

## LOW OIL SHUT DOWN CONTROL (LOSC)

# **MARNING**

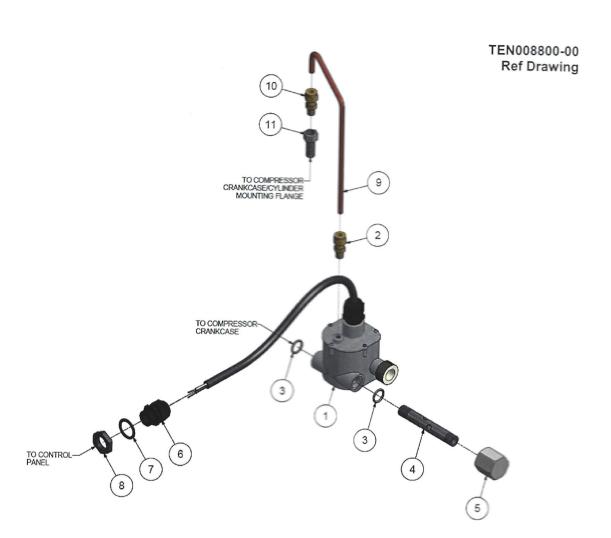
THIS MANUAL CONTAINS IMPORTANT SAFETY INFORMATION AND SHOULD ALWAYS BE AVAILABLE TO THOSE PERSONNEL OPERATING THIS UNIT.

READ, UNDERSTAND AND RETAIN ALL INSTRUCTIONS BEFORE OPERATING THIS EQUIPMENT TO PREVENT INJURY OR EQUIPMENT DAMAGE.



C520-B (Ref. Drawing)

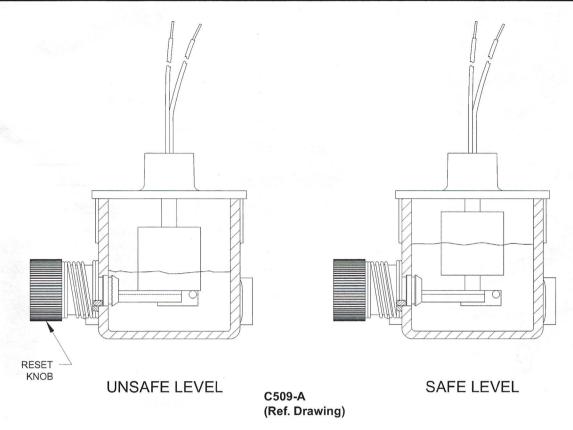
# LOSC BASIC CONTROL NEMA 1 & 4



LOW O	L SHUTDOWN CONTROL		TEN008800
1	TEN008741	SWITCH-LOW OIL SHUTDOWN CONTROL	1
2	M2863	COMPRESSION FITTING, STRAIGHT	1
3	2009222	O-RING	2
4	CC1153304	OIL TUBE	4
5	LO30	RETAINER CAP	4
6	003FE98	CORD GRIP	4
7	TEN008088	SEALING RING	4
8	TEN008089	LOCK NUT	4
9	See Pages 4-5	VENT TUBE	
10	M2863	COMPRESSION FITTING, STRAIGHT	1
11	P13757A	VENT FITTING	1

# OIL MONITOR KITS (For installation on Pumps without Oil Monitor)

PUMP MODEL	KIT#	DIAGRAM
R10, R15, PL15, S12, S20 R30, PL30, S40	CC1007124 CC1007125	A B
R40, PL40	CC1007127	C
R70, PL70	CC1007128	D
RV15	CC1007129	E
RV30	 CC1007166	F



#### **OPERATION:**

The oil monitor must be used in conjunction with a magnetic starter (see wiring diagram for details). The oil monitor is installed on the outside of the air compressor crankcase with a port that allows oil to feed into it's float bowl chamber and maintain the same level as in the crankcase. The float moves vertically up or down as the oil level changes. If the oil level is below minimum allowable operating level, the reed switch will open, thus stopping the motor. A magnet holds the float and prevents the compressor from starting. In order to start the compressor the following steps must be taken:

- 1. Fill crankcase to recommended capacity as indicated when level reaches the middle of the oil sight glass.
- 2. Turn cam reset knob 90° clockwise.

**IMPORTANT NOTE**: The Oil Monitor does not eliminate the compressor owner's responsibility for periodically checking oil level. Refer to compressor Owner's Manual for maintenance instructions.

DIAGRAM A	R10, R15, PL15, S12, AND S20			)
5	3 3 4 5 5	PART NO. CC1007376 M2863 CC1007635 M2863 P13757A	QTY.  1 1 1 1 1	DESCRIPTION  LOSC ASSY COMPRESSION FITTING, STRAIGHT TUBE, VENT COMPRESSION FITTING, STRAIGHT FITTING, VENT
	C506-B (Ref. Drawing)		Not	te: R15 Shown

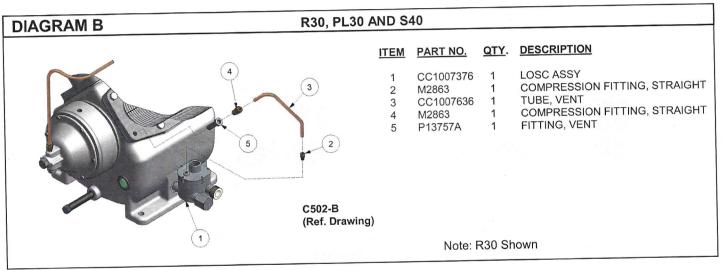
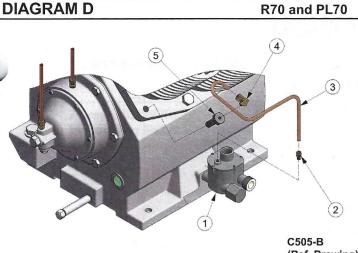


DIAGRAM C	R	40 AND	PL40		
	4)	ITEM	PART NO.	QTY.	DESCRIPTION
5	3	1 2 3 4 5	CC1007376 M2863 CC1007631 M2868 M1500	1 1 1 1	LOSC ASSY COMPRESSION FITTING, STRAIGHT TUBE, VENT COMPRESSION FITTING, 90 DEG FITTING, VENT
1	C504-B (Ref. Drawing)		40	Note: R40 S	Shown



ITEM	PART NO.
1	CC1007376
2	M2863
3	CC1007632
4	M2868
_	

M1500

DESCRIPTION QTY. LOSC ASSEMBLY.

COMPRESSION FITTING, STRAIGHT

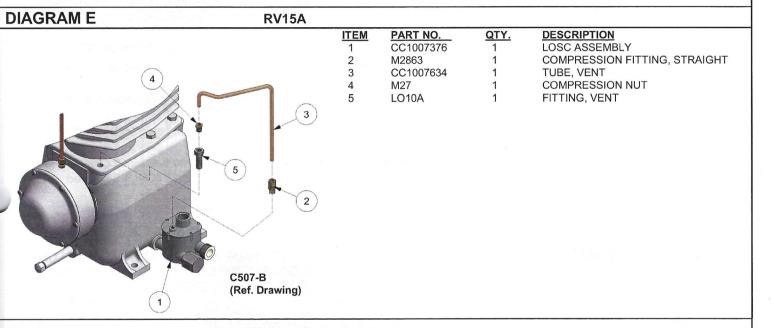
TUBE, VENT

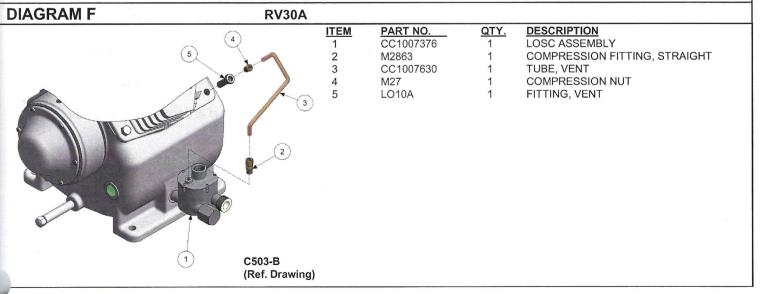
COMPRESSION FITTING 90 DEG.

FITTING, VENT

(Ref. Drawing)

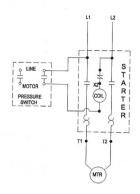
Note: R70 Shown





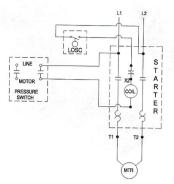
# LOSC WIRING DIAGRAMS

#### SUPPLY VOLTAGE FROM DISCONNECT



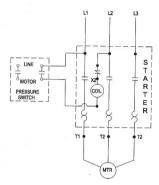
### SINGLE PHASE MAGNETIC STARTER

## SUPPLY VOLTAGE FROM DISCONNECT



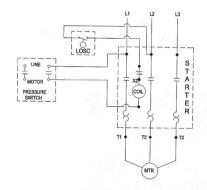
SINGLE PHASE MAGNETIC STARTER WITH LOSC (LOSC SHOWN NORMALLY OPEN WHEN THERE IS NO OIL IN THE CRANKCASE)

### SUPPLY VOLTAGE FROM DISCONNECT



THREE PHASE MAGNETIC STARTER

### SUPPLY VOLTAGE FROM DISCONNECT



THREE PHASE MAGNETIC STARTER WITH LOSC (LOSC SHOWN NORMALLY OPEN WHEN THERE IS NO OIL IN THE CRANKCASE)

TO HAVE WARRANTY CONSIDERATION, ELECTRIC MOTORS MUST BE EQUIPPED WITH FACTORY INSTALLED THERMAL OVERLOAD

C519-A (Ref. Drawing)

### **TROUBLESHOOTING & SERVICING**

# M

## **WARNING**

Always disconnect unit from power supply and relieve all pressure from air tank before performing any maintenance. "Lock Out" or "Tag Out" all power sources. Failure to do so may result in equipment damage or injury.

## NOTICE

Do not disassemble LOSC switch. Disassembly will void warranty.

No adjustments are required for oil monitor.

If the Oil Monitor does not operate properly, check the items listed below to determine the cause.

#### 1) CRANKCASE OIL

Check sight glass to insure proper oil level in crankcase, when compressor is shut off.

Check crankcase oil for proper viscosity. This is particularly important for temperature conditions below 32°F. Oil which is too thick can slow the response of the mechanism, causing float to register a low level.

Change oil regularly. Clean oil insures proper operation of the Oil Monitor, as well as compressor.

#### 2) VENT TUBE

Check vent tube to insure it is not clogged.

Check the gasket between valve body and bowl for leaks. This will cause a pressure rise in the crankcase which will give a false safe oil level indication.

Check the fittings at ends of vent tube (3) for tightness and leaks.

#### 3) RESET

Check that reset return spring is in proper working order.

Verify that reset knob is in fully counterclockwise position.





For additional information, contact your local representative or visit: www.championpneumatic.com/contactus.aspx

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