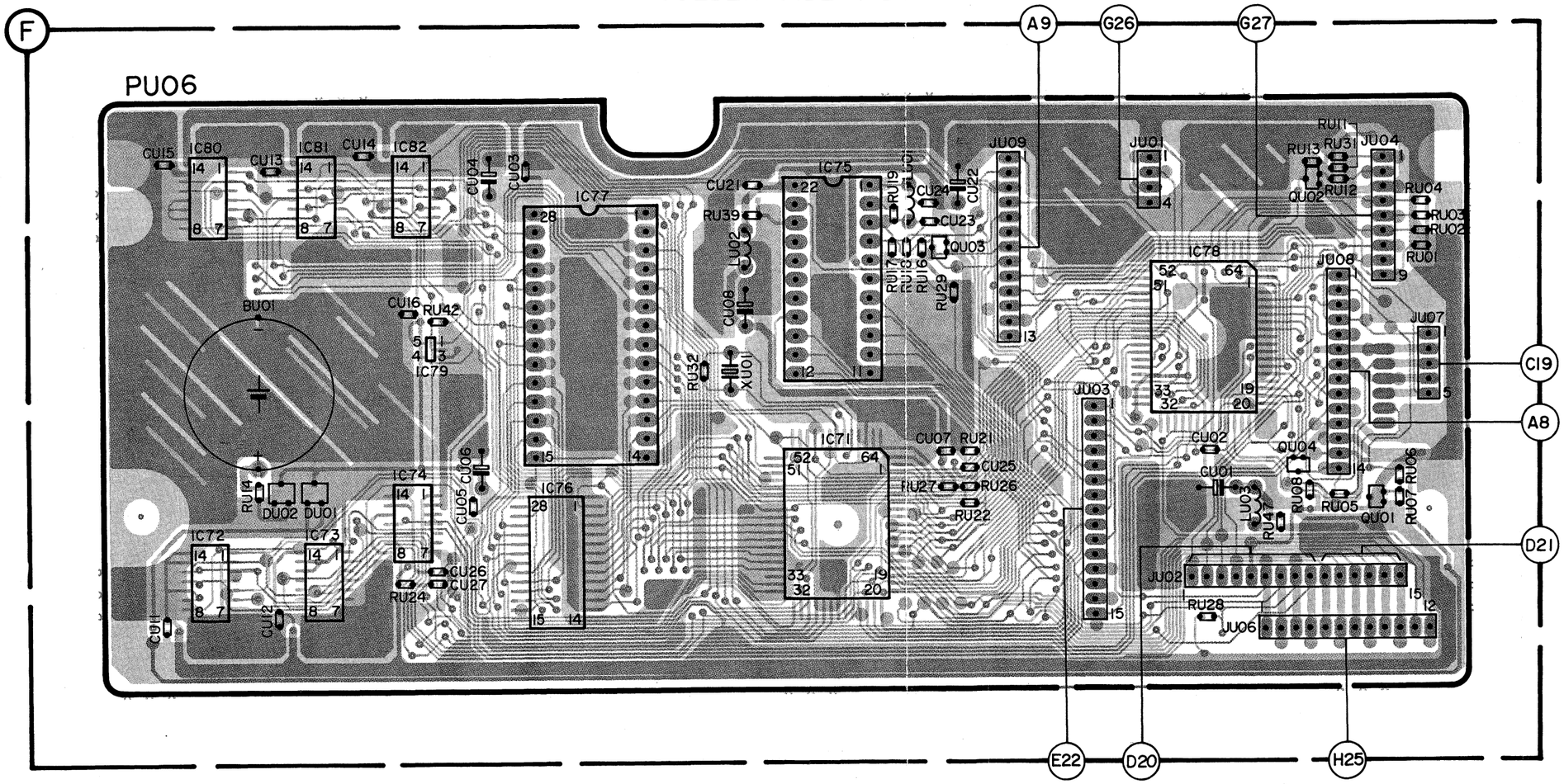
SOLDER SIDE VIEW



M. PU06 SYSTEM CONTROL PCB

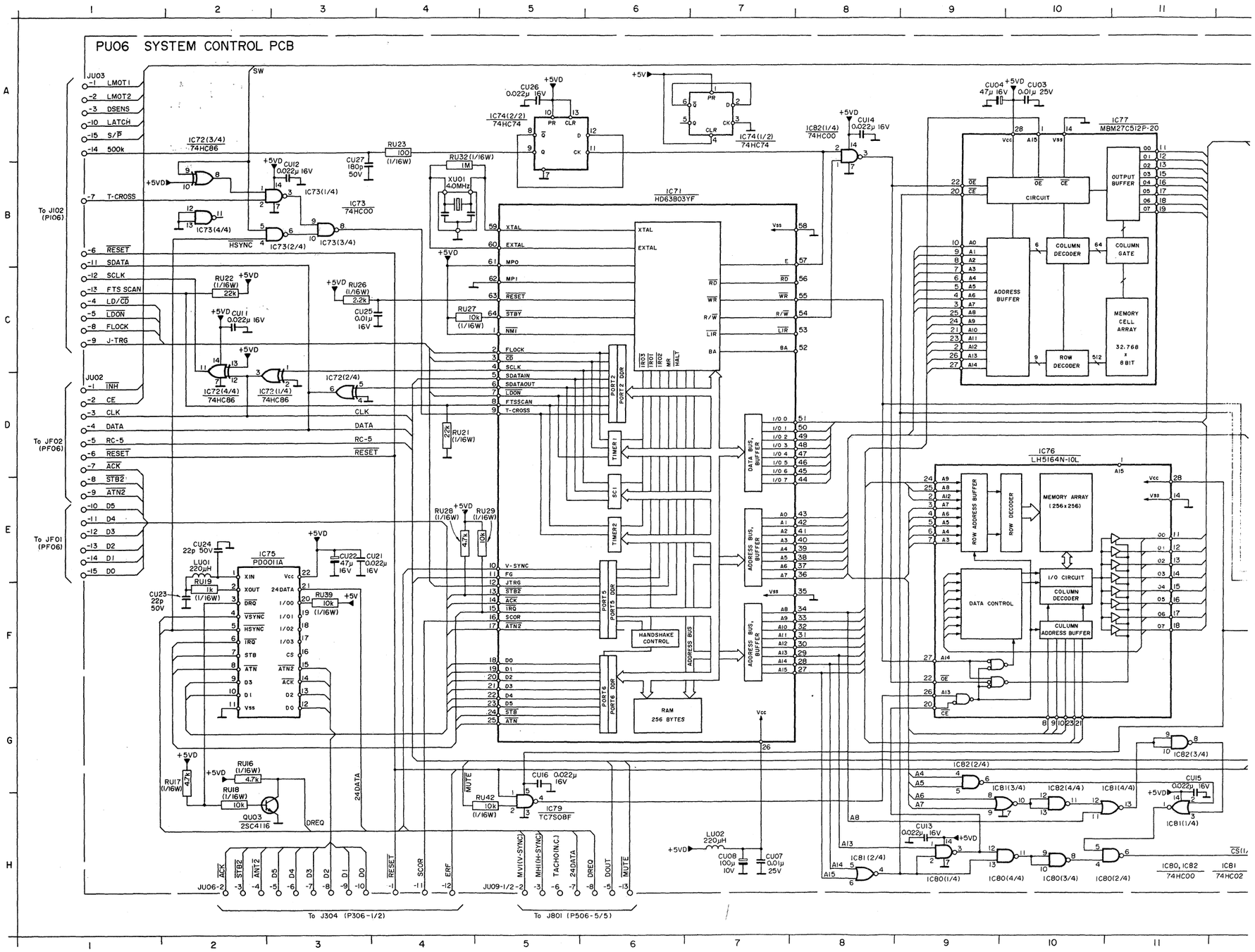
R	RU39 RU16~RU19 RU29 RU11~RU13 RU31 RU01~RU04	R
	RU14 RU24 RU42 RU32 RU27 RU21 RU22 RU26 RU28 RU47 RU08 RU05 RU06 RU07	
C	CU15 CU13 CU14 CU16 CU04 CU03 CU21 CU08 CU22~CU24	C
	CU11 CU12 CU26 CU27 CU06 CU05 CU07 CU25 CU02 CU01	
Q-IC	IC80 IC81 IC82 IC77 IC75 QU03 IC78 QU02	Q-IC
	IC72 IC73 IC74 IC79 IC76 IC71 QU04 QU01	
D	DU02 DU01	D
B-L-X	BU01 LU02 XU01 LU01 LU03	B-L-X

SOLDER SIDE VIEW



N. PU06 SYSTEM CONTROL SCHEMATIC DIAGRAM

BU01 G12 CU01 E15 CU02 E15 CU03 A10 CU04 A9 CU05 F13 CU06 F13 CU07 H7 CU08 H7 CU11 H7 CU12 B3 CU13 H9 CU14 A8 CU15 G11 CU16 G5 CU21 E3 CU22 E3 CU23 F1 CU24 E2 CU25 C3 CU26 A5 CU27 B4 DU01 F13 DU02 F12 IC71 B6 IC72 A2 IC72 B2 IC72 D3 IC73 B2 IC73 B3 IC74 A5 IC74 A7 IC75 E2 IC76 D10 IC77 A11 IC78 A13 IC79 H5 IC80 H9 IC80 H11 IC81 G10 IC81 G11 IC81 H8 IC81 H11 IC82 A8 IC82 G9 IC82 G11 IC82 H8 LU01 E2 LU02 H7 QU01 F13 QU02 G15 QU03 H2 QU04 A14 RU01 A16 RU02 A16 RU03 A16 RU04 A16 RU05 A15 RU06 F14 RU07 G14 RU08 F13 RU11 G15 RU12 G15 RU13 G14 RU14 F12 RU16 G2 RU17 G2 RU18 H2 RU19 F2 RU21 D4 RU22 C2 RU23 A4 RU26 C3 RU27 C4 RU28 E4 RU29 E5 RU31 A17 RU32 A4 RU39 F3 RU42 H5 RU47 E15 RU51 A7 RU52 H13 XU01 B4



IAGRAM

PCB

BU01 G12
CU01 E15
CU02 E15
CU03 A10
CU04 A9
CU05 F13
CU06 F13
CU07 H7
CU08 H7
CU11 H7
CU12 B3
CU13 H9
CU14 A8
CU15 G11
CU16 G5
CU21 E3
CU22 E3
CU23 F1
CU24 E2
CU25 C3
CU26 A5
CU27 B4
DU01 F13
DU02 F12
IC71 B6
IC72 A2
IC72 B2
IC73 B2
IC73 B3
IC74 A5
IC74 A7
IC75 E2
IC76 D10
IC77 A11
IC78 A13
IC79 H5
IC80 H9
IC80 H11
IC81 G10
IC81 G11
IC81 H8
IC81 H11
IC82 A8
IC82 G9
IC82 G11
IC82 H8
LU01 E2
LU02 H7
QU01 F13
QU02 G15
QU03 H2
QU04 A14
RU01 A16
RU02 A16
RU03 A16
RU04 A16
RU05 A15
RU06 F14
RU07 G14
RU08 F13
RU11 G15
RU12 G15
RU13 G14
RU14 F12
RU16 G2
RU17 G2
RU18 H2
RU19 F2
RU21 D4
RU22 C2
RU23 A4
RU26 C3
RU27 C4
RU28 E4
RU29 E5
RU31 A17
RU32 A4
RU39 F3
RU42 H5
RU47 E15
RU51 A7
RU52 H13
XU01 B4

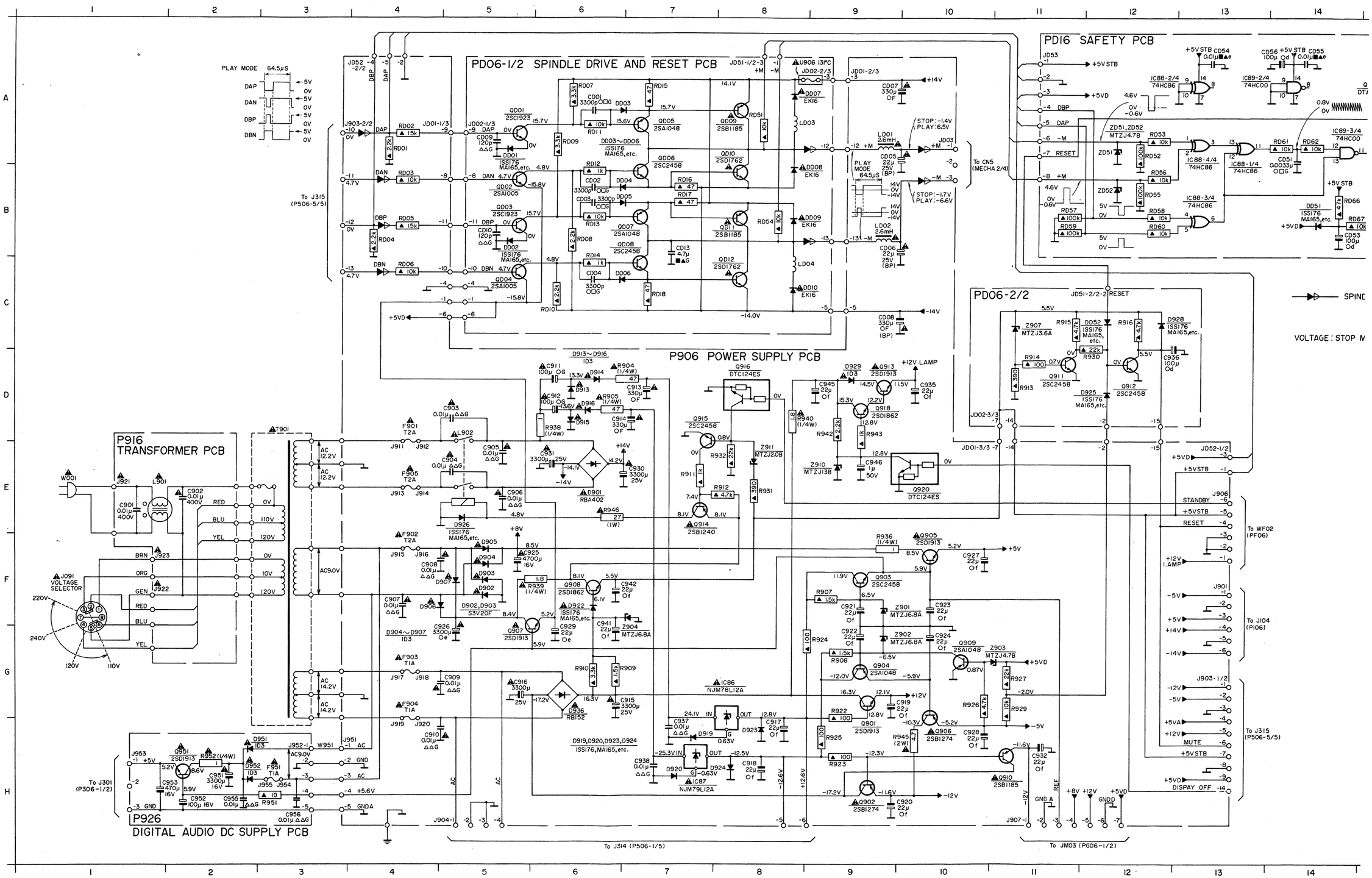
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

A B C D E F G H

+5VD
+5V
+5VSTB
0V
5.1V
CU26 0.022µ 16V
IC74(2/2) 74HC74
IC74(1/2) 74HC74
CU14 0.022µ 16V
IC82(1/4) 74HC00
CU04 47µ 16V
CU03 0.01µ 25V
IC77 MBM27C512P-20
IC78 CXD1095Q
QU04 DTC124EU
RU05 (1/16W) 10k
RU23 100 (1/16W)
CU27 180p 50V
RU32 (1/16W) 1M
XU01 4.0MHz
IC73 74HC00
IC73(1/4)
IC73(2/4)
IC73(3/4)
IC71 HD63B03YF
RU26 (1/16W) 2.2k
CU25 0.01µ 16V
RU27 10k (1/16W)
IC72(2/4)
IC72(1/4) 4HC86
CLK
DATA
RC-5
RESET
RU21 (1/16W) 22k
RU28 (1/16W) 4.7k
RU29 (1/16W) 10k
IC75 011A
CU22 47µ 16V
CU21 0.022µ 16V
RU39 10k (1/16W)
24DATA
DREQ
MUTE
RU42 (1/16W) 10k
CU16 0.022µ 16V
IC79 TC7S08F
LU02 220µH
CU08 100µ 10V
CU07 0.01µ 25V
CU13 0.022µ 16V
CU15 0.022µ 16V
IC81(2/4)
IC80(1/4)
IC80(4/4)
IC80(3/4)
IC80(2/4)
IC82(2/4)
IC81(3/4)
IC82(4/4)
IC81(4/4)
IC82(3/4)
IC81(1/4)
IC80, IC82 74HC00
IC81 74HC02
CS(1/0)
A8
A13
A14
A15
XTAL
EXTAL
MPO
MPI
RESET
STBY
NMI
FLOCK
CB
SCLK
SDATAIN
SDATAOUT
LOON
FTSSCAN
T-CROSS
V-SYNC
FG
JTRG
STBZ
ACK
IRQ
SCOR
ATNZ
D0
D1
D2
D3
D4
D5
STB
ATN
E
RD
WR
R/W
LIR
BA
IRQ3
IRQ2
IRQ1
MRT
HALT
PORT2
PORT2 DDR
TIMER1
SCI
TIMER2
PORT5
PORT5 DDR
PORT6
PORT6 DDR
HANDSHAKE CONTROL
ADDRESS BUS
RAM 256 BYTES
DATA BUS, BUFFER
ADDRESS BUS, BUFFER
OUTPUT BUFFER
CIRCUIT
ADDRESS BUFFER
COLUMN DECODER
COLUMN GATE
MEMORY CELL ARRAY 32,768 x 8 BIT
ROW DECODER
IC76 LH5164N-10L
MEMORY ARRAY (256x256)
ROW ADDRESS BUFFER
ROW DECODER
I/O CIRCUIT
COLUMN DECODER
CULUMN ADDRESS BUFFER
DATA CONTROL
I/O 0
I/O 1
I/O 2
I/O 3
I/O 4
I/O 5
I/O 6
I/O 7
NC
Vss (GND)
LATCH
DATA SELECTOR
CONTROL
CLR
ODEN
WR
RD
CS
POS1
POS2
INSW
PARK
ROTB
ROTA
CHRBUSY
DSENS
ROTC2
ROTC1
MOTRES
ANTSW
CHRSTB
INTVID
TOGL
LMOT1
LMOT2
CX
N/P
ANAMUTE
NC
CE
INH
INIT
MEMT/M
WRE
COLOR BACK
CDV
S/P
SW
CAV/CLV
LATCH
RNW
ERF
Vdd
Vss
DISPLAY OFF
RU47
CU01 47µ 16V
CU02 0.01µ 25V
RU04 (1/16W) 10k
RU03 (1/16W) 10k
RU02 (1/16W) 10k
RU01 (1/16W) 10k
RU31 (1/16W) 150
JU01
JU04
JU07
JU08
To MECHANISM-4/5 PK01
To MECHANISM-2/5 CN6 (PK02)
To JM05 (PG06-2/2)
To J505 (P506-5/5)
DU01 DU02 DU01~DU03 1SS153
BU01 3.0V
RU14 (1/16W) 10k
CU05 0.01µ 25V
CU06 47µ 16V
RU08 (1/16W) 10k
QU01 2SC4116
RU06 (1/16W) 47k
RU07 (1/16W) 100k
RU13 (1/16W) 10k
QU02 2SC4116
RU11 (1/16W) 47k
RU12 (1/16W) 4.7k
JU09-2/2-1
JU09-1/2-2
To J304 (P306-1/2)
To J801 (P506-5/5)
VOLTAGE : STOP MODE

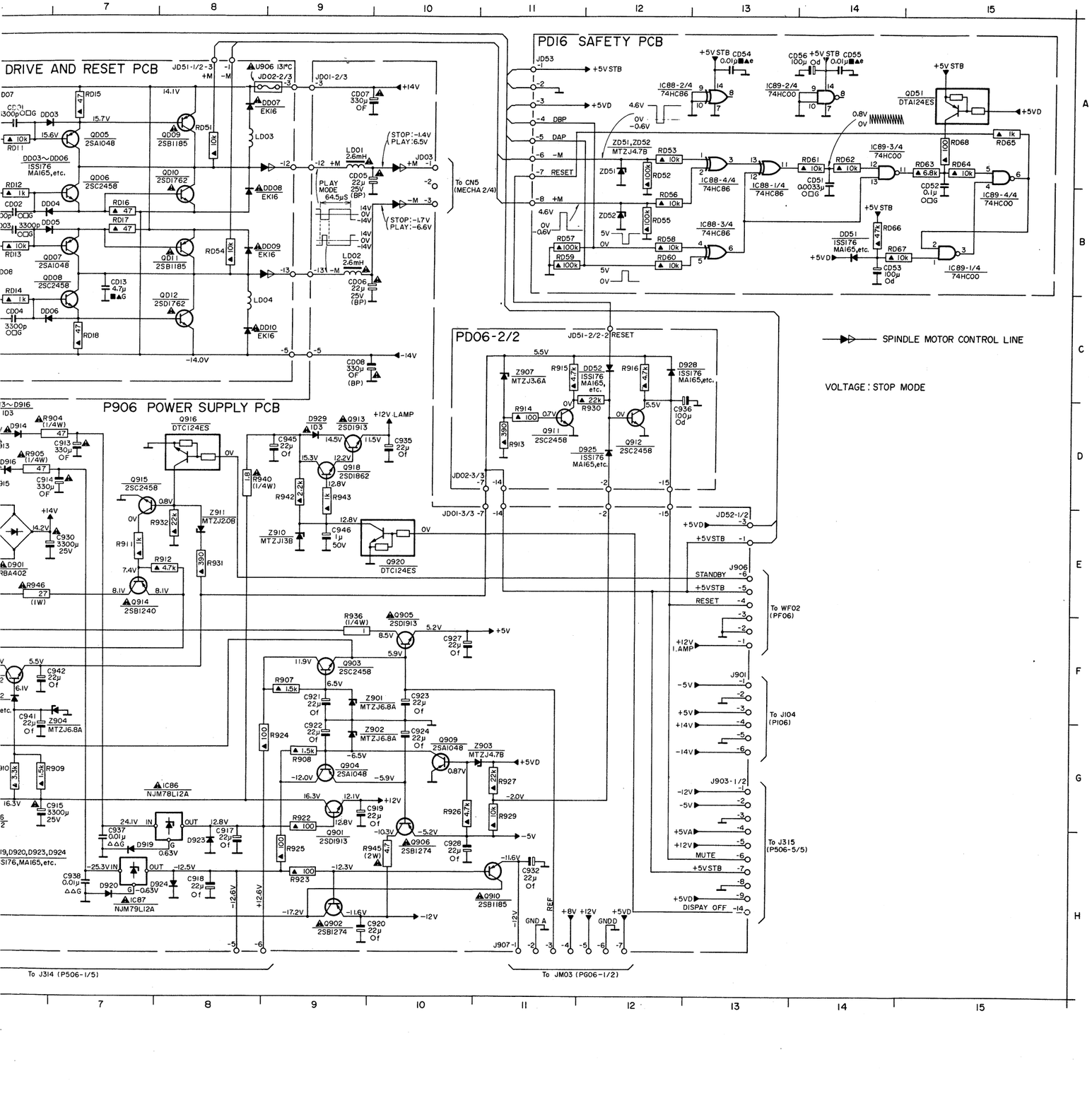
O. P906 POWER SUPPLY/P916 TRANSFORMER/P926 DIGITAL AUDIO DC SUPPLY /PD06 SPINDLE DRIVE & RESET/PD16 SAFETY SCHEMATIC DIAGRAMS

C901 E1 C902 E2 C903 D5 C904 E5 C905 E5 C906 E5 C907 F4 C908 F4 C909 G5 C910 H4
C911 D6 C912 D6 C913 D7 C914 D7 C915 G7 C916 G5 C917 H8 C918 H8 C919 G10 C920 H10
C921 F9 C922 G9 C923 F10 C924 G10 C925 F5 C926 G5 C927 F10 C928 H10 C929 G6 C930 E7
C931 E6 C932 H11 C935 D10 C936 D12 C937 H7 C938 H7 C941 G6 C942 F7 C945 D9 C946 E6
C951 H2 C952 H2 C953 H2 C954 H2 C955 H2 C956 H3 CD01 A6 CD02 B6 CD03 B6 CD04 C6
CD05 A9 CD06 B9 CD07 A9 CD08 C9 CD09 A5 CD10 B5 CD13 B7 CD51 A14 CD52 B15 CD53 B14
CD54 A13 CD55 A14 CD56 A14 D901 E6 D902 F5 D903 F5 D904 F5 D905 F5 D906 F4 D907 F5
D913 D6 D914 D6 D915 D6 D916 D6 D919 H7 D920 H7 D922 F6 D923 H8 D924 H8 D925 D12
D926 E5 D928 C13 D929 D9 D936 G6 D951 H2 D952 H2 DD01 A5 DD02 B5 DD03 A6 DD04 B6
DD05 B6 DD06 C6 DD07 A8 DD08 B8 DD09 B8 DD10 C8 DD51 B14 DD52 C12 F901 D4 F902 F4
F903 G4 F904 G4 F905 E4 F951 H3 IC86 G8 IC87 H7 IC88 A12 IC88 A13 IC88 B13 IC89 A13
IC89 A14 IC89 B15 L901 E1 L902 D5 LD01 A9 LD02 B9 LD03 A8 LD04 C8 Q901 H9 Q902 H9
Q903 F9 Q904 G9 Q905 F10 Q906 H10 Q907 G5 Q908 F6 Q909 G10 Q910 H11 Q911 D11 Q912 D12
Q913 D9 Q914 E7 Q915 D8 Q916 D8 Q920 E10 Q951 H2 QD01 A5 QD02 B5 QD03 B5
QD04 C5 QD05 A7 QD06 A7 QD07 B7 QD08 B7 QD09 A8 QD10 A8 QD11 B8 QD12 C8 QD51 A15
R904 D7 R905 D6 R907 F9 R908 G9 R909 G7 R910 G6 R911 E7 R912 E8 R913 D11 R914 D11
R915 C11 R916 C12 R922 G9 R923 H9 R924 G9 R925 H9 R926 G10 R927 G11 R929 G11 R930 D12
R931 E8 R932 E8 R936 F8 R938 D6 R939 F6 R940 D8 R942 D9 R943 D9 R945 H10 R946 E6



CS 44 329

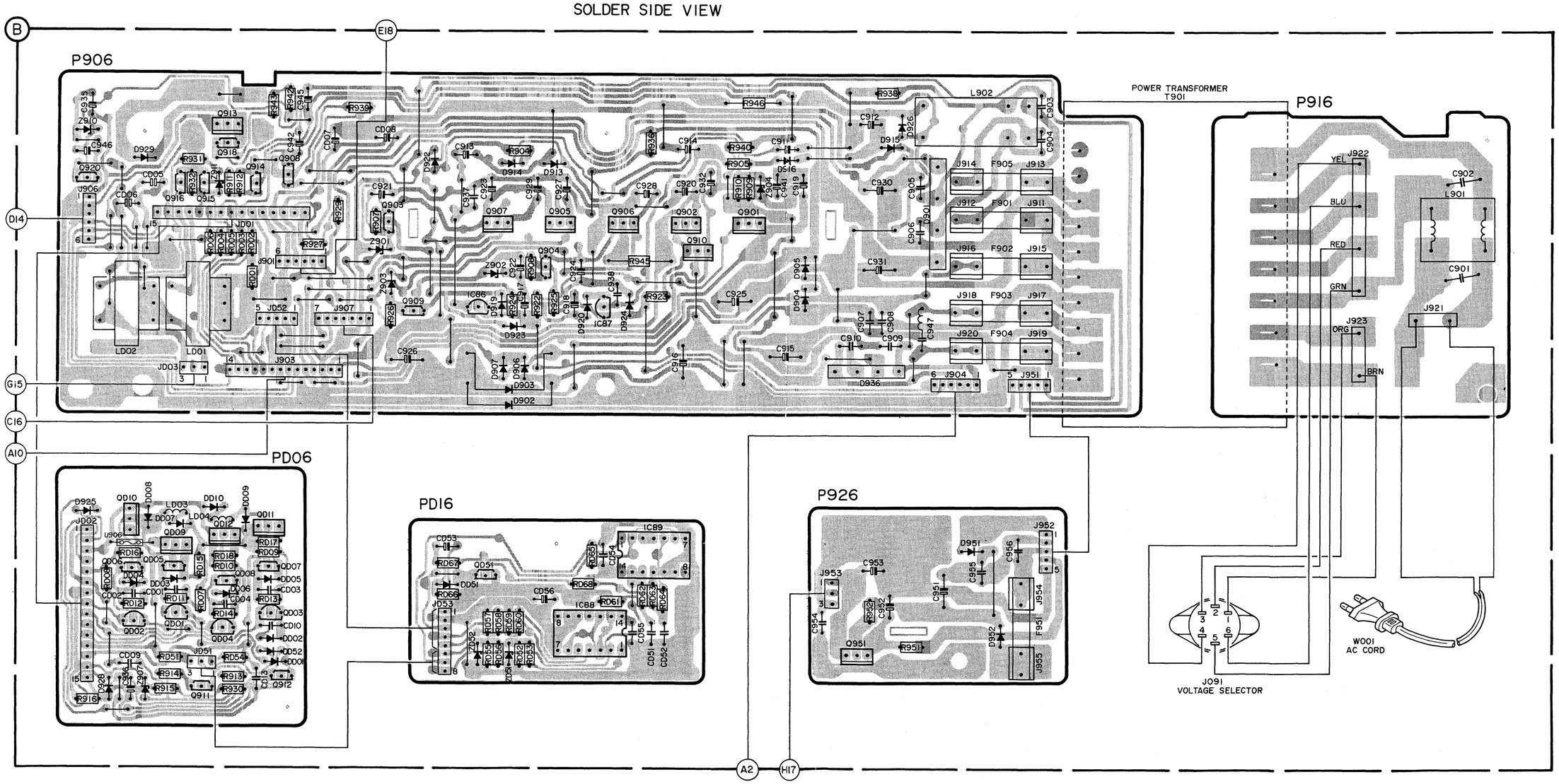
1	D6	C921	F9	C931	E6	C951	H2	CD05	A9	CD54	A13	D913	D6	D926	E5	DD05	B6	F903	G4	IC89	A14	Q903	F9	Q913	D9	QD04	C5	R904	D7	R915	C11	R931	E8	R951	H3	RD09	A6	RD51	A8	RD61	A14	W001	E1
2	D6	C922	G9	C932	H11	C952	H2	CD06	B9	CD55	A14	D914	D6	D928	C13	DD06	C6	F904	G4	IC89	B15	Q904	G9	Q914	E7	QD05	A7	R905	D6	R916	C12	R932	E8	R952	H2	RD10	C6	RD52	A12	RD62	A14	Z901	F10
3	D7	C923	F10	C935	D10	C953	H2	CD07	A9	CD56	A14	D915	D6	D929	D8	DD07	A8	F905	E4	L901	E1	Q905	F10	Q915	D7	QD06	A7	R907	F9	R922	G9	R936	F8	RD01	A4	RD11	A6	RD53	A12	RD63	A15	Z902	G10
4	D7	C924	G10	C936	D12	C954	H2	CD08	C9	D901	E6	D916	D6	D936	G6	DD08	B8	F951	H3	L902	D5	Q906	H10	Q916	D8	QD07	B7	R908	G9	R923	H9	R938	D6	RD02	A4	RD12	B6	RD54	B8	RD64	A15	Z903	G11
5	G7	C925	F5	C937	H7	C955	H2	CD09	A5	D902	F5	D919	H7	D951	H2	DD09	B8	IC86	G8	L001	A9	Q907	G5	Q918	D9	QD08	B7	R909	G7	R924	G9	R939	F6	RD03	B4	RD13	B6	RD55	B12	RD65	A15	Z904	G7
6	G5	C926	G5	C938	H7	C956	H3	CD10	B5	D903	F5	D920	H7	D952	H2	DD10	C8	IC87	H7	L002	B9	Q908	F6	Q920	E10	QD09	A8	R910	G6	R925	H9	R940	D8	RD04	B4	RD14	C6	RD56	B12	RD66	B14	Z907	C11
7	H8	C927	F10	C941	G6	CD01	A6	CD13	B7	D904	F5	D922	F6	DD01	A5	DD51	B14	IC88	A12	L003	A8	Q909	G10	Q951	H2	QD10	A8	R911	E7	R926	G10	R942	D9	RD05	B4	RD15	A7	RD57	A11	RD67	B14	Z910	E9
8	H8	C928	H10	C942	F7	CD02	B6	CD51	A14	D905	F5	D923	H8	DD02	B5	DD52	C12	IC88	A13	L004	C8	Q910	H11	QD01	A5	QD11	B8	R912	E8	R927	G11	R943	D9	RD06	C4	RD16	B7	RD58	B12	RD68	A15	Z911	E8
9	G10	C929	G6	C945	D9	CD03	B6	CD52	B15	D906	F4	D924	H8	DD03	A6	F901	D4	IC88	B13	Q901	H9	Q911	D11	QD02	B5	QD12	C8	R913	D11	R929	G11	R945	H10	RD07	A6	RD17	B7	RD59	A11	T901	D3	ZD51	A12
10	H10	C930	E7	C946	E6	CD04	C6	CD53	B14	D907	F5	D925	D12	DD04	B6	F902	F4	IC89	A13	Q902	H9	Q912	D12	QD03	B5	QD51	A15	R914	D11	R930	D12	R946	E6	RD08	B6	RD18	C7	RD60	B12	U906	A8	ZD52	B12



P. P906 POWER SUPPLY/P916 TRANSFORMER/P926 DIGITAL AUDIO DC SUPPLY /PD06 SINDLE DRIVE & RESET/PD16 SAFETY PCBs

R	R931 R911 R943 R942 R939 R904 R936 R940 R946 R938 R932 RD01~RD06 R912 R927 R929 R907 R908 R945 R905 RD08 RD16 RD11 RD15 RD07 RD18 RD10 RD17 RD09 R926 R924 R922 R925 R923 R910 R909 R916 RD12 RD51 R914 R915 RD14 RD54 R913 R930 RD13 RD67 RD66 RD55~RD60 RD52 RD53 RD68 RD61~RD65 R952 R951	R
C	C935 C942 C945 CD07 CD08 C913 C914 C911 C912 C930 C905 C903 C904 C946 CD06 CD05 C921 C926 C937 C923 C929 C927 C928 C920 C932 C941 C919 C931 C906 C902 CD02 CD01 CD04 CD03 C922 C917 C918 C924 C938 C916 C925 C915 C910 C907 C908 C909 C947 C901 CD09 C936 CD13 CD10 CD53 CD56 CD54 CD55 CD51 CD52 C954 C953 C952 C951 C955 C956	C
Q-IC	Q920 Q916 Q915 Q913 Q918 Q908 Q903 Q907 Q905 Q906 Q902 Q910 Q901 QD09~QD12 QD05~QD08 Q914 Q909 IC86 Q904 IC87 QD01~QD04 Q911 Q912 QD51 IC88 IC89 Q951	Q-IC
D-Z	Z910 D929 Z911 Z901 D922 Z902 D914 D913 D920 D924 Z904 D916 D915 D926 D925 DD04 DD08 DD07 DD03 DD10 DD06 DD09 DD05 Z903 D919 D907 D923 D906 D903 D902 D905 D904 D901 D928 Z907 DD02 DD52 DD01 DD51 ZD52 ZD51 D936 D951 D952	D-Z
F-L-T-U	U906 LD02 LD03 LD01 LD04 L902 F901~F905 F951 T901 L901	F-L-T-U

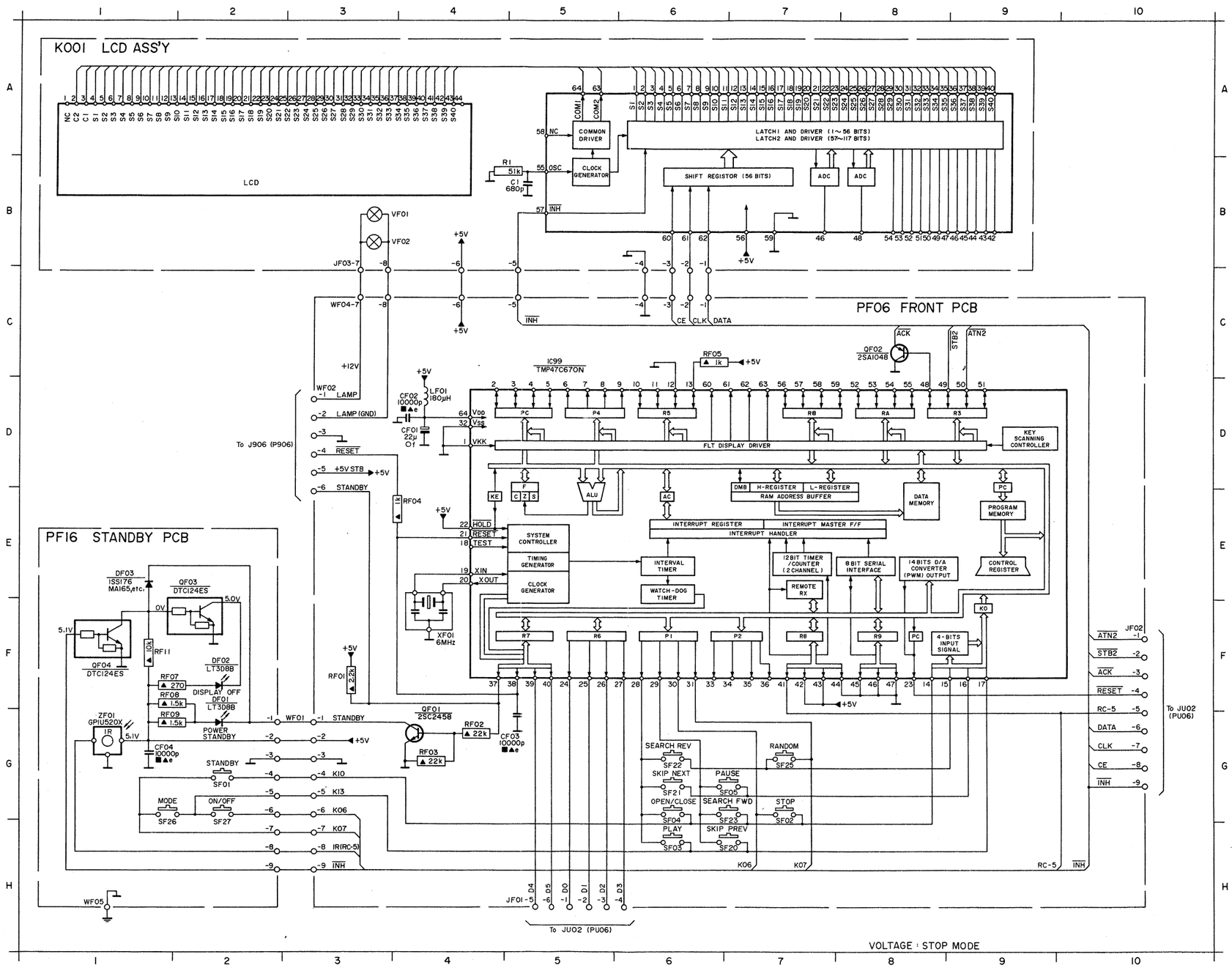
SOLDER SIDE VIEW



Q. PF06 FRONT/PF16 STANDBY SCHEMATIC DIAGRAMS

CF01	D4	QF01	G4	RF08	F1
CF02	D4	QF02	C8	RF09	G1
CF03	G5	QF03	F2	RF11	F1
CF04	G1	QF04	F1	SF01	G2
DF01	F2	RF01	F3	SF02	G7
DF02	F2	RF02	G4	SF03	H6
DF03	E1	RF03	G4	SF04	G6
IC99	C6	RF04	E4	SF05	G7
K001	A1	RF05	C6	SF20	H7
LF01	C4	RF07	F1	SF21	G6

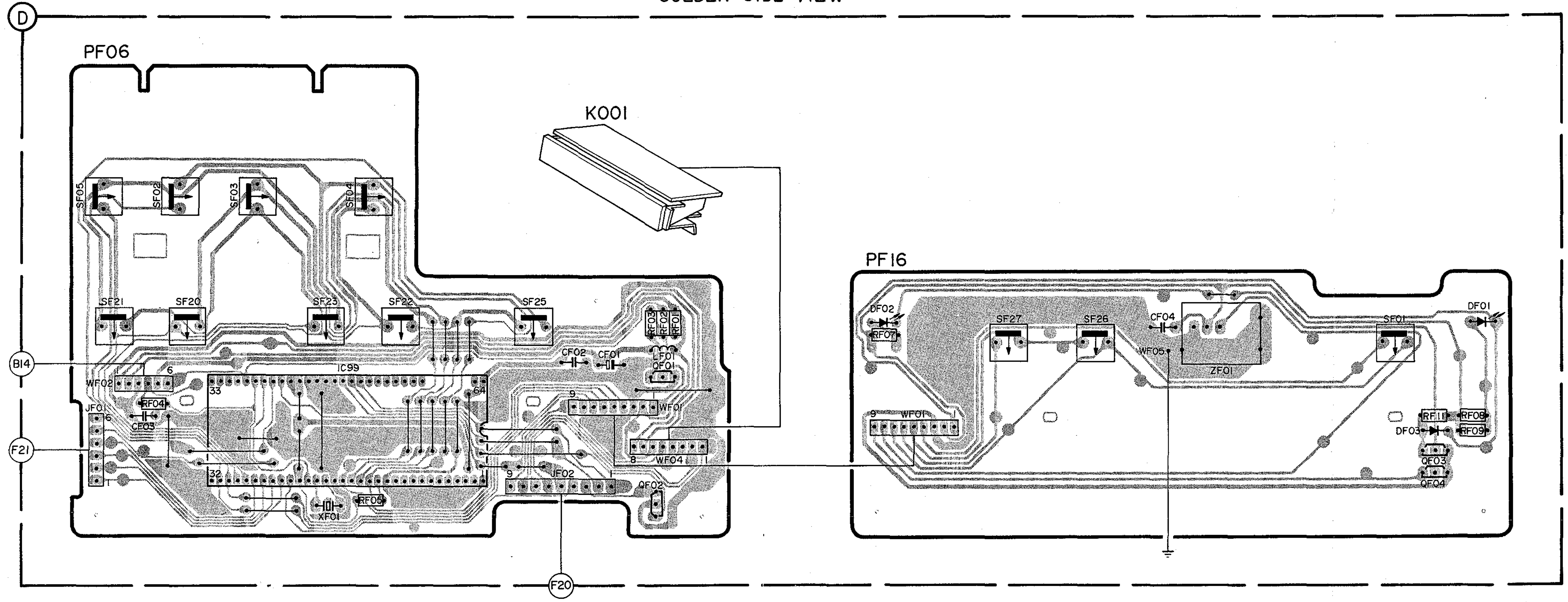
SF22	G6
SF23	G7
SF25	G7
SF26	H1
SF27	H2
VF01	B3
VF02	B3
XF01	F4
ZF01	G1



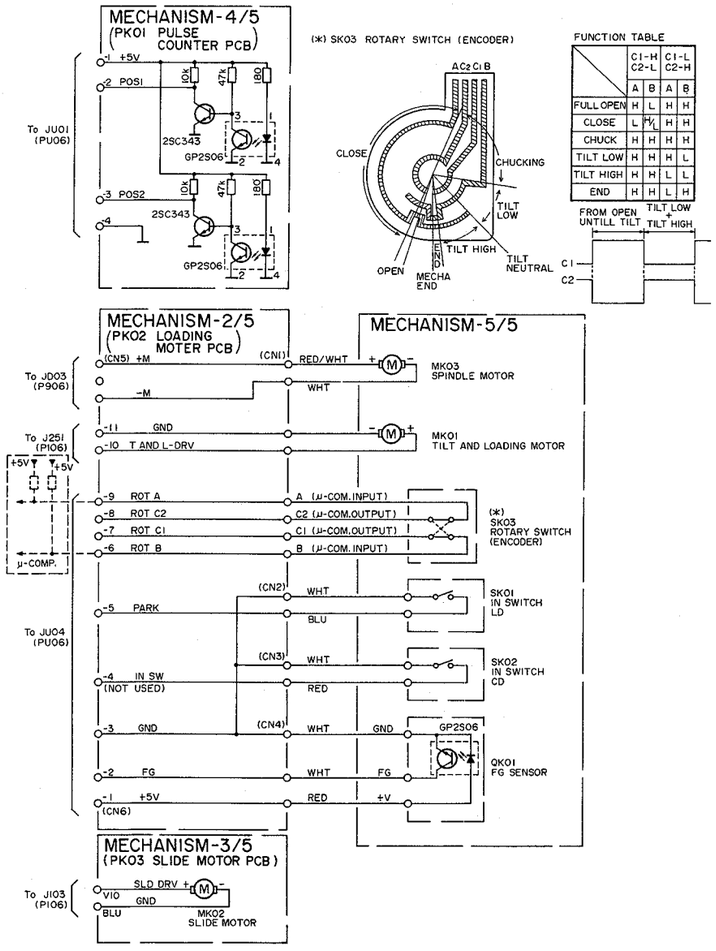
R. PF06 FRONT/PF16 STANDBY PCBs

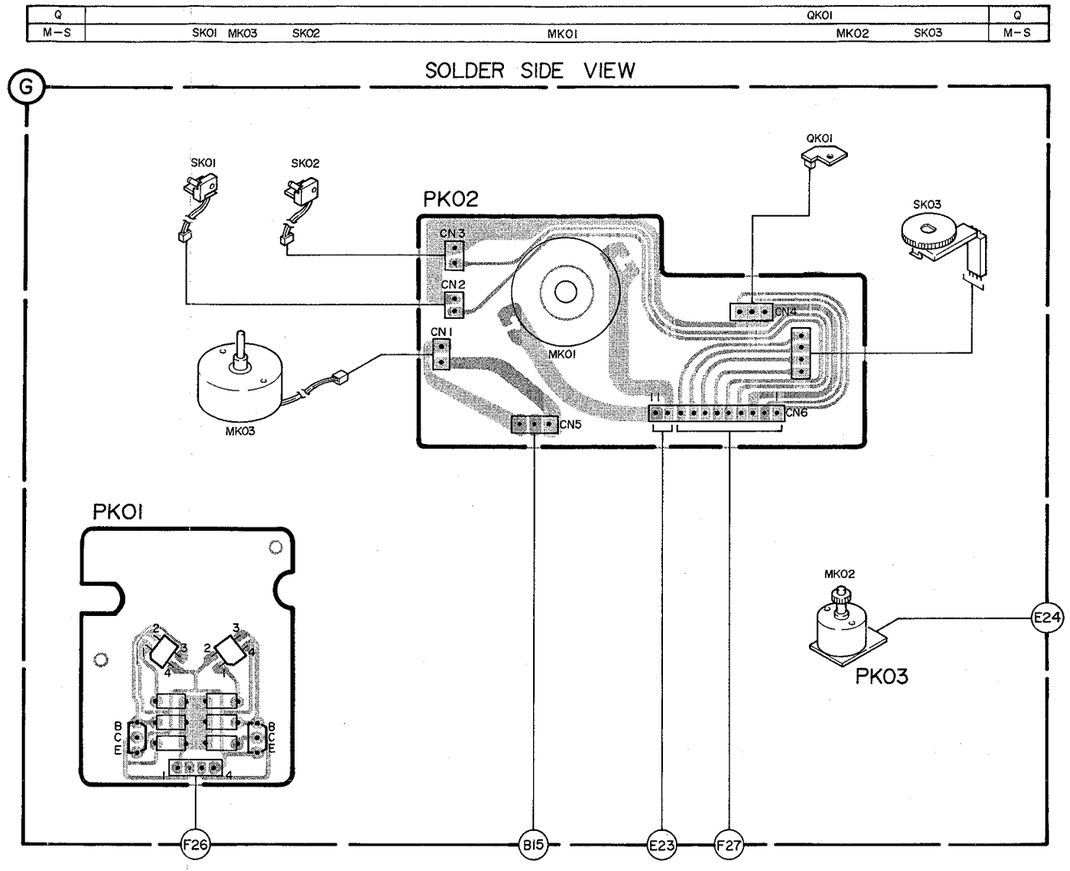
R	RF04 RF05 RF01~RF03 RF07 RF11 RF08 RF09	R
C	CF03 CF02 CF01 CF04	C
Q-IC	IC99 QF02 QF01 QF03 QF04	Q-IC
D	DF02 DF03 DF01	D
S	SF05 SF21 SF02 SF20 SF03 SF23 SF04 SF22 SF25 SF27 SF26 SF01	S
L-X-Z	XF01 LF01 ZF01	L-X-Z

SOLDER SIDE VIEW



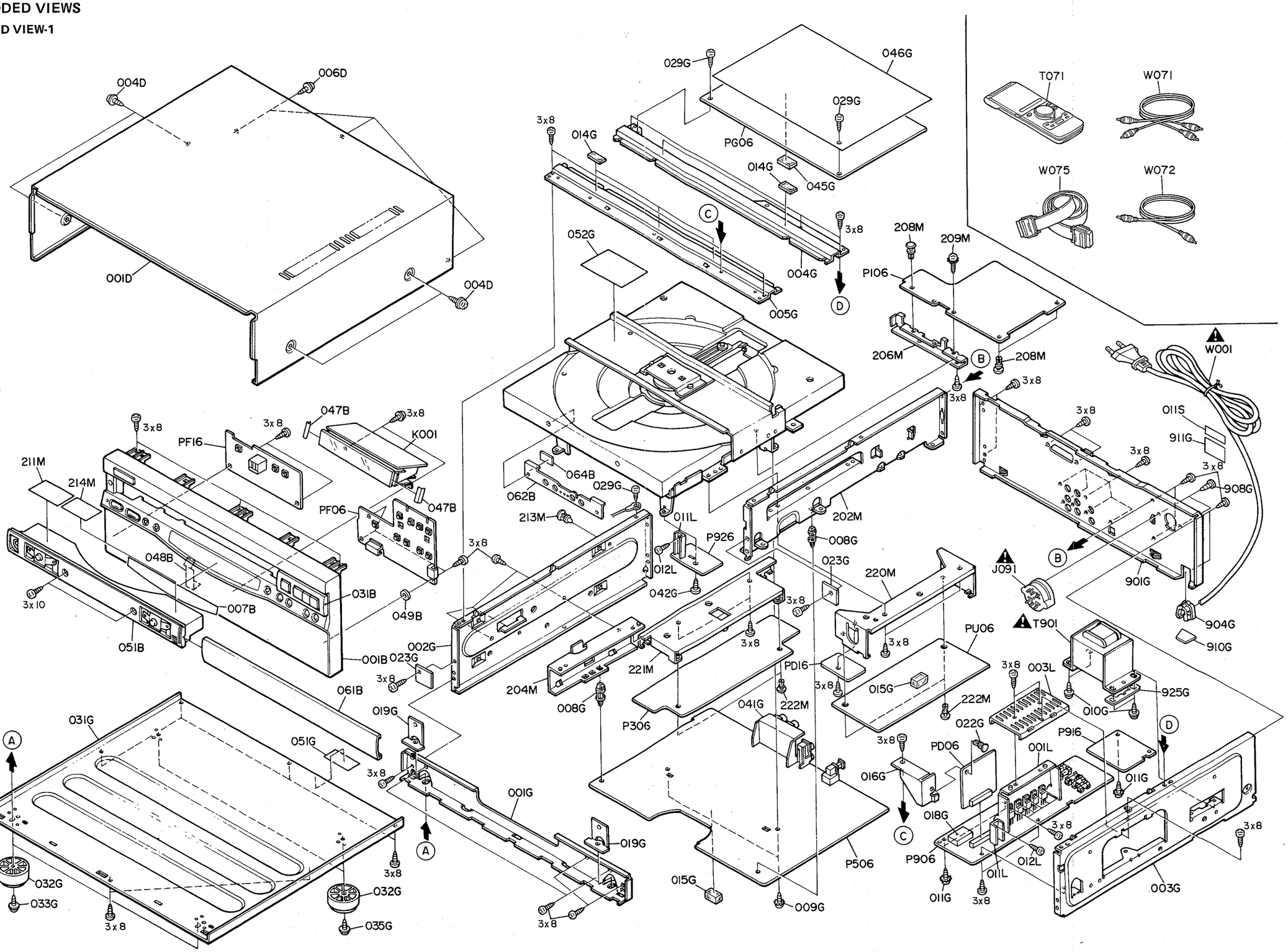
S. MECHANISM SCHEMATIC DIAGRAMS & PCBs



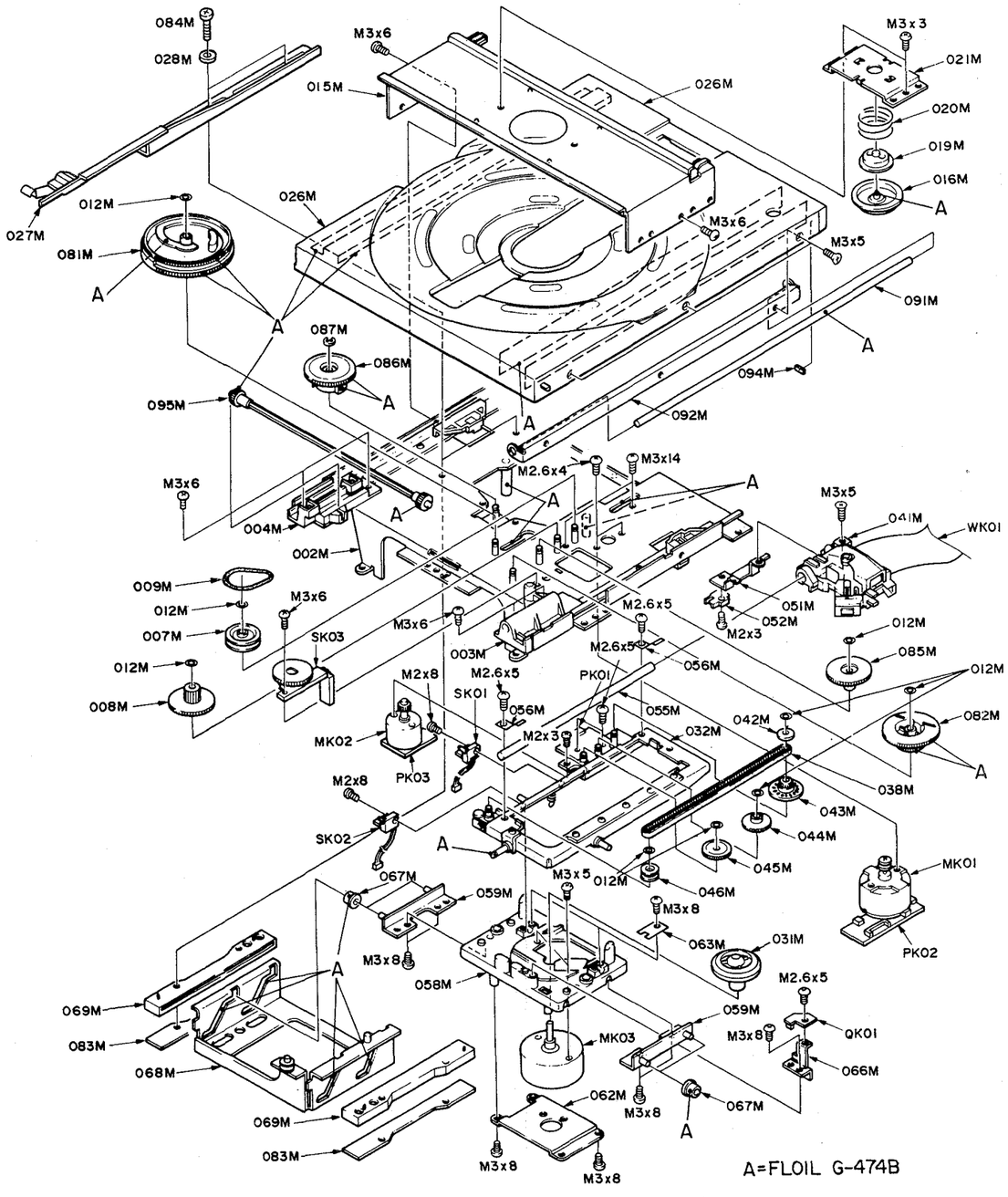


XI. EXPLODED VIEWS

A. EXPLODED VIEW-1



B. EXPLODED VIEW-2



XII PARTSLIST

PARTSLIST LDP600WS CONTENTS:

EXPLODE VIEW	**MECHANISM**
EXPLODED VIEW	**CABINET**
MAIN PCB	**P506**
DIGITAL AUDIO PCB	**P306**
RGB PCB	**PG06**
SERVO PCB	**P106**
SYSTEM CONTROL PCB	**PU06**
POWERSUPPLY PCB	**P906**
SAFETY PCB	**PD16**
SPINDEL DRIVER PCB	**PD06**
DIG.AUDIO PCB	**P926**
TRANSFORMER PCB	**P916**
FRONT PCB	**PU06**
STANDBY PCB	**PF16**
SERVICE TOOLS	

PARTSLIST EXPLODED VIEW-1 CABINET

T071	4822 218 10412	RC600LDP REMOTE CONT
031B	4822 454 30453	OPEN/CLOSE ESCUTCHEON
J091	4822 272 10227	4 VOLTAGE SW
K001	4822 130 90999	LCD UNIT BLUE
T901	4822 146 21633	POWER TRANS EI66-40
W071	4822 321 61265	AUDIO CORD (GOLD)
W072	4822 321 61029	VIDEO CORD
W075	4822 321 61032	EURO CABLE 1.5M
001B	4822 444 40466	FRONT PANEL (ASS'Y)
001D	4822 444 60726	TOP COVER (BLACK)
002L	4822 502 12128	SCREW FOR TRANSF.
004D	4822 532 11276	SCREW FOR TOP COVER
004L	4822 502 12128	SCREW FOR HEAT-SINK
005L	4822 502 12128	SCREW FOR HEAT-SINK
006D	4822 502 12355	SCREW FOR TOP COVER
006G	4822 502 12128	SCREW FOR TOP STAY
007G	4822 502 12128	SCREW FOR MECHA BRAC
008G	4822 401 10944	SUPPORT FOR MAIN PCB
013G	4822 502 12128	SCREW FOR FRONT STAY
020G	4822 502 12128	SCREW FOR 019G
022G	4822 401 11383	PLASTI RIVET FOR M-D
024G	4822 502 12128	SCREW FOR 023G
032G	4822 462 41198	LEG
034G	4822 502 12128	SCREW FOR BOTTOM LID
035G	4822 502 12355	SCREW FOR LEG (REAR)
041B	4822 502 12128	SCREW FOR LCD ASS'Y
042B	4822 502 12128	SCREW FOR PCB(R)
043B	4822 502 12128	SCREW FOR PCB(L)
045B	4822 502 12128	FRONT PANEL FIX (TOP
047B	4822 459 40683	MASK FOR LCD
049B	4822 532 52343	SPACER FOR FRONT PCB
051B	4822 466 82854	JOINT ASS'Y (BLACK)
057B	4822 502 12128	SCREW FOR LEAF SPRIN
061B	4822 454 30452	ESCUTCHEON (BLACK)
063B	4822 502 12364	SCREW FOR JOINT
203M	4822 502 12128	SCREW FOR CENTER STA
205M	4822 502 12128	SCREW FOR MECHA BRAC
208M	4822 401 11383	PLASTI RIVET FOR SER
213M	4822 535 71081	SPACER KGLS-8R
222M	4822 401 11383	PLASTI RIVET FOR SYS
223M	4822 502 12128	SCREW FOR TUIKA PCB
901G	4822 444 50654	REAR PANEL (R)
902G	4822 502 12128	SCREW FOR STAY (L,C,
903G	4822 502 12128	SCREW FOR RCA
904G	4822 532 61204	BUSH FOR AC CORD
905G	4822 502 12128	SCREW FOR AV CONNECT
908G	4822 502 12128	SCREW FOR VOLTAGE SE

PARTSLIST EXPLODE VIEW-2 MECHANISM

001M	4822 691 30261	LOADING ASSY COMPLETE
MK01	4822 361 30327	L MOTOR ASS'Y
MK02	4822 361 30328	SLED MOTOR ASS'Y
MK03	4822 361 30329	DC MOTOR.
PK01	4822 214 51843	PULSE CNTR PCB ASSY
PK02	4822 214 51844	L MOTOR PCB ASS'Y
PK03	4822 214 51845	S MOTOR PCB ASS'Y
QK01	4822 130 82419	FG PCB ASS'Y
SK01	4822 271 30743	SW PCB ASS'Y FOR CD
SK02	4822 271 30744	SW PCB ASS'Y FOR LD
SK03	4822 273 10221	ROTARY SWITCH
WK01	4822 320 50211	FLAT CABLE
003M	4822 462 30517	LOADING GUIDE(A)
004M	4822 462 30518	LOADING GUIDE(B) 2-
007M	4822 528 50323	LOADING PULLEY 2-
008M	4822 522 32992	GEAR B 2-
009M	4822 358 31104	LM BELT
012M	4822 532 12029	WASHER
016M	4822 532 12028	CLAMPER ASS'Y
019M	4822 532 12027	CLAMPER RETAINER
020M	4822 492 70831	SPRING
026M	4822 425 20204	TRAY ASS'Y (BLACK)
027M	4822 402 61393	TRAY SUPPORT ASSY
028M	4822 532 12109	COLLAR
031M	4822 528 10821	TURNTABLE ASS'Y
038M	4822 358 31105	TIMING BELT
041M	4822 691 30237	PU ASS'Y KHS-130A
042M	4822 532 12031	HOLE PIECE
043M	4822 522 32995	GEAR V
044M	4822 522 32996	GEAR A2
045M	4822 522 32997	GEAR A1
046M	4822 528 50324	PULLEY
052M	4822 401 11385	BELT CLAMPER
055M	4822 535 93168	SLIDE SHAFT
056M	4822 401 11386	SHAFT CLAMPER
063M	4822 404 60686	CHASSIS STOPPER
067M	4822 528 90808	ROLLER
069M	4822 404 60684	SLIDE GUIDE
081M	4822 528 30395	CONTROL CAM
082M	4822 522 32993	LOADING GEAR
085M	4822 522 32994	GEAR A
086M	4822 528 30396	TILT CAM
087M	4822 530 70123	E RING
091M	4822 535 93169	LOADING SHAFT 2-
094M	4822 462 71728	CUSHION
095M	4822 522 32998	TRAY GEAR ASS'Y

PARTSLIST MAIN PCB P506

CA01	4822 124 21739	22µF/16V
CA02	4822 126 11559	120pF J CH 50V BLK
CA03	4822 122 10367	150pF J CH 50V BLK
CA04	4822 126 11553	15pF 50V
CA05	4822 126 11557	4.7pF 50V
CA06	4822 122 40528	27pF J CH 50V BLK
CA07	4822 122 40568	68pF J CH 50V BLK
CA08	4822 122 40528	27pF J CH 50V BLK
CA09	4822 122 40588	0.022µF 25V
CA10	4822 122 40588	0.022µF 25V T
CA11	4822 121 42697	0.0082µF,J,M,50V,D=9
CA12	4822 122 40588	0.022µF TP050F223Z T
CA13	4822 124 41246	47µF/ 16V
CA14	4822 122 40588	0.022µF TP050F223Z T
CA15	4822 124 41246	47µF/16V
CA21	4822 122 40588	0.022µF TP050F223Z T
CA22	4822 122 40588	0.022µF TP050F223Z T
CA32	4822 124 22048	220µF/6.3V
CA33	4822 124 22048	220µF/6.3V
CA34	4822 124 22048	220µF/6.3V
CA35	4822 126 11554	18pF 50V
CA36	4822 126 11553	15pF 50V
CA37	4822 122 31173	220pF 50V
CA38	4822 122 31173	220pF 50V
CA39	4822 124 21739	22µF/ 16V
CA40	4822 124 21739	22µF/ 16V
CA41	4822 121 42722	0.001µF,J,M,50V
CA42	4822 121 42722	0.001µF,J,M,50V
CA43	4822 121 42726	0.0047µF,J,M,50V
CA44	4822 121 42726	0.0047µF,J,M,50V
CA45	5322 122 32072	33pF J CH 50V BLK
CA46	5322 122 32072	33pF J CH 50V BLK
CA49	4822 122 31173	220pF 50V
CA50	4822 122 31173	220pF 50V
CA51	4822 124 21739	22µF/16V
CA52	4822 124 21739	22µF/16V
CA53	4822 121 42697	0.0082µF,J,M,50V,D=9
CA54	4822 121 42697	0.0082µF,J,M,50V,D=9
CA55	5322 121 42491	0.047µF,J,N,50V
CA56	5322 121 42491	0.047µF,J,N,50V
CA57	4822 124 22048	220µF/6.3V
CA58	4822 124 22048	220µF/6.3V
CA59	4822 121 42722	0.001µF,J,M,50V
CA60	4822 121 42722	0.001µF,J,M,50V
CA61	4822 124 40792	4.7µF 50V BIPOLAR 7L
CA62	4822 124 40792	4.7µF 50V BIPOLAR 7L
CA63	4822 124 21739	22µF/ 16V
CA64	4822 124 21898	0.47µF/ 50V
CA65	4822 121 42698	0.1µF,J,N,50V
CA66	4822 124 21983	4.7µF/ 50V
CA67	4822 121 42614	0.015µF,J,M,50V
CA69	4822 122 40588	0.022µF TP050F223Z T
CA71	4822 122 33657	56pF J CH 50V
CA72	4822 122 33792	10pF UP050TA100J 50
CA73	4822 122 33657	56pF J CH 50V
CA75	4822 124 21894	10µF 16V 7L
CA78	4822 124 21894	10µF 16V 7L
CA80	4822 122 40588	0.022µF TP050F223Z T
CA81	4822 122 40588	0.022µF TP050F223Z T
CA82	5322 122 32143	22pF J CH 50V
CA83	4822 122 33656	39pF J CH 50V
CG01	4822 124 22048	220µF/6.3V
CG02	4822 126 11558	0.1µF CERAMIC CAP Z
CG03	4822 124 22048	220µF/6.3V
CG04	4822 126 11558	0.1µF CERAMIC CAP Z

CG05	4822 124 22048	220µF/6.3V
CG06	4822 122 40588	0.022 25V TP050223Z
CG07	4822 124 22048	220µF/6.3V
CG08	4822 122 40588	0.022 µF TP050F23Z
CG10	4822 122 40589	CERMIC CAP. 0.047
CG11	4822 122 40586	0.01µF 16V TP050103Z
CG12	4822 122 40586	10000pF 16V
CG13	4822 122 40568	68pF J CH 50V BLK
CG14	4822 124 41246	47µF/ 16V
CG16	4822 124 22048	220µF/6.3V
CG17	4822 122 40588	0.022µF 25V TP050223
CG18	4822 126 11554	18 pF UP050CH180J 5
CG22	4822 124 41246	47µF/ 16V
CG23	4822 126 11553	15pF 50V
CG24	5322 122 32143	22pF J CH 50V BLK
C301	4822 124 21739	22µF/ 16V
C302	4822 124 21739	22µF/ 16V
C303	4822 126 11559	120pF J CH 50V BLK
C304	4822 121 42327	470PF,J,M,50V
C305	4822 126 11236	82pF J CH 50V BLK
C306	4822 124 41246	47µF/ 16V
C307	4822 122 40588	0.022µF TP050F223Z 2
C308	4822 122 10367	150pF J CH 50V BLK
C310	4822 121 42701	0.018µF,J,M,50V,D=10
C311	4822 124 21983	4.7µF/ 50V
C312	4822 124 41246	47µF/ 16V
C313	4822 122 40589	CERMIC CAP. 0.047
C325	4822 124 41246	47µF/ 16V
C326	4822 124 41246	47µF/ 16V
C327	4822 122 40588	0.022µF TP050F223Z 2
C328	4822 122 40588	0.022µF TP050F223Z T
C330	5322 122 32072	33pF J CH 50V BLK
C365	5322 124 21349	470µF 6.3V 11L
C370	4822 122 40588	0.022µF TP050F223Z 2
C371	4822 122 40588	0.022µF TP050F223Z T
C372	4822 124 21736	1µF/50V
C458	4822 122 40589	0.047µF UP050TA473Z
C459	4822 122 40589	CERMIC CAP. 0.047
C461	4822 122 40589	CERMIC CAP. 0.047
C462	4822 122 40589	CERMIC CAP. 0.047
C463	4822 124 23781	2200µF 25V 16X 25 AR
C464	4822 124 23781	2200µF 25V 16X 25 AR
C465	4822 124 23778	100µF 16V 6.3V 11 AR
C466	4822 124 23778	100µF 16V 6.3X 11 AR
C467	4822 124 23783	470µF 16V 10X12.5 AR
C468	4822 124 23783	470µF 16V 10X12.5 AR
C469	4822 124 23783	470µF 16V 10X12.5 AR
C501	4822 122 40588	0.022µF TP050F223Z 2
C502	4822 124 41246	47µF/ 16V
C503	4822 122 31172	180pF J SL 50V GRN
C504	4822 126 11236	82pF J CH 50V BLK
C505	4822 126 11236	82pF J CH 50V BLK
C506	4822 126 11561	240pF 50V
C507	4822 122 10367	150pF J CH 50V BLK
C508	4822 126 11236	82pF J CH 50V BLK
C509	4822 126 11236	82pF J CH 50V BLK
C510	4822 122 31168	270pF J SL 50V GRN
C511	4822 122 31176	390pF J SL 50V GRN
C512	4822 122 33792	10pF 50V
C513	5322 122 32072	33pF J CH 50V BLK
C514	4822 122 33792	10pF 50V
C515	4822 122 40588	0.022µF TP050F223Z 2
C516	4822 122 40588	0.022µF TP050F223Z 2
C517	4822 122 40588	0.022µF TP050F223Z 2
C518	4822 122 40588	0.022µF TP050F223Z T

PARTSLIST MAIN PCB P506 (continued)

⊣⊢		
C519	4822 122 40588	0.022µF TP050F223Z T
C520	4822 122 33792	10pF 50V
C521	4822 122 40588	0.022µF TP050F223Z T
C522	4822 126 11558	0.1µF UP050104Z 50V
C523	4822 126 11554	18pF 50V
C524	5322 122 32072	33pF J CH 50V BLK
C525	4822 122 33792	10pF 50V
C526	4822 122 31205	47pF J CH 50V BLK
C527	4822 122 33657	56pF J CH 50V BLK
C528	4822 121 41854	0.15µF,J,T,50V
C529	4822 122 40588	0.022µF TP050F223Z 2
C530	4822 122 40588	0.022µF TP050F23Z
C531	4822 122 40589	CERMIC CAP. 0.047
C533	5322 122 32072	33pF J CH 50V BLK
C534	4822 122 33817	6.8pF UP050068V 50
C535	4822 122 33656	39pF J CH 50V BLK
C536	4822 124 21739	22µF/ 16V
C537	4822 124 21739	22µF/ 16V
C540	4822 126 11559	120pF J CH 50V BLK
C541	4822 122 33657	56pF J CH 50V BLK
C542	4822 121 42609	0.33µF,J,T,50V
C543	4822 122 40589	CERMIC CAP. 0.047
C544	4822 126 11556	2.7pF 50V
C545	4822 122 33817	6.8pF 50V
C546	5322 122 32072	33 pF J CH 50V BLK
C547	4822 126 11558	0.1 µF CERAMIC CAP Z
C548	4822 122 10367	150pF J CH 50V BLK
C549	4822 122 40589	0.047 µF TP050F473Z
C550	4822 122 40589	0.047µF UP050TA473Z
C551	4822 122 40588	0.022µF TP050F223Z 2
C552	4822 124 41153	220µF 16V
C553	4822 122 40588	0.022µF TP050F223Z T
C554	4822 124 41246	47µF/ 16V
C555	4822 122 40588	0.022µF TP050F223Z T
C556	4822 122 40588	0.022µF TP050F223Z T
C557	4822 124 21983	4.7µF/ 50V
C558	4822 126 11558	0.1µF UP050104Z 5
C559	4822 126 11558	0.1µF UP050F223Z T
C560	4822 124 21739	22µF/ 16V
C561	4822 124 21739	22µF/ 16V
C562	5322 122 32143	22pF J CH 50V BLK
C563	4822 122 33657	56pF J CH 50V BLK
C564	4822 126 11236	82pF J CH 50V BLK
C565	4822 122 40589	CERMIC CAP. 0.047
C566	4822 122 40589	CERMIC CAP. 0.047
C567	4822 122 33792	10pF UP050100J 5
C568	4822 124 41246	47µF/16V
C569	4822 122 40588	0.022µF TP050F223Z 2
C570	4822 122 40588	0.022µF TP050F223Z T
C571	4822 122 40588	0.022µF TP050F223Z T
C572	4822 124 41153	220µF/ 16V
C573	4822 122 40589	CERMIC CAP. 0.047
C574	4822 126 11558	0.1µF UP050104Z 5
C575	4822 122 40588	0.022µF TP050F223Z T
C576	4822 122 40588	0.022µF TP050F223Z T
C577	4822 122 40588	0.022µF TP050F223Z T
C578	4822 122 40588	0.022µF TP050F223Z T
C579	4822 122 40588	0.022µF TP050F223Z T
C580	4822 126 11559	120pF J CH 50V BLK
C581	4822 122 40589	CERMIC CAP. 0.047
C582	4822 126 11552	12pF 50V
C584	4822 122 33656	39pF J CH 50V BLK
C585	4822 124 41153	220µF/ 16V
C586	4822 122 40588	0.022µF TP050F223Z 2
C587	4822 122 40589	CERMIC CAP. 0.047
C588	4822 122 40589	CERMIC CAP. 0.047

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C589	4822 122 40588	0.022µF TP050F223Z T
C590	4822 124 21983	4.7µF/50V
C591	4822 122 40588	0.022µF TP050F223Z T
C592	4822 122 33656	39pF J CH 50V BLK
C593	4822 126 11559	120pF J CH 50V BLK
C594	4822 122 40589	CERMIC CAP. 0.047
C596	4822 126 11559	120pF J CH 50V BLK
C597	4822 122 40589	CERMIC CAP. 0.047
C600	4822 122 40588	0.022µF TP050F223Z 2
C601	4822 124 41246	47µF/16V 7L
C602	4822 122 31173	220pF J SL 50V GRN
C603	4822 122 40568	68pF J CH 50V BLK
C605	4822 122 40588	0.022µF TP050F223Z T
C606	4822 124 41246	47µF 16V 7L
C609	4822 122 31168	270pF J SL 50V GRN
C610	4822 124 41246	47µF 16V L=7MM
C616	4822 124 22048	220µF/6.3V
C617	4822 122 40588	0.022µF TP050F223Z T
C618	5322 124 21349	470µF/6.3V
C619	5322 124 21349	470µF/6.3V
C620	4822 126 11557	4.7pF 50V
C622	4822 122 40588	0.022 µF TP050F23Z 2
C625	4822 126 11558	0.1 µF CERAMIC CAP Z
C643	4822 122 40588	0.022µF TP050F223Z T
C644	5322 122 32072	33pF J CH 50V BLK
C645	4822 122 31172	180pF J SL 50V GRN
C646	4822 121 42609	0.33µF,J,T,50V
C647	4822 122 33792	10pF 50V
C648	4822 121 42722	0.001µF,J,M,50V
C649	4822 121 42327	470pF,J,M,50V
C650	4822 122 40588	0.022µF TP050F223Z 2
C651	4822 122 31172	180pF J SL 50V GRN
C657	4822 126 11236	82 pF J CH 50V BLK
C658	4822 126 11236	82pF J CH 50V BLK
C660	4822 121 42722	0.001µF,J,M,50V
C661	4822 122 40588	0.022µF TP050F223Z T
C662	4822 124 41153	220µF/ 16V
C663	4822 122 40588	0.022µF TP050F223Z T
C664	4822 122 33792	10pF 50V
C665	4822 122 33792	10pF 50V
C666	4822 126 11557	4.7pF 50V
C667	4822 126 11236	82pF J CH 50V BLK
C668	4822 124 41153	220µF 16V
C669	4822 126 11558	0.1µF 50V
C671	4822 122 40588	0.022µF TP050F223Z T
C672	4822 124 22048	220µF/6.3V
C673	4822 122 40588	0.022µF TP050F223Z T
C674	4822 124 22048	220µF/6.3V
C675	4822 122 40588	0.022µF TP050F223Z T
C676	4822 124 22048	220µF/6.3V
C679	4822 124 41246	47µF 16V L=7MM
C680	4822 124 22048	220µF/6.3V
C681	4822 122 40588	0.022µF TP050F223Z T
C682	4822 122 40589	0.047µF UP050223Z 5
C701	4822 122 40588	0.022µF TP050F223Z 2
C702	4822 124 22048	220µF/6.3V
C704	4822 126 11558	CERMIC CAP. 0.1µF Z
C705	4822 124 22048	220µF/6.3V
C706	4822 121 42725	0.0027µF,J,M,50V,D=9
C707	4822 126 11558	CERMIC CAP. 0.1µF Z
C708	4822 121 42722	1000pF J,M,50V
C710	4822 121 42722	0.001µF,J,M,50V
C711	4822 126 11558	CERMIC CAP. 0.1µF Z
C712	4822 126 11558	CERMIC CAP. 0.1µF Z
C714	4822 122 40528	27pF J CH 50V BLK
C715	4822 122 40528	27pF J CH 50V BLK

PARTSLIST MAIN PCB P506 (continued)

C716	5322 122 32072	33pF J CH 50V BLK
C717	5322 122 32072	33pF J CH 50V BLK
C718	4822 124 41246	47µF/16V
C719	4822 122 40588	0.022µF TP050F223Z 2
C720	4822 124 41246	47µF/16V
C722	4822 125 60165	VCT51G 50PF
C723	4822 126 11554	18pF 50V
C724	4822 125 60165	VCT51G 50PF
C725	4822 126 11554	18pF 50V
C727	4822 125 60165	VCT51G 50PF
C728	4822 122 33657	56pF J CH 50V BLK
C729	4822 121 42722	1000pF J 50V
C730	4822 122 40568	68pF J CH 50V BLK
C731	4822 122 40588	0.022µF TP050F223Z 2
C732	4822 122 40588	0.022µF TP050F223Z T
C733	4822 122 40528	27pF J CH 50V BLK
C734	4822 121 42725	0.0027µF,J,M,50V,D=9
C735	4822 122 33657	56pF J CH 50V BLK
C736	4822 122 33657	56pF J CH 50V BLK
C737	4822 122 40528	27pF J CH 50V BLK
C738	4822 122 40588	0.022µF TP050F223Z T
C741	4822 121 41856	0.022µF,J,M,50V
C742	4822 122 40588	0.022µF TP050F223Z T
C743	4822 121 42697	0.068µF,J,N,50V
C744	4822 121 41856	0.022µF,J,M,50V
C745	4822 121 41854	0.15µF,J,T,50V
C746	4822 122 40588	0.022µF TP050F223Z T
C747	4822 124 41246	47µF/ 16V
C748	4822 122 40588	0.022µF TP050F223Z T
C751	4822 121 42771	0.0022µF,J,M,50V
C752	4822 121 42327	470PF,J,M,50V
C753	4822 122 40588	0.022µF TP050F223Z T
C759	4822 122 40588	0.022µF TP050F223Z T
C760	4822 124 41246	47µF/ 16V
C761	4822 122 40588	0.022µF TP050F223Z T
C770	4822 124 21894	10µF 16V L=7MM
C771	5322 122 32072	33pF J CH 50V BLK
C772	5322 122 32072	33pF J CH 50V BLK
C780	4822 124 41246	47µF/ 16V
C781	4822 124 21983	4.7µF/50V
C782	4822 121 42722	0.001µF,J,M,50V
C783	4822 124 21739	22µF/16V
C784	4822 124 41246	47µF/ 16V
C785	4822 122 33657	56pF J CH 50V BLK
C786	4822 124 21983	4.7µF/50V
C787	4822 122 40588	0.022µF TP050F223Z 2
C788	4822 122 40588	0.022µF TP050F223Z 2
C789	4822 124 41246	47µF/16V
C790	4822 126 11554	18pF 50V UP050180J
C791	4822 126 11559	120pF J CH 50V BLK
C792	4822 122 33792	10pF J CH 50V
C793	4822 122 31172	180pF J SL 50V GRN
C794	4822 122 31168	270pF J SL 50V GRN
C795	4822 122 31172	180pF J SL 50V GRN
C796	4822 121 42327	470pF J,M,50V
C797	4822 124 41246	47µF 16V L=7MM
C798	4822 124 41246	47µF 16V L=7MM
C799	4822 124 41246	47µF/16V
C800	4822 122 40588	0.022µF TP050F223Z 2
C801	4822 122 40588	0.022µF TP050F223Z 2
C802	4822 122 40588	0.022µF TP050F223Z T
C803	4822 122 40588	0.022µF TP050F223Z T
C804	4822 122 31172	180pF J SL 50V GRN
C805	4822 122 31172	180pF J SL 50V GRN
C806	4822 122 31172	180pF J SL 50V GRN
C807	4822 122 31172	180pF J SL 50V GRN

C808	4822 122 31172	180pF J SL 50V GRN
C809	4822 121 41856	0.022µF,J,M,50V
C810	4822 124 40792	4.7µF/ 50V (BP)
C811	4822 121 42609	0.33µF,J,T,50V
C812	4822 121 42722	1000pF,J,M,50V
C813	4822 124 41246	47µF/ 16V
C814	4822 121 42769	1500pF,J,M,50V
C815	4822 122 40528	27pF J CH 50V BLK
C816	4822 124 21739	22µF/16V
C817	4822 121 42697	0.068µF,J,M,50V
C818	4822 121 42697	0.0082µF,J,M,50V,D=9
C819	4822 122 40588	0.022µF TP050F223Z T
C820	4822 122 40588	0.022µF TP050F223Z T
C821	4822 122 40588	0.022µF TP050F223Z T
C822	4822 122 40588	0.022µF TP050F223Z T
C823	4822 122 31172	180pF J SL 50V GRN
C831	4822 124 41246	47µF/ 16V
C832	4822 124 41246	47µF 16V
C833	4822 124 21894	10µF/ 16V
C834	4822 124 41246	47µF 16V
C835	4822 124 41246	47µF 16V
C837	4822 124 22048	220µF/6.3V

DA01	4822 130 33305	1SS176,MA165,1SS254
DA02	4822 130 33305	1SS176,MA165,1SS254
D361	4822 130 33305	1SS176.MA165.1SS254
D362	4822 130 33305	1SS176.MA165 1SS254
D363	4822 130 33305	1SS176,MA165,1SS254
D364	4822 130 33305	1S1555/2473/2076.DS4
D365	4822 130 33305	1SS176,MA165,1SS254
D367	4822 130 33305	1SS176,MA165,1SS254
D368	4822 130 33305	1SS176,MA165,1SS254
D401	4822 130 82608	10DF1-FC3 FAST RECOV
D402	4822 130 82608	10DF1-FC3 FAST RECOV
D403	4822 130 82608	10DF1-FC3 FAST RECOV
D404	4822 130 82608	10DF1-FC3 FAST RECOV
D412	4822 130 33305	1SS176,MA165,1SS254
D421	4822 130 33305	1SS176,MA165,1SS254
D501	4822 130 33305	1SS176,MA165,1SS254
D502	4822 130 33305	1SS176,MA165,1SS254
D511	4822 130 33305	1SS176,MA165,1SS254
D781	4822 130 31542	SVC321SP-B
D801	4822 130 33305	1SS176,MA165,1SS254
D802	4822 130 33305	1SS176,MA165,1SS254
D803	4822 130 33305	1SS176,MA165,1SS254
D804	4822 130 33305	1SS176,MA165,1SS254
D805	4822 130 33305	1SS176,MA165,1SS254
D806	4822 130 33305	1SS176,MA165,1SS254
D807	4822 130 33305	1SS176,MA165,1SS254
D808	4822 130 33305	1SS176,MA165,1SS254
D809	4822 130 33305	1SS176,MA165,1SS254
D810	4822 130 33305	1SS176,MA165,1SS254
D811	4822 130 33305	1SS176,MA165,1SS254
D812	4822 130 33305	1SS176,MA165,1SS254

FA01	4822 242 80283	144-1009-01 2.5MHz
FA02	4822 242 80282	144-1006-01 2.3MHz
FA03	4822 242 80284	144-1008-01 2.8MHz
FA04	4822 242 73896	144-5188-01 684KHz B
FA05	4822 242 73897	144-5074-01 1066KHz
F305	4822 242 73892	135-1032-04 1/7MHz L
F501	4822 242 73901	5.1MHz LPF

PARTSLIST MAIN PCB P506 (continued)

F502	4822 242 80287	4.5MHz L.P.F.
F503	4822 320 50228	63.5US DELAY LIWE BN
F510	4822 242 73895	5.9MHzLPF
F511	4822 242 73843	DSS306-91-F-223Z NOI
F512	4822 242 73843	DSS306-91-F-223Z NOI
F711	4822 242 73843	DSS306-91-F-223Z NOI
F712	4822 242 73843	DSS306-91-F-223Z NOI
F801	4822 242 73843	DSS306-91-F-223Z NOI

IC36	4822 209 63455	NJM2233BD
IC37	4822 209 70082	NJM78L05A
IC51	4822 209 30058	TEA7650-V3B
IC52	4822 209 63465	MSM7401RS 1H CCD
IC53	4822 209 63461	SAA7630P (CCD)
IC54	4822 209 30054	MSM7400RS CCD
IC55	4822 209 30055	PA0023 VIDEO DEMO
IC56	4822 209 63464	TBC-MA
IC57	4822 209 60753	TBC-MD
IC58	4822 209 61187	BA15218
IC59	4822 209 61187	BA15218
IC60	4822 209 61187	BA15218
IC61	4822 209 70082	NJM78L05A
IC62	4822 209 63455	NJM2233BD
IC63	4822 209 63455	NJM2233BD
IC64	4822 209 63455	NJM2233BD
IC65	4822 209 63455	NJM2233BD
IC90	4822 209 63747	HA12127ANT
IC91	4822 209 60626	DSC-M2
IC92	4822 209 63468	NJM082D
IC93	4822 209 61187	BA15218
IC95	4822 209 83839	UPD4053BC

LA01	4822 157 62898	LAL02TA181J 180UH
L301	4822 157 62901	EL0607RA392J 3.9MH
LG16	4822 157 62909	LAL02TA220J 22UH
L411	4822 280 20448	RA9W-K TAKAMIZAWA
L501	4822 157 62912	LAL02TA560J 56UH
L502	4822 157 62899	LAL02TA221J 220UH
L503	4822 157 62921	LAL02TA151J 150UH
L504	4822 157 62922	LAL02TA330J 33UH
L505	4822 157 62906	LAL02TA120J 12UH
L506	4822 157 62906	LAL02TA120J 12UH
L507	4822 157 62906	LAL02TA120J 12UH
L508	4822 157 62906	LAL02TA120J 12UH
L509	4822 157 62906	LAL02TA120J 12UH
L510	4822 157 62906	LAL02TA120J 12UH
L511	4822 157 63312	5.6UH LAL02TP056J
L512	4822 157 62902	6.8UH LAL02TP068J
L513	4822 157 62906	LAL02TA120J 12UH
L514	4822 157 62907	LAL02TA150J 15UH
L516	4822 157 62898	LAL02TA181J 180UH
L517	4822 157 62907	LAL02TA150J 15UH
L518	4822 157 62907	LAL02TA150J 15UH
L519	4822 157 62912	LAL02TA560J 56UH
L520	4822 157 62911	LAL02TA3R3J 3.3UH
L522	4822 157 62909	LAL02TA220J 22UH
L523	4822 157 62899	LAL02TA221J 220UH
L526	4822 157 62922	LAL02TA330J 33UH
L527	4822 157 62912	LAL02TA560J 56UH
L529	4822 157 62912	LAL02TA560J 56UH
L530	4822 157 62913	EL0606-561J 560UH
L542	4822 157 62909	LAL02TA220J 22UH
L543	4822 157 62909	LAL02TA220J 22UH

L714	4822 157 62909	LAL02TA220J 22UH
L715	4822 157 62909	LAL02TA220J 22UH
L716	4822 157 62907	LAL02TA150J 15UH
L717	4822 157 62907	LAL02TA150J 15UH
L718	4822 157 62907	LAL02TA150J 15UH
L719	4822 157 62914	LAL02TA680J 68UH
L721	4822 157 62907	LAL02TA150J 15UH
L722	4822 157 62907	15UH LAL02TP150J
L723	4822 157 62914	68UH LAL02TP680J

QA01	4822 130 42298	2SC536SP,2SC2458,2SC
QA02	4822 130 42298	C536SP,C2458,C3311,C
QA03	4822 130 42298	C536SP,C2458,C3311,C
QA04	4822 130 42298	C536SP,C2458,C3311,C
QA05	4822 130 42715	2SA608SP,2SA1048,2SA
QA08	4822 130 42298	CS36SP,C2458,C3311,C
QA09	4822 130 42298	C536SP,C2458,C3311,C
QA10	4822 130 42298	C536SP,C2458,C3311,C
QA11	4822 130 42298	C536SP,C2458,C3311,C
QA12	4822 130 42298	C536SP.C2458.C3311.C
QA21	4822 130 42298	C536SP.C2458,C3311,C
QA22	4822 130 42298	C536SP,C2458,C3311,C
QG01	4822 130 42715	2SA608SP,2SA1048,2SA
QG02	4822 130 42298	2SC536SP,2SC2458,2SC
QG03	4822 130 42715	A608SP,A1048,A1309,A
QG04	4822 130 42298	C536SP,C2458,C3311,C
QG05	4822 130 42298	C536SP,C2458,C3311,C
QG06	4822 130 42683	DRC124ES (TP)
QG67	4822 130 42298	C536SP,C2458,C3311,C
Q301	4822 130 42298	2SC536SP,2SC2458,2SC
Q302	4822 130 42298	C536SP,C2458,C3311,C
Q303	4822 130 42298	C536SP,C2458,C3311,C
Q304	4822 130 42298	C536SP,C2458,C3311,C
Q305	4822 130 42298	C536SP,C2458,C3311,C
Q306	4822 130 42298	C536SP,C2458,C3311,C
Q307	4822 130 42298	C536SP,C2458,C3311,C
Q358	4822 130 43818	2SC2878-A
Q365	4822 130 42683	DTC124ES (TP)
Q368	4822 130 42593	DTA124ES (TP)
Q369	4822 130 42593	DTA124ES (TP)
Q401	4822 130 61179	2SD2037 E OR F 50V 1
Q402	4822 130 61176	2SB1357 E OR F 50V 1
Q405	4822 130 43818	2SC2878
Q406	4822 130 43818	2SC2878
Q407	4822 130 42715	2SA608SP,2SA1048,2SA
Q409	4822 130 42593	DTA124ES (TP)
Q410	4822 130 42683	DTC124ES (TP)
Q501	4822 130 42715	A608SP,A1048,A1309,A
Q502	4822 130 42298	C536SP,C2458,C3311,C
Q503	4822 130 42298	C536SP,C2458,C3311,C
Q504	4822 130 42715	A608SP,A1048,A1309,A
Q505	4822 130 42298	C536SP,C2458,C3311,C
Q506	4822 130 42298	C536SP,C2458,C3311,C
Q508	4822 130 42298	C536SP,C2458,C3311,C
Q509	4822 130 42298	C536SP,C2458,C3311,C
Q510	4822 130 42298	C536SP,C2458,C3311,C
Q511	4822 130 42298	C536SP,C2458,C3311,C
Q512	4822 130 42683	DTC124ES (TP)
Q513	4822 130 42298	C536SP,C2458,C3311,C
Q514	4822 130 42715	A608SP,A1048,A1309,A
Q515	4822 130 42715	A608SP,A1048,A1309,A
Q516	4822 130 61441	2SD1862
Q517	4822 130 42715	A608SP,A1048,A1309,A
Q518	4822 130 61441	2SD1862

PARTSLIST MAIN PCB P506 (continued)

Q519	4822 130 42683	DTC124ES (TP)
Q520	4822 130 42683	DTC124ES (TP)
Q521	4822 130 42298	C536SP,C2458,C3311,C
Q522	4822 130 42298	C536SP,C2458,C3311,C
Q523	4822 130 42683	DTC124ES (TP)
Q524	4822 130 42298	C536SP,C2458,C3311,C
Q525	4822 130 42715	A608SP,A1048,A1309,A
Q526	4822 130 42298	C536SP,C2458,C3311,C
Q527	4822 130 42715	A608SP,A1048,A1309,A
Q528	4822 130 61441	2SD1862
Q529	4822 130 61417	2SB1240
Q530	4822 130 42715	A608SP,A1048,A1309,A
Q531	4822 130 42715	A608SP,A104S,A1309,A
Q532	4822 130 42298	C536SP,C2458,C3311,C
Q536	4822 130 42715	A608SP,A1048,A1309,A
Q537	4822 130 42715	A608SP,A1048,A1309,A
Q539	4822 130 42715	A608SP,A1048,A1309,A
Q540	4822 130 42298	C536SP,C2458,C3311,C
Q541	4822 130 42298	C536SP,C2458,C3311,C
Q546	4822 130 60886	2SC1923 Y
Q547	4822 130 42298	C536SP,C2458,C3311,C
Q561	4822 130 42298	C536SP,C2458,C3311,C
Q562	4822 130 42298	C536SP,C2458,C3311,C
Q575	4822 130 60886	2SC1923 Y
Q576	4822 130 42715	A608SP,A1048,A1309,A
Q582	4822 130 61438	2SA1005 L.OR K
Q583	4822 130 61438	2SA1005 L.OR K
Q584	4822 130 60886	2SC1923 Y
Q585	4822 130 60886	2SC1923 Y
Q586	4822 130 42298	C536SP,C2458,C3311,C
Q601	4822 130 42683	DTC124ES (TP)
Q702	4822 130 61438	2SA1005
Q703	4822 130 42683	DTC124ES (TP)
Q704	4822 130 42298	2SC536SP,2SC2458,2SC
Q705	4822 130 42298	C536SP,C2458,C3311,C
Q706	4822 130 42298	C536SP,C2458,C3311,C
Q707	4822 130 42715	2SA608SP,2SA1048,2SA
Q708	4822 130 42683	DTC124ES (TP)
Q709	4822 130 42683	DTC124ES (TP)
Q713	4822 130 42593	DTA124ES
Q715	4822 130 42298	C536SP,C2458,C3311,C
Q716	4822 130 42298	C536SP,C2458,C3311,C
Q717	4822 130 42298	C536SP,C2458,C3311,C
Q718	4822 130 42298	C536SP,C2458,C3311,C
Q719	4822 130 42298	C536SP,C2458,C3311,C
Q721	4822 130 42683	DTC124ES (TP)
Q801	4822 130 42298	2SC536SP,2SC2458,2SC
Q802	4822 130 42298	C536SP,C2458 C3311

RA01	4822 116 52231	12K Ω +- 5% 1/6W
RA02	4822 050 11002	1K Ω +- 5% 1/6W
RA03	4822 116 52269	3.3K Ω +- 5% 1/6
RA04	4822 116 52215	220 Ω +- 5% 1/6W
RA05	4822 116 52296	6.8KΩ +- 5% 1/6W
RA06	4822 116 52207	1.2K Ω +- 5% 1/6
RA07	4822 116 52269	3.3K Ω +-5% 1/6W
RA08	4822 116 52207	1.2K Ω +- 5% 1/6
RA09	4822 111 41355	75 Ω +-5% 1/6W
RA10	4822 116 52202	82 Ω +- 5% 1/6
RA11	4822 116 52202	82 Ω +- 5% 1/6
RA12	4822 116 52228	680 Ω +- 5% 1/6
RA13	4822 116 52243	1.5K Ω +- 5% 1/6
RA14	4822 050 11002	1K Ω +- 5% 1/6
RA15	4822 050 11002	1K Ω +- 5% 1/6

RA16	4822 050 11002	1K Ω +- 5% 1/6
RA17	4822 050 11002	1K Ω +- 5% 1/6
RA21	4822 050 11002	1K Ω J 1/6W
RA22	4822 050 11002	1K Ω J 1/6W
RA23	4822 116 52284	47K Ω +-5% 1/6W
RA24	4822 116 52284	47K Ω +-5% 1/6W
RA31	4822 116 52289	5.6K Ω +-5% 1/6W
RA32	4822 116 52296	6.8K Ω +- 5% 1/6
RA33	4822 116 52283	4.7K Ω +- 5% 1/6
RA34	4822 116 52283	4.7K Ω +- 5% 1/6
RA35	4822 116 52296	6.8K Ω +- 5% 1/6
RA36	4822 116 52296	6.8K Ω +- 5% 1/6
RA37	4822 116 52249	1.8K Ω +- 5% 1/6
RA38	4822 116 52249	1.8K Ω +- 5% 1/6
RA39	4822 116 52283	4.7K Ω +- 5% 1/6
RA40	4822 116 52283	4.7K Ω +- 5% 1/6
RA41	4822 116 52234	100K Ω +- 5% 1/6
RA42	4822 116 52234	100K Ω +- 5% 1/6
RA43	4822 116 52244	15K Ω +- 5% 1/6
RA44	4822 116 52244	15K Ω +-5% 1/6W
RA45	4822 116 52257	22K Ω +- 5% 1/6
RA46	4822 116 52257	22K Ω +- 5% 1/6
RA47	4822 116 52296	6.8K Ω +- 5% 1/6
RA48	4822 116 52296	6.8K Ω +- 5% 1/6
RA49	4822 116 52284	47K Ω +- 5% 1/6
RA50	4822 116 52284	47K Ω +- 5% 1/6
RA53	4822 116 52244	15K Ω J 1/6W
RA55	4822 116 52234	100K Ω +- 5% 1/6
RA56	4822 116 52244	15K Ω +- 5% 1/6
RA57	4822 116 52231	12K Ω +- 5% 1/6
RA59	4822 050 19103	91K Ω +- 5% 1/6
RA60	4822 116 52283	4.7K Ω +-5% 1/6W
RA61	4822 116 52245	150K Ω +- 5% 1/6
RA62	4822 116 52234	100K Ω +- 5% 1/6
RA63	4822 116 52245	150K Ω +- 5% 1/6
RA71	4822 116 52175	100 Ω J 1/6W
RA72	4822 050 11002	1K Ω J 1/6W
RA73	4822 116 52226	560 Ω J 1/6W
RA74	4822 050 11002	1K Ω J 1/6W
RA76	4822 050 11002	1K Ω J 1/6W
RA77	4822 050 11002	1K Ω J 1/6W
RA78	4822 050 11002	1K Ω J 1/6W
RA79	4822 050 11002	1K Ω J 1/6W
RA81	4822 116 52284	47K Ω J 1/6W
RA82	4822 116 52283	4.7K Ω J 1/6W
RA83	4822 116 52235	1M Ω +-5% 1/6W
RA84	4822 116 52235	1M Ω +-5% 1/6W
RA90	4822 116 52284	47K Ω J 1/6W
RA91	4822 116 52284	47K Ω J 1/6W
RA92	4822 116 52283	4.7K Ω J 1/6W
RA93	4822 116 52263	2.7K Ω J 1/6W
RA94	4822 116 52284	47K Ω J 1/6W
RA95	4822 116 52284	47K Ω J 1/6W
RA96	4822 116 52284	47K Ω J 1/6W
RA97	4822 116 52296	6.8K Ω J 1/6W
RG01	4822 116 52207	1.2K Ω +- 5% 1/6
RG02	4822 050 11002	1K Ω +- 5% 1/6W
RG11	4822 116 52257	22K Ω J 1/6W
RG12	4822 116 52289	5.6K Ω J 1/6W
RG13	4822 116 52296	6.8K Ω +- 5% 1/6
RG14	4822 116 52224	470 Ω +- 5% 1/6
RG15	4822 116 52215	220 Ω +- 5% 1/6W
RG16	4822 050 11002	1K Ω +- 5% 1/6
RG17	4822 050 11002	1K Ω +- 5% 1/6
RG18	4822 116 52243	1.5K Ω +- 5% 1/6
RG22	4822 116 52197	56 Ω +- 5% 1/6W

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RG23	4822 116 52197	56 Ω +- 5% 1/6W
RG31	4822 116 52284	47K Ω +- 5% 1/6W
RG32	4822 116 52233	10K Ω +- 5% 1/6W
RG35	4822 050 11002	1K Ω +- 5% 1/6W
RG36	4822 116 52197	56 Ω +- 5% 1/6W
RG37	4822 116 52175	100 Ω +- 5% 1/6W
R301	4822 116 52264	27K Ω +-5% 1/6W
R302	4822 116 52296	6.8K Ω +- 5% 1/6
R303	4822 116 52207	1.2K Ω +- 5% 1/6W
R304	4822 116 52224	470 Ω +- 5% 1/6
R305	4822 116 52219	470 Ω +- 5% 1/6
R306	4822 050 11002	1K Ω +- 5% 1/6W
R307	4822 116 52215	220 Ω +- 5% 1/6W
R308	4822 116 52222	390 Ω +- 5% 1/6
R309	4822 116 52256	2.2K Ω +- 5% 1/6
R310	4822 116 52233	10K Ω +- 5% 1/6
R311	4822 116 52269	3.3K Ω +- 5% 1/6
R312	4822 050 11002	1K Ω +- 5% 1/6
R313	4822 116 52226	560 Ω +- 5% 1/6W
R314	4822 050 11002	1K Ω +- 5% 1/6
R315	4822 116 52283	4.7K Ω +- 5% 1/6
R316	4822 116 52296	6.8K Ω +- 5% 1/6
R317	4822 116 52207	1.2K Ω +- 5% 1/6
R318	4822 116 52228	680 Ω +- 5% 1/6
R319	4822 116 52219	330 Ω +- 5% 1/6
R320	4822 116 52219	330 Ω +- 5% 1/6W
R321	4822 116 52175	100 Ω +- 5% 1/6
R322	4822 116 52296	6.8K Ω +- 5% 1/6W
R323	4822 116 52224	470 Ω +- 5% 1/6W
R324	4822 116 52217	270 Ω +- 5% 1/6W
R326	4822 116 52233	10K Ω +- 5% 1/6
R327	4822 050 11002	1K Ω +- 5% 1/
R359	4822 116 52283	4.7K Ω +- 5% 1/6
R360	4822 116 52283	4.7K Ω +- 5% 1/6
R378	4822 116 52283	4.7K Ω +- 5% 1/6
R379	4822 050 11002	1K Ω +- 5% 1/6
R392	4822 116 52283	4.7K Ω +- 5% 1/6
R393	4822 116 52283	4.7K Ω +- 5% 1/6
R394	4822 116 52283	4.7K Ω +- 5% 1/6
R395	4822 116 52283	4.7K Ω +- 5% 1/6
R396	4822 116 52283	4.7K Ω +- 5% 1/6
R397	4822 116 52283	4.7K Ω +-5% 1/6W
R398	4822 116 52234	100K Ω +- 5% 1/6
R399	4822 116 52234	100K Ω +- 5% 1/6
R461	4822 116 52233	10K Ω +- 5% 1/6
R462	4822 116 52283	4.7K Ω +- 5% 1/6
R463	4822 116 52215	220 Ω +- 5% 1/6
R464	4822 116 52215	220 Ω +- 5% 1/6
R465	4822 116 52215	220 Ω +- 5% 1/6
R466	4822 116 52215	220 Ω +- 5% 1/6
R469	4822 116 52197	56 Ω +- 5% 1/6
R470	4822 116 52256	2.2K Ω +- 5% 1/6
R471	4822 116 52256	2.2K Ω +- 5% 1/6
R472	4822 116 52283	4.7K Ω +- 5% 1/6
R473	4822 116 52283	4.7K Ω +- 5% 1/6
R481	4822 116 60446	3.3 Ω J 1/4W
R482	4822 116 60446	3.3 Ω J 1/4W
R483	4822 116 52175	100 Ω +-5% 1/6W
R484	4822 116 52175	100 Ω +-5% 1/6W
R492	4822 116 52233	10K Ω +- 5% 1/6
R493	4822 116 52283	4.7K Ω +- 5% 1/6
R501	4822 116 52231	12K Ω +- 5% 1/6
R502	4822 116 52296	6.8K Ω +- 5% 1/6
R504	4822 116 52226	560 Ω +- 5% 1/6
R505	4822 116 52228	680 Ω +- 5% 1/6
R507	4822 116 52233	10K Ω +- 5% 1/6

R508	4822 116 52233	10K Ω +- 5% 1/6
R509	4822 100 11351	10K Ω VER,RES
R510	4822 116 52226	560 Ω +- 5% 1/6
R511	4822 100 11351	10K Ω VER,RES
R512	4822 116 52284	47K Ω +- 5% 1/6
R513	4822 116 52283	4.7K Ω +- 5% 1/6W
R514	4822 116 52226	560 Ω +- 5% 1/6
R516	4822 116 52284	47K Ω +- 5% 1/6
R517	4822 116 52283	4.7K Ω +- 5% 1/6W
R518	4822 116 52226	560 Ω +- 5% 1/6
R520	4822 050 22209	22 Ω +- 5% 1/4W
R521	4822 116 52269	3.3K Ω +- 5% 1/6
R522	4822 116 52296	6.8K Ω +- 5% 1/6
R523	4822 116 52269	3.3K Ω +- 5% 1/6W
R524	4822 116 52226	560 Ω +- 5% 1/6
R526	4822 111 41355	75 Ω +- 5% 1/6
R527	4822 111 41355	75 Ω J 1/6W
R529	4822 050 11002	1K Ω +- 5% 1/6
R530	4822 050 11002	1K Ω +- 5% 1/6
R531	4822 050 11002	1K Ω +- 5% 1/6
R532	4822 050 11002	1K Ω +- 5% 1/6W
R534	4822 116 52296	6.8K Ω +- 5% 1/6W
R535	4822 050 11002	1K Ω +- 5% 1/6
R536	4822 116 52256	2.2K Ω +- 5% 1/6
R537	4822 116 52256	2.2K Ω +- 5% 1/6
R538	4822 116 52269	3.3K Ω +- 5% 1/6W
R539	4822 116 52303	8.2K Ω +- 5% 1/6
R540	4822 116 52303	8.2K Ω +- 5% 1/6
R541	4822 116 52233	10K Ω +- 5% 1/6W
R542	4822 116 52197	56 Ω +- 5% 1/6
R543	4822 116 52284	47K Ω +- 5% 1/6W
R544	4822 116 52243	1.5K Ω +- 5% 1/6W
R545	4822 116 52283	4.7K Ω +- 5% 1/6W
R546	4822 116 52249	1.8K Ω +- 5% 1/6W
R547	4822 050 11002	1K Ω +- 5% 1/6
R548	4822 050 11002	1K Ω +- 5% 1/6
R549	4822 116 52243	1.5K Ω +- 5% 1/6
R550	4822 116 52207	1.2K Ω +- 5% 1/6W
R551	4822 116 52243	1.5K Ω +- 5% 1/6W
R552	4822 050 11002	1K Ω +- 5% 1/6
R553	4822 116 52284	47K Ω +- 5% 1/6W
R554	4822 116 52296	6.8K Ω +- 5% 1/6
R555	4822 115 90167	10 Ω +- 2% 1/4W
R556	4822 116 52226	560 Ω +- 5% 1/6
R557	4822 050 11002	1K Ω +- 5% 1/6
R558	4822 111 91404	150 Ω +- 5% 1/6W
R560	4822 115 90167	10 Ω +- 2% 1/4W
R561	4822 116 52207	1.2K Ω +- 5% 1/6
R562	4822 116 52175	100 Ω +- 5% 1/6
R563	4822 116 52226	560 Ω +- 5% 1/6
R564	4822 050 11002	1K Ω +- 5% 1/6
R565	4822 116 52175	100 Ω +- 5% 1/6
R566	4822 116 52228	680 Ω +- 5% 1/6W
R567	4822 116 52233	10K Ω +- 5% 1/6W
R568	4822 116 52175	100 Ω +- 5% 1/6
R569	4822 050 11002	1K Ω +- 5% 1/6
R570	4822 116 52245	150K Ω +- 5% 1/6
R571	4822 116 52245	150K Ω +- 5% 1/6
R572	4822 116 52284	47K Ω +- 5% 1/6
R573	4822 116 52256	2.2K Ω +- 5% 1/6
R574	4822 116 52197	56 Ω +- 5% 1/6
R575	4822 116 52175	100 Ω +- 5% 1/6
R576	4822 050 11002	1K Ω +- 5% 1/6
R577	4822 116 52219	330 Ω +- 5% 1/6
R578	4822 116 52207	1.2K Ω +- 5% 1/6
R579	4822 116 52224	470 Ω +- 5% 1/6

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R580	4822 116 52175	100 Ω +- 5% 1/6
R581	4822 050 11002	1K Ω +- 5% 1/6
R582	4822 050 11002	1K Ω +- 5% 1/6
R583	4822 116 52243	1.5K Ω +- 5% 1/6
R584	4822 050 11002	1K Ω +- 5% 1/6
R587	4822 116 52226	560 Ω +- 5% 1/6W
R588	4822 116 52243	1.5K Ω +- 5% 1/6
R589	4822 116 52233	10K Ω +- 5% 1/6
R590	4822 116 52296	6.8K Ω +- 5% 1/6
R591	4822 116 52296	6.8K Ω +- 5% 1/6
R594	4822 116 52296	6.8K Ω +- 5% 1/6
R595	4822 050 11002	1K Ω +- 5% 1/6W
R596	4822 116 52226	560 Ω +- 5% 1/6W
R597	4822 116 52243	1.5K Ω +- 5% 1/6
R601	4822 116 52263	2.7K Ω +- 5% 1/6
R602	4822 116 52224	470 Ω +- 5% 1/6W
R603	4822 116 52243	1.5K Ω +- 5% 1/6W
R604	4822 050 11002	1K Ω +- 5% 1/6
R605	4822 115 90167	10 Ω +- 2% 1/4W
R606	4822 116 52215	220 Ω +- 5% 1/6W
R608	4822 050 11002	1K Ω +- 5% 1/6W
R609	4822 050 11002	1K Ω +- 5% 1/6W
R610	4822 050 11002	1K Ω +- 5% 1/6W
R611	4822 116 52233	10K Ω +- 5% 1/6
R613	4822 116 52215	220 Ω +- 5% 1/6W
R614	4822 116 52226	560 Ω +- 5% 1/6W
R615	4822 116 52211	150 Ω +- 5% 1/6W
R617	4822 116 52175	100 Ω +- 5% 1/6
R618	4822 116 52217	270 Ω 1/6W +-5%
R619	4822 111 41355	75 Ω +- 5% 1/6
R620	4822 116 52175	100 Ω +- 5% 1/6
R621	4822 111 41355	75 Ω +- 5% 1/6
R622	4822 100 11755	220 Ω RH0634CJ2R
R623	4822 116 52226	560 Ω +- 5% 1/6W
R624	4822 116 52256	2.2K Ω +- 5% 1/6W
R625	4822 116 52211	150 Ω +- 5% 1/6W
R626	4822 116 52217	270 Ω 1/6W +- 5%
R627	4822 116 52226	560 Ω +- 5% 1/6W
R630	4822 116 52213	180 Ω +- 5% 1/6W
R631	4822 116 52263	2.7K Ω +- 5% 1/6
R632	4822 050 11002	1K Ω +- 5% 1/6
R637	4822 116 52256	2.2K Ω +- 5% 1/6W
R638	4822 116 52256	2.2K Ω +- 5% 1/6W
R639	4822 116 52224	470 Ω +- 5% 1/6W
R640	4822 100 11426	RH0634CS2R TYPE 470
R641	4822 050 11002	1K Ω +- 5% 1/6W
R642	4822 116 52256	2.2K Ω +- 5% 1/6W
R644	4822 116 52213	180 Ω 1/6W +- 5%
R645	4822 116 52224	470 Ω +- 5% 1/6
R646	4822 116 52206	120 Ω 1/6W +-5%
R647	4822 050 11002	1K Ω 1/6W +-5%
R648	4822 116 52224	470 Ω +- 5% 1/6
R649	4822 116 52224	470 Ω +- 5% 1/6
R678	4822 116 52233	10K Ω +- 5% 1/6
R679	4822 116 52231	820 Ω +- 5% 1/6
R681	4822 116 52234	100K Ω +- 5% 1/6
R682	4822 116 52284	47K Ω +- 5% 1/6
R683	4822 116 52243	1.5K Ω +- 5% 1/6
R685	4822 116 52215	220 Ω 1/6W +-5%
R686	4822 050 11002	1K Ω +- 5% 1/6
R687	4822 100 11386	1KΩ RH0634C13R TYP
R688	4822 116 52263	2.7K Ω +- 5% 1/6
R689	4822 116 52243	1.5K Ω +- 5% 1/6
R690	4822 116 52211	150 Ω +- 5% 1/6
R691	4822 116 52175	100 Ω +- 5% 1/6
R692	4822 116 52211	150 Ω +- 5% 1/6
R693	4822 116 52175	100 Ω +- 5% 1/6
R694	4822 116 52175	100 Ω +- 5% 1/6
R695	4822 116 52175	100 Ω +- 5% 1/6
R696	4822 116 52283	4.7K Ω +- 5% 1/6
R697	4822 116 52283	4.7K Ω +- 5% 1/6
R698	4822 116 52217	270 Ω +- 5% 1/6
R699	4822 050 11002	1K Ω +- 5% 1/6
R700	4822 116 52256	2.2K Ω +- 5% 1/6
R702	4822 116 52256	2.2K Ω +- 5% 1/6
R703	4822 116 52284	47K Ω +- 5% 1/6
R704	4822 116 52211	150 Ω +- 5% 1/6W
R705	4822 116 52211	150 Ω +- 5% 1/6W
R706	4822 116 52283	4.7K Ω +- 5% 1/6
R707	4822 116 52175	100 Ω +- 5% 1/6W
R710	4822 116 52226	560 Ω +- 5% 1/6
R712	4822 116 52219	330 Ω +- 5% 1/6
R714	4822 116 52219	330 Ω +- 5% 1/6
R718	4822 116 52233	10K Ω +- 5% 1/6W
R719	4822 116 52226	560 Ω +- 5% 1/6W
R720	4822 116 52284	47K Ω +- 5% 1/6
R721	4822 116 52297	68K Ω +- 5% 1/6
R722	4822 116 52264	27K Ω +- 5% 1/6
R723	4822 116 52297	68K Ω +- 5% 1/6
R724	4822 116 52244	15K Ω +- 5% 1/6
R725	4822 116 52226	560 Ω +- 5% 1/6
R726	4822 050 11002	1K Ω +- 5% 1/6
R727	4822 116 52303	8.2K Ω +- 5% 1/6
R728	4822 116 52245	150K Ω +- 5% 1/6
R729	4822 116 52269	3.3K Ω +- 5% 1/6
R730	4822 050 11002	1K Ω +- 5% 1/6
R731	4822 116 52284	47K Ω +- 5% 1/6W
R732	4822 116 52284	47K Ω +- 5% 1/6W
R735	4822 116 52235	1M Ω +- 5% 1/6
R736	4822 050 11002	1K Ω J 1/6W
R737	4822 100 11351	10KΩ RH0634C14R TY
R738	4822 116 52233	10K Ω +- 5% 1/6W
R740	4822 050 12404	240K Ω +- 5% 1/6
R741	4822 050 19103	91K Ω +- 5% 1/6
R742	4822 116 52271	33K Ω J 1/6W
R743	4822 116 52291	56K Ω +- 5% 1/6
R744	4822 116 52291	56K Ω +- 5% 1/6
R745	4822 116 52291	56K Ω +- 5% 1/6
R751	4822 116 52296	6.8K Ω +- 5% 1/6
R752	4822 116 52257	22K Ω +- 5% 1/6
R753	4822 116 52249	1.8K Ω +- 5% 1/6
R754	4822 116 52243	1.5K Ω +- 5% 1/6
R755	4822 116 52243	1.5K Ω +- 5% 1/6
R756	4822 115 90167	10 Ω +- 2% 1/4W
R757	4822 115 90167	10 Ω +- 2% 1/4W
R758	4822 116 52243	1/5K Ω +- 5% 1/6W
R760	4822 050 11002	1K Ω +- 5% 1/6W
R761	4822 116 52233	10K Ω +-5% 1/6W
R762	4822 116 52269	3.3K Ω +- 5% 1/6W
R763	4822 116 52224	470 Ω +- 5% 1/6W
R764	4822 116 52197	56 Ω +- 5% 1/6W
R765	4822 116 52219	330 Ω +- 5% 1/6W
R766	4822 050 11002	1K Ω +- 5% 1/6W
R767	4822 116 52233	10K Ω +- 5% 1/6W
R768	4822 116 52233	10K Ω +- 5% 1/6W
R769	4822 050 11002	1K Ω +- 5% 1/6W
R770	4822 116 52215	220 Ω +- 5% 1/6W
R771	4822 116 52284	47K Ω +- 5% 1/6W
R772	4822 050 11002	1K Ω +- 5% 1/6W
R773	4822 050 11002	1K Ω +- 5% 1/6W
R774	4822 116 52224	470 Ω +- 5% 1/6W
R775	4822 050 11002	1K Ω +- 5% 1/6W

PARTSLIST MAIN PCB P506 (continued)

R776	4822 050 11002	1K Ω +- 5% 1/6W
R780	4822 116 52244	15K Ω +- 5% 1/6
R781	4822 116 52265	270K Ω +- 5% 1/6
R782	4822 100 11352	22KΩ RH0634CJ4R TY
R783	4822 116 52234	100K Ω +- 5% 1/6
R784	4822 116 52283	4.7K Ω +- 5% 1/6
R785	4822 116 52283	4.7K Ω +- 5% 1/6
R786	4822 116 52258	220K Ω +- 5% 1/6W
R787	4822 050 11002	1K Ω +- 5% 1/6
R788	4822 116 52219	330 Ω +- 5% 1/6W
R790	4822 116 52207	1.2K Ω +- 5% 1/6
R793	4822 050 11002	1K Ω +- 5% 1/6W
R794	4822 116 52256	2.2K Ω +- 5% 1/6W
R801	4822 050 11002	1K Ω +- 5% 1/6
R802	4822 050 11002	1K Ω +- 5% 1/6
R803	4822 116 52224	470 Ω +- 5% 1/6
R804	4822 116 52224	470 Ω +- 5% 1/6
R805	4822 116 52224	470 Ω +- 5% 1/6
R806	4822 116 52224	470 Ω +- 5% 1/6
R807	4822 116 52224	470 Ω +- 5% 1/6
R808	4822 116 52234	100K Ω +- 5% 1/6
R809	4822 116 52234	100K Ω +- 5% 1/6
R810	4822 050 11002	1K Ω +- 5% 1/6
R811	4822 116 52297	68K Ω +- 5% 1/6
R812	4822 116 52249	1.8K Ω +- 5% 1/6
R813	4822 116 52249	1.8K Ω +- 5% 1/6
R814	4822 116 52271	33K Ω +-5% 1/6W
R815	4822 116 52234	100K Ω +-5% 1/6W
R816	4822 116 52284	47K Ω +- 5% 1/6
R817	4822 116 52231	12K Ω +- 5% 1/6
R818	4822 050 11002	1K Ω +- 5% 1/6
R819	4822 116 52234	100K Ω +- 5% 1/6
R820	4822 116 52289	5.6K Ω +- 5% 1/6
R821	4822 116 52283	4.7K Ω +- 5% 1/6
R822	4822 116 52233	10K Ω +- 5% 1/6
R824	4822 116 52233	10K Ω +-5% 1/6W
R825	4822 116 52224	470 Ω +- 5% 1/6W
R826	4822 116 52265	270K Ω +- 5% 1/6
R827	4822 116 52283	4.7K Ω +- 5% 1/6
R828	4822 116 52296	6.8K Ω +- 5% 1/6
R829	4822 116 52284	47K Ω +- 5% 1/6
R830	4822 116 52256	2.2K Ω +- 5% 1/6
R831	4822 116 52233	10K Ω +- 5% 1/6
R832	4822 116 52256	2.2K Ω +- 5% 1/6
R833	4822 116 52284	47K Ω +- 5% 1/6
R834	4822 116 52283	4.7K Ω +- 5% 1/6W
R835	4822 115 90167	10 Ω +- 2" 1/4W
R836	4822 115 90167	10 Ω +- 2% 1/4W
R840	4822 116 52283	4.7K Ω +- 5% 1/6
R841	4822 116 52283	4.7K Ω +-5% 1/6W

X701	4822 242 73902	AT49 15MHz XTAL
X702	4822 242 80288	AT49/14.31818MHz(TP)
X703	4822 242 73903	17MHz X-TAL AT-49

Z301	4822 130 80932	6.2V ZENER EQUIVALEN
Z501	4822 130 80321	MTZJ10C
Z506	4822 130 80318	6.8V ZENER EQUIVALEN
Z507	4822 130 31554	4.3V ZENER EQUIVALEN
Z516	4822 130 80319	9.1V ZENER EQUIVALEN
Z517	4822 130 80319	9.1V ZENER EQUIVALEN
Z706	4822 130 80132	3.9V ZENER EQUIVALEN
Z707	4822 130 80132	3.9V ZENER EQUIVALEN
Z711	4822 130 80316	3.6V ZENER EQUIVALEN

Misellaneous

J401	4822 290 60998	3P RCA PIN JACK (GOL
J402	4822 290 60998	3P RCA PIN JACK (GOL
J403	4822 267 41009	2P RCA PIN JACK
J404	4822 267 31369	OPTICAL OUT TERMINAL

C315	4822 126 11567	0.022µF +- 10% R 16
C316	4822 126 11567	0.022µF +- 10% R 16
C317	4822 126 11568	470pF (GR39) 50V CH
C318	4822 126 11568	470pF (GR39) 50V CH
C319	4822 126 11566	2200pF (GR39) 50V CH
C320	4822 121 42698	0.1µF, J,N,50V
C321	4822 124 21983	4.7µF 50V
C322	4822 124 21894	10µF 16V
C323	4822 126 11565	10000pF (GR39) 25V C
C350	4822 122 32698	4700P 50V CHIP
C351	5322 121 42491	0.047µF, J,N,50V
C353	4822 124 21983	4.7µF 50V
C354	4822 124 41243	2.2µF 50V
C355	4822 124 41246	47µF 16V
C356	4822 126 11565	CHIP CAP 0.01µF 25V
C357	4822 126 11565	CHIP CAP 0.01µF
C358	4822 126 11565	CHIP CAP 0.01µF
C359	4822 124 21983	4.7µF 50V
C360	4822 124 21894	10µF 16V
C361	4822 126 11565	CHIP,CAP 0.01µF
C362	4822 126 11565	CHIP,CAP 0.01µF
C363	4822 124 41246	47µF 16V
C364	4822 126 11565	CHIP CAP 0.01µF
C366	4822 126 11567	CERAMIC.CAP 0.022µF
C380	4822 126 11567	CERAMIC CAP 0.022µF
C381	4822 126 11567	CERAMIC CAP 0.022µF
C401	4822 124 23779	220µF 10V 6.3X 11 AR
C402	4822 124 23779	220µF 10V 6.3X 11 AR
C403	4822 122 32669	47000pF 50V CHIP
C404	4822 122 32669	47000pF 50V CHIP
C405	4822 124 23776	100µF 10V 8X11 .5 AR
C406	4822 124 23776	100µF 10V 8X11 .5 AR
C407	4822 122 32669	47000pF
C408	4822 122 32669	47000pF
C409	4822 124 23776	100µF 10V 8X11 .5 AR
C410	4822 124 23776	100µF 10V 8X11 .5 AR
C411	4822 122 32669	47000pF 50V CHIP
C412	4822 122 32669	47000pF 50V
C413	4822 124 23779	220µF 10V 6.3X 11 AR
C414	4822 124 23779	220µF 10V 6.3X 11 AR
C415	4822 122 32669	47000pF 50V CHIP
C416	4822 122 32669	47000pF 50V
C417	4822 124 23779	220µF 10V 6.3X 11 AR
C418	4822 124 23779	220µF 10V 6.3X 11 AR
C419	4822 122 32669	47000pF 50V CHIP
C420	4822 122 32669	47000pF 50V
C421	4822 124 23779	220µF 10V 6.3X 11 AR
C422	4822 124 23779	220µF 10V 6.3X 11 AR
C423	4822 122 32669	47000pF 50V CHIP
C424	4822 122 32669	47000pF 50V
C425	4822 121 43927	150P 50V ECH-R
C426	4822 121 43927	150P 50V ECH-R
C427	4822 121 42722	0.001µF, J,M,50V
C428	4822 121 42722	0.001µF, J,M,50V
C429	4822 121 42769	0.0015µF, J,M,50V
C430	4822 121 42769	0.0015µF, J,M,50V
C431	4822 126 11562	100pF (GR39) 50V CHI
C432	4822 126 11562	100pF (GR39) 50V
C433	4822 121 43928	330P 50V ECH-R
C434	4822 121 43928	330P 50V ECH-R
C435	4822 121 43928	330P 50V ECH-R
C436	4822 121 43928	330P 50V ECH-R
C437	4822 121 42769	0.0015µF, J,M,50V
C438	4822 121 42769	0.0015µF, J,M,50V
C439	4822 126 11562	100pF (GR39) 50V CHI

C440	4822 126 11562	100pF (GR39) 50V
C441	4822 121 42722	0.001µF, J,M,50V
C442	4822 121 42722	0.001µF, J,M,50V
C443	4822 121 43927	150P 50V ECH-R
C444	4822 121 43927	150P 50V ECH-R
C445	4822 124 23777	4.7µF 10V 6.3X 11 AR
C446	4822 124 23777	4.7µF 10V 6.3X 11 AR
C447	4822 124 23777	4.7µF 10V 6.3X 11 AR
C448	4822 124 23777	4.7µF 10V 6.3X 11 AR
C449	4822 124 23778	100µF 16V 6.3X 11 AR
C450	4822 124 23778	100µF 16V 6.3X 11 AR
C451	4822 124 23778	100µF 16V 6.3X 11 AR
C452	4822 124 23778	100µF 16V 6.3X 11 AR
C453	4822 124 23778	100µF 16V 6.3X 11 AR
C454	4822 124 23778	100µF 16V 6.3X 11 AR
C470	4822 126 11567	0.022µF +- 10% R 16
C471	4822 126 11567	0.022µF +- 10% R 16V
C472	4822 126 11567	0.022µF +- 10% R 16V
C473	4822 126 11567	0.022µF +- 10% R 16
C476	4822 126 11567	0.022µF +- 10% R 16
C477	4822 126 11567	0.022µF +- 10% R 16
C478	4822 126 11567	0.022µF +- 10% R 16
C479	4822 126 11567	0.022µF +- 10% R 16
C480	4822 126 11567	0.022µF +- 10% R 16
C481	4822 126 11567	0.022µF +- 10% R 16
C482	4822 126 11567	0.022µF +- 10% R 16
C483	4822 126 11567	0.022µF +- 10% R 16
C484	4822 126 11567	0.022µF +- 10% R 16
C485	4822 126 11567	0.022µF +- 10% R 16
C486	4822 126 11567	0.022µF +-10% R 16V
C487	4822 126 11567	0.022µF +- 10% R 16
C488	4822 126 11567	CERAMIC CAP.0.022µF
C489	4822 126 11567	CERAMIC CAP 0.022µF
C490	4822 126 11567	CERAMIC CAP.0.022µF
C491	4822 126 11567	CERAMIC CAP.0.022µF

D302	4822 130 82612	1SS153 NEC
D303	4822 130 82612	1SS153 NEC
D304	4822 130 82612	1SS153 NEC
D305	4822 130 82612	1SS153 NEC
D306	4822 130 82612	1SS153 NEC
D307	4822 130 82612	1SS153 NEC
D351	4822 130 82612	1SS153 NEC
D352	4822 130 82612	1SS153 NEC
D353	4822 130 82613	02CZ9.1Z
D354	4822 130 82612	1SS153 NEC
D355	4822 130 81169	02CZ5.6Y
D356	4822 130 80156	SVC203

F301	4822 242 73843	DSS306-91-F-223Z NOI
F302	4822 242 73843	DSS306-91-F-223Z NOI
F303	4822 242 73843	DSS306-91-F-223Z NOI
F304	4822 242 73843	DSS306-91-F-223Z NO

IC31	4822 209 63458	LC6543H
IC32	4822 209 30056	IR2339N1 (FLAT PAC)
IC33	4822 209 63453	SAA7310 DEMODULATOR
IC34	4822 209 73952	UPD41416C,MB81416.
IC35	4822 209 72545	SAA7220P/B (9338 746
IC4A	4822 209 62764	74HC164F TAPING
IC4B	4822 209 62764	74HC164F TAPING

IC4C	4822 209 61494	74HC74 FLAT
IC4D	4822 209 62765	74HC258F TAPING
IC4E	4822 209 61494	74HC74 FLAT
IC4F	4822 209 61494	74HC74 FLAT
IC4G	4822 209 12079	74HC153 (FLAT PAC)
IC4H	4822 209 62758	1BIT DAC SAA7321
IC4J	4822 209 62758	1BIT DAC SAA7321
IC4K	4822 209 30062	NJM5334M FLAT
IC4L	4822 209 30062	NJM5534M FLAT PAC
IC41	4822 209 82377	CMOS 74HC00 FLAT TAP
IC42	4822 209 61494	74HC74 FLAT
IC43	4822 209 61494	74HC74 FLAT
IC44	4822 209 62764	74HC164F TAPING
IC45	4822 209 62764	74HC164F TAPING
IC46	4822 209 62764	74HC164F TAPING
IC47	4822 209 62764	74HC164F TAPING
IC48	4822 209 62764	74HC164F TAPING
IC49	4822 209 62764	74HC164F TAPING

L401	4822 157 62546	4.7UH EL0606
L402	4822 157 62546	4.7UH EL0606
L403	4822 157 62547	CHOKE COIL 820UH
L404	4822 157 62547	CHOKE COIL 820UH
L405	4822 157 62547	CHOKE COIL 820UH
L406	4822 157 62547	CHOKE COIL 820UH

Q308	4822 130 61541	2SC4116 (TOSHIBA)
Q309	4822 130 61541	2SC4116 (TOSHIBA)
Q310	4822 130 61553	DTC124EU
Q351	4822 130 61438	2SA1005 L.OR K
Q352	4822 130 61553	DTC124EU
Q353	4822 130 61541	2SC4116 (TOSHIBA)
Q354	4822 130 61553	DTC124EU
Q355	4822 130 61553	DTC124EU
Q356	4822 130 61553	DTC124EU

R328	4822 051 30222	2.2K Ω +- 5% 1/16
R329	4822 051 30273	27K Ω +- 5% 1/16
R330	4822 051 30153	15K Ω +- 5% 1/16
R331	4822 051 30222	2.2K Ω +- 5% 1/16
R332	4822 051 30222	2.2K Ω +- 5% 1/16
R333	4822 051 30391	390 Ω +- 5% 1/16
R334	4822 051 30273	27K Ω +- 5% 1/16
R335	4822 051 30153	15K Ω +- 5% 1/16
R336	4822 051 30103	10K Ω +- 5% 1/16
R337	4822 051 30274	270K Ω +- 5% 1/16
R338	4822 051 30274	270K Ω +- 5% 1/16
R340	4822 051 30184	180K Ω +- 5% 1/16
R341	4822 051 30273	27K Ω +- 5% 1/16
R342	4822 051 30472	4.7K Ω +- 5% 1/16
R343	4822 051 30473	47K Ω +- 5% 1/16
R344	4822 051 30103	10K Ω +- 5% 1/16
R345	4822 051 30272	2.7K Ω +- 5% 1/16
R346	4822 051 30103	10K Ω +- 5% 1/16
R347	4822 051 30472	4.7K Ω +- 5% 1/16
R348	4822 051 30472	4.7K Ω +- 5% 1/16
R349	4822 051 30472	4.7K Ω +- 5% 1/16
R350	4822 051 30223	22K Ω +- 5% 1/16
R351	4822 051 30561	560 Ω +-5% 1/16W
R352	4822 116 82487	0 Ω +-5% 1/16W
R353	4822 051 30103	10K Ω +-5% 1/16W
R354	4822 051 30684	680 Ω +-5% 1/16W
R355	4822 051 30392	3.9K Ω +-5% 1/16W
R356	4822 051 30829	82 Ω +- 5% 1/16
R357	4822 051 30105	1M Ω +- 5% 1/16
R358	4822 051 30472	4.7K Ω +- 5% 1/16
R365	4822 051 30472	4.7K Ω +- 5% 1/16
R366	4822 051 30472	4.7K Ω +- 5% 1/16
R367	4822 051 30103	10K Ω +- 5% 1/16
R368	4822 100 11372	47KΩ RH0634CS4R TY
R369	4822 051 30104	100K Ω +- 5% 1/16
R370	4822 051 30104	100K Ω +- 5% 1/16
R371	4822 116 82487	0 Ω +-5% 1/16W
R373	4822 051 30222	2.2K Ω +- 5% 1/16
R374	4822 051 30154	150K Ω +- 5% 1/16
R375	4822 051 30472	4.7K Ω +- 5% 1/16
R376	4822 051 30105	1M Ω +-5% 1/16W
R377	4822 051 30105	1M Ω +-5% 1/16W
R401	4822 051 30168	1.5 Ω +- 5% 1/4
R402	4822 051 30168	1.5 Ω +- 5% 1/4
R403	4822 051 30168	1.5 Ω +- 5% 1/4
R404	4822 051 30168	1.5 Ω +- 5% 1/4
R405	4822 051 30168	1.5 Ω +- 5% 1/4
R406	4822 051 30168	1.5 Ω +- 5% 1/4
R407	4822 051 30103	10K Ω +- 5% 1/16
R408	4822 051 30103	10K Ω +- 5% 1/16
R409	4822 051 30392	3.9K Ω +- 5% 1/16
R410	4822 051 30392	3.9K Ω +- 5% 1/16
R411	4822 051 30682	6.8K Ω +- 5% 1/16
R412	4822 051 30682	6.8K Ω +- 5% 1/16
R413	4822 051 30392	3.9K Ω +- 5% 1/16
R414	4822 051 30392	3.9K Ω +- 5% 1/16
R415	4822 051 30223	22K Ω +- 5% 1/16
R416	4822 051 30223	22K Ω +- 5% 1/16
R417	4822 051 30103	10K Ω +- 5% 1/16
R418	4822 051 30103	10K Ω +- 5% 1/16
R419	4822 051 30105	1M Ω +- 5% 1/16
R420	4822 051 30105	1M Ω +- 5% 1/16
R421	4822 051 30105	1M Ω +- 5% 1/16
R422	4822 051 30105	1M Ω +- 5% 1/16
R423	4822 051 30103	10K Ω +- 5% 1/16
R424	4822 051 30103	10K Ω +- 5% 1/16
R425	4822 051 30223	22K Ω +- 5% 1/16
R426	4822 051 30223	22K Ω +- 5% 1/16
R427	4822 051 30392	3.9K Ω +- 5% 1/16
R428	4822 051 30392	3.9K Ω +- 5% 1/16
R429	4822 051 30392	3.9K Ω +- 5% 1/16
R430	4822 051 30392	3.9K Ω +- 5% 1/16
R431	4822 051 30682	6.8K Ω +- 5% 1/16
R432	4822 051 30682	6.8K Ω +- 5% 1/16
R433	4822 051 30472	4.7K Ω +- 5% 1/16
R434	4822 051 30472	4.7K Ω +- 5% 1/16
R435	4822 051 30682	6.8K Ω +-5% 1/16W
R436	4822 051 30682	6.8K Ω +-5% 1/16W
R437	4822 051 30472	4.7K Ω +- 5% 1/16
R438	4822 051 30472	4.7K Ω +- 5% 1/16
R439	4822 051 30682	6.8K Ω +-5% 1/16W
R440	4822 051 30682	6.8K Ω +-5% 1/16W
R441	4822 051 30472	4.7K Ω +- 5% 1/16
R442	4822 051 30472	4.7K Ω +- 5% 1/16
R443	4822 051 30229	22 Ω +- 5% 1/16
R444	4822 051 30229	22 Ω +- 5% 1/16

X-TAL

X351	4822 242 73894	11.2896MHZ HC49/U X
X352	4822 242 72223	CERALOCK CST4.00MGW

PARTSLIST RGB PCB PG06

CG51	4822 122 40297	2pF C CK 50V BLK
CG52	4822 121 41856	0.022µF J.M.50V
CG53	5322 122 31626	100pF J CH 50V
CG55	4822 124 23563	47µF/10V
CG56	4822 122 40588	0.022µF F 25V
CM01	4822 122 40588	0.022µF TP050F223Z 2
CM02	4822 122 40588	0.022µF TP050F223Z T
CM04	4822 124 23563	47µF/10V
CM05	4822 122 40588	0.022µF TP050F223Z T
CM06	4822 124 22324	22µF/16V
CM08	4822 124 22324	22µF/16V
CM09	4822 124 23563	47µF/ 10V
CM11	4822 122 40588	0.022µF TP050F223Z T
CM13	4822 124 22324	22µF/16V
CM14	4822 124 22324	22µF/16V
CM15	4822 124 22324	22µF/16V
CM21	4822 124 22319	100µF/6.3V
CM22	4822 124 22319	100µF/6.3V
CM23	4822 126 11558	CERMIC CAP. 0.1 U
CM24	4822 122 40588	0.022µF TP050F223Z T
CM25	4822 122 40588	0.022µF TP050F223Z T
CM26	4822 122 40589	CERMIC CAP. 0.047
CM27	4822 122 40589	CERMIC CAP. 0.047
CM28	4822 124 22327	0.47µF/ 50V
CM29	4822 126 11558	CERMIC CAP. 0.1 U
CM31	4822 124 23769	4.7µF/ 50V
CM32	4822 124 23771	1µF/50V (BP)
CM34	4822 124 23771	1µF/50V (BP)
CM36	4822 126 11558	CERMIC CAP. 0.1 U
CM37	4822 122 40588	0.022µF TP050F223Z T
CM38	4822 126 10362	22pF 50V
CM39	4822 126 11554	18pF J CH 50V
CM40	4822 126 10362	22pF 50V
CM42	4822 126 11555	24pF J SL 50V
CM43	4822 122 33639	1000pF K B 50V
CM49	4822 122 40588	0.022µF TP050F223Z T
CM50	4822 126 11558	CERMIC CAP. 0.1 U
CM55	4822 124 23563	47µF/ 10V
CM56	4822 124 23563	47µF/ 10V
CM57	4822 122 40588	0.022µF TP050F223Z T
CM58	4822 122 40588	0.022µF TP050F223Z T
CM59	4822 124 23563	47µF/ 10V
CM60	4822 126 11557	4.7pF 50V
CM61	4822 124 23771	1µF 50V (BP)
CM65	4822 124 22324	22µF 16V L5MM
CM66	4822 126 11557	4.7pF K CH 50V
CM71	4822 124 23563	47µF/10V
CM72	4822 124 23563	47µF/10V
CM73	4822 124 23563	47µF/10V
CM74	4822 122 40588	0.022µF F 25V
CM75	4822 122 31219	150pF J SL 50V
CM76	4822 126 11557	4.7pF K CH 50V
CM77	4822 126 10362	22pF J SL 50V
CM78	4822 126 11552	12pF J CH 50V
CM80	4822 124 23563	47µF/10V
CM81	4822 124 23563	47µF/10V
CM84	4822 122 40588	0.022µF F 25V
CM85	4822 122 40588	0.022µF F 25V
CM86	4822 124 22324	22µF/16V
CM87	4822 124 22319	100µF/6.3V
CM88	4822 122 40588	0.022µF F 25V
CM89	4822 122 40588	0.022µF F 25V
CM90	4822 124 22324	22µF/16V
CM91	4822 124 22324	22µF/16V
CM92	4822 124 22319	100µF/6.3V
CM93	4822 122 40588	0.022µF F 25V

CM94	4822 124 22324	22µF/16V
CM95	4822 124 22324	22µF/16V
CM96	4822 122 40588	0.022µF F 25V
CM97	4822 124 23563	47µF/10V
CM98	4822 122 40588	0.022µF F 25V
CM99	4822 122 40588	0.022µF F 25V
CN01	4822 124 23563	47µF/ 10V
CN02	4822 126 11558	CERMIC CAP. 0.1 U
CN03	4822 126 10362	22pF J SL 50V
CN04	4822 122 33638	27pF J SL 50V
CN05	4822 124 22324	22µF/ 16V
CN06	4822 122 40588	0.022µF TP050F223Z T
CN07	4822 126 10364	100pF UP050B101K-A
CN08	4822 126 10364	100pF UP050B101K-A
CN09	4822 126 10364	100pF UP050B101K-A
CN10	4822 122 40588	0.022µF TP050F223Z 2
CN11	4822 124 22319	100µF/6.3V
CN12	4822 122 40588	0.022µF TP050F223Z T
CN13	4822 121 41856	0.022µF J 50V
CN14	4822 121 42727	0.0068µF, K,M,50V,D=9
CN20	4822 126 11558	CERMIC CAP. 0.1 U
CN21	4822 126 11558	CERMIC CAP. 0.1 U
CN22	4822 126 11558	CERMIC CAP. 0.1 U
CN23	4822 126 11558	CERMIC CAP. 0.1 U
CN24	4822 126 11558	CERMIC CAP. 0.1 U
CN25	4822 126 11558	CERMIC CAP. 0.1 U
CN26	4822 126 11558	CERMIC CAP. 0.1 U
CN33	4822 124 22319	100µF/6.3V
CN34	4822 124 22319	100µF/6.3V
CN35	4822 122 40588	0.022µF TP050F223Z T
CN36	4822 122 40588	0.022µF TP050F223Z T
CN41	4822 124 23536	470µF/ 4V
CN42	4822 124 23536	470µF/ 4V
CN43	4822 124 23536	470µF/ 4V
CN45	4822 122 40588	0.022µF TP050F223Z T
CN46	4822 124 23563	47µF/ 10V
CN47	4822 124 22319	100µF/6.3V
CN48	4822 124 22319	100µF/6.3V
CN49	4822 122 40588	0.022µF TP050F223Z T
CN50	4822 122 40588	0.022µF TP050F223Z T
CN51	4822 126 10364	100pF UP050B101K-A
CN52	4822 126 11557	4.7pF K CH 50V
CN53	4822 124 23563	47µF/10V
CN54	4822 126 10362	22pF J SL 50V
CN55	4822 124 23536	470µF/4V
CN56	4822 124 23563	47µF/10V
CN61	4822 126 11552	12pF J CH 50V
CN62	4822 126 10362	22pF J SL 50V
CN64	4822 124 23563	47µF/10V
CN65	4822 124 22324	22µF/16V
CN66	4822 124 22324	22µF/16V
CN67	4822 124 22324	22µF/16V
CN68	4822 124 22324	22µF/16V
CN69	4822 122 40588	0.022µF F 25V
CN70	4822 126 11559	120pF J CH 50V
CN71	4822 122 40588	0.022µF F 25V
CN72	4822 122 40588	0.022µF F 25V
CN73	4822 122 33639	1000pF K B 50V
CN74	4822 126 11558	0.1µF F 50V
CN75	4822 122 40588	0.022µF F 25V
CN76	4822 126 11558	0.1µF F 50V
CN81	4822 126 11552	12pF J CH 50V
CN82	4822 122 31205	47pF J CH 50V
CN83	4822 124 22324	22µF 16V L5MM

DN01	4822 130 33305	1SS176,MA165,1SS254
DN02	4822 130 33305	1SS176,MA165,1SS254
DN03	4822 130 33305	1SS176,MA165,1SS254
DN04	4822 130 33305	1SS176,MA165,1SS254

FM01	4822 242 80286	4.43MHZ BpF 144-5115
FM04	4822 242 73898	3.5MHZ LpF
FM05	4822 242 80285	3.58MHZ BpF 144-5196
FM07	4822 320 50226	190NSEC DELAY LINE 1
FM08	4822 320 40242	64US DELAY LINE
FM09	4822 320 50226	190NSEC DELAY LINE 1
FM10	4822 320 50227	190NSEC DELAT LINE 1
FM11	4822 320 50226	190NSEC DELAY LINE 1
FM12	4822 320 50227	190NSEC DELAY LINE 1
FN01	4822 242 73843	DSS306-91-F-223Z NOI
FN61	4822 320 50226	190NSEC DELAY LINE 1
FN62	4822 320 50227	190NSEC DELAY LINE 1
FN63	4822 242 80285	3.58MHZ BpF 144-5196
FN64	4822 242 80286	4.43MHZ BpF 144-5115

ICM1	4822 209 30057	RGB DECORDER V7021 S
ICM2	4822 209 83839	UPD4053BC
ICM4	4822 209 63455	NJM2233BD
ICM5	4822 209 63455	NJM2233BD
ICM6	4822 209 30063	REGULATOR -5V
ICN1	4822 209 71835	V7040 SONY
ICN2	4822 209 12422	74HC00 HI-SPEED C-MO
ICN3	5322 209 63116	DUAL MMV TC4538BP
ICN4	4822 209 63183	74HC74
ICN5	4822 209 63471	74HC08 2-INPUT AND G
ICN6	4822 209 83839	UPD4053BC
ICN7	4822 209 63469	UPD6451CX-001 NEC
ICN8	4822 209 63455	NJM2233BD
ICN9	4822 209 12422	74HC00 HI-SPEED C-MO

Misellaneous

JM06	4822 290 81428	EUROCONNECTOR 21P BL
KM01	4822 214 51891	Y/C MODULE TDK HCF00

LM01	4822 157 62909	LAL02TA220J 22UH
LM11	4822 157 62902	LAL02TA6R8J 6.8UH
LM12	4822 157 62924	CHOKE COIL 8.2UH
LN01	4822 157 62922	LAL02TA330J 33UH
LN16	4822 157 62919	LAL02TA101J 100UH
LN61	4822 157 62909	LAL02TA220J 22UH
LN81	4822 157 62909	LAL02TA220J 22UH
QG51	4822 130 42298	C536,C2458,C3311,C17
QM01	4822 130 60839	2SC2458 Y OR GR
QM03	4822 130 60839	2SC2458 Y OR GR
QM04	4822 130 60839	2SC2458 Y OR GR
QM05	4822 130 60839	2SC2458 Y OR GR
QM07	4822 130 60839	2SC2458 Y OR GR
QM08	4822 130 42715	2SC536SP,2SC2458,2SC
QM09	4822 130 60839	2SC2458 Y OR GR
QM10	4822 130 42715	2SA608SP,2SA1048,2SA
QM11	4822 130 42715	A608SP.A1048.A1309.A

QM12	4822 130 60839	2SC2458 Y OR GR
QM13	4822 130 42715	A608SP,A1048,A1309,A
QM14	4822 130 42683	DTC124ES
QM15	4822 130 60839	2SC2458 Y OR GR
QM16	4822 130 42715	A608SP.A1048.A1309.A
QM90	4822 130 61179	2SD2037 E.F
QM91	4822 130 60839	2SC2458 Y OR GR
QN01	4822 130 60839	2SC2458 Y OR GR
QN11	4822 130 42715	A608SP,A1048,A1309,A
QN12	4822 130 60839	2SC2458 Y OR GR
QN13	4822 130 60839	2SC2458 Y OR GR
QN51	4822 130 60839	2SC2458 Y OR GR
QN52	4822 130 42715	A608SP.A1048.A1309.A
QN61	4822 130 60839	2SC2458 Y OR GR
QN62	4822 130 42715	A608SP.A1048.A1309.A
QN71	4822 130 42683	DTC124ES (TP)
QN81	4822 130 60839	2SC2458 Y OR GR
QN82	4822 130 42715	A608SP.A1048.A1309.A

RG51	4822 116 52256	2.2K Ω J 1/6W
RG52	4822 116 52289	5.6K Ω J 1/6W
RG53	4822 116 52263	2.7K Ω J 1/6W
RG54	4822 100 11471	100K Ω VER,RES.
RM02	4822 116 52228	680 Ω +- 5% 1/6
RM06	4822 050 11002	1K Ω +- 5% 1/6
RM07	4822 050 11002	1K Ω +- 5% 1/6
RM09	4822 116 52244	15K Ω J 1/6W
RM10	4822 116 52233	10K Ω J 1/6W
RM11	4822 050 11002	1K Ω +- 5% 1/6
RM12	4822 100 11426	RH0634CS2R TYPE 470
RM13	4822 116 52226	560 Ω +- 5% 1/6
RM18	4822 116 52233	10K Ω +- 5% 1/6
RM19	4822 116 52233	10K Ω +- 5% 1/6
RM20	4822 050 11002	1K Ω +- 5% 1/6
RM22	4822 050 11002	1K Ω +- 5% 1/6
RM23	4822 050 11002	1K Ω +- 5% 1/6
RM24	4822 100 11426	RH0634CS2R TYPE 470
RM25	4822 116 52226	560 Ω +- 5% 1/6
RM28	4822 116 52233	10K Ω J 1/6W
RM29	4822 116 52256	2.2K Ω J 1/6W
RM30	4822 116 52284	47K Ω J 1/6W
RM31	4822 116 52278	390K Ω +- 5% 1/6
RM32	4822 116 52252	180K Ω +- 5% 1/6
RM33	4822 116 52233	10K Ω +- 5% 1/6W
RM34	4822 100 11373	RH0634CS2R TYPE 4.7K
RM35	4822 116 52233	10K Ω +-5% 1/6W
RM36	4822 116 52233	10K Ω +- 5% 1/6W
RM37	4822 100 11373	RH0634CS2R TYPE 4.7K
RM38	4822 116 52233	10K Ω +-5% 1/6W
RM39	4822 116 52222	390 Ω +- 5% 1/6
RM40	4822 116 52222	390 Ω +- 5% 1/6
RM41	4822 116 52263	2.7K Ω +-5% 1/6W
RM42	4822 100 11426	RH0634CS2R TYPE 470
RM43	4822 116 52256	2.2K Ω +- 5% 1/6
RM44	4822 116 52284	47K Ω +- 5% 1/6
RM45	4822 116 52284	47K Ω +- 5% 1/6
RM46	4822 116 52233	10K Ω +- 5% 1/6
RM51	4822 116 52251	18K Ω +- 5% 1/6
RM52	4822 100 11351	10KΩ RH0634C14R TY
RM53	4822 116 52249	1.8K Ω +-5% 1/6W
RM54	4822 100 11426	RH0634CS2R TYPE 470
RM55	4822 116 52276	3.9K Ω +-5% 1/6W
RM56	4822 116 52284	47K Ω +-5% 1/6W
RM57	4822 116 52249	1.8K Ω J 1/6W

PARTSLIST RGB PCB PG06 (continued)

RM58	4822 100 11426	RH0634CS2R TYPE 470
RM59	4822 116 52276	3.9K Ω J 1/6W
RM60	4822 116 52284	47K Ω J 1/6W
RM61	4822 116 52233	10K Ω +- 5% 1/6
RM62	4822 100 11351	10KΩ RH0634C14R TY
RM63	4822 116 52283	4.7K Ω +- 5% 1/6
RM64	4822 116 52244	15K Ω +- 5% 1/6
RM74	4822 116 52283	4.7K Ω J 1/6W
RM75	4822 116 52207	1.2K Ω J 1/6W
RM76	4822 116 52207	1.2K Ω J 1/6W
RM77	4822 116 52224	470 Ω +- 5% 1/6
RM78	4822 116 52224	470 Ω +- 5% 1/6
RM90	4822 116 60307	1Ω J 1/4W
RM92	4822 116 52222	390 Ω J 1/6W
RM93	4822 116 52175	100 Ω J 1/6W
RM95	4822 116 52271	33K Ω J 1/6W
RM96	4822 116 52233	10K Ω J 1/6W
RM97	4822 116 52243	1.5K Ω J 1/6W
RM98	4822 116 52224	470 Ω J 1/6W
RM99	4822 116 52226	560 Ω J 1/6W
RN01	4822 116 52244	15K Ω J 1/6W
RN02	4822 116 52234	100K Ω +- 5% 1/6
RN03	4822 116 52256	2.2K Ω +- 5% 1/6
RN04	4822 116 52283	4.7K Ω +- 5% 1/6
RN05	4822 050 11002	1K Ω +- 5% 1/6
RN06	4822 116 52211	150 Ω +- 5% 1/6
RN07	4822 050 11002	1K Ω +- 5% 1/6
RN08	4822 116 52211	150 Ω +- 5% 1/6
RN09	4822 050 11002	1K Ω +- 5% 1/6
RN10	4822 116 52211	150 Ω +- 5% 1/6
RN15	4822 116 52284	47K Ω +- 5% 1/6
RN16	4822 116 52277	39K Ω J 1/6W
RN17	4822 116 52257	22K Ω J 1/6W
RN21	4822 116 52233	10K Ω +- 5% 1/6
RN22	4822 116 52233	10K Ω +- 5% 1/6
RN31	4822 111 41355	75 Ω +- 5% 1/6
RN32	4822 111 41355	75 Ω +- 5% 1/6
RN33	4822 111 41355	75 Ω +- 5% 1/6
RN35	4822 116 52219	330 Ω J 1/6W
RN37	4822 116 52175	100 Ω +- 5% 1/6
RN38	4822 116 52224	470 Ω J 1/6W
RN39	4822 111 41355	75 Ω +- 5% 1/6
RN41	4822 116 52256	2.2K Ω +- 5% 1/6
RN42	4822 050 11002	1K Ω J 1/6W
RN44	4822 111 41355	75 Ω +- 5% 1/6
RN45	4822 116 52222	390 Ω +- 5% 1/6
RN46	4822 050 11002	1K Ω +- 5% 1/6
RN47	4822 116 52233	10K Ω +- 5% 1/6
RN48	4822 116 52233	10K Ω +- 5% 1/6
RN49	4822 116 52215	220 Ω J 1/6W
RN50	4822 116 52215	220 Ω J 1/6W
RN51	4822 116 52271	33K Ω J 1/6W
RN52	4822 116 52233	10K Ω J 1/6W
RN53	4822 116 52207	1.2K Ω J 1/6W
RN54	4822 116 52224	470 Ω J 1/6W
RN55	4822 116 52224	470 Ω J 1/6W
RN56	4822 050 11002	1K Ω J 1/6W
RN57	4822 050 11002	1K Ω J 1/6W
RN61	4822 116 52224	470 Ω J 1/6W
RN62	4822 116 52224	470 Ω J 1/6W
RN63	4822 116 52243	1.5K Ω J 1/6W
RN64	4822 116 52228	680 Ω J 1/6W
RN65	4822 050 11002	1K Ω J 1/6W
RN67	4822 050 11002	1K Ω J 1/6W
RN68	4822 116 52228	680 Ω J 1/6W
RN69	4822 116 52228	680 Ω J 1/6W
RN70	4822 050 11002	1K Ω J 1/6W
RN71	4822 116 52283	4.7K Ω J 1/6W
RN75	4822 116 52224	470 Ω J 1/6W
RN76	4822 116 52224	470 Ω J 1/6W
RN77	4822 050 11002	1K Ω J 1/6W
RN78	4822 116 52228	680 Ω J 1/6W
RN80	4822 116 52271	33K Ω J 1/6W
RN81	4822 116 52233	10Ω J 1/6W
RN82	4822 116 52243	1.5K Ω J 1/6W
RN83	4822 116 52228	680 Ω J 1/6W
RN84	4822 116 52224	470 Ω J 1/6W
RN85	4822 116 52224	470 Ω J 1/6W
RN86	4822 050 11002	1K Ω J 1/6W
RN87	4822 050 11002	1K Ω J 1/6W
RN88	4822 116 52243	1.5K Ω J 1/6W
RN89	4822 116 52228	680 Ω J 1/6W
RN90	4822 050 11002	1K Ω J 1/6W
RN92	4822 050 11002	1K Ω J 1/6W
RN95	4822 050 11002	1K Ω J 1/6W
RN96	4822 050 11002	1K Ω J 1/6W
XM01	4822 242 72593	CRYSTAL RESONATOR HC
XM02	4822 242 72972	HC49/U 3.579545MHZ
ZM90	4822 130 80321	10V

PARTSLIST SERVO PCB P106

C101	4822 122 40588	22000pF 25V
C102	4822 122 40588	22000pF 25V
C103	4822 121 42698	0.1µF, J,N,50V
C104	4822 124 23773	10µF/ 16V (BP)
C105	4822 122 40586	10000pF 16V
C106	4822 122 40586	10000pF 16V
C107	4822 122 40586	10000pF 16V
C108	4822 122 40586	10000pF
C109	4822 121 42666	0.22µF, J,T,50V
C110	4822 122 40586	10000pF +-20% 16V
C111	4822 122 40586	10000pF
C112	4822 122 40586	10000pF
C113	4822 124 23775	0.47µF/ 50V (BP)
C114	4822 124 23772	1µF/ 50V (BP)
C115	4822 121 42723	0.012µF, J,M,50V
C116	4822 121 42701	0.018µF, J,M,50V
C117	4822 121 42723	0.012µF, J,M,50V
C118	4822 121 42666	0.22µF, J,T,50V
C119	4822 124 23774	22µF/25V (BP)
C120	4822 122 31219	150pF +-5% SL 50V
C121	4822 126 11557	4.7pF UP050F4R7K 50V
C122	4822 126 11557	4.7pF UP050F4R7K 50V
C131	4822 124 21736	1µF/50V
C132	4822 121 42698	0.1µF, J,N,50V
C133	4822 122 40588	22000pF +-20% 25VF
C134	4822 122 40588	22000pF +-20% 25VF
C135	4822 122 31197	15pF +-5% SL
C151	4822 124 21823	22µF/ 25V
C152	4822 124 21823	22µF/ 25V
C153	4822 122 40586	10000pF 16V
C154	4822 122 40586	10000pF 16V
C155	4822 124 21823	22µF/ 25V
C156	4822 124 21823	22µF/ 25V
C157	4822 122 31207	68pF +-5% SL 50V
C171	4822 121 42722	0.001µF, J,M,50V
C172	4822 124 41138	100 µF/10V
C173	4822 121 42725	0.0027µF, J,M,50V,D=9
C174	4822 124 23775	0.47µF/ 50V (BP)
C175	4822 121 42773	0.0039µF, J,M,50V
C176	4822 121 41857	0.01µF, J,M,50V
C177	4822 121 42701	0.018µF, J,M,50V
C178	4822 121 42666	0.22µF, J,T,50V
C179	4822 121 42666	0.22µF, J,T,50V
C180	4822 122 31207	68pF +-5% SL 50V
C181	4822 122 40588	22000pF 25V
C182	4822 121 42698	0.1µF, J,N,50V
C183	4822 124 23773	10µF/ 16V (BP)
C184	4822 121 41856	0.022µF, J,M,50V
C185	4822 121 42771	0.0022µF, J,M,50V
C191	4822 122 40588	0.022 µF 50V
C192	4822 126 11071	330pF 50V
C193	4822 121 42698	0.1µF, J,N,50V
C194	4822 121 42698	0.1µF, J,N,50V
C195	4822 122 40586	10000pF +-20% 16V Y
C196	4822 122 40588	22000pF 25V
C197	4822 122 40588	22000pF
C198	4822 122 40588	22000pF
C199	4822 121 42698	0.1µF, J,N,50V
C200	4822 122 40588	22000pF
C251	4822 122 40588	22000pF +-20% 25V F
C252	4822 122 40588	22000pF +-20% 25V F
C253	4822 124 23775	0.47µF/ 50V (BP)
C254	4822 122 40586	10000pF 16V
C255	4822 122 40586	10000pF
C256	4822 122 40586	10000pF +-20% 16V Y
C281	4822 122 40586	10000pF
C282	4822 122 40586	10000pF

C283	4822 126 11554	18pF CERAMIC CAP 50V
C284	4822 124 23772	1µF/ 50V (BP)
C285	4822 122 40586	10000pF
C286	4822 122 40586	10000pF
C287	4822 124 21823	22µF/ 25V
C288	4822 122 40586	10000pF
C289	4822 124 21823	22µF/ 25V

D101	4822 130 33305	1SS176,MA165,1SS254
D102	4822 130 33305	1SS176,MA165,1SS254
D104	4822 130 33305	1SS176,MA165, 1SS25

IC20	4822 290 60997	HA11529NT (SERVO)
IC21	4822 209 61187	BA15218
IC22	4822 209 61187	BA15218
IC23	4822 209 61187	BA15218
IC24	4822 209 61187	BA15218
IC25	4822 209 61379	CXA1081Q
IC26	4822 209 83839	UPD4053BC
IC27	4822 209 83654	NJM4556D
IC28	4822 209 83654	NJM4556D
IC29	4822 209 61187	BA15218

Q101	4822 130 42683	DTC124ES(TP)
Q102	4822 130 42683	DTC124ES (TP)
Q103	4822 130 42683	DTC124ES (TP)
Q104	4822 130 42593	DTA124ES (TP)
Q105	4822 130 60839	2SC2458 Y OR GR
Q106	4822 130 42683	DTC124ES (TP)
Q108	4822 130 61417	2SB1240 Q,R
Q110	4822 130 42683	DTC124ES (TP)
Q111	4822 130 42683	DTC124ES(TP)
Q201	4822 130 62547	STA451C
Q202	4822 130 62547	STA451C
Q281	4822 130 60839	2SC2458 Y OR GR
Q282	4822 130 60839	2SC2458 Y OR GR

RL01	4822 116 52233	10K Ω +- 5% 1/6
RL02	4822 116 52233	10K Ω +- 5% 1/6
RL03	4822 116 52233	10K Ω +- 5% 1/6
RL04	4822 116 52233	10K Ω +- 5% 1/6
RL05	4822 116 52233	10K Ω +- 5% 1/6
RL06	4822 116 52296	6.8K Ω +-5% 1/6W
R101	4822 116 52233	10K Ω +- 5% 1/6
R102	4822 116 52233	10K Ω +- 5% 1/6
R103	4822 116 52233	10K Ω +- 5% 1/6
R104	4822 116 52233	10K Ω +- 5% 1/6
R105	4822 116 52269	3.3K Ω +- 5% 1/6
R106	4822 116 52271	33K Ω +- 5% 1/6
R107	4822 116 52257	22K Ω +- 5% 1/6
R108	4822 116 52245	150K Ω +- 5% 1/6
R109	4822 116 52233	10K Ω +- 5% 1/6
R110	4822 116 52283	4.7K Ω +- 5% 1/6
R111	4822 116 52284	47K Ω +- 5% 1/6
R112	4822 116 52284	47K Ω +- 5% 1/6
R113	4822 116 52269	3.3K Ω +- 5% 1/6
R114	4822 116 52284	47K Ω +- 5% 1/6
R115	4822 116 52245	150K Ω +- 5% 1/6
R116	4822 116 52284	47K Ω +- 5% 1/6

PARTSLIST SERVO PCB P106 (continued)

R117	4822 116 52284	47K Ω +- 5% 1/6
R118	4822 116 52233	10K Ω +- 5% 1/6
R119	4822 116 52269	3.3K Ω +- 5% 1/6
R120	4822 116 52233	10K Ω +- 5% 1/6
R121	4822 116 52245	150K Ω +- 5% 1/6
R122	4822 116 52207	1.2K Ω +- 5% 1/6
R123	4822 100 11373	4.7KΩ RH0634CS3R T
R124	4822 100 11373	4.7KΩ RH0634CS3R T
R125	4822 116 52277	39K Ω +-5% 1/6W
R126	4822 116 52271	33K Ω +- 5% 1/6
R127	4822 116 52234	100K Ω +- 5% 1/6
R128	4822 116 52233	10K Ω +- 5% 1/6
R129	4822 116 52234	100K Ω +- 5% 1/6
R130	4822 116 52235	1M Ω +- 5% 1/6
R131	4822 116 52283	4.7K Ω +- 5% 1/6
R132	4822 116 52233	10K Ω +- 5% 1/6
R133	4822 100 11351	10K Ω RH634CJ4R TY
R134	4822 116 52175	100 Ω +- 5% 1/6W
R135	4822 116 52285	470K Ω +- 5% 1/6
R136	4822 116 52244	15K Ω +- 5% 1/6
R137	4822 116 52264	27K Ω +- 5% 1/6W
R138	4822 116 52207	1.2K Ω +-5% 1/6W
R139	4822 116 52264	27K Ω +-5% 1/6W
R140	4822 116 52256	2.2K Ω +-5% 1/6W
R141	4822 116 52264	27K Ω +-5% 1/6W
R142	4822 116 52245	150K Ω +-5% 1/6W
R143	4822 116 52231	12K Ω +-5% 1/6W
R144	4822 116 52245	150K Ω +-5% 1/6W
R145	4822 116 52257	22K Ω +-5% 1/6W
R149	4822 116 52283	4.7K Ω +-5% 1/6W
R150	4822 116 52297	68K Ω +-5% 1/6W
R151	4822 116 52284	47K Ω +- 5% 1/6
R152	4822 116 60422	2.2 Ω +-5% 2W
R153	4822 116 52257	22K Ω +- 5% 1/6
R154	4822 116 52257	22K Ω +-5% 1/6W
R160	4822 116 52243	1.5K Ω +- 5% 1/6
R171	4822 116 52186	22 Ω +- 5% 1/6
R172	4822 116 52234	100K Ω +- 5% 1/6
R173	4822 116 52234	100K Ω +- 5% 1/6
R174	4822 100 11352	22KΩ RH0634CJ4R TY
R175	4822 116 52257	22K Ω +- 5% 1/6
R176	4822 116 52175	100 Ω +- 5% 1/6W
R178	4822 100 11386	1K Ω RH634CJ4R TYP
R179	4822 116 52271	33K Ω +- 5% 1/6
R181	4822 116 52285	470K Ω +- 5% 1/6
R182	4822 116 52277	39K Ω +-5% 1/6W
R183	4822 116 52284	47K Ω +-5% 1/6W
R184	4822 116 52269	3.3K Ω +- 5% 1/6
R185	4822 116 52263	2.7K Ω +-5% 1/6W
R186	4822 116 52264	27K Ω +-5% 1/6W
R187	4822 116 52245	150K Ω +-5% 1/6W
R188	4822 116 52234	100K Ω +-5% 1/6W
R189	4822 116 52289	5.6K Ω +-5% 1/6W
R192	4822 116 52296	6.8K Ω +-5% 1/6W
R193	4822 116 52296	6.8K Ω +-5% 1/6W
R194	4822 116 52271	33K Ω +- 5% 1/6
R195	4822 116 52234	100K Ω +- 5% 1/6
R196	4822 116 60422	2.2 Ω +-5% 2W
R197	4822 116 52251	18K Ω +-5% 1/6W
R198	4822 116 52257	22K Ω +- 5% 1/6
R200	4822 116 52243	1.5K Ω +- 5% 1/6
R201	4822 116 52283	4.7K Ω +-5% 1/6W
R211	4822 116 52239	120K Ω +-5% 1/6W
R212	4822 116 52257	22K Ω +-5% 1/6W
R213	4822 116 52283	4.7K Ω +-5% 1/6W
R216	4822 116 52277	39K Ω +-5% 1/6W

R217	4822 116 52291	56K Ω +- 5% 1/6
R218	4822 116 52284	47K Ω +- 5% 1/6
R219	4822 116 52217	270 Ω +- 5% 1/6
R220	4822 116 52271	33K Ω +-5% 1/6W
R221	4822 116 52258	220K Ω +- 5% 1/6
R222	4822 116 52257	22K Ω +- 5% 1/6
R223	4822 116 52233	10K Ω +- 5% 1/6
R224	4822 116 52257	22K Ω +- 5% 1/6
R225	4822 116 52271	33K Ω +-5% 1/6W
R227	4822 116 52243	1.5K Ω +- 5% 1/6
R228	4822 116 52176	10 Ω +- 5% 1/6
R229	4822 116 60421	2.2 Ω +-5% 1W
R231	4822 116 83036	27 Ω 1/4W +-2%
R232	4822 116 83036	27 Ω 1/4W +-2%
R233	4822 116 60307	1 Ω J 1/4W +-5%
R234	4822 116 60307	1 Ω J 1/4W +-5%
R235	4822 116 83036	27 Ω 1/4W +-2%
R236	4822 116 83036	27 Ω 1/4W +-2%
R237	4822 116 60307	1 Ω J 1/4W +-5%
R238	4822 116 60307	1 Ω J 1/4W +-5%
R239	4822 116 52175	100 Ω 1/6W +-5%
R240	4822 116 52175	100 Ω 1/6W +-5%
R241	4822 116 52175	100 Ω 1/6W +-5%
R242	4822 116 52175	100 Ω 1/6W +-5%
R243	4822 116 52175	100 Ω 1/6W +-5%
R244	4822 116 52175	100 Ω 1/6W +-5%
R245	4822 116 52175	100 Ω 1/6W +-5%
R246	4822 116 52175	100 Ω 1/6W +-5%
R251	4822 116 52219	330 Ω +- 5% 1/6
R252	4822 050 19109	91 Ω +-5% 1/6W
R253	4822 116 52234	100K Ω +- 5% 1/6
R254	4822 116 52233	10K Ω +- 5% 1/6
R255	4822 100 11471	100KΩ RH0634C15R T
R256	4822 116 52234	100K Ω +- 5% 1/6
R257	4822 116 52233	10K Ω +- 5% 1/6
R258	4822 116 52245	150K Ω +-5% 1/6W
R259	4822 116 52245	150K Ω +-5% 1/6W
R260	4822 116 52285	470K Ω +-5% 1/6W
R261	4822 116 52285	470K Ω +-5% 1/6W
R262	4822 116 52234	100K Ω +- 5% 1/6
R263	4822 116 52245	150K Ω +-5% 1/6W
R264	4822 116 52233	10K Ω +- 5% 1/6
R265	4822 116 52285	470K Ω +-5% 1/6W
R266	4822 116 52233	10K Ω +- 5% 1/6
R267	4822 116 52244	15K Ω +-5% 1/6W
R268	4822 116 52297	68K Ω +- 5% 1/6
R269	4822 116 52283	4.7K Ω +- 5% 1/6
R270	4822 116 52233	10K Ω +- 5% 1/6
R271	4822 116 52257	22K Ω +- 5% 1/6
R272	4822 116 52257	27K Ω +-5% 1/6W
R274	4822 116 52243	1.5K Ω +- 5% 1/6
R275	4822 116 52176	10 Ω +- 5% 1/6
R276	4822 116 60421	2.2 Ω +-5% 1W
R285	4822 116 52175	100 Ω +-5% 1/6W
R286	4822 100 11386	RH0634CS2R TYPE 1K O
R287	4822 116 52233	10K Ω +- 5% 1/6
R288	4822 116 52244	15K Ω +- 5% 1/6
R289	4822 050 11002	1K Ω +-5% 1/6W
R290	4822 116 52186	22 Ω 1/6W +-5%
R291	4822 116 52283	4.7K Ω +-5%

Z101	4822 130 80316	3.6V ZENER

PARTSLIST SYSTEMCONTROL PU 06

CU01	4822 124 41246	47µF 16V
CU02	4822 126 11565	10000pF (GR39) 25V C
CU03	4822 126 11565	10000pF (GR39) 25V C
CU04	4822 124 41246	47µF 16V
CU05	4822 126 11565	10000pF (GR39) 25V C
CU06	4822 124 41246	47µF 16V
CU07	4822 126 11565	10000pF (GR39) 25V C
CU08	4822 124 41242	100µF/ 10V
CU11	4822 126 11567	0.022µF +- 10% R 16
CU12	4822 126 11567	0.022µF +-10% R 16V
CU13	4822 126 11567	0.022µF +- 10% R 16
CU14	4822 126 11567	0.022µF +- 10% R 16
CU15	4822 126 11567	0.022µF +- 10% R 16
CU16	4822 126 11567	0.022µF +-10% R 16V
CU21	4822 126 11567	0.022µF +- 10% R 16
CU22	4822 124 41246	47µF 16V
CU23	4822 126 11564	22pF (GR39) 50V CHIP
CU24	4822 126 11564	22pF (GR39) 50V CHIP
CU25	4822 126 11567	0.022µF +- 10% R 16
CU26	4822 126 11567	0.022µF +- 10% R 16
CU27	4822 126 11563	180pF (GR39) 50V CHI

DU01	4822 130 82612	1SS153 NEC
DU02	4822 130 82612	1SS153 NEC

IC71	4822 209 30061	HD63B03YF
IC72	4822 209 73856	74HC86FP
IC73	4822 209 82377	CMOS 74HC00 FLAT TAP
IC74	4822 209 61494	74HC74 FLAT
IC75	4822 209 63739	PD0011A 24BIT DEC.
IC76	4822 209 73588	64K S-RAM FLAT PAC L
IC77	4822 209 30059	MBM27C512P-20 ONE TI
IC78	4822 209 63741	CXD1095Q
IC79	4822 209 63557	TC7S08F TOSHIBA TAPI
IC80	4822 209 82377	CMOS 74HC00 FLAT TAP
IC81	4822 209 63341	74HC02 (JEDEC)
IC82	4822 209 82377	CMOS 74HC00 FLAT TAP

LU01	4822 152 20651	220UH CHOKE COIL
LU02	4822 152 20651	220UH CHOKE COIL
QU01	4822 130 61541	2SC4116 (TOSHIBA)
QU02	4822 130 61541	2SC4116 (TOSHIBA)
QU03	4822 130 61541	2SC4116 (TOSHIBA)
QU04	4822 130 61553	DTC124EU

RU01	4822 051 30103	10K Ω +- 5% 1/16
RU02	4822 051 30103	10K Ω +- 5% 1/16
RU03	4822 051 30103	10K Ω +- 5% 1/16
RU04	4822 051 30103	10K Ω +- 5% 1/16
RU05	4822 051 30103	10K Ω +-5% 1/16W
RU06	4822 051 30473	47K Ω +- 5% 1/16
RU07	4822 051 30104	100K Ω +- 5% 1/16
RU08	4822 051 30103	10K Ω +- 5% 1/16
RU11	4822 051 30473	47K Ω +- 5% 1/16
RU12	4822 051 30472	4.7K Ω +- 5% 1/16
RU13	4822 051 30103	10K Ω +- 5% 1/16
RU14	4822 051 30103	10K Ω +- 5% 1/16
RU16	4822 051 30472	4.7K Ω +- 5% 1/16
RU17	4822 051 30472	4.7K Ω +- 5% 1/16
RU18	4822 051 30103	10K Ω +- 5% 1/16
RU19	4822 051 30102	1K Ω +- 5% 1/16
RU21	4822 051 30223	22K Ω +- 5% 1/16
RU22	4822 051 30223	22K Ω +- 5% 1/16
RU23	4822 051 30101	100 Ω +- 5% 1/16
RU26	4822 051 30222	2.2K Ω +- 5% 1/16
RU27	4822 051 30103	10K Ω +- 5% 1/16
RU28	4822 051 30472	4.7K Ω +- 5% 1/16
RU29	4822 051 30103	10K Ω +- 5% 1/16
RU31	4822 051 30151	150 Ω +- 5% 1/16
RU32	4822 051 30105	1M Ω +- 5% 1/16
RU42	4822 051 30103	10K Ω +-5% 1/16W
RU47	4822 116 82487	0 Ω +-5% 1/16W

XU01	4822 242 72223	CERALOCK CST4.00MGW

Miscellaneous

BU01	4822 138 10297	CR2032-IHF

PARTSLIST POWER SUPPLY P 906

CD05	4822 124 23774	22µF/ 25V (BP)
CD06	4822 124 23774	22µF/ 25V (BP)
C903	4822 122 32486	0.01µF Z 50V
C904	4822 122 32486	0.01µF Z 50V
C905	4822 122 32486	0.01µF Z 50V
C906	4822 122 32486	0.01µF Z 50V
C907	4822 122 32486	0.01µF Z 50V
C908	4822 122 32486	0.01µF Z 50V
C909	4822 122 32486	0.01µF Z 50V
C910	4822 122 32486	0.01µF Z 50V
C911	4822 124 22008	100µF/50V
C912	4822 124 22008	100µF/50V
C915	4822 124 22239	3300µF 25V RA2 TYPE
C916	4822 124 22239	3300µF 25V RA2 TYPE
C917	4822 124 21823	22µF/ 25V
C918	4822 124 21823	22µF/ 25V
C919	4822 124 21823	22µF/ 25V
C920	4822 124 21823	22µF/ 25V
C921	4822 124 21823	22µF/ 25V
C922	4822 124 21823	22µF/ 25V
C923	4822 124 21823	22µF/ 25V
C924	4822 124 21823	22µF/ 25V
C925	4822 124 22268	4700µF/ 16V
C927	4822 124 21823	22µF/ 25V
C928	4822 124 21823	22µF/ 25V
C929	4822 124 21823	22µF/ 25V
C930	4822 124 22239	3300 µF 25V RA2 T
C931	4822 124 22239	3300 µF 25V RA2 T
C932	4822 124 21823	22µF 25V
C935	4822 124 21823	22µF 25V
C937	4822 122 32486	0.01µF Z 50V
C938	4822 122 32486	0.01µF Z 50V
C941	4822 124 21823	22µF/ 25V
C942	4822 124 21823	22µF/ 25V
C945	4822 124 21823	22µF/ 25V
C946	4822 124 21736	1µF/50V

D901	4822 130 82425	RBA402 4A/200V BRIDG
D902	4822 130 33063	SI.DIODE S3V20 (SHIN
D903	4822 130 33063	SI,DIODE S3V20 (SHIN
D904	4822 130 82421	1D3 1A/200V
D905	4822 130 82421	1D3 1A/200V
D906	4822 130 82421	1D3 1A/200V
D907	4822 130 82421	1D3 1A/200V
D913	4822 130 82421	1D3 1A/200V
D914	4822 130 82421	1D3 1A/200V
D915	4822 130 82421	1D3 1A/200V
D916	4822 130 82421	1D3 1A/200V
D919	4822 130 33305	1SS176,MA165,1SS254
D920	4822 130 33305	1SS176,MA165,1SS254
D922	4822 130 33305	1SS176,MA165,1SS254
D923	4822 130 33305	1SS176,MA165,1SS254
D924	4822 130 33305	1SS176,MA165,1SS254
D926	4822 130 33305	1SS176,MA165,1SS254
D929	4822 130 82421	1D3 1A/200V
D936	4822 130 82611	RB152 1.5A/200V

FUSE

F901	4822 253 30206	2 A 250V BS LISTED
F902	4822 253 30206	2 A 250V BS LISTED
F903	4822 070 31002	1 A 250V BS LISTED
F904	4822 070 31002	1 A 250V BS LISTED
F905	4822 253 30206	2 A 250V BS LISTED

IC86	4822 209 71902	NJM 78L12A
IC87	4822 209 73524	NJM 79L12A

LD01	4822 157 62926	S0627 2.6MH 1A
LD02	4822 157 62926	S0627 2.6MH 1A

Relais

L902	4822 280 20467	RELAY UB-5MBU

Q901	4822 130 61442	2SD1913 R,S
Q902	4822 130 61359	2SB1274 R,S
Q903	4822 130 60839	2SC2458 Y OR GR
Q904	4822 130 60107	2SA1048 Y OR GR T
Q905	4822 130 61442	2SD1913 R,S
Q906	4822 130 61359	2SB1274 R,S
Q907	4822 130 61442	2SD1913 R,S
Q908	4822 130 61441	2SD1862 TV-2 NPN Q,R
Q909	4822 130 60107	2SA1048 Y OR GR T
Q910	4822 130 62548	2SB1185 E OR F
Q913	4822 130 61442	2SD1913 R,S
Q914	4822 130 61417	2SB1240 TV-2 PNP Q,R
Q915	4822 130 60839	2SC2458 Y OR GR
Q916	4822 130 42683	DTC124ES (TP)
Q918	4822 130 61441	2SD1862 TV-2 NPN Q,R
Q920	4822 130 42683	DTC124ES (TP)

RD01	4822 116 52256	2.2K Ω +- 5% 1/6
RD02	4822 116 52244	15K Ω +- 5% 1/6
RD03	4822 116 52233	10K Ω +- 5% 1/6
RD04	4822 116 52256	2.2K Ω +- 5% 1/6
RD05	4822 116 52244	15K Ω +- 5% 1/6
RD06	4822 116 52233	10K Ω +- 5% 1/6
R904	4822 111 90731	47 Ω G 1/4W RADIA
R905	4822 111 90731	47 Ω G 1/4W RADIA
R907	4822 116 52243	1.5K Ω +- 5% 1/6
R908	4822 116 52243	1.5K Ω +- 5% 1/6
R909	4822 116 52269	3.3K Ω J 1/6W9
R910	4822 116 52269	3.3K Ω J 1/6W
R911	4822 050 11002	1K Ω +- 5% 1/6
R912	4822 116 52283	4.7K Ω +- 5% 1/6
R922	4822 116 52175	100 Ω +- 5% 1/6
R923	4822 116 52175	100 Ω +- 5% 1/6
R924	4822 116 52175	100 Ω +- 5% 1/6
R925	4822 116 52175	100 Ω +- 5% 1/6
R926	4822 116 52283	4.7K Ω +- 5% 1/6
R927	4822 116 52257	22K Ω J 1/6W
R929	4822 116 52233	10K Ω J 1/6W
R931	4822 116 52222	390 Ω +-5% 1/6W
R932	4822 116 52257	22K Ω +-5% 1/6W
R938	4822 116 60307	1 Ω J 1/4W
R939	4822 116 83034	1.8 Ω J 1/4W
R940	4822 116 83034	1.8 Ω J 1/4W
R942	4822 116 52256	2.2K Ω +- 5% 1/6
R943	4822 050 11002	1K Ω +- 5% 1/6
R945	4822 116 81153	4.7 Ω +-5% 2W
R946	4822 116 83035	27 Ω +-5% 1W

Z901	4822 130 82423	MTZJ6.8A
Z902	4822 130 82423	MTZJ6.8A
Z903	4822 130 33759	4.7V ZENER EQUIVALEN
Z904	4822 130 82423	MTZJ6.8A669
Z910	4822 130 80623	13V ZENER EQUIVALENT
Z911	4822 130 82609	MTZJ2.0B

PARTSLIST SPINDELMOTOR DRIVER PD06

Miscellaneous		
	4822 252 20295	THERMAL FUSE
CD01	4822 121 43855	0.0033µF, J,M,50V
CD02	4822 121 43855	0.0033µF, J,M,50V
CD03	4822 121 43855	0.0033µF, J,M,50V
CD04	4822 121 43855	0.0033µF, J,M,50V
CD09	4822 122 31218	120pF J SL 50V GRN
CD10	4822 122 31218	120pF J SL 50V GRN
CD13	4822 126 11557	4.7pF +-10% CH 50V
C936	4822 124 41138	100 µF/10V
DD01	4822 130 33305	1SS176,MA165,1SS254
DD02	4822 130 33305	1SS176,MA165,1SS254
DD03	4822 130 33305	1SS176,MA165,1SS254
DD04	4822 130 33305	1SS176,MA165,1SS254
DD05	4822 130 33305	1SS176,MA165,1SS254
DD06	4822 130 33305	1SS176,MA165,1SS254
DD07	4822 130 82422	EK16 1.5A/S.B.D
DD08	4822 130 82422	EK16 1.5A/60V S.B.D
DD09	4822 130 82422	EK16 1.5A/60V S.B.D
DD10	4822 130 82422	EK16 1.5A/60V S.B.D
DD52	4822 130 33305	1SS176.MA165.1SS254
D925	4822 130 33305	1SS176,MA165,1SS254
D928	4822 130 33305	1SS176,MA165,1SS254
LD03	4822 526 10543	ZBF503AR-00(TA)
LD04	4822 526 10543	ZBF503AR-00(TA)
QD01	4822 130 60886	2SC1923 Y
QD02	4822 130 61438	2SA1005 L OR K
QD03	4822 130 60886	2SC1923 Y
QD04	4822 130 61438	2SA1005 L OR K
QD05	4822 130 60107	2SA1048 Y OR GR T
QD06	4822 130 60839	2SC2458 Y OR GR
QD07	4822 130 60107	2SA1048 Y OR GR T
QD08	4822 130 60839	2SC2458 Y OR GR
QD09	4822 130 62548	2SB1185 E OR F
QD10	4822 130 62549	2SD1762 E OR F
QD11	4822 130 62548	2SB1185 E OR F
QD12	4822 130 62549	2SD1762 E OR F
Q911	4822 130 60839	2SC2458 Y OR GR
Q912	4822 130 60839	2SC2458 Y OR GR
RD07	4822 116 52269	3.3K Ω +- 5% 1/6
RD08	4822 116 52256	2.2K Ω +- 5% 1/6
RD09	4822 116 52269	3.3K Ω +- 5% 1/6
RD10	4822 116 52256	2.2K Ω +- 5% 1/6
RD11	4822 116 52233	10K Ω +- 5% 1/6
RD12	4822 050 11002	1K Ω +- 5% 1/6
RD13	4822 116 52233	10K Ω +- 5% 1/6
RD14	4822 050 11002	1K Ω +- 5% 1/6
RD15	4822 116 52195	47 Ω +-5% 1/6W
RD16	4822 116 52195	47 Ω +-5% 1/6W
RD17	4822 116 52195	47 Ω +-5% 1/6W
RD18	4822 116 52195	47 Ω +-5% 1/6W
RD51	4822 116 52233	10K Ω +-5% 1/6W
RD54	4822 116 52233	10K Ω +-5% 1/6W
R913	4822 116 52222	390 Ω +- 5% 1/6
R914	4822 116 52175	100 Ω +- 5% 1/6
R915	4822 116 52283	4.7K Ω +- 5% 1/6
R916	4822 116 52283	4.7K Ω +- 5% 1/6
R930	4822 116 52257	22K Ω +- 5% 1/6
Z907	4822 130 80316	3.6V ZENER EQUIVALEN

PARTSLIST SAFETY PCB PD06

CD51	4822 121 43855	0.0033µF, J,M,50V
CD52	4822 121 42698	0.1µF, J,N,50V
CD53	4822 124 41138	100µF/10V
CD54	4822 122 40586	10000pF Y 16V
CD55	4822 122 40586	10000pF Y 16V
CD56	4822 124 41138	100µF/10V
DD51	4822 130 33305	1SS176.MA165.1SS254
IC88	4822 209 63184	74HC86 EX-QR
IC89	4822 209 12422	74HC00 NAND
QD51	4822 130 42593	DTA124ES (TP)
RD52	4822 116 52234	100K Ω +-5% 1/6W
RD53	4822 116 52233	10K Ω +-5% 1/6W
RD55	4822 116 52234	100K Ω +-5% 1/6W
RD56	4822 116 52233	10K Ω +-5% 1/6W
RD57	4822 116 52234	100K Ω +-5% 1/6W
RD58	4822 116 52233	10K Ω +-5% 1/6W
RD59	4822 116 52234	100K Ω +-5% 1/6W
RD60	4822 116 52233	10K Ω +-5% 1/6W
RD61	4822 116 52233	10K Ω +-5% 1/6W
RD62	4822 116 52233	10K Ω +-5% 1/6W
RD63	4822 116 52296	6.8K Ω +-5% 1/6W
RD64	4822 116 52233	10K Ω +-5% 1/6W
RD65	4822 050 11002	1K Ω +-5% 1/6W
RD66	4822 116 52284	47K Ω +-5% 1/6W
RD67	4822 116 52233	10K Ω +-5% 1/6W
RD68	4822 116 52175	100 Ω +-5% 1/6W
ZD51	4822 130 33759	4.7V ZENER EQUIVALEN
ZD52	4822 130 33759	4.7V ZENER EQUIVALEN

POWERSUPPLY DIG. AUDIO P926

C951	4822 124 23782	3300µF 16V 16X 25 AR
C952	4822 124 23778	100µF 16V 6.3X 11 AR
C953	4822 124 23783	470µF 16V 10X12.5 AR
C955	4822 122 32486	0.01µF Z 50V
C956	4822 122 32486	0.01µF Z 50V
D951	4822 130 82421	1D3 1A/200V
D952	4822 130 82421	1D3 1A/200V
Fuse		
F951	4822 253 30206	2 A 250 V BS LISTED
Q951	4822 130 61442	2SD1913 R,S
R951	4822 116 52176	10 Ω +-5% 1/6W

TRANSFORMER PCB P916

C901	4822 122 33276	DE7150 F 103M 0.01µF
C902	4822 122 33276	DE7150 F 103M 0.01µF
L901	4822 157 62918	LINE FILTER µF2327S-
T901	4822 146 21633	POWER TRANSFORMER

FRONT PCB PU06

CF01	4822 124 21823	22µF/25V
CF02	4822 122 40586	10000pF 16V
CF03	4822 122 40586	10000pF 16V
IC99	4822 209 63457	FRONT CPU TMP47C670N
LF01	4822 157 62898	LAL02TA181J 180UH
QF01	4822 130 60839	2SC2458 Y OR GR9
QF02	4822 130 60107	2SA1048 Y OR GR T
RF01	4822 116 52256	2.2K Ω +- 5% 1/6
RF02	4822 116 52257	22K Ω +- 5% 1/6
RF03	4822 116 52257	22K Ω +- 5% 1/6
RF04	4822 050 11002	1K Ω +- 5% 1/6
RF05	4822 050 11002	1K Ω +- 5% 1/6
SF02	4822 276 20508	TACT SWICH ALPS-SKHV

Miscellaneous

SF03	4822 276 20508	TACT SWICH ALPS-SKHV
SF04	4822 276 20508	TACT SWICH ALPS-SKHV
SF05	4822 276 20508	TACT SWICH ALPS-SKHV
SF20	4822 276 20508	TACT SWICH ALPS-SKHV
SF21	4822 276 20508	TACT SWICH ALPS-SKHV
SF22	4822 276 20508	TACT SWICH ALPS-SKHV
SF23	4822 276 20508	TACT SWICH ALPS-SKHV
SF25	4822 276 20508	TACT SWICH ALPS-SKHV
K001	4822 130 90999	LCD UNIT

X-tal

XF01	4822 242 73893	6MHz CERAMIC RESONAT

PARTSLIST STANDBY PCB PF 16

CF04	4822 122 40586	10000pF 16V
DF01	4822 130 80326	LT3D8B RED 3O
DF02	4822 130 80326	LT3D8B RED 3O
DF03	4822 130 33305	1SS176,MA165,1SS254
QF03	4822 130 42683	DTC124ES (TP)
QF04	4822 130 42683	DTC124ES (TP)
RF07	4822 116 52217	270 Ω +-5% 1/6W
RF08	4822 116 52243	1.5K Ω +- 5% 1/6
RF09	4822 116 52243	1.5K Ω +- 5% 1/6W
RF11	4822 116 52233	10K Ω +-5% 1/6W

Miscellaneous

SF01	4822 276 20508	TACT SWICH ALPS-SKHV
SF26	4822 276 20508	TACT SWICH ALPS-SKHV
SF27	4822 276 20508	TACT SWICH ALPS-SKHV

X-tal

ZF01	4822 130 81254	GP1U520X 36.0KHZ IR-

PARTSLIST LDP600 SERVICETOOLS

4822 397 30244	NTSC TESTDISC 12"
4822 395 90896	TEST STAND
4822 395 80389	SPINDLE MOTOR JIG.
4822 321 61071	EXT. CABLE 3P.
4822 321 61072	EXT. CABLE 11P.
4822 321 61073	EXT. CABLE 12P.

3.1 SAFETY INSTRUCTIONS

- Safety regulations demand that the set be restored to its original condition and that components identical with the original types be used.
  Safety components are marked by the symbol ⚠.
- **ESD**

  All IC's and many other semi-conductors are susceptible to electrostatic discharges (ESD).
  Careless handling during repair can reduce life drastically.
  When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
  Keep components and tools also at this potential.
  For detailed information see "Handling ESD-sensitive components".
- A set to be repaired should always be connected to the mains via a suitable isolating transformer.
- never replace any modules or any other parts while the set is switched on.
- Use plastic instead of metal alignment tools. This in order to prelude short-circuit or to prevent a specific circuit form being rendered unstable.

3.2 SERVICING OF SMDs (Surface Mounted Devices)

3.2.1 General cautions on handling and storage

a. Oxidation on the SMDs terminals results in poor soldering. Do not handle SMDs with bare hand.
b. Avoid for storage places that are sensitive to oxidation such as places with sulfur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity.
   As a result the capacitance or resistance value of the SMDs may be affected.
c. Rough handling of circuit boards containing SMDs may cause damage to the components as well as the circuit boards. Circuit boards containing SMDs should never be bent or flexed. Different circuit board materials expand and contract at different rates when heated or cooled and the components and/or solder connections may be damaged due to the stress.
   Never rub or scrape chip components as this may cause the value of the component to change. Similary, do not slide the circuit board across any surface.

3.2.2 Removal of SMDs

a. Heat the solder (for 2-3 seconds) at each terminal of the chip. Small components can, by means of litz wire and a limited horizontal force, be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 1a) or
b. While holding the SMD with a pair of tweezers take it off gently using th soldering iron's heat applied to each terminal (see Fig. 1b).
c. Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 1c).

3.2.2.1 Caution on removal:

a. When handling the soldering iron, use suitable pressure and be careful.
b. When removing the chip, do not use undue force with the pair of tweezers.
c. The soldering iron to be used (approx. 30 W), must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
d The chip, once removed, must **never** be used again.

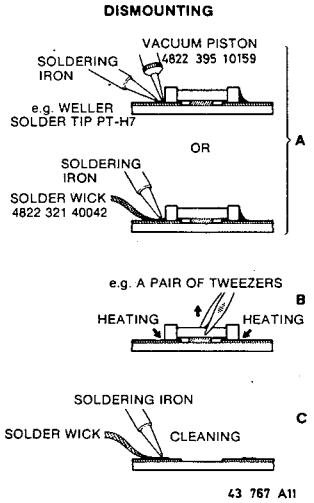


Fig. 1

3.2.3 Attachment of SMDs

a. Locate the SMD on the solder lands by means of tweezers and solder the component at one side. Ensure that the component is positioned well on the solder lands (see Fig. 2a).
b. Next complete te soldering of the terminals of the component (see Fig. 2b).

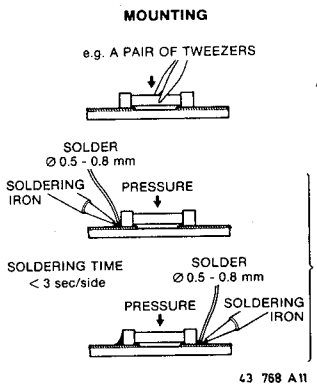


Fig. 2

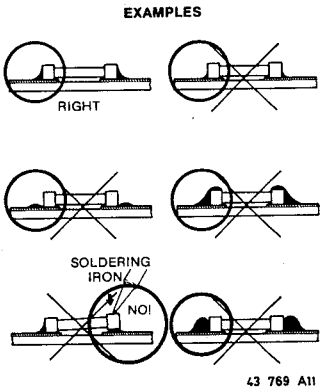


Fig. 3

3.2.3.1 Caution on attachment:

a. When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering must be as quick as possible; care must be taken to avoid damage to the terminals and the body itself.
b. Keep the SMD's body in contact with the printed board when soldering.
c. The soldering iron to be used (approx. 30 W) must preferably be provided with a thermal control (soldering temperature about 225 to 250°C).
d. Soldering should not be done outside the solder land.
e. Soldering flux (of rosin) may be used but should not be acidic.
f. After soldering, let the SMD cool down gradually at room temperature.
g. The quantity of solder must be proportional with the size of the solder land. If the quantity is too great, the SMD might crack or the solder lands might be torn loose from the printed board (see Fig. 3).

3.3 HANDLING ESD-SENSITIVE COMPONENTS

3.3.1 Personal safety

The testing, handling and replacing of ESD-sensitve components requires special attention for personal safety. A person dealing with ESD-sensitive components should, normally speaking, be connected via a resistance to the same potential as the chassis of the set to protect him against direct contact with the supply voltage.
This resistance is often applied in the connection lead of wrist wraps. If necessary, make use of an isolating transformer.

3.3.2 Storage and transport

Transport and store the circuits and PCBs in their original packages.
As an alternative to the original package one may use a conductive material or special IC package which short-circuits all the pins of the component with one another.
Always discharge the package before opening it.

3.3.3 Testing or handling

Work on a conductive surface when testing loose circuits and components or when transferring components and circuits from one package to another.
Use a conductive wrist wrap with lead to make an electrical connection between the conductive surface and yourself via a resistance in the connection lead of the wrist wrap.
Connect equipment and tools also with this conductive surface.
Do not connect any signals to inputs as long as the power supply of the set to be tested is off.
All the inputs that are not used should be connected either to ground or to the supply voltage. When testing, do not use any freon sprays for under-cooling of sensitive components.

3.3.4 Mounting ESD-sensitive components

Mount ESD-sensitive components only after all other components have been mounted.
Make sure that the components themselves, the metal parts of the PCB, mounting equipment and mounting operator are at the same potential level as the chassis of the set.
If it is impossible to ground the PCB, the mounting operator should pick the PCB up before bringing it into contact with the components to be replaced.

3.3.5 Soldering

Soldering iron tips, also those of low-voltage soldering stations, should be kept at the same potential as the components and the PCB.
It is better to use solder-removing braid than solder suckers.

3.3.6 Electrostatic charges

One should stick to the precautionary measures also after the ESD-sensitive components have been mounted on the PCB. Until the sub-PCBs have been incorporated into a complete system on which the correct supply voltages are connected, the PCB is nothing more than an extension of the conductors of the components on this PCB. To prevent electrostatic discharges from passing to the components via the terminals, we recommend that you apply conductive clips or conductive tape on the terminals of the PCB.

3.3.7 Transients (switch-on phenomena)

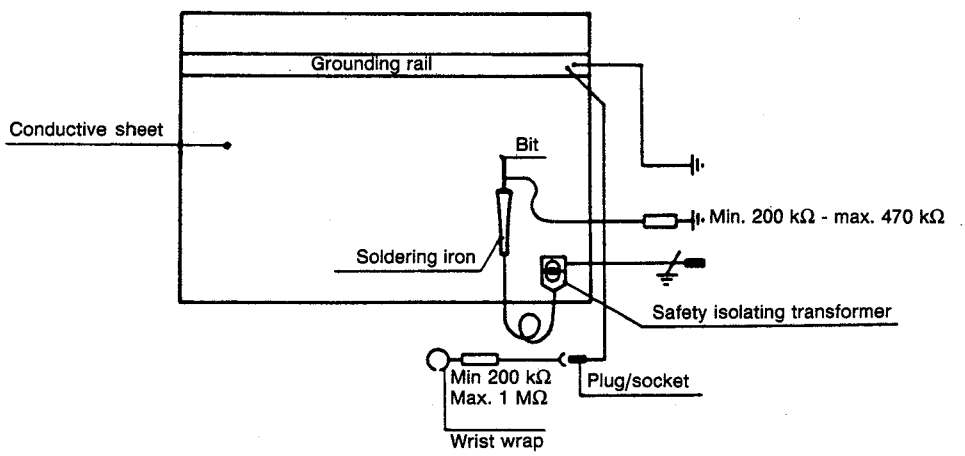
To prevent permanent damages as a result of switch-on phenomena, no ESD-sensitive components, or PCBs populated with these components, should be inserted in or removed from test-sockets or systems with the supply voltage on.
Prevent switching peeks on the mains as a consequence of switching electric equipment, relay and DC lines on and off.

3.3.8 Working environment

The work bench for the service technician should look like the one shown in the figure.

3.3.9 Replacement of the Flat Pack IC's

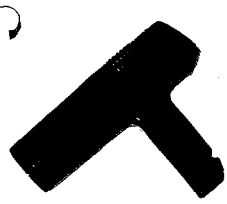
For replacing a component see Fig. 6 Dismounting and Mounting. Also a number of precautions and examples is given.
When replacing a flat pack, rosin flux applied to the device leads will ensure a good soldered joint.
Since rosin flux, when not properly heated by the soldering process, is sticky, it will attract dust which will result in component degeneration over a period of time.
The removal of excess flux with a cleaner will not solve this problem because the flux is then even spread over a greater area by the cleaner. Drying of the flux can be accomplished by blowing the area with a common hair dryer for 1 or 2 minutes at a distance of approx. 10 centimeters.

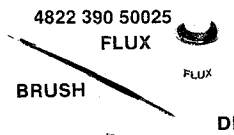


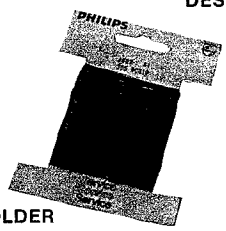
Special attention should be paid in regions having a dry atmosphere and when the floor is covered with a nylon carpet or such.

TOOLS TO BE USED

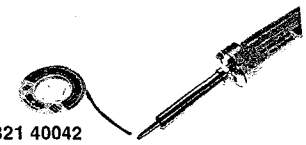

ANTISTATIC MAT


HAIR DRYER





SOLDER
ø0,5-0,8 MM



SOLDERING IRON
WELLER TCP 50

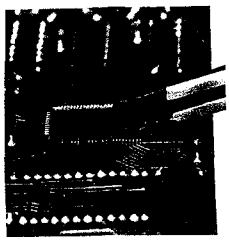

SOLDER TIP
WELLER PT-CC7
4822 310 50081

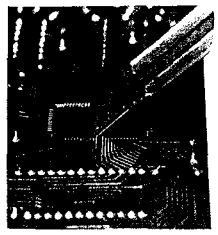

MAGNIFYING GLASS

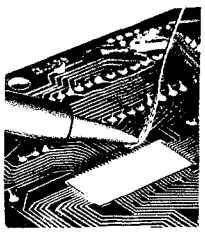

METAL BRUSH

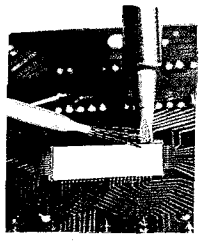

KNIFE

DISMOUNTING

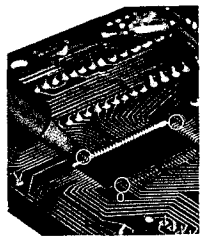

CUTTING
THE LEADS

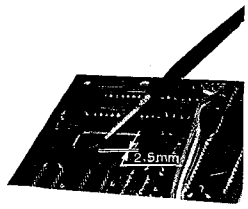

WRONG
TRACKS WILL
BE DAMAGED


CLEANING
THE TRACKS



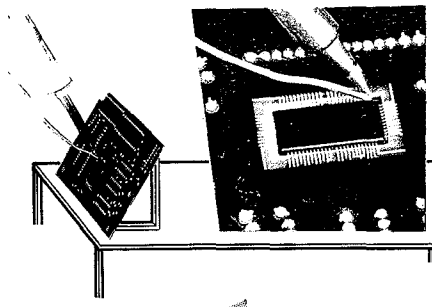
MOUNTING

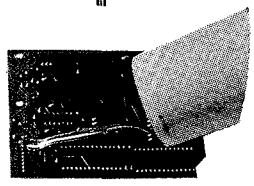


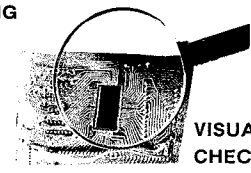


APPLYING FLUX

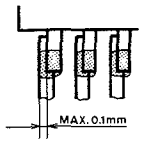
FIXING IC
AT THE CORNERS

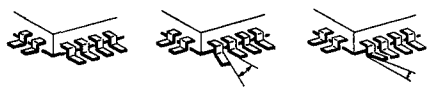

SOLDERING:
SPEED
1 CM IN 5 SEC.


DRYING

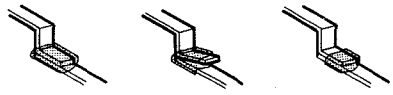

VISUAL
CHECK

ALIGNING THE LEADS




RIGHT WRONG WRONG

SOLDERING


RIGHT WRONG WRONG

Service
Service
Service

Service & Support IMS

Service Information

D/A CONVERTER MODIFICATION.

Reason:
Change to SAA7321GP-M5 because the production of DAC (IC4H, IC4J) SAA7321GP-M3 used on the digital audio circuit (P306) is stopped.

Situation:

	old situation	new situation	
IC4H IC4J	SAA7321GP-M3	SAA7321GP-M5	4822 209 30706

When the SAA7321GP-M3 is replaced by the SAA7321GP-M5, the following parts are added and/or changed.

Situation:

	old situation	new situation	
C433 | C436	330PF 50V	Film Cap. 560PF 50V	5322 122 32336
	added		
C496 | C498	addition	Ceramic Cap. 0.1µF 50V	4822 126 12873

Introduction
The above countermeasure is implemented from the following lot.

model	applied lot for countermeasure
LDP600WS	25 lot ~

The service code is changed from MZ04 to MZ05.

Note
You can confirm service code and lot No. by serial No. on the player rear panel.

Serial No.:MZ□□XXXX□□XXXX
lot No.
service code

Already published Service informations for this model;

IMS	**92-003**	**Ringing noise modification**
IMS	**92-006**	**Mechanism modification**
IMS	**92-008**	**Modification CCD-IC**
IMS	**92-009**	**Software modification for single side discs.**

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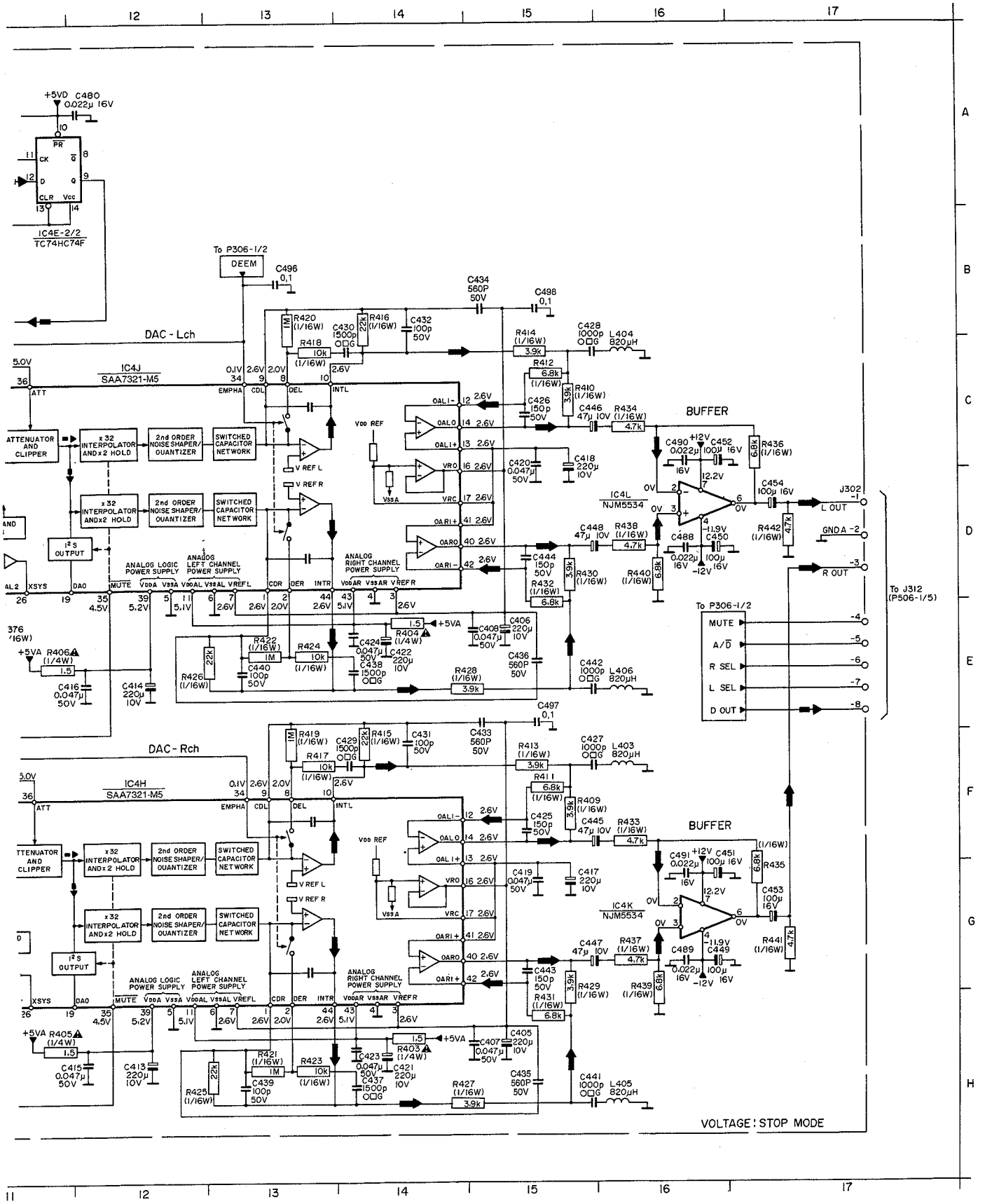
P306-2/2 DIGITAL AUDIO P.C.BOARD



P306 DIGITAL AUDIO P.C.BOARD