

BELL SYSTEM PRACTICES
Teletypewriter Stations

SECTION P35.476
Issue 2, July, 1954
AT&T Co Standard

INSTALLATION OF
TP101389 SET OF PARTS
FOR SPLICED CHADLESS TAPE
AND TP101481 END-OF-TAPE
STOP MECHANISM
14 TRANSMITTER DISTRIBUTOR

1. GENERAL

1.01 This section gives information for equipping the 14 transmitter-distributor to handle chadless and spliced chadless tape as well as fully perforated tape. Instructions are also given for installing the end-of-tape stop mechanism, also called 6th-pin or tape-out mechanism. This mechanism closes a contact while tape is in the transmitter and opens it when the end of the tape passes the end-of-tape stop pin.

1.02 This section is reissued to list a modified TP101389 set of parts, which is arranged to handle spliced chadless tape and includes a new retainer lid TP111628 and a new tape guide plate TP111627.

1.03 The adjustments are in Section P35.631.

2. LIST OF PARTS

2.01 The TP101389 set of parts (Tape Retaining Lid Assembly and Tape Guide Plate) consists of:

5—TP101715 Terminal Assemblies

1—TP111631 Tape-Retaining-Lid Assembly consisting of:

1—TP99230 Lid Plate

1—TP112635 Spring

1—TP125278 Pin

1—TP95954 Screw Plate

12—TP95953 Shims

1—TP125873 Latch

2—TP1164 Screws

1—TP111628 Retainer Lid

1—TP125872 Shaft

1—TP125871 Bracket

2—TP110440 Pin

1—TP111627 Tape Guide Plate

1—TP101441 Cam

1—TP101439 Feed-Lever Stop

1—TP2191 Lock Washer

1—TP3649 Washer

2.02 The TP101481 set of parts (End-of-Tape Stop Mechanism) consists of:

1—TP97467 Tape-out Contact Assembly

2—TP80342 Screws

2—TP2191 Lock Washers

1—TP97447 Contact Pin

1—TP97448 Contact Pin Guide

2—TP1177 Screws

2—TP125011 Washers

2—TP110743 Lock Washers

1—TP97449 Cable (complete)

3. INSTALLATION

A. TP101389 SET OF PARTS

3.01 Remove and discard the retaining-lid assembly by removing the two screws which fasten the lid assembly to the top plate of the transmitter.

- 3.02 Replace the tape guide plate with the TP111627 tape←
guide plate which has a scribed line and a hole for the
tape-out contact pin.
- 3.03 Install the TP111631 retaining-lid assembly, using the←
two screws removed.
- 3.04 Remove the transmitter cover, the top-plate assembly,
base plate, left bracket, and the upper spacing contact
assembly.
- 3.05 Loosen the five spring-anchor screws.
- 3.06 Unhook the feed-lever spring from the spring anchor.
- 3.07 Remove the two screws which mount the bracket and
remove the contact-lever assembly by carefully raising
the contact end while lowering the sensing pins out of the guide
slots in the lever guide.
- 3.08 Remove the five contact tongues, keeping them in
order so that they may be reassembled in their original
positions.

**Note: This removal operation is necessary to avoid in-
jury to the insulation by heat from soldering.**

- 3.09 Then proceed as follows with each of the five contact←
tongues: ←
- Unsolder the spring from the contact tongue and dis-
card the spring and anchor assembly.
 - Clamp the edges of the tongue, between the jaws of a
vise, if one is available, with the soldering lug projecting
horizontally, free of the vise.
 - Hook the free loop of the spring of the TP101715 ter-
minal assembly over the soldering lug of the tongue.
 - Solder the TP101715 terminal assembly to the contact
tongue, taking care to align the spring to be vertical, and
at right angles to the soldering lug of the tongue and to
have the curved portion of the anchor facing toward the
contact end of the tongue. Apply heat sparingly to avoid
annealing the spring. Apply solder sparingly so that no
accumulation of it will interfere with the assembly of the
pile-up.
 - Remount the five contact tongues.
- 3.10 Reassemble the contact-lever assembly in the trans-
mitter, carefully passing the tape pins under the lever
guide, making sure that each lever is properly positioned in its
guide slot. Each spring anchor should be inserted carefully
behind its wire terminal. The contact end of the lever should
be properly in line with its contact screw.

3.11 Remove the screw that clamps the lever guide to the rear transmitter bracket. Mount the TP101439 feed-lever stop to the lever guide with the projecting portion of the bracket at the top and toward the front, using the screw just removed with a TP3649 washer under the head of the screw.

3.12 Replace the cam with the new TP101441 cam with the surface marked X facing downward.

3.13 Replace the upper spacing-contact assembly, the left bracket, base plate, top-plate assembly and the transmitter cover.

Note: If the end-of-tape stop mechanism is to be installed do not replace the top-plate assembly and transmitter cover at this time.

B. TP101481 Set of Parts (End-of-Tape Stop Mechanism)

3.14 Remove the snap panel, transmitter cover, and top-plate assembly.

3.15 Holding the top-plate assembly with the bottom up, remove and discard the two screws that clamp the front feed-roll bearing. Mount the TP97448 contact-pin guide on top of the front feed-roll bearing with the bentover portion toward the feed wheel, using the two TP1177 screws, TP110743 lock washers and TP125011 washers.

3.16 Mount the TP97467 tape-out contact assembly using the two tapped holes at the front of the casting and clamping it in place with the two TP80342 screws and TP2191 lock washers.

3.17 Solder the two leads at one end of the TP97449 cable to the soldering lugs of the tape-out contact springs, the red lead to the upper spring, the white to the lower.

3.18 Reinstall the top-plate assembly after inserting the TP97447 contact pin in its guide with the large end down, holding the pin in place until it rests on the insulator of the contact spring.

3.19 Run the TP97449 cable along the existing cable from the tape-stop switch to the slip-connector terminal block, tying where necessary.

3.20 Connect the two leads at the other end of the TP97449 cable to terminals at the slip-connector terminal to provide the type of service desired. Where the tape-out contacts are used to stop the transmitter, connect the leads as follows:

(a) Transfer the black lead from slip-connector terminal 8 to terminal 4.

(b) Connect the white lead of the TP97449 cable to slip-connector terminal 8 and the red lead to terminal 4.

3.21 If spark protection is required, install a TP82378 set of parts normally used for dc governor spark protection (not furnished with the TP101481 set of parts). Where a synchronous motor is used, mount the TP82378 set of parts to the left of the motor unit, using the two tapped holes provided in the base casting. Where a series ac or dc motor is used, some other location for the TP82378 set of parts will be needed. Connect the two outside terminals of the TP82391 condenser (1 mf) to the two terminals of the start magnet using No. 18 or No. 20 Deltabeston wire, taking care to run the wire so as not to interfere with any moving parts.

3.22 Replace the transmitter cover and the snap panel.

4. DESCRIPTION OF OLD-STYLE TP101389 SET OF PARTS

4.01 This set differs from the modified set only in the tape-retaining-lid assembly which was TP101393 (including the old-style retainer lid TP97445 and the old-style tape guide plate TP97468). The old-style TP101389 set of parts is equipped to handle chadless and fully perforated tape; it will not handle spliced chadless tape.