GENERAL ELECTRIC
ELECTRONICS SECTION

RS15T1C
RSC15T1C

CHASSIS DESIGNATION

RS15T1C: Basic 15 Transistor Radio Stereogram Chassis

RSC15T1C: As above with provision for 117V AC Tapedeck

These Chassis comprise two printed boards, covering the RF and stereo audio stages, mounted on a base plate incorporating the controls, switches, power supply and ferrite rod aerial. The Chassis, with dial scale attached, mount directly to die-cast escutcheons and form complete modules ready for mounting in cabinets.

The tuner provides an extended frequency range covering the University of the Air transmission.

Other features include treble and bass boost and cut, a 10 kHz whistle filter and jacks for left and right hand channel input and output.

ESCUTCHEON REMOVAL

Remove Five rotary control knobs.

Remove four hexagon head screws (A, fig. 2) securing chassis to escutcheon.

Carefully lift escutcheon and glass panel from chassis.

Note: Panel is lightly attached to escutcheon by adhesive tape. If glass is not moved then registration will be maintained.

Reassembly is reverse of above, taking care glass surfaces are clean.

DIAL SCALE REMOVAL

Remove escutcheon as above.

The dial scale is held by two clamp brackets. Remove one and slacken off the other.

Gently slide dial glass out.

Reassembly is reverse of above.

POTENTIOMETER REMOVAL

Remove escutcheon as above.

Straighten mounting lugs of appropriate control and remove same.

Reassembly is reverse of above.

GANG REMOVAL

Turn gang to fully open position.

Loosen drive drum grub screws.

Carefully remove drive without disturbing dial cord.

Disconnect leads to gang.

With long Shaft screw driver remove three gang mounting screws and gang may be removed.

Reassembly is the reverse of the above.

Check and adjust if necessary alignment and calibration.

DIAL CORD REPLACEMENT. (Refer fig. 1.)

Remove the escutcheon.

Use at least 56" of dial cord.

Adjust the tuning gang to its fully closed position when the slot in the drive drum is in the position shown.

Start with the tied loop and follow the route as indicated.

Finish by tieing off at the spring extended by 50% to provide correct tension.

Attach pointer to drive cord and hook the pointer over the steady cord as illustrated.

Remount the front escutcheon.

Check the tracking on local stations and adjust if necessary.

IDLING CURRENT ADJUSTMENT:

Connect a meter in series with the 26.5 volt lead to the audio board. With 240 volts mains supply, the receiver operating in "gram" mode and both BIAS controls R151 and R152 set fully anticlockwise the current drain should be between 40 and 60 ma. Correct bias is set when each control is adjusted to increase the current in each channel by 5 to 9 ma.

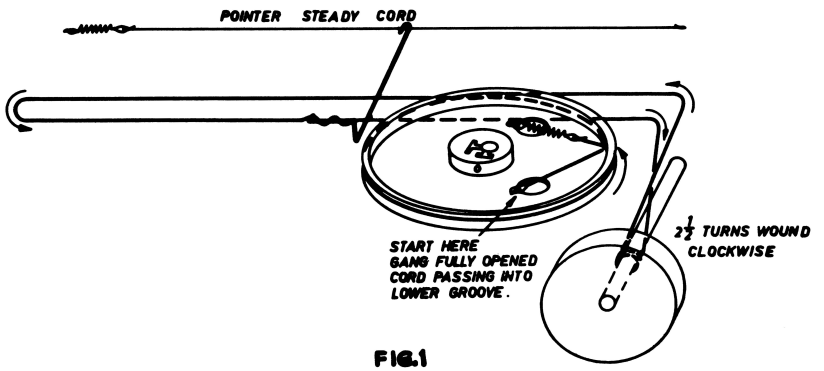


FIG.1

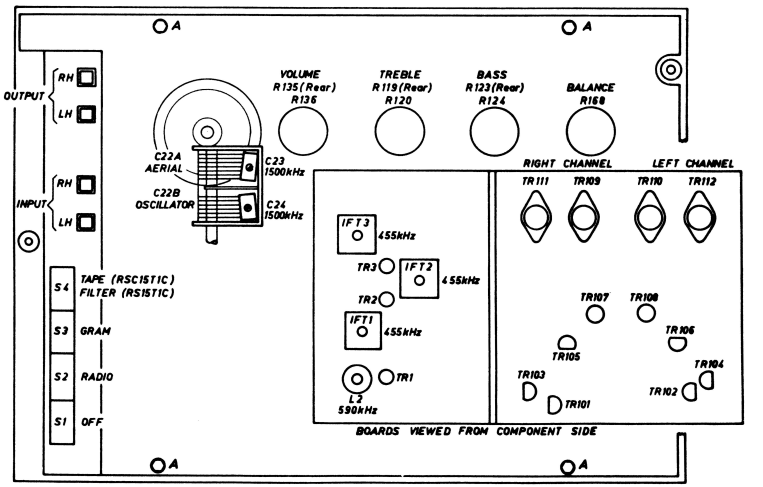


FIG.2

ALIGNMENT

General:

Testing Instruments.
Signal Generator- Modulated 400 Hz
Output Meter - 8 ohms impedance

Set volume, bass and treble controls fully clockwise. Adjust balance control to provide maximum output on meter.

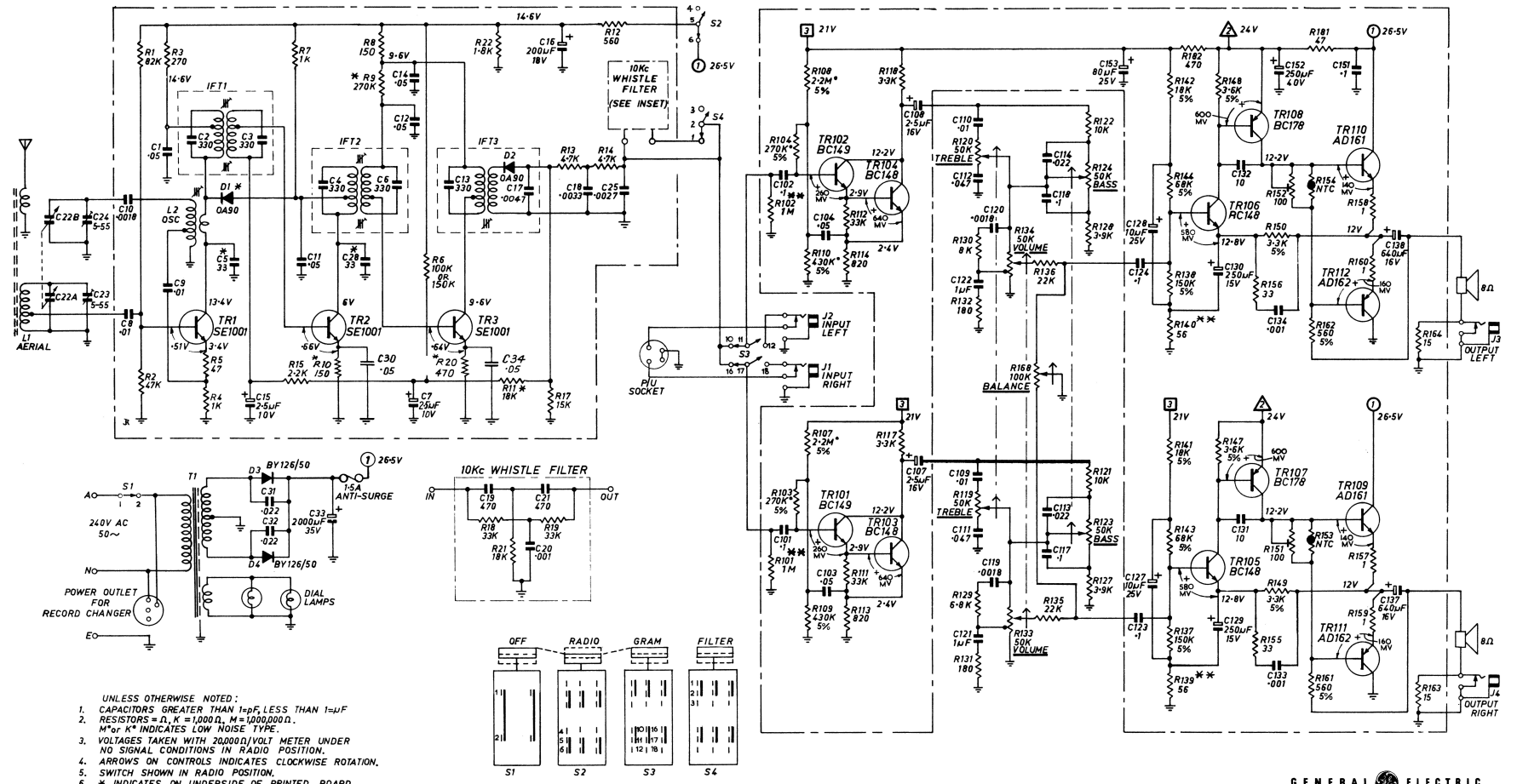
Keep generator output low to prevent A.G.C. action. That is, adjust generator output on 30% modulation to produce receiver output of 100 mW.

All adjustments peaked for maximum output.

Procedure:

STEP	CONNECT GENERATOR TO	SET GENERATOR TO	TUNE RECEIVER TO	ADJUSTMENT
1	Aerial section of gang via a 0.01uF	455 kHz	Lowest frequency (gang fully closed)	Peak IF transformer. Tune top cores of IFT1 and IFT2 to inner peaks and all others to the outer peaks.
	Repeat until maximum output is obtained			
2	-	-	As above	Set pointer to 520 kHz marker on dial.
3	Inductively coupled to aerial rod*	590 kHz	590 kHz mark	Peak aerial coil L1+. Peak oscillator coil L2.
4	As in 3	1500 kHz	1500 kHz mark	Peak oscillator trimmer C24 and aerial trimmer C23.
5	Repeat steps 3 and 4 until no further improvement is obtained then seal trimmers and coils.			

* Connect the signal generator to a coil, comprising of 3 turns of 16 guage D.C.C. wire about 12 inches in diameter placed concentric with, and not less than 1 foot from the rod aerial.
+ Slide coil along ferrite rod to peak and seal in this position.

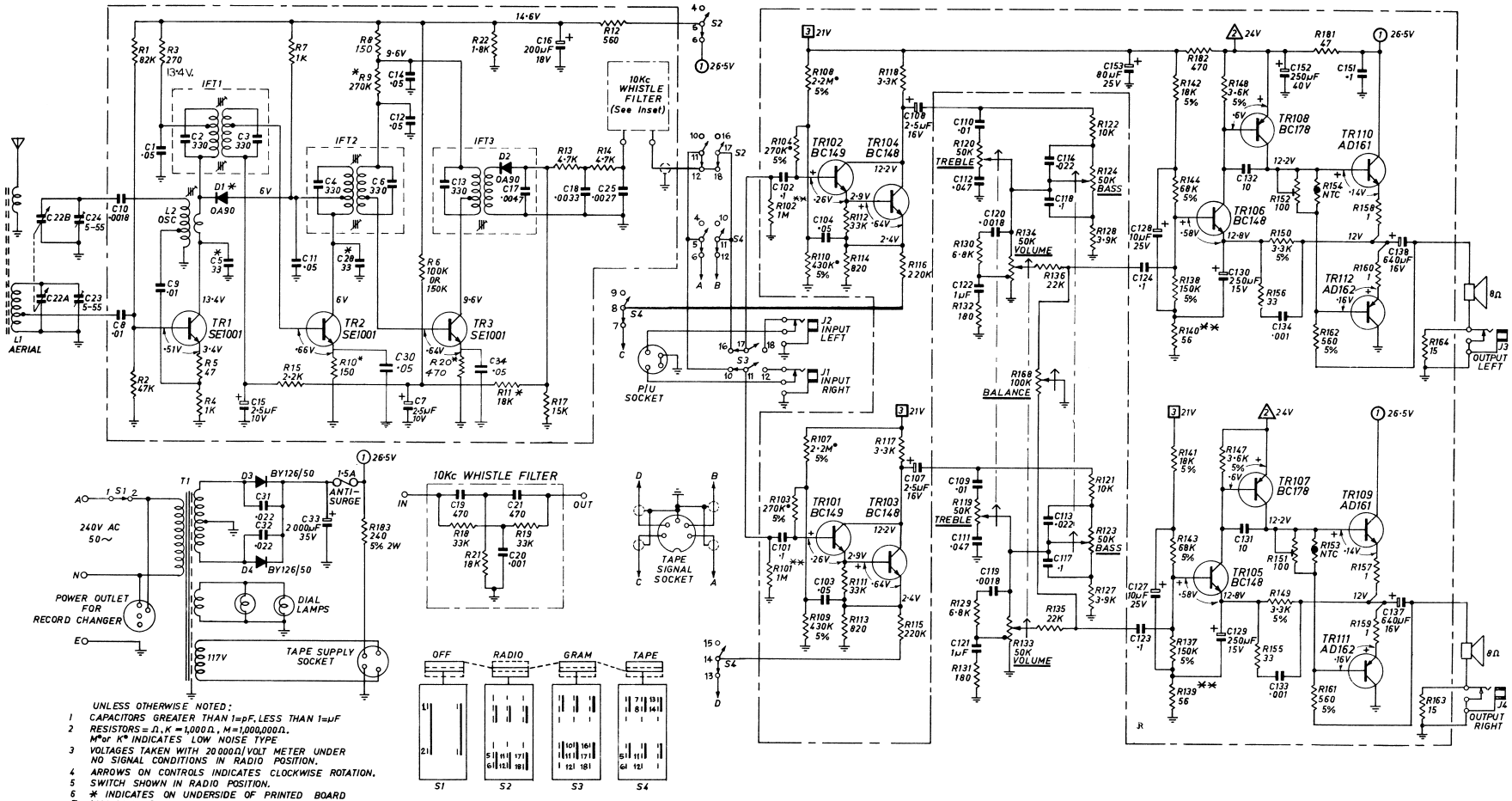


UNLESS OTHERWISE NOTED:

1. CAPACITORS GREATER THAN 1=pF, LESS THAN 1=μF
2. RESISTORS = Ω, K = 1,000 Ω, M = 1,000,000 Ω. M* or K* INDICATES LOW NOISE TYPE.
3. VOLTAGES TAKEN WITH 20,000 Ω/VOLT METER UNDER NO SIGNAL CONDITIONS IN RADIO POSITION.
4. ARROWS ON CONTROLS INDICATES CLOCKWISE ROTATION.
5. SWITCH SHOWN IN RADIO POSITION.
6. * INDICATES ON UNDERSIDE OF PRINTED BOARD
7. ** WHEN BSR SC5M CARTRIDGE IS USED
   R101 & R102 BECOME 3·3 MEG
   R139 & R140 BECOME 33 Ω.

GENERAL ELECTRIC

RS15T1C RADIO STEREOGRAM CIRCUIT



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General Electric RS15T1C & RSC15T1C