

DESCRIPTION, ADJUSTMENTS AND ORDERING INFORMATION
TELETYPE MODEL REC-20 RECTIFIER

Description

The Model REC-20 rectifier is designed to deliver continuously .2 ampere at 120 volts D.C. when operated on a 105 to 125 volt 25 cycle A.C. single phase power supply. The direct current output of this rectifier is filtered so that the ripple is less than 1/2% (r.m.s.) at full load. The no load voltage of a new rectifier will not exceed 135 volts.

The rectifier consists essentially of a transformer, a full wave rectifying assembly utilizing selenium coated discs, a filter consisting of a condenser and choke coil, a condenser for correcting the power factor, and a bleeder resistor. These parts are mounted on a metal base which is provided with rubber feet. The rectifier is furnished complete with cover, cords, plug, and receptacle for making A.C. and D.C. connections.

The ventilated metal cover, which is fastened to the base by means of screws, is finished in black wrinkle enamel.

The approximate dimensions of the rectifier are as follows: length, 11-7/8"; width 8-1/2"; height 8".

Adjustments

The secondary of the transformer is provided with taps so that the output voltage of the rectifier can be adjusted to suit requirements and to compensate for voltage drop due to aging of the rectifying assembly. These taps terminate in eight pin jacks. Three jacks provide coarse voltage adjustment and are labeled "L", "M", and "H". Five jacks provide fine voltage adjustment and are labeled "1", "2", "3", "4", and "5". Connections to these jacks are made by means of pin plugs attached to flexible leads. The plugs are inserted, at the factory, in jacks "M" and either "1", "2", or "3" to deliver .2 ampere at 120 volts D.C.

The method normally employed in the adjustment of this rectifier is to connect a 1260 ohm resistance (plus or minus 1%) in series with a milliammeter across the output, and to adjust the taps until the current through the resistance is nearest to, but not less than 98 milliamperes. Each fine tap will change the current through the 1260 ohm load resistor approximately 3 milliamperes, and each coarse tap approximately 14 milliamperes. This adjustment should be checked when the rectifier is installed and periodically thereafter.

Voltage drop due to aging of the rectifying assembly decreases with service. After the first few months of use the rectifier should operate for long periods without the necessity of readjustment. If at any time it is necessary to use the maximum regulating tap to obtain the proper output current, the rectifier should be withdrawn from service and repaired.

Internal wiring of the rectifier is shown in the attached drawing W.D.2077. An assembly drawing is also furnished showing names and numbers of the component parts of the rectifier.

REVISIONS

④ *Revised and
checked drawings
11-17-41*

**TELETYPE
CORPORATION**

WD-2077

WD-2077-A

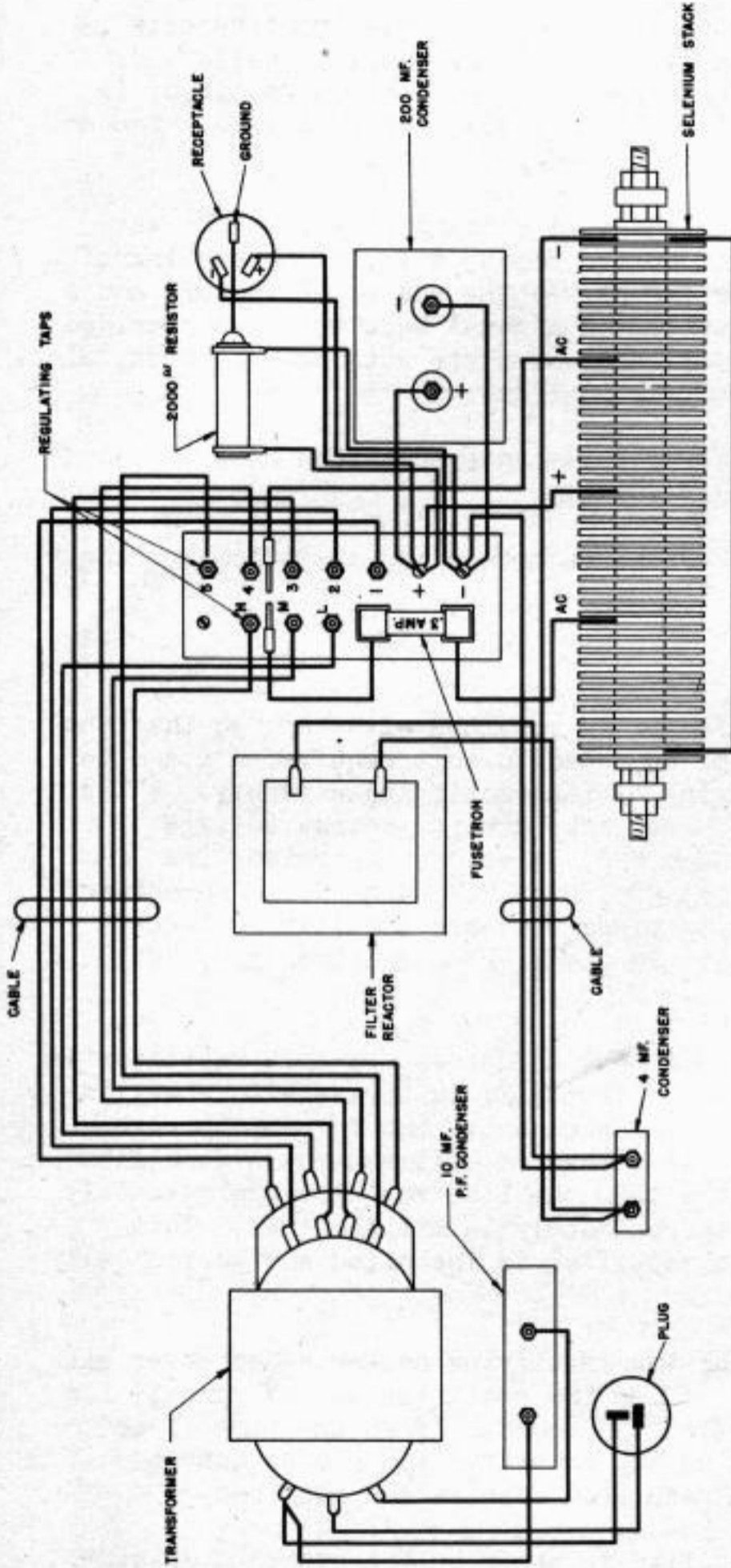
**WIRING
DIAGRAM**

FOR

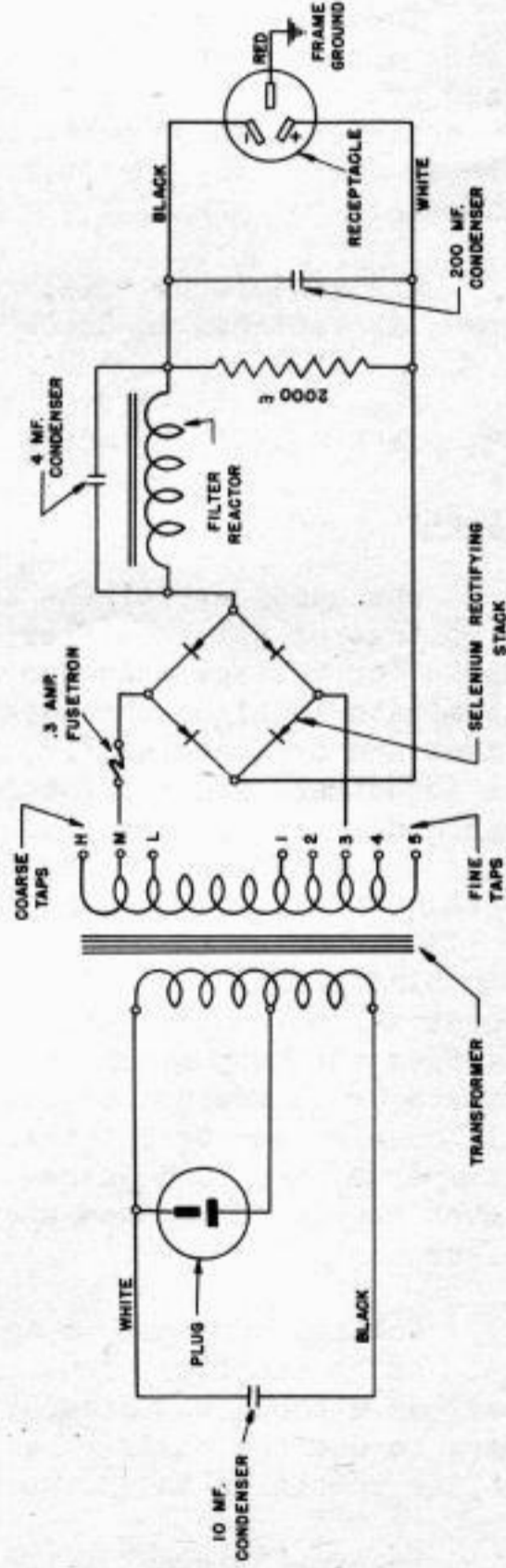
REC-20

RECTIFIER

**DRAWN: CMR
TRACED:
CHECKED: [Signature]
ENGINEER: [Signature]
APPROVED: [Signature]**



ACTUAL WIRING



SCHEMATIC WIRING

