

*DESCRIPTION, ADJUSTMENTS AND PARTS ORDERING INFORMATION
OF THE TELETYPE REC29 RECTIFIER

(For Multi-Voltage Multi-Frequency Operation)

1. DESCRIPTION

a. The REC29 rectifier is designed to provide direct current suitable for signal line battery as well as local battery, and to provide the proper A.C. voltage for the operation of series governed motors, when the rectifier is operated from A.C. sources of various voltages and frequencies.

b. The rectifier consists essentially of a transformer, a full wave selenium rectifying assembly, a choke coil with tuning condenser, a bleeder resistor, a filter condenser, terminal panels, input and output fuses, input power switch, input cord with plugs, and output cords with receptacles. The parts are secured to a metal base which is provided with feet. The metal cover has expanded metal panels for ventilation, and a hinged door provides access to the control panel and fuses.

c. The primary winding of the transformer has two sets of taps. One set provided for input voltages of 95, 105, 115, 125, 190, 210, 230, and 250 volts and terminate on the left-hand side of the control panel. The other set of primary taps provide the proper voltage for motor operation on 25, 40, 50, or 60 cycles A.C. and terminate on the lower right-hand side of the control panel.

d. 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 aging of the rectifier assembly. Three taps provide coarse voltage adjustment and are marked "L", "M", "H". Five taps providing fine voltage adjustment are marked "1", "2", "3", "4", and "5". These taps are wired to terminals at the top of the control panel and connections to the terminals are made by means of flexible leads.

e. The choke coil has taps which terminate on the upper right-hand corner of the control panel. These are provided to adapt the filter to the frequency of the power supply and are utilized by connecting the flexible lead from the tuning condenser to the tap corresponding to the input frequency.

f. The input and output cords terminate on a panel at the rear of the rectifier. The double pole switch disconnects both sides of the input line from the entire rectifier, with the exception of this panel, when the switch is in the "off" position. The cover must be removed to gain access to the terminals on this panel.

g. The approximate dimensions of the rectifier are as follows: 12-9/16" long, 9-1/4" wide, and 8-3/16" high. The approximate weight is 46 pounds. The cover and base are finished in black wrinkle enamel.

2. RATING

Input: 95 to 125 or 190 to 250 volts, 25 to 60 cycles, single phase
A.C.

* Indicates change

Printed in U.S.A.

Output: .2 ampere at 120 volts D.C. (No load voltage of a new rectifier should not exceed 135 volts.)

Also

A.C. at suitable voltage for the operation on one or two series governed motors at any frequency from 25 to 60 cycles.

3. ADJUSTMENTS

a. Move the power switch to the "off" position and open the hinged door in the rectifier cover.

Caution: The secondary voltage of the transformer is 300 volts. Do not make any adjustments while the rectifier is in operation.

b. To adjust for A.C. input voltage, connect the flexible lead on the left-hand side of the panel to the terminal with the marking which most nearly corresponds to the voltage of the available A.C. supply.

c. To adjust for frequency, connect the two flexible leads on the right-hand side of the control panel to the two terminals having markings which most nearly correspond to the frequency of the available A.C. supply.

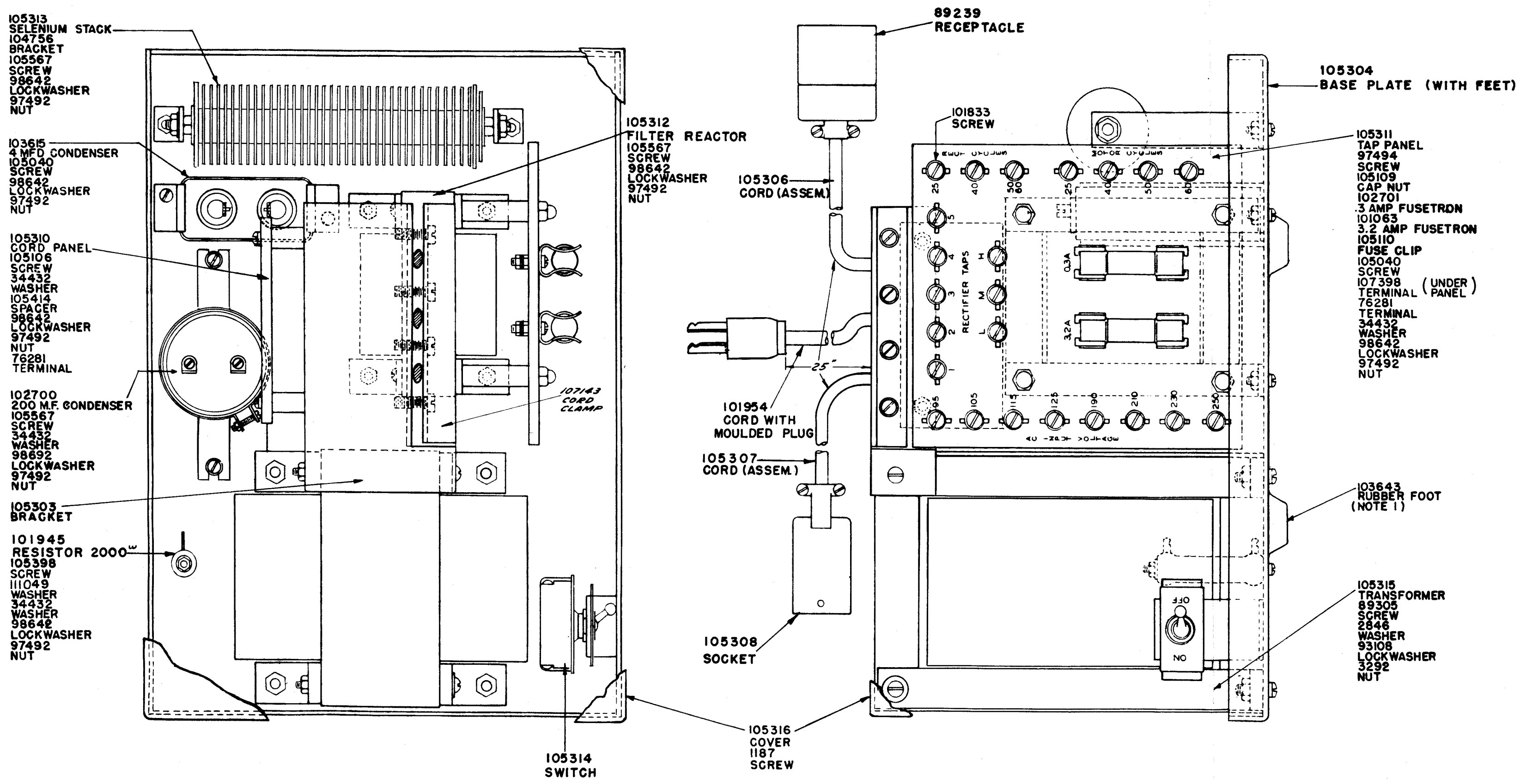
d. To adjust D.C. output voltage, connect a 600 ohm resistor in series with a suitable milliammeter across the D.C. output of the rectifier and connect the flexible leads located near the top of the control panel to the terminals (marked L, M, H, and 1, 2, 3, 4, 5) which cause the milliammeter to register a current flow which is nearest to but not less than .2 amperes.

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 for readjustment. If at any time it becomes necessary to use the maximum regulation tap to obtain the proper output current, the rectifier should be withdrawn from service and repaired.

*e. The actual and schematic wiring diagrams of the rectifier are shown on the attached wiring diagram 2153WD.

4. Parts

a. Parts ordering information is shown in Figure 1.



NOTE 1
 103643 RUBBER FOOT HAS BEEN REPLACED WITH A STEEL FOOT WHICH IS WELDED TO THE BASE PLATE.

FIGURE 1