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CIRCUIT EXPLANATION
OF
RINGING CONVERTER
CIRCUIT H-51297-A

FUNCTIONS:

1. START THE RINGING CONVERTER.
2. CAUSE THE TRANSFORMER TO PRODUCE AN ALTERNATING CURRENT FOR RINGING PURPOSES
3. STOP THE RINGING CONVERTER.

OPERATION:

1. STARTING THE RINGING CONVERTER

When the RING. CONV. ST. lead is grounded the circuit is closed to the operating winding of the motor magnet. The armature is attracted to the cores and closes the circuit to the de-energizing winding allowing the tension of the reed to reverse the direction of armature travel. The circuit to the de-energizing winding is opened and the armature is again attracted.

2. PRODUCING GENERATOR CURRENT

This action is continued as long as ground remains on the RING. CONV. ST. lead and, during one-half of the cycle, the circuit is closed in one direction thru half of the transformer primary, thru the four windings of the REPT COIL in multiple to battery. During the other half of the cycle the circuit is closed thru the other half of the transformer primary in the opposite direction, thru the multiple windings of the REPT COIL to battery. These currents induce an alternating (termed generator) current in the secondary of the transformer which may be either ground or battery connected.

3. STOPPING THE CONVERTER

When ground is removed from the RING CONV ST lead, the circuit thru the primary of the transformer is opened so that no further generator current is produced; and the circuit is opened to the motor magnet so that the pendulum vibration decreases in amplitude until it comes to rest.

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