

PREVENTIVE MAINTENANCE

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SERVICE SCHEDULE

Maintenance work must be done at regular intervals. Failure to do so will result in excessive wear 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 Operation Maintenance Manual, Handbook and signs (decals) on machine. Follow warnings and instructions in the manual 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-2003-1289

SERVICE SCHEDULE		HOURS					
ITEM	SERVICE REQUIRED	8-10	50	100	250	500	1000
Engine Oil	Check the oil level & add oil as needed.						
Engine Air Cleaner	Empty dust cup. Replace the outer filter element only when the red ring shows in the indicator window. Check for leaks & damage.						
Engine Cooling System (742, 743)	Check coolant level. Add coolant as needed. Clean the radiator grill area.						
Engine Cooling Inlet	Check rear door grill & blower inlet for restriction of air. Clean cooling fins & blower as needed.						
Tires	Check for damaged tires & correct air pressure.						
Seat Belt, Seat Bar	Check the condition of seat belt. Check the seat bar for correct operation.						
Safety Signs (Decals) & Safety Tread	Check for damaged signs (decals) & safety treads. Replace any signs or safety treads that are damaged or worn.						
All Pivot Points	Add grease to the fittings until extra grease shows.						
Fuel Filter	Remove water from filter.						
Operator Cab	Check the fastening bolts, washers and nuts.						
Wheel Nuts	<input type="checkbox"/> Check for loose wheel nuts. Tighten to correct torque.						
Engine Oil & Filter	Replace the oil and filter.						
Battery	Check the water level. Check cable ends for corrosion & being tight.						
Parking Brake	Check operation adjust as needed.						
Hydraulic Fluid, Tubelines & Hoses	Check fluid level & add as needed. Check for damage & replace as needed.						
Alternator Drive Belt	Check the tension & adjust as needed.						
Crankcase Breather	Clean breather cap.						
Bob-Tach	Check levers & wedges for correct operation & condition.						
Controls & Brake	Check for correct operation & Adjust as needed.						
Chaincase	Check for oil level & add as needed.						
Hydraulic Filter	Replace filter element (S/N 14999 & Below).						
Crankcase Breather (741)	Clean breather cap.						
Spark Arrestor Muffler	Remove the plug & clean the spark chamber.						
Ignition System	Check spark plugs, points & timing. Repair as needed.						
Governor (742)	Check oil level & add as needed.						
Seat Bar	Grease pivot as needed.						
Steering Shaft Pivots	Add grease to two fittings. Add oil to steering shaft.						
U-Joint	Grease three fittings with the correct grease.						
Engine Fuel Filter	Replace filter element & inline filter element.						
Hydraulic Filter	• Replace the filter element.						
40 Micron Filter	Replace the filter in port block (S/N 14999 & Below).						
Hyd./Hydro. Breather Cap	Replace the breather cap.						
Chaincase	Replace the oil.						
•Hydraulic Fluid Reservoir	Replace the hydraulic fluid & filter element.						
Starting Motor	Remove, clean & service as needed.						
Engine Compression (743)	Check compression & repair engine as needed.						

- Check wheel nut torque every 8 hours for the first 24 hours.
- Also replace hydrostatic filter element when the transmission warning light stays on for five minutes after the hydrostatic fluid is at operating temperature.
- Or every 12 months.

⚠ WARNING

Instructions are necessary before operating or servicing machine. Read Operation & Maintenance Manuals, 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-2003-1289

⚠ WARNING

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-2019-1285

LIFTING AND BLOCKING THE LOADER

Procedure

Always park the loader on a level surface.

⚠ WARNING

Put jackstands under the front axles and rear corners of the frame before running the engine for service. Failure to use jackstands can allow the machine to fall or move and cause injury or death.

W-2017-0286

Put floor jack under the rear of the loader [B].

Lift the rear of the loader and install jackstands [B].

Put the floor jack under the front the loader [C].

Lift the front of the loader and put jackstands [C].

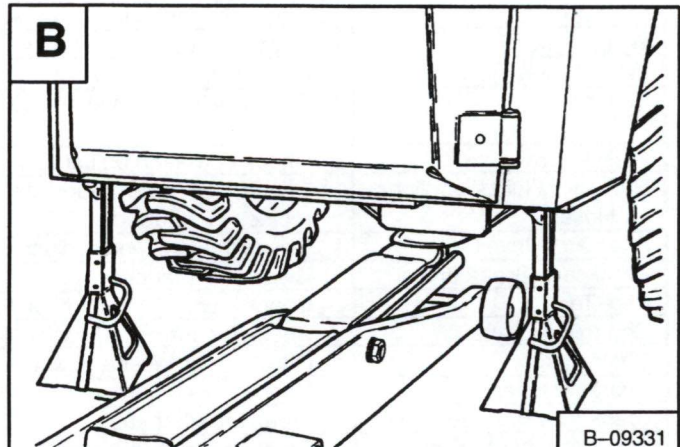
NOTE: Make sure the jackstands do not touch the tires.

A



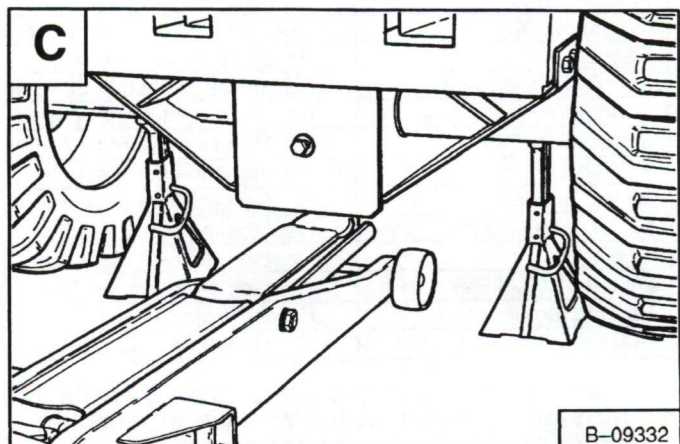
B-07023

B



B-09331

C



B-09332

TRANSPORTING THE BOBCAT LOADER

Procedure

! WARNING

Adequately designed ramps of sufficient strength are needed to support the weight of the machine when loading onto a transport vehicle. Wood ramps can break and cause personal injury.

W-2058-0494

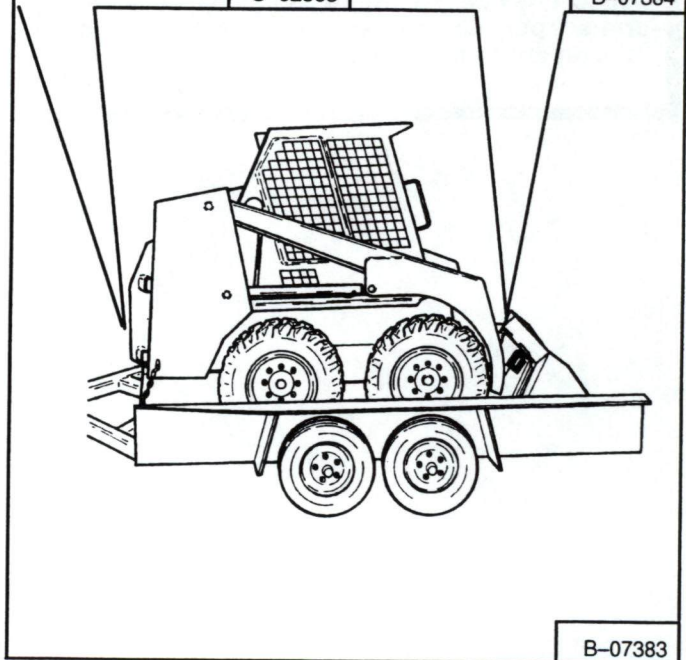
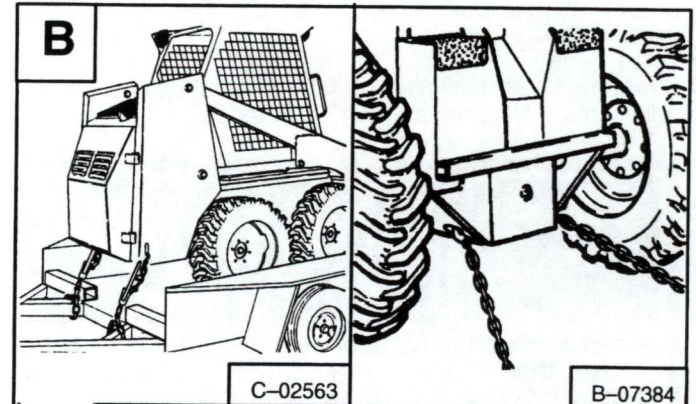
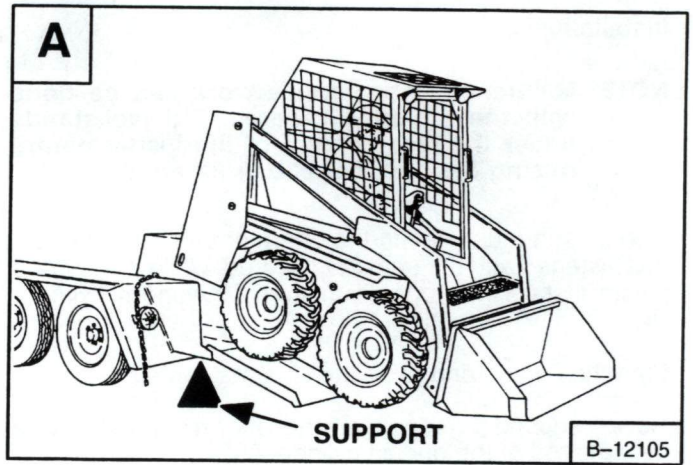
A loader with an empty bucket or no attachment must be loaded backward onto the transport vehicle [A].

The rear of the trailer must be blocked or supported [A] when loading or unloading the loader to prevent the front end of the trailer from raising up.

Lower the lift arms and bucket to the transport vehicle.

Stop the engine. Engage the parking brake.

Install chains as shown [B] to prevent the loader from moving during sudden stops or when going up or down slopes.



LIFT ARM SUPPORT DEVICE

Installation

NOTE: Maintenance or service work can be done with the lift arms lowered. Put jackstands under the rear corners of the loader before raising the operator cab or lift arms.

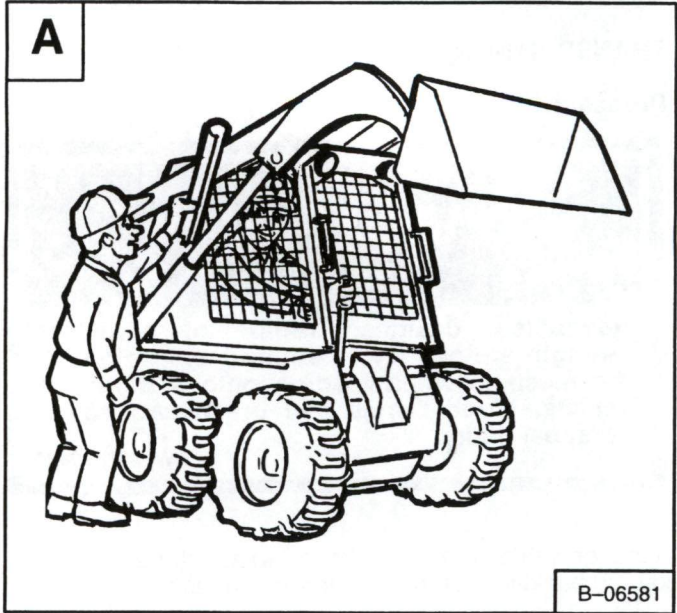
One person must stay in the operator cab with the seat belt fastened and the seat bar lowered, while the second person installs the stop over the rod of the one lift cylinder [A].

Start the engine and raise the lift arms.

Have a second person install the lift arm support device over the rod of the one lift cylinder [A].

the lift arm support device must be tight against the cylinder rod.

Lower the lift arms slowly until the support device is held between the lift arms and the lift cylinder.



WARNING

Never work on a machine with the lift arms up unless the lift arms are secured by a 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-2059-0991

OPERATOR CAB

The Bobcat loader has an operator cab (ROPS and FOPS) as standard equipment to protect the operator from rollover and falling objects.

WARNING

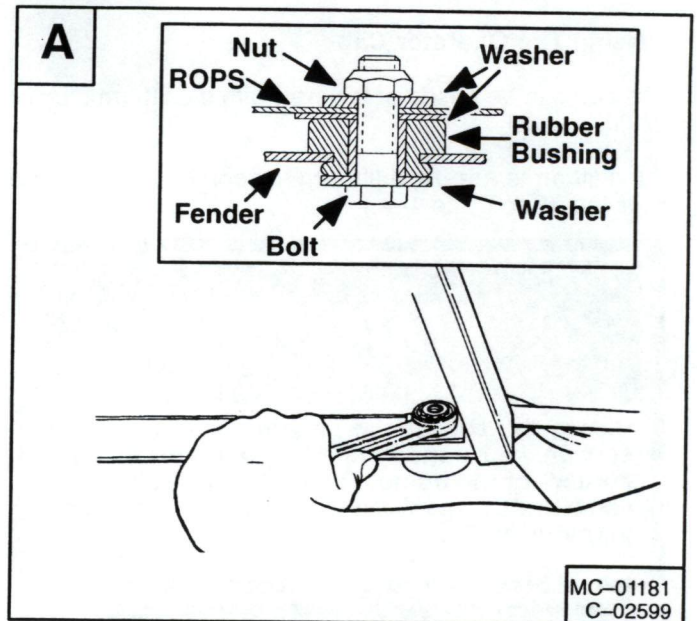
Never modify operator cab by welding, grinding, drilling holes or adding attachments unless instructed to do so by Melroe Company. Changes to the cab can cause loss of operator protection from rollover and falling objects, and result in injury or death.

W-2069-1285

Check with your dealer if the operator cab has been damaged.

The operator cab fastening bolts and nuts must be tight [A].

Tighten to 40–50 ft.-lbs. (54–68 Nm) torque.



OPERATOR CAB (Cont'd)

Raising The Operator Cab

The cab can be raised or lowered with the lift arms up or down.

If the lift arms are up, a lift arm support device must be installed. (See Page 1-4.)

! WARNING

Before the cab or the lift arms are raised for service, jackstands must be put under the rear corners of the frame. Failure to use jackstands can allow the machine to tip backward causing injury or death.

W-2014-0895

! WARNING

AVOID INJURY

Cylinders for raising and lowering operator cab have gas under pressure. Do not open cylinder. Only qualified service personnel can remove the cylinder.

W-2112-0987

Stop the loader on a level surface. Stop the engine and engage the brake. Put jackstands under the rear of the loader.

Disconnect the two front fasteners.

If the lift arms are down, stand on the safety tread [A].

If the lift arms are up, stand beside the loader [B].

Slowly raise the cab until it is all the way up [A] or [B].

Lowering The Operator Cab

Stand on the safety tread [A] or beside the loader [B] and slowly lower the operator cab.

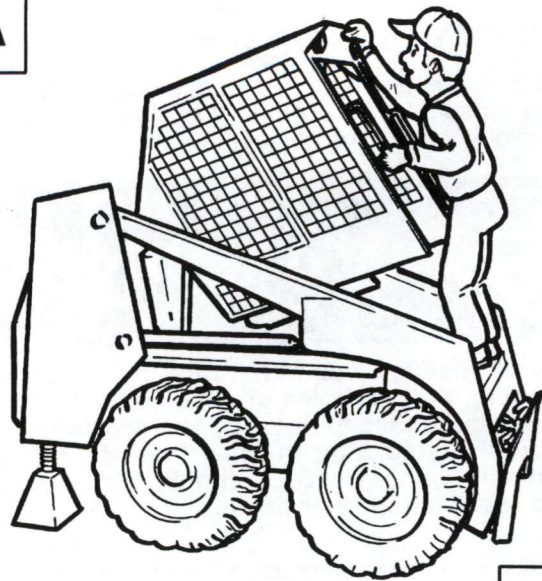
! WARNING

Both sets of fasteners at the front of the operator cab (ROPS) must be assembled as shown in this manual. Failure to secure ROPS correctly can cause injury or death.

W-2005-1189

Install the fasteners before operating the loader.

A



B-07465

B



B-07463

OPERATOR CAB (Cont'd)

Seat Bar Description

The seat bar system has a pivoting seat bar with arm rests and has spring loaded latches for the lift and tilt control pedals.

The operator controls the use of the seat bar. The seat bar in the down position helps to keep the operator in the seat and unlocks the foot pedals.

When the seat bar is up, lift and tilt pedals are locked in neutral position.



WARNING

AVOID INJURY OR DEATH

The seat bar system must lock the lift and tilt control pedals in neutral when the seat bar is up. Service the system if pedals do not lock correctly.

W-2105-1285

Seat Bar Inspection

Sit in the seat and fasten the seat belt. Engage the parking brake.

Pull the seat bar all the way down. Start the engine.

Operate each foot pedal to check both the lift and tilt functions. Raise the lift arms until the bucket is about 2 feet (600 mm) off the ground.

Raise the seat bar. Try to move each foot pedal. Pedals must be firmly locked in neutral position [B]. There must be no motion of the lift arms or tilt (bucket) when the pedals are pushed.

Pull the seat bar down, lower the lift arms fully and place the bucket flat on the ground.

Stop the engine. Raise the seat bar and operate the foot pedals to be sure that the pedals are firmly locked in the neutral position [B]. Unfasten the seat belt.

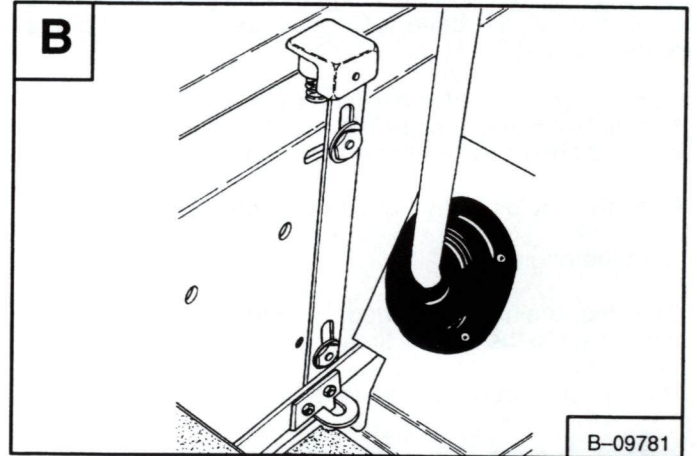
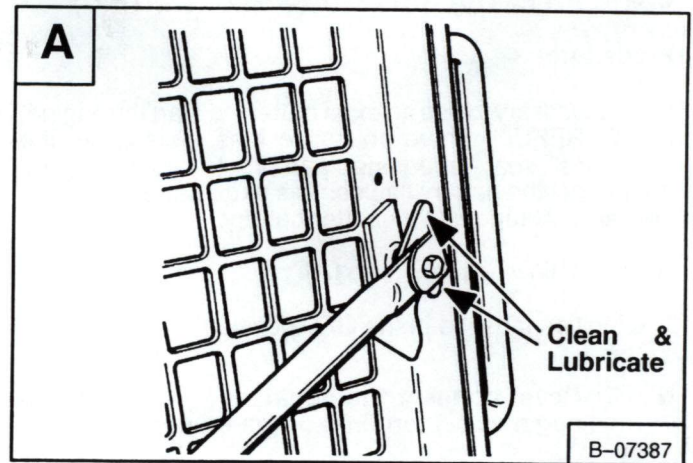
Seat Bar Maintenance

Clean any debris or dirt from the moving parts [A] & [B].

Inspect the linkage bolts and nuts for tightness. The correct torque is 25–28 ft.-lbs. (34–38 Nm).

Use general purpose grease to lubricate the seat bar pivot points at each side of the cab [A].

If the seat bar system does not function correctly, check for free movement of each linkage part. Check for excessive wear. Adjust pedal control linkages. Replace parts that are worn or damaged. Use only genuine Melroe replacement parts.



USING AN EXTRA BATTERY (JUMP STARTING)

Procedure

If it is necessary to use an extra 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 extra battery must be the same voltage as the loader battery.

Use the following procedure [A]:

The ignition must be in the OFF position.

NOTE: Never connect the negative (-) cable to the negative (-) terminal of the loader battery.

Connect the end of the first cable to the positive terminal (+) of the booster battery. Connect the other end of the same cable to the starter [A].

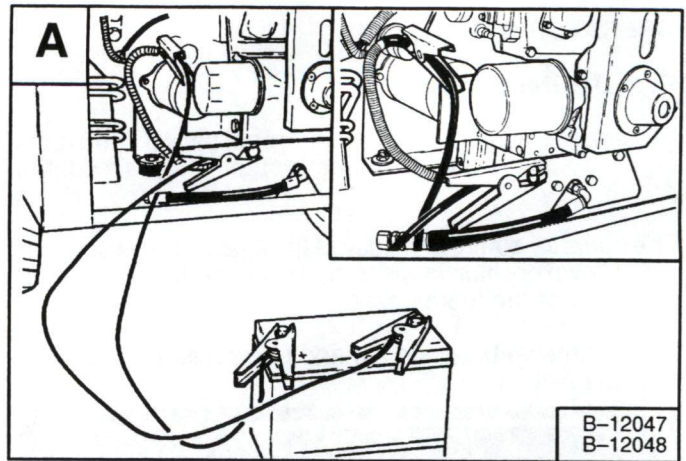
Connect the end of the second cable to the negative terminal (-) of the booster battery. Connect the other end of the second cable to the engine [A].

Keep the cables away from moving parts.

Start the engine.

After the engine has started, remove the ground cable connected to the engine first.

Remove the cable connected to the starter.



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.

I-2023-1285

! 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.

W-2066-1296

REMOTE START SWITCH

Procedure

The tool listed will be needed to do the following procedure:

MEL1138A – Remote Start Switch

The remote start switch is required when the operator cab is in the raised position for service and the service technician needs to start the engine. The wire harness must be separated at the operator cab and engine wiring harness connectors [A].

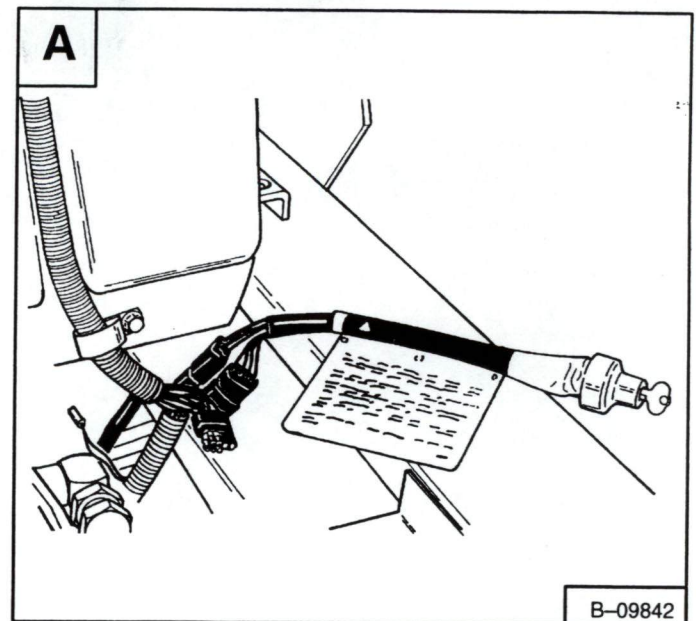
Place the loader on jackstands before centering the steering linkage, checking the main relief valve, or check pump flow.



WARNING

Put jackstands under the front axles and rear corners of the frame before running the engine for service. Failure to use jackstands can allow the machine to fall or move and cause injury or death.

W-2017-0286



The remote start switch is connected to the engine harness connector.

This remote start switch is required when the service technician is adjusting the steering linkage or checking the hydraulic or hydrostatic system

