

BELL SYSTEM PRACTICES
Teletypewriter and Manual
Telegraph Station and P.B.X.
Installation and Maintenance

SECTION P35.467
Issue 1, August, 1935
AT&T Co. Standard

NO. 14 TELETYPEWRITER

INSTALLATION OF 82697(M)

TAPE ILLUMINATOR

1. GENERAL

- 1.01 This section describes the method of installing the 82697(M) tape illuminator on No. 14 teletypewriters.
- 1.02 This section replaces Teletype Specifications S-5046 and includes a change in the location of the illuminator resistance to avoid interference between this resistance and the new remote bell contact assembly.

2. METHOD OF INSTALLATION

- 2.01 If the typing unit is equipped with a scissors guard it should be removed and discarded. The tape illuminator cannot be used with a scissors guard due to interference.
- 2.02 Drill and tap a 6-40 hole in the left rear leg of the main bracket as shown in Fig. 1 for mounting the illuminator resistance.
- 2.03 Mount the 74614(M) resistance on the tapped hole in the rear left leg of the main bracket, using the 1297(M) screw, 7002(M) washer, 3646(M) lockwasher, and the 3620(M) fibre washers as shown in Fig. 1. The terminals should be positioned as near vertical as possible without causing interference.
- 2.04 Pass the tape illuminator cable through the space between the bell and the bell hammer post and so to the rear of the typing unit, at the same time moving the 82681(M) tape illuminator assembly into position and then mounting it on top of the tap chute mounting bracket, using the two 82440(M) screws, 7002(M) washers, 2191(M) lockwashers and

the 8254(M) cable clamp. The 8254(M) cable clamp is held in place by the right mounting screw.

Note: If no tape chute is used, the 82681(M) assembly may be mounted directly on the base.

2.05 Insert the 82687(M) tape illuminator lamp in the lamp socket.

2.06 Remove the hexagon head screw and lockwasher used for mounting the left backstop bracket on the typebar segment. Reassemble the same parts, this time with the 82696(M) reflector plate installed, polished side down, between the backstop bracket and the lockwasher. Before tightening in place be sure that the reflector plate does not interfere with any other parts of the teletypewriter.

Note: If the typing unit is equipped with an upper case "H" contact mechanism the reflector plate should be installed between the backstop bracket and the 80400(M) spring bracket. It will also be necessary in this case to replace the 6746(M) screws mounting the bracket extension of the upper case "H" contact assembly by fillister head screws 33-6(M).

2.07 Swing the motor away from the rear of the typing unit.

2.08 Pass the tape illuminator cable around the rear of the typing unit, just above the motor circuit cable.

2.09 Solder the green and red leads to terminals 13 and 16 on 14DD, 14DF, 14DG, 14DT and 14DU teletypewriters.

On other No. 14 machines solder these leads to terminals 13 and 15.

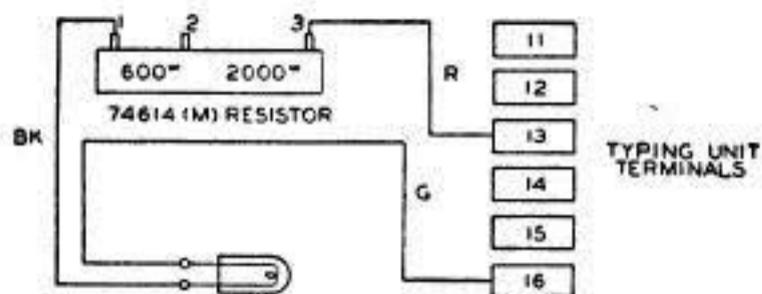
2.10 Tie the tape illuminator cable in place as follows:

(a) Horizontally, against the base plate, to the extreme left leg of the main bracket. Fig. 1. The cable should not touch the bell.

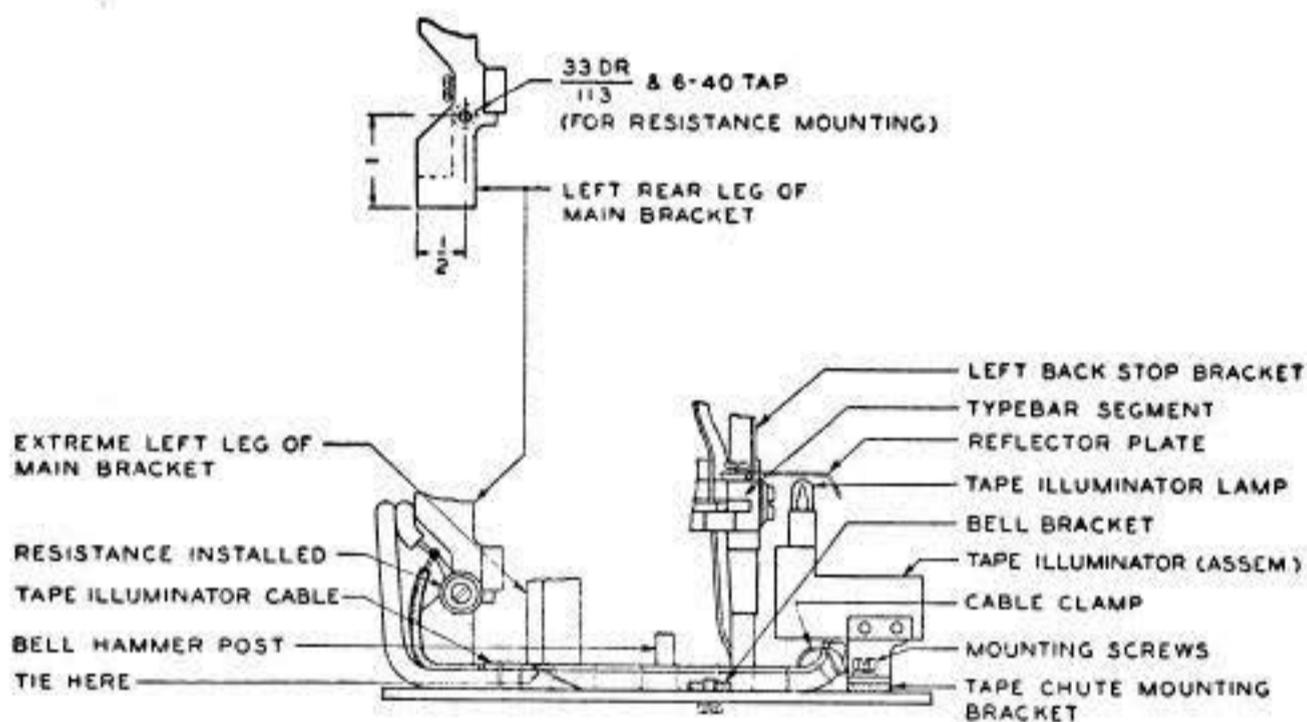
(b) Horizontally, to the top side of the motor circuit cable just back of the rear mounting leg of the main bracket.

2.11 An open loop will be found in one conductor of the cable, which leaves two leads, one red and one black. For 130-volt operation solder these leads to the end terminals (No. 1 and No. 3 on diagram in Fig. 1) of the 74614(M) resistor. For 110 volts, or less, connect to the 2000 ohms resistance coil (No. 2 and No. 3 on the diagram). The 2000-ohm coil is the large section of the resistance.

2.12 Swing the motor unit back in position.



WIRING DIAGRAM FOR TAPE
ILLUMINATOR (130 VOLTS)
SEE NOTES 1 & 2



LEFT SIDE VIEW OF TYPING UNIT SHOWING
TAPE ILLUMINATOR PARTS INSTALLED

NOTE

- 1 FOR OPERATION ON 110 VOLTS OR LESS CONNECT TO RESISTOR TERMINAL NO 2 INSTEAD OF NO 1.
- 2 FOR MACHINES OTHER THAN 14DD, 14DF, 14DG, 14DT & 14DU, THE GREEN LEAD SHOULD TERMINATE AT 15 INSTEAD OF 16.

Fig. 1.