

## Sleevoil® Oil Level and Filtration System (OLF) Instruction Manual

These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see [dodgeindustrial.com](http://dodgeindustrial.com) for updated instruction manuals.

**WARNING:** To ensure the drive is not unexpectedly started, turn off and lock-out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

**WARNING:** All products over 25 kg (55 lbs) are noted on the shipping package. Proper lifting practices are required for these products.



### INSTALLATION

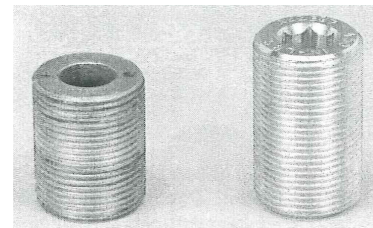
1. Verify Sleeveoil Pillow Block series and bore size prior to installation of Oil Level and Filtration System (OLF System).

**Note:** One OLF System per Sleeveoil Pillow Block.

2. Check to ensure that correct oil inlets have been ordered and received for the OLF system installation.

**WARNING:** Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Dodge® nor are the responsibility of Dodge. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

Table 1 - Oil Inlets for the OLF System	
R Series PLWC Bore Size	Need Plunger Screw Modified For Circulating Oil Part Number
1-7/16"	422392*
1-11/16" – 1-15/16"	422393*
2-3/16"	422394*
2-7/16"	422395*
2-11/16" – 2-15/16"	422397*
3-7/16"	422398*
* Only if PLWC pillow block was manufactured prior to 1988 is new plunger screw required.	



**Figure 2**

Plunger Screw Prior to 1988      Plunger Screw 1988 to Present

3. Shut down the main fan by following the manufacturer instructions.
4. Locate the OLF System at least 3 feet below the circulating oil control level drain return hole on the Sleeveoil bearing housing.
5. Fasten the OLF System horizontally to the base using the four 5/16 inch motor mount bolts.

### LUBRICATION

1. Fill the OLF System reservoir to the top by monitoring the oil level gauge. The OLF System reservoir will hold 1 gallon of oil.

Since the satisfactory operation of the pillow block depends almost entirely on the oil film being maintained between the shaft and bearing liner surface, the use of a high quality oil from a reputable manufacturer cannot be overemphasized. Use a high grade straight mineral oil with rust and oxidation (R & O) inhibitors and antifoam agents. Check construction drawings or equipment instruction manual for proper oil. Oil viscosity is determined by the equipment manufacturer and normally specified on the construction drawing or in the operating manual.

2. Connect the output of the OLF System to the Bearing Housing circulating oil inlet using the fitting designated by the bearing supplier.

R-Series 1-7/16" – 3-7/16" Only. Supply line requires the user to provide 3/4" NPT hose, inlet adapter (see chart), and pipe nipple. Hose length is limited by the motor's ability to supply oil to the bearing. Connect the output of the filtration unit to the Sleeveoil circulating oil inlet.

Attachment Dimensions R Series 1-7/16" - 3-7/16"				
Bore Size R Series	Circ. Oil Inlets	Inlet Pipe NPT Size	Circ. Oil Drain Hole NPT Size	Alt. Oil Gauge Hole NPT Size
1-7/16"	1	3/4"	–	1/2"
1-11/16"	1	3/4"	–	1/2"
1-15/16"	1	3/4"	–	1/2"
2-3/16"	1	3/4"	–	1/2"
2-7/16"	1	3/4"	–	1/2"
2-11/16"	1	3/4"	–	1/2"
2-15/16"	1	3/4"	–	1/2"
3-7/16"	1	3/4"	1"	3/4"

**R-SERIES 3-15/16"–12" and all series of RTL and RXT**  
Supply line requires the user to provide 3/4" NPT hose, inlet adapter (see chart), pipe nipple and standard "T" fitting. Hose length is limited by the motor's ability to supply oil to the bearing. Connect the output of the filtration unit to the two Sleeveoil circulating inlet kits using the "T" fitting.

Attachment Dimensions R-Series					
Bore Size R Series	Circ. Oil Inlets	Inlet Pipe NPT Size	Circ. Oil Drain Hole NPT Hole		Alt. Oil Gauge Hole NPT Size
			STL	SSL	
3-15/16"	2	1/4"	3/4"	3/4"	1/2"
4-7/16"	2	1/4"	3/4"	1"	1/2"
4-15/16"	2	1/4"	1"	1-1/4"	1/2"
5-7/16"	2	1/4"	1"	1-1/4"	3/4"
6"	2	1/4"	1"	1-1/4"	3/4"
7"	2	1/4"	1-1/4"	1-1/4"	3/4"
8"	2	1/4"	1-1/4"	1-1/4"	3/4"
9" PL	2	1/4"	1-1/4"	1-1/4"	3/4"
10" PL	2	1/4"	1-1/4"	1-1/4"	3/4"
12" PL	2	1/4"	1-1/2"	1-1/2"	3/4"
9" XC	2	1/4"	1-1/2"	1-1/2"	3/4"
10" XC	2	1/4"	1-1/2"	1-1/2"	3/4"

#### RTL Supply Line

All plumbing (oil and water) should be cleaned and flushed before being connected to the pillow block. These systems should be tested before the bearing is put into operation. Insert the two pipe nipples through the holes in the housing

cap and screw them tightly into the liner.



Install grommet, grommet plate and collar over each inlet pipe. Press down on collar and tighten collar set screw. Connect oil filtration lines so that each inlet receives an equal amount of oil.

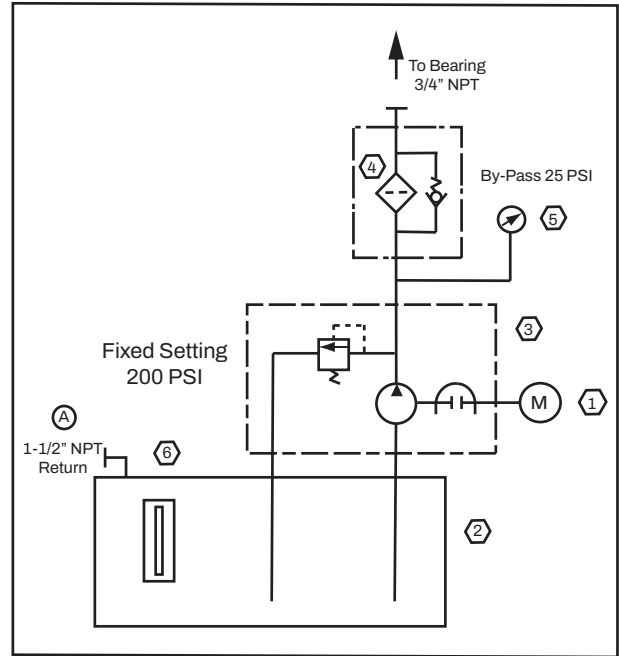


Attachment Dimensions RTL Supply Line				
Bore Size RTL Series	Circ. Oil Inlets	Inlet Pipe NPT Size	Circ. Oil Drain Hole NPT Size	Alt. Oil Gauge Hole NPT Size
3-7/16"	2	1/4"	1-1/2"	3/4"
3-15/16"	2	1/4"	1-1/2"	3/4"
4-7/16"	2	1/4"	1-1/2"	3/4"
4-15/16"	2	1/4"	2"	3/4"
5-7/16"	2	1/4"	2"	3/4"
6"	2	3/8"	2"	3/4"
7"	2	3/8"	2"	3/4"
8"	2	3/8"	2"	3/4"
9"	2	3/8"	2"	3/4"
10"	2	3/8"	2-1/2"	3/4"
12"	2	3/8"	2-1/2"	3/4"

#### RXT Supply Line

Inlet pipe plugs are already on pillow block. Connect oil filtration lines so that each inlet receives an equal amount of oil.

The pressurized oil is delivered to the 2 openings on the downswing side of the pillow block when the radial load is directed into the base and the upswing side when the radial load is directed into the cap.



**Figure 1 - Wiring Diagram**

Attachment Dimensions RXT Supply Line				
Bore Size RTX Series	Circ. Oil Inlets	Inlet Pipe NPT Size	Circ. Oil Drain Hole NPT Size	Alt. Oil Gauge Hole NPT Size
2-15/16"	2	1/2"	1-1/4"	3/4"
3-7/16"	2	1/2"	1-1/4"	3/4"
3-15/16"	2	1/2"	2"	3/4"
4-7/16"	2	1/2"	2"	3/4"
4-15/16"	2	1/2"	2"	3/4"
5-7/16"	2	1/2"	2"	3/4"
6"	2	3/4"	2-1/2"	3/4"
7"	2	3/4"	2-1/2"	3/4"
8"	2	3/4"	2-1/2"	3/4"
9"	2	3/4"	2-1/2"	3/4"
10"	2	1"	2-1/2"	3/4"
12"	2	1"	2-1/2"	3/4"

3. Connect the bearing housing circulating oil level drain hole on alternate oil gauge hole for draining to the return on the OLF System. Note: Drain piping should be vented and of adequate size to drain oil from the bearing at the specified flow rate. The housing drain must be directed straight down into a return drain sloping away at a 15° or greater angle. Fill the bearing with oil to its recommended level (see Sleeveoil installation manual).
4. Connect the 1 HP electrical motor to 400 volts 3 phase power source. 9. Fill the bearing with oil to its recommended level (see Sleeveoil installation manual).
5. Connect the 1 HP electrical motor to 400 volts 3 phase power source.

6. Start and allow the OLF System to circulate. Be sure to monitor the oil level in the reservoir to ensure that the oil returns from the bearing housing.
7. Monitor the oil sight gauge on the bearing housing to ensure that the oil level is maintained. Also monitor the pressure gauge on the OLF System. It should read less than 10 PSI at start-up.
8. If the oil level in the bearing housing rises this means that the oil is not returning back to the oil level filtration unit. This can be due to not using the right size return line or due to improper location of the unit with respect to the bearing. In this case call Dodge.
9. If the oil level in both the OLF System and the bearing are stable, start the main fan. Continue to monitor the oil level in both the bearing and the OLF System to ensure that the oil still flows under the dynamic condition.
10. It is important to note that the drain return from the bearing housing is above the sump oil level in the housing, therefore the bearing will receive the oil it needs even if the OLF System is shut down or stops.

## MAINTENANCE

Periodically check the oil level in the bearing housing and the OLF System to ensure proper operation. When the filter becomes plugged, the oil pressure gauge reading should rise. Replace the filter element when the pressure reaches 18-20 psi. The bypass is set at a different pressure of 25 psi.

## GENERAL INFORMATION

Flow: .4 GPM

Electric Motor: 1 HP Three Phase

400 Volts AC — 1450 RPM

Supply Line Connection: ¾ inch NPT at the filter outlet

Return Line Connection: 1½ NPT

## REPLACEMENT FILTER

Use OLF System replacement oil filter part number 063500.

## OIL LEVEL FILTRATION SYSTEM PART NUMBERS

Part number 063575 - 60 Hz 115 Volts AC with 1/2 gallon per minute flow rate.

Part number 058219 - 50 Hz 400 Volts AC with 1/2 gallon per minute flow rate.

### Dodge Industrial, Inc.

1061 Holland Road

Simpsonville, SC 29681

+1 864 297 4800

