

TCM-77V

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model



Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MT-77-44

SPECIFICATIONS

Recording system: 2-track 1-channel monaural
Frequency response: 150–8 000 Hz (For normal tape TYPE I)
Power output (DC): 250 mW (at 10% harmonic distortion)
Input: Microphone input jack (minijack) sensitivity 0.2 mV for 3 k Ω or lower impedance microphone
Output: Earphone jack (minijack) for 8–300 ohm earphone
Power requirements: 3 V DC, two size AA (R6) batteries
DC IN 3 V jack accepts:
Sony AC-77 AC power adaptor
120 V AC, 60 Hz
Sony DCC-70 car battery cord (not supplied) for use on 12 V car battery

Battery life:

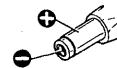
Batteries	Recording (hours)
Sony batteries SUM-3 (NS)	Approx. 2
Sony alkaline batteries AM3 (N)	Approx. 6

For maximum performance, we recommend the use of alkaline batteries.
Dimensions: Approx. 111.8 × 35.2 × 79.5 mm (w/h/d)
(4 3/4 × 1 7/16 × 3 1/4 inches)

Incl. projecting parts and controls
Weight: Approx. 260 g (9.2 oz) incl. batteries
Accessories supplied: Carrying case (1)
Earphone microphone (1)
AC power adaptor (AC-77) (1) (US model only)

Note: Use only the recommended AC power adaptor or car battery cord manufactured by Sony. Polarity of the plugs of other manufacturers may be different.

Polarity of the
TCM-77V



Design and specifications subject to change without notice.



CASSETTE-CORDER
SONY®

FEATURES

- Auto-reverse function allows you to record or playback both sides of a cassette continuously without turning the cassette over.
- A large display window allows you to read indicators easily.
- Cue marker function to mark a desired portion during recording.
- VOR function allows you to record only when sound is picked up.
- Adjustable tape speed in playback mode.
- Equipped with a microphone sensitivity switch to adjust the recording level depending on the microphone you are using and the recording condition.
- Safety HOLD switch to prevent the function buttons (REC, PLAY, FF/CUE, PAUSE, REW/REVIEW, STOP, DIR) from being activated by mistake.

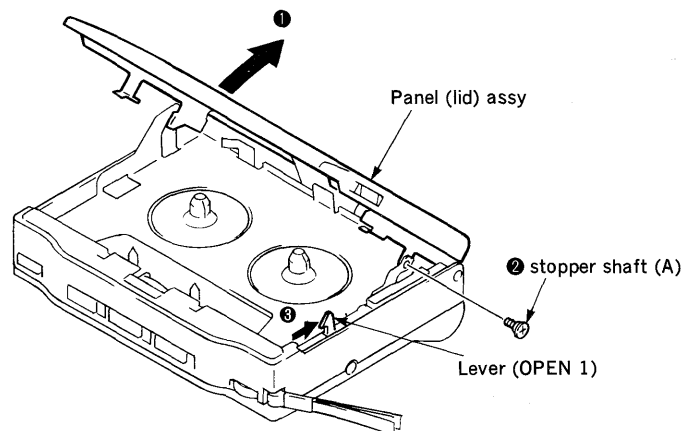
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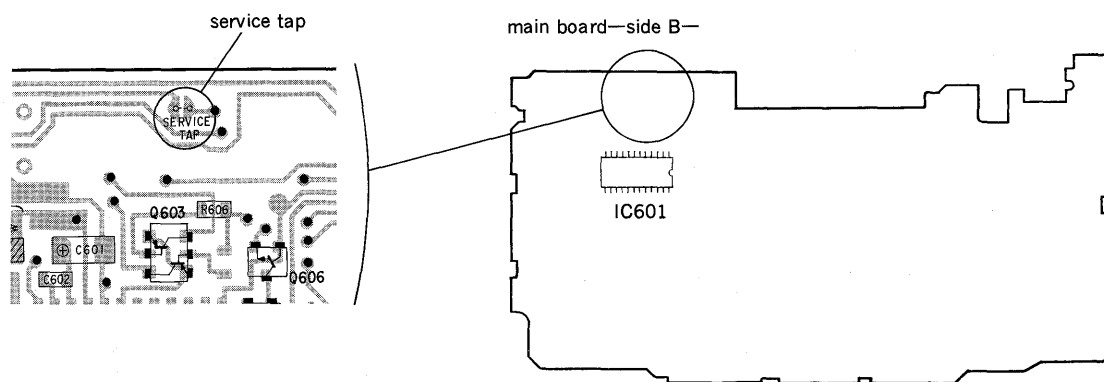
SECTION 1 SERVICING NOTES

1-1. METHOD OF TORQUE MEASUREMENT AND TAPE PASS CHECK

1. Open the panel (lid) assy.
2. Remove the stopper shaft (A).
3. Insert a torque meter and a mirror cassette and measure the torque and tape pass.
4. When taking out a torque meter and a mirror cassette, press the STOP button, shift the lever (Open 1) in the direction of an arrow ③ and return the head completely.



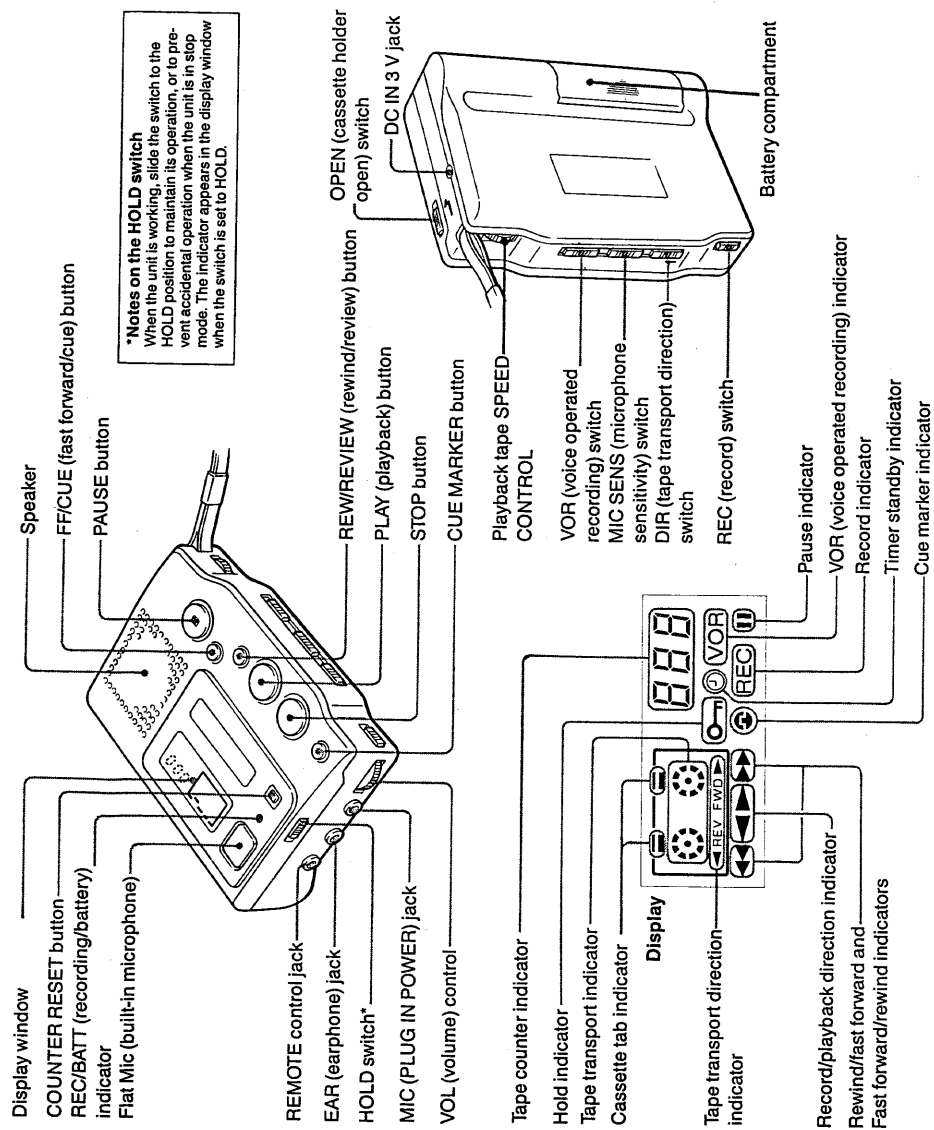
1-2. SERVICE MODE



Soldering the service tap allows to check the each mode of the mechanism deck on the condition that the door is opened.

- (1) PLAY mode.....Press the PLAY button.
- (2) REC mode.....In the FWD mode, REC SW (S706) is momentarily turned ON.
- (3) PAUSE modePress the PAUSE button.
- (4) STOP modePress the STOP button. (Stops after setting REW mode for approximately two seconds.)
- (5) DIR modePLAY button → S101 → DIR SW (S707) is momentarily turned ON.
- (6) FF/REW modePress the FF/REW button. (Stops after setting FF or REW mode for approximately two seconds.)

2-1. PARTS IDENTIFICATION

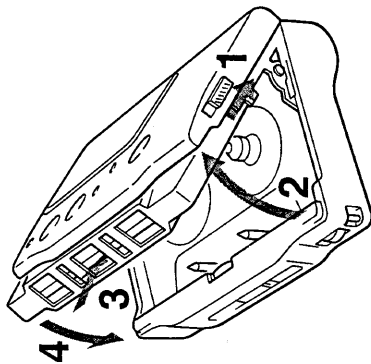


SECTION 2 GENERAL

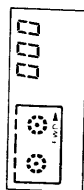
2-3. INSTALLING A CASSETTE

Install a cassette when the unit is in the stop mode. Take up any slack of the tape with a pencil before installing a cassette.

- 1 Slide OPEN in the direction of the arrow.
- 2 Open the lid while keeping OPEN slid.
- 3 Install a cassette.
- 4 Close the lid.

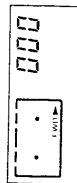


When you install a cassette
 The following indicators appear in the display window.
 The FWD indicator always appears when you open the lid.



2-2. INSTALLING BATTERIES

When you install batteries, the following indicators will appear in the display window right after all the indicators appear for a second.



When the lid of the battery compartment comes off
 Hook one of the projecting parts of the lid into the corresponding hole of the compartment first, and then push in the other side.

2-4. RECORDING

To stop recording  STOP	To rewind the tape  Press STOP and then REWIREVIEW	To wind the tape rapidly  Press STOP and then FF/CUE	To stop recording for a moment  PAUSE Press PAUSE or slide REC again to release the pause mode.
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If you begin recording on the upper (FWD) side
 When the tape ends, the tape direction automatically changes to the
 ◀ REV (reverse) mode, and recording of the reverse side begins.

At the end of the reverse (REV) side recording
 The tape stops (automatic shut off), and the tape direction automatically
 changes to the FWD ▶ (forward) mode.

Locating the Cue Marker Position

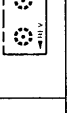
Press CUE MARKER during recording. ◻ blinks for a few seconds.
 You will hear a buzz at the cue marker position when you press FF/CUE
 or REWIREVIEW while playing back the tape.

It is convenient to mark at an important part of speech, for example, dur-
 ing an interview to quickly find that portion by pressing FF/CUE or
 REWIREVIEW while playing back the tape.

Notes

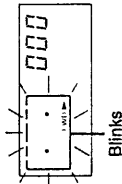
- Cue will not be marked if you press STOP or PAUSE immediately after having pressed CUE MARKER.
- You may hear noise at the cue marker position during playback when you are listening to the recording through a sensitive earphone or ear receiver.

Reading tape transport direction indicators

Display during recording or playback	Fast forward FF/CUE button	Rewind REWIREVIEW button
Upper (FWD) side 		
Reverse (REV) side 		

The tape is wound in forward direction by pressing FF/CUE, and in the
 opposite direction by pressing REWIREVIEW, regardless of which side
 you are recording on or listening to.

If you operate REC/PLAY/STOP/FF/REW/DIR/PAUSE when a cassette
 is not in the unit



The cassette indicator blinks to let
 you know a cassette is not in the unit.

Forward side priority function

If you open the cassette holder in the stop mode, the tape direction
 will be automatically set to the FWD ▶ (forward) mode and recording
 or playback will be started from the upper (FWD) side.

Notes

- When recording for a long time, use new batteries.
- When REC/BATT indicator goes off, the recording may not be done properly. In this case, replace the batteries with new ones.
- Do not set the earphone volume too high, otherwise a howling effect (acoustic feedback) may occur. When you take off the earphone from your ear, lower the earphone volume, otherwise a howling effect may occur.
- Do not use the microphone near a lamp cord or fluorescent lamp. It may pick up unnecessary noise.
- DIR switch does not function while recording.
- Tape SPEED CONTROL does not operate while recording.

Adjust MIC SENS according to a microphone

Adjust MIC SENS switch depending on the microphone you are using.

	MIC SENS*
Earphone microphone Built-in microphone	M or H
External microphone (not supplied)	L or M

* L: Only for loud sound M: Normal recording H: For low sound

Recording only when sound is picked up (VOR system**)

Slide VOR to ON. The VOR indicator appears in the display window and
 the unit will go into the recording mode only when the microphone picks
 up sound.

**With the VOR (voice operated recording) system, recording starts auto-
 matically at a certain sound level, and stops when sound is no longer
 detected. This is useful to avoid an empty recording.
 The VOR indicator blinks when sound is not detected.

While the VOR system is operating

Recording will not stop when the sensitivity is too high and will not start
 when it is too low.

	MIC SENS***
A loud place	L or M
A quiet or open place	M or H

*** L: Start only at high sound level M: Normal H: At low sound level.

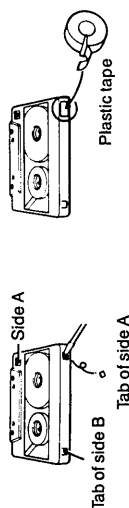
Reviewing the material just recorded

During recording, press REWIREVIEW.

When you release, playback will begin automatically from that point.

To correct a previously recorded portion during playback, simply
 slide REC in the direction of the arrow. The recorder will immediately
 change to the recording mode.

To prevent accidental erasure
 Break out the cassette tab of
 side A or B as illustrated.

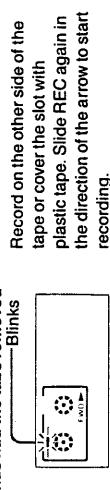


When the cassette has had the tabs removed

Shows that the tab of the upper
 (FWD) side of the tape has been
 removed.

Shows that the tab of the
 reverse (REV) of the tape has
 been removed.

If you slide REC in the direction of the arrow when the tape
 has had the tabs removed

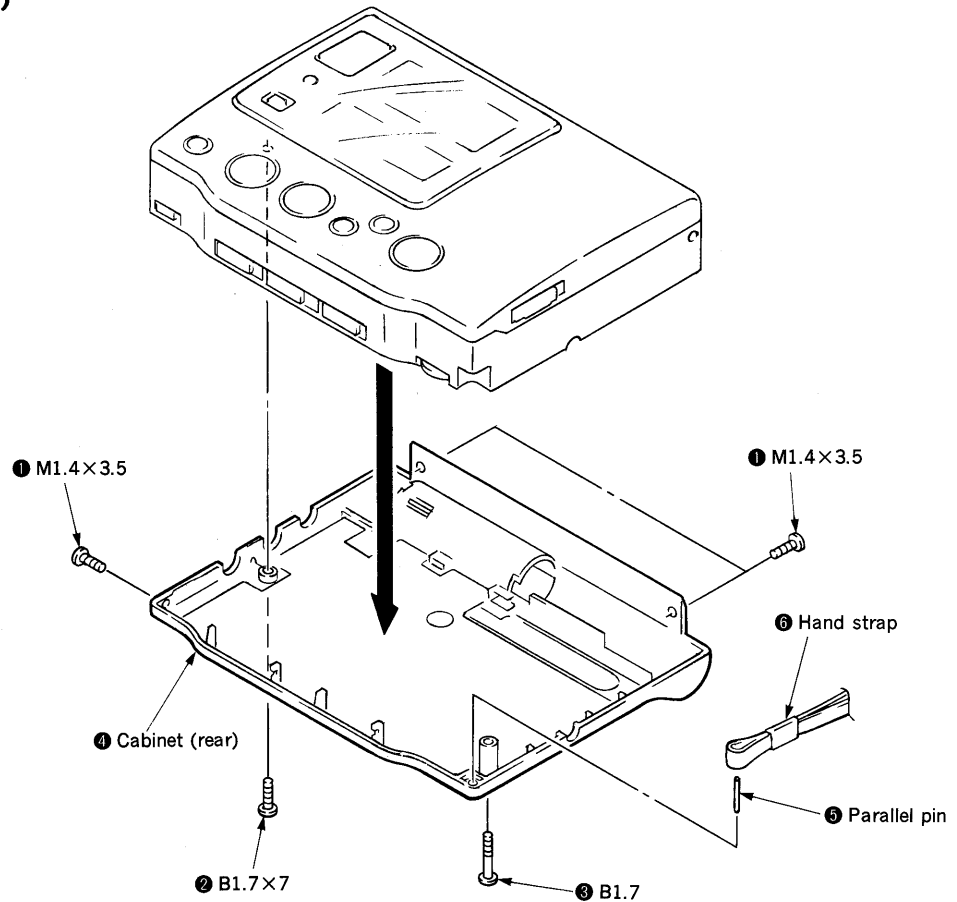


Record on the other side of the
 tape or cover the slot with
 plastic tape. Slide REC again in
 the direction of the arrow to start
 recording.

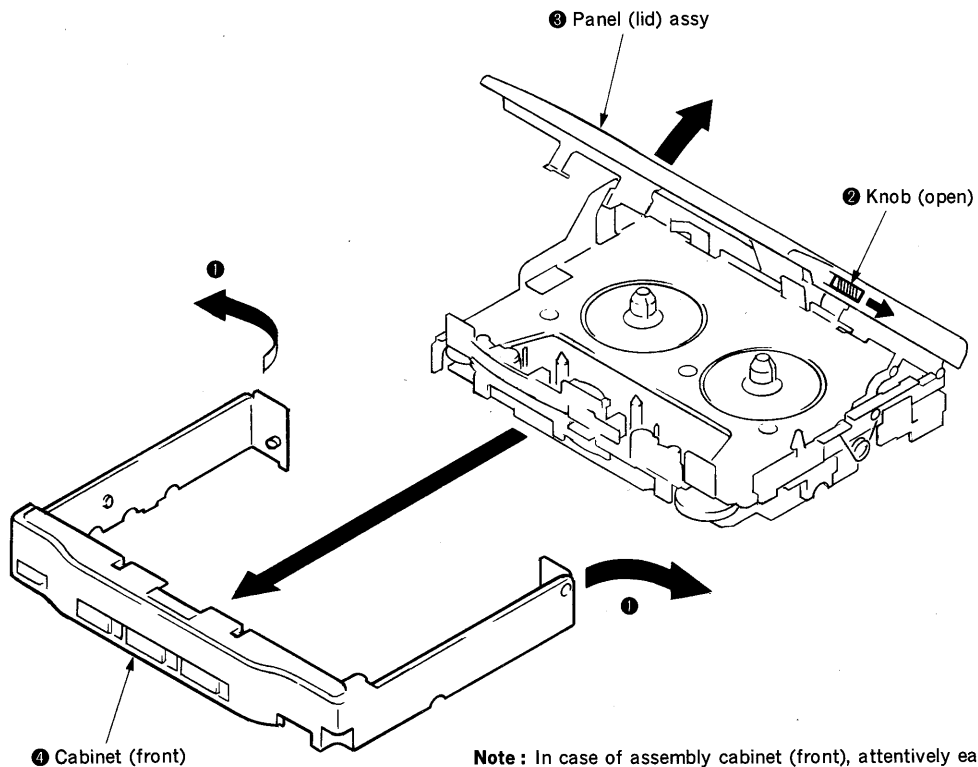
SECTION 3 DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

3-1. CABINET (REAR)

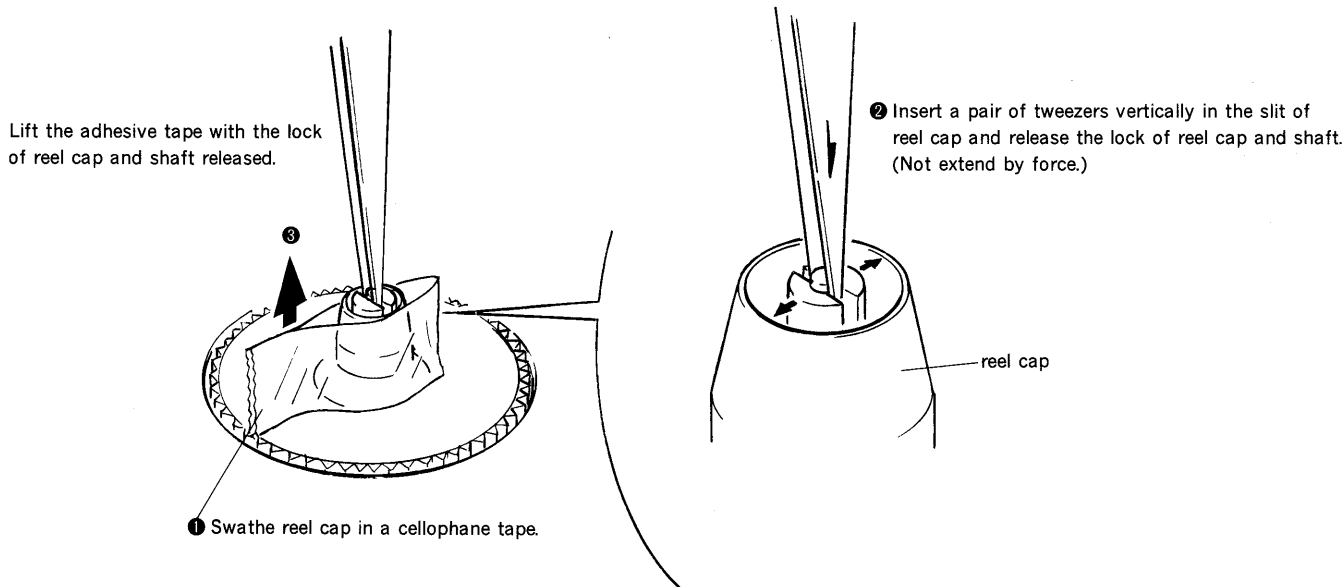


3-2. CABINET (FRONT)



Note : In case of assembly cabinet (front), attentively each switches main board.

3-3. GEAR (S REEL, T REEL) ASSY



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab :
record/playback head pinch roller
erase head rubber belts
capstan idlers
- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustment.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	22—45g•cm (0.31—0.62 oz•inch)
Forward back tension	CQ-102C	1.0—3.5g•cm (0.014—0.049 oz•inch)
Reverse	CQ-102RB	22—45g•cm (0.31—0.62 oz•inch)
Reverse back tension	CQ-102RB	1.0—3.5g•cm (0.014—0.049 oz•inch)
Fast Forward, Rewind	CQ-201B	more than 60g•cm (more than 0.83 oz•inch)

Tape Tension Measurement

Mode	Meter	Meter Reading
Forward	CQ-403A	more than 50g (more than 1.76 oz)
Reverse	CQ-403R	

SECTION 5 ELECTRICAL ADJUSTMENTS

PRECAUTION

- The adjustments should be performed with the following procedure unless otherwise noted.

• Switches and controls position

Forward/Reverse switch (S101) : Forward
 MIC SENS switch (S102) : H (high)
 VOLUME control (RV101) : max.
 VOR switch (S501) : OFF
 TAPE SPEED control (RV601) : mechanical center
 REC switch (S706) : OFF
 REVERSE switch (S707) : OFF

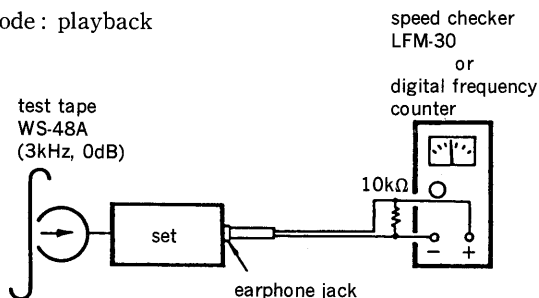
Test Tape

Tape	Contents	Use
WS-48A	3kHz, 0dB	Tape speed adjustment

Tape Speed Adjustment

Procedure :

Mode : playback

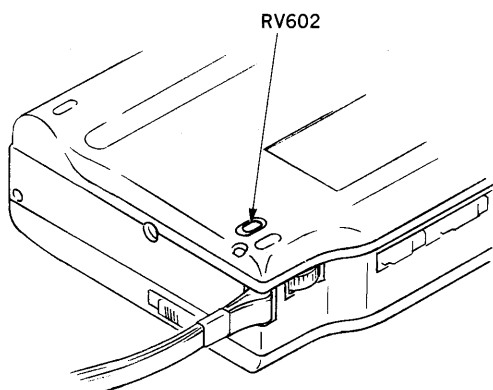


Adjustment Limits :

Speed checker	Digital frequency counter
3,000Hz $\pm$ 0.5%	2,985—3,015Hz

Frequency difference between the beginning and the end of the tape should be within 1% (30Hz).

Adjustment Location :

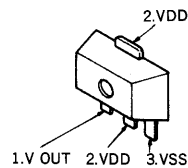


Note : On adjustment, rip off blind plate on hole of cabinet (rear).

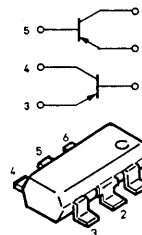
SECTION 6 DIAGRAMS

6-1. SEMICONDUCTOR LEAD LAYOUTS

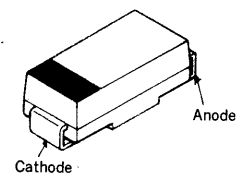
SCI7700YBA



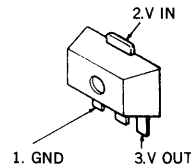
XN4404



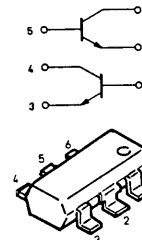
MA110



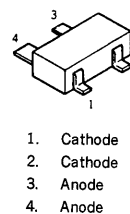
SCI7710YHA



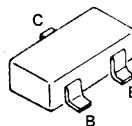
XN4501



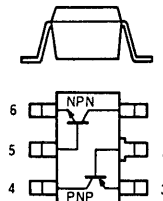
MA713



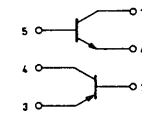
UN5114 UN5115 UN5215 UN5216 UN5217 2SB1218A-R 2SD1819A-R



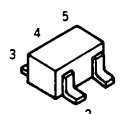
XN4601



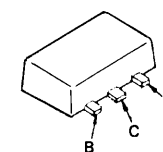
XN4608



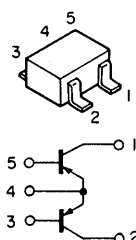
XN1215 XN1216 XN1217



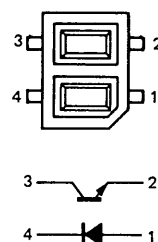
2SB798-DL



XN1401



GP2S22B



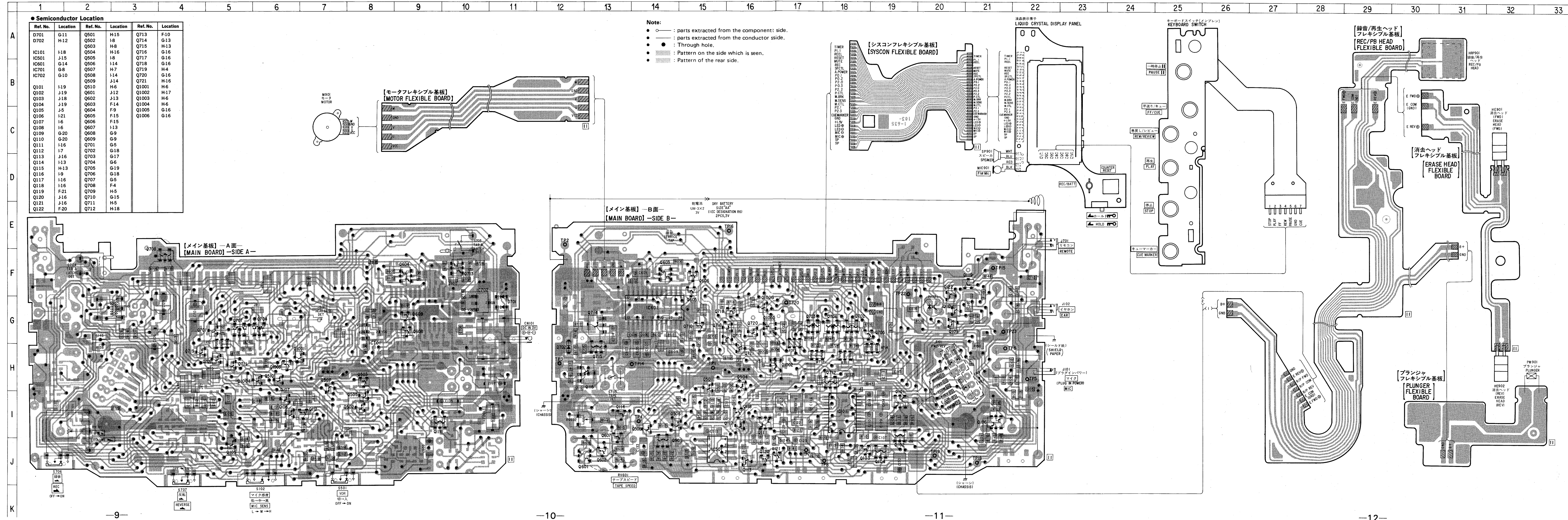
SEE ADDITIONAL INFORMATION

TCM-77V TCM-77V

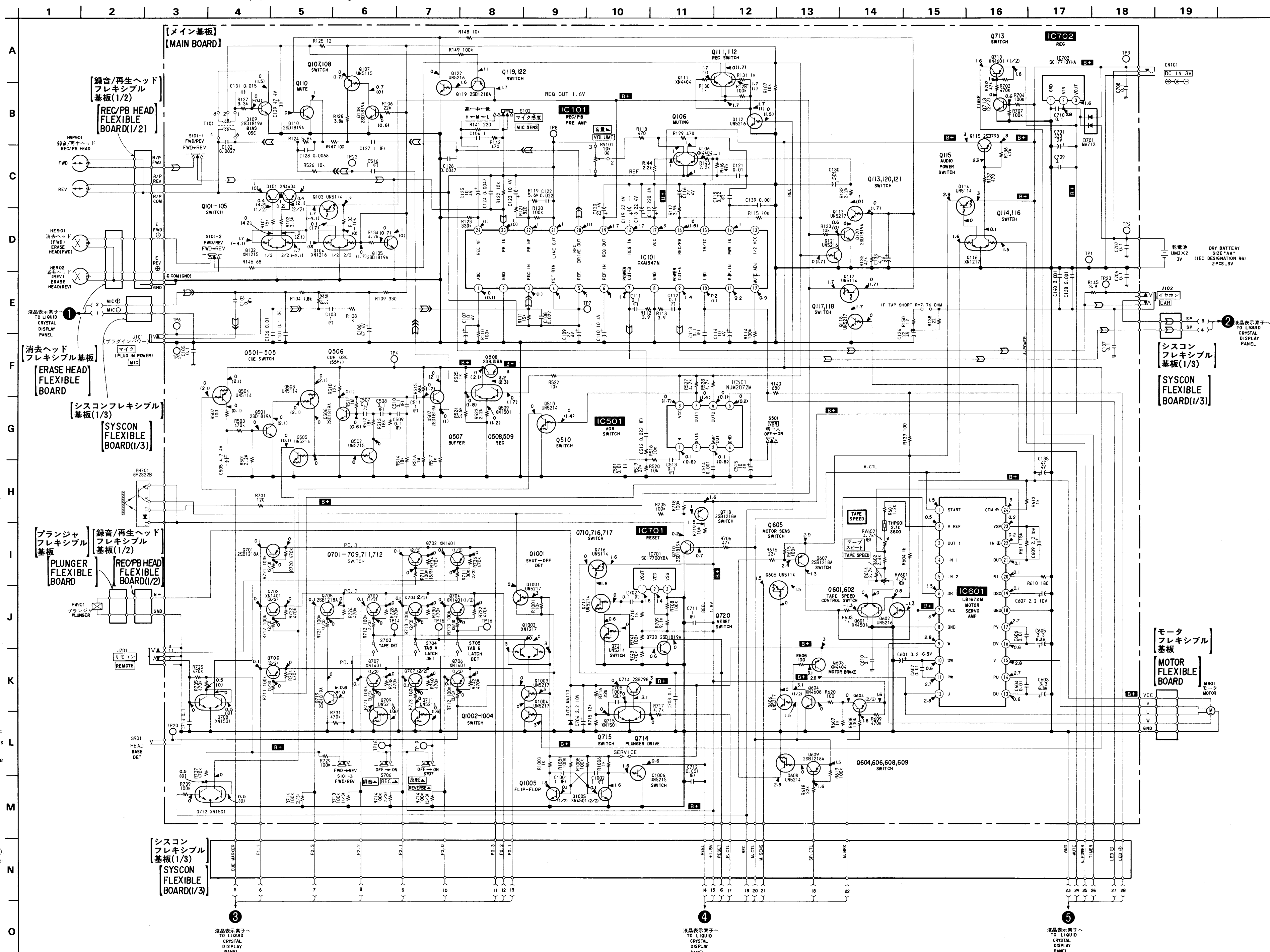
SEE ADDITIONAL INFORMATION

TCM-77V TCM-77V

6-2. PRINTED WIRING BOARDS • Refer to page 8 for Semiconductor Lead Layouts.



6-3. SCHEMATIC DIAGRAM—Audio Section— • Refer to page 16 for IC Block Diagrams.

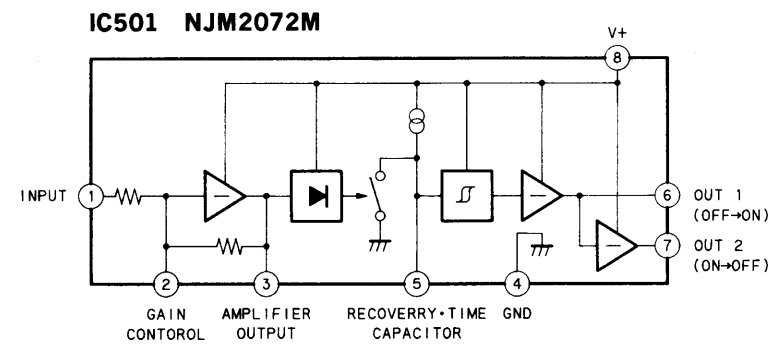


Note:

- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$
- 500W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- : adjustment for repair.
- Power voltage is dc 3V and fed with regulated dc power supply from battery terminal.
- Voltage is dc with respect to ground under no-signal conditions.
- no mark : PB
- () : REC
- < > : VOR : ON
- [] : REVERSE : ON
- Voltages are taken with a VOM (Input Impedance 10M Ω)
- Voltage variations may be noted due to normal production tolerances.
- Signal path.
-  : PB
-  : REC

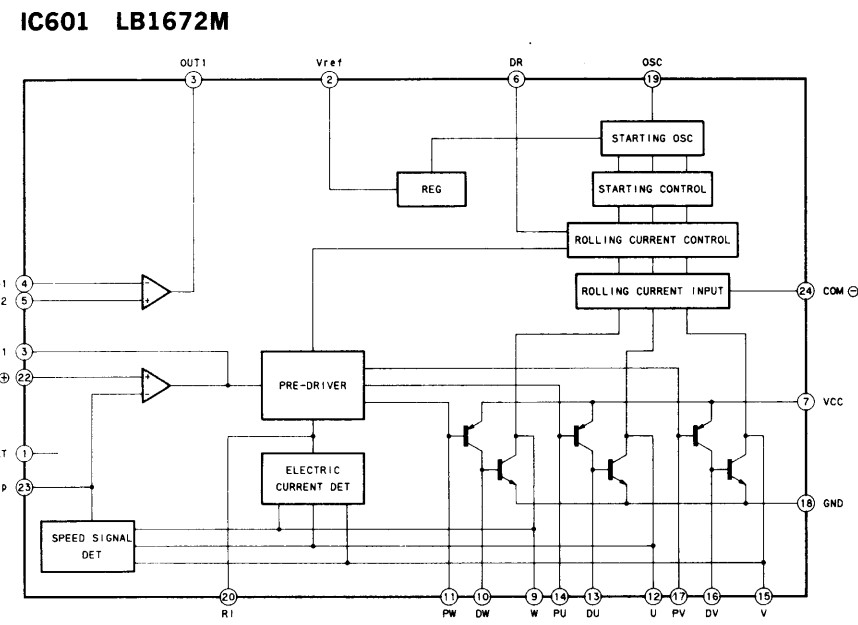
- **IC Block Diagrams**

IC501 NJM2072M

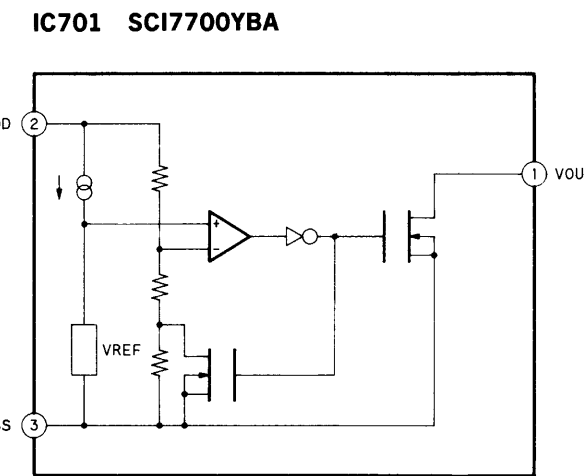


SEE ADDITIONAL
INFORMATION

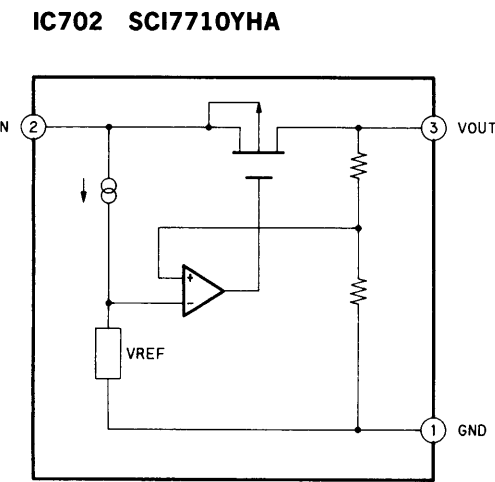
IC601 LB1672M



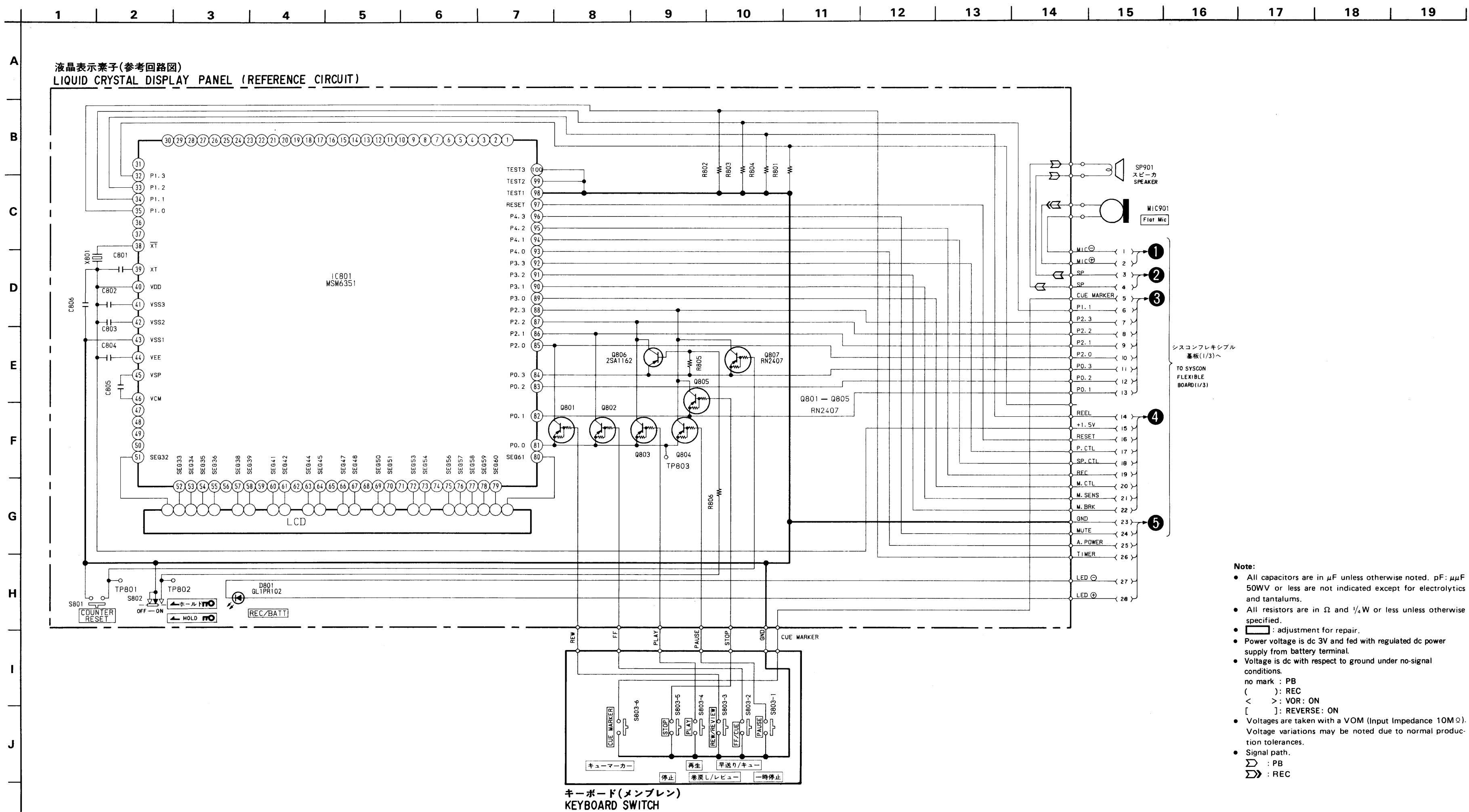
IC701 SCI7700YBA



IC702 SCI7710YHA

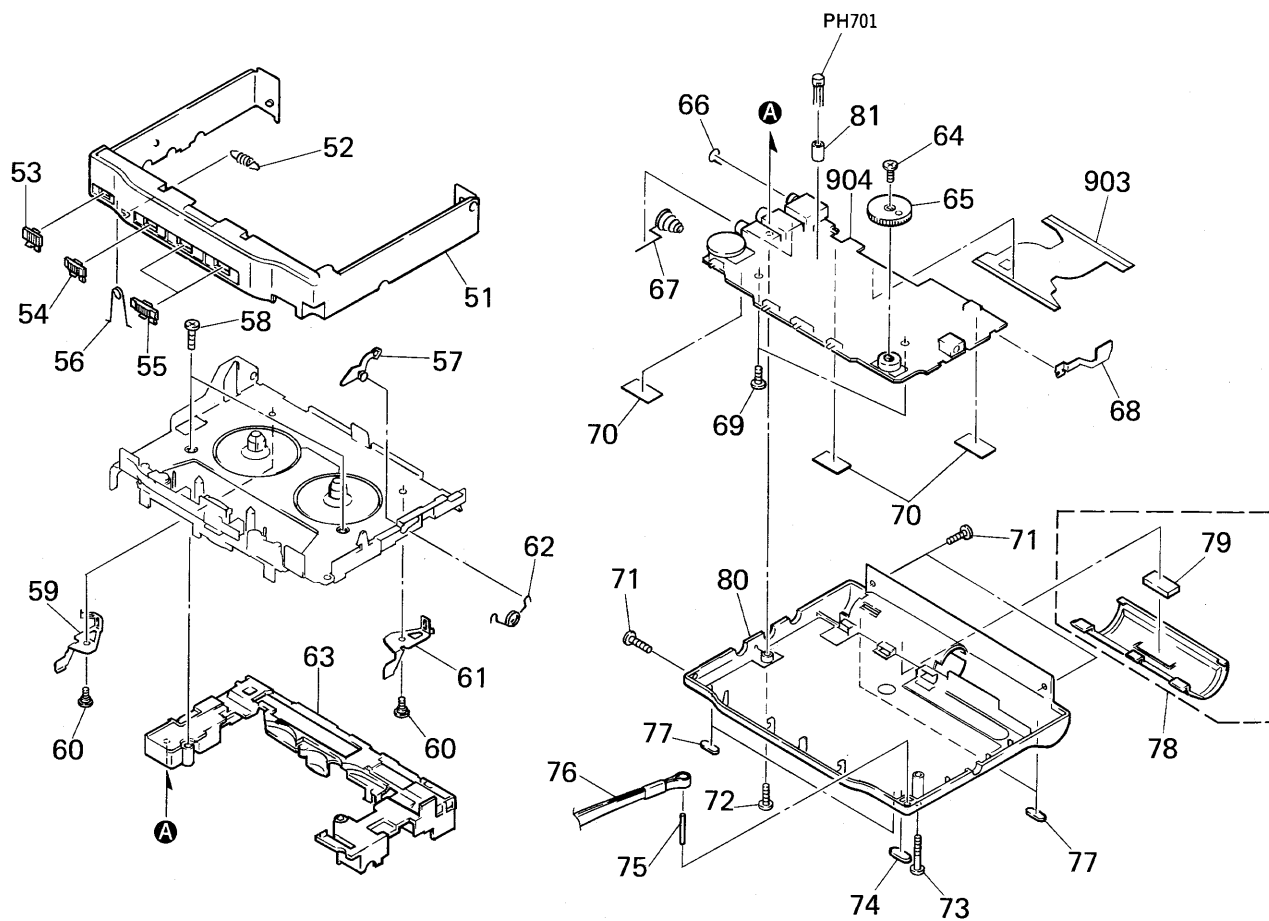


6-4. SCHEMATIC DIAGRAM—Display Section—



- **Note:**
 - All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F} : \text{F}$ 500W or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - : adjustment for repair.
 - Power voltage is dc 3V and fed with regulated dc power supply from battery terminal.
 - Voltage is dc with respect to ground under no-signal conditions.
 - no mark : PB
 - (): REC
 - < > : VOR: ON
 - [] : REVERSE: ON
 - Voltages are taken with a VOM (Input Impedance $10\text{M}\Omega$).
 - Voltage variations may be noted due to normal production tolerances.
 - Signal path.
 - Σ : PB
 - $\gg$: REC

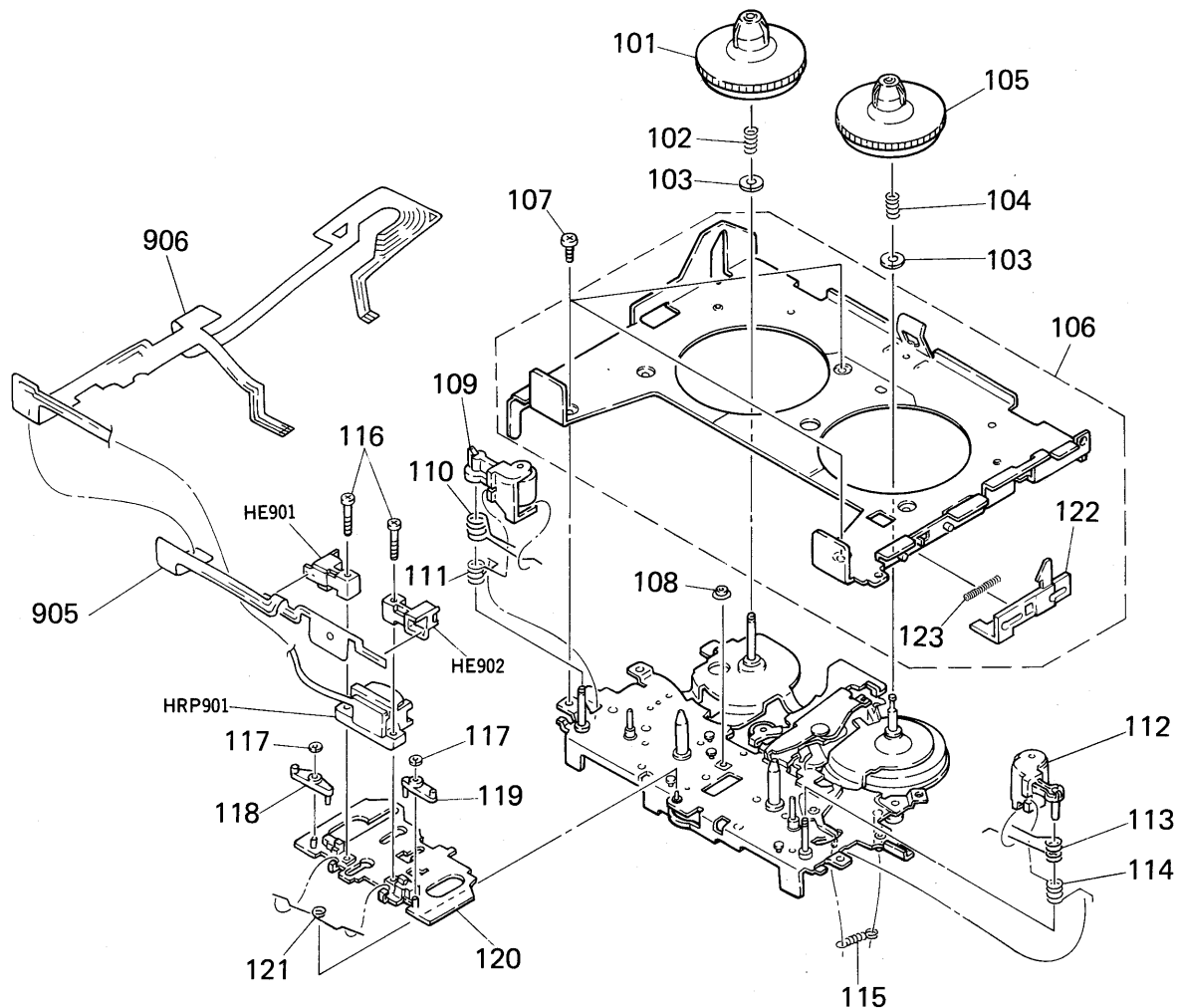
7-2. CABINET BLOCK



Ref.No	Part No.	Description	Remarks	Ref.No	Part No.	Description	Remarks
51	3-360-647-11	CABINET (FRONT)		68	3-360-627-01	TERMINAL BOARD, BATTERY	
52	3-360-633-01	SPRING, TENSION		69	3-703-502-31	SCREW (+PHW 1.4X3)	
53	3-360-622-01	KNOB (REC)		70	3-831-441-11	CUSHION (B)	
54	3-360-623-01	KNOB (DIR)		71	3-704-197-51	SCREW (M1.4X3.5), LOCKING	
55	3-360-624-01	KNOB (VOR)		72	3-318-203-81	SCREW (B1.7X7), TAPPING	
56	3-360-625-01	SPRING (REC), TORSION		73	3-342-171-51	SCREW (B1.7), TAPPING	
57	X-3328-425-1	LEVER ASSY, TOGGLE		74	3-349-258-11	PLATE, BLIND	
58	3-893-942-31	SCREW (1.7X4), TAPPING (B)		75	3-576-082-00	PIN, PARALLEL	
59	*3-360-637-01	LEVER (CLAW, L)		76	3-360-636-01	STRAP, HAND	
60	3-333-124-01	SCREW (M1.4), STEP, PRECISION		77	3-360-629-01	CUSHION (FOOT)	
61	*3-360-638-01	LEVER (CLAW, R)		78	X-3328-426-1	LID ASSY, BATTERY CASE	79
62	3-360-620-01	SPRING (HOLDER), TORSION		79	9-911-815-01	CUSHION	
63	3-360-644-01	FRAME (MD)		80	X-3328-433-1	CABINET (REAR) ASSY	
64	3-318-382-31	SCREW (1.7X3), TAPPING		81	3-360-609-01	SPACER (REFLECTOR)	
65	3-360-621-01	KNOB (SPEED)		903	X-3362-303-1	PC BOARD KIT, SYSCON FLEXIBLE	
66	3-362-348-01	SPRING (REMOTE CONTROL)		904	A-3015-870-A	PC BOARD ASSY, MAIN	
67	3-360-626-01	SPRING, BATTERY COIL		PH701	8-749-920-97	PHOTO REFLECTOR GP2S22B	

SEE ADDITIONAL
INFORMATION

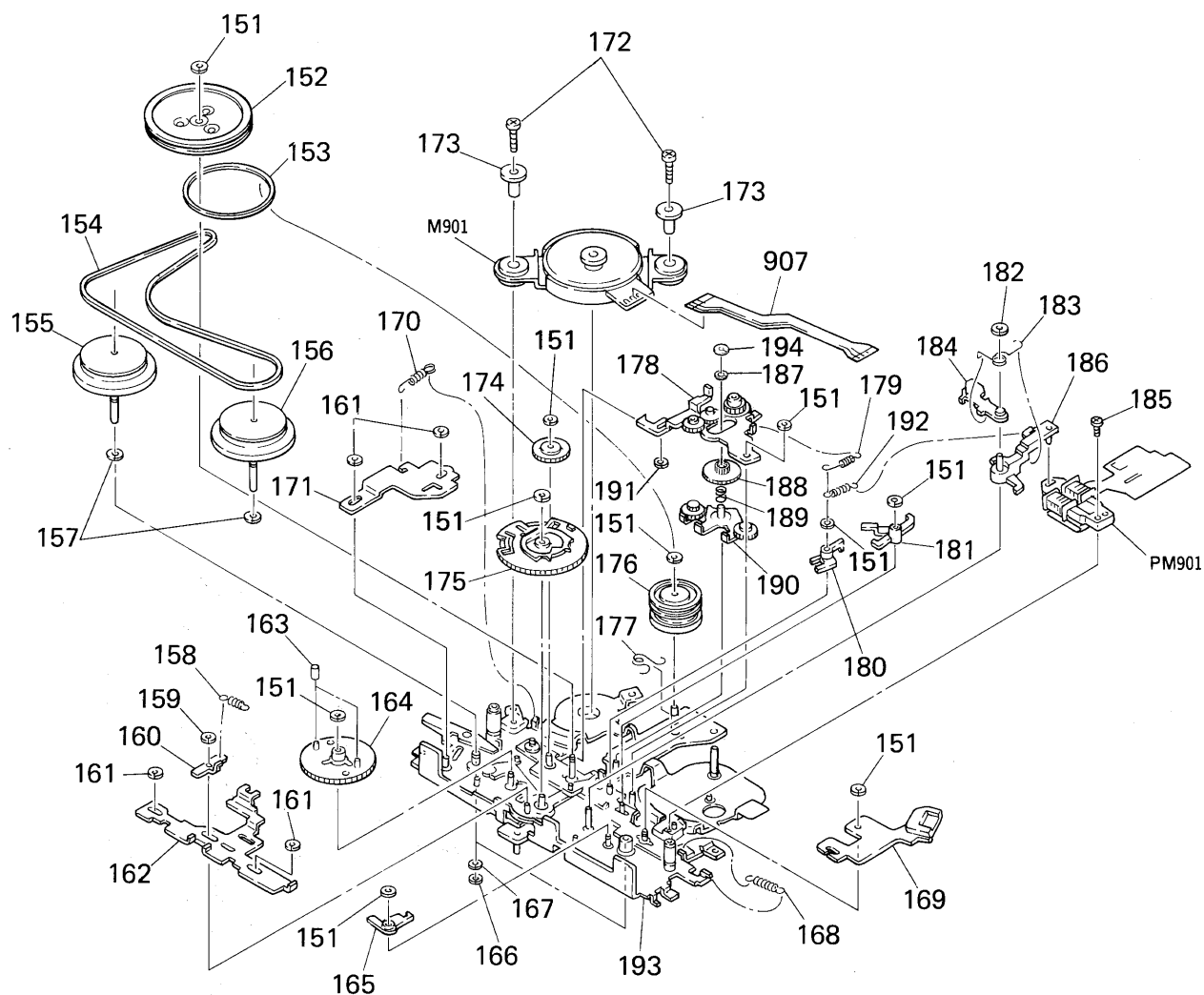
7-3. MECHANISM BLOCK (1) (MT-77-44)



Ref.No	Part No.	Description	Remarks
101	X-3328-420-1	GEAR (S REEL) ASSY	
102	3-360-520-01	SPRING (3), COMPRESSION	
103	3-701-436-51	WASHER, POLYETHYLENE (T=0.2)	
104	3-360-519-01	SPRING (3), COMPRESSION	
105	3-360-604-01	GEAR (T REEL)	
106	X-3328-417-1	PANEL ASSY, REEL	122, 123
107	3-704-197-21	SCREW (M1.4X2.5), LOCKING	
108	3-355-380-01	COLLAR	
109	X-3328-406-1	LEVER (PINCH R) ASSY	
110	3-360-550-01	SPRING (PINCH R), TORSION	
111	3-360-553-01	SPRING (P RETURN R), TORSION	
112	X-3328-407-1	LEVER (PINCH N) ASSY	
113	3-360-551-01	SPRING (PINCH N), TORSION	
114	3-360-552-01	SPRING (P RETURN N), TORSION	

Ref.No	Part No.	Description	Remarks
115	3-360-521-01	SPRING, TENSION	
116	3-355-407-01	SCREW (M1.4), STEP	
117	3-363-748-11	WASHER (0.9-2.3) (T=0.25)	
118	X-3328-415-1	LEVER (P PRESS,R) ASSY	
119	X-3328-416-1	LEVER (P PRESS,N) ASSY	
120	X-3328-422-1	LEVER (HEAD) ASSY	
121	3-360-565-01	SPRING (HEAD RETURN), TORSION	
122	3-360-508-01	LEVER (OPEN 1)	
123	3-360-512-01	SPRING, COMPRESSION	
905	*1-635-263-11	PC BOARD, ERASE HEAD FLEXIBLE	905
906	*1-635-262-11	PC BOARD, REC/PB HEAD FLEXIBLE	906
HE901	1-543-732-11	HEAD, MAGNETIC (ERASE)	905
HE902	1-543-718-11	HEAD, MAGNETIC (REC/PB)	906

7-4. MECHANISM BLOCK (2) (MT-77-44)



Ref.No	Part No.	Description	Remarks	Ref.No	Part No.	Description	Remarks
151	3-338-645-31	WASHER (0.8-2.5) (T=0.25)		175	3-360-542-01	GEAR (SET UP A)	
152	3-360-566-01	PULLEY (MIDWAY)		176	X-3328-408-1	LIMITER ASSY	
153	3-360-527-01	BELT		177	3-360-554-01	SPRING (TU), TORSION	
154	3-360-526-01	BELT		178	X-3328-419-1	LEVER (FR RELEASE) ASSY	
155	X-3328-410-1	FLYWHEEL (N) ASSY		179	3-360-545-01	SPRING, TENSION	
156	X-3328-409-1	FLYWHEEL (R) ASSY		180	3-355-395-01	LEVER (FR RELEASE.B)	
157	3-350-945-31	WASHER (T=0.3)		181	3-360-558-01	LEVER (SHUT-OFF, A)	
158	3-360-546-01	SPRING, TENSION		182	3-348-953-21	WASHER (T=0.25)	
159	3-363-748-01	WASHER (0.9-2.3) (T=0.19)		183	3-360-555-01	SPRING (TR), TORSION	
160	3-360-559-01	LEVER (DIR. B)		184	3-360-537-01	LEVER (TRIGGER. E)	
161	3-341-473-01	WASHER (MP) (T=0.25)		185	3-345-648-06	SCREW (M1.4X3.3), TOOTHED LOCK	
162	*3-360-531-01	LEVER (DIR)		186	3-355-379-01	LEVER (TRIGGER D)	
163	3-363-129-01	COLLAR (SUB)		187	3-355-388-01	WASHER	
164	3-363-130-01	GEAR (SUB)		188	3-360-540-01	GEAR (FRB)	
165	3-360-548-01	LEVER (TRIGGER, C)		189	3-355-396-01	SPRING, COMPRESSION	
166	3-348-993-01	WASHER (T=0.25)		190	X-3328-421-1	LEVER (FR) ASSY	
167	3-350-989-01	WASHER (T=0.25)		191	3-349-859-01	WASHER	
168	3-360-547-01	SPRING, TENSION		192	3-363-792-01	SPRING, TENSION (TRIGGER, D)	
169	3-355-399-01	LEVER (NR SELECTION)		193	X-3328-423-1	CHASSIS ASSY	
170	3-360-563-01	SPRING, TENSION		194	3-363-748-11	WASHER (0.9-2.3) (T=0.25)	
171	3-362-662-01	LEVER (LOCK)		907	*1-635-226-11	PC BOARD, MOTOR FLEXIBLE	
172	3-703-816-21	SCREW (M1.4X5.0), SPECIAL HEAD		M901	1-541-716-11	MOTOR (NBL-122)	
173	3-360-510-01	COLOR (MOTOR)		PM901	1-454-512-11	SOLENOID, PLUNGER	
174	X-3328-405-1	GEAR (TRIGGER) ASSY					

SEE ADDITIONAL
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ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF: μ F, PF: μ F.

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORS

In each case, U: μ , for example:UA...: μ A..., UPA...: μ PA...,UPC...: μ PC, UPD...: μ PD...

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description					Ref.No	Part No.	Description				
901	A-3089-558-A	PC BOARD ASSY, SYSTEM CONTROL (LIQUID CRYSTAL DISPLAY PANEL)					C510	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
902	1-572-212-11	SWITCH, KEYBOARD					C511	1-164-346-11	CERAMIC CHIP	1MF		16V	
903	X-3362-303-1	PC BOARD KIT, SYSCON FLEXIBLE					C512	1-164-227-11	CERAMIC CHIP	0.022MF	10%	25V	
904	A-3015-870-A	PC BOARD ASSY, MAIN					C513	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
905	*1-635-263-11	PC BOARD, ERASE HEAD FLEXIBLE					C514	1-162-964-11	CERAMIC CHIP	0.001MF	10%	50V	
906	*1-635-262-11	PC BOARD, REC/PB HEAD FLEXIBLE					C515	1-135-201-11	TANTAL. CHIP	10MF	20%	4V	
907	*1-635-226-11	PC BOARD, MOTOR FLEXIBLE					C516	1-164-346-11	CERAMIC CHIP	1MF		16V	
CAPACITOR													
C101	1-164-156-11	CERAMIC CHIP	0.1MF		25V		C601	1-135-180-21	TANTAL. CHIP	3.3MF	20%	6.3V	
C102	1-164-156-11	CERAMIC CHIP	0.1MF		25V		C602	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V	
C103	1-164-346-11	CERAMIC CHIP	1MF		16V		C603	1-135-180-21	TANTAL. CHIP	3.3MF	20%	6.3V	
C104	1-164-346-11	CERAMIC CHIP	1MF		16V		C604	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V	
C105	1-164-156-11	CERAMIC CHIP	0.1MF		25V		C605	1-135-180-21	TANTAL. CHIP	3.3MF	20%	6.3V	
C106	1-126-607-11	ELECT CHIP	47MF	20%	4V		C606	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V	
C107	1-135-201-11	TANTAL. CHIP	10MF	20%	4V		C607	1-135-149-21	TANTAL. CHIP	2.2MF	20%	10V	
C108	1-164-227-11	CERAMIC CHIP	0.022MF	10%	25V		C609	1-135-149-21	TANTAL. CHIP	2.2MF	20%	10V	
C109	1-135-202-21	TANTAL. CHIP	22MF	20%	4V		C610	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C110	1-135-201-11	TANTAL. CHIP	10MF	20%	4V		C701	1-126-608-11	ELECT	330MF	20%	2V	
C111	1-163-038-00	CERAMIC CHIP	0.1MF		25V		C702	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C112	1-163-038-00	CERAMIC CHIP	0.1MF		25V		C703	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C113	1-163-038-00	CERAMIC CHIP	0.1MF		25V		C704	1-135-149-21	TANTAL. CHIP	2.2MF	20%	10V	
C114	1-135-201-11	TANTAL. CHIP	10MF	20%	4V		C705	1-162-953-11	CERAMIC CHIP	100PF	5%	50V	
C115	1-164-222-11	CERAMIC CHIP	0.22MF		25V		C706	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C116	1-135-202-21	TANTAL. CHIP	22MF	20%	4V		C707	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C117	1-126-246-11	ELECT CHIP	220MF	20%	4V		C708	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C118	1-135-202-21	TANTAL. CHIP	22MF	20%	4V		C709	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C119	1-135-202-21	TANTAL. CHIP	22MF	20%	4V		C710	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C120	1-135-202-21	TANTAL. CHIP	22MF	20%	4V		C711	1-164-346-11	CERAMIC CHIP	1MF		16V	
C121	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V		C712	1-162-964-11	CERAMIC CHIP	0.001MF	10%	50V	
C122	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V		C713	1-164-156-11	CERAMIC CHIP	0.1MF		25V	
C123	1-135-201-11	TANTAL. CHIP	10MF	20%	4V		C1001	1-164-346-11	CERAMIC CHIP	1MF		16V	
C124	1-162-968-11	CERAMIC CHIP	0.0047MF	10%	50V		C1002	1-164-346-11	CERAMIC CHIP	1MF		16V	
C125	1-135-201-11	TANTAL. CHIP	10MF	20%	4V		CN101	1-569-369-11	JACK, EXTERNAL POWER (DC IN 3V)				
C126	1-162-968-11	CERAMIC CHIP	0.0047MF	10%	50V		D701	8-719-404-16	DIODE MA713				
C127	1-164-346-11	CERAMIC CHIP	1MF		16V		D702	8-719-404-46	DIODE MA110				
C128	1-162-969-11	CERAMIC CHIP	0.0068MF	10%	25V		HE901	1-543-732-11	HEAD, MAGNETIC (ERASE) (INCLUDING FLEXIBLE PC BOARD)				
C129	1-126-607-11	ELECT CHIP	47MF	20%	4V		HE902						
C130	1-135-202-21	TANTAL. CHIP	22MF	20%	4V		HRP901	1-543-718-11	HEAD, MAGNETIC (REC/PB) (INCLUDING FLEXIBLE PC BOARD)				
C131	1-164-245-11	CERAMIC CHIP	0.015MF	10%	25V		IC101	8-752-034-90	IC CXA1347N				
C132	1-163-215-00	CERAMIC CHIP	0.0027MF	5%	50V		IC501	8-759-701-51	IC NJM2072M				
C133	1-135-151-21	TANTAL. CHIP	4.7MF	20%	4V		IC601	8-759-821-20	IC LB1672M				
C134	1-135-202-21	TANTAL. CHIP	22MF	20%	4V		IC701	8-759-995-32	IC SCI7700YBA				
C135	1-126-607-11	ELECT CHIP	47MF	20%	4V		IC702	8-759-994-35	IC SCI7710YHA				
C136	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V		J101	1-563-319-21	JACK (MIC)				
C137	1-164-156-11	CERAMIC CHIP	0.1MF		25V		J102	1-507-999-21	JACK (EAR)				
C138	1-162-964-11	CERAMIC CHIP	0.001MF	10%	50V		J701	1-566-895-11	JACK 1P (REMOTE)				
C139	1-162-964-11	CERAMIC CHIP	0.001MF	10%	50V		JR1	1-216-295-00	METAL GLAZE	0	5%	1/10W	
C140	1-162-964-11	CERAMIC CHIP	0.001MF	10%	50V		JR2	1-216-864-11	METAL GLAZE	0	5%	1/16W	
C501	1-162-970-11	CERAMIC CHIP	0.01MF	10%	25V		JR3	1-216-295-00	METAL GLAZE	0	5%	1/10W	
C505	1-135-151-21	TANTAL. CHIP	4.7MF	20%	4V		JR4	1-216-296-00	METAL GLAZE	0	5%	1/8W	
C507	1-164-156-11	CERAMIC CHIP	0.1MF		25V		JR5	1-216-864-11	METAL GLAZE	0	5%	1/16W	
C508	1-164-156-11	CERAMIC CHIP	0.1MF		25V								
C509	1-164-156-11	CERAMIC CHIP	0.1MF		25V								

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Ref.No	Part No.	Description
JR6	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR7	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR8	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR9	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR10	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR11	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR12	1-216-296-00	METAL GLAZE 0 5% 1/8W
JR15	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR16	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR17	1-216-864-11	METAL GLAZE 0 5% 1/16W
JR18	1-216-864-11	METAL GLAZE 0 5% 1/16W
JR19	1-216-864-11	METAL GLAZE 0 5% 1/16W
JR20	1-216-864-11	METAL GLAZE 0 5% 1/16W
JR21	1-216-295-00	METAL GLAZE 0 5% 1/10W
JR22	1-216-295-00	METAL GLAZE 0 5% 1/10W
M901	1-541-716-11	MOTOR (NBL-122)
MIC901	1-542-142-11	MICROPHONE, BUILT-IN (FLAT MIC)
PH701	8-749-920-97	PHOTO REFLECTOR GP2S22B
PM901	1-454-512-11	SOLENOID, PLUNGER
Q101	8-729-422-39	TRANSISTOR XN4404
Q102	8-729-403-17	TRANSISTOR XN1215
Q103	8-729-402-96	TRANSISTOR UN5114
Q104	8-729-421-23	TRANSISTOR XN1216
Q105	8-729-402-32	TRANSISTOR 2SD1819A-R
Q106	8-729-422-39	TRANSISTOR XN4404
Q107	8-729-420-53	TRANSISTOR UN5115
Q108	8-729-402-32	TRANSISTOR 2SD1819A-R
Q109	8-729-402-32	TRANSISTOR 2SD1819A-R
Q110	8-729-402-32	TRANSISTOR 2SD1819A-R
Q111	8-729-422-39	TRANSISTOR XN4404
Q112	8-729-421-26	TRANSISTOR UN5216
Q113	8-729-422-48	TRANSISTOR UN5217
Q114	8-729-402-96	TRANSISTOR UN5114
Q115	8-729-101-07	TRANSISTOR 2SB798-DL
Q116	8-729-422-45	TRANSISTOR XN1217
Q117	8-729-402-96	TRANSISTOR UN5114
Q118	8-729-422-48	TRANSISTOR UN5217
Q119	8-729-402-55	TRANSISTOR 2SB1218A-R
Q120	8-729-402-32	TRANSISTOR 2SD1819A-R
Q121	8-729-421-26	TRANSISTOR UN5216
Q122	8-729-421-26	TRANSISTOR UN5216
Q501	8-729-402-32	TRANSISTOR 2SD1819A-R
Q502	8-729-420-50	TRANSISTOR UN5215
Q503	8-729-402-96	TRANSISTOR UN5114
Q504	8-729-402-96	TRANSISTOR UN5114
Q505	8-729-421-26	TRANSISTOR UN5216
Q506	8-729-402-32	TRANSISTOR 2SD1819A-R
Q507	8-729-402-32	TRANSISTOR 2SD1819A-R
Q508	8-729-402-55	TRANSISTOR 2SB1218A-R
Q509	8-729-421-23	TRANSISTOR XN1216
Q510	8-729-421-26	TRANSISTOR UN5216
Q601	8-729-402-81	TRANSISTOR XN4501
Q602	8-729-421-26	TRANSISTOR UN5216
Q603	8-729-422-39	TRANSISTOR XN4404
Q604	8-729-402-16	TRANSISTOR XN4608
Q605	8-729-402-96	TRANSISTOR UN5114
Q606	8-729-422-48	TRANSISTOR UN5217
Q607	8-729-402-55	TRANSISTOR 2SB1218A-R
Q608	8-729-421-26	TRANSISTOR UN5216
Q609	8-729-402-55	TRANSISTOR 2SB1218A-R
Q701	8-729-402-55	TRANSISTOR 2SB1218A-R
Q702	8-729-403-42	TRANSISTOR XN1401
Q703	8-729-403-42	TRANSISTOR XN1401

Ref.No	Part No.	Description
Q704	8-729-403-42	TRANSISTOR XN1401
Q705	8-729-402-55	TRANSISTOR 2SB1218A-R
Q706	8-729-403-42	TRANSISTOR XN1401
Q707	8-729-403-42	TRANSISTOR XN1401
Q708	8-729-421-23	TRANSISTOR XN1216
Q709	8-729-421-26	TRANSISTOR UN5216
Q710	8-729-402-32	TRANSISTOR 2SD1819A-R
Q711	8-729-421-26	TRANSISTOR UN5216
Q712	8-729-421-23	TRANSISTOR XN1216
Q713	8-729-402-84	TRANSISTOR XN4601
Q714	8-729-101-07	TRANSISTOR 2SB798-DL
Q715	8-729-421-23	TRANSISTOR XN1216
Q716	8-729-402-96	TRANSISTOR UN5114
Q717	8-729-421-26	TRANSISTOR UN5216
Q718	8-729-402-55	TRANSISTOR 2SB1218A-R
Q719	8-729-402-32	TRANSISTOR 2SD1819A-R
Q720	8-729-402-32	TRANSISTOR 2SD1819A-R
Q721	8-729-421-26	TRANSISTOR UN5216
Q1001	8-729-422-48	TRANSISTOR UN5217
Q1002	8-729-422-45	TRANSISTOR XN1217
Q1003	8-729-422-48	TRANSISTOR UN5217
Q1004	8-729-422-48	TRANSISTOR UN5217
Q1005	8-729-402-81	TRANSISTOR XN4501
Q1006	8-729-420-50	TRANSISTOR UN5215

RESISTOR

R101	1-216-835-11	METAL GLAZE	15K	5%	1/16W
R102	1-216-827-11	METAL GLAZE	3.3K	5%	1/16W
R103	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R104	1-216-824-11	METAL GLAZE	1.8K	5%	1/16W
R105	1-216-830-11	METAL GLAZE	5.6K	5%	1/16W
R106	1-216-837-11	METAL GLAZE	22K	5%	1/16W
R107	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R108	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R109	1-216-815-11	METAL GLAZE	330	5%	1/16W
R110	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R111	1-216-835-11	METAL GLAZE	15K	5%	1/16W
R112	1-216-306-11	METAL GLAZE	3.9	5%	1/10W
R113	1-216-306-11	METAL GLAZE	3.9	5%	1/10W
R114	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R115	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R116	1-216-841-11	METAL GLAZE	47K	5%	1/16W
R117	1-216-828-11	METAL GLAZE	3.9K	5%	1/16W
R118	1-216-817-11	METAL GLAZE	470	5%	1/16W
R119	1-216-830-11	METAL GLAZE	5.6K	5%	1/16W
R120	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R121	1-216-820-11	METAL GLAZE	820	5%	1/16W
R122	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R123	1-216-851-11	METAL GLAZE	330K	5%	1/16W
R124	1-216-830-11	METAL GLAZE	5.6K	5%	1/16W
R125	1-216-798-11	METAL GLAZE	12	5%	1/16W
R126	1-216-828-11	METAL GLAZE	3.9K	5%	1/16W
R127	1-216-827-11	METAL GLAZE	3.3K	5%	1/16W
R128	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R129	1-216-817-11	METAL GLAZE	470	5%	1/16W
R130	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R131	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R132	1-216-825-11	METAL GLAZE	2.2K	5%	1/16W
R133	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R134	1-216-829-11	METAL GLAZE	4.7K	5%	1/16W
R135	1-216-841-11	METAL GLAZE	47K	5%	1/16W
R136	1-216-841-11	METAL GLAZE	47K	5%	1/16W
R137	1-216-817-11	METAL GLAZE	470	5%	1/16W
R138	1-216-158-00	METAL GLAZE	22	5%	1/8W
R139	1-216-809-11	METAL GLAZE	100	5%	1/16W
R140	1-216-819-11	METAL GLAZE	680	5%	1/16W

Ref.No	Part No.	Description			
R141	1-216-813-11	METAL GLAZE	220	5%	1/16W
R142	1-216-817-11	METAL GLAZE	470	5%	1/16W
R143	1-216-825-11	METAL GLAZE	2.2K	5%	1/16W
R144	1-216-825-11	METAL GLAZE	2.2K	5%	1/16W
R145	1-216-140-00	METAL GLAZE	3.9	5%	1/8W
R146	1-216-807-11	METAL GLAZE	68	5%	1/16W
R147	1-216-809-11	METAL GLAZE	100	5%	1/16W
R148	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R149	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R150	1-216-003-11	METAL GLAZE	12	5%	1/10W
R501	1-216-861-11	METAL GLAZE	2.2M	5%	1/16W
R503	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R507	1-216-809-11	METAL GLAZE	100	5%	1/16W
R510	1-216-834-11	METAL GLAZE	12K	5%	1/16W
R511	1-216-857-11	METAL GLAZE	1M	5%	1/16W
R512	1-216-836-11	METAL GLAZE	18K	5%	1/16W
R513	1-216-836-11	METAL GLAZE	18K	5%	1/16W
R514	1-216-836-11	METAL GLAZE	18K	5%	1/16W
R515	1-216-843-11	METAL GLAZE	68K	5%	1/16W
R516	1-216-857-11	METAL GLAZE	1M	5%	1/16W
R517	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R518	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R519	1-216-838-11	METAL GLAZE	27K	5%	1/16W
R520	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R522	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R523	1-216-825-11	METAL GLAZE	2.2K	5%	1/16W
R524	1-216-830-11	METAL GLAZE	5.6K	5%	1/16W
R525	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R526	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R527	1-216-829-11	METAL GLAZE	4.7K	5%	1/16W
R528	1-216-829-11	METAL GLAZE	4.7K	5%	1/16W
R601	1-216-822-11	METAL GLAZE	1.2K	5%	1/16W
R602	1-216-993-11	METAL GLAZE	2.4K	5%	1/16W
R603	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R604	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R606	1-216-809-11	METAL GLAZE	100	5%	1/16W
R607	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R608	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R609	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R610	1-216-812-11	METAL GLAZE	180	5%	1/16W
R611	1-216-835-11	METAL GLAZE	15K	5%	1/16W
R613	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R614	1-216-826-11	METAL GLAZE	2.7K	5%	1/16W
R615	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R616	1-216-837-11	METAL GLAZE	22K	5%	1/16W
R618	1-216-837-11	METAL GLAZE	22K	5%	1/16W
R619	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R620	1-216-809-11	METAL GLAZE	100	5%	1/16W
R701	1-216-810-11	METAL GLAZE	120	5%	1/16W
R702	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R703	1-216-841-11	METAL GLAZE	47K	5%	1/16W
R704	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R705	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R706	1-216-841-11	METAL GLAZE	47K	5%	1/16W
R707	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R708	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R709	1-218-345-11	METAL GLAZE	9.1K	5%	1/16W
R710	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R711	1-236-502-11	RES, NETWORK	100KX3		
R712	1-236-502-11	RES, NETWORK	100KX3		
R713	1-236-502-11	RES, NETWORK	100KX3		
R714	1-236-502-11	RES, NETWORK	100KX3		
R715	1-218-718-11	METAL CHIP	12K	0.50%	1/16W
R716	1-218-724-11	METAL CHIP	22K	0.50%	1/16W
R717	1-216-829-11	METAL GLAZE	4.7K	5%	1/16W

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No	Part No.	Description			
R718	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R719	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R720	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R721	1-236-502-11	RES, NETWORK	100KX3		
R722	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R723	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R724	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R725	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R726	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R728	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R729	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R730	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R731	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R732	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R734	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R735	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R736	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R737	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R738	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R739	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R740	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R741	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R742	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R743	1-216-853-11	METAL GLAZE	470K	5%	1/16W
R1001	1-216-833-11	METAL GLAZE	10K	5%	1/16W
R1003	1-216-821-11	METAL GLAZE	1K	5%	1/16W
R1004	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R1005	1-216-845-11	METAL GLAZE	100K	5%	1/16W
R1006	1-216-821-11	METAL GLAZE	1K	5%	1/16W
RV101	1-238-920-11	RES, VAR, CARBON 10K (VOLUME )			
RV601	1-238-947-11	RES, VAR, CARBON 4.7K (TAPE SPEED)			
RV602	1-238-663-11	RES, ADJ, CERMER 4.7K			
S101	1-572-214-11	SWITCH, SLIDE (FWD/REV)			
S102	1-571-506-41	SWITCH, SLIDE (MIC SENS)			
S501	1-571-275-31	SWITCH, SLIDE (VOR)			
S703	1-570-953-11	SWITCH, PUSH (1 KEY)(TAPE DET)			
S704	1-571-585-11	SWITCH, PUSH (1 KEY)(TAB A)			
S705	1-571-585-11	SWITCH, PUSH (1 KEY)(TAB B)			
S706	1-572-263-11	SWITCH, SLIDE (REC )			
S707	1-572-263-11	SWITCH, SLIDE (REVERSE )			
S901	1-570-395-11	SWITCH, LEAF (HEAD BASE DET)			
SP901	1-544-328-11	SPEAKER			
T101	1-433-286-11	TRANSFORMER, BIAS OSCILLATION			
THP601	1-809-137-11	THERMISTOR, POSITIVE			

ACCESSORIES & PACKING MATERIALS

 1-465-481-11	(US)....ADAPTOR, AC (AC-77)
* 3-355-341-01	CUSHION
3-360-641-01	CASE, CARRYING
* 3-360-650-01	(US)....INDIVIDUAL CARTON
* 3-360-652-01	(US)....CASE, ACCESSORY
* 3-360-653-01	(CND, UK, E)....INDIVIDUAL CARTON
* 3-360-655-01	(AEP)....INDIVIDUAL CARTON
3-701-625-00	(AEP)....BAG, POLYETHYLENE
3-751-587-11	(EXCEPT FOR US)....MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)
3-751-587-21	(US)....MANUAL, INSTRUCTION (ENGLISH)
3-751-587-41	(AEP)....MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN)
3-752-541-11	(AEP, UK, E)....MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)
3-752-541-21	(US, CND)....MANUAL, INSTRUCTION (ENGLISH)
8-952-222-90	(US)....MDR-E140C SET

TCM-77V

SONY[®] SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

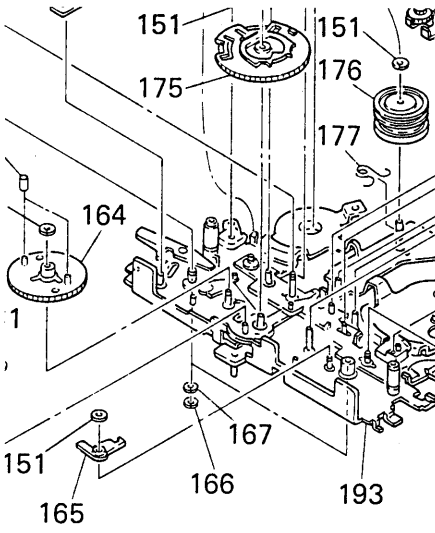
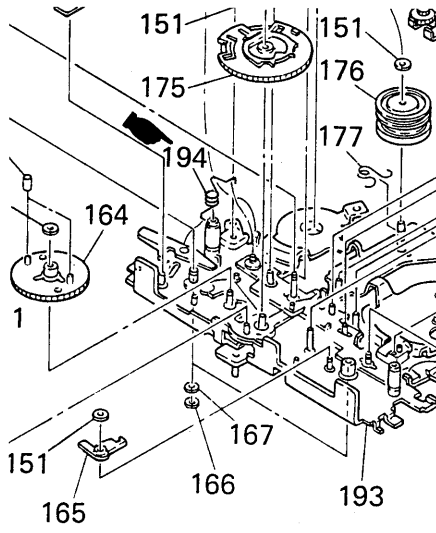
SUPPLEMENT-1

File this supplement with the Service Manual.

Subject :

1. CHANGE THE MECHANICAL PARTS
2. CHANGE THE PRINTED CIRCUIT BOARDS

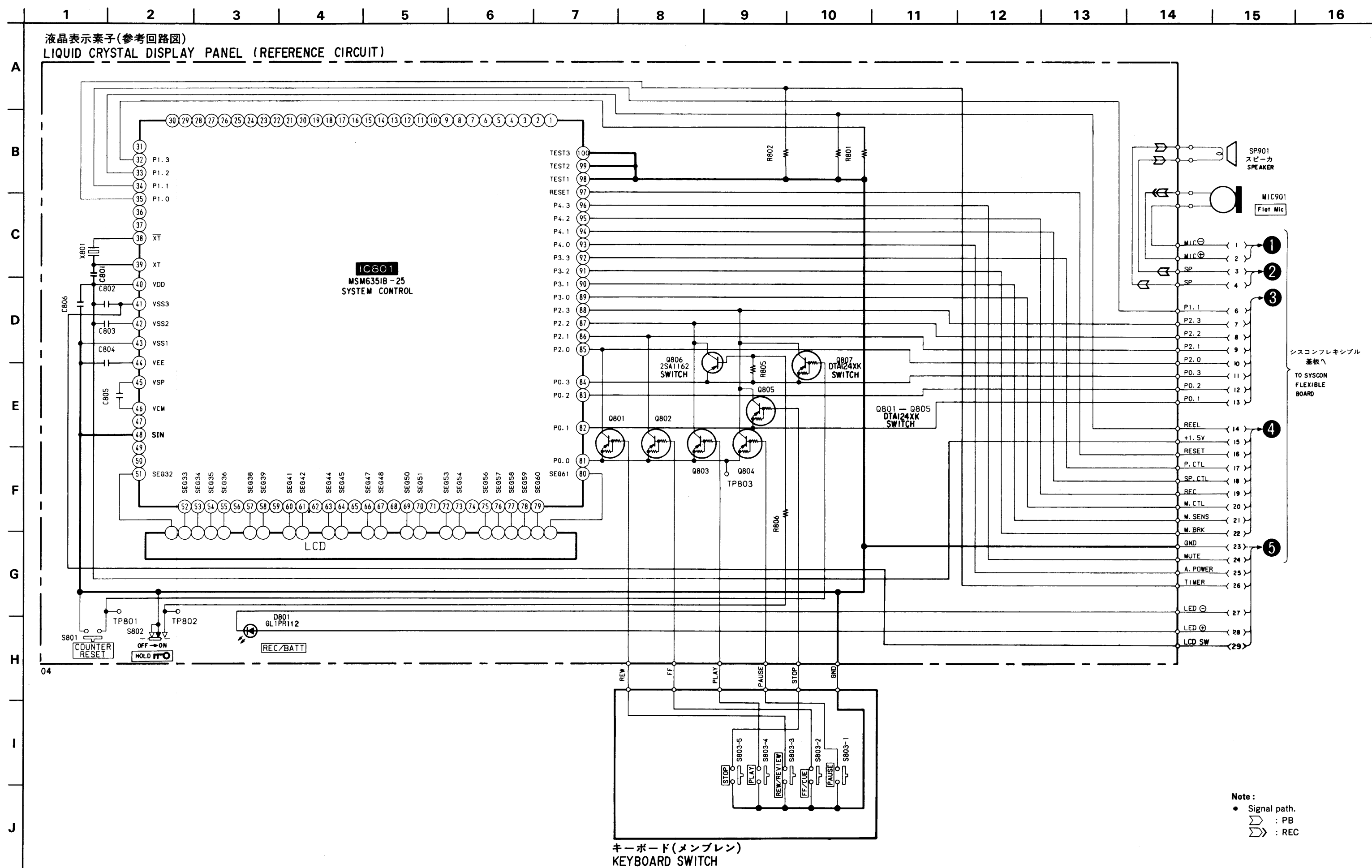
1. CHANGE THE MECHANICAL PARTS DIFFERENCE OF EXPLODED VIEWS

Page	Former Type				New Type		
	Ref. No.	Part No.	Description	Remark	Part No.	Description	Remark
20	60	3-333-124-01	SCREW (M1.4), STEP, PRECISION		3-367-832-01	SCREW (M1.4), STEP	
	64	3-318-382-31	SCREW (1.7×3), TAPPING		3-303-809-71	SCREW (M1.7×2.5), SPECIAL HEAD	
	70	3-831-441-11	CUSHION (B)		4-017-441-01	CUSHION (B)	
21	107	3-704-197-21	SCREW (M1.4×2.5), LOCKING		3-703-816-01	SCREW (M1.4×2.0), SPECIAL HEAD	
22							
	Ref. No.	Part No.	Description	Remark	Part No.	Description	Remark
	193	X-3328-423-1	CHASSIS ASSY		X-3364-429-1	CHASSIS ASSY	
	194				3-908-016-01	SPRING (M GROUND), TORSION	
	M901	1-541-716-11	MOTOR (NBL-122)		1-541-980-11	MOTOR, DC	
25	ACCESSORIES & PACKING MATERIALS *****				ACCESSORIES & PACKING MATERIALS *****		
	*	3-355-341-01	CUSHION		* 3-355-341-01	(US)---CUSHION	
	*	3-360-652-01	(US)---CASE, ACCESSORY		* 3-363-222-01	(EXCEPT FOR US)---CUSHION	
	*	3-360-653-01	(CND, UK, E)---INDIVIDUAL CARTON				
	*	3-360-655-01	(AEP)---INDIVIDUAL CARTON				
		3-701-625-00	(AEP)---BAG, POLYETHLENE		* 3-360-655-01	(EXCEPT FOR US)---INDIVIDUAL CARTON	
		3-752-541-11	(AEP, UK, E)---MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)				
		3-752-541-21	(US, CND)---MANUAL, INSTRUCTION (ENGLISH)				

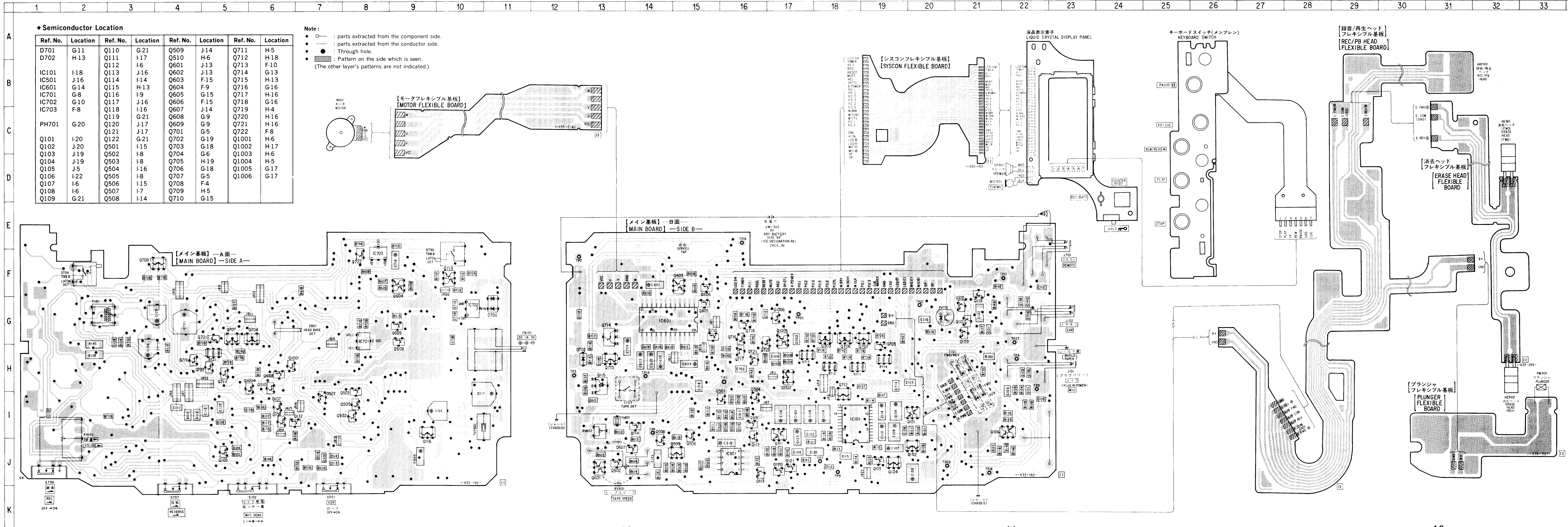
Note : Items marked "*" are not stocked since they are seldom required for routine service.
Some delay should be anticipated when ordering these items.

2. CHANGE THE PRINTED CIRCUIT BOARDS

SCHEMATIC DIAGRAM—DISPLAY SECTION—



PRINTED WIRING BOARDS



ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A... uPA...: μ PA...
uPB...: μ PB... uPC...: μ PC... uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description	Remark				Ref.No.	Part No.	Description	Remark			
*	A-3015-870-A	MAIN BOARD, COMPLETE	*****				C133	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V	
							C134	1-135-202-21	TANTAL. CHIP	22uF	20%	4V	
							C135	1-126-607-11	ELECT CHIP	47uF	20%	4V	
	3-303-809-71	SCREW (M1.7X2.5), SPECIAL HEAD					C136	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
*	3-360-609-01	SPACER (REFLECTOR)					C137	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
	3-360-621-01	KNOB (SPEED CONTROL)											
	3-362-348-01	SPRING (REMOTE CONTROL)					C138-140						
		< CAPACITOR >						1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C101	1-164-156-11	CERAMIC CHIP	0.1uF		25V		C501	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C102	1-164-156-11	CERAMIC CHIP	0.1uF		25V		C505	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V	
C103	1-164-346-11	CERAMIC CHIP	1uF		16V		C507-510						
C104	1-164-346-11	CERAMIC CHIP	1uF		16V			1-164-156-11	CERAMIC CHIP	0.1uF		25V	
C105	1-164-156-11	CERAMIC CHIP	0.1uF		25V		C511	1-164-346-11	CERAMIC CHIP	1uF		16V	
C106	1-126-607-11	ELECT CHIP	47uF	20%	4V		C512	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	
C107	1-135-201-11	TANTALUM CHIP	10uF	20%	4V		C513	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
C108	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V		C514	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C109	1-135-202-21	TANTAL. CHIP	22uF	20%	4V		C515	1-135-201-11	TANTALUM CHIP	10uF	20%	4V	
C110	1-135-201-11	TANTALUM CHIP	10uF	20%	4V		C516	1-164-346-11	CERAMIC CHIP	1uF		16V	
C111	1-163-038-11	CERAMIC CHIP	0.1uF		25V		C601	1-135-180-21	TANTALUM CHIP	3.3uF	20%	6.3V	
C112	1-163-038-11	CERAMIC CHIP	0.1uF		25V		C602	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C113	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V		C603	1-135-180-21	TANTALUM CHIP	3.3uF	20%	6.3V	
C114	1-135-201-11	TANTALUM CHIP	10uF	20%	4V		C604	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C115	1-164-222-11	CERAMIC CHIP	0.22uF		25V		C605	1-135-180-21	TANTALUM CHIP	3.3uF	20%	6.3V	
C116	1-135-202-21	TANTAL. CHIP	22uF	20%	4V		C606	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C117	1-126-246-11	ELECT CHIP	220uF	20%	4V		C607	1-135-149-21	TANTALUM CHIP	2.2uF	20%	10V	
C118-120							C609	1-135-149-21	TANTALUM CHIP	2.2uF	20%	10V	
	1-135-202-21	TANTAL. CHIP	22uF	20%	4V		C610	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
C121	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C701	1-126-608-11	ELECT	330uF	20%	2V	
C122	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V		C702	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C123	1-135-201-11	TANTALUM CHIP	10uF	20%	4V		C703	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
C124	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V		C704	1-135-149-21	TANTALUM CHIP	2.2uF	20%	10V	
C125	1-135-201-11	TANTALUM CHIP	10uF	20%	4V		C705	1-162-953-11	CERAMIC CHIP	100PF	5%	50V	
C126	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V		C706-710						
C127	1-164-346-11	CERAMIC CHIP	1uF		16V			1-164-156-11	CERAMIC CHIP	0.1uF		25V	
C128	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V		C711	1-164-346-11	CERAMIC CHIP	1uF		16V	
C129	1-126-607-11	ELECT CHIP	47uF	20%	4V		C712	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C130	1-135-202-21	TANTAL. CHIP	22uF	20%	4V		C713	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
C131	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V		C714	1-164-346-11	CERAMIC CHIP	1uF		16V	
C132	1-163-215-00	CERAMIC CHIP	0.0027uF	5%	50V		C715	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V	
							C1001	1-164-346-11	CERAMIC CHIP	1uF		16V	
							C1002	1-164-346-11	CERAMIC CHIP	1uF		16V	

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< JACK >				Q104	8-729-421-23	TRANSISTOR	XN1216
CN101	1-569-369-11	JACK, EXTERNAL POWER (DC IN 3V)		Q105	8-729-402-32	TRANSISTOR	2SD1819A-R
< DIODE >				Q106	8-729-422-39	TRANSISTOR	XN4404
D701	8-719-404-16	DIODE MA713		Q107	8-729-420-53	TRANSISTOR	UN5115
D702	8-719-404-46	DIODE MA110		Q108	8-729-402-32	TRANSISTOR	2SD1819A-R
< IC >				Q109	8-729-402-32	TRANSISTOR	2SD1819A-R
IC101	8-752-036-38	IC CXA1347N		Q110	8-729-402-32	TRANSISTOR	2SD1819A-R
IC501	8-759-701-51	IC NJM2072M		Q111	8-729-422-39	TRANSISTOR	XN4404
IC601	8-759-821-20	IC LB1672M		Q112	8-729-421-26	TRANSISTOR	UN5216
IC701	8-759-973-01	IC S-8051ANR-NB-T1		Q113	8-729-422-48	TRANSISTOR	UN5217
IC702	8-759-515-82	IC S-81215AG-RK-S		Q114	8-729-402-96	TRANSISTOR	UN5114
IC703	8-759-945-21	IC S-8052ANB-NE-S		Q115	8-729-101-07	TRANSISTOR	2SB798-DL
< JACK >				Q116	8-729-422-45	TRANSISTOR	XN1217
J101	1-563-319-21	JACK (MIC)		Q117	8-729-402-96	TRANSISTOR	UN5114
J102	1-507-999-31	JACK (EAR)		Q118	8-729-422-48	TRANSISTOR	UN5217
J701	1-566-895-11	JACK 1P (REMOTE)		Q119	8-729-230-60	TRANSISTOR	2SA1586-YG
< JUMPER RESISTOR >				Q120	8-729-402-32	TRANSISTOR	2SD1819A-R
JR1	1-216-295-00	METAL CHIP	0 5% 1/10W	Q121	8-729-421-26	TRANSISTOR	UN5216
JR2	1-216-864-11	METAL CHIP	0 5% 1/16W	Q122	8-729-421-26	TRANSISTOR	UN5216
JR3	1-216-295-00	METAL CHIP	0 5% 1/10W	Q501	8-729-402-32	TRANSISTOR	2SD1819A-R
JR4	1-216-296-00	METAL CHIP	0 5% 1/8W	Q502	8-729-420-50	TRANSISTOR	UN5215
JR5	1-216-864-11	METAL CHIP	0 5% 1/16W	Q503	8-729-402-96	TRANSISTOR	UN5114
JR6-8	1-216-296-00	METAL CHIP	0 5% 1/8W	Q504	8-729-402-96	TRANSISTOR	UN5114
JR9	1-216-295-00	METAL CHIP	0 5% 1/10W	Q505	8-729-402-93	TRANSISTOR	UN5214
JR10	1-216-296-00	METAL CHIP	0 5% 1/8W	Q506	8-729-402-33	TRANSISTOR	2SD1819A-S
JR11	1-216-295-00	METAL CHIP	0 5% 1/10W	Q507	8-729-402-32	TRANSISTOR	2SD1819A-R
JR12	1-216-296-00	METAL CHIP	0 5% 1/8W	Q508	8-729-230-60	TRANSISTOR	2SA1586-YG
JR14	1-216-864-11	METAL CHIP	0 5% 1/16W	Q509	8-729-402-13	TRANSISTOR	XN1501
JR15	1-216-295-00	METAL CHIP	0 5% 1/10W	Q510	8-729-402-93	TRANSISTOR	UN5214
JR16	1-216-295-00	METAL CHIP	0 5% 1/10W	Q601	8-729-402-81	TRANSISTOR	XN4501
JR17-20	1-216-864-11	METAL CHIP	0 5% 1/16W	Q602	8-729-421-26	TRANSISTOR	UN5216
JR21	1-216-295-00	METAL CHIP	0 5% 1/10W	Q603	8-729-422-39	TRANSISTOR	XN4404
JR22	1-216-295-00	METAL CHIP	0 5% 1/10W	Q604	8-729-402-16	TRANSISTOR	XN4608
< PHOTO REFLECTOR >				Q605	8-729-402-96	TRANSISTOR	UN5114
PH701	8-749-920-97	PHOTO REFLECTOR	GP2S22B	Q606	8-729-422-48	TRANSISTOR	UN5217
< TRANSISTOR >				Q607	8-729-230-60	TRANSISTOR	2SA1586-YG
Q101	8-729-422-39	TRANSISTOR	XN4404	Q608	8-729-402-93	TRANSISTOR	UN5214
Q102	8-729-403-17	TRANSISTOR	XN1215	Q609	8-729-230-60	TRANSISTOR	2SA1586-YG
Q103	8-729-402-96	TRANSISTOR	UN5114	Q701	8-729-230-60	TRANSISTOR	2SA1586-YG
Q703	8-729-403-42	TRANSISTOR	XN1401	Q702	8-729-403-42	TRANSISTOR	XN1401
Q704	8-729-403-42	TRANSISTOR	XN1401	Q703	8-729-403-42	TRANSISTOR	XN1401
Q705	8-729-230-60	TRANSISTOR	2SA1586-YG	Q704	8-729-403-42	TRANSISTOR	XN1401
Q706	8-729-403-42	TRANSISTOR	XN1401	Q705	8-729-230-60	TRANSISTOR	2SA1586-YG
Q707	8-729-403-42	TRANSISTOR	XN1401	Q706	8-729-403-42	TRANSISTOR	XN1401
Q708	8-729-402-13	TRANSISTOR	XN1501	Q707	8-729-403-42	TRANSISTOR	XN1401
Q709	8-729-402-93	TRANSISTOR	UN5214	Q708	8-729-402-13	TRANSISTOR	XN1501
Q710	8-729-402-32	TRANSISTOR	2SD1819A-R	Q709	8-729-402-93	TRANSISTOR	UN5214
Q711	8-729-402-93	TRANSISTOR	UN5214	Q710	8-729-402-32	TRANSISTOR	2SD1819A-R

Ref. No.	Part No.	Description	Remark		
Q712	8-729-402-13	TRANSISTOR	XN1501		
Q713	8-729-402-84	TRANSISTOR	XN4601		
Q714	8-729-101-07	TRANSISTOR	2SB798-DL		
Q715	8-729-402-13	TRANSISTOR	XN1501		
Q716	8-729-402-96	TRANSISTOR	UN5114		
Q717	8-729-402-93	TRANSISTOR	UN5214		
Q718	8-729-230-60	TRANSISTOR	2SA1586-YG		
Q719	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q720	8-729-402-32	TRANSISTOR	2SD1819A-R		
Q721	8-729-402-93	TRANSISTOR	UN5214		
Q722	8-729-402-96	TRANSISTOR	UN5114		
Q1001	8-729-422-48	TRANSISTOR	UN5217		
Q1002	8-729-422-45	TRANSISTOR	XN1217		
Q1003	8-729-422-48	TRANSISTOR	UN5217		
Q1004	8-729-422-48	TRANSISTOR	UN5217		
Q1005	8-729-402-81	TRANSISTOR	XN4501		
Q1006	8-729-420-50	TRANSISTOR	UN5215		
< RESISTOR >					
R101	1-216-835-11	METAL CHIP	15K	5%	1/16W
R102	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R103	1-216-833-11	METAL CHIP	10K	5%	1/16W
R104	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R105	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R106	1-216-837-11	METAL CHIP	22K	5%	1/16W
R107	1-216-833-11	METAL CHIP	10K	5%	1/16W
R108	1-216-821-11	METAL CHIP	1K	5%	1/16W
R109	1-216-815-11	METAL CHIP	330	5%	1/16W
R110	1-216-845-11	METAL CHIP	100K	5%	1/16W
R111	1-216-835-11	METAL CHIP	15K	5%	1/16W
R112	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R113	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/16W
R115	1-216-833-11	METAL CHIP	10K	5%	1/16W
R116	1-216-841-11	METAL CHIP	47K	5%	1/16W
R117	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R118	1-216-817-11	METAL CHIP	470	5%	1/16W
R119	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R120	1-216-845-11	METAL CHIP	100K	5%	1/16W
R121	1-216-820-11	METAL CHIP	820	5%	1/16W
R122	1-216-833-11	METAL CHIP	10K	5%	1/16W
R123	1-216-851-11	METAL CHIP	330K	5%	1/16W
R124	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R125	1-216-798-11	METAL GLAZE	12	5%	1/16W
R126	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R127	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R128	1-216-845-11	METAL CHIP	100K	5%	1/16W
R129	1-216-817-11	METAL CHIP	470	5%	1/16W
R130	1-216-821-11	METAL CHIP	1K	5%	1/16W

Ref. No.	Part No.	Description	Remark		
R131	1-216-821-11	METAL CHIP	1K	5%	1/16W
R132	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R133	1-216-833-11	METAL CHIP	10K	5%	1/16W
R134	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R135	1-216-841-11	METAL CHIP	47K	5%	1/16W
R136	1-216-841-11	METAL CHIP	47K	5%	1/16W
R137	1-216-817-11	METAL CHIP	470	5%	1/16W
R138	1-216-158-00	METAL GLAZE	22	5%	1/8W
R139	1-216-809-11	METAL CHIP	100	5%	1/16W
R140	1-216-819-11	METAL CHIP	680	5%	1/16W
R141	1-216-813-11	METAL CHIP	220	5%	1/16W
R142	1-216-817-11	METAL CHIP	470	5%	1/16W
R143	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R144	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R145	1-216-140-00	METAL GLAZE	3.9	5%	1/8W
R146	1-216-807-11	METAL CHIP	68	5%	1/16W
R147	1-216-809-11	METAL CHIP	100	5%	1/16W
R148	1-216-833-11	METAL CHIP	10K	5%	1/16W
R149	1-216-845-11	METAL CHIP	100K	5%	1/16W
R150	1-216-003-11	METAL GLAZE	12	5%	1/10W
R501	1-216-861-11	METAL CHIP	2.2M	5%	1/16W
R503	1-216-853-11	METAL CHIP	470K	5%	1/16W
R507	1-216-809-11	METAL CHIP	100	5%	1/16W
R510	1-218-873-11	METAL CHIP	12K	0.5%	1/16W
R511	1-216-857-11	METAL CHIP	1M	5%	1/16W
R512-514					
	1-216-836-11	METAL CHIP	18K	5%	1/16W
R515	1-216-843-11	METAL CHIP	68K	5%	1/16W
R516	1-216-857-11	METAL CHIP	1M	5%	1/16W
R517	1-216-821-11	METAL CHIP	1K	5%	1/16W
R518	1-216-833-11	METAL CHIP	10K	5%	1/16W
R519	1-216-838-11	METAL CHIP	27K	5%	1/16W
R520	1-216-833-11	METAL CHIP	10K	5%	1/16W
R522	1-216-833-11	METAL CHIP	10K	5%	1/16W
R523	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R524	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R525	1-216-821-11	METAL CHIP	1K	5%	1/16W
R526	1-216-833-11	METAL CHIP	10K	5%	1/16W
R527	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R528	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R602	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R603	1-216-821-11	METAL CHIP	1K	5%	1/16W
R604	1-216-821-11	METAL CHIP	1K	5%	1/16W
R605	1-216-809-11	METAL CHIP	100	5%	1/16W
R606	1-216-809-11	METAL CHIP	100	5%	1/16W
R607	1-216-821-11	METAL CHIP	1K	5%	1/16W
R608	1-216-845-11	METAL CHIP	100K	5%	1/16W
R609	1-216-853-11	METAL CHIP	470K	5%	1/16W
R610	1-216-812-11	METAL CHIP	180	5%	1/16W

MAIN

Ref. No.	Part No.	Description	Remark
R611	1-216-835-11	METAL CHIP	15K 5% 1/16W
R613	1-216-821-11	METAL CHIP	1K 5% 1/16W
R614	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R615	1-216-845-11	METAL CHIP	100K 5% 1/16W
R616	1-216-836-11	METAL CHIP	18K 5% 1/16W
R618	1-216-837-11	METAL CHIP	22K 5% 1/16W
R619	1-216-845-11	METAL CHIP	100K 5% 1/16W
R620	1-216-809-11	METAL CHIP	100 5% 1/16W
R701	1-216-810-11	METAL CHIP	120 5% 1/16W
R702	1-216-853-11	METAL CHIP	470K 5% 1/16W
R703	1-216-841-11	METAL CHIP	47K 5% 1/16W
R704	1-216-845-11	METAL CHIP	100K 5% 1/16W
R705	1-216-837-11	METAL CHIP	22K 5% 1/16W
R706	1-216-841-11	METAL CHIP	47K 5% 1/16W
R707	1-216-845-11	METAL CHIP	100K 5% 1/16W
R708	1-216-845-11	METAL CHIP	100K 5% 1/16W
R709	1-218-345-11	METAL GLAZE	9.1K 5% 1/16W
R710	1-216-821-11	METAL CHIP	1K 5% 1/16W
R711-714	1-236-502-11	RES, NETWORK	100KX3
R715	1-218-873-11	METAL CHIP	12K 0.5% 1/16W
R716	1-218-725-11	METAL CHIP	24K 0.5% 1/16W
R717	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R718	1-216-845-11	METAL CHIP	100K 5% 1/16W
R719	1-216-833-11	METAL CHIP	10K 5% 1/16W
R720	1-216-853-11	METAL CHIP	470K 5% 1/16W
R721	1-236-502-11	RES, NETWORK	100KX3
R722	1-216-853-11	METAL CHIP	470K 5% 1/16W
R723	1-216-845-11	METAL CHIP	100K 5% 1/16W
R724-726	1-216-853-11	METAL CHIP	470K 5% 1/16W
R727	1-216-845-11	METAL CHIP	100K 5% 1/16W
R728	1-216-853-11	METAL CHIP	470K 5% 1/16W
R729	1-216-845-11	METAL CHIP	100K 5% 1/16W
R730-732	1-216-853-11	METAL CHIP	470K 5% 1/16W
R733	1-216-833-11	METAL CHIP	10K 5% 1/16W
R734-738	1-216-853-11	METAL CHIP	470K 5% 1/16W
R739	1-216-845-11	METAL CHIP	100K 5% 1/16W
R740	1-216-853-11	METAL CHIP	470K 5% 1/16W
R741	1-216-845-11	METAL CHIP	100K 5% 1/16W
R742	1-216-853-11	METAL CHIP	470K 5% 1/16W
R743	1-216-853-11	METAL CHIP	470K 5% 1/16W
R744	1-216-837-11	METAL CHIP	22K 5% 1/16W
R1001	1-216-833-11	METAL CHIP	10K 5% 1/16W
R1003	1-216-821-11	METAL CHIP	1K 5% 1/16W
R1004	1-216-845-11	METAL CHIP	100K 5% 1/16W
R1005	1-216-845-11	METAL CHIP	100K 5% 1/16W

Ref. No.	Part No.	Description	Remark
R1006	1-216-821-11	METAL CHIP	1K 5% 1/16W
		< VARIABLE RESISTOR >	
RV101	1-238-920-11	RES, VAR, CARBON 10K/10K (VOLUME)	
RV601	1-223-193-11	RES, VAR, CARBON 22K (TAPE SPEED)	
RV602	1-238-663-11	RES, ADJ, CERMET 4.7K	
		< SWITCH >	
S101	1-572-039-11	SWITCH, SLIDE (FWD/REV)	
S102	1-571-506-41	SWITCH, SLIDE (MIC SENS)	
S501	1-571-275-31	SWITCH, SLIDE (VOR)	
S703	1-570-953-11	SWITCH, PUSH (1 KEY) (TAPE DET)	
S704	1-571-585-11	SWITCH, PUSH (1 KEY) (TAB A LATCH DET)	
S705	1-571-585-11	SWITCH, PUSH (1 KEY) (TAB B LATCH DET)	
S706	1-572-263-11	SWITCH, SLIDE (REC)	
S707	1-572-263-11	SWITCH, SLIDE (REVERSE)	
S901	1-570-395-11	SWITCH, LEAF (HEAD BASE DET)	
		< TRANSFORMER >	
T101	1-433-286-11	TRANSFORMER, BIAS OSCILLATION	
		< THERMISTOR >	
TH601	1-809-833-21	THERMISTOR (2125)	
		< THERMISTOR (POSITIVE) >	
THP601	1-809-137-11	THERMISTOR, POSITIVE 2.7K	

TCM-77V

SONY[®] SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model

SUPPLEMENT-2

File this Supplement with the Service Manual.

Subject : EXPLODED VIEWS

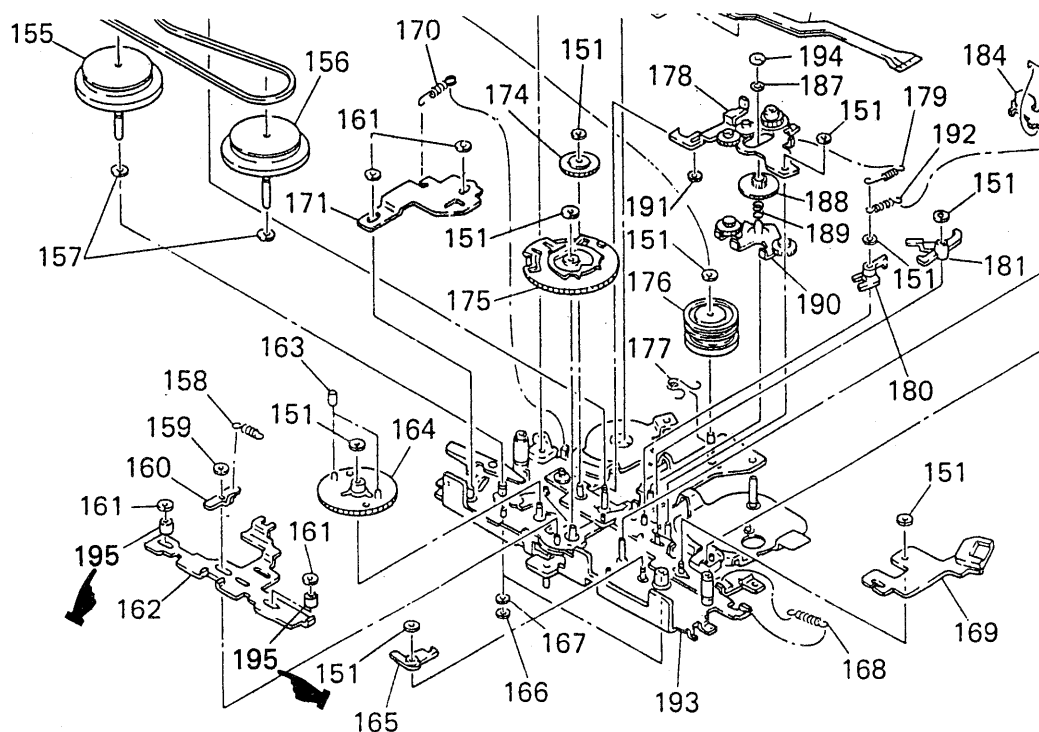
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EXPLODED VIEWS

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MECHANISM BLOCK (2)
(MT-77-44)



Ref.No.	Part No.	Description
195	3-376-149-01	COLLAR (DIR LEVER)