

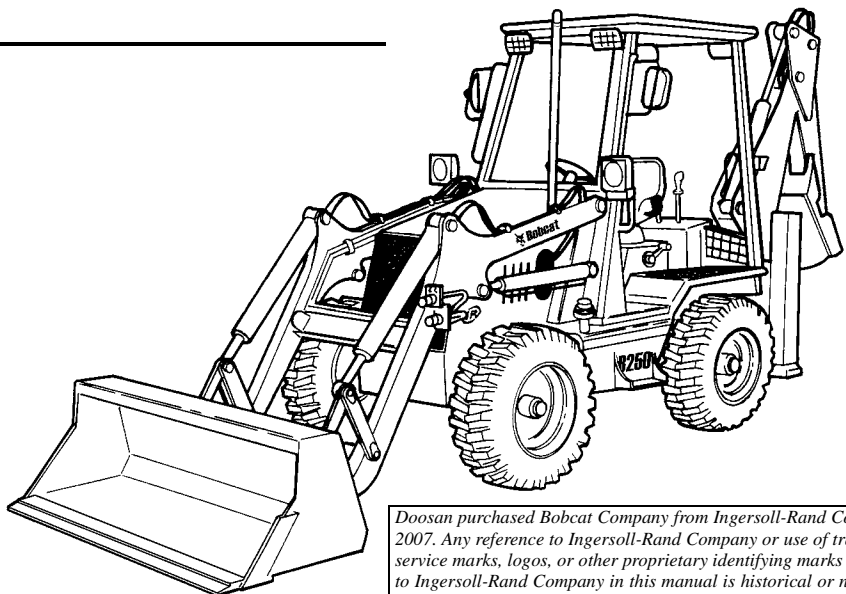
# B-250



# Bobcat®

# Operation & Maintenance Manual

**S/N 572911001 & Above  
B Series**



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## OPERATOR CAB (ROPS AND FOPS)

The Bobcat Loader Backhoe is equipped with either an open cab or an enclosed cab (ROPS and FOPS) to protect the operator from rollover and falling objects. Check with your dealer if the operator cab has been damaged. The seat belt must be worn for rollover protection.

ROPS/FOPS - Roll Over Protective Structure per ISO 3471 and Falling Object Protective Structure per ISO 3449, Level I.

*Level I* - Protection from falling bricks, small concrete blocks and hand tools encountered in operations such as highway maintenance, landscaping or other construction sites.

## OPERATOR CAB ENCLOSURE (IF EQUIPPED)

The Bobcat Loader Backhoe may be equipped with an enclosed operator cab (ROPS and FOPS) to protect the operator from rollover and falling objects. Check with your dealer if the operator cab has been damaged. The seat belt must be worn for rollover protection.

## Emergency Exit

The left and right doors provide emergency exits, if one cannot be accessed in the event of an emergency use the opposite side to exit the machine.

Figure OI-12

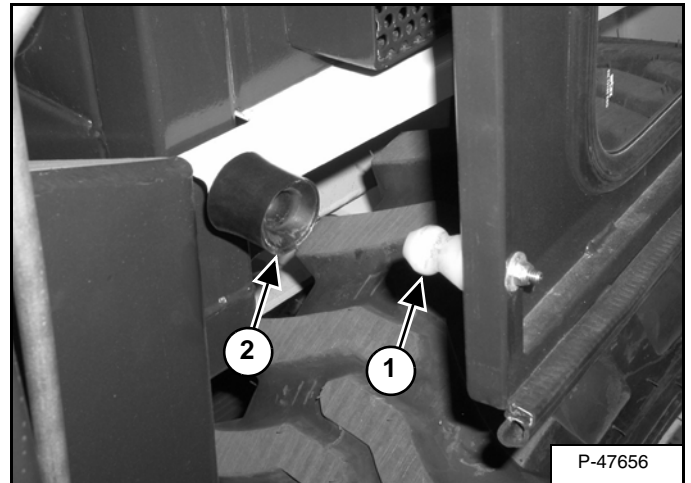


The rear window can also be used as an exit in an emergency [Figure OI-12].

## Cab Door

The cab doors can be locked from the outside using a key.

Figure OI-13

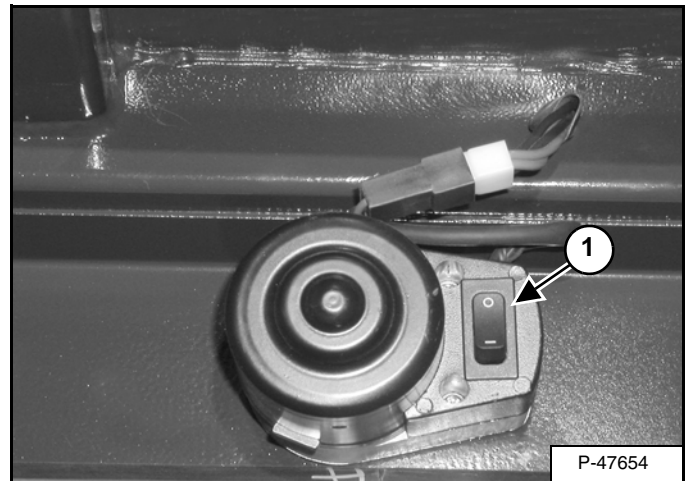


Push the door all the way open until the latch (Item 1) engages into the rubber stop (Item 2) [Figure OI-13] to hold the door open.

Firmly pull the door away from the cab to disengage the latch (Item 1) [Figure OI-13] and close the door.

## Front Window And Wiper

Figure OI-14

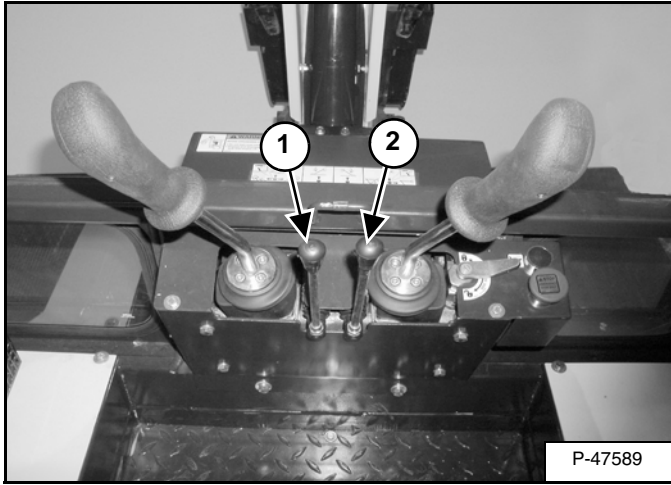


The front window is equipped with a wiper. The wiper is controlled by the ON/OFF switch (Item 1) [Figure OI-14].

## BACKHOE HYDRAULIC CONTROLS (CONT'D)

### Stabilizer Control Levers

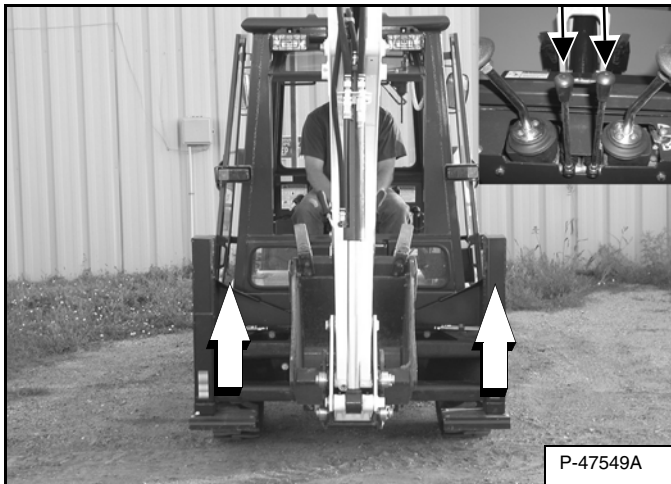
Figure OI-34



The left lever (Item 1) [Figure OI-34] controls the left stabilizer.

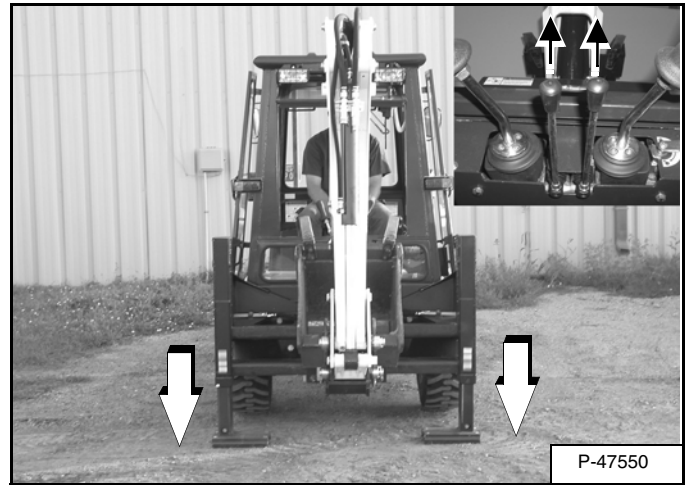
The right lever (Item 2) [Figure OI-34] controls the right stabilizer.

Figure OI-35



Pull the levers (Item 1 & 2) [Figure OI-34] back to raise both stabilizers [Figure OI-35].

Figure OI-36



Push the levers (Item 1 & 2) [Figure OI-34] forward to lower both stabilizers [Figure OI-36].

## STARTING THE ENGINE (CONT'D)

### Warming The Hydraulic/Hydrostatic System

Let the engine run for a minimum of 5 minutes to warm the engine and hydrostatic transmission fluid before operating the loader backhoe.

# IMPORTANT

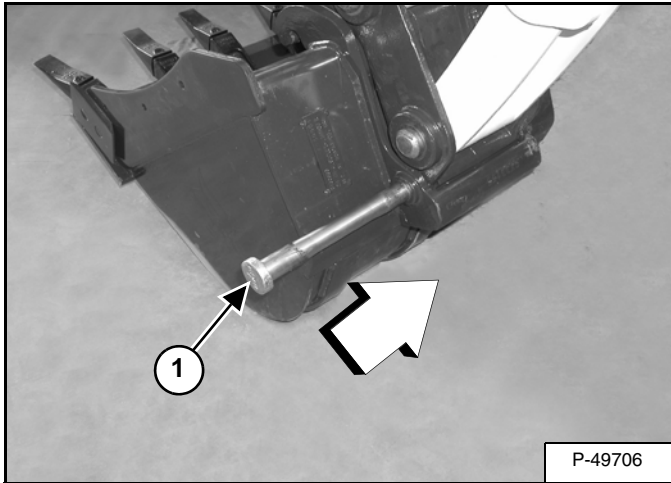
When the temperature is below  $-20^{\circ}\text{F}$  ( $-30^{\circ}\text{C}$ ), hydrostatic oil must be warmed before starting. The hydrostatic system will not get enough oil at low temperatures and will be damaged. Park the machine in an area where the temperature will be above  $0^{\circ}\text{F}$  ( $-18^{\circ}\text{C}$ ) if possible.

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## BACKHOE ATTACHMENTS (CONT'D)

### Pin On X-Change™ - Installing Bucket Or Attachment (If Equipped) (Cont'd)

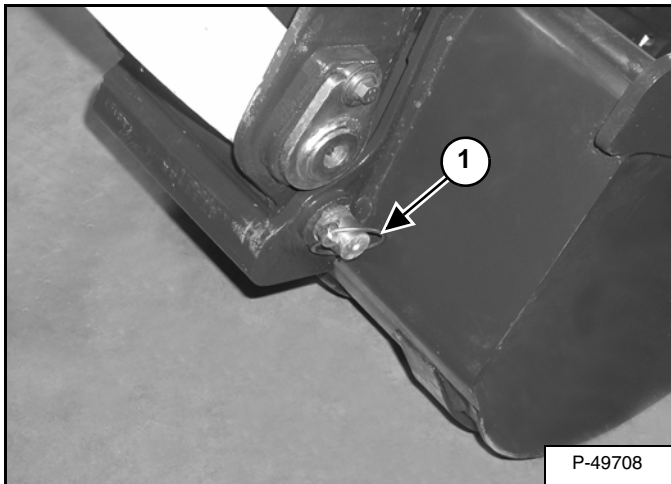
Figure OI-80



Stop the engine. Release the hydraulic pressure.

Drive the pin (Item 1) **[Figure OI-80]** through the bucket mount and X-Change.

Figure OI-81



Install the retainer pin (Item 1) **[Figure OI-81]**.

Check for proper installation.

Lift the attachment and fully extend and retract the bucket cylinder.

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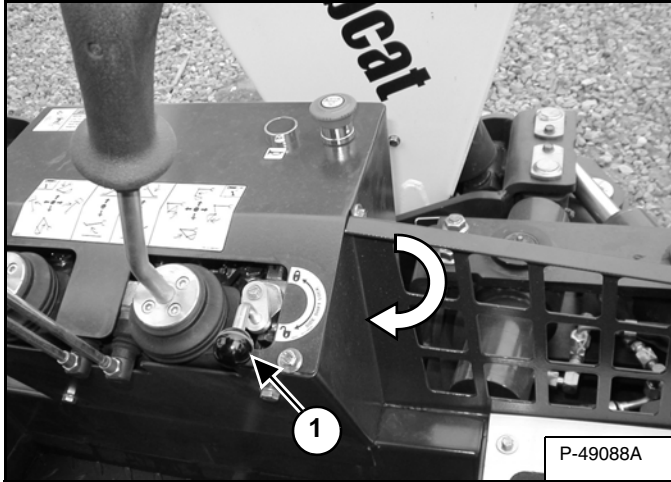
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## OPERATING PROCEDURE (CONT'D)

### Side Shifting The Backhoe

Use the following procedure to move the backhoe swing frame to either the right, left or center of the backhoe frame:

Figure OI-100



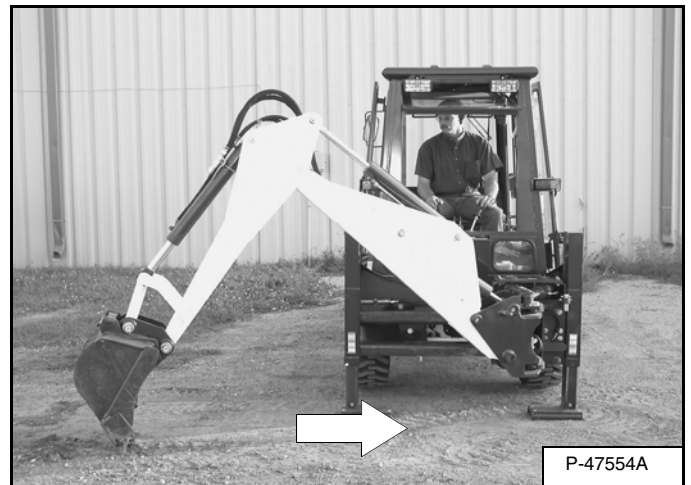
Disengage the side shift locking system by rotating the lever (Item 1) [Figure OI-100] down.

Figure OI-101



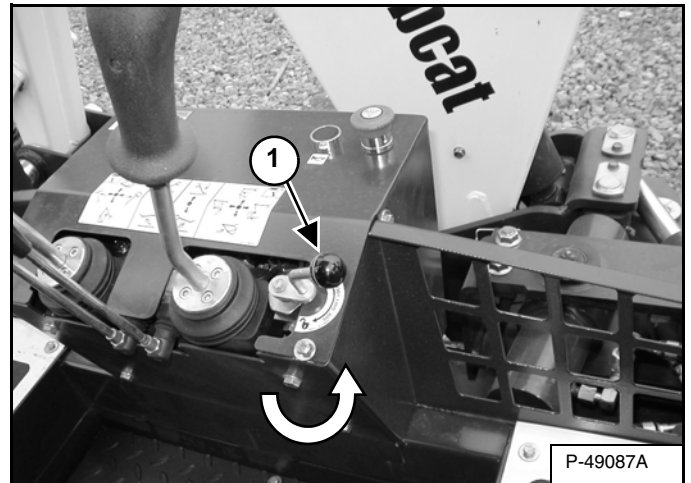
Move the levers to position the boom, arm and bucket as shown [Figure OI-101].

Figure OI-102



Simultaneously move the arm lever (out) and the boom lever (boom down) to push the swing frame to the other side of the backhoe frame [Figure OI-102].

Figure OI-103



Engage the side shift locking system by rotating the lever (Item 1) [Figure OI-103] up. Operate the arm or boom slightly to ensure that the sideshift frame locks in place.

Repeat the procedure to move the swing frame to the center position, or the other side of the backhoe frame.

## **WARNING**

### AVOID INJURY OR DEATH

Keep objects balanced and as close to the backhoe and ground as possible when lifting with the backhoe. Swing lifted objects slowly. Always lower objects to the ground before leaving the machine.

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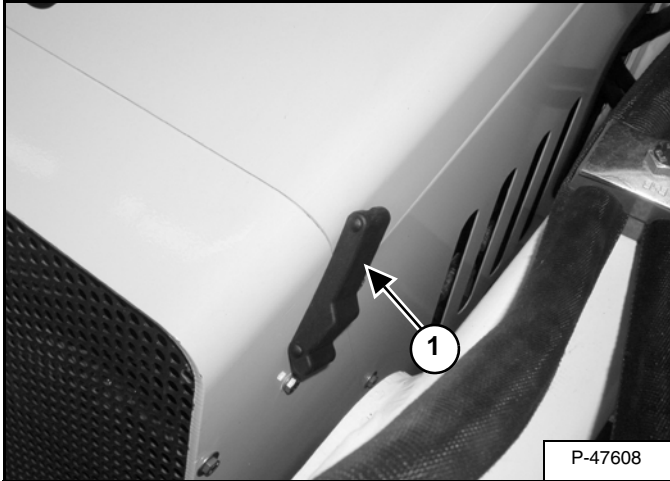
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## PREVENTIVE MAINTENANCE

## ENGINE COVER

Figure PM-12



Open the latch (Item 1) [Figure PM-12] on each side of the engine cover.

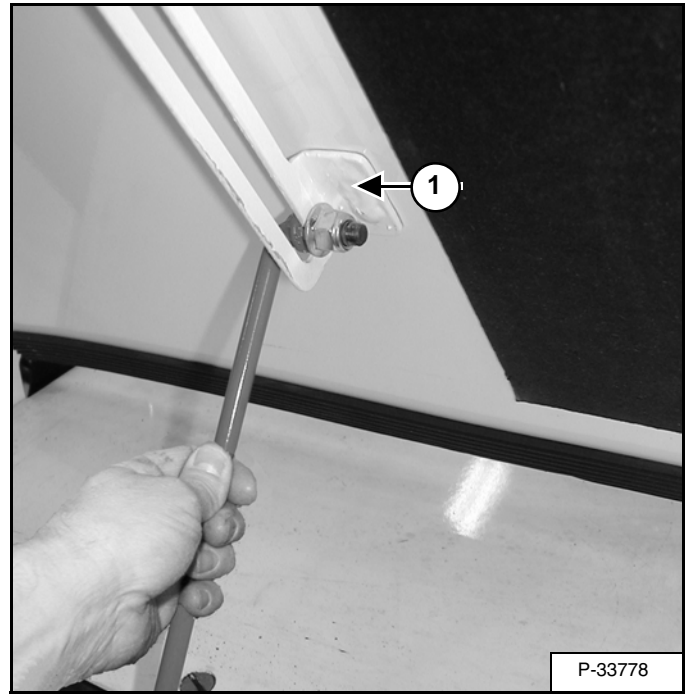
Raise the engine cover.

Figure PM-13



Remove the engine cover support rod (Item 1) [Figure PM-13] from the storage position.

Figure PM-14

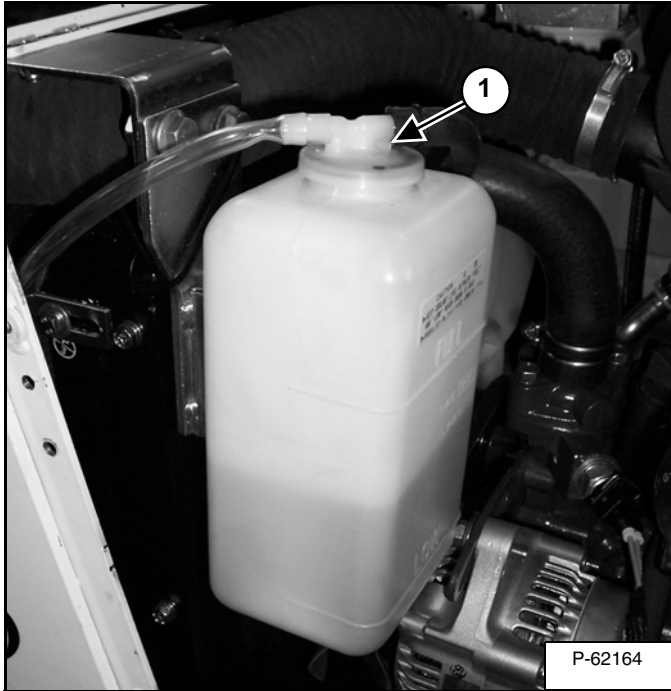


To lower the engine cover, slightly raise the engine cover and pull the support rod (Item 1) [Figure PM-14] forward. Lower the engine cover fully and install latches (Item 1) [Figure PM-12].

## ENGINE COOLING SYSTEM (CONT'D)

### Checking Coolant Level

Figure PM-35



Open the engine cover. (See ENGINE COVER on Page PM-11.)

Check the coolant level in the coolant recovery tank (Item 1) [Figure PM-35].

The coolant level must be between the full and low marks on the side of the coolant recovery tank when the engine is cold.

**NOTE:** The loader backhoe is factory filled with propylene glycol. Do Not mix propylene glycol with ethylene glycol. Always mix coolant in a separate container before adding to the coolant system.

### Coolant Replacement

See SERVICE SCHEDULE on Page PM-5 for the correct service interval.

**! WARNING**

#### AVOID BURNS

Do not remove radiator cap when the engine is hot. You can be seriously burned.

I-2066-0395

**! WARNING**

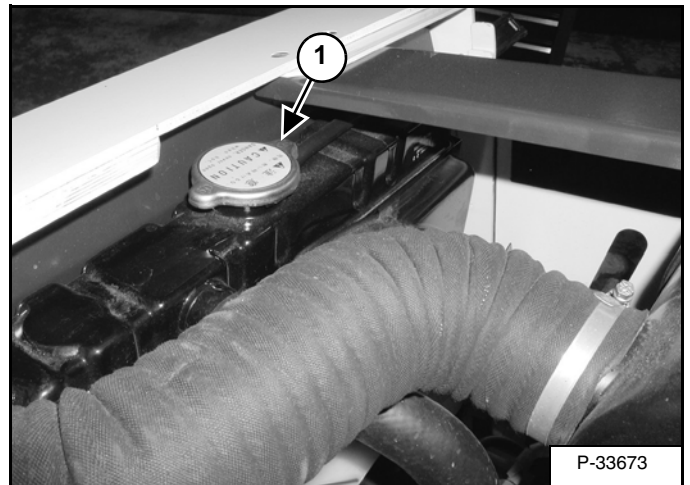
Never work on a machine with the lift arms up unless the lift arms are secured by an approved lift arm support device. Failure to use an approved lift arm support device can allow the lift arms or attachment to fall and cause injury or death.

W-2059-0598

Raise the lift arms and install an Approved Lift Arm Support Device. (See Installing The Approved Lift Arm Support Device on Page PM-6.)

Stop the engine, open the engine cover.

Figure PM-36



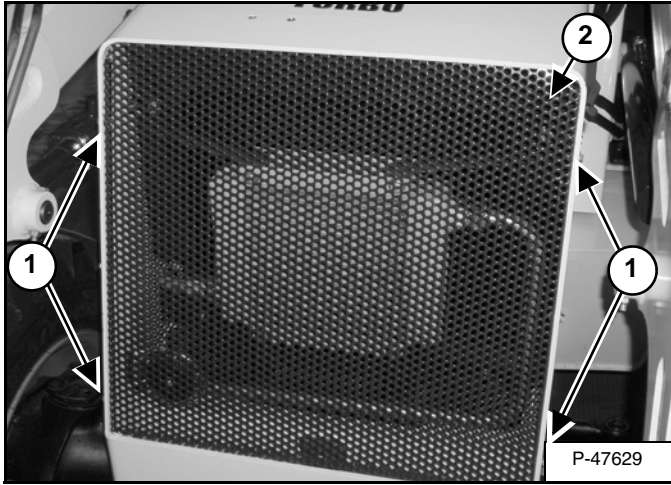
When the engine is cool, loosen and remove the radiator cap (Item 1) [Figure PM-36].

Remove the engine side covers.

## HYDRAULIC/HYDROSTATIC SYSTEM (CONT'D)

### Cleaning The Cooler

Figure PM-56



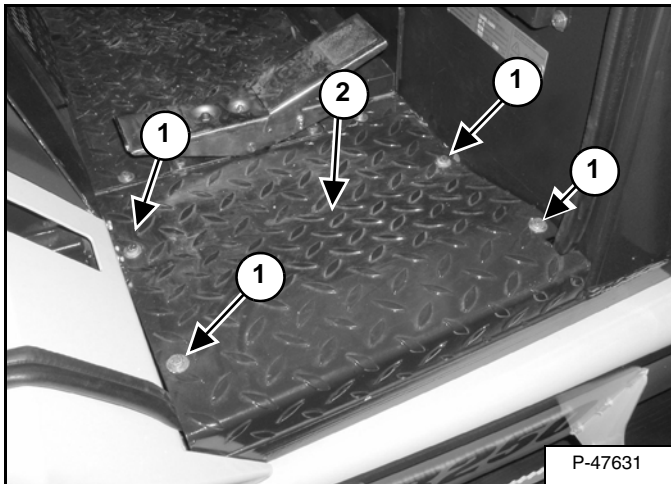
Use low air pressure or water pressure to clean the radiator/oil cooler. Be careful not to damage the radiator fins while cleaning.

If necessary, remove the four bolts (Item 1) and remove the grill screen (Item 2) [Figure PM-56] for easier access for cleaning the radiator. Reinstall the grill screen when finished.

### Replacing Hydraulic/Hydrostatic Filter

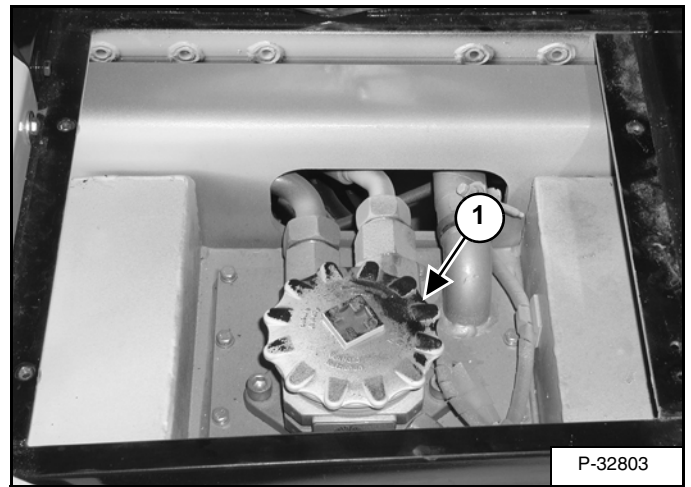
See the *SERVICE SCHEDULE* Page PM-5 for the correct service interval.

Figure PM-57



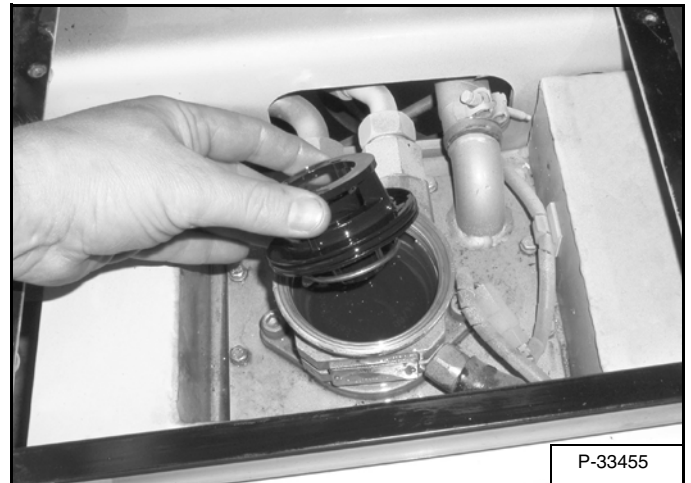
Remove the four mounting bolts (Item 1) and cover (Item 2) [Figure PM-57].

Figure PM-58



Loosen and remove the hydraulic filter cap (Item 1) [Figure PM-58].

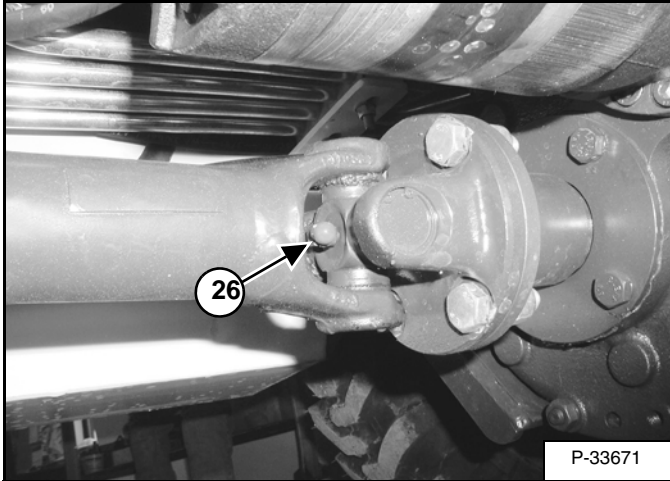
Figure PM-59



Remove the plastic spacer [Figure PM-59].

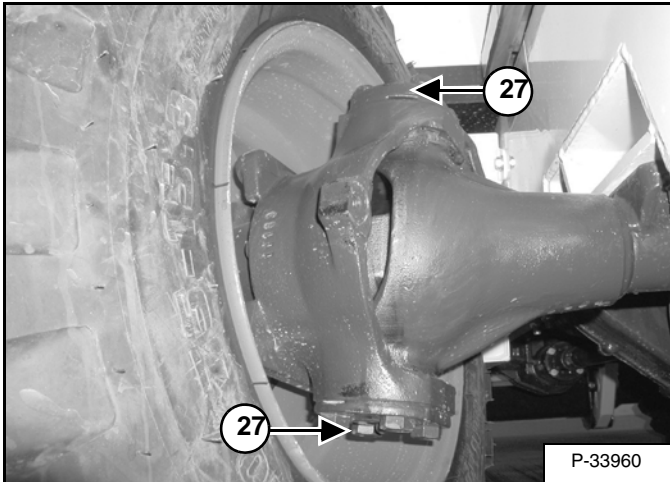
**LUBRICATING THE LOADER BACKHOE (CONT'D)**

**Figure PM-90**



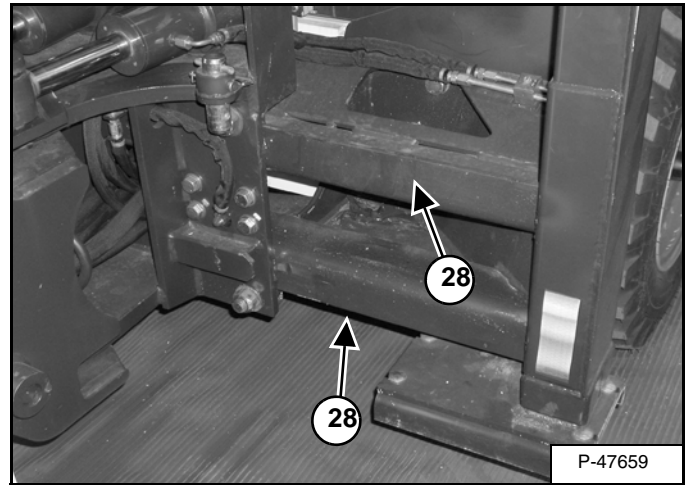
**26. Rear Universal Joint [Figure PM-90].**

**Figure PM-91**



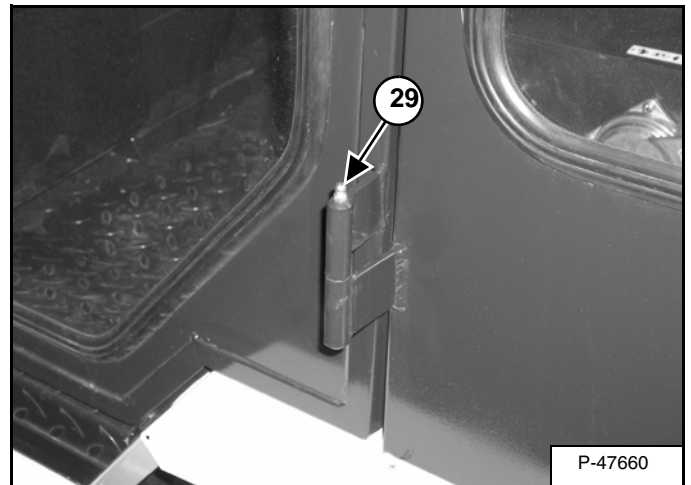
**27. Rear Axle (Both sides) [Figure PM-91].**

**Figure PM-92**



**28. Side Shift Frame (Both sides) [Figure PM-92].**


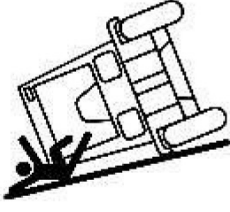
**Figure PM-93**



**29. Cab Door Hinges (upper and lower both sides) If equipped [Figure PM-93].**

 <h1>WARNING</h1>	
	<p><b>ROLLOVERS CAN CAUSE SERIOUS INJURY OR DEATH</b></p> <ul style="list-style-type: none"><li>• Fasten seat belt securely. Do not jump.</li><li>• Slow down when turning.</li><li>• <b>CARRY LOAD LOW.</b> Keep heavy end uphill.</li><li>• Keep away from drop offs, steep slopes or surfaces that can break away.</li><li>• Do not modify or remove Rollover Protective Structure (ROPS).</li></ul>
	<p>XXXXX <span style="float: right;">SW 02 EF3</span></p>

 <h1>ADVERTENCIA</h1>	
	<p><b>VUELCOS PUEDEN CAUSAR LESIONES GRAVES O ACCIDENTES FATALES</b></p> <ul style="list-style-type: none"><li>• Abrcchese el cinturn de seguridad con firmeza. No salte.</li><li>• Desacelere cuando efecte giros.</li><li>• <b>CARGUE LA CARGA ABAJO.</b> Mantenga el extremo pesado cuesta arriba.</li><li>• Mantngase alejado de voladizos, pendientes empinadas o superficies que se pueden desprender.</li><li>• No modifique o retire la Estructura Protectora de Vuelcos (ROPS).</li></ul>
	<p>0505/02 <span style="float: right;">SW 04 6960049 AR</span></p>

 <h1>AVERTISSEMENT</h1>	
	<p><b>TOUT RETOURNEMENT PEUT PROVOQUER DES BLESSURES GRAVES, VOIRE MORTELLES</b></p> <ul style="list-style-type: none"><li>• Serrez soigneusement la ceinture de sécurité. Ne sautez pas.</li><li>• Ralentissez dans les virages</li><li>• <b>TRANSPORTEZ TOUTE CHARGE LE PLUS BAS POSSIBLE.</b> Maintenez l'extrémité lourde vers le haut de la pente.</li><li>• Restez à l'écart des chutes de terrain, des pentes raides ou des surfaces friables.</li><li>• Ne modifiez pas et ne retirez pas la structure de protection contre le retournement (ROPS).</li></ul>
	<p>XXXXX <span style="float: right;">SW 02 EF3</span></p>

# SPECIFICATIONS

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Backhoe Rated Lift Capacity (Per SAE J31) .....	SPEC-4
Capacities .....	SPEC-6
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Drive System .....	SPEC-6
Electrical System .....	SPEC-6
Engine .....	SPEC-5
Hydraulic System .....	SPEC-5
Loader Performance .....	SPEC-5
Standard Instrument Panel .....	SPEC-6
Tires .....	SPEC-6

**SPECIFICATIONS**

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