

* INSTRUCTIONS FOR INSTALLING THE 151999 OR 152950 RECTIFIER AND
CABLE ASSEMBLY ON THE MODEL 28 ELECTRICAL SERVICE UNIT
AND INSTRUCTIONS FOR CONVERTING THE 151999 ASSEMBLY
TO A 152950 ASSEMBLY USING THE 153477 CABLE ASSEMBLY

1. GENERAL

a. The 151999 (for LESU1, LESU2, LESU5, LESU6; Bell System 28A) or 152950 (for LESU7; Bell System 28B) Rectifier and Cable Assembly is designed for use as a source of direct current to operate the local selector magnet and the bias winding of the local line relay on the Model 28 printer when no direct current is available for the installation. The 152950 assembly also supplies current for a local line test key circuit and supplies loop current when no direct current is available for the installation. For maximum rated output, see paragraph 1.d.

b. The rectifier assembly consists of an insulated input transformer, two half wave selenium rectifiers, a filter capacitor, a metal base on which all parts are secured, and wiring cables. The assembly is mounted on the Electrical Service Unit.

c. The rectifier assembly is 4-3/4" long, 2-7/8" deep, and 6-1/8" high.

d. The rectifier ratings are:

(1) Input Voltage: 105 to 125 volts, 50 to 60 cycles
single phase A.C.

(2) Output Voltage, with 115 volts A.C. input:

*(a) 115 (+5) volts D.C. at 0.12 ampere load.

(b) Not over 150 volts D.C. at no load (new unit).

(3) Output Current, up to 122° F. (50° C.) maximum ambient
temperature:

(a) 0.15 ampere maximum, intermittent duty.

(b) 0.12 ampere maximum, continuous duty.

(c) Derate to 0.060 ampere maximum, continuous duty, at
140° F. (60° C.).

(4) A.C. component in D.C. output: Not more than 2% RMS at
0.12 amperes.

*e. The 153477 cable assembly converts the 151999 rectifier and cable assembly to a 152950 assembly.

f. Specification 5664S covers instructions for the installation of a line relay mounting assembly on Electrical Service Units.

g. The Electrical Service Unit LESU1 must be equipped with the 152126 auxiliary terminal block as shown in Figure 1. Information for installing the 152126 auxiliary terminal block on an Electrical Service Unit LESU1 may be found in Specification 5693S.

h. For part numbers referred to and for parts ordering information, refer to Teletype Model 28 Printer Parts Bulletin.

2. INSTALLATION

a. 151999 Assembly (for use on Electrical Service Unit LESU5; Bell System 28A)

(1) Remove and discard the 151411 blank plate that is mounted on the Electrical Service Unit next to the cover plate that contains the fuse sockets.

(2) Mount the 151999 rectifier assembly in place of the 151411 blank plate with the transformer toward the front. Tighten the mounting screws so that the 151427 clamp plates secure the assembly in position.

(3) Route and connect the 151825 cable as shown in Figure 1, 2 or 3.

*b. 153477 Cable Assembly (for converting the 151999 to the 152950 Assembly)

(1) Unsolder and remove the 151825 cable assembly.

*(2) Route and connect the 153477 cable as shown in Figure 5 and wiring diagram 2948WD.

*(3) To distinguish the converted assembly from a 151999 assembly, write "152950 assem" on the side of the unit. Use black paint, marking crayon, or other form of durable marking.

*(4) Follow procedure in paragraph 2.c.

c. 152950 Assembly (for use on Electrical Service Unit LESU7; Bell System 28B).

(1) Remove and discard the center blank plate that is mounted on the Electrical Service Unit.

(2) Mount the 152950 rectifier assembly in place of the center blank plate with the transformer toward the front. Tighten the mounting screws so that the 151427 clamp plates secure the assembly in position.

*(3) Route and connect the 153477 cable as shown in Figure 5 and wiring diagram 2948WD.

3. WIRING

a. 151999 Assembly (Figures 1, 2, or 3) for Electrical Service Unit LESU5 (Bell System 28A).

NOTE: For circuit wiring, see figure 4; figures 1, 2, or 3 show where loose cable connections are to be made.

(1) For standard rectifier operation, wire in accordance with Figure 1, 2, or 3. Disregard the orange and blue leads which are dead ended and taped in the 151825 cable.

(2) For continuous rectifier operations, wire as follows:

(a) For Electrical Service Unit LESU1, connect the black and red leads to the auxiliary terminal block as shown in Figure 1.

(b) For Electrical Service Unit LESU2, connect the black and red leads on the selector magnet terminal block as shown in Figure 2.

(c) For Electrical Service Units LESU1 and LESU2, tape the white lead and the green lead. Remove the tape covering from the orange and blue leads. Solder the blue lead from the rectifier assembly to the side terminal of the fuse socket which is nearer the convenience outlet. Solder the orange lead of the side terminal of the other fuse socket.

(d) For Electrical Service Units LESU1, LESU2, LESU3, LESU4, and LESU5 on the power terminal block, attach white lead to terminals 1, and attach green lead to terminal 9. Connect the black and red leads on the selector magnet terminal block as shown in Figure 3.

b. 152950 Assembly (for Electrical Service Unit LESU7; Bell System 28B).

*NOTE: For circuit wiring, see wiring diagram 2948WD; Figure 5 shows where loose cable connections are to be made.

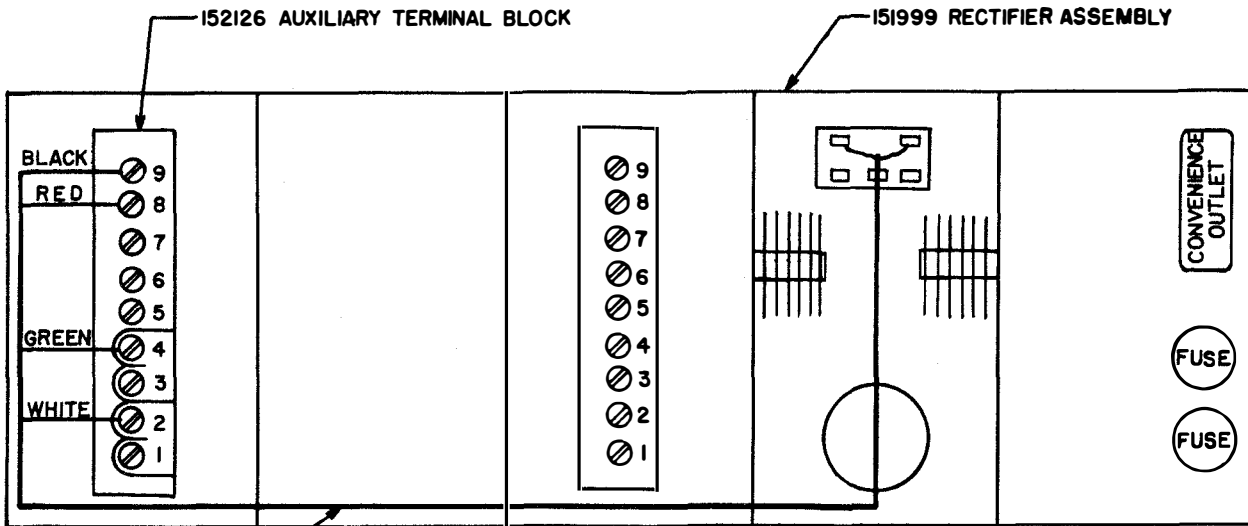
(1) Connect the black rectifier lead:

(a) For standard operation (rectifier controlled by power switch) to terminal 2 of terminal block E.

(b) For continuous rectifier operation, to terminal 1 of terminal block E.

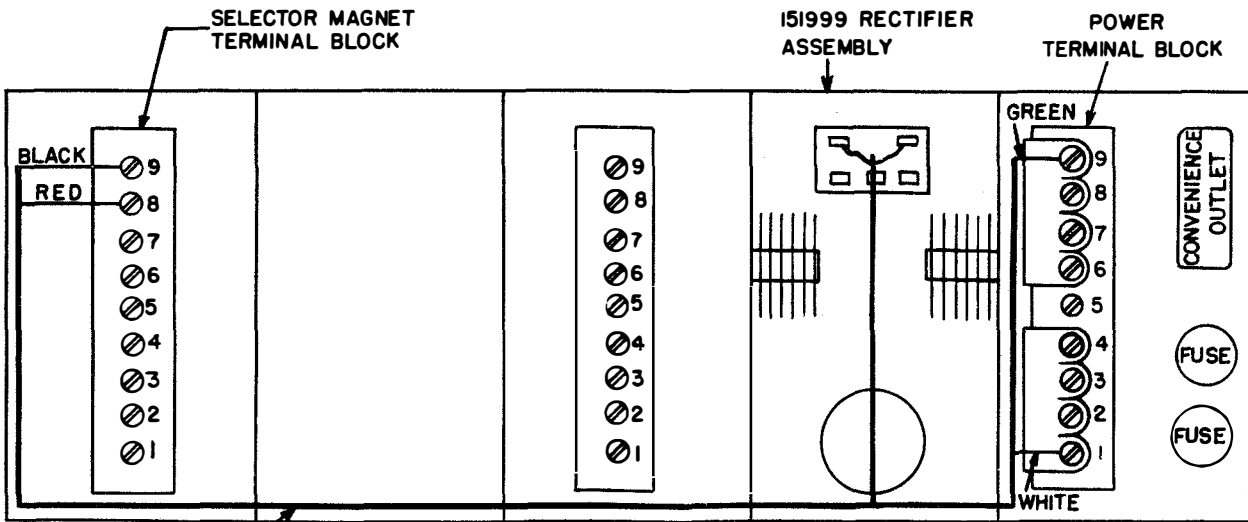
(c) For rectifier, operation controlled by the electrical motor control, to terminal 3 of terminal block E.

*(2) Wiring diagram 2948WD indicates the actual wiring of the 152950 Rectifier and Cable Assembly.



BOTTOM VIEW OF ELECTRICAL SERVICE UNIT (LESU1)

FIGURE 1

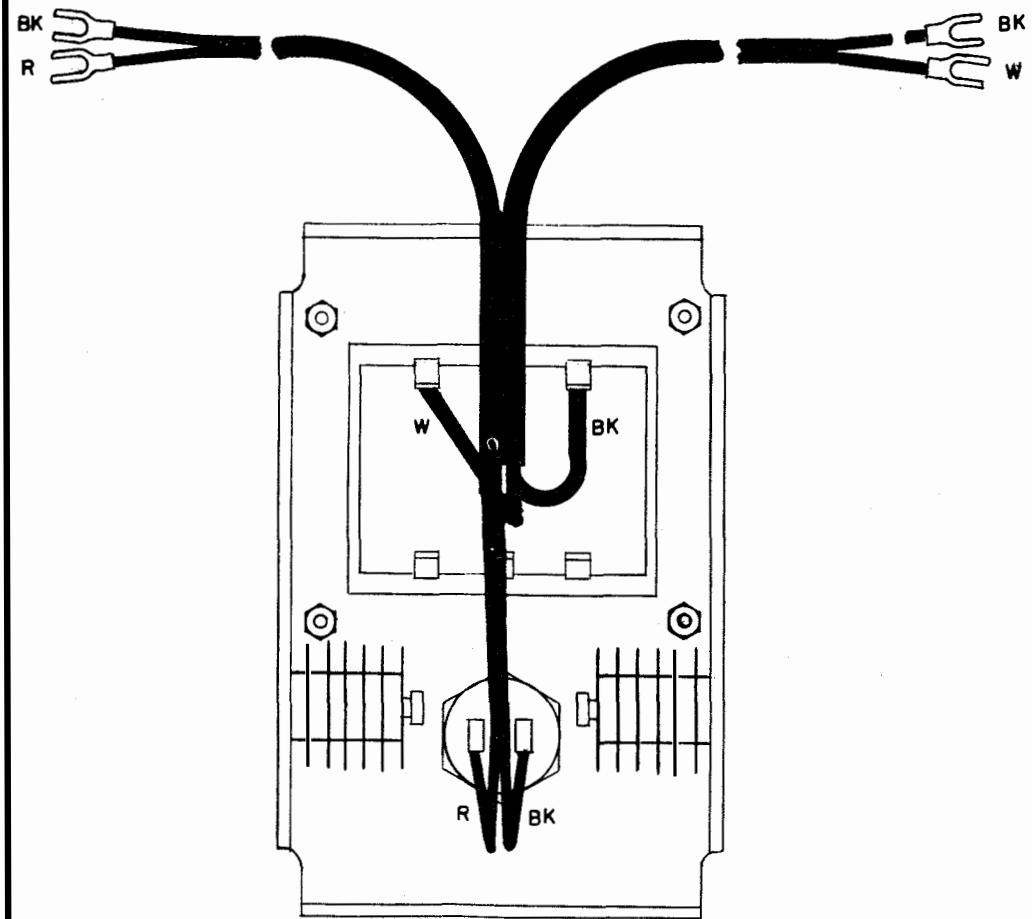


BOTTOM VIEW OF ELECTRICAL SERVICE UNIT (LESU2)

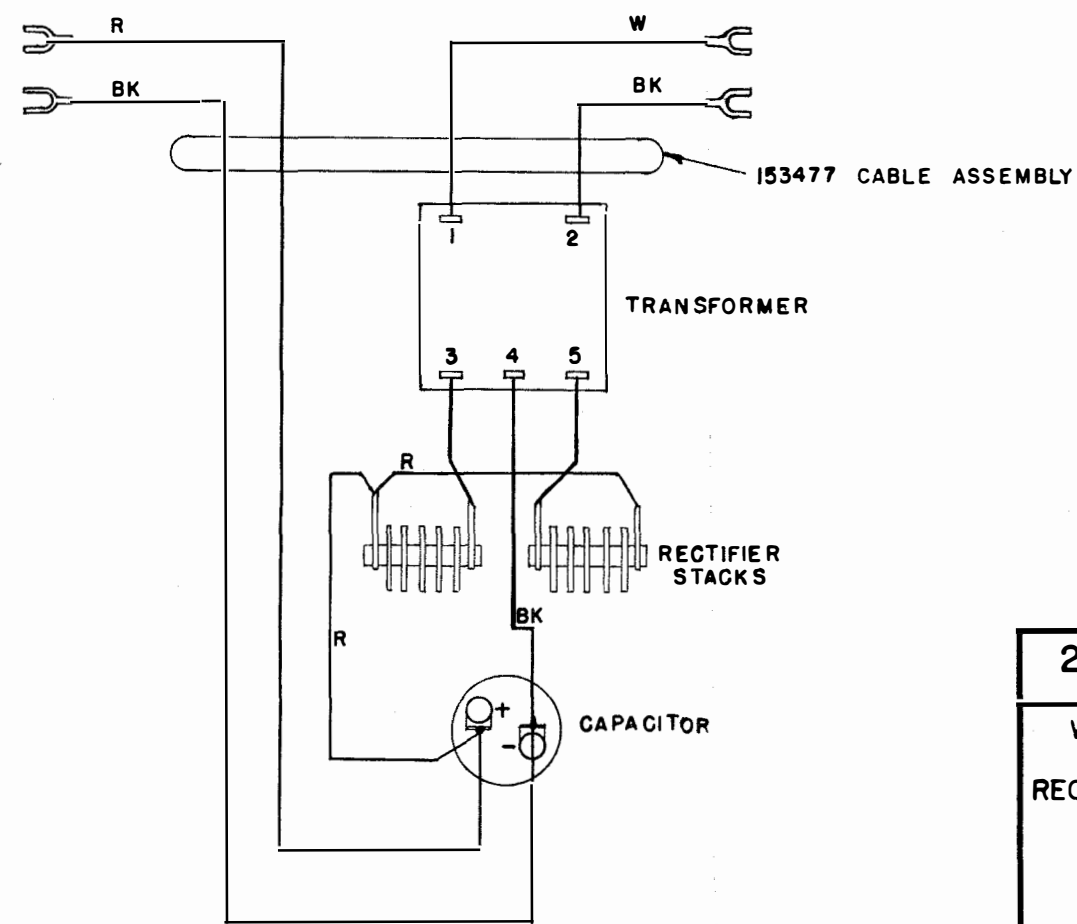
FIGURE 2

NO.	NOTES
1	COLOR CODE: BK- BLACK R- RED W- WHITE

REVISIONS		
A	2-25-55	28-5032



CABLE ROUTING
(BOTTOM VIEW OF ASSEMBLY)



2948 WD	
DATE: 4-13-54	
WIRING DIAGRAM FOR RECTIFIER ASSEMBLY 15295Q	
DRAWN: N.K.G	APPROVED: <i>[Signature]</i>
ENG'R'D: G.A.O.	
CHECKED: <i>[Signature]</i>	
FILE: 2-30.65.156A	
TELETYPE CORPORATION	

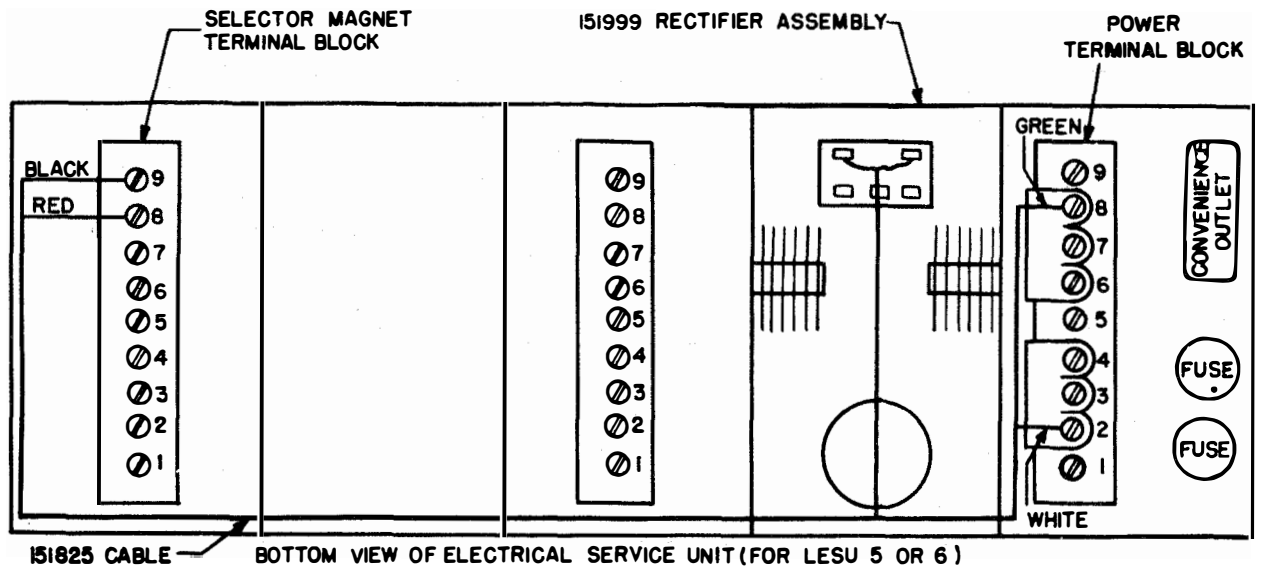


FIGURE 3

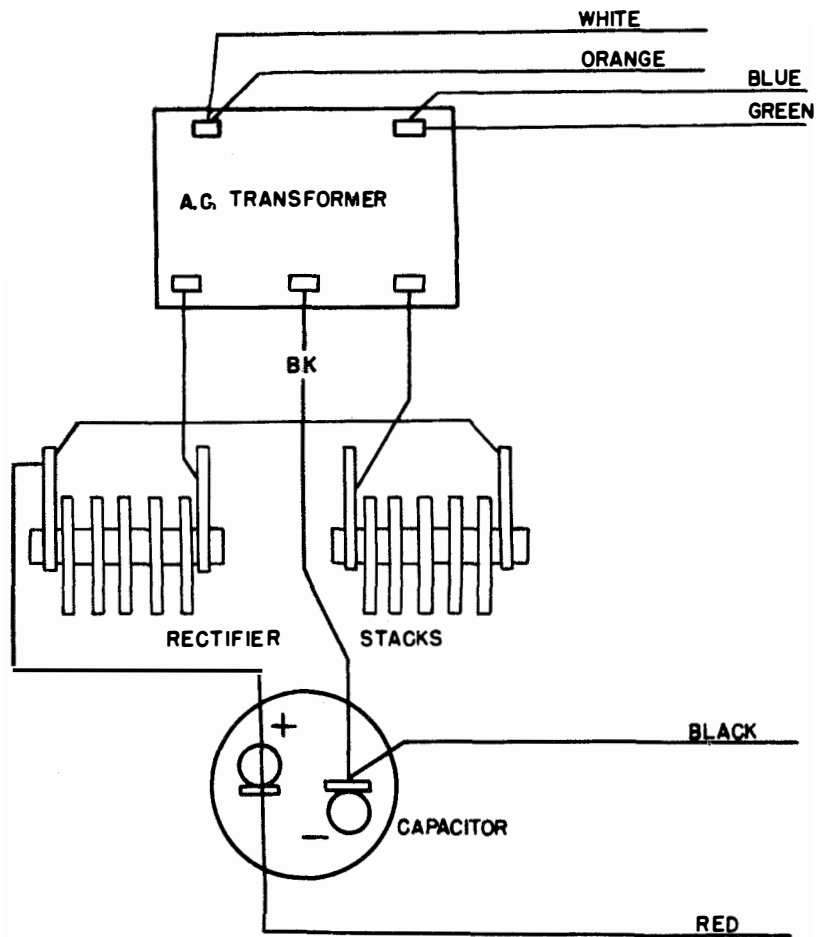
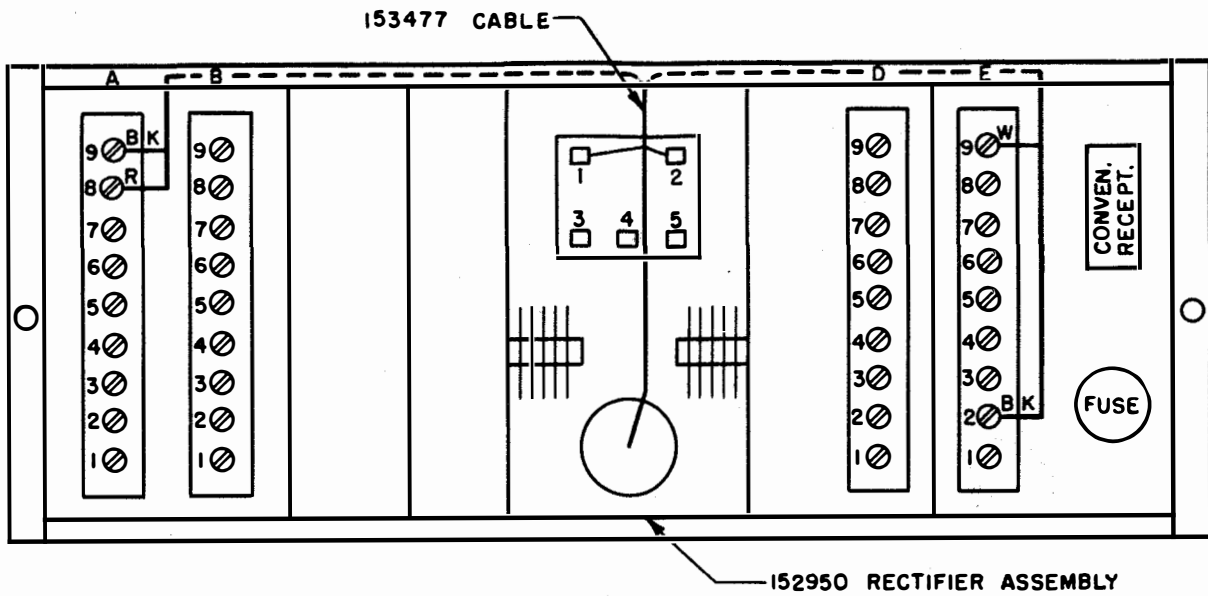


FIGURE 4



BOTTOM VIEW

FIGURE 5