



NCR 7150 POS printer

Specifications

Standard Features

- Solenoid retractable platen
- Receipt / Slip / Journal printing
- Bi-directional slip motor
- Power-ON self tests
- Journal take up roll

Optional Features

- Cut-sheet and detector

Print Features

- 9 pin print head
- Bi-directional print direction
- Font select -(7 x 9 or 9 x 9)
- 42 or 46 character per line.
- 200 lines per minute
- Near-end of roll detection switch

Tools Required

- Phillips (xCELITE x100)
- #2 Posi-drive screwdriver
- 5/32" Flat-blade screwdriver
- 5.5 MM Hex Nut driver
- Feeler gauges
- Allen Wrenches
 - 90 Degree,
 - 3/32",
 - 5/64",
 - 1.5 MM.

Jumper/Switch Settings

Diagnostic Options	S4	S3	S2	S1
Receipt ASCII Dump	0	0	0	1
Journal ASCII Dump	0	0	1	0
Slip ASCII Dump	0	0	1	1
Knife Cut	0	1	0	0
Loop On Lever 0	1	1	0	0

Power-On Self Test

Setup For All Tests

- Make sure a ribbon cassette is installed
- Load proper paper for the test you desire in the printer.
- Close all covers on the printer.
- Perform your desired test listed below.

Receipt Paper

- Press Receipt Feed button and hold
- Press the Reset button then release both buttons
- Printer will print a test pattern, check the bi-directional feed, and if available do a partial and full knife cut.

Journal Paper

- Press Journal Feed button and hold.
- Press the Reset button then release both buttons
- Printer will print a test pattern if paper loaded.

Slip Paper

- Press Receipt and Journal Feed buttons and hold
- Press the Reset button then release all buttons
- Printer will print a test pattern if paper is loaded.

Conclusion For All Tests

- Since the Receipt and Journal print continuously without stop then the reset button has to be depressed again to stop the test.

Field Replaceable Units

Description	OEM Part	IBM Part
7150-7001-9001 Printer	7150-7001-9001	22H3354
Switch-Snap Action	006-1050199	22H3355
Core - Take Up	189-1051983	22H3356
Core - Paper Supply	189-1052974	22H3357
Slip Sensor Assembly	189-1053854	22H3358
Receipt Guide-Non Knife	189-1054915	22H3359
Platen Assembly	189-1055024	22H3360
Print Head	189-1055991	22H3361
Ribbon Guide	189-1056571	22H3362
Blade - Tear Off	189-0213500	22H3363

Special Notices

- Do not allow printer to print data or a self test without having a ribbon and paper installed, because damage will occur to the print-head of the printer.
- Do not use thinner or benzene cleaners because this could deform the plastic parts of the printer.
- Removal of the receipt / slip motor is not recommended as a field engineer since the motor tabs break quite easily thus destroying the whole assembly.
- When handling the heat-sink for the print-head jewel be careful when changing the ribbon because the heat-sink has a fragile hinge and it breaks off easily.
- The Ohm charge for all the wires to the print-head pins must be a minimum of 19 ohm between each print wire and common
- Never lubricate the Journal Take-up Clutch since this is a friction type clutch.
- If an excess of Ribbon Fluff or debris is detected then this could mean a bent Print Wire or incorrect platen size platen.

Adjustments

Journal Exhaust Switch

- Lift journal box assembly and depress the micro-switch, this switch will depress and stop allowing a 1/32" opening in the height of the paper chute. Paper may bind if the opening is smaller while may not be sensed correctly if the opening is larger than 1/32".
- Adjust from bottom of printer with a 5/64" Allen wrench.

Journal Platen Gaps

- Install ribbon cassette in printer with no paper.
- Move Print Carriage to the left of the journal print area and adjust screw until a $.013 \pm .002$ " gap is obtained.
- Move Print Carriage to the right of the journal print area and adjust screw until a $.013 \pm .002$ " gap is obtained.
- Install paper and test.

Receipt and Slip Platen Gaps

- Install ribbon cassette in printer with no paper.
- Move platen to rear of printer and into receipt mode.
- Move print carriage to the left of the Receipt print area and adjust screw until a $.013 \pm .002$ " gap is obtained.
- Move print carriage to the right of the Receipt print area and adjust screw until a $.013 \pm .002$ " gap is obtained.
- The slip platen gap is already done since the platen is the only thing that switches between them.
- Install paper and test.

Slip Guide Widths

- Loosen the Allen screw and slide the three plates around. Bottom plate for the narrowest slip, the middle plate for the medium slip and top plate for widest slip.
- Tighten Allen screw into place and test.

Procedures

Replace Driver Board

- Turn OFF the Printer. **Never replace this board when there is power to the printer.**
- Locate the driver Board and loosen the Phillips screw on the same side as the black plastic plate.
- Push in on both tabs in the front and lift board up board to expose the cables connections.
- Disconnect all cables and note their locations
- Replace board and reconnect the cables and reseal the card. J2 & J4 on the boards is the same jumper.
- Reinstall the Phillips screw to secure the board.
- Turn ON the Printer.

Replace Ribbon Cassette Or Print-Head

- Turn OFF the printer and unplug power cord.
- Move print-head to left side of the Journal print area.
- Carefully swing Heat-Sink on its hinge up and to right.
- Locate Ribbon Cartridge between the head and guide.
- Release the Ribbon Cartridge by pulling it up and out.
- Release the Print-Head by pulling it up and out.
- Check Print-Head for its Ohm level. If the Ohm(s) are below 19 Ohms then driver board will need replacing.
- Place back the new or old Print-Head
- Place back the new or old Ribbon Cartridge. Make sure the ribbon passes between the nose of the Print-Head and the metal ribbon guide.
- Flip back the Heat-Sink into place and spin the knob on the ribbon cassette to tighten the ribbon.
- Plug in power cord and turn ON the printer.

Replace Ribbon Guide

- Turn OFF the printer and unplug power cord.
- Locate and remove the ribbon cassette
- Locate Ribbon Guide, located at center of Print-Head.
- Unsnap the Ribbon guide from the Print-Head area.
- Install a new Ribbon Guide with diamond shape down.
- Plug in power cord and turn ON the printer.

Replace Ribbon Drive Assembly

- Turn OFF the printer and unplug power cord.
- Locate Ribbon Drive Gear, in front left of the printer.
- Lift the Ribbon gear up and tilt it to the front of printer.
- Check the gear teeth for wear or damage
- Remove "C" clip from left belt pulley and remove the flange, pulley and pivot link.
- Exchange with the new Ribbon gear now if desired.
- Start adding the pivot link, pulley's and flanges back to the Ribbon drive gear and replace the "C" clip.
- Reinstall Ribbon gear back in printer
- Plug in power cord and turn ON the printer.