

20A CHANGE NOTICE

This is a summary of changes made during production of Multiphase Exciter Model 20A. Some of these changes are applicable to Model 10B and are noted accordingly. This information is presented in accordance with Central Electronics' policy to keep its customers advised of improvements.

The first change occurred on 6-21-54 when an improved 9 MC master crystal oscillator was incorporated using a 6U8 in lieu of the 12BH7. This information will be sent upon request.

Later the 3 mmf capacitor (C72) on pin 7 of the grid of the 12BH7 cathode follower was removed. This increased the 10 meter drive.

In the latter part of 1954 a bad batch of 6AG7 tubes was received from GE. The tube would develop control grid to screen shorts and burn out the 180 ohm series screen resistors R57 and R58. These resistors were removed and jumpers installed so the fuse would blow, instead of a resistor, if a tube shorted. Production switched to RCA type 6AG7 tubes with complete success.

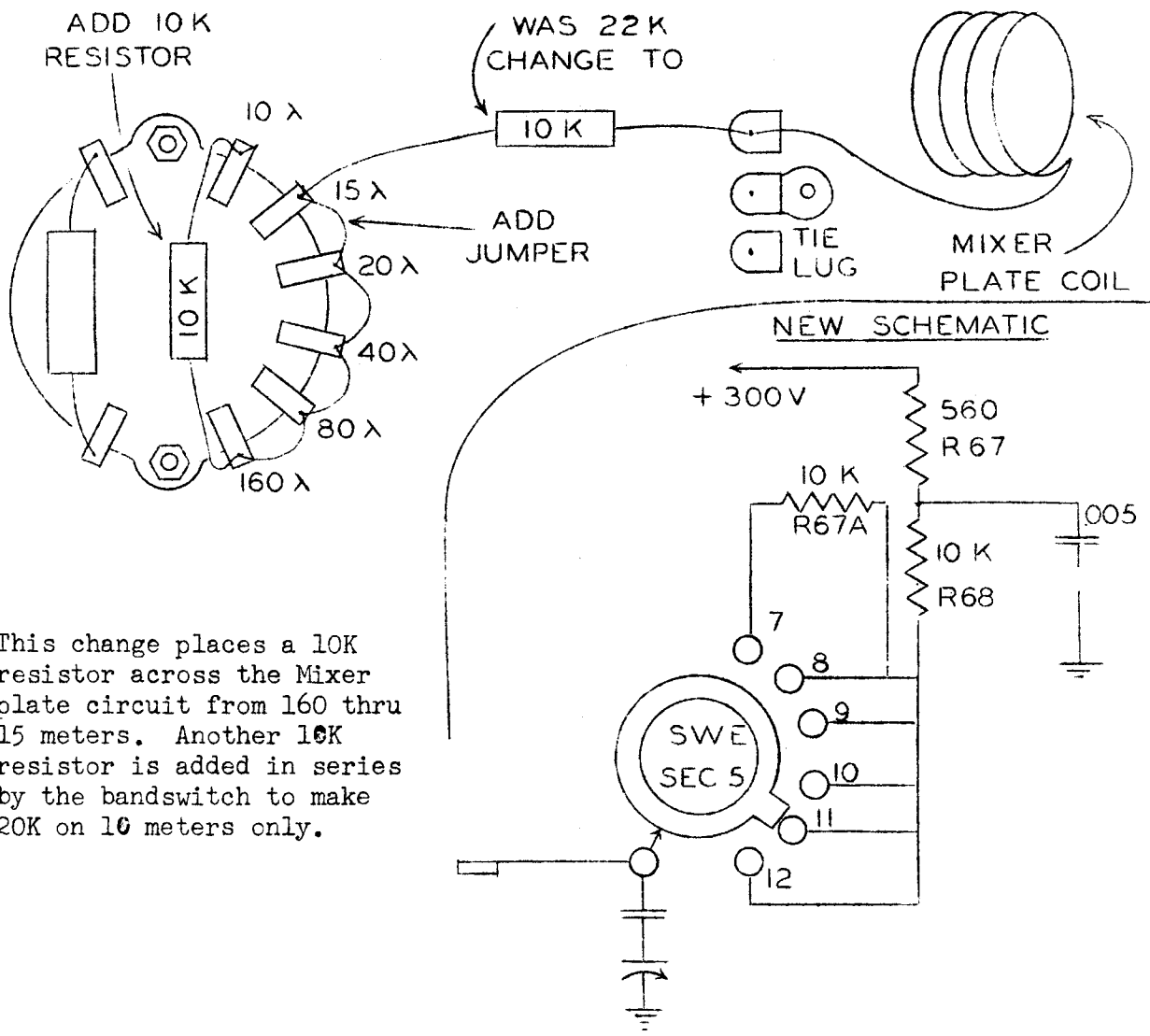
Early production units had a 330 ohm resistor across the VFO input coax. This was removed to raise the mixer injection on 16 MC for improved 40 meter operation.

Some wiring changes to grounds, etc., are shown on the attached Change Notices, as well as information on the voice control relay.

It is recommended that the changes shown on Notice M151 be made to the 6BA7 Mixer plate circuit in the 20A Bandswitch Assembly, if the changes outlined on Notice M149 are made. These changes will raise the 10 meter output to almost equal that obtained on the lower frequencies. The Exciter exhibits no tendency toward parasitics, even without load.

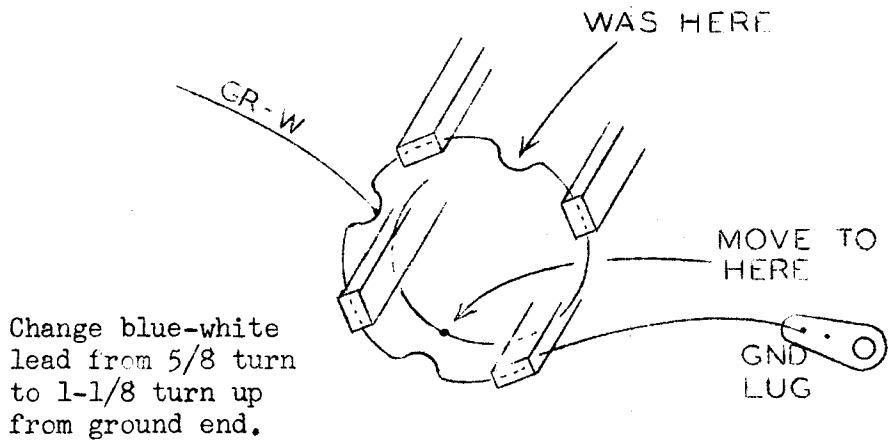
Change tuning slugs in the orange and yellow 15 MC trap coils from half brass and iron to all iron. The brass ring on the slug can generally be removed. This change increases 15 MC rejection.

20 A MIXER CIRCUIT CHANGE



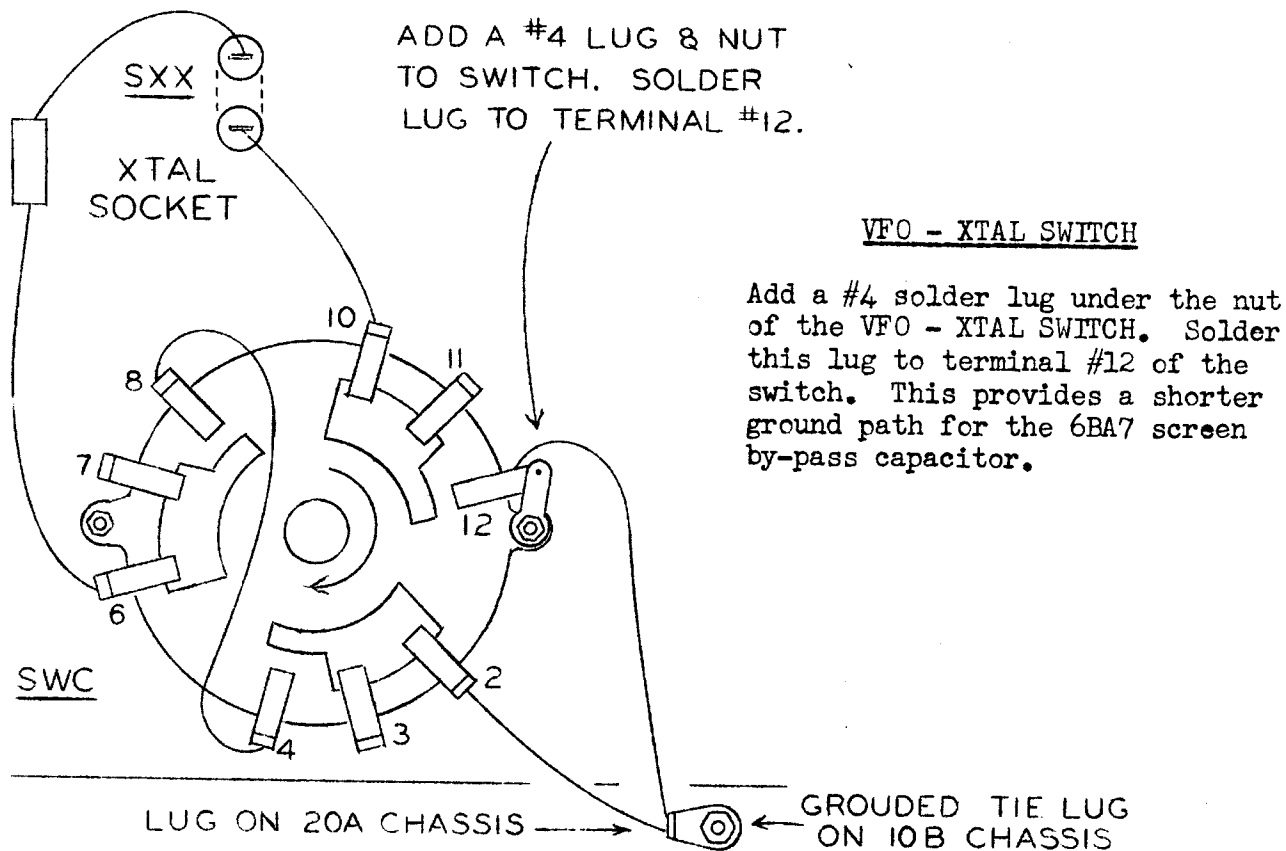
This change places a 10K resistor across the Mixer plate circuit from 160 thru 15 meters. Another 10K resistor is added in series by the bandswitch to make 20K on 10 meters only.

15 METER 6AG7 PLATE COIL CHANGE

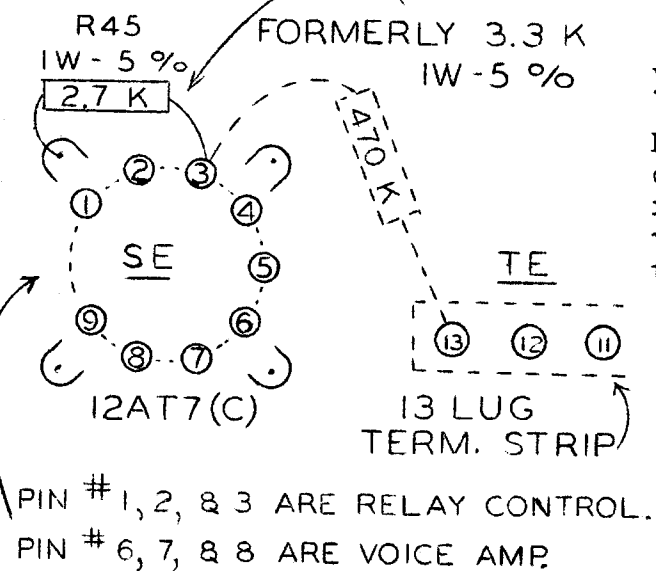


Change blue-white lead from 5/8 turn to 1-1/8 turn up from ground end.

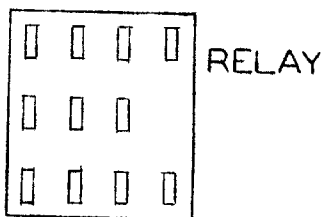
10B - 20A CHANGES



VOICE CONTROL RELAY CIRCUIT CHANGE



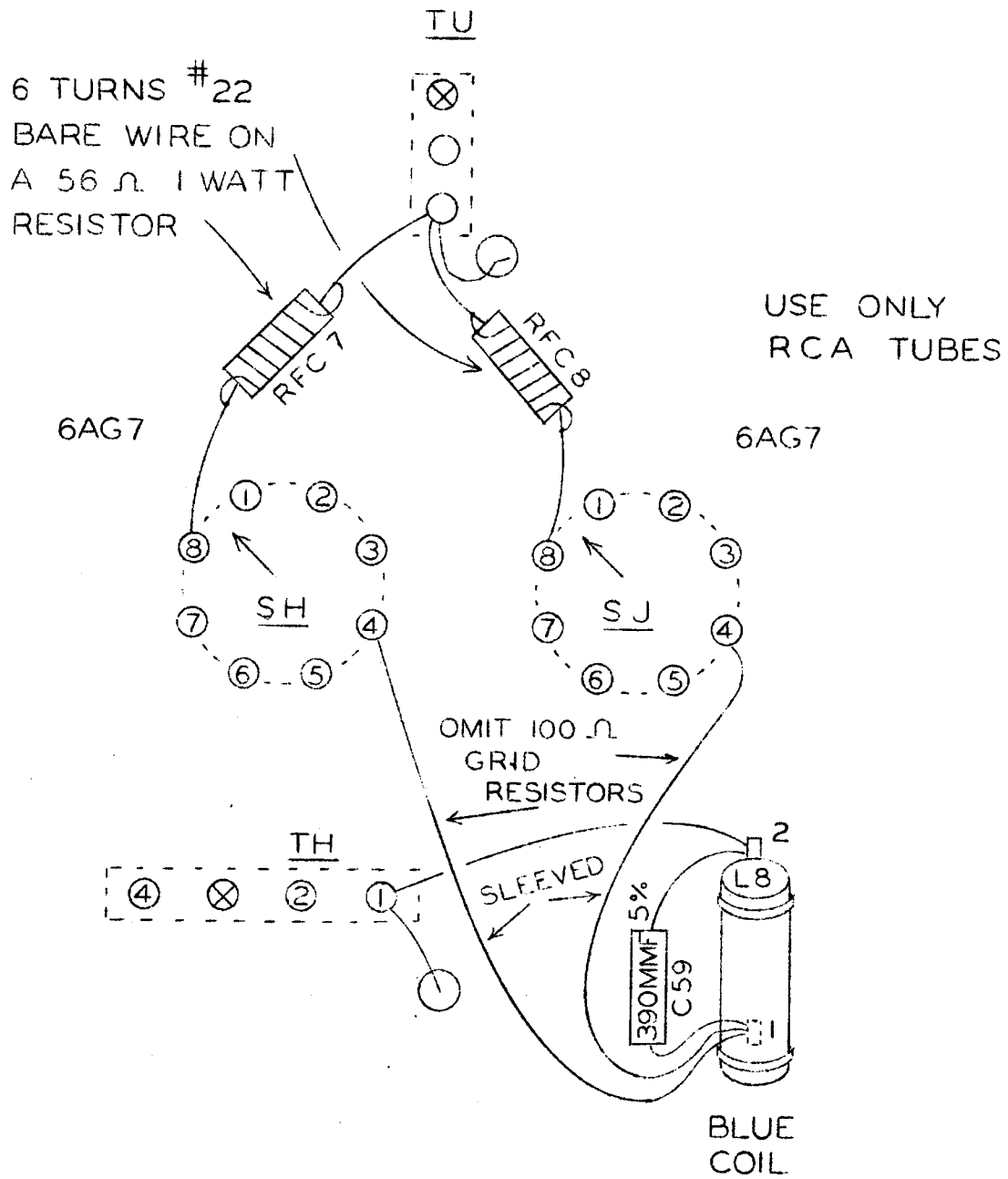
R45, in the cathode of the relay control tube, has been changed from 3.3K 5% to 2.7K 5% in order to lengthen the relay "hold-in" time and sensitivity. If the relay will not release after speaking into the mike, the value of this resistor should be increased.



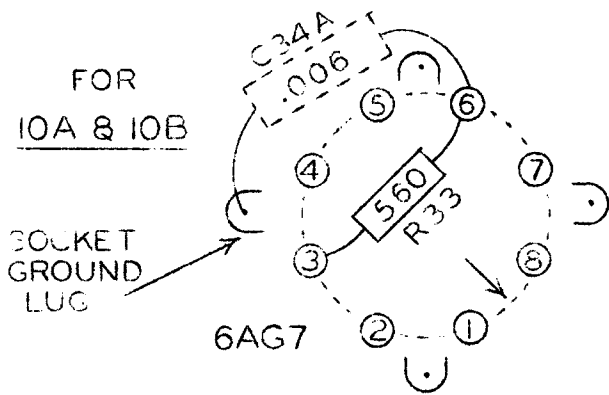
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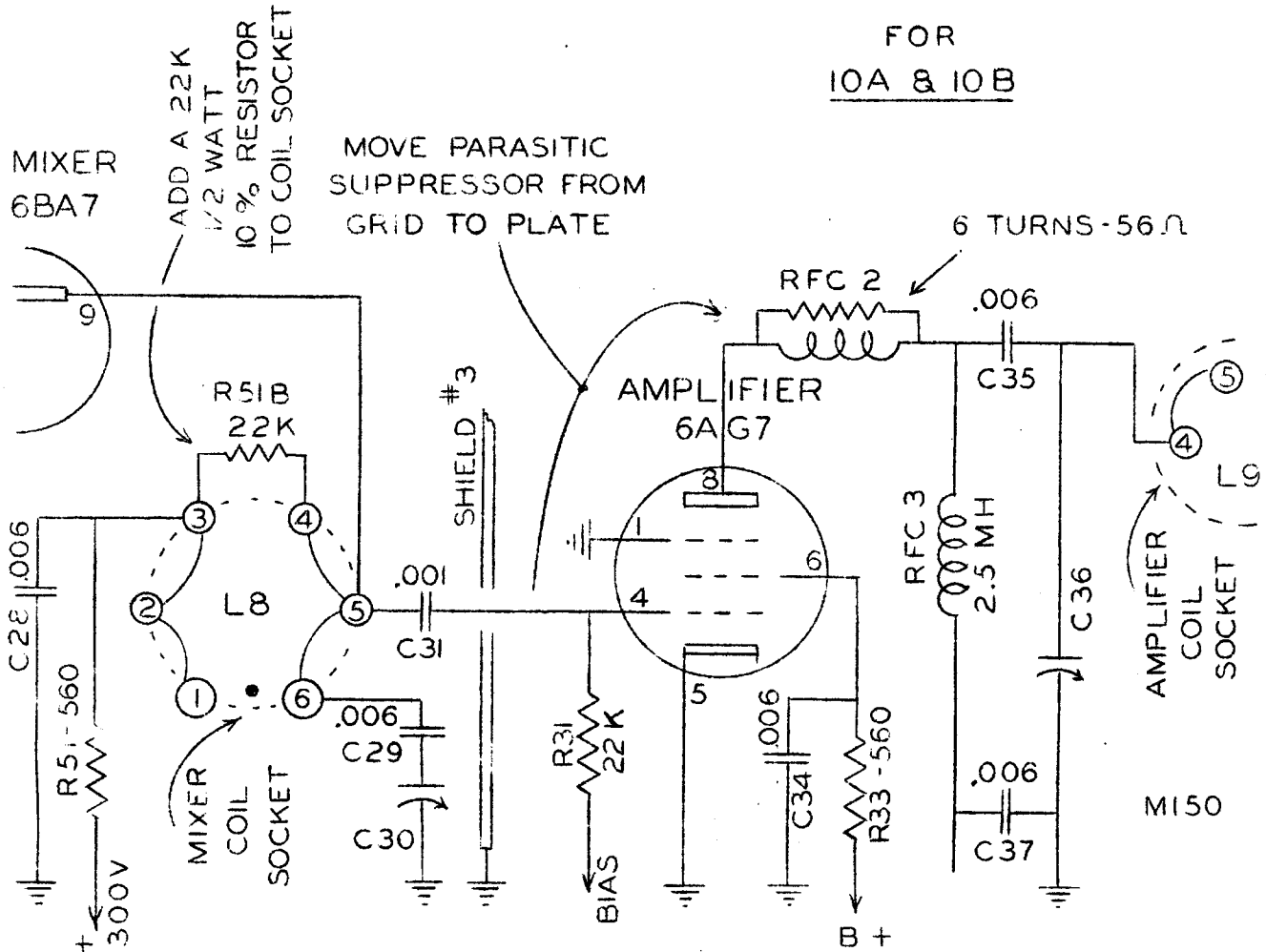
20-A CHANGE NOTICE



CENTRAL ELECTRONICS, INC.



ADD A .006 MICA CAPACITOR FROM PIN No. 6 TO SOCKET GROUND LUG, AS SHOWN. THIS WILL REDUCE THE TENDENCY TOWARD PARASITIC OSCILLATION.



This change raises the 10 and 15 meter output and reduces parasitic tendencies on all bands.

Change tuning slugs in the orange and yellow 15 MC trap coils from half brass and iron to all iron. The brass ring on the slug can generally be removed. This change increases 15 MC rejection.

3-19-56 Rev.
10B - 20A Change
M139