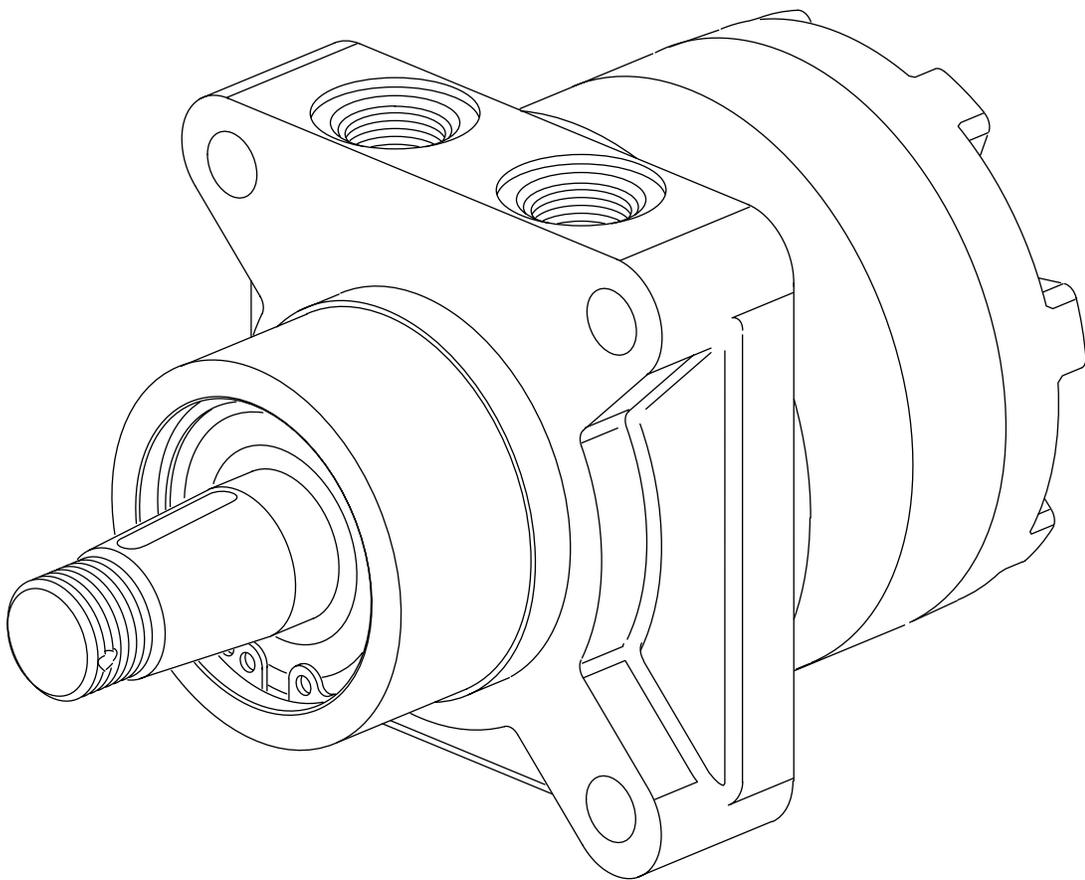




## Repair Information



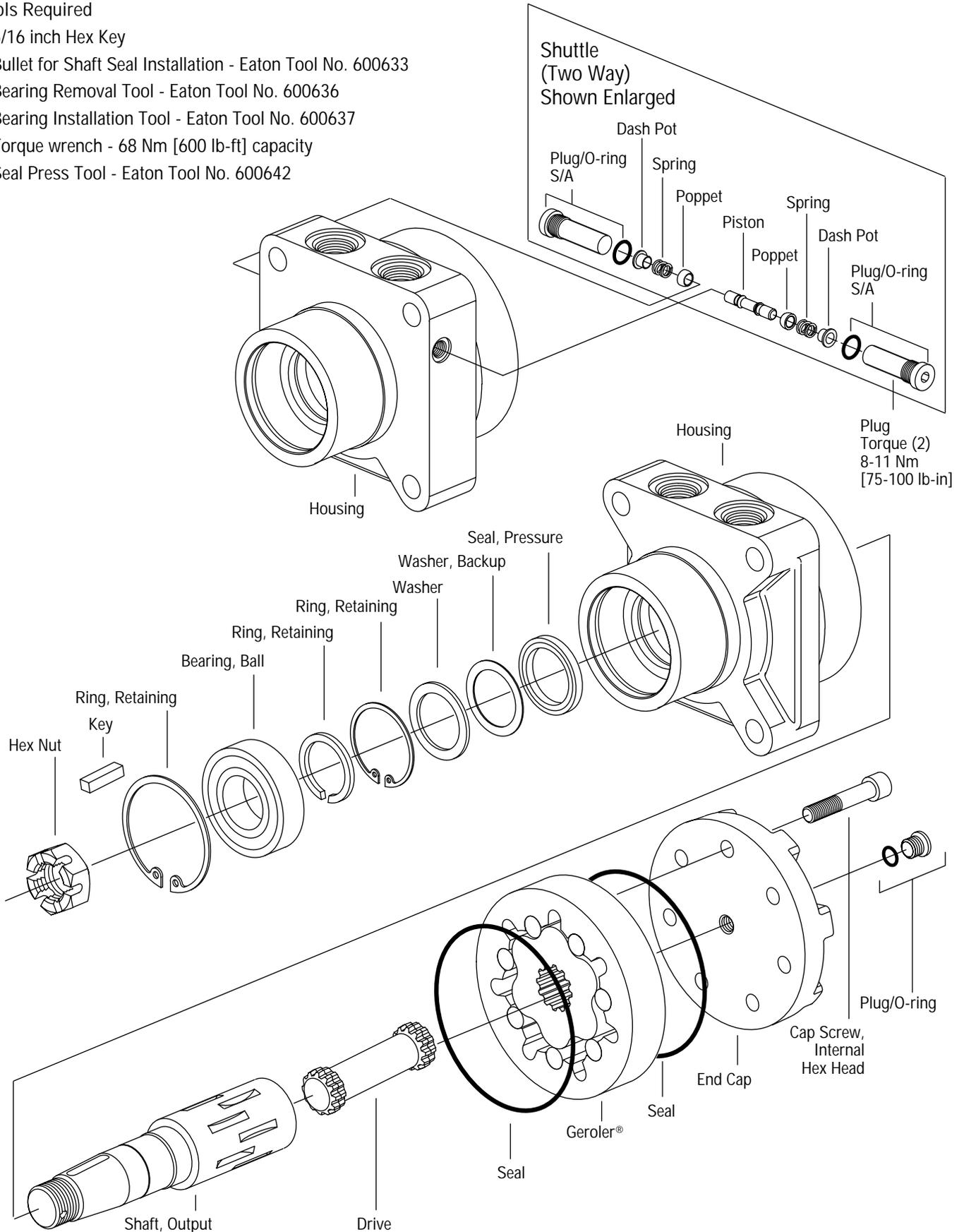
W Series  
Geroler® Motors

002, 003

# W Series Geroler® Motors

**Tools Required**

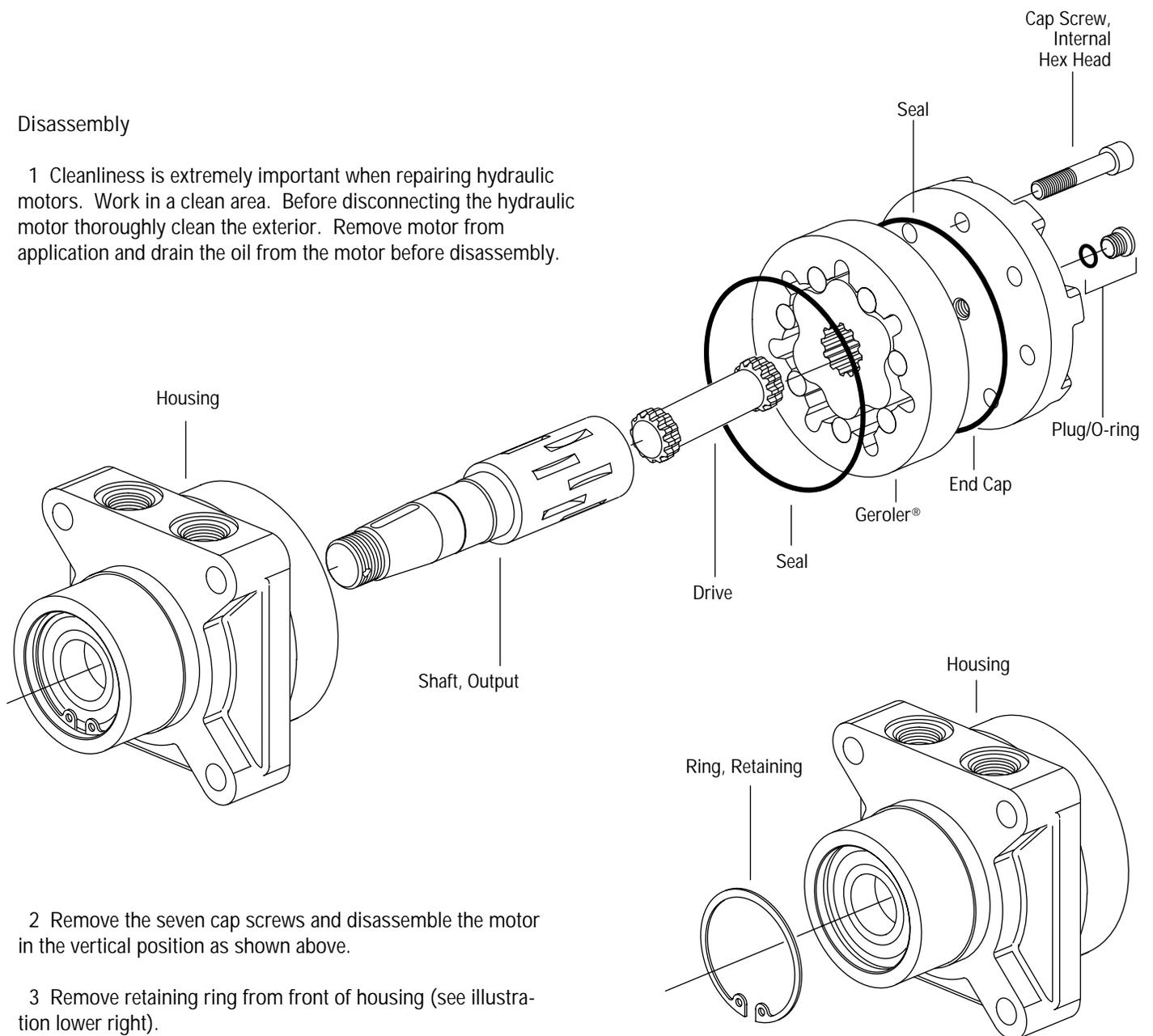
- 5/16 inch Hex Key
- Bullet for Shaft Seal Installation - Eaton Tool No. 600633
- Bearing Removal Tool - Eaton Tool No. 600636
- Bearing Installation Tool - Eaton Tool No. 600637
- Torque wrench - 68 Nm [600 lb-ft] capacity
- Seal Press Tool - Eaton Tool No. 600642



# W Series Geroler Motors

## Disassembly

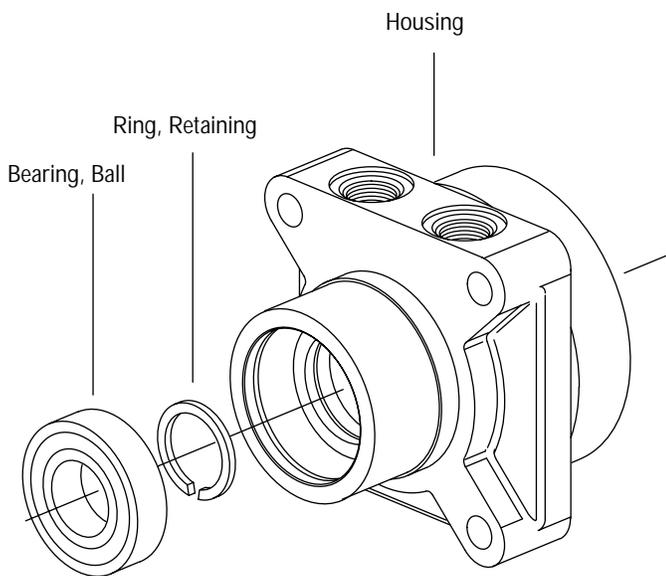
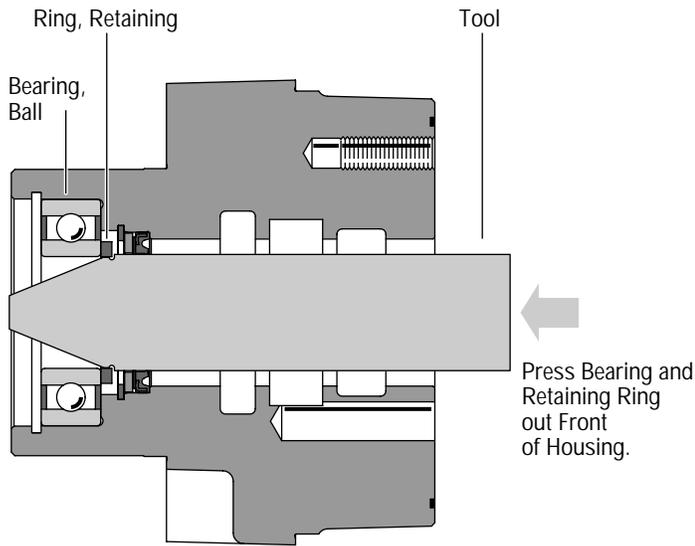
1 Cleanliness is extremely important when repairing hydraulic motors. Work in a clean area. Before disconnecting the hydraulic motor thoroughly clean the exterior. Remove motor from application and drain the oil from the motor before disassembly.



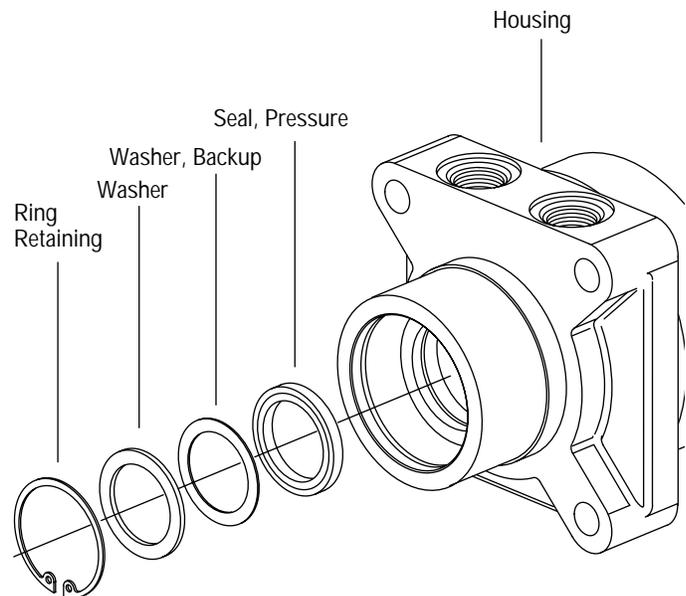
2 Remove the seven cap screws and disassemble the motor in the vertical position as shown above.

3 Remove retaining ring from front of housing (see illustration lower right).

## W Series Geroler<sup>®</sup> Motors



4 Remove bearing and retaining ring with special tool by inserting tool cone end first and driving these two parts out from back side of housing. Seal will be damaged when tool is inserted and must be replaced upon reassembly.

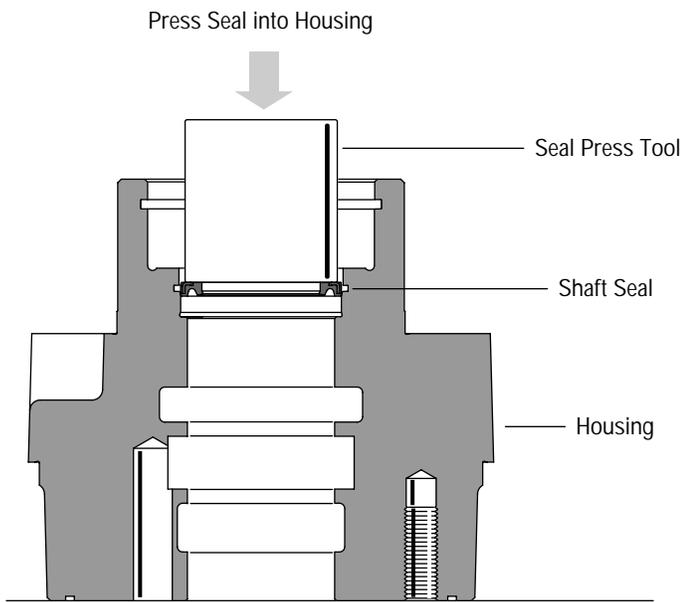


5 Remove retaining ring, washer, backup washer and pressure seal from housing.

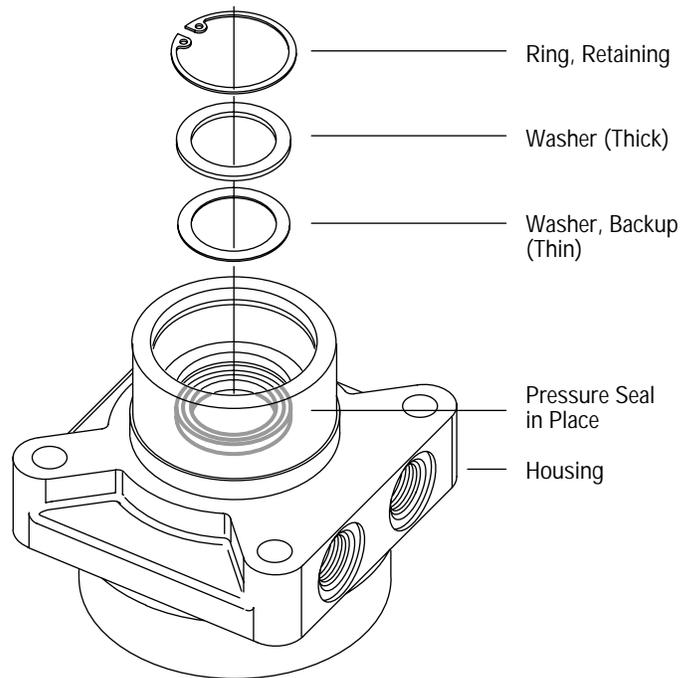
6 Check all mating surfaces. To reduce the chance of leakage, replace any parts that have scratches or burrs. Wash all metal parts in clean solvent. Blow them dry with pressurized air. Do not wipe parts dry with paper towels or cloth as lint in a hydraulic system will cause damage.

# W Series Geroler Motors

## Reassembly

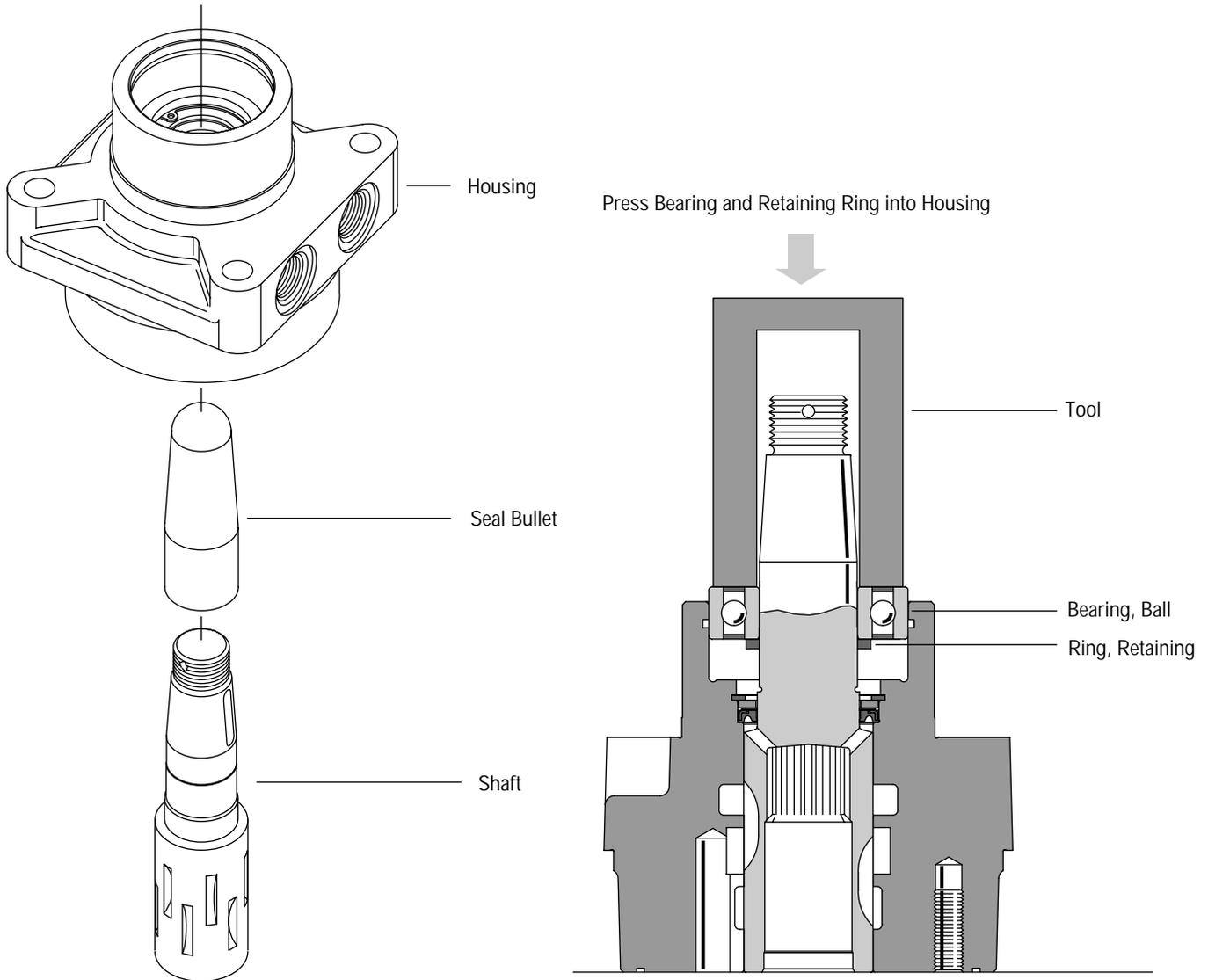


7 Position housing in the vertical position on a clean smooth surface, lubricate pressure seal with petroleum jelly and insert in housing, seal lip in the down position. Use seal press tool No. 600642 and press seal into position in housing.



8 Place backup washer, washer, and retaining ring on top of pressure seal. Make sure retaining ring is fully engaged in groove in housing.

## W Series Geroler<sup>®</sup> Motors

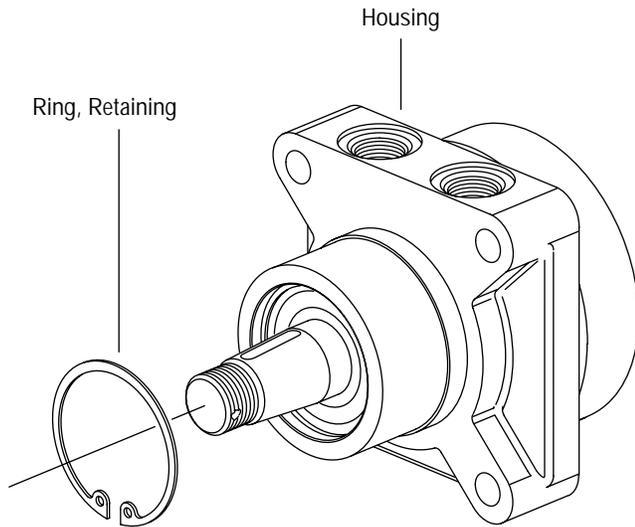


9 Place seal bullet over shaft. With bullet and shaft seal surface lubricated with petroleum jelly, place shaft on a clean smooth hard surface, output end of shaft up. Position housing over shaft and carefully lower housing over bullet and shaft.

10 Remove bullet from shaft end and place retaining ring and bearing on shaft, along with bearing driver tool. Press these parts into housing.

**IMPORTANT NOTE:** When handling motor assembly without bearing installed, extra care should be taken to make sure that the back end of the Output Shaft always stays flush with the back end of housing surface. If Output Shaft moves, in either direction, more than 0,79mm [1/32 in.], Output Shaft should be removed from the housing so that the Seal may be inspected for cuts. If necessary, replace Seal per steps 7 and 8, and then reinstall Output Shaft per step 9.

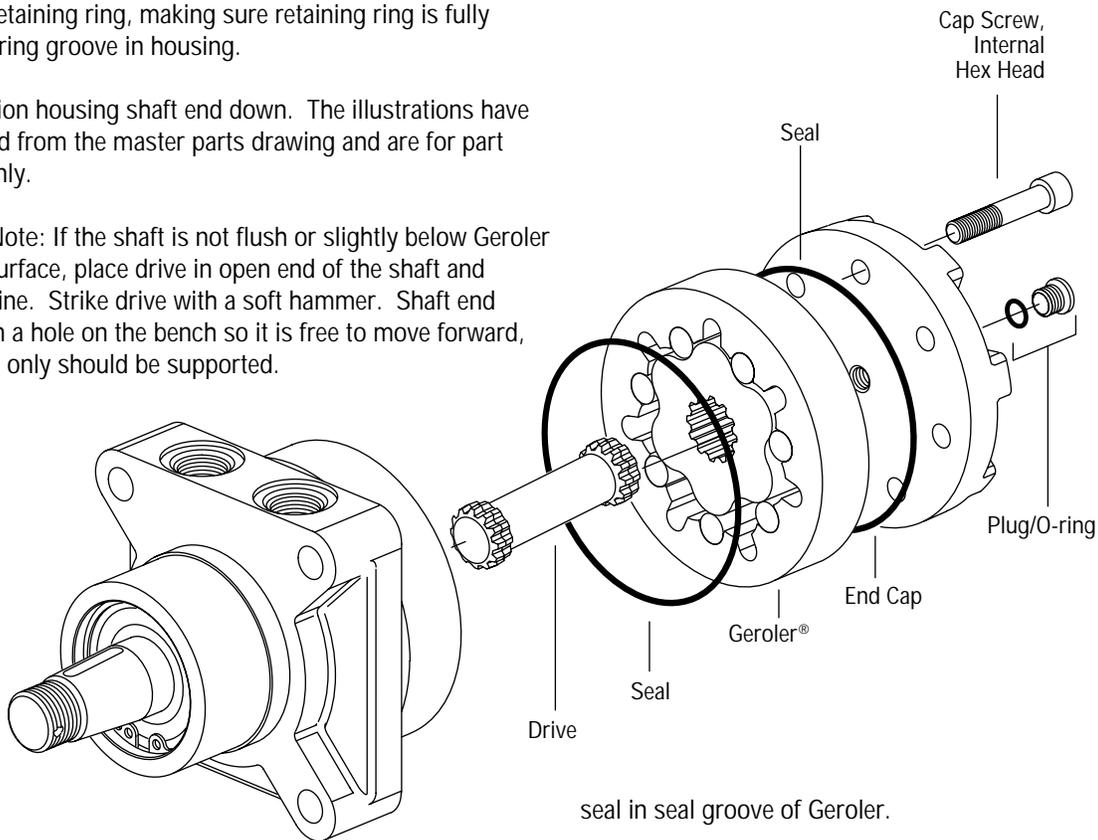
## W Series Geroler Motors



11 Install retaining ring, making sure retaining ring is fully engaged in ring groove in housing.

12 Reposition housing shaft end down. The illustrations have been created from the master parts drawing and are for part reference only.

**Important Note:** If the shaft is not flush or slightly below Geroler mounting surface, place drive in open end of the shaft and through spline. Strike drive with a soft hammer. Shaft end should be in a hole on the bench so it is free to move forward, the housing only should be supported.



13 Install seal in seal groove of housing.

14 Place drive in shaft, engage spline. Mark drive using mark on shaft as a reference point. Timing procedure is shown on Page 8.

15 Place Geroler over drive seal groove up, star point or star valley aligned with mark on drive per your rotation preference.

16 Align bolt holes on Geroler with housing holes, and install

seal in seal groove of Geroler.

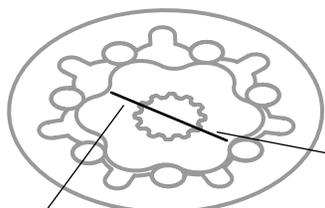
17 Place end cap on Geroler, insert seven cap screws and pretorque in a crisscross pattern to a 28-34 Nm [250-300 in-lb]. Final torque in a crisscross pattern to a 51-62 Nm [450-550 in-lb].

18 Install new o-ring on case drain plug. This plug would be present only when case drain option is not being used. Torque plug to 7-9 Nm [64.84 in-lb].

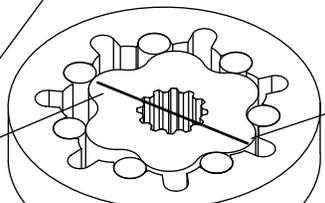
# W Series Geroler Motors

Timing

Geroler

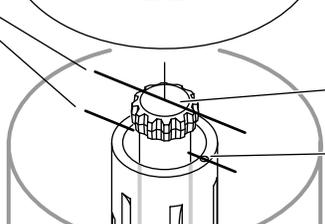


Star Valley  
(Reverse  
Timing)



Star Point  
(Std. Timing)

Parallel

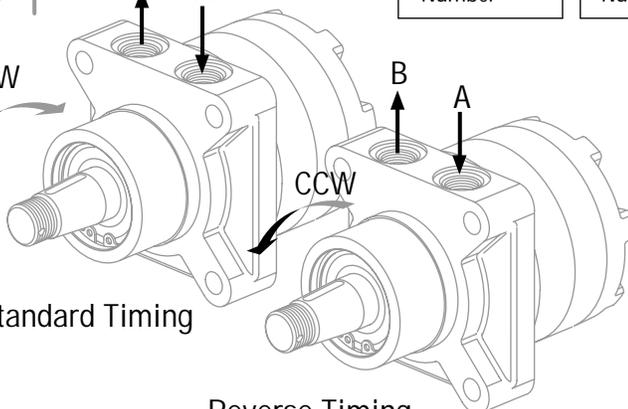


Marked Drive  
(for Reference)

Timing Dot

CW

Standard Timing



Reverse Timing

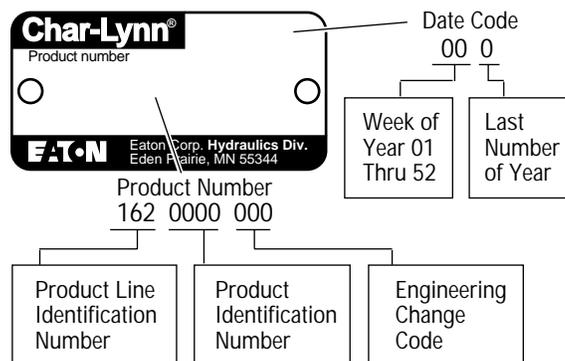
## How to Order Replacement Parts

Each Order Must Include the Following:

- |                   |                      |
|-------------------|----------------------|
| 1. Product Number | 4. Part Number       |
| 2. Date Code      | 5. Quantity of Parts |
| 3. Part Name      |                      |

For More Detailed Information Contact Eaton Corp. Hydraulics Division 15151 Highway 5 Eden Prairie, MN 55344.

- Specifications and performance data, Catalog 11-111.
- Replacement part numbers and kit information — Parts Information:  
W -Motor -002 — No. 6-163  
W -Motor -003 — No. 6-164



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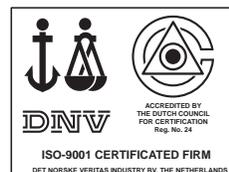
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