MODEL NUMBER: MR 71

MODIFICATION: This modification increases stereo separation on MR 71 tuners to better than 35 db separation. This modification is in units with serial numbers above 45B00.

DESCRIPTION: The stereo multiplex detector in the MR 71 tuner is a self matrixing detector. It automatically recombines the L+R and L—R stereo information to produce L and R output. The SCA filter causes a slight loss in the L—R portion of the composite multiplex signal. This limits stereo separation to about 30 db. Separation is improved by increasing the difference signal gain in the tuner left and right audio amplifiers while leaving the common signal gain unchanged. This is done by connecting a RC network between the cathodes of the R and L input audio amplifier stages.

PROCEDURE:

1. Connect a 27K 5% ½ watt resistor and a .0015 MF 10% capacitor in parallel. Connect this network between pin #8 on one 6BL8 audio tube to pin #8 on the other 6BL8 audio tube.

2. Feed a multiplex signal modulated with 1KC audio left or right channel only into the tuner antenna input. Tune the tuner to the MPX signal. Align the 19KC phase adjust (coil L5) for maximum stereo separation. It is possible to obtain greater than 35 db separation between channels.

NOTE: Before making this alignment be sure the MPX generator is accurately set up. View the composite stereo signal at the generator with an oscilloscope. Do not attempt to estimate stereo separation by viewing the tuner discriminator output at TP 2. The signal at TP 2 should **NOT** look like an ideal multiplex signal.

MATERIAL NEEDED: 1. ea. resistor, 27K 5% ½w
1. ea. capacitor, .0015 MFD 10%