

## Sleevoil® RTL Pillow Blocks Sizes 3-7/16" through 12" 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.

This manual is best suited for RTL Pillow Blocks. If your Sleeveoil housing nameplate specifies "RTL spherical housing", use manual MN3085. Dodge started manufacturing RTL spherical pillow blocks in 2014.

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

**CAUTION:** Do not scrape, rebabbitt or otherwise alter this product. Such action adversely affects bearing performance and may result in damage to or destruction of equipment.

Sleevoil RTL pillow blocks are designed for applications requiring a bearing with high thrust load capacities and are available in expansion and non-expansion types.

Options include: thermocouple, circulating oil kit, heater and thermostat, vibration detector kit, auxiliary seal kit and end closure.



Exploded view of expansion pillow block (housing cap and liner cap not shown). Non-expansion pillow block includes thrust plate kit and split thrust collar.



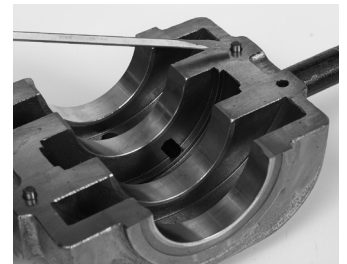
### PRE-ASSEMBLY INSTRUCTIONS

Refer to applicable contract/assembly drawings to verify that all parts are available prior to assembly. Disassemble and thoroughly clean all parts of the pillow block. The installer is the last person to inspect all parts for fit, damage and cleanliness. Care **MUST** be taken to avoid contaminating the internal surfaces of the bearing.

**WARNING:** Rust Preventatives and solvents can be toxic and/or flammable. Follow directions and safety procedures recommended by their manufacturers.

**WARNING:** Liner assembly has critical machined surfaces which are easily damaged. Use care in handling to protect these surfaces. Liner parts should be placed on a soft, **CLEAN** surface.

For ease of installation, the housings and liners are split and match-marked. The split halves are machined together and must not be interchanged. The match-mark on the housing is found near the joint in the grommet area. The match-mark on the liner is found on the outer diameter of the pilot on one end of the liner.

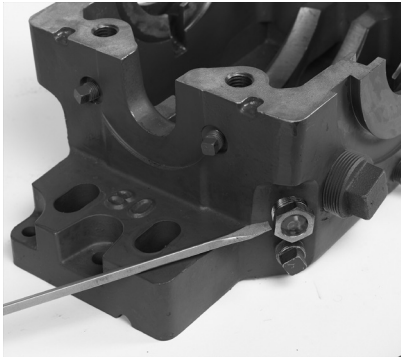


**WARNING:** Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, 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.

## INSTALLATION OF BASES

**WARNING:** To ensure that 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.

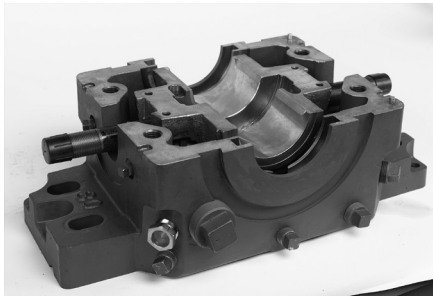
Check mounting structure to insure it is rigid, level and well supported. Position housing base on pedestal so oil gauge is in position specified on construction drawing. **Do NOT tighten housing base to pedestal.**



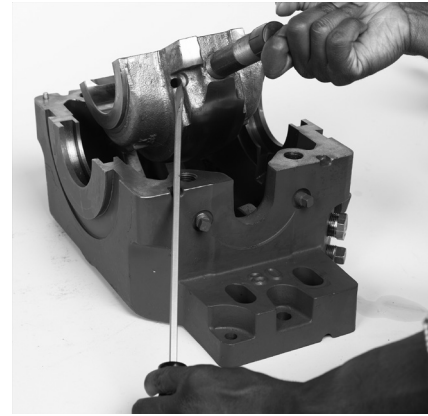
Apply oil to the spherical seats of the housing base.



Set liner base in housing base.



Because of the closely controlled liner to housing fit, it may be necessary to bolt the housing base down to allow the liner to slip into the housing seat. Do a preliminary alignment check at this time.



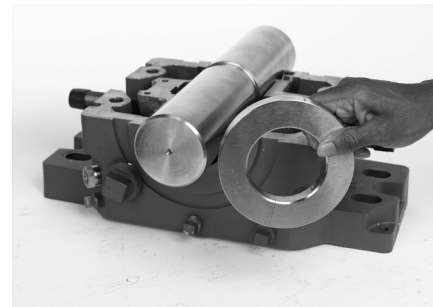
**Make sure the two thermocouple/RTD holes in the liner are aligned with the two thermocouple/RTD holes in the housing.** Apply oil to the liner bearing surface.

**NOTE:** Liner has been machined to close tolerances. Scraping of bore is not necessary.

## INSTALLATION OF SHAFT AND THRUST COLLAR

Inspect shaft to ensure it is smooth (32 micro-inch RMS or better) and free of burrs and rough spots. Standard shaft diametrical tolerance should be nominal  $+0.000/-0.002$ " unless otherwise specified on shaft detail drawing.

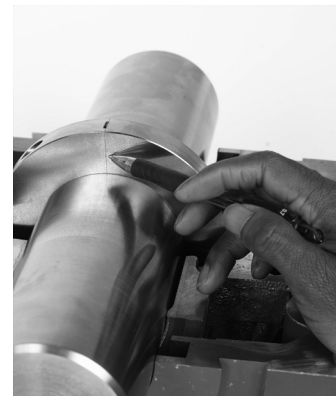
If bearing is non-expansion (fixed) type, check thrust collar for burrs and scratches. Use crocus cloth (NOT emery) to smooth any scratches on the thrust collar faces.



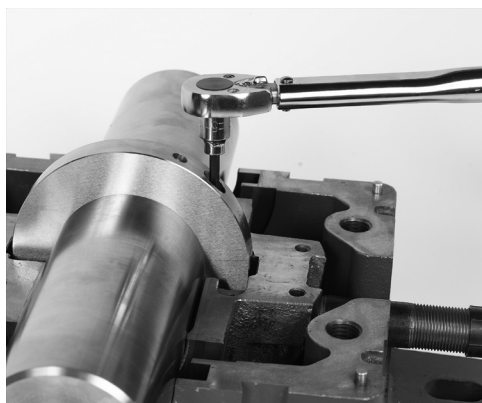
If clamp-on type thrust collar is used, make sure joints of collar are clean. Place both halves of thrust collar into shaft groove and tighten clamp screws alternately and evenly to torque value specified in Table 1.

**NOTE:** Set and jam screws are shipped separately.

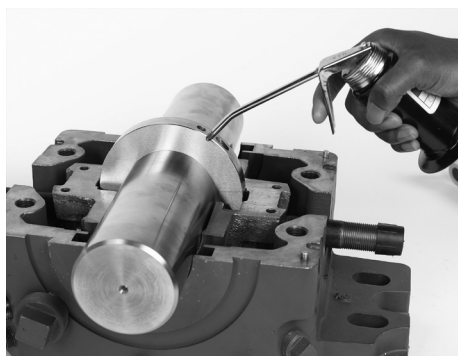
The collar faces must be smooth with no offset at the split.



Tighten set screws to value specified in Table 1. **Install and tighten jam screws 1/10 of torque specified for set screws.**

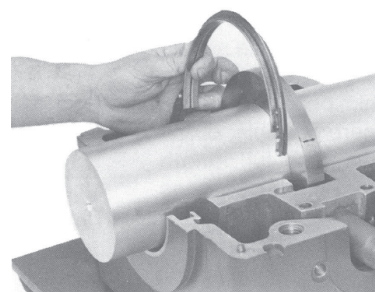


Oil shaft in the bearing area and CAREFULLY set shaft in place.



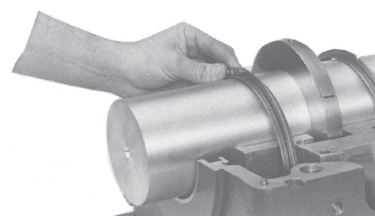
**NOTE: Oil ring halves are match-marked and must not be interchanged.**

Place oil ring around outside of liner base and over shaft.



Install oil ring screws to insure they are secure. Repeat for second ring.

Make sure oil rings rotate freely on shaft.



## INSTALLATION OF THRUST PLATES

For non-expansion bearings:

Clean one set of babbitt faced thrust plates.

**NOTE:** Thrust plates are shipped in protective wax with the babbitted faces on the outside. Be careful not to damage the babbitted faces when peeling off the wax.

**NOTE:** Plates are matched halves and must not be interchanged.



The thrust collar must be centered in the cavity of the liner base.

## INSTALLATION OF OIL RINGS

**NOTE: Do NOT use oil rings if liner cap has baffles installed in the oil ring grooves.**

Oil rings are shipped disassembled with two extra screws. Place oil rings around outside of liner base and over shaft.

Carefully smooth any scratches on babbitted face with crocus cloth (NOT emery cloth or sandpaper). Oil plate halves generously.

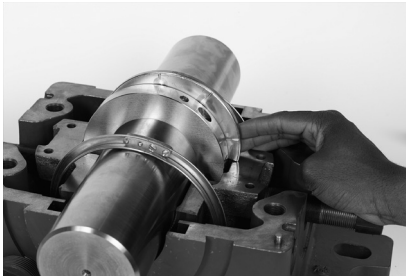


Table 1

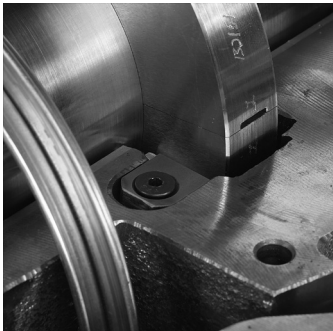
RTL Sleeveoil Size	Thrust Collar			
	Clamp Screw		Set Screw	
	Screw Size (Soc. Hex)	Wrench Torque (In.-Lbs.)	Screw Size (Soc. hex)	Wrench Torque (In.-Lbs.)
3 7/16 RTL	¼ - 20NC	160	5/16 - 24NF	160
3 15/16 RTL	¼ - 20NC	160	5/16 - 24NF	160
4 7/16 RTL	¼ - 20NC	160	5/16 - 24NF	160
4 15/16 RTL	5/16 - 18NC	325	5/16 - 24NF	160
5 7/16 RTL	3/8 - 16NC	580	3/8 - 16NC	275
6 RTL	½ - 13NC	1425	3/8 - 16NC	275
7 RTL	½ - 13NC	1425	3/8 - 16NC	275
8 RTL	½ - 13NC	1425	5/8 - 11NC	1200
9 RTL	5/8 - 11NC	2800	5/8 - 11NC	1200
10 RTL	¾ - 10NC	5000	5/8 - 11NC	1200
12 RTL	¾ - 10NC	5000	5/8 - 11NC	1200



First, install the plate half without milled slots in the steel back. Press the babbitted face against the thrust collar and rotate plate around shaft into liner cavity.



Install retainer washer in groove in liner base. Rotate plate until stopped by retainer washer.



Place the other thrust plate half (half with two milled slots in steel back) against thrust collar, making sure babbitt faces thrust collar.

Clean and oil the second thrust plate set and install in same manner. It may be necessary to move the shaft slightly to obtain enough clearance in the liner cavity to install the lower plate half.

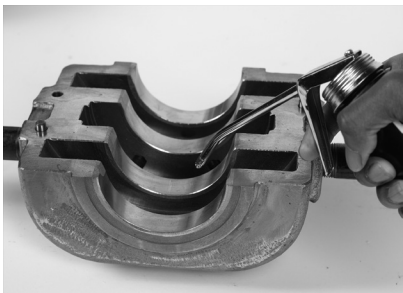


**CAUTION:** The bearing is not yet fastened in place and can be moved.

Total axial clearance between thrust plates and thrust collar is .015 - .030 inches.

### INSTALLATION OF LINER CAP

Apply oil to the bearing area of liner cap.

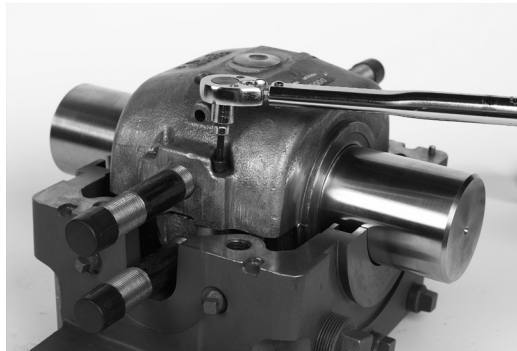


**WARNING:** If it ever becomes necessary to remove liner cap, make certain that both upper thrust plate halves remain in place next to the thrust collar. If a plate half should remain in the liner cap it can drop from the liner and cause injury.

CAREFULLY locate liner cap on liner base. These Sleeveoil liners have match-marks permanently stamped at the joint near one end. These match marks permanently insure that parts stay paired and critical orientation of assemblies is maintained. Makes sure oil rings rotate freely. End faces of liner should have no appreciable offset.



Install cap screws and tighten alternately to torque given in Table 2.



**NOTE:** If liner cap on non-expansion bearing will not drop into place, remove cap and reposition thrust plates tightly against thrust collar. Reinstall liner cap.

Table 2

RTL Sleeveoil Size	Liner Cap Bolts	
	Thread Size	Torque (In.-Lbs.)
3-7/16	5/16 - 18	132
3-15/16	5/16 - 18	132
4-7/16	5/16 - 18	132
4-15/16	5/16 - 18	132
5-7/16	5/16 - 18	132
6	3/8 - 16	240
7	½ - 13	600
8	½ - 13	600
9	½ - 13	600
10	¾ - 10	2100
12	¾ - 10	2100

Check alignment of pillow block by noting clearance between housing and shaft at each end of the housing. Clearance should be uniform within 1/32". Shim bearing pedestal where possible; otherwise, use full length shims under base as required. Alignment of pillow block should be accurate to prevent the seals from rubbing.



Tighten the four pedestal bolts to torque value given in Table 3. Shaft should rotate freely.



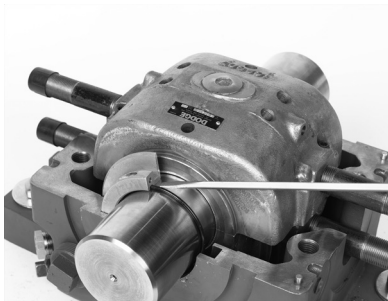
### INSTALLATION OF OIL SEALS

Cut the O-ring (rubber cord) and wrap it around the shaft inside the seal groove. If the O-ring is too large, cut it to fit the shaft. For most effective sealing, ends of O-ring must meet. Cement or glue the ends together. Lubricate O-ring with oil or grease.



Apply a thin coat of heavy oil or light grease in the housing seal grooves to extend seal life.

Disassemble one seal and place one half on shaft with flinger facing liner. Locate O-ring in seal groove and rotate seal half around shaft into housing base groove.



Install other half of seal and tighten screws to torque given in Table 3. Check to make sure the seal will slide along the shaft with minimum effort to allow for shaft expansion. Align the seal in the middle of the seal groove.

Install second seal in same manner. If end closure is to be used, the neoprene disc is to be installed on one end at this time instead of the bearing seal. Consult construction drawing.

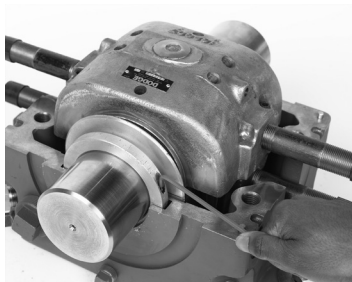


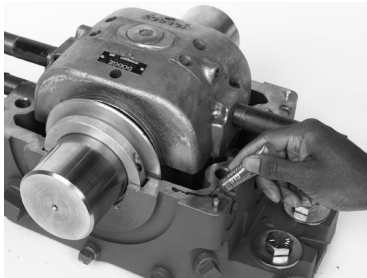
Table 3

RTL Sleeveoil Size	Housing/Pedestal Bolts		Seal Clamp Screws	
	Thread Size	Torque (In.-Lbs.)	Thread Size	Torque (In.-Lbs.)
3-7/16 3-15/16	3/4 7/8	2100 2040	10-24 10-24	12 12
4-7/16 4-15/16	1 1	3000 3000	10-24 10-24	12 12
5-7/16 6	1-1/8 1-1/4	4200 6000	1/4-20 1/4-20	33 33
7 8	1-1/2 1-3/4	10000 11500	5/16-18 5/16-18	65 65
9 10 12	1-3/4 2 2	11500 15000 15000	3/8-16 3/8-16 3/8-16	120 120 120

### INSTALLATION OF HOUSING CAP

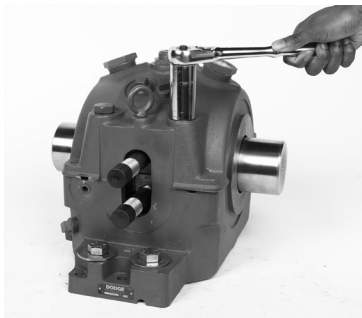
Back off the plunger screw as far as possible.

Along the outer contour of the housing base, apply the supplied LOCTITE® 515 or an equivalent sealant to the joint. CAREFULLY place the housing cap on the base, and take special precautions to prevent seal damage.



The plunger screw must remain loose until the housing bolts have been tightened.

Apply RTV (not supplied) around each of the four housing bolt holes. This will prevent water from entering the bolt hole cavities.



Insert the bolts, and torque to the values shown in Table 4.

NOTE: Follow all instructions and precautions shown by LOCTITE or the equivalent product's manufacturer.

Wipe off any excess sealant and RTV/gasket material.

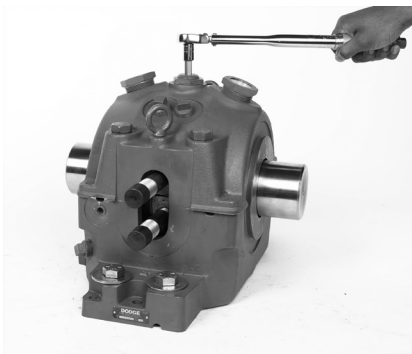
Table 4

RTL Sleeveoil Size	Plunger Screw		Housing Cap Bolt	
	Wrench Size (Soc. Hex)	Torque (In.-Lb.)	Thread Size	Torque (In.-Lb.)
3-7/16 3-15/16	3/8 3/8	850 850	3/4-10 3/4-10	1920 1920
4-7/16 4-15/16	1/2 5/8	1260 2500	7/8-9 7/8-9	2280 2280
5-7/16 6	5/8 5/8	2500 2500	1-8 1-8	2640 2640
7 8	5/8 3/4	2500 3600	1-1/8-7 1-1/8-7	3600 3600
9 10 12	3/4 3/4 3/4	3600 4800 4800	1 1/4-7 1 1/4-7 1 1/2-6	5040 5040 8880

Plunger screw will be tightened to torque given in Table 4, following procedure described below.

CAP LOADED BEARINGS

To install cap in cap loaded bearings, tighten plunger screw to torque given in Table 4 while shaft is held down. Mark the position of the plunger screw. Loosen plunger screw one turn and loosen shaft hold down.



Next, tighten plunger screw to the mark. Remove shaft hold down and tighten plunger screw locknut.



NOTE: Do not tighten plunger screw on accompanying base loaded bearing until cap loaded bearing has been installed and shaft hold down removed.

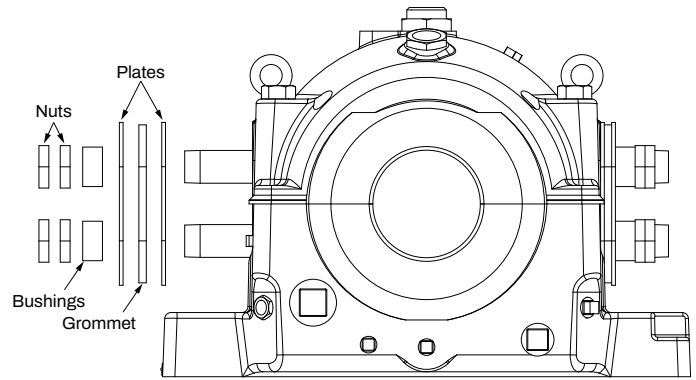
BASE LOADED BEARINGS

Tighten plunger screw to torque given in Table 4 and secure with locknut.

INSTALLATION OF GROMMETS AND OIL GAUGE

Install grommet and grommet plate over coolant pipes.

Apply RTV or a non-hardening sealant on the housing grommet area and between the grommet and grommet plates, and around coolant pipes.



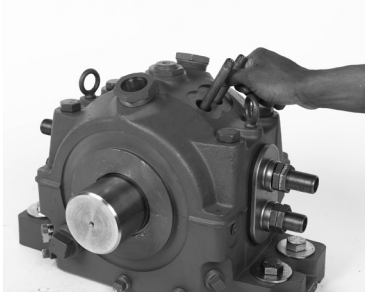
Install bushings and nuts on pipes (snug not tight).

Oil level gauge may be located any distance from the pillow block by use of a coupling and pipe of desired length. The extended pipe must be supported so that it remains straight and level with no offsets (use a spirit level—do not guess). Use pipe sealer on all connections.

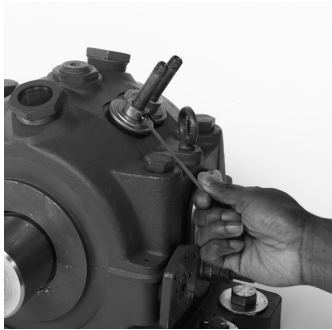
When pillow block is arranged for circulating oil, the oil level is controlled by the drain system and the oil level gage is not needed.

## OPTIONS

When pillow block is arranged for circulating oil, insert the two small pipe nipples thru the holes in the housing cap and screw them tightly into the liner.



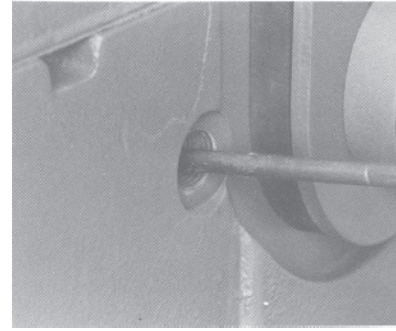
Install grommet, grommet plate and collar over each inlet pipe. Press down on collar and tighten collar set screw.



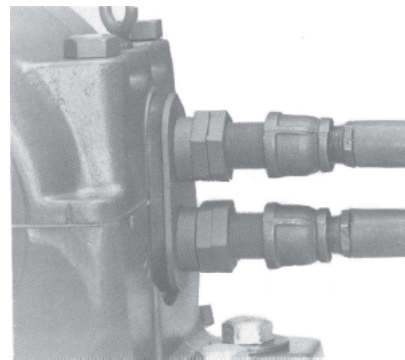
**NOTE: ALL plumbing (oil and water) should be cleaned and flushed before being connected to the pillow block. These systems should be tested before the bearing is put into operation.**

Connect circulating oil supply lines so that each inlet receives an equal amount of oil. A flow control valve and oil flow indicator are recommended in the inlet line. Oil flow must be adjusted to the rate recommended by the equipment manufacturer. Connect the drain lines. The drain piping should be vented and must be of adequate size to remove the oil 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. The oiling system should have a means of filtering the oil to remove any contaminating particles. A 25 micron filter or better is recommended.

It is strongly recommended to use thermocouples or RTDs to monitor the bearing bore temperature during operation. Probe diameters should be a maximum of 1/4". There are two designated thermocouple/RTD holes machined in the housing base next to the water pipe grommets. These two holes should align with the two thermocouple/RTD holes drilled into the liner. Install two RTDs/thermocouples in each bearing. Make sure the probe tips contact the end of the drilled holes in the liner. Use sealant on all threaded connections.



Check construction drawings to determine if coolant (water or air) is to be supplied to the bearings. Do not connect coolant pipes and bearing unless construction drawings and/or equipment instructions call for this. If no connection is required, pipes can be left open.

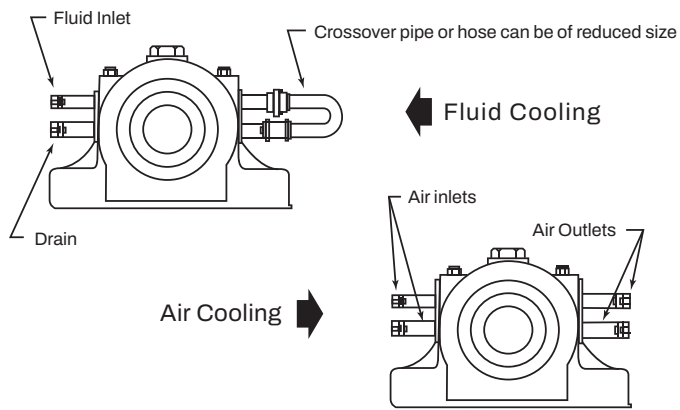


**NOTE: ALL plumbing (oil and water) should be cleaned and flushed before being connected to the pillow block. These systems should be tested before the bearing is put into operation.**

If coolant pipes are to be connected, make sure that all pipe lengths are correct and unions are well aligned. Careless fitting will result in serious preloading of the bearing. Lengths of flexible hose between the pillow block and rigid piping are recommended to avoid preloading of the bearing. A regulating valve should be placed ahead of the inlet and a sight drain at the outlet for liquid coolants. The recommended method of pipe connection for liquid coolants is to connect the inlet to the top pipe and the outlet to the bottom pipe on the same side of the bearing. A return is then used to connect the two pipes on the other side of the bearing. Adjust coolant flow to rate specified on construction drawing or to suit conditions. Anti-freeze type additives may be used in cold operating environments, otherwise purge all coolant from liner by blowing out with compressed air or steam anytime coolant is subject to freezing. Bearing rating is generally based on a maximum water inlet temperature of 90 °F. The interior pressure of the liner should never exceed 120 psi. For deviations see construction drawings or contact equipment manufacturer.



**CAUTION:** Water pressure should never exceed 120 P.S.I.



**NOTE:** If coolant temperature can fluctuate below 70 °F during low ambient conditions, then an oil sump heater/ thermostat should be installed to ensure proper oil temperature is maintained.

**CAUTION:** Do not stand on water pipes.

Remove and reinstall, using sealer, all pipe plugs not previously removed.

Prior to placing the bearings into operation check for cooling pipe leaks by placing the cooling water system into operation at normal operating pressure and flow rate. If a leak is detected, remove and reinstall the coolant pipes with pipe sealant, and check again.

When using air as the cooling medium, connect an inlet to each pipe on one side of the bearing and an outlet to the pipes on the other side. Adjust flow to rate specified on construction drawing or to suit conditions.

Other Accessories/Options Available:

- Combination Heater/Thermostat Assembly
- Oil Sump Thermometer
- Auxiliary Seal Kit
- Isolator Seal Kit
- End Cap Kit
- Vibration Detector Mounting Kit
- Coolant Hose Kit
- RTD Kit
- OLF-2
- Cool Lube 2

## LUBRICATION AND OPERATION

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 is recommended. Use a high grade straight mineral oil with rust and oxidation (R & O) inhibitors and anti-foam 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. Information regarding qualities and properties of specific oils should be referred to the lubricant manufacturer.

If bearings do not have circulating oil, fill pillow block with oil to top of center circle in the oil gauge.

After placing into operation remove inspection covers and check to make sure oil rings are bringing up oil. Operation should be checked frequently during the first few days.

**IMPORTANT:** Check and re-torque plunger screw to the specified torque after 24 hours or initial start-up and then check periodically as required.

Table 6

RTL Sleeve Size	Oil Volume *†		
	Fluid Ounces Approx.	Quarts Approx.	Liters Approx.
3 7/16	56	1.75	1.66
3 15/16	64	2	1.89
4 7/16	80	2.5	2.37
4 15/16	128	4	3.79
5 7/16	152	4.75	4.49
6	224	7	6.62
7	336	10.5	9.94
8	416	13	12.30
9	608	19	17.98
10	896	28	26.50
12	1440	45	42.59

\* Volume of oil required to fill pillow block to top of CENTER CIRCLE of oil gauge.

† 32 fluid ounces = 1 quart = 0.946 Liters

If noise develops, check alignment of housing, plunger screw and all operating parts. Check all points and re-torque bolts and plunger screws after several days operation. Maintain oil level between top and midpoint of the oil level gauge at all times while unit is in operation. Oil will leak out of the shaft seals if the bearings are overfilled with oil.

**NOTE:** Bearings should NOT be stored outdoors before installation. For extended or outdoor storage, contact equipment manufacturer for special storage instructions.

**NOTE:** Bearings (and shafts) allowed to set idle for extended periods after being run MUST be protected against corrosion. If the unit can not be run for several minutes at least once a week, consult equipment manufacturer for special lubrication instructions.



## OIL MAINTENANCE SCHEDULE

Drain, flush, and refill with oil after 2 to 3 weeks of initial break-in operation. Since the satisfactory operation of the bearing depends entirely on an oil film being maintained between the shaft and the bearing liner surface, it is recommended that an oil analysis be performed at these regular intervals.

- Every 3 months for 24 hour/day service
- Every 6 months for 8 hour/day service

Acceptability of oil should be referred to the lubricant manufacturer. If oil quality is acceptable then repeat this procedure in 3 month intervals. Visually check oil for contamination between oil analysis checks. Oil service life depends upon several factors such as ambient conditions, operating temperature and frequency of bearing starts and stops. It is recommended that the oil be changed at least once per year for unfiltered static applications. Removing contaminants through the use of either the OLF 2 (Oil Level and Filtration 2) Unit or a circulating oil system can extend oil service life. Consult equipment manufacturer for more information.

Any questions about installation, maintenance, and arrangement of coolant or oil connections should be referred to the equipment manufacturer.

**NOTE: Isolators or Auxiliary Seals are recommended for outdoor applications, contaminated atmospheres, and high volume air flowing over the bearing.**

## TEMPERATURE

The bearing temperature will increase after start-up until its normal operating point is reached. The normal operating temperature should not exceed 180 °F. Make sure to check with the OEM for the specified normal operating temperature. An alarm temperature should be set at 15 °F above the normal operating temperature. A shut-down temperature should be set at 30 °F above the normal operating temperature. Some fluctuation due to ambient temperature change is normal.

Low ambient and operating temperatures can be as harmful to the bearing as high temperatures. The Dodge heater / thermostat combo can be used in these low ambient conditions.

The Dodge heater / thermostat combo turns on at 70 °F and turn off at 100 °F to ensure proper oil sump temperature during operation.

**NOTE: The recommended oil temperature at start-up is 70 °F MINIMUM.**

**CAUTION: If heaters are used, be sure heaters are off when oil is removed from bearing.**

**WARNING: When installing heater and thermoswitch, follow directions and safety procedures recommended by the manufacturer. Install wiring in accordance with the National Electrical Code and local codes. Failure to observe these guidelines could result in electrical shock.**

## VIBRATION

Any significant vibration or imbalance **MUST** be corrected. Check with equipment manufacturer for acceptable conditions.

## PILLOW BLOCK MATERIAL DETAILS

Housing:	Class 30 Gray Cast Iron
Liner:	Class 30 Gray Cast Iron
Babbitt:	Lead or Tin Based Babbitt
Oil Rings:	Bronze
Aluminum Seal:	Sand Cast Aluminum
O-ring:	Elastomer Compound
Aux. Seal:	HNBR with Stainless Steel Retainer
Grommet:	Synthetic Rubber
Grommet Plate:	Carbon Steel
Pipe Nipple:	Carbon Steel
Oil Gauge:	Stainless Steel, Polypropylene
Hardware:	Carbon Steel
Plunger Screw:	Carbon Steel
Gasket Eliminator:	LOCTITE 515 Sealant

This Sleeveoil pillow block could contain lead in the bearing Babbitt material, please exercise proper precautions in the use, installation, dismantling and recycling of this unit.

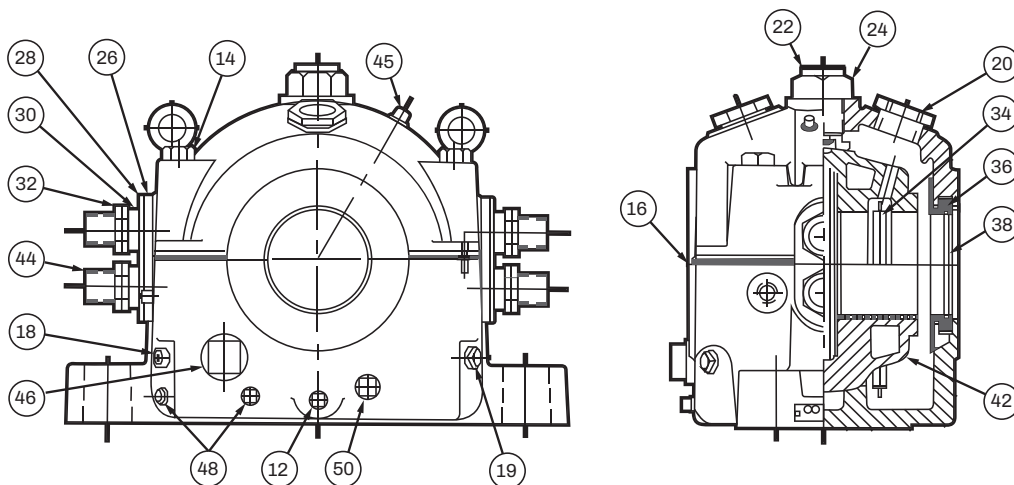
**CAUTION: This product is not to be used for person moving applications.**

**NOTE: Care has been taken to keep instruction manuals accurate and timely. The most recent version of the instruction manual can be found on our website: [www.dodgeindustrial.com](http://www.dodgeindustrial.com)**

## WEIGHTS

Table 7 - Weight of RTL Sleeveoil

RTL Sleeveoil Size	Approximate Weights (lbs.)		
	Non-Expansion Pillow Block	Expansion Pillow Block	Liner Assembly
3-7/16	195	190	47
3-15/16	238	230	65
4-7/16	311	300	82
4-15/16	441	425	113
5-7/16	521	500	144
6	854	825	182
7	1018	978	257
8	1368	1310	412
9	1738	1650	623
10	2262	2150	955
12	3670	3500	1405



**Sleeveoil RTL Pillow Blocks - Parts Diagram**

Item	Description	Number Required	Replacement Part Number										
			3-7/16	3-15/16	4-7/16	4-15/16	5-7/16	6	7	8	9	10	12
	RTL Expansion Pillow Block ① ⑥ RTL Modular Housing ②		132474 132373	132475 132374	132476 132397	132477 132398	132383 132399	132384 132411	132385 132412	132386 132413	132387 132414	132388 132437	132389 132438
12	Drain Plug ②	1	430012	430012	430012	430012	430012	430012	430012	430012	430014	430014	430014
14	Housing Bolt ②	4	411189	411190	411196	411197	411205	411205	411224	411227	411228	411229	411230
16	Gasket Eliminator-515 ②	varies	427359	427359	427359	427359	427359	427359	427359	427359	427359	427359	427359
18	Oil Gage ②	1	430135	430135	430135	430135	430135	430135	430135	430135	430135	430135	430135
19	Oil Level Plug ②	1	430014	430014	430014	430014	430014	430014	430014	430014	430014	430014	430014
20	Inspection Cover ②	2	432198	432198	432198	432198	432198	432198	432198	432198	432198	432198	432198
45	Circulating Oil Inlet Plug ②	2	430014	430014	430014	430014	430014	430016	430016	430016	430016	430016	430016
46	Circulating Oil Drain Plug ②	1	430018	430018	430018	430019	430019	430019	430019	430019	430019	430022	430022
48	Thermostat Plug ②	1	430012	430012	430012	430012	430012	430012	430012	430012	430012	430012	430012
50	Heater Plug ②	1	430014	430016	430016	430017	430017	430017	430017	430017	430017	430017	430017
22	Plunger Screw Kit ①	1	435012	435012	435013	435014	435015	435015	435016	435017	435018	435019	435019
24	Plunger Screw Assembly ② Plunger Screw Nut ②	1 1	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....
26	RTL Grommet Kit ①	1	435027	435028	435028	435029	435029	435029	435029	435030	435030	435031	435032
28	RTL Grommet ②	2	....	....	....	....	....	....	....	....	....	....	....
30	RTL Bushing (Locktube) ②	4	....	....	....	....	....	....	....	....	....	....	....
32	RTL Locknut ②	8	....	....	....	....	....	....	....	....	....	....	....
44	RTL Coolant Pipe ②	4	....	....	....	....	....	....	....	....	....	....	....
34	Trapezoidal Oil Ring ④	2	135290	135291	135292	135293	135294	135295	135296	135297	135298	135299	135135
36	RTL Seal Kit ①	2	435001	435002	435003	435004	435005	435006	435007	435008	435009	435010	435011
38	Clamp Seal Assembly ② O-Ring ②	2 2	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....	.... ....
42	RTL Liner Assembly ①	1	132420	132421	132422	132423	132424	132425	132426	132427	132428	132429	132430
44	RTL Coolant Pipe ②	4	....	....	....	....	....	....	....	....	....	....	....
③	Dowel Pin ②	2	....	....	....	....	....	....	....	....	....	....	....
③	Cap Screw ②	2	....	....	....	....	....	....	....	....	....	....	....
Non-Expansion Accessories													
③	Thrust Plate Kit ⑦	1	137101	137102	137103	137104	137105	137106	137107	137108	137109	137110	137111
③	Split Thrust Collar ⑦	1	132151	132152	132153	132154	132155	132156	132157	132158	132159	132160	132161
Optional Accessories													
③	Auxiliary Seal Kit	2	132811	432181	432184	432187	133932	133933	133937	133938	132814	132816	132819
③	Sleeveoil Isolator	2	434706	434707	434708	434709	434710	434711	434712	434713	434714	434715	434716
③	Housing End Cap Kit ⑤	1	132542	432190	432193	432196	132546	132547	132548	132549	132564	132565	132566
③	Circulating Oil Grommet Kit	1	132203	132203	132203	132203	132203	132205	132205	132205	132205	132205	132205
③	Vibration Detection Adapter Kit	1	430153	430153	430153	430153	430153	430153	430153	430153	430153	430153	430153
③	Coolant Hose Kit	1	434770	434771	434771	434772	434772	434772	434772	434773	434774	434775	434775
③	110V Heater / Thermostat	1	434721	434725	434725	434727	434727	434727	434729	434729	434729	434729	434735
③	Combo	1	434722	434726	434726	434728	434728	434728	434730	434730	434730	434730	434736
③	220V Heater / Thermostat	1	435093	435093	435093	435093	435093	435093	435093	435093	435093	435093	435093
③	Combo Oil Sump Thermometer RTD Kit	2	435147	435147	435147	435147	435147	435147	435147	435147	435147	435147	435147

① These parts are assemblies and include the parts listed below them.

② These parts make up the assemblies under which they are listed.

③ Not shown on drawing.

④ Older "T Section" rings have been discontinued

⑤ To be used when shaft does not extend through expansion bearing housing.

⑥ Expansion Pillow Block includes modular housing and liner assembly

⑦ Required for Non-Expansion Pillow Block

## SLEEVOIL ACCESSORIES

The following accessories are available for Sleeveoil bearing to enhance operation and extend bearing life. For compatibility and technical information contact DODGE product support.



### OIL LEVEL AND FILTRATION (OLF-2) SYSTEM

- Increase bearing longevity and reliability.
- One OLF-2 system supplies two bearings with a continuous flow of filtered oil.
- The oil is supplied directly to the circulating oil inlets on the bearings, which helps minimize wear during startups and shutdowns.



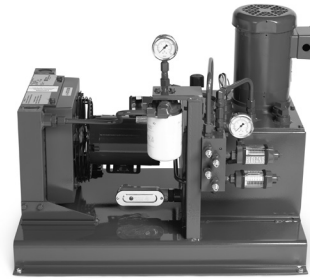
### SLEEVOIL BEARING ISOLATOR

- Fully split multi-labyrinth sealing system.
- Provides outstanding protection in harsh and dirty environments.
- IP56 rated



### RTD KIT

- Prevent catastrophes by accurately measuring bearing temperature.
- Features a field-cuttable stainless steel probe, a platinum sensing element and a spring-loaded fitting with an oil seal.



### COOL LUBE 2

- All the features of the OLF-2 system plus a built-in heat exchanger for continuous oil cooling and adjustable oil flow controls.
- Particularly well suited in applications where bearing operating temperatures and speeds approach the maximum permissible levels.



### HEATER/THERMOSTAT

- The bearing sump heater and thermostat have been combined into one user-friendly unit.
- Sump heaters are a necessity to ensure safe startups when bearings are exposed to ambient temperatures below 70 °F.



### THERMOMETER

- Dial thermometer for convenient monitoring of the oil sump temperature
- All stainless steel construction with glass face



### COOLANT HOSE KIT

- An easy to install solution for connecting coolant lines to your Sleeveoil bearing.
- Durable flexible hoses are composed of a synthetic rubber inner tube reinforced with fiber and steel braids.

**Dodge Industrial, Inc.**  
1061 Holland Road  
Simpsonville, SC 29681  
+1 864 297 4800

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