



# Bobcat®

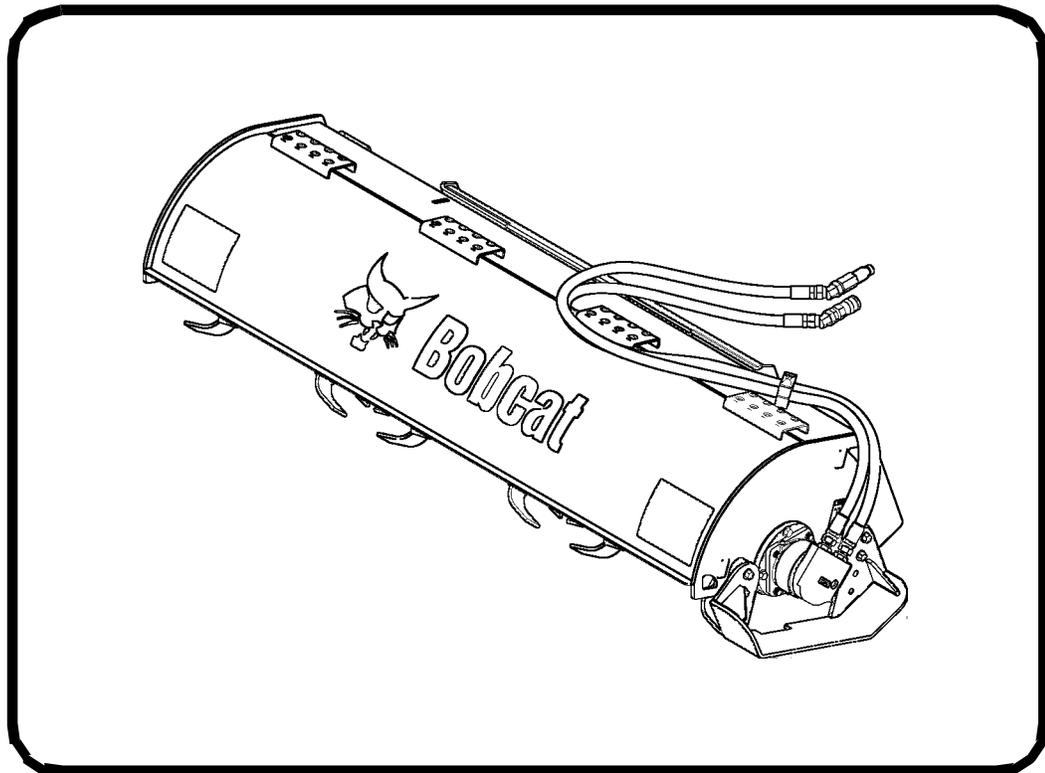
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## Service Manual

### Tiller

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**(62 In.) S/N 055200855 & Below**  
**(62 In.) S/N 055200856 & Above**  
**(76 In.) S/N 055100947 & Below**  
**(76 In.) S/N 055100948 & Above**



Product: 2007 Bobcat 62 Inch,76 Inch Tiller Service Repair Workshop Manual  
Full Download: <https://www.arepairmanual.com/downloads/2007-bobcat-62-inch76-inch-tiller-service-repair-workshop-manual/>

Sample of manual. Download All 55 pages at:  
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# MAINTENANCE SAFETY



## WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0903



**Safety Alert Symbol:** This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



B-10731a

-  Never service attachments without instructions. See Operation & Maintenance Manual and Attachment Service Manual.
-  Cleaning and maintenance are required daily.
-  Never service or adjust attachment with the engine running unless instructed to do so in manual.
-  Always lower the attachment to the ground before lubricating or servicing.
-  Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate skin or eyes.
-  Stop, cool and clean engine of flammable materials before checking fluids.
-  Keep body, loose objects and clothing away from moving parts, electrical contacts, hot parts and exhaust.
-  Safety glasses are needed for eye protection from electrical arcs, battery acid, compressed springs, fluids under pressure and flying debris or when tools are used. Use eye protection approved for type of welding.



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**SAFETY &  
MAINTENANCE**

**HYDRAULIC  
SYSTEM**

**MAIN  
FRAME**

**SPECIFICATIONS  
AND  
SCHEMATICS**

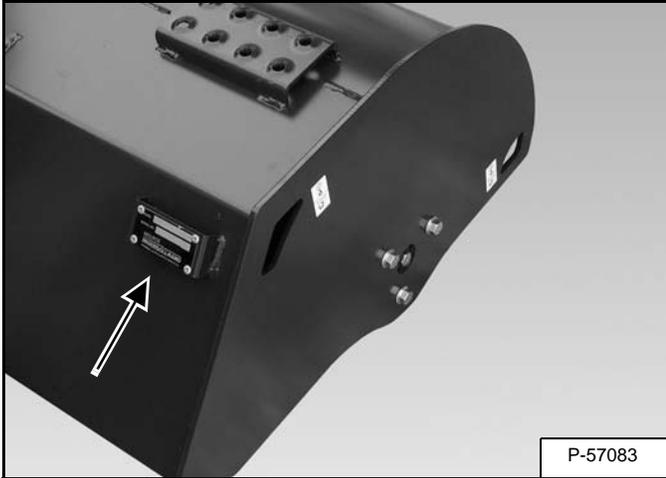
### **CALIFORNIA PROPOSITION 65 WARNING**

Diesel engine exhaust and some of its constituents are known to the state of California to cause cancer, birth defects and other reproductive harm.



## SERIAL NUMBER LOCATION

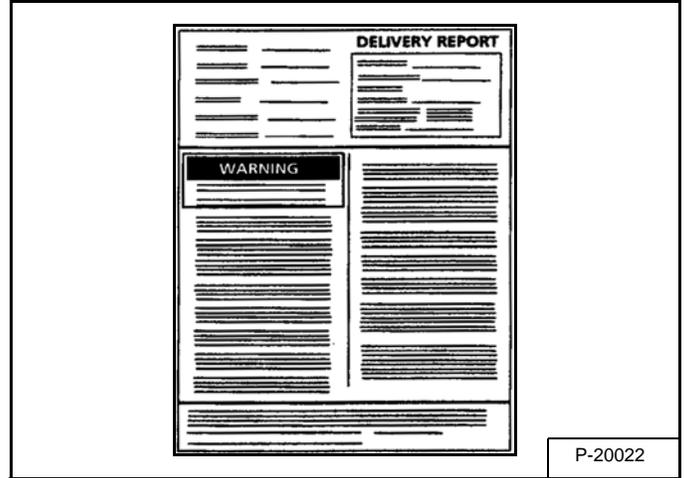
Figure 1



Always use the serial number of the tiller when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation [Figure 1].

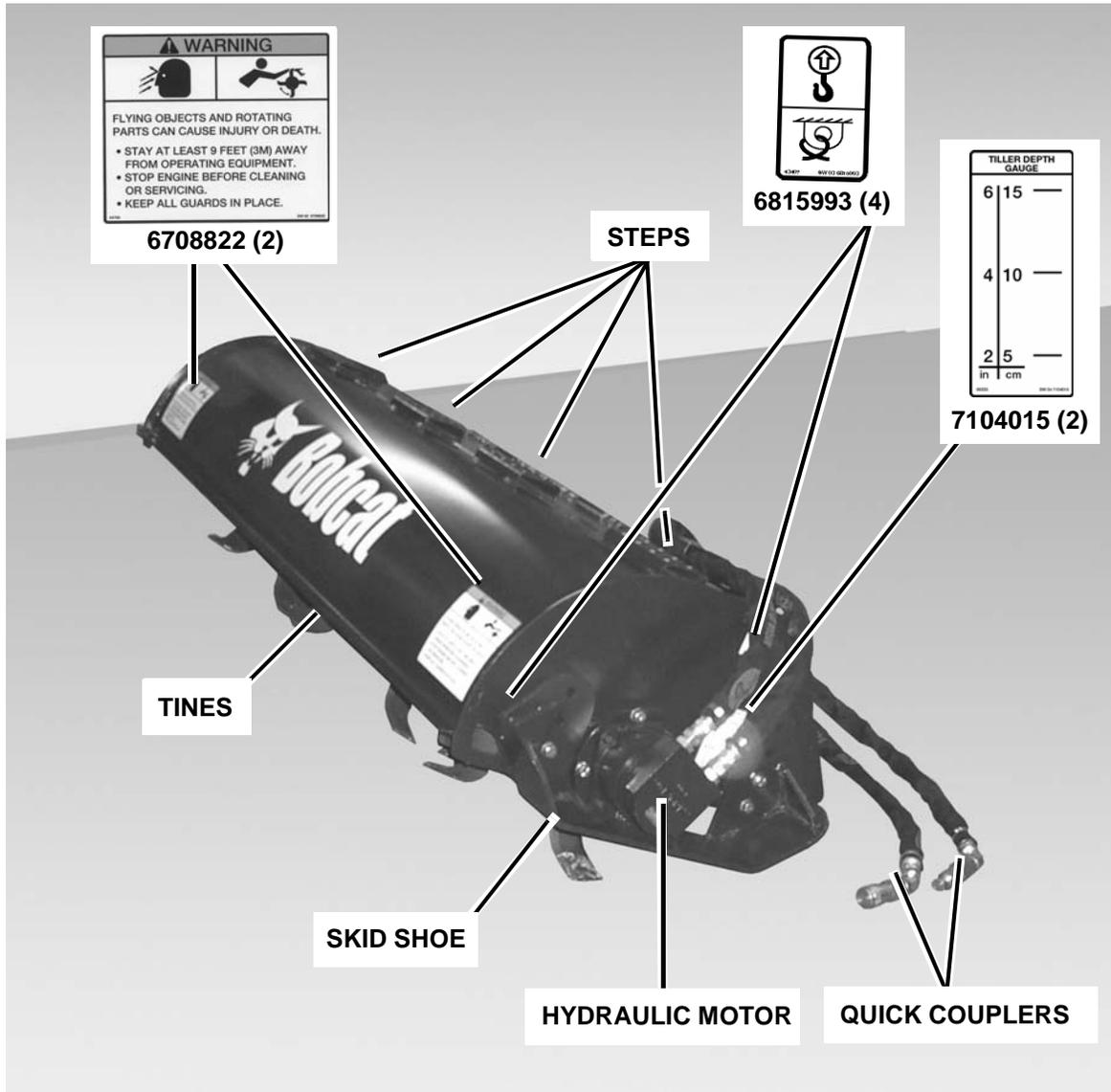
## DELIVERY REPORT

Figure 2



The delivery report must be filled out by the dealer and signed by the owner or operator when the tiller is delivered. An explanation of the form must be given to the owner. Make sure it is filled out completely [Figure 2].

# IDENTIFICATION AND MACHINE SIGNS (DECALS)



## **SAFETY & MAINTENANCE**



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## TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Tiller will not function.	Hydraulic hoses improperly connected.	Check the hydraulic quick couplers to make sure they are connected properly.
	Auxiliary Hydraulics not engaged.	Engage Auxiliary Hydraulics.
Tiller leaves an uneven finish (half smooth, half rough).	Tiller tines are either missing, or are worn.	Replace broken tines. Be sure all tines are present.
Tiller leaves a rough finish.	Tiller is being operated at low RPM's.	Increase loader RPM's.
	Tiller tines are either missing, or are worn.	Replace broken tines. Be sure all tines are present.
	Tiller is traveling too fast.	Decrease the rate of travel.
Tiller operation causes the loader to vibrate roughly.	Tiller is operating in the wrong direction.	Check to make sure tiller shaft is rotating in the opposite direction of travel.
	Tiller is traveling too fast.	Decrease the rate of travel.
	Loader arms not positioned in cradle.	Lower loader arms fully.

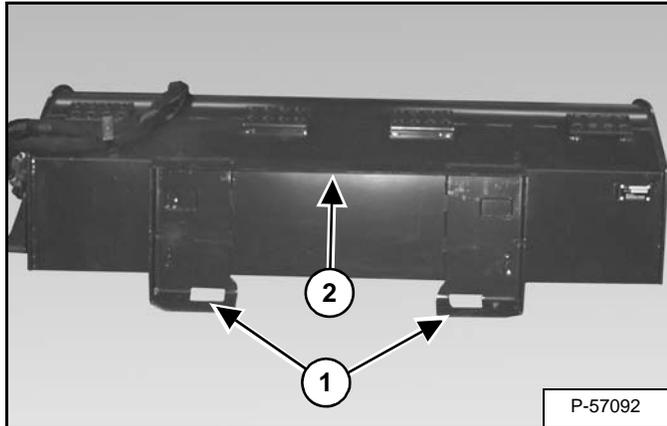


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## DAILY INSPECTION

### Attachment Mounting Frame

Figure 10-20-1



Inspect the Bob-Tach wedge mounts (Item 1), mounting flange (Item 2) [Figure 10-20-1] and all welds on the tiller for wear and damage each time the tiller is removed from the machine.

### Bob-Tach

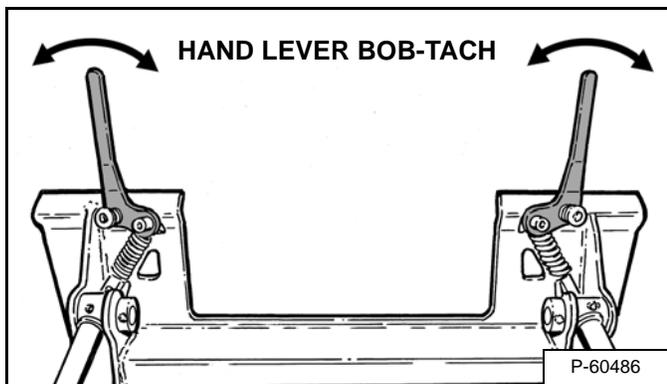
#### Hand Lever Bob-Tach



Bob-Tach wedges must extend through the holes in attachment. Lever(s) must be fully down and locked. Failure to secure wedges can allow attachment to come off and cause injury or death.

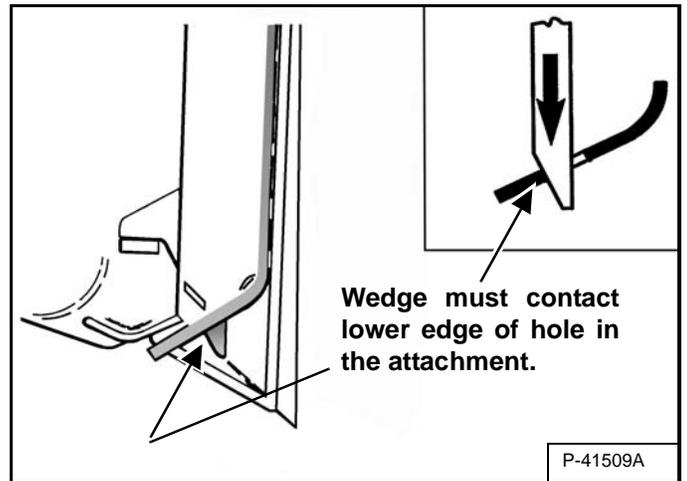
W-2102-0497

Figure 10-20-2



Move the Bob-Tach levers to engage and disengage the wedges [Figure 10-20-2]. The levers and wedges must move freely.

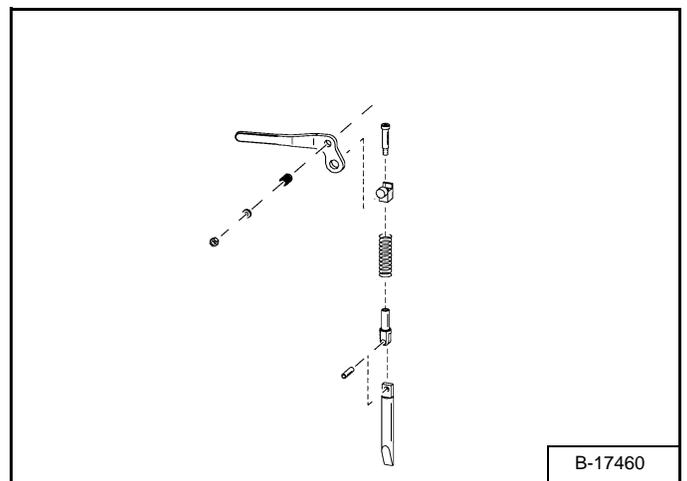
Figure 10-20-3



The wedges must extend through the holes in the attachment mounting frame [Figure 10-20-3].

If the wedge does not contact the lower edge of the hole [Figure 10-20-3], the attachment will be loose and can come off the Bob-Tach.

Figure 10-20-4



Inspect the mounting frame on the attachment and the Bob-Tach, linkages and wedges for excessive wear or damage [Figure 10-20-4]. Replace any parts that are damaged, bent or missing. Keep all fasteners tight.

Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the correct machine's Operation & Maintenance Manual for lubrication procedures.)

## DAILY INSPECTION (CONT'D)

### Bob-Tach (Cont'd)

Power Bob-Tach Option

# ! WARNING

Bob-Tach wedges must extend through the holes in attachment. Lever(s) must be fully down and locked. Failure to secure wedges can allow attachment to come off and cause injury or death.

W-2102-0497

Figure 10-20-5

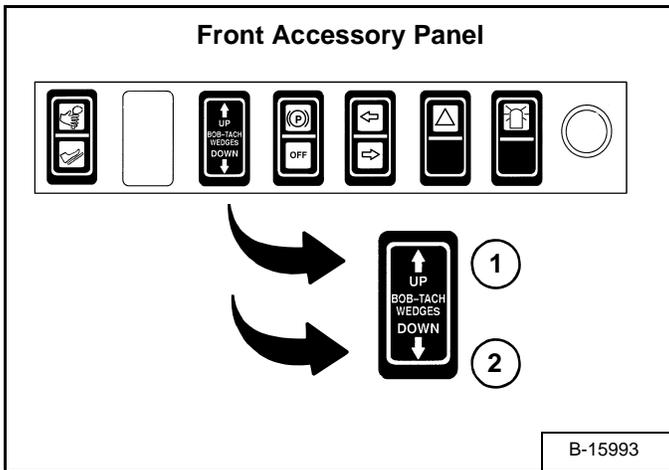
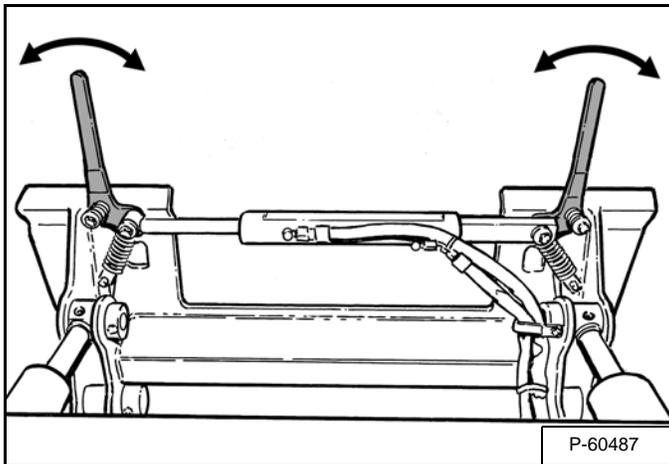


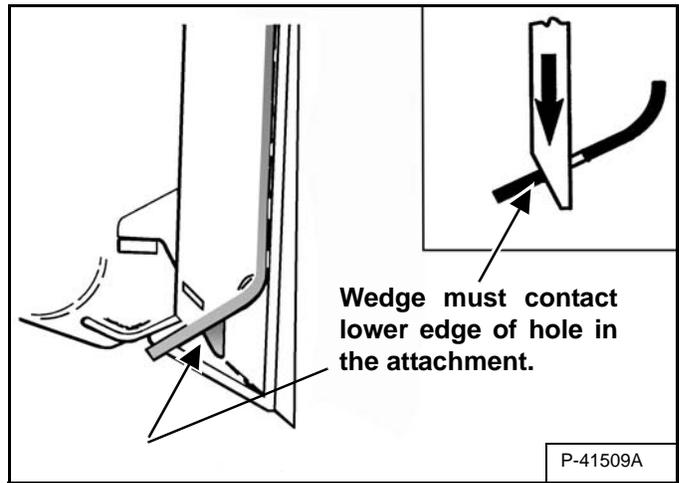
Figure 10-20-6



Push and hold the BOB-TACH WEDGES UP switch (Item 1) until the wedges are fully raised. Push and hold the BOB-TACH WEDGES DOWN switch (Item 2) [Figure 10-20-5] until the wedges are fully lowered.

The levers and wedges must move freely [Figure 10-20-6].

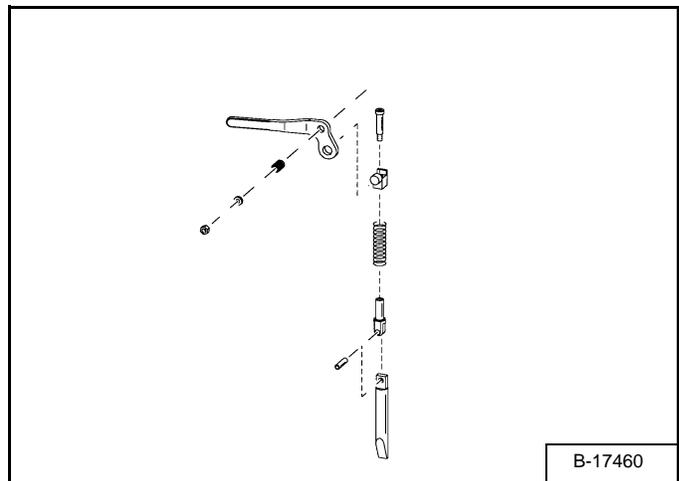
Figure 10-20-7



The wedges must extend through the holes in the attachment mounting frame [Figure 10-20-7].

If the wedge does not contact the lower edge of the hole [Figure 10-20-7], the attachment will be loose and can come off the Bob-Tach.

Figure 10-20-8



Inspect the mounting frame on the attachment and the Bob-Tach, linkages and wedges for excessive wear or damage [Figure 10-20-8]. Replace any parts that are damaged, bent or missing. Keep all fasteners tight.

Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the correct machine's Operation & Maintenance Manual for lubrication procedures.)

## HYDRAULIC SYSTEM

### HYDRAULIC SYSTEM

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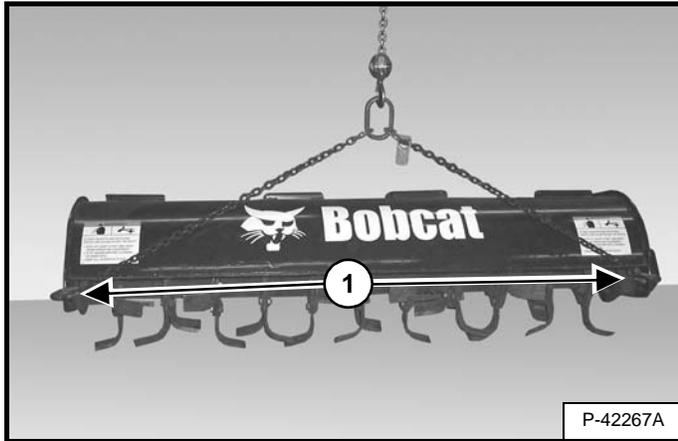


**Bobcat®**

**HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW)**

**Removal and Installation**

**Figure 20-10-1**

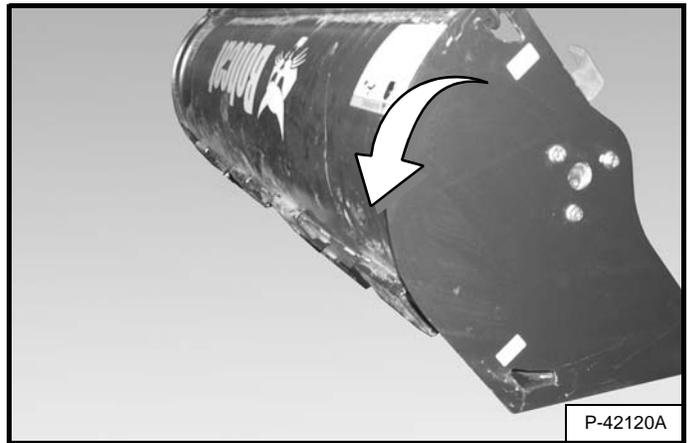


Attach chains to the front tie down locations (Item 1) [Figure 20-10-1].

**NOTE: Use chains that are in good condition and of adequate size to lift the attachment.**

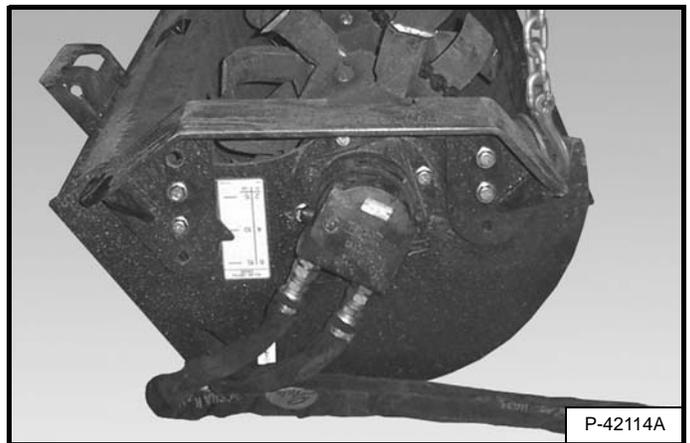
Raise the tiller slowly, keeping the mounting frame in contact with the ground.

**Figure 20-10-2**



Raise the tiller until the mounting frame moves slightly forward [Figure 20-10-2].

**Figure 20-10-3**

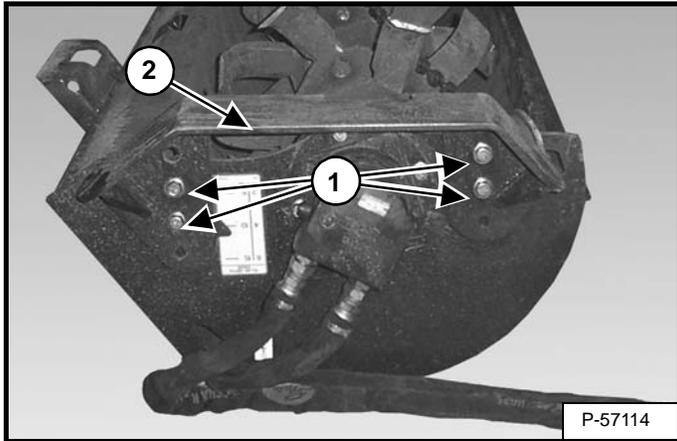


Lower the tiller to the ground until the top of the tiller is flat on the ground [Figure 20-10-3].

HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW) (CONT'D)

Removal and Installation (Cont'd)

Figure 20-10-4

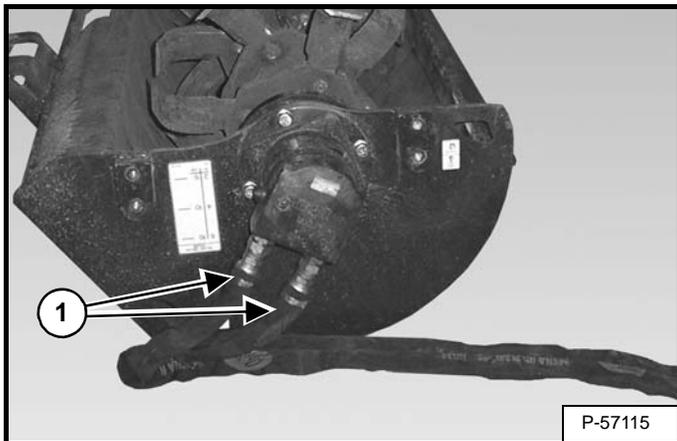


Remove the four bolts (Item 1) [Figure 20-10-4].

**Installation:** Tighten bolts to 65-70 ft.-lb. (88-95 N•m) torque.

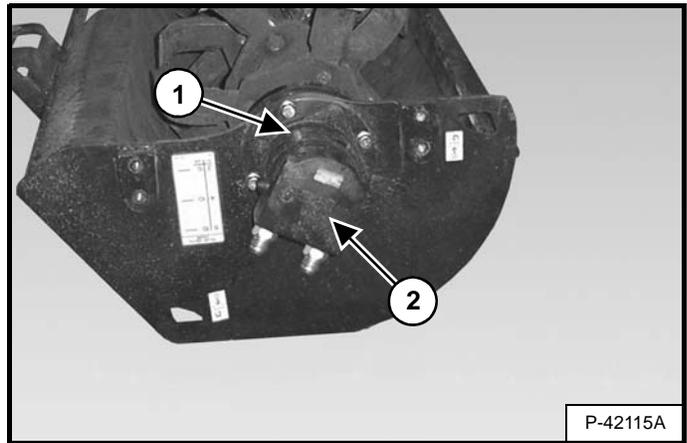
Remove the skid shoe (Item 2) [Figure 20-10-4].

Figure 20-10-5



Remove hoses (Item 1) [Figure 20-10-5].

Figure 20-10-6



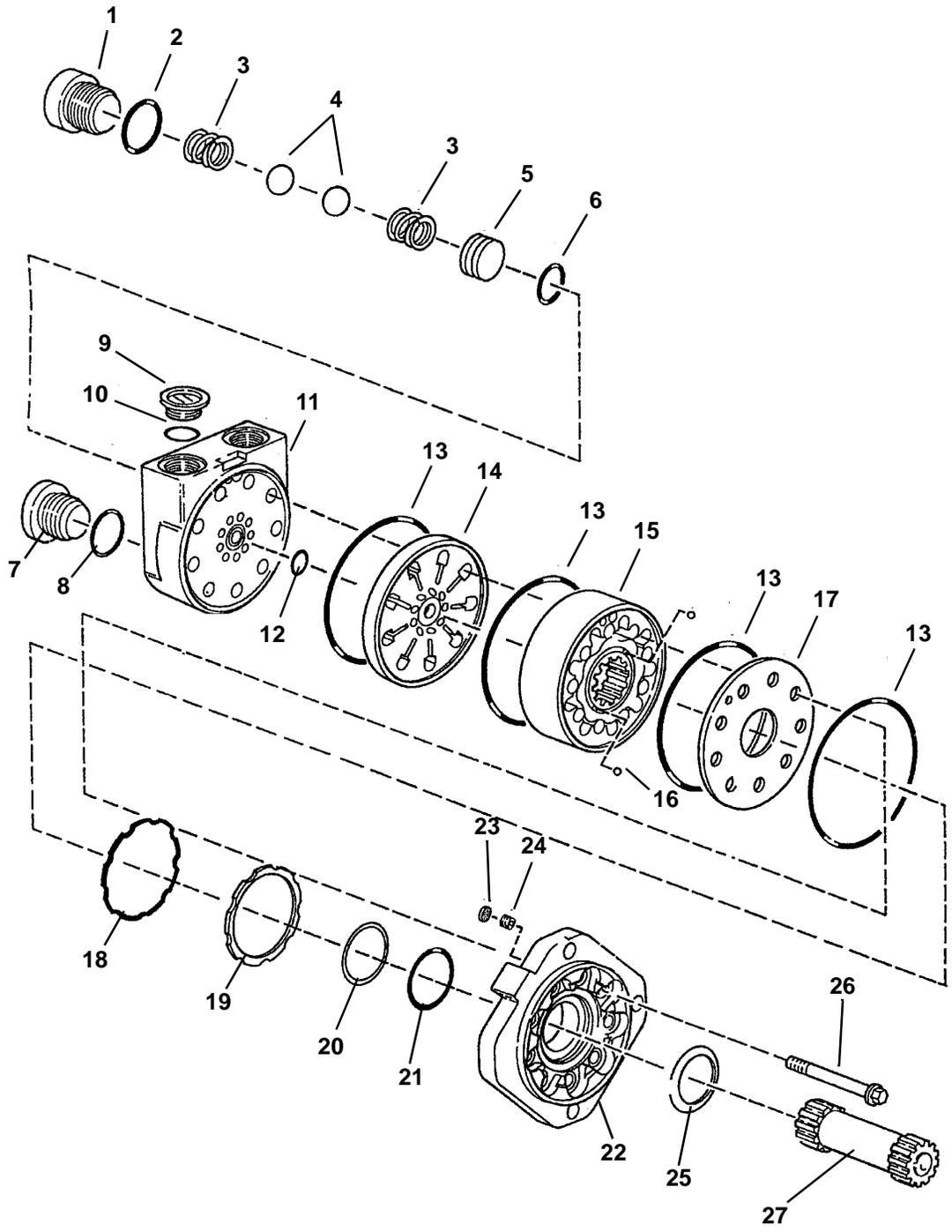
Remove the four bolts (Item 1), then remove the motor (Item 2) [Figure 20-10-6].

**Installation:** Tighten bolts to 65-70 ft.-lb. (88-95 N•m) torque.

HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW) (CONT'D)

Parts Identification

- 1.Plug
- 2.O-ring
- 3.Spring
- 4.Ball
- 5.Seat
- 6.O-ring
- 7.Plug
- 8.O-ring
- 9.Plug
- 10.O-ring
- 11.Housing
- 12.O-ring
- 13.O-ring
- 14.Valve
- 15.Geroler
- 16.Ball
- 17.Plate
- 18.Back-up Ring
- 19.Seal
- 20.Back-up Ring
- 21.O-ring
- 22.Flange
- 23.Screen
- 24.Orifice
- 25.Face Seal
- 26.Bolt
- 27.Drive Shaft



C-03426

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

## IMPORTANT

Contain and dispose of any oil leakage in an environmentally safe manner.

I-2066-0395

## WARNING

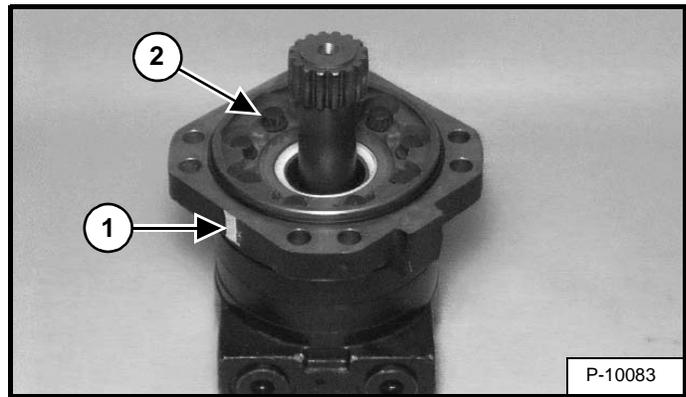
### AVOID INJURY OR DEATH

Wear safety glasses to prevent eye injury when any of the following conditions exist:

- When fluids are under pressure.
- Flying debris or loose material is present.
- Engine is running.
- Tools are being used.

W-2019-0907

Figure 20-10-7



Put a mark (Item 1) [Figure 20-10-7] across the motor sections for correct assembly.

Loosen and remove the nine bolts (Item 2) [Figure 20-10-7] from the motor mount flange.

Figure 20-10-8



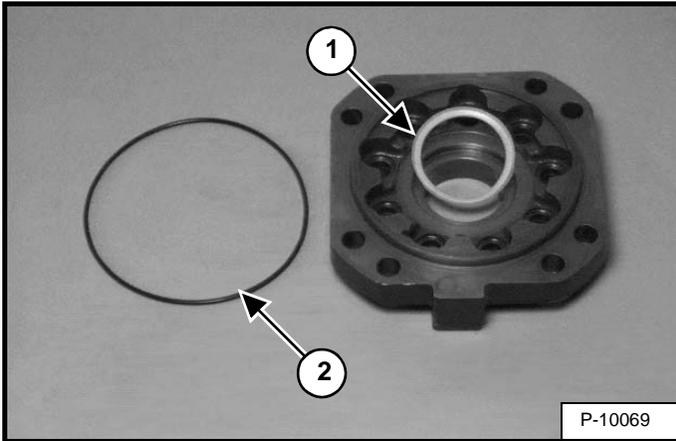
Remove the mounting flange from the balance plate [Figure 20-10-8].

**NOTE: DO NOT scratch or damage the surfaces of the motor sections. Always put them on a soft surface.**

**HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW) (CONT'D)**

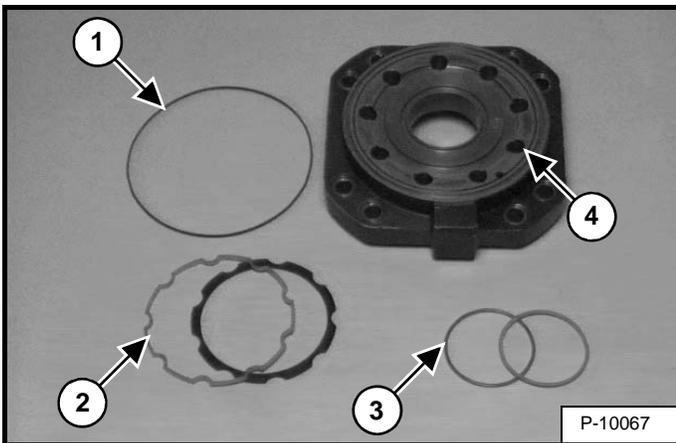
**Disassembly (Cont'd)**

**Figure 20-10-9**



Remove the seal (Item 1) and O-ring (Item 2) [Figure 20-10-9] from the mounting flange.

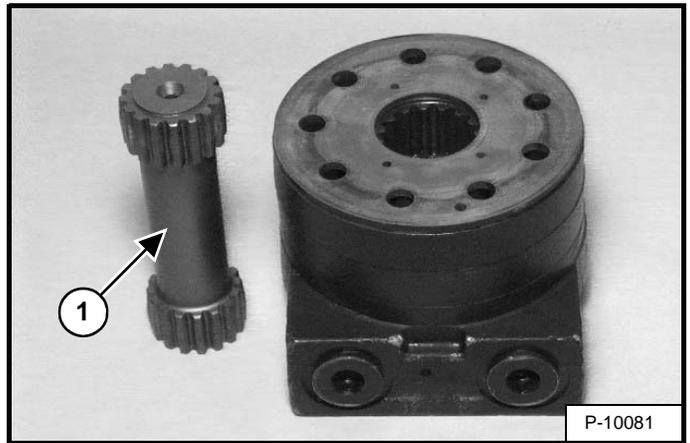
**Figure 20-10-10**



Turn the mounting flange over. Remove the large O-ring (Item 1), the seal and back-up ring (Item 2), and the small O-ring and back-up ring (Item 3) [Figure 20-10-10].

Remove the screen and orifice (Item 4) [Figure 20-10-10] from the mounting flange.

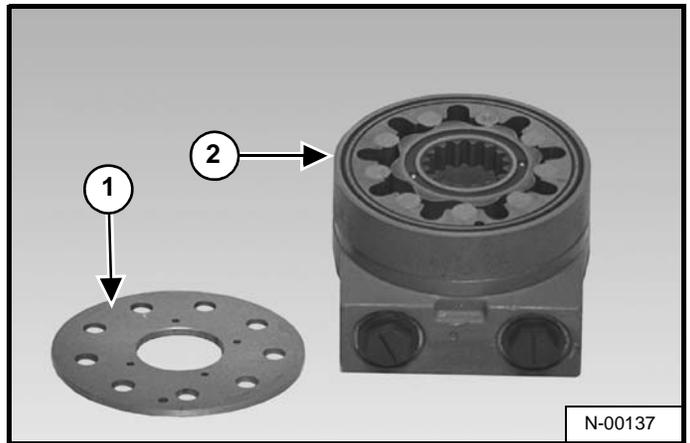
**Figure 20-10-11**



Remove the center shaft (Item 1) [Figure 20-10-11].

**NOTE:** The center shaft is built up at one end and recessed at the other end. The recessed end has a mating area in the geroler. Be sure to install the center shaft correctly during assembly.

**Figure 20-10-12**



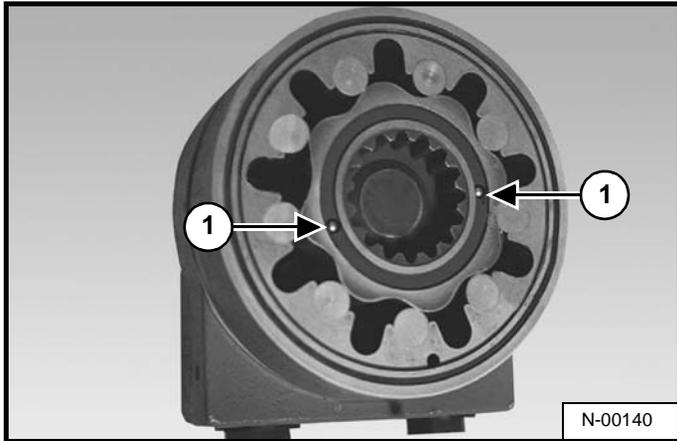
Remove the balance plate (Item 1) [Figure 20-10-12] from the geroler.

Remove the O-ring (Item 2) [Figure 20-10-12] from the geroler.

HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW) (CONT'D)

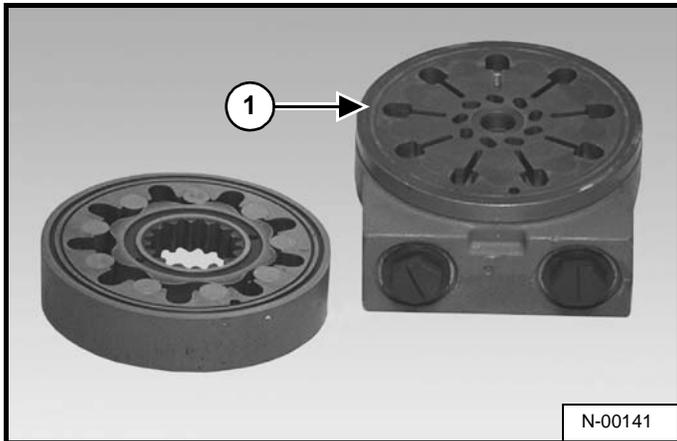
Disassembly (Cont'd)

Figure 20-10-13



Remove the two steel balls (Item 1) [Figure 20-10-13] from the geroler.

Figure 20-10-14

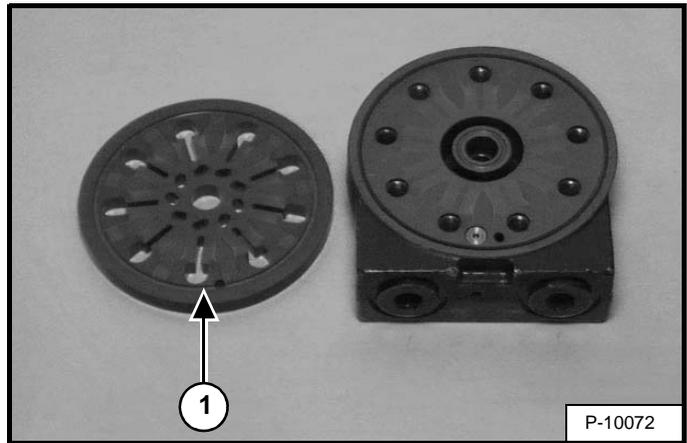


Remove the geroler from the valve plate [Figure 20-10-14].

Remove the O-ring (Item 1) [Figure 20-10-14] from the valve plate.

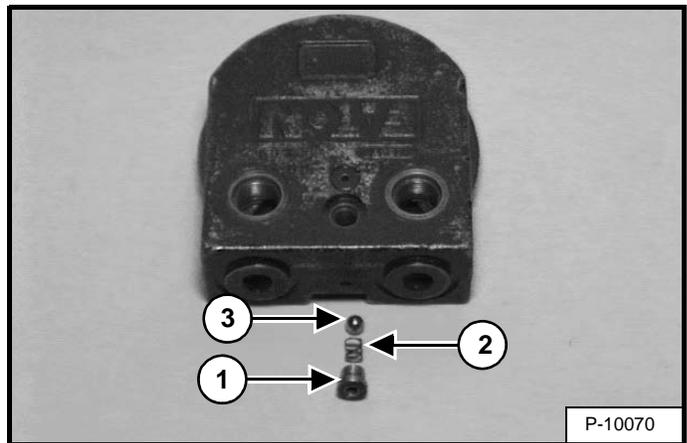
**Do not disassemble the geroler.**

Figure 20-10-15



Remove the valve plate (Item 1) [Figure 20-10-15] from the end housing.

Figure 20-10-16



Remove the plug (Item 1), spring (Item 2), and ball (Item 3) [Figure 20-10-16] from the outside of the end housing.

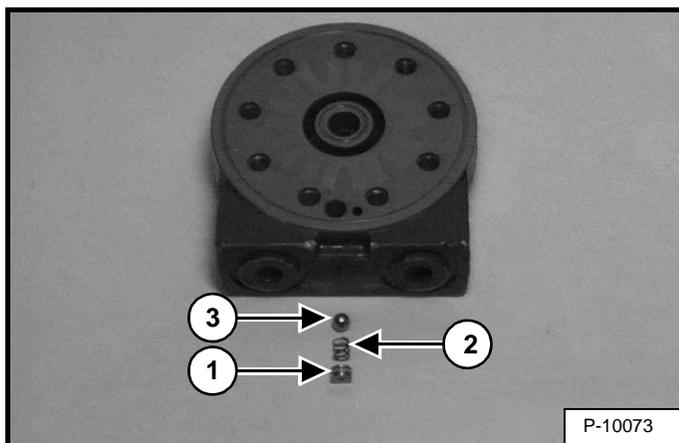
Replace the O-ring on the plug.

Check the condition of the balls and springs [Figure 20-10-16]. Replace as needed.

HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW) (CONT'D)

Disassembly (Cont'd)

Figure 20-10-17



Using a punch, tap from the outside of the housing to remove the ball (Item 1), spring (Item 2), and plug (Item 3) [Figure 20-10-17].

Replace the O-ring on the plug.

Check the condition of the balls and springs [Figure 20-10-17]. Replace as needed.

Check the condition of the seating surface in the end housing. If the surface is damaged, replace the end housing.

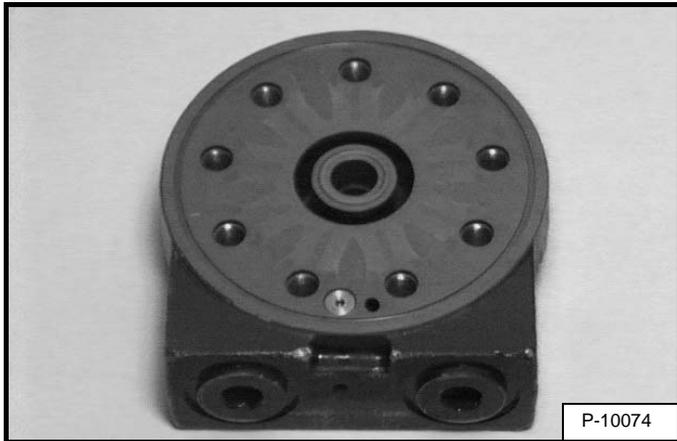
**HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW) (CONT'D)**

**Inspection**

Clean all the parts in solvent and dry with compressed air. DO NOT use cloth or paper to dry the parts. Small pieces of material can get into the system and cause damage.

Check the following parts before assembly.

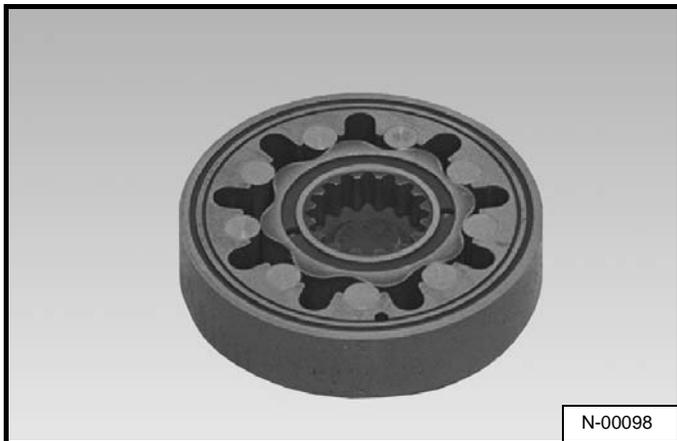
**Figure 20-10-18**



Check the end housing surface for scratches [Figure 20-10-18].

**NOTE: Inspect and clean the motor case drain filters during motor repair or replacement.**

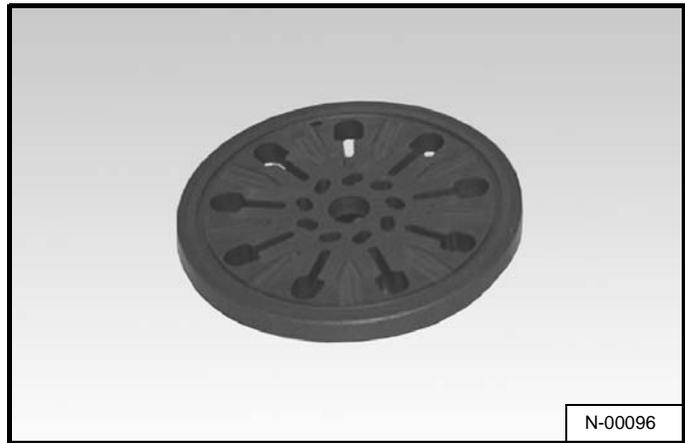
**Figure 20-10-19**



Check the geroler rollers and rotor for wear and scratches [Figure 20-10-19].

**NOTE: Do not disassemble the geroler. If rollers come out, put them back in their original bore.**

**Figure 20-10-20**



Check the valve plate surface for scratches (both sides) [Figure 20-10-20].

**Figure 20-10-21**



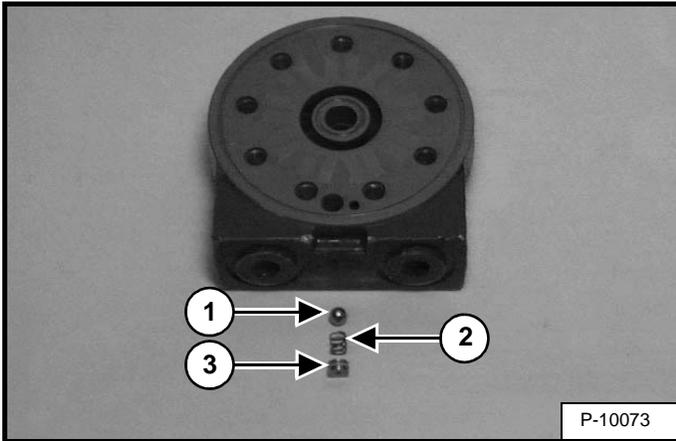
Check the balance plate surface for scratches (both sides) [Figure 20-10-21].

**HYDRAULIC MOTOR (S/N 055200855 & BELOW, S/N 055100947 & BELOW) (CONT'D)**

**Assembly**

**NOTE:** Always use new O-rings and seals when assembling the motor. Put a small amount of grease on all the O-rings and seals for easier installation.

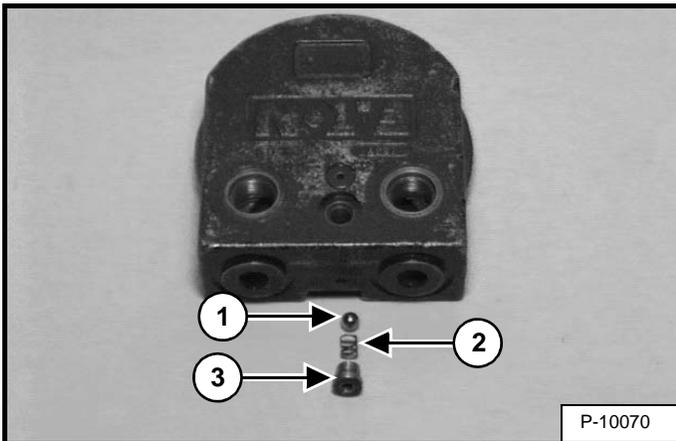
**Figure 20-10-22**



From the inside of the end housing, install the ball (Item 1), spring (Item 2), and plug (Item 3) [Figure 20-10-22].

Install the plug until it is flush with the surface of the end housing.

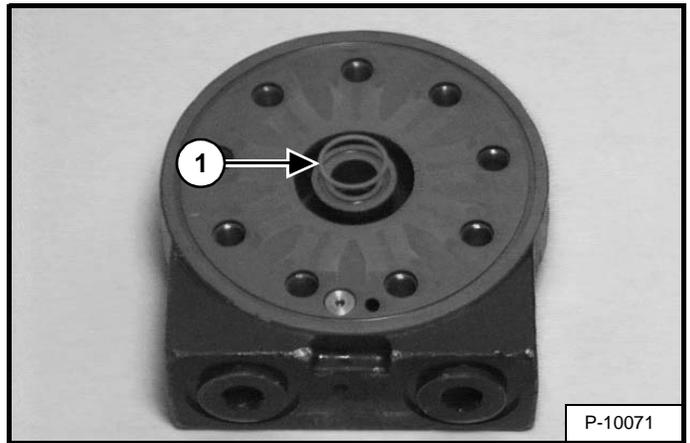
**Figure 20-10-23**



From the outside of the end housing, install the ball (Item 1), spring (Item 2), and plug (Item 3) [Figure 20-10-23].

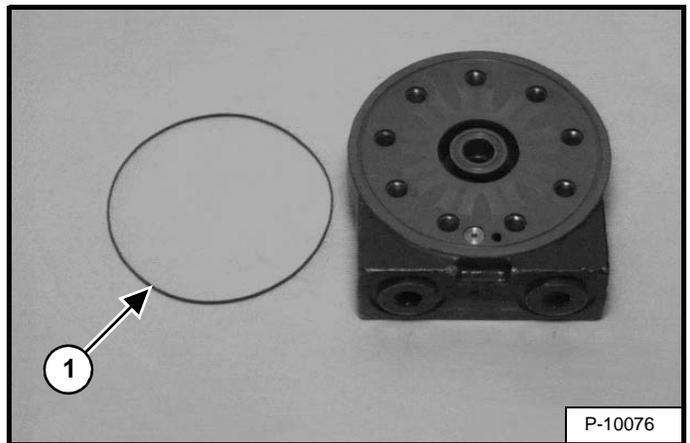
**Installation:** Tighten the plug to 30 ft.-lb. (41 N•m) torque.

**Figure 20-10-24**



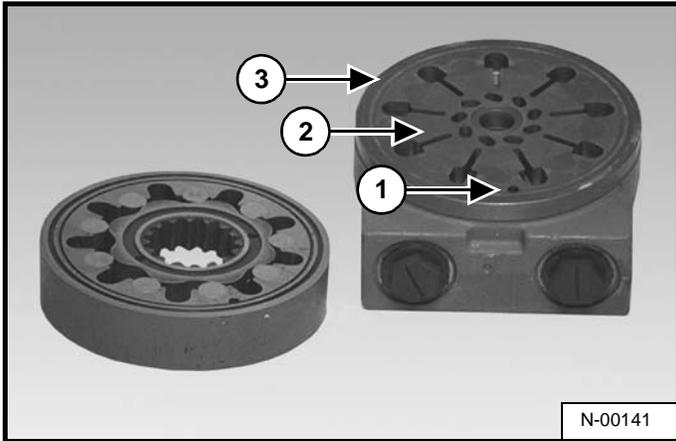
Install the small O-ring (Item 1) [Figure 20-10-24] in the groove in the end housing.

**Figure 20-10-25**



Install the large O-ring (Item 1) [Figure 20-10-25] on the end housing.

Figure 20-10-26

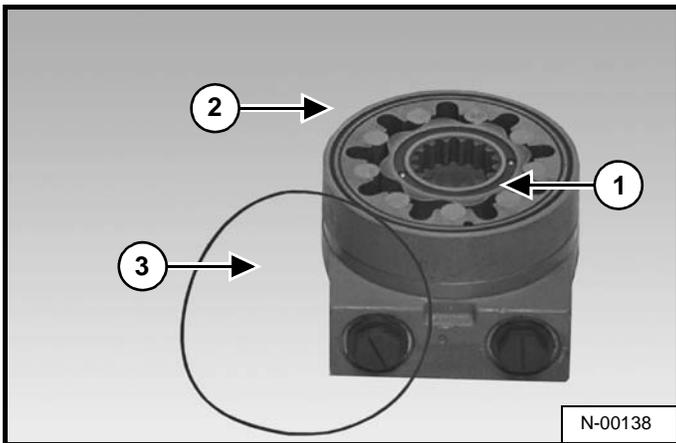


Align the case drain hole (Item 1) [Figure 20-10-26] in the valve plate with the case drain hole in the end housing.

Install the valve plate (Item 2) [Figure 20-10-26] on the end housing.

Install the large O-ring (Item 3) [Figure 20-10-26] on the valve plate.

Figure 20-10-27

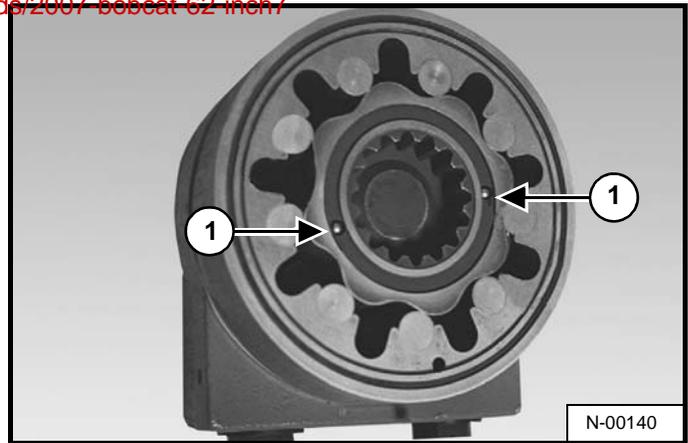


Align the case drain hole (Item 1) [Figure 20-10-27] in the geroler with the case drain hole in the valve plate.

Install the geroler (Item 2) [Figure 20-10-27] on the valve plate.

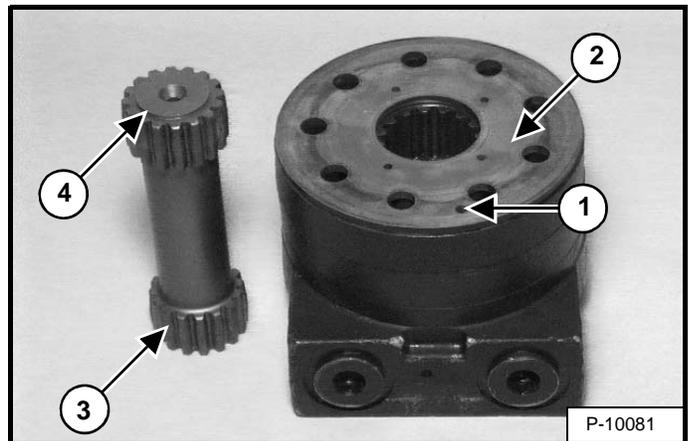
Install the large O-ring (Item 3) [Figure 20-10-27] on the geroler.

Figure 20-10-28



Install the two steel balls (Item 1) [Figure 20-10-28] in the geroler holes.

Figure 20-10-29



Align the case drain hole (Item 1) [Figure 20-10-29] in the balance plate with the case drain hole in the geroler.

Install the balance plate (Item 2) [Figure 20-10-29] on the geroler.

Install the center shaft (Item 3) [Figure 20-10-29] in the geroler splines.

**NOTE:** Install the center shaft so the built up end (Item 4) [Figure 20-10-29] is up. The recessed end will fit in a mating area in the geroler.