



VIDEO CASSETTE RECORDER

SV-613X/611X/610X/510X

SV-613F/610F

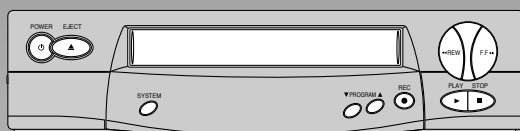
SV-613B

SV-B150B/B150X/B130G

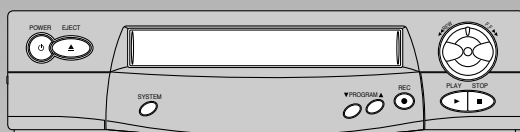
SERVICE Manual

For mechanical disassembly and adjustment, refer to the "Mechanical Manual" (DX7-A/AC, DX8-A/AC → AC68-20392A).

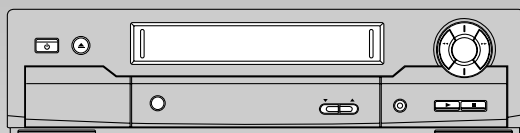
VIDEO CASSETTE RECORDER



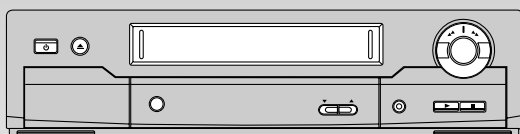
SV-613X/611X/610X/613F/610F/613B



SV-510X



SV-B150B/B150X



SV-B130G

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1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including : control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1) :
Warning : Do not use an isolation transformer during this test. Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).
5. With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.
6. X-ray Limits :
The picture tube is designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original.

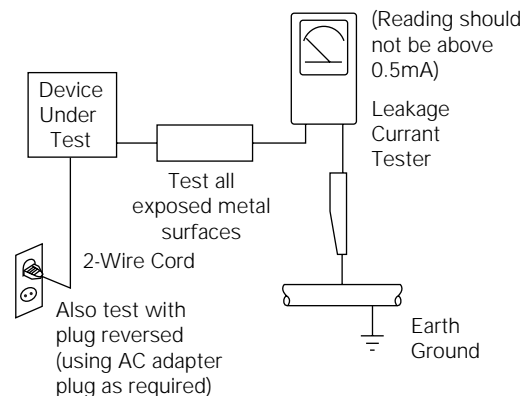




Fig. 1-1 AC Leakage Test

7. Antenna Cold Check :
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
8. High Voltage Limit :
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits.

Heed the high voltage limits. These include the *X-ray protection Specifications Label*, and the *Product Safety and X-ray Warning Note* on the service data schematic.
9. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
10. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

11. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
12. Design Alteration Warning :
Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
13. Hot Chassis Warning :
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

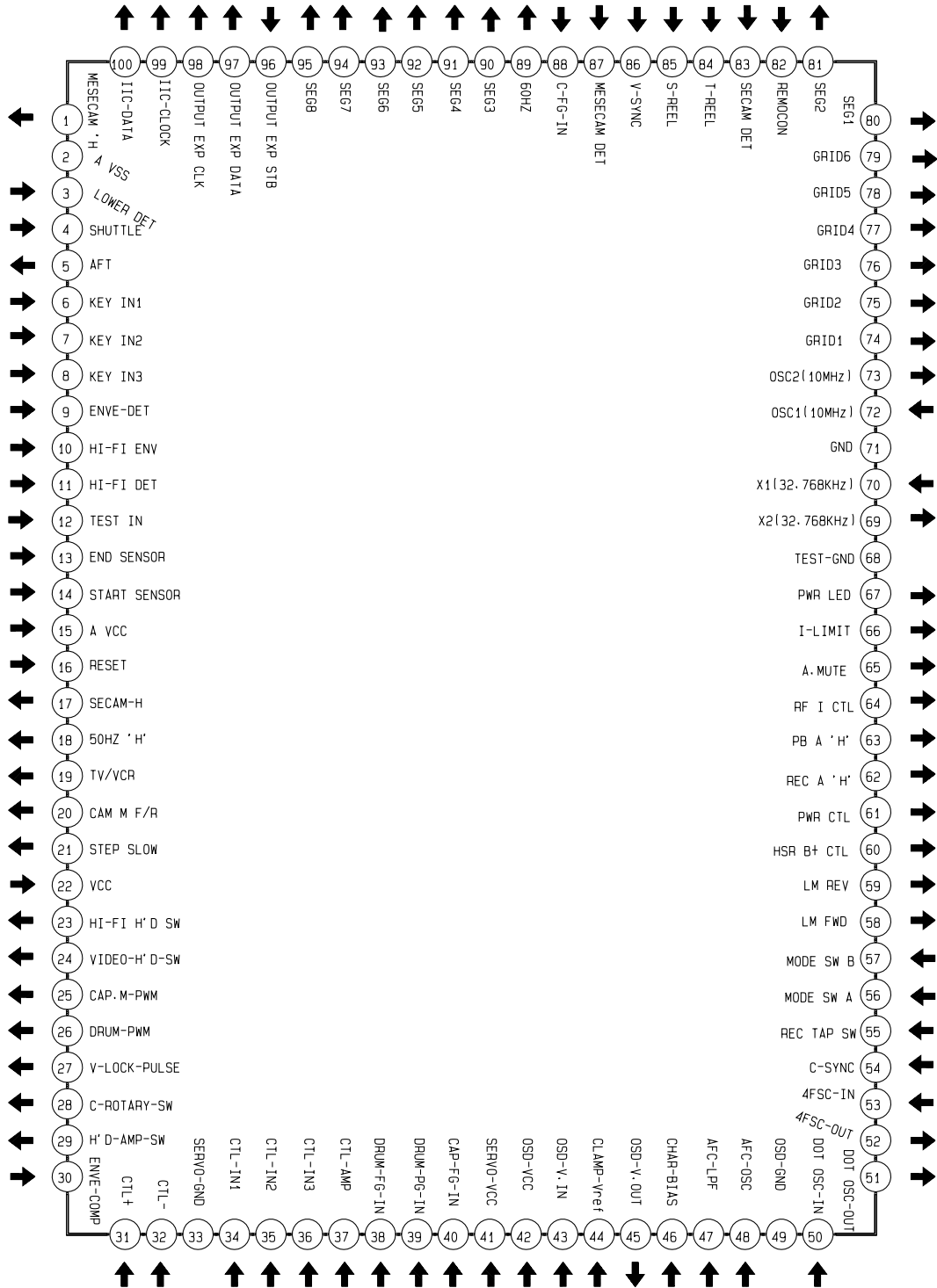
To confirm that the AC power plug is inserted correctly, do the following : Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
14. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, *regardless of the AC plug polarity*. These units can be safely serviced *only* if an isolation transformer inserted between the receiver and the power source.
15. Never defeat any of the B+ voltage interlocks.
Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
16. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.
17. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
18. Picture Tube Implosion Warning :
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
19. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
20. Product Safety Notice :
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.

Components that are critical for safety are indicated in the circuit diagram by shading, ( or ).
Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

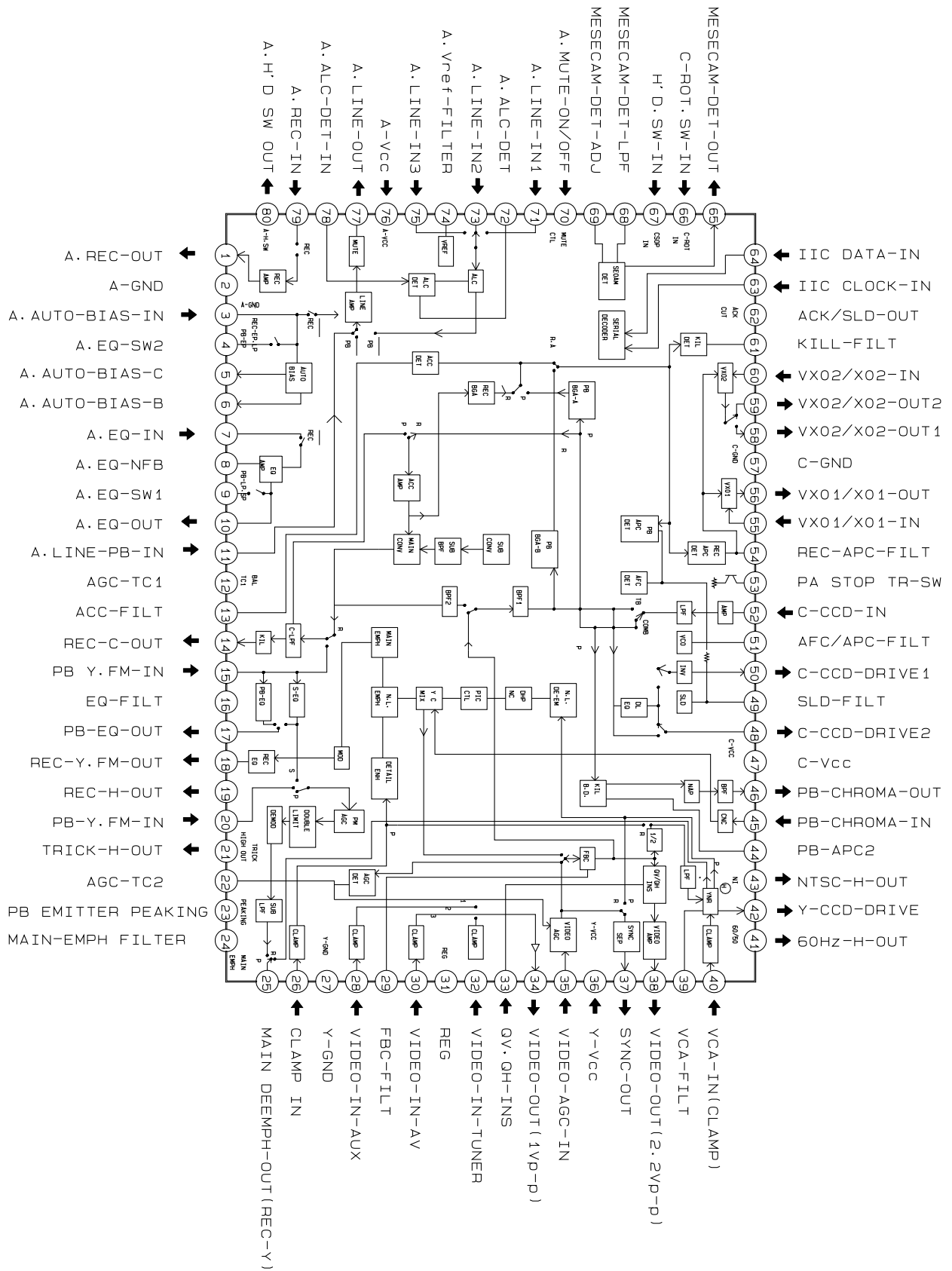
2. Reference Information

2-1 IC BLOCK

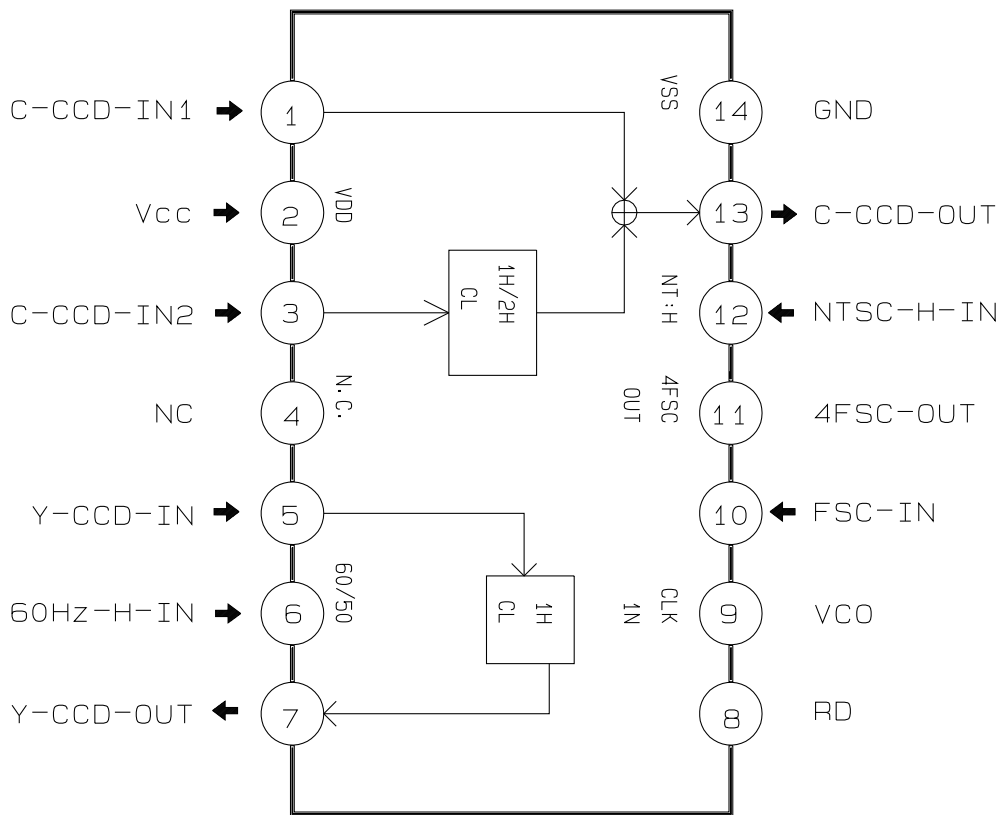
2-1-1 IC601 (HD6473977)



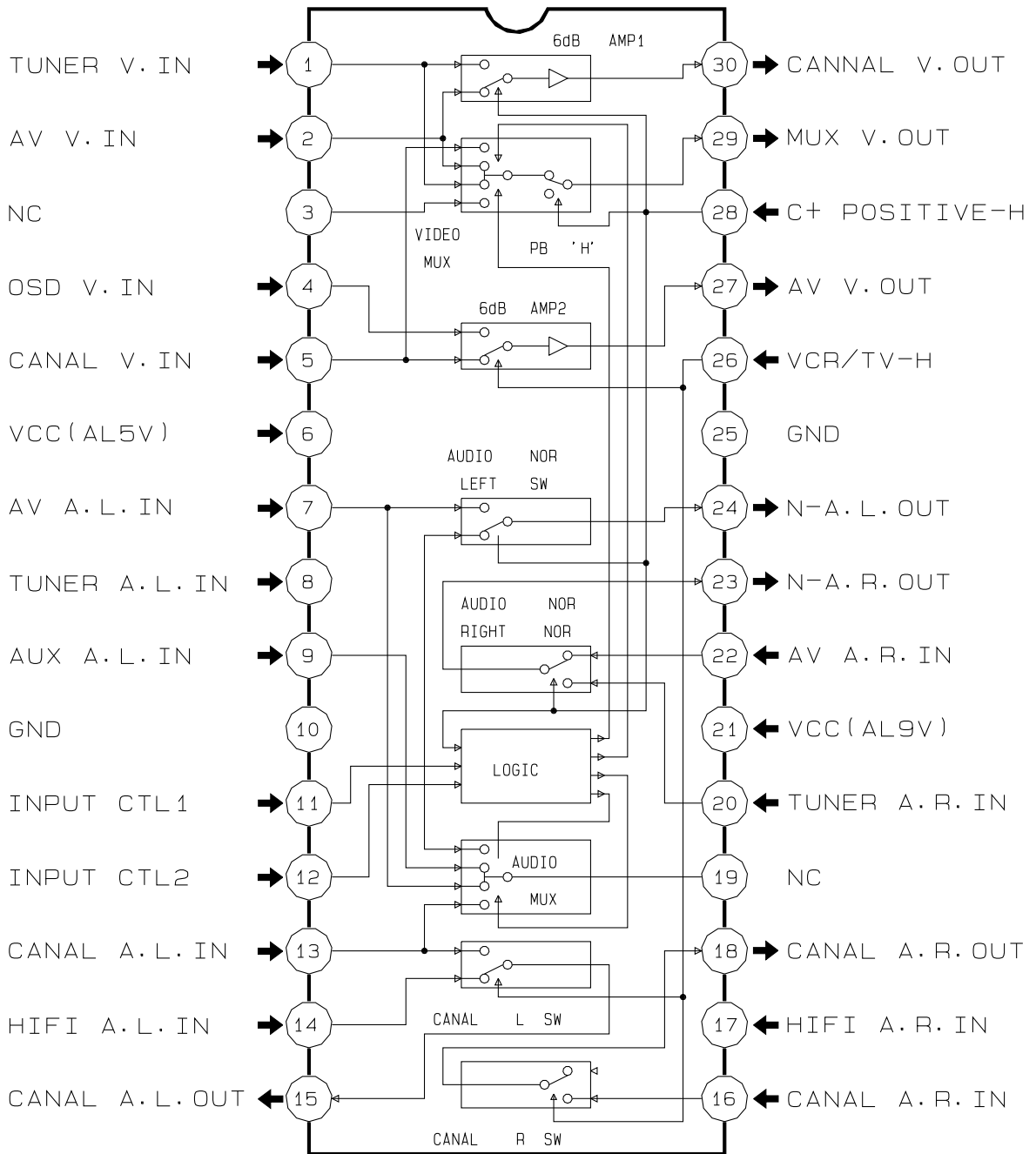
2-1-2 IC301 (SS11511M/SS11501M)



2-1-4 IC303 (SS23377M/SS23378M)



2-1-6 IC801 (KA8119)



3. Product Specifications and Comparison Chart

3-1 Product Specifications

Design and specifications are subject to change without notice.

Operation	Description
Format	VHS PAL standard (except middle east asia : VHS PAL/NTSC standard)
Heads	Video : 4 rotary heads Hi-Fi : 2 rotary heads Audio/Control : 1 stationary head Erase : 1 full track erase head
Receiving channel	VHF-I, VHF-III, UHF, Hyperband
Television system	Standard B/G (for German & West Europe) Standard B/G, L'L (for France) Standard B/G, D/K (for East Europe & Middle East Asia) Standard I (for U.K) Standard B/B (for Australia)
Recording system	
Luminance	FM azimuth recording
Colour	PAL (NTSC/MESECAM) : Down converted subcarrier phase shifted direct recording SECAM : 1/4 counted down subcarrier direct recording NTSC PB on PAL TV
Tape speed	SP : 23.39 mm/sec, LP : 11.69 mm/sec
Recording/playback time	SP : 3 hours (E-180 Tape), LP : 6 hours (E-180 Tape)
F.F/REW time	About 100 ~ 190 sec in REW/F.F with E-180 tape
VIDEO	
Input Output Signal-to-noise ratio Horizontal resolution	0.5 to 2.0 Vp-p : 75 ohm unbalanced 1.0 ± 0.2 Vp-p : 75 ohm unbalanced Better than 43 dB (SP) More than 240 lines (SP)
Audio	
Input Output Wow and flutter (WTD) Signal-to-noise ratio Frequency response	-8 dBm, 47 Kohm unbalanced -8 ± 3 dBm, 1 Kohm unbalanced 0.4% max (SP) Hi-Fi : 68dB min (IHF A filter), Mono : 42 dB min (IHF filter) Hi-Fi : 20Hz ~ 20KHz, Mono : 100Hz ~ 8KHz
Power requirement	230V or 100 ~ 240V (AC 50/60 Hz)
Power consumption	Approx. 21 watts
Operation temperature	41°F ~ 104°F (5°C ~ 40°C)
Operation humidity	10%-75%
Weight	4.4 Kg (net)
Dimensions (W x H x D)	360 x 92 x 314 mm

3-2 Comparison Chart

COUNTRY	MODEL	A2	NICAM	S/VIEW	V/PLUS	VPS	PDC	ATS	CANAL+	P/MIERE	VCR/TV	DIAMOND HEAD (DLC)	REMARK
GERMANY	SV-613X	O	X	O	X	O	X	O	X	O	O	X	
AUSTRIA	SV-613X	O	X	O	X	O	X	O	X	O	O	X	
SWITZERLAND	SV-613X	O	X	O	X	O	X	O	X	O	O	X	
	SV-613F	O	O	O	X	X	O	O	O	X	O	X	
FRANCE	SV-613F	O	O	O	X	X	O	O	O	X	O	X	
	SV-610F	O	O	X	X	X	O	O	O	X	O	X	
U.K	SV-613B	X	O	X	O	X	X	X	X	X	X	X	
SPAIN	SV-611X	O	O	X	X	X	O	O	O	X	O	X	
	SV-510X	X	X	O	X	X	O	O	O	X	O	X	Hi-Fi Playback
ITALY	SV-611X	O	X	X	X	X	O	O	O	X	O	X	
	SV-510X	X	X	O	X	X	O	O	O	X	O	X	Hi-Fi Playback
PORTUGAL	SV-611X	O	O	X	X	X	O	O	O	X	O	X	
FINLAND/SWEDEN/NORWAY	SV-610X	O	O	X	X	X	O	O	X	X	X	X	
NETHERLANDS	SV-610X	O	X	X	X	X	O	O	X	X	X	X	
BELGIUM	SV-610X	O	O	X	X	X	O	O	X	X	X	X	
DENMARK	SV-610X	O	O	X	X	X	O	O	X	X	X	X	
SAUDI ARABIA	SV-B130G	X	X	X	X	X	X	X	X	X	X	O	
LEBANON	SV-B130G	X	X	X	X	X	X	X	X	X	X	O	
AUSTRALIA	SV-B150B	O	X	G-CODE	X	X	X	X	X	X	X	O	
NEW ZEALAND	SV-B150X	O	O	G-CODE	X	X	X	X	X	X	X	O	

4. Disassembly and Reassembly

4-1 Cabinet Assembly

Note : Disassemble in the order shown.
Reassemble in reverse order.

4-1-1 Cabinet Top removal

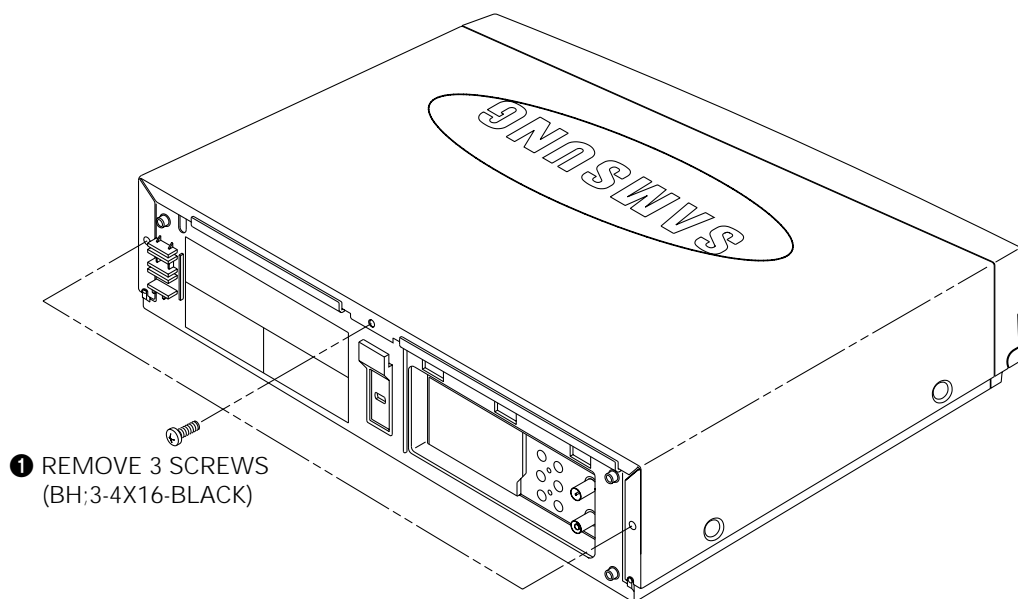


Fig. 4-1 Cabinet Top removal

4-1-2 Bottom cover removal

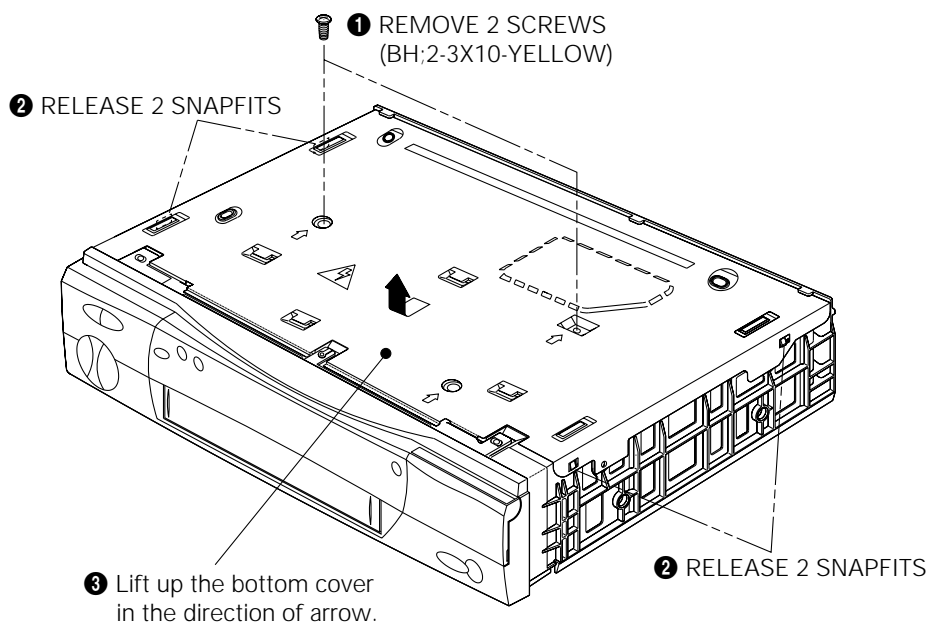


Fig. 4-2 Bottom Cover removal

4-1-3 Ass'y Front Panel removal

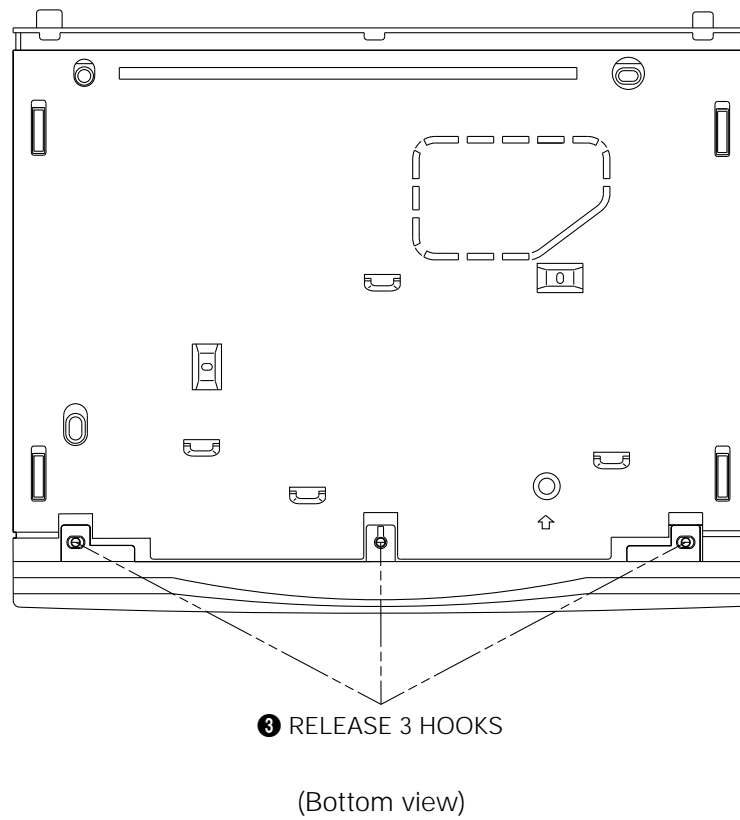
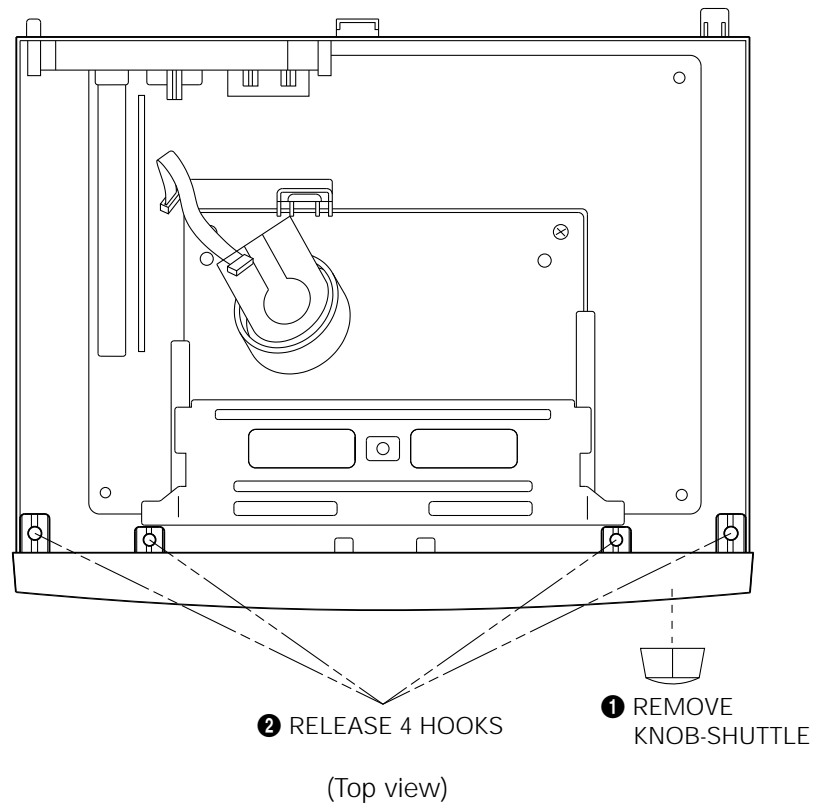


Fig. 4-3 Ass'y Front Panel removal

4-1-4 Ass'y Function-Timer removal

Note : Take extreme care not to damage the PCB when removing it.

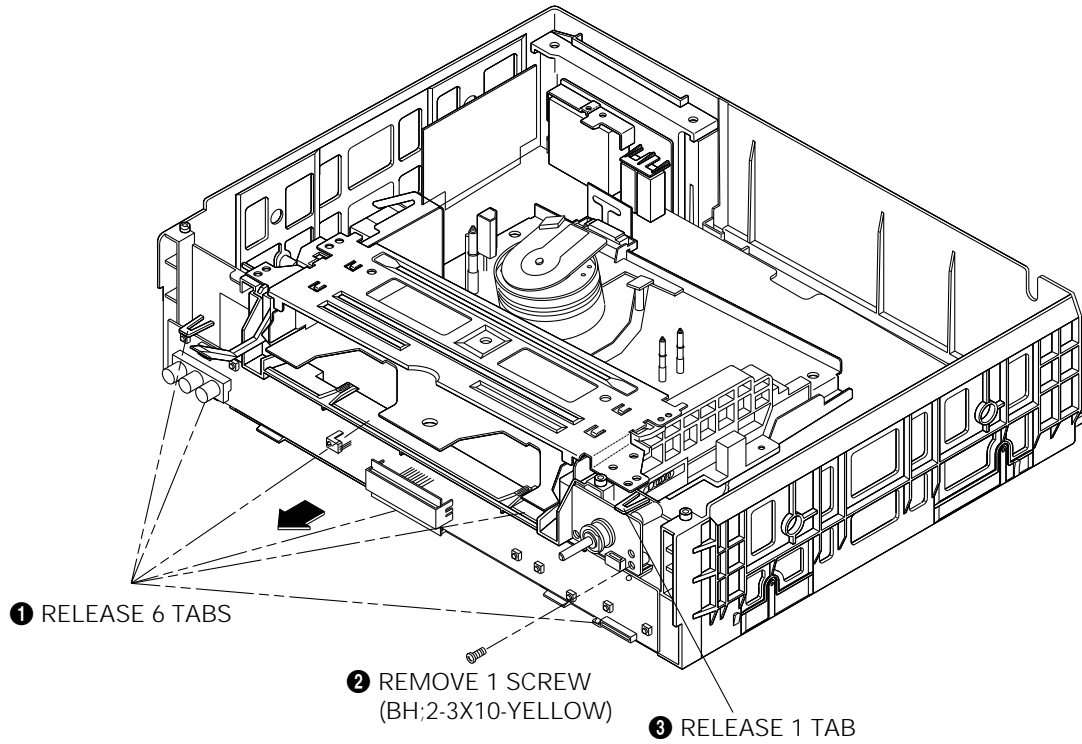


Fig. 4-4 Ass'y Function-Timer removal

4-1-5 Chassis removal

Note : 1. When removing chassis, take extreme care not to damage the main PCB front.
2. When reinstalling the deck on the main PCB, take extreme care not to damage the sensor.

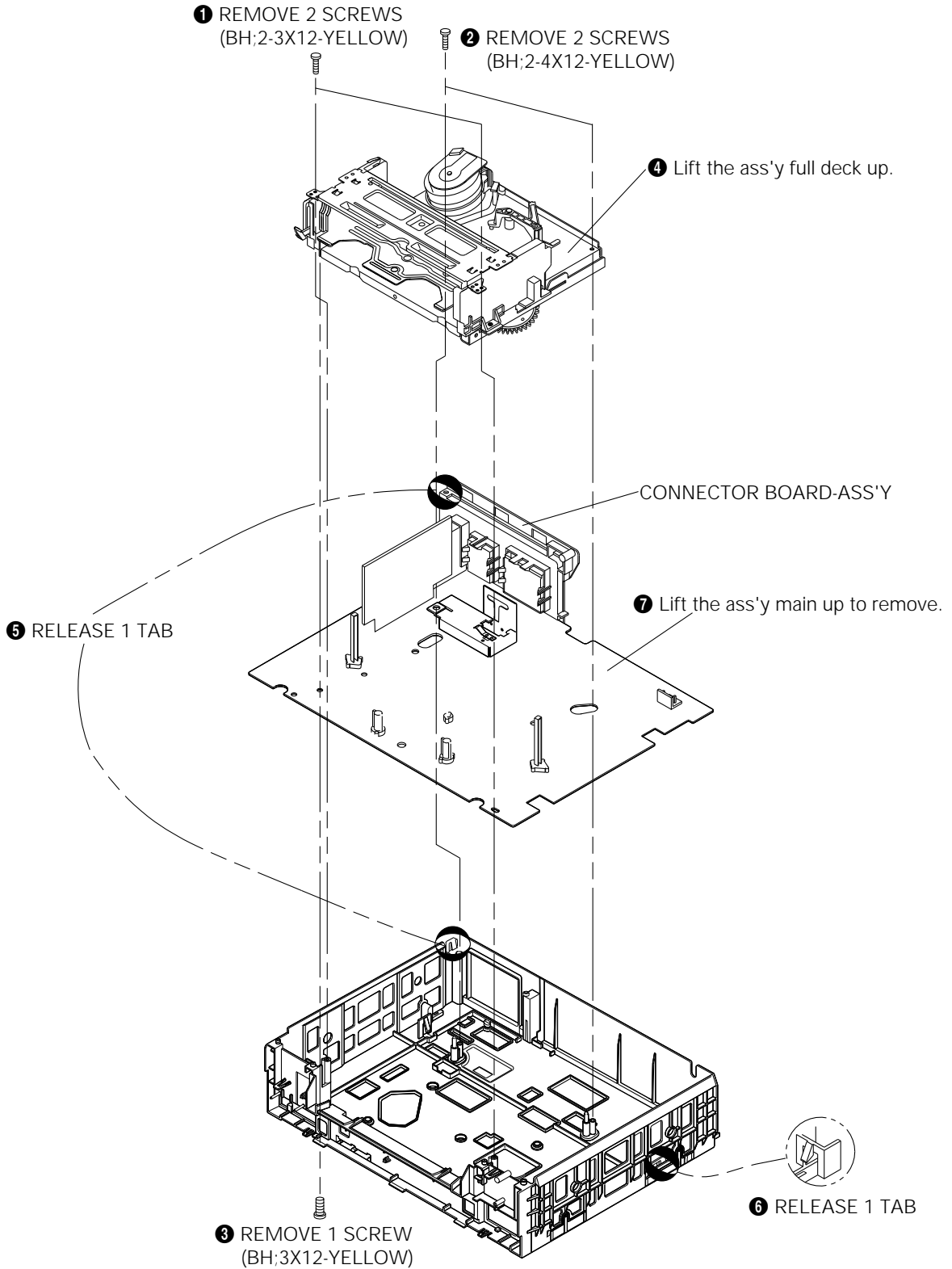


Fig. 4-5 Chassis Removal

4-2 Circuit Board Locations

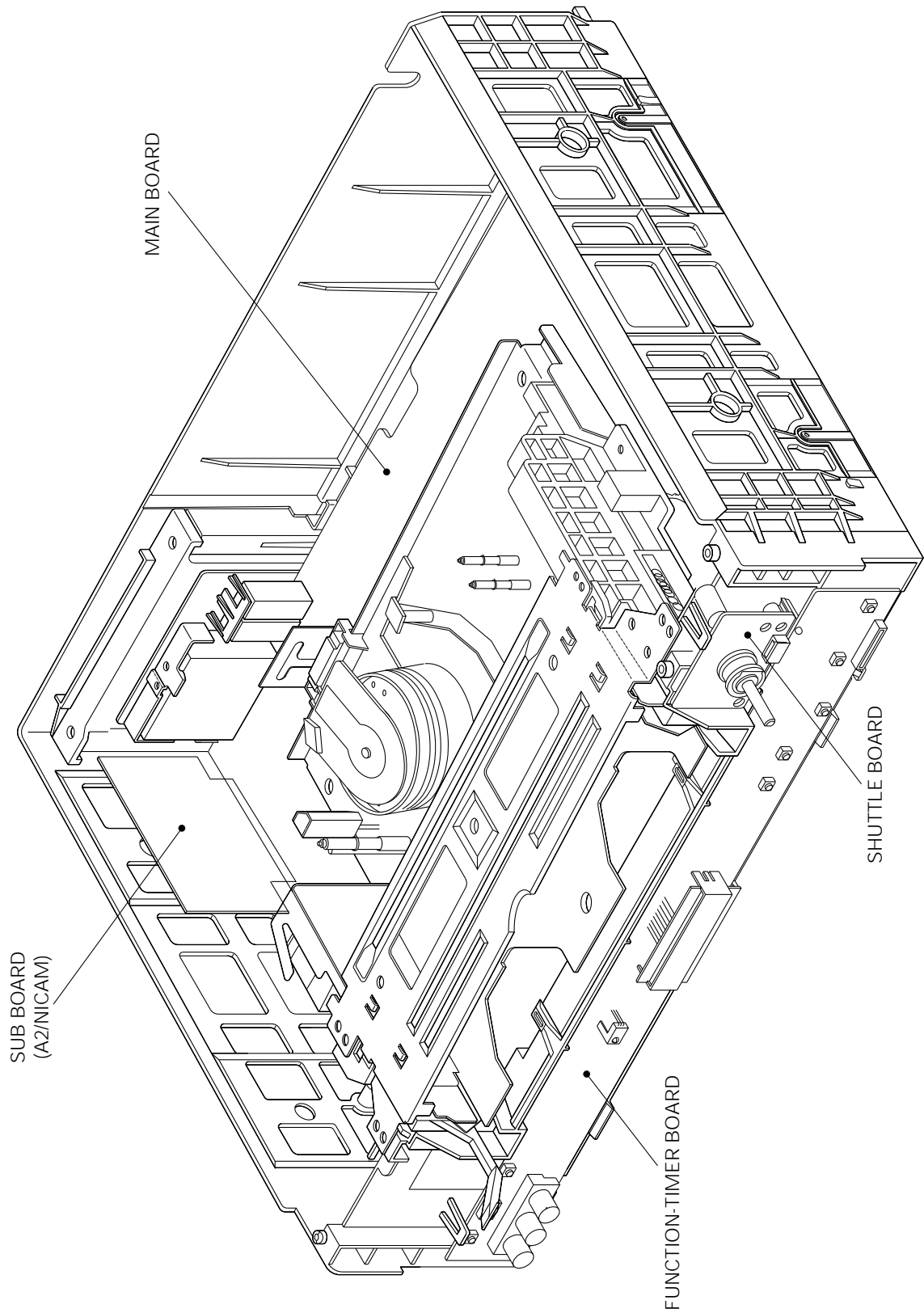


Fig. 4-6 Circuit Board Locations

MEMO

5. Alignment and Adjustment

Note : After replacing the ass'y full deck, the ass'y main, the cylinder ass'y and the micom(IC601), the remote control ass'y can be used to adjust the "X-point (tracking center) adjustment" and "Head S/W point" adjustment.

5-1 Reference

5-1-1 The type of remote control ass'y

1. Remote control ass'y (AC93-10039Y/69099-633-252) is specified as a service jig in the service manual of X-5/X-6(DX5-R/DX5-RC/DX6-R/DX6-RC) chassis. (See Fig. 5-1)
2. Normal remote control ass'y for X-7/X-8 (DX7-R/DX7-RC/DX8-R/DX8-RC) chassis. (See Fig. 5-2)

5-1-2 How to identify between normal remote control ass'y and multi remote control ass'y for X-7/X-8 chassis (See Fig. 5-2)

1. The color of some buttons related to TV function are gold.
2. Audio button is added instead of the test button hidden behind of inlay.
3. The positions of some buttons are different.

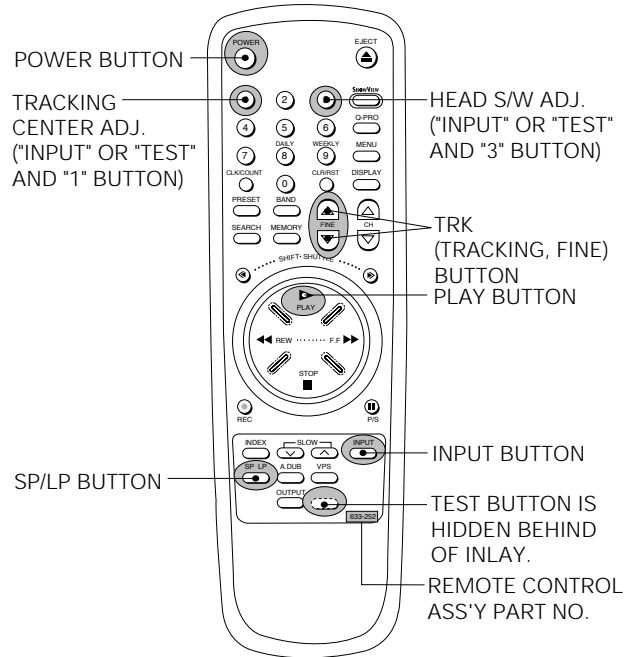


Fig. 5-1 Remote Control Ass'y Jig for X-5/X-6 Chassis (AC93-10039Y/69099-633-252)

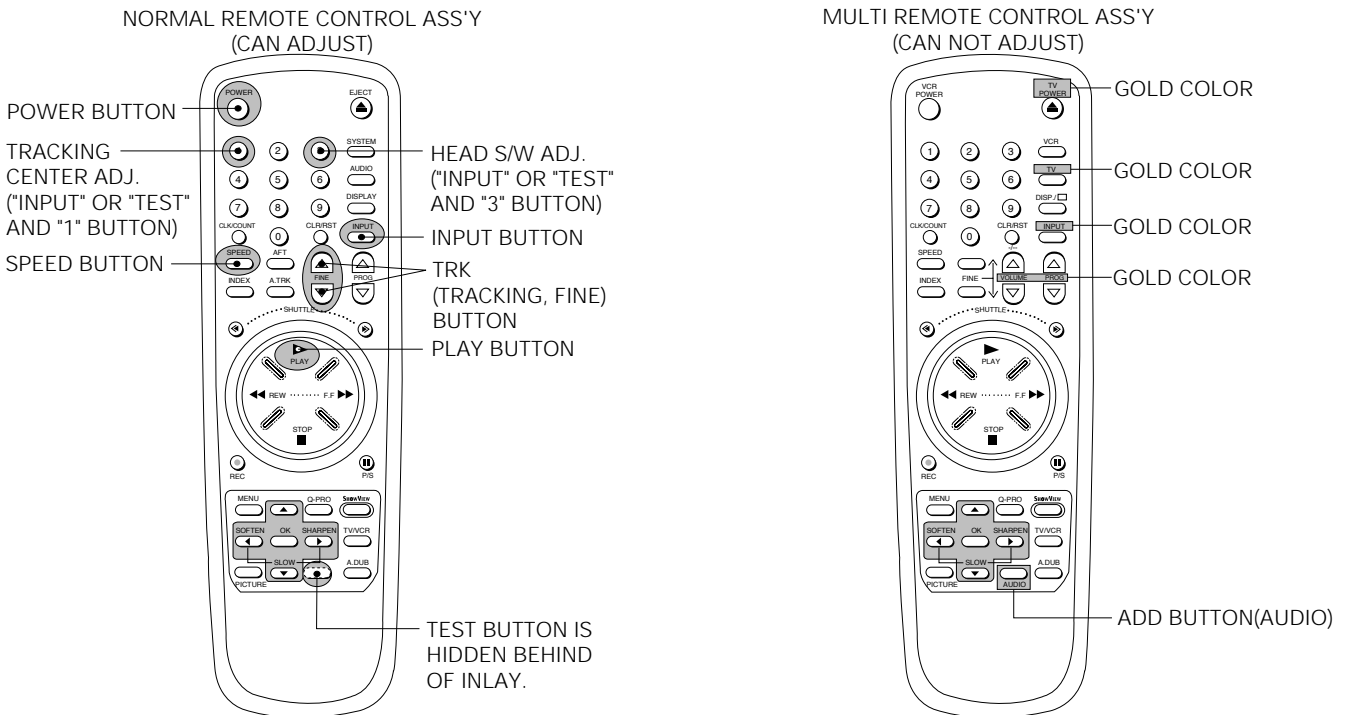


Fig. 5-2 Remote Control Ass'y for X-7/X-8 Chassis

5-2 Mechanical Adjustment

Note : Refer to the Mechanical Manual “DX7-A/DX7-AC/DX8-A/DX8-AC (AC68-20392A)” for the adjustment and confirmation of ass’y full deck.

5-2-1 The number and position of test point

Test point : TP02 (CTL Pulse)
TP03 (H'D S/W -Trigger)
TP04 (V. Envelope)
TP05 (Audio out)

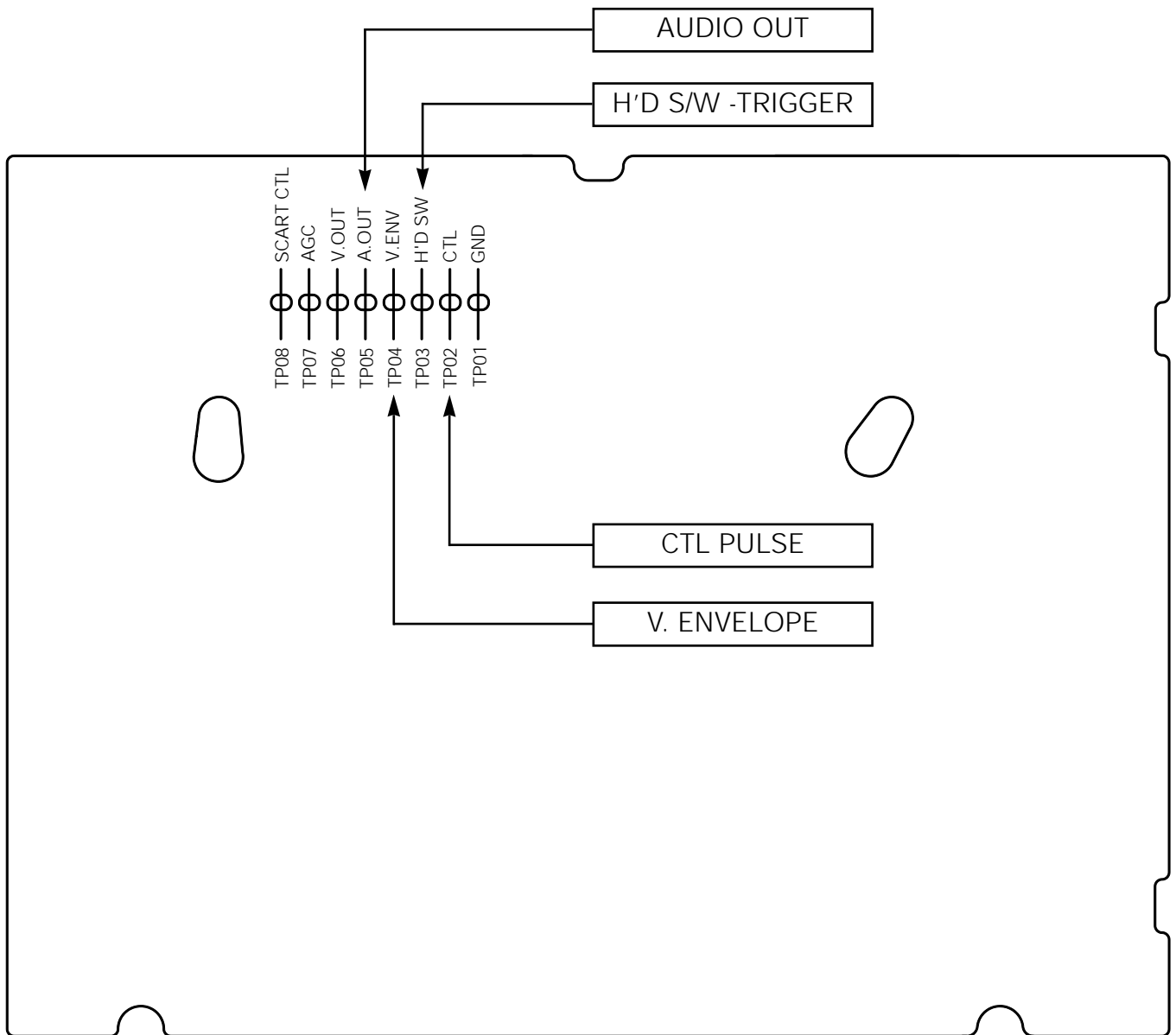




Fig. 5-3 The position of test point (Main PCB-Component side)

5-2-2 X-Point(Tracking center) adjustment (See the 2-2-1 (d) AC HEAD POSITION(X-POINT) ADJUSTMENT on page 2-3 of the mechanical manual)

5-2-2 (a) IF THE REMOTE CONTROL ASS'Y IS NOT AVAILABLE

1. Playback the colorbar alignment tape.
2. Connect CH-1 scope probe to "TP02" and CH-2 scope probe to "TP03". And then, trigger head switching pulse.
3. Set tracking preset to 11msec (2head : 2.7msec, 4, 6head : 11msec) using the "FINE (ADJUST)" button  /  of the other remote control ass'y except the remote control ass'y jig for X-5/ X-6 chassis and the normal remote control ass'y for X-7/ X-8 chassis.
4. Insert the adjusting driver (+) into X-position adjusting gear. Adjust the driver in either direction for maximum envelope waveform.

Note : Since the adjusting gear unit may be damaged, do not adjust by force when adjusting the X-point using the adjusting driver (+). After turn the X-point adjusting screw (D) counterclockwise a little, perform the adjustment. After adjustment is completed, tighten the screw.

<Setting of scope>

- Volt/div. : CH-1 = 0.1V
CH-2 = 0.2V

- Time/div. : 5msec

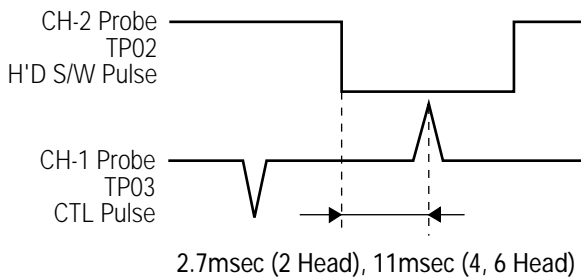


Fig. 5-4 Tracking preset adjustment



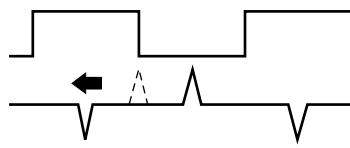


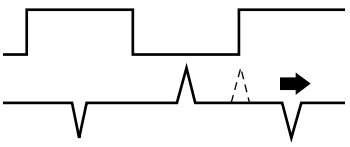
REMOTE BUTTONS	CONTROL PULSE REMOVE
 PUSH FINE 	
 FINE  PUSH	

Fig. 5-5 Tracking preset adjustment

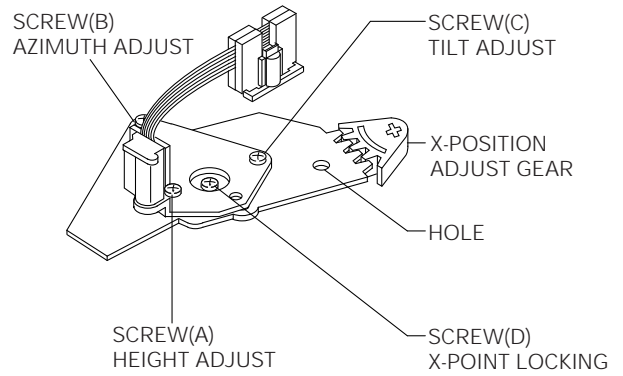


Fig. 5-6 Location of A/C Head adjustment screw

5-2-2 (b) IF THE REMOTE CONTROL ASS'Y (AC93-10039Y/69099-633-252) IS AVAILABLE

Note : How to use the "TEST" button.

1. Disattach the inlay of remote control ass'y. (See Fig. 5-1 and Fig. 5-2)
2. Press the "TEST" button with the pincers and the precise driver as shown in Fig. 5-1 and 5-2)

1. When using the "INPUT" button of remote control ass'y;

- 1) Simultaneously press the "INPUT" button and "1" button in PB mode. This will adjust the tracking center automatically.
- 2) Set the tracking preset using the "FINE (ADJUST)" button of remote control.
- 3) After adjustment is completed, press the "POWER" button to release.

2. When using the "TEST" button of remote control ass'y ;

- 1) Simultaneously press the "TEST" button and "5" button in PB mode. This will adjust the tracking center automatically.
- 2) Set the tracking preset using the "FINE (ADJUST)" button of remote control.
- 3) After adjustment is completed, press the "POWER" button to release.

5-2-2 (b) IF THE NORMAL REMOTE CONTROL ASS'Y OF X-7/X-8(DX7-R/DX7-RC/DX8-R/DX8-RC) CHASSIS IS AVAILABLE

Note 1 : Two kinds of remote control ass'y are used for X-7/X-8(DX7-R/DX7-RC/DX8-R/DX8-RC) chassis.

1. One is a normal remote control ass'y, the other is a multi remote control ass'y
2. All adjustments are adjusted by normal remote control ass'y only.
3. For the identification of normal remote control ass'y and multi remote control ass'y, See page 5-1.

Note 2 : How to use the "TEST" button.

1. Disattach the inlay of remote control ass'y.
(See Fig. 5-1 and Fig. 5-2)
 2. Press the "TEST" button with the pincers and the precise driver as shown in Fig. 5-1 and 5-2)
-
1. When using the "INPUT" button of remote control ass'y;
 - 1) Simultaneously press the "INPUT" button and "1" button in PB mode.
This will adjust the tracking center automatically.
 - 2) Set the tracking preset using the "FINE (ADJUST)" button of remote control.
 - 3) After adjustment is completed, press the "POWER" button to release.
 2. When using the "TEST" button of remote control ass'y ;
 - 1) Simultaneously press the "TEST" button and "5" button in PB mode.
This will adjust the tracking center automatically.
 - 2) Set the tracking preset using the "FINE (ADJUST)" button of remote control.
 - 3) After adjustment is completed, press the "POWER" button to release.

5-3 Electrical Adjustment

5-3-1 Head S/W Adjustment

Note : Only remote control ass'y can adjust.

5-3-1 (a) IF REMOTE CONTROL ASS'Y
(AC93-10039Y/69099-633-252) IS
AVAILABLE

1. When using the "INPUT" button of remote control
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "INPUT" button and "3" button simultaneously.
- 4) This will adjust the head S/W point adjustment automatically.
- 5) After the adjustment is completed, press "POWER" button to release.

2. When using the "TEST" button of remote control
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "TEST" button and "SP/LP" button simultaneously.
- 4) This will adjust the head S/W point adjustment automatically.
- 5) After adjustment is completed, press the "POWER" button to release.

5-3-1 (b) IF NORMAL REMOTE CONTROL
ASS'Y FOR X-7/X-8(DX7-R/DX7-RC/
DX8-R/DX8-RC) CHASSIS IS
AVAILABLE

1. When using the "INPUT" button of remote control
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "INPUT" button and "3" button simultaneously.
- 4) This will adjust the head S/W point adjustment automatically.
- 5) After the adjustment is completed, press "POWER" button to release.

2. When using the "TEST" button of remote control
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "TEST" button and "SPEED" button simultaneously.
- 4) This will adjust the head S/W point adjustment automatically.
- 5) After adjustment is completed, press the "POWER" button to release.

5-3-2 RF AGC Adjustment (SV-613F/610F Only)

1. "E-E", (stop mode), RF signal.
2. TP4N01 and VR4L01,
 - Apply PAL color bar signal to the video input terminal of the TV channel generator and set channel selector to CH2 (48.25 MHz).
 - Adjust the point signal level so that the output of attenuator is 70dBu.
 - Apply the output of attenuator to the ANT IN terminal of VCR.
 - Set the channel of VCR to CH2.
 - Conec DC voltmeter to TP4N01.
 - Adjust VR4L01 for $DC3.5 \pm 0.1V$.

• Composition for RF AGC Adjustment

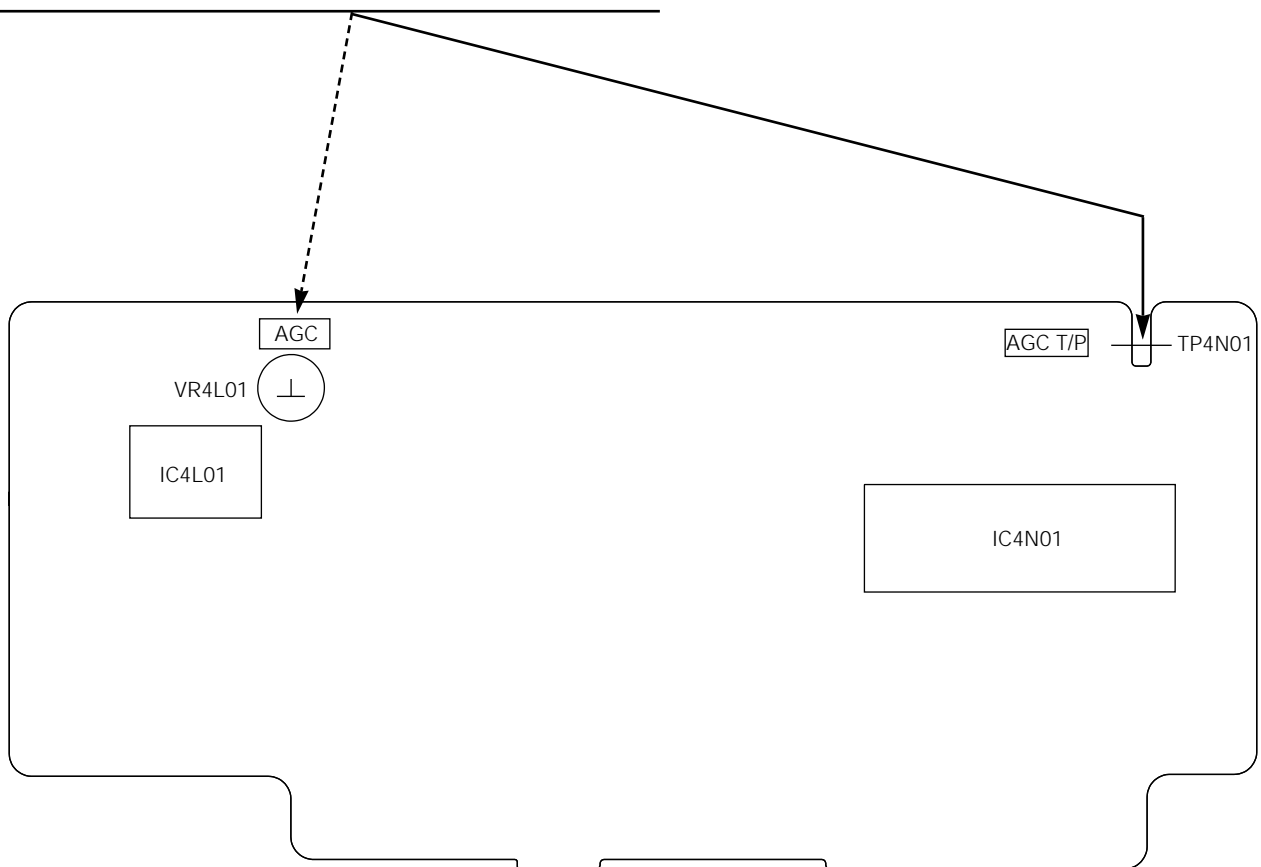
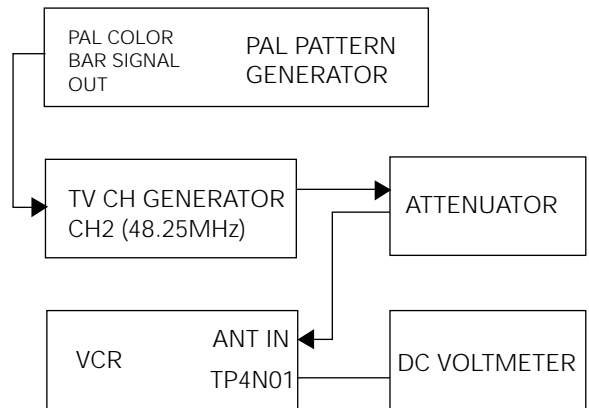


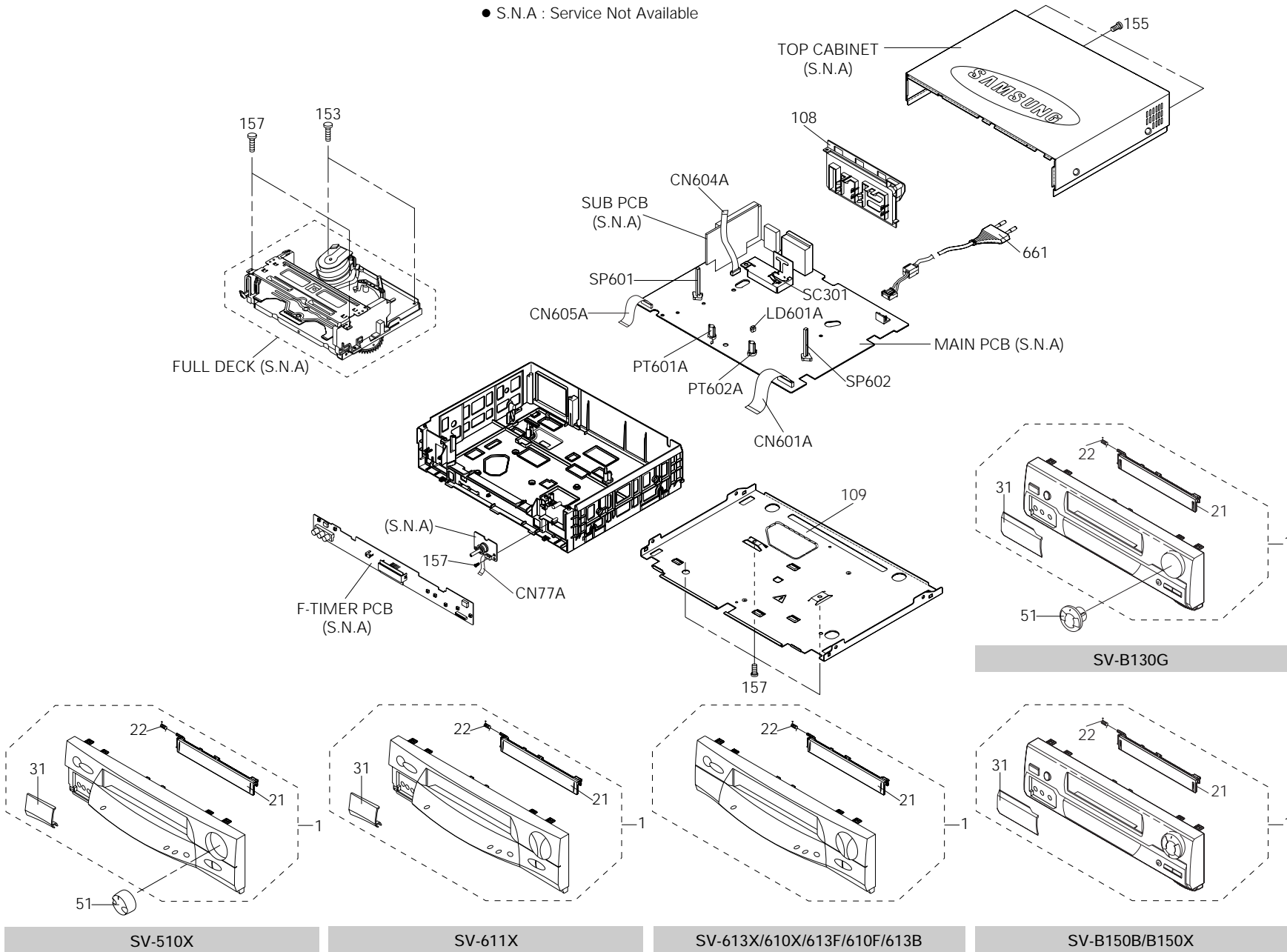
Fig. 5-7 SUB (A2/NICAM) PCB

6. Exploded View and Parts List

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6-1 Cabinet Assembly	6-2
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6-4 Housing Assembly	6-8

6-1 Cabinet Assembly

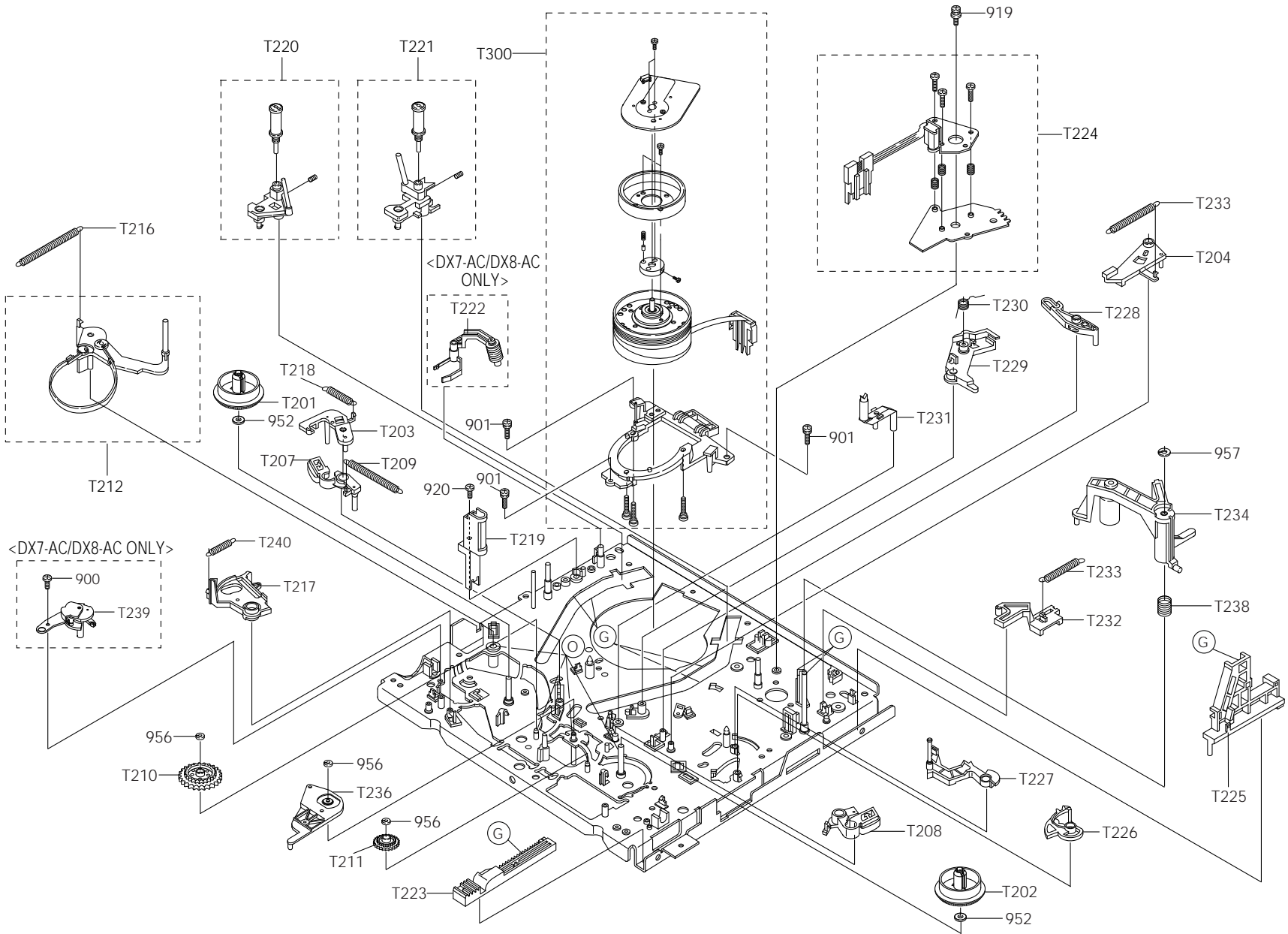
● S.N.A : Service Not Available



Loc. No	Part No	Description and Specification	Remark
1	Refer to table below	ASSY-PANEL FRONT	
21	Refer to table below	DOOR-CASSETTE	
22	AC61-62003A	SPRING;-;SUS304,(GE/RCA),-,-,-,-	
31	Refer to table below	DOOR-FRONT	
51	Refer to table below	KNOB-SHUTTLE;ABS94,HB	
108	Refer to table below	CONNECTOR BOARD-ASSY	
109	AC63-32127A	COVER-BOTTOM;SV-B80F,SECC,353.2X275,T0.5	
153	AC60-12126A	SCREW-BH;-;BH,-,4*12,FE,FZY,-,-,-	
155	AC60-12134A	SCREW-TAP BH;-;BH,-,2-4X16,-,-,FE	
157	AC60-10063A	SCREW-TAPTITE;BH,+,-,M3,L12,ZPC3,SWRCH18	
661	Refer to table below	POWER-CORD	
CN601A	3809-001090	CABLE-FLAT;30V,80C,100mm,22P,1.0MM, UL2896	
CN604A	3809-001048	CABLE-FLAT;30V,80C,110mm,6P,1.25MM, UL2896	
CN605A	3809-001049	CABLE-FLAT;30V,80C,100MM,5P,1.25MM, UL2896	
CN77A	3809-001094	CABLE-FLAT;30V,80C,40mm,5P,1.25MM, UL2896	
LD601A	AC61-22345A	HOLDER-LED;POM,-,-,-,-,-	
PT601A	AC61-22344A	HOLDER-PHOTO;POM,-,-,-,-,-	
PT602A	AC61-22344A	HOLDER-PHOTO;POM,-,-,-,-,-	
SP601	AC61-22321A	HOLDER-TR;POM,-,-,-,-,-	
SP602	AC61-22321A	HOLDER-TR;POM,-,-,-,-,-	
SC301	AC98-12023J	ASSY-SH/CASE TOP;SV-A140F,IS-PAL	

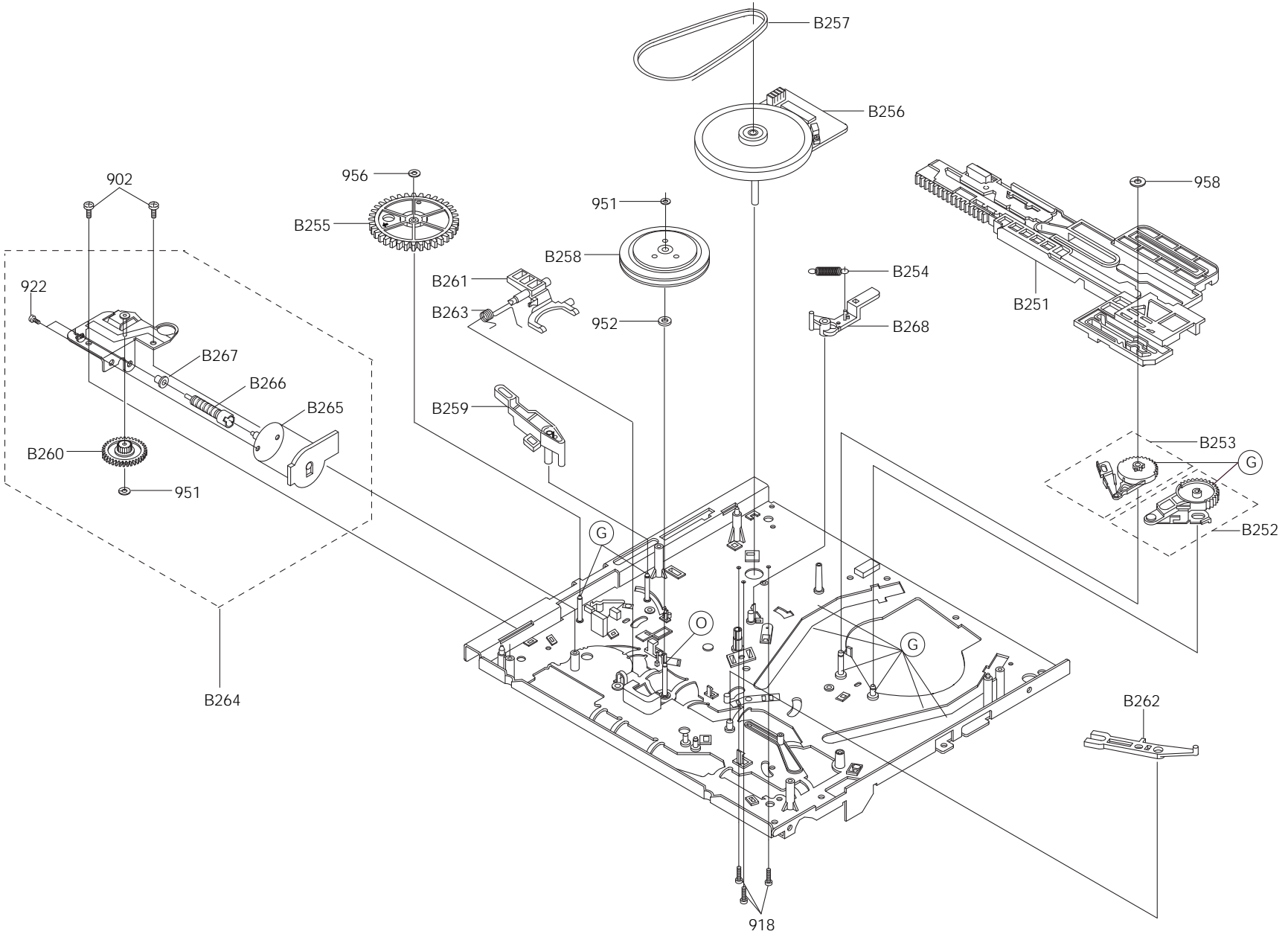
COUNTRY	MODELS	1	21	31	51	108	661
GERMANY	SV-613X	AC98-11244Y	AC64-50958D	X	X	AC61-11039G	AC39-10019A
AUSTRIA	SV-613X	AC98-11244Y	AC64-50958D	X	X	AC61-11039G	AC39-10019A
SWITZERLAND	SV-613X	AC98-11244Y	AC64-50958D	X	X	AC61-11039G	AC39-10019A
	SV-613F	AC98-11245R	AC64-50958D	X	X	AC61-11039F	AC39-10019A
FRANCE	SV-613F	AC98-11245R	AC64-50958G	X	X	AC61-11039F	AC39-10019A
	SV-610F	AC98-11245E	AC64-50958A	X	X	AC61-11039F	AC39-10019A
U.K	SV-613B	AC98-11246Z	AC64-50958D	X	X	AC61-11039H	AC39-12022K
SPAIN	SV-611X	AC98-11246U	AC64-50958D	AC64-50959J	X	AC61-11039G	AC39-10019A
	SV-510X	AC98-11246Y	AC64-50958D	AC64-50959L	AC64-11038A	AC61-11039G	AC39-10019A
ITALY	SV-611X	AC98-11244V	AC64-50958D	AC64-50959K	X	AC61-11039G	AC39-10019A
	SV-510X	AC98-11246Y	AC64-50958D	AC64-50959L	AC64-11038A	AC61-11039G	AC39-10019A
PORTUGAL	SV-611X	AC98-11246U	AC64-50958D	AC64-50959J	X	AC61-11039G	AC39-10019A
FINLAND/SWEDEN/NORWAY	SV-610X	AC98-11245U	AC64-50958D	X	X	AC61-11039J	AC39-10019A
NETHERLANDS	SV-610X	AC98-11245F	AC64-50958D	X	X	AC61-11039J	AC39-10019A
BELGIUM	SV-610X	AC98-11245U	AC64-50958D	X	X	AC61-11039J	AC39-10019A
DENMARK	SV-610X	AC98-11245U	AC64-50958D	X	X	AC61-11039J	AC39-10019A
SAUDI ARABIA	SV-B130G	AC98-11250H	AC64-50934P	AC64-50933C	AC64-10973A	AC61-11039K	AC39-10019A
LEBANON	SV-B130G	AC98-11250H	AC64-50934P	AC64-50933C	AC64-10973A	AC61-11039K	AC39-10019A
AUSTRALIA	SV-B150B	AC98-11250K	AC64-50934Q	AC64-50933D	X	AC61-11039K	AC39-10015A
NEW ZEALAND	SV-B150X	AC98-11250L	AC64-50934R	AC64-50933D	X	AC61-11039K	AC39-10015A

6-2 Mechanical Parts (Top Side)



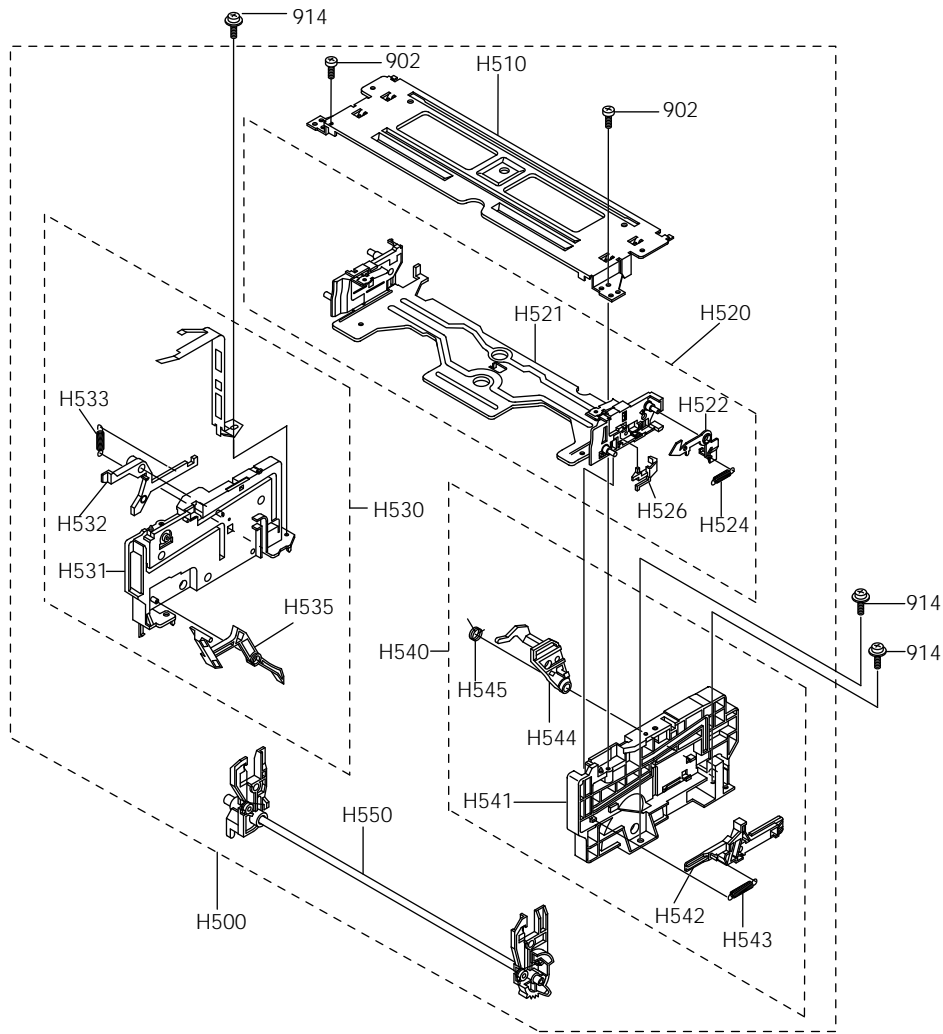
Loc. No	Part No	Description and Specification	Remark
900	AC60-12091A	SCREW-MACHINE;FP,BH,-,M3,L4,SWRCH10A,YEL ROB	(OPTIONAL)
901	AC60-10012A	SCREW-MACHINE;BH,+,M3,L8,-,FE,-,-,-	
919	AC60-10004A	SCREW-MACHINE;BH,+,M3,L8,ZPC,SWRCH18A,-,	
920	AC60-10007A	SCREW-TAPPING;BH,+,M2.6,L12,-,SWRCH18A,-	
952	AC60-30018A	WASHER-PLAIN;PLAIN,M3.2,D6,T0.5,POLYSLID	
956	AC60-30007A	WASHER-SLIT;PLAIN,ID2.5,OD7,T0.5,SPC1,-,	
957	AC60-30008A	WASHER-SLIT;-ID3.5,OD9,T0.5,SPC1,-,-	
T201	AC66-10023A	REEL-DISK L ASSY;POM,-,PACKAGE,X-5,-	
T202	AC66-10022A	REEL-DISK R (ASSY);POM,-,PACKAGE,X-5,-	
T203	AC66-30474A	BRAKE-SUB L;-PBT,-,-,-,X-5/IS	
T204	AC66-30148A	BRAKE SUB R;-,-,-,-,X5,-	
T207	AC66-30475A	BRAKE-MAIN L ASSY;-POM+PELT,-,-,-,X-5/	
T208	AC66-30476A	BRAKE-MAIN R ASSY;-POM+PELT,-,-,-,X-5/	
T209	AC61-60112A	SPRING- BRAKE MAIN;ES,SUS304WPB,PI0.35,I	
T210	AC66-20073A	GEAR RELAY S-ASSY;-,-,-,-,-,X5,-	
T211	AC66-20037A	GEAR- RELAY T;PEBAX7033,X-5,Z39,GEAR-SPU	
T212	AC66-30073A	ARM-TENSION ASSY;-DX5-R,-,-,-,-	
T216	AC61-60119A	SPRING TENSION;ES,SWPB,PI0.4,D3,L33(OD3.	
T217	AC66-30470A	LEVER-REC S/W;-PBT #3300,T4.0,L32,-,(X-	
T218	AC61-62017A	SPRING-SUB BRAKE L;ES,SUS304,PI0.23,D3.5	
T219	AC33-10003P	HEAD- MAGNET F/E;MH131S,-,-,-,-,L51.05XW7.	
T220	AC66-82050A	SLIDER-G/R ASSY(S);-,-,-,-,-,X-5	
T221	AC66-82054A	SLIDER-G/R ASSY(T);-,-,-,-,-,X-5	
T222	AC33-10002E	HEAD-CLEANER;-,-,-,-,-,X-5	(OPTIONAL)
T223	AC66-20065A	RACK-HOUSING;L74.29,POM M90-44,BLK,M1,3.	
T224	AC33-10216K	HEAD-ACE ALL ASSY;-,-,-,-,-,X-7A	
T225	AC66-80005A	SLIDER-PINCH;POM(M90-44),T10.5,L54.35,NA	
T226	AC66-30014A	LEVER-REVIEW;ZYTEL(70G-43L),T5,-,PCD25.6	
T227	AC66-30099A	ARM-REVIEW ASSY;-,-,-,-,-,DX5-R,-	
T228	AC66-30013A	LEVER- CAM;PBT 6300T,-,L45,W9,X-5,-	
T229	AC66-30003A	LEVER-PINCH COMP;PBT 3300,T7.5,L45.25,-,	
T230	AC61-60116A	SPRING- PINCH COMP;TS,SWPB,PI1.0,D6,L38(
T231	AC67-32001A	PRISM-LED;PMMA,D5,IF-850,-,-,-,-	
T232	AC66-82049A	SLIDER-PUSH;LUPOX 2150,T2,-,NTR,-	
T233	AC61-62016A	SPRING-SLIDE PUSH;ES,SUS304WPB,PI0.55,D3	
T234	AC59-90402A	UNIT-PINCH ROLLER;X-7A,RESIN BEARING	
T236	AC66-10010A	IDLER-ASSY;PACKAGE,-,X-5,-	
T238	AC61-60132A	SPRING ARM PINCH;CS,SUS304WPB,PI0.4,D7.1	
T239	AC66-30132A	LEVER JOG-ASSY;-,-,-,-,-,X-5	(OPTIONAL)
T240	AC61-60505A	SPRING-REC S/W;-ES,SUS304 WPB,PI0.29,PI	
T300	AC96-10475L	ASSY-CYLINDER;CX8A-H6P	(NON-DLC)
	AC96-10475K	ASSY-CYLINDER;CX8A-H6P/DLC	(DLC)

6-3 Mechanical Parts (Bottom Side)



Loc. No	Part No	Description and Specification	Remark
902	AC60-10051A	SCREW-TAPPING;BH,-,-,M3,L8,FZY	
918	AC60-10041A	SCREW-TAPPING;BH,+,-,M2.6XL7.5,ZPC3	
922	AC60-10504A	SCREW-MACHINE;-;PH,+,-,M3,L3,FE,FZY,YEL	
951	AC60-30025A	WASHER-SLIT;-;ID2.5,OD5.0,T0.5,POLY SLID	
952	AC60-30018A	WASHER-PLAIN;PLAIN,M3.2,D6,T0.5,POLYSLID	
956	AC60-30007A	WASHER-SLIT;PLAIN,ID2.5,OD7,T0.5,SPC1,-,	
958	AC60-30028A	WASHER-SLIT;-;D2.5,D9.0,T0.5,NUMIRROR,-,	
B251	AC66-82043A	SLIDER-MAIN;TOPEX 4010S,-,-,-,-	
B252	AC66-20019A	GEAR-LOADING L ASSY;-,-,-,-,PACKAGE,-,X-5,	
B253	AC66-20069A	GEAR-LOADING R ASSY;-,-,-,-,-,X5,-	
B254	AC61-60115A	SPRING-BRAKE CAPSTAN;ES,SUS304WPB,PI0.4,	
B255	AC66-20004A	GEAR-MASTER;POM (M90-44),M 1,Z 60,SP,-,X	
B256	AC31-12006A	MOTOR-D/D CAPSTAN;DMVCMC07A,-,-	
B257	AC66-62008A	BELT-CAPSTAN;-;DLB-601,T2,8,L134.9,BLK,X	
B258	AC66-20066A	GEAR-CLUTCH ASSY;X-5,-,-,-,-,-	
B259	AC66-32185A	LEVER-SLIDER PINCH;PBT,T4,NAT,-,-,-	
B260	AC66-20016A	GEAR- WORM WHEEL;POM SW-01,M0.55/M1,Z57/	
B261	AC66-30011A	LEVER- SHIFT;PBT2002K,T10.9,L35,-,-,-	
B262	AC66-30012A	LEVER- IDELR CHANGE;PBT330,T33,L50,-,W6.	
B263	AC61-60111A	SPRING-LEVER SHIFT;TS,SWPB,PI0.7,D5.5,L1	
B264	AC59-90001A	UNIT-LOADING ASSY;X-5,-,-	
B265	AC31-12015A	MOTOR-LOADING ASSY;POM+RF370C X-5	
B266	AC66-20039A	GEAR- WORM LO;PBT 2002K,-,-,-,D4.5,3,-	
B267	AC61-20224A	HOLDER SHAFT;POM M90-44,T1.25,NTR,PI5XH5	
B268	AC66-30149A	BRAKE CAPSTAN;-,-,-,-,X5,-	

6-4 Housing Assembly



Loc. No	Part No	Description and Specification	Remark
902	AC60-10051A	SCREW-TAPPING;BH,-,-,M3,L8,FZY	
914	AC60-10067A	SCREW-TAPTITE;PWH,+,-,M3,L8,MFZN2-C,SWCH	
H500	AC61-82014D	HOUSING-ASSY;-X7FL26280B,230X130X60,-,X	
H510	AC61-10006A	CHASSIS- UPPER;SECC 20/20,-,T1.0,BLK,-,X	
H520	AC61-20932B	HOLDER-CASSETTE ASSY;-X5FL06080A,-,-,-,	
H521	AC61-20922B	HOLDER-CASSETTE;-SECC T1.2,-,NAT,-,X-7(
H522	AC66-30018A	LEVER-LOCK R;SECC 20/20,T1.2,L44,W32,-,-	
H524	AC61-60121A	SPRING-LEVER LOCK;ES,SUS304 WPB,PI0.2,D2	
H526	AC66-30019A	LEVER-KEY CASSETTE;LUCEL N109-LD,T2.5,L2	
H530	AC61-11033A	CHASSIS-SIDE L ASSY;-,-,-,-,-,X5FL0505A,	
H531	AC61-10004A	CHASSIS- SIDE L;ABS HF-380,-,T10,BLK,-,X	
H532	AC66-30004A	LEVER- LIGHT SHUTTER;LUCEL N109-LD,T2.5,	
H533	AC61-60142A	SPRING- LIGHT;ES,SUS304WPB,PI0.2,L11.4(O	
H535	AC66-30017A	LEVER- DOOR;LUCELN109-LD,T3.5,L74.3,W21.	
H540	AC61-11032A	CHASSIS-SIDE R ASSY;-,-,-,-,-,X5FL0505A,	
H541	AC61-10003A	CHASSIS- SIDE R;ABS HF-380,-,T10,BLK,-,X	
H542	AC66-80008A	SLIDER DAMPER;LUCEL N109-LD,T4,L87,-,-,-	
H543	AC61-60120A	SPRING-SLIDER;ES,SUS 304WPB,PI0.4,D3.8,L	
H544	AC66-30016A	LEVER- LID OPENER;LUCEL N109-LD,T4.0,L34	
H545	AC61-60123A	SPRING-LID OPENER;TS,SWPB,PI0.55,D8.9,L1	
H550	AC61-50654A	SHAFT-ARM ASSY;-SUM24L,-,-,-,-,X-5	

Electrical Parts List

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
C607	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C677	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
C608	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		C678	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,1mm	
C609	2203-001679	C-CERAMIC,CHIP;68NF,+80-20%,25V,Y5V,TP,2		C679	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V	
C610	2203-001679	C-CERAMIC,CHIP;68NF,+80-20%,25V,Y5V,TP,2		C681	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,	
C6101	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5		C682	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5	
C6102	2203-000239	C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012,		C698	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,	
C6103	2202-000216	C-CERAMIC,MLC-AXIAL;27pF,5%,50V,SL,TP,3,		CN601	3708-001251	CONNECTOR-FPC/FC/PIC;22P,1mm,STRAIGHT-F,	
C6104	2202-000216	C-CERAMIC,MLC-AXIAL;27pF,5%,50V,SL,TP,3,		CN602	3711-002445	CONNECTOR-HEADER;BOX,2P,2R,1.5MM,STRAIGH	
C6105	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		CN603	3711-003749	CONNECTOR-HEADER;BOX,8P,2R,2mm,STRAIGHT,	
C6106	2301-000392	C-FILM,PEF;15nF,5%,50V,6.5x8.5x3.2mm,5mm		CN604	3708-001165	CONNECTOR-FPC/FC/PIC;6P,1.25mm,STRAIGHT,	
C6107	2203-000818	C-CERAMIC,CHIP;33pF,5%,50V,NPO,TP,2012,-		D605	0402-000132	DIODE-RECTIFIER ;1N4004,400V,1A,DO-41	
C611	2201-000928	C-CERAMIC,DISC;2.7NF,20%,16V,Y5R,TP,3.5X		D608	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C6114	2201-000800	C-CERAMIC,DISC;120PF,5%,50V,SL,TP,5X3,5		D609	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C6116	2203-001612	C-CERAMIC,CHIP MELF;22PF,5%,50V,SL,TP,20		D6102	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C6117	2203-001612	C-CERAMIC,CHIP MELF;22PF,5%,50V,SL,TP,20		D6104	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C6119	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5		D6105	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C612	2202-000791	C-CERAMIC,MLC-AXIAL;150PF,10%,50V,Y5P,TP		D6106	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C6120	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5		D611	0402-000132	DIODE-RECTIFIER ;1N4004,400V,1A,DO-41	
C6122	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7.5		D612	0402-000132	DIODE-RECTIFIER ;1N4004,400V,1A,DO-41	
C6123	2401-001978	C-AL;47UF,20%,25V,GP,TP,6.3X5,5		D613	0402-000132	DIODE-RECTIFIER ;1N4004,400V,1A,DO-41	
C6124	2401-001325	C-AL;470NF,20%,50V,GP,TP,3x5,5		D614	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C6125	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		D615	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C6126	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5		IC601	Refer to table below	IC-MCU;100P,QFP	
C6127	2203-001659	C-CERAMIC,CHIP MELF;47PF,5%,50V,SL,TP,20					
C613	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,					
C614	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2					
C615	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2					
C616	2203-001696	C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,					
C617	2202-000796	C-CERAMIC,MLC-AXIAL;UP050 B102KB INF,10%					
C618	2203-001702	C-CERAMIC,CHIP;2.2nF,5%,50V,X7R,2012,-,T					
C619	2203-001696	C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,		IC602	1003-001090	IC-MOTOR DRIVER;LB1643,SIP,10P,-,SINGLE,	
C620	2203-001696	C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,		IC603	1201-000230	IC-OP AMP;6324,DIP,14P,-,QUAD,15/100mV,P	
C623	2203-001580	C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,20		IC604	AC14-12006C	IC;KA7533,DIP,-	
C624	2203-001580	C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,20		IC605	1103-001020	IC-EEPROM;24LC04,4Kx8BIT,DIP,8P,300ML,-	
C625	2203-001580	C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,20		IC606	AC14-12009E	IC;HCF4094BE/TC4094BP,DIP,LOGIC	
C626	2203-001580	C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,20		J602	2007-001589	R-CHIP,MELF;1Kohm,5%,1/8W,DB,BK,2012	
C627	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V		L601	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
C628	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V		L602	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
C630	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5		L603	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
C632	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5		L604	2701-000131	INDUCTOR-AXIAL;15uH,5%,2.4x3.4MM	
C633	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		L605	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
C634	2401-000208	C-AL;100NF,+80-20%,5.5V,GP,TP,12.3m		L606	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
C635	2401-000199	C-AL;1000UF,20%,6.3V,GP,TP,10X12,5,		L6101	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
C636	2401-001978	C-AL;47UF,20%,25V,GP,TP,6.3X5,5		L6103	2701-000117	INDUCTOR-AXIAL;10uH,5%,2.4x3.4mm	
C637	2401-001978	C-AL;47UF,20%,25V,GP,TP,6.3X5,5		LD601	0601-000495	LED-IR;ROUND,3mm,150mW,6V,950nm,BK	
C638	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,1mm		Q601	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C639	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		Q602	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C640	2401-001978	C-AL;47UF,20%,25V,GP,TP,6.3X5,5		Q604	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250mW,TO-92	
C642	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5		Q607	0504-000142	TR-DIGITAL;KSR2001,NPN,300mW,4.7K-4.7K,T	
C643	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5		Q608	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C645	2203-000477	C-CERAMIC,CHIP;1uF,+80-20%,16V,Y5V,TP,20		Q609	AC14-12001G	IC;KA78L05,T,-	
C650	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		Q6101	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C651	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5		Q6102	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C652	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5		Q6106	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C660	2203-001702	C-CERAMIC,CHIP;2.2nF,5%,50V,X7R,2012,-,T		Q6108	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250mW,TO-92	
C661	2203-001702	C-CERAMIC,CHIP;2.2nF,5%,50V,X7R,2012,-,T		R601	2001-000832	R-CARBON;510ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C663	2203-000374	C-CERAMIC,CHIP;15nF,10%,50V,X7R,TP,2012,		R602	2001-000679	R-CARBON;36KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
C671	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		R604	2007-001472	R-CHIP,MELF;68KOHM,5%,1/8W,DB,BK,2012	
C675	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5		R605	2007-001589	R-CHIP,MELF;1Kohm,5%,1/8W,DB,BK,2012	
C676	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		R606	2007-000658	R-CHIP;27ohm,5%,1/10W,DA,TP,2012	

Country	Part No	Specification
Italy/Spain/Portugal/U.K	AC09-10457Y	HD6433977RB19F
Germany/Austria/Switzerlands	AC09-10458K	HD6433977RB15F
France/Netherlands/Belgium/Denmark Finland/Sweedden/Norway	AC09-10457X	HD6433977RB18F
Saudi Arabia/Lebanon Australia/New Zealand	AC09-10457Z	HD6433977RB17F

Electrical Parts List

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
W158	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm		C363	2203-001608	C-CERAMIC,CHIP;22nF,+80-20%,50V,Y5V,2012	
XT601	2801-003293	CRYSTAL-UNIT;10MHZ,50PPM,28-AAA,16PF,500		C364	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
XT602	2801-003318	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAA,12.5		C366	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
XT6102	2801-003311	CRYSTAL-UNIT;17.734475MHz,50ppm,28-AAA,1		C367	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,	
				C368	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,	
AUDIO/VIDEO PARTS				C369	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
C305	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C370	2301-000283	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C306	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C371	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
C307	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C373	2301-000439	C-FILM,PEF;3NF,5%,50V,TP,5.5X7X3MM,5MM	
C308	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C374	2202-000781	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP	
C309	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C380	2401-001905	C-AL;10UF,20%,16V,BP,BK,6X11MM,2,5M	
C310	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A01	2401-001893	C-AL;100uF,20%,16V,GP,TP,6.3x7mm,5	
C311	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A03	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	
C312	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A04	2301-000299	C-FILM,PEF;6.8nF,5%,100V,TP,5.8x12.5mm,5	
C313	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A05	2301-000445	C-FILM,PEF;4.7nF,5%,50V,5.5x7x3mm,5mm,TP	
C314	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5		C3A06	2301-000408	C-FILM,PEF;2.7nF,5%,50V,5.5x7x3mm,5mm,TP	
C315	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		C3A07	2301-000402	C-FILM,PEF;1NF,5%,50V,TP,5X7X2.8MM,5MM	
C316	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A08	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	
C317	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK		C3A09	2401-003122	C-AL;4.7UF,20%,50V,LL,TP,4X7,1.5	
C318	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A10	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	
C319	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		C3A11	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C320	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A12	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP	
C321	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A15	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
C322	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A16	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK	
C324	2301-000283	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5		C3A17	2202-000855	C-CERAMIC,MLC-AXIAL;6.8NF,30%,16V,Y5R,TP	
C325	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A18	2202-000855	C-CERAMIC,MLC-AXIAL;6.8NF,30%,16V,Y5R,TP	
C326	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		C3A19	2202-000856	C-CERAMIC,MLC-AXIAL;8.2NF,30%,16V,Y5R,TP	
C327	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A21	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5	
C328	2203-001620	C-CERAMIC,CHIP MELF;27PF,5%,50V,SL,TP,20		C3A22	2301-000217	C-FILM,PEF;220nF,5%,50V,8.0X9.5X4.5X5,5m	
C329	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		C3A23	2401-001169	C-AL;33UF,20%,16V,GP,-,6.3X7,2,5MM	
C330	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		C3A25	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
C331	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5		C3A26	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	
C332	2203-001659	C-CERAMIC,CHIP MELF;47PF,5%,50V,SL,TP,20		C3A27	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM	
C333	2203-000840	C-CERAMIC,CHIP;390PF,5%,50V,NPO,TP,2012,		C3A28	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,	
C335	2203-001580	C-CERAMIC,CHIP MELF;15PF,5%,50V,SL,TP,20		C3A29	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP	
C336	2203-001606	C-CERAMIC,CHIP MELF;220PF,10%,50V,Y5P,TP		CN301	3708-000391	CONNECTOR-FPC/FC/PIC;10P;1.25MM,STRAIGHT	
C337	2203-001670	C-CERAMIC,CHIP MELF;56PF,5%,50V,SL,TP,20		CN3A01	3708-001053	CONNECTOR-FPC/FC/PIC;7P;1.25MM,STRAIGHT,	
C339	2203-001558	C-CERAMIC,CHIP MELF;100PF,10%,50V,Y5E,TP		CN3A02	3711-000371	CONNECTOR-HEADER;-2P,1R,2MM,STRAIGHT,-	
C340	2401-001965	C-AL;470NF,20%,50V,-,BK,4X7MM,1.5MM		D301	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
C341	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5		FL3A01	AC27-80100A	COIL-OSC;126QN-K5272YHC=K,-,AM	
C342	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		IC301	1204-001057	IC-SIGNAL PROCESSOR;SS11511M,QFP,80P,-P	
C343	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5		IC302	AC14-12013F	IC-LINEAR;LA7416,DIP,BULK	
C344	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5		IC303	1209-001023	IC-DELAY LINE;SS23377M,SOP,14P,225MIL,PL	
C345	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		L301	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-	
C346	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5		L303	2701-000206	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	
C347	2401-000419	C-AL;10UF,20%,16V,GP,-,4X7,5		L304	2701-000206	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	
C348	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK		L306	2702-000176	INDUCTOR-RADIAL;56uH,5%,6x6.4mm	
C349	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK		L308	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-	
C350	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		L3A01	2301-000283	C-FILM,PEF;47nF,5%,100V,TP,7.3X7X3.2X5,5	
C351	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		L3A02	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-	
C352	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5		L3A03	2702-000120	INDUCTOR-RADIAL;15mH,5%,6.2x7.4mm	
C353	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		L3A04	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-	
C355	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		Q302	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250mW,TO-92	
C356	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		Q303	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250mW,TO-92	
C357	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		Q304	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C358	2401-001915	C-AL;1uF,20%,50V,GP,TP,3x5,1mm		Q308	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C359	2203-002188	C-CERAMIC,CHIP;10NF,+80-20%,16V,Y5V,TP,2		Q309	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C360	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		Q310	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250mW,TO-92	
C361	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5		Q312	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C362	2401-001912	C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK		Q3A01	0501-000231	TR-SMALL SIGNAL;2SD1468SQ,NPN,300MW,TO-9	

Loc.No	Part No	Desc & Spec	Remark	Loc.No	Part No	Desc & Spec	Remark
C805	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		JC802	AC37-20001E	JACK-RCA;DPAE-9606,6P,HIFI,PI3.3	6PIN
C806	2401-001975	C-AL;4.7UF,20%,16V,GP,TP,5X11MM,5		L801	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C807	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		L802	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C808	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L803	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C809	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L804	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C810	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L805	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C811	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L806	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C812	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L807	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
C813	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L808	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	
C814	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L809	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C815	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5		L810	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C816	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L811	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C817	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		L812	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	
C818	2401-001975	C-AL;4.7UF,20%,16V,GP,TP,5X11MM,5		L815	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
C819	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		L816	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
C820	2401-001511	C-AL;4.7UF,20%,16V,GP,-,6X7,5		Q803	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C823	2401-002197	C-AL;4.7UF,20%,25V,GP,TP,4X7,5MM		Q804	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C824	2203-001696	C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,		Q808	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C825	2203-001696	C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,		Q809	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C829	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5		Q810	0504-000142	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
C831	2203-001615	C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP		Q811	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
C832	2203-001615	C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP		Q812	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C833	2203-001615	C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP		Q813	0504-000142	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
C834	2203-001591	C-CERAMIC,CHIP MELF;1nF,20%,25V,Y5S,TP,2		Q814	0504-000142	TR-DIGITAL;KSR2001,PNP,300mW,4.7K-4.7K,T	
C835	2203-001659	C-CERAMIC,CHIP MELF;47PF,5%,50V,SL,TP,20		Q815	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C836	2203-001659	C-CERAMIC,CHIP MELF;47PF,5%,50V,SL,TP,20		R805	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C838	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5		R807	2007-001446	R-CHIP,MELF;910OHM,5%,1/8W,DB,BK,2012	
C839	2401-000918	C-AL;22uF,20%,16V,GP,-,6.3x7,5		R808	2007-001505	R-CHIP,MELF;470OHM,5%,1/8W,DB,BK,2012	
C840	2203-001615	C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP		R811	2007-001505	R-CHIP,MELF;470OHM,5%,1/8W,DB,BK,2012	
C841	2203-001615	C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP		R812	2007-001460	R-CHIP,MELF;75OHM,5%,1/8W,DB,BK,2012	
C842	2203-001591	C-CERAMIC,CHIP MELF;1nF,20%,25V,Y5S,TP,2		R813	2007-001460	R-CHIP,MELF;75OHM,5%,1/8W,DB,BK,2012	
C843	2203-001591	C-CERAMIC,CHIP MELF;1nF,20%,25V,Y5S,TP,2		R814	2007-001464	R-CHIP,MELF;750OHM,5%,1/8W,DB,BK,2012	
C844	2203-001615	C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP		R815	2007-001464	R-CHIP,MELF;750OHM,5%,1/8W,DB,BK,2012	
C845	2203-001615	C-CERAMIC,CHIP MELF;270PF,10%,50V,Y5P,TP		R816	2007-001557	R-CHIP,MELF;270ohm,5%,1/8W,DB,BK,2012	
C847	2203-001696	C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,		R817	2007-001557	R-CHIP,MELF;270ohm,5%,1/8W,DB,BK,2012	
C848	2203-001696	C-CERAMIC,CHIP MELF;82PF,10%,50V,Y5P,TP,		R820	2007-001572	R-CHIP,MELF;220Kohm,5%,1/8W,DB,BK,2012	
C850	2203-001557	C-CERAMIC,CHIP;100NF,+80-20%,25V,Y5V,TP,		R821	2007-001572	R-CHIP,MELF;220Kohm,5%,1/8W,DB,BK,2012	
D801	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R822	2007-001557	R-CHIP,MELF;270ohm,5%,1/8W,DB,BK,2012	
D802	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R823	2007-001557	R-CHIP,MELF;270ohm,5%,1/8W,DB,BK,2012	
D803	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R826	2007-001557	R-CHIP,MELF;270ohm,5%,1/8W,DB,BK,2012	
D804	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R827	2007-001557	R-CHIP,MELF;270ohm,5%,1/8W,DB,BK,2012	
D805	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R828	2007-001589	R-CHIP,MELF;1Kohm,5%,1/8W,DB,BK,2012	
D806	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R829	2007-001589	R-CHIP,MELF;1Kohm,5%,1/8W,DB,BK,2012	
D807	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R830	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
D808	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R831	2007-001572	R-CHIP,MELF;220Kohm,5%,1/8W,DB,BK,2012	
D809	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R832	2007-001572	R-CHIP,MELF;220Kohm,5%,1/8W,DB,BK,2012	
D810	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R833	2007-001460	R-CHIP,MELF;75OHM,5%,1/8W,DB,BK,2012	
D811	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R835	2004-001290	R-METAL;820ohm,5%,1/4W,AA,TP,2.4x6.4mm	
D812	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R836	2007-001505	R-CHIP,MELF;470OHM,5%,1/8W,DB,BK,2012	
D813	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R837	2007-001460	R-CHIP,MELF;75OHM,5%,1/8W,DB,BK,2012	
D814	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		R852	2004-001096	R-METAL;560ohm,5%,1/4W,AA,TP,2.4X6.4mm	
D815	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		SW802	3404-000135	SWITCH-TACT;12V,50mA,160+50gf,7.4x7.1mm	
D816	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,					
D817	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,					
D818	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		C4L01	2202-000797	ASSY-SUB(A2/NICAM);SV-613F610F ONLY C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	S.N.A
D819	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		C4L02	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
IC801	1001-001026	IC-RF/VI/AUDIO SW;KA8119BDBT,CMOS,S0P,3		C4L03	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
JC801	3722-001093	JACK-RCA;42P,3.81MM,SN,BLU/BLK,#20-28	2 SCART	C4L04	2202-000787	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3	
	3710-000482	CONNECTOR-SOCKET;210,-,-,ANGLE,SN	1 SCART	C4L05	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
JC802	AC37-22002E	JACK-PIN;3.5MM,DPAE9634,2P,TR,-	2 PIN	C4L06	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	

Electrical Parts List

Loc.No	Part No	Desc & Spec	Remark	Loc.No	Part No	Desc & Spec	Remark
C4L07	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		L4N02	2702-000108	INDUCTOR-RADIAL;100uH,5%,6x6.4mm	
C4L08	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		L4N03	2701-000188	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
C4L09	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		L4N04	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
C4L10	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP		L4N06	2702-000170	INDUCTOR-RADIAL;560nH,20%,6x6.4mm	
C4L11	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP		L4N07	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
C4L12	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		Q4L01	0501-000436	TR-SMALL SIGNAL;KTC3197,NPN,625mW,TO-92,	
C4L13	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		Q4L02	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C4L14	2202-000794	C-CERAMIC,MLC-AXIAL;18pF,5%,50V,CH,TP,3.		Q4L03	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C4L16	2401-001169	C-AL;33UF,20%,16V,GP,-,6.3X7,2.5MM		Q4L04	0504-000203	TR-DIGITAL;KSR1004,NPN,300mW,47K-47K,TO-	
C4L17	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		Q4L05	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250mW,TO-92	
C4L18	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		Q4N01	0501-000436	TR-SMALL SIGNAL;KTC3197,NPN,625mW,TO-92,	
C4L19	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5		R4L01	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4L20	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		R4L02	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
C4L21	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		R4L03	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4L30	2202-000787	C-CERAMIC,MLC-AXIAL;10PF,5%,50V,Y5P,TP,3		R4L04	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N01	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP		R4L05	2001-000666	R-CARBON;33ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N02	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		R4L06	2001-000221	R-CARBON;1.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N03	2202-000806	C-CERAMIC,MLC-AXIAL;220PF,10%,50V,Y5P,TP		R4L07	2001-000605	R-CARBON;3.6Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N04	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		R4L08	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
C4N05	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP		R4L09	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N06	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP		R4L10	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N07	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP		R4L11	2001-000006	R-CARBON;2.4Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N08	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP		R4L12	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N09	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		R4L13	2001-000005	R-CARBON;390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N10	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		R4L14	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N11	2401-001019	C-AL;3.3UF,20%,50V,GP,-,5X7,1.5MM		R4L15	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N12	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		R4L16	2001-000405	R-CARBON ;180 OHM,5%,1/8W,AA,T	
C4N13	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		R4L17	2001-000977	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N14	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		R4L18	2001-000008	R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N15	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		R4L19	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N16	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5		R4L20	2001-000679	R-CARBON;36KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
C4N17	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP		R4L21	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N19	2202-000279	C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X1		R4L22	2001-000674	R-CARBON;360ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N27	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		R4L23	2001-000449	R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
C4N28	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		R4L24	2001-000005	R-CARBON;390ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N29	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		R4N01	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N30	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		R4N02	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N31	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		R4N03	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N50	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP		R4N04	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N70	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5		R4N05	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C4N71	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5		R4N06	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
CN4N01	3711-003177	CONNECTOR-HEADER;NOWALL,15P,1R,2.5mm,ANG		R4N18	2001-000924	R-CARBON;680ohm,5%,1/8W,AA,TP,1.8x3.2mm	
D4L01	0401-000156	DIODE-SWITCHING;1SS110,35V,100mA,DO-34,T		R4N19	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
D4L02	0401-000156	DIODE-SWITCHING;1SS110,35V,100mA,DO-34,T		R4N20	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
D4L03	0401-000156	DIODE-SWITCHING;1SS110,35V,100mA,DO-34,T		R4N22	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
D4L04	0401-000156	DIODE-SWITCHING;1SS110,35V,100mA,DO-34,T		R4N23	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
D4N01	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		TL4L01	AC26-12001A	TRANS-DET;9MM,0UH,BLK,8PF,77.9MHZ,M7T1,S	
D4N04	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,		VR4L01	61247-102-223	VR-SEMI;EVN-DCY A03 BE4 TAPG 22KB	
FL4L01	B1245-0060	FILTER-SAW;K9453M SECAM SIF		VR4L02	61247-102-223	VR-SEMI;EVN-DCY A03 BE4 TAPG 22KB	
FL4L02	2903-000178	FILTER-CERAMIC;BP,5.5MHz,-,-,TP,-		XT4N01	2801-003171	CRYSTAL-UNIT;18.432MHz,20PPM,28-AAM,4PF,	
FL4L03	2903-000199	FILTER-CERAMIC;TR,6.5MHz,70KHz,-,-,TP,-				ASSY-SUB; A2 ONLY	S.N.A
FL4N01	2904-001016	FILTER-SAW AV;38.9MHz,SIP5K,TP,15.3dB,PA		C4A01	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	
IC4L01	1209-000218	IC;TDA98145 SOP STICK DEMOD		C4A02	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
IC4N01	AC14-10001D	IC;MSP3415D,DIP,52P,47*15.6,PLAST		C4A03	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
L4L01	AC27-12001U	COIL-PEAKING;EL0606RA 1.3UH-K		C4A04	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
L4L02	2701-000160	INDUCTOR-AXIAL;22UH,5%,2.4X3.4MM		C4A05	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	
L4L03	2701-000218	INDUCTOR-AXIAL;8.2UH,5%,2.4X3.4MM		C4A06	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
L4L05	2701-000145	INDUCTOR-AXIAL;1UH,5%,2.4X3.4MM		C4A07	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
L4L50	2701-000122	INDUCTOR-AXIAL;12uH,5%,2.4x3.4mm		C4A08	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
L4N01	2702-000160	INDUCTOR-RADIAL;4.7uH,10%,6x6.4mm		C4A09	2301-000129	C-FILM,PEF;100nF,5%,50V,10X9X4.3X5.5mm,T	

Loc.No	Part No	Desc & Spec	Remark	Loc.No	Part No	Desc & Spec	Remark
C4A10	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		C4N02	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	
C4A11	2301-000439	C-FILM,PEF;3NF,5%,50V,TP,5.5X7X3MM,5MM		C4N03	2202-000806	C-CERAMIC,MLC-AXIAL;220PF,10%,50V,Y5P,TP	
C4A12	2301-000439	C-FILM,PEF;3NF,5%,50V,TP,5.5X7X3MM,5MM		C4N04	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	
C4A13	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP		C4N05	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP	
C4A14	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP		C4N06	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP	
C4A15	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		C4N07	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
C4A16	2301-000383	C-FILM,PEF;10nF,5%,50V,6x7x3.2mm,5mm,TP		C4N08	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP	
C4A17	2301-000129	C-FILM,PEF;100nF,5%,50V,10X9X4.3X5,5mm,T		C4N09	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	
C4A18	2401-000778	C-AL;220uF,20%,10V,GP,-,6.3x11,2.5m		C4N10	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	
C4A19	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		C4N11	2401-001019	C-AL;3.3UF,20%,50V,GP,-,5X7,1.5MM	
C4A20	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		C4N12	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
C4A21	2301-000427	C-FILM,PEF;3.9NF,10%,50V,TP,5.5X7X3MM,5M		C4N13	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
C4A22	2301-000264	C-FILM,PEF;4.7nF,5%,50V,TP,6.5X5.5X3.0X5		C4N14	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	
C4A24	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,		C4N15	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5	
C4A25	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5		C4N16	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	
CN4A01	3711-003177	CONNECTOR-HEADER;NOWALL,15P,1R,2.5mm,ANG		C4N17	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
FL4A01	2904-001024	FILTER-SAW AV;38.9MHz,SIP5K,TP,18.3dB,PA		C4N19	2202-000279	C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X1	
FL4A02	2903-000188	FILTER-CERAMIC;BP;5.74MHz,+50KHz,9dB,-,		C4N27	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
IC4A01	AC14-12011Q	IC-LINEAR;TDA9800,DIP,NEG DEMOD		C4N28	2202-000822	C-CERAMIC,MLC-AXIAL;56PF,5%,50V,SL,TP,3,	
IC4A02	AC14-12011Y	IC-LINEAR;TDA9840V2,DIP,TV-AUDIO DECODE		C4N29	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
L4A01	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-		C4N30	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
L4A02	AC27-12001U	COIL-PEAKING;EL0606RA 1.3UH-K		C4N31	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
L4A03	2702-000214	INDUCTOR-RADIAL;2.2mH,5%,6x6.4x10mm		C4N50	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP	
Q4A01	0501-000436	TR-SMALL SIGNAL;KTC3197,NPN,625mW,TO-92,		C4N70	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	
Q4A02	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250mW,TO-92		C4N71	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	
R4A01	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		CN4N01	3711-003177	CONNECTOR-HEADER;NOWALL,15P,1R,2.5mm,ANG	
R4A02	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		D4N01	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
R4A03	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm		D4N04	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
R4A04	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M		FL4A01	2904-001024	FILTER-SAW AV;38.9MHz,SIP5K,TP,18.3dB,PA	
R4A05	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m		IC4A01	AC14-12011Q	IC-LINEAR;TDA9800,DIP,NEG DEMOD	
R4A06	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m		IC4N01	AC14-10001D	IC;MSP3415D,DIP,52P,47*15.6,PLAST	
R4A07	2001-001006	R-CARBON;82ohm,5%,1/8W,AA,TP,1.8x3.2mm		L4N01	2702-000160	INDUCTOR-RADIAL;4.7uH,10%,6x6.4mm	
R4A08	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m		L4N02	2702-000108	INDUCTOR-RADIAL;100uH,5%,6x6.4mm	
R4A12	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm		L4N03	2701-000188	INDUCTOR-AXIAL;4.7UH,5%,2.4X3.4MM	
R4A13	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm		L4N06	AC27-12001U	COIL-PEAKING;EL0606RA 1.3UH-K	
R4A14	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm		L4N07	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
R4A15	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm		Q4N01	0501-000436	TR-SMALL SIGNAL;KTC3197,NPN,625mW,TO-92,	
R4A16	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm		R4A01	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4A18	2001-001015	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m		R4A02	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4A19	2001-000633	R-CARBON;30Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R4A03	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4A20	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m		R4A04	2001-000472	R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R4A21	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM		R4N01	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4A22	2001-000613	R-CARBON ;3.9K OHM,5%,1/8,AA,T		R4N02	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4A23	2001-000864	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R4N03	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4A24	2001-000337	R-CARBON;130Kohm,5%,1/8W,AA,TP,1.8x3.2m		R4N04	2001-000563	R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R4A25	2001-001015	R-CARBON;9.1Kohm,5%,1/8W,AA,TP,1.8x3.2m		R4N05	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
TL4A01	AC26-12001A	TRANS-DET;9MM,0UH,BLK,8PF,77.9MHZ,M7T1,S		R4N06	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
W4A12	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R4N18	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
W4A13	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R4N19	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
W4A14	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,		R4N20	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m	
XT4A01	2801-003293	CRYSTAL-UNIT;10MHZ,50PPM,28-AAA,16PF,500		R4N21	2001-000793	R-CARBON;47ohm,5%,1/8W,AA,TP,1.8x3.2mm	
-	-	ASSY-SUB; A2+NICAM	S.N.A	R4N22	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	
C4A01	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		R4N23	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
C4A02	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		TL4A01	AC26-12001A	TRANS-DET;9MM,0UH,BLK,8PF,77.9MHZ,M7T1,S	
C4A03	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		XT4N01	2801-003171	CRYSTAL-UNIT;18.432MHz,20PPM,28-AAM,4PF,	
C4A04	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5		-	-	ASSY-F/TIMER	S.N.A
C4A06	2202-000780	C-CERAMIC,MLC-AXIAL;100nF,+80-20%,50V,Y5		C701	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3x7mm,5	
C4A07	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5		C702	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,	
C4N01	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,30%,50V,Y5S,TP		C703	2202-000796	C-CERAMIC,MLC-AXIAL;JP050 B102KB INF,10%	
				CN701	3708-001251	CONNECTOR-FPC/FC;PIC,22P,1mm,STRAIGHT-F,	

Electrical Parts List

Loc.No	Part No	Desc & Spec	Remark
D702	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D705	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D707	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D710	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D711	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D712	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D713	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D714	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D718	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D725	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D740	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D741	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D742	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D743	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
D744	0401-000101	DIODE-SWITCHING;1N4148,100V,200mA,500mW,	
DT701	0703-001042	DISPLAY-LED;GRN,6digit,8seg,46x21x17mm	
L701	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	
Q701	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q702	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q703	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q704	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q705	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q706	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q707	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q708	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T	
Q709	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q710	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q711	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q712	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q713	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
Q714	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,	
R701	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R702	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R703	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R704	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R705	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R706	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R707	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R708	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R709	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R710	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R711	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R712	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R713	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R714	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R715	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R716	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R723	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R724	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R725	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R726	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R729	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R731	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R732	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R733	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R734	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R735	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R737	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R739	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM701	AC59-62001K	MODULE-REMOCON;TSOP1238RF1,38KHz,-,-,-,-	

Loc.No	Part No	Desc & Spec	Remark
SW701	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW702	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW703	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW704	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW705	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW706	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW707	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW708	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW709	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
SW710	3404-000165	SWITCH-TACT;12V,50mA,160gf+-50gf,6x6mm,S	
CN707	3708-001163	CONNECTOR-FPC/FC/PIC;5P,1.25mm,STRAIGHT,	S.N.A
SH701	2101-000101	VR-ROTARY;100Kohm,20%,1/10W,SIDE	

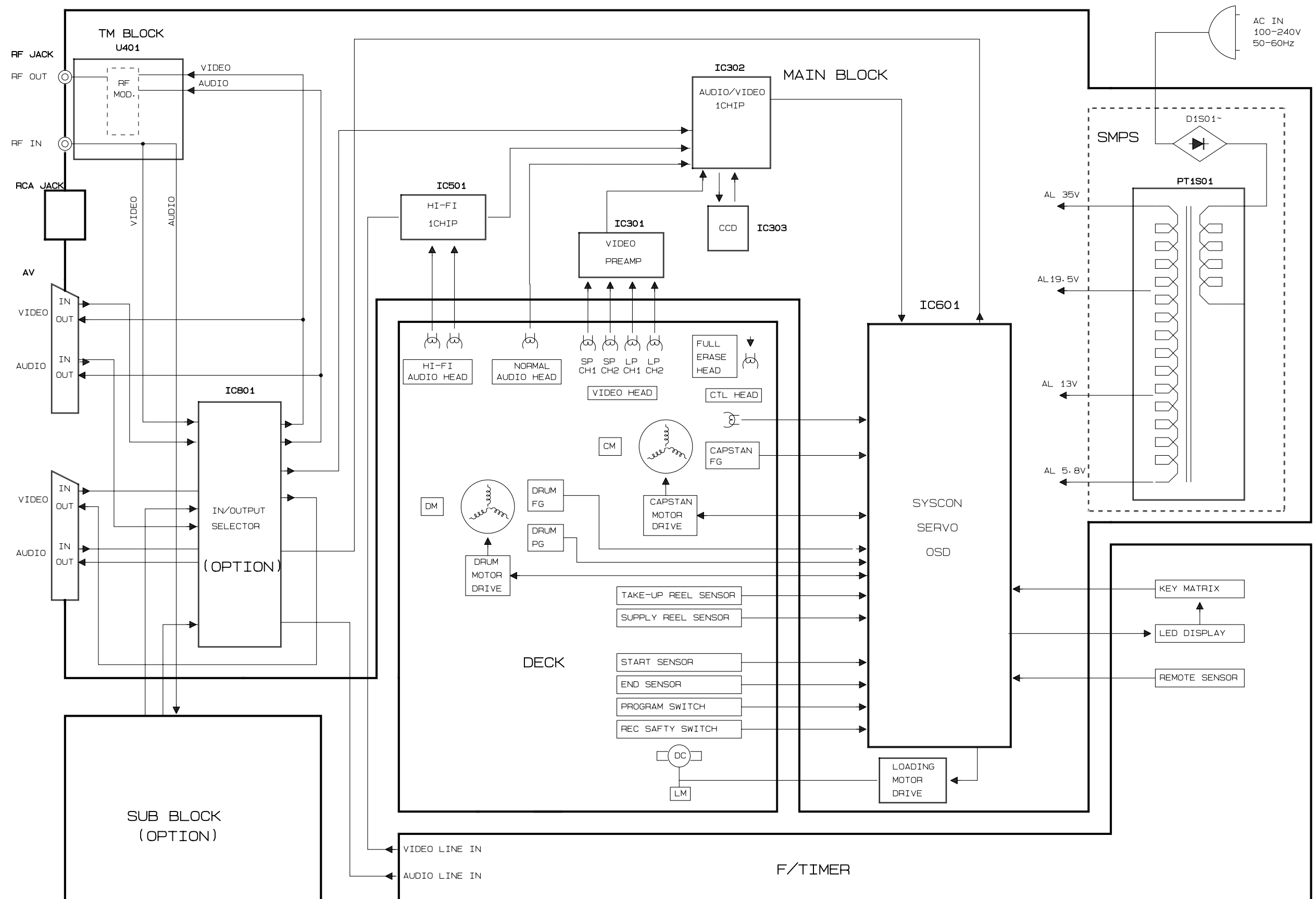
Refer to table below REMOCON-ASSY;-NR-3346,-,-,
AC64-50953A DOOR-BATTERY REMOCON;-ABS94,HB,T2.0,-,D

COUNTRY	MODELS	PARTS NO.
GERMANY	SV-613X	AC59-10343M
AUSTRIA	SV-613X	AC59-10343M
SWITZERLAND	SV-613X	AC59-10343M
	SV-613F	AC59-10343K
FRANCE	SV-613F	AC59-10343K
	SV-610F	AC59-10343J
U.K	SV-613B	AC59-10343Q
SPAIN	SV-611X	AC59-10343N
	SV-510X	AC59-10343M
ITALY	SV-611X	AC59-10343N
	SV-510X	AC59-10343M
PORTUGAL	SV-611X	AC59-10343N
FINLAND/SWEDEN/NORWAY	SV-610X	AC59-10434P
NETHERLANDS	SV-610X	AC59-10434P
BELGIUM	SV-610X	AC59-10434P
DENMARK	SV-610X	AC59-10434P
SAUDI ARABIA	SV-B130G	AC59-10343P
LEBANON	SV-B130G	AC59-10343P
AUSTRALIA	SV-B150B	AC59-10643W
NEW ZEALAND	SV-B150X	AC59-10643W

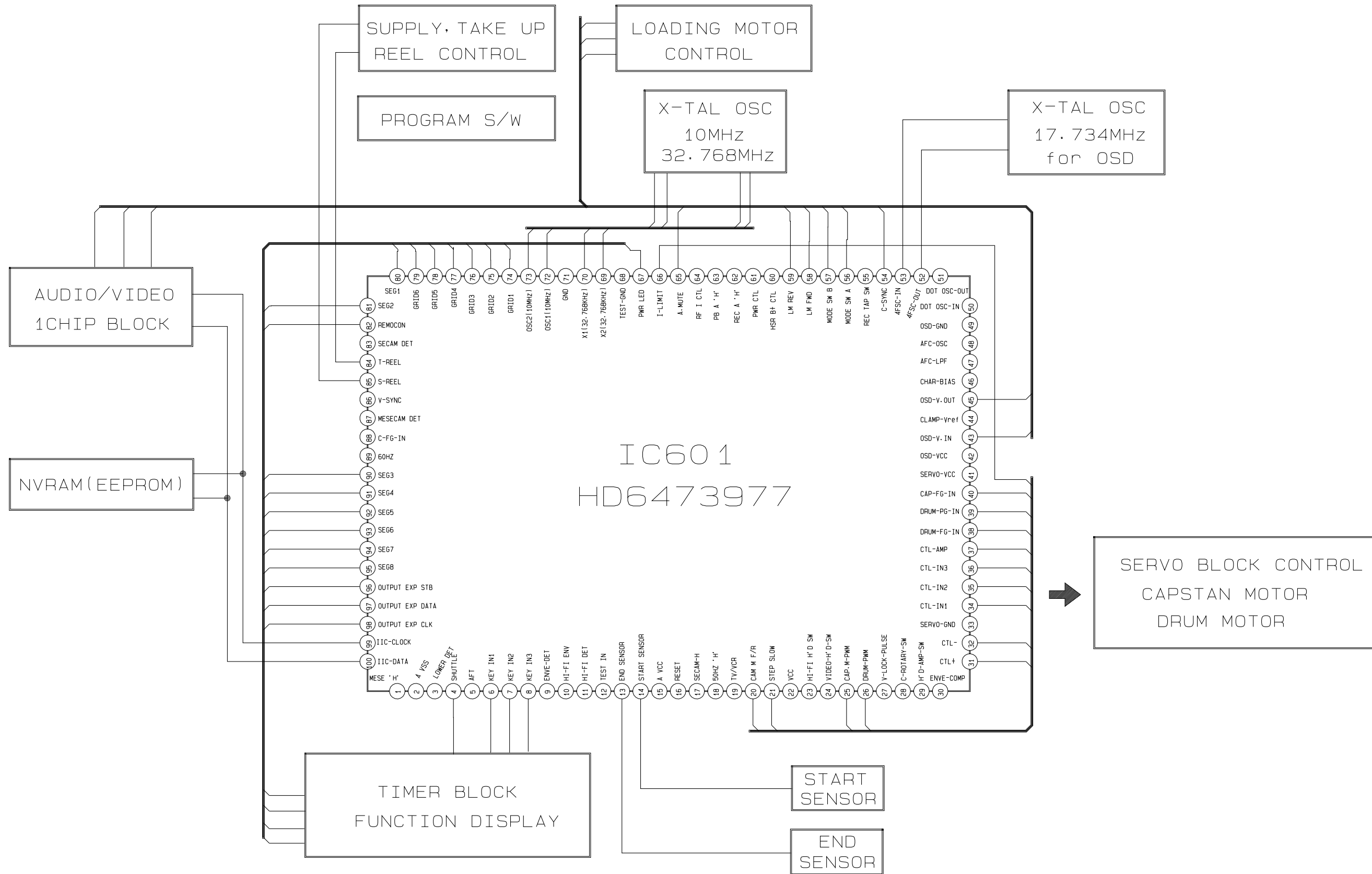
8. Block Diagrams

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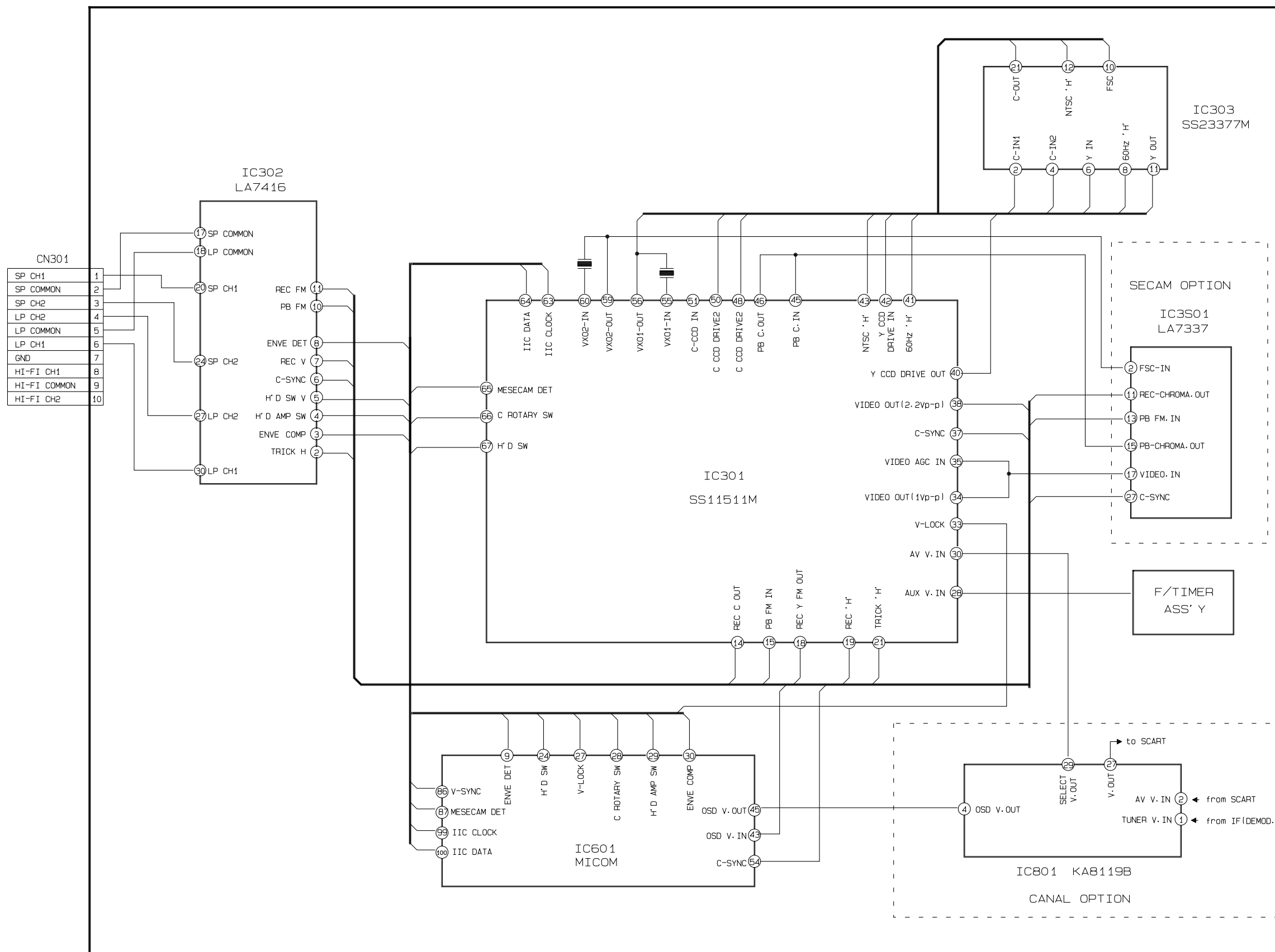
8-1 Overall Block Diagram



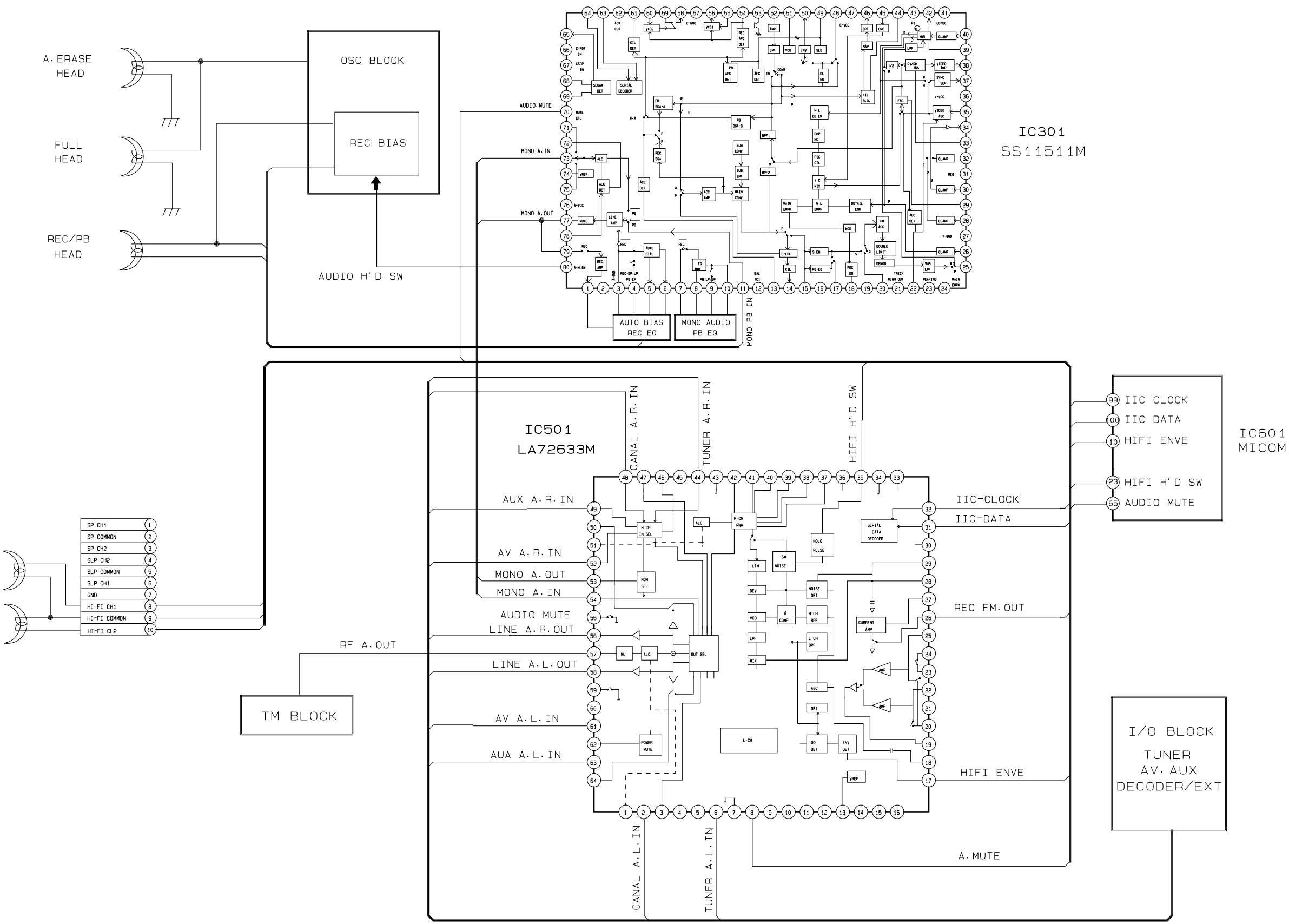
8-2 System Control



8-3 Video



8-4 Hi-Fi

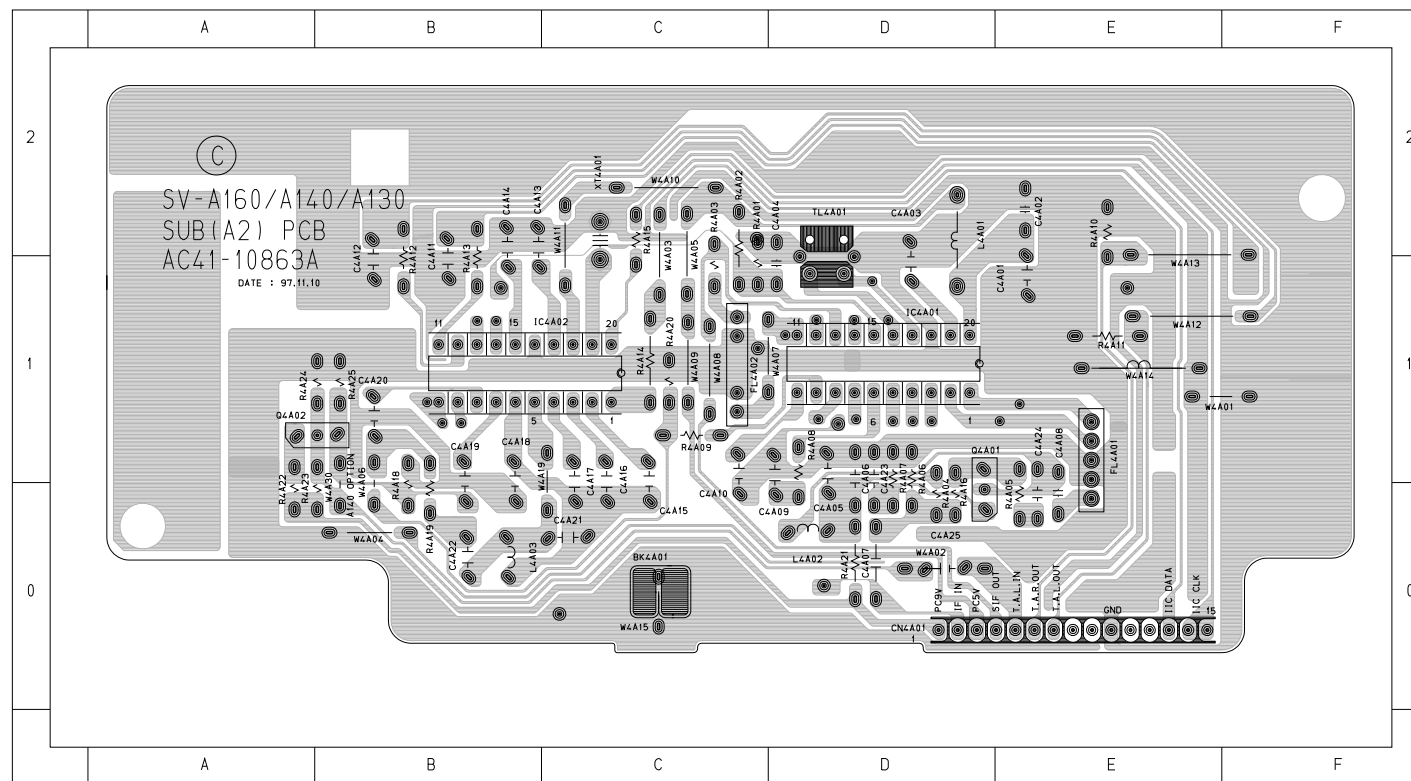


9. PCB Diagrams

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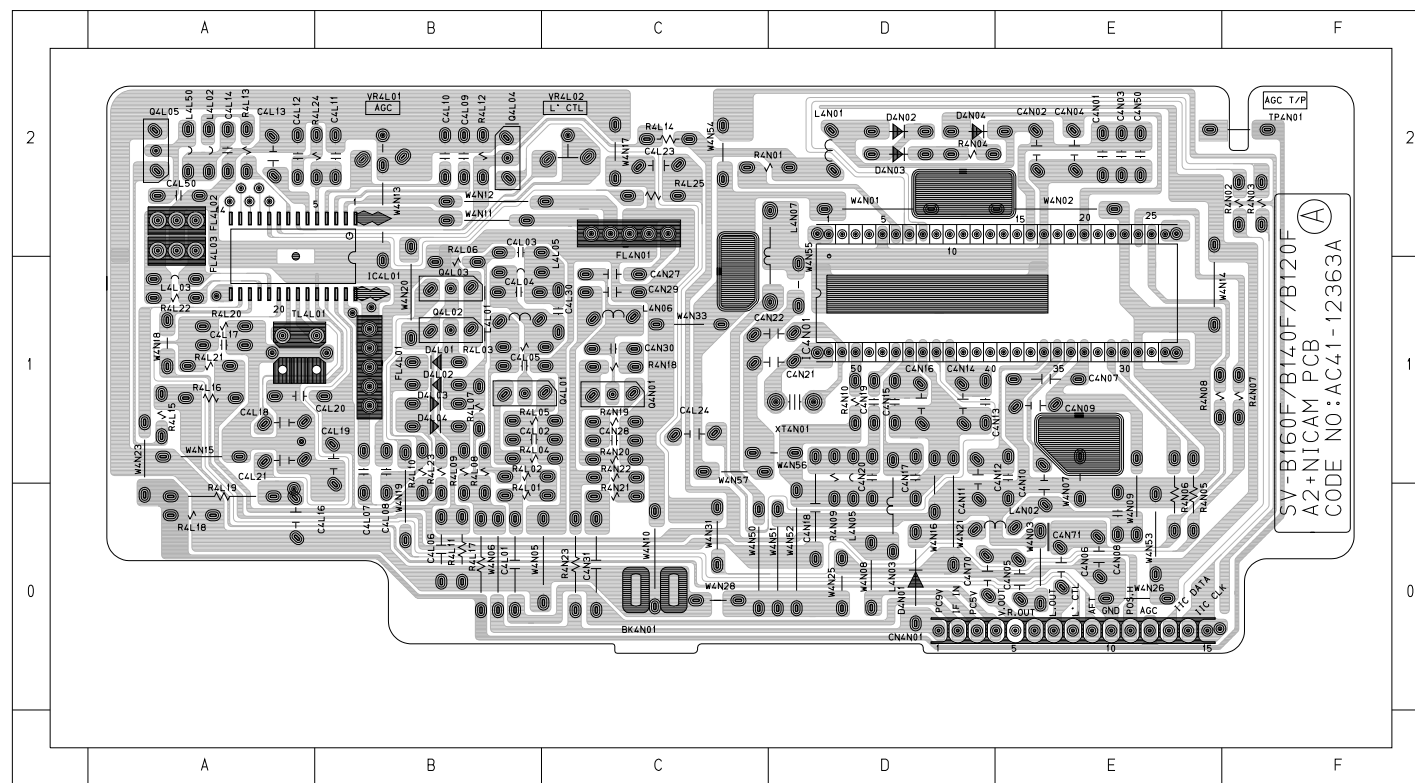
*** RESISTOR ***		*** CONDENSER ***		*** DIODE ***		*** TR ***		*** IC&WAFER ***		*** CHIP ***		
R1P01 (J0)	R540 (I4)	R681 (C1)	C1P01 (K3)	C3A23 (E5)	C804 (F6)	D1P01 (B1)	IC1S3 (B2)	CN1S1 (A7)	C1P03 (B1)	C607 (B1)	J808 (J3)	R524 (H4)
R1P02 (K2)	R570 (G2)	R682 (C2)	C1P02 (K5)	C3A24 (E5)	C805 (I5)	D1P02 (B1)	IC4A2 (K5)	CN3A01 (E5)	C301 (H5)	C608 (B0)	R1P07 (J0)	R525 (I4)
R1P03 (A1)	R571 (G2)	R683 (C2)	C1P04 (K0)	C3A25 (D6)	C806 (J5)	D1P03 (B1)	IC604 (A0)	CN401 (J4)	C302 (H5)	C609 (H2)	R303 (G6)	R604 (A1)
R1P04 (A1)	R601 (G0)	R684 (C2)	C1P05 (I0)	C3A26 (D6)	C808 (J6)	D1P04 (B1)	Q1P01 (A1)	CN602 (E0)	C303 (H5)	C610 (H2)	R305 (G5)	R605 (D2)
R1P05 (B1)	R602 (J2)	R686 (I1)	C1P06 (J0)	C3A27 (D6)	C809 (I4)	D1P06 (J0)	Q1P02 (B1)	CN604 (J5)	C304 (H5)	C6102 (C1)	R307 (G4)	R606 (A1)
R1P06 (J0)	R603 (E0)	R688 (E2)	C1P09 (J1)	C3A29 (E6)	C810 (I4)	D1P20 (K1)	Q1P03 (J0)	CN606 (H1)	C305 (G6)	C6105 (D1)	R308 (H5)	R607 (G6)
R1P09 (K1)	R610 (K1)	R689 (H0)	C1P10 (J0)	C3A30 (E5)	C811 (I6)	D1S01 (B5)	Q1P04 (J0)	IC1P01 (K0)	C306 (H6)	C6107 (D7)	R309 (F6)	R608 (G3)
R1P10 (J0)	R6100 (F7)	R690 (G0)	C1S02 (B7)	C3S02 (F3)	C812 (J5)	D1S02 (A5)	Q1P05 (J1)	IC302 (H5)	C307 (H5)	C6116 (E0)	R310 (F6)	R6101 (E1)
R1S02 (A4)	R6103 (D0)	R691 (G0)	C1S03 (B7)	C3S07 (F3)	C813 (J4)	D1S03 (B5)	Q1P06 (J1)	IC3501 (E3)	C308 (H6)	C6117 (E1)	R311 (F6)	R6102 (D0)
R1S03 (B5)	R6105 (I0)	R692 (I1)	C1S04 (B6)	C3S10 (C6)	C814 (I6)	D1S04 (B5)	Q1P07 (J1)	IC603 (H2)	C309 (H5)	C6125 (E0)	R312 (F6)	R6104 (C1)
R1S06 (A4)	R6107 (D0)	R693 (F2)	C1S05 (A6)	C3S11 (E3)	C815 (J6)	D1S05 (A4)	Q1S02 (A4)	IC605 (D4)	C310 (H5)	C6127 (C1)	R313 (F6)	R6106 (E1)
R1S07 (A3)	R6109 (C7)	R694 (G0)	C1S06 (A6)	C3S13 (F4)	C816 (J5)	D1S07 (B3)	Q302 (F6)	IC606 (J2)	C311 (G6)	C613 (B2)	R314 (F6)	R6110 (C7)
R1S12 (B4)	R6112 (C1)	R695 (G0)	C1S07 (B7)	C3S14 (F4)	C817 (I6)	D1S08 (B4)	Q303 (F6)	IC6P01 (D4)	C312 (G5)	C614 (C2)	R315 (F6)	R6111 (C7)
R1S13 (B4)	R6113 (D7)	R696 (J1)	C1S09 (A4)	C3S15 (F4)	C818 (J6)	D1S30 (A2)	Q304 (F7)	JC802 (I7)	C313 (G5)	C615 (C3)	R316 (F6)	R6115 (D6)
R1S14 (B4)	R6116 (H1)	R697 (J1)	C1S10 (A4)	C3S16 (F4)	C819 (J6)	D1S31 (A1)	Q305 (F6)	S601 (J2)	C315 (G5)	C616 (C4)	R317 (F6)	R6120 (D5)
R1S15 (A4)	R6117 (G2)	R698 (H0)	C1S15 (A3)	C3S18 (E4)	C820 (F7)	D1S33 (A2)	Q308 (C6)	S602 (B2)	C316 (G5)	C618 (C3)	R318 (F6)	R6122 (D5)
R1S16 (A5)	R6119 (G2)	R699 (H0)	C1S16 (B6)	C3S21 (E4)	C822 (J7)	D1S41 (A2)	Q309 (F7)		C318 (H5)	C619 (F0)	R319 (F7)	R6123 (D6)
R1S19 (B4)	R612 (J1)	R6P11 (D5)	C1S17 (A4)	C3S22 (D4)	C823 (J3)	D1S42 (A2)	Q310 (D7)		C320 (F6)	C620 (F0)	R320 (F6)	R6134 (C6)
R1S20 (A4)	R6121 (D5)	R805 (I6)	C1S18 (A3)	C3S23 (D5)	C829 (J6)	D1S43 (A1)	Q312 (D6)		C321 (F6)	C622 (C4)	R321 (F6)	R617 (D3)
R1S21 (B4)	R6124 (G2)	R809 (J7)	C1S19 (B3)	C3S24 (F4)	C838 (I6)	D301 (G5)	Q3A01 (E5)		C322 (F6)	C623 (E1)	R322 (E7)	R618 (C4)
R1S22 (A5)	R6125 (G2)	R810 (J7)	C1S20 (A5)	C403 (K3)	C839 (I6)	D3501 (D4)	Q3A02 (E5)		C323 (F6)	C624 (D1)	R323 (E7)	R619 (F2)
R1S30 (B2)	R6128 (C6)	R830 (J4)	C1S21 (A5)	C410 (K3)	C849 (J4)	D410 (K6)	Q3A03 (F5)		C325 (F6)	C625 (D1)	R324 (F7)	R620 (A0)
R1S31 (B2)	R6129 (B1)	R835 (J2)	C1S22 (B4)	C501 (H3)	XT602 (D1)	D605 (A1)	Q3A04 (E5)		C327 (E6)	C626 (D1)	R325 (D4)	R626 (G3)
R1S32 (B2)	R6130 (C6)	R852 (I2)	C1S23 (B4)	C503 (H3)		D608 (A0)	Q3A05 (F5)		C328 (F7)	C645 (G2)	R327 (E7)	R631 (B2)
R1S33 (B2)	R6131 (C7)	W132 (H1)	C1S24 (A4)	C504 (H3)		D609 (D3)	Q3A06 (E5)		C329 (G5)	C650 (C4)	R328 (F7)	R635 (H5)
R1S34 (B2)	R6132 (C7)	W133 (H1)	C1S30 (A2)	C506 (I5)		D6102 (D3)	Q3501 (F3)		C332 (F7)	C660 (B2)	R329 (D7)	R648 (D2)
R301 (G6)	R6133 (C7)	W134 (H1)	C1S35 (A1)	C507 (I5)		D6104 (D7)	Q3502 (F6)		C333 (E6)	C661 (C3)	R331 (C6)	R679 (C2)
R302 (G6)	R614 (G0)	W135 (H1)	C1S38 (B2)	C513 (H5)		D6105 (C5)	Q3503 (F4)		C334 (G5)	C663 (G0)	R332 (D6)	R687 (E1)
R304 (G5)	R615 (G0)	W152 (E2)	C1S99 (A2)	C518 (H4)		D6106 (C7)	Q3504 (C6)		C335 (F7)	C664 (E4)	R333 (D6)	R6P05 (D4)
R306 (G4)	R616 (D0)	W158 (E2)	C314 (G5)	C523 (G3)		D611 (I1)	Q3505 (F4)		C336 (F7)	C665 (E4)	R334 (D6)	R6P06 (C4)
R336 (C7)	R621 (H2)	XT301 (D6)	C317 (G5)	C526 (G3)		D612 (H5)	Q3506 (F4)		C337 (E7)	C666 (E4)	R335 (D7)	R6P07 (C4)
R339 (D5)	R622 (J2)	XT302 (D6)	C319 (H5)	C528 (I3)		D613 (B0)	Q401 (K2)		C338 (F7)	C671 (D2)	R337 (D4)	R6P08 (D3)
R340 (D6)	R623 (J2)	XT601 (D1)	C324 (E6)	C529 (I3)		D614 (J1)	Q402 (J2)		C339 (F7)	C680 (D4)	R338 (D5)	R6P09 (C4)
R341 (C6)	R624 (F2)	XT6102 (E0)	C326 (F6)	C530 (H3)		D615 (K2)	Q601 (G0)		C345 (E7)	C681 (C1)	R342 (C6)	R6P10 (D4)
R3A01 (F5)	R625 (H1)		C330 (F6)	C531 (I5)		D801 (G7)	Q602 (H0)		C351 (D7)	C698 (C1)	R345 (G5)	R6P12 (C4)
R3A02 (F5)	R627 (H2)		C331 (F6)	C551 (G4)		D802 (G7)	Q604 (K1)		C356 (D7)	C6P01 (D4)	R350 (D6)	R807 (G7)
R3A03 (F5)	R628 (G0)		C340 (E7)	C552 (G4)		D803 (F7)	Q607 (E1)		C357 (D7)	C6P05 (D4)	R351 (H5)	R808 (G7)
R3A07 (F5)	R629 (H0)		C341 (F7)	C602 (D1)		D804 (G7)	Q608 (D1)		C359 (D7)	C6P06 (D3)	R352 (E7)	R811 (G7)
R3A08 (E5)	R630 (J1)		C342 (E7)	C605 (G0)		D805 (J6)	Q609 (I0)		C363 (C6)	C807 (J6)	R353 (G5)	R812 (G7)
R3A09 (E6)	R632 (C2)		C343 (E7)	C606 (A0)		D806 (J6)	Q6101 (C7)		C367 (E7)	C824 (G7)	R354 (F6)	R813 (G7)
R3A12 (F5)	R633 (C3)		C344 (E7)	C6101 (C1)		D807 (J6)	Q6102 (C6)		C368 (D6)	C825 (G7)	R399 (D7)	R814 (I7)
R3A13 (F6)	R634 (I1)		C346 (D7)	C6103 (C1)		D808 (J6)	Q6106 (D5)		C372 (E7)	C826 (I3)	R3A04 (F5)	R815 (I7)
R3A14 (E5)	R636 (E2)		C347 (D7)	C6104 (D0)		D809 (J6)	Q6108 (C6)		C376 (G5)	C827 (J5)	R3A05 (E5)	R816 (I7)
R3A18 (E4)	R637 (D3)		C348 (E7)	C6106 (C7)		D810 (I1)	Q802 (G7)		C377 (G6)	C831 (I7)	R3A06 (E5)	R817 (I7)
R3A19 (E5)	R639 (J7)		C349 (D7)	C611 (F2)		D811 (I2)	Q803 (G7)		C378 (G6)	C832 (I7)	R3A10 (E6)	R820 (I7)
R3A20 (E5)	R640 (H1)		C350 (D7)	C6114 (C5)		D812 (J6)	Q804 (I6)		C379 (H6)	C833 (I7)	R3A11 (E6)	R821 (I7)
R3A24 (E5)	R641 (I1)		C352 (C7)	C6119 (C6)		D813 (J6)	Q808 (J2)		C3A14 (E5)	C834 (I7)	R3A15 (E6)	R822 (I7)
R3A30 (E5)	R642 (J1)		C353 (D7)	C612 (H0)		D814 (J6)	Q809 (I2)		C3A28 (E6)	C835 (H7)	R3A16 (F6)	R823 (I7)
R3A31 (E5)	R643 (J1)		C355 (D6)	C6120 (C5)		D815 (J3)	Q810 (J2)		C3501 (E4)	C836 (H7)	R3A17 (F6)	R826 (H7)
R3A32 (E5)	R644 (F2)		C358 (E7)	C6122 (C7)		D816 (G4)	Q811 (G7)		C3503 (E3)	C840 (H7)	R3A21 (D5)	R827 (I6)
R3S02 (F3)	R645 (H2)		C360 (D7)	C6123 (E0)		D817 (I6)	Q812 (J1)		C3504 (E3)	C841 (I6)	R3A22 (D5)	R828 (I7)
R3S03 (F3)	R646 (I1)		C361 (D7)	C6124 (E1)		D818 (H6)	Q813 (J1)		C3505 (E4)	C842 (H7)	R3A23 (D5)	R829 (I7)
R3S06 (D6)	R647 (I1)		C362 (D7)	C6126 (C6)		D819 (I1)	Q814 (G6)		C3506 (F3)	C843 (H7)	R3A25 (E5)	R831 (H7)
R3S09 (F5)	R649 (B1)		C364 (C6)	C617 (H1)		D820 (I1)	Q815 (G6)		C3508 (F4)	C844 (I7)	R3A26 (E5)	R832 (I7)
R3S11 (F4)	R650 (J7)		C366 (D6)	C627 (G0)		D821 (J4)			C3509 (E4)	C845 (I7)	R3A27 (E6)	R833 (G7)
R3S14 (F4)	R651 (C1)		C369 (D6)	C628 (G0)		D822 (I7)			C3512 (F6)	C847 (G7)	R3A28 (E5)	R836 (G7)
R3S15 (E4)	R652 (B2)		C370 (D6)	C630 (E0)		ZDIP01 (K7)			C3517 (F4)	C848 (G7)	R3A29 (E6)	R837 (G7)
R3S16 (E4)	R653 (C3)		C371 (D6)	C632 (C4)		ZDIP02 (J1)			C3519 (F4)	C850 (I6)	R3501 (E3)	R850 (J7)
R3S18 (E4)	R654 (G2)		C373 (G5)	C633 (A0)		ZD1S01 (A4)			C3520 (E4)	IC301 (E6)	R3504 (F4)	R851 (J7)
R3S20 (E3)	R655 (I1)		C374 (E7)	C636 (C5)		ZD1S2 (B4)			C3525 (F4)	IC303 (D7)	R3505 (F3)	
R3S21 (D5)	R656 (H2)		C380 (F7)	C637 (H5)		ZD1S30 (A2)			C3526 (F4)	IC501 (H4)	R3507 (F6)	
R3S23 (E3)	R657 (D1)		C3A01 (F5)	C638 (G3)					C3527 (E4)	IC801 (J6)	R3508 (F6)	
R401 (K2)	R658 (I2)		C3A02 (F5)	C639 (G4)					C3528 (F3)	J301 (G5)	R3510 (F5)	
R402 (K2)	R659 (K2)		C3A03 (F4)	C640 (G4)					C3530 (F4)	J320 (F3)	R3512 (E3)	
R403 (K2)	R660 (E2)		C3A04 (F4)	C642 (E0)					C502 (H3)	J355 (D7)	R3513 (F4)	
R405 (K5)	R661 (K6)		C3A05 (F5)	C643 (F0)					C505 (H4)	J356 (D7)	R3517 (E4)	
R406 (K5)	R662 (K6)		C3A06 (E6)	C647 (G1)					C508 (H4)	J357 (D4)	R3519 (E4)	
R407 (K7)	R663 (J3)		C3A07 (E6)	C651 (B0)					C509 (H4)	J358 (G6)	R3522 (F4)	
R418 (K7)	R664 (J3)		C3A08 (E5)	C652 (I1)					C512 (I4)	J501 (H5)	R3524 (F3)	
R501 (H3)	R665 (B2)		C3A09 (F5)	C675 (K1)					C514 (H4)	J502 (H5)	R3525 (F4)	
R502 (H3)	R666 (E2)		C3A10 (F5)	C676 (K1)					C515 (H3)	J601 (D5)	R503 (I5)	
R505 (G4)	R667 (F3)		C3A11 (E6)	C677 (K2)					C516 (H4)	J602 (E2)	R504 (H4)	
R507 (G3)	R668 (B1)		C3A12 (F6)	C678 (K2)					C517 (H4)	J620 (C4)	R506 (G4)	
R508 (G4)	R669 (F0)		C3A13 (F5)	C679 (H0)					C519 (H4)	J621 (B1)	R509 (G4)	
R510 (G4)	R670 (F0)		C3A15 (F6)	C682 (C4)					C522 (H4)	J622 (H2)	R512 (G4)	
R511 (G4)	R671 (F0)		C3A16 (E6)	C683 (G2)					C524 (H3)	J801 (G7)	R517 (H3)	
R513 (G3)	R672 (I2)		C3A17 (E4)	C6P02 (D5)					C525 (H3)	J802 (G7)	R518 (H3)	
R514 (H3)	R673 (I2)		C3A18 (D5)	C6P03 (D5)					C527 (G3)	J803 (I7)	R519 (H3)	
R515 (G3)	R674 (I2)		C3A19 (D5)	C6P07 (D4)					C550 (H2)	J804 (J7)	R520 (H3)	
R516 (H3)	R675 (I1)		C3A20 (D5)	C801 (I4)					C601 (C5)	J805 (F7)	R521 (H3)	
R533 (G4)	R676 (D3)		C3A21 (E5)	C802 (J7)					C603 (J2)	J806 (F7)	R522 (H4)	
R535 (K7)	R677 (C2)		C3A22 (E5)	C803 (I6)					C604 (H5)	J807 (J4)	R523 (H4)	

9-2 SUB (A2)



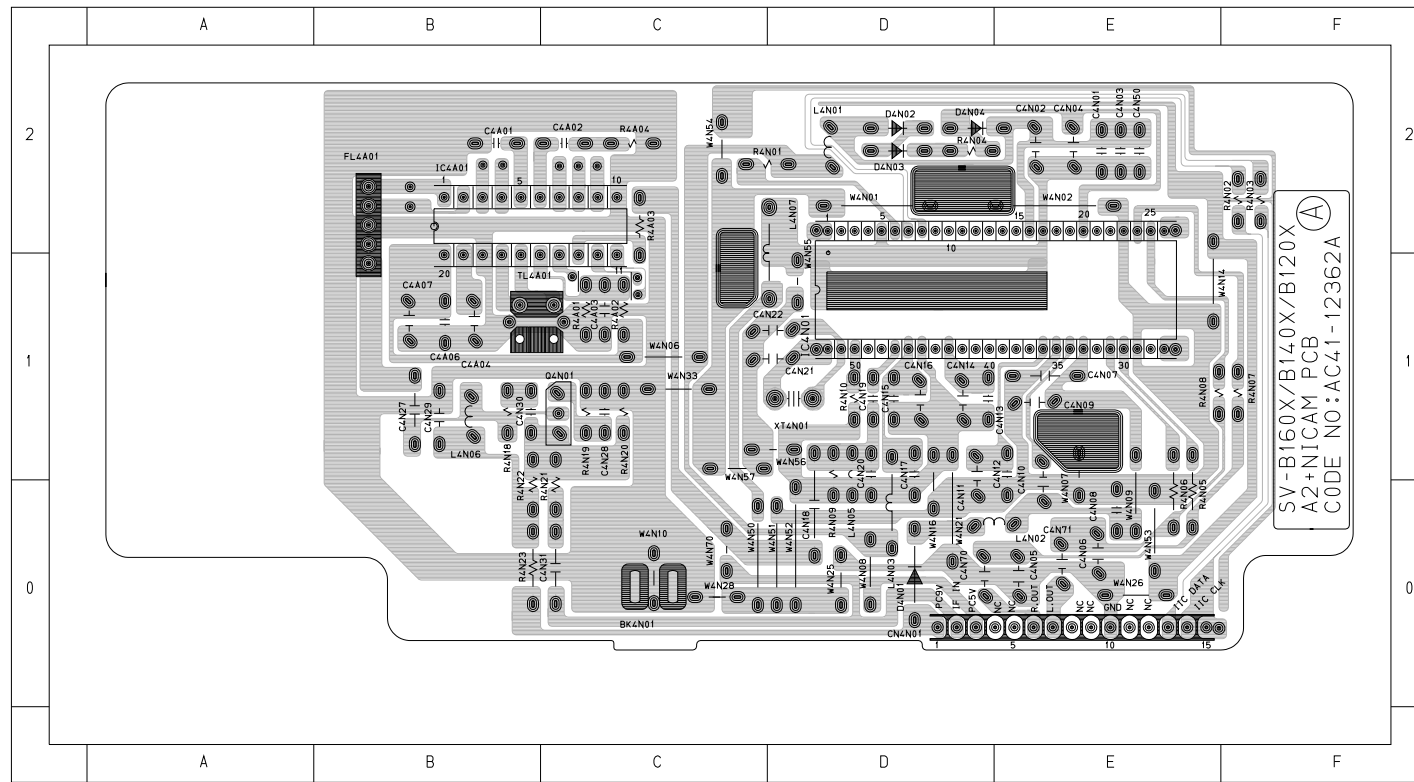
*** RESISTOR ***	*** CONDENSER ***	*** TR ***	*** IC&WAFER ***
R4A01 (C1)	C4A01 (E1)	Q4A01 (D1)	CN4A01 (D0)
R4A02 (C1)	C4A02 (E2)	Q4A02 (B1)	IC4A01 (D1)
R4A03 (C1)	C4A03 (D1)		IC4A02 (C1)
R4A04 (D0)	C4A04 (D1)		
R4A05 (E0)	C4A05 (D0)		
R4A06 (D0)	C4A06 (D0)		
R4A07 (D0)	C4A07 (D0)		
R4A08 (D0)	C4A08 (E0)		
R4A09 (C1)	C4A09 (D0)		
R4A10 (E1)	C4A10 (C1)		
R4A11 (E1)	C4A11 (B2)		
R4A12 (B1)	C4A12 (B2)		
R4A13 (B1)	C4A13 (B2)		
R4A14 (C1)	C4A14 (B2)		
R4A15 (C1)	C4A15 (C1)		
R4A16 (D0)	C4A16 (C1)		
R4A18 (B0)	C4A17 (C1)		
R4A19 (B0)	C4A18 (B1)		
R4A20 (C1)	C4A19 (B1)		
R4A21 (D0)	C4A20 (B1)		
R4A22 (A1)	C4A21 (C0)		
R4A23 (B1)	C4A22 (B0)		
R4A24 (B1)	C4A23 (D0)		
R4A25 (B1)	C4A24 (E0)		
XT4A01 (C1)	C4A25 (D0)		

9-3 SUB (A2/NICAM) ; SV-613F/610F Only



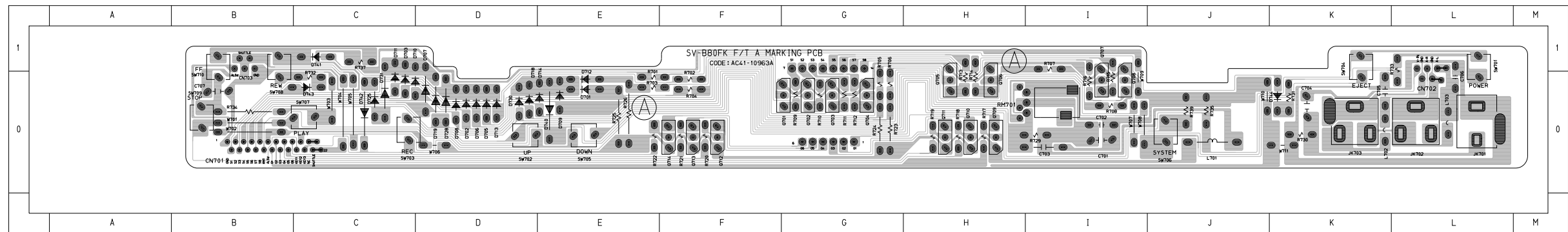
*** RESISTOR ***	*** CONDENSER ***	*** DIODE ***	*** TR ***
R4L01 (B0)	R4N04 (D2)	C4L01 (B0)	C4N05 (E0)
R4L02 (B1)	R4N05 (E0)	C4L02 (B1)	C4N06 (E0)
R4L03 (B1)	R4N06 (E0)	C4L03 (B2)	C4N07 (E1)
R4L04 (B1)	R4N07 (F1)	C4L04 (B1)	C4N08 (E0)
R4L05 (B1)	R4N08 (E1)	C4L05 (B1)	C4N09 (E1)
R4L06 (B1)	R4N09 (D0)	C4L06 (B0)	C4N10 (E0)
R4L07 (B1)	R4N10 (D1)	C4L07 (B0)	C4N11 (D1)
R4L08 (B0)	R4N18 (C1)	C4L08 (B0)	C4N12 (E0)
R4L09 (B0)	R4N19 (C1)	C4L09 (B2)	C4N13 (D1)
R4L10 (B0)	R4N20 (C1)	C4L10 (B2)	C4N14 (D1)
R4L11 (B0)	R4N21 (C0)	C4L11 (B2)	C4N15 (D1)
R4L12 (B2)	R4N22 (C1)	C4L12 (A2)	C4N16 (D1)
R4L13 (A2)	R4N23 (C0)	C4L13 (A2)	C4N17 (D0)
R4L14 (C2)	XT4N01 (D1)	C4L14 (A2)	C4N18 (D0)
R4L15 (A1)		C4L16 (A0)	C4N19 (D1)
R4L16 (A1)		C4L17 (A1)	C4N20 (D0)
R4L17 (B0)		C4L18 (A1)	C4N21 (C1)
R4L18 (A0)		C4L19 (B1)	C4N22 (C1)
R4L19 (A0)		C4L20 (A1)	C4N27 (C1)
R4L20 (A1)		C4L21 (A1)	C4N28 (C1)
R4L21 (A1)		C4L23 (C2)	C4N29 (C1)
R4L22 (A1)		C4L24 (C1)	C4N30 (C1)
R4L23 (B0)		C4L30 (C1)	C4N31 (C0)
R4L24 (B2)		C4L50 (A2)	C4N50 (E2)
R4L25 (C2)		C4N01 (E2)	C4N70 (D0)
R4N01 (C2)		C4N02 (E2)	C4N71 (E0)
R4N02 (F2)		C4N03 (E2)	
R4N03 (F2)		C4N04 (E2)	

9-4 SUB (A2/NICAM)



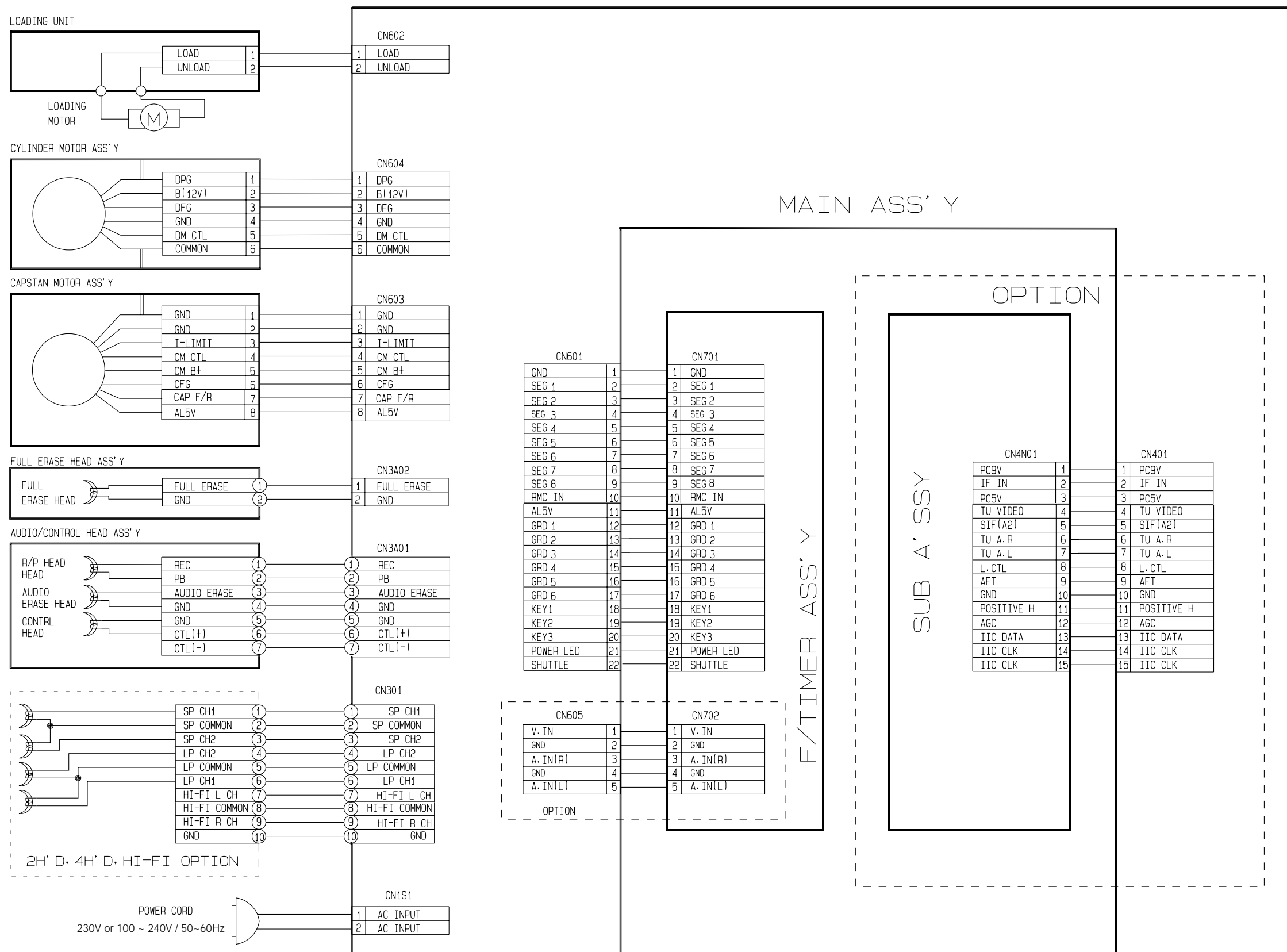
*** RESISTOR ***	*** CONDENSER ***	*** DIODE ***	*** TR ***
R4A01 (C1)	C4A01 (B2)	C4N27 (B1)	D4N01 (D0)
R4A02 (C1)	C4A02 (C2)	C4N28 (C1)	D4N02 (D2)
R4A03 (C1)	C4A03 (C1)	C4N29 (B1)	D4N03 (D2)
R4A04 (C2)	C4A04 (B1)	C4N30 (B1)	D4N04 (E2)
R4N01 (C2)	C4A06 (B1)	C4N31 (C0)	
R4N02 (F2)	C4A07 (B1)	C4N50 (E2)	
R4N03 (F2)	C4N01 (E2)	C4N70 (D0)	
R4N04 (D2)	C4N02 (E2)	C4N71 (E0)	
R4N05 (E0)	C4N03 (E2)		*** IC&WAFER ***
R4N06 (E0)	C4N04 (E2)		CN4N01 (D0)
R4N07 (F1)	C4N05 (E0)		IC4A01 (B1)
R4N08 (E1)	C4N06 (E0)		
R4N09 (D0)	C4N07 (E1)		
R4N10 (D1)	C4N08 (E0)		
R4N18 (B1)	C4N09 (E1)		
R4N19 (C1)	C4N10 (E0)		
R4N20 (C1)	C4N11 (D1)		
R4N21 (C0)	C4N12 (E0)		
R4N22 (B0)	C4N13 (D1)		
R4N23 (B0)	C4N14 (D1)		
XT4N01 (D1)	C4N15 (D1)		
	C4N16 (D1)		
	C4N17 (D0)		
	C4N18 (D0)		
	C4N19 (D1)		
	C4N20 (D0)		
	C4N21 (C1)		
	C4N22 (C1)		

9-5 Function-Timer



*** RESISTOR ***	*** CONDENSER ***	*** DIODE ***	*** TR ***	*** IC&WAFER ***	*** CHIP ***
R701 (E0)	R714 (H0)	R729 (H0)	C701 (I0)	D701 (E0)	D718 (D0)
R702 (F0)	R715 (I0)	R730 (K0)	C702 (I0)	D702 (D0)	D719 (D0)
R703 (E0)	R716 (I0)	R731 (K0)	C703 (H0)	D703 (C1)	D725 (C0)
R704 (F0)	R717 (H0)	R732 (C0)	C704 (K0)	D705 (D0)	D728 (D0)
R705 (G0)	R718 (H0)	R733 (L0)	C705 (G0)	D706 (D0)	D730 (D0)
R706 (G0)	R719 (H0)	R734 (B0)	C706 (L0)	D707 (D1)	D731 (C1)
R707 (I1)	R720 (F0)	R735 (J0)	C707 (B0)	D708 (D0)	D740 (E0)
R708 (I0)	R721 (F0)	R737 (C1)		D709 (E0)	D741 (C1)
R709 (G0)	R722 (E0)	R739 (J0)		D710 (D1)	D742 (C0)
R710 (G0)	R723 (G0)			D711 (C1)	D743 (C0)
R711 (G0)	R724 (G0)			D712 (E0)	D744 (K0)
R712 (G0)	R725 (E0)			D713 (D0)	
R713 (H0)	R726 (E0)			D714 (E0)	
					JK701 (L0)
					JK702 (K0)
					JK703 (L0)

10. Wiring Diagram



11. Schematic Diagrams

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11-13 Remote-Control - - - - -	11-15

Note

For schematic Diagram
 - Resistors are in ohms, 1/8W unless otherwise noted.

Special note :

Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

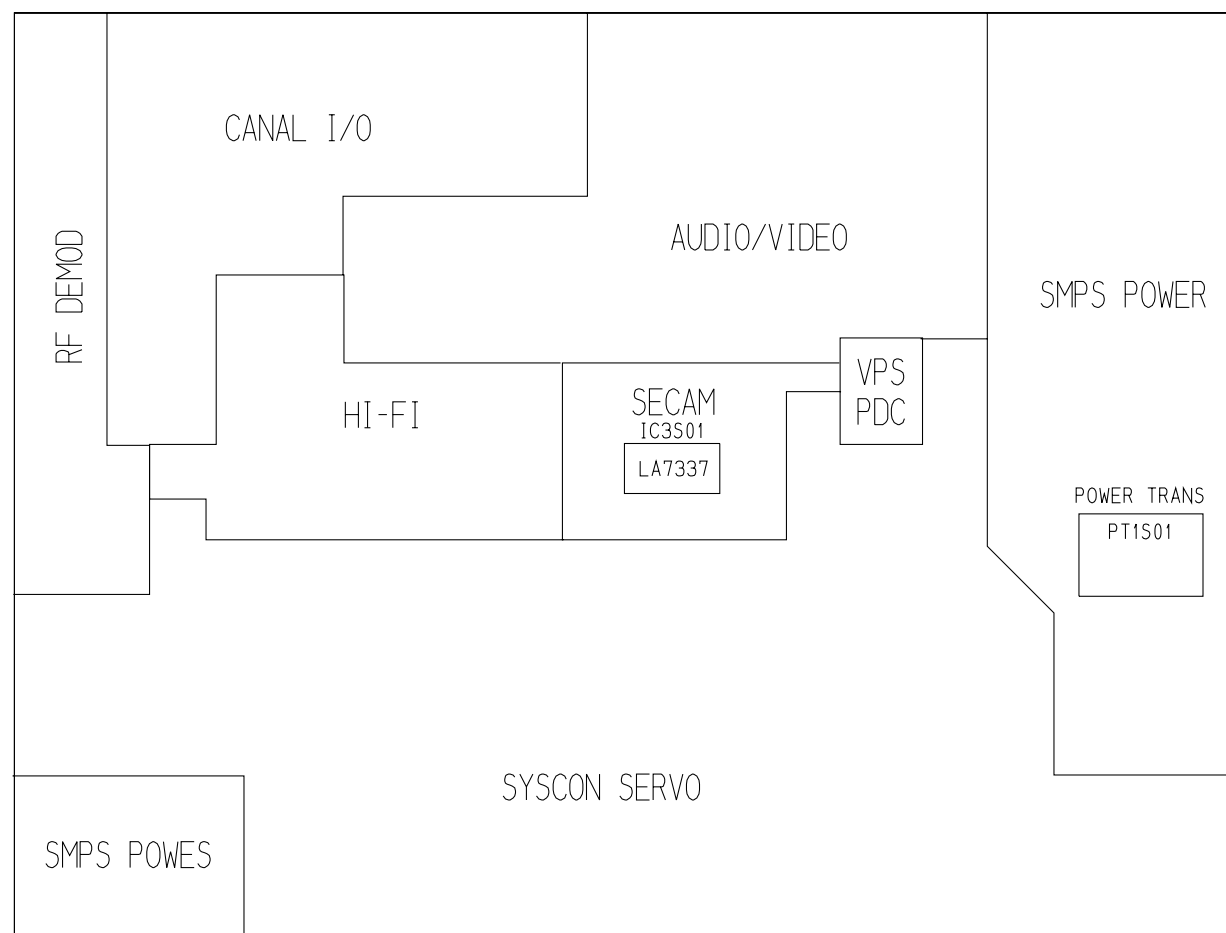
Note :

Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

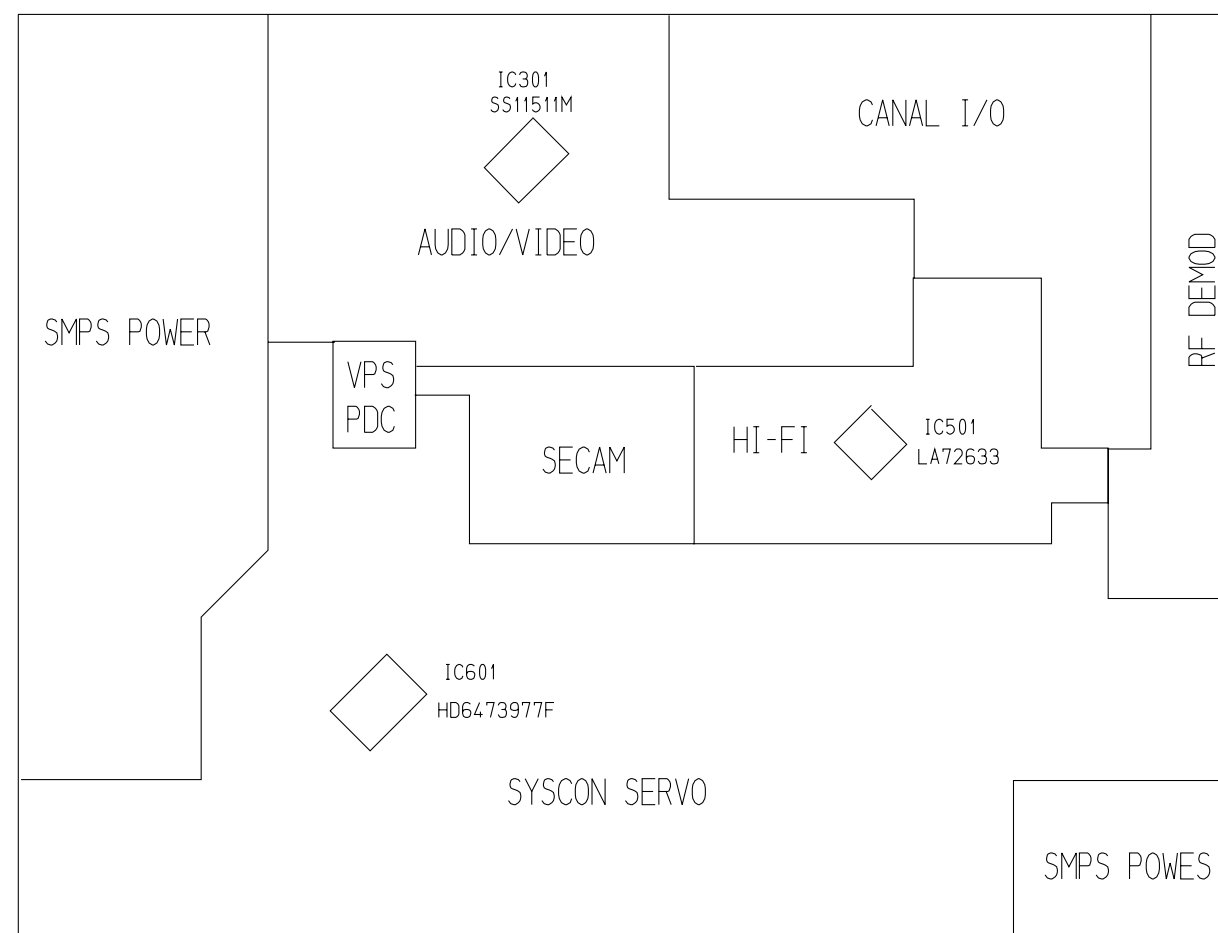
Important safety notices :

Components identified with the mark \triangle have the special characteristics for safety. When replacing any of these components. Use only the same type.

◆ **Block Identification of Main PCB**

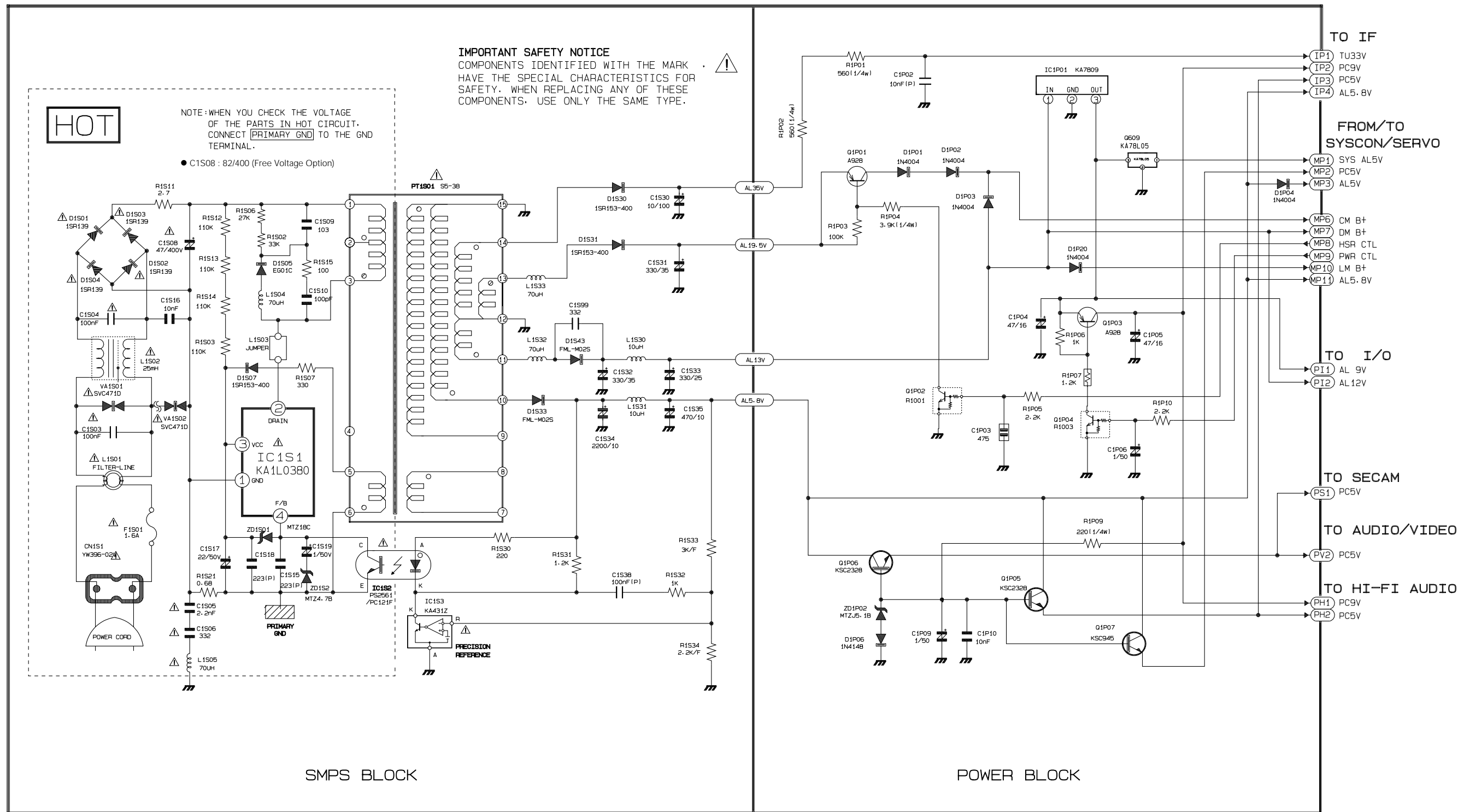


(Component Side)

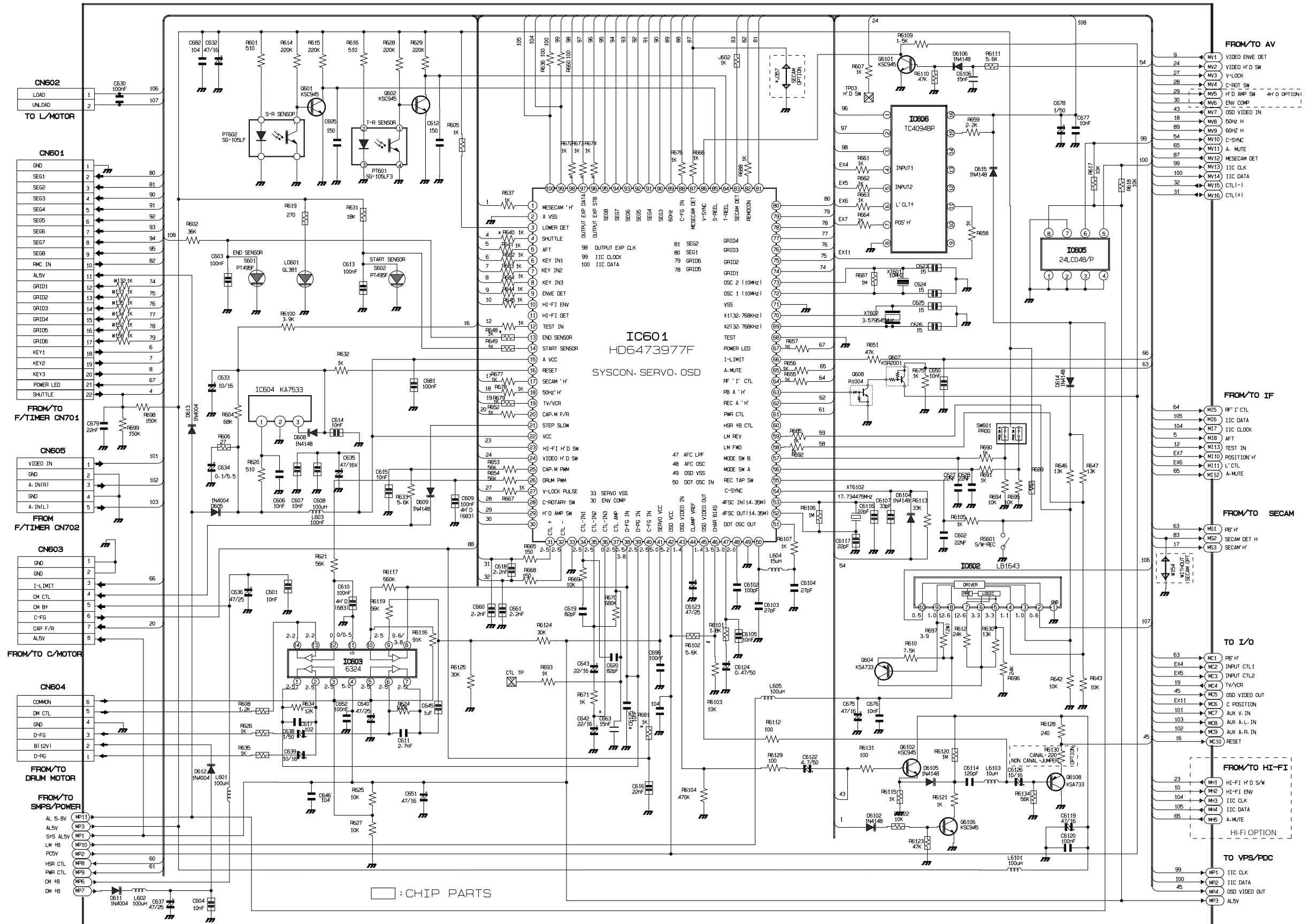


(Conductor Side)

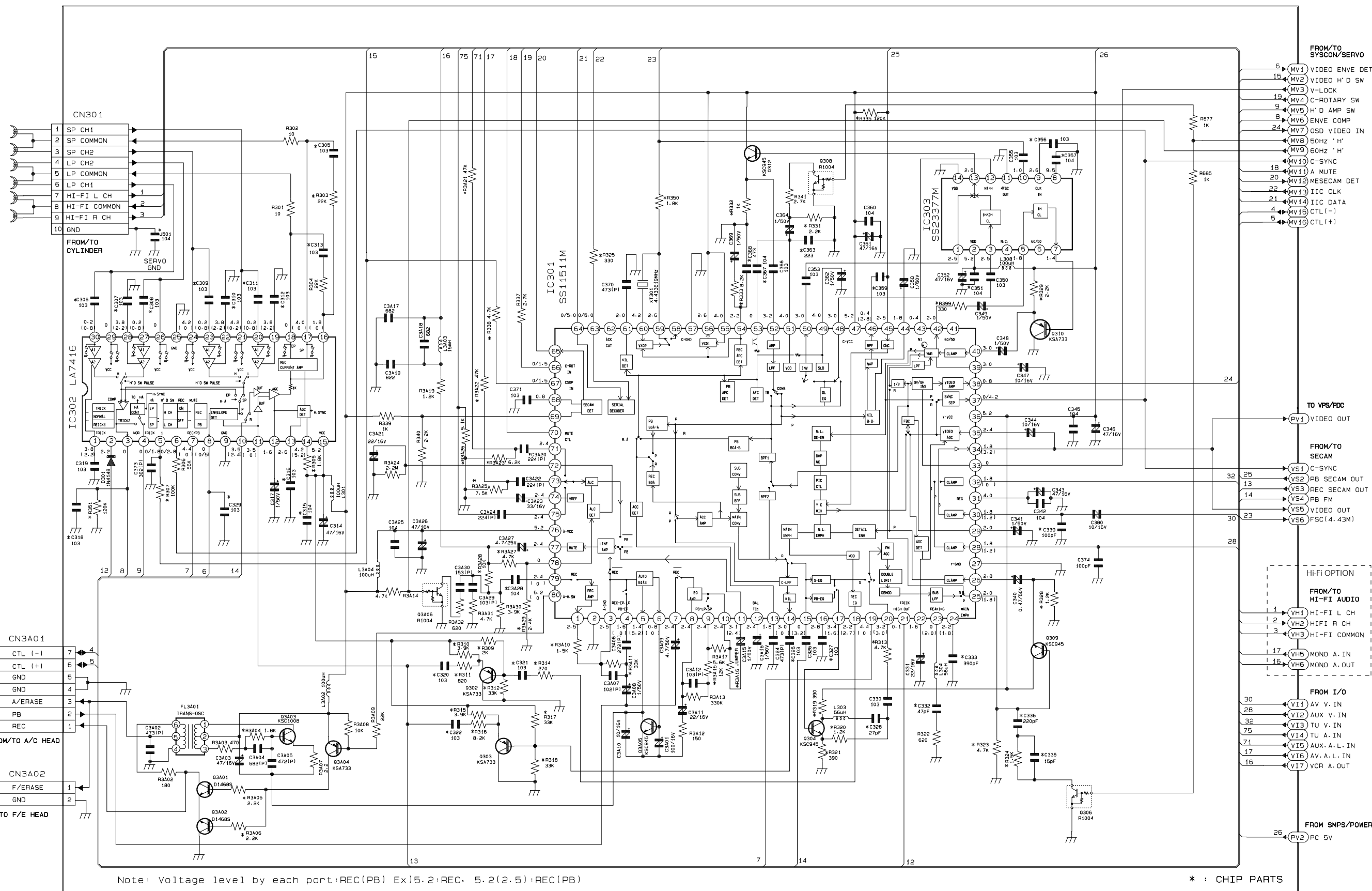
11-1 S.M.P.S./POWER



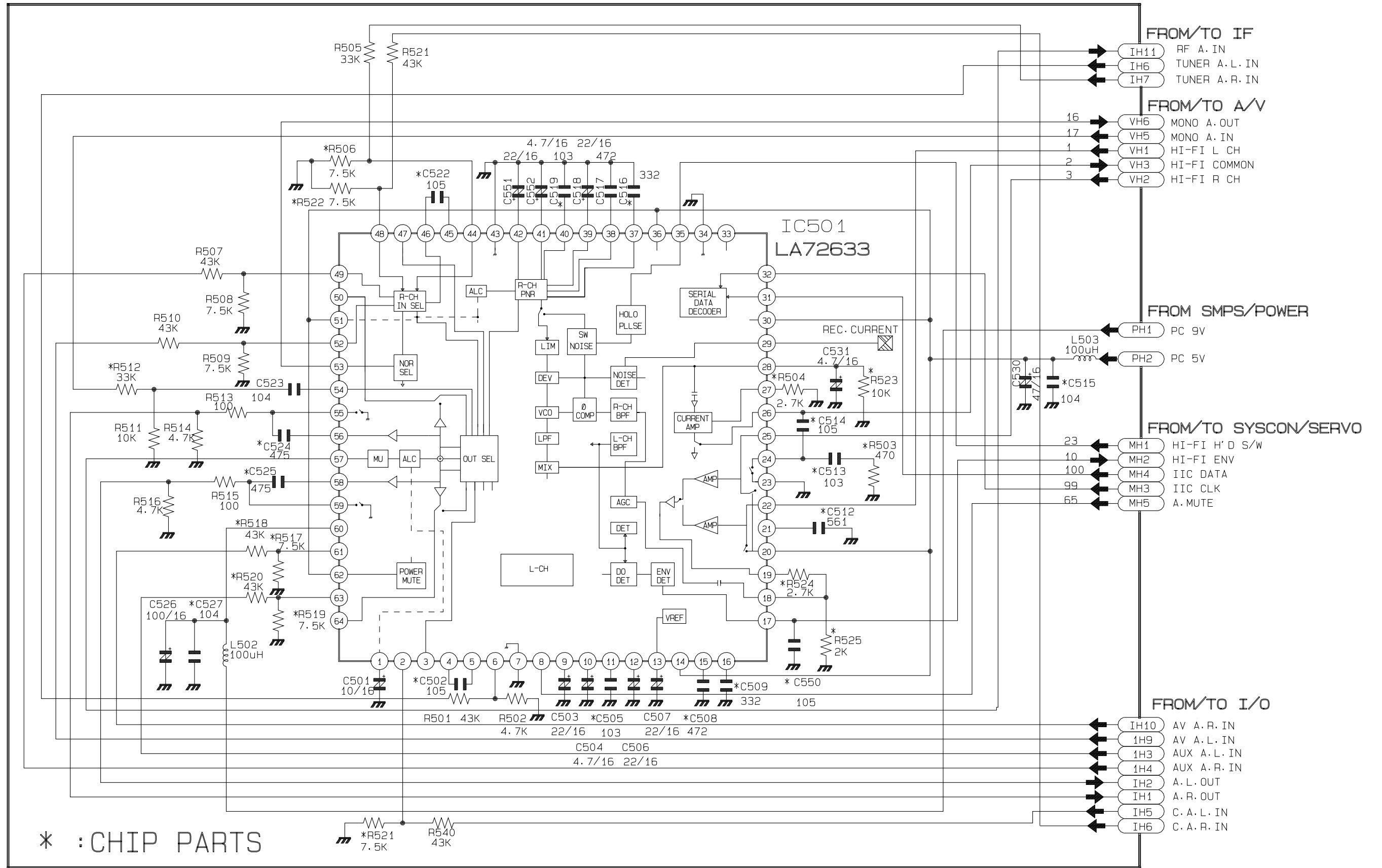
11-2 System Control/Servo



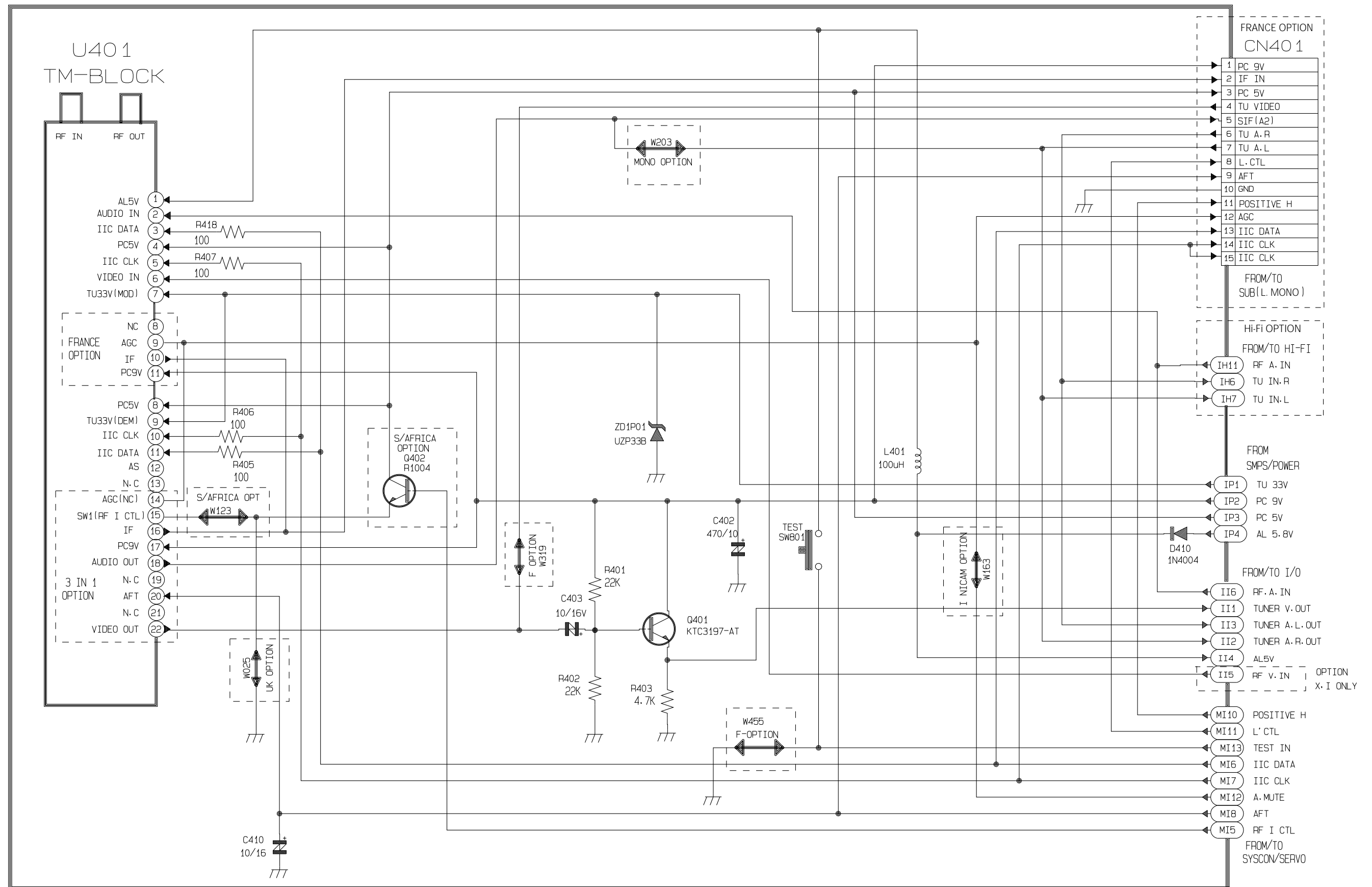
11-3 Audio/Video



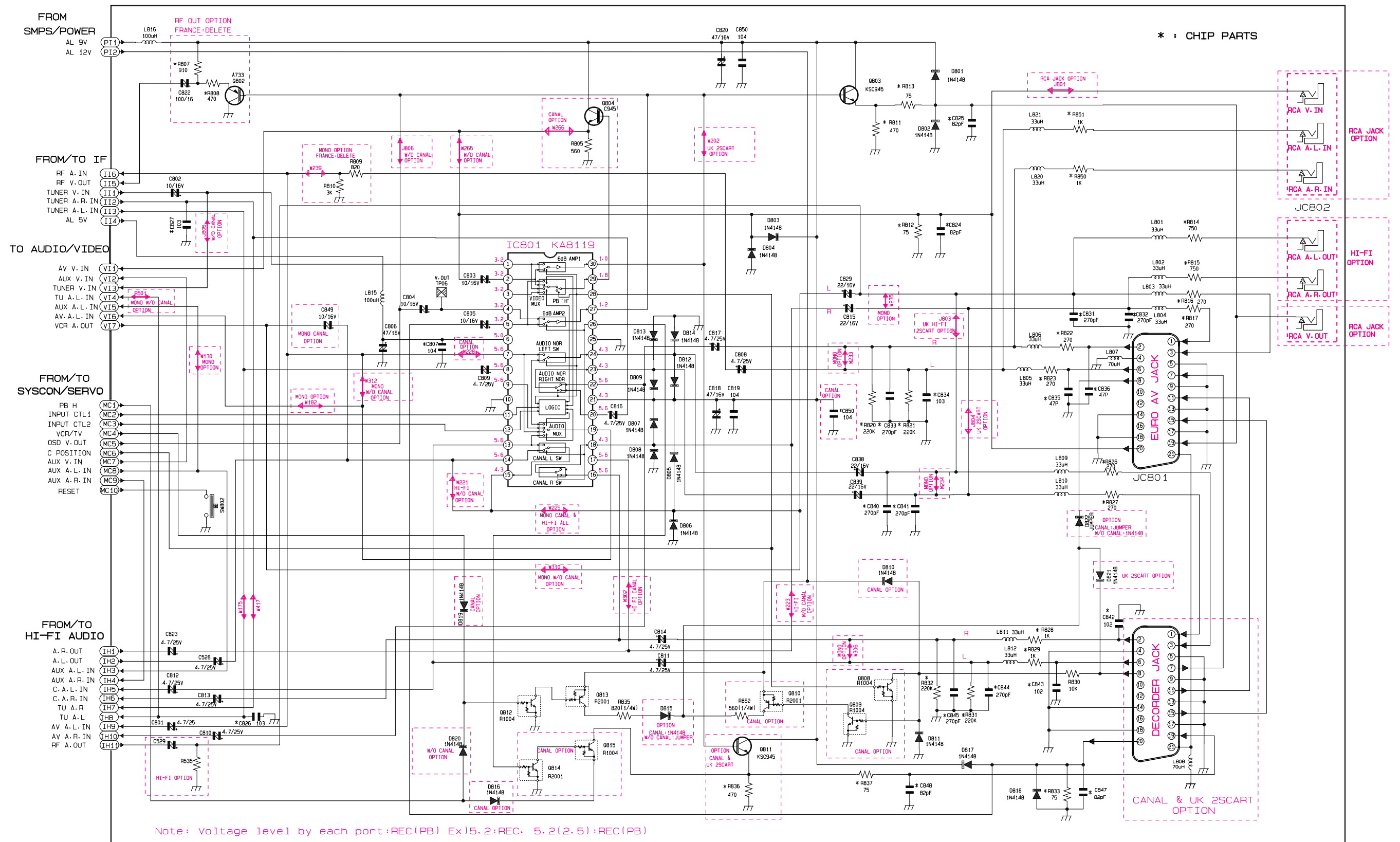
11-4 Hi-Fi



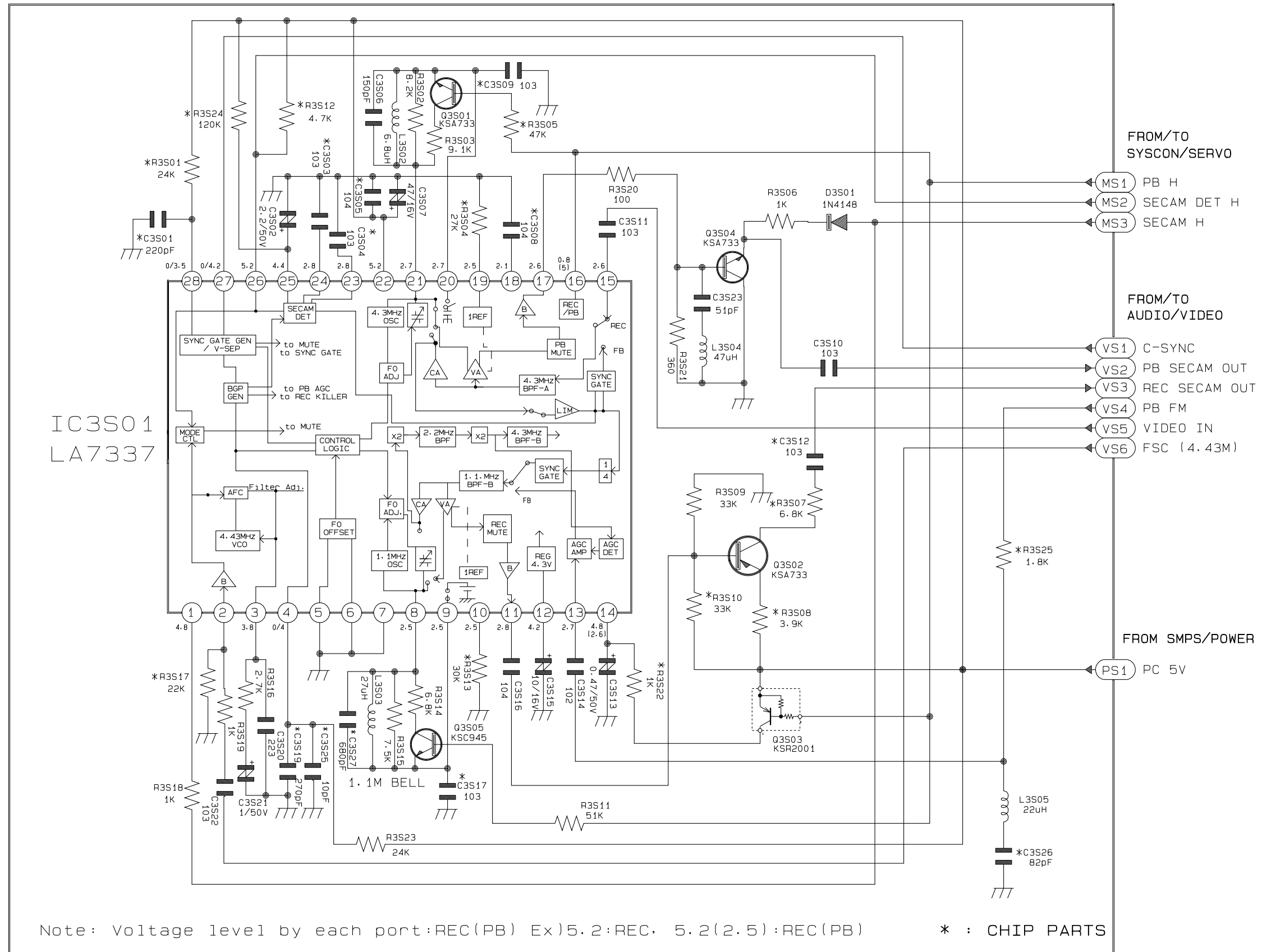
11-5 IF



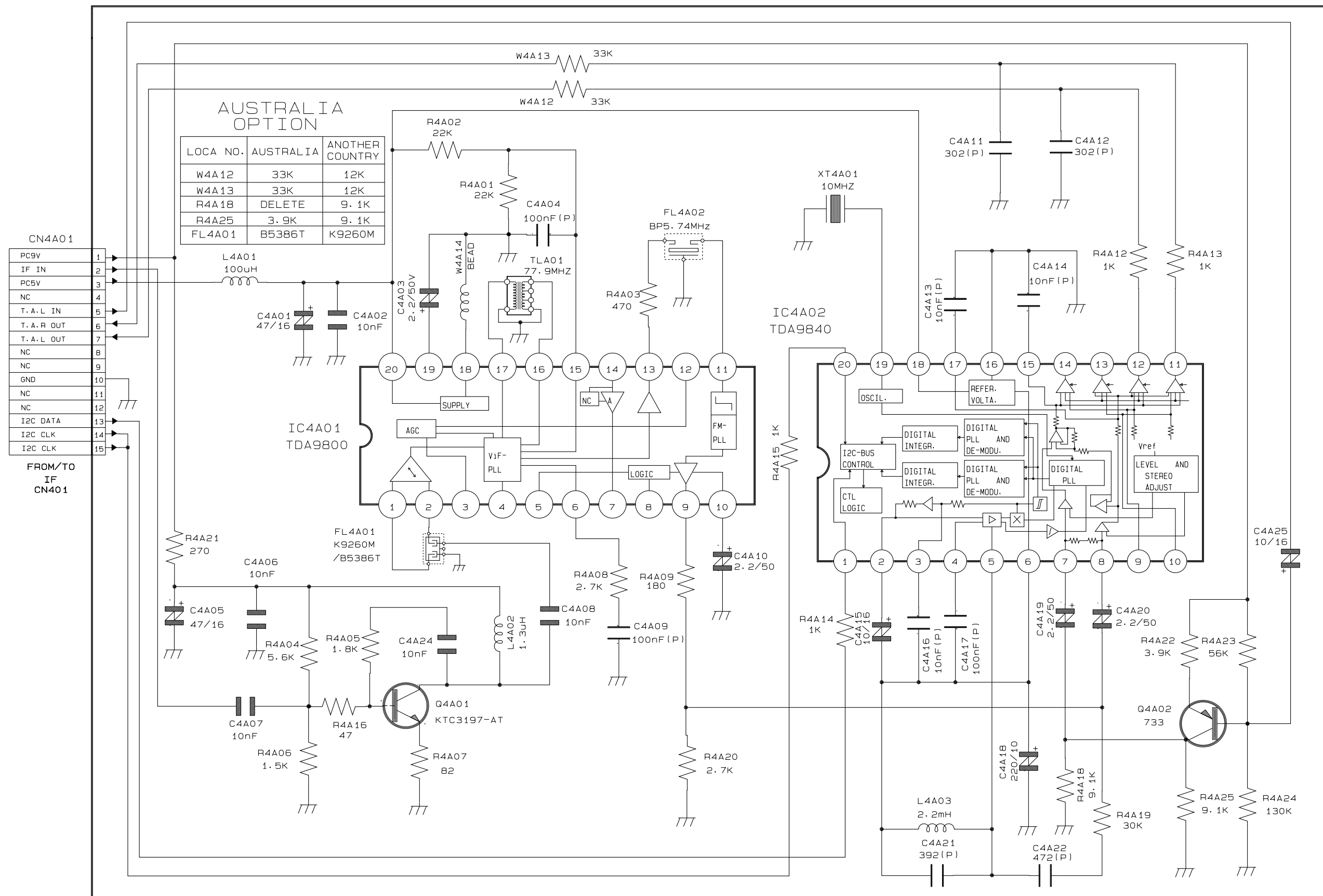
11-6 I/O



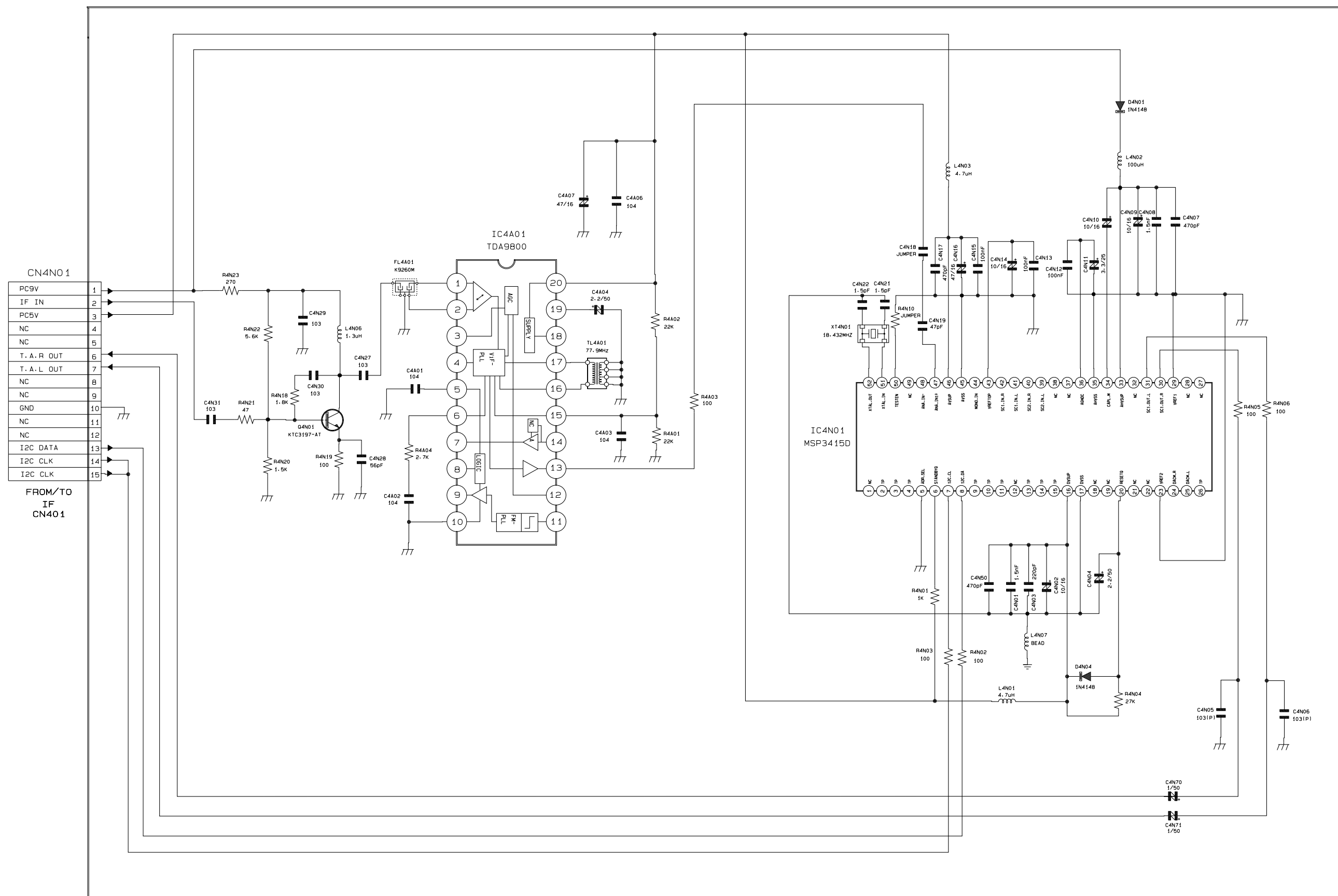
11-7 SECAM (SV-613F/610F Only)



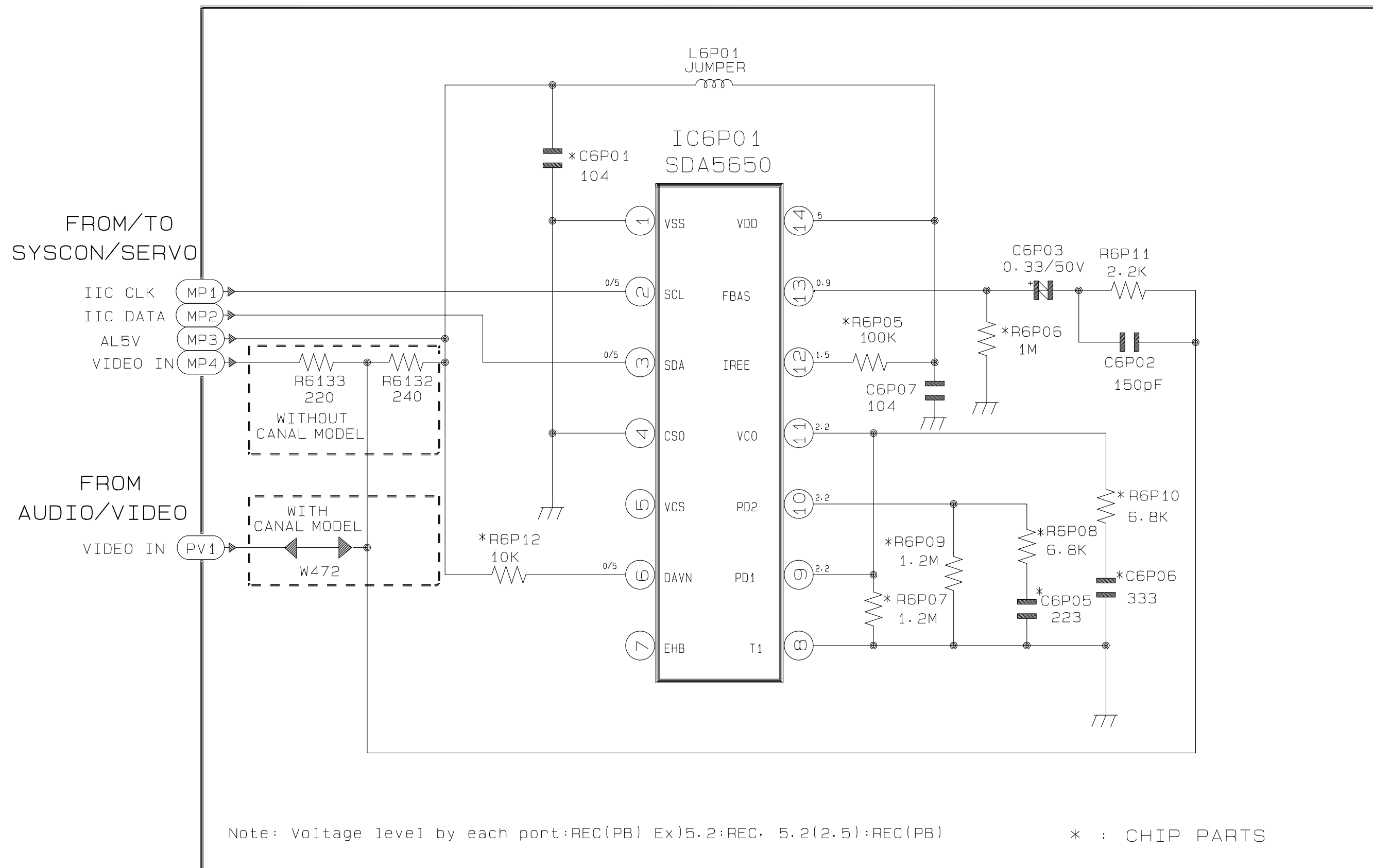
11-8 SUB (A2)



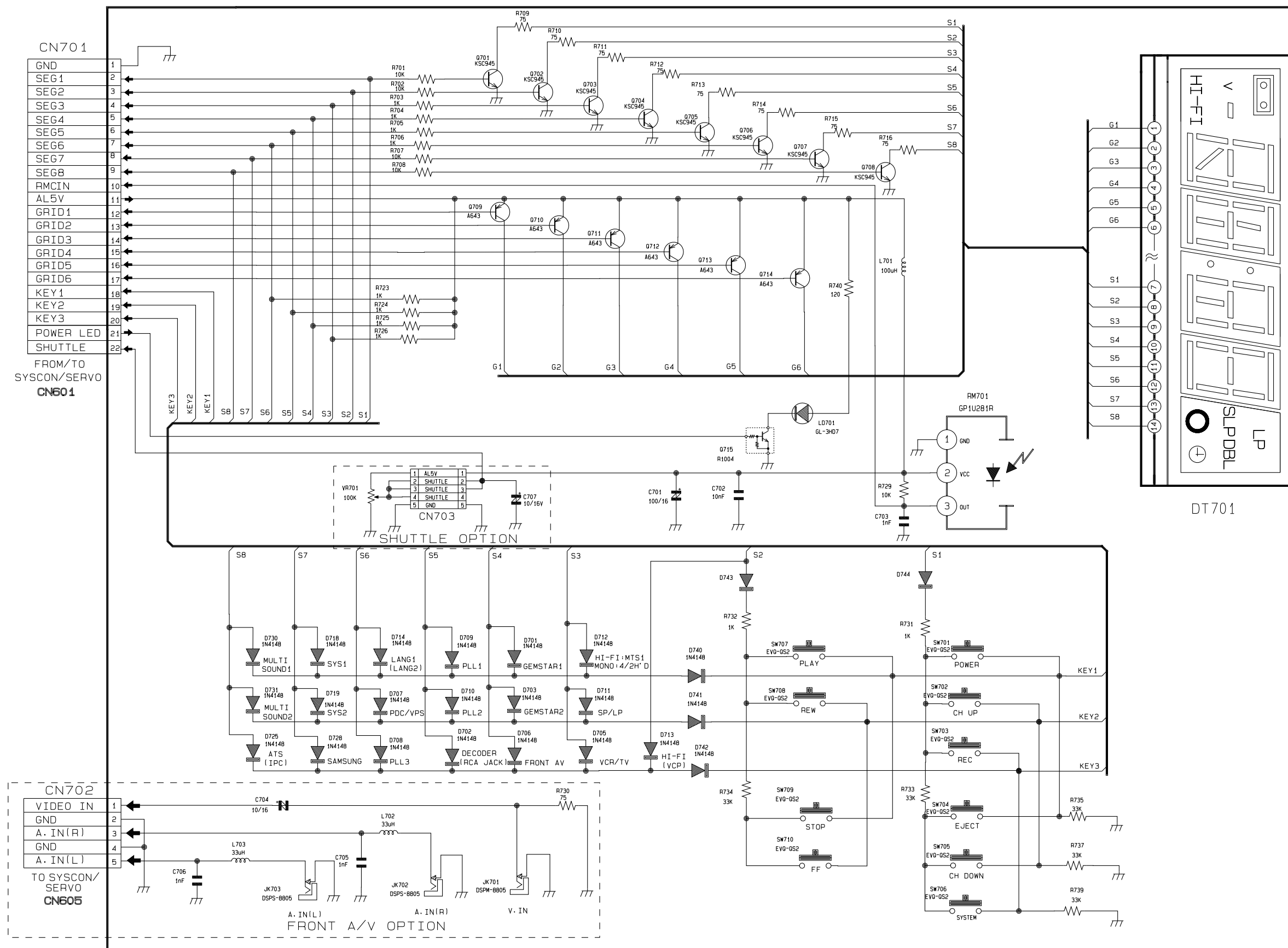
11-10 SUB (A2/NICAM)



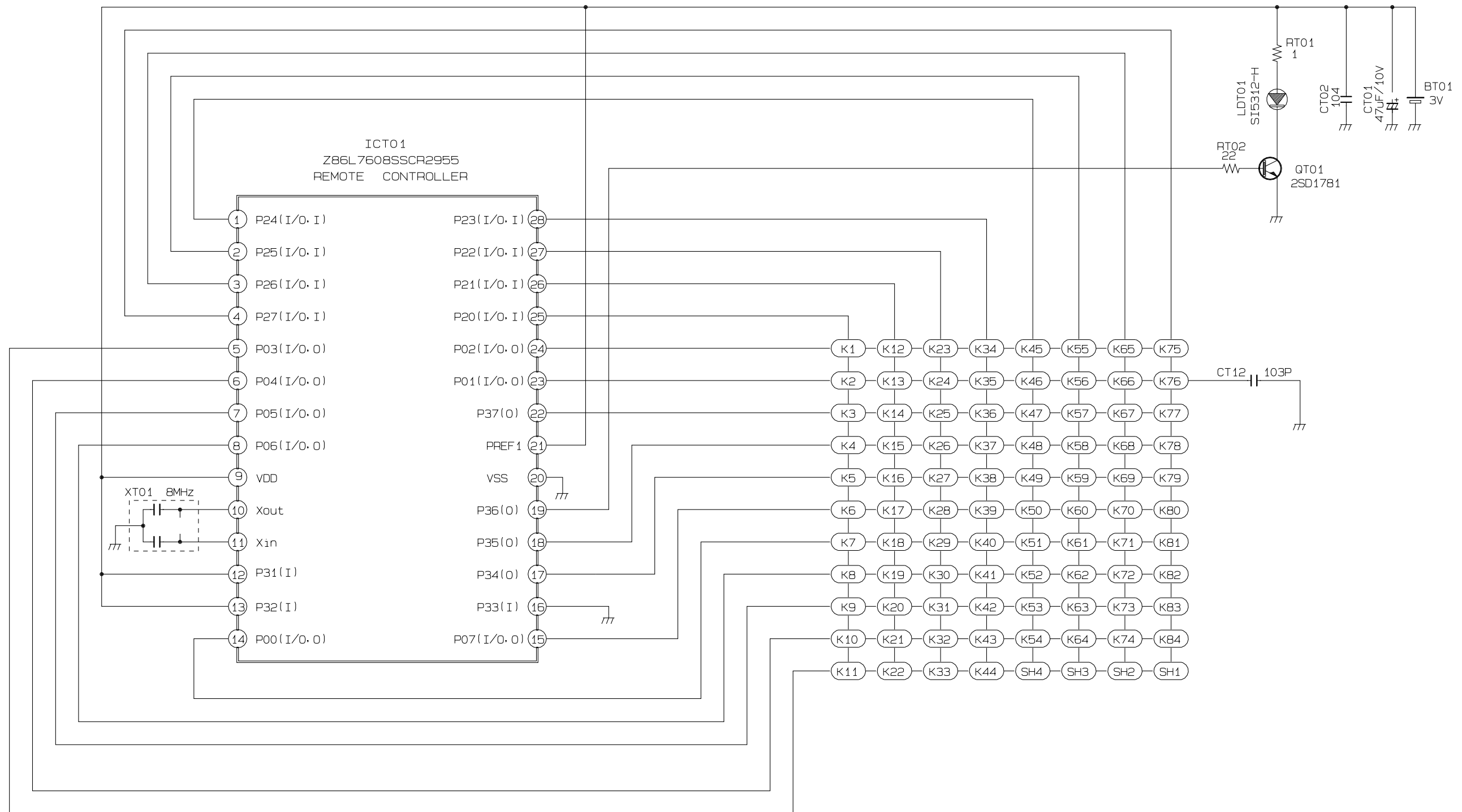
11-11 VCS/PDC



11-12 Function-Timer



11-13 Remote-Control



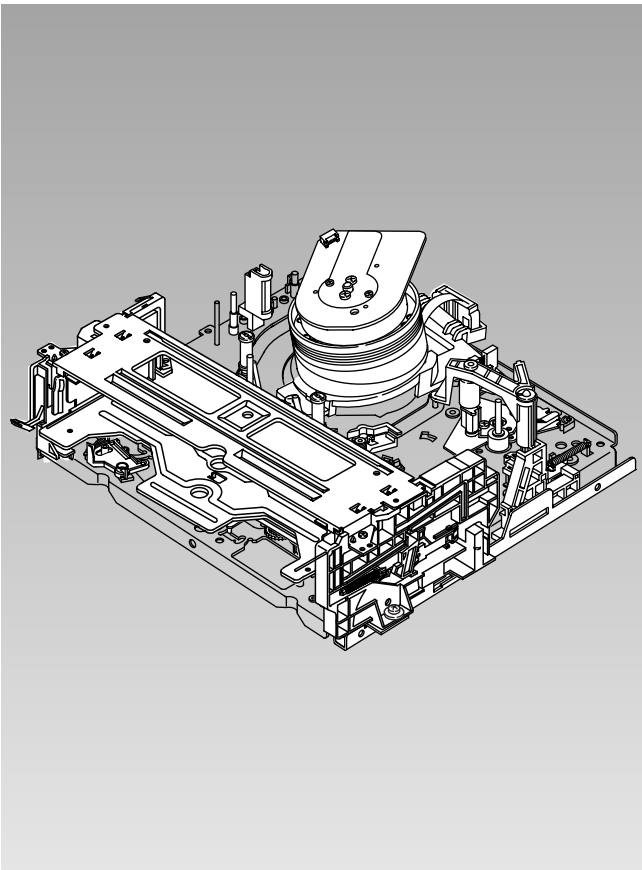
DX7-A/DX7-AC DX8-A/DX8-AC



MECHANICAL *Manual*

◆ File with the SERVICE MANUAL.

VHS DECK



CONTENTS

1. Disassembly and Reassembly
2. Alignment and Adjustment

1. Disassembly and Reassembly

1-1 Deck Parts Locations

1-1-1 Deck (Top View)

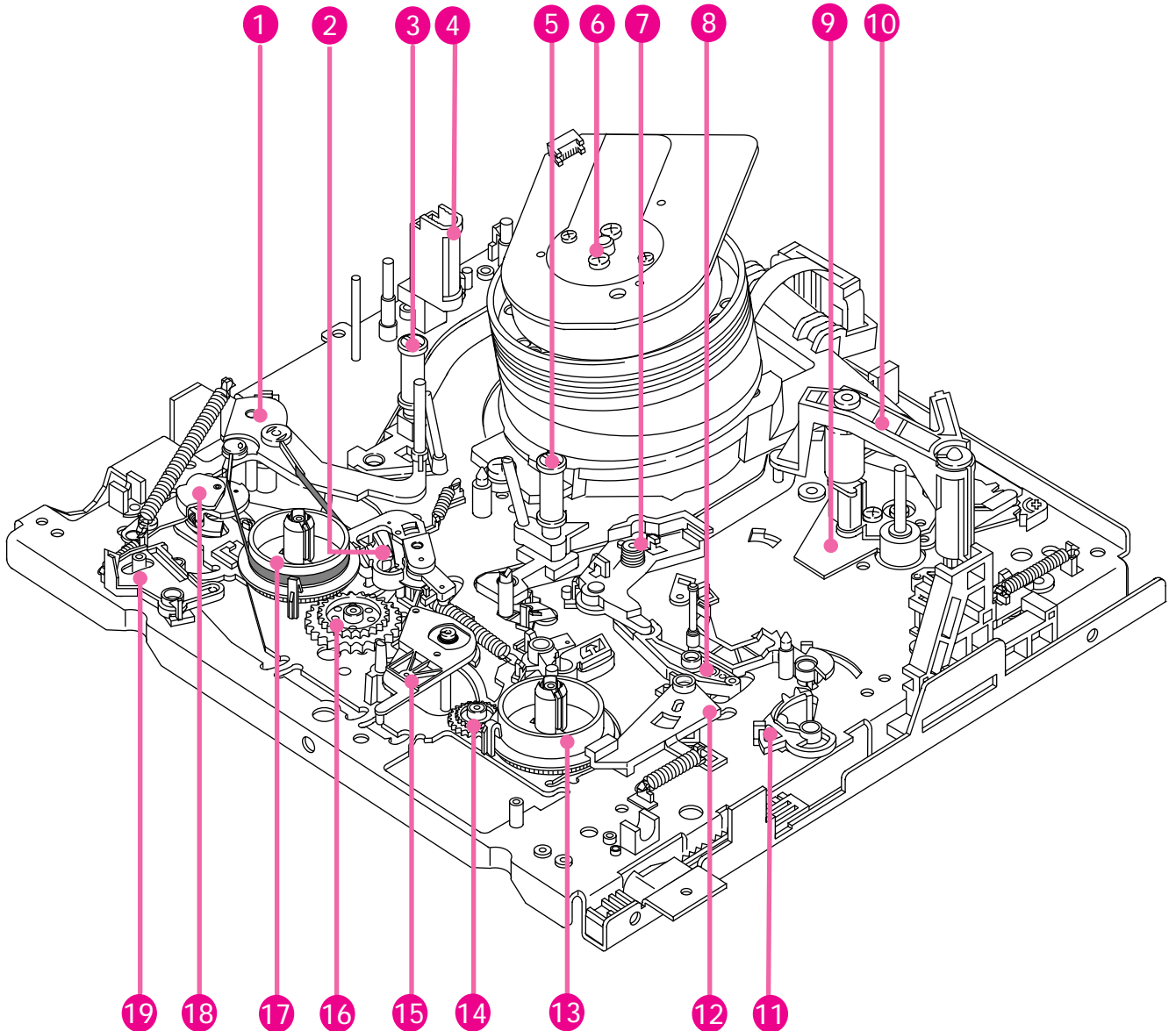


Fig. 1-1 Deck Top Parts Location (DX7-A/DX8-A DECK ONLY)

- | | | |
|---------------------------|-----------------------------|--|
| 1. ARM TENSION FULL ASS'Y | 9. FULL ACE HEAD ASS'Y | 17. REEL DISK "L" ASS'Y |
| 2. BRAKE MAIN "L" ASS'Y | 10. UNIT PINCH ROLLER ASS'Y | 18. LEVER JOG ASS'Y
(DX8-A/AC ONLY) |
| 3. GUIDE ROLLER ASS'Y "T" | 11. LEVER REVIEW | 19. LEVER REC SWITCH |
| 4. FULL ERASE HEAD | 12. BRAKE SUB "R" ASS'Y | |
| 5. GUIDE ROLLER ASS'Y "S" | 13. REEL DISK "R" ASS'Y | |
| 6. CYLINDER ASS'Y | 14. GEAR RELAY "T" ASS'Y | |
| 7. LEVER PINCH COMP ASS'Y | 15. IDLER ASS'Y | |
| 8. LEVER PINCH CAM | 16. GEAR RELAY "S" ASS'Y | |

1-1-2 Deck (Top View)

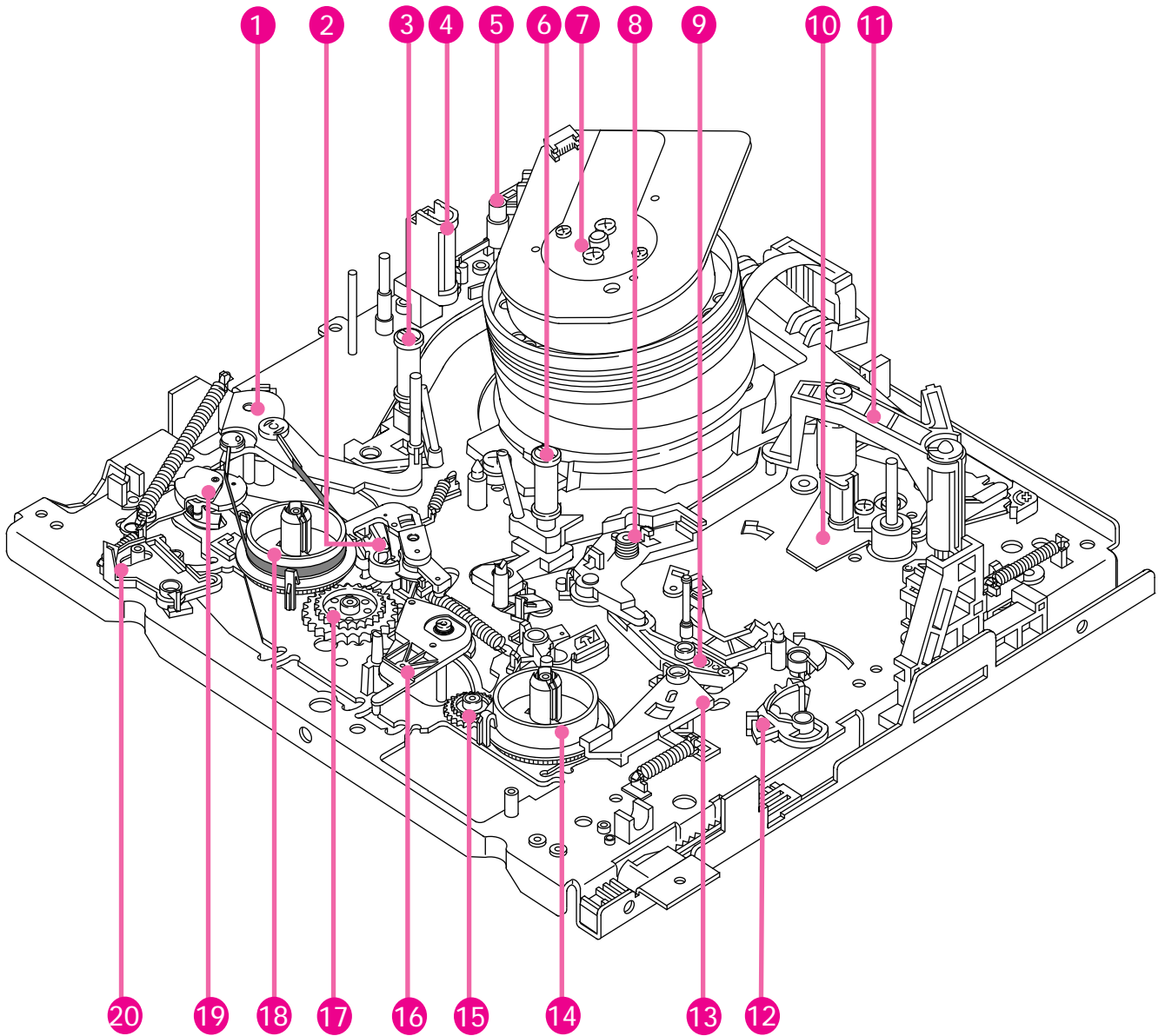


Fig. 1-2 Deck Top Parts Location (DX7-AC/DX8-AC DECK ONLY)

- | | | |
|---|-----------------------------|--|
| 1. ARM TENSION FULL ASS'Y | 8. LEVER PINCH COMP ASS'Y | 16. IDLER ASS'Y |
| 2. BRAKE MAIN "L" ASS'Y | 9. LEVER PINCH CAM | 17. GEAR RELAY "S" ASS'Y |
| 3. GUIDE ROLLER ASS'Y "T" | 10. FULL ACE HEAD AAS'Y | 18. REEL DISK "L" ASS'Y |
| 4. FULL ERASE HEAD | 11. UNIT PINCH ROLLER ASS'Y | 19. LEVER JOG ASS'Y
(DX8-A/AC ONLY) |
| 5. HEAD CLEANER ASS'Y
(DX7-AC/DX8-AC ONLY) | 12. LEVER REVIEW | 20. LEVER REC SWITCH |
| 6. GUIDE ROLLER ASS'Y "S" | 13. BRAKE SUB "R" ASS'Y | |
| 7. CYLINDER ASS'Y | 14. REEL DISK "R" ASS'Y | |
| | 15. GEAR RELAY "T" ASS'Y | |

1-1-3 Deck (Bottom View)

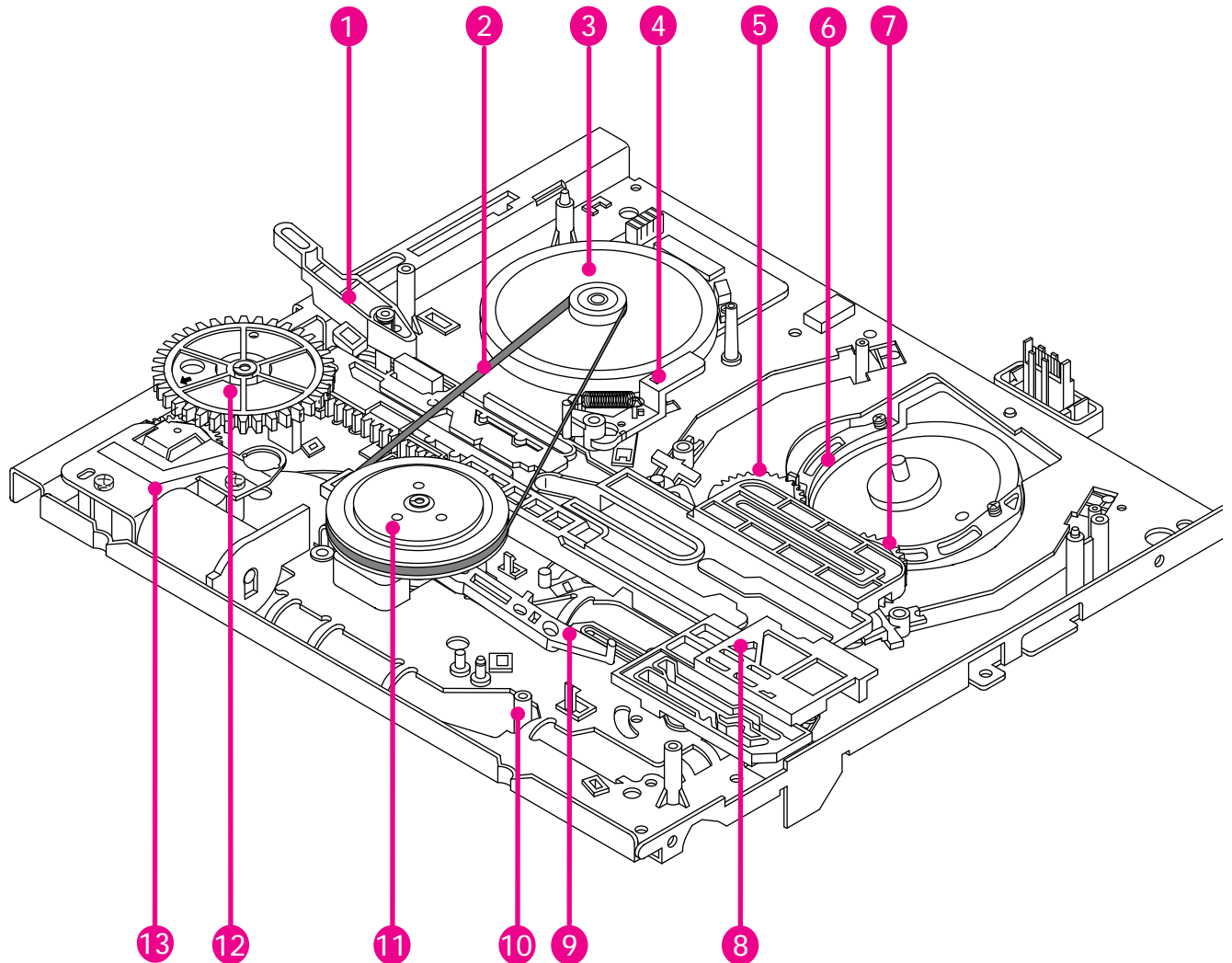


Fig. 1-3 Deck Bottom Parts Location

- | | |
|---------------------------|------------------------|
| 1. LEVER SLIDE PINCH | 8. SLIDE MAIN |
| 2. BELT CAPSTAN | 9. LEVER REC SWITCH |
| 3. MOTOR D.D CAPSTAN | 10. LEVER IDLER CHANGE |
| 4. BRAKE CAPSTAN ASS'Y | 11. CLUTCH ASS'Y |
| 5. GEAR LOADING "R" ASS'Y | 12. UNIT LOADING |
| 6. MOTOR CYLINDER | 13. GEAR MASTER |
| 7. GEAR LOADING "L" ASS'Y | |

1-1-4 Housing

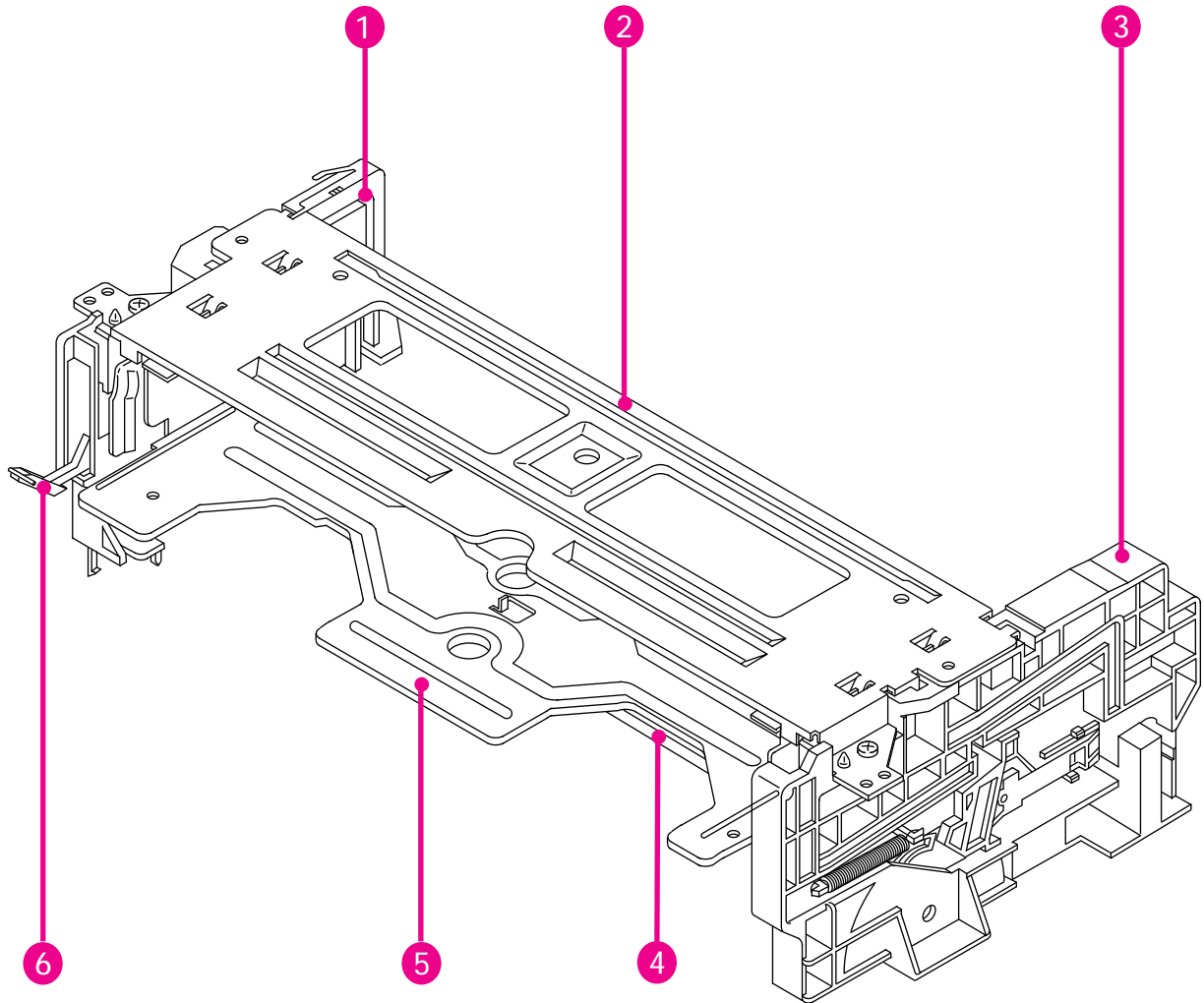


Fig. 1-4 Housing Parts Location

1. CHASSIS SIDE "L" ASS'Y
2. UPPER CHASSIS
3. CHASSIS SIDE "R" ASS'Y
4. SHAFT ARM ASS'Y
5. HOLDER CASSETTE ASS'Y
6. LEVER DOOR

1-2 Housing Assembly

1-2-1 Removal from Main Base

1. Remove 3 Screws ①.
2. Lift the Housing Ass'y in the direction of arrow "B", while pushing the tab ② in the direction of arrow "A".
(Refer to detail drawing)

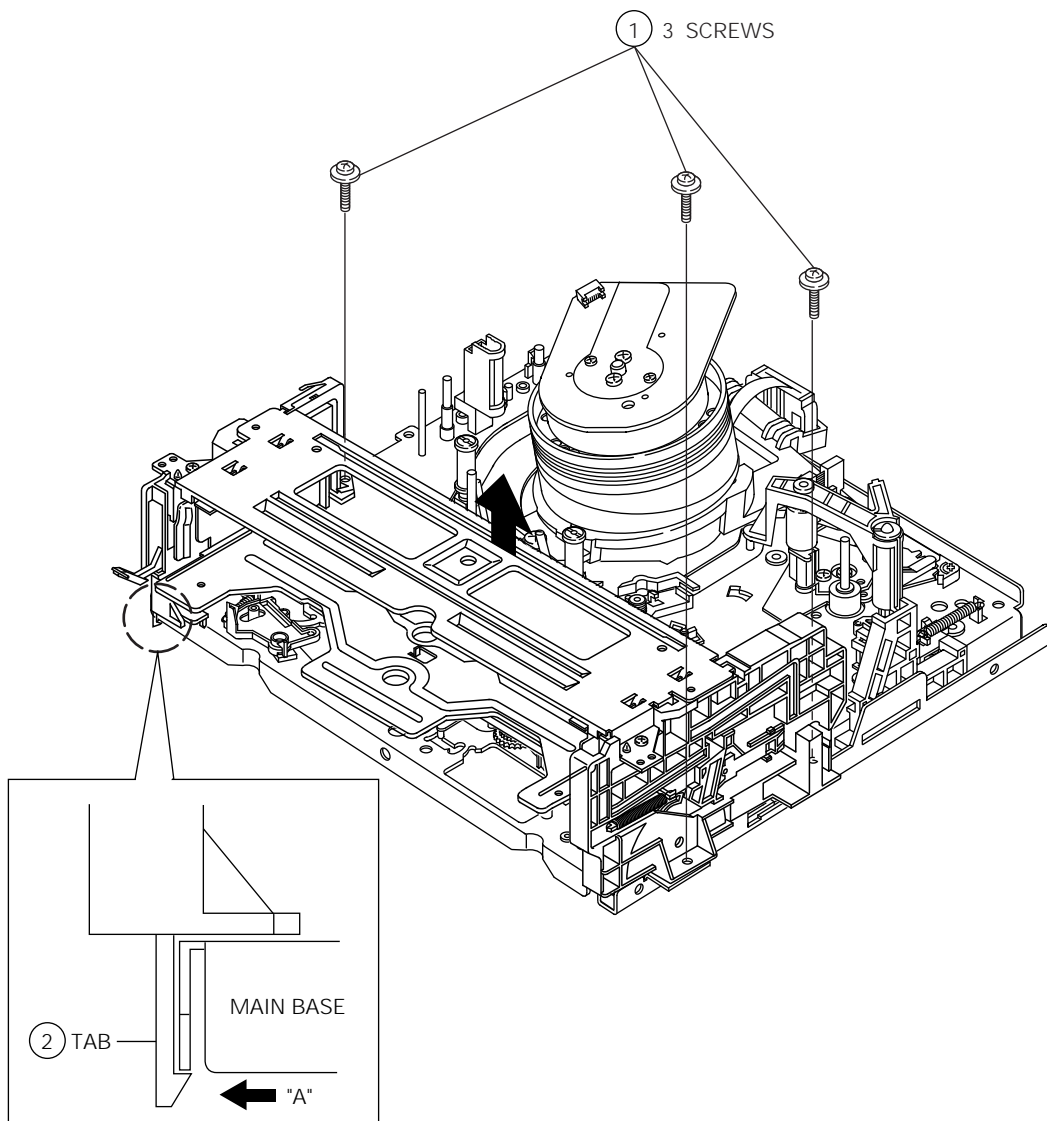


Fig. 1-5 Housing Ass'y Removal from Main Base

1-2-2 Disassembly

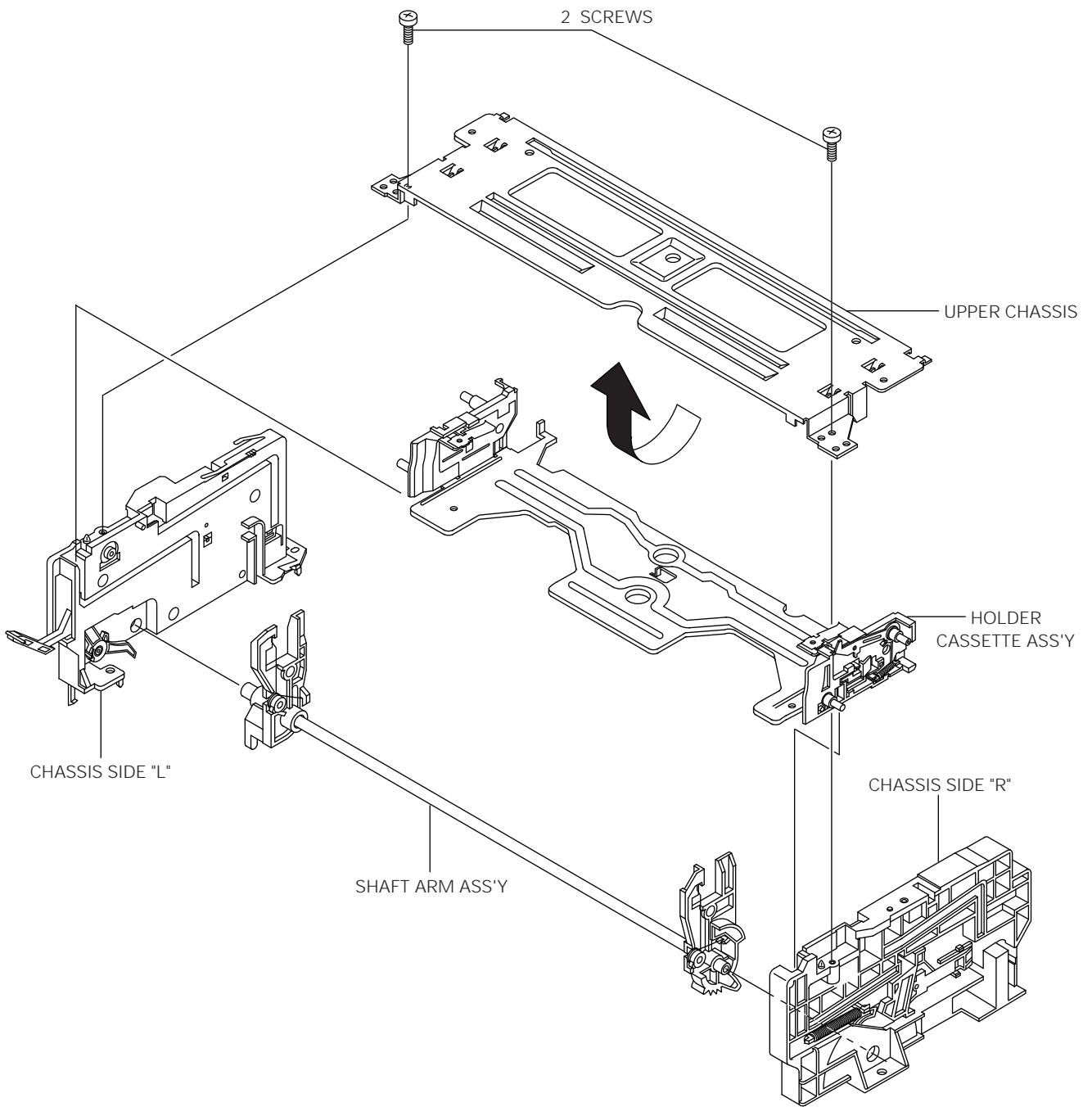


Fig. 1-6 Housing Ass'y Removal

1-2-3 Upper Chassis Removal

1. Remove 2 Screws ①.
2. Lift the Upper Chassis ② in the direction of arrow "A".

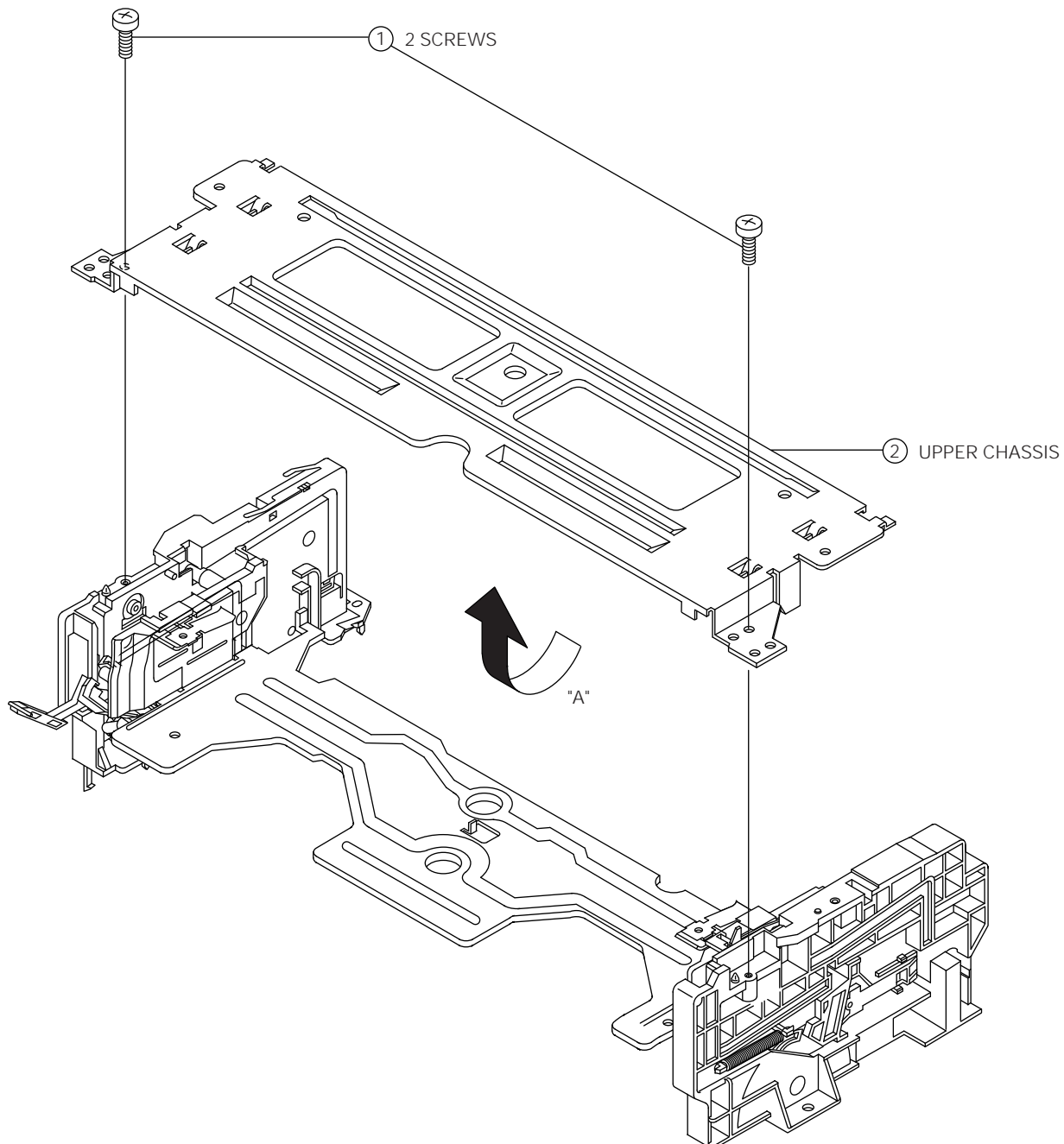


Fig. 1-7 Upper Chassis Removal

1-2-4 Holder Cassette Ass'y and Chassis Side L/R Removal

1. Lift the Cassette Holder ① in the direction of arrow "A" (Refer to Fig. A).
2. Remove the Side Chassis "L" ② and "R" ③ from Arm Shaft Ass'y ④ in the direction of arrow "B", "C" (Refer to Fig. B).

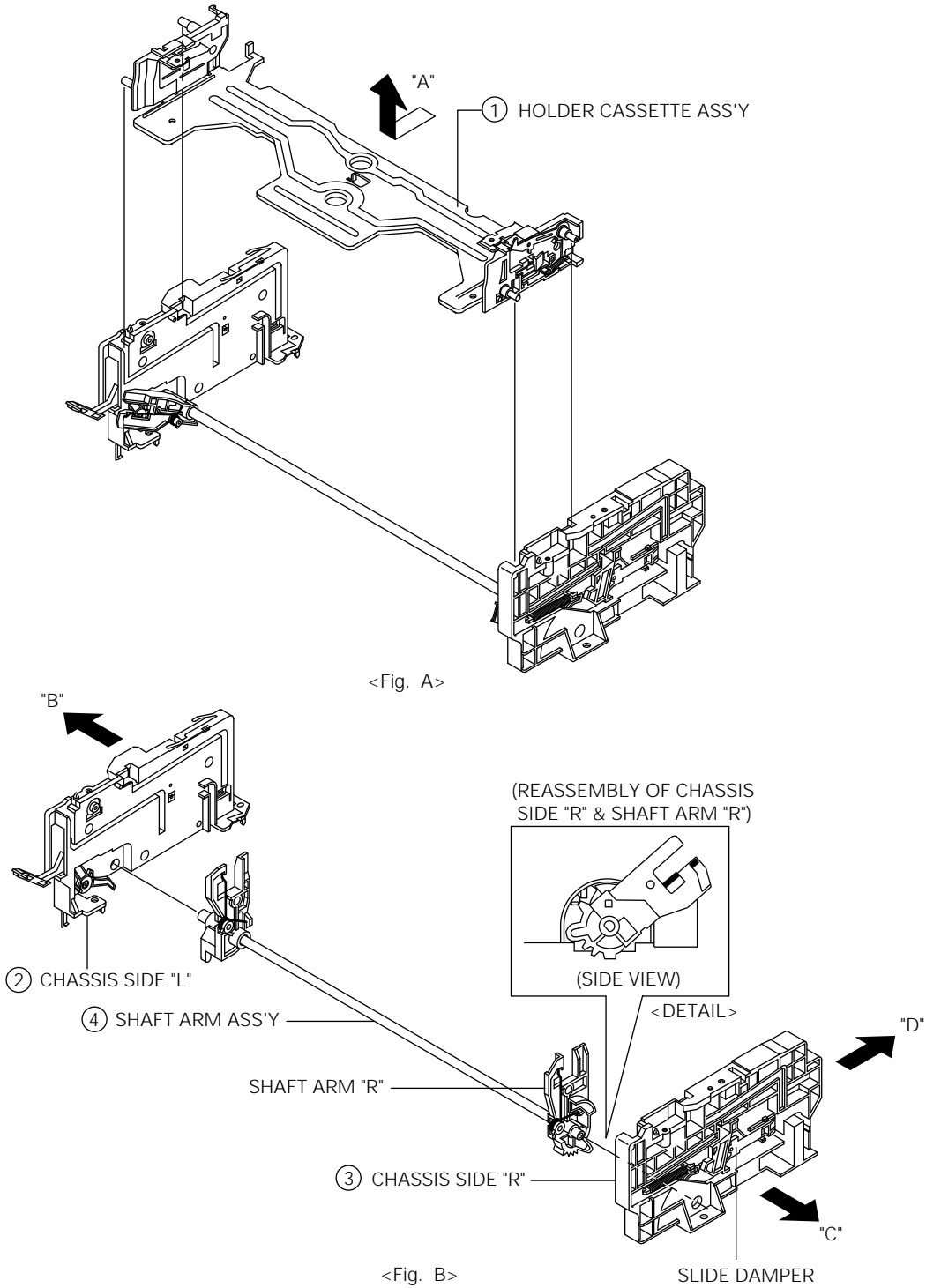


Fig. 1-8 Holder Cassette Ass'y and Chassis Side L/R

1-2-5 Chassis Side "R" Parts Locations

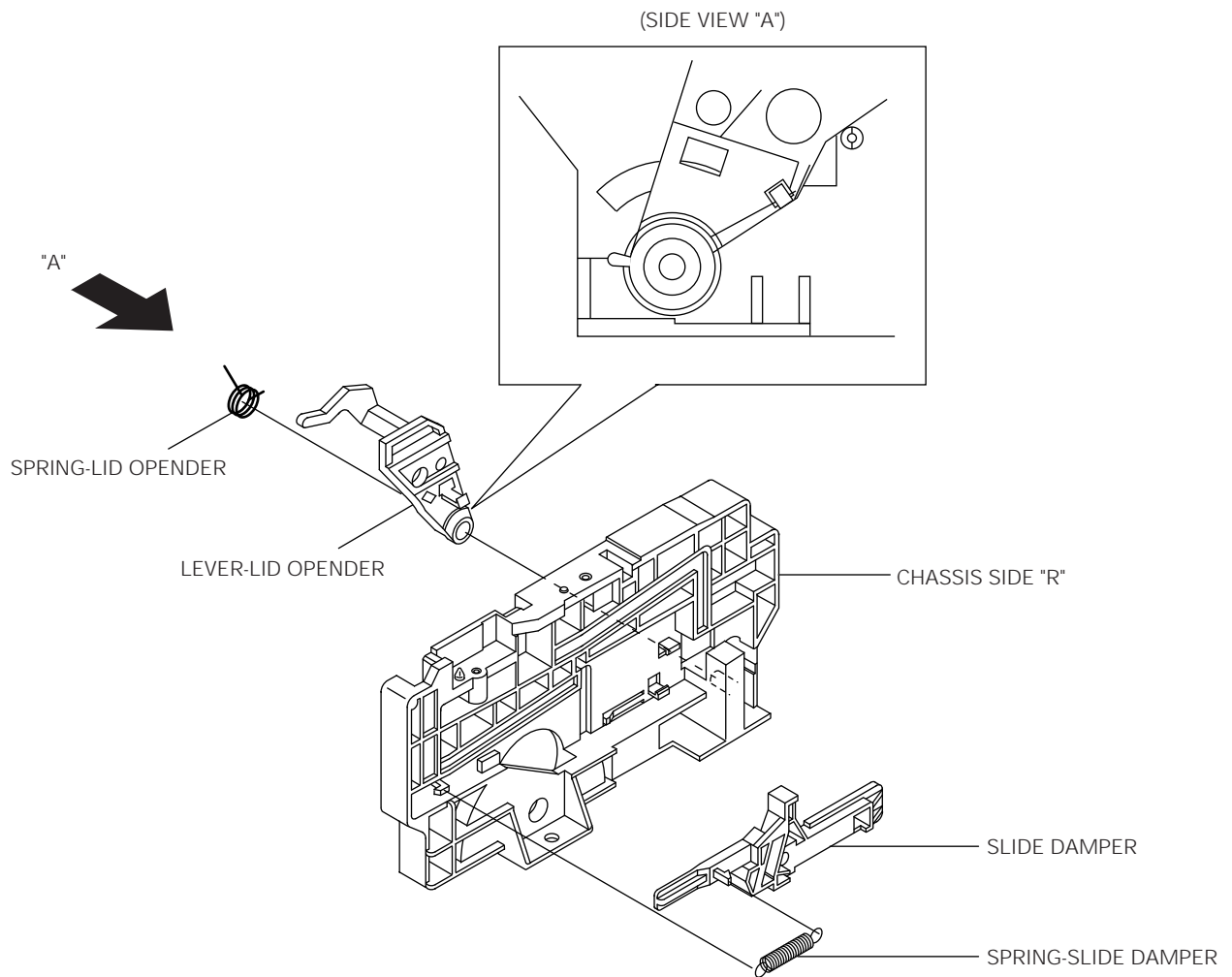


Fig. 1-9 Chassis Side "R" Parts Locations

Note : If you operate the deck when the Cassette Ass'y Holder is removed, the Arm Shaft "R" and the Damper Slide are not returned to their original positions. If this happens by accident, push the Damper Slide of Side Chassis "R" in the direction of arrow "D", and return the Damper Slide in the reverse direction of arrow "D" when the Arm Shaft Ass'y is in eject mode.

1-2-6 Slide Damper Removal

1. Remove the Slide Damper Spring ①.
2. Push the Stopper ③ of the Side Chassis "R" ④. Move the Damper Slide ② in the direction of arrow.
3. Align the Damper Slide ② with the chassis side tab (as shown detail drawing).

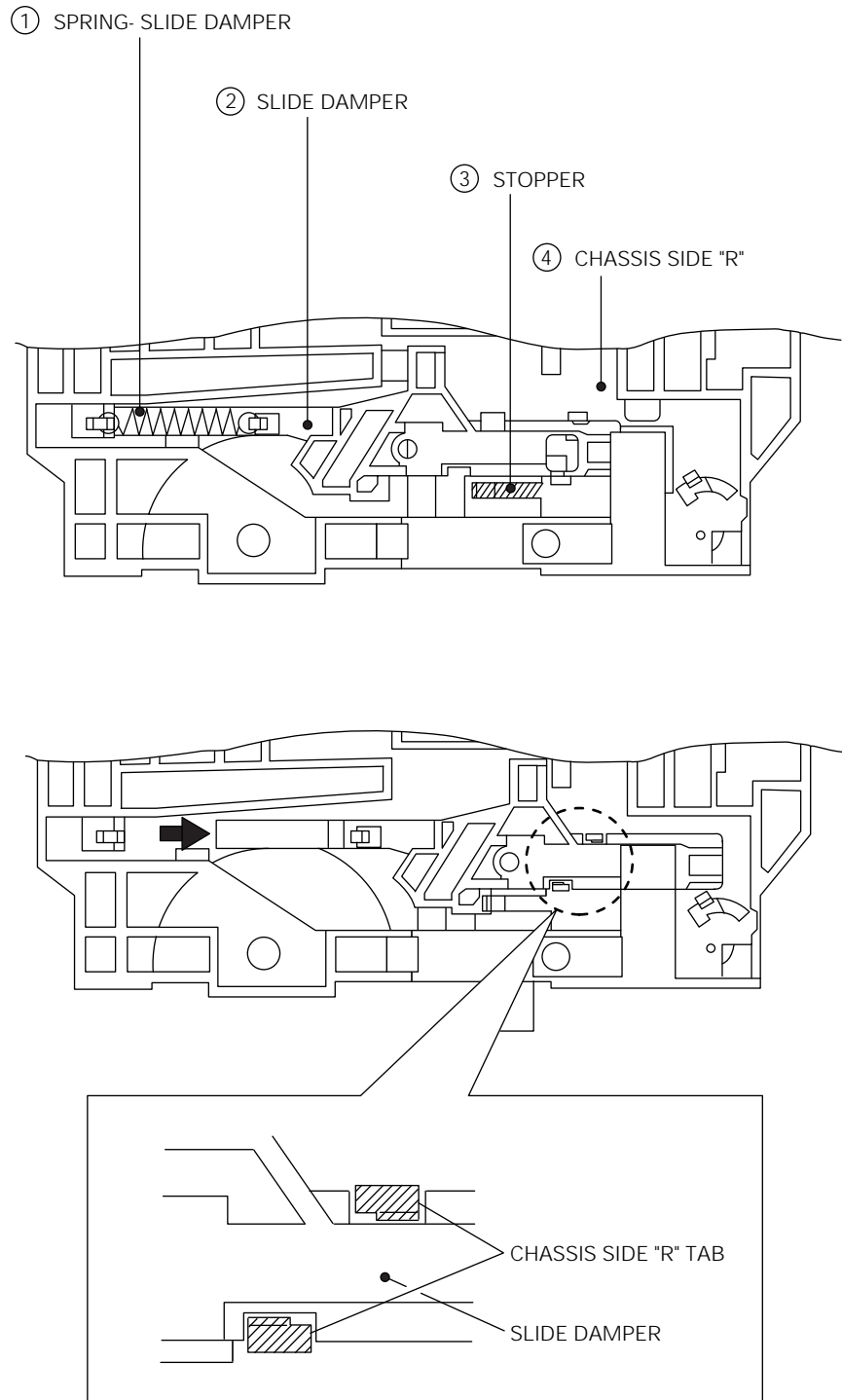


Fig. 1-10 Slide Damper Removal

1-3 Cylinder Ass'y

1-3-1 Exploded View of Cylinder Ass'y

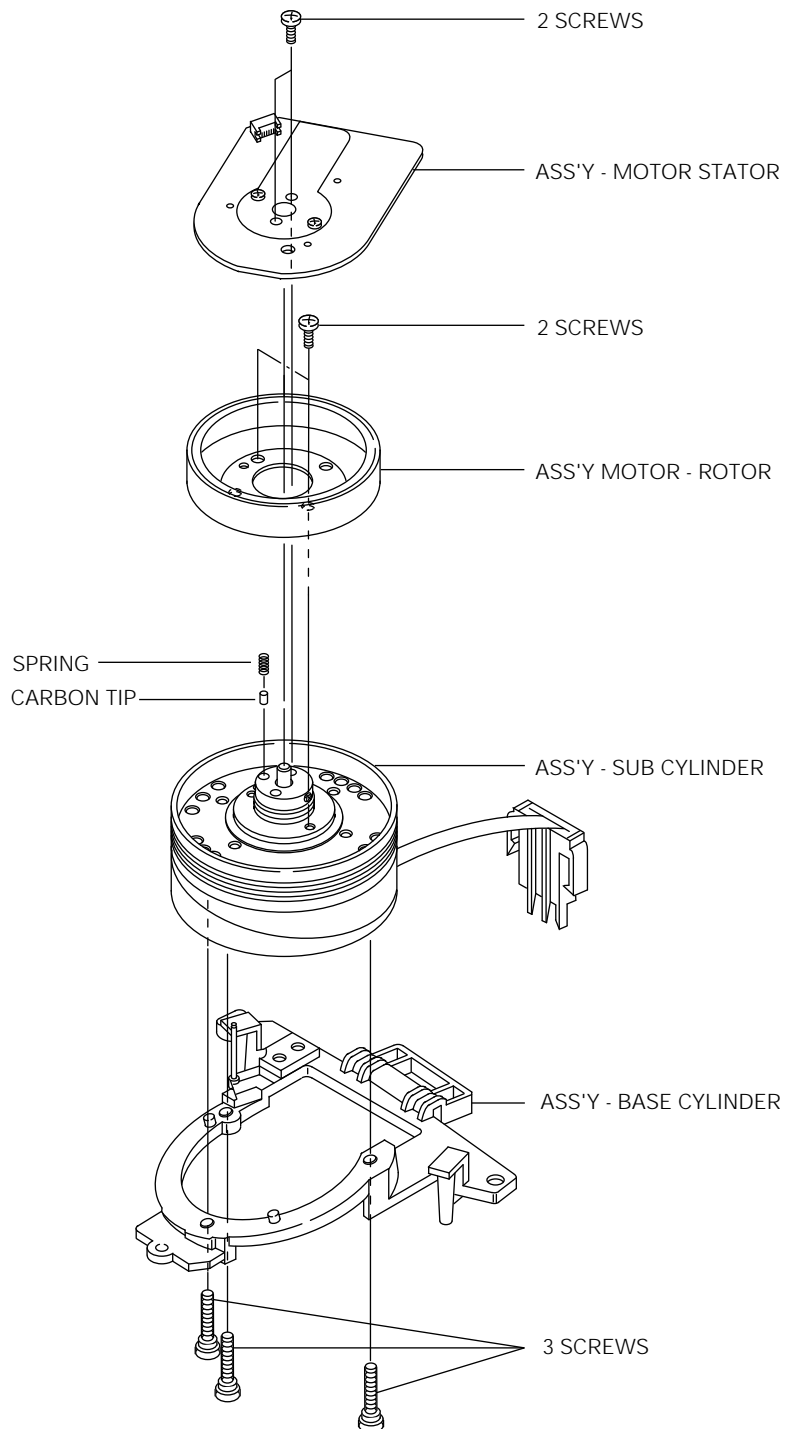


Fig. 1-11 Exploded View of Cylinder Ass'y

1-3-2 Stopper Tape Removal (Only for Deck : DX7-A/DX8-A)

1. Release 1 tab ① in the direction of arrow "A". (Refer to detail drawing)
2. Lift the Tape Stopper ② in the direction of arrow "B".

Note: Stopper tape has deleted from JAN.1998

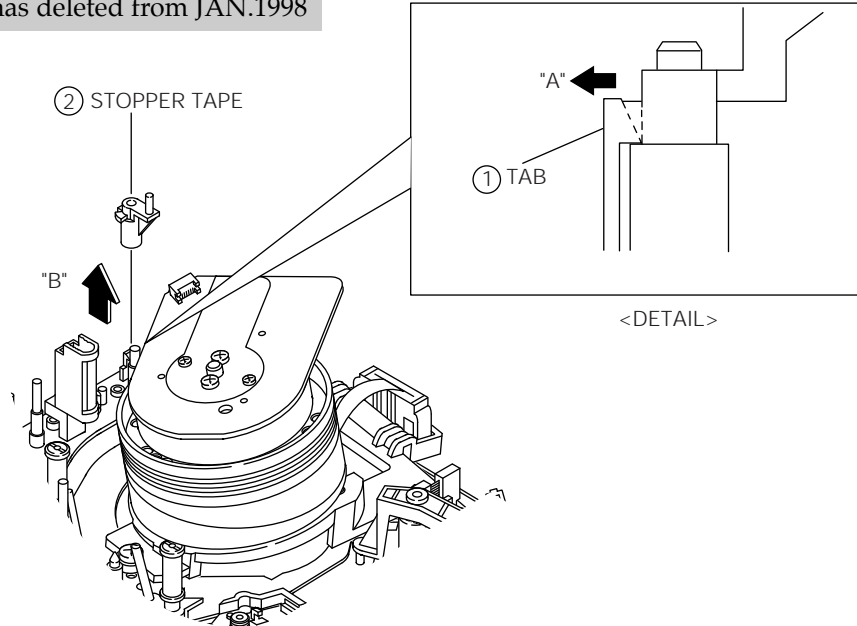


Fig. 1-12 Stopper Tape Removal

1-3-3 Head Cleaner Ass'y Removal (Only for Deck : DX7-AC/DX8-AC)

1. Release 1 tab ① in the direction of arrow "A". (Refer to detail drawing)
2. Lift the Head Cleaner ② in the direction of arrow "B".

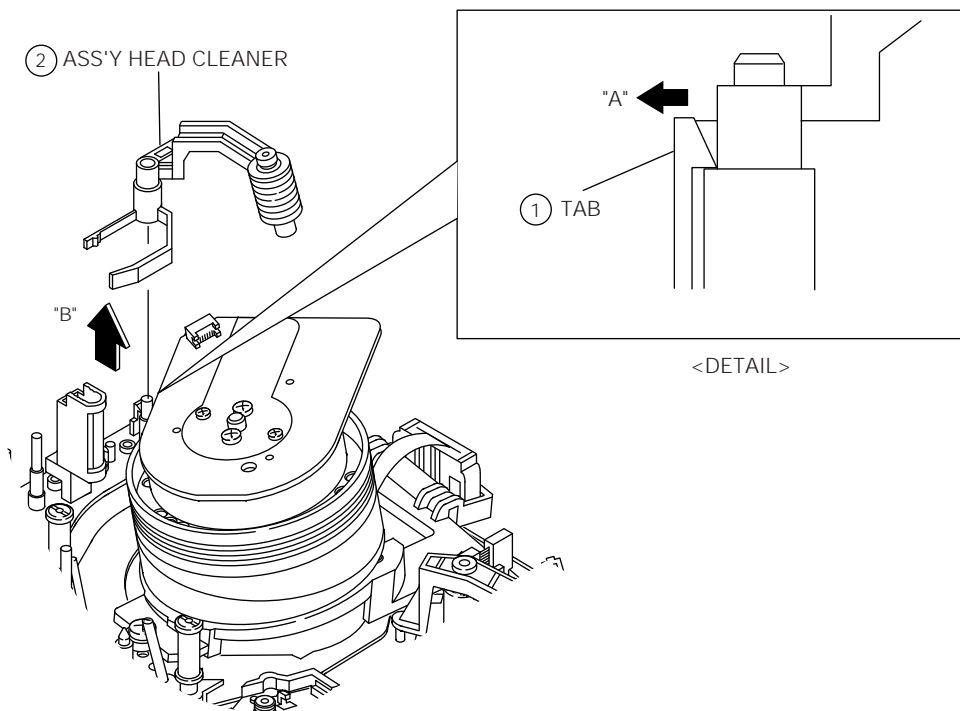


Fig. 1-13 Head Cleaner Ass'y Removal

1-3-4 Cylinder Ass'y Removal from Main Base

1. Remove 3 Screws ① holding the Main Base and the Cylinder Ass'y.
2. Lift the Cylinder Ass'y ② in the direction of arrow.

Note : Do not touch the video heads during removal or installation.

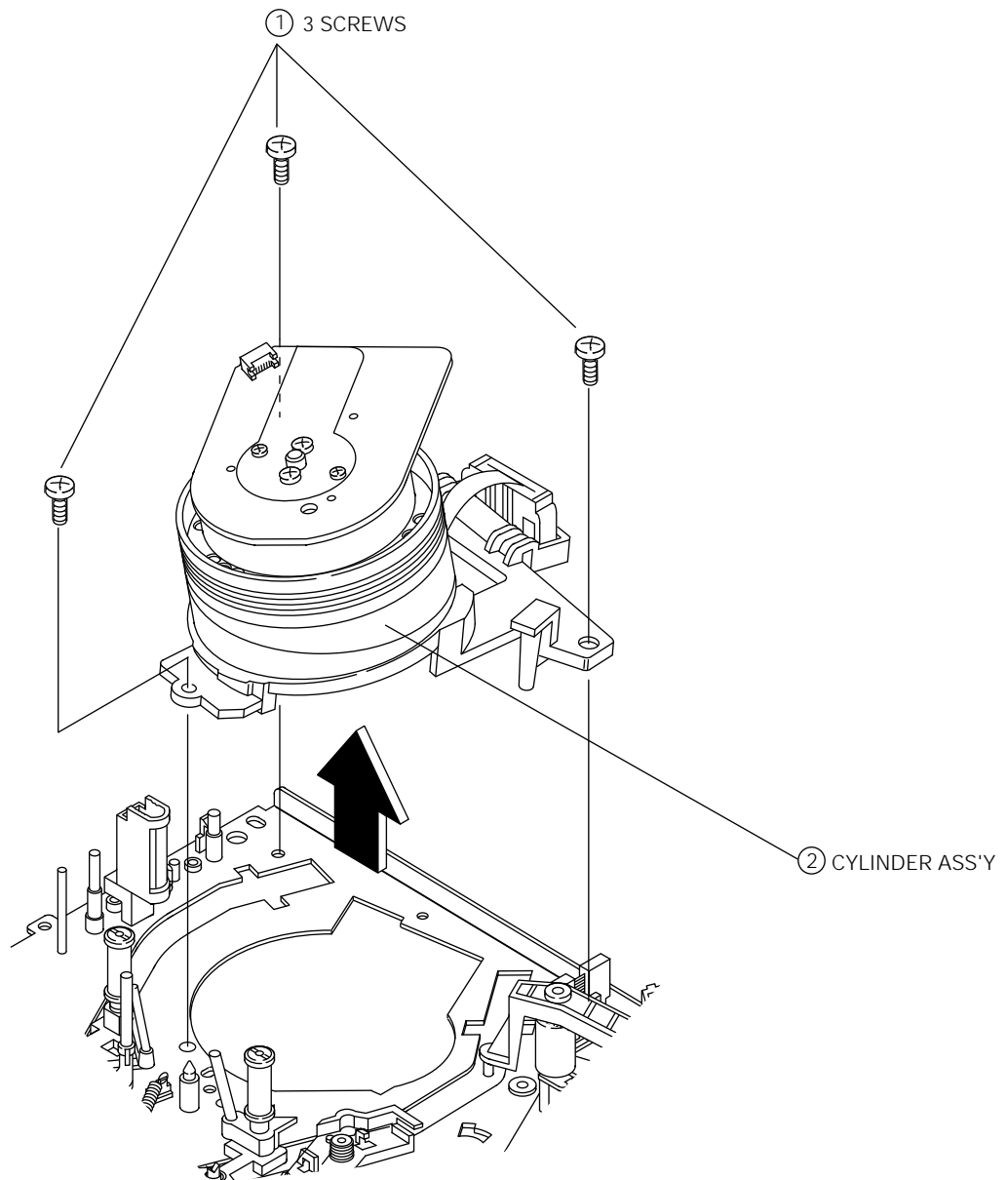


Fig. 1-14 Cylinder Ass'y Removal from Main Base

1-3-5 Holder FPC Removal

1. Release the Holder FPC tab holding the Cylinder Base ② in the direction of arrow. (Refer to detail drawing)
2. Disconnect the Holder FPC ① from the Cylinder Base ②.

Note : When disconnecting the FPC Holder ① from the Cylinder Base ② :
Take care not to disconnect the FPC cable from the FPC Holder (The FPC cable is very short).

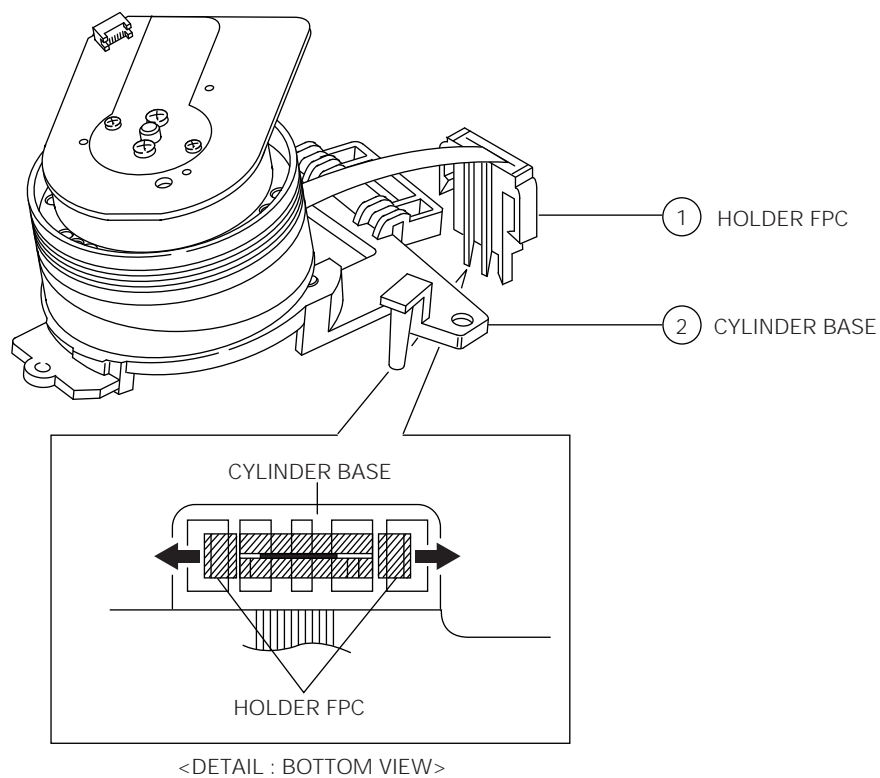


Fig. 1-15 Head Brush and Holder FPC Removal

1-3-6 Cylinder Ass'y Removal from Cylinder Base

1. Remove 3 Screws ① from the Cylinder Base ②.
2. Lift the Cylinder Ass'y ③ from the Cylinder Base ② in the direction of arrow.

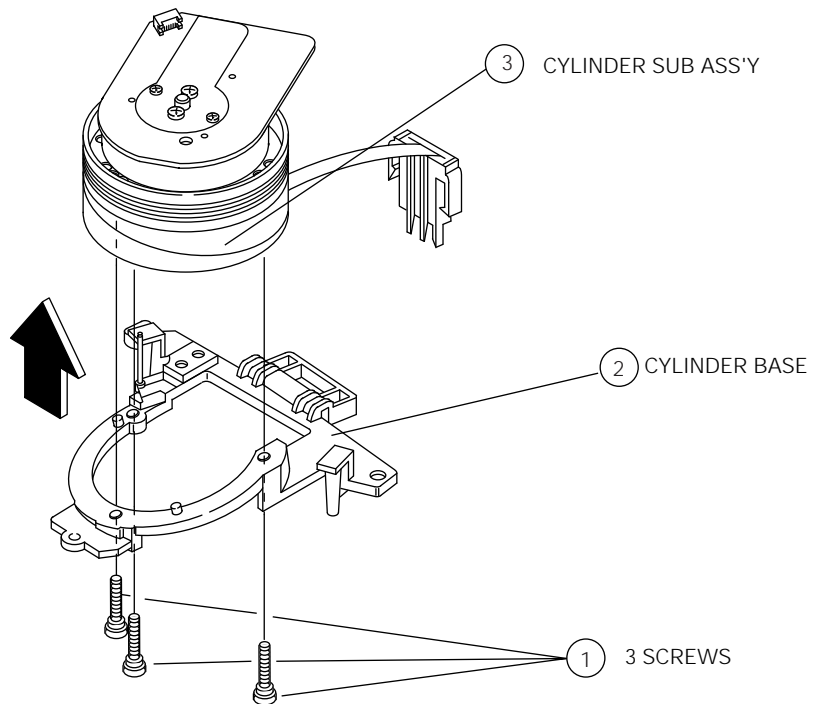


Fig. 1-16 Cylinder Ass'y Removal from Cylinder Base

1-3-7 Motor Stator Removal

1. Remove 2 Screws ①.
2. Remove the Motor Stator ② from the Cylinder Sub Ass'y ⑤.

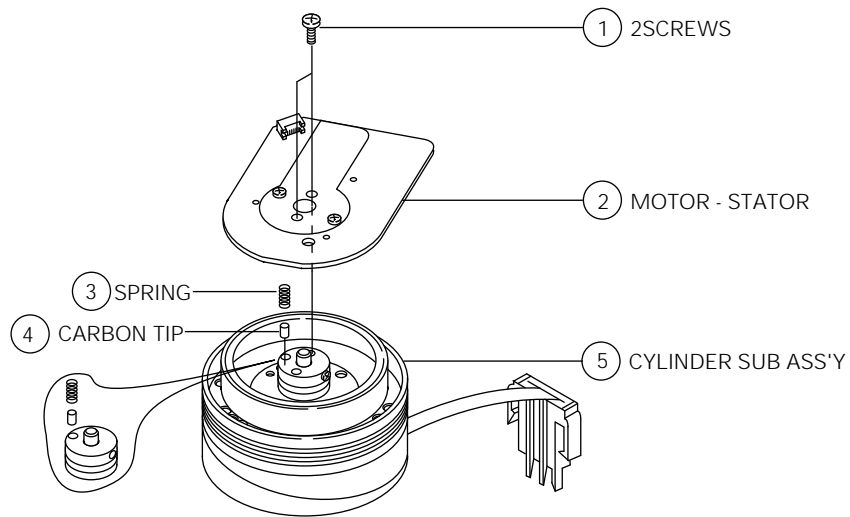


Fig. 1-17 Motor Stator Removal

Note : When disassembling the Motor-Stator, take extreme care not to loose the carbon-tip and spring.

1-3-8 Motor Rotor Removal

1. Remove 2 Screws ①.
2. Lift The Motor Rotor ②.

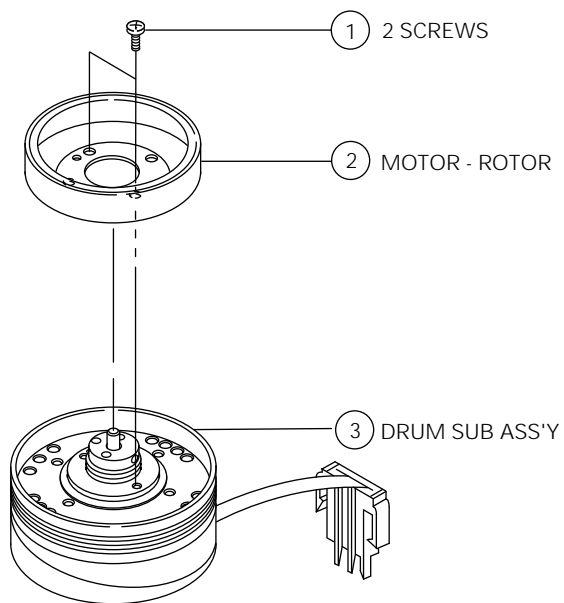


Fig. 1-18 Motor Rotor Removal

1-3-9 Motor Rotor and Cylinder Sub Ass'y

1. Make sure that phase matching holes of the Motor Rotor and the Cylinder Sub Ass'y are aligned correctly as shown in Fig. 1-19 (Refer to phase matching hole).
2. Secure with 2 Screws.

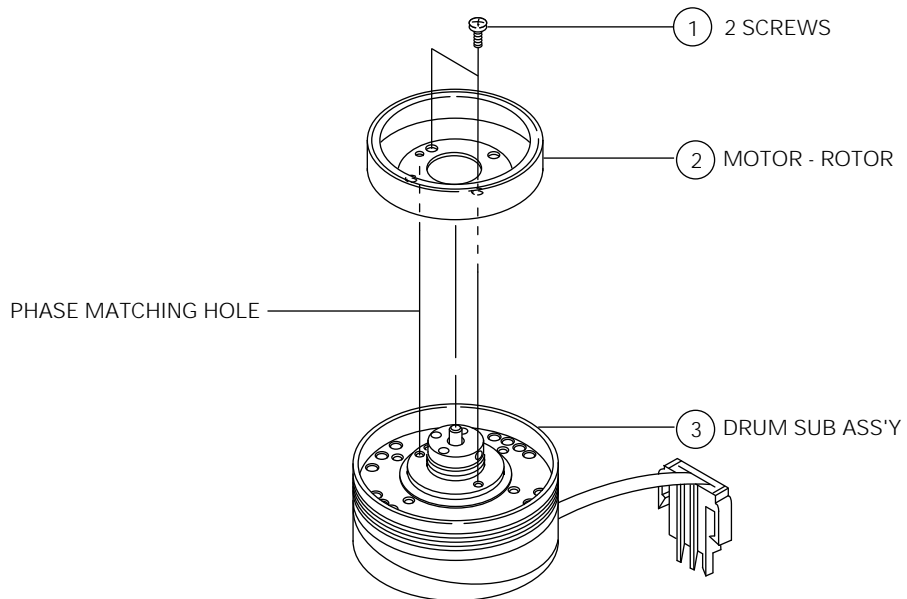


Fig. 1-19 Assembly of Motor Rotor and Cylinder Sub Ass'y

1-3-10 Motor Stator and Cylinder Sub Ass'y

1. Reinstall the Motor Stator ① toward the FPC cable of Cylinder Sub Ass'y ②.
2. Secure 2 Screws. (Refer to Fig. 1-17)

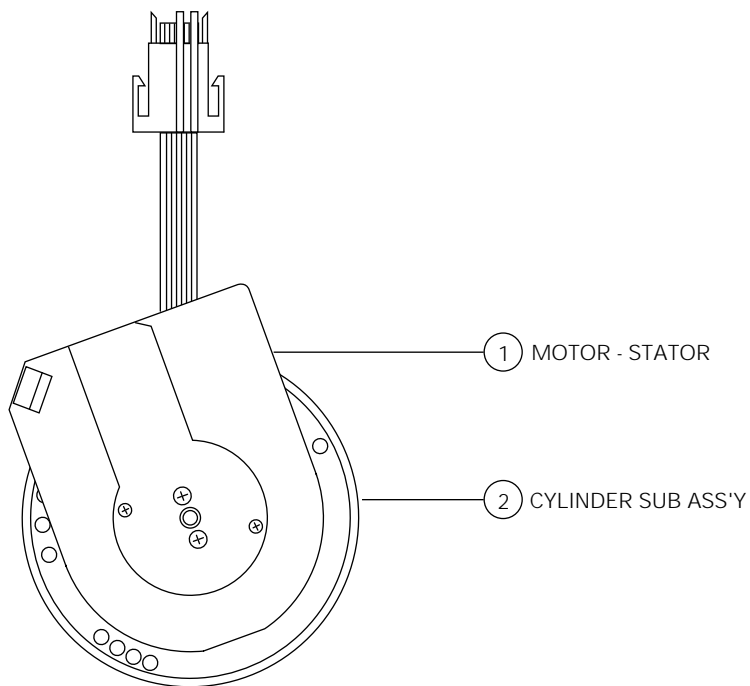


Fig. 1-20 Assembly of Motor Stator and Cylinder Sub Ass'y

1-4 Main Deck Removal and Reassembly

1-4-1 Slide Rack Housing Removal

1. Lift the Slide Rack Housing.

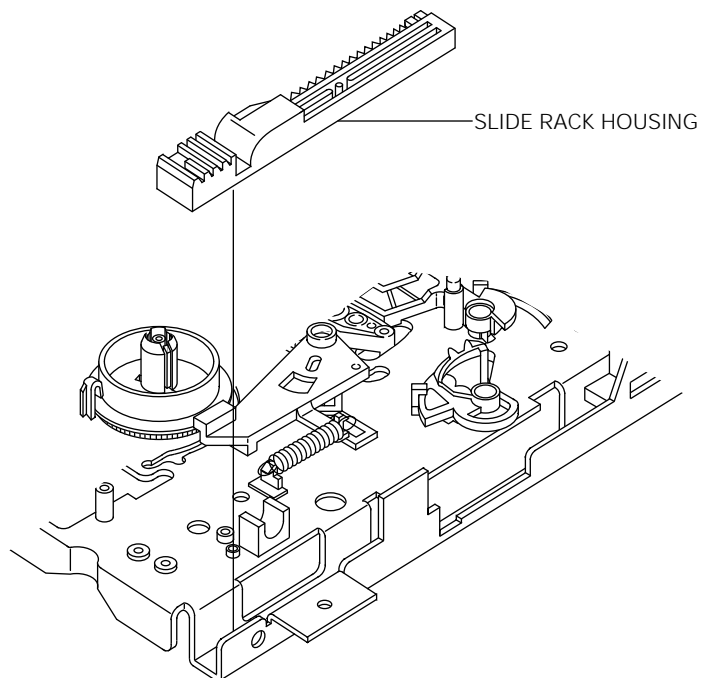


Fig. 1-21 Slide Rack Housing Removal

1-4-2 Assembly of Slide Rack Housing and Gear Master

1. Confirm that the hole of Master Gear ① and the hole "A" of Main Base are aligned correctly. (Eject mode)
2. Align the Slot #1 of Master Gear ① with the Tooth #1 of Rack Housing Slide ②. (Refer to timing point)

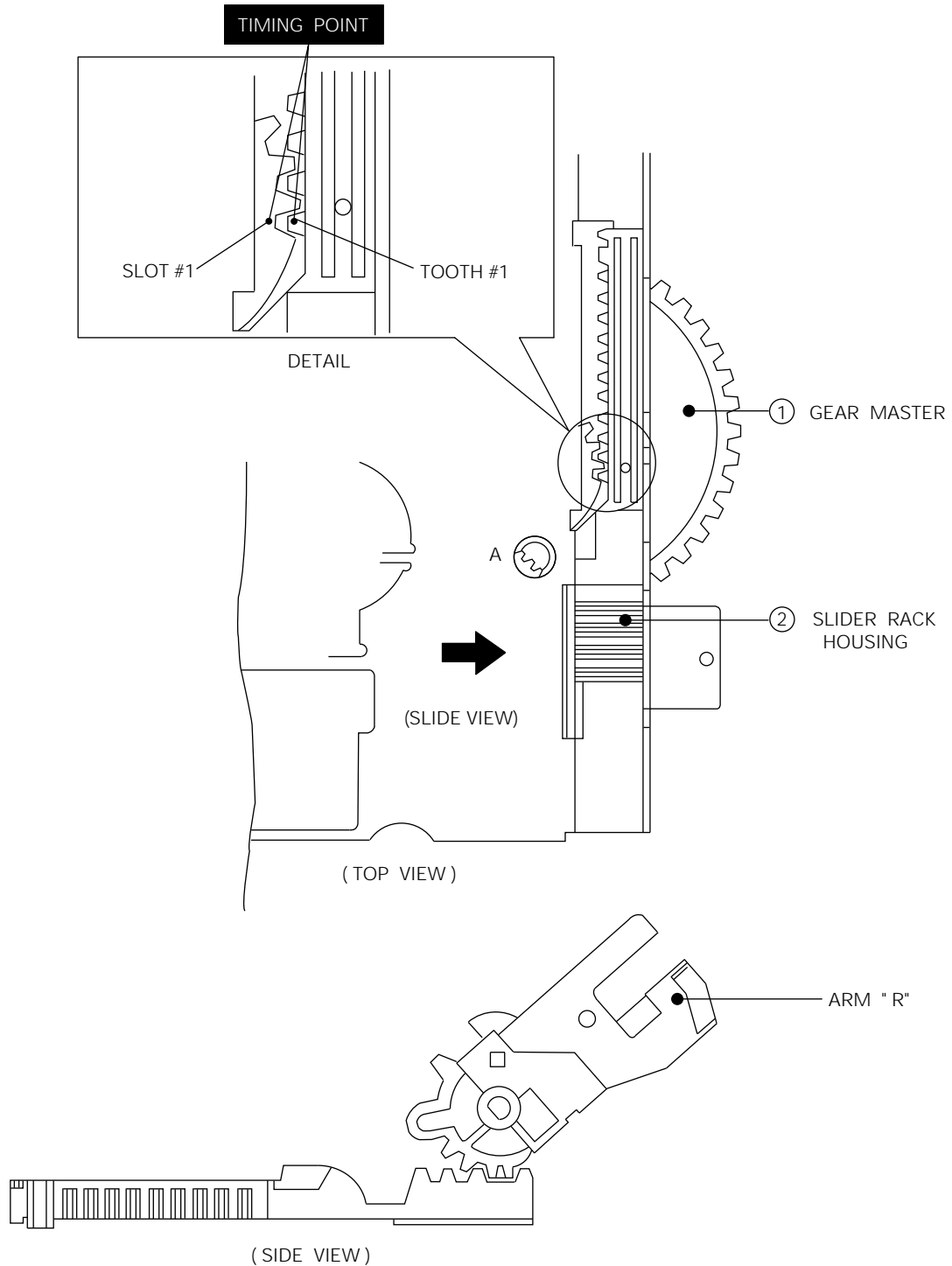


Fig. 1-22 Assembly of Slide Rack Housing and Gear Master

1-4-3 Brake Sub "L" Removal

1. Remove the Sub "L" Brake Spring ①.
2. Release the tab ② in the direction of arrow. (Refer to detail drawing)
3. Lift the Sub "L" Brake ③.

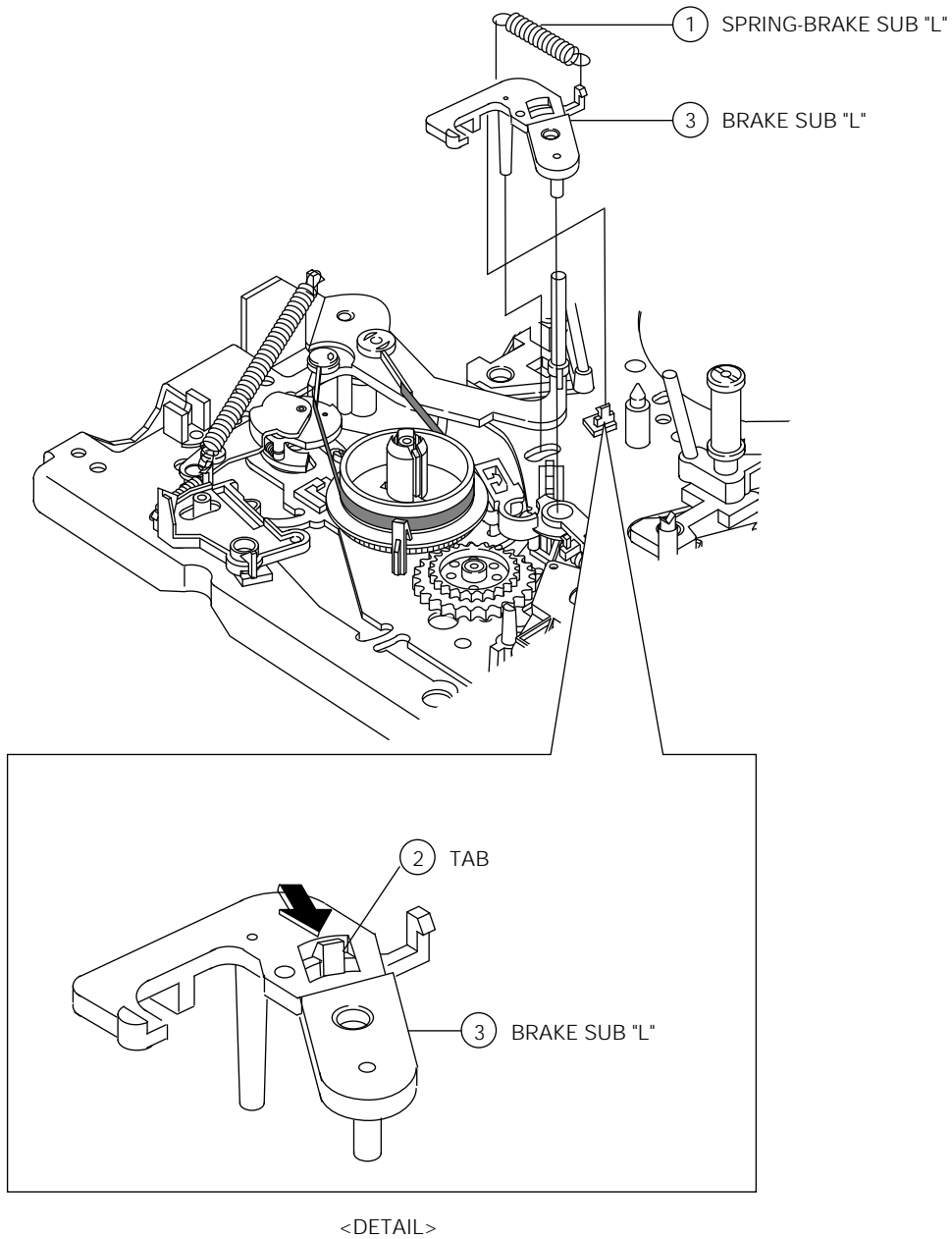


Fig. 1-23 Brake Sub "L" Removal

1-4-4 Arm Tension Full Ass'y Removal

1. Remove the Tension Spring ①.
2. Release the tab ② in the direction of arrow. (Refer to detail drawing)
3. Lift the Full Tension Arm Ass'y ③.

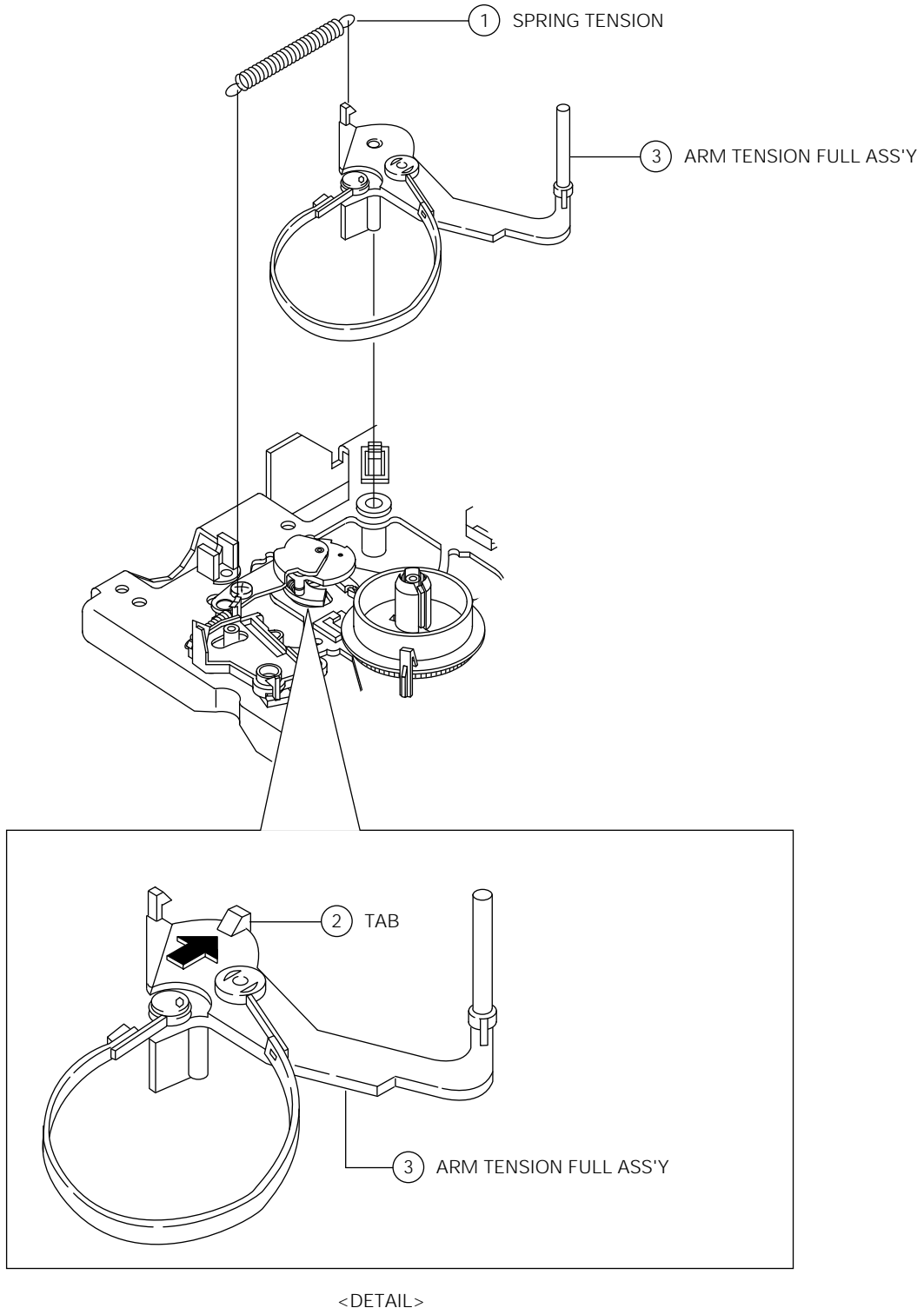


Fig. 1-24 Arm Tension Full Ass'y Removal

1-4-5 Lever JOG Ass'y Removal (Only for deck : DX8-A/DX8-AC)

1. Remove the 1 Screw ①.
2. Lift the JOG Lever Ass'y ②.

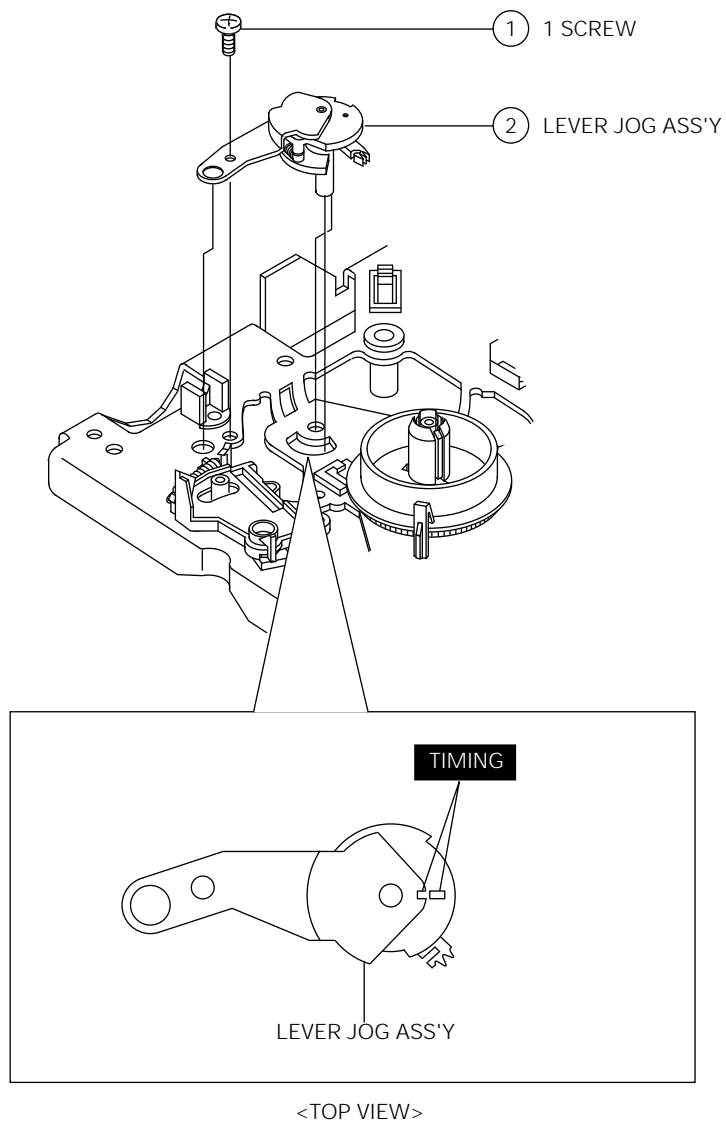


Fig. 1-25 Lever JOG Ass'y Removal

1-4-6 Reel Disk "L" and Gear Relay "S" Ass'y Removal

1. Release the tab ① in the direction of arrow. (Refer to detail drawing)
2. Lift the Reel Disk "L" ②.
3. Remove the Plain Washer ③.
4. Remove the Slit Washer ④.
5. Lift the Relay "S" Gear Ass'y ⑤.

Note : When reinstalling, be sure to install the Reel Disk "L" ② after installing the Plain Washer ③.

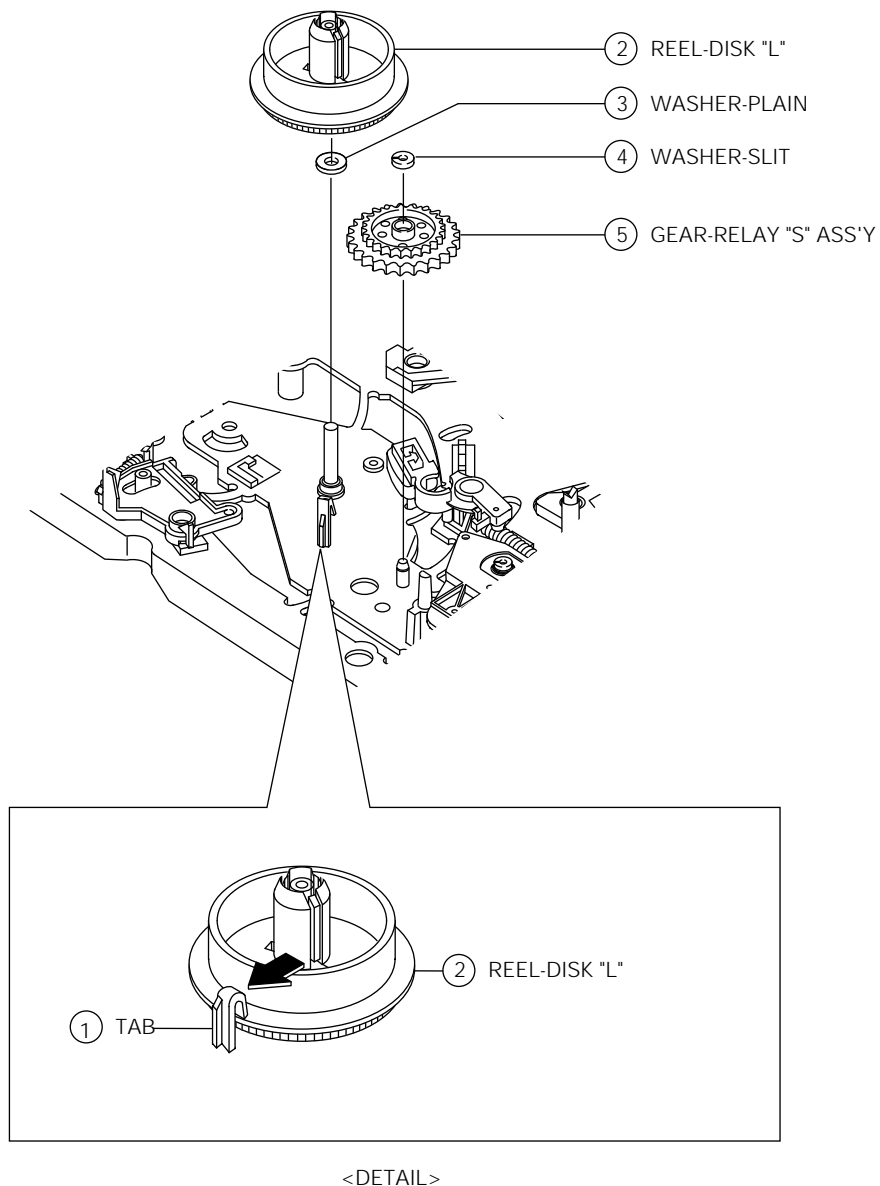
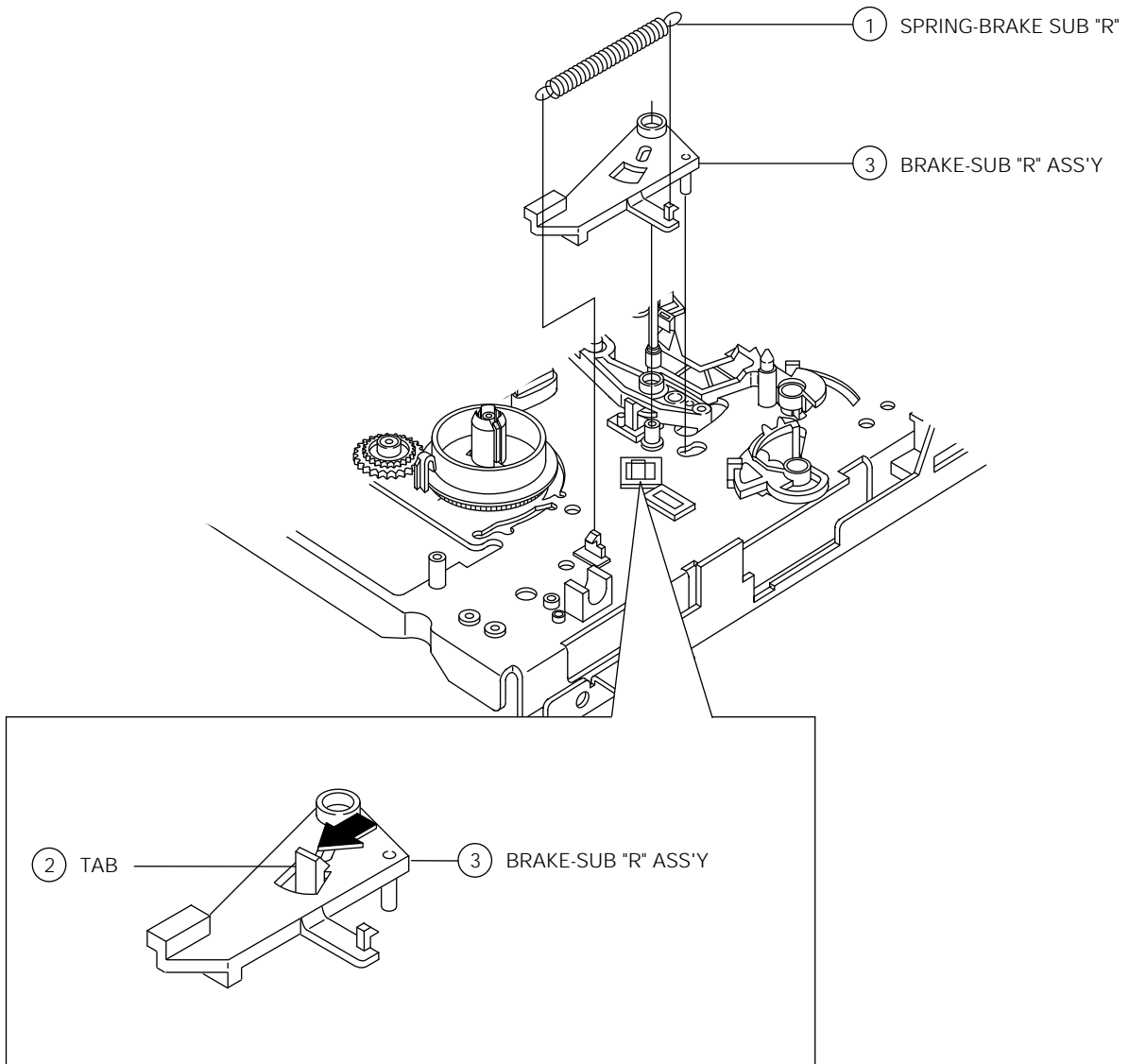


Fig. 1-26 Reel Disk "L" and Gear Relay "S" Ass'y Removal

1-4-7 Brake Sub "R" Ass'y Removal

1. Remove the Sub "R" Brake Spring ①.
2. Release the tab ② in the direction of arrow. (Refer to detail drawing)
3. Lift the Brake Sub "R" Ass'y ③.



<DETAIL>

Fig. 1-27 Brake Sub "R" Ass'y Removal

1-4-8 Reel Disk "R" Ass'y and Gear Relay "T" Removal

1. Release the tab ① in the direction of arrow. (Refer to detail drawing)
2. Lift the Reel Disk "R" Ass'y ②.
3. Remove the Plain Washer ③.
4. Remove the Slit Washer ④.
5. Lift the Relay "T" Gear Ass'y ⑤.

Note : When reinstalling, be sure to install the Reel Disk "R" Ass'y ② after installing the Plain Washer ③.

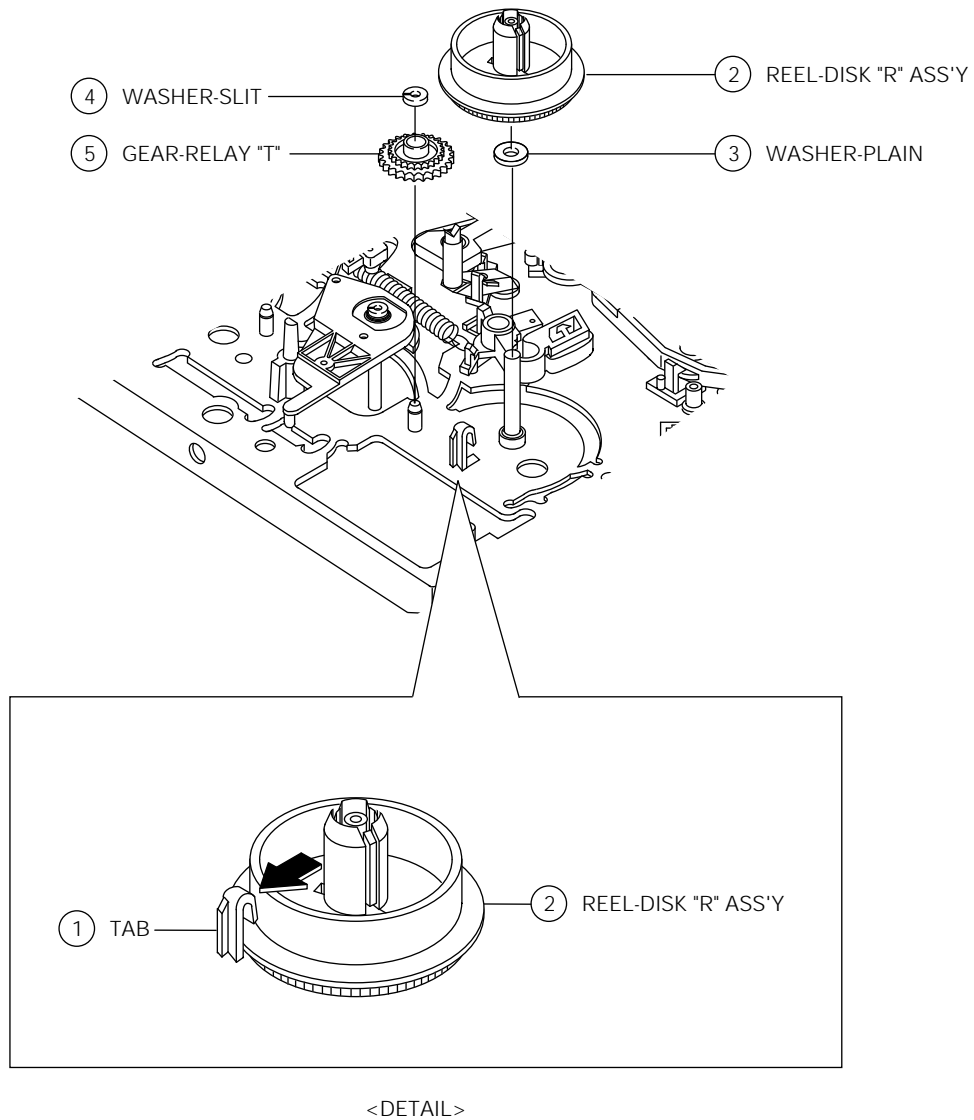


Fig. 1-28 Reel Disk "R" Ass'y and Gear Relay "T" Removal

1-4-9 Brake Main "L", "R" Ass'y Removal

1. Release the Main Brake Spring ①.
2. Release the tab ② in the direction of arrow "A". (Refer to detail drawing A)
3. Lift the Brake Main "L" ③.
4. Release the tab ④ in the direction of arrow "B". (Refer to detail drawing B)
5. Lift the Main "R" Brake ⑤.

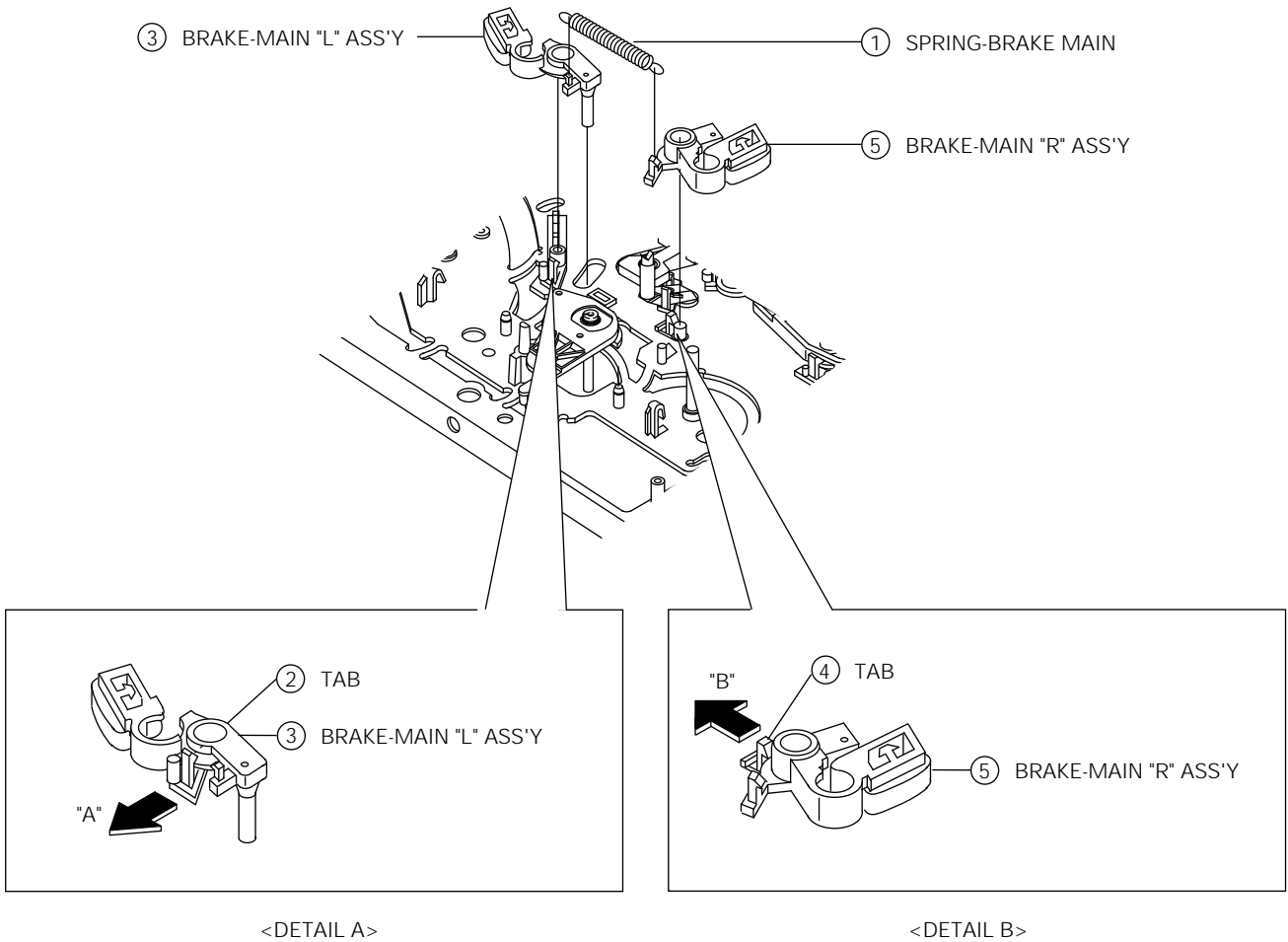


Fig. 1-29 Brake Main "L", "R" Ass'y Removal

1-4-10 Idler Ass'y Removal

1. Remove the Slit Washer ①.
2. Lift the Idler Ass'y ②.

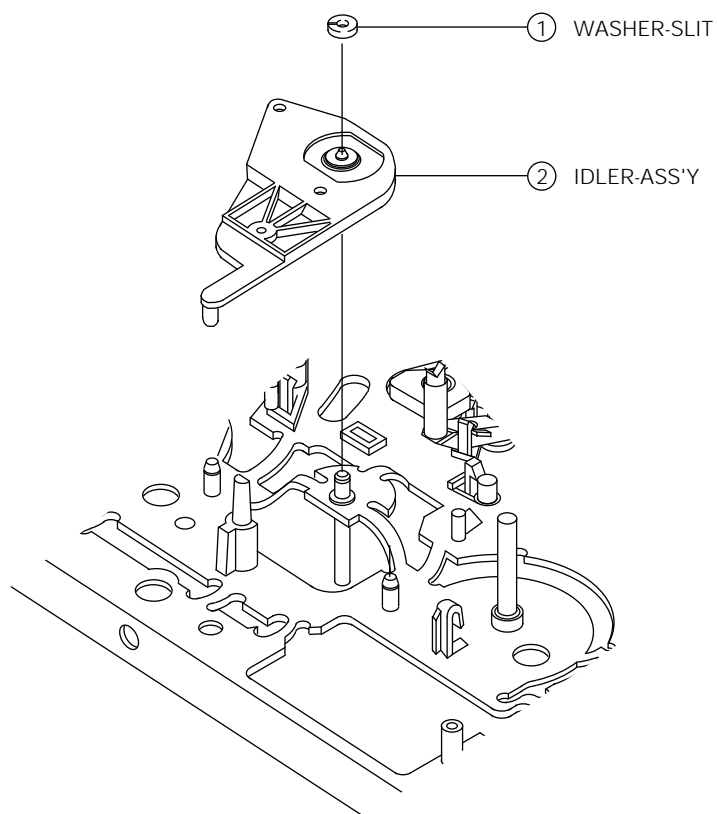


Fig. 1-30 Idler Ass'y Removal

1-4-11 Unit Pinch Roller Ass'y Removal

1. Remove the Slit Washer ①.
2. Lift the Pinch Roller Unit ②.
3. Lift the Arm Pinch Spring ③.

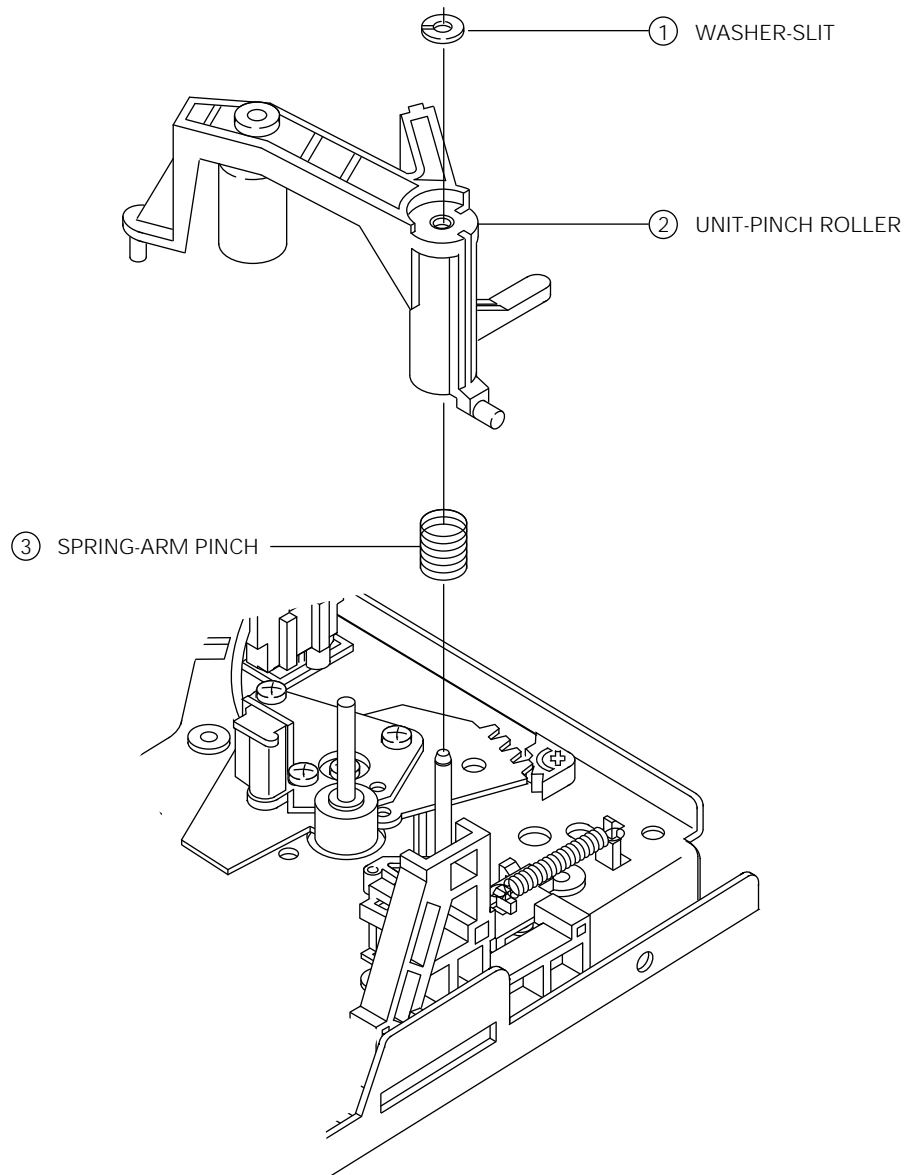


Fig. 1-31 Unit Pinch Roller Ass'y Removal

1-4-12 Assembly of Unit Pinch Roller

1. Install the Pinch Roller Unit as shown in Fig. 1-32. (Refer to A, B)

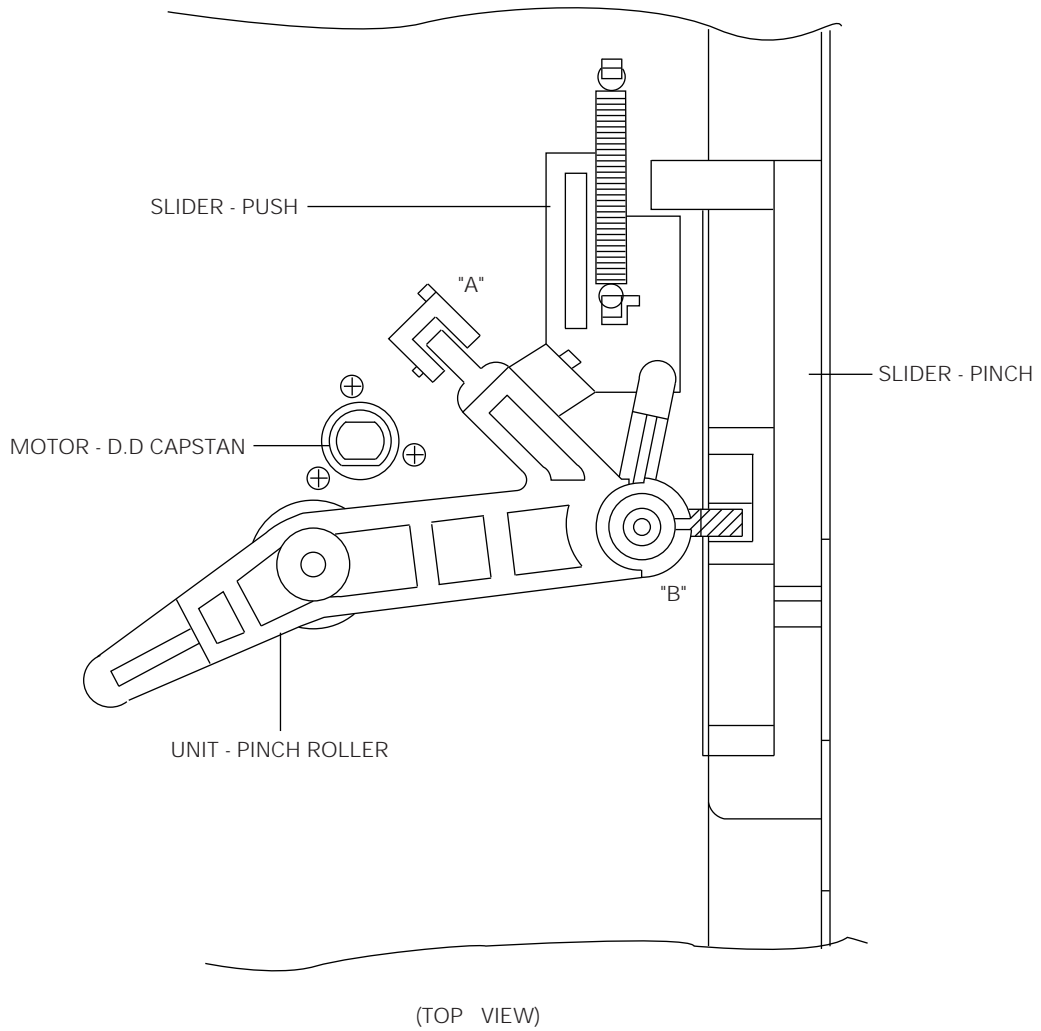


Fig. 1-32 Assembly of Unit Pinch Roller

1-4-13 Exploded View of Lever Pinch Comp Ass'y, Lever Pinch Cam, Arm Review Ass'y and Lever Review Ass'y

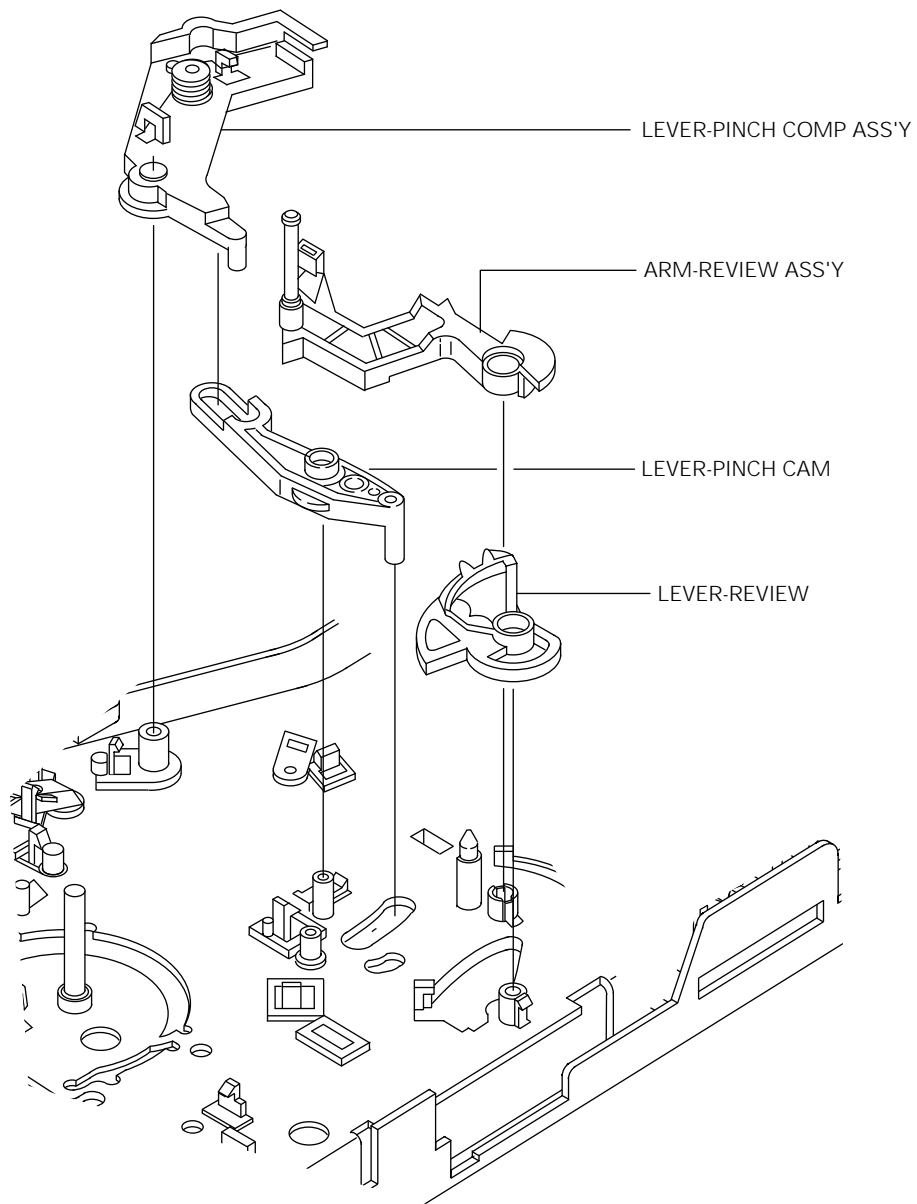
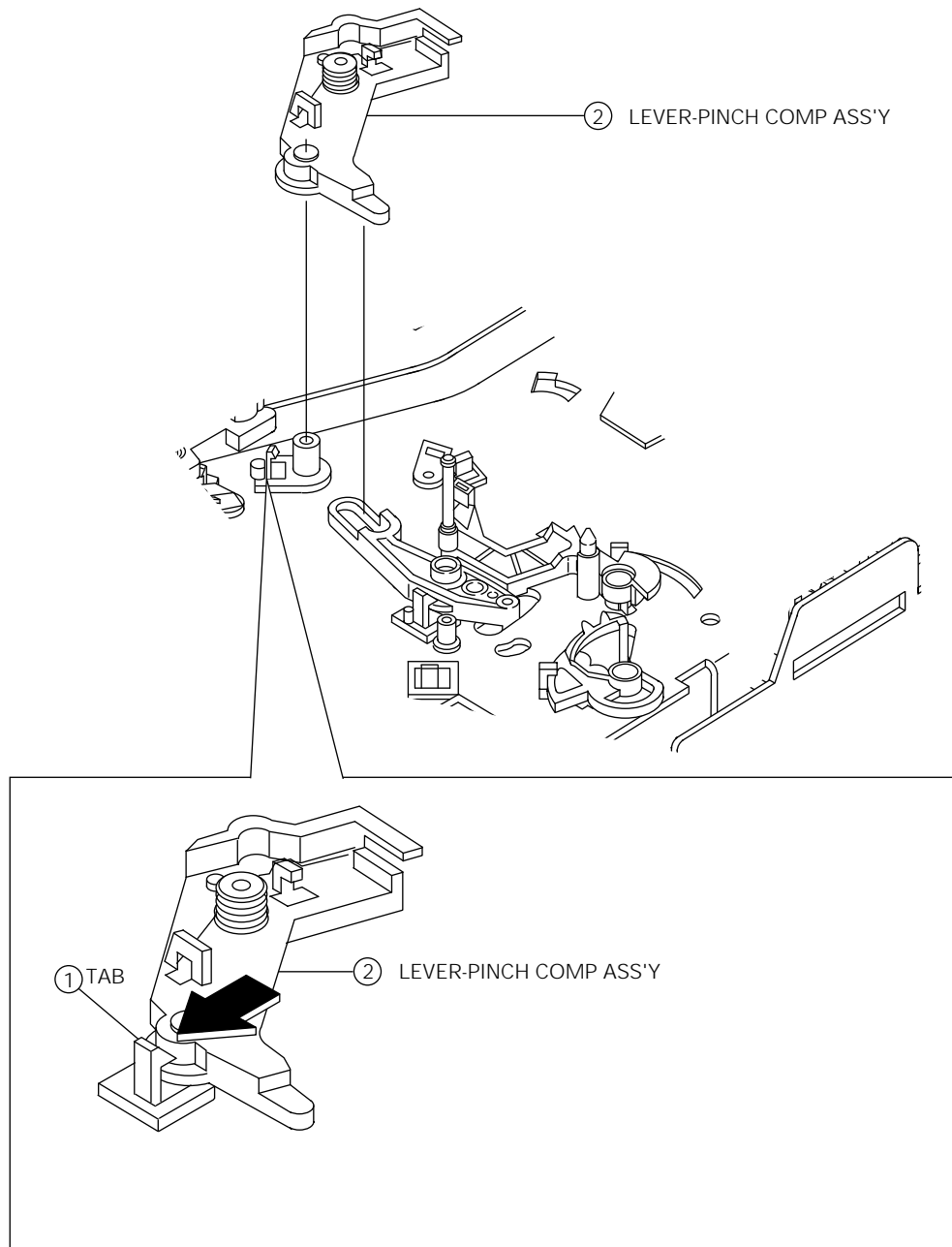


Fig. 1-33 Exploded View of Lever Pinch Comp Ass'y, Lever Pinch Cam, Arm Review Ass'y and Lever Review Ass'y

1-4-14 Lever Pinch Comp Ass'y Removal

1. Release the tab ① in the direction of arrow. (Refer to detail drawing)
2. Lift the Pinch Comp Lever Ass'y ②.

Note : Don't touch the Pinch Comp Lever Ass'y ① to Audio Head Base during removal.



<DETAIL>

Fig. 1-34 Lever Pinch Comp Ass'y Removal

1-4-15 Lever Pinch Cam Removal

1. Release the tab ① in the direction of arrow. (Refer to detail drawing)
2. Lift the Pinch Cam Lever ②.

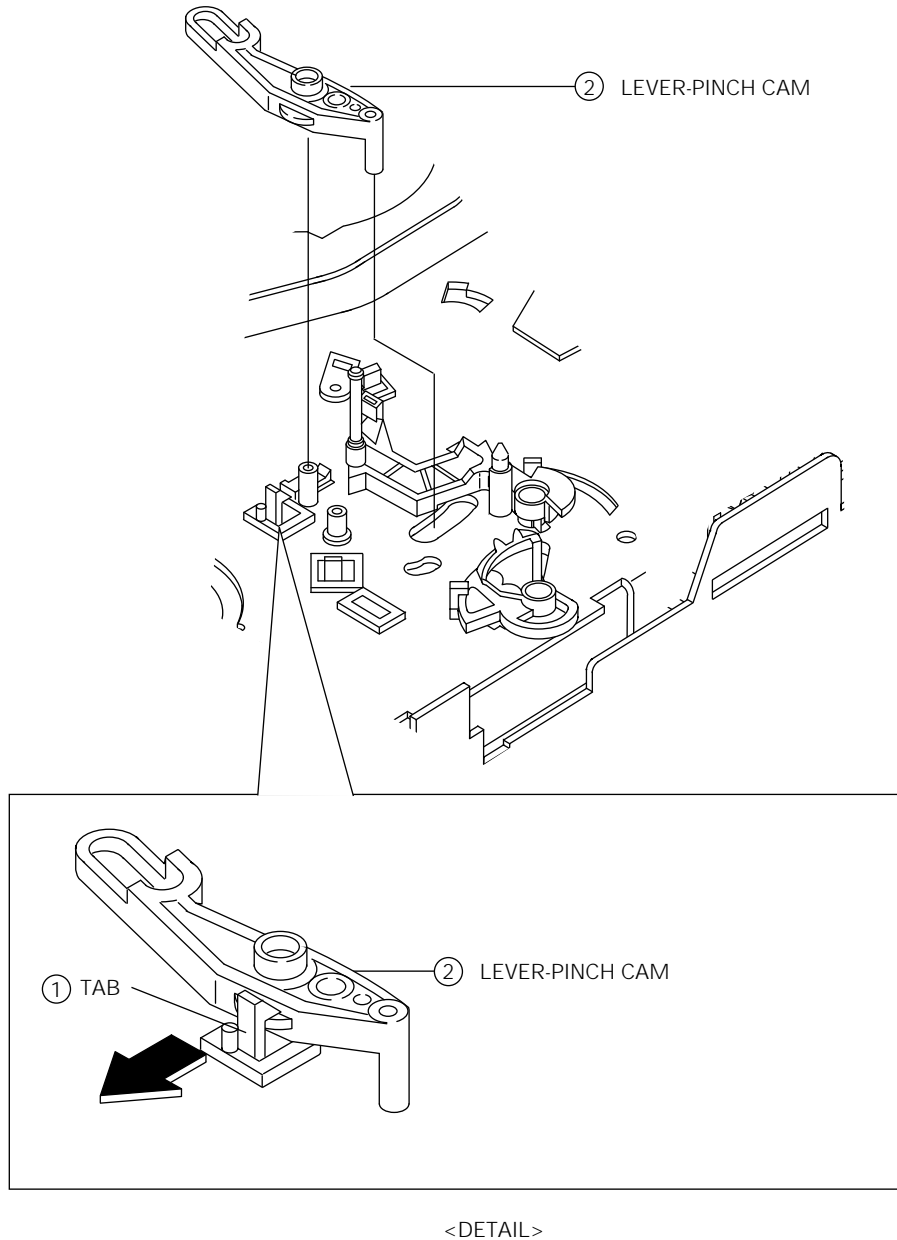


Fig. 1-35 Lever Pinch Cam Removal

1-4-16 Arm Review Ass'y Removal

1. Push the Stopper tab ① in the direction of arrow.
2. Pull the Review Arm Ass'y ② in the direction of arrow "A" and then confirm "B".
(Refer to detail drawing "A")
3. Release the tab ③ in the direction of arrow and then lift the Review Arm Ass'y ②.

Note : Take extreme care not to damage when removing the Review Arm Ass'y ②.
(B part of detail drawing A)

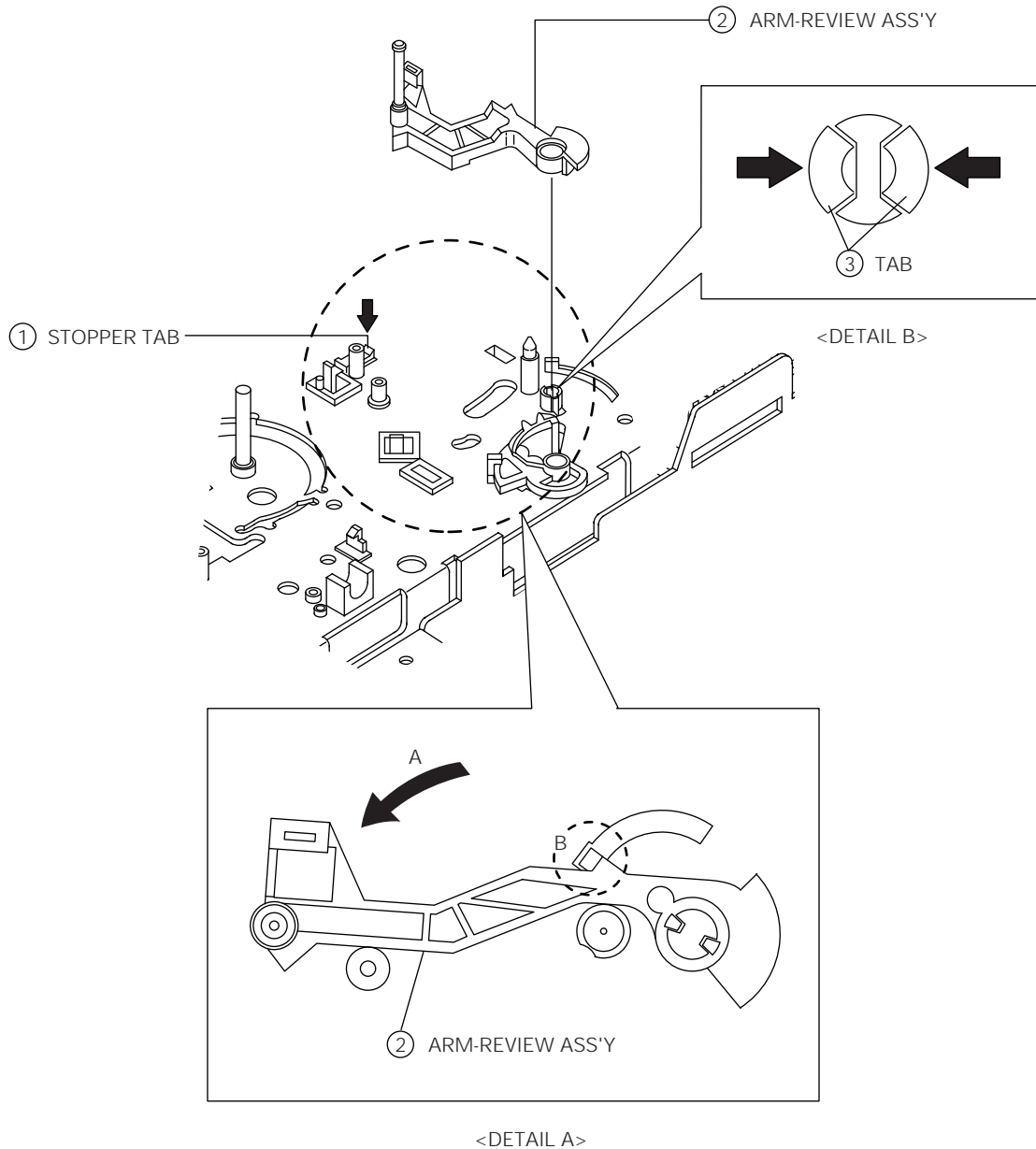


Fig. 1-36 Arm Review Ass'y Removal

1-4-17 Lever Review Removal

1. Release the tab ① in the direction of arrow. (Refer to detail drawing)
2. Lift the Review Lever ②.

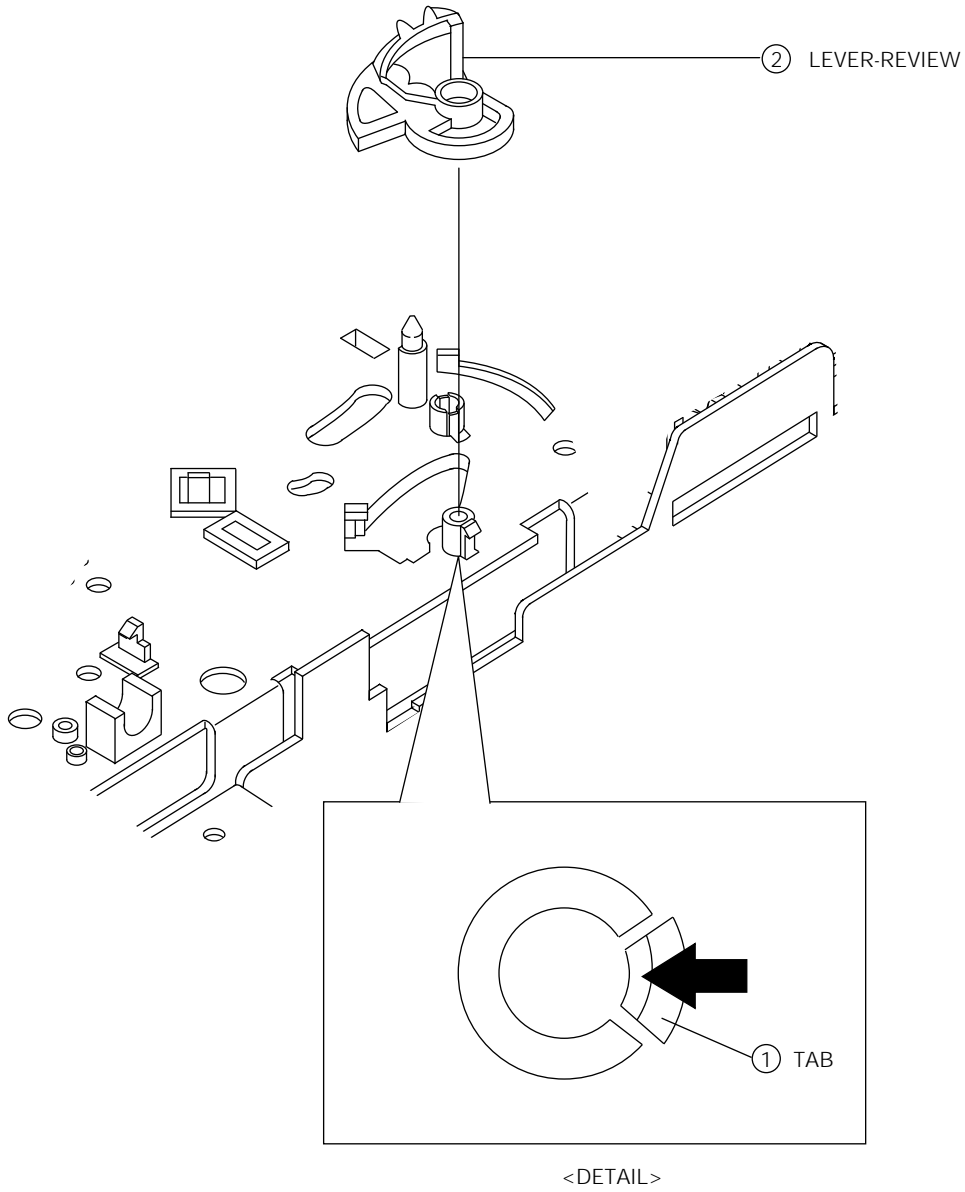


Fig. 1-37 Lever Review Removal

1-4-18 Belt Capstan Removal

1. Remove the Capstan Belt ①.

Note : Take extreme care not to touch the grease when removing or reinstalling.

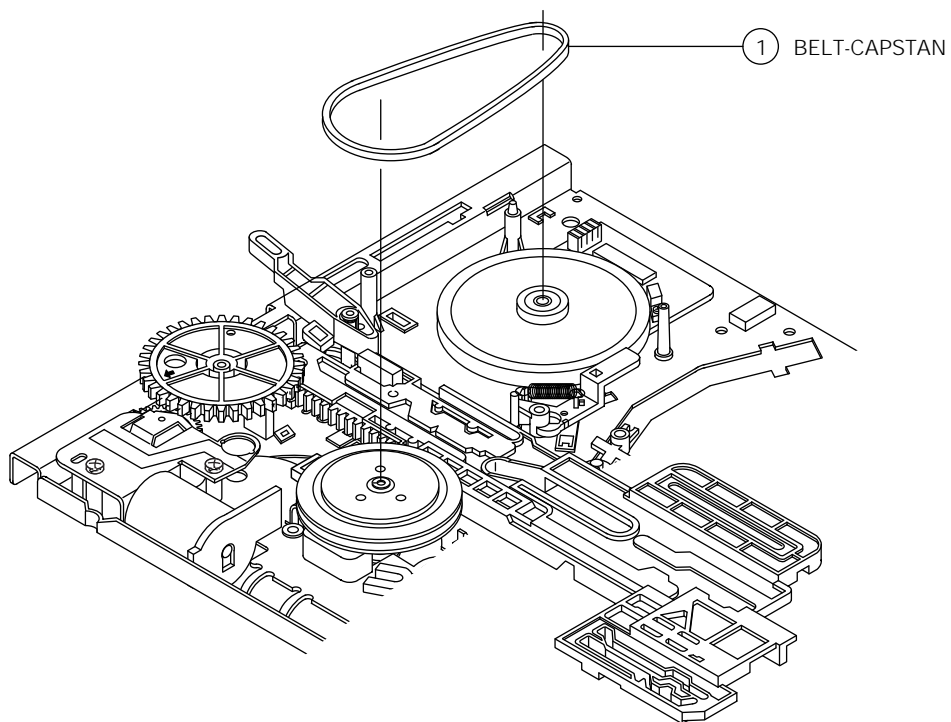


Fig. 1-38 Belt Capstan Removal

1-4-19 Brake Capstan Ass'y Removal

1. Remove the Brake Capstan Spring ①.
2. Release the tab ② in the direction of arrow. (Refer to detail drawing)
3. Lift the Capstan Brake Ass'y ③.

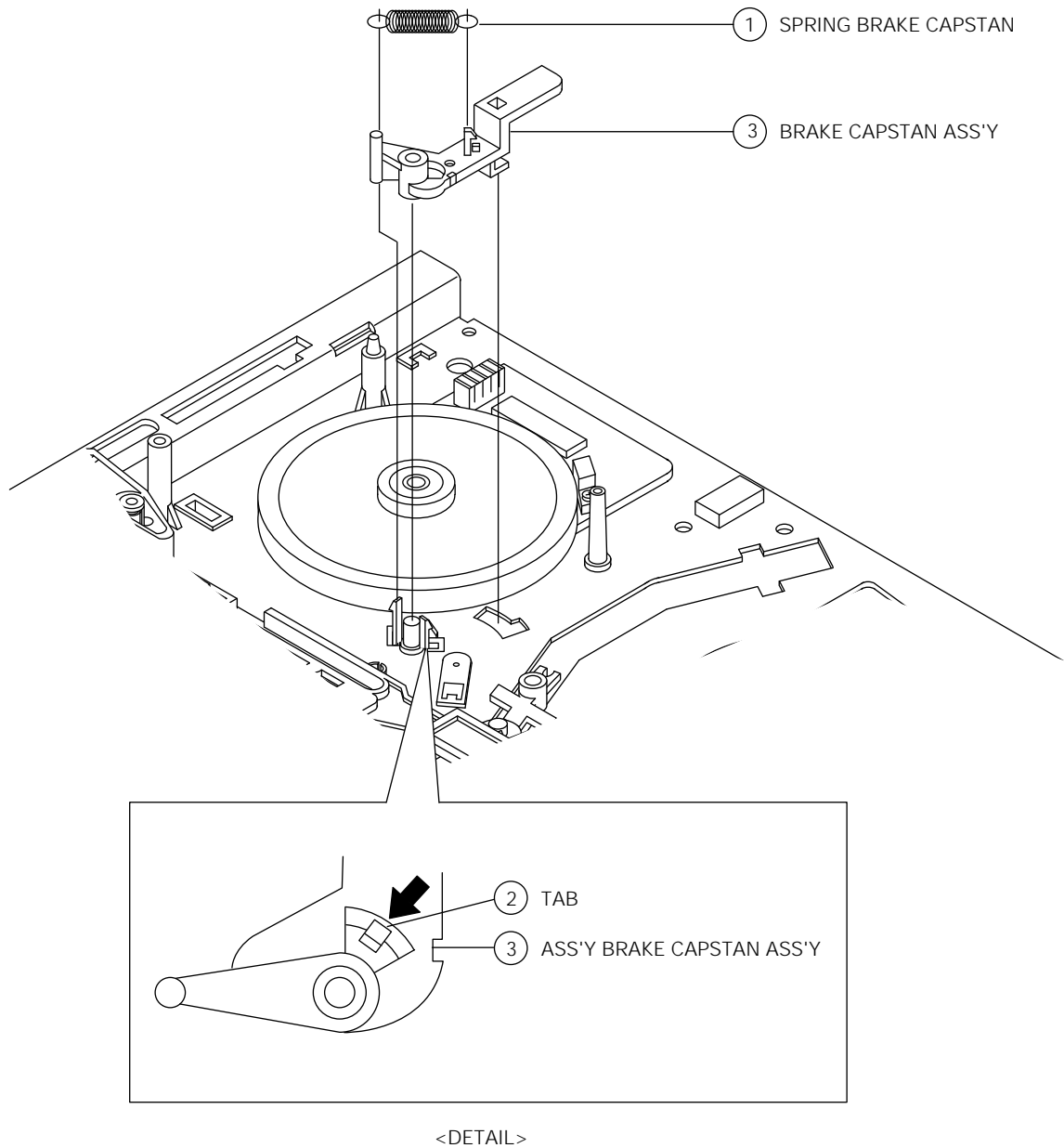


Fig. 1-39 Brake Capstan Ass'y Removal

1-4-20 Motor D.D Capstan Removal

1. Remove 3 Screws ①. (Top view)
2. Lift the Capstan D.D Motor ② in the direction of arrow. (Bottom view)

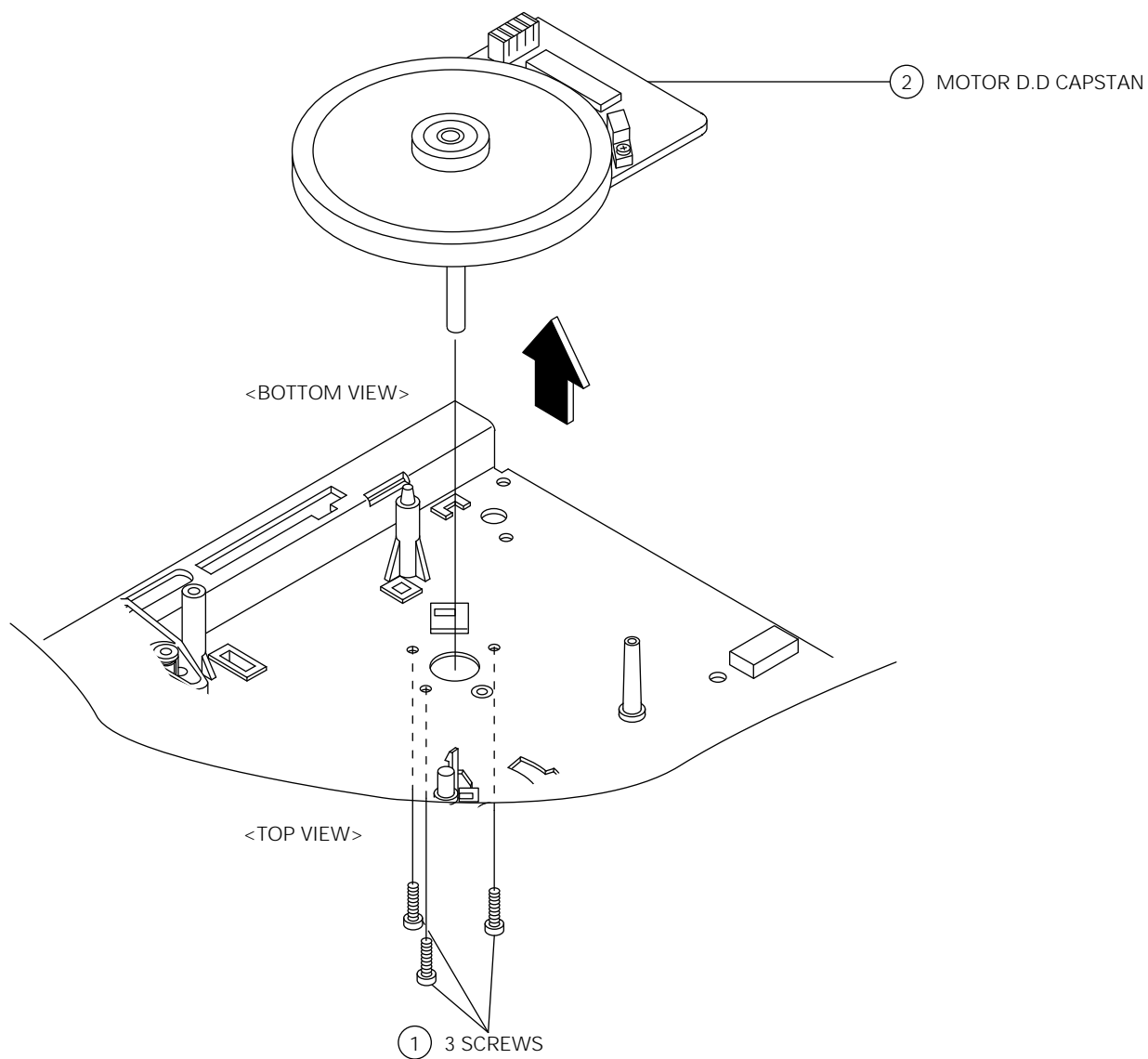


Fig. 1-40 Motor D.D Capstan Removal

1-4-21 Clutch Ass'y Removal

1. Remove the Slit Washer ①.
2. Lift the Clutch Ass'y ②.
3. Remove the Plain Washer ③.

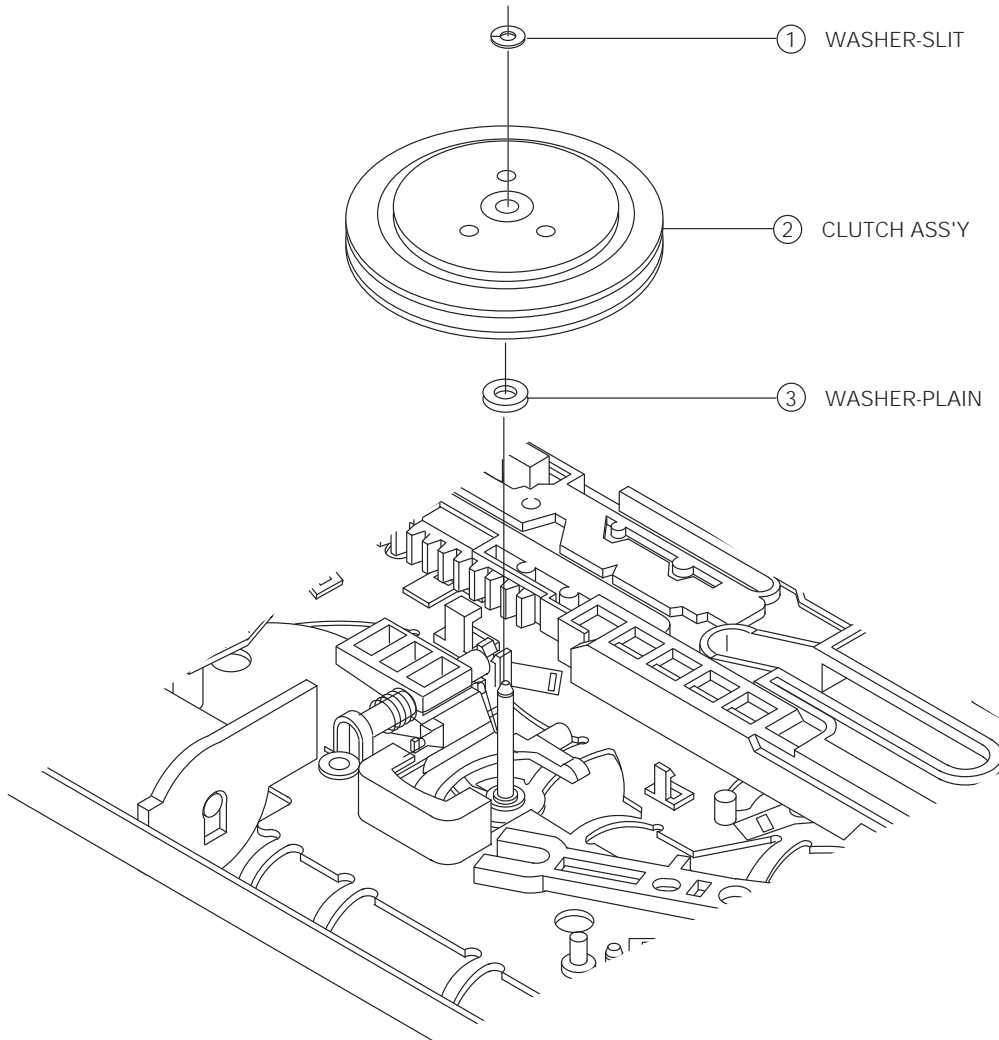


Fig. 1-41 Clutch Ass'y Removal

1-4-22 Gear Master Removal

1. Remove the Slit Washer ①.
2. Lift the Master Gear ②.

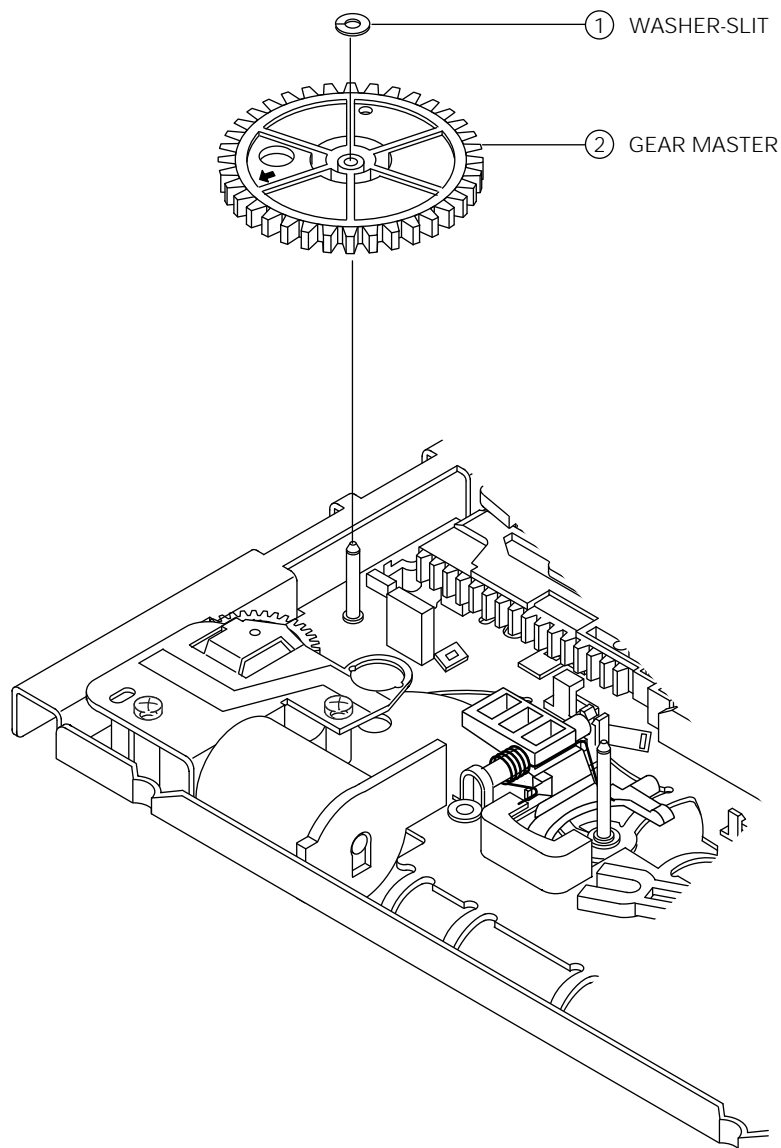


Fig. 1-42 Gear Master Removal

1-4-23 Assembly of Gear Master

1. When reinstalling, be sure to align the arrow of the Master Gear ① with home Gear of the Worm-Wheel Gear ②. (Refer to timing point)

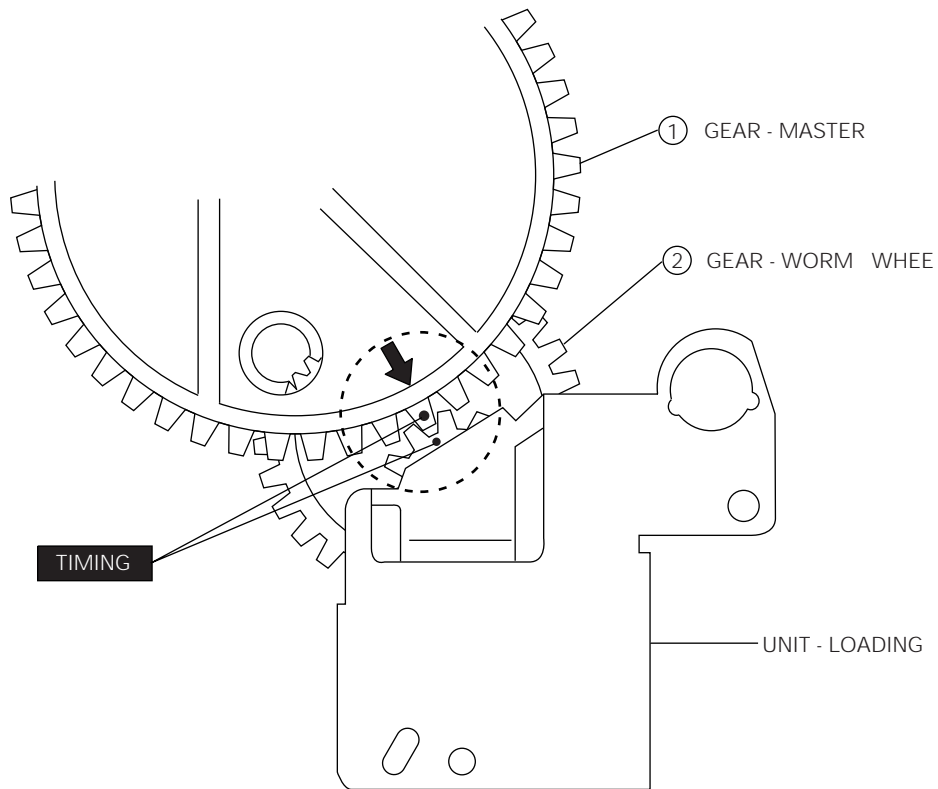


Fig. 1-43 Assembly of Gear Master

1-4-24 Unit Loading Removal

1. Remove 2 Screws ①.
2. Lift the Loading Unit ② in the direction of arrow.

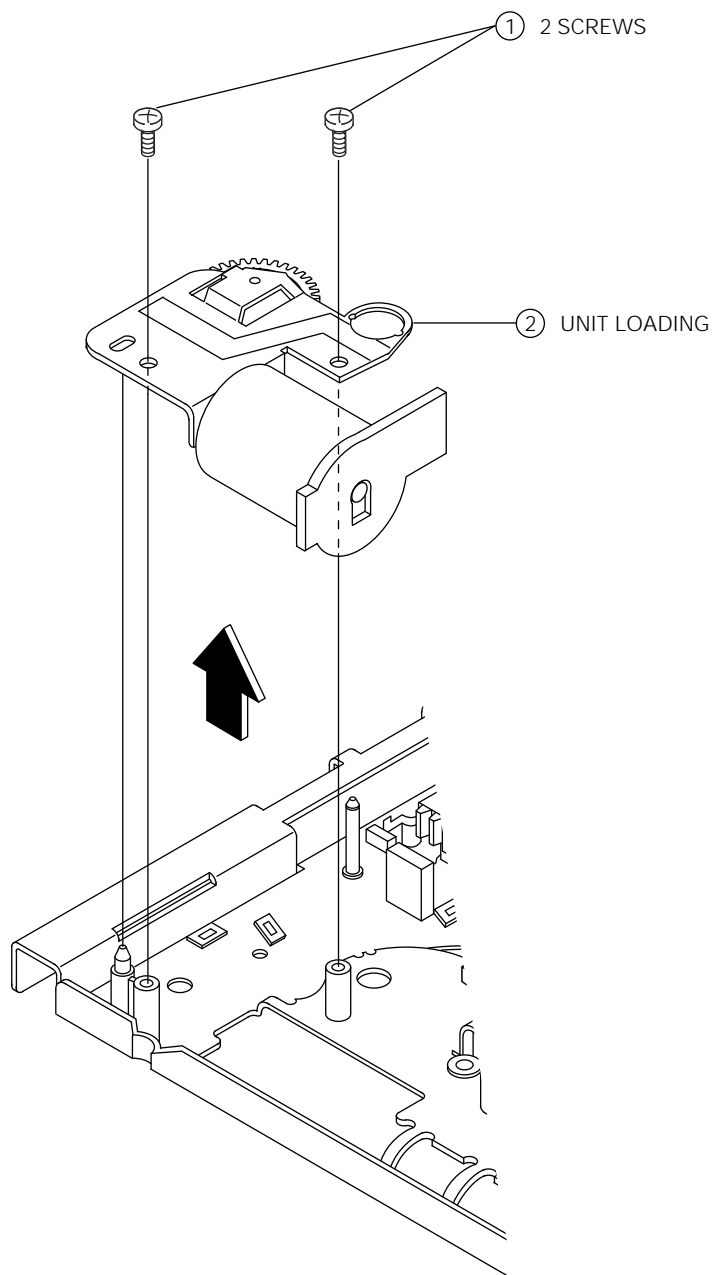


Fig. 1-44 Unit Loading Removal

1-4-25 Lever Slide Pinch Removal

1. Remove the Slit Washer ①.
2. Lift the Slide Lever Pinch ②.

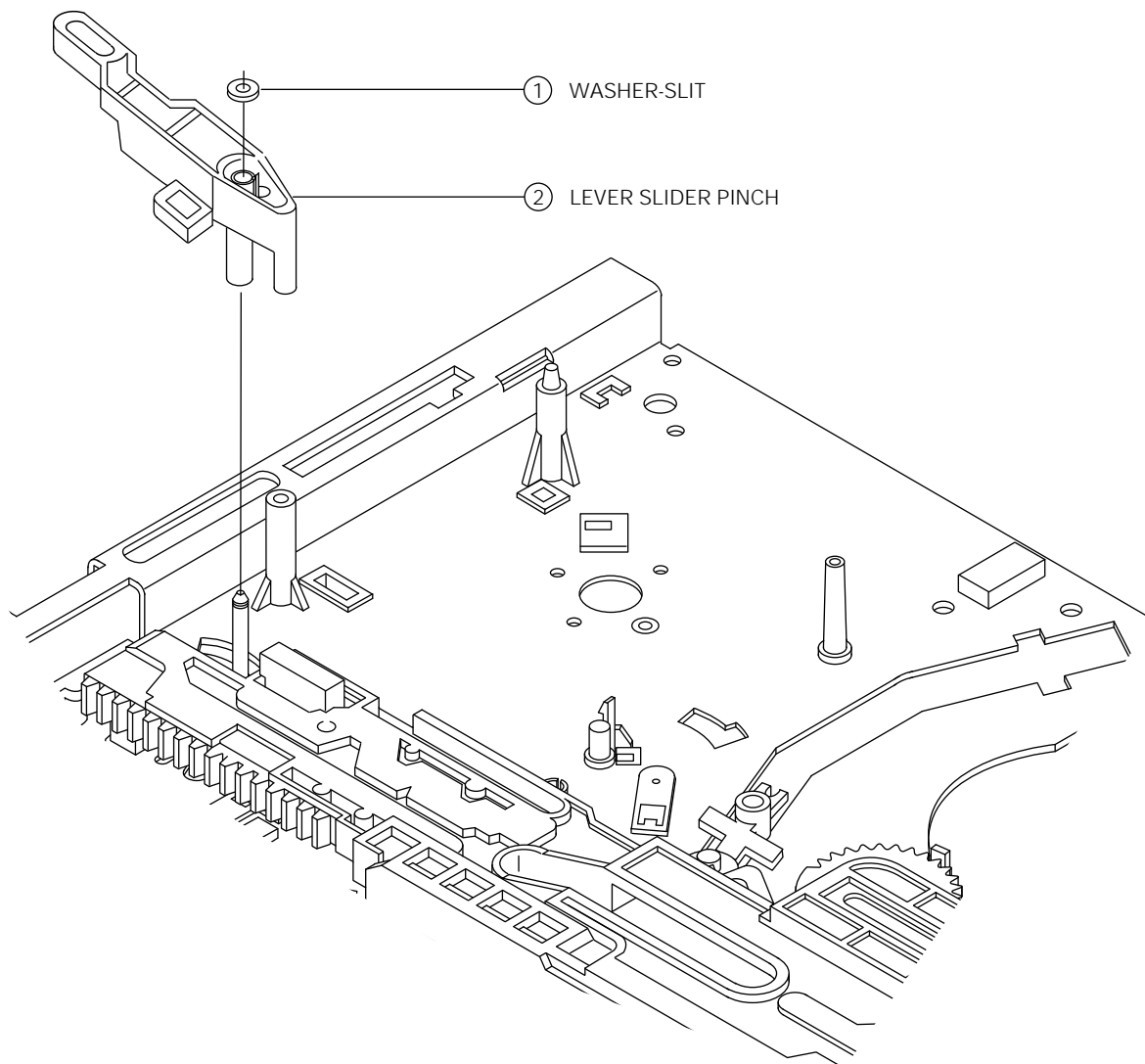


Fig. 1-45 Lever Slide Pinch Removal

1-4-26 Assembly of Lever Slide Pinch

1. Pull the Pinch Slide ① to the end in the direction of arrow.
2. Insert the Pinch Slide ① into the hole of Slide Lever Pinch ②. (Refer to detail "A")

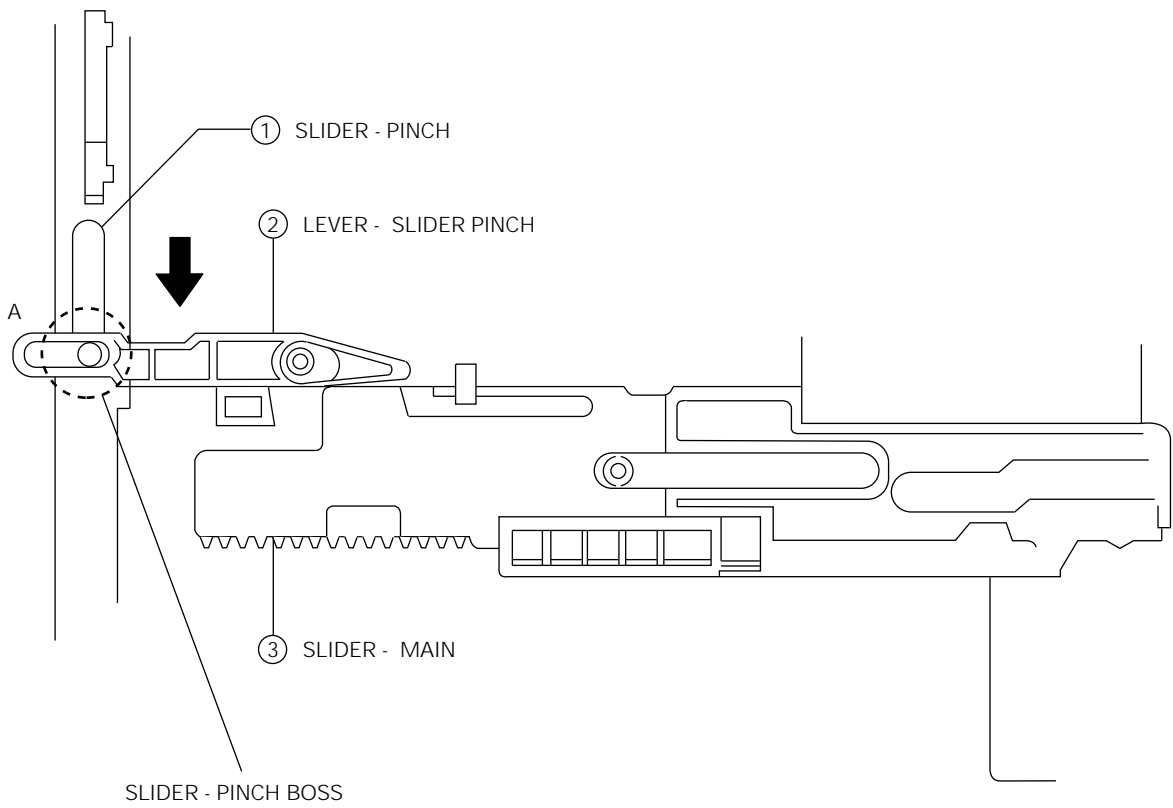


Fig. 1-46 Assembly of Lever Slide Pinch

1-4-27 Slide Main Removal

1. Remove the Slit Washer ①.
2. Release 3 tabs ②, ③, ④ in the direction of arrow.
3. Lift the Main Slide ⑤.

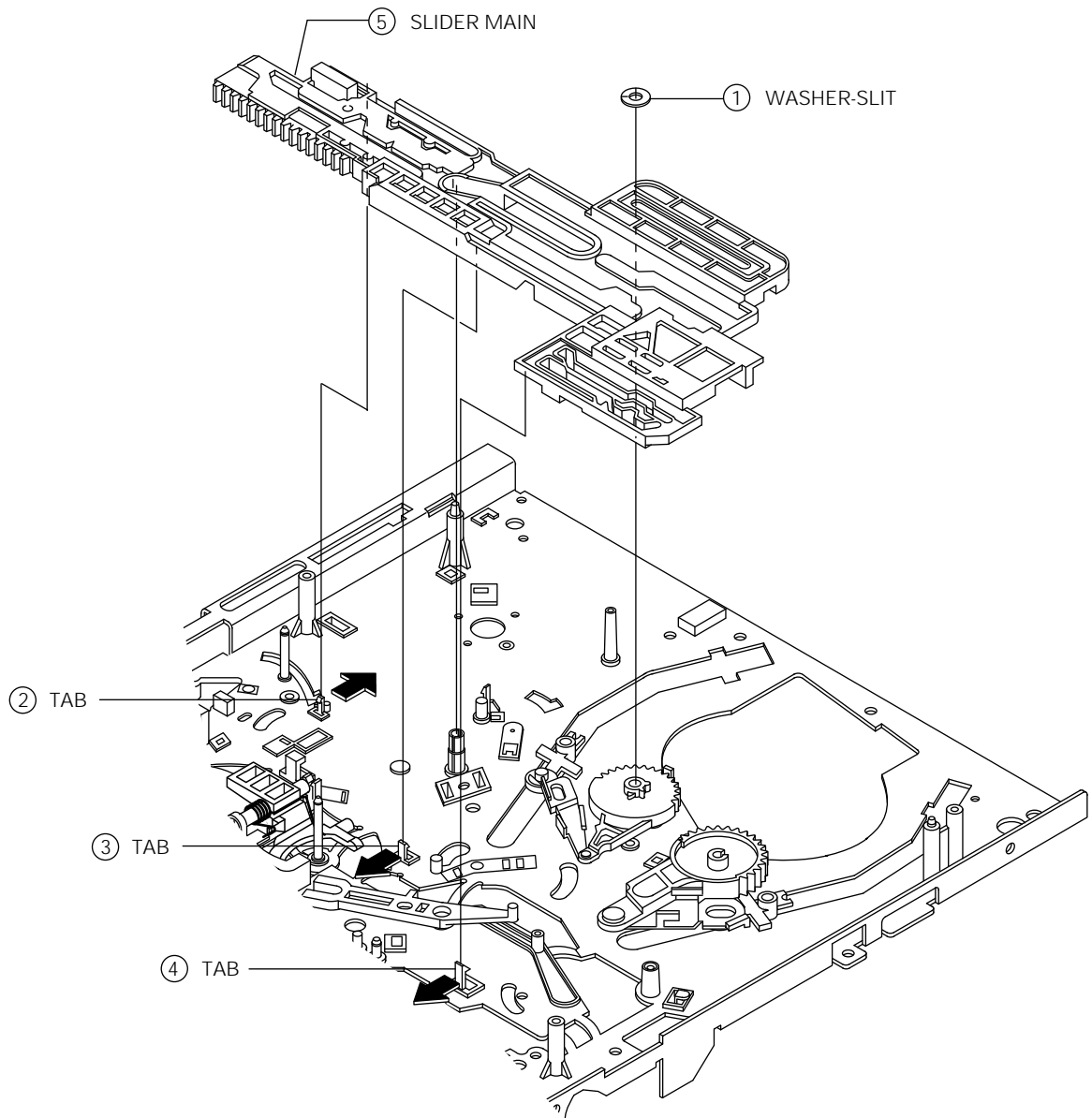


Fig. 1-47 Slide Main Removal

1-4-28 Assembly of Slide Main

1. Install the shaft of Loading "R" Gear Ass'y into the left of the Main Slide Hole and secure with the Slit Washer ②. (Refer to detail "A")
2. Insert the Tension Control Lever ③ and the Idler Change Lever ④ into the Main Slide Hole. (Refer to detail "B")
3. After confirming the above items 1, 2 install the Main Slide and secure with tabs (a, b, c).

Note : Be sure to assemble the Main Slide when the Loading L/R Gear Ass'y is in unloading position.

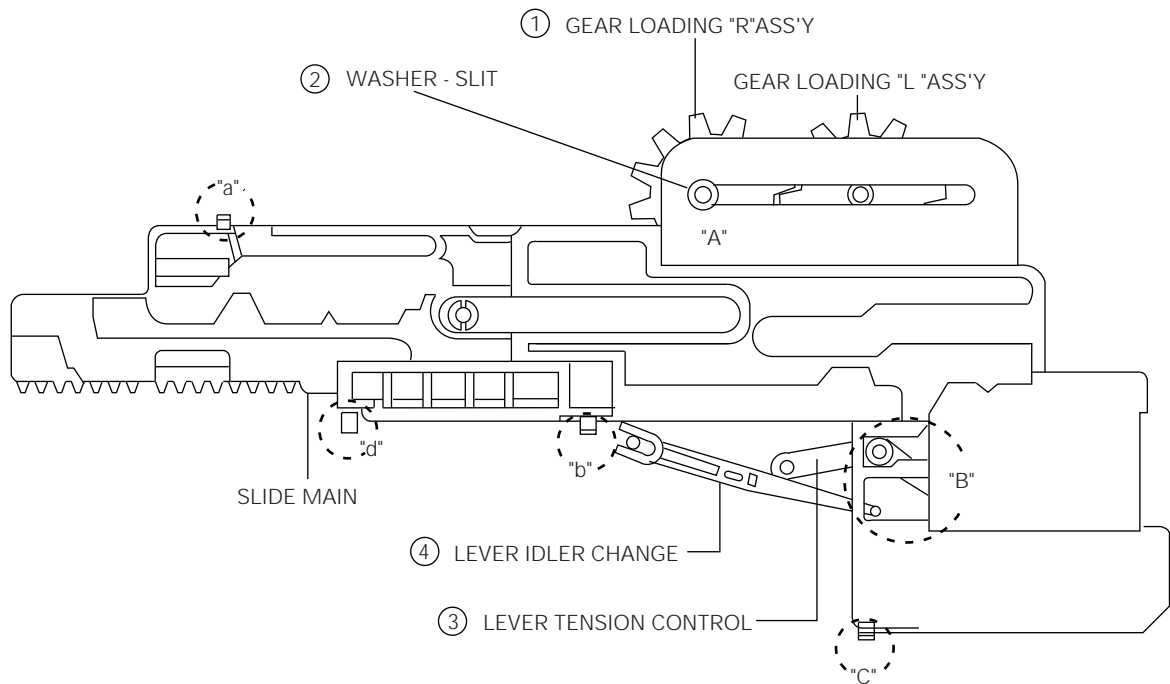


Fig. 1-48 Assembly of Slide Main

1-4-29 Lever Shift Ass'y Removal

1. Hang the Lever Shift Spring ① to the claw of the Shift Lever ③. (Refer to detail drawings A, B)
2. Release the tab ② in the direction of arrow.
3. Lift the Shift Lever ③.

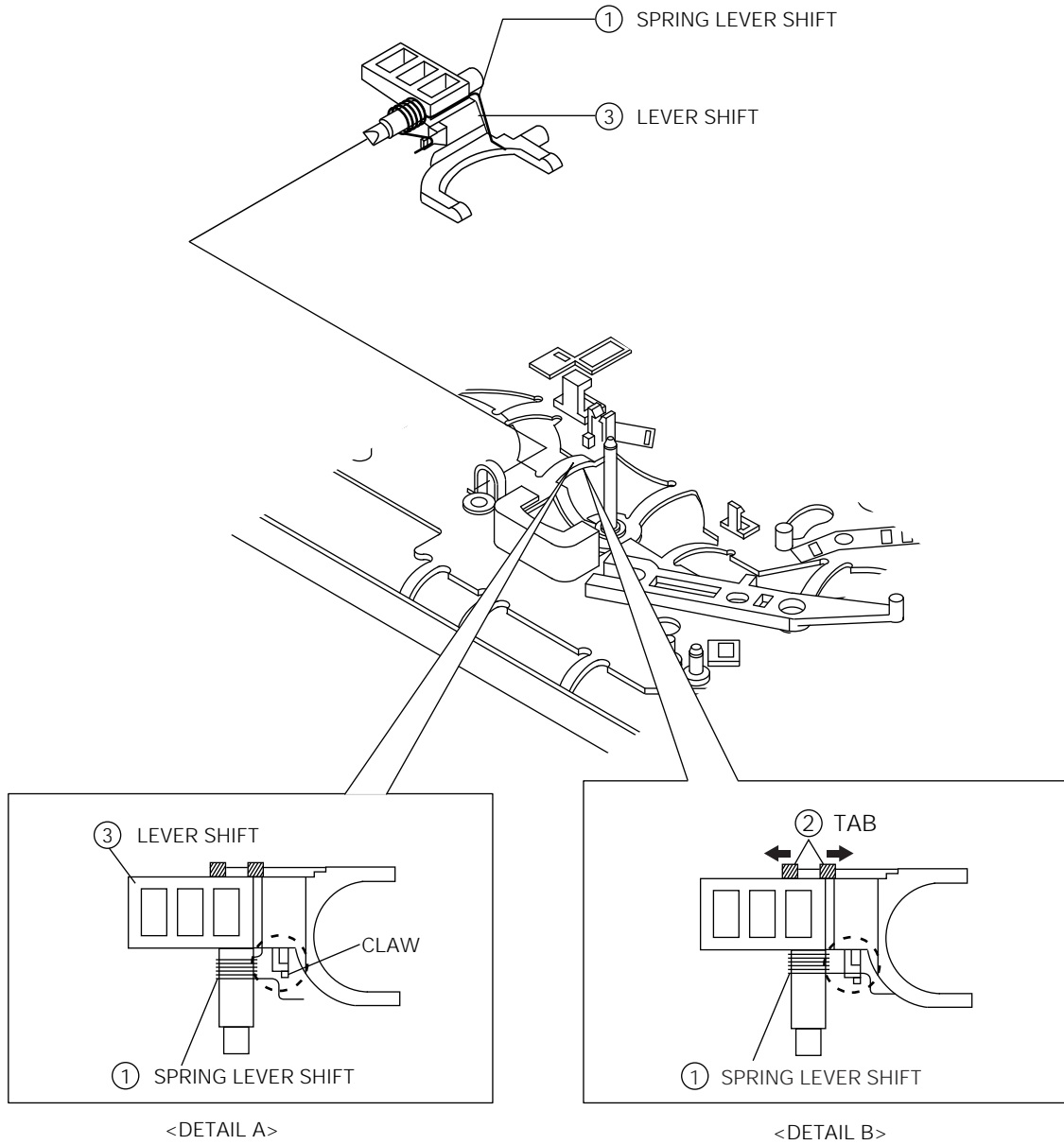


Fig. 1-49 Lever Shift Ass'y Removal

1-4-30 Lever Idler Change Removal

1. Release the tab ① in the direction of arrow. (Refer to detail drawing)
2. Lift the lever Change Idler ②.

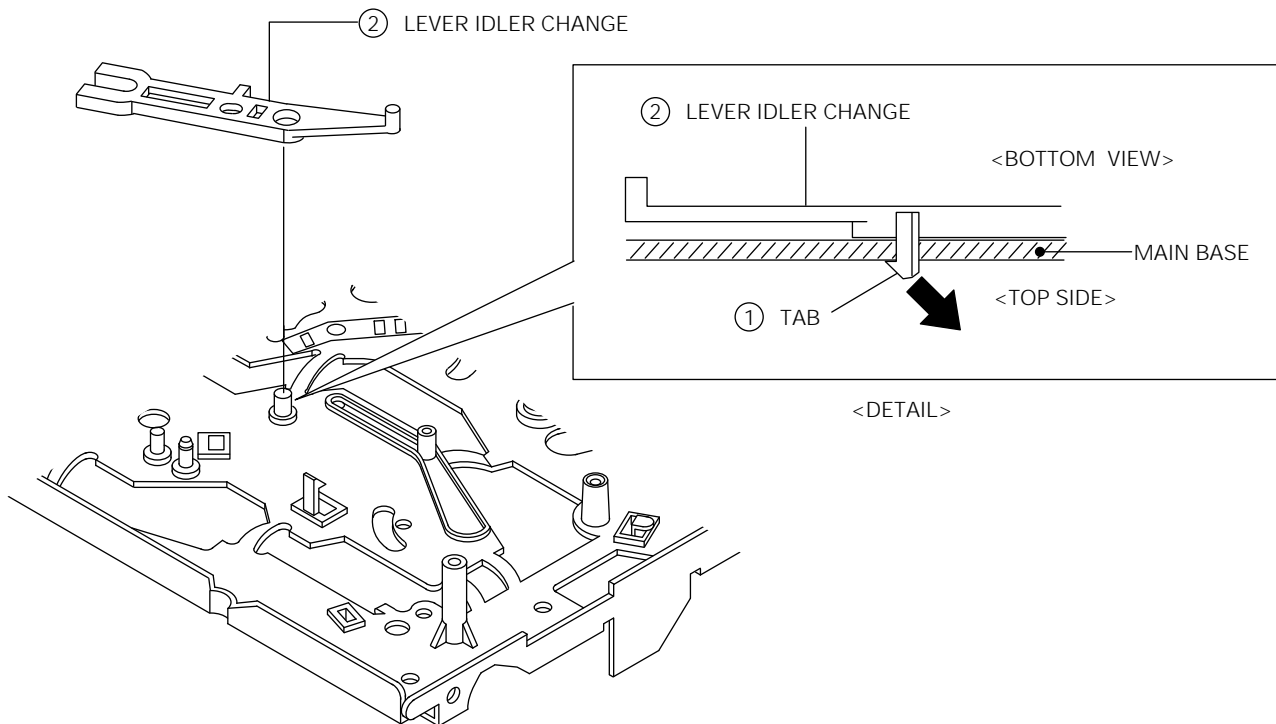


Fig. 1-50 Lever Idler Change Removal

1-4-31 Gear Loading "L", "R" Ass'y Removal

1. Remove the Loading "R" Gear Ass'y ② from the Roller "T" Guide ③ by pushing the Loading "R" Spring ① in the direction of arrow. (Refer to detail drawing A)
2. Remove the Loading "L" Gear Ass'y ⑤ from the Roller "S" Guide ⑥ by pushing the Loading "L" Spring ④ in the direction of arrow. (Refer to detail drawing B)
3. Lift the Loading "R" Gear Ass'y ②.
4. Lift the Loading "L" Gear Ass'y ⑤ by pushing the tab ⑦ of the Loading "L" Gear Ass'y ⑤. (Refer to detail drawing C)

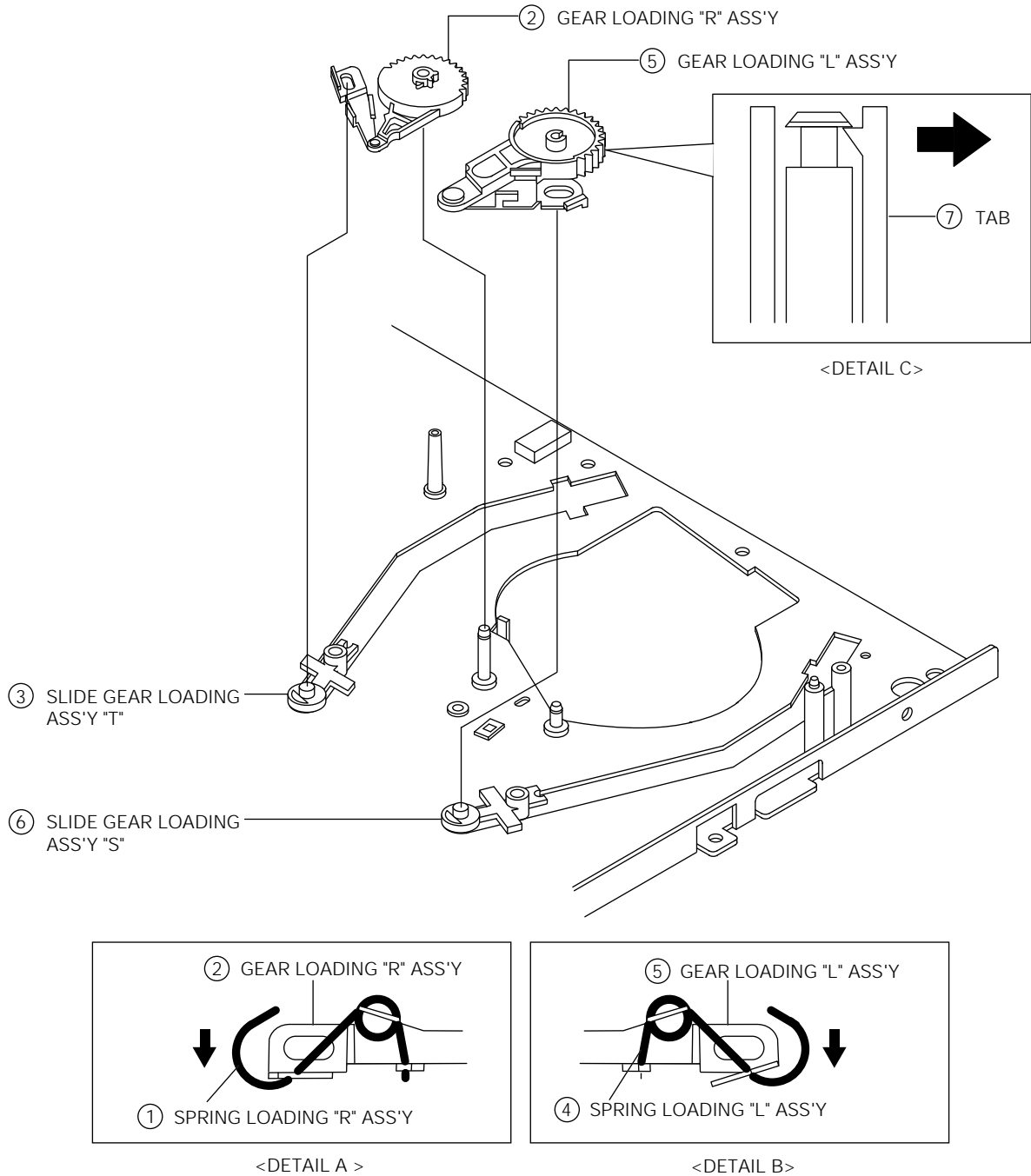


Fig. 1-51 Gear Loading "L", "R" Ass'y Removal

1-4-32 Assembly of Gear Loading "L", "R" Ass'y

1. When reinstalling, be sure to align 2 arrow as shown in Fig. 1-52. (Refer to timing point)

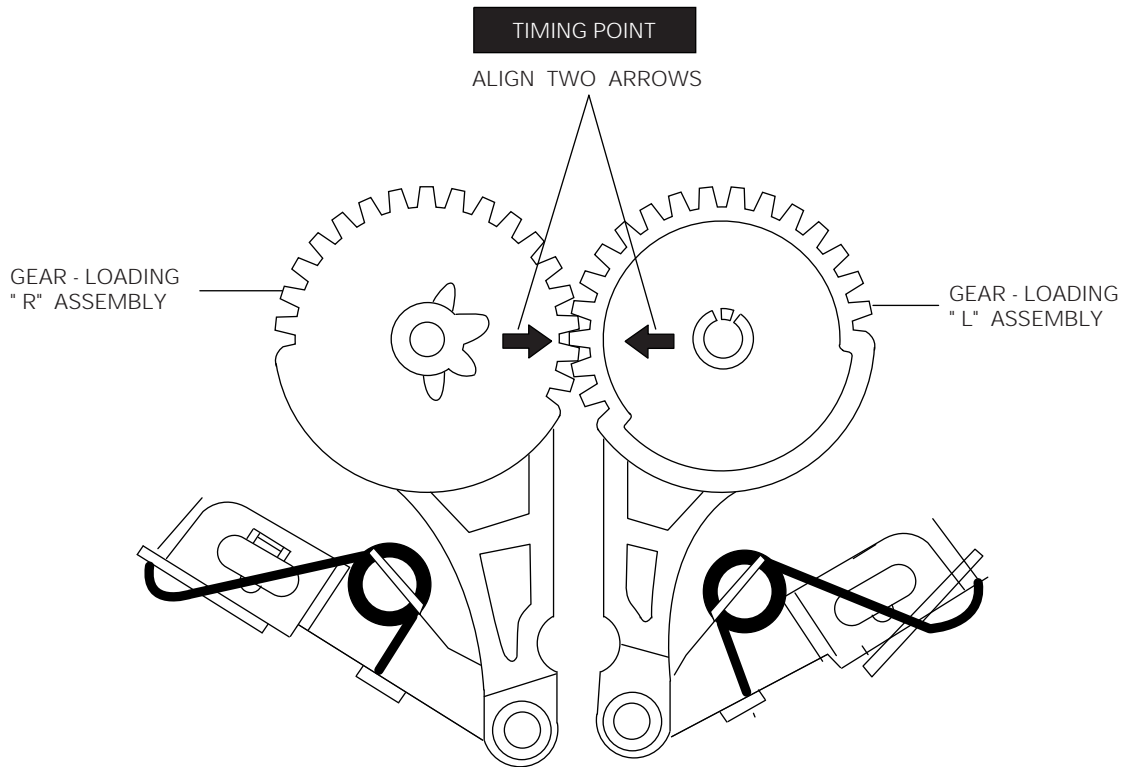


Fig. 1-52 Assembly of Gear Loading "L", "R" Ass'y

1-4-33 Slide Pinch Removal

1. Push the tab ① in the direction of arrow "A". (Refer to detail drawing)
2. Lift the Slide Pinch ② in the direction of arrow "B".

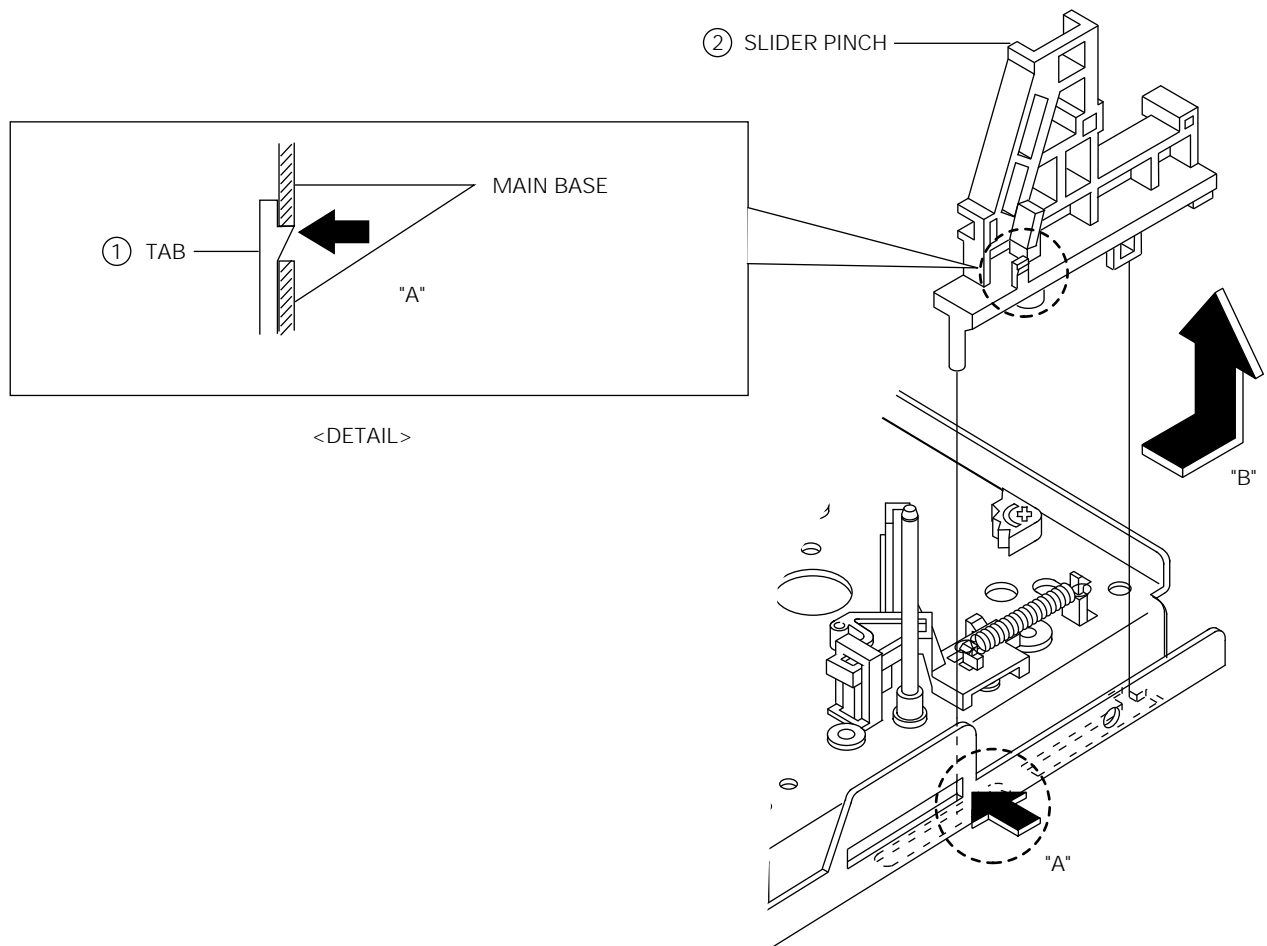


Fig. 1-53 Slide Pinch Removal

1-4-34 Slide Push Removal

1. Remove the Slide Push Spring ①.
2. Push the Slider ② in the direction of arrow "A".
3. Lift the Push Slider ② by pushing the tab ③ in the direction of arrow "B". (Refer to detail drawing)

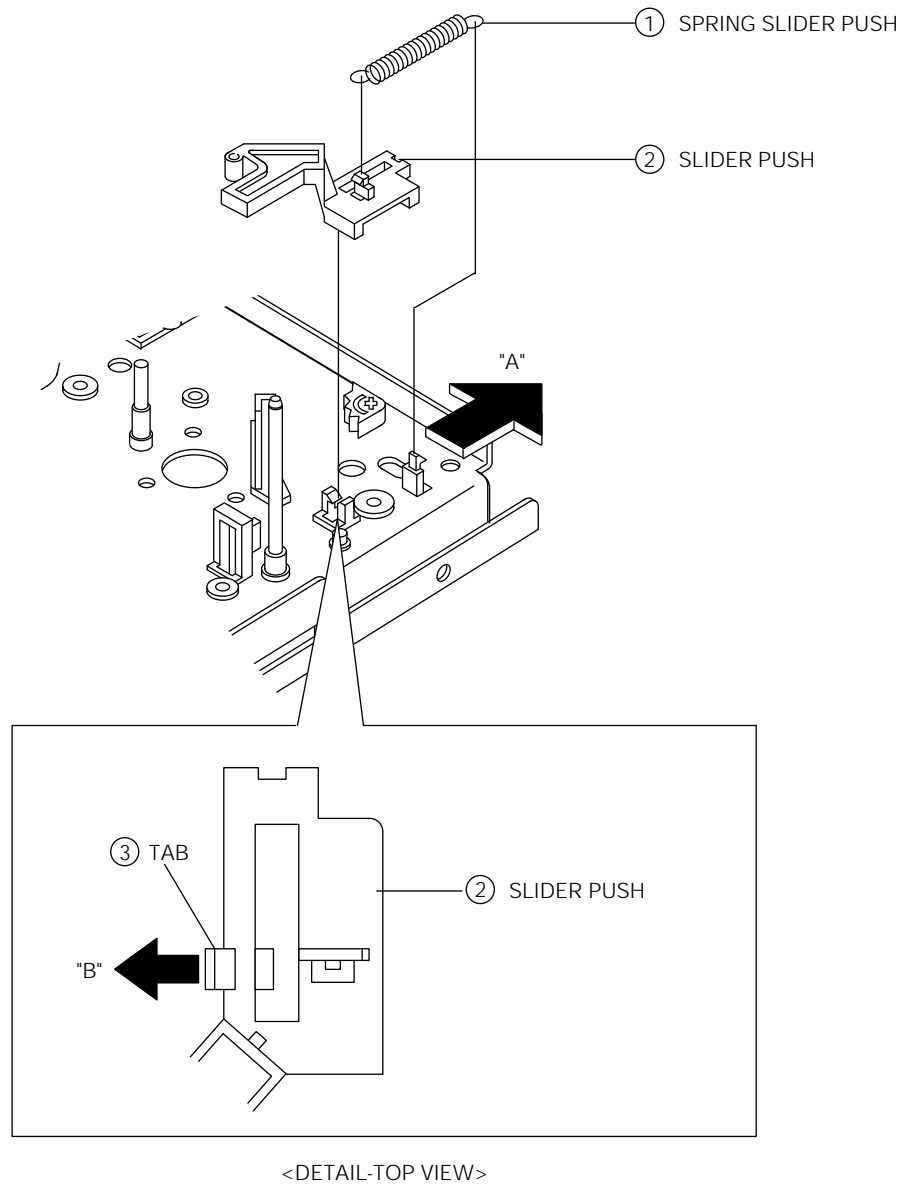


Fig. 1-54 Slide Push Removal

1-4-35 Prism LED Removal

1. Release the tab ① in the direction of arrow. (Refer to detail drawing)
2. Lift the LED Prism ②.

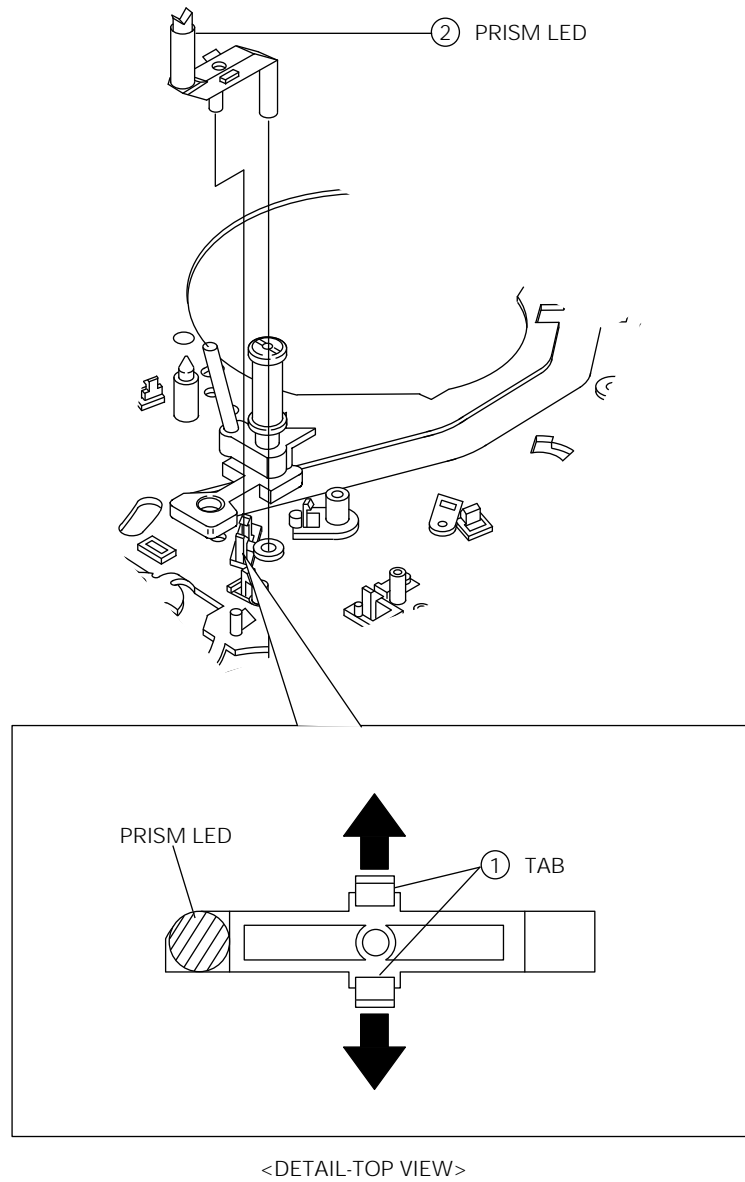


Fig. 1-55 Prism LED Removal

1-4-36 Lever Record Switch Removal

1. Remove the Record Switch Spring ①.
2. Release the tab ② in the direction of arrow. (Refer to detail drawing)
3. Lift the Record Switch Lever ③.

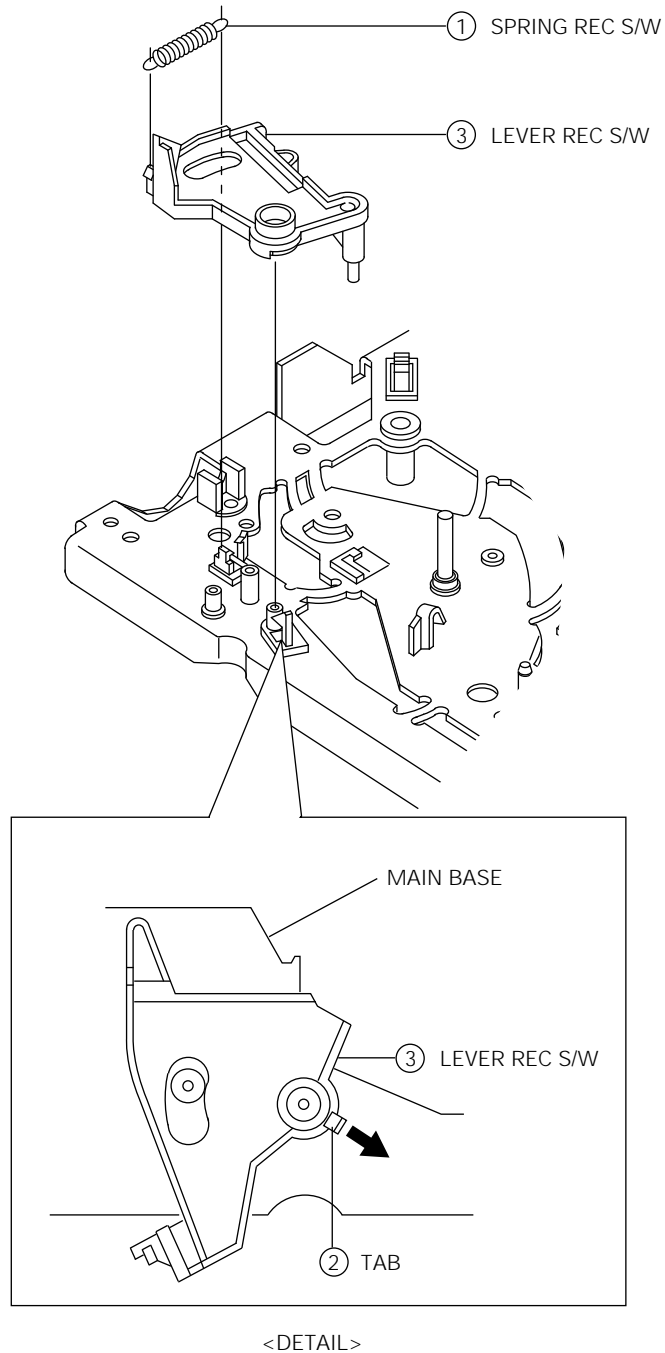


Fig. 1-56 Lever Record Switch Removal

1-4-37 Full Erase Head Removal

1. Remove 1 Screw ①.
2. Lift the F/E Magnet Head ②.

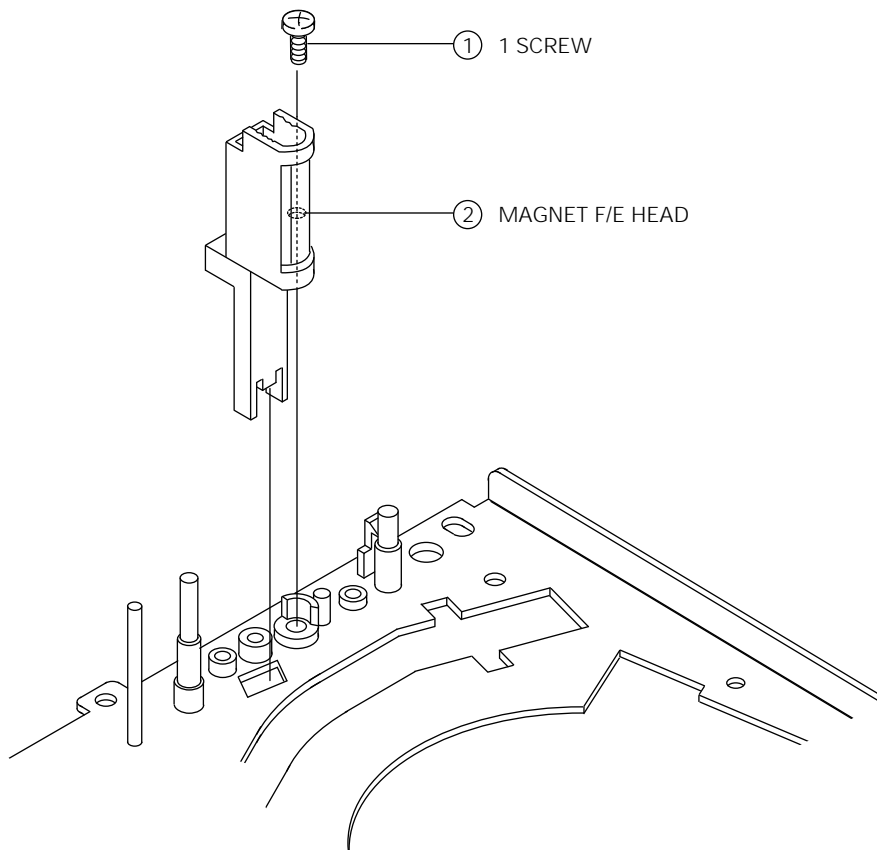


Fig. 1-57 Full Erase Head Removal

1-4-38 ACE Head Removal and Reassembly

1. Release the tab ① holding ACE Holder toward arrow. (Refer to detail drawing A)
2. Remove 1 Screw ②.
3. Lift the ACE Head Ass'y Magnet ③.

Assembly : When reinstalling, be sure to align the 3 teeth of X-Position adjustment gear with the 2 slot of ACE Head Base.

Note : When adjusting the X-Position adjustment gear using (+) driver, do not adjust by force.

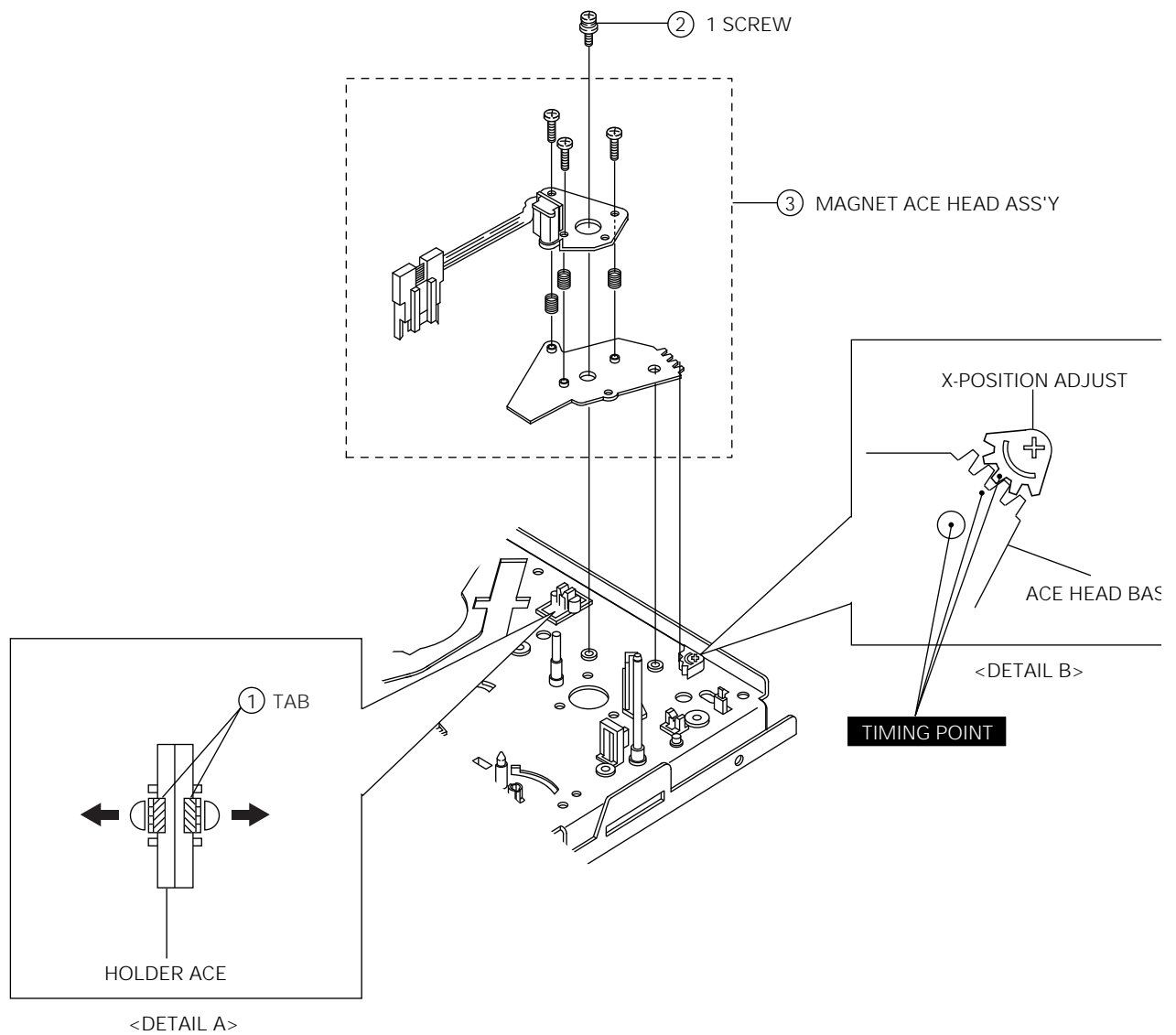


Fig. 1-58 ACE Head Ass'y Removal and Reassembly

1-4-39 Slide Guide Roller "S", "T" Ass'y Removal

1. Remove the Cylinder Ass'y from the Main Base. (Refer to Fig. 1-12, 1-13, 1-14)
2. Remove the Slide "S", "T" from the Loading "L", "R" Gear Ass'y. (Refer to Fig. 1-52)
3. Move the Roller "S", "T" Guide Ass'y to slot and then lift it to remove. (Refer to arrow)

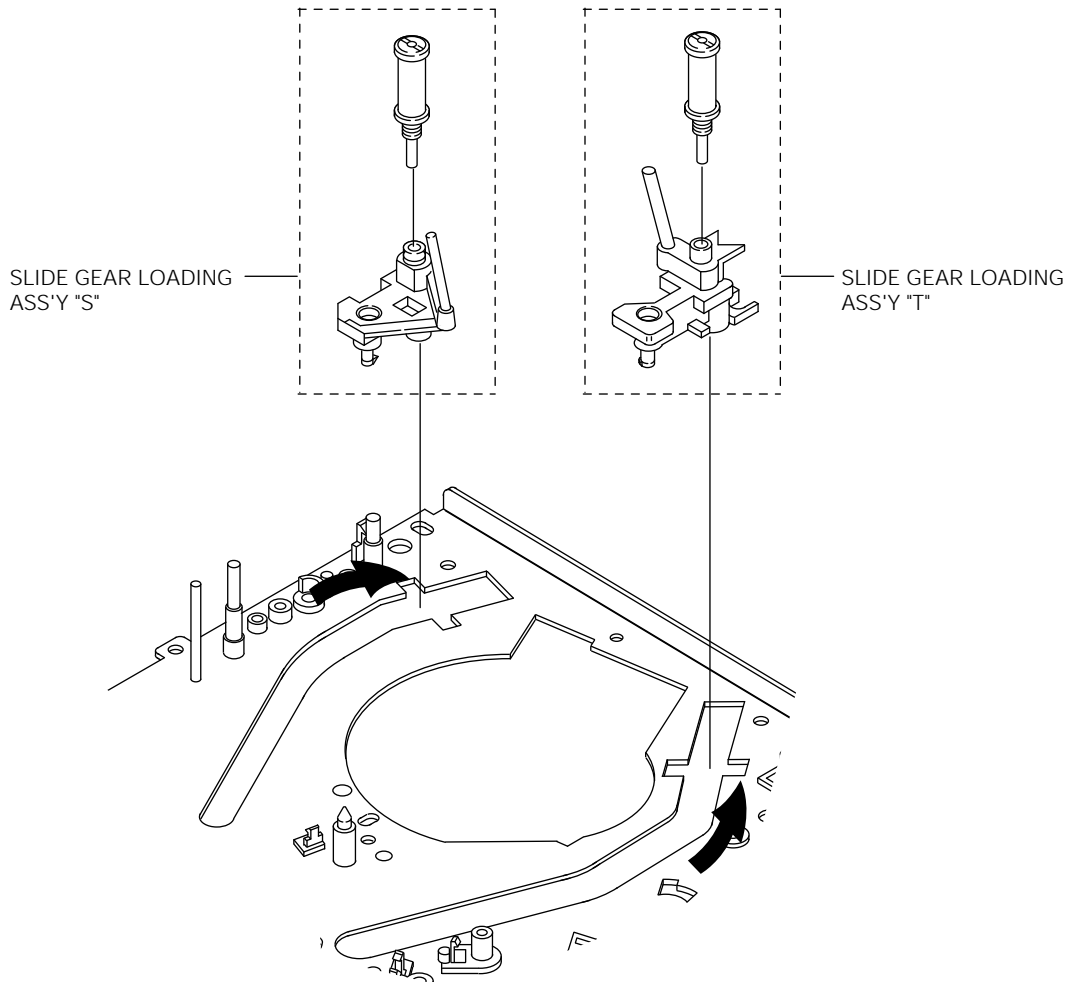


Fig. 1-59 Slide Guide Roller "S", "T" Ass'y Removal

1-4-40 Assembly of Slide Guide Roller "S", "T" Ass'y (When all parts except the Cylinder Ass'y are removed.)

1. Push 4 Lever Locks ① of the Housing Ass'y Simultaneously. (Refer to Fig. 1-60)
2. Push the Cassette Ass'y Holder ③ toward arrow "B" while turning the Master Gear ② toward arrow "A".
(Refer to Fig. 1-60)
3. Load the Loading L, R Gear Ass'y ④, ⑤ to the middle position of Guide Rail by turning the Master Gear ② toward arrow "A". (Refer to Fig. 1-60, 1-61)
4. Install the Guide Roller S, T Slide ⑥, ⑦ into the Rail slot and then move it to the position of Loading Gear L, R Ass'y ④, ⑤. (Refer to Fig. 61)
5. Turn the Master Gear ② toward arrow "A". (Eject mode)

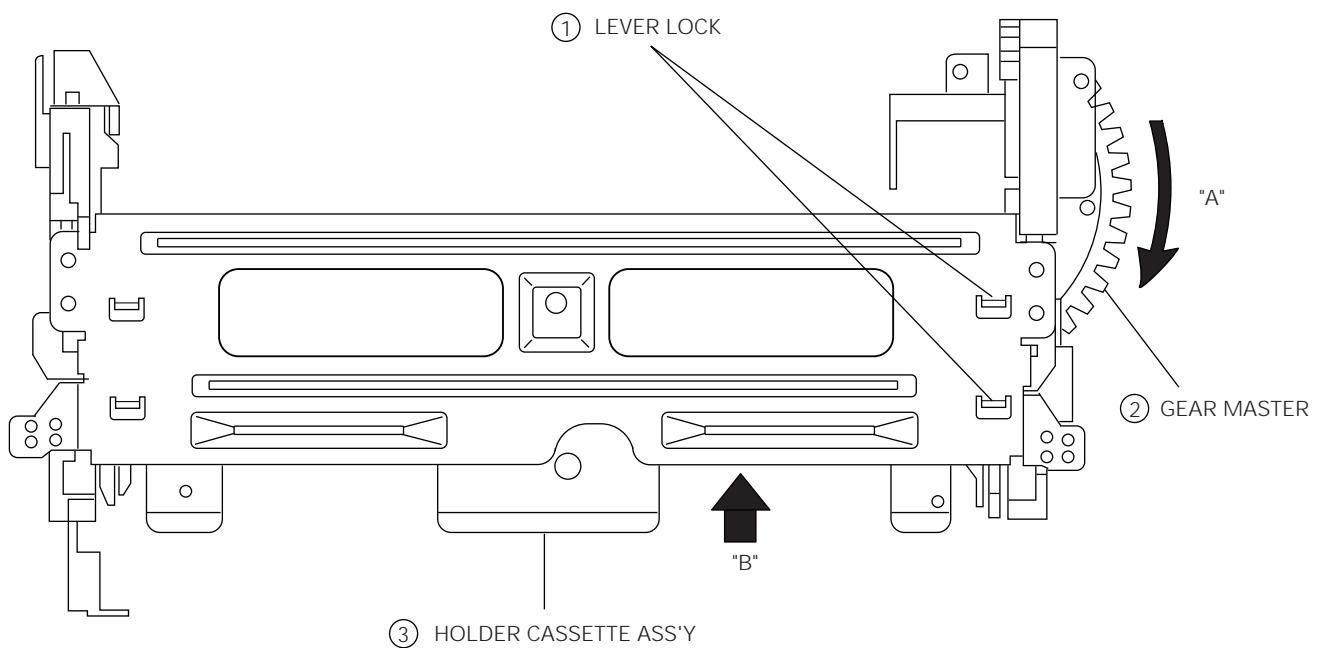


Fig.1-60 How to operate the Housing Ass'y

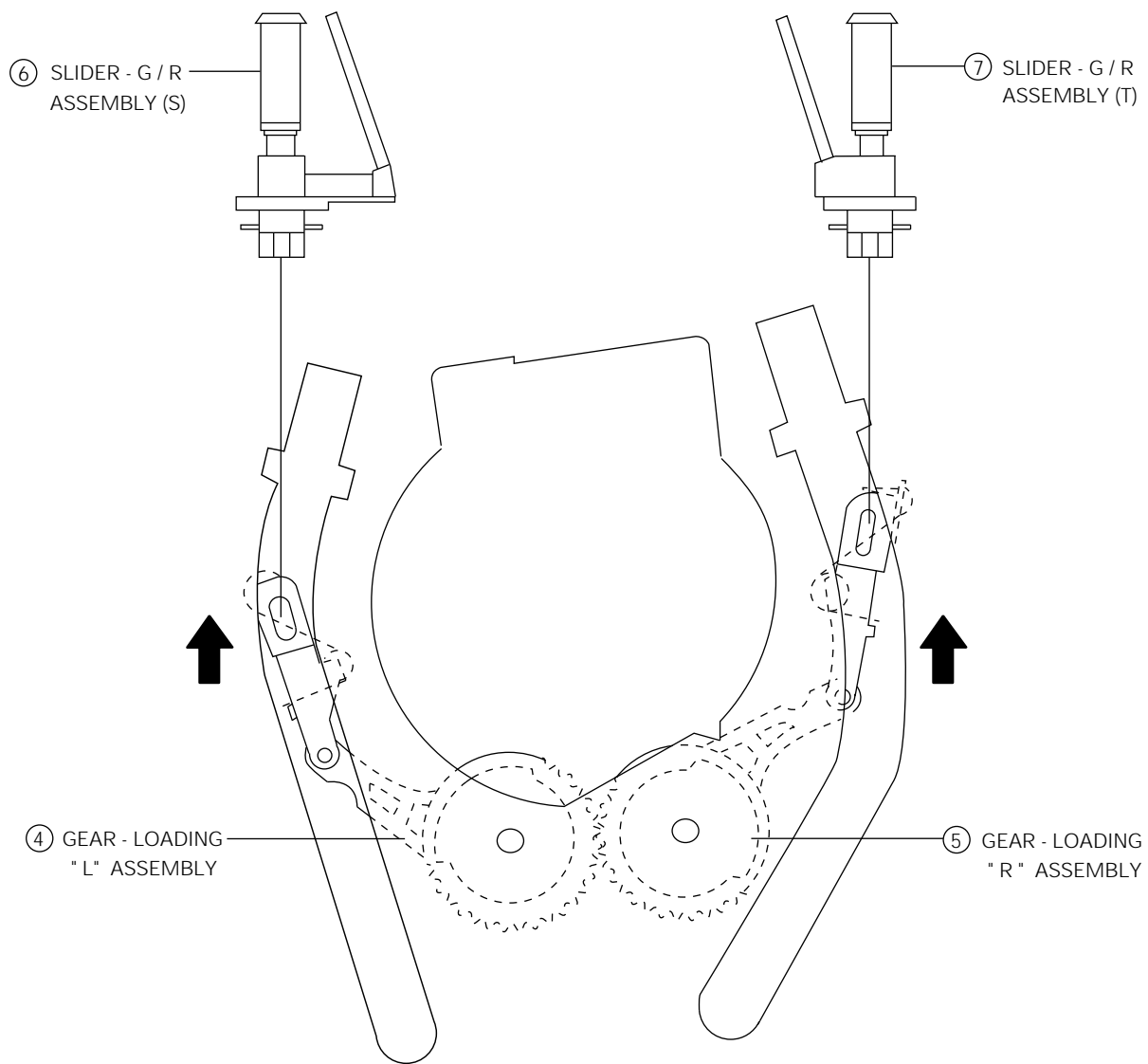


Fig. 1-61 Assembly of Slide Guide Roller "S", "T" Ass'y

1-5 Cleaning and Lubrication

1-5-1 Cleaning Tape Mechanism

Periodic cleaning of the tape mechanism is necessary. To clean the following parts, use patch and solvent :

1. Capstan Shaft
2. All tape guide posts
3. Clutch Pulley
4. Pinch roller
5. Belt Capstan
6. Capstan Motor Pulley

1-5-2 Cleaning of Rotating and Stationary Heads

To clean video heads, full erase head, and the audio/control (A/C) head we recommend using a head cleaning kit and solvent.

Note : When cleaning video heads, move the cleaning stick in the direction of head rotation (wiping in a vertical direction may damage the heads.)

Press a chamois cloth which has been dipped in cleaning fluid lightly against the rotating Cylinder Ass'y. Clean slowly by rotating the Upper Cylinder Ass'y by hand.

Note : Never turn the Motor on when cleaning.

1-5-3 Lubrication of Tape Mechanism

The tape transport mechanism is properly lubricated at the factory. In normal use cycles, and with average environmental conditions, additional lubrication should not be required during the first year of operation.

Depending on the frequency of use and environmental conditions, periodic lubrication may be required. When lubricating, first remove the old lubricant, then sparingly apply new lubricant. Excessive lubricant is transferred to other assemblies, malfunction will result.

Use grease on the following parts every 1,000 hours. (See exploded view for location) :

1. Between base pole assembly (L, R) and main base
2. Gear Loading L, R
3. Slide Main
4. Lever Shift
5. Gear Master
6. Lever Slide Pinch
7. Pinch Roller
8. Slide Pinch
9. Base Cylinder

Oil may be required for the following parts after 1,000 hours. (See exploded view for location) :

Main Base

1. Arm Tension molding
2. Shaft Reel Disk L, R
3. Shaft Gear Relay S, T
4. Shaft Idler
5. Shaft Clutch

Other parts which are not listed above do not require lubrication, except when parts are replaced. Use appropriate oil or grease as indicated on the exploded view.

THE ASSEMBLY PROCEDURES OF DECK PARTS

NO	DESCRIPTION	SUBPARTS	LOCATE	REMARK
1	BASE MAIN ASS'Y	GREASE	TOP VIEW	
2	MOTOR D.D CAPSTAN	3 SCREWS	TOP VIEW	
3	LEVER JOG ASS'Y	1 SCREW	TOP VIEW	DX8-A/DX8-AC
4	GEAR RELAY "S" ASS'Y	1 WASHER SLIT	TOP VIEW	
5	GEAR RELAY "T" ASS'Y	1 WASHER SLIT	TOP VIEW	
6	IDLER ASS'Y	1 WASHER SLIT	TOP VIEW	
7	REEL DISK "L" ASS'Y	1 WASHER PLAIN	TOP VIEW	
8	REEL DISK "R" ASS'Y	1 WASHER PLAIN	TOP VIEW	
9	ARM TENSION FULL ASS'Y		TOP VIEW	
10	SLIDE G/R ASS'Y (S)		TOP VIEW	
11	SLIDE G/R ASS'Y (T)		TOP VIEW	
12	SLIDE PUSH		TOP VIEW	
13	SLIDER PINCH	GREASE	TOP VIEW	
14	GEAR LOADING "L" ASS'Y		BOTTOM VIEW	
15	GEAR LOADING "R" ASS'Y		BOTTOM VIEW	
16	LEVER IDLER CHANGE		BOTTOM VIEW	
17	LEVER SHIFT ASS'Y	SPRING GUIDE	BOTTOM VIEW	
18	SLIDER MAIN	1 WASHER SLIT	BOTTOM VIEW	
19	LEVER SLIDER PINCH	1 WASHER SLIT	BOTTOM VIEW	
20	CLUTCH ASS'Y	1 WASHER SLIT, PLAIN	BOTTOM VIEW	
21	BRAKE CAPSTAN ASS'Y		BOTTOM VIEW	
22	SPRING BRAKE CAPSTAN		BOTTOM VIEW	
23	UNIT LOADING	2 SCREWS	BOTTOM VIEW	
24	GEAR MASTER	1 WASHER SLIT	BOTTOM VIEW	
25	BELT CAPSTAN		BOTTOM VIEW	
26	LEVER REVIEW		TOP VIEW	
27	ARM REVIEW ASS'Y		TOP VIEW	
28	LEVER PINCH CAM		TOP VIEW	
29	LEVER PINCH COMP ASS'Y		TOP VIEW	
30	SPRING ARM PINCH		TOP VIEW	
31	UNIT PINCH ROLLER	1 WASHER SLIT	TOP VIEW	
32	BRAKE MAIN "L" ASS'Y		TOP VIEW	
33	BRAKE MAIN "R" ASS'Y		TOP VIEW	
34	SPRING BRAKE MAIN		TOP VIEW	
35	BRAKE SUB "L" ASS'Y		TOP VIEW	
36	BRAKE SUB "R" ASS'Y		TOP VIEW	
37	SPRING BRAKE SUB "L"		TOP VIEW	
38	SPRING BRAKE SUB "R"		TOP VIEW	

NO	DESCRIPTION	SUBPARTS	LOCATE	REMARK
39	PRISM LED		TOP VIEW	
40	SLIDER RACK HOUSING		TOP VIEW	
41	LEVER REC S/W		TOP VIEW	
42	SPRING REC S/W		TOP VIEW	
43	SPRING TENSION		TOP VIEW	
44	SPRING SLIDE PUSH		TOP VIEW	
45	MAGNET ACE HEAD ASS'Y	1 SCREW	TOP VIEW	
46	HOUSING ASS'Y	3 SCREWS	TOP VIEW	
47	CYLINDER ASS'Y	3 SCREWS	TOP VIEW	
48	MAGNET F/E HEAD	1 SCREW	TOP VIEW	
49	STOPPER TAPE		TOP VIEW	DX7-A/DX8-A
	HEAD CLEANER ASS'Y		TOP VIEW	DX7-AC/DX8-AC

Note: Stopper tape has deleted from JAN.1998

MEMO

2. Alignment and Adjustment

2-1 Tape Transport System and Adjustment Locations

The tape transport system has been adjusted precisely in the factory. Alignment is not necessary except for the following :

1. Noise observed on the screen.
2. Tape damage.
3. Parts replacement in the tape transport system.

Lower flange height of tape guide is used as the reference for the transport adjustment.

To maintain the height of the tape guide and prevent damage, do not apply excessive force onto the main base.

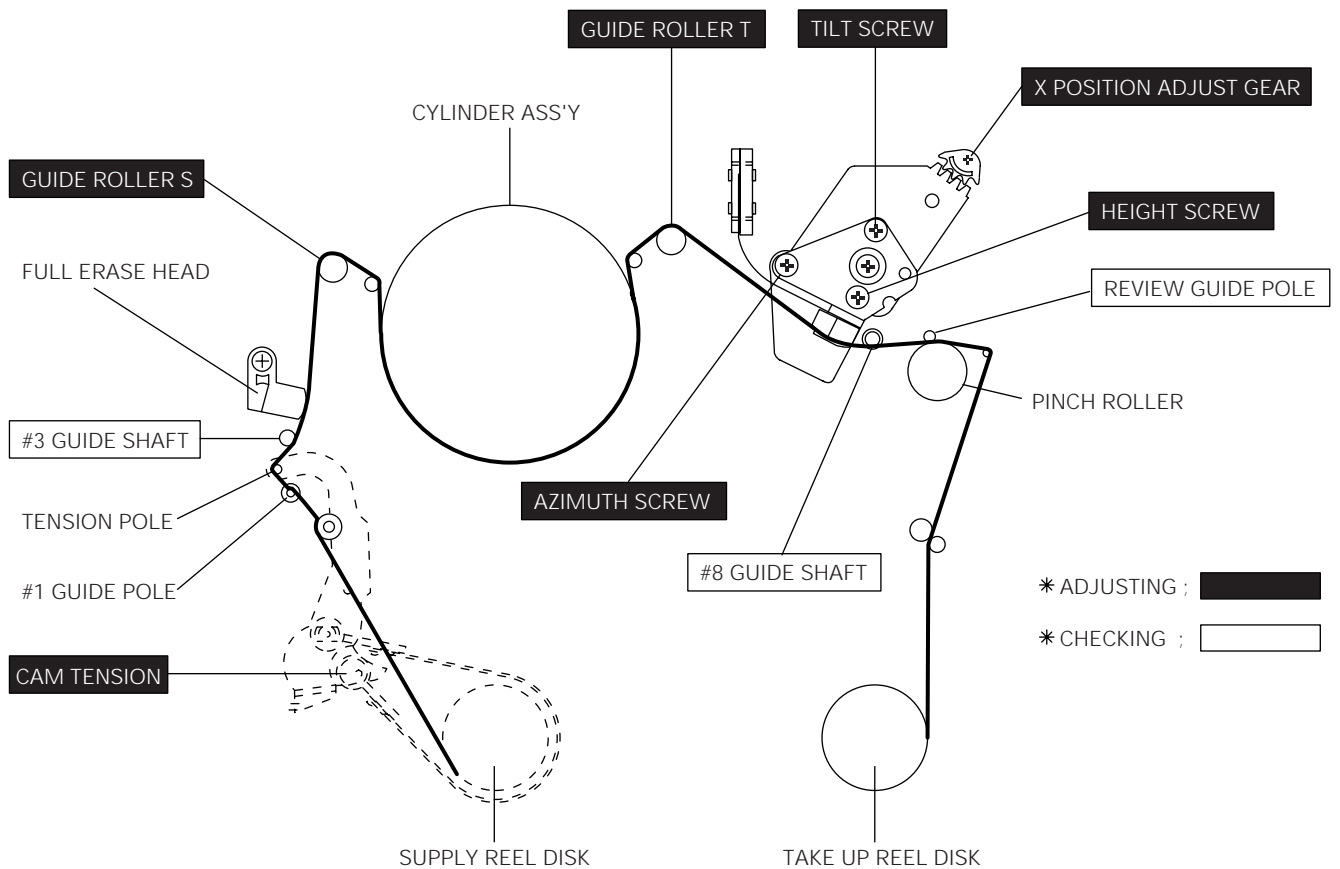


Fig. 2-1 Location of Tape Transport Adjustment

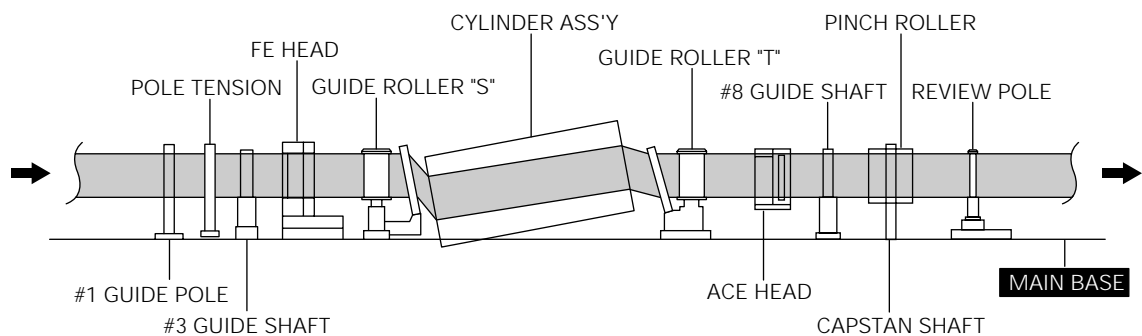


Fig. 2-2 Tape Travel Diagram

2-2 Tape Transport System Adjustment

When parts are replaced, perform the required adjustments by referring to precedures for the tape transport system. If there are any changes to the tape path, first run a T-120 (E-180) tape and make sure excessive tape wrinkle does not occur at the tape guides.

1. If tape wrinkle is observed at the S, T-guide rollers, turn the S, T-guide rollers until wrinkle disappears.
2. If the tape wrinkle is still observed at the tape guide, perform the tilt adjustment of the A/C head. (See page 5-1 of the Service Manual for Test Point Locations.)

2-2-1 A/C Head Assembly Adjustment

2-2-1 (a) A/C HEAD HEIGHT ADJUSTMENT

- 1) Run the alignment tape (Color bar) in the playback mode.
- 2) Observe surface of the audio head using a dental mirror.
- 3) Turn screw (A), (B), (C) clockwise or counterclockwise until the gap of lower tape edge and the lower edge of the control head is about 0.25mm. (Refer to Fig. 2-3 and 2-4)

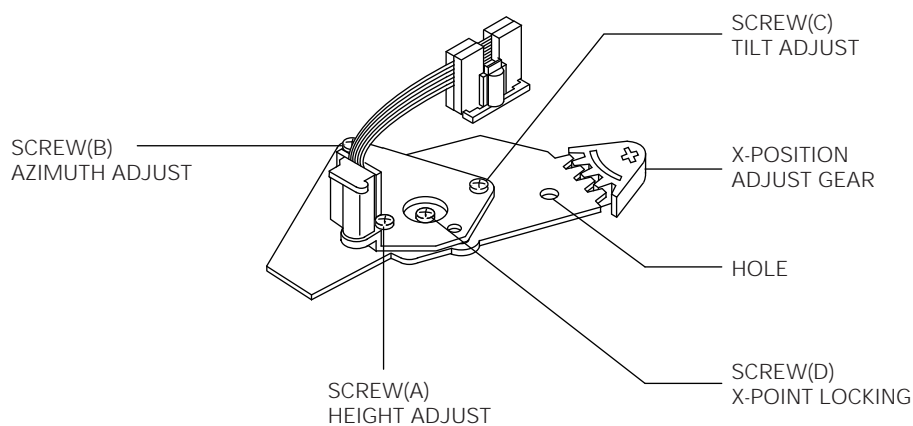


Fig. 2-3 Location of A/C Head Adjustment Screw

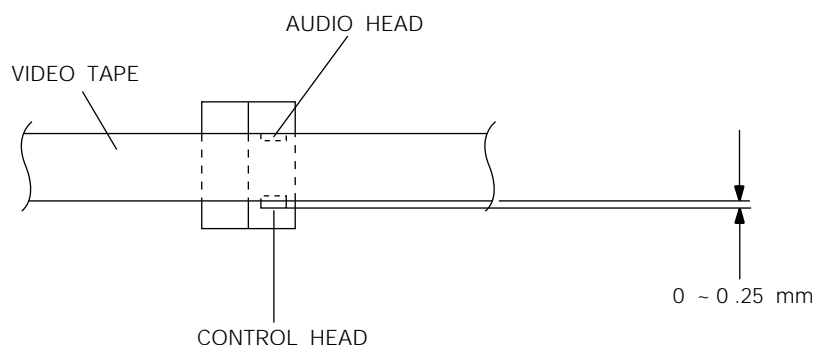


Fig. 2-4 A/C Head Height Adjustment

2-2-1 (b) A/C HEAD TILT ADJUSTMENT

1. Playback a T160 (E-240) tape and observe the position of the tape at the lower flange of tape guide.
2. Confirm that there is no curl or wrinkle at the lower flange of tape guide as shown in Fig.2- 5 (B)
3. If a curl or wrinkle of the tape occurs, slightly turn the screw (C) tilt adjust on the A/C Head ass'y.
4. Reconfirm the A/C head height.

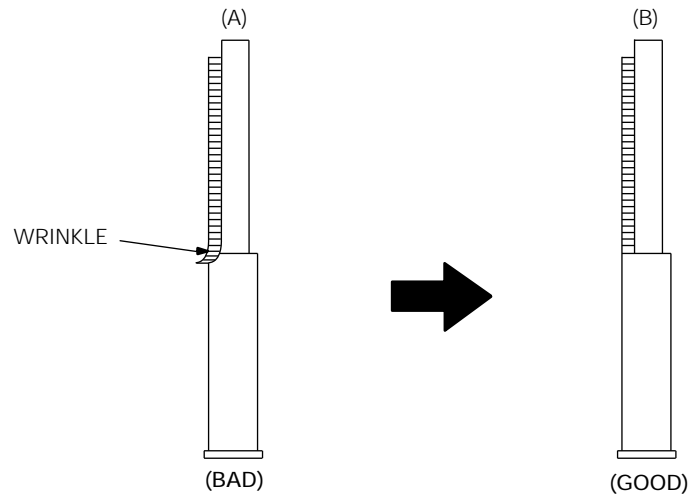


Fig. 2-5 Tape Guide Check

2-2-1 (c) AUDIO AZIMUTH ADJUSTMENT

1. Load alignment tape (Mono scope) and playback the NTSC : 7KHz (PAL : 6KHz) signal.
2. Connect channel-1 scope probe to audio output test point.
3. Adjust screw (B) to achieve maximum audio level. (See Fig. 2-3)

2-2-1 (d) A/C HEAD POSITION (X-POINT) ADJUSTMENT

1. See page 5-2 of the Service Manual for A/C Head position (X-Point) adjustment.

2-2-2 Linearity adjustment (S, T-guide rollers adjustment)

1. Playback the Mono Scope alignment tape (SP mode).
2. Observe the video envelope signal on an oscilloscope (triggered by the video switching pulse).
3. Make sure the video envelope waveform (at its minimum) meets the specification shown in Fig. 2-6.
If it does not, adjust as follows :

Note : a=Maximum output of the video RF envelope.
 b=Minimum output of the video RF envelope at the entrance side.
 c=Minimum output of the video RF envelope at the center point.
 d=Maximum output of the video RF envelope at the exit side.

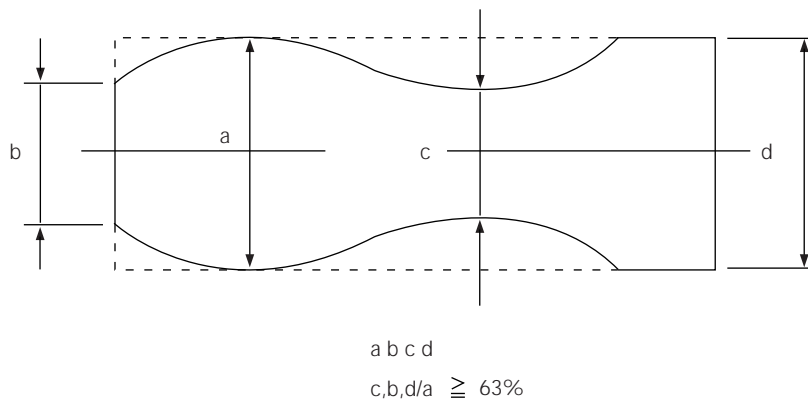


Fig. 2-6 Envelope Waveform Adjustment

4. If the section A in Fig. 2-7 does not meet the specification, adjust the S-guide roller up or down.
5. If the section B in Fig. 2-7 does not meet the specification, adjust T-guide roller up or down.

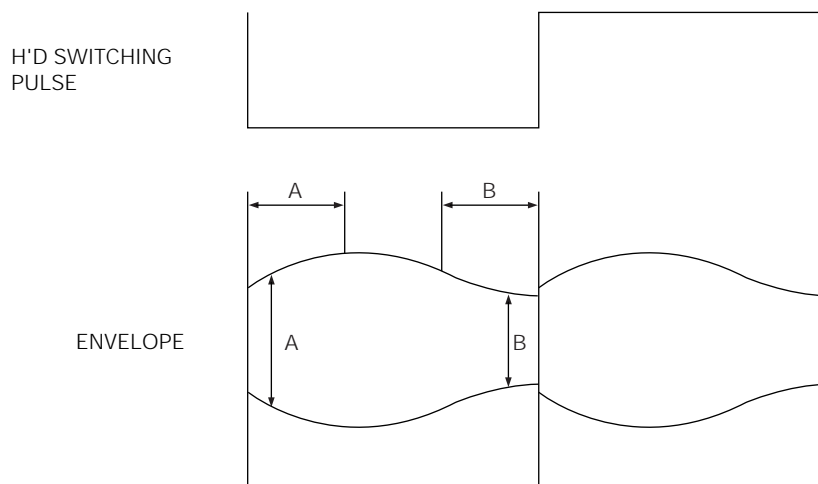



Fig. 2-7 Adjustment Points

6. Play back the Mono Scope alignment tape (SP mode).
7. Connect an oscilloscope CH-1 to the Envelope and CH-2 to the H'D SW Pulse for triggering.
8. Turn the guide roller heads with a flat head () driver to obtain a flat video RF envelope as shown in Fig. 2-8.
9. After the adjustment is completed, tighten the set screws.

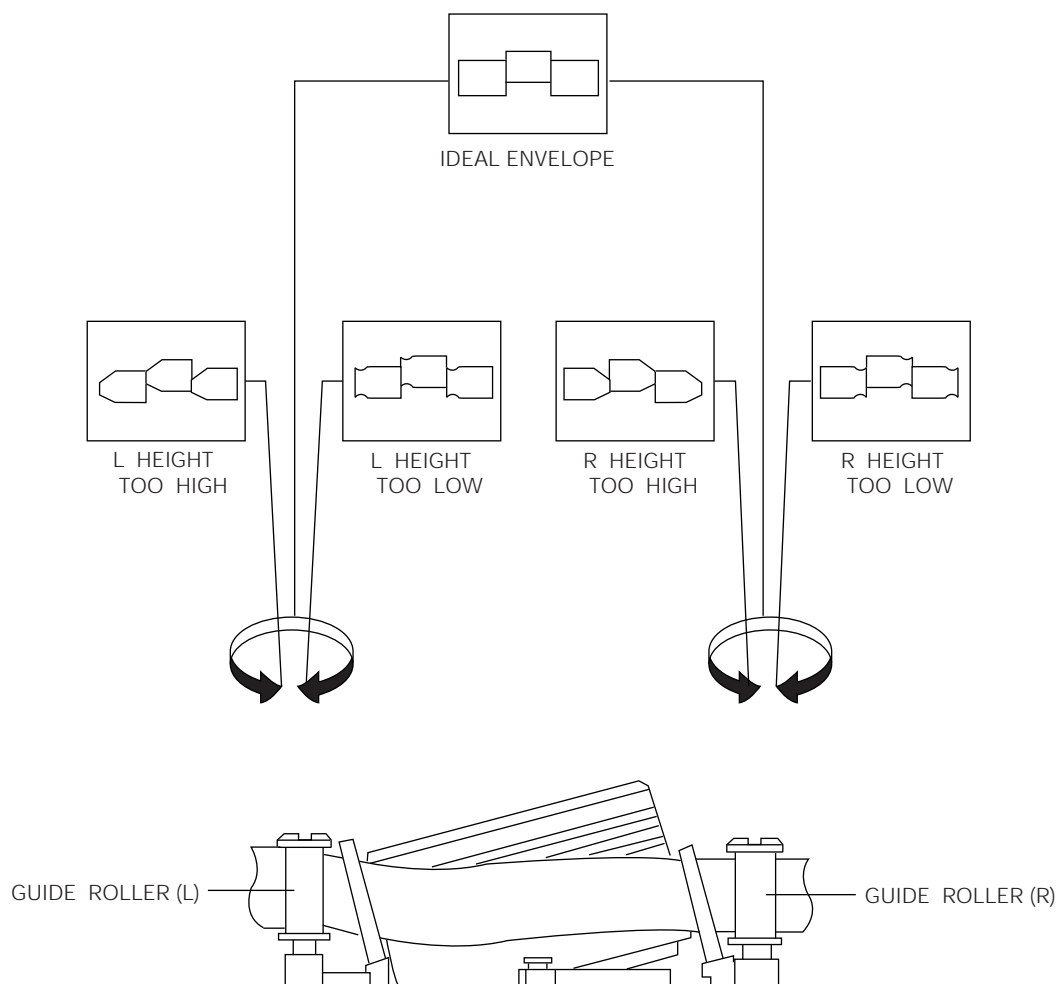


Fig. 2-8 S, T-Guide Roller Height Adjustment

2-2-3 Check Transitional Operation from RPS to Play

Check transition from RPS mode to play mode : Using a pre-recorded SP tape, make sure the entry side of envelope comes to an appropriate steady state within 3 seconds (as shown in Fig. 2-9). If the envelope waveform does not reach specified peak-to-peak amplitude within 3 seconds, adjust as follows :

1. Make sure there is no gap between the supply roller lower flange and the tape.
If there is a gap, adjust the supply guide roller again.
2. Change operation mode from the RPS to the play mode (again) and make sure the entry side of envelope rises within 3 second.

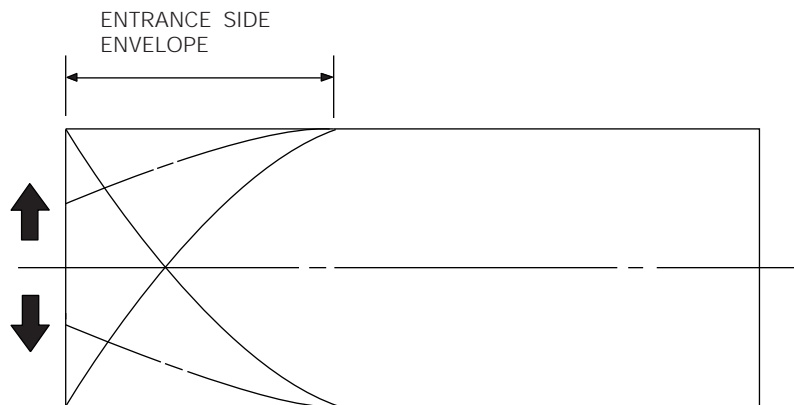


Fig. 2-9 Video Envelope Rising when Operation mode Changes from RPS to Play Mode

2-2-4 Envelope Check

1. Make recordings on T-120 (E-120) and T-160 (E-180) tape. Make sure the playback output envelope meets the specification as shown in Fig. 2-10.
2. Play back a self recorded tape (recording made on the unit using with T-120, E-120). The video envelope should meet the specification as shown in Fig. 2-10. In SP mode, (A) should equal (B).
If the head gap is wide, upper cylinder should be checked.

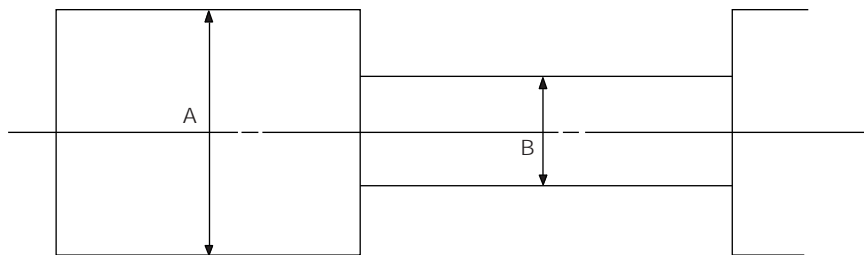


Fig. 2-10 Envelope Output and Output Level

2-2-5 Tape Wrinkle Check

1. Run the T-160 (E-240) tape in the playback, FPS, RPS and Pause modes and observe tape wrinkle at each guide.
2. If excessive tape wrinkle is observed, perform the following adjustments in Playback mode :

- ◆ Tape wrinkle at the S, T-guide roller section : Linearity adjustment.
- ◆ Tape wrinkle at tape guide flange : A/C head assembly coarse adjustment.

2-3 Reel Torque

2-3-1 Reel Torque

1. The rotation of the capstan motor drives the clutch ass'y through the capstan motor belt.
2. Brake operation and shift operation in FF/REW are done by a leverslide.
3. Transportation of accurate driving force is done by gears (clutch ass'y).

Note : If the spec does not meet the followings specifications, replace the clutch ass'y and then recheck.

MODE	TORQUE g/cm	GAUGE
PB/REC	100 ± 30	Cassette Torquemeter
RPS	170 ± 30	Cassette Torquemeter
FF/REW	Minimum 600	Torque Gauge

2-3-2 Location of Tension Pole and Back Tension Adjustments

1. Remove the housing ass'y and set the deck to "PLAY" mode.
2. Adjust the tension cam to 0 ~ -0.5mm from the center of supply roller.
3. The back tension meter should read 41 ~ 51g.cm. (PAL : 40 ~ 47g.cm)

Counterclockwise : Torque UP
 Clockwise : Torque DOWN

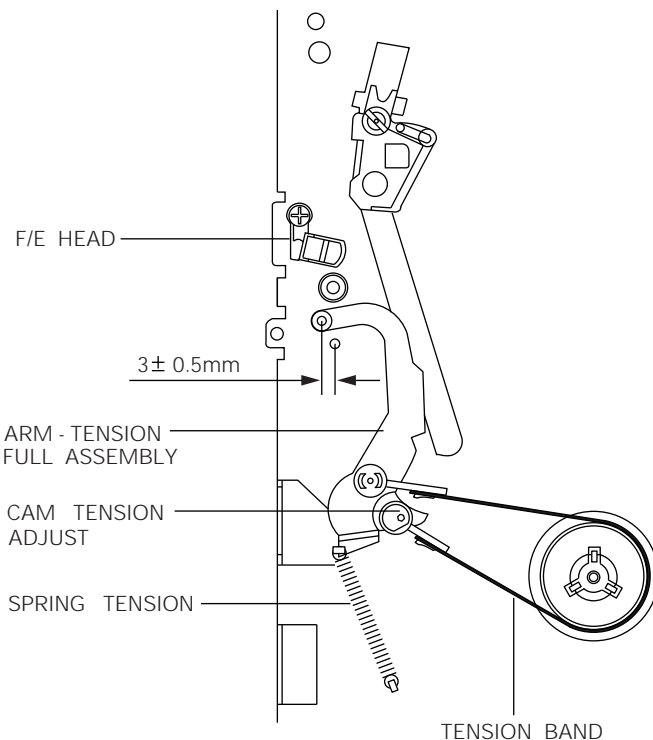


Fig. 2-11 Tension Pole and Back Tension Adjustment

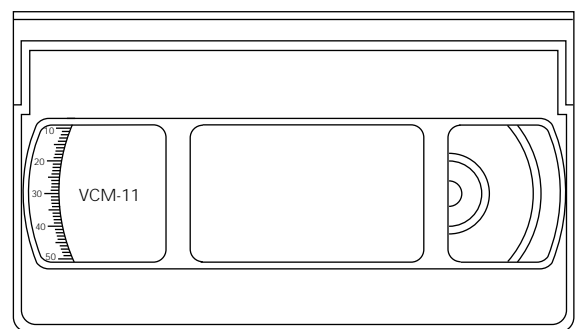


Fig. 2-12 Back Tension Tape Torque Cassette