

Parts Identification

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- This diagram illustrates the exploded view of a mechanical assembly, likely a pump or motor component, with parts numbered 1 through 44. The assembly is shown in three main sections, separated by dashed lines indicating the assembly sequence.
- Top Section:** Includes the main housing (28) and the drive shaft assembly (29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44). The drive shaft (29) is shown with various seals and bearings (30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44) and a coupling (28).
 - Middle Section:** Shows the internal components, including the impeller (16) and the shaft (17). The impeller (16) is shown with its housing (15) and the shaft (17) is shown with its bearings (18, 19, 20, 21, 22, 23, 24, 25, 26, 27).
 - Bottom Section:** Shows the base assembly, including the base plate (1) and the mounting bracket (2). The base plate (1) is shown with its housing (2) and the mounting bracket (2) is shown with its base (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14).
- The diagram uses standard mechanical drawing conventions, with dashed lines indicating the assembly sequence and the relative positions of the components.

325/328 Service Manual

TRAVEL MOTOR (CONT'D)

Disassembly

IMPORTANT

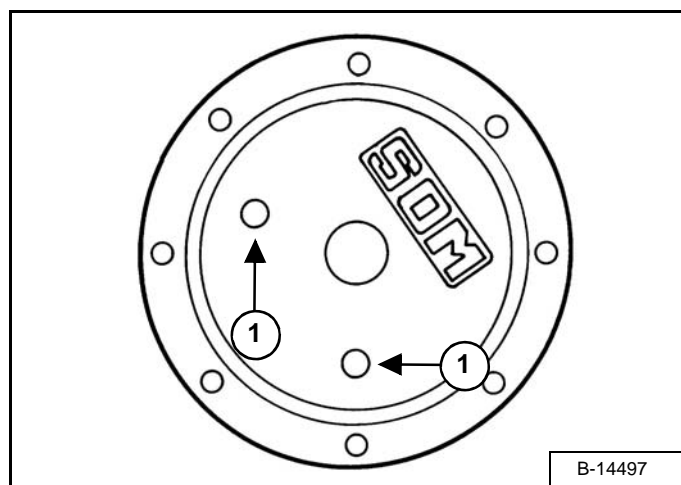
When repairing hydrostatic and hydraulic systems, clean the work area before disassembly and keep all parts clean. Always use caps and plugs on hoses, tubelines and ports to keep dirt out. Dirt can quickly damage the system.

I-2003-0888

The following tool will need to be ordered from OTC Tool to reassemble the travel motor:

MEL1519 for torque ring and seal ring assembly.

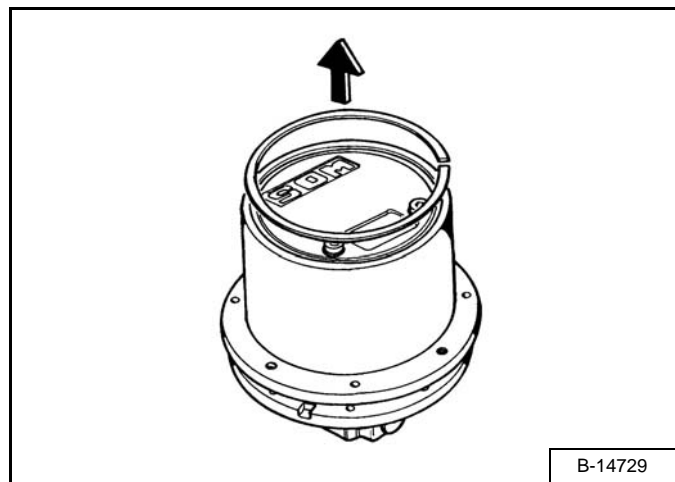
Figure 20-70-4



Remove the drain plugs (Item 1) [Figure 20-70-4] from the cover.

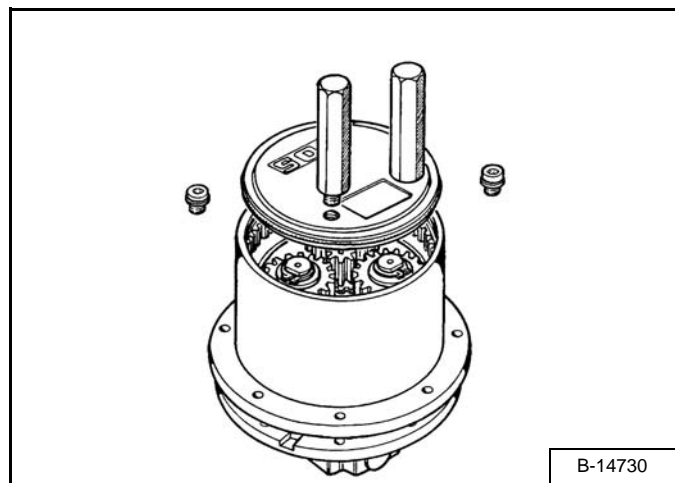
Drain the oil into a container.

Figure 20-70-5



Remove the internal snap ring from the travel motor case [Figure 20-70-5].

Figure 20-70-6



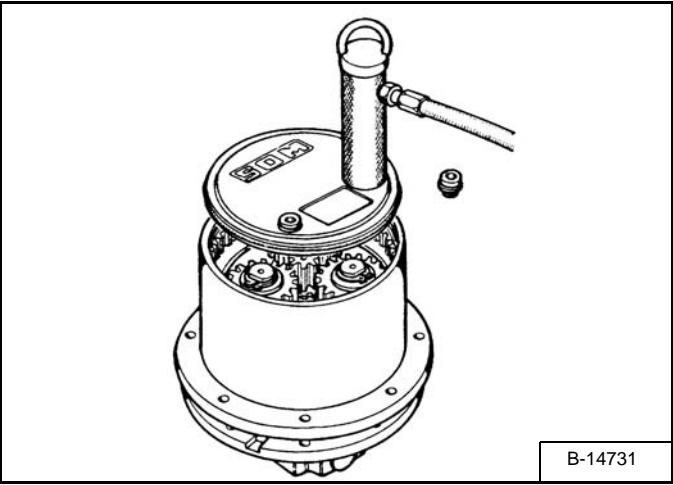
To remove the cover, install two threaded pins in the drain holes and lift the cover off [Figure 20-70-6].

Air pressure may also be used to remove the cover.

TRAVEL MOTOR (CONT'D)

Disassembly (Cont'd)

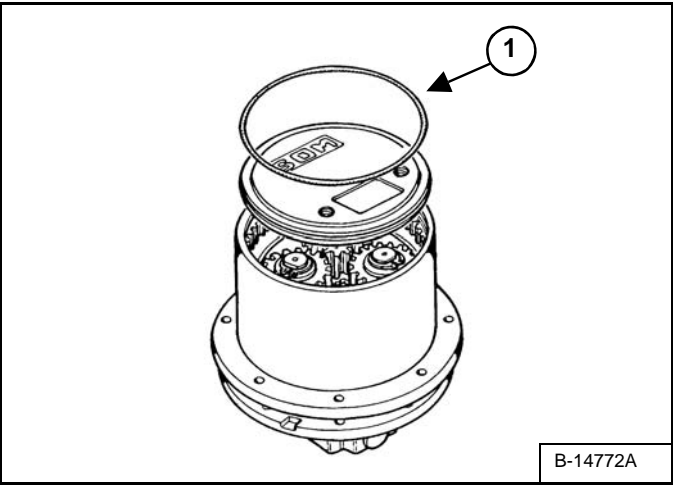
Figure 20-70-7



Screw the adapter in a drain hole and apply 8 - 11 psi [Figure 20-70-7].

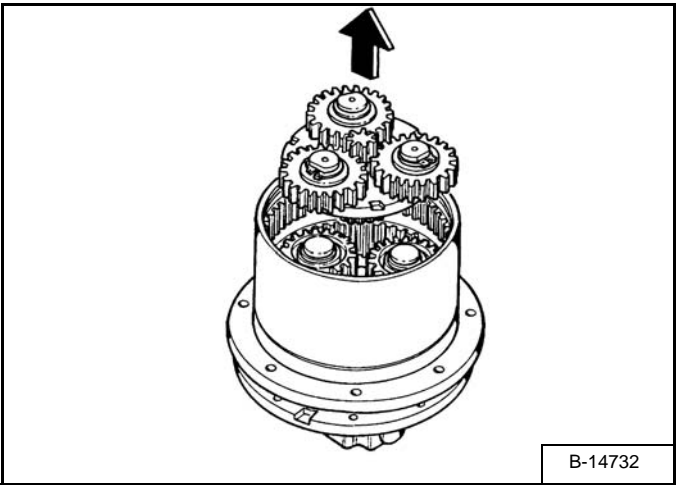
NOTE: Do not use excess pressure or seal damage may result.

Figure 20-70-8



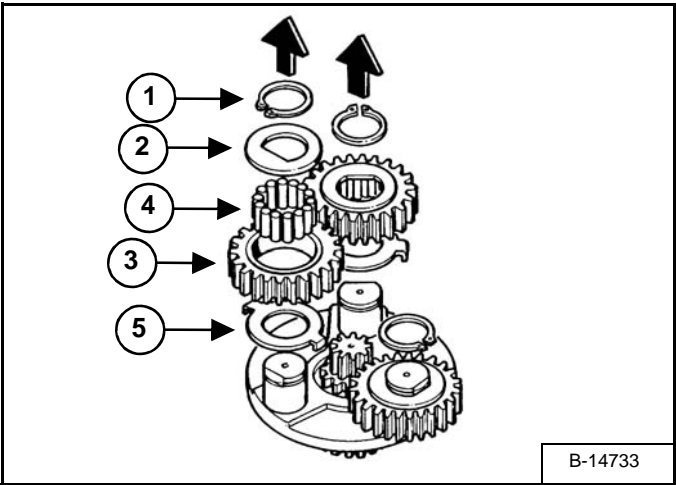
Remove the O-ring (Item 1) [Figure 20-70-8] from the cover.

Figure 20-70-9



Remove the planetary carrier [Figure 20-70-9].

Figure 20-70-10

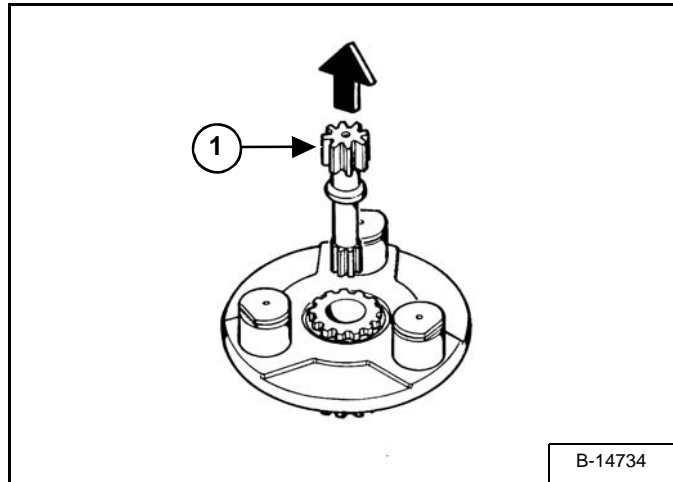


Remove the snap rings (Item 1), anti-rotation washers (Item 2), gears (Item 3), bearings (Item 4) and the bottom thrust washers (Item 5) [Figure 20-70-10] from the planetary carrier assembly.

TRAVEL MOTOR (CONT'D)

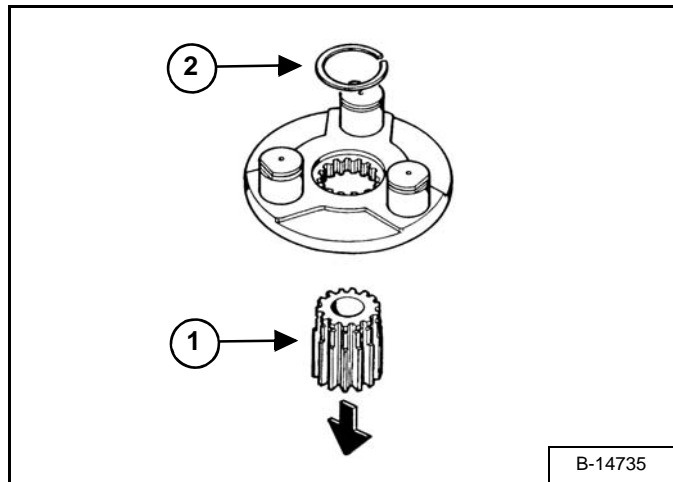
Disassembly (Cont'd)

Figure 20-70-11



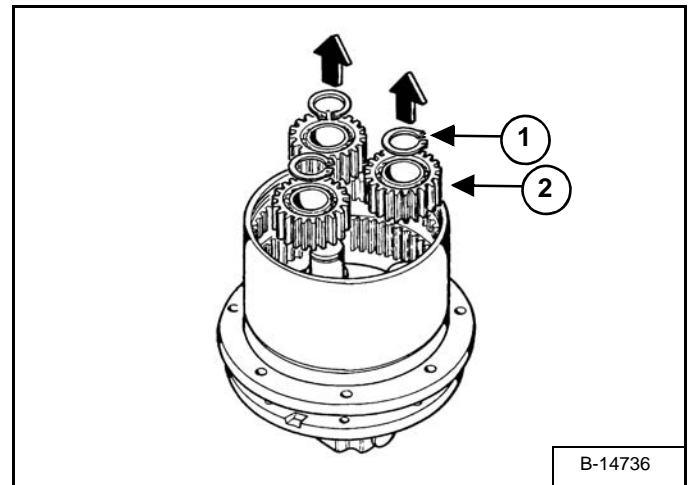
Remove the drive shaft (Item 1) [Figure 20-70-11] from the carrier.

Figure 20-70-12



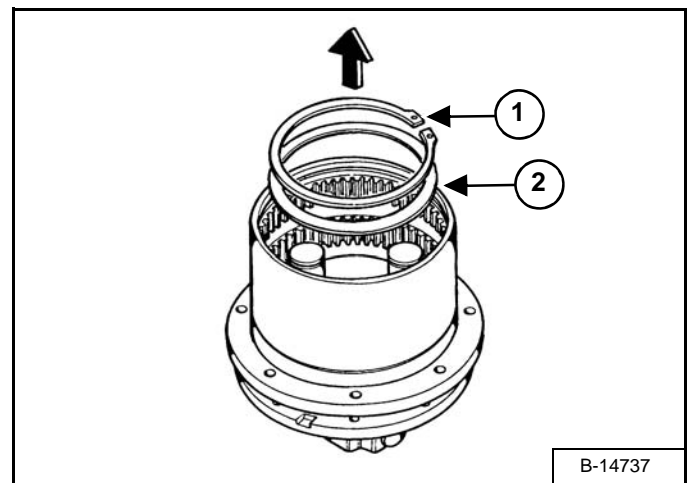
Remove the sun gear (Item 1) from the planetary carrier, by removing the snap ring (Item 2) and pushing the sun gear (Item 1) [Figure 20-70-12] out of the carrier.

Figure 20-70-13



Remove the snap rings (Item 1) and the gears/bearings (Item 2) [Figure 20-70-13].

Figure 20-70-14



Remove the external snap ring (Item 1) and the shim(s) (Item 2) [Figure 20-70-14].

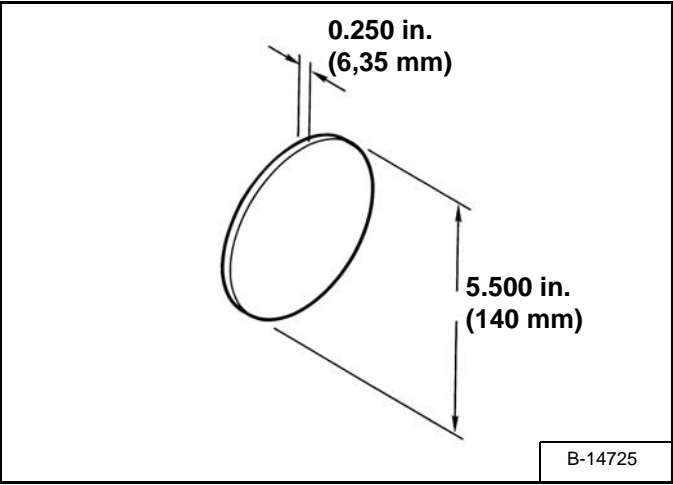
Before the ring gear can be pulled from the hub, a plate must be placed on the three pins of the planetary carrier.

The plate will provide support for the three jaw puller.

TRAVEL MOTOR (CONT'D)

Disassembly (Cont'd)

Figure 20-70-15



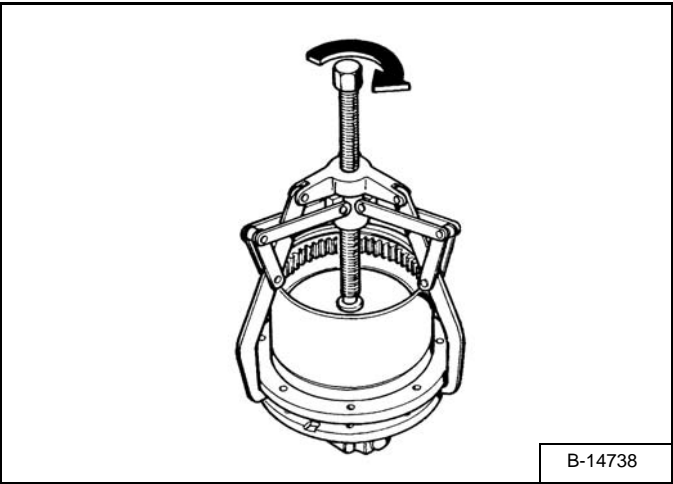
Obtain the plate [Figure 20-70-15] locally.

The dimensions of the plate are as follows:

Diameter 5.500 in. (140 mm)

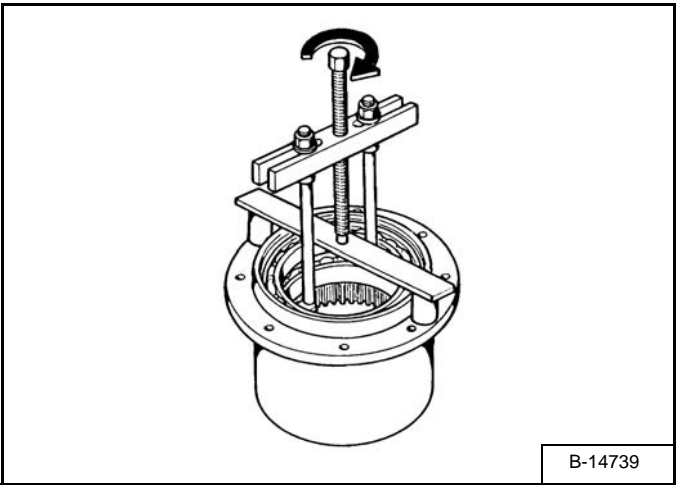
Thickness 0.250 in. (6.35 mm)

Figure 20-70-16



Using a three jaw puller, separate the hub and the ring gear assembly [Figure 20-70-16].

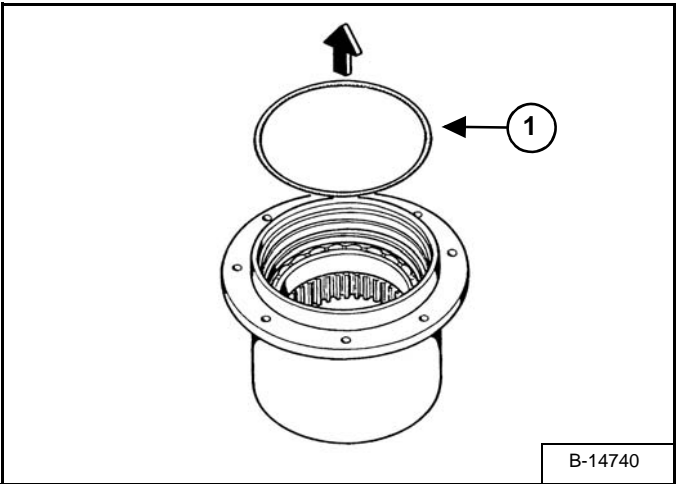
Figure 20-70-17



Remove the ball bearing from the ring gear as shown [Figure 20-70-17].

NOTE: Do not damage the top surface of the bearing as it is lapped (polished) to mate with the front seal ring.

Figure 20-70-18

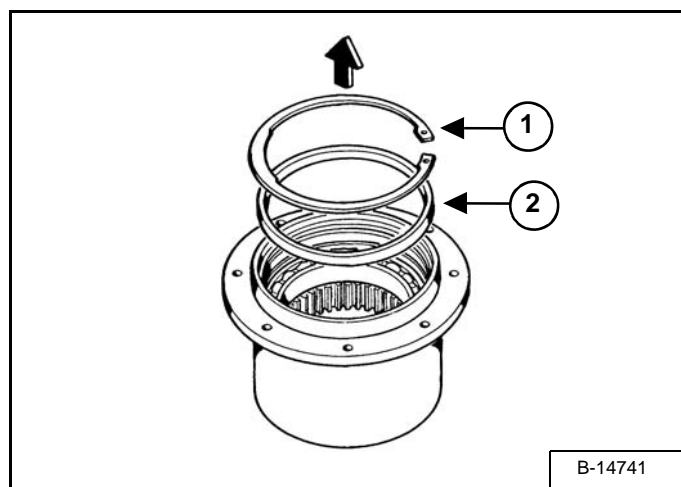


Remove the O-ring (Item 1) [Figure 20-70-18] from the ring gear.

TRAVEL MOTOR (CONT'D)

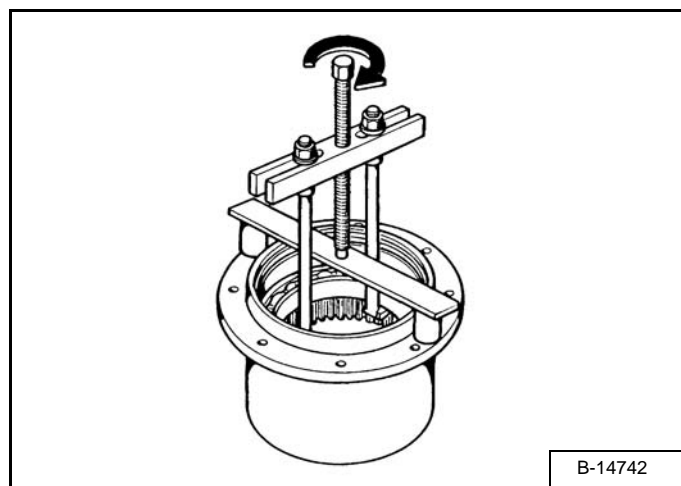
Disassembly (Cont'd)

Figure 20-70-19



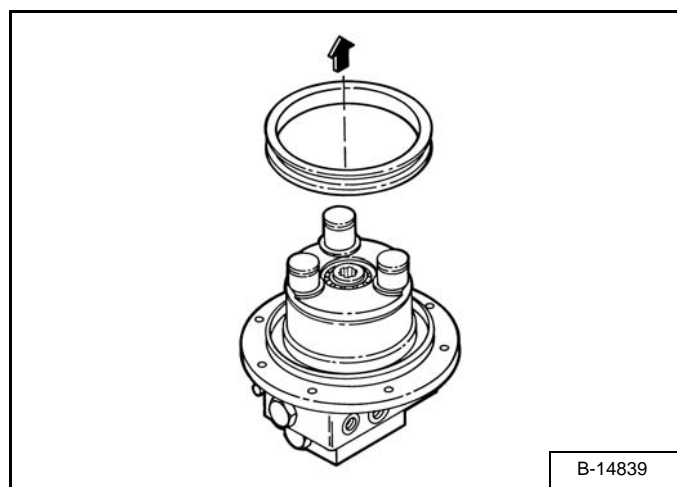
Remove the internal snap ring (Item 1) and spacer (Item 2) [Figure 20-70-19].

Figure 20-70-20



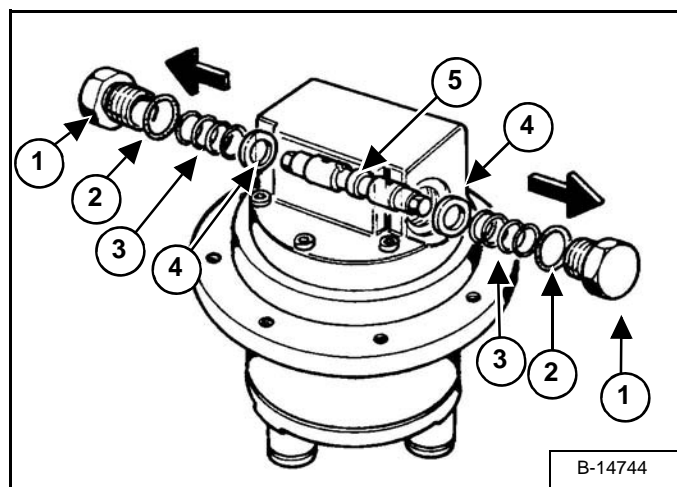
Remove the second bearing from the ring gear [Figure 20-70-20].

Figure 20-70-21



Remove the front seal ring from the motor hub [Figure 20-70-21].

Figure 20-70-22



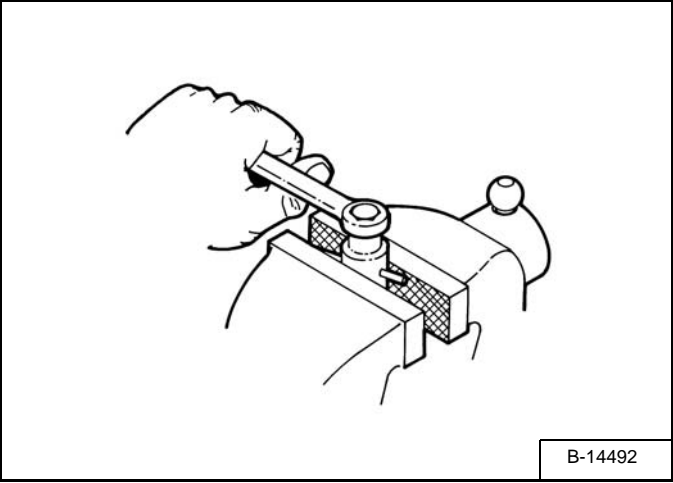
Remove the plugs (Item 1), O-rings (Item 2), springs (Item 3), and washers (Item 4) [Figure 20-70-22] from both ends of the spool.

Remove the spool (Item 5) [Figure 20-70-22].

TRAVEL MOTOR (CONT'D)

Disassembly (Cont'd)

Figure 20-70-23

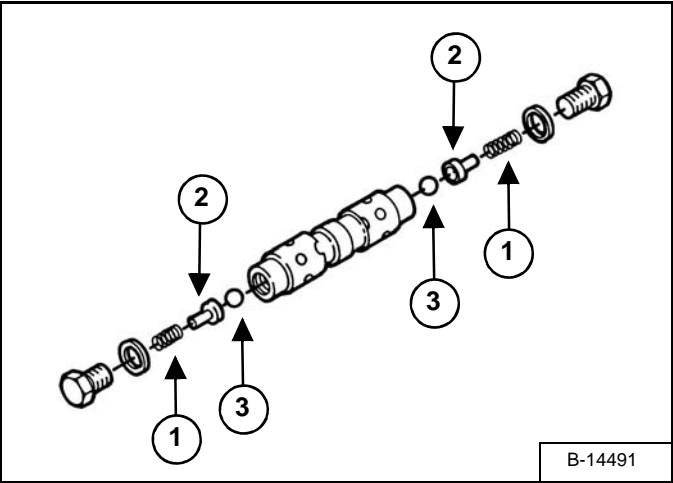


To disassemble the spool, insert a hardened pin through the hole in the spool and use a vise with protective jaws to hold the spool [Figure 20-70-23].

NOTE: Do not use any type of tool to grip the spool or damage to the spool will result.

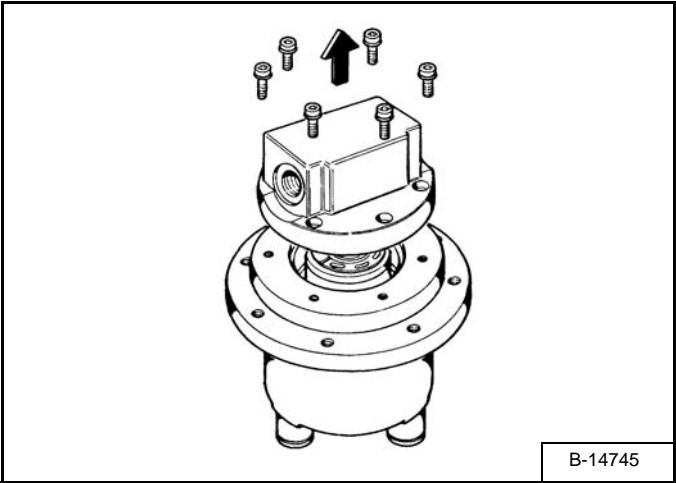
Remove the end plug from both ends of the spool [Figure 20-70-23].

Figure 20-70-24



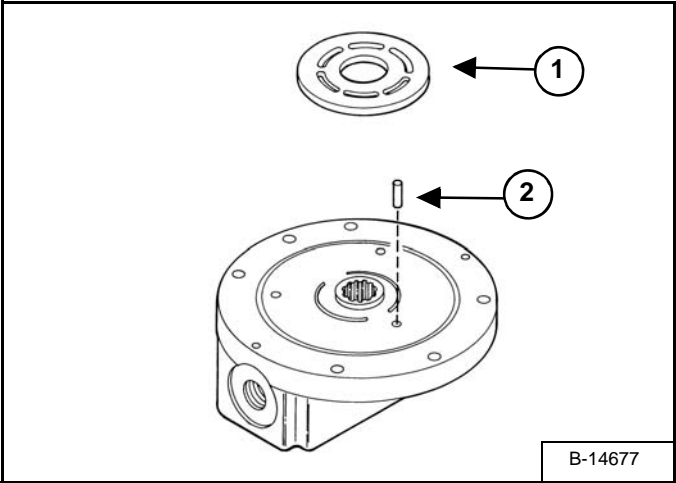
Remove the spring (Item 1), poppet (Item 2), and check ball (Item 3) [Figure 20-70-24] from both ends of the spool.

Figure 20-70-25



Remove the bolts and motor cover [Figure 20-70-25].

Figure 20-70-26



Remove the valve plate (Item 1) and dowel pin (Item 2) [Figure 20-70-26]