

# DODGE COOL LUBE 2 for Mounted Roller Bearings

Part Numbers 063485, 063486, 078327, 078328

These instructions must be read thoroughly before installing or operating this product.

**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:** Only qualified personnel familiar with hydraulic and electrical installations, the construction and operation of this equipment, and the hazards involved should install, adjust, operate, and/or service it. Read and understand this manual in its entirety before proceeding. Failure to observe this precaution could result in severe bodily injury or loss of life.

## System Specifications:

| System Part Number | Motors Information                                      |
|--------------------|---|
| 063486             | Single Phase—115/230 VAC                                |
| 063485             | Three Phase—230/460 VAC                                 |
| 078327             | Three Phase—208-230/460 VAC<br>(Explosion Proof Motors) |
| 078328             | Three Phase—575 VAC (Canada)                            |

|                                 |  |
|---------------------------------|--|
| Air to oil heat exchanger:      | Thermal Transfer BOL-8-2                                       |
| * Pump Relief valve setting:    | 150 psi  |
| * Bearing Relief valve setting: | 65 psi   |
| Pump flow rate:                 | 2 GPM  |
| Flow meter range:               | 0.5 – 0.50 GPM   |
| Oil supply line connection:     | Two 1/4" NPT connections at<br>the flow meter outlets (female) |
| Oil return line connection:     | Two 1" NPT connections<br>(female)                             |

\* Relief valves are preset at the factory, but are field adjustable. If other settings are required, consult Dodge Engineering

**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 Baldor Electric Company, nor are the responsibility of Baldor Electric Company. 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 risks 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.

## Receiving & Inspection:

1. Carefully unpack the Circulating Oil (CO) system. Inspect the system for any damage during shipping.
2. Report any damage to the carrier for claims.
3. Make sure that available voltage supply is within 10% of the system voltage.
4. Check all hydraulics to ensure that nothing came loose during shipping. Tighten as needed.
5. No alterations are allowed without authorization from Dodge. Unauthorized changes void the warranty.

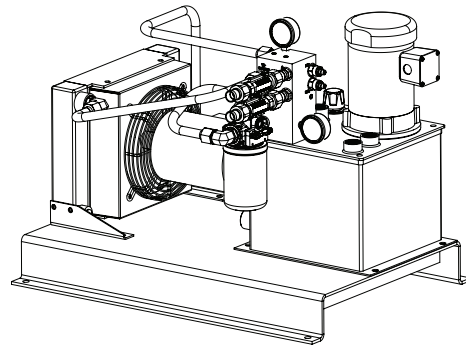


Figure 1 - Cool Lube 2

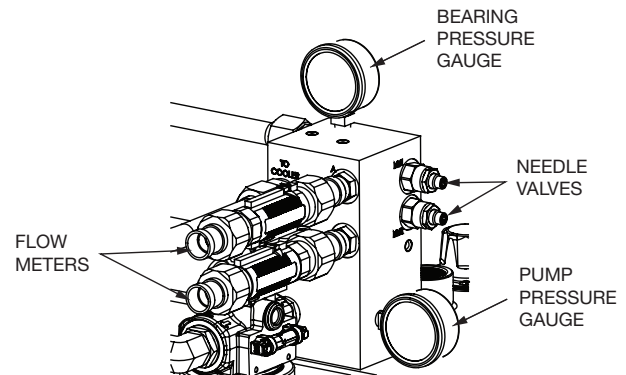


Figure 2 - Controls

## Installation Instructions:

1. Place the unit in the designated area and anchor it down using the 4 mounting holes in the base plate. The unit should be positioned below the circulating oil drain holes in the bearings so that at least a 15° drain line slope is achieved to allow for adequate oil return.
2. Make sure that there is enough space around the unit to allow for servicing.
3. Connect oil supply and return lines to the bearings.

**NOTE:** All plumbing should be cleaned and flushed before being connected to the bearings.

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**NOTE: Drain piping should be vented and of adequate size to drain oil from the bearings at the same rate as the incoming oil flow. The circulating oil drains must be directed straight down into a return drain sloping away at a 15° or greater angle.**

4. Fill the reservoir with clean oil by monitoring the oil level gauge on the tank. The reservoir will hold 5 gallons of oil.

### **Electrical Hook Up:**

Connect the two electric motors to a power supply through the proper fuses, starters and overload protection using NEC and local electrical codes.

### **Optional Heater/Thermostat Assembly:**

260W X 120V, 1 PH—Part # 434725

260W X 240V, 1 PH—Part # 434726

### **Optional Temperature/Oil Level Switch:**

Part # 434941. Connects to a control system (not provided by Dodge) in order to monitor oil level and temperature.

### **Operating Instructions:**

1. Observe the oil level gauge on the tank to ensure that oil is at the proper level.
2. Quickly jog both motors on and off to see if they are rotating in the correct directions (reference the rotation arrows on the motors). Correct the wiring if necessary.
3. Before starting the CO System, jog the pump motor four or more times to prime the pump.
4. Start the CO system and allow the oil to circulate. Be sure to monitor the oil level in the tank to ensure that the oil returns from the bearing housings. If air in the return lines becomes a problem, it may be necessary to bleed the air out of the lines by loosening a fitting close to where the problem is.
5. Visually check the system for leaks and correct if necessary.
6. Confirm that there is flow by using the flow meters. If there is no flow, check for leaks.
7. Adjust the oil flow rates to desired flow by adjusting the needle valves while observing the flow meters (See Figure 2). To adjust the needle valves, first loosen the locknut, then use an Allen wrench to open and close the valves. Make sure that the pump pressure does not exceed 200 psi by watching the system pressure gauge.
8. Make sure there are no leaks of any kind.
9. Turn off the pump.
10. Check oil level in the tank. The oil level will go down as the oil fills the bearing lines. If the lines are lengthy, additional oil may be needed to restore the proper level.
11. Once the flows to the bearings are confirmed, the unit is ready for operation.
12. Monitor the pressure gauges and oil level closely the first few hours of operation.
13. To change the filter while the unit is running, pull and rotate the filter bypass valve 90°.

### **Maintenance:**

Periodically check the oil level in the bearing housings and the CO system to ensure proper operation.

Most foreign material in a system flushes to the reservoir after the first few hours of operation. We recommend that you drain the tank, replace the fluid, change the filter, and clean the suction strainer after 3-5 hours of operation. After the initial cleaning, the strainer should be cleaned at a minimum of every 4000 hours of operation. More frequent cleaning is required if the system is used in a highly contaminated atmosphere such as a foundry or paper mill.

After the initial replacement, the supply line filter should be replaced periodically as required by operating conditions. Check the visual clog indicator on the filter head between filter changes to ensure the filter is not being bypassed.

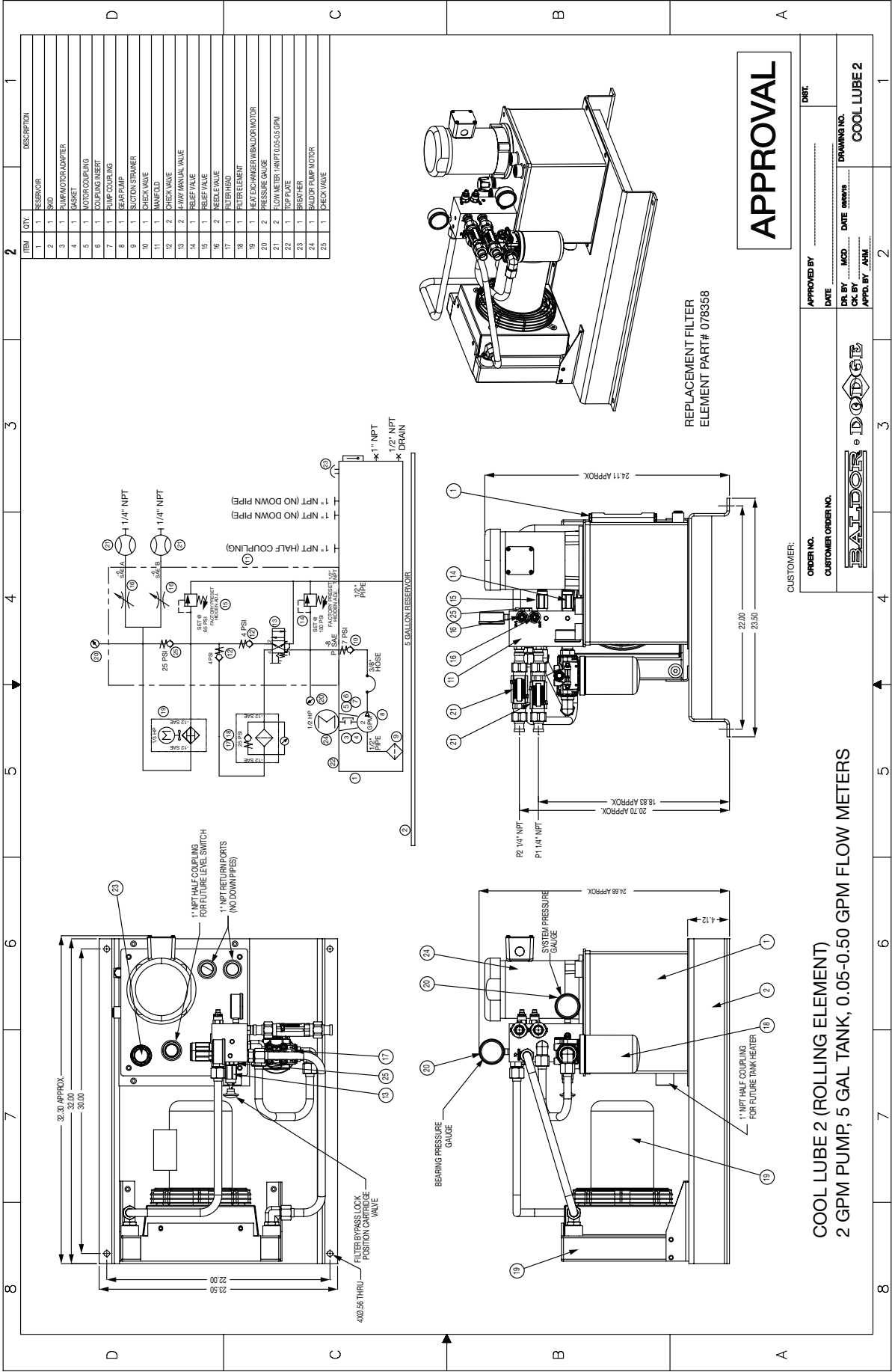
Good preventative maintenance is the best insurance against unscheduled downtime. Unscheduled downtime is usually more expensive than preventive maintenance.

### **Replacement Filter:**

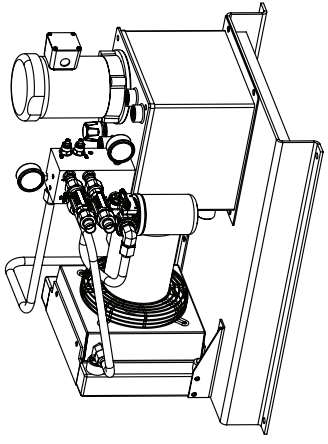
Use replacement oil filter Part # 078358

### **Optional Filter Additions:**

1. Duplex filter head with two filters
2. Desiccant filter with moisture absorbing capability can be added in series with the standard filter.



| ITEM | QTY | DESCRIPTION                    |
|------|-----|--------------------------------|
| 1    | 1   | RESERVOIR                      |
| 2    | 1   | SKID                           |
| 3    | 1   | PUMP MOTOR ASSEMBLY            |
| 4    | 1   | BASKET                         |
| 5    | 1   | MOTOR COUPLING                 |
| 6    | 1   | COUPLING INSERT                |
| 7    | 1   | PUMP COUPLING                  |
| 8    | 1   | BEAR RAMP                      |
| 9    | 1   | SUCTON STRAINER                |
| 10   | 1   | CHECK VALVE                    |
| 11   | 1   | MANIFOLD                       |
| 12   | 2   | CHECK VALVE                    |
| 13   | 2   | 4-WAY MANUAL VALVE             |
| 14   | 1   | RELIEF VALVE                   |
| 15   | 2   | NEEDLE VALVE                   |
| 16   | 2   | NEEDLE VALVE                   |
| 17   | 1   | FILTER HEAD                    |
| 18   | 1   | FILTER ELEMENT                 |
| 19   | 1   | HEAT EXCHANGER/BAIDOR MOTOR    |
| 20   | 2   | PRESSURE GAUGE                 |
| 21   | 2   | FLOW METER (MPT) 0.05-0.50 GPM |
| 22   | 1   | TOP PLATE                      |
| 23   | 1   | BREATHER                       |
| 24   | 1   | BAIDOR PUMP MOTOR              |
| 25   | 1   | CHECK VALVE                    |



REPLACEMENT FILTER  
ELEMENT PART# 078358

**APPROVAL**

CUSTOMER:  
ORDER NO. \_\_\_\_\_  
CUSTOMER ORDER NO. \_\_\_\_\_

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
DATE \_\_\_\_\_  
DRA. BY \_\_\_\_\_ MCD. DATE SHOWN \_\_\_\_\_  
APPLY BY \_\_\_\_\_ JHM. \_\_\_\_\_

DIST. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
COOL LUBE 2 \_\_\_\_\_

**COOL LUBE 2 (ROLLING ELEMENT)  
2 GPM PUMP, 5 GAL TANK, 0.05-0.50 GPM FLOW METERS**

# **BALDOR**

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