

Model DR4500 & DR4500A Truline Recorder Pen Arm Assembly Kit Replacement Instruction

Pen Arm Assembly 30756304-501(High Speed)
Pen Arm Assembly 30756304-502 (Abrasion Resistant)

Document Number

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Summary

Enclose with this instruction is a pen arm assembly for either your

- DR4500 Recorder (Truline)
- DR4500A Recorder (Truline)



WARNING

Never access components inside the controller enclosure with power applied.

ATTENTION

Users of DR4500A Truline Recorders with the Abrasion Resistant pen (white end on pen assembly) must connect the pen motor to J5 on the Main processor circuit board if the unit has firmware revision 64 or higher. If the firmware revision is 63 or earlier, connect to J6. The firmware revision can be found on the label attached to component U18 on the Main processor board.

Removing the Existing Pen Arm

Table 1 Procedure for removing the existing pen arm

Step	Action
1	Open the recorder door.
2	Press the [CHART] key. The pen arm will move to its outer limit and stop. Prompt "CHT HOLD" will appear in the lower display.
3	Remove power from the recorder.
4	Loosen the captive screw on the right side of the chart plate and swing the plate out.
5	Disconnect the stylus wires by removing the plug connector from J8 on the Main printed circuit board (just above the large capacitor near the bottom of the board - under alarm PCB, if supplied).
6	Remove the screw that fastens the pen arm to the plastic sector gear on the servo shaft, and remove the pen arm with stylus wires from the shaft.

Installing the New Pen Arm

Table 2 Procedure for installing the new pen arm

Step	Action
1	Feed the stylus wires through the hole in the center of the sector gear. Place the pen arm on the sector gear and fasten it with the screw provided with the pen assembly, but don't tighten it completely.
2	Be sure a chart is installed and swing the chart plate out.
3	Use finger pressure on the sector gear to move the pen arm toward the chart hub until the sector gear comes to its limit stop.
4	Close the chart plate. Rotate the pen arm on the sector gear so that the stylus (pen tip) sets on the chart plate next to the chart hub but not touching the chart hub. Then tighten the screw holding the pen to the sector gear. Swing the chart plate out.
5	Route the plug end of the stylus wires to connector J8 on the Main printed circuit board. Secure the wires to other wires with wire ties.
6	Close the chart plate and tighten the captive screw.
7	Follow the next procedure to adjust the printing.

Adjust Printing

Table 3 Procedure for selecting pen and trace information

Step	Press	Action/Result
1	SET UP until you see:	Upper Display SET UP Lower Display LOCKOUT
2	FUNC until you see:	Upper Display + + + + Lower Display PASSWD ← Use ▲ or ▼ to enter password as each appropriate character is highlighted
3	FUNC until you see:	Upper Display [] ← Use ▲ or ▼ to select NONE Lower Display LOCKOUT
4	SET UP until you see:	Upper Display ADJUST Lower Display PRINTING
5	FUNC until you see:	Upper Display [] ← Use ▲ or ▼ to select MEDIUM Lower Display TRACE LN
6	FUNC until you see:	Upper Display [] ← Use ▲ or ▼ to select MEDIUM Lower Display GRID LN
7	FUNC until you see:	Upper Display [] ← Use ▲ or ▼ to select NORMAL for P/N 30756304-501 JEWEL for P/N 30756304-502 Lower Display PEN TYPE
8	SET UP until you see:	Upper Display SET UP Lower Display LOCKOUT
9	FUNC until you see:	Upper Display + + + + Lower Display PASSWD ← Use ▲ or ▼ to enter password as each appropriate character is highlighted

10	<div style="border: 1px solid black; padding: 2px; display: inline-block; text-align: center;">FUNC</div> until you see:	Upper Display <div style="border: 1px solid black; width: 60px; height: 15px; margin: 2px 0;"></div> Lower Display <div style="border: 1px solid black; padding: 2px; display: inline-block;">LOCKOUT</div>
11		Check the pen alignment

Use ▲ or ▼ to select any selection other than NONE

Check Pen Alignment

Check the pen alignment by creating a chart. The base or bottom line of the created chart should not print over the word HONEYWELL logo on the blank chart. The base line of the created chart should not be further than 1/8th of an inch away from the HONEYWELL logo.

ATTENTION If the alignment is incorrect, loosen the screw at the sector gear and readjust. Adjustment is linear.

If the printing is too dark, repeat steps 3, 4, and 5 in Table 3.

If any other problem occurs, call Honeywell Technical Assistance Center
1-800-423-9883