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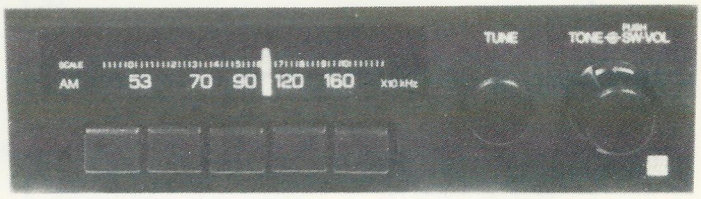


Service Manual

PRODUCED FOR AUSTRALIAN MOTOR INDUSTRIES FOR FITMENT TO TOYOTA COROLLA

12 V

SPECIFICATIONS

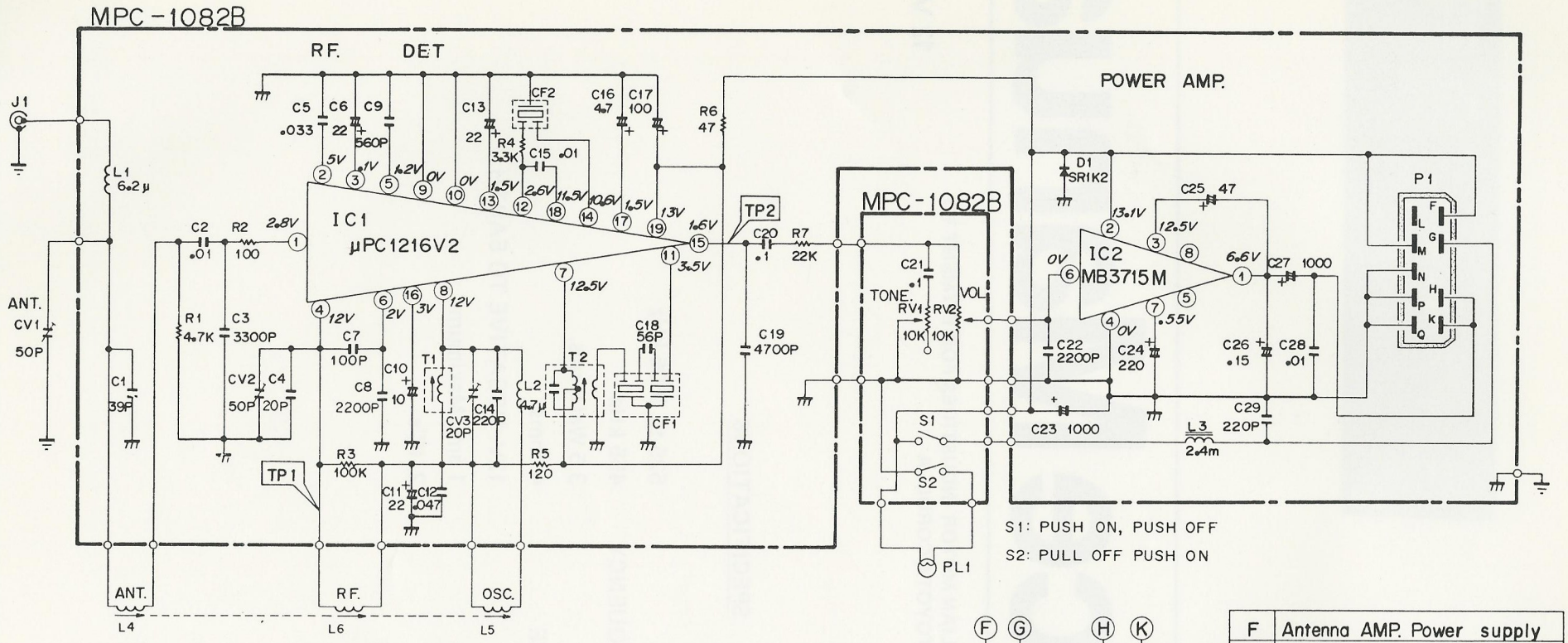
TUNING RANGE	525 to 1605 kHz
INTERMEDIATE FREQUENCY	455 kHz
POWER OUTPUT	3.5 Watts rms.
SPEAKER IMPEDANCE	4 ohms
POWER INPUT	12V. NEGATIVE TO EARTH
CURRENT	1 amp Maximum
SEMICONDUCTORS	2. IC's

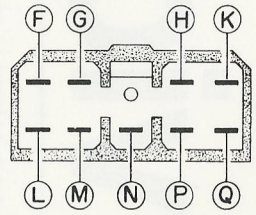
Subject to modification

4802 725 17091

PHILIPS

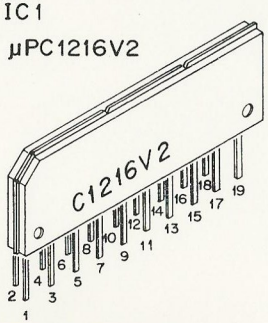
SCHEMATIC





F	Antenna AMP. Power supply
G	Power supply +13.2VDC.
H	Speaker (L) (+)
K	Speaker (R) (+)
L	NC
M	Speaker AMP. Power supply
N	Ground
P	Speaker (−)
Q	Speaker (−)

IC1
μPC1216V2



IC2
MB 3715M

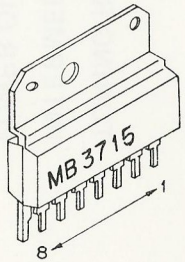
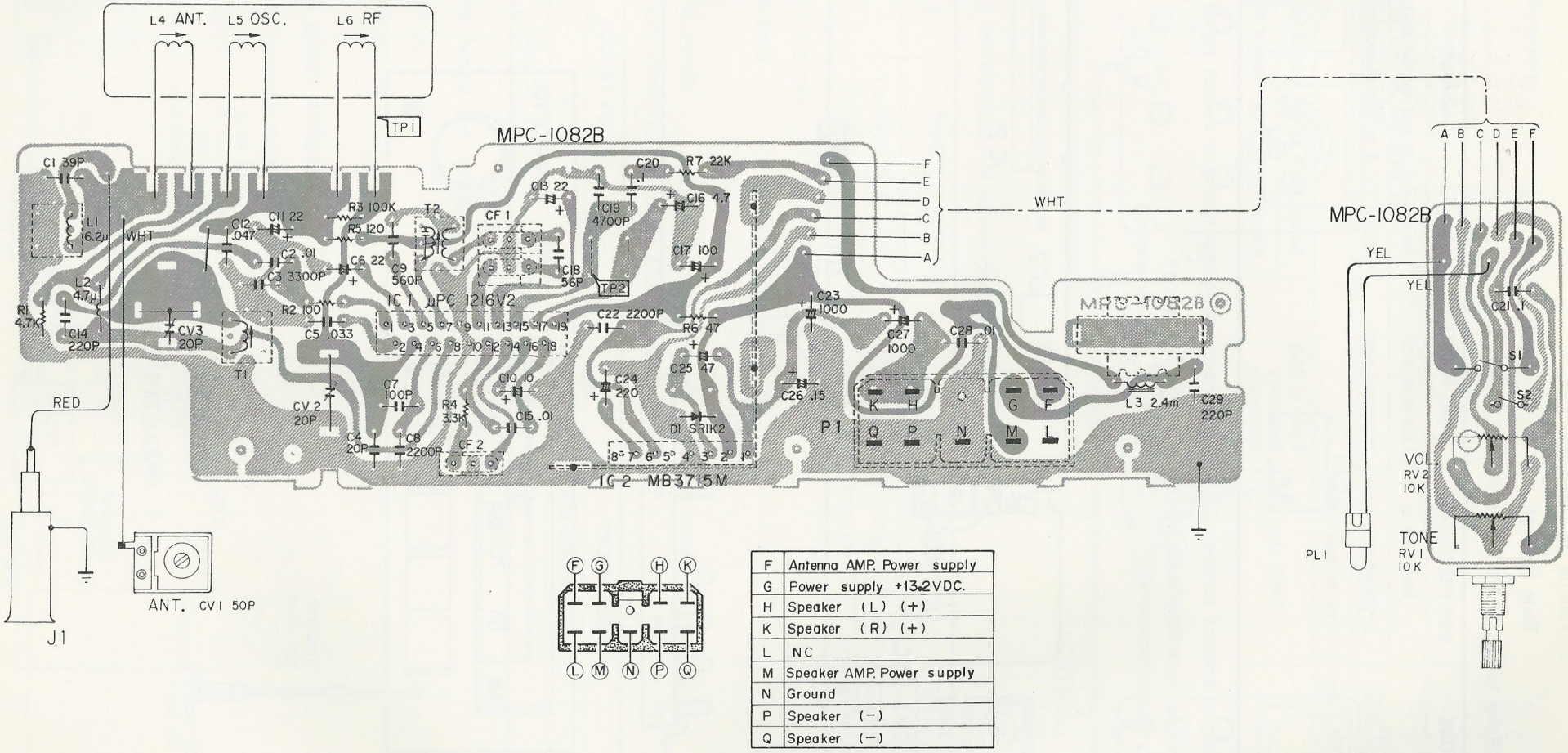


Fig. 5 (C24071010/02)

NOTES:
1. All resistance in ohm, K=10⁻³
2. All capacitance in μF, P=μμF
3. All inductance in henry, 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.



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P	Speaker (−)
Q	Speaker (−)

Fig. 6 (C27071010/02)

IC \ Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
IC 1	2.8V	2V	0.1V	12V	1.2V	2V	12.5V	12V	0V	0V	3.5V	2.6V	1.5V	10.6V	1.6V	3V	1.5V	11.5V	13V
IC 2	6.6V	13.1V	12.5V	0V	0V	0V	0.55V	0V											

HOOK-UP

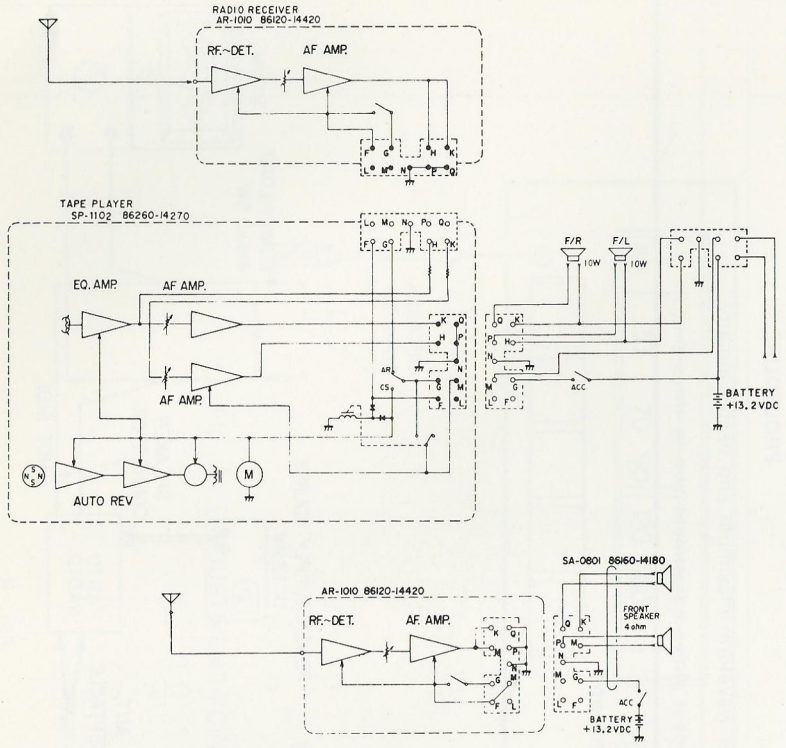

Fig. 3 (C32071010/02)

CONNECTIONS

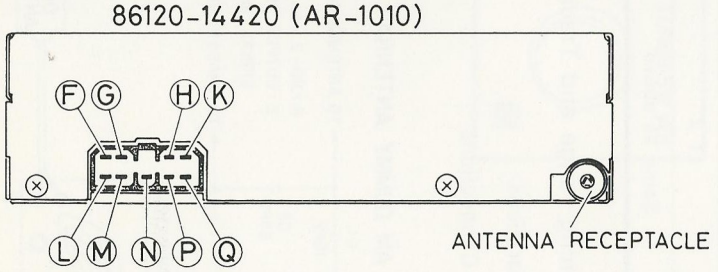

Fig. 4 (C23071010)

F	Power supply (ANT. AMP.)	G	Power supply (battery)			H	Speaker Lch ⊕	K	Speaker Rch ⊕
L	NC	M	Power supply (power boost)	N	Ground	P	Speaker Lch ⊖	Q	Speaker Rch ⊖

REPLACEMENT PARTS LIST

Ref. No.	Description	Service Code
Capacitors		
Note! All Capacitors Are Standard Types Unless Specified Otherwise.		
CV 2	Capacitor Variable	4802 125 57108
CV 3	Capacitor Variable	4802 125 57026
Resistors		
Note! All Resistors Are Standard Types Unless Specified Otherwise.		
RV 1, 2 (S 1, 2)	Volume + Tone	4802 102 37167
Semiconductors		
IC 1	UPC1216V2	4802 209 81222
IC 2	MB3715M	4802 209 87459
D 1	Diode SR1K2	4802 130 37022
Miscellaneous Electrical		
CF 1	Ceramic Filter A2–119/CA	4802 242 77091
CF 2	Ceramic Filter A1–118/CA	4802 242 77088
T 1	AM. OSC (Red).	4802 153 17362
T 2	AM. IF 455kHz. (Black).	4802 153 17363
––	Tuner Assy. Complete.	4802 210 17121
––	Shaft. Tuning.	4802 535 97255
––	Button. Tuner.	4802 410 27622
J 1	Receptacle. Antenna.	4802 267 30196
Miscellaneous Mechanical		
5	Knob Tuning	4802 413 17181
6	Knob Vol.	4802 410 27443
7	Knob Tone	4802 413 37278
8	Dialplate Calibrated	4802 331 47008

ALIGNMENT

[1] IF Alignment

◎ Preparations

(1) Connections

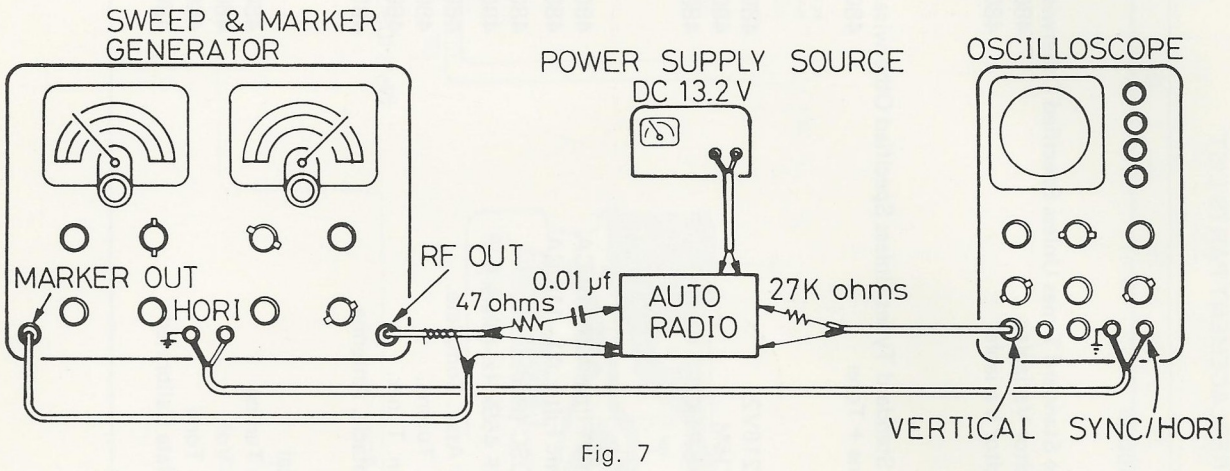

Fig. 7

Set the frequency of sweep generator at 455 kHz.

PURPOSE	SWEEP GENERATOR OUTPUT	VERTICAL INPUT	HORIZONTAL INPUT
IF curve	Connect [TP 1] in Fig. 9 through 0.01 μF capacitor	Connect [TP 2] in Fig. 9 through 27k-ohms resistor	Connect with HORIZONTAL terminal of sweep generator

(2) Power supply : 13.2 VDC

(3) Controls : Volume for minimum
Tone for high

(4) Dial pointer : Place the pointer near 1,000 kHz where no signal exists.

◎ Alignments (Refer to Fig. 9 for ADJUSTMENT POINTS)

STEP	ADJUST POINTS	PROCEDURE
1	T 2	Get waveform maximum and best symmetry
2	Same as above	Repeat above adjustment two or three times

[2] Tuning range and Tracking Aignment

◎ Preparations

(1) Connections

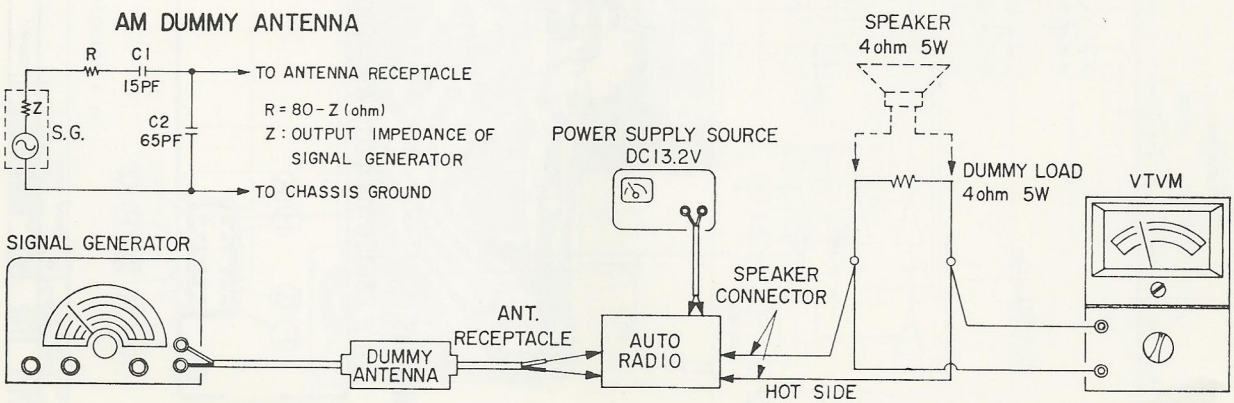

Fig. 8

(2) Power supply : 13.2 VDC

(3) Controls : Volume for maximum
Tone for high

◎ Alignments (Refer to Fig. 9 for ADJUSTMENT POINTS)

STEP	PURPOSE	SSG FREQUENCY	DIAL POINTER	ADJUST
1	Tuning range	505 kHz	Low-end stop	Adjust T 1 to get output maximum
2		1640 kHz	Hige-end stop	Adjust CV 3 to get output maximum
3	Repeat STEP 1 and 2 three or four times.			
4	Tracking	1400 kHz	Tune in SSG frequency accurately	Adjust CV 1 to get output maximum
5				Adjust CV 2 to get output maximum

NOTE : Always readjust antenna trimmer CV 1 to get maximum volume tuning in a weak signal near 1400 kHz, when you install the radio in car or replace an antenna.

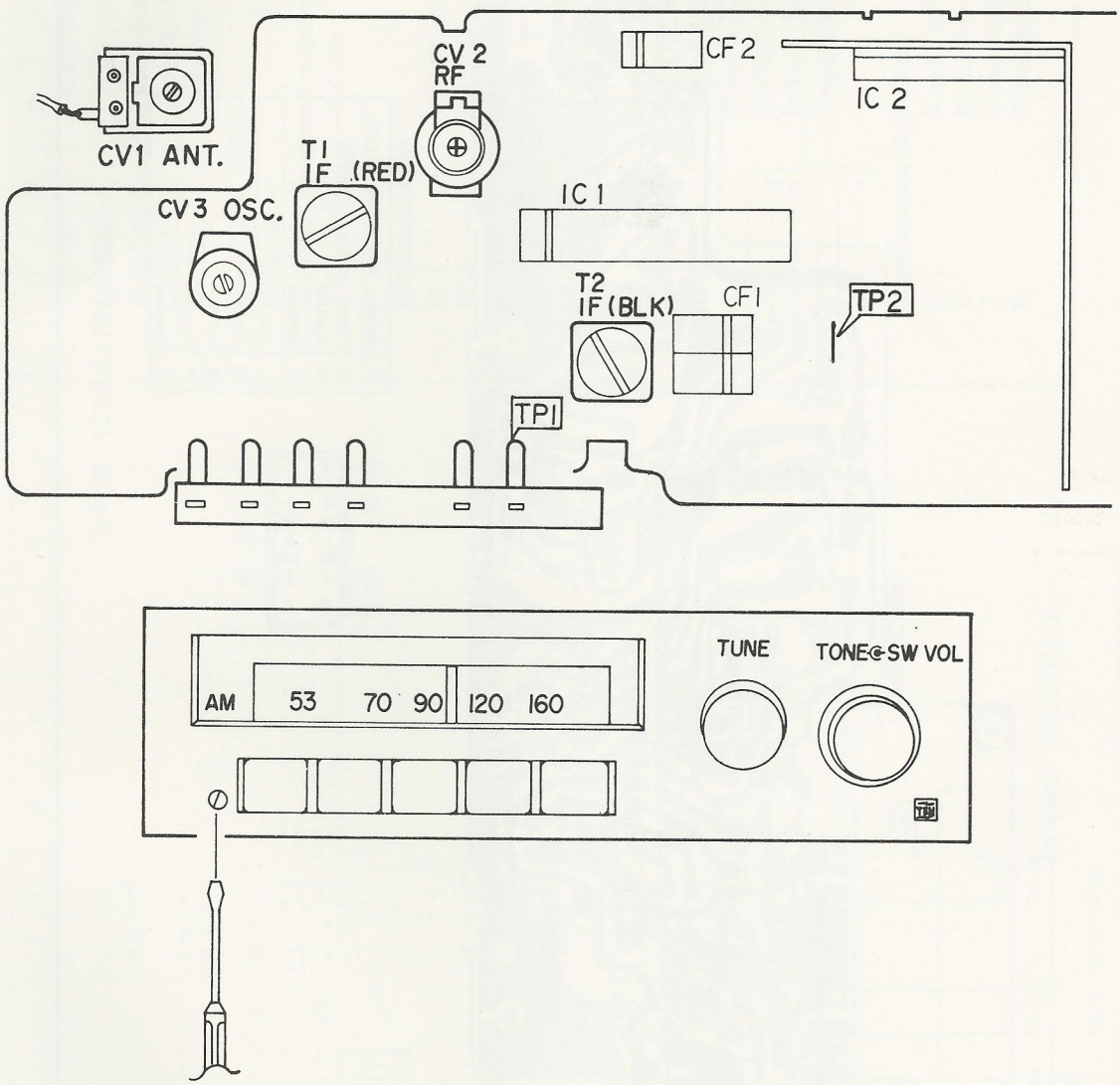

Fig. 9 (ADJUSTMENT POINTS)