

ALIGNMENT PROCEDUREEQUIPMENT

Signal Generator - modulated 400 Hz
 Output Meter - 15 Ohms Impedance
 Generator Series Capacitor - .1uF Part No. 4009-008-20 for I.F. Alignment
 I.F. Attenuator - Part No. 4121-014-01
 Dummy Aerial - 65pF Part No. 4121-009-01
 Alignment Tools :

- Flat Metal Blade Type; Part No. 4121-001-01 for I.F.T. and Osc. shunt coil adjustment.
- Chisel Point Type : Part No. 4121-005-01, for Aer. and RF trimmer capacitor adjustment.
- Hexagonal Socket Type : Part No. 4121-028-02, for Osc. trimmer capacitor adjustment.
- Alignment Gauge : Part No. 4121-022-02 for tuner 1000 KHz position.
- Tuning Unit Iron Core Adjustor: Part No. 4121-008-01

Collector Current Meter Connection : Socket Part No. 4078-018-01.

CONDITIONS

Remove screws and hinge top lid upward.
 Volume Control - maximum, upward.
 Tone Control - maximum treble, upward.
 Noise Suppression Switch - "OFF"
 Output Meter Connection - Socket, adjacent to battery lead entry.
 Output Level - 50 Milliwatts, speaker disconnected.
 Supply voltage - 13.0V DC.
 Supply Connection - Positive supply lead to receiver lead.
 Negative supply lead to receiver chassis.

INTERMEDIATE FREQUENCY TRANSFORMER ALIGNMENT

Turn tuning control until cores of tuner unit are out of coil windings. Insert .1uF capacitor in series with generator "hot" lead.

Oper. No.	Generator Connection	Generator Frequency	Instructions
1	To test pin "A" (base of Mixer stage.) and return lead to test pin "C" (negative line.)	455 KHz	Adjust iron core of 4th IF trans. for max.output.
2	As oper. 1	455 KHz	Adjust iron core of 3rd IF trans. for max.output.
3	As oper. 1	455 KHz	Adjust iron core of 2nd IF trans. for max.output.
4	As oper. 1	455 KHz	Adjust iron core of 1st IF trans. for max.output.
5	Repeat operations No. 3 and 4 until max. output is obtained.		

BROADCAST ALIGNMENT

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

- Connect IF. Attenuator to test pins "B" and "C" (resistor to pin "C")
- Aerial Lead-in Socket-65pF 1000 KHz Tune receiver to generator frequency. Adjust RF and both aerial trimmer capacitors for max. output.

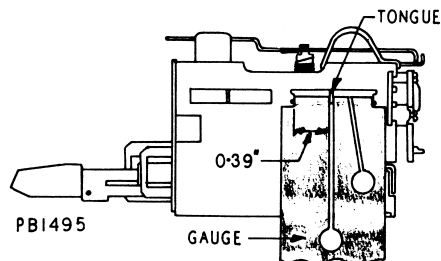
AERIAL TRIMMER ADJUSTMENTIMPORTANT

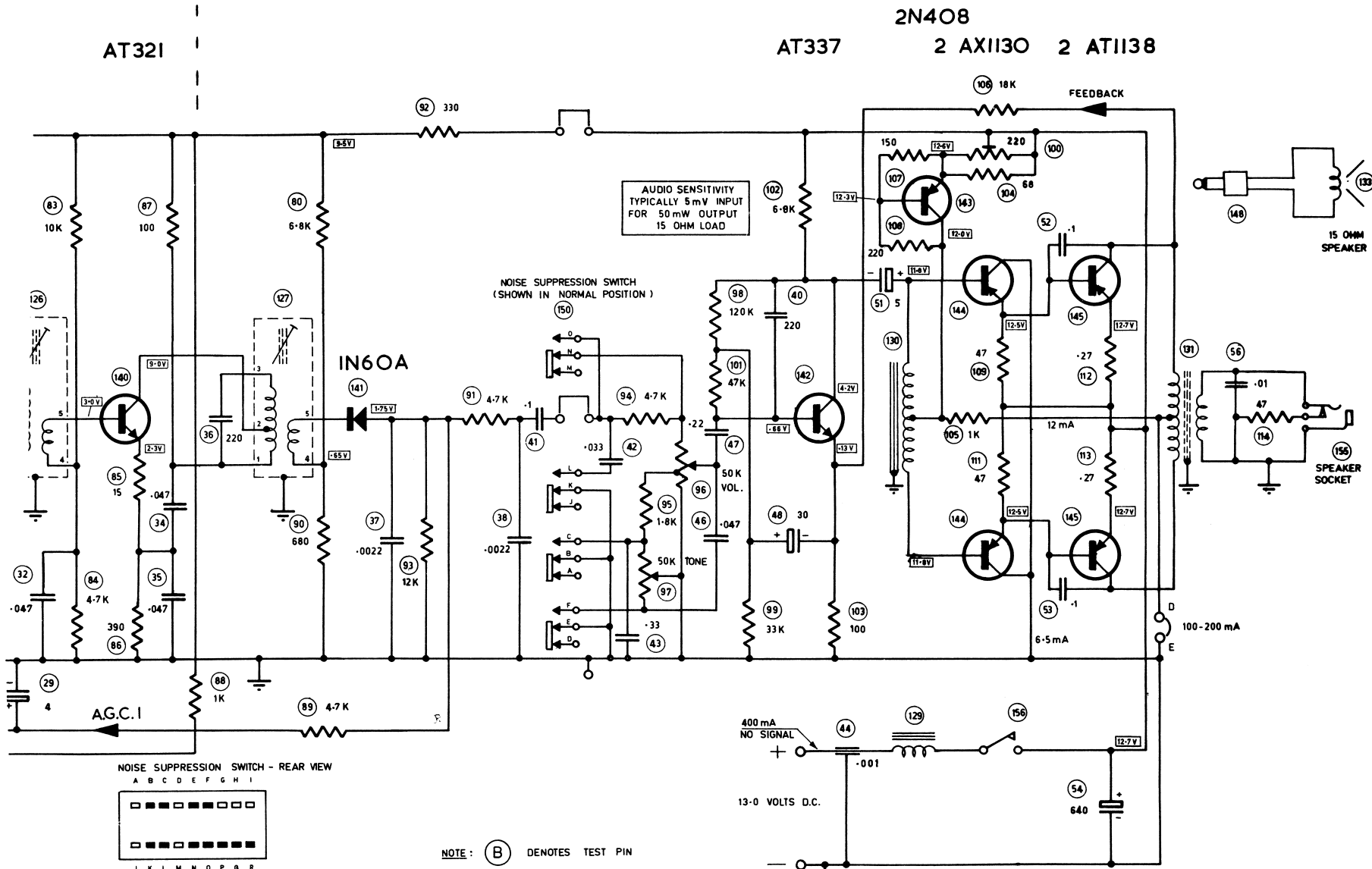
When the receiver has been installed in the vehicle and the aerial connected the aerial trimmer must be readjusted. Pull the large outer rod of the fully retractable aerial upward against the stop in aerial base. Adjust knob on passenger side of receiver for maximum output on a weak station near 1000 KHz (approx. centre of dial).

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 in series 1625 KHz		Adjust Osc. RF and both aerial trimmer capacitors for max. output.
4	Partly push in one of the push button knobs to release clutch before inserting gauge.		
In the side of tuning unit, opposite end to tuning spindle there are two slots; place the notched blade of gauge into the slot nearest rear of tuner. The 0.39" section of gauge is to be against the projection at front edge of slot. Spring fingers of gauge are to be at rear of tongue. Refer diagram.			
<u>NOTE:</u> Do not strain or tilt core carriage.			
As oper. 3		1000 KHz	With tuner set in position detailed, adjust osc., RF and both Aerial iron cores for maximum output.
5	As oper. 3	600 KHz	Rock tuning control through signal, adjust osc. shunt coil for maximum output.
6	Turn tuning control to low frequency end of travel (iron cores full in). Tune signal generator to receiver. The low frequency tuning limit should be between 510 and 528 KHz.		
7	Repeat operation 4.		
8	Align dial pointer.		

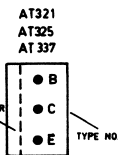
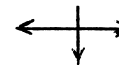




MODEL PN C19U

II TRANSISTOR PUSH-BUTTON
NEGATIVE TO CHASSIS

DRAWN	DATE	CHK'D	APP'D	DATE
	5-2-69	D. H.		7-3-69

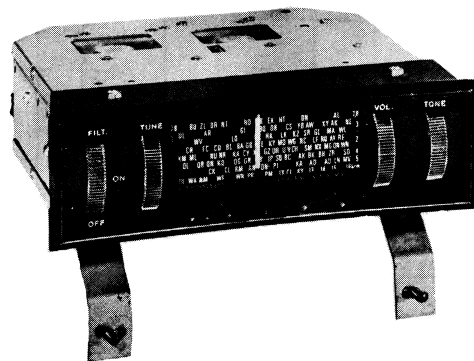


Astor PN-C19U

PUSH BUTTON 11 TRANSISTOR 12 VOLT NEGATIVE TO CHASSIS CAR RADIO

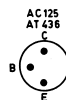
ESPECIALLY DESIGNED FOR DODGE PHOENIX

WARNING : BATTERY CONNECTION OF INCORRECT POLARITY WILL DAMAGE THE RECEIVER. BATTERY LEAD OF THESE RECEIVERS MUST BE CONNECTED TO THE POSITIVE TERMINAL OF SUPPLY. CONNECT NEGATIVE SUPPLY LEAD TO RECEIVER CHASSIS.



Tuning Range : 525 - 1630 KHz
Intermediate Frequency : 455 KHz
Supply Voltage : 13.0 Volts D.C.
Current Consumption : 250 milli Amps
Power Output : 8 Watts
Speaker Impedance : 15 Ohms

TRANSISTORS
UNDERSIDE VIEW



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 KHz.

Using a screwdriver, adjust by bending the pointer carriage arm so that the pointer coincides with the centre of the tuned station call sign.

Check dial logging and if necessary, readjust pointer carriage arm.

SETTING THE PUSH BUTTONS

1. Unlock the push buttons by pulling outward.
2. Tune a desired station with the manual tuning thumbwheel.
3. Press one of the push buttons fully in.
4. Repeat the above procedure to set remaining four buttons.

INTERFERENCE REDUCTION SWITCH

Interference and static which originates in power lines, trams, welders, electrical storms etc., may be reduced through the use of the Interference Reduction Switch.

To reduce the interference make certain the radio is tuned accurately to the station, then turn the 'ON/OFF' switch thumbwheel upward to the 'FILT' position.

The switch should be returned to the 'ON' position to obtain the best sound quality under good reception conditions. It should be noted that the switch over-rides the action of the tone control which is in-operative whilst the Interference Reduction Switch is in the 'FILT' position.

SUMMARY OF PRODUCTION CHANGES

CIRCUIT No.

62	Changed to 180K ohm 10% 1/2W	Part Number	4022-014-03
66	Changed to 10K ohm 10% 1/2W	Part Number	4022-004-01
89	Changed to 12K ohm 10% 1/2W	Part Number	4022-029-01
143	Changed to transistor type AC125	Part Number	4128-039-01
144	Changed to transistor type 2-AT436	Part Number	4128-167-01