## PHONO PREAMPLIFIER MODEL M5C



Electronics Department Receiver Division Syracuse, N. Y.

Phono Preamplifier, Model M5C, is designed to be used with the G-E Variable Reluctance Pickup to provide sufficient voltage gain for operation of the pickup with a standard radio receiver or audio amplifier.

A single dual triode tube, Type 6SC7, is employed and its socket is assembled on a special shock mounting to reduce microphonics. The preamplifier derives its plate and filament voltages from the associated radio or amplifier to which it is connected. Equalizing circuits are incorporated to give essentially flat frequency response, making it unnecessary to provide a correction circuit at the pickup.

A standard phonograph receptacle is mounted on the preamplifier chassis to permit input connection. The output is provided through a 12-inch shielded cable that is fitted with a standard phonograph plug. Fourteen-inch leads are provided for obtaining electrical power for the preamplifier from an associated chassis.

## SPECIFICATIONS:

Tube Type—6SC7 Chassis Dimensions—35%" x 35%" x 11/4" Over-all Height—41/2 inches Weight—12 ozs. Finish—G-E Staybrite Lusteron

INSTALLATION: If possible, permanently mount the preamplifier on the radio receiver or amplifier. It is recommended that some shock mounting be used between the amplifier and mounting member. Machine or self-tapping screws

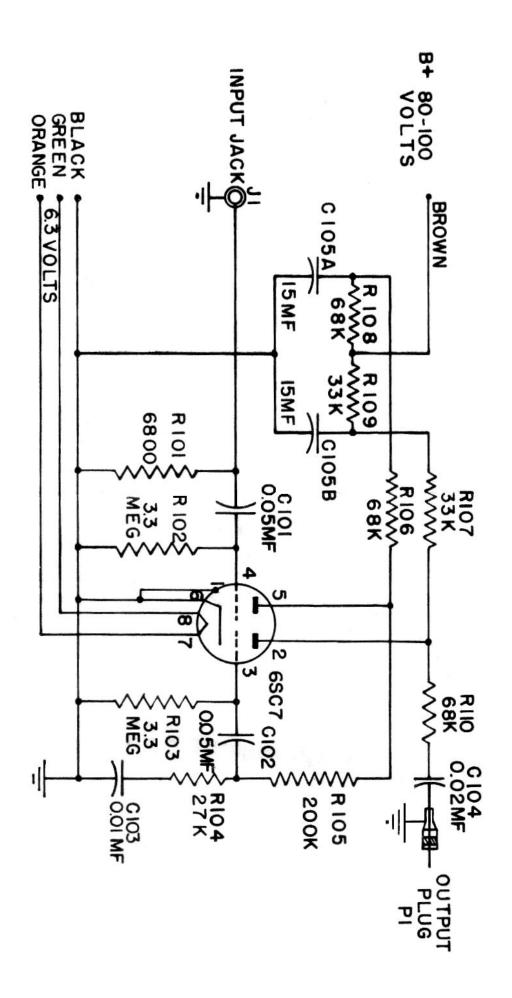
may be used through the two corner mounting holes in the preamplifier for mounting to a metal chassis. In the event that the amplifier cannot be mounted on a receiver chassis, it can be mounted with two wood screws  $(1\frac{5}{8}" \times \frac{1}{8}" R.H.)$  within the receiver cabinet.

The input, output, and power leads should be connected as follows:

- 1. Run the four, color-coded leads to the underside of the radio or amplifier through a convenient hole.
  - 2. Connect the black lead to B minus.
- 3. Connect the brown lead to a well-filtered 80 to 100 volt positive d-c supply. The current requirements are approximately 3 milliamperes.
- 4. Connect the green and orange leads to the 6.3 volt filament supply. This may be either a-c or d-c.
- 5. The phonograph pickup output should be plugged into the input receptacle on the preamplifier.
- 6. The shielded output lead should be plugged into the

phonograph receptacle on the receiver chassis.

NOTE: No frequency correcting resistors or capacitors are required with the G-E Variable Reluctance Pickup when this preamplifier is used. The preamplifier is provided with a bass-boost circuit which gives a rising characteristic from 350 cycles downward in order to compensate for constant velocity type recording below that frequency as adapted by phonograph record manufacturers. In case turntable rumble is reproduced in the output, it is advisable to have C103 shunted by a resistor of 180,000 ohms.



## REPLACEMENT PARTS LIST

Circuit Symbol No.	Title	Value	Rating
C101	Capacitor, Paper	.05 μf	600V
C102	Capacitor, Paper	$.05 \mu f$	600V
C103	Capacitor, Paper	.01 µf	600V
C104	Capacitor, Paper	$.02~\mu f$	600V
C105A	Capacitor, Elect.	$15 \mu f$	150V
C105B	Capacitor, Elect.	$15 \mu f$	150V
J1	Jack, Input		
P1	Plug, Output		
R101	Resistor, Carbon	6800	$\frac{1}{2}W$
R102	Resistor, Carbon	3.3 Meg.	$\frac{1}{2}W$
R103	Resistor, Carbon	3.3 Meg.	$\frac{1}{2}W$
R104	Resistor, Carbon	27,000	$\frac{1}{2}W$
R105	Resistor, Carbon	200,000	½W
R106	Resistor, Carbon	68,000	½W
R107	Resistor, Carbon	33,000	½W
R108	Resistor, Carbon	68,000	$^{1}/_{2}W$
R109	Resistor, Carbon	33,000	½W
R110	Resistor, Carbon	68,000	$^{1}\!/_{2}\mathrm{W}$

WARRANTY: General Electric Company warrants to the Purchaser of the new General Electric Phono Preamplifier that any part thereof (except electronic tubes incorporated therein which are covered by the Company's standard tube warranties) which proves to be defective in material or workmanship within ninety (90) days from the date of original purchase for use will be repaired or replaced. Any defect in said Phono Preamplifiers should be brought to the attention of the General Electric Dealer from whom it was purchased, who will be authorized to furnish or arrange for repairs or replacements within the terms of this warranty.

The foregoing is in lieu of all other warranties, express or implied, and General Electric Company neither assumes, nor authorizes any person to assume for it, any other obligations or liability in connection with said Phono Preamplifiers.



PMRTE