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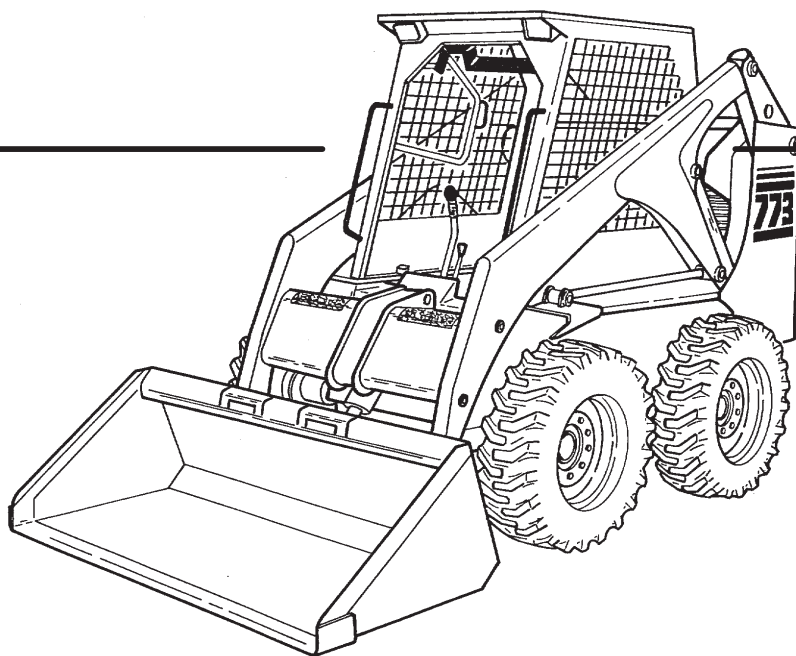


Bobcat®

Operation & Maintenance Manual

S/N 509648900 thru 509659999

S/N 509617300 thru 509618999



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**EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)**

6900789 (9-00) Revised (6-12)

IR Bobcat®
Printed in U.S.A.

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OPTIONS AND ACCESSORIES

Model 773 Bobcat loaders are equipped with the following standard items:

Bob-Tach
 Spark Arrestor Muffler
 Lift Arm Support Device
 Operator Cab (with ROPS & FOPS Approval)
 Bobcat Interlock Control System (BICS™)
 Seat Belt
 Seat Bar
 Parking Brake
 Gauges/Warning Lights
 Glow Plug Preheat system
 Tires, 10–16.5, 8PR Bobcat Heavy Duty
 Adjustable Cushion Seat

Below is a list of some equipment available as a Factory Installed Option or as a Field Installed Accessory from your Bobcat Loader dealer. See your Bobcat dealer for other available accessories and attachments.

Tires

10–16.5, 8PR Bobcat Heavy Duty (Machine Width – 60 inches)	Opt. & FA
31 x 15.5–15, 8PR Ultra Grip Tread	Opt. & FA
7.50 x 15 Air Boss Segmented Tires	FA
10 x 16.5 Air Boss Segmented Tires	FA
6.5–16 Solid Tires	Opt. & FA
10–16.5 8PR Bobcat Heavy Duty (machine Width – 66")	Std. & FA

Operator Cab

Sound Cab (Reduces Noise at Operator's Ear)	Opt.
Deluxe Cab	Opt. & FA
Operating Lights (Front & Rear)	Opt. & FA
Horn	FA
Back-up Alarm	Opt. & FA
Top Window	FA
Rear Window	FA
Cab Enclosure and Heater	Opt. & FA
Vinyl Cab Enclosure	FA
Cover Kit (Pedals Area)	FA
Cover Kit (Hydraulic Reservoir Area)	FA
Fire Extinguisher	FA
Flasher Lights	FA
Strobe or Rotating Beacon Light	FA
3" Seat Belt	FA
Special Applications Kit*	FA
Suspension Seat	Opt. & FA
Rear Window Wiper	FA
Large Operator Seat Bar Kit	FA
Advanced Hand Controls	Opt.

Opt. = Factory Installed Option

FA = Field Accessory

N/A = Not Available

* Includes 1/2 inch Lexan Front Door; 1/4 inch Lexan Top & Rear Windows

Instrumentation

Bobcat Operation Sensing System (BOSS®)	Opt.
Keyless Start System	FA

Hydraulics

Front Auxiliary Hydraulics	Opt. & FA
Rear Auxiliary Hydraulics	Opt. & FA
Hydraulic Bucket Positioning (Includes On/Off Selection)	Opt. & FA

Other

Catalytic Exhaust Purifier	Opt. & FA
Engine Block Heater	FA
Single Point Lift	FA
Locking Fuel Cap	FA
Radiator Screen Kit	FA
Tailgate Lock	FA
Tool Box	FA
Counterweight Kit	Opt. & FA

**Specifications subject to
change without notice**

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OPERATING
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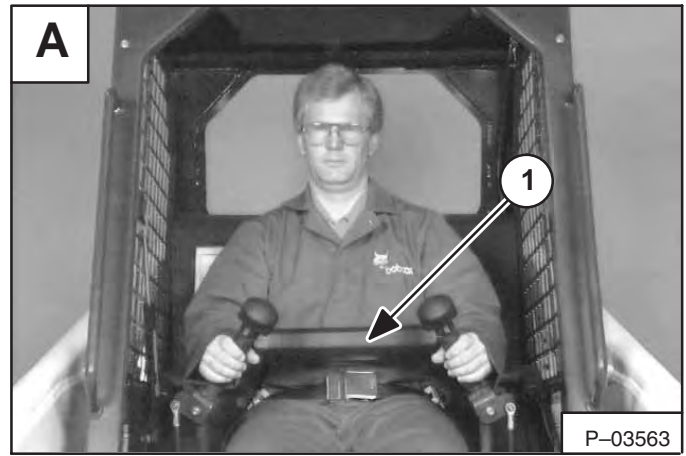
SEAT BAR RESTRAINT SYSTEM (MECHANICAL HAND CONTROLS)

The seat bar restraint system has a pivoting seat bar (Item 1) [A] with arm rests and has spring loaded interlocks for the lift and tilt control functions.

The operator controls the use of the seat bar. The seat bar in the down position helps to keep the operator in the seat.

The interlocks require the operator to lower the seat bar in order to operate the hand controls.

When the seat bar is up, the lift and tilt control functions are locked when returned to the NEUTRAL POSITION.



P-03563

! WARNING

AVOID INJURY OR DEATH

When operating the machine:

- Keep the seat belt fastened snugly.
- The seat bar must be lowered.
- Keep your feet on the footrests.

W-2179-0694

Before you leave the operator's seat:

- Lower the lift arms, put the attachment flat on the ground.
- Stop the engine.
- Engage the parking brake.
- Raise seat bar.
- **(Mechanical Hand Controls)** Move the hand controls until both lock. The seat bar system must lock the lift and tilt controls in neutral when the seat bar is up. Service the system if hand controls do not lock correctly.

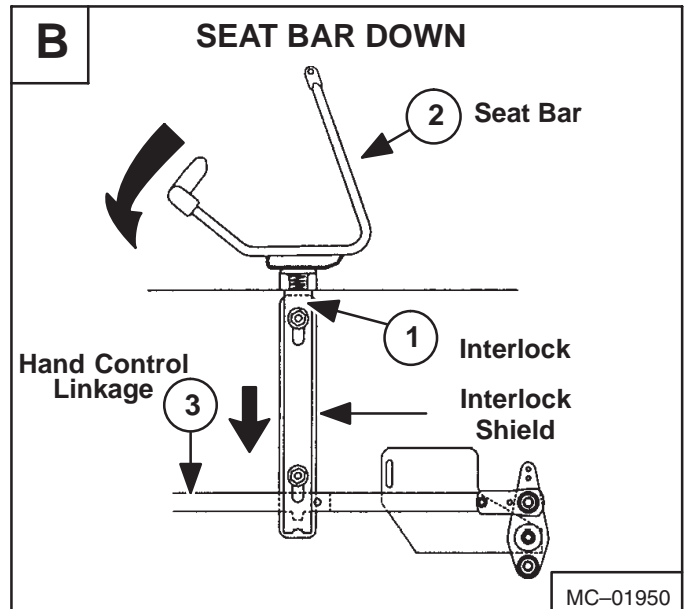
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The spring loaded interlocks (Item 1) [B] control the locking and unlocking functions of the hand controls.

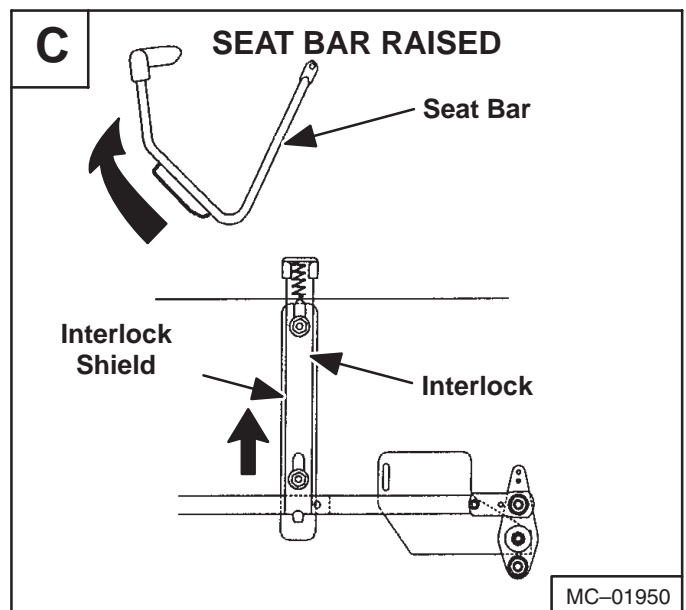
The interlocks (Item 1) [B] require the operator to lower the seat bar (Item 2) [B] which allows the operator to move the hand controls to control the lift and tilt functions.

When the seat bar is lowered, it pushes the interlock (Item 1) [B] down on both sides, releasing the hand control linkages (Item 3) [B] from the interlocks.

The hand controls will pivot in both directions when the interlock is down.



MC-01950



MC-01950

! WARNING

AVOID INJURY OR DEATH

The Seat Bar System must lock the lift and tilt foot pedals or hand controls in neutral when the Seat Bar is up. Service the system if controls do not lock correctly.

W-2263-0597

When the seat bar is raised, spring forces raise the interlocks [C].

The hand controls will not function when the interlock is up.

Refer to *SEAT BAR RESTRAINT SYSTEM Inspection and Maintenance* Page 47.

STARTING THE ENGINE (Cont'd)

Normal Starting (Without BOSS®) (Cont'd)

Put the hydraulic controls and steering levers in NEUTRAL POSITION (center) (Item 1) [A].

Set the engine speed control to the 1/2 SPEED position (Item 2) [A].

Turn the key switch to the ON POSITION (Item 3) [A]. The engine and transmission warning lights will be ON when the key switch is on and the engine is stopped (Item 3) [A].

Turn the key switch to START POSITION (Item 4) [A] and release it when the engine starts.

Advanced Hand Controls Only: Make sure both hand controls are in neutral before starting the engine. **Do not move** the Advanced Hand Control levers from the neutral position when turning the key ON.

If either hand control is moved:

- a. – The neutral position for the hydraulic valve spool and hand control may not be correctly calibrated. This can result in movement of the lift or tilt hydraulic cylinders when the hand control lever is returned to the neutral position after start–up.

OR

- b. – The hydraulics will not operate (corresponding diagnostic lights on the left handle will blink).

If either condition occurs, turn the key OFF. Put the controls in neutral position and re–start the engine.

When you release the key, it will return to the RUN POSITION (Item 5) [A].

STOP THE ENGINE IF THE WARNING LIGHTS DO NOT GO OFF.

NOTE: Upon failed start, if the key switch is turned OFF, wait for at least three seconds before turning the key switch ON to reset the fuel timer module.

Cold Temperature Starting (Without BOSS®)

See **Normal Starting**. Turn the key switch to the RUN POSITION.

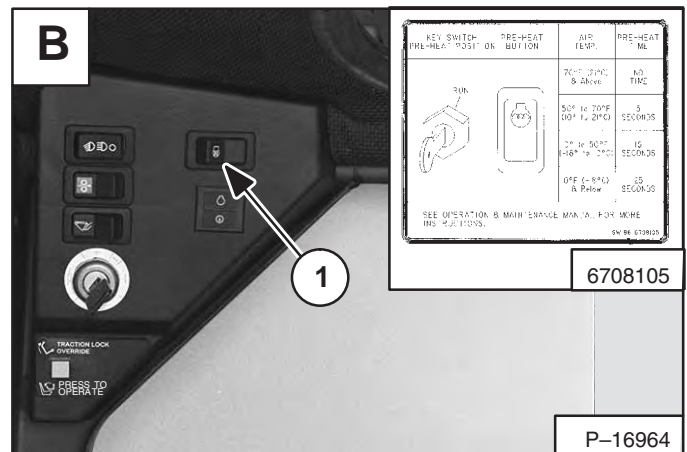
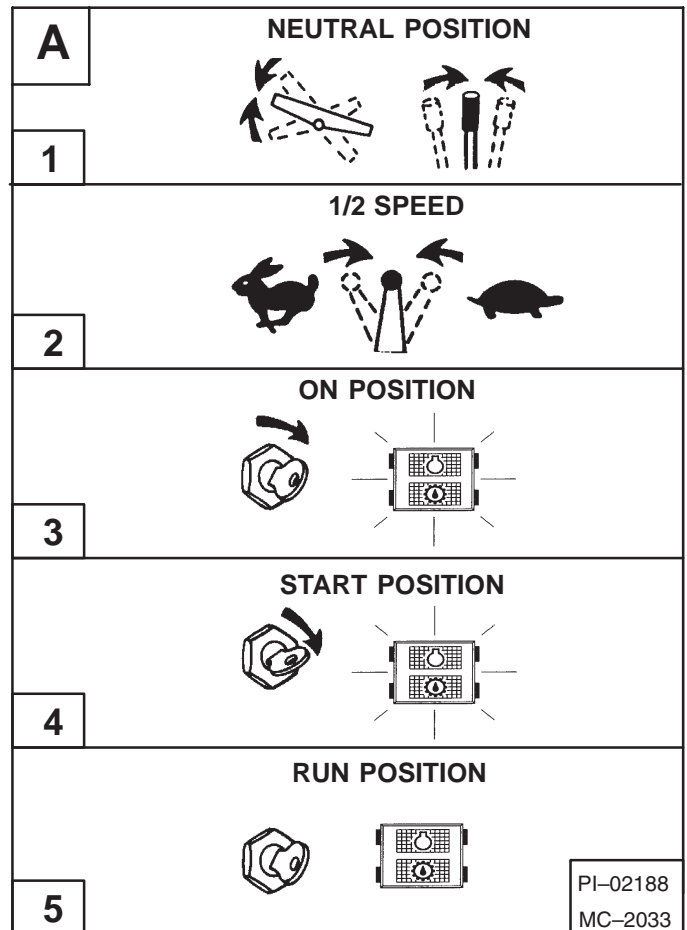
Push the preheat switch (Item 1)[B] on the left side of the instrument panel.

The decal (Inset) [B] on the left side of the operator cab shows the correct amount of time to hold the preheat switch.

Follow the steps under **Normal Starting** and repeat the **Preheat** procedure until the engine starts.

If the temperature is below 32 °F. (0°C.), perform the following to make starting the engine easier:

- Replace the engine oil with the correct type and viscosity for the anticipated starting temperature. (See *Engine Lubrication System* Page 56.)
- Make sure the battery is fully charged.
- Install an engine heater, available from your Bobcat loader dealer.



IMPORTANT

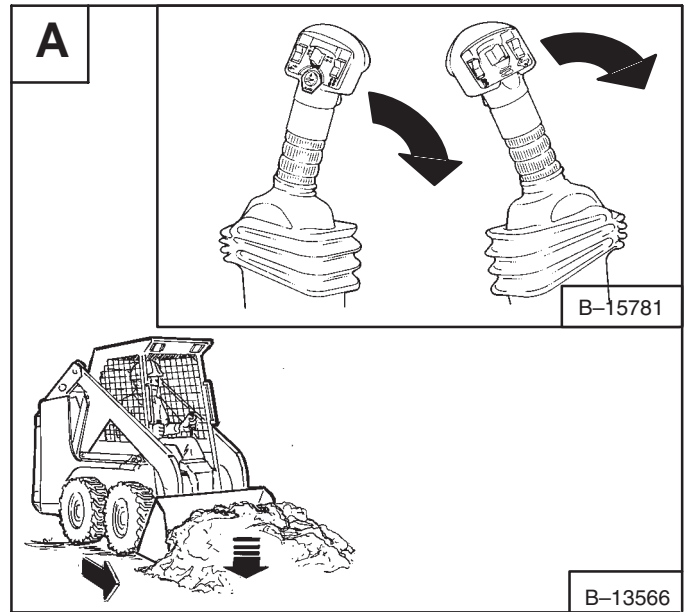
Do not engage the starter for longer than 15 seconds at a time. Longer use can damage the starter by overheating. Cool the starter for one minute between uses.

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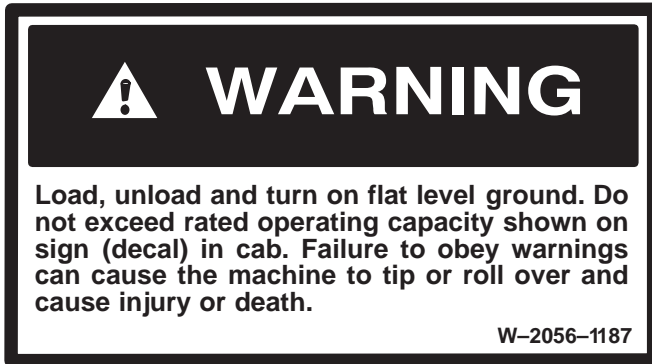
OPERATING PROCEDURE (HAND CONTROLS)

Filling The Bucket

Move the left hand lever toward the operator until the lift arms are all the way down. Move the right hand lever away from the operator to put the cutting edge of the bucket on the ground [A].



Drive slowly forward into the material. Move the right hand lever toward the operator to raise the front of the bucket [B].

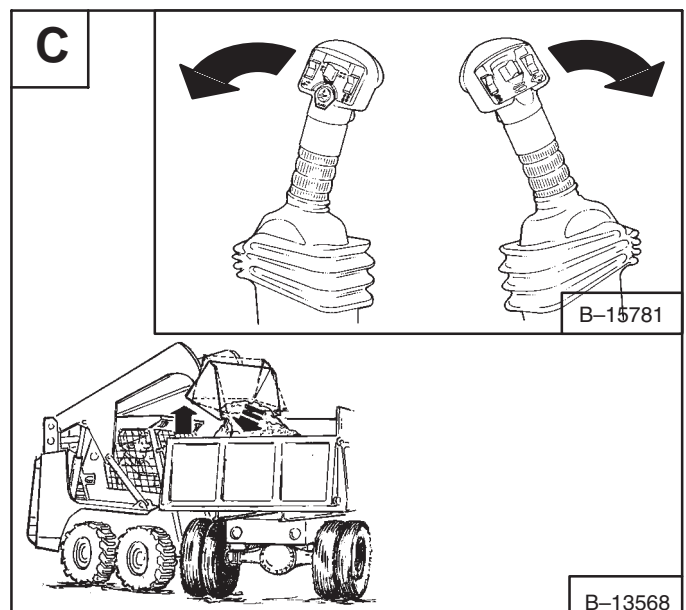
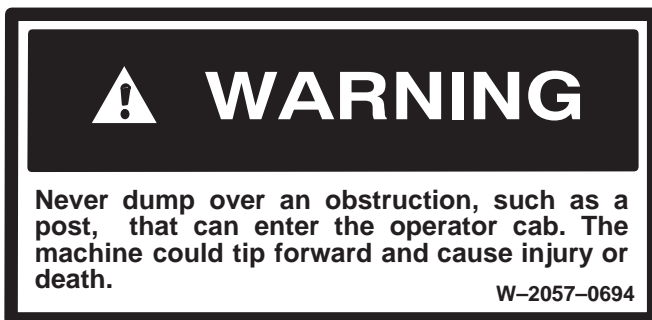
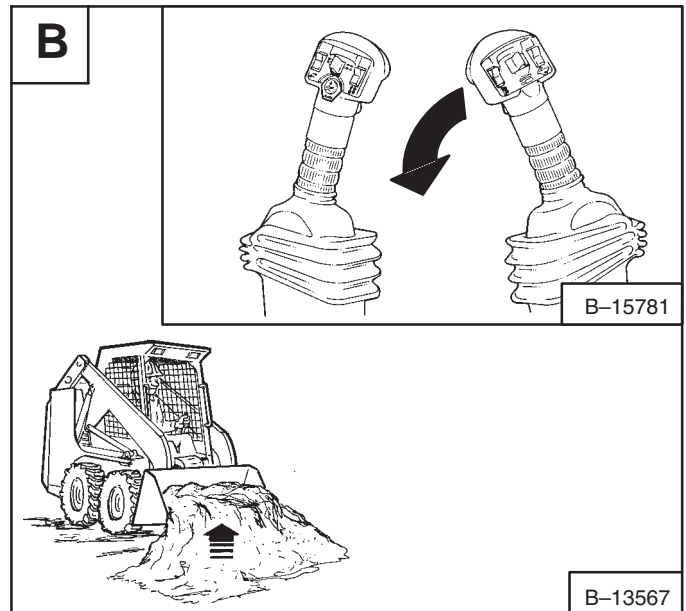


Drive backward away from the material.

Emptying The Bucket

Move the left hand lever away from the operator to raise the lift arms [C]. Move the right hand lever away from the operator to level the bucket or attachment and help prevent material from falling off the back of the bucket or attachment.

Drive forward slowly until the bucket is over the top of the truck box or bin. Move the right hand lever away from the operator until the bucket is empty [C]. If all the material is near the side of the truck or bin, push it to the other side with the bucket.



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SERVICE SCHEDULE

Maintenance work must be done at regular intervals. Failure to do so will result in excessivewear and early failures. The service schedule is a guide for correct maintenance of the Bobcat loader.

WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, 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. Failure to follow instructions can cause injury or death.

W-2003-1298

SERVICE SCHEDULE		HOURS					
ITEM	SERVICE REQUIRED	8-10	50	100	250	500	1000
Engine Oil	Check the oil level and add oil as needed.	■					
Engine Air Filter and Air System	Check condition indicator or display panel. Service only when required. Check for leaks and damaged components.						
Engine Cooling System	Clean debris from oil cooler, radiator and grill. Check coolant level in recovery tank (engine cold). Add coolant as needed.						
Tires	Check for damaged tires and correct air pressure.						
Seat Belt, Seat Bar, Foot Pedal or Hand Control Interlocks	Check the condition of seat belt. Check the seat bar and foot pedal interlocks or hand control interlocks. Clean dirt and debris from moving parts.						
Safety Signs and Safety Tread	Check for damaged signs (decals) and safety tread. Replace any signs or safety treads that are damaged or worn.						
Indicators & Lights (Opt.)	Check for correct operation of all indicators & lights.						
Operator Cab	Check the fastening bolts, washers & nuts. Check the condition of cab.						
Lift Arms, Cyl., Bob-Tach Pivot Pins and Wedges	Lubricate with multi-purpose lithium based grease.						
Fuel Filter	Remove the trapped water.						
Bobcat Interlock Control System (BICST TM)	Check BICST TM functions.						
Hydraulic Fluid, Hoses and Tubelines	Check fluid level and add as needed. Check for damage and leaks. Repair or replace as needed.		■				
Final Drive Trans.(Chaincase) Foot Pedals, Hand Controls, and Steering Levers	Check oil level. Check for correct operation. Repair or adjust as needed.		■				
Wheel Nuts	<input type="checkbox"/> Check for loose wheel nuts and tighten to 105-115 ft.-lbs. (142-156 Nm) torque.		■				
Parking Brake	Check operation.		■				
Spark Arrestor Muffler	Clean the spark chamber.			■			
Battery	Check cables, connections and electrolyte level. Add distilled water as needed				■		
Steering Shaft	Grease two fittings.				■		
Engine/Hydros. Drive Belt	* Check for wear or damage. Adjust as needed.				■		
Fan Drive Gearbox	Check gear lube level. Add as needed.				■		
Alternator Belt	Check belt tension and adjust as needed.				■		
Engine Oil and Filter	† Replace oil and filter. Use CD or better grade oil and Melroe filter				■		
Fuel Filter	Replace the filter element.				■		
Hydraulic Reservoir Breather Cap	Replace the reservoir breather cap.					■	
Hydraulic Reservoir	Replace the fluid.						■
Final Drive Trans.(Chaincase)	Replace the fluid.						■
Hydraulic/Hydrostatic Filter	● Replace the filter element.						■
Case Drain Filters	Replace the filters.						■
Bobcat Interlock Control System (BICST TM)	Check lift arm bypass control						■

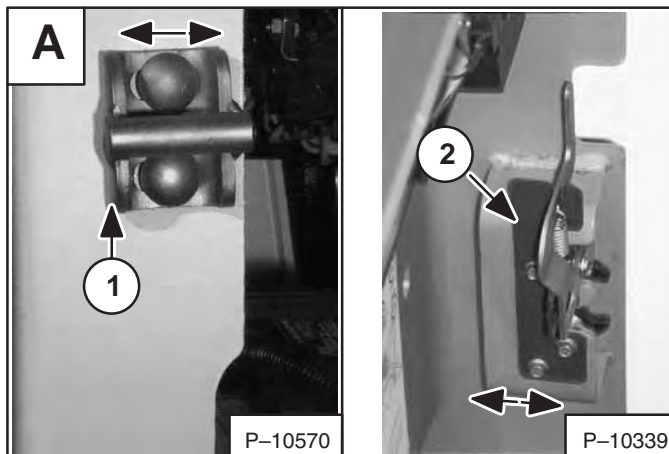
- Check wheel nut torque every 8 hours for the first 24 hours.
- Replace filter element after the first 50 hours and when the transmission warning light comes ON.
- Or every 12 months.
- * Inspect the new belt after first 50 hours.
- † First oil and filter change must occur at 50 hours; 250 hours thereafter.

Adjusting The Latch

The door latch catch (Item 1) **[A]** can be adjusted side to side for alignment with the door latch mechanism.

The door latch mechanism (Item 2) **[A]** can be adjusted backward or forward for alignment with the door catch.

Close the rear door before operating the loader.



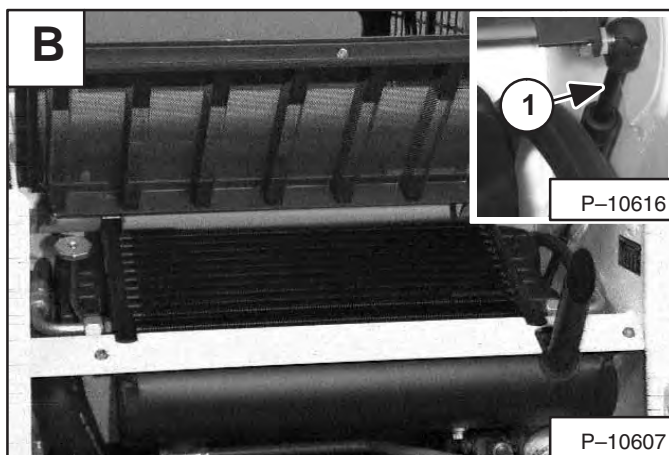
REAR GRILL

Open the rear door.

Raise the rear grill **[B]**.

The rear grill is held open by the cylinder (Item 1) **[B]** on the right side of the rear grill.

Lower the rear grill and close the rear door before operating the loader.



ELECTRICAL SYSTEM (Cont'd)

Using A Booster Battery (Jump Starting)

If it is necessary to use a booster battery to start the engine, **BE CAREFUL!** There must be one person in the operator's seat and one person to connect and disconnect the battery cables.

The key switch must be in the OFF POSITION. The booster battery must be 12 volt.

! WARNING

Batteries contain acid which burns eyes and skin on contact. Wear goggles, protective clothing and rubber gloves to keep acid off body.

In case of acid contact, wash immediately with water. In case of eye contact get prompt medical attention and wash eye with clean, cool water for at least 15 minutes.

If electrolyte is taken internally drink large quantities of water or milk! **DO NOT** induce vomiting. Get prompt medical attention.

W-2065-1296

! WARNING

Keep arcs, sparks, flames and lighted tobacco away from batteries. When *jumping* from booster battery make final connection (negative) at engine frame.

Do not jump start or charge a frozen or damaged battery. Warm battery to 60°F. (16°C.) before connecting to a charger. Unplug charger before connecting or disconnecting cables to battery. Never lean over battery while boosting, testing or charging.

Battery gas can explode and cause serious injury.

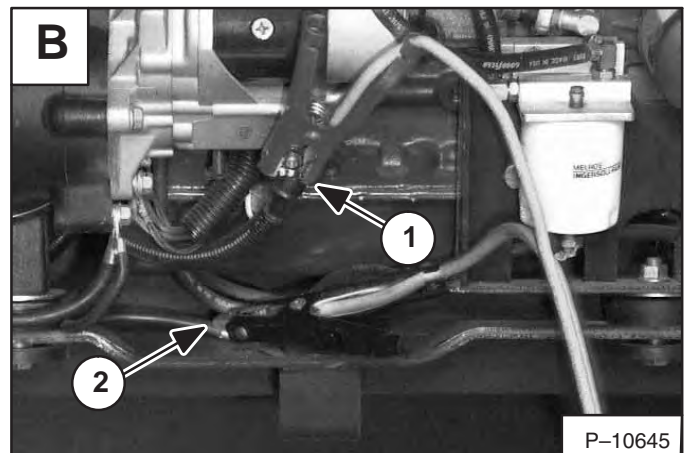
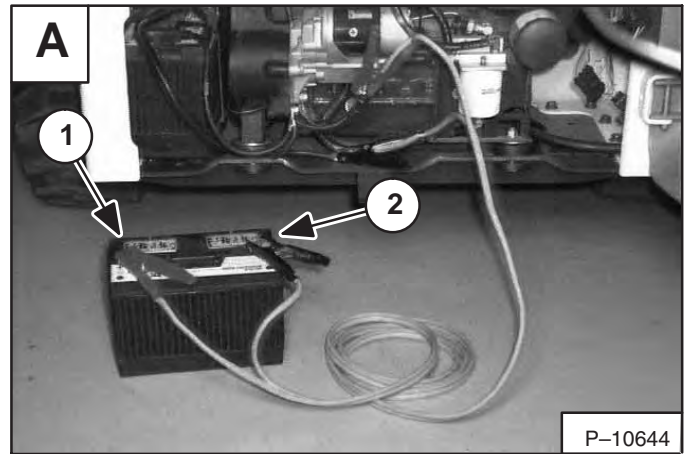
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Connect the end of the first cable (Item 1) **[A]** to the positive (+) terminal of the booster battery. Connect the other end of the same cable (Item 1) **[B]** to the positive terminal on the loader starter (battery for early models).

Connect the end of the second cable (Item 2) **[A]** to the negative (-) terminal of the booster battery. Connect the other end of the same cable (Item 2) **[B]** to the engine.

Keep cables away from moving parts. Start the engine

After the engine has started, remove the ground (-) cable (Item 2) **[B]** first. Remove the cable from the positive terminal (Item 1) **[B]**.



IMPORTANT

Damage to the alternator can occur if:

- Engine is operated with battery cables disconnected.
- Battery cables are connected when using a fast charger or when welding on the loader (Remove both cables from the battery).
- Extra battery cables (booster cables) are connected wrong.

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LUBRICATION OF THE BOBCAT LOADER

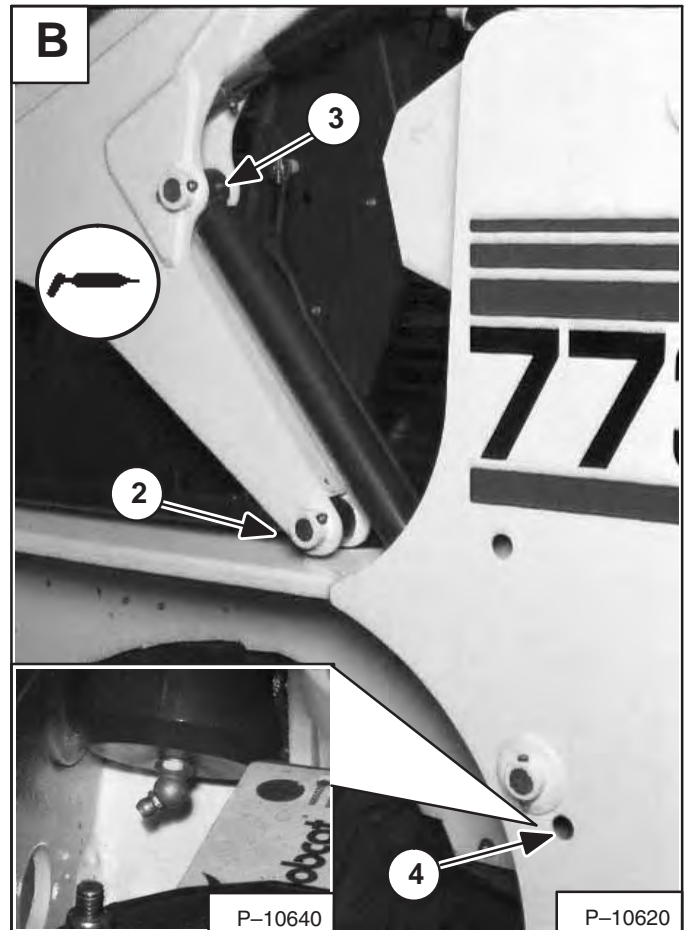
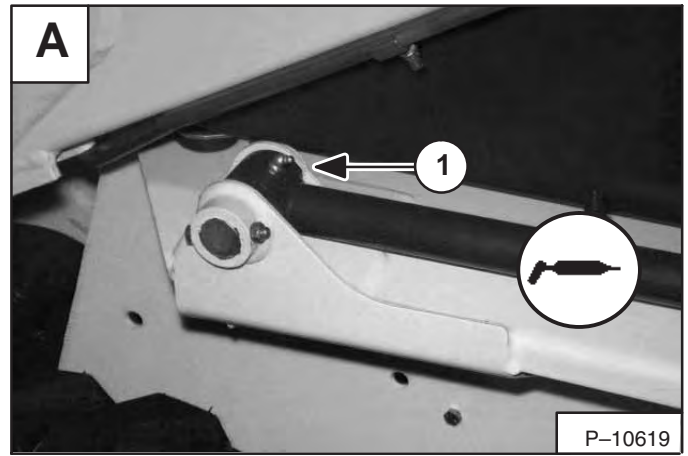
Lubricate the loader as specified in the *SERVICE SCHEDULE*, Page 41, for the best performance of the loader.

Record the operating hours each time you lubricate the Bobcat loader.

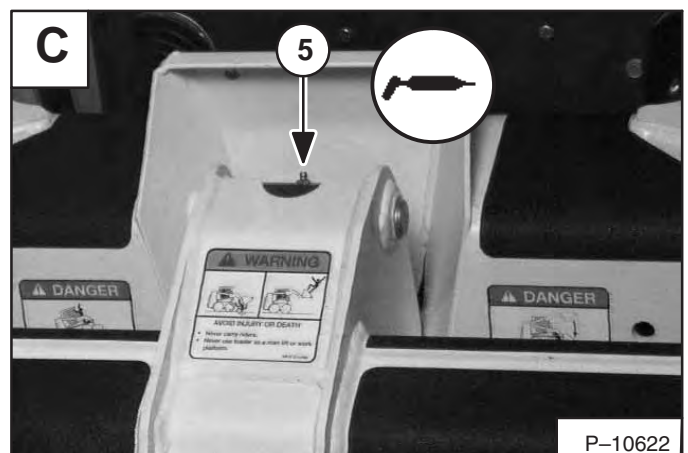
Always use a good quality lithium based multi-purpose grease when you lubricate the loader. Apply lubricant until extra grease shows.

Lubricate the following locations on the loader: 

1. Stabilizer Rod – Front (Both Sides) **[A]**
2. Stabilizer Rod – Rear (Both Sides) **[B]**.
3. Lift Cylinder Rod End (Both Sides) **[B]**.
4. Lift Cylinder Base End (Both Sides) **[B]**.



5. Tilt Cylinder Base End **[C]**.



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**MACHINE SIGN
TRANSLATIONS**

MACHINE SIGNS (DECALS)

Machine signs (decals) are an essential part of the loader. (See Page xiv & xv.) This section provides French and Spanish translations of the machine signs that are in English.

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SPECIFICATIONS

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