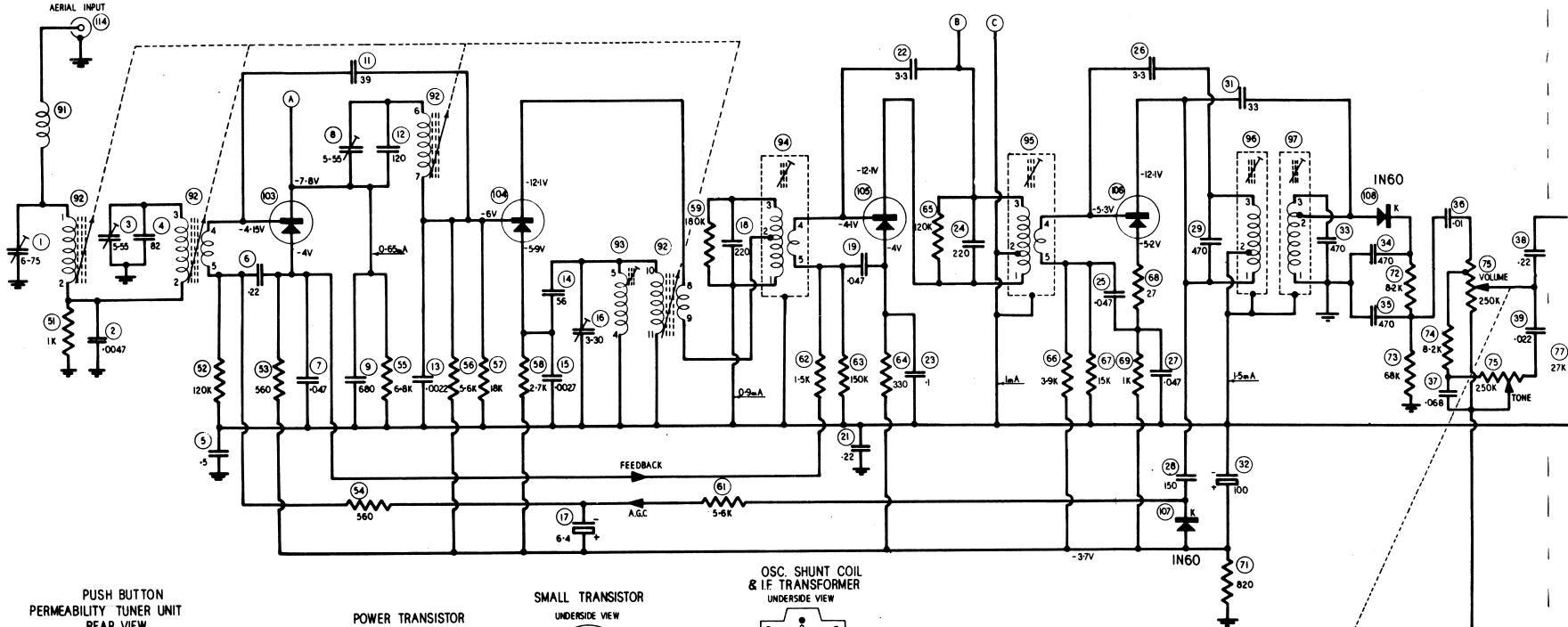


AT17

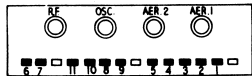
2N412

2N410-E

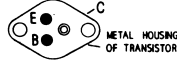
2N410-B



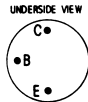
PUSH BUTTON
PERMEABILITY TUNER UNIT
REAR VIEW



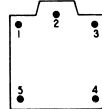
POWER TRANSISTOR
UNDERSIDE VIEW



SMALL TRANSISTOR
UNDERSIDE VIEW



OSC. SHUNT COIL
& IF TRANSFORMER
UNDERSIDE VIEW



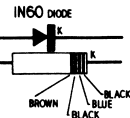
I.F. 455 Kc/s

ALL VOLTAGES MEASURED BETWEEN POINTS INDICATED AND CHASSIS WITH A D.C. VACUUM TUBE VOLTMETER. NO INPUT SIGNAL.
NUMBERS ASSIGNED TO TERMINALS OF COILS AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT BE FOUND ON THE UNIT.
IMPORTANT: REFER TO SERVICE DATA PP-C10G-1 FOR INSTRUCTIONS BEFORE ADJUSTING COLLECTOR CURRENT OF 25B337'S

MODEL PP-C10G

PUSH-BUTTON TUNING
POSITIVE TO CHASSIS

NOTE: (B) DENOTES TEST PINS

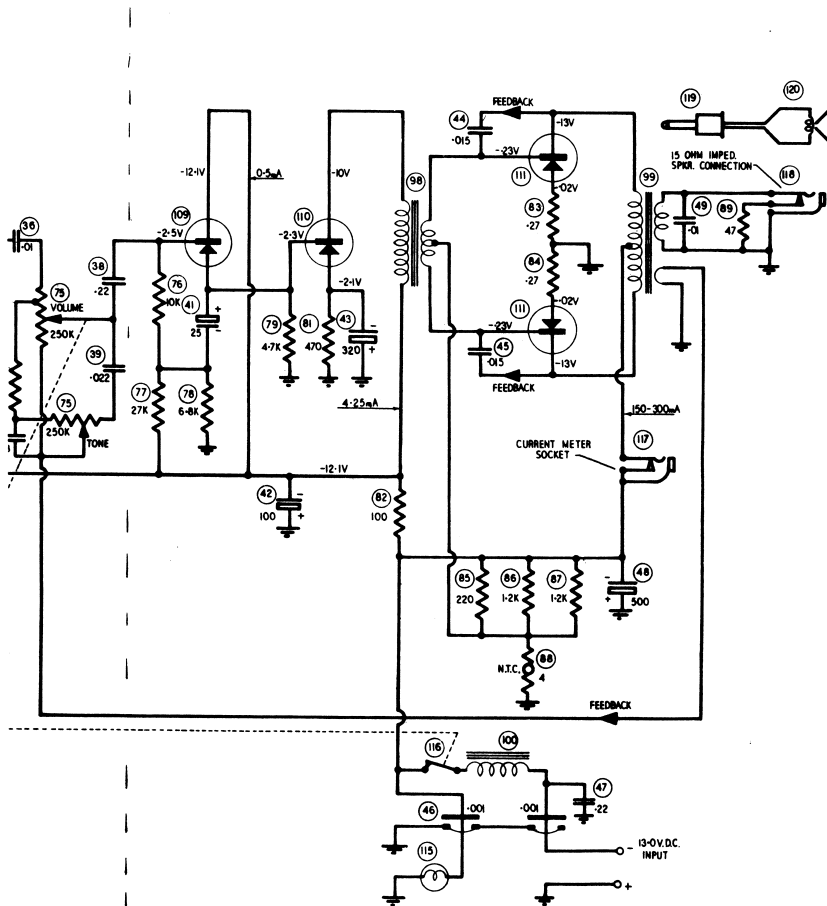


ASTOR Model PP-C10G

2N406

2N591

2-2SB337



ALIGNMENT PROCEDUREEQUIPMENT

Signal Generator - modulated 400 cps
 Output Meter - 15 Ohms Impedance
 Generator Series Capacitor - .1mF Part No. 4006-005-03. for IF alignment
 IF Attenuator - Part No. 4121-014-01
 Dummy Aerial - 65pF Part No. 4121-009-01
 Alignment Tools

- (a) Chisel Point Type: Part No. 4121-005-01 for trimmer capacitor adjustment
 (b) Flat Metal Blade Type: Part No. 4121-001-01 for I. F. T. and Osc. shunt coil adjustment.
 (c) Tuning Unit Iron Core Adjustor: Part No. 4121-008-01
 (d) Alignment Gauge: Part No. 4121-022-02 for tuner 1000 Kc/s position.
 Collector Current Meter Connection - Jack plug Part No. 7171-015-02

CONDITIONS

Remove screws and slide can off receiver.
 Volume Control - maximum (fully clockwise)
 Tone Control - maximum treble (fully clockwise)
 Output Level - 50 milliwatts, output meter reading with speaker voice coil disconnected.
 Output Meter
 Connection - Socket adjacent to receiver battery lead entry. Use plug Part No. 7171-015-02 or use original plug and leads from speaker.

Supply Voltage and Connection - 13-0V DC. Connect positive supply lead to chassis and negative lead to fuse holder lead.

INTERMEDIATE FREQUENCY TRANSFORMER ALIGNMENT

Turn tuning control until perm. tuner iron cores are out of the coil formers. Insert .1mF capacitor in series with generator "hot" lead.

Oper. No.	Generator Connection	Generator Frequency	Instructions
1.	To test pin "B" (term 3 of 2nd I. F. T.)	455 Kc/s	Adjust iron core of 4th IF. trans. for max. output
2.	as Oper. 1.	455 Kc/s	Adjust iron core of 3rd IF. trans. for max. output
3.	Repeat operations 1 & 2		
4.	To Terminal 8. on tuner (mixer/osc. collector)	455 Kc/s	Adjust iron core of 2nd IF. trans. for max output
5.	To test pin "A" (RF. amp. collector)	455 Kc/s	Adjust iron core of 1st IF. trans. for max. output

BROADCAST ALIGNMENT

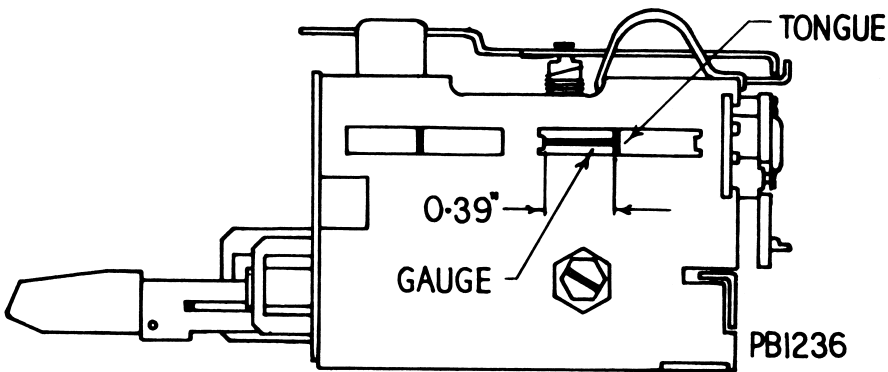
If the receiver logging is satisfactory the signal circuits may be aligned as detailed.

1. Connect IF. attenuator to test pins "B" and "C" (resistor to pin "C")
2. Aerial Lead-in Socket - 65 pF. dummy in series 1000 Kc/s Tune receiver to generator frequency. Adjust RF. and both aerial trimmer capacitors for max. output.

BROADCAST ALIGNMENT

When iron cores or tuning unit coil assy. have been replaced or if station logging is outside limits.

Oper. No.	Generator Connection	Generator Frequency	Instructions
1.	Connect IF. attenuator to test pins "B" and "C" (resistor to pin "C").		
2.	Turn perm. tuner against high frequency end of travel stop. Set all iron cores so that not less than 1/8" of shaft protrudes out through front panel of receiver.		
3.	To aerial Lead-in Socket. 65pF. dummy aerial series	1625 Kc/s	Adjust Osc. RF and both Aerial trimmer capacitors for max. output.
4.	In the side of tuning unit, opposite end to tuning spindle there are two slots; place a gauge in the form of a flat piece of metal 0.39" wide into slot nearest rear of tuner. The 0.39" gauge is to be against projection at front edge of slot. Refer diagram. NOTE. Do not strain or tilt core carriage. Gently turn tuning spindle until the metal tongue touches the gauge.		
	As oper. 3.	1000 Kc/s	With tuner set in position detailed, adjust Osc. , RF. and both Aerial iron cores for maximum output.
5.	As oper. 3.	600 Kc/s	Rock tuning control through signal, adjust Osc. shunt coil iron core for max. output.
6.	Turn tuning control to low freq. end of travel (iron cores full in). Tune signal generator to receiver. The low freq. tuning limit should be between 510 and 528 Kc/s.		
7.	Repeat operation 4.		
8.	Align dial pointer.		



SETTING OF DIAL POINTER

Disconnect the IF attenuator.

Disconnect the generator cable from dummy aerial then connect 20 ft. , of aerial wire to the dummy aerial terminal.

Accurately tune the receiver to a station marked on the dial near 1000 Kc/s. Using a screwdriver, adjust by bending the pointer carriage arm so that pointer coincides with the centre of the tuned station call sign.

Check dial logging and if necessary readjust pointer carriage arm.

MODEL PP-C10G

PRODUCTION CHANGES

A noise reduction circuit is now being incorporated in current production receivers.

The circuit switch is mounted concentric with the tuning spindle and is operated by turning the passenger side rear knob anticlockwise.

When the switch is turned to the noise reduction position the normal tone control becomes inoperative.

The diagram shown on page 2 shows circuit detail.

The tuner unit which includes the switch assy. is available under Part No. 4050-039-06.

The switch assy. which includes the tuning spindle and drive pinion is available as Part No. 4059-111-02.

Early production tuners may be modified by removing original drive bracket and fitting a new bracket Part No. 7028-196-01.

The switch and drive spindle assy. is then attached to the bracket with original fastenings.

Wire switch and .006uF capacitor, circuit No. 40, as shown on circuit page 2.

Circuit No. 40 .0068uF Polyester Capacitor 10% 400 V 4009-004-03

CHANGE OF RESISTOR VALUES IN OUTPUT TRANSISTOR BIAS NETWORK

To conform with the requirements of the characteristics of the transistors used in current and future production receivers, the following resistors have been changed.

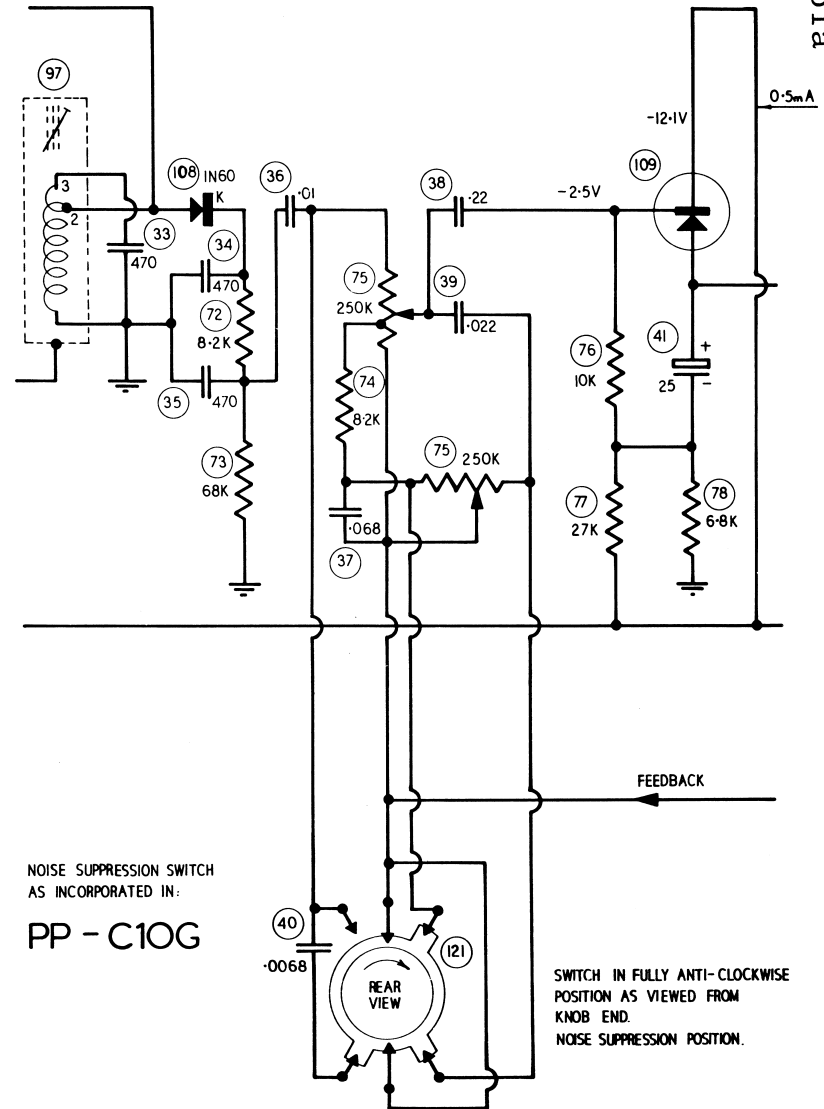
Circuit No. 85, 220 ohm changed to a 270 ohm wire wound 5% 5 watt resistor, Part No. 4024-048-01.

Circuit Nos. 86 and 87, 1.2K ohm changed to 1.5K ohm carbon, 10% 1/2 watt resistors, Part No. 4022-007-01.

NOTE: Depending on the bias adjustment these resistors may be omitted or in other cases one only may be fitted.

OUTPUT TRANSISTORS TYPE AT1138

Due to supply position type AT1138 transistors may be used in place of type 2SB337. No circuit changes are required and the bias adjusting procedure detailed in Service Data PP-C10G-1 applies.



NOISE SUPPRESSION SWITCH AS INCORPORATED IN:

PP - C10G

SWITCH IN FULLY ANTI-CLOCKWISE POSITION AS VIEWED FROM KNOB END. NOISE SUPPRESSION POSITION.