Instruction Sheet

for Low Oil Level Switch Kit 22102388

- **WARNING** **Before installing this kit, release air pressure from the system and disconnect, lock and tag the main power supply.**

DESCRIPTION

A properly functioning low oil level switch (LOLS) is critical to the operation of your compressor. Operating the compressor with a defective LOLS can cause extensive damage should the crankcase oil level drop to an unsafe point undetected. The LOLS is a single-pole, double- throw device, and is NEMA 4 rated. LOLS data is listed in the following table.

AMPS	VOLTAGE
0.4	575 VAC PILOT DUTY
1/4	250 VDC - NON-INDUCTIVE
1/2	125 VDC - NON-INDUCTIVE
3-1/2	24 VDC - NON-INDUCTIVE
10	125, 250, 480 VAC

The LOLS does not alleviate the need to check the oil level in your compressor on a regular basis. Refer to the maintenance information in the owner's manual for details. Ingersoll-Rand Company cannot assume responsibility for any damage which might occur as the result of operating the compressor without adequate lubrication.

OPERATION

If the oil level in the compressor crankcase reaches an unsafe level, the float will cause the LOLS to activate and shut down the unit. When the proper lubricant level has been restored, the float will reset to its original position, enabling the compressor to be restarted.

MAINTENANCE

Under normal operation, the LOLS requires no operator intervention or routine maintenance. If the LOLS fails, as evidenced by frequently shutting off the motor, or failing to shut off the motor if the oil level drops to an unsafe point, it should be removed and checked immediately. A defective LOLS must be replaced.

REMOVAL OF OLD LOLS

1. Drain the oil from the crankcase (refer to the owner's manual for draining procedures).
2. Disconnect the switch wires from the control circuit.
3. Loosen the three set screws and remove the switch cover.
4. Remove the switch body from the compressor frame.
5. Use a clean rag to remove any residue from the LOLS port.

INSPECTION OF WIRING IN NEW LOLS

The wiring configuration inside the switch depends on whether the switch is normally open or normally closed. Use the old switch as a reference, or refer to the Figure 1 to determine the proper wiring configuration for your compressor. If the wiring inside the switch needs to be changed, remove the two screws inside the switch, pull out the wire assembly and proceed to reposition the black wire onto the empty terminal. Reassemble the switch, ensuring the screws are securely tightened.

NORMALLY OPEN wiring for compressor models using a starter. Note black wire on far left terminal.

NORMALLY CLOSED wiring for TS5 compressor models using a combination Condor pressure switch and shunt release coil. Note black wire on second terminal from left.

OVER

NOTES

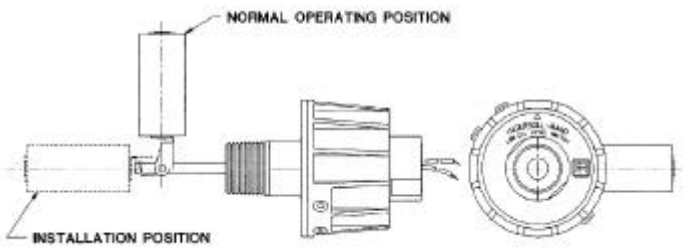
Printed in U.S.A.

Form 22102396
Rev. A
March 2002

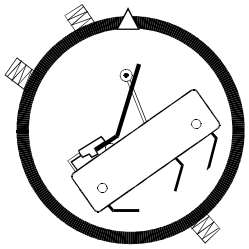
INSTALLING NEW LOLS

NOTE: Use a standard 12-volt automotive test light to test the switch during installation.

1. Thoroughly clean the float with a dry rag. If necessary, a non-flammable solvent can be used provided the float is wiped clean before the LOLS is installed.
2. Align the cover on the LOLS body as shown in the ilustration below.



3. Hold the float up so that the contact rod and cover do not make contact. The test light should be on.
4. Release the float. When the rod and cover make contact, the test light should go off.
5. With the LOLS cover removed, apply pipe thread sealant to the switch threads.
6. Open and hold the spring-loaded float straight to the stem and insert it through mounting hole. Release the float and continue to push the stem through the opening. The spring will close the float when it clears the opening.
7. Care must be taken during the placement of the cover to the LOLS body to ensure that the float assembly shaft is positioned to the outside of of the microswitch lever. Rotate the cover to the right approximately 1/4 turn, placed on the body, then turned to the left to the correct working position with the "arrow" on the cover pointing straight up.



8. Carefully and evenly tighten the three set screws to secure the cover to the LOLS body, using caution not to over-tighten and damage the LOLS. Tighten the set screws to 24-32 In. Oz.
9. Connect the LOLS wires to the control circuit. Refer to your owner's manual.
10. Fill the compressor crankcase with lubricant. Refer to your owner's manual.

PARTS LIST

Should it ever be necessary to replace the switch, supply the following information when ordering.

PART NO.	DESCRIPTION
32276313	SWITCH, LOW OIL LEVEL

NOTES