

ACCESS TO CHASSIS

- (a) Open record changer storage compartment lids.
- (b) Remove two circular nuts from front wall of record storage compartment and one from record changer compartment.
- (c) Move cabinet front section forward and downward on the hinges until held by support cord.
- (d) Most service adjustments may be performed with the chassis retained in this position.

REMOVAL OF RECEIVER CHASSIS

- (a) Open front of cabinet as detailed in paragraph 1.
- (b) Note: Before disconnecting speakers and pick-up leads, note lead colours and terminations to avoid incorrect channel connections when reconnecting.
- (c) Disconnect support cord and support cabinet front with a box or some other suitable object.
- (d) Remove screws securing speaker switch to escutcheon, disconnect speaker and pick-up leads, aerial and earth leads and record changer motor leads from chassis junction block.
- (e) Pull mains lead and plug through opening in cabinet back.
- (f) Remove the four screws fastening escutcheon mount brackets to cabinet front and remove the four screws fastening chassis brackets to cabinet front.
- (g) Lift chassis and escutcheon assembly clear of cabinet front.
- (h) Refitting chassis and escutcheon assembly is the reverse procedure to removal.

REMOVAL OF RECORD CHANGER

- (a) Open front of cabinet as detailed in paragraph 1.
- (b) Disconnect record changer motor leads at the chassis junction block.
- (c) Note colours and lead terminations then disconnect the pick-up leads from chassis sockets.
- (d) Turn changer transit screws fully clockwise then rotate clip on end of each screw to a vertical position.
- (e) Lift changer upward off motor board and out of cabinet.
- (f) Refitting the changer unit is the reverse procedure to removal. With transit screws fully clockwise rotate clip on end of each screw to a horizontal position.

RECORD CHANGER TRANSIT

- (a) Before transporting, the changer transit screws must be turned fully anti-clockwise until unit mount plate is firm against mount board.
- (b) Place pick-up arm on rest pillar and fasten with cord.
- (c) Lift overarm at pivot end, swing the overarm to the right over pick-up and fasten with cord.
- (d) Before use untie the overarm and pick-up arm then turn transit screws fully clockwise to release changer unit suspension.

DIAL GLASS REPLACEMENT

- (a) Open front of cabinet as detailed in paragraph 1.
- (b) Remove chassis and escutcheon assy. as detailed in paragraph 2.

- (c) Pull off the six push-on type knobs then remove barrel nuts and washers from control bushes.
- (d) Lift escutcheon clear of chassis and remove four nuts and metal support frame.
- (e) Fit new dial glass into cavity in escutcheon and refit support frame and nuts. Securely tighten.
- (f) Refit escutcheon to chassis.

POWER TRANSFORMER MAINS TAP ADJUSTMENT

- (a) Open front of cabinet as detailed in paragraph 1.
- (b) The mains input tap terminal strip is located on the chassis near the power transformer.
- (c) Unsolder the mains lead from 230/240 volt tap lug and connect lead to input tap terminal corresponding to the mains supply voltage, i. e., 200 or 250 volts.

AUDIO AMPLIFIER GAIN AND BALANCE TEST

- Function Switch
- Volume Switch
- Tone Control
- Microphone Volume Control
- Output Meter and Speaker
- AF. Generator Frequency
- AF. Generator Connection
- Mono position
  - Maximum volume (fully clockwise)
  - Maximum treble (fully clockwise)
  - Minimum volume (fully anticlockwise)
  - Output meter to one channel output (speaker disconnected) and a speaker connected to other channel output.
  - 1000 c. p. s. - 600 ohm output impedance.
- Before proceeding, identify pick-up lead plugs to receiver sockets. Remove plugs and connect generator output lead to both sockets.

Set generator output to 200mV (0.2 volts RMS). Turn Balance Control to stop position at one end and note meter reading.

Transfer output meter and speaker connections to opposite channels.

Turn Balance Control to opposite stop position and note meter reading.

The output from each channel should be between 100 and 300 milliwatts and the difference in output between the channels must not exceed 3dB. Set the Balance Control so that the output from each channel is identical. The position of the control should be approximately midway between fully anticlockwise and clockwise positions.

MICROPHONE AND GUITAR PREAMPLIFIER

Connect generator to both microphone jack sockets. Set generator output to 2 mV. (0.002 volts RMS). Turn Microphone Volume Control to maximum (fully clockwise) and set volume control to minimum (fully anticlockwise). Adjust Balance Control to obtain identical output from each channel which should be between 100 and 300 milliwatts.

With controls set as above, connect generator output to Guitar jack socket. Output from one channel only should be between 100 and 300 milliwatts.

SPEAKER PHASINGIMPORTANT:

If speaker lead plugs are to be removed from receiver sockets, identify left and right hand channel outlets and lead plugs to prevent wrong connection.

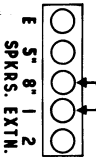
It is essential that the speakers be phased correctly. If the speaker is removed for service, note lead connections to ensure correct phasing when reconnecting. A method for checking the phasing is detailed below.

- (a) Play a monophonic record.
- (b) If the phasing is correct, the reproduced sound will appear to be radiated from a point near the centre of the cabinet. The listener should be located 4 feet away in front of the cabinet.
- (c) With incorrect phasing the quality of reproduction will be poor. It will appear to be lacking in bass response and will appear to be radiated from both ends of the cabinet.
- (d) If the speakers are incorrectly phased, reverse the leads connected to the voice coil terminals of one of the eight inch speaker then repeat the test detailed above. The green and black terminals of the five inch speakers are to be connected to the green and black terminals of the adjacent eight inch speaker.



## ASTOR MODEL G6E

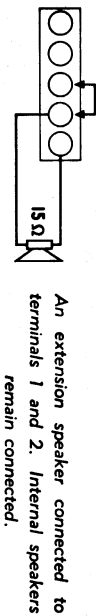
## CONNECTIONS TO SPEAKER TERMINAL STRIPS



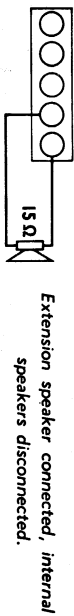
Links on terminal strips for use as normal stereogram.  
Identical strips for left and right channels.

## EXTENSION SPEAKERS

If two extension speakers are required, connect one to each strip.

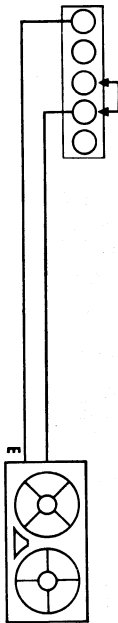


An extension speaker connected to terminals 1 and 2. Internal speakers remain connected.

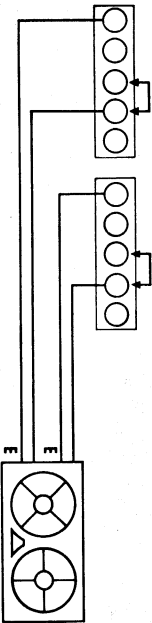


Extension speaker connected, internal speakers disconnected.

## TAPE RECORDERS



To connect a mono tape recorder for recording from radio, microphone or records (mono or stereo), use either the left or right terminal strip.  
Set tone control to fully clockwise position.  
Function switch to Mono.



To connect a stereo tape recorder for recording stereo.  
Function switch to Stereo.

## ALIGNMENT EQUIPMENT

- R. F. Signal Gen - modulated 400 cps.
- Output Meter - 15 ohm imped.
- .01mf Capacitor - Part No. 4003-031-02
- Alignment Tools:-
- Blade tip type, Part No. 4121-015-01 (trim caps. adj. and IFT core adj.)
- Flexible rod type Part No. 4121-018-01 (osc. core adj.)
- I. F. Attenuator Part No. 4121-007-02

## ALIGNMENT CONDITIONS

The chassis does not have to be removed from the cabinet for alignment purposes; refer paragraph: ACCESS TO CHASSIS.

- Function Switch - Radio position
- Volume Control - Max. vol. (fully clockwise)
- Tone Control - Max. treble (fully clockwise)
- Balance Control - Mid position
- Output Level - 50 milliwatts
- Output Meter - Across sec. of one output trans
- Connection - Speaker voice coil disconnected.

## INTERMEDIATE FREQUENCY TRANSFORMER ALIGNMENT

**IMPORTANT:** Maximum output peaks will be obtained at two positions of transformer cores. Correct setting is where cores are furthest apart.

Oper. No.	R. F. Sig. Gen. Connection	Generator Frequency	Instructions
1.	.01mf cond. in series to grid end of rod aerial.	455 Kc/s	Turn tuning control to HF. end of travel. Peak 2nd IFT. pri. and sec. cores for max.
2.	As oper. 1	455 Kc/s	Peak 1st IFT. pri. & sec. cores for max.

## DIAL POINTER SETTING

Turn tuning capacitor to L. F. end of travel; plates fully meshed. Set centre of dial pointer on centre of end of travel spot at left end of dial.

## BROADCAST ALIGNMENT

- A. To inject a signal into rod aerial, connect to Sig. Gen. active terminal approx. two feet of aerial wire, then fashion wire to a vertical position.
- B. Place vertical wire in line with, and not less than 1 ft. from inductance trimmer end of rod aerial.
- C. Connect I.F. attenuator between pin 2 of 6N8 socket and chassis.

Oper. No.	R. F. Sig. Gen. Connection	Generator Frequency	Instructions
1.	Refer para. A & B.	600 Kc/s	Turn tuning gang and dial pointer to 600 Kc/s dial mark. Leave gang and pointer set in this position. Adjust oscil. coil core and rod aerial ind. trim (metal ring) for max. output.
2.	Refer para. A. & B.	1400 Kc/s	Turn tuning gang and pointer to 1400 Kc/s dial mark. Adjust oscil. and aerial trimmer capacitors for max. output
3.	Repeat operations 1 and 2.		Tuning range after alignment 525 to 1640 Kc/s. approx.