

43 TELEPRINTER 5-LEVEL PAPER TAPE PUNCH ASSEMBLY

TROUBLESHOOTING

1. GENERAL

1.01 This section provides troubleshooting information for 43 Teleprinter 5-Level Paper Tape Punch Assembly.

1.02 Whenever this section is reissued the reason will be listed in this paragraph.

1.03 Punch troubleshooting is initiated by the 43 Teleprinter 5-Level Paper Tape Unit, Troubleshooting, Section 574-504-300 when trouble in the punch is suspected from symptoms observed.

1.04 Analysis in this section is limited to isolation of the trouble within the punch up to its electrical interface to the PTU set logic card. Where analysis indicates the trouble is not in the punch, return to Section 574-504-300 for further analysis.

1.05 The 412399 punch assembly and 410711 logic card are returnable to Western Electric Service Center for repair.

1.06 Isolation and correction of troubles is based on electrical checks and parts replacement.

Reference sections are:

574-505-400	Wiring
574-504-720 and 574-505-720	Disassembly/Reassembly
574-504-800 and 574-505-800	Parts

1.07 A voltmeter is required for measuring voltages or checking continuity.

1.08 Trouble analysis is presented in the form of a "20 Questions" type of routine in paragraph 2. TROUBLESHOOTING GUIDE. The guide, with questions and yes and no column, should be used always starting with the first question and proceeding according to the "yes" and "no" directive.

1.09 When ordering, replaceable parts, unless otherwise specified, prefix each part number with the letters "TP" (ie, TP410047).

2. TROUBLESHOOTING GUIDE

QUESTION	YES	NO
1 Can tape be threaded into punch?	Go to 2.	<p>Check for and remove chad from opening.</p> <p>Check bias spring (adjust or replace).</p> <p>Check for binding punch pins.</p> <p>Replace punch block.</p>
2 Does punch feed tape with only feed holes perforated, when Feed switch is operated?	Go to 3.	<p>Check for mechanical binds (punch feed, pin, selector levers, armature, etc).</p> <p>Check continuity of feed magnet.</p> <p>Check transport detent spring tension.</p> <p>Check feed pawl and ratchet wheel adjustment.</p> <p>Tape supply bind.</p> <p>Replace punch block.</p>
3 Are feed holes cleanly punched? (no burrs)	Go to 4.	<p>Check punch pin penetrations and feed wheel axial alignment adjustment.</p> <p>Check TTI.</p> <p>Replace punch block.</p>
4 Does unit reverse feed properly when Backspace is operated?	Go to 5.	<p>Check adjustments -- (Feed pawl-pole face gap adjustment) (Feed pawl and ratchet wheel adjustment)</p>

QUESTION	YES	NO
5 Does unit perforate characters properly? (tape obtainable from self-test)	Go to 6.	<p>Check switch SPA1-3.</p> <p>Check variable feature 455.</p> <p>Check for mechanical binds (punch pins levers, armatures).</p> <p>Check continuity of magnet coils.</p> <p>Check adjustments - (punch pin penetration adjustment) (magnet bank position adjustment)</p> <p>Replace magnet bank.</p> <p>Replace punch unit.</p>
6 Are perforations straight with respect to edge of tape?	Go to 7.	<p>Check tape entry guide adjustment.</p> <p>Check bias spring adjustment.</p> <p>Adjust or replace bias spring.</p>
7 Does perforated tape meet 10 to the inch requirement?	Go to Section 574-504-300.	<p>Check for drag on tape roll.</p> <p>Check adjustments - (transport detent spring adjustment) (ten to inch adjustment) (Feed pawl and ratchet wheel adjustment) (Feed pawl-pole face gap adjustment)</p>