Bently Nevada 3500/77M 176449-07

01 Define the service boundary

1 Map cylinder and chamber assignments

Record 3500/77M 176449-07 and each transducer-to-channel-to-chamber relationship. Identify the monitor and its matching internal or external termination arrangement.

2 Retain calibration and mechanics

Save pressure/voltage calibration points, configured ranges and the mechanical data used for rod-load calculations. Do not replace them with a generic sensor range.

Input paths	1-4 pressure channels
Transducer signal	Approved positive-voltage pressure
Input impedance	50 kilohms

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02 Prepare the installation

1 Place protection in maintenance

Apply the approved compressor protection bypass and isolation procedure. Preserve the configured Alert/Danger assignments and relay-path relationship.

2 Inspect the pressure interface

Confirm approved positive-voltage transducers and correct termination hardware. Check signal, common and sensor-supply conductors against the retained channel map.

Transducer	Approved positive-voltage pressure
Calibration	Retain two pressure/voltage points

03 Restore connections and settings

1 Restore the intended component

Use 143737-01 only for its external-termination I/O role and 176449-07 for the monitor role. Reconnect the correct field path without exchanging cylinder assignments.

2 Restore the configuration

Load retained sensor scales, measured-variable selection, alarm limits and mechanical parameters. Confirm the installed monitor/I/O arrangement matches the project.

Field path	Correct termination and chamber mapping
Derived values	Correct mechanical configuration

04 Verify the operating response

1 Test pressure response

Use an approved reference to check each channel scaling and chamber identity. Compare minimum, maximum and configured pressure variables under the test conditions.

2 Interpret buffered outputs correctly

Account for inversion and the -2.265 VDC offset when comparing diagnostic voltages. A direct raw-sensor comparison without that transformation is misleading.

Buffered signal	Inverted and offset by -2.265 VDC
Release	Channel and alarm proof

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05 Release and retain the evidence

1 Verify alarms and derived values

Test the assigned Alert and Danger functions and review rod-load calculations against the configured mechanics. Do not release on a plausible pressure display alone.

2 Retain compressor-channel evidence

Record the complete component markings, termination map, calibration and alarm tests. Restore protection only after the affected channels and assigned logic pass.

Technical basis: Bently Nevada 3500/77M Recip Cylinder Pressure Monitor, 147485 Rev. Y.

Related product navigation

Bently Nevada 3500/20 125744-02

Bently Nevada 3500/42M 140734-02

These are related references, not confirmed substitutes or an automatically approved assembly.