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Service Manual

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SUZUKI Motorcycle Genuine Electronic Radio with Cassette Deck

Model PS-9063V

■ SPECIFICATIONS:

[RADIO SECTION]

Circuit system:	Superheterodyne		
Tuning system:	Electronic tuning		
Receive range:	AM 530kHz 1620kHz		
	FM 87.9MHz to 107.9MHz		
Intermediate frequency:	AM 450kHz		
	FM 10.7MHz		
Quieting sensitivity:	AM Less than 35dB		
	(at 20dB S/N)		
	FM Less than 18dB		
	(at 30dB S/N)		
Selectivity:	AM More than 50dB		
Separation:	FM More than 20dB		
Fidelity:	AM	100Hz	H 1±3dB
			L 2±3dB
		400Hz	0dB
		4000Hz	H −14±5dB
			L −28±5dB
	FM	100Hz	H −1±3dB
			L 1±3dB
		400Hz	0dB
		4000Hz	H −11±5dB
			L −32±5dB
Auto tuning stop sensitivity:	AM	DX	30dB to 55dB
		LO	58±10dB
	FM	DX	28±6dB
		LO	50±10dB

[TAPE SECTION]

Reproduction system:	4 track, 2 channel, Stereo cassette deck
Tape speed:	4.76cm/sec.
Wow & flutter:	Less than 0.15% (W.R.M.S)
Separation:	More than 30dB
Crosstalk:	More than 40dB
S/N ratio:	More than 45dB
FF, REW time:	Less than 80 sec. (C-60)

[Head Set Section]

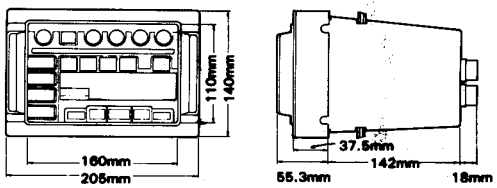
Separation:	More than 30dB
S/N ratio:	More than 45dB

[Inter COM.]

S/N ratio:	More than 45dB

[Synthesis]

Speaker impedance:	4Ω×2
Head set impedance:	16Ω×2
Power output:	8W×2 (at 3% distortion)
	12W×2 (at max. output)
Power supply voltage:	DC 14.0V (10.8V to 15.6V)
Current consumption:	Less than 7A
Demension:	



Weight: 3.2kg

Replacement switches are:

http://www.digikey.com Part #P8080SCT-ND 160g of force

16 are required to replace them all.

Published Service Administration Section PS [redacted]

■ MAJOR FEATURES:

(1) This is an AM/FM PLL Synthesizer Radio, Cassette Player with Micro Computer Control Inter-COM constructed in a single body.

(2) This system, specially developed for two-wheel vehicles, can be dismounted in the entire set for the prevention of theft and features a drip-proof structure, vibrationproof structure, etc.

(3) Since radio stations are selected by a handle remote control switch and the indicator is separately installed, the operability and safety are outstanding.

(4) Incorporated is an auto volume control circuit which adjusts the sound volume in conformity with the speed of vehicle.

(5) Although this system is the dismounting type, each function mode and each frequency are memory backed up for about 7 years by the lithium cell incorporated in the system.

(6) Since a remote control is installed on the passenger side, radio stations can be freely selected.

(7) Radio programs can be enjoyed with the head set (op) which is connected to the system. Inter-Communication (with auto mute) can be made between the front seat and rear seat.

(8) This system is provided with an auto-reverse cassette mechanism which allows the KEY-ON-play and the KEY-OFF-play.

(9) Both AM and FM have a noise killer circuit which ensures the clear sound.

■ COMPONENT:

PAS-204-100	Ant Rod
SPA-968-100	Speaker Kit
090-0050-66	Speaker
851-2561-00	Speaker Lead
RAS-001-100	Audio Box
948-0139-00	Speaker Grille Ass'y (LEFT)
948-0140-00	Speaker Grille Ass'y (RIGHT)
925-0915-00	Parts Kit (ANT)

■ ADJUSTMENT:

1. AZIMUTH ADJUSTMENT

Play the 8kHz, −10VU section of the AZIMUTH tape and adjust te head azimuth adjustment screw (716-0429-00) so that the output levels are maximized in both tape running directions. (Figure 1)

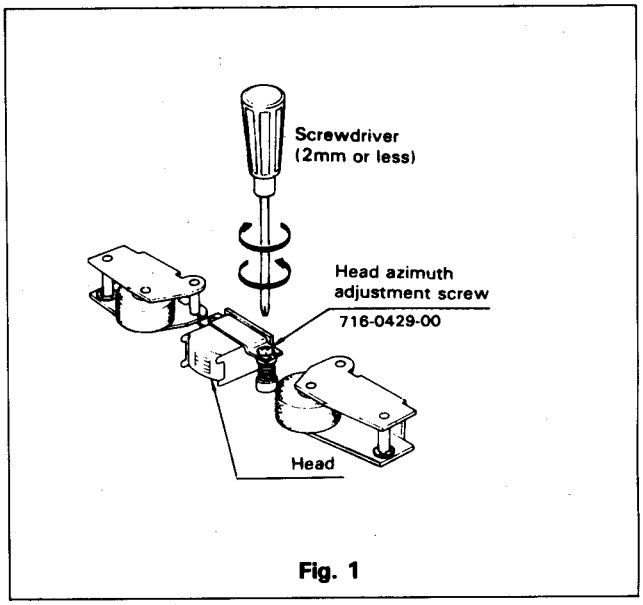


Fig. 1

2. REEL BASE TORQUE ADJUSTMENT

The plate spring (brass) which applies torque to each reel base can be seen through the hole in the deck plate around each reel shaft. (Figure 2)

Six sets of 3-level steps are provided on each reel base and torque can be varied by changing the step on which each plate spring foot is placed; Changing it to a lower step decreases torque and changing it to a higher step increases torque.

Among the six feet of the plate spring, one rests a step with stoppers as shown in Figure 3. To adjust torque slightly lift the spring and shift it to another step with tweezers. Be careful not to lift the spring foot to much, or it may be deformed.

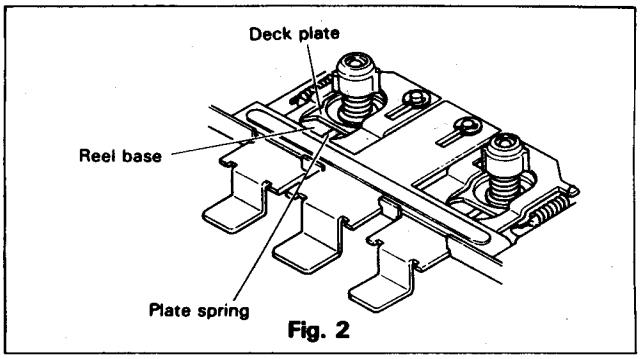


Fig. 2

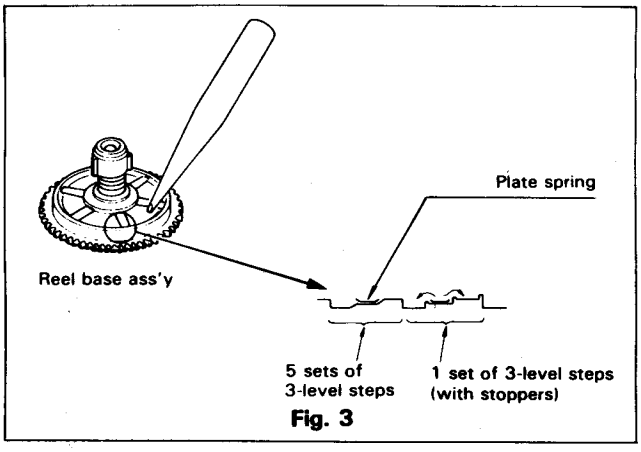


Fig. 3

3. FF/REW GEAR ENGAGEMENT ADJUSTMENT

If any abnormal sound is heard during FF/REW operation, adjust gear engagement as follows.

First identify the gear causing the abnormal sound. Then, adjust projection of the base plate assembly by bending it in an appropriate direction as shown in Fig. 4; (A) when the REW gear causes abnormal sound; (B) when the FF gear causes abnormal sound.

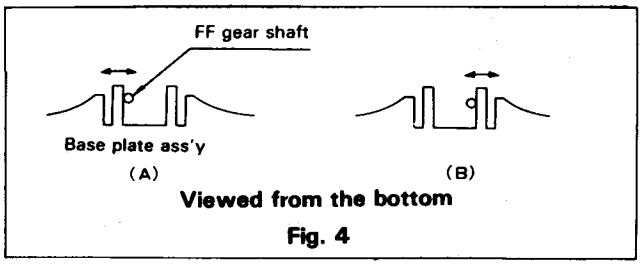


Fig. 4

4. LEAF SWITCH ADJUSTMENT

Adjust the leaf switch gap (t) to 0.5mm by loosening the machine screw (M2×6) las shown in Figure 5.

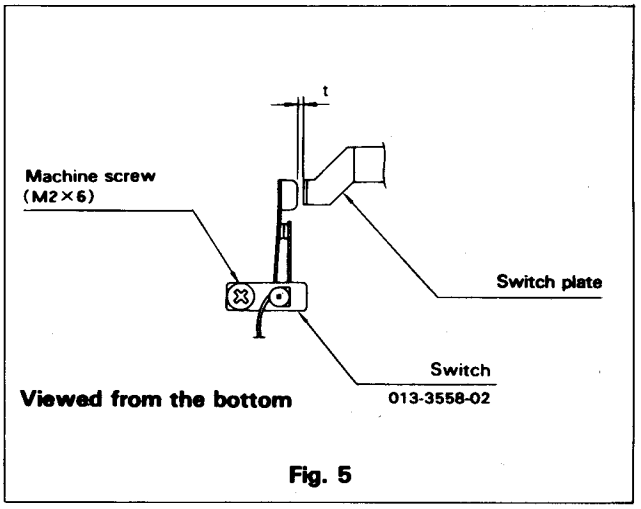


Fig. 5

5. POWER SWITCH (MICROSWITCH) ADJUSTMENT

The microswitch is actuated as follows: when a cassette is inserted, the guide A-A assembly drops and the projection on the right side of the A-A assembly pushes switch lever A so that the other end of the switch lever A actuates the microswitch.

When a cassette is loaded, the flat part of switch lever A around the microswitch actuation point (embossed part) must contact the microswitch and must not move any further. (Figure 6-1)

Bend the projection (highlighted part) of the guide A-A assembly in the direction of movement of switch lever A so that the above condition is satisfied. (Figure 6-2)

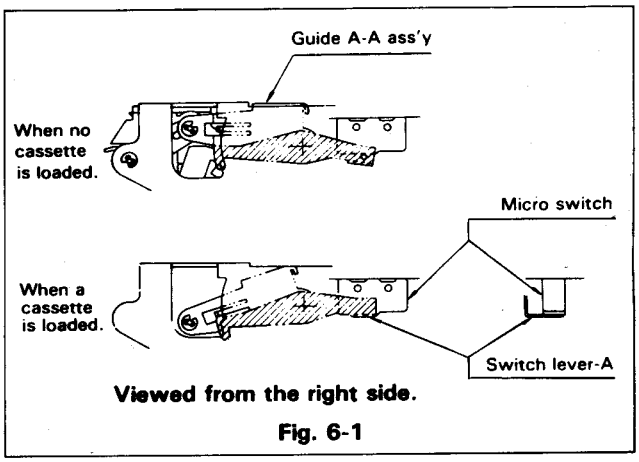


Fig. 6-1

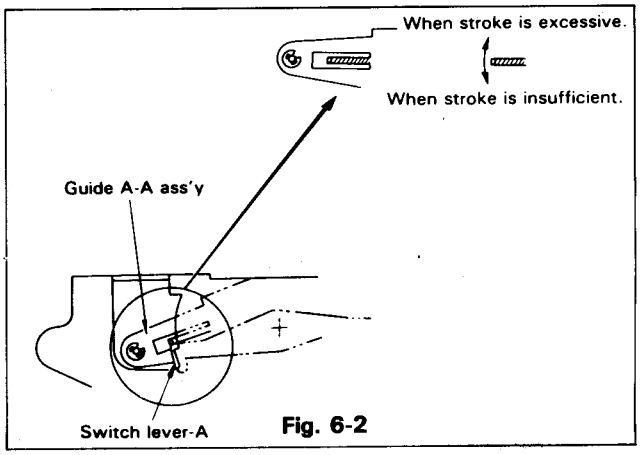


Fig. 6-2

6. HEAD PLATE SLIDING PLUNGER (015-0230-00) ADJUSTMENT

Press the plunger core by hand in the direction indicated with; if the core stroke is insufficient, the lock mechanism of the plunger link will not be released and the cam gear will not move; and, if the core stroke is excessive, the drawing force will be lowered and the core will not be drawn.

Adjust distance t in Figure 8 to 1.3 ~ 1.5mm after loosening the machine screw (M2.6 × 3). After adjustment has been completed, press the core and check whether or not it is returned smoothly by the spring. Apply lock paint to the screw.

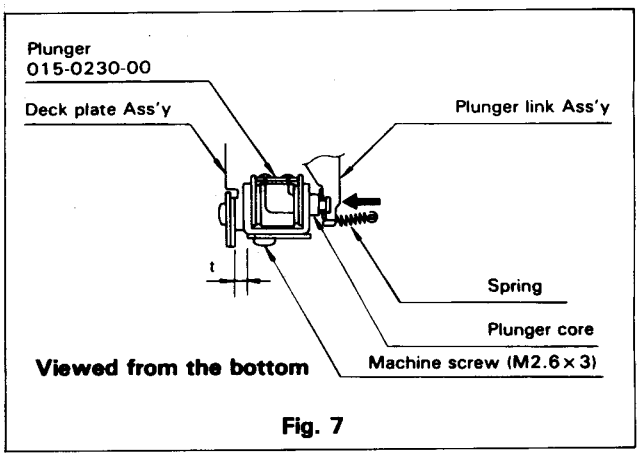


Fig. 7

7. HEAD PLATE LATCHING PLUNGER (015-0227-04) ADJUSTMENT

When the gap between the core and plunger is too large, plunger plate B cannot be drawn by the core and head shift operation cannot be performed.

When the gap is too narrow, the head link lock may be reset.

Press the plunger (015-0230-00) core (Figure 7), turn the cam a little and adjust the gap so that the core contacts the plunger when the lock arm is all the way to the left after loosening the machine screw (M2.6 × 3). (Figure 8)

* Be sure to apply lock paint to the machine screw after plunger adjustment.

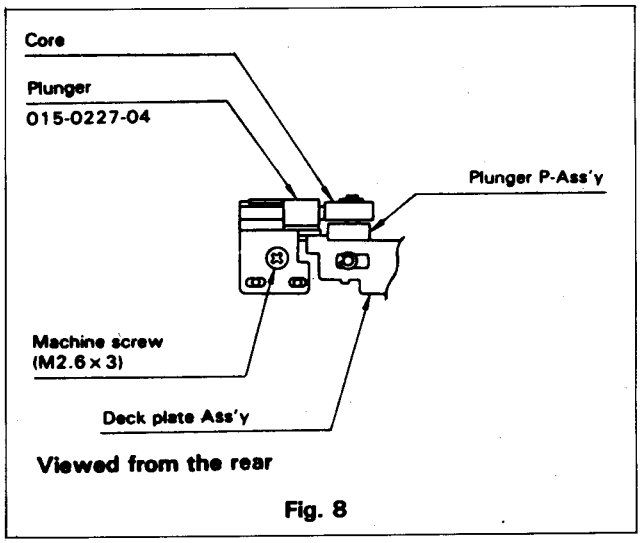


Fig. 8

■ EXPLANATION OF IC:

■MPX-NC-D 051-0632-00 / 051-0632-01 MPX with Noise Canceller for FM

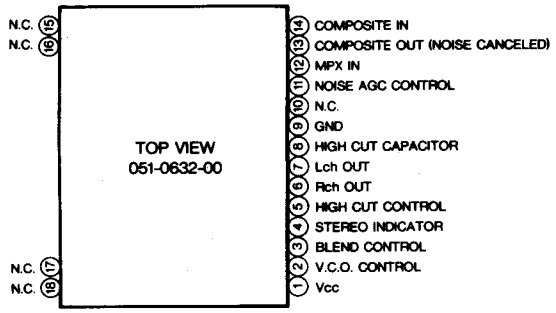
Function:

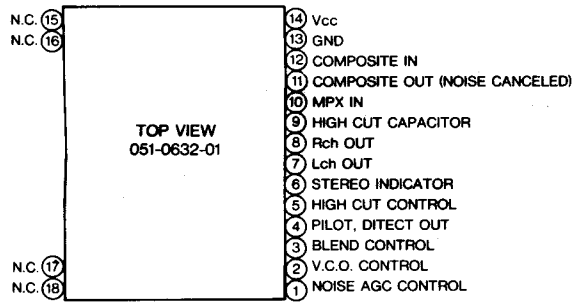
- o MPX
- o Pulse noise cancellation
- o Pilot signal cancellation
- o Stereo noise control (automatic mixing)
- o Automatic high-cut
- o Automatic stereo/monaural switching
- o VCO oscillation shutdown

Absolute Maximum Ratings (Ta=25±15°C)

Supply Voltage	V_{CC} max	16V
Power Dissipation	P_D max	920mW

Terminal Connection





No.	Terminal Name	Function
18(18) 17(17) 16(16) 15(15)	N.C.	Unused
14(1)	Vcc	Power pin; recommended power +12V.
13(9)	GND	
12(14)	COMPOSITE IN	The composite signal demodulated by the FM modem is input here.
11(13)	COMPOSITE OUT	The composite signal out of which the pulse noises are eliminated by the noise canceller is output here.
10(12)	MPX IN	The input pin of MPX circuit.
9(8)	HIGH CUT CAPACITOR	The high-cut capacitor is connected here for the composite signal.
8(6)	Rch OUT	The right channel output of Audio signal.
7(7)	Lch OUT	The left channel output of Audio signal.
6(4)	STEREO INDICATOR	The stereo-indicator LED is connected here.
5(5)	HIGH CUT CONTROL	The high-band component of the composite signal can be attenuated if the voltage over 1.2V is applied to this pin.
4	PILOT SIGNAL DETECTOR OUT	By shorting this terminal with GND, the AF signal output changes to the monaural output. Open this terminal to effect the stereo output.
3(3)	BLEND CONTROL	By turning this pin 0V, the L and R signals can be blended into the monaural output or into the stereo output of the maximum separation if it exceeds 1.8V.
2(2)	V.C.O. CONTROL	The VCO oscillation of PLL MPX can be stopped by raising the voltage of this pin over 7V.
1(11)	NOISE A.G.C. CONTROL	By setting this pin to "H", the sensitivity of noise A.G.C. can be raised so much as to eliminate even microscopic pulse noise. But it is more likely to cause false operations by the continuous noises.

( )·····051-0632-00

μPD1710G016-03 / μPD1710G216-03 } 051-0564-00
■μPD1710G027-03 / μPD1710G227-03 } 051-0564-01
μPD1710G521-03 051-0564-02

PLL Synthesizer & Controller

Due to convenience of management in parts number by IC manufacturers, the type names for μPD1710G016-03 and μPD1710G027-03 has changed as follows. Their performance, function and external view have not been changed through this alteration. Therefore, the parts numbers on Clarion side will not be changed.

051-0564-00
μPD1710G016-03 ➡ μPD1710G216-03
051-0564-01
μPD1710G027-03 ➡ μPD1710G227-03

I Absolute Maximum Ratings (Ta=25°C)

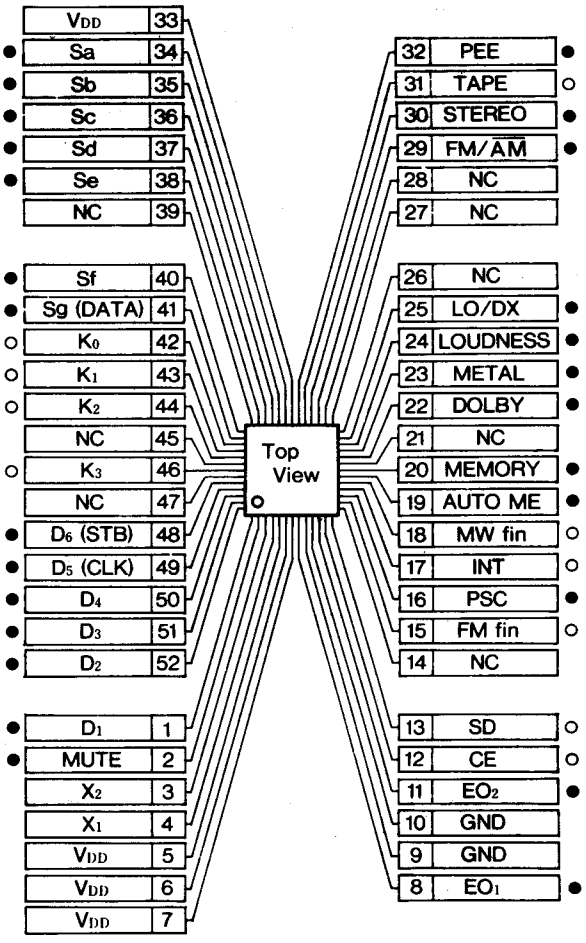
Supply Voltage	V_{DD}	−0.3~+6.0
Input Voltage	V_I	−0.3~+V_{DD}
Output Voltage	V_O	−0.3~+V_{DD}

II AM Frequency Range when Channel Space is 9kHz.

μPD1710G016-03	(051-0564-00)	522~1,611kHz
μPD1710G027	(051-0564-01)	522~1,629kHz
μPD1710G521-03	(051-0564-02)	531~1,602kHz

III Terminal Construction

● ··· Output terminal ○ ··· Input terminal



Terminal Description

No.	Symbol	Terminal name	Function
1, 48~52	D1~D6	Digit Output	Digit signal output indicated.
2	MUTE	Mute Signal Output	Output terminal to erase a shock noise occuring when the lock of PLL is removed. It outputs a low signal in the mute ON state.
3, 4	X1, X2	X'tal	Terminal for connecting an crystal resonator. (4.5MHz)
5, 6, 7, 33	V_{DD}	Power Supply	Supply voltage of 5V±10% when the device functions. Moreover, in the backup state, the voltage can be dropped into 2.5V. (Pins 7 and 33 is internally connected; however, other pins form other circuits to which V_{DD} voltage should be applied.)
8, 11	EO1, EO2	Error Out	PLL error output. Same signals are output from EO1 and EO2 at the same time.
9, 10	GND		
12	CE	Chip Enable	When the device is used in the normal manner, set the signal into the high level. When the device is not used, set it into the low level. (Backup state is obtained in the low state.)
13	SD	Station Detector Input	Terminal for inputing a stop signal in the auto tuning state. Auto tuning stops when a high signal is input.
15	FMf	Pulse swallow type oscillating input	An output signal from the FM local oscillator (VCO) which is divided into 1/16 or 1/17 with μPB553AC is input.
16	PSC	Prescaler Control Output	Terminal for outputing a dividing ratio selectable signal, connected to the PSC terminal of μPB553AC.
17	$\overline{INT}$	$\overline{INT}$	Pull-up to V_{DD}.
18	AMf	AM oscillating Input	Input a local oscillating (VCO) of AM.
19	AUTO ME	AUTO MEMORY	Output a high level signal in the auto memory state.
20	ME	MEMORY	Output a high level signal in the memory write state.
22	DOLBY	DOLBY Output	Invert an output signal whenever depressing the DOLBY SW (momentary key switch ⑯).
23	MTL	METAL/NORMAL Output	Inverted whenever the METAL/NORMAL switch (momentary key switch ⑮) is depressed in the tape running state.
24	LD	Loudness Control Output	Inverted whenever the loudness ON/OFF switch (momentary key switch ⑭) is depressed.
25	LO/DX	Local/DX	Inverted whenever the Lo/Dx switch is depressed. (momentary key ⑬)
29	FM/$\overline{AM}$	FM BAND Output	Output a high level signal when FM is received.
30	ST	STEREO/MONORAL Output	Inverted whenever the STEREO/MONO switch (momentary key switch ⑳) is depressed.
31	TAPE	TAPE MODE Input	Input a high level signal when a tape is loaded.
32	PEE	PEE	Output a 30ms high level signal when the key is accepted.
34~38, 40, 41	Sa~Sg	Segment Output	Terminal for outputing an indicated segment signal, forming a key matrix together with KO to K3.
42~44, 46	KO~K3	Key Return Signal Inputs	Key return signal input terminal from the external key matrix, forming a key matrix together with Sa to Sg.

Table-1

Ⅳ Key Matrix

	K3 Pin 46	K2 Pin 44	K1 Pin 43	KO Pin 42
Sa Pin 34	AU ①	AD ②	SCAN ③	AMS ④
Sb Pin 35	MU (MA) ⑤	MD (HA) ⑥	M5 ⑦	M6 ⑧
Sc Pin 36	M1 ⑨	M2 ⑩	M3 ⑪	M4 ⑫
Sd Pin 37	Lo/Dx ⑬	LOUD ⑭	METAL ⑮	DOLBY ⑯
Se Pin 38	RECAL ⑰	PRESET SCAN ⑱	ME ⑲	STEREO ⑳
Sf Pin 40	FM FM1 BAND ㉑	FM2 ㉒	FM3 ㉓	AM ㉔
Sg Pin 41	DIM ㉕	FM SEL1 ㉖	FM SEL2 ㉗	PRIORITY ㉘
D1 Pin 1	———	MW SEL ㉙	BAND1 ㉚	BAND2 ㉛
D2 Pin 52	IF ㉜	CLOCK SEL ㉝	CH DISP ㉞	STATIC/ DYNAMIC ㉟
D3 Pin 51	BLANK ㊱	———	———	———

Diode Sw. Alternate Sw. Momentary Sw.

Table-2

(1) Diode Switch

These switches are set by shortcircuiting or opening an intersection on the matrix by the use of a diode.
In the following description, OFF and ON respectively mean open and shortcircuit.
Note that this diode switch is read only when the V_{DD} terminal is initially powered and the CE terminal is changed from "low" to "high"; otherwise, the switch is ignored.

No.	Switch name	Description
㉖ ㉗	FM SEL1 FM SEL2	Select Area of FM FM SEL1 / FM SEL2 / Area / Frequency Range / Channel Space OFF / OFF / U.S.A / 87.9~107.9MHz / 200kHz OFF / ON / Japan / 76.1~ 89.9MHz / 100kHz ON / OFF / Oceania / 87.9~107.9MHz / 100kHz ON / ON / ——— / ——— / ———
㉙	AM SEL	Select Channel space of AM AM SEL / Frequency Range / Channel Space OFF / 530~1,620kHz / 10kHz ON / ※ / 9kHz
㉚ ㉛	BAND1 BAND2	These 2 diode switches decide the positions of the alternate SW for selecting the band number and band selection as shown in the following table. BAND1 / BAND2 / Momentary Sw. used for band Selection / Receiving Band i / OFF / OFF / FM1 ⑪ / FM2 ㉒ / FM3 ㉓ / AM ㉔ / FM1,FM2,FM3,AM ii / ON / ON / FM ⑰ / AM ㉔ / FM1,FM2,AM iii / OFF / ON / FM ⑰ / AM ㉔ / FM1,FM2,FM3,AM iv / ON / OFF / BAND ㉑ / FM1,AM Whenever the key ㉑ (FM/FM1/BAND) is depressed in (i) to (iv) above, the following function is activated. (i) FM1 ⑪ : FM1 is selected (ii) FM ⑰ : Mode is changed in the order FM1→FM2→MW (iii) FM ⑰ : Mode is changed in the order FM1→FM2→FM3→MW (iv) BAND ㉑ : Mode is changed in the order FM1→MW
㉜	IF	Select IF of FM (MHz) IF SW. / U.S.A. / JAPAN / OCEANIA OFF / 10.700 / −10.700 / 10.700 ON / 10.725 / −10.675 / 10.725
㉝	CLOCK SEL	Select whether or not clock mode is used. OFF : Clock mode is not used. ON : Clock mode is used.
㉞	CH DISP	Select the indicating mode of the preset channel. OFF : Numerical indication ON : Dot indication
㉟	STATIC/ DYNAMIC	Select the driven mode of the indicator. OFF : Dynamic drive ON : Static drive
㊱	BLANK	Select whether the clock is indicated or not (blanking), when pin ㊲ is "High" OFF : Clock ON : Blank

Table-3

※ Ref. II AM Frequency Range when Channel Space is 9kHz.

(2) Alternate Switch

No.	Switch name	Description
㉕	DIM	Change the brightness of indicator which is driven by Dynamic drive. OFF : Light ON : Dark
㉘	PRIORITY	Select priority mode of clock indication. OFF : Normal ON : Priority mode

Table-4

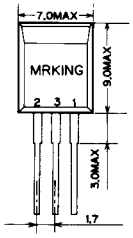
(3) Momentary Switch

No.	Switch name	Description
1 2	AUTO UP AUTO DOWN	By depressing this switch, a station is continuously searched downward or upward and when the SD terminal (Pin 13) is set to "high", the corresponding frequency is held. By depressing the switch twice, auto-tuning stops.
3	SCAN	By depressing this switch, a station is continuously searched upward and when the SD terminal is set to "high", another station is continuously searched after the former station is received for 5 sec. Depressing this switch once again causes to stop the SCAN function.
4	AUTO MEMORY	By depressing the (MEMORY ⑱), (ME) lights up for about 5 sec. during which depress this AUTO MEMORY switch. At the time, the AUTO MEMORY lamp lights up and a broadcasting station is detected and memorized from the existing receiving frequency to higher frequency. When the receiving frequency is memorized by the presetting, the following memories are sequentially memorized; otherwise, memory is performed from M1 in sequence. The writing operation is terminated when the upper limit of a band comes in or M6 is written. Next, after M1 is called, (AUTO MEMORY) lamp does not light up and the sequential operation is terminated. When canceling this mode in the mid-operation, depress this switch once again.
5 6	MANUAL UP (MINUTE) MANUAL DOWN (HOUR)	Used for manual tuning. Whenever this switch is depressed, one step of frequency is stepped up/down. When this switch is depressed for 0.5 sec. or more, fast forward tuning is performed continuously until the switch is released. When it's indicating "Clock", theese keys are used for adjustment of time with depressing "ME".
7 \ 12	M1 \ M6	Since the switches of preset channels independently accord with FM1, FM2, FM3, and AM, then max. 30 stations can be memorized. By depressing this switch only, the required frequency is called and the corresponding station is received. When memorizing a frequency by means of this switch, first depress the (MEMORY ⑱) switch and then depress this switch while (ME) lamp lights up (for about 5 sec). Moreover, in the power on state, in all the preset memories, the lower limit frequency of each band is set.
⑱	Lo/Dx	Ref. Table-2, No. 25
⑭	LOUD	Ref. Table-2, No. 24
⑮	METAL	Ref. Table-2, No. 23
⑯	DOLBY	Ref. Table-2, No. 22
⑰	RECAL	Change indication mode, "Tuner" to "Clock", and reversional.
⑱	PRESET SCAN	Call preset for 5 sec. automatically.
⑲	ME	Ref. this table, ④, ⑦.
⑳	STEREO	Ref. Table-2, No. 30
㉑ \ ㉔	FM/FM1/BAND FM2 FM3 MW	Ref. Table-3, ㉑ ㉓

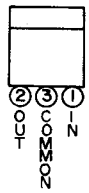
Table-5

■ μPC78L05 (051-0259-00) 3 Terminal Voltage Regulator

• **Outward Form**



• **Terminal Connection**



• **Absolute Maximum Ratings (Ta = 25°)**

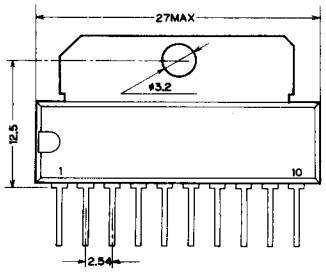
Input Voltage	V_I	30V
Power Dissipation	P_D	800mW

Electrical Characteristics

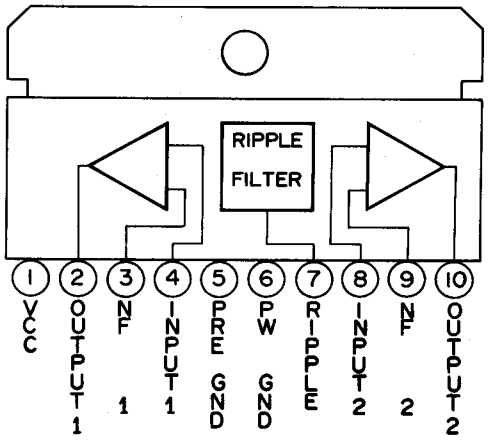
Item	Symbol	Condition		MIN.	TYP.	MAX.	Unit
Output Voltage	Vo	$T_j = 25°C$		4.6	5.0	5.4	V
Input Regulation	REG_{IN}	$T_j = 25°C$	$7V \leqq V_{IN} \leqq 20V$		55	200	mV
			$8V \leqq V_{IN} \leqq 20V$		45	150	mV
Load Regulation	REG_L	$T_j = 25°C$	$1mA \leqq I_{OUT} \leqq 100mA$		11	60	mV
			$1mA \leqq I_{OUT} \leqq 40mA$		5.0	30	mV
Output Voltage	V_O	$7V \leqq V_{IN} \leqq 20V$, $1mA \leqq I_{OUT} \leqq 40mA$		4.5		5.5	V
		$V_{IN} = 10V$, $1mA \leqq I_{OUT} \leqq 70mA$		4.5		5.5	V
Noise Output Voltage	NL	$Ta = 25°C$, $10Hz \leqq f \leqq 100kHz$			30		μV
Ripple Rejection Retio		$f = 120Hz$, $8V \leqq V_{IN} \leqq 18$, $T_j = 25°C$		40	50		dB

■ TA7230P (051-0741-00) 4W + 4W AUDIO POWER AMP.

• **Outward Form**



• **Block Diagram**



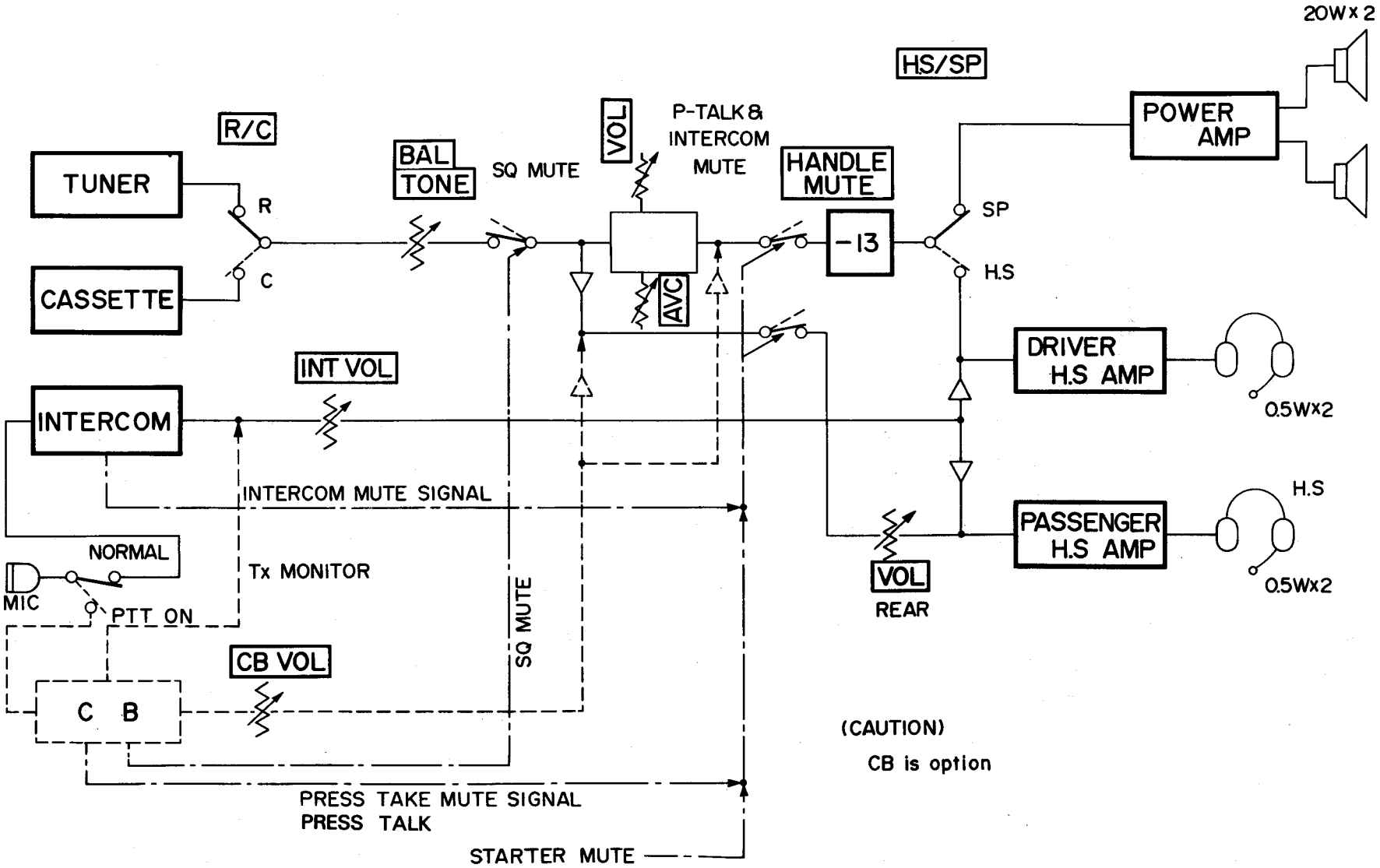
• **Absolute Maximum Ratings (Ta = 25°C)**

Supply Voltage	V_{CC}	24V
Output Current	I_O	1.5A
Power Dissipation	P_D	1.25W

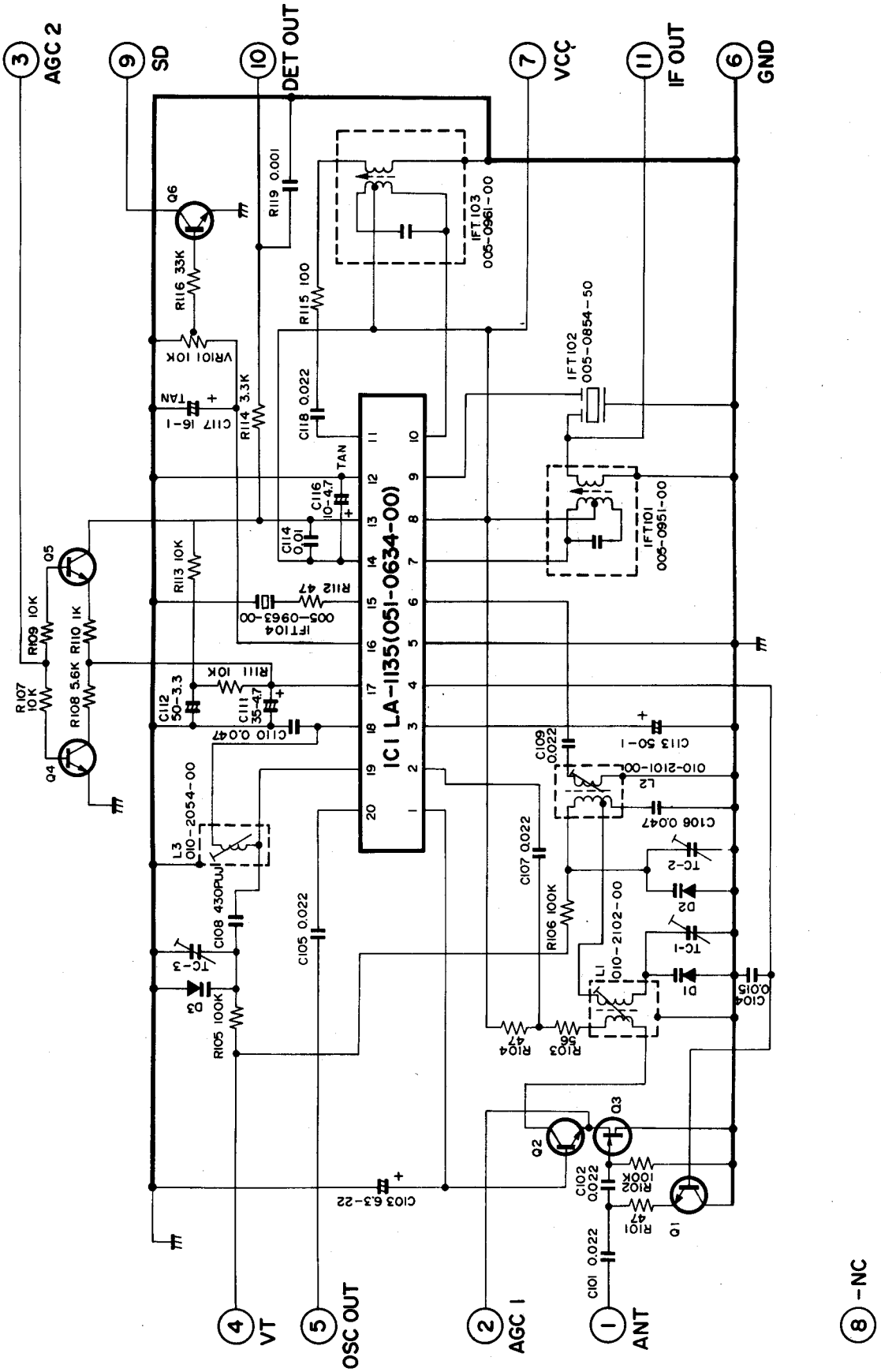
• **Electrical Characteristics (V_{CC} = 14V, R_L = 4Ω, f = 1kHz, Rg = 600Ω, Ta = 25°C)**

		min	typ	max	
Output Power	P_O		4.0		W
Voltage Gain	V_G	46	48	50	dB (THD = 10%)
Total Harmonic Distortion	THD		0.4		% (P_O = 1W)
Input Resistance	R_{IN}		33		kΩ (V_{OUT} = 1Vrms)
Ripple Rejection Ratio	R.R		−50		dB (Rg = 0, f = 100Hz)

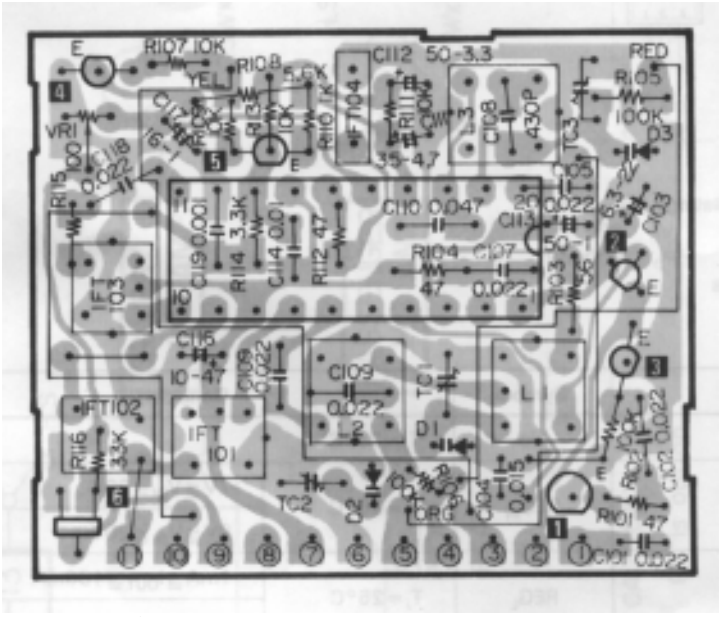
■ BLOCK DIAGRAM:



■ AM TUNER PACK (970-0303-01):



■ PRINTING WIRING BOARD (AM TUNER P.W.B):



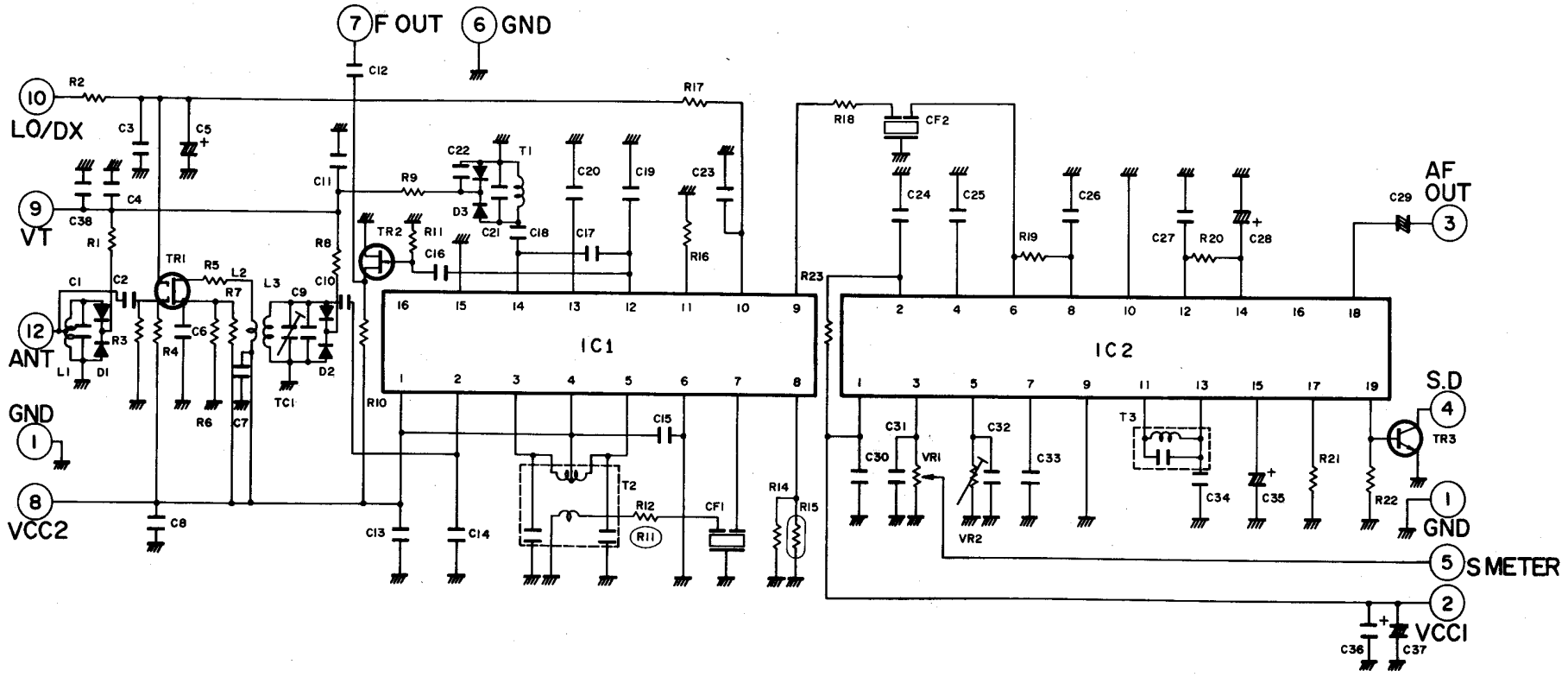
■ PARTS LIST:

<Electrical section>

Ref. No.	Part No. (Order No.)	Description	Q'ty
D1 ~ 3	001-0402-00	Diode (1SV149AB)	3
TC1 ~ 3	004-1567-00	Trimmer (20pF)	3
IFT102	005-0854-50	IF-transformer (450P-6AS1)	1
IFT101	005-0951-00	IF-transformer	1
IFT103	005-0961-00	IF-transformer	1
IFT104	005-0963-00	IF-transformer (BFU450D4)	1
L3	010-2054-00	Coil (OSC)	1
L2	010-2101-00	Coil (2ND)	1
L1	010-2102-00	Coil (1ST)	1
VR101	012-3808-06	Variable resistor (10kΩ)	1
IC1	051-0634-00	IC (LA1135)	1
Q1, 2, 4, 5	102-2458-25	Transistor (2SC2458Y)	4
Q3	108-0435-51	FET (2SK435-CD)	1
Q6	102-2715-15	Transistor (2SC2715)	1
R106	111-1041-92	Film resistor (100kΩ)	1
R108	111-5621-91	Film resistor (5.6kΩ)	1
R109, 113	116-1031-10	Chip resistor (10kΩ)	2
R105	116-1041-10	Chip resistor (100kΩ)	1
R104	116-4701-10	Chip resistor (47Ω)	1
R103	116-5601-10	Chip resistor (56Ω)	1

Ref. No.	Part No. (Order No.)	Description	Q'ty
R115	117-1011-10	Chip resistor (100Ω S)	1
R110	117-1021-10	Chip resistor (1kΩ S)	1
R107, 111	117-1031-10	Chip resistor (10kΩ S)	2
R102	117-1041-10	Chip resistor (100kΩ S)	1
R114	117-3321-10	Chip resistor (3.3kΩ S)	1
R116	117-3331-10	Chip resistor (33kΩ S)	1
R101, 112	117-4701-10	Chip resistor (47Ω S)	2
C104	171-1533-06	Ceramic capacitor (0.015μF SR)	1
C102, 118	171-2233-06	Ceramic capacitor (0.022μF SR)	2
C108	176-4311-06	Ceramic chip capacitor (430pF UJ S)	1
C119	177-1022-05	Ceramic chip capacitor (0.001μF FB)	1
C106, 110	177-4732-05	Ceramic chip capacitor (0.047μF B)	2
C114	178-1032-05	Ceramic chip capacitor (0.01μF B S)	1
C101, 105, 107, 109	178-2232-05	Ceramic chip capacitor (0.022μF B S)	4
C116	042-0200-00	Electrolytic capacitor (10V 47μF TAN)	1
C117	042-0239-00	Electrolytic capacitor (16V 1μF TAN)	1
C113	182-1053-62	Electrolytic capacitor (50V 1μF)	1
C103	182-2263-12	Electrolytic capacitor (6.3V 22μF)	1
C112	182-3353-62	Electrolytic capacitor (50V 3.3μF)	1
C111	182-4753-52	Electrolytic capacitor (35V 4.7μF)	1

■ FM TUNER PACK (941-0145-00):



■ PARTS LIST:

<Main section>

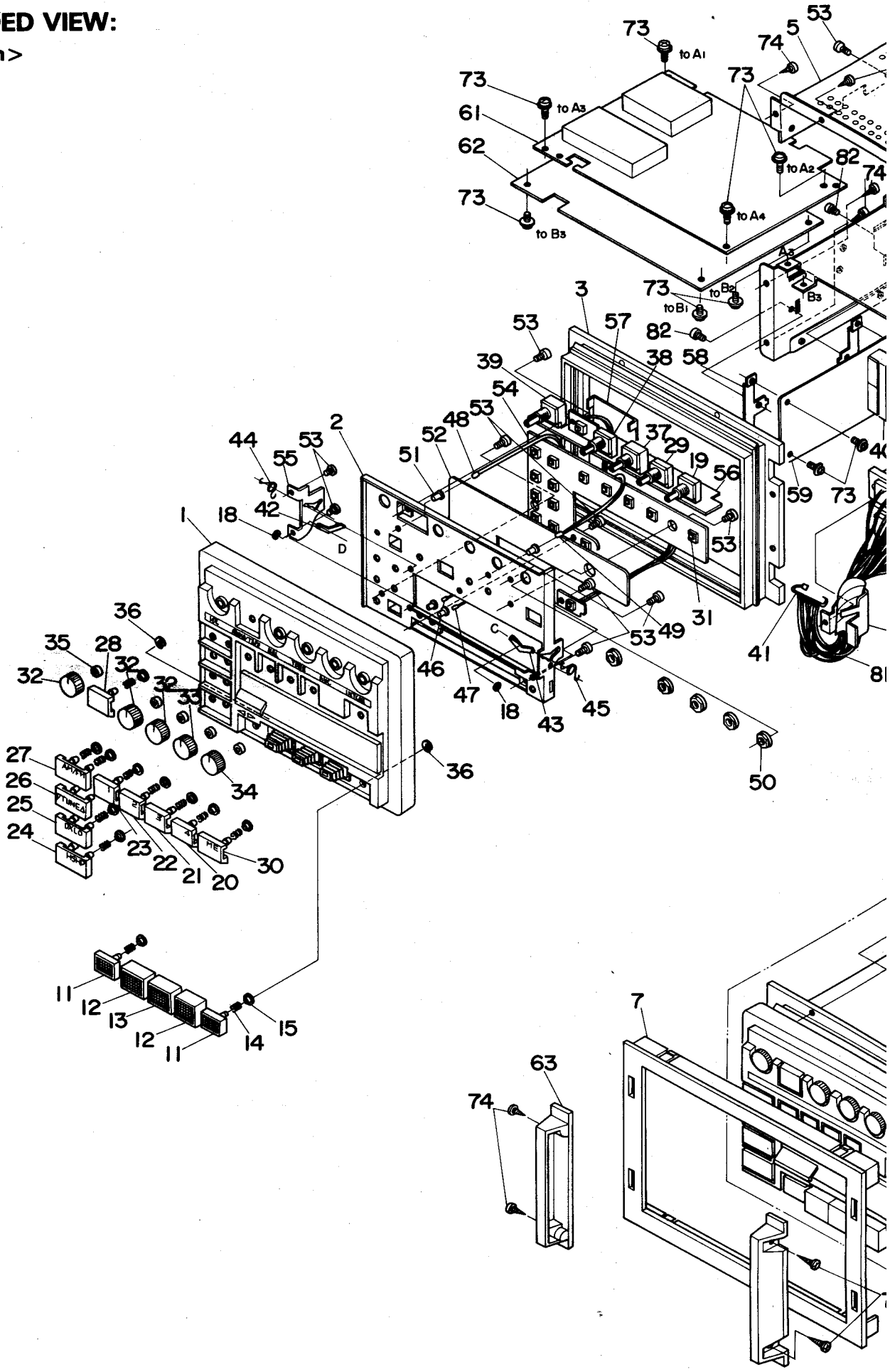
Ref. No.	Part No. (Order No.)	Description	Q'ty
1	940-0510A	Escutcheon ass'y	1
2	309-0542-00	Front plate	1
3	286-5635-00	Set plate	1
4	312-0258-00	Chassis	1
5	310-1235-00	Upper case	1
6	311-1197-00	Lower case	1
7	335-1974-00	Inner case A	1
8	335-1975-00	Inner case B	1
9	330-8262-00	Main case	1
10	313-1244-00	Heat sink	1
11	382-0893-00	Button	2
12	382-0895-00	Button	2
13	382-0894-00	Button	1
14	750-2349-00	Button spring	16
15	345-4105-00	Spacer	16
16	335-2039-00	Button base	3
17	746-0734-00	Washer	1
18	743-1500-01	E-ring	2
19	012-4370-00	Variable resistor (INTCOME)	1
20	382-0890-04	Button [4]	1
21	382-0890-03	Button [3]	1
22	382-0890-02	Button [2]	1
23	382-0890-01	Button [1]	1
24	382-0891-02	Button [HS/SP]	1
25	382-0891-01	Button [DX/LO]	1
26	382-0892-00	Button [▼TUNE▲]	1
27	382-0891-00	Button [AM/FM]	1
28	382-0896-00	Button	1
29	012-4369-00	Variable resistor (AVC)	1
30	382-0890-00	Button [ME]	1
31	013-3449-01	Switch	16
32	380-4683-03	Knob (GREEN)	3
33	380-4683-04	Knob (RED)	1
34	380-4683-05	Knob (BLU)	1
35	345-4106-00	Spacer	5
36	743-2500-01	E-ring	2
37	012-4372-00	Variable resistor (TONE)	1
38	012-4371-00	Variable resistor (BAL)	1
39	012-4373-00	Variable resistor (VOL)	1
40	330-8257-00	IC bracket	1
41	335-0833-01	Lead clamp	12

Ref. No.	Part No. (Order No.)	Description	Q'ty
42	330-8247-00	DPC-RINK L	1
43	330-8247-01	DPC-RINK R	1
44	750-2494-01	Spring	1
45	750-2495-01	Spring	1
46	017-0345-22	Pilot lamp	1
47	017-0345-21	Pilot lamp	1
48	017-0345-16	Pilot lamp	1
49	017-0345-32	Pilot lamp	1
50	722-0368-00	Nut	5
51	345-3436-00	Lamp holder	4
52	348-0140-00	Spacer	1
53	714-3005-81	Machine screw (M3×5)	32
54	099-7454-00	P.W.B.	1
55	330-8245-00	D.P.C. plate	1
56	099-7455-00	P.W.B.	1
57	330-8254-00	Shield cover	1
58	330-8258-00	Bracket	2
59	099-7458-00	P.W.B.	1
60	345-3528-00	Rubber Stopper	1
61	099-7453-00	P.W.B.	1
62	099-7458-00	P.W.B.	1
63	335-2046-00	Handle	2
64	335-2068-00	Rivet	8
65	330-8260-00	Extension lead holder	1
66	335-2044-00	Cam guide	4
67	335-2045-00	Lock cam	4
68	750-2499-00	Spring	8
69	330-8261-00	Bracket	2
70	345-4118-00	Shock absorber	2
71	330-8259-00	Mechanism cover	1
72	930-0502-02	Tape Mechanism	1
73	735-3008-11	D-sems screw (M3×8)	12
74	716-0682-00	Screw (M3×8)	14
75	714-3008-81	Machine screw (M3×8)	12
76	714-3012-81	Machine screw (M3×12)	4
77	732-3006-11	Machine screw (M3×6)	8
78	732-3008-11	Machine screw (M3×8)	12
79	732-4012-11	Sems screw (M4×12)	4
80	399-3867-00	Extension lead bracket	1
81	852-8684-01	Extension lead	1
82	714-3004-81	Machine screw (M3×4)	2

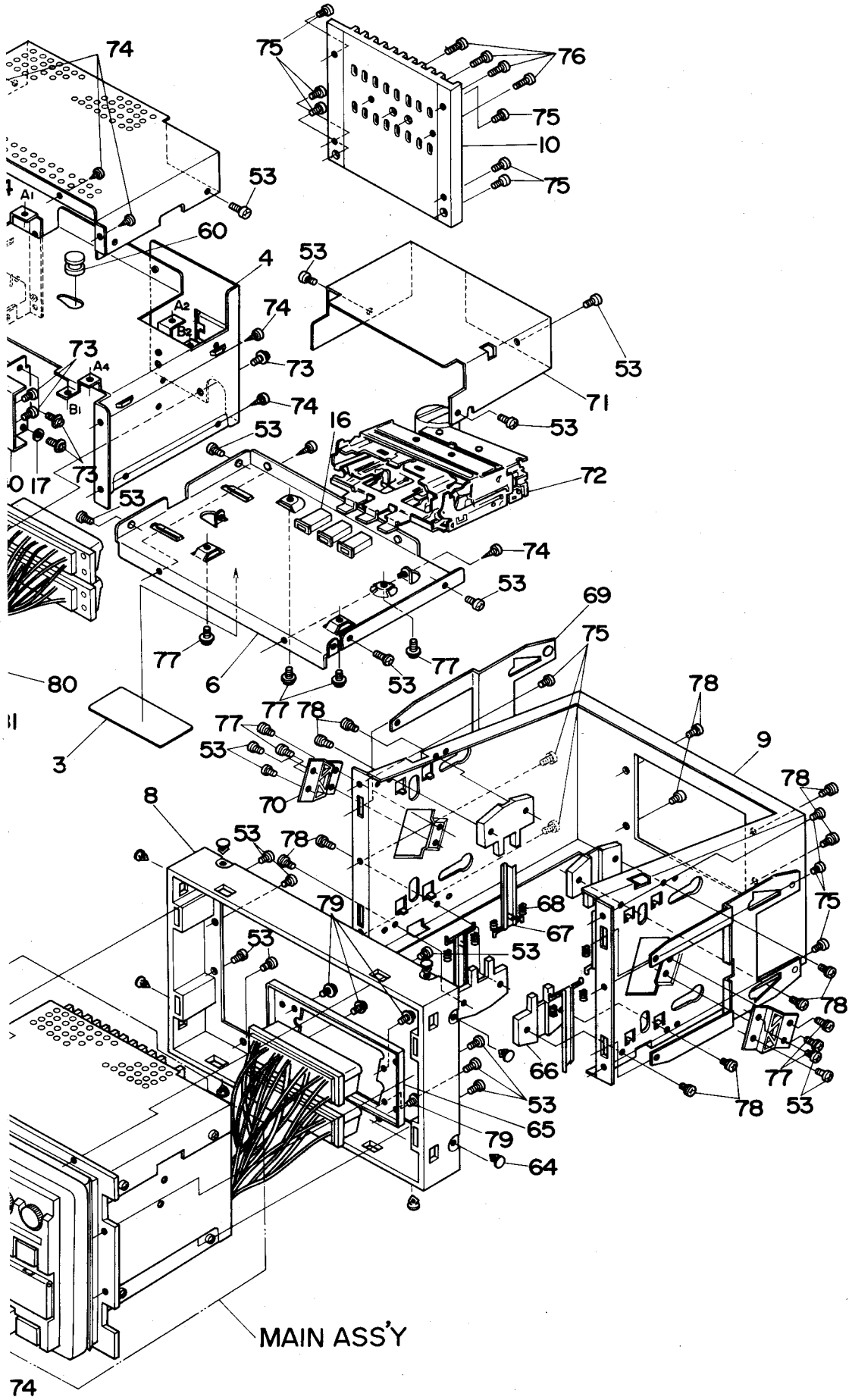
http://www.digikey.com Part #P8080SCT-ND 160g of force - 16 each required

■ EXPLODED VIEW:

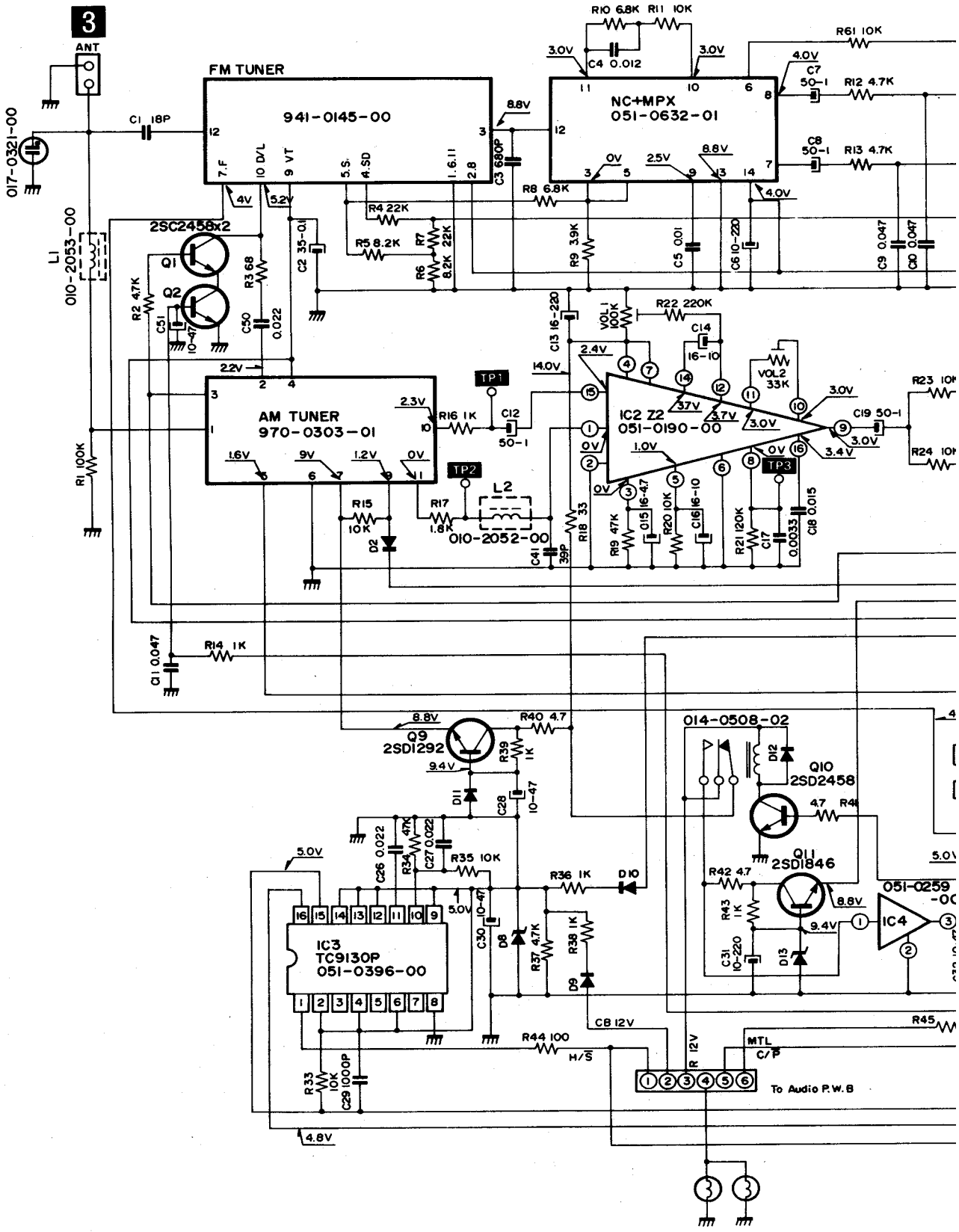
<Main section>

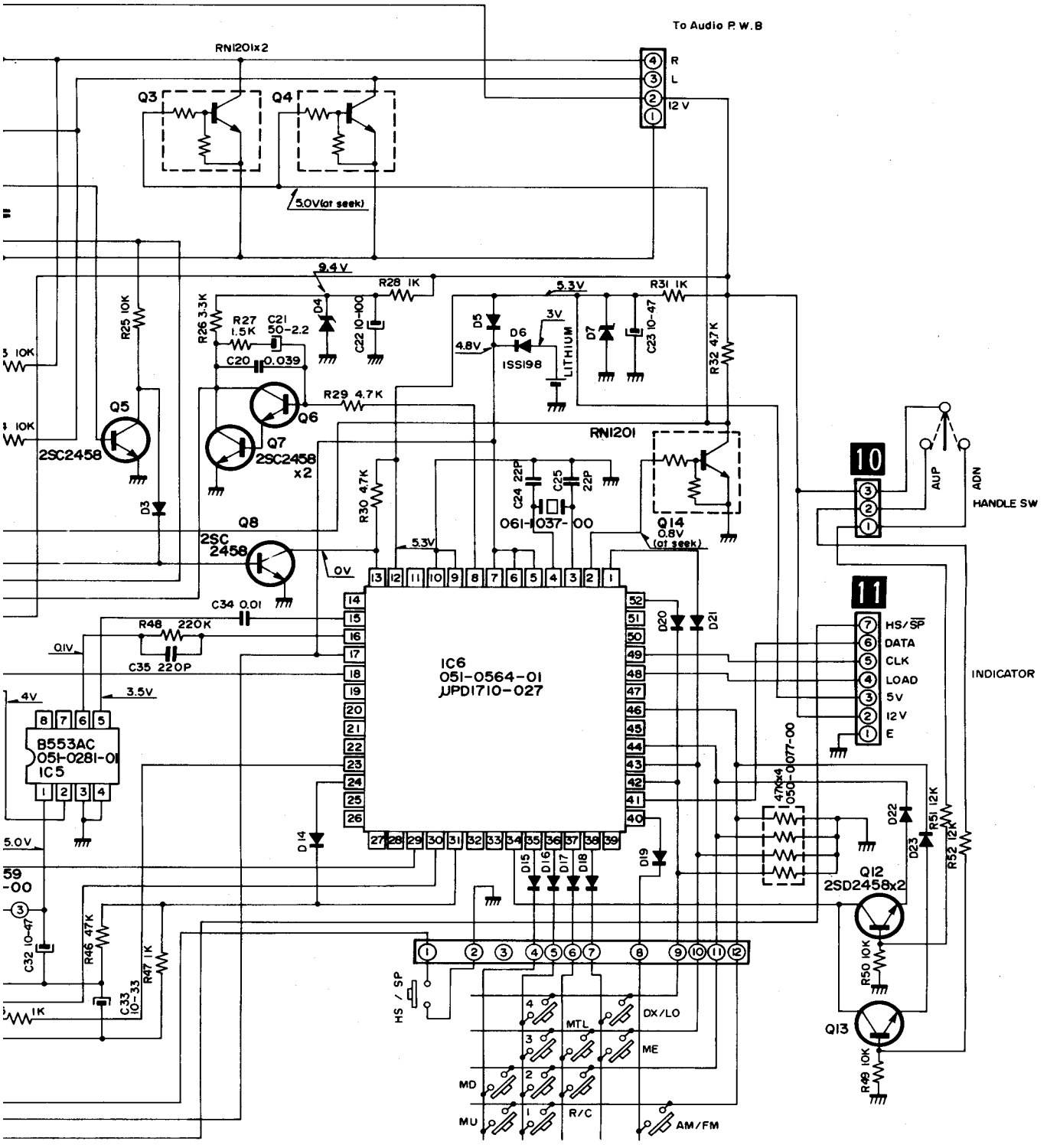


PS 9063V


MAIN ASS'Y

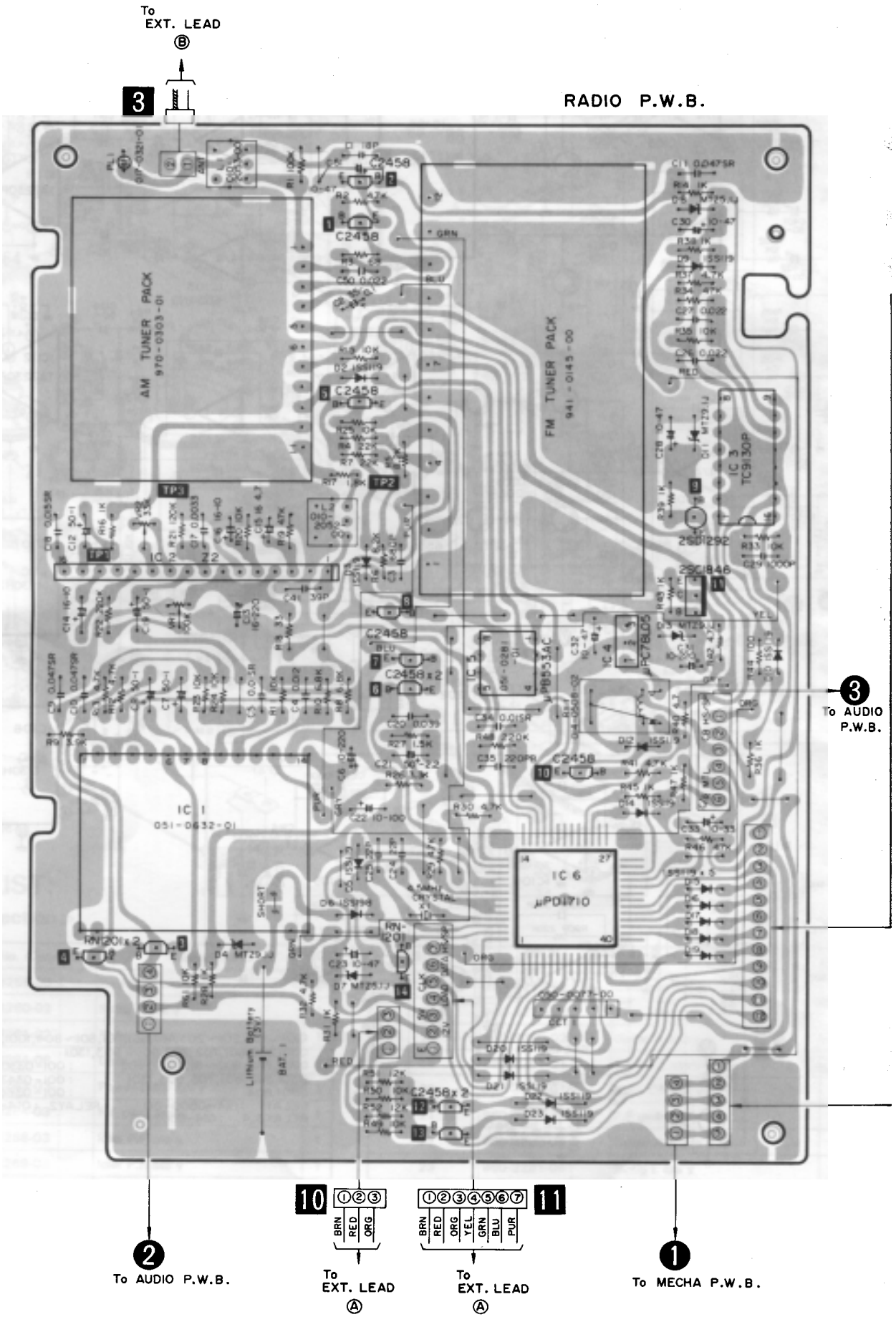
■ CIRCUIT DIAGRAM:

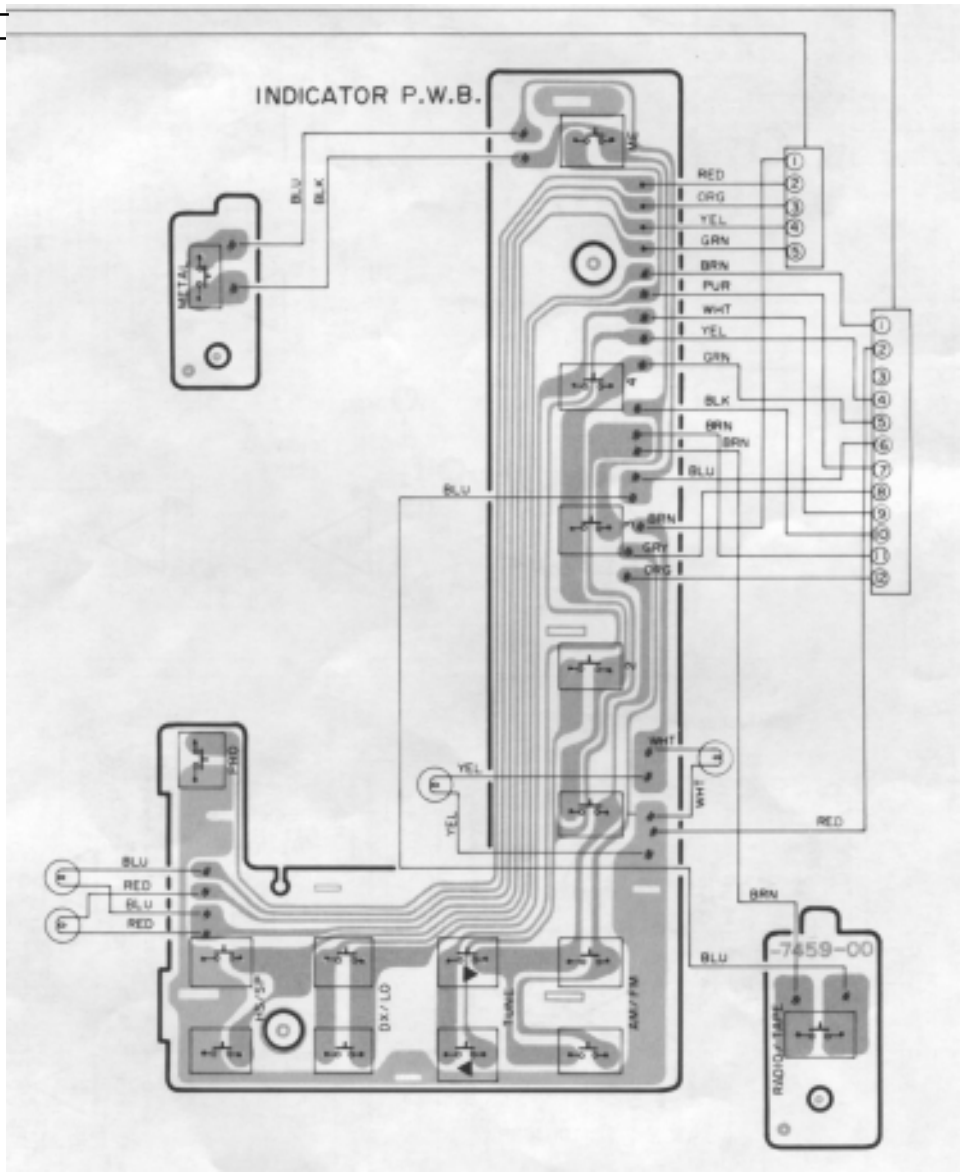




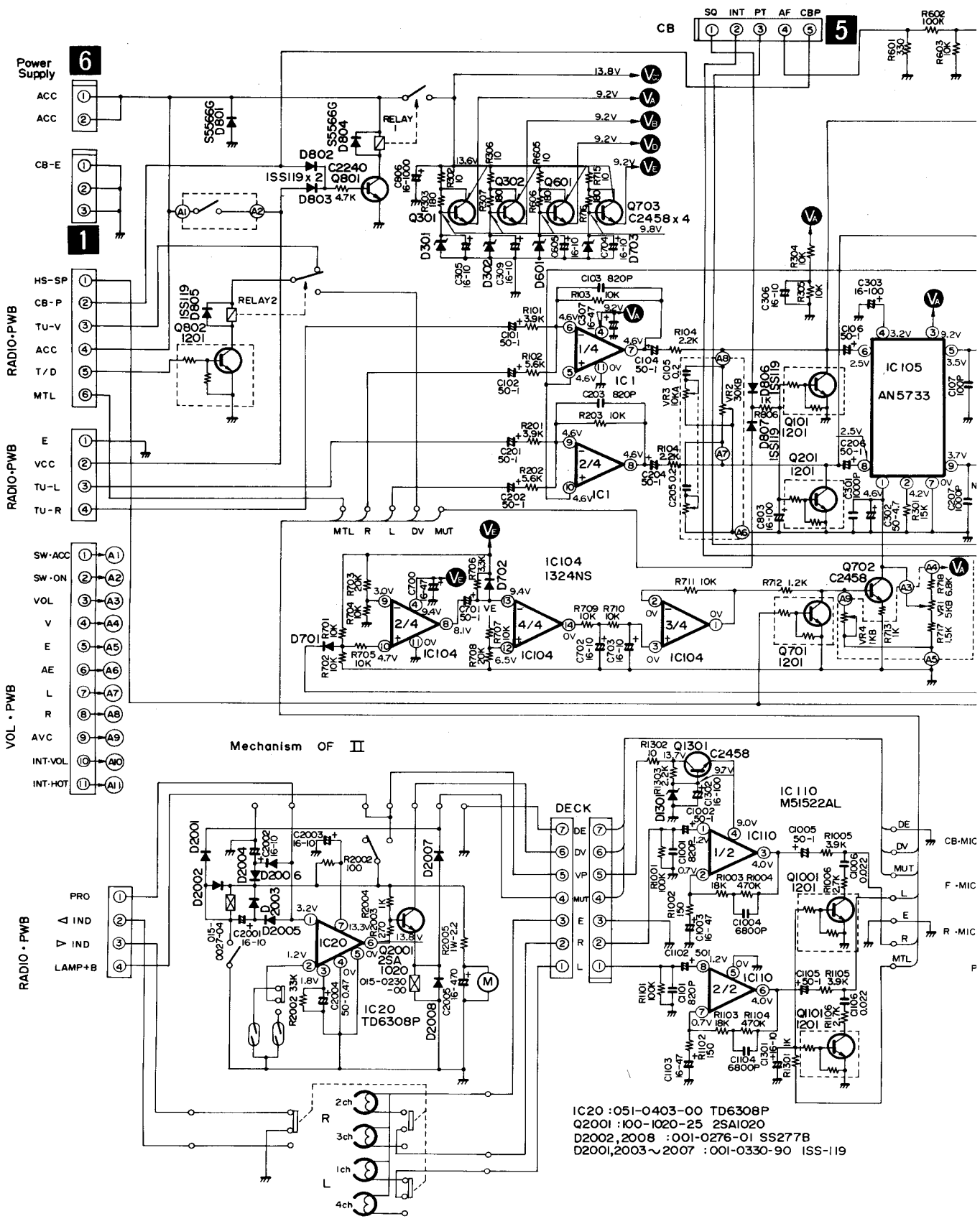
* —||— and —|(— are same meaning.

■ PRINTED WIRING BOARD:



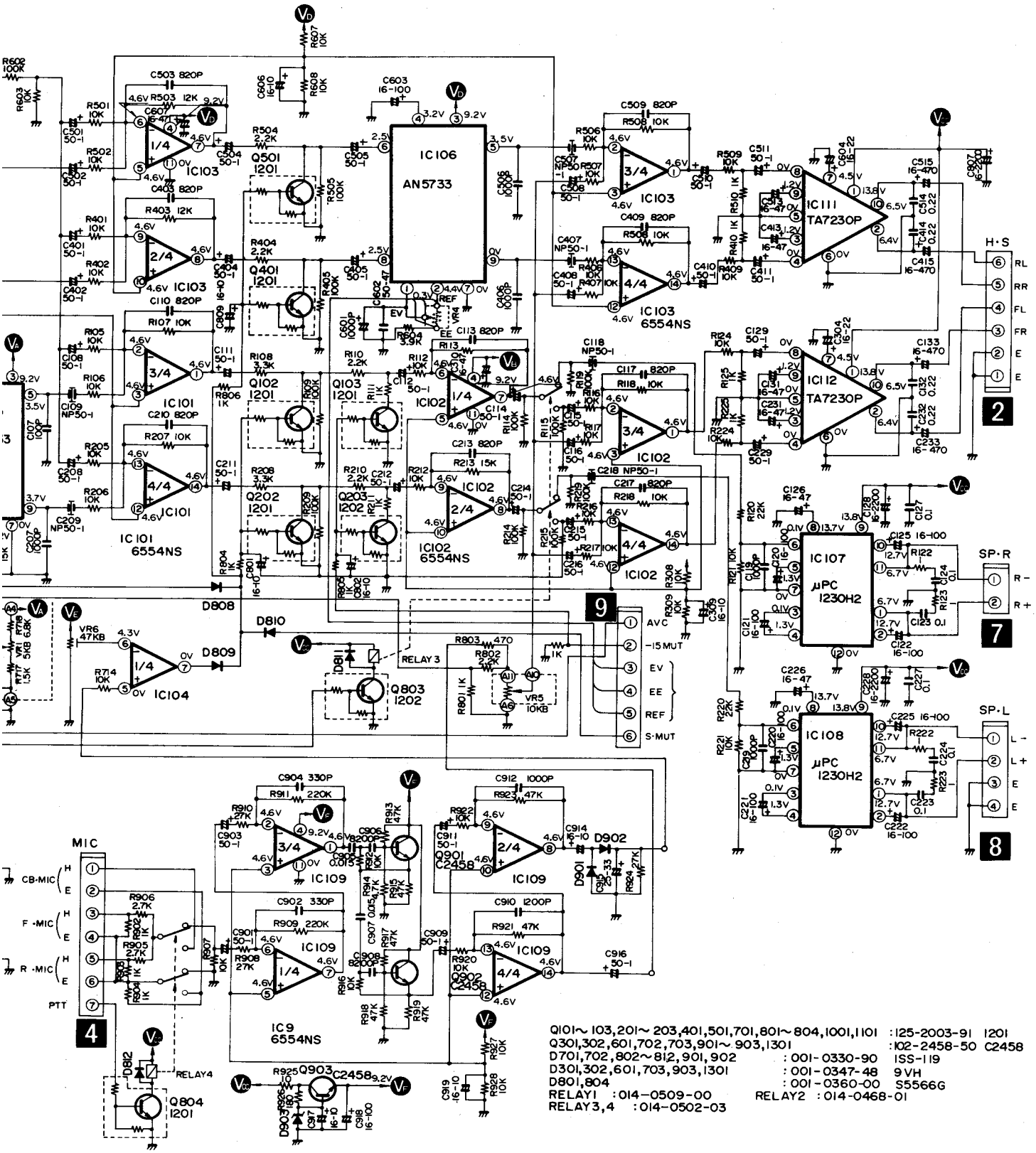

INDICATOR P.W.B.
METAL
BLU
BLK
RED
ORG
YEL
GRN
BRN
PUR
WHT
YEL
GRN
BLK
BRN
BRN
BLU
BLU
BRN
GRY
ORG
YEL
YEL
WHT
WHT
RED
BRN
BLU
BLU
RED
BLU
RED
-7459-00
RADIO/TAPE
ZM/FM
TUNE
DX/LO
LOC/SP
2ND

■ CIRCUIT DIAGRAM:



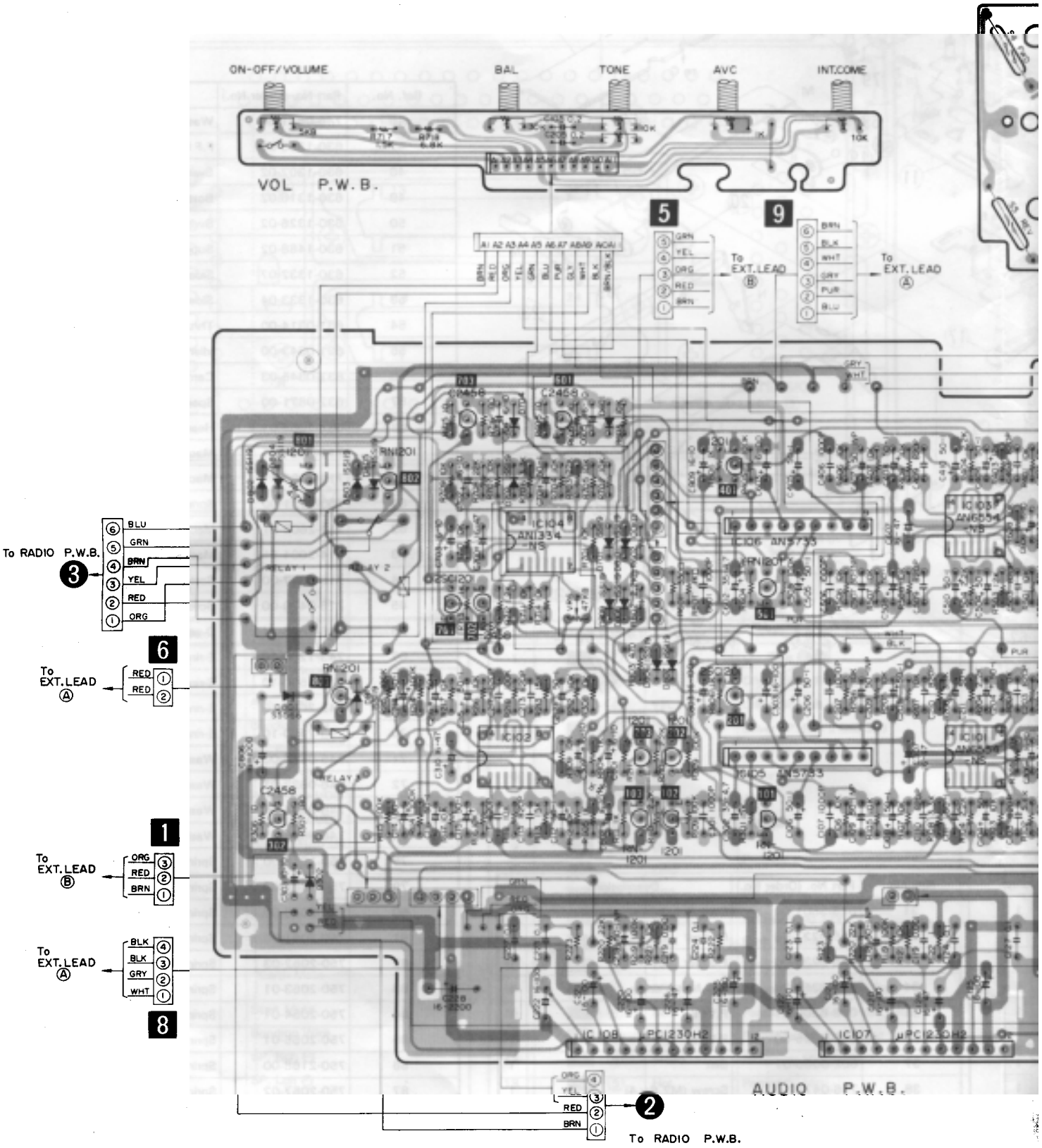
PS-9063V

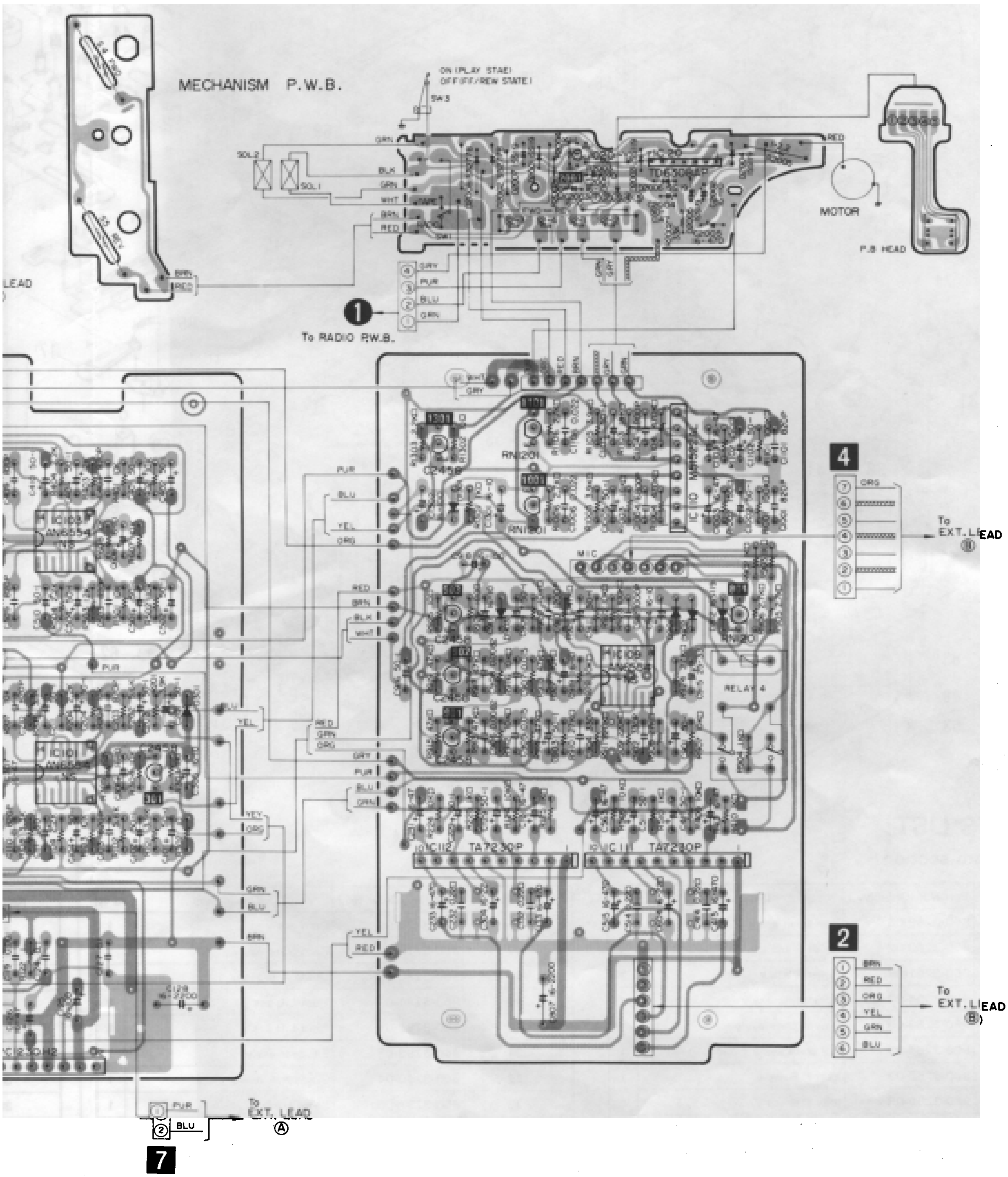
F G H I J



Q101~103,201~203,401,501,701,801~804,1001,1101 :125-2003-91 1201
Q301,302,601,702,703,901~903,1301 :102-2458-50 C2458
D701,702,802~812,901,902 :001-0330-90 ISS-119
D301,302,601,703,903,1301 :001-0347-48 9VH
D801,804 :001-0360-00 S5566G
RELAY1 :014-0509-00 RELAY2 :014-0468-01
RELAY3,4 :014-0502-03

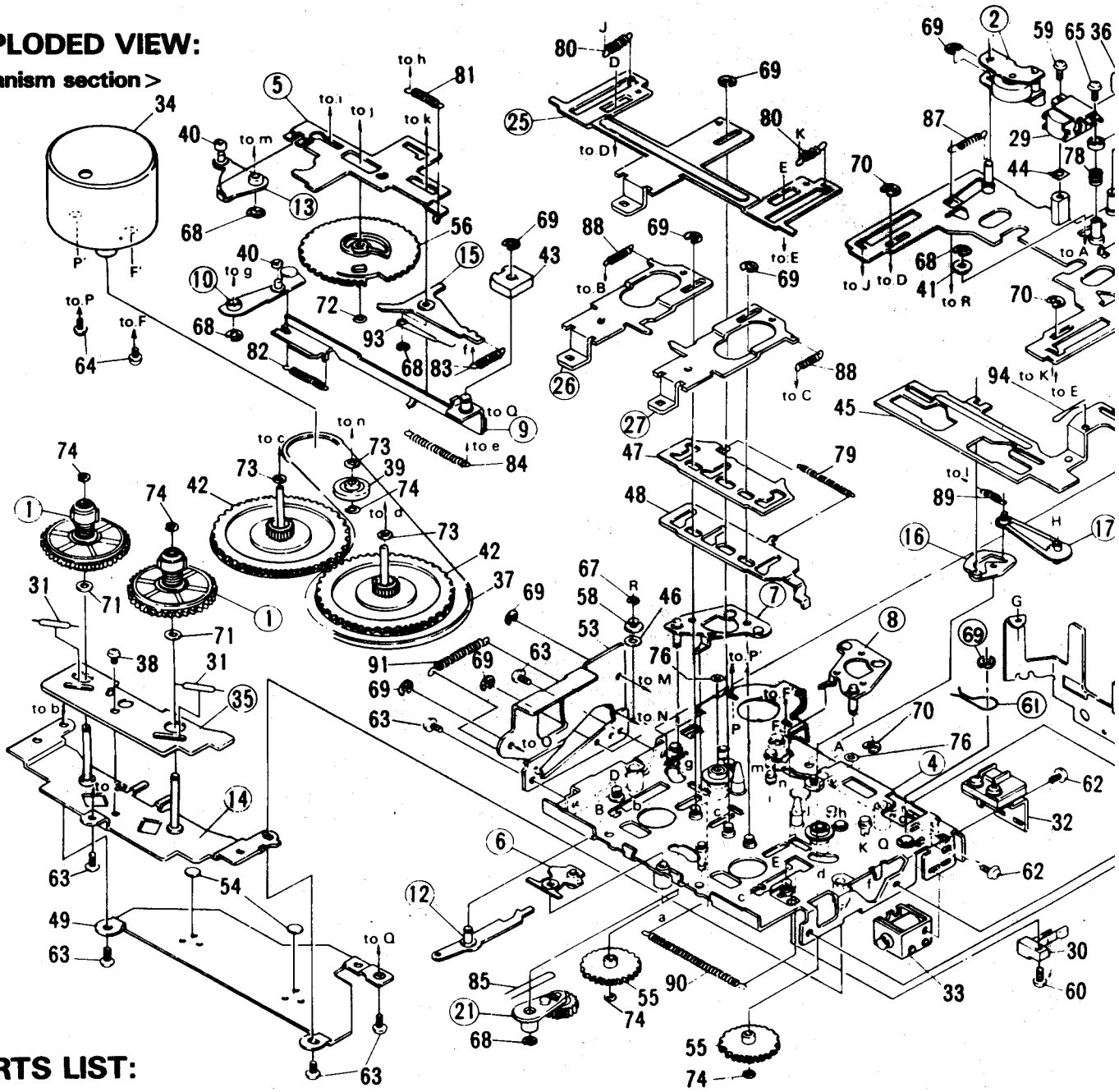
■ PRINTED WIRING BOARD:




MECHANISM P.W.B.
ON (PLAY STATE)
OFF (FF/REW STATE)
SW3
SOL2
SOL1
TD6308AP
MOTOR
P.B HEAD
To RADIO P.W.B.
RN1201
RN1301
IC110
IC102 AN6554
IC101 AN6554
IC109 AN6554
MIC
RELAY 4
IC112 TA7230P
IC111 TA7230P
C129 16-2200
To EXT. LEAD Ⓐ
To EXT. LEAD Ⓑ
4
2
7
GRN
BLK
WHT
BRN
RED
GRY
PUR
BLU
YEL
ORG

■ EXPLODED VIEW:

<Mechanism section>

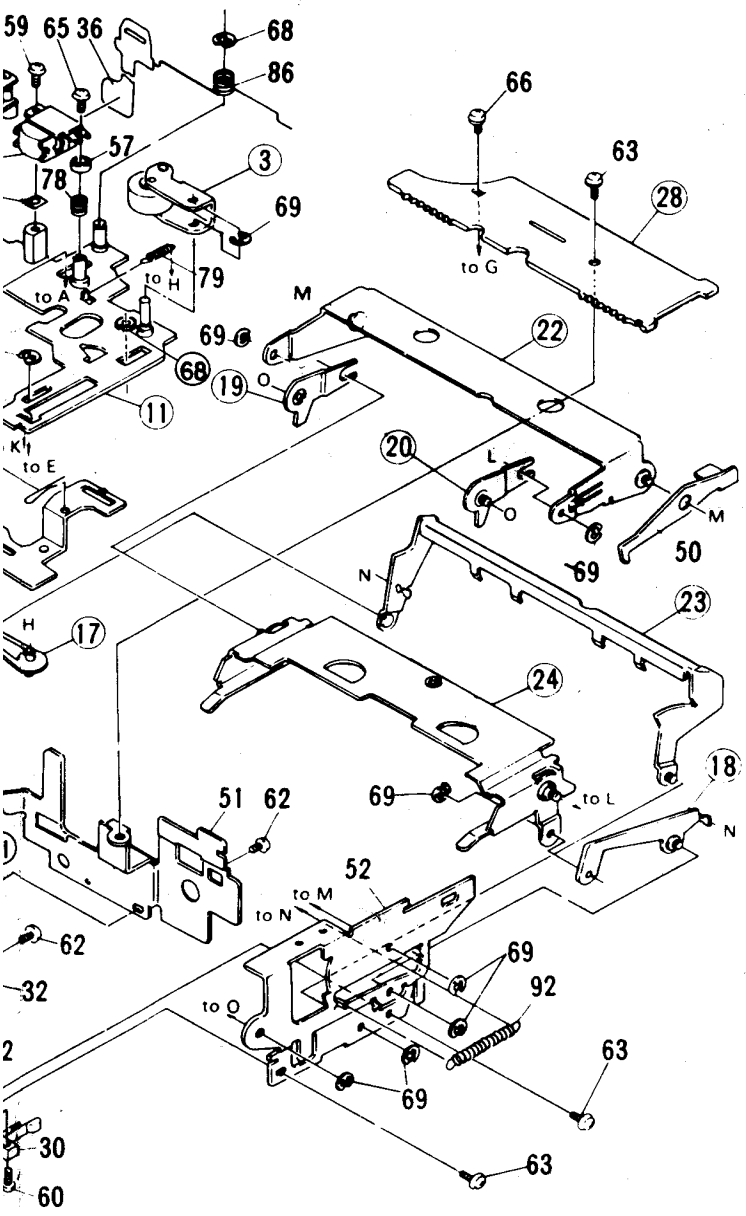


■ PARTS LIST:

<Mechanism section>

Ref. No.	Part No. (Order No.)	Description	Q'ty
1	960-3259-05	Reel base ass'y	2
2	960-3260-02	Roller F ass'y	1
3	960-3261-02	Roller R ass'y	1
4	960-3394-08	Deck plate ass'y	1
5	960-3263-03	Power plate ass'y	1
6	960-3264-03	F.F plate ass'y	1
7	960-3268-03	Idler P.F ass'y	1
8	960-3269-03	Idler P.R ass'y	1
9	960-3270-09	Plunger P ass'y	1
10	960-3271-05	Lock arm ass'y	1
11	960-3272-11	Head plate ass'y	1
12	960-3273-05	Head link ass'y	1
13	960-3274-05	Power link ass'y	1
14	960-3275-06	Base plate ass'y	1
15	960-3276-02	Plunger link ass'y	1

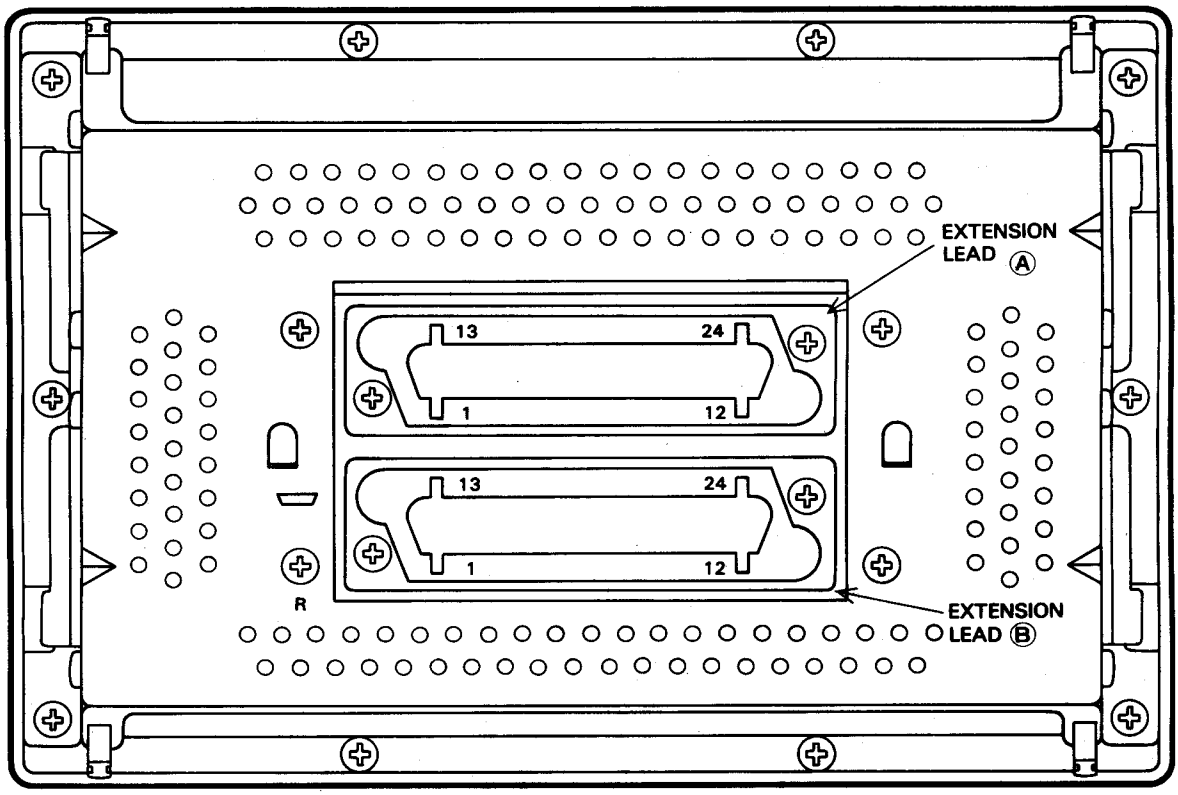
Ref. No.	Part No. (Order No.)	Description	Q'ty
16	960-3277-02	Cam ass'y	1
17	960-3278-02	Cam plate ass'y	1
18	960-3280-02	Guide A.B ass'y	1
19	960-3281-01	Eject L.L ass'y	1
20	960-3282-01	Eject L.R ass'y	1
21	960-3283-03	F.F gear ass'y	1
22	960-3290-04	Guide A.A ass'y	1
23	960-3291-05	Seing L ass'y	1
24	960-3354-01	Pack guide ass'y	1
25	960-3732-00	Eject lever ass'y	1
26	960-3730-00	F.F lever ass'y	1
27	960-3731-00	Rew lever ass'y	1
28	099-6226-03	P.W.B.	1
29	011-0274-01	Head	1
30	013-3558-02	Switch	1



Ref. No.	Part No. (Order No.)	Description	Q'ty
31	013-3601-00	Switch	2
32	015-0227-04	Plunger	1
33	015-0230-00	Plunger	1
34	960-3356-00	D.C Motor ass'y	1
35	099-6206-01	P.W.B.	1
36	099-6225-00	P.W.B.	1
37	602-0065-01	Belt	1
38	716-0479-00	Screw (M2.6×4)	1
39	604-0024-00	Tension pulley	1
40	610-0092-00	Roller E	2
41	610-0093-01	Roller C	1
42	611-0061-00	Flywheel	2
43	630-1198-03	Core	1
44	630-1279-00	Spacer	1
45	960-3355-01	Change plate ass'y	1

Ref. No.	Part No. (Order No.)	Description	Q'ty
46	746-0621-00	Washer	1
47	630-1305-03	F.F lock	1
48	630-1307-02	Switch plate	1
49	630-1316-02	Bottom plate	1
50	630-1326-02	Switch lever A	1
51	630-1488-02	Support plate	1
52	630-1332-07	Side panel R	1
53	630-1333-04	Side panel L	1
54	631-0314-00	Thrust plate	2
55	631-0343-00	Idler gear	2
56	631-0345-03	Cam gear	1
57	632-0871-00	Spacer	1
58	632-1069-01	Head link roller	1
59	714-2004-81	Machine screw (M2×4)	1
60	714-2006-81	Machine screw (M2×6)	1
61	750-2171-00	Spring	1
62	714-2603-81	Machine screw (M2.6×3)	3
63	714-2604-81	Machine screw (M2.6×4)	9
64	716-0347-00	Screw	2
65	716-0429-00	Screw	1
66	735-2605-11	D-sems screw (M2.6×5)	1
67	743-1200-10	E-ring	1
68	743-1500-10	E-ring	7
69	743-2000-10	E-ring	17
70	743-2500-10	E-ring	3
71	745-0586-00	Washer	2
72	746-0622-01	Washer	1
73	746-0624-00	Washer	3
74	746-0628-01	Washer	5
78	750-1910-00	Spring	1
79	750-2049-00	Spring	2
80	750-2050-00	Spring	2
81	750-2051-00	Spring	1
82	750-2052-03	Spring	1
83	750-2053-01	Spring	1
84	750-2054-01	Spring	1
85	750-2055-01	Spring	1
86	750-2168-00	Spring	1
87	750-2057-02	Spring	1
88	750-2058-00	Spring	2
89	750-2059-01	Spring	1
90	750-2061-01	Spring	1
91	750-2062-00	Spring	1
92	750-2169-00	Spring	1
93	750-2093-02	Spring	1
94	750-2108-03	Spring	1

■ EXTENTION LEAD (852-8684-00):



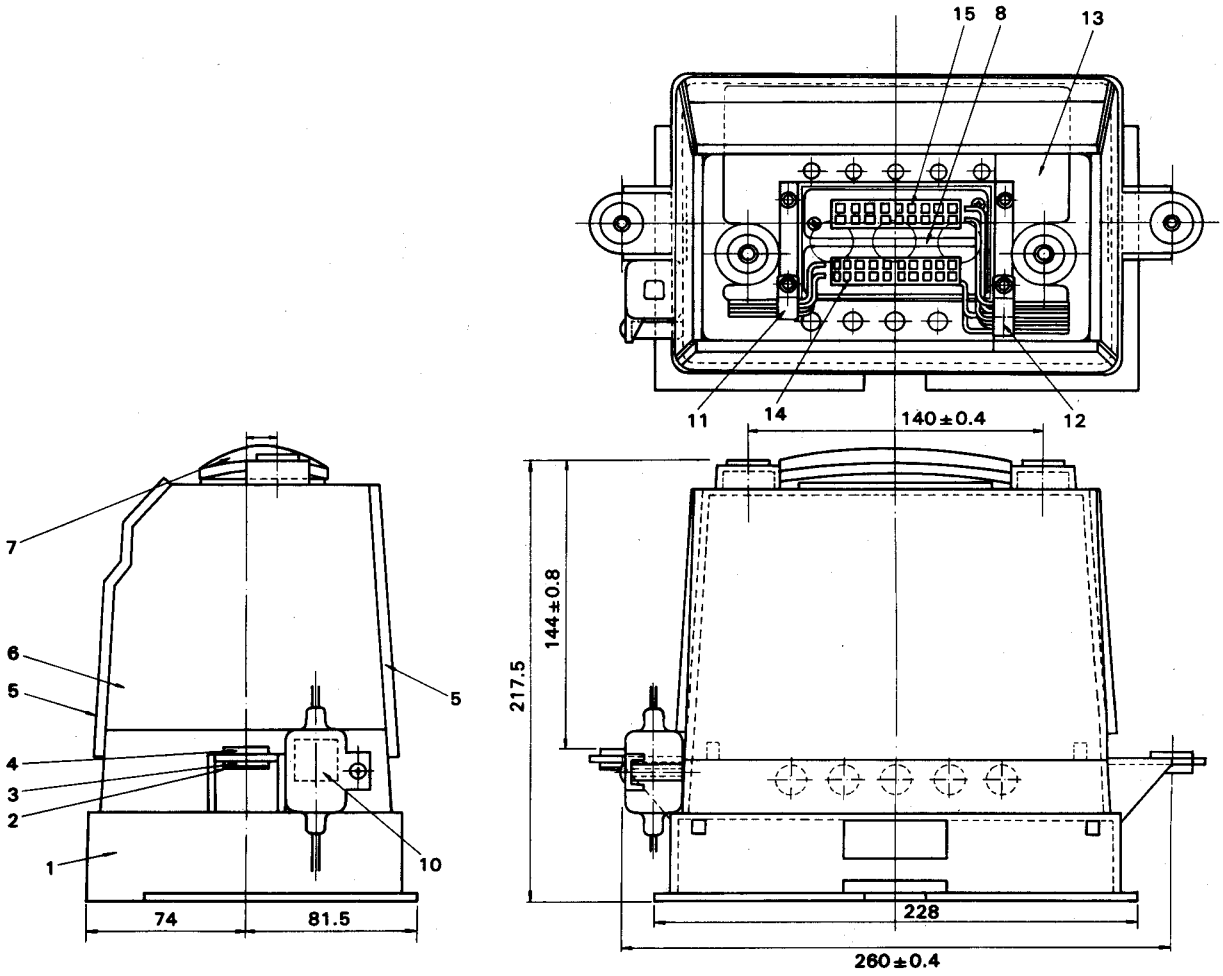
EXTENSION LEAD Ⓐ

Pin No.	Plug (from P.W.B.)	Color	Description
1	6 - ①	RED	+12V Input
	6 - ②	RED	
2	9 - ①	BLU	AVC Input
3	——	BLK	Bonding Wire
4	7 - ②	BLU	SP. Rch ⊕
5	8 - ②	GRY	SP. Lch ⊕
6	9 - ⑤	BLK	Passenger VOL 1
7	9 - ③	GRY	Passenger VOL 3
8	10 - ②	BRN	Handle Auto Up
9	10 - ③	ORG	Passenger 12V
10	11 - ⑥	BLU	Indicator Data
11	11 - ④	YEL	Indicator Load
12	11 - ③	ORG	Indicator +5V
13	8 - ③	BLK	Earth Main
	8 - ④	BLK	
14	9 - ⑥	BRN	Start Mute.
15	——	BLK	Bonding Wire
16	7 - ①	PUR	SP. Rch ⊖
17	8 - ①	WHT	SP. Lch ⊖
18	9 - ④	WHT	Passenger VOL 2
19	9 - ②	PUR	Handle Mute
20	10 - ①	BRN	Handle Auto Down
21	11 - ②	RED	Indicator Illumination
22	11 - ⑤	GRN	Indicator Clock
23	11 - ①	BRN	Indicator Earth
	——	BLK	Bonding Wire
24	11 - ⑦	PUR	Indicator Head Set

EXTENSION LEAD Ⓑ

Pin No.	Plug (from P.W.B.)	Color	Description
1	1 - ②	RED	Din Case Earth
2	7 - ②	RED	Driver Earth (Head Set)
3	7 - ④	YEL	Driver SP. Lch (Head Set)
4	7 - ③	ORG	Driver SP. Rch (Head Set)
5	4 - ④	Shield	Driver Mic (Earth)
6	4 - ③	Hot	Driver Mic
7	3 - ①	Hot	ANT
8	4 - ①	Hot	CB MIC
9	1 - ⑦	ORG	Press to talk
	5 - ③	ORG	
10	5 - ②	RED	CB Monitor
11	5 - ⑤	GRN	CB Remocon 12V
12	1 - ①	BRN	Earth CB Unit
13	1 - ③	ORG	Din Case Earth
14	2 - ①	BRN	Passenger Earth (Head Set)
15	2 - ⑥	BLU	Passenger SP. Lch (Head Set)
16	2 - ⑤	GRN	Passenger SP. Rch (Head Set)
17	4 - ⑥	Shield	Passenger Mic (Earth)
18	4 - ⑤	Hot	Passenger Mic
19	3 - ②	Shield	Ant. Earth
20	4 - ②	Shield	CB MIC (Earth)
21	——	——	
22	5 - ④	YEL	CB Audio Flequency Out
23	5 - ①	BRN	Squelch Signal
24	——	——	

■ AUDIO BOX (RAS-001-100):

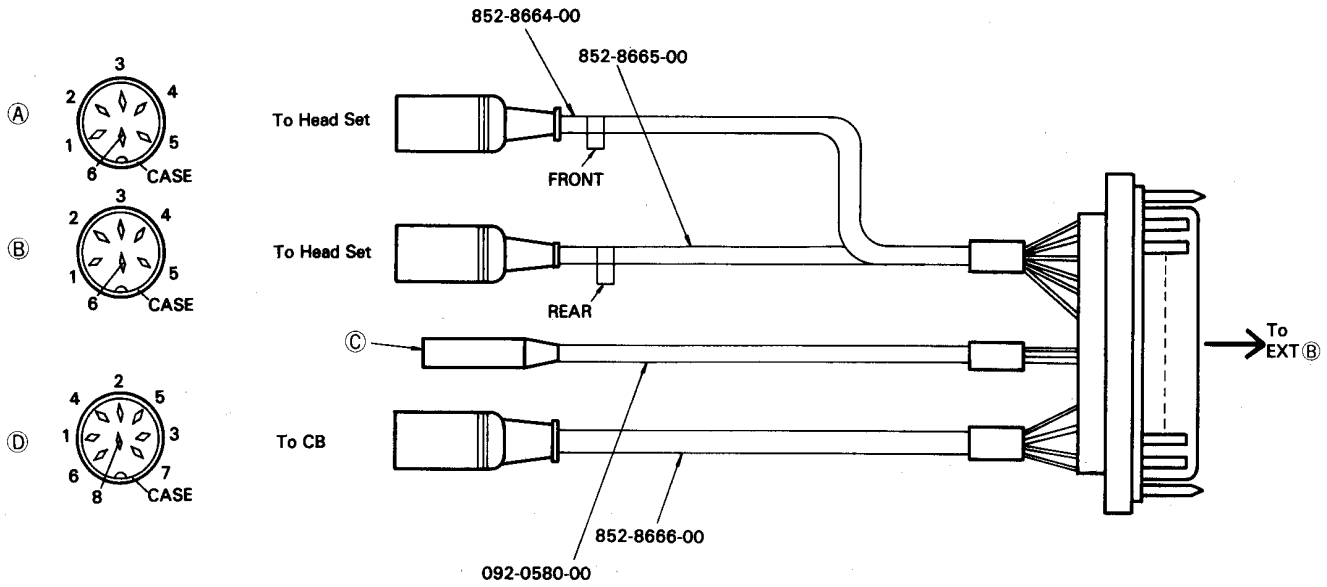


■ PARTS LIST:

Ref. No.	Part No. (Order No.)	Description	Q'ty
1	335-1973-04	Outer case	1
2	340-1354-00	Spacer	4
3	345-4119-00	Rubber part	4
4	345-4120-00	Rubber part	4
5	345-4130-00	Insulator	2
6	345-4128-00	Insulator	1
7	345-4147-00	Insulator	1
8	330-8260-00	Pressed part	1

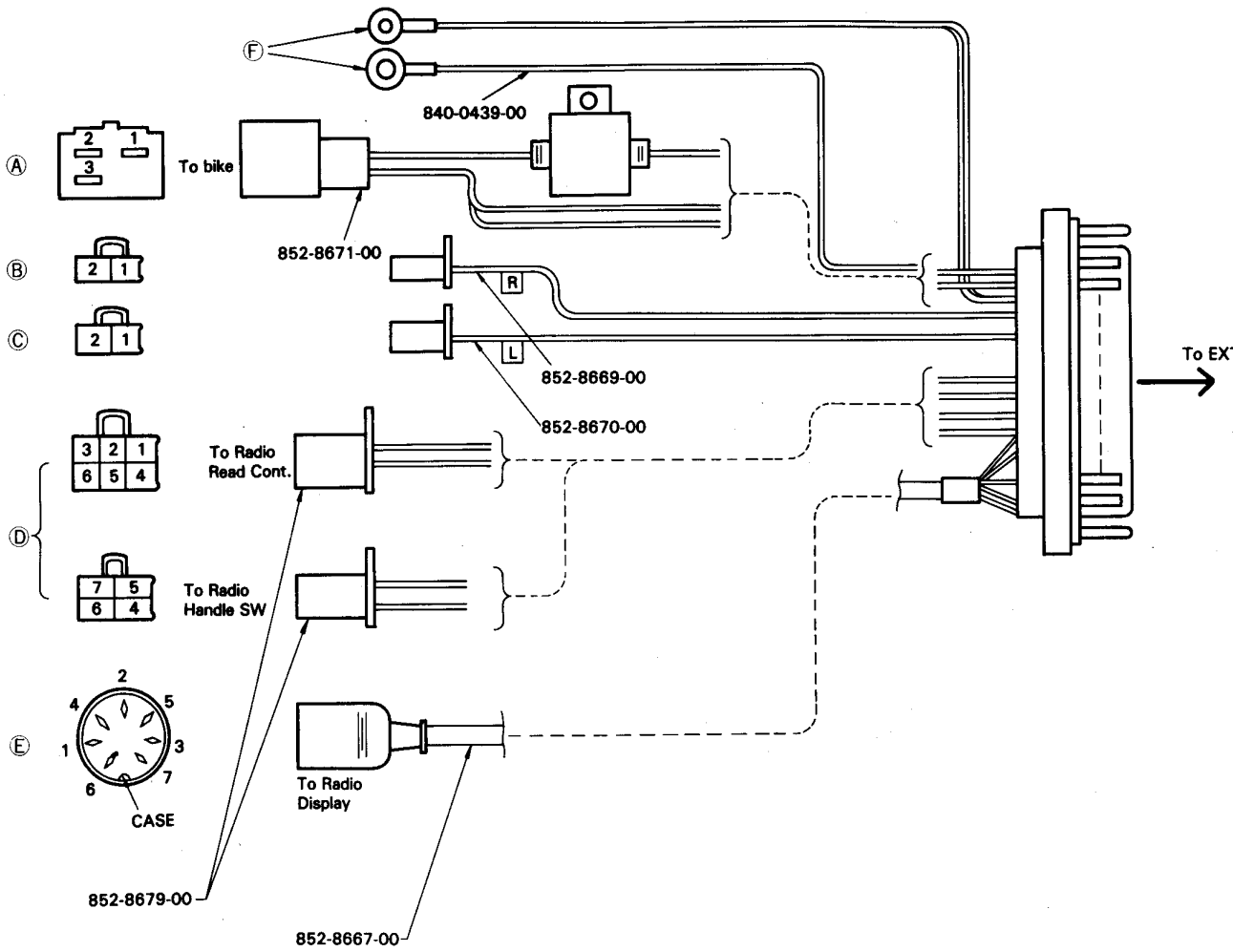
Ref. No.	Part No. (Order No.)	Description	Q'ty
9	345-4129-00	Insulator	1
10	345-4136-00	Rubber part	1
11	321-0841-00	Clamp	1
12	321-0924-00	Clamp	1
13	321-8250-00	Pressed part	1
14	852-8672-00	Extention lead Ⓑ´	1
15	852-8673-01	Extention lead Ⓐ´	1

■ EXTENTION LEAD Ⓑ´ (852-8672-00):



Pin No.		Color	Description	Connector No.
DIN 6 Pin (BLACK) Ⓐ 6 pin Not used.	1	Red	Driver Mic	6
	4	Yellow	Mic Earth	5
	2	Blue	Driver Earth	2
	5	Black	Driver SP, Lch	4
	3	White	Driver SP, Rch	3
	Case	Shield	Earth	1
DIN 6 Pin (GRAY) Ⓑ 6 Pin Not used.	1	Red	Passenger Mic	18
	4	Yellow	Mic Earth	17
	2	Blue	Passenger Earth	14
	5	Black	Passenger SP, Lch	16
	3	White	Passenger SP, Rch	15
	Case	Shield	Earth	13
Ⓒ	Line (hot)		ANT	7
	Shield		ANT. Earth	19
DIN 8 Pin (GRAY) Ⓓ	6	Red	CB Remocon 12V	11
	1	Brown	Earth CB Unit	12
	4	White	Press to Talk	9
	2	Gray	Squelch Signal	23
	5	Yellow	Driver Mic Earth	8
	3	Blue	CB A.F. Out	22
	7	Green	CB Monitor	10
	8	Black	CB Mic (Earth)	20
	Case	Shield	Earth	12

■ EXTENTION LEAD Ⓐ′ (852-8673-01):



Pin No.		Color	Description	Connector No.
Ⓐ (WHITE)	1	Yellow/Green	Start Mute	14
	2	Red/Black	+12V Input	1
	3	Blue/Red	AVC Input	2
Ⓑ (WHITE)	1	Gray	SP, Rch ⊕	4
	2	Purple	SP, Rch ⊖	16
Ⓒ (WHITE)	1	Blue	SP, Lch ⊕	5
	2	Green	SP, Lch ⊖	17
Ⓓ	1	Green/Red	Passenger Vol 1	6
	2	Green/Black	Passenger Vol 2	18
	3	Green/Blue	Passenger Vol 3	7
	4	Green/Yellow	Indicator Auto Up	8
	5	Green/White	Indicator Auto Down	20
	6	Black/White	Passenger 12V	9
	7	Blue/Green	Indicator Mute	19
Ⓔ (BLACK)	6	Yellow	Indicator Load	11
	1	Brown	Indicator Illumination	21
	4	Green	Indicator Head Set	24
	2	White	Indicator Earth	23
	5	Red	Indicator Clock	22
	3	Black	Indicator Data	10
	7	Blue	Indicator +5V	12
	Case	Shield	Indicator Earth	23
Ⓕ		Black	Earth	13
		Black	Earth	13, 15

■ PARTS LIST:

<Electrical section>

• Main P.W.B.

Ref. No.	Part No. (Order No.)	Description	Q'ty
D2, 3, 5, 9, 10, 12, 14, 15~23	001-0330-00	Diode (1SS119)	16
D6	001-0361-00	Diode (1SS198)	1
D7, 8	001-0424-18	Diode (MA4051-TA)	2
D4, 11, 13	001-0376-48	Diode (MTZ9.1JC)	3
L2	010-2052-00	Coil	1
L1	010-2053-00	Coil	1
VR2	012-3808-08	Variable vesistor (33k)	1
VR1	012-3808-10	Variable resistor (100k)	1
RY1	014-0508-02	Relay	1
PL1	017-0321-01	Pilotlamp	1
CCT1	050-0077-00	Component circuit	1
IC2	051-0190-00	IC (Z2)	1
IC4	051-0259-00	IC (μPC78L05)	1
IC5	051-0281-01	IC (μPB553AC)	1
IC3	051-0396-00	IC (TC9130P)	1
IC6	051-0564-01	IC (μPD1710)	1
IC1	051-0632-01	IC (MPX-NC)	1
X1	061-1037-00	Crystal	1
BAT1	088-0011-00	Lithium battery (3V)	1
Q11	102-1846-00	Transistor (2SC1846 QRS)	1
Q1, 2, 5~8, 10, 12, 13	102-2458-00	Transistor (2SC2458)	9
Q9	103-1292-00	Transistor (2SD1292)	1
Q3, 4, 14	125-2003-91	Transistor (RN1201)	3
R16	032-0059-01	Film resistor (1kΩ)	1
R17	032-0059-45	Film resistor (1.8kΩ)	1
R21	032-0059-57	Film resistor (120kΩ)	1

Ref. No.	Part No. (Order No.)	Description	Q'ty
C15	042-0174-00	Electrolytic capacitor (16V 4.7μF)	1
C16	042-0176-00	Electrolytic capacitor (16V 10μF)	1
C2	042-0226-00	Electrolytic capacitor (35V 0.1μF)	1
C29	160-1022-05	Ceramic capacitor (1000pFB)	1
C35	160-2212-05	Ceramic capacitor (220pFB)	1
C17	160-3322-05	Ceramic capacitor (3300pFB)	1
C3	160-6812-05	Ceramic capacitor (680pFB)	1
C5, 34	171-1033-06	Semiconductor-ceramic capacitor (0.01μF)	2
C18	171-1533-06	Semiconductor-ceramic capacitor (0.015μF)	1
C50	171-2232-10	Semiconductor-ceramic capacitor (0.022μF)	1
C9, 10, 11	171-4733-06	Semiconductor-ceramic capacitor (0.047μF)	3
C4	173-1231-10	Compact polyester capacitor (0.012μF)	1
C26, 27	173-2232-10	Compact polyester capacitor (0.022μF)	2
C20	173-3932-10	Compact polyester capacitor (0.039μF)	1
C1	174-1800-13	Temperature-compensating Ceramic capacitor (18pF CH)	1
C24, 25	174-2200-13	Ceramic capacitor (22pF CH)	2
C41	174-3900-13	Ceramic capacitor (39pF CH)	1
C6, 31	179-2273-23	Compact electrolytic capacitor (10V 220μF)	2
C13	179-2273-33	Compact electrolytic capacitor (16V 220μF)	1
C23, 28, 30, 32 51	179-4763-22	Compact electrolytic capacitor (10V 47μF)	5
C7, 8, 12, 19	182-1053-62	Super compact electrolytic capacitor (50V 1μF)	4
C14	182-1063-32	Super compact electrolytic capacitor (16V 10μF)	1
C22	182-1073-22	Super compact electrolytic capacitor (10V 100μF)	1
C21	182-2253-62	Super compact electrolytic capacitor (50V 2.2μF)	1
C33	182-3363-22	Super compact electrolytic capacitor (10V 33μF)	1

• Audio P.W.B.

Ref. No.	Part No. (Order No.)	Description	Q'ty
D701, 702, 802~812, 901, 902	001-0330-00	Diode (1SS119)	15
D301, 302, 601, 703, 903, 1301	001-0347-48	Diode (MA4091M)	6
D801, 804	001-0360-00	Diode (S5566B)	2
VR6	012-3808-09	Variable resistor (47kΩ B)	1
RY2	014-0468-01	Relay (PT)	1
RY3, 4	014-0502-03	Relay (DS)	2
RY1	014-0509-00	Relay (POWER)	1
IC110	051-0301-02	IC (M51522AL)	1
IC107, 108	051-0364-01	IC (μPC1230H2)	2
IC105, 106	051-0471-00	IC (AN5733)	2
IC104	051-0506-00	IC (AN1324NS)	1
IC101, 102, 103, 109	051-0556-00	IC (AN6554NS)	4
IC111, 112	051-0741-00	IC (TA7230P)	2
Q301, 302, 601, 702, 703, 901~903, 1301	102-2458-50	Transistor (2SC2458)	9
Q101~103, 201, 203, 401, 501, 701, 801~804, 1001, 1101	125-2003-91	Transistor (RN1201)	15
R925, 1302	116-1001-10	Chip resistor (1/8W 10Ω)	2
R125, 225, 410, 510, 801, 901, 902, 903, 904, 1301	116-1021-10	Chip resistor (1/8W 1kΩ)	10
R124, 224, 409, 509, 907, 912, 916, 920, 922, 927, 928	116-1031-10	Chip resistor (1/8W 10kΩ)	11
R602, 923, 1001, 1101	116-1041-10	Chip resistor (1/8W 100kΩ)	4
R1002, 1102	116-1511-10	Chip resistor (1/8W 150Ω)	2
R926	116-1811-10	Chip resistor (1/8W 180Ω)	1
R1003, 1103	116-1831-10	Chip resistor (1/8W 18kΩ)	2
R802, 1303	116-2221-10	Chip resistor (1/8W 2.2kΩ)	2
R909, 911	116-2241-10	Chip resistor (1/8W 220kΩ)	2
R905, 906, 1006, 1106	116-2721-10	Chip resistor (1/8W 2.7kΩ)	4
R908, 910, 924	116-2731-10	Chip resistor (1/8W 27kΩ)	3
R601	116-3311-10	Chip resistor (1/8W 330Ω)	1
R1005, 1105	116-3921-10	Chip resistor (1/8W 3.9kΩ)	2
R913, 914, 915, 917, 918, 919, 921	116-4731-10	Chip resistor (1/8W 47kΩ)	7
R1004, 1104	116-4741-10	Chip resistor (1/8W 470kΩ)	2

Ref. No.	Part No. (Order No.)	Description	Q'ty
C912	160-1022-05	Higher dielectric ceramic capacitor (1000pF)	1
C910	160-1222-05	Higher dielectric ceramic capacitor (1200pF)	1
C902, 904	160-3312-05	Higher dielectric ceramic capacitor (330pF)	2
C107, 119, 207, 219, 301, 406, 506, 601	173-1022-10	Compact polyester capacitor (1000pF)	8
C123, 124, 127, 223, 224, 227	173-1042-10	Compact polyester capacitor (0.1μF)	6
C905, 907	173-1532-10	Compact polyester capacitor (50V 0.015μF)	2
C1006, 1106	173-2232-10	Compact polyester capacitor (50V 0.022μF)	2
C1004, 1104	173-6822-10	Compact polyester capacitor (50V 0.0068μF)	2
C103, 110, 113, 117, 203, 210, 213, 217, 403, 409, 503, 509, 1001, 1101	173-8212-10	Compact polyester capacitor (820pF)	14
C906, 908	173-8222-10	Compact polyester capacitor (50V 0.0082μF)	2
C132, 232, 414, 514	177-2245-06	Higher dielectric ceramic chip capacitor (0.22μF)	4
C303, 603, 918	179-1073-33	Compact electrolytic capacitor (16V 100μF)	3
C806	179-1083-33	Compact electrolytic capacitor (16V 1000μF)	1
C128, 228, 807	179-2283-31	Compact electrolytic capacitor (16V 2200μF)	3
C133, 233, 415, 515	179-4773-33	Compact electrolytic capacitor (16V 470μF)	4
C101, 102, 104, 106, 108, 111, 112, 115, 114, 116, 129, 201, 202, 204, 206, 208, 211, 212, 214, 215, 216, 229, 401, 402, 404, 405, 408, 410, 411, 501, 502, 504, 505, 508, 510, 511, 701, 901, 903, 909, 911, 916, 1002, 1005, 1102, 1105	182-1053-62	Super compact electrolytic capacitor (50V 1μF)	46
C109, 118, 209, 218, 407, 507	182-1056-62	Super compact electrolytic capacitor (50V 1μF NP)	6
C305, 306, 308, 309, 605, 606, 702, 703, 704, 801, 802, 809, 914, 917, 919, 1301	182-1063-32	Super compact electrolytic capacitor (16V 10μF)	16
C120, 121, 122, 125, 220, 221, 222, 225, 1302	182-1073-32	Super compact electrolytic capacitor (16V 100μF)	10
C304, 604	182-2263-32	Super compact electrolytic capacitor (16V 22μF)	2
C915	182-3363-42	Super compact electrolytic capacitor (25V 33μF)	1
C302, 602	182-4753-52	Super compact electrolytic capacitor (35V 4.7μF)	2
C126, 131, 226, 231, 307, 310, 413, 513, 607, 700, 1003, 1103	182-4763-32	Super compact electrolytic capacitor (16V 47μF)	12

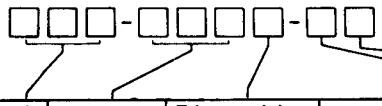
Ref. No.	Part No. (Order No.)	Description	Q'ty
D2002, 2008	001-0276-00	Diode (S5277B)	2
D2001, 2003, 2004, 2005, 2006, 2007	001-0330-00	Diode (1SS119)	6
IC20	051-0403-01	IC (TD6308AP)	1
O2001	100-1020-25	Transistor (2SA1020Y)	1

Ref. No.	Part No. (Order No.)	Description	Q'ty
R2005	114-2291-51	Film resistor (1W 2.2Ω)	1
C2005	179-4773-33	Electrolytic capacitor (16V 470μF)	1
C2001, 2002, 2003	182-1063-32	Electrolytic capacitor (16V 10μF)	3
C2004	182-4743-62	Electrolytic capacitor (50V 0.47μF)	1

● How to read resistor

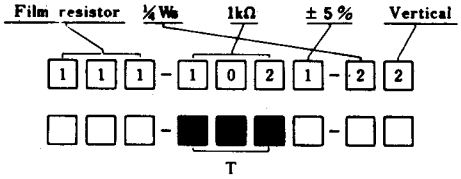
Resistors are deleted from the table of electric components, (except metal film resistors and special resistors). They can be converted to product Nos. as follows.

Film resistor (Carbon film resistor)



Classification	Resistance *	Tolerance of the value of resistance		Rated power			Shape	
1 1 1		0		0			0	
	Example	1	± 5 %	1	⅛W	Approx. 3.7mm	1	Horizontal
	33Ω=330	2		2	¼Ws	Approx. 6.5mm	2	Vertical
	33kΩ=333	3		3			3	
		4		4	½W	Approx. 9mm	4	
				7	⅛W	Approx. 3.5mm		
				8	½Ws	Approx. 6.6mm		
				9	¼Wss	Approx. 3.2mm		

(Example)



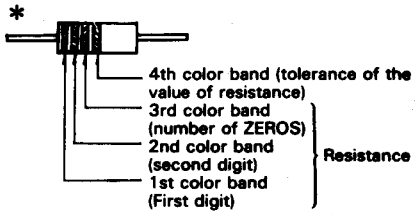
Note 1. The first two of three digits representing resistance are effective digits and the last one represents number of "0" following this.
Unit is given in ohm (Ω).

Example of conversion of resistance ■■■□ (T)

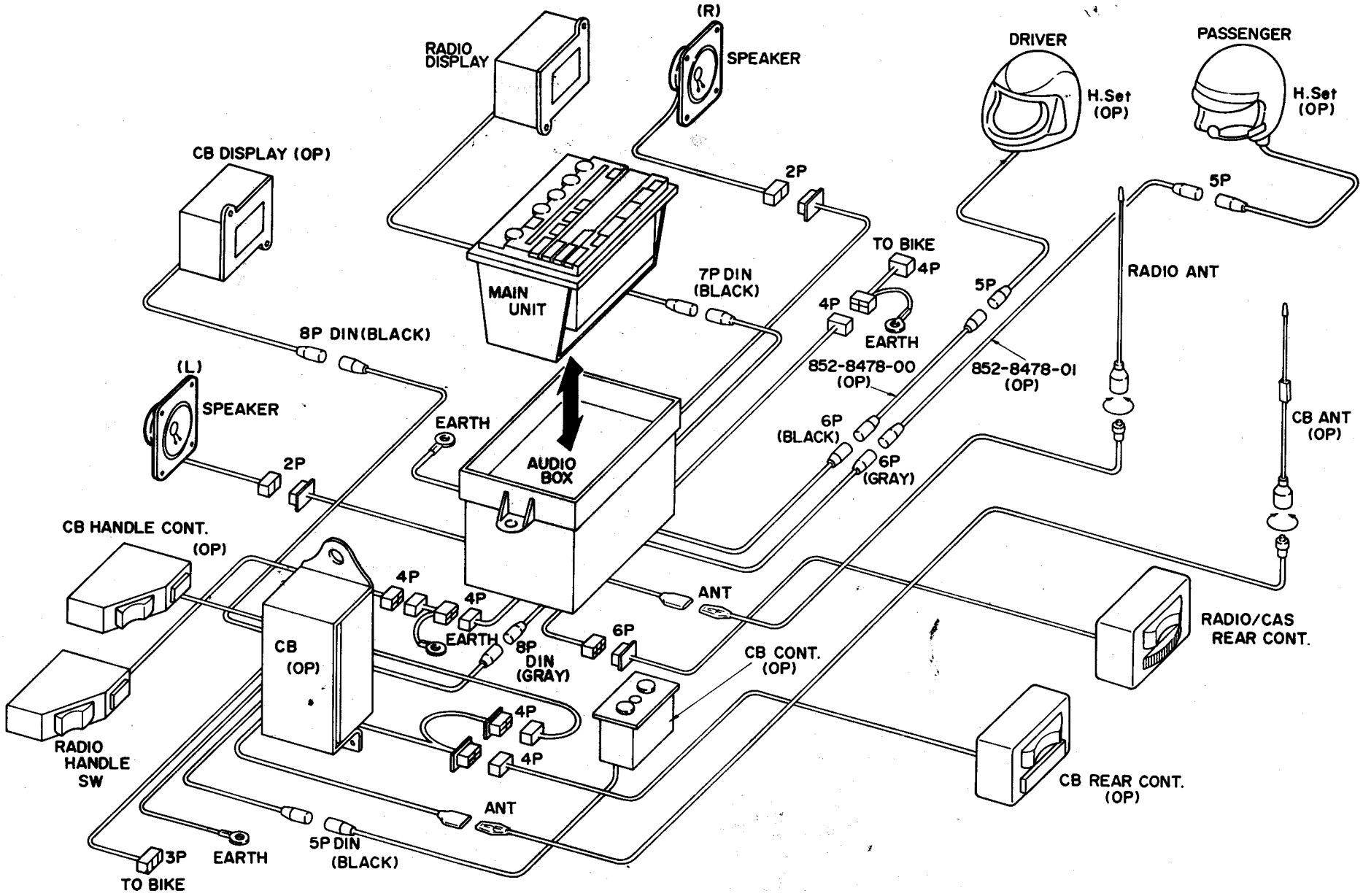
Note) R : Resistance, T : Converted value

R	T	R	T	R	T	R	T	R	T	R	T	R	T	R	T	R	T	R	T
Ω 0.1	108	Ω 1.0	109	Ω 10	100	Ω 100	101	kΩ 1.0	102	kΩ 10	103	kΩ 100	104	MΩ 1.0	105	MΩ 10	106	MΩ 100	107
0 15	158	1.5	159	15	150	150	151	1.5	152	15	153	150	154	1.5	155	15	156	150	157

COLOR	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	GOLD	SILVER	NO COLOR
1st color band	0	1	2	3	4	5	6	7	8	9			
2nd color band	0	1	2	3	4	5	6	7	8	9			
3rd color band	10^0	10^1	10^2	10^3	10^4	10^5	10^6				10^{-1}	10^{-2}	
4th color band											± 5 % (J)	±10% (K)	±20% (M)



■ OVERALL CONNECTIONS:



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