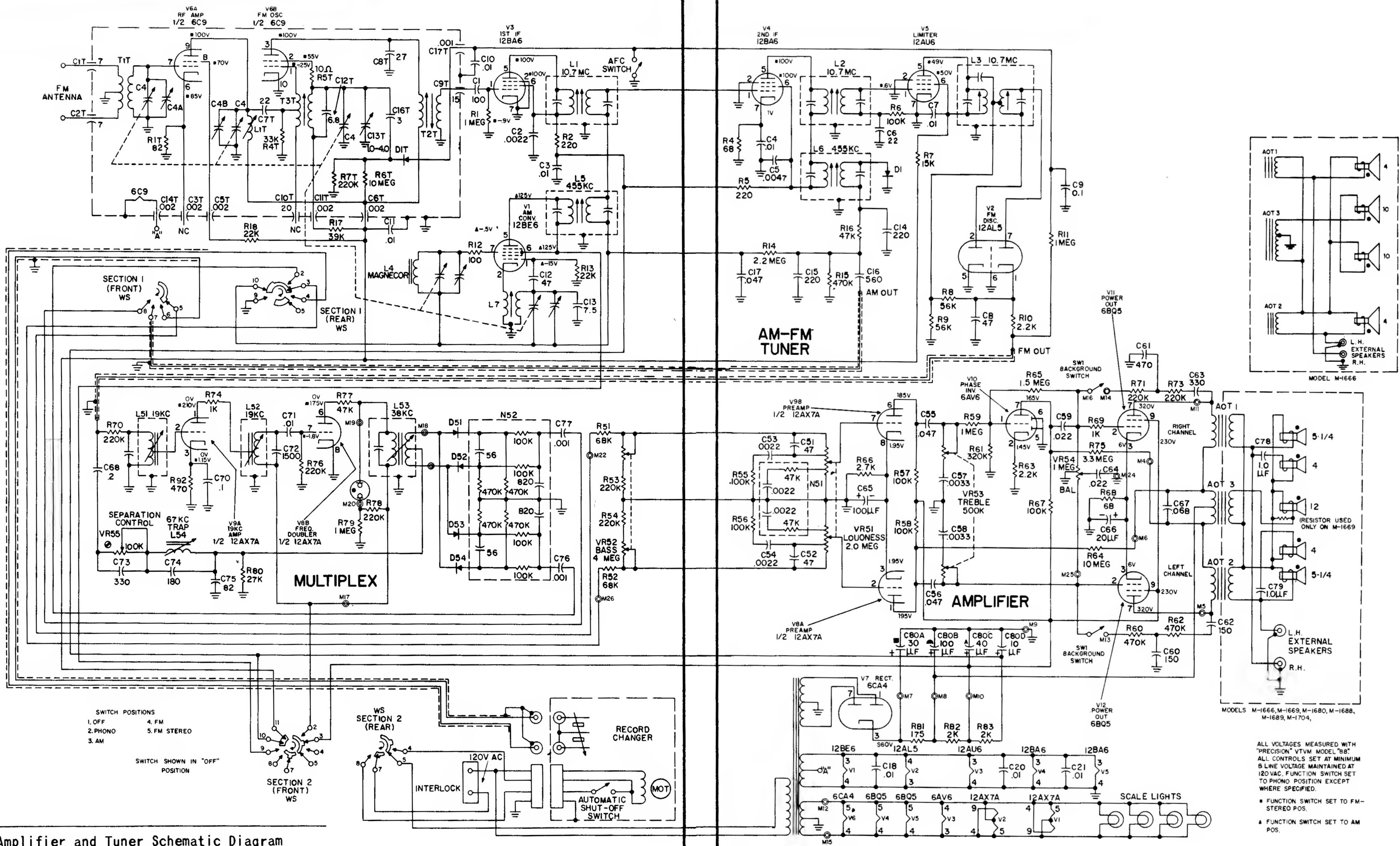


PHILCO

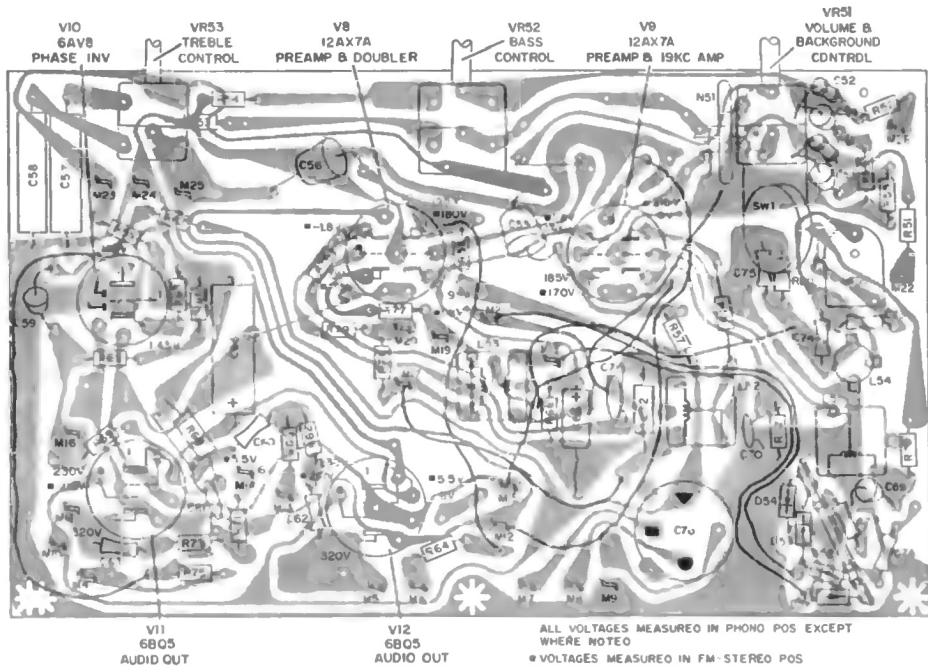
MODELS M-1666, M-1669, M-1680, M-1688, M-1689, & M-1704 AMPLIFIER & TUNER



Amplifier and Tuner Schematic Diagram

ALL VOLTAGES MEASURED WITH "PRECISION" VTVM MODEL "88". ALL CONTROLS SET AT MINIMUM. B LINE VOLTAGE MAINTAINED AT 120 VAC. FUNCTION SWITCH SET TO PHONO POSITION EXCEPT WHERE SPECIFIED.

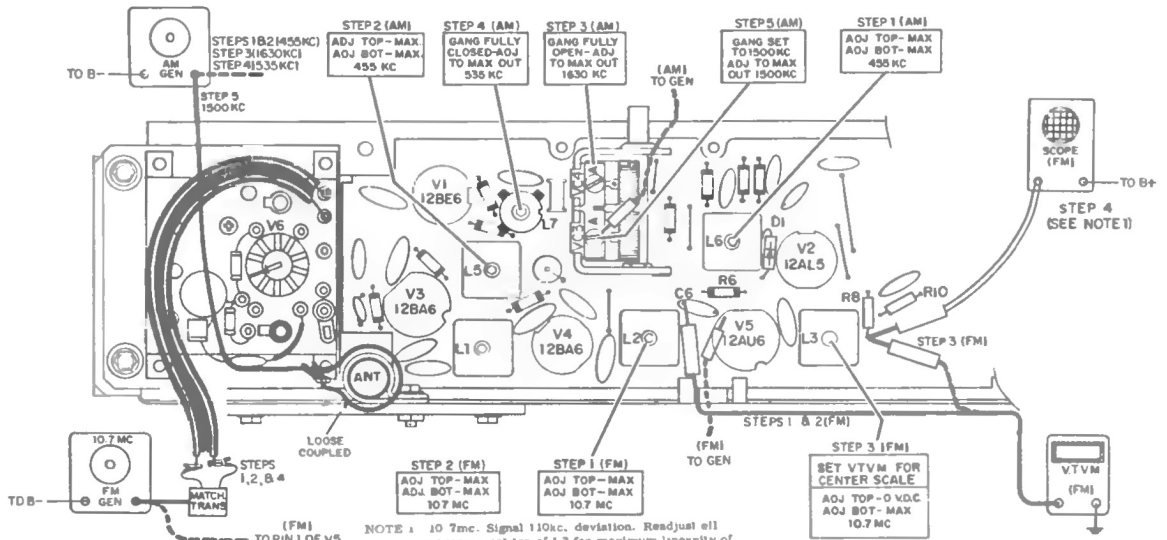
- FUNCTION SWITCH SET TO FM-STEREO POS.
- ▲ FUNCTION SWITCH SET TO AM POS.



Bottom Perma-Circuit View, Parts Location

PRELIMINARY ALIGNMENT INFORMATION

1. Connect amplifier through isolation transformer to eliminate dangerous shock hazard.
2. Allow receiver and test equipment 15 minutes to warm up and stabilize.
3. For AM Alignment -
 - A. Connect VTVM across center output transformer.
 - B. Use 30% modulation on generator for AM alignment.
 - C. Proceed with alignment steps as illustrated in alignment chart.
4. For FM Alignment -
 - A. Connect FM generator, through a 72 ohm to 300 ohm matching network, to antenna terminals.
 - B. Alignment is to be made in FM position. DO NOT USE FM/AFC position.
 - C. Use ± 75 kc sweep deviation for FM alignment.
 - D. Keep generator output as low as possible throughout FM alignment procedure.



Alignment Procedure Chart AM-FM Tuner