

CM-6430 EX1



# "TEN" SERVICE MANUAL

## AM-FM MPX, RADIO WITH CASSETTE TAPE PLAYER Model CM-6430EX1



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# COMPOSITION

## CM-6430EX1

Tape deck unit	CM-6430	1	
Knob	RN-MYC-1016A	2	Fig. 8 ㉓
Knob	RN-MYD-1031	1	Fig. 8 ㉔
Knob	RN-MYD-1041	1	Fig. 8 ㉕
Front panel	RN-MDP-1214	1	Fig. 8 ㉖
Wiring sub-assembly, speaker	RN-EWS-298	1	
Wiring sub-assembly	RN-EWJ-2855	1	
Wiring sub-assembly	RN-EWJ-1744	1	
Bracket	RN-MBF-11	1	
Installation screws	RN-MWA-1085	1 set	
Net	RN-MEN-57	(4)	Fig. 8 ㉗
Washer	RN-MWS-1010	(4)	Fig. 8 ㉘
Screw	RN-MET-152	(1)	
Nut	RN-MNR-D5S	(2)	
Bolt	RN-MBW-C5×16S	(1)	
Screw	RN-MTN-A6×16S	(1)	
Bolt	RN-MBW-C5×8S	(1)	

# SPECIFICATIONS

## RADIO SECTION

	MW	FM
TUNING RANGE .....	520 to 1605 kHz	88 to 108 MHz
INTERMEDIATE FREQUENCY .....	460 kHz	10.7 MHz
SENSITIVITY .....	30 dB or better (at 0.5 watt output)	8 ± 8 dB (Limiting sensitivity)
SIGNAL TO NOISE RATIO .....	21 dB or better (35 dB input)	30 dB or better (18 dB input)
ELECTRICAL FIDELITY .....	-2 ± 3 dB at 100 Hz -14 ± 4 dB at 4 kHz	0 ± 3 dB at 100 Hz -14 ± 6 dB at 10 kHz
SEPARATION .....		20 dB or better (at 54 dB input)

## TAPE PLAYER SECTION

NUMBER OF TRACK .....	4-track 2-channels
TAPE CARTRIDGE .....	Stereo/Monaural compact cassette
TAPE SPEED .....	4.76 cm/sec. ± 3% FF: 60 to 75 sec. (C-60 tape) REW: 60 to 75 sec. (C-60 tape)
WOW & FLUTTER .....	0.25% at less (WRMS)
SIGNAL TO NOISE RATIO .....	46 dB or better (at 1 kHz)
CROSSTALK .....	40 dB or better between adjacent tracks
SEPARATION .....	25 dB or better between left and right channel
FREQUENCY RESPONSE .....	0 ± 3 dB at 125 Hz    0 ± 6 dB at 8 kHz (Ref. Freq: 1 kHz)
EQUALIZATION .....	3180/120 μ sec. (Normal) 3180/70 μ sec. (Chrome)
TAKE-UP TORQUE .....	60 to 75 g-cm

COMMON SECTIONS

[CM-6430EX1]

LOUDNESS .....8 ± 4 dB at 125 Hz    5 ± 4 dB at 6.3 kHz  
 POWER OUTPUT.....3.5 watt per channels (at 400 Hz T.H.D.=10%)  
 SPEAKER IMPEDANCE.....4 ohm per channels  
 POWER SUPPLY.....12-volt car battery, negative terminal to ground.  
     Voltage .....13.2 VDC  
     Current .....Approx. 0.5 ampere (at 0.5 watt output)  
 SEMICONDUCTOR.....8 ICs, 11 transistors, 23 diodes, 3 LED, 1 FET  
 DIMENSIONS .....178(W)×51(H)×129.6(D)mm (7-1/4", 2-1/4", 5-7/64")  
 WEIGHT.....Player unit 1.5 kg

CONNECTIONS

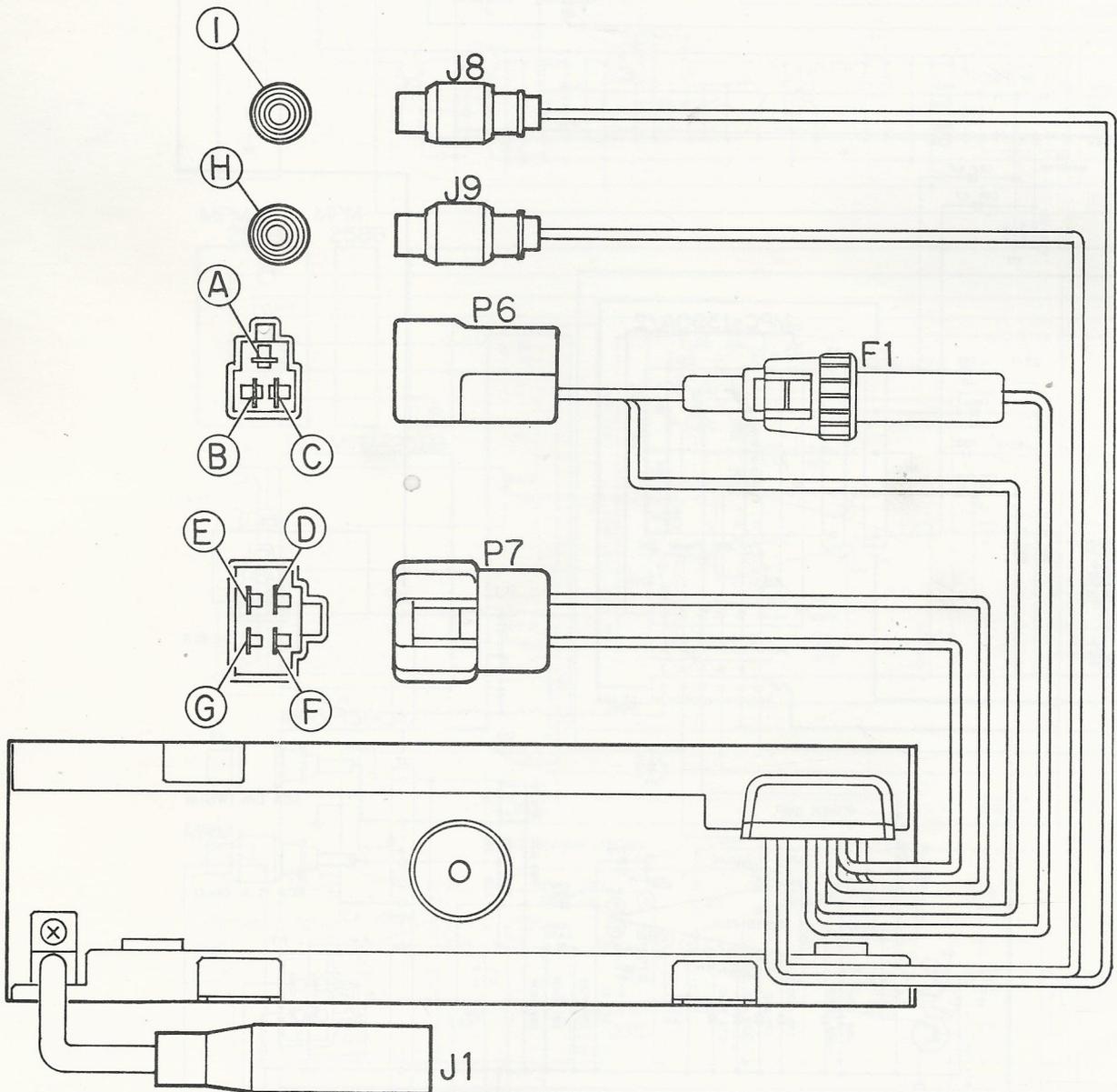


Fig. 1 (C23156430)

A	N.C.	B	ACC +B	C	ANT. +B
D	Rch OUTPUT (+)	E	Rch OUTPUT (-)	F	Lch OUTPUT (+)
G	Lch OUTPUT (-)	H	Rch OUTPUT	I	Lch OUTPUT

# INSTRUMENT WIRING

STARBUCK

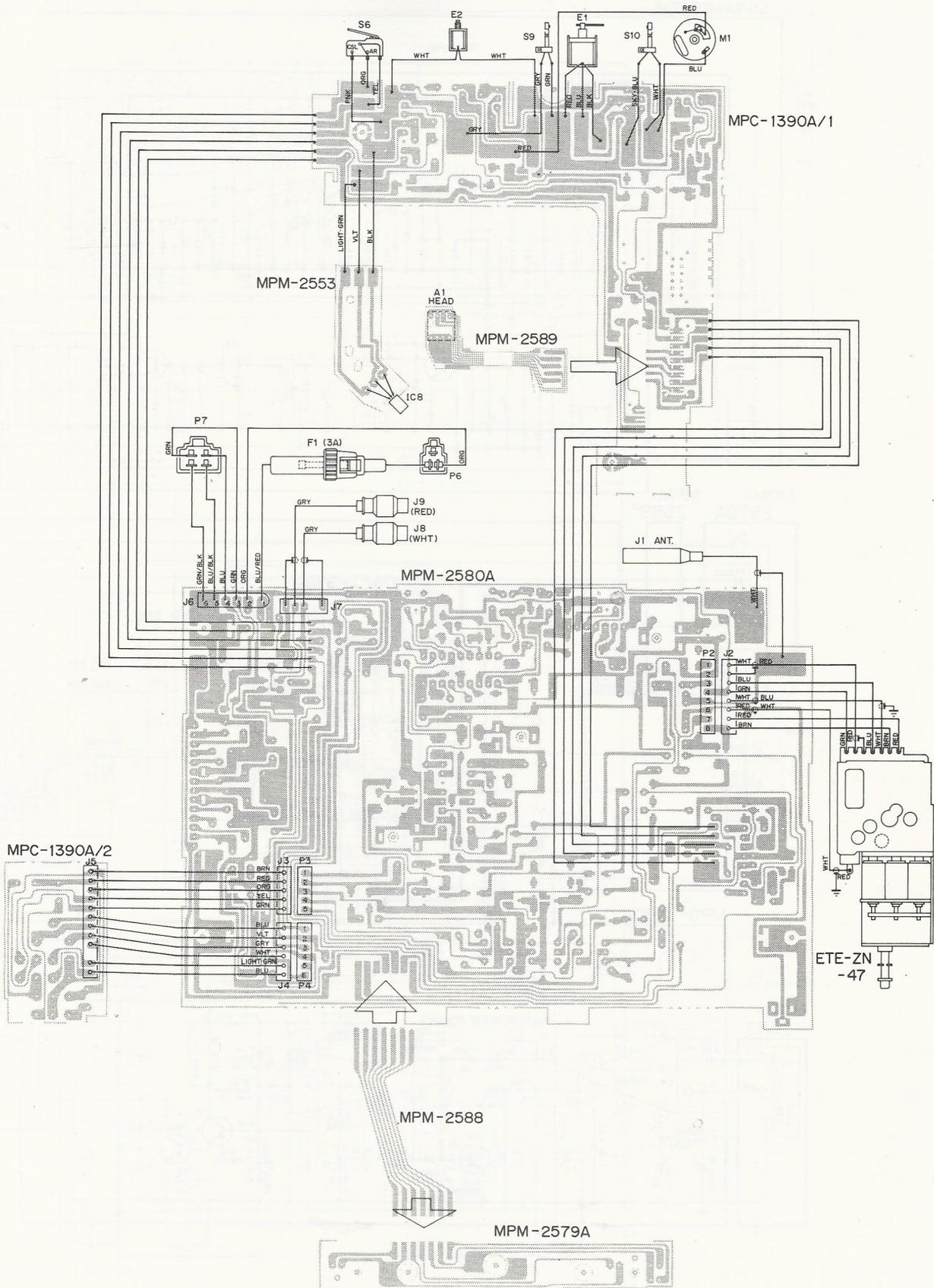


Fig. 2 (C27156430)



# EXPLODED VIEW

WRITE ON PC BOARD (P/W-2500)

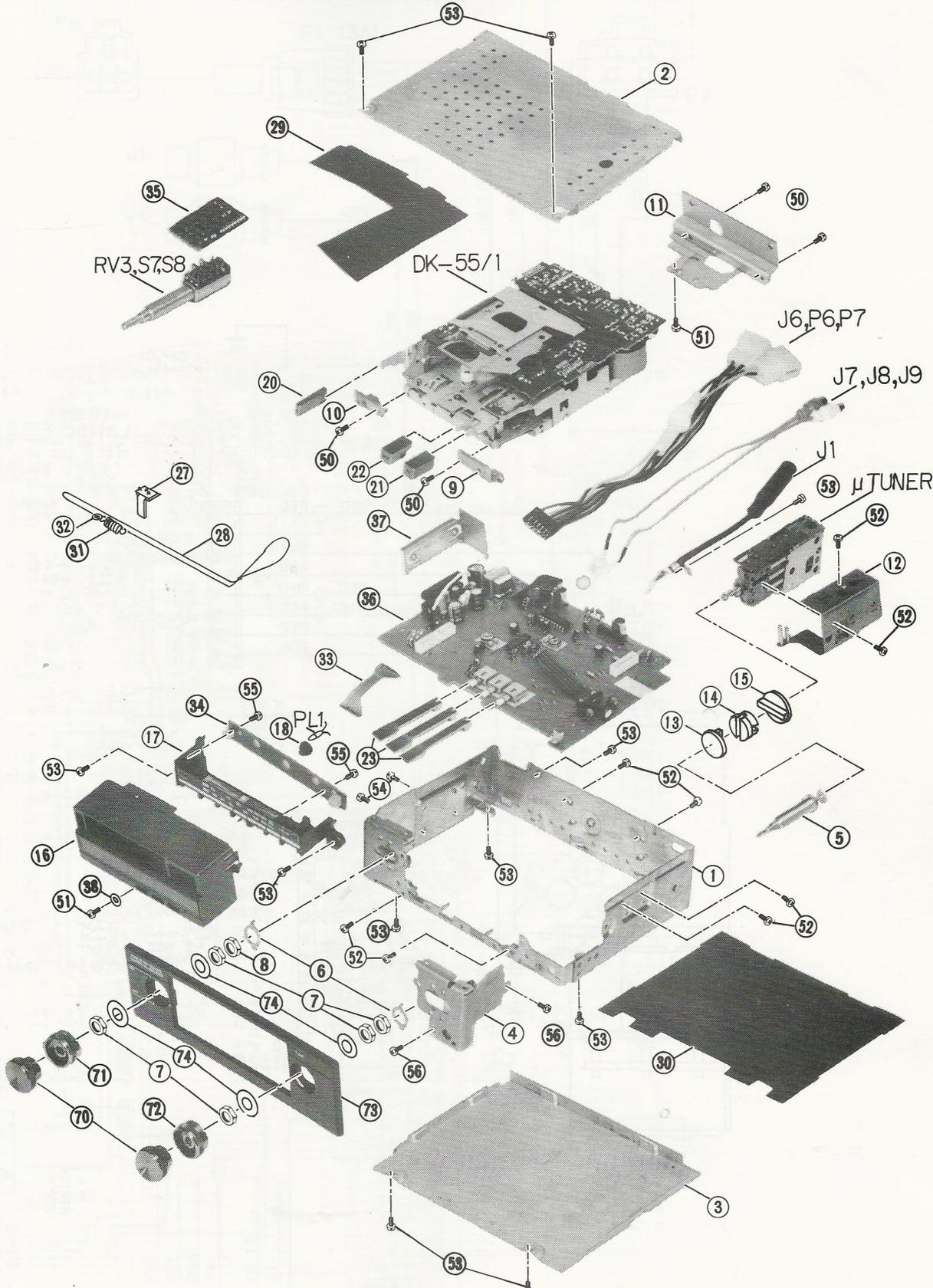


Fig. 8

# EXPLODED VIEW (CASSETTE DECK DK-55/1)

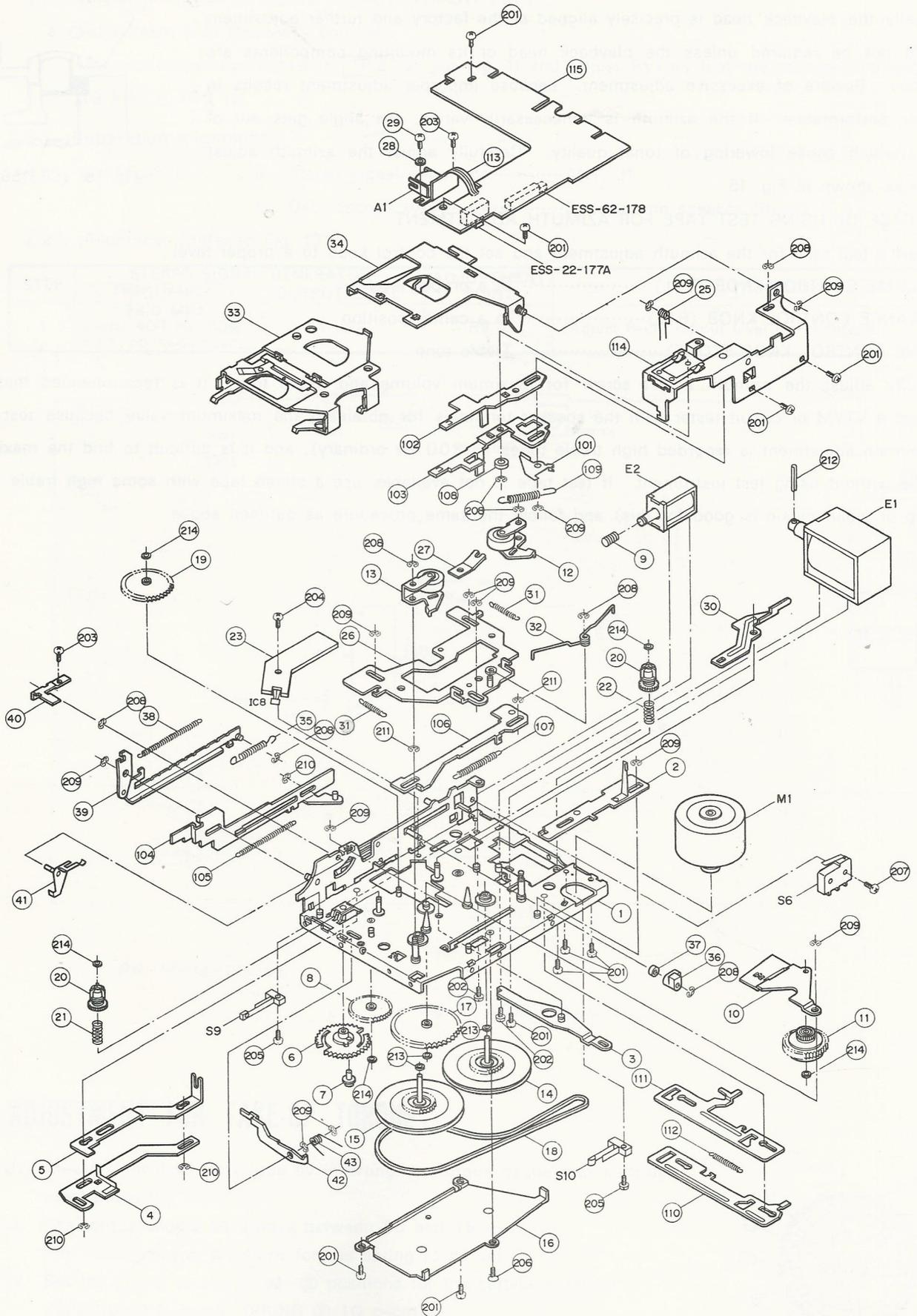


Fig. 9 (C28156430)

# FM ALIGNMENT

NOTE: After removing deck, **TP 4** and **TP 5** should be shorted.

## [ 1 ] IF Alignment

### a. Connections

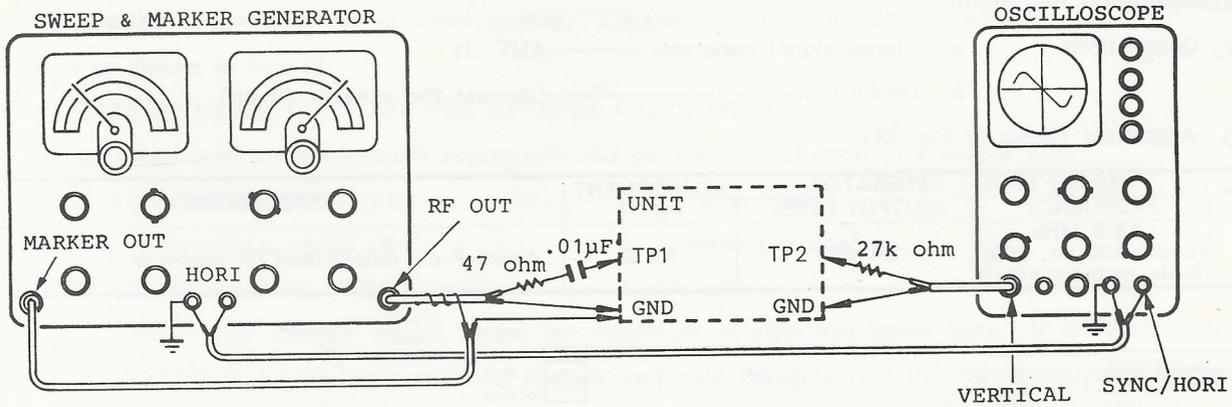


Fig. 10

SWEEP GENERATOR OUTPUT	OSCILLOSCOPE VERTICAL INPUT	OSCILLOSCOPE HORIZONTAL INPUT
Connect <b>TP 1</b> in Fig. 13 through 00.1 $\mu$ F capacitor & 47 ohm resistor	Connect <b>TP 2</b> in Fig. 13 through 27k-ohm resistor	Connect with HORIZONTAL terminal of sweep generator

- b. Power supply : 13.2 VDC
- c. Switch : Band selector for FM
- d. Controls : Volume for minimum  
Tone for high

(2) Alignment (Refer to Fig. 13 for ADJUSTMENT POINTS.)

STEP	PURPOSE	SWEEP GENERATOR FREQUENCY	SET TUNER TO	ADJUSTMENT POINTS	PROCEDURE
1	IF circuit	Center frequency varies according to the color of the ceramic filter (Refer to chart given below)	Near 98 MHz no signal exists	T 1	S-curve adjust for full gain and length of at linears. (See Fig. 12)
2					Keep S-curve straight at the center, and adjust waveform for best symmetry of S-curve against the axis as much as possible. (See Fig. 12)
3	Detector circuit				
4	Repeat STEP 1 to 3 until no further gain output can be obtained.				

COLOR	CENTER FREQUENCY
Black	10.64 MHz $\pm$ 30 kHz
Blue	10.67 MHz $\pm$ 30 kHz
Red	10.70 MHz $\pm$ 30 kHz
Orange	10.73 MHz $\pm$ 30 kHz
White	10.76 MHz $\pm$ 30 kHz

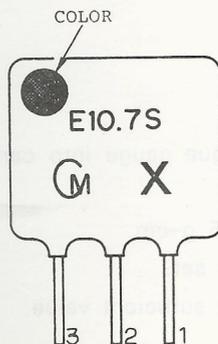


Fig. 11

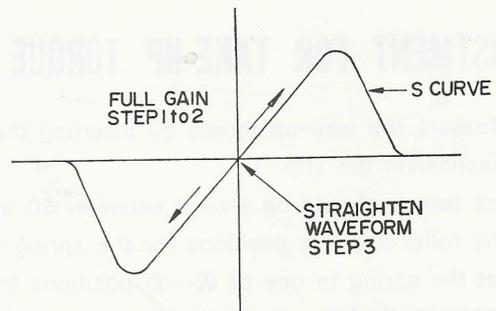


Fig. 12

[ 2 ] MPX. ADJUSTMENT

[CM-6430EX1]

(1) Alignment (Refer to Fig. 13 for ADJUSTMENT POINTS.)

a. Adjustment with frequency counter :

Connect frequency counter to **TP 3** as per Fig. 11 and adjust RV1 so that the counter frequency becomes 19 kHz  $\pm$  100 Hz.

[ 3 ] Separation alignment

(1) Connections

a. Stereo signal generator .....ANT. J1

b. Oscilloscope .....Connect the speaker (R-ch)

(2) Alignment (Refer to Fig. 13)

STEP	STEREO SIGNAL GENERATOR		ADJUSTMENT POINT	PROCEDURE
	FREQUENCY	OUTPUT LEVEL		
1	98.0 MHz (L-ch: 400 Hz, 30% R-ch: no modulation)	54 dB $\mu$	RV 2	Adjust R-ch. output level for minimum.

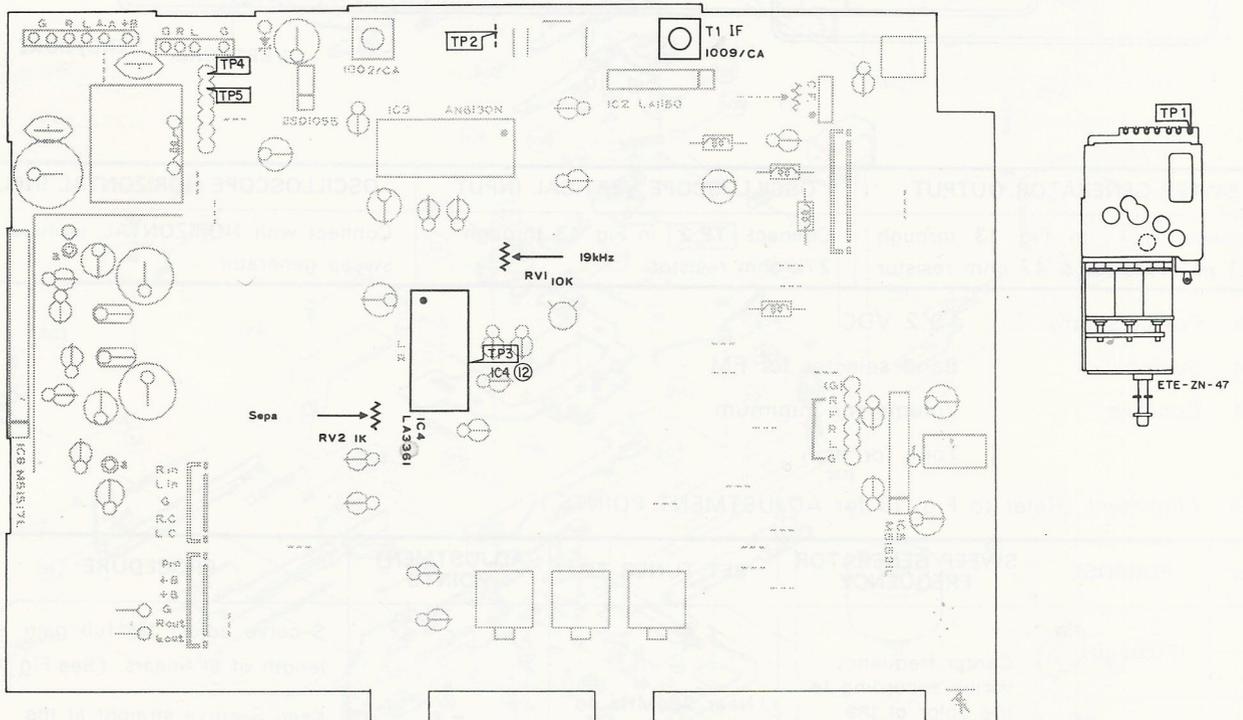


Fig. 13 (C33156430)

**ADJUSTMENT FOR TAKE-UP TORQUE**

1. Measure the take-up torque by inserting the torque gauge into cartridge mechanism the slip.
2. The torque should be always between 60 and 75 g-cm.  
The roller has five positions for the spring to be set.
3. Set the spring in one of ①—⑤ positions for the sufficient value.  
(SPRING ① 5 g-cm, SPRING ② 10 g-cm)

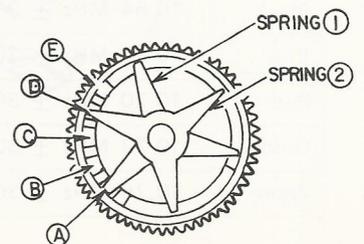


Fig. 14

## PLAYBACK HEAD ADJUSTMENT (Azimuth)

Normally the playback head is precisely aligned at the factory and further adjustment should not be required unless the playback head or its mounting components are replaced. Beware of excessive adjustment, because improper adjustment results in inferior performance. If the azimuth is unnecessarily varied, the angle gets out of order, which cause lowering of tonal quality. Carefully adjust the azimuth adjust screw as shown in Fig. 15.

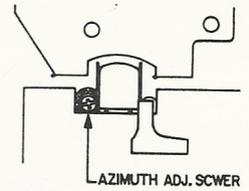


Fig. 15 (C33156430)

### \* IN CASE OF USING TEST TAPE FOR AZIMUTH ADJUSTMENT

Insert a test tape for the azimuth adjustment and set the control knob to a proper level :

VOLUME CONTROL KNOB (VOL) ..... In a proper level

BALANCE CONTROL KNOB (BAL)..... In a center position

TONE CONTROL KNOB (TONE)..... Treble tone

Carefully adjust the azimuth adjust screw for maximum volume and treble tone. It is recommended that you connect a VTVM or circuit tester with the speaker terminals for obtaining the maximum value because test tape for azimuth adjustment is recorded high treble tones (6,300 Hz ordinary), and it is difficult to find the maximum volume without using test instrument. If test tape is not available, use a stereo tape with some high treble tones (piano or violin music is good for this) and follow the same procedure as outlined above.

## [1] Structure

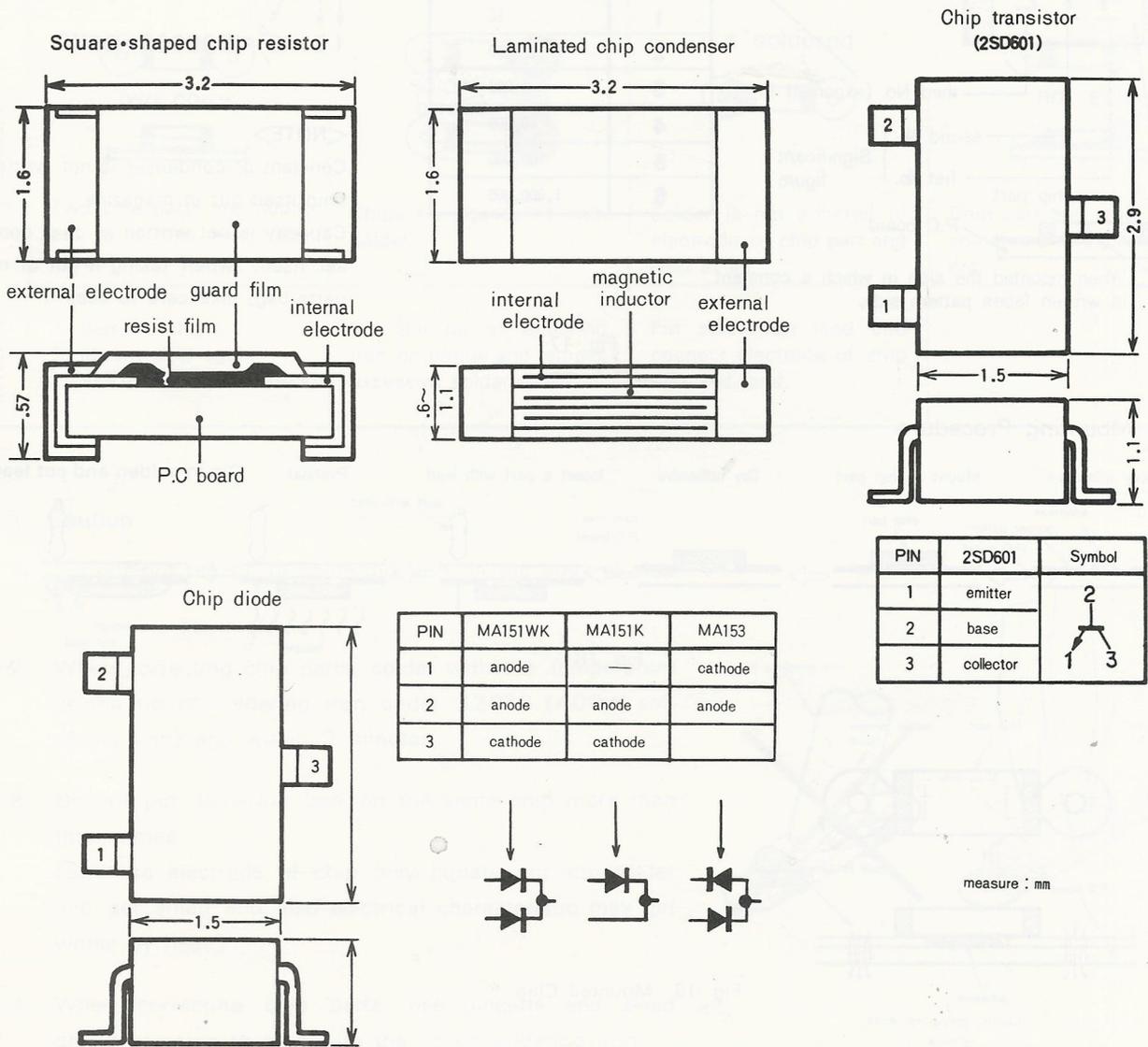


Fig. 16

## [2] Advantages

### a. Units can be of small size and of light weight.

1. An element itself is of small size, of light weight and of simple shape. So circuit PC board can be compact and whole design can be miniaturized.
2. Density of mounted parts can be higher by using them together with discrete parts and by mounting them in both sides of PC board.

### b. Electrical characteristics can be highly efficient.

1. Circuit without lead can be made in a small-sized PC board. So unnecessary reactance or capacitance does not affect so much and it is easy to design optimum circuit.
2. As having no lead, circuit can be soldified and performance can be stable.

### c. Productivity can be increased.

Small-sized and simple-shaped element enables high-density, automatic mounting and labor can be saved.

[ 3 ] How to read a constant

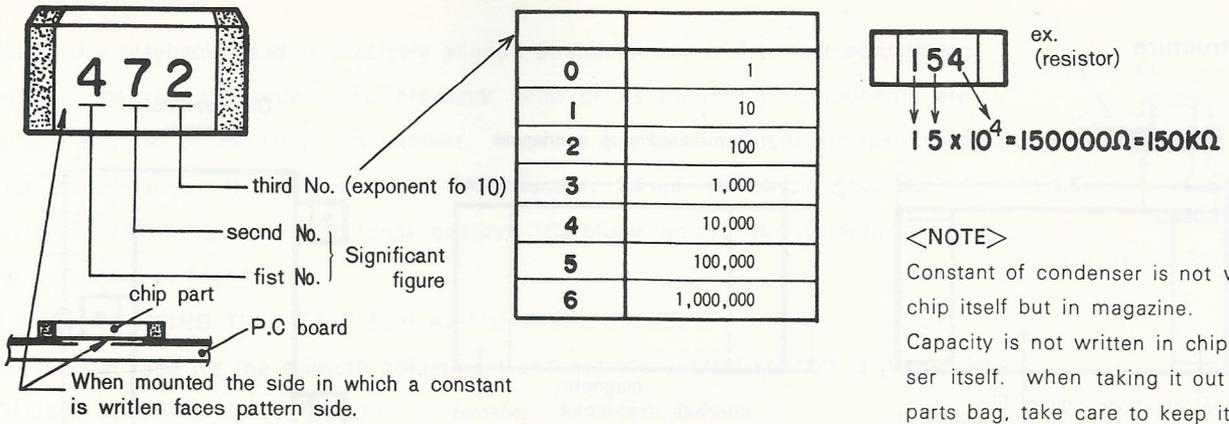


Fig. 17

[ 4 ] Mounting Procedure

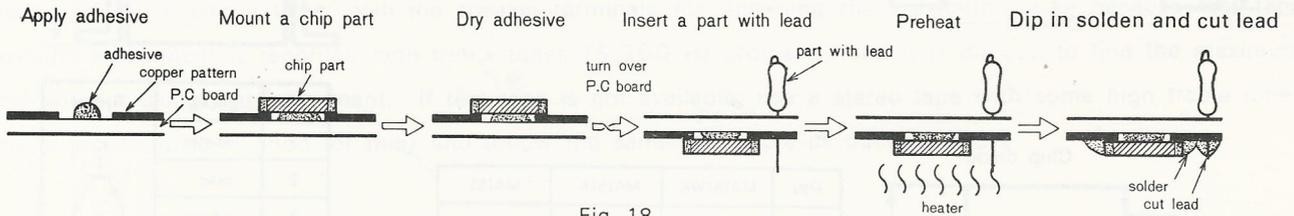


Fig. 18

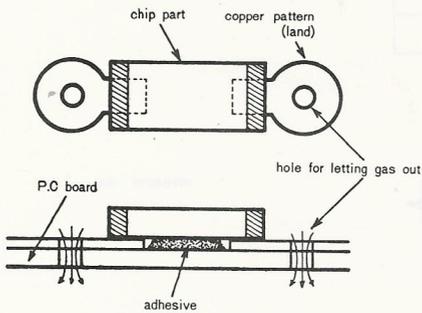
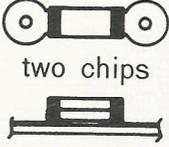
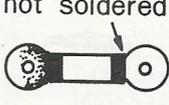


Fig. 19 Mounted Chip

[ 5 ] Correction

	A	B	C	D
Condition	<p>Chip part is not mounted where it should be mounted.</p>	<p>Chip part is out of its right position.</p>	<p>Chip part is cracked or broken.</p>	<p>Chip part is set upright.</p>
Correction	<ol style="list-style-type: none"> <li>1. Pre-solder one land.</li> <li>2. Hold chip with a pin-cette, apply it to land and solder.</li> <li>3. Solder another land.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove chip</li> <li>2. Mount chip again. (See A-Correction 1~3)</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove chip.</li> <li>2. Mount chip again. (See A-Correction 1~3)</li> <li>3. Removed chip cannot be used again.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove chip.</li> <li>2. Mount chip again. (See A-Correction 1~3)</li> </ol>

	E	F	G	H
Condition	 <p>two chips</p> <p>Two chip parts are mounted, with one over the other.</p>	 <p>soldering bridge</p> <p>Chips are connected with solder.</p>	 <p>not soldered</p> <p>Solder is not adhered to electrode of chip part and land at all.</p>	 <p>not soldered</p> <p>Chip part and land is not soldered owing to adhesive etc.</p>
Correction	<p>1. Remove chip. 2. Mount chip again. (See A-Correction 1~3)</p>	<p>Put the tip of soldering iron on bridge and remove excessive solder.</p>	<p>Put solder on land and connect electrode of chip part and land.</p>	<p>←</p>

[ 6 ] Caution

- Do not put the tip of soldering iron on the body of chip part.
- When correcting chip parts, solder with the temperature of the tip of soldering iron under 320°C (400W soldering iron) and within 3 minutes.
- Do not put soldering iron on the same chip more than three times.  
(Because electrode of chip may liquefy out into solder and get small and also electrical characteristic may get worse by heat.)
- When correcting chip parts, use pincette and avoid giving pressure to chip with the tip of soldering iron.
- Do not give any excessive force or flexion (distortion) to PC board where chip parts are mounted.
- Chip parts are easily affected by thermal shock.  
If possible, do not use removed parts. When using it, check to see if nothing is wrong by watching it or by using a tester.

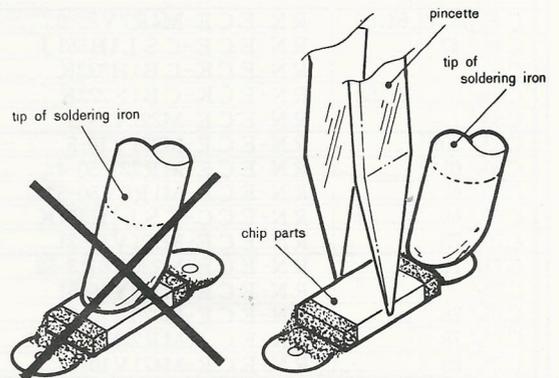


Fig. 20

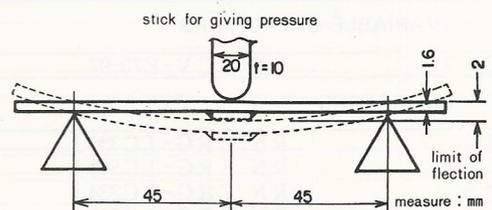


Fig. 21

# REPLACEMENT PARTS LIST

Note: Main replacement parts are marked ○ in the remarks column.

Symbol No.	Stock No.	Description				Remark
<b>CAPACITORS</b>						
C 1, 6, 23, 24	RN-ECK-CB1H103M	.01 $\mu$ F	50V	ceramic		
C 2, 17, 31, 43	RN-ECE-M1R0V50-7	1 $\mu$ F	50V	electrolytic		
C 3, 7, 35	RN-ECK-CB1E473M	.047 $\mu$ F	25V	ceramic		
C 8	RN-ECK-CF1H104Z	.1 $\mu$ F	50V	ceramic		
C 9, 30, 37, 52, 53, 86	RN-ECE-M470V10-10	47 $\mu$ F	10V	electrolytic		
C10	RN-ECC-CSL1H100D	10 pF	50V	ceramic		
C11	RN-ECC-CSL1H471J	470 pF	50V	ceramic		
C12, 13, 14, 15	RN-ECG-DSA181J	180 pF	50V	ceramic		
C16	RN-ECC-CSL1H050D	5 pF	50V	ceramic		
C18, 19, 34	RN-ECC-CSL1H681K	680 pF	50V	ceramic		
C20	RN-ECC-CSL1H122K	1200 pF	50V	ceramic		
C21	RN-ECC-CSL1H680J	68 pF	50V	ceramic		
C22, 102, 103, 107	RN-ECE-M100V16-10	10 $\mu$ F	16V	electrolytic		
C25, 26, 41, 42	RN-ECE-MR47V50-8	.47 $\mu$ F	50V	electrolytic		
C27	RN-ECK-CB1H222M	.0022 $\mu$ F	50V	ceramic		
C28	RN-ECK-CB1H682M	6800 pF	50V	ceramic		
C29	RN-ECK-CB1H153M	.015 $\mu$ F	50V	ceramic		
C33	RN-ECK-CB1E333M	.033 $\mu$ F	25V	ceramic		
C36	RN-ECG-DSA102J	1000 pF	50V	ceramic		
C38, 39, 40, 44, 51, 62, 63	RN-ECK-CB1H153K	.015 $\mu$ F	50V	ceramic		
C45, 48, 49, 64, 65	RN-ECE-M4R7V25-6	4.7 $\mu$ F	25V	electrolytic		
C46, 47	RN-ECE-CSL1H561J	560 pF	50V	electrolytic		
C50	RN-ECK-CB1H332K	3300 pF	50V	ceramic		
C54, 55, 57, 58	RN-ECK-CB1E223K	.022 $\mu$ F	25V	ceramic		
C56	RN-ECE-M221V16-9	220 $\mu$ F	15V	electrolytic		
C59, 108	RN-ECE-M221V16-5	220 $\mu$ F	16V	electrolytic		
C60, 61	RN-ECE-MR22V50-4	.022 $\mu$ F	50V	electrolytic		
C66, 67	RN-ECE-M1R0V50-52	1 $\mu$ F	50V	electrolytic		
C68, 69, 81, 82	RN-ECC-CSL1H221K	220 pF	50V	ceramic		
C70, 73	RN-ECE-M101V10-31	100 $\mu$ F	10V	electrolytic		
C71, 72	RN-ECE-M220V6R3-52	220 $\mu$ F	6.3V	electrolytic		
C74	RN-ECE-M102V16-51	1000 $\mu$ F	16V	electrolytic		
C75, 76	RN-ECE-M470V10-31	470 $\mu$ F	10V	electrolytic		
C77, 78	RN-E C J -MR22M25-09F	.22 $\mu$ F	25V	alox		
C79, 80	RN-ECE-M471V10-41	470 $\mu$ F	10V	electrolytic		
C83, 84	RN-ECB-DBC104B	1 $\mu$ F	12V	ceramic		
C88	RN-ECE-M221V10-51	220 $\mu$ F	10V	electrolytic		
C101, 104	RN-ECE-M220V16-8	22 $\mu$ F	16V	electrolytic		
C105, 106	RN-ECE-M220V10-5	22 $\mu$ F	10V	electrolytic		
<b>VARIABLE CAPACITORS</b>						
CV 1	RN-E C V -E70-97	Max. 70 pF	ANT. trimmer			
<b>RESISTORS</b>						
R 1, 7	RN-ERG-IC331J	330 ohm	5%	$\frac{1}{8}$ W	metallic	
R 2	RN-ERG-IC563J	56k ohm	5%	$\frac{1}{8}$ W	metallic	
R 8	RN-ERG-IC334J	330k ohm	5%	$\frac{1}{8}$ W	metallic	
R 9, 10, 27, 30	RN-ERG-IC222J	2.2k ohm	5%	$\frac{1}{8}$ W	metallic	
R11	RN-ERG-IC272J	2.7k ohm	5%	$\frac{1}{8}$ W	metallic	
R12, 23	RN-ERG-IC223J	22k ohm	5%	$\frac{1}{8}$ W	metallic	
R13	RN-ERG-IC474J	470k ohm	5%	$\frac{1}{8}$ W	metallic	
R14, 15, 16, 17	RN-ERG-IC472J	4.7k ohm	5%	$\frac{1}{8}$ W	metallic	
R18, 35, 36, 51, 53, 101	RN-ERG-IC104J	100k ohm	5%	$\frac{1}{8}$ W	metallic	
R19, 48, 49, 50, 52, 69, 71, 105	RN-ERG-IC332J	3.3k ohm	5%	$\frac{1}{8}$ W	metallic	
R20, 25, 34, 55, 61, 62, 78, 108, 109, 110, 112, 114, 116	RN-ERG-IC102J	1k ohm	5%	$\frac{1}{8}$ W	metallic	
R21, 59, 60	RN-ERG-IC182J	1.8k ohm	5%	$\frac{1}{8}$ W	metallic	
R22, 28, 38, 39, 54, 63, 64, 73, 74, 75	RN-ERG-IC103J	10k ohm	5%	$\frac{1}{8}$ W	metallic	
R24, 26, 29	RN-ERG-IC682J	6.8k ohm	5%	$\frac{1}{8}$ W	metallic	
R31, 103	RN-ERG-IC391J	390 ohm	5%	$\frac{1}{8}$ W	metallic	
R32, 104, 106	RN-ERG-IC471J	470 ohm	5%	$\frac{1}{8}$ W	metallic	
R33	RN-ERG-IC822J	8.2k ohm	5%	$\frac{1}{8}$ W	metallic	
R37, 40, 41	RN-ERG-IC393J	39k ohm	5%	$\frac{1}{8}$ W	metallic	
R42, 43	RN-ERG-IC470J	47 ohm	5%	$\frac{1}{8}$ W	metallic	

Symbol No.	Stock No.	Description	Remark
R44, 45	RN-ERG-IC562J	5.6k ohm 5% 1/8W metallic	
R46, 47	RN-ERG-IC154J	150k ohm 5% 1/8W metallic	
R56, 111, 113	RN-ERG-IC221J	220 ohm 5% 1/8W metallic	
R57, 58	RN-ERG-IC100J	10 ohm 5% 1/8W metallic	
R65, 66	RN-ERG-IC122J	1.2k ohm 5% 1/8W metallic	
R67, 68	RN-ERD-DE102JB	1k ohm 5% 1/4W carbon	
R70, 72	RN-ERG-IC181J	180 ohm 5% 1/8W metallic	
R76	RN-ERG-IC273J	27k ohm 5% 1/8W metallic	
R115	RN-ERC-CF2R2K	2.2 ohm 10% 1/2W solid	
<b>VARIABLE RESISTORS</b>			
RV 1	RN-ERV-0N1-132	10k ohm	
RV 2	RN-ERV-0N1-129	1k ohm	
RV 3 S 7, S 8	RN-ERV-2Z4-7	10k ohm x4, Volume, Tone, Balance, Power SW, Program SW.	○
<b>SEMICONDUCTORS</b>			
IC 1		Included in $\mu$ tuner assembly	
IC 2	RN-EIC-LA1150	FM IF linear-monolithic IC	○
IC 3	RN-EIC-AN6130N	Noise blanker linear-monolithic IC	○
IC 4	RN-EIC-LA3361	FM MPX linear-monolithic IC	○
IC 5	RN-EIC-M51521L	Equalizer amp. linear-monolithic IC	○
IC 6	RN-EIC-M51517L	Power amp. linear-monolithic IC	○
IC 7	RN-EID-CX10006	Auto reverse control linear-monolithic IC	○
IC 8	RN-EIA-DM106A	Tape and detector linear-manolithic IC	○
Q 1, 2	RN-EVS-2SD601QRS	Silicon transistor	○
Q 3	RN-EVS-2SD1055-QR	Silicon transistor	○
Q 4, 5	RN-EVS-2SD1328ST	Silicon transistor	○
Q101	RN-EVS-2SD636	Silicon transistor	○
Q102, 103	RN-EVS-2SD1247-U	Silicon transistor	○
D 1, 3, 4	RN-EDS-MA151WK	Silicon diode	○
D 2	RN-EDT-RD9R1EB-3	Silicon diode	○
D101, 104	RN-EDS-MA151K	Silicon diode	○
D102	RN-EDT-RD9R1-C	Zener diode	○
D103	RN-EDS-MA153	Silicon diode	○
D105,106,107,109	RN-EDT-10E1	Silicon diode	○
D108, 110	RN-EDS-MA151WK	Silicon diode	○
D111	RN-EDP-LN310GP	LED Green	○
D112, 113	RN-EDP-LN410YP	LED Yellow	○
<b>COILS &amp; TRANSFORMERS</b>			
L 1	RN-ELH-C680-4KH	68 $\mu$ H	
L 2, 3	RN-ELH-C6R8-4KH	6.8 $\mu$ H	
L 4	RN-ELH-C5R6-2KH	5.6 $\mu$ H	
L 5	RN-ELL-326	1.8 mH	
T 1	RN-ETF-1009	FM IF	
T 2	RN-ELT-1002	FM IF 19 kHz	
<b>CERAMIC FILTER</b>			
CF 1	RN-EFC-F2-115	FM IF Filter, 10.7 MHz	
<b>MISCELLANEOUS ELECTRICAL</b>			
$\mu$	RN-ETE-2N-47	$\mu$ tuner assy.	○
CI 1, 2	RN-ECI-A271-1	Filter capacitor	
F 1	RN-EFG-B03	Fuse 3A	
J 1	RN-EJL-1012A	Receptacle antenna	
J 2	RN-EWJ-3187	8P connector and lead assy.	
J 3, 4, 5	RN-EWJ-3186	5P-6P-11P connector and lead assy	
J 6, P 6, 7	RN-EWJ-3185	6P-4P-3P connector and lead assy	
J 7, 8, 9	RN-EWJ-3184	4P-1P-1P connector and lead assy	
P 2	RN-EJU-S08V-567	8P connector	
P 3	RN-EJU-S05V-564	5P connector	
P 4	RN-EJU-S06V-565	6P connector	
PL 1	RN-EPM-1061	Lamp	
S 1~S 3	RN-ESB-2L2-183	Push switch, S1-1, -2 FM/AM, S2-1 MO/ST S2-2 Tape select S3-1, -2 LOUDNESS ON/OFF	○
S 4	RN-ESS-22-178	Slide switch, Head changing switch	○

Illus. No. (Fig. 6)	Stock No.	Description	Q'ty	Remark
1	RN-MTD-1089B	Chassis, main	1	
2	RN-MTD-1090A	Cover, top	1	
3	RN-MTD-1091A	Cover, bottom	1	
4	RN-MHE-1263A	Holder, tuning	1	
5	RN-MMT-1005	Tuning shaft	1	
6	RN-MWS-1025	Washer	2	
7	RN-MEN-57	Nut	1	
8	RN-MEN-43	Nut	1	
9	RN-MHE-1264A	Holder, Deck Right side	1	
10	RN-MHE-1265A	Holder, Deck Left side	1	
11	RN-MHE-1302	Holder	1	
12	RN-MHE-1267	Holder	1	
13	RN-MUJ-1015	Joint	1	
14	RN-MUJ-1016	Joint	1	
15	RN-MUJ-1017	Joint	1	
16	RN-MFP-1075B	Escutcheon	1	○
17	RN-MBP-1024B	Backplate	1	
18	RN-MLF-1067B	Cover, tilter	1	
20	RN-MYB-1254	Button, eject	1	○
21	RN-MYB-1255	Button, FF	1	○
22	RN-MYB-1256	Button, REW	1	○
23	RN-MYB-1257	Button	3	○
27	RN-MIM-1004	Pointer	1	
28	RN-MNW-0.4 シロ	Nylon thread	1	
29	RN-MIP-1193A	Insulator	1	
30	RN-MIP-1194	Insulator	1	
31	RN-MSC-1202	Spring	1	
32	F6-WK-2	Washer	1	
33	RN-MPM-2588	PC Board	1	
34	RN-MPM-2579A	PC Board	1	
35	RN-MPC-1390A/2	PC Board	1	
36	RN-MPM-2580A	PC Board	1	
37	RN-MHE-1268	Holder	1	
38	F6-WM-3S	Washer	1	

# CASSETTE DECK UNIT

[CM-6430EX1]

Illus. No. (Fig. 9)	Stock No.	Description	Q'ty	Remark
1	RN-MAS-1033D	Chassis main	1	
2	RN-MUL-1180B	Lever	1	
3	RN-MUL-1181	Lever	1	
4	RN-MUL-1182	Lever	1	
5	RN-MUL-1183	Lever	1	
6	RN-MUG-1069	Gear	1	
7	RN-MSI-1049	Shaft	1	
8	RN-MUG-1070	Gear	1	
9	RN-MSC-1216	Spring	1	
10	RN-MUL-1184A	Lever	1	
11	RN-MKS-1016	Slip mechanism	1	○
12	RN-MKR-1018	Pinchroller assy.	1	
13	RN-MKR-1019	Pinchroller assy.	1	
14	RN-MUF-1011	Flywheel	1	
15	RN-MUF-1010A	Flywheel	1	
16	RN-MYT-1079A	Sub-chassis	1	
17	RN-MUG-1073	Gear	1	
18	RN-MUB-1027A	Belt	1	○
19	RN-MUG-1074	Gear	1	
20	RN-MUG-1075	Gear	2	
21	RN-MSC-1217	Spring	1	
22	RN-MSC-1210A	Spring	1	
23	RN-MPM-2553	PC Board	1	
25	RN-MSC-1186	Spring	1	
26	RN-MYT-1080B	Sub chassis	1	
27	RN-MSP-141	Spring	1	
28	RN-MST-133	Spacer	1	
29	RN-MFT-232A	Special screw	1	
30	RN-MUL-1190A	Lever	1	
31	RN-MSC-1191	Spring	2	
32	RN-MSC-1192	Spring	1	
33	RN-MKI-1013A	Slide plate assy.	1	
34	RN-MHE-1243	Holder	1	
35	RN-MSC-1193	Spring	1	
36	RN-MRP-1066A	Roller	1	
37	RN-MRP-1069	Roller	1	
38	RN-MSC-1194	Spring	1	
39	RN-MUL-1193	Lever	1	
40	RN-MHL-1042A	Holder	1	
41	RN-MUL-1196C	Lever	1	
42	RN-MUL-1198A	Lever	1	
43	RN-MSC-1205	Spring	1	
101	RN-MUL-1204	Lever	1	
102	RN-MUL-1186	Lever	1	
103	RN-MUL-1187A	Lever	1	
104	RN-MUL-1188A	Lever	1	
105	RN-MSC-1189	Spring	1	
106	RN-MUL-1185A	Lever	1	
107	RN-MSC-1187	Spring	1	
108	RN-MRP-220	Roller	1	
109	RN-MSC-1211A	Spring	1	
110	RN-MUC-1006A	Cam	1	
111	RN-MUC-1007	Cam	1	
112	RN-MSC-1188	Spring	1	
113	RN-MPM-2589	PC. Board	1	
114	RN-MHE-1242B	Holder	1	
115	RN-MPC-1390A	PC. Board	1	
201	F6-SBD-2.6×4S	Screw, 2.6×4mm	10	
202	F6-SNA-2.6×2.5S	Screw, 2.6×2.5mm	2	
203	F6-SBD-2×3S	Screw, 2×3mm	2	
204	F6-SBD-2×4S	Screw, 2×4mm	1	
205	F6-SBD-2×5S	Screw, 2×5mm	2	
206	F6-SSA-2×4S	Screw, 2×4mm	1	
207	F6-SBD-2.3×8S	Screw, 2.3×8mm	1	
208	F6-ER-1.5	E-ring washer 1.5φ	8	
209	F6-ER-2	E-ring washer 2φ	12	
210	RN-MHJ-3	E-ring washer	3	
211	F6-ER-3	E-ring washer 3φ	2	
212	F6-PS-2×18SUS	Pin, spring	1	
213	RN-MWP-85	Washer	2	

Illus. No. (Fig. 9)	Stock No.	Description	Q'ty	Remark
214	RN-MWP-80A	Washer	5	
A 1	RN-EHM-C44-57	Playback head	1	○
E 1	RN-EEM-1018A	Solenoid	1	
E 2	RN-EEM-1017A	Solenoid	1	
M 1	RN-EDM-1023	DC motor	1	○
S 6	RN-ESN-1004	Micro switch	1	○
S 9	RN-ESL-1020	Leaf switch	1	○
S10	RN-ESL-155	Leaf switch	1	○

NOTE: Specifications subject to change without prior notice.



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# SCHEMATIC

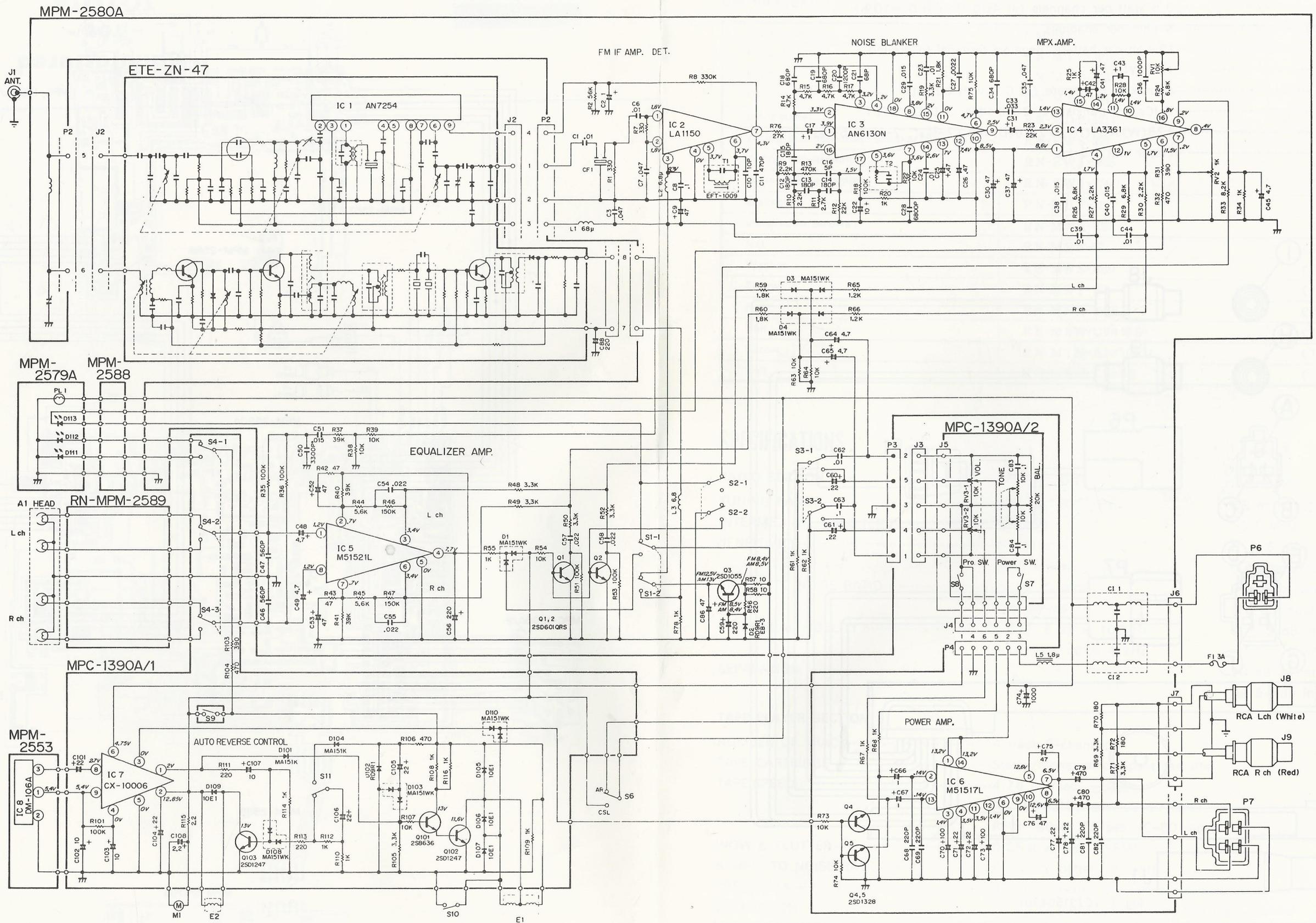


Fig. 3 (C24156430)

- NOTES:**
1. All capacitance in farad,  $\mu=10^{-6}$ , P= $10^{-12}$
  2. All resistance in ohm, K= $10^3$
  3. All inductance in henly,  $\mu=10^{-6}$ , m= $10^{-3}$ .
  4. DC voltages against the chassis measured with 100k ohm/volt meter, power supply set at +13.2 VDC, no signal input.

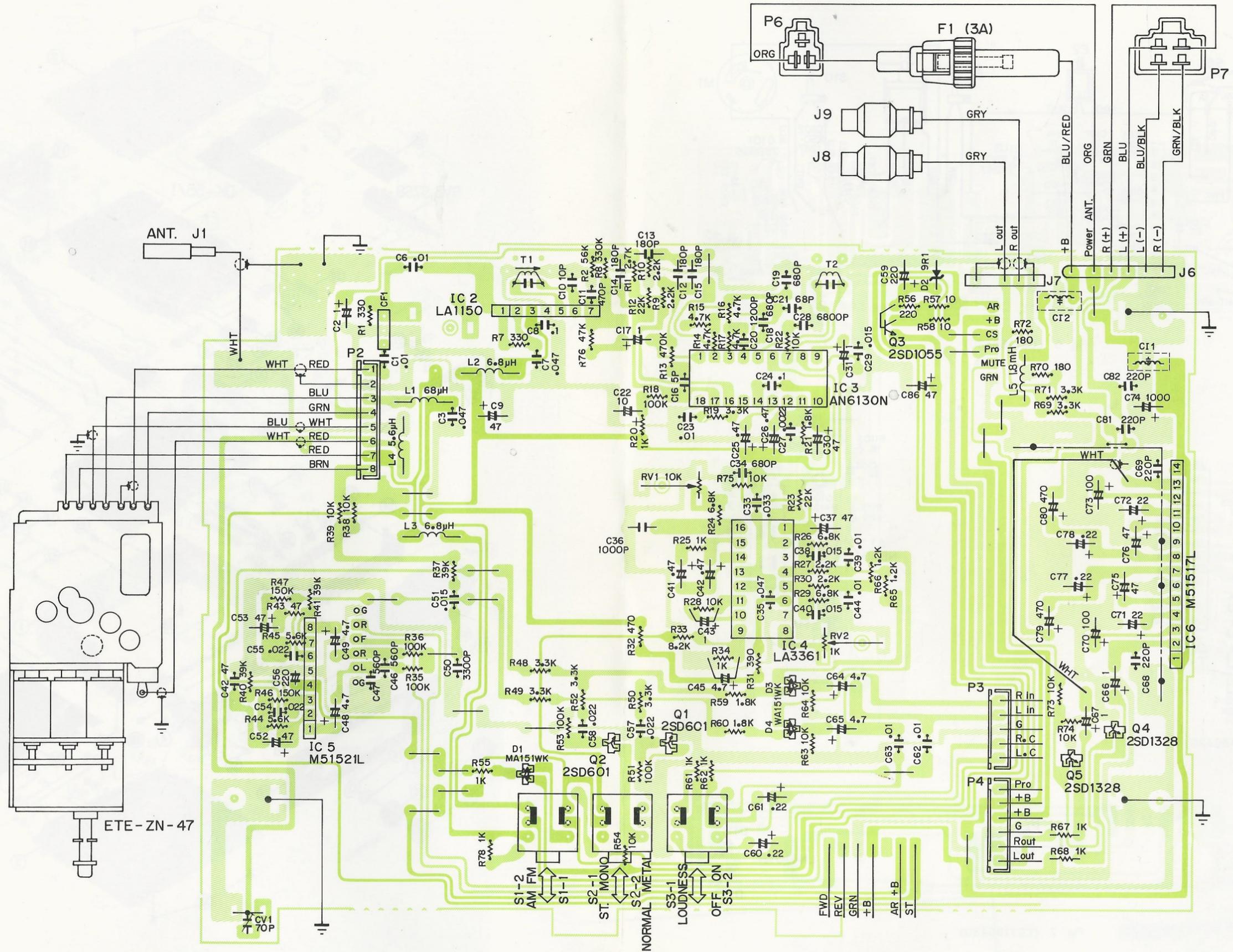


Fig. 4 (C23156430)