

43 TRACTOR FEED PRINTER  
TROUBLESHOOTING

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1. GENERAL

1.01 This section provides troubleshooting information for the 43 Tractor Feed Printer.

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

1.03 Printer troubleshooting is initiated either by the associated 43 Teleprinter Troubleshooting sections or when trouble in the printer is suspected from symptoms observed.

1.04 Analysis in this section is limited to isolation of the trouble within the printer up to its electrical interface to the logic card. The 43 printer must be tested as part of a 43 Teleprinter Station. Where analysis indicates the trouble is not in the printer, return to the station section for further analysis.

1.05 When ordering replaceable components, unless otherwise specified, prefix each part number with the letters "TP" (ie, TP41055).

1.06 The 430850 print head is returnable to Western Electric Company Service Center for repair.

1.07 Isolation and correction of troubles is based on electrical checks, parts replacement or adjustments.

Reference Sections are:

574-501-400 Wiring  
574-501-701 Adjustments and Spring Tensions  
574-501-721 Disassembly/Reassembly  
574-501-801 Parts

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

2. TROUBLESHOOTING GUIDE

QUESTION	YES	NO
1. Does test message print and paper advance properly while PRINTER TEST key is depressed (or No. 2 switch on logic card) is operated?	Go to 2.	Go to 1a.
1a. Is red lamp on power supply lit?	Go to 1b.	Go to Teleprinter Troubleshooting.  Check circuit in printer that failed for shorts.

## SECTION 574-501-301

QUESTION	YES	NO
1b. Does anything print or perform?	Go to 1c.	Go to Teleprinter Troubleshooting.
1c. Does carriage space and return properly?	Go to 1d.	<p>Check for mechanical bind by moving carriage manually with power off.</p> <p>Check for proper lead screw lubrication.</p> <p>Check for proper spacing belt spring tension.</p> <p>Check continuity of spacing motor and encoder.</p> <p>Check switch No. 1 on print head.</p> <p>Replace motor and/or encoder or cable.</p> <p>Replace lead screw nut.</p>
1d. Does paper advance properly (successive lines uniformly spaced)?	Go to 1e.	<p>Check for mechanical bind by rotating platen manually with power off.</p> <p>Check for both tractor rotation as platen knob is rotated.</p> <p>Check PLATEN END PLAY adjustment.</p> <p>Check line feed motor gear backlash.</p> <p>Check idler gear to platen gear backlash.</p> <p>With power on (reset) check platen detenting through full rotation by turning platen knob.</p> <p>Check continuity of line feed motor.</p> <p>Replace motor or cable.</p>
1e. Do tractor pins line up with paper holes?	Go to 1f.	Check paper specifications.
1f. Are any characters printed?	Go to 1g.	<p>Check continuity of print head and cable.</p> <p>Go to Teleprinter Troubleshooting.</p>

QUESTION	YES	NO
1g. Are any dots missing from printed characters?	<p>Check continuity of associated print magnet.</p> <p>Check <u>PRINT HEAD ARMATURE</u> adjustment.</p> <p>Replace print head or cable.</p>	Go to 1h.
1h. Are any dots noticeably out of line on characters with vertical segments?	Replace print head.	Go to 1i.
1i. Is proper print density obtained (good ribbon, proper multicopy paper — see Section 570-008-010)?	Go to 2.	<p>Check <u>PRINT HEAD TO PLATEN</u> adjustment.</p> <p>With power off and carriage moved manually, check that ribbon moves with carriage during return but does not move when carriage is moved to the right.</p> <p>Check left bracket ribbon rollers for “one way” rotation.</p>
1j. Does printed copy align properly with edge of paper (prints equally on each side of page perforation)?	<p>Undefined problem during PRINTER TEST.</p> <p>Go to Teleprinter Troubleshooting.</p>	<p>Reposition tractors.</p> <p>Readjust left margin verneir.</p>
2. Did bell ring during PRINTER TEST?	Go to 3.	Go to 2a.
2a. Does bell ring under any conditions (on power turn on)?	Go to Teleprinter Troubleshooting.	<p>Check bell coil and cable continuity.</p> <p>Check for freedom of bell plunger.</p>
3. Does ALARM indicator light when a paper-out condition is sensed?	<p>Undefined trouble.</p> <p>Go to Teleprinter Troubleshooting.</p>	<p>Check continuity of paper-out cable and contacts.</p> <p>Check <u>PAPER ALARM CONTACT</u> adjustment.</p>