

## SERVICE MANUAL

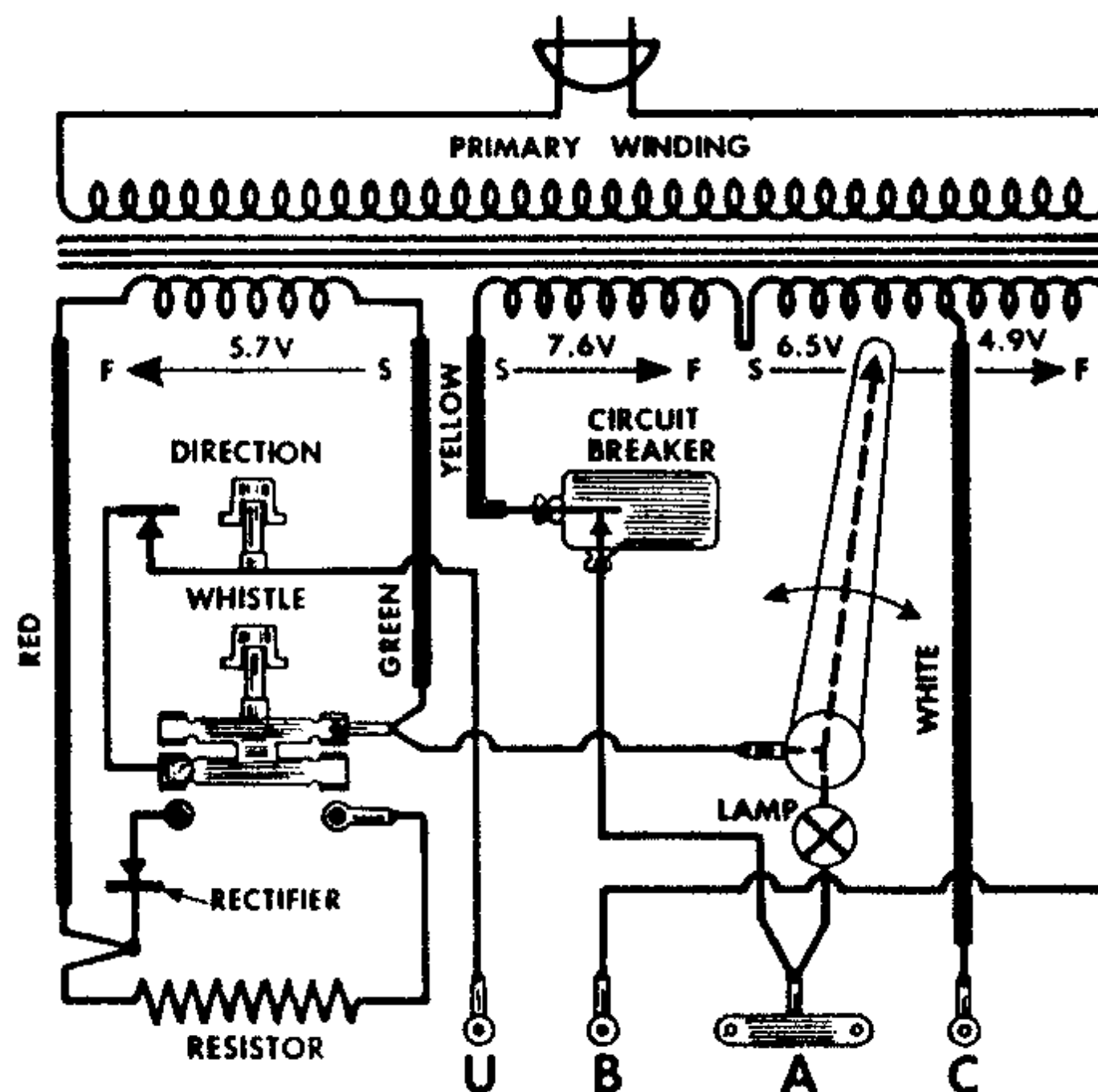
### TYPE "LW" TRANSFORMER

Lionel Type "LW" transformer, first built in 1955, is rated for a 125-watt input and is able to deliver continuously approximately 75 watts of usable power, or a current of  $5\frac{1}{2}$  to 6 amperes at the normal operating voltage. The optimum power distribution is 3 amperes from the variable voltage circuit and approximately 4 amperes from the fixed voltage taps. The "LW" transformer is designed for use with 115-volt 60-cycle alternating current power lines only.

As illustrated in the schematic diagram, "LW" transformer is equipped with a conventional Lionel whistle control circuit consisting of a copper-oxide rectifier, a two-step switch to provide "pickup" and "holding" d.c. voltage, a shunting resistor and a compensating winding. A 12-16 volt lamp No. 53-300 functions as a "power-on" pilot and a short circuit indicator and also provides edge illumination for the lucite voltage dial.

Mechanically, the assembly of the transformer is quite straight-forward and should present no problem. The only place requiring special attention is the leaf spring activated by the reversing push rod. When re-assembling the bearing plate to the transformer base care must be taken to see that this spring has sufficient tension to provide good electrical contact with the upper half of the contact riveted to the whistle control assembly.

Schematic Diagram of Type "LW" Transformer



Pictorial Diagram of Type "LW" Transformer

