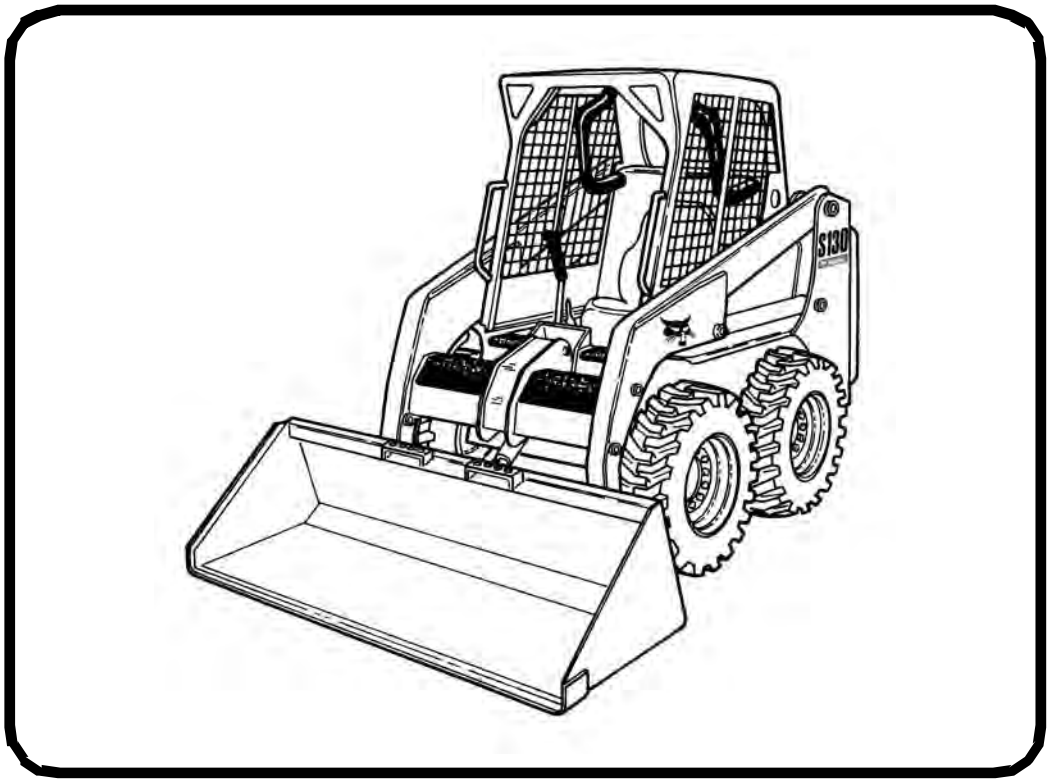
EN

Bobcat®

Operation & Maintenance Manual
S130 Skid-Steer Loader

S/N A1Z760001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

7143872enGB (05-14) (E)

Printed in Belgium
Original Instructions

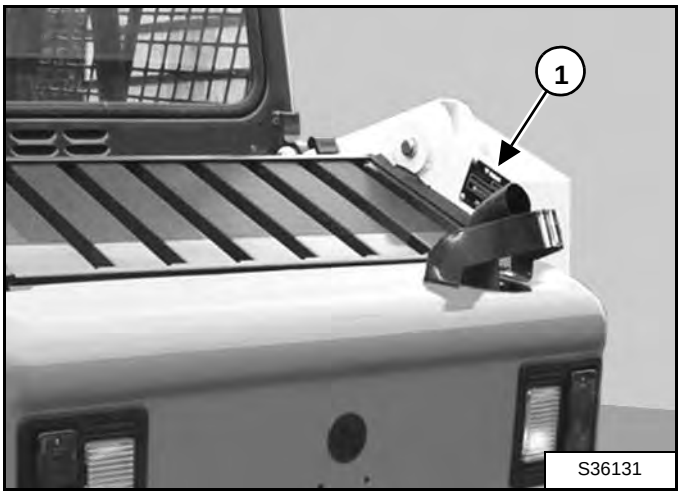
MEA S3A

SERIAL NUMBER LOCATIONS

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

Loader Serial Number

Figure 1



The loader serial number plate (Item 1) **[Figure 1]** is located on the outside of the loader frame.

Explanation of loader Serial Number:

XXXX XXXXX

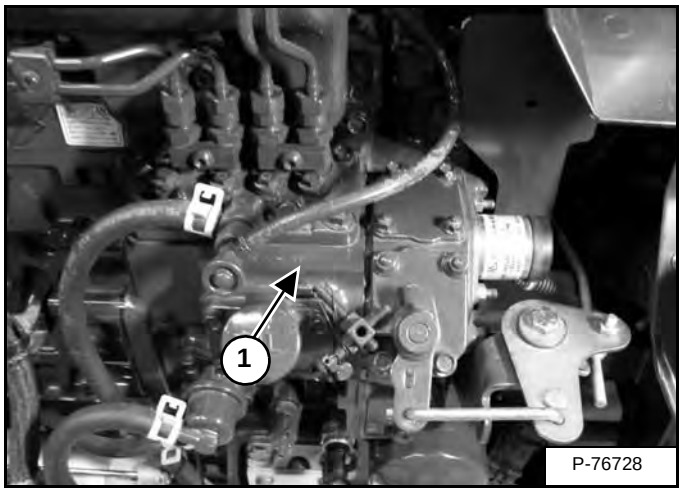
- XXXXX — Module 2. - Production Sequence (Series)
- XXXX — Module 1. - Model / Engine Combination

1. The four digit Model / Engine Combination Module number identifies the model number and engine combination.

2. The five digit Production Sequence Number identifies the order which the loader is produced.

Engine Serial Number

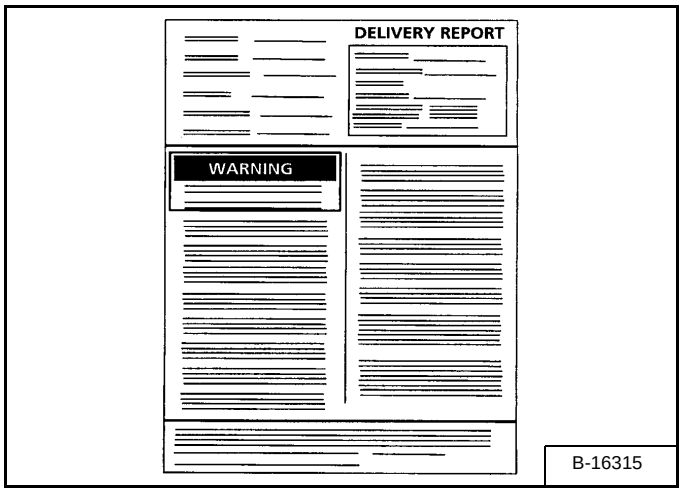
Figure 2



The engine serial number is located on the side of the engine (Item 1) **[Figure 2]**.

DELIVERY REPORT

Figure 3



The delivery report **[Figure 3]** contains a list of items that must be explained or shown to the owner or operator by the dealer when the Bobcat loader is delivered.

The delivery report must be reviewed and signed by the owner or operator and the dealer.

Avoid Silica Dust

Cutting or drilling concrete containing sand or rock containing quartz may result in exposure to silica dust. Use a respirator, water spray or other means to control dust.

FIRE PREVENTION

Maintenance

The machine and some attachments have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.

Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential fire hazard.

The operator's area, engine compartment and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.

All fuels, most lubricants and some coolants mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Operation

Do not use the machine where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases.

Electrical

Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.

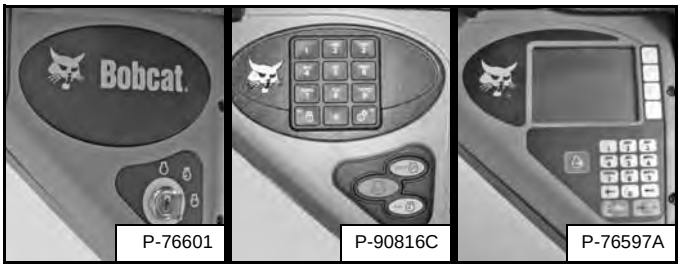
Battery gas can explode and cause serious injury. Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting. Do not jump start or charge a frozen or damaged battery. Keep any open flames or sparks away from batteries. Do not smoke in battery charging area.

INSTRUMENT PANEL IDENTIFICATION

Figure 5

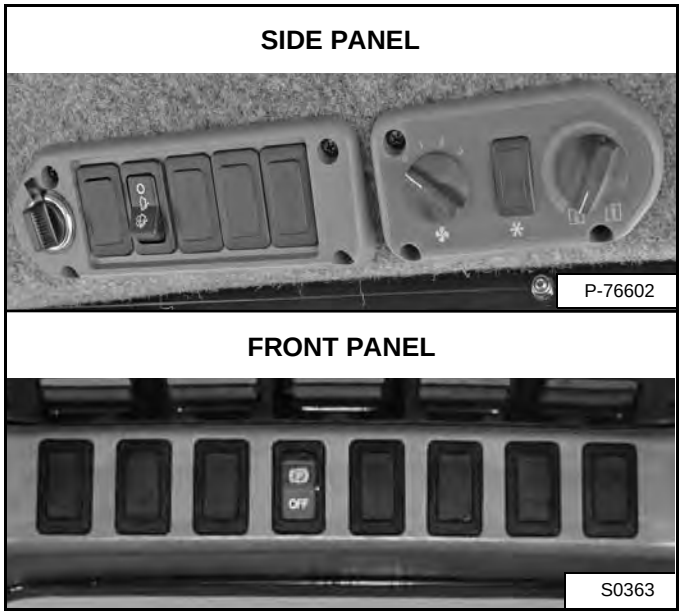
The left panel **[Figure 5]** is described in more detail. (See Left Panel on Page 31.)

Figure 6



The right panel **[Figure 6]** is described in more detail. (See Standard Key Panel on Page 35.), (See Keyless Start Panel on Page 35.) or (See Deluxe Instrumentation Panel on Page 36.)

Figure 7



The side and front panels **[Figure 7]** are described in more detail. (See Side Panel on Page 37.) and (See Front Panel on Page 38.)

CONTROL IDENTIFICATION

This loader has four control configurations available to operate lift / tilt functions and driving / steering the loader:

- Standard Controls - Uses foot pedals for lift and tilt functions.
  Uses steering levers for driving and steering the loader.

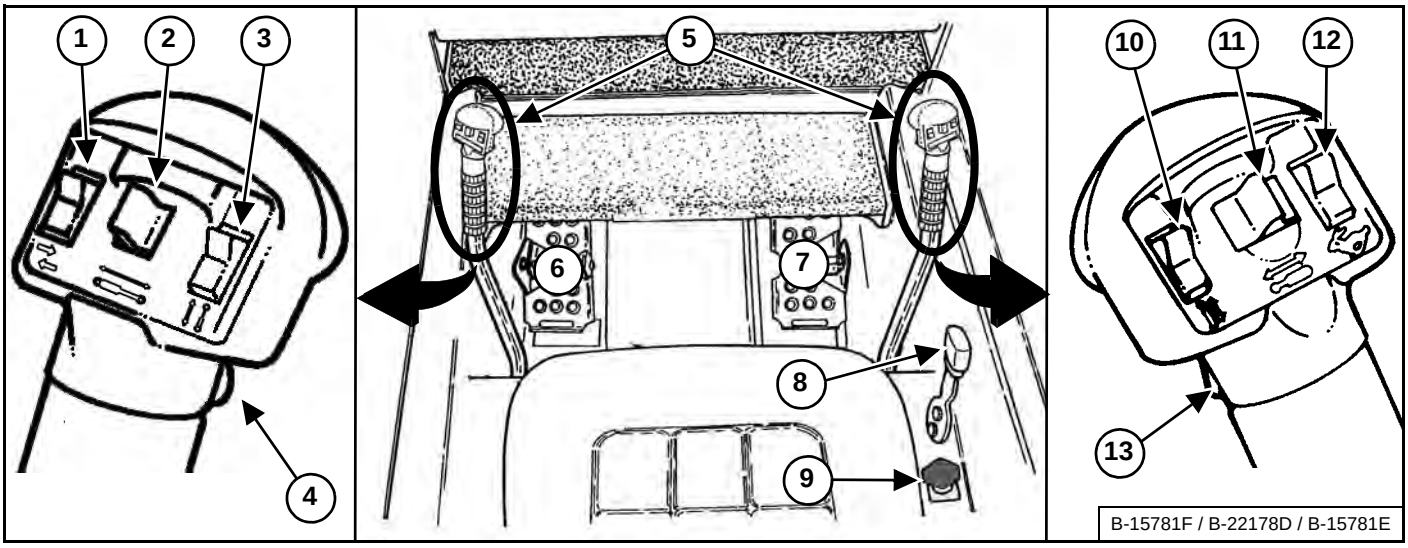
- Advanced Control System (ACS) (Option) - Uses a choice of foot pedals or handles for lift and tilt functions.
  Uses steering levers for driving and steering the loader.

- Advanced Hand Controls (AHC) (Option) - Uses handles for lift and tilt functions.
  Uses steering levers for driving and steering the loader.

- Selectable Joystick Controls (SJC) (Option) - Uses joysticks for lift / tilt functions and driving / steering the loader.

Standard Controls

Figure 18



REF. NO.	DESCRIPTION	FUNCTION / OPERATION
1	TURN SIGNALS (Option)	Press the top to activate right signal; bottom to activate left signal; centre position to turn off.
2	REAR AUXILIARY HYDRAULICS (Option) Also: ATTACHMENT FUNCTION CONTROL	See REAR Auxiliary Hydraulics Operation in this manual. See ATTACHMENT CONTROL DEVICE in this manual.
3	ATTACHMENT FUNCTION CONTROL	See ATTACHMENT CONTROL DEVICE in this manual.
4	FRONT HORN (Option)	Press the front switch to sound the front horn.
5	STEERING LEVERS	See DRIVING AND STEERING THE LOADER in this manual.
6	LIFT ARM PEDAL	See HYDRAULIC CONTROLS in this manual.
7	TILT PEDAL	See HYDRAULIC CONTROLS in this manual.
8	ENGINE SPEED CONTROL	See ENGINE SPEED CONTROL in this manual.
9	LIFT ARM BYPASS CONTROL	See LIFT ARM BYPASS CONTROL in this manual.
10	ATTACHMENT FUNCTION CONTROL	See ATTACHMENT CONTROL DEVICE in this manual.
11	FRONT AUXILIARY HYDRAULICS	See FRONT Auxiliary Hydraulics Operation in this manual.
12	NOT USED	- - -
13	CONTINUOUS FLOW CONTROL FOR AUXILIARY HYDRAULICS	See FRONT Auxiliary Hydraulics Operation (CONTINUOUS FLOW) in this manual.

ENGINE SPEED CONTROL

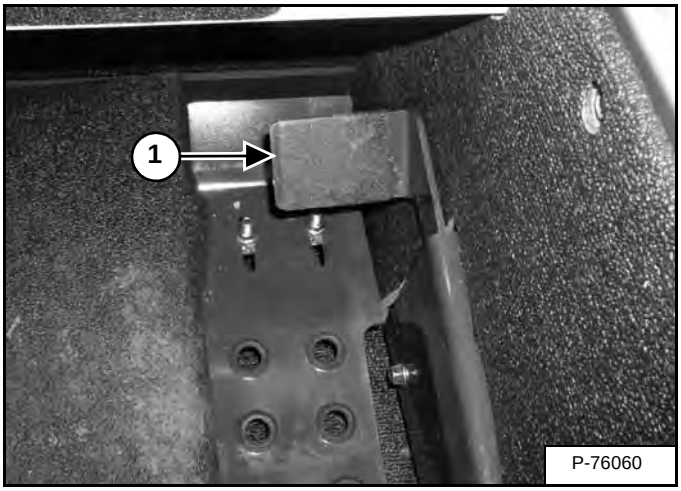
Operation

Figure 33

The engine speed control lever is at the right side of the operator's seat (Item 1) **[Figure 33]**.

Move the lever forward to increase engine speed. Move backward to decrease engine speed.

Figure 34



There is a foot operated engine speed control pedal (Item 1) **[Figure 34]** in addition to the engine speed control lever on SJC equipped machines. It is located on the right side floor above the footrest.

LIFT AND TILT COMPENSATION

Lift and Tilt Compensation is available on ACS, AHC, and SJC equipped machines.

NOTE: Software version 79.8 or higher is required to support this feature. The software version can be viewed on the display screen using the lights button. (See Left Panel (Cont'd) on Page 32.) See your Bobcat dealer to update your machine software version if necessary.

Description

Lift and Tilt Compensation can be used to adjust the lift and tilt control sensitivity. This enables the operator to increase or decrease the amount of control movement before lift up, lift down, tilt back, and tilt out begins. The operator can change each setting to their preference.

EXAMPLE: Your machine is being used with a mower attachment. The mower slowly lowers because you move the controls slightly when passing over extremely rough ground. Adjusting the lift down control to a low setting will provide an increased neutral band and allow for more control movement before the lift arms move.

The procedure that follows provides a starting point for the lift and tilt control compensation. Operators can adjust the settings to account for attachment weight, engine rpm and application.

Operation

NOTE: Lift and Tilt Compensation should be performed when the machine has been warmed to operating temperature and any attachment has been removed.

Perform PRE-STARTING PROCEDURE and STARTING THE ENGINE procedures:

1. Fasten seat belt.
2. Lower seat bar and engage the parking brake.
3. Place handles or joysticks in neutral position.
4. Start the engine.
5. **(ACS)** - Select hand control operation.

   OR

   (SJC) - Select 'H' control pattern.
6. Press the PRESS TO OPERATE LOADER button.
7. Raise the lift arms about 1 m (3 ft) off the ground and tilt the Bob-Tach frame forward about 300 mm (1 ft).
8. Raise and lower the seat bar to engage the interlocks and enable the procedure to be performed.
9. Increase engine speed to high idle.
10. Continue with the correct procedure for your machine. (See Operation (ACS And AHC) on Page 60.) or (See Operation (SJC) on Page 61.)

NOTE: When the procedure has begun, raising the seat bar will cause the machine to disengage from lift and tilt compensation. Changes made to the lift and tilt compensation settings will NOT be saved.

Relieve Auxiliary Hydraulic Pressure (Loader And Attachment)

⚠ WARNING

AVOID BURNS

Hydraulic fluid, tubes, fittings and quick couplers can get hot when running machine and attachments. Be careful when connecting and disconnecting quick couplers.

W-2220-0396

⚠ WARNING

AVOID INJURY OR DEATH

Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a doctor familiar with this injury.

W-2072-EN-0909

Front Auxiliary Quick Couplers

When Connecting: Push the quick couplers tightly together and hold for five seconds; the pressure is automatically relieved as the couplers are installed.

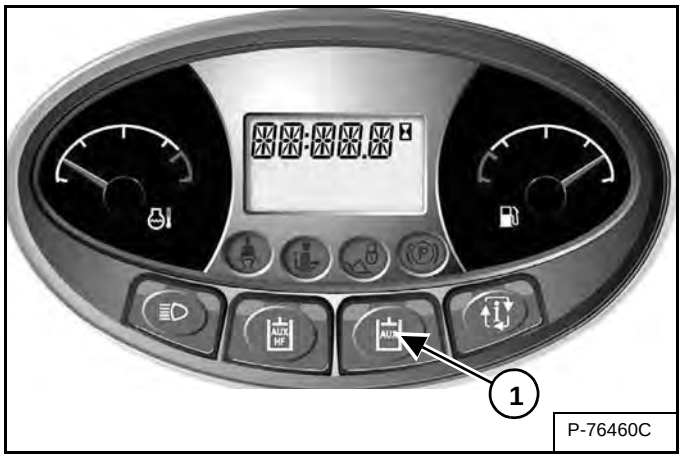
When Disconnecting: Push the quick couplers tightly together and hold for five seconds; then retract the sleeve until the couplers disconnect.

Rear Auxiliary And Secondary Front Auxiliary Quick Couplers

Put the attachment flat on the ground.

Stop the engine and turn the key to RUN or press the RUN button.

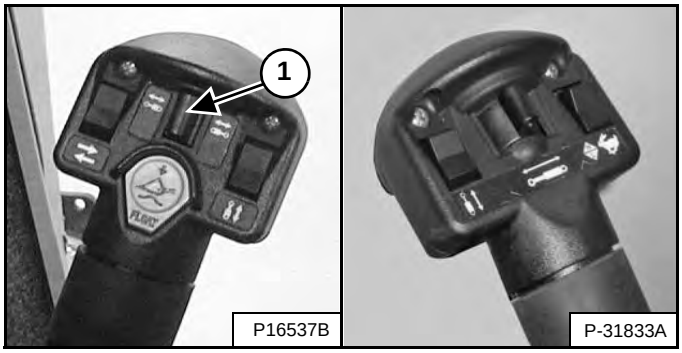
Figure 75



Press the auxiliary hydraulics button (Item 1) **[Figure 75]**.

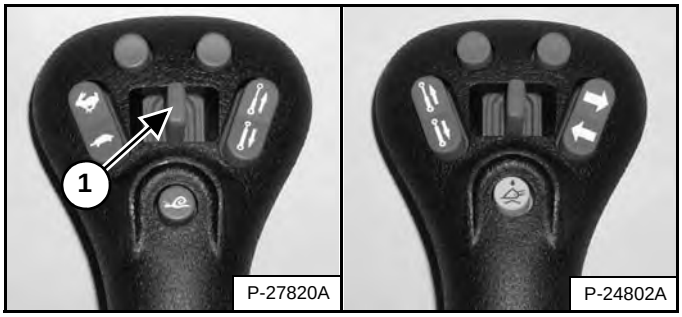
Standard, ACS And AHC (If Equipped)

Figure 76



SJC (If Equipped)

Figure 77



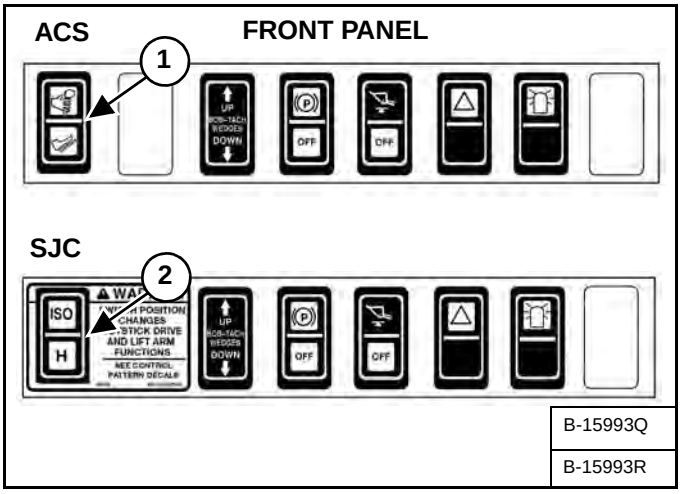
Move the rear auxiliary hydraulic switch (Item 1) **[Figure 76]** or **[Figure 77]** to the right and left several times.

Turn the key to OFF or press the STOP button.

Keyless Start Panel (Cont'd)

NOTE: Make sure both hand controls (ACS / AHC) or joysticks (SJC) are in the neutral position before starting the engine. Do not move the levers or joysticks from the neutral position when pressing the RUN / ENTER or START buttons with the BICS™ activated.

Figure 99

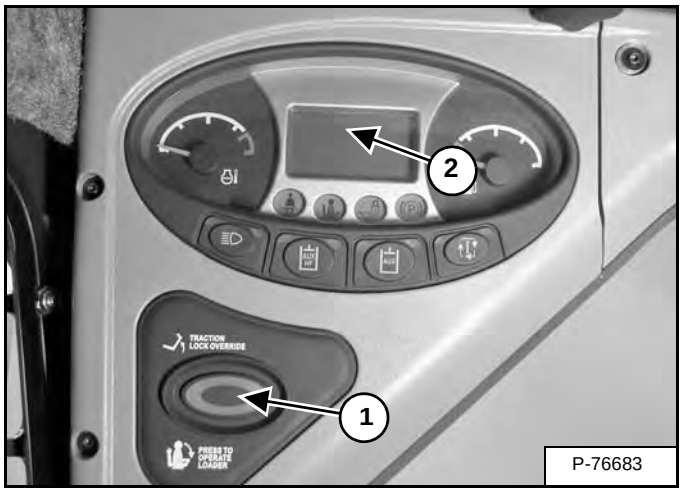


(ACS) Select hand control or foot pedal operation (Item 1) **[Figure 99]**.

OR

(SJC) Select 'ISO' or 'H' Control Pattern (Item 2) **[Figure 99]**.

Figure 100



Press the PRESS TO OPERATE LOADER button (Item 1) **[Figure 100]** to activate the BICS™ and to perform hydraulic and loader functions.

(SJC) The current drive response setting will be displayed briefly in the data display (Item 2) each time the PRESS TO OPERATE LOADER button (Item 1) **[Figure 100]** is pressed.

NOTE: (SJC) The light of the current switch position (ISO or H) will flash, which will indicate PRESS TO OPERATE LOADER is required. The light will flash when the RUN button has been pressed and continue to flash until the PRESS TO OPERATE LOADER button is pressed, thereafter the light will become solid. If the mode (ISO / H) is changed while driving, the active mode light will remain solid and the pending mode light will flash. When operation of the machine is returned to neutral, the active mode light will then turn off and the pending mode light will continue to flash until the PRESS TO OPERATE LOADER button is pressed.

⚠ WARNING

AVOID INJURY OR DEATH

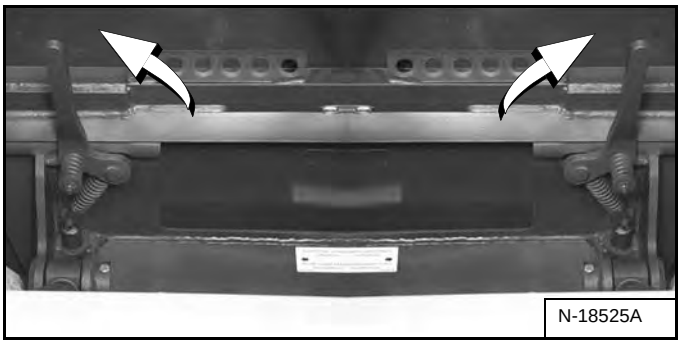
When an engine is running in an enclosed area, fresh air must be added to avoid concentration of exhaust fumes. If the engine is stationary, vent the exhaust outside. Exhaust fumes contain odorless, invisible gases which can kill without warning.

W-2050-0807

Installing And Removing The Attachment (Hand Lever Bob-Tach) (Cont'd)

Removing (Cont'd)

Figure 116



Pull the Bob-Tach levers **[Figure 116]** all the way up.

⚠ WARNING

Bob-Tach levers have spring tension. Hold lever tightly and release slowly. Failure to obey warning can cause injury.

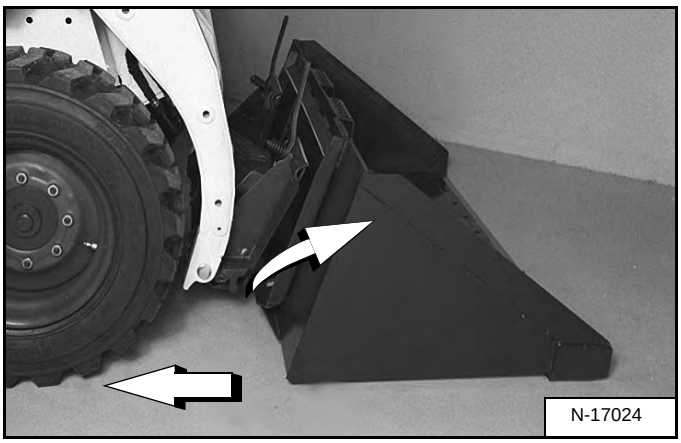
W-2054-1285

Enter the loader.

Perform the PRE-STARTING PROCEDURE. (See PRE-STARTING PROCEDURE on Page 73.)

Start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

Figure 117



Tilt the Bob-Tach forward and move the loader backward, away from the bucket or attachment **[Figure 117]**.

Installing And Removing The Attachment (Power Bob-Tach)

This machine can be equipped with a Power Bob-Tach.

Installing

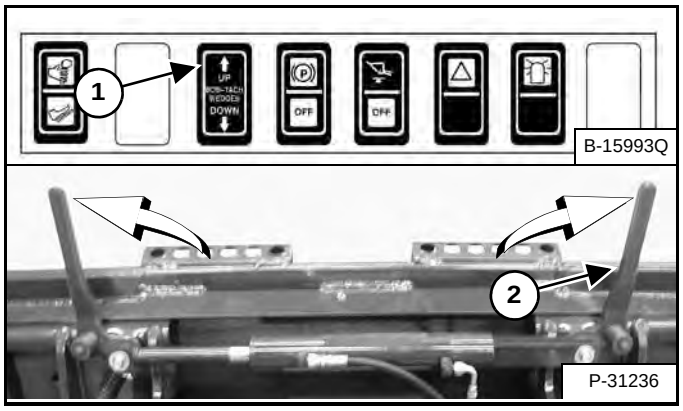
The Bob-Tach is used for fast changing of buckets and attachments. See the appropriate attachment Operation & Maintenance Manual to install other attachments.

Perform the PRE-STARTING PROCEDURE. (See PRE-STARTING PROCEDURE on Page 73.)

Start the engine, press the PRESS TO OPERATE LOADER button and release the parking brake.

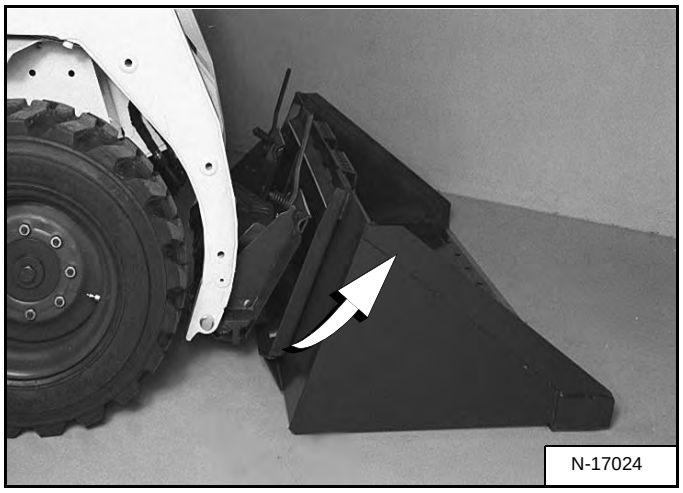
Lower the lift arms and tilt the Bob-Tach forward.

Figure 118



Push and hold BOB-TACH "WEDGES UP" switch (Item 1) (Front Panel) until levers (Item 2) **[Figure 118]** are in unlocked position (wedges fully raised).

Figure 119



Drive the loader forward until the top edge of the Bob-Tach is completely under the top flange of the bucket **[Figure 119]** (or other attachment). Be sure the Bob-Tach levers do not hit the bucket.

Filling And Emptying The Bucket (SJC - 'ISO' Pattern)

Filling

Figure 142

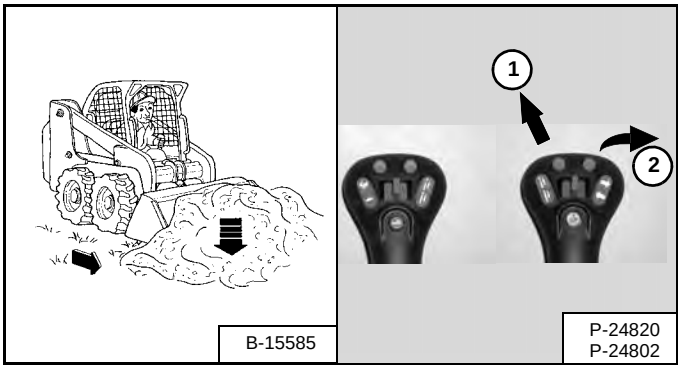
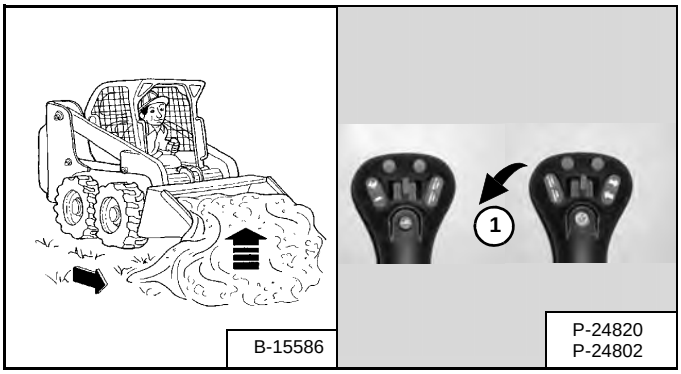


Figure 143



Lower the lift arms all the way (Item 1) **[Figure 142]**.

Tilt the bucket forward (Item 2) **[Figure 142]** until the cutting edge of the bucket is on the ground.

Drive slowly forward into the material. Tilt the bucket backward (Item 1) **[Figure 143]** all the way when the bucket is full.

Drive backward away from the material.

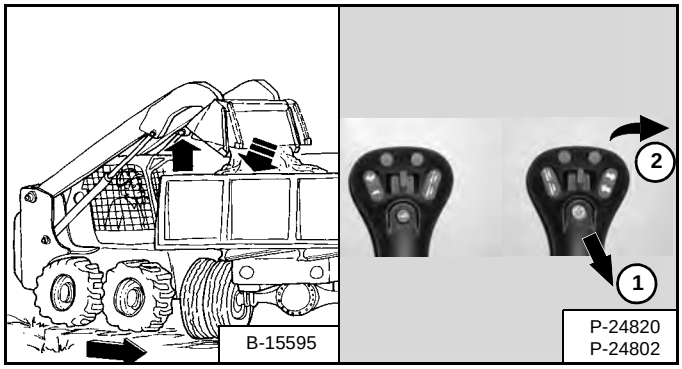
⚠ WARNING

Load, unload and turn on flat level ground. Do not exceed Rated Operating Capacity (ROC) shown on sign (decal) in cab. Failure to obey warnings can cause the machine to tip or rollover and cause injury or death.

W-2056-1112

Emptying

Figure 144



Keep the bucket low when moving to the area where you want to empty the bucket.

Raise the lift arms (Item 1). Level the bucket (Item 2) **[Figure 144]** while raising the lift arms to help prevent material from falling off the back of the bucket.

Drive forward slowly until the bucket is over the top of the truck box or bin.

Empty the bucket (Item 2) **[Figure 144]**. If all material is near the side of the truck or bin, use the bucket tilt to move it to the other side.

⚠ WARNING

Never dump over an obstruction, such as a post, that can enter the operator cab. The machine could tip forward and cause injury or death.

W-2057-0694

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-2003-0807

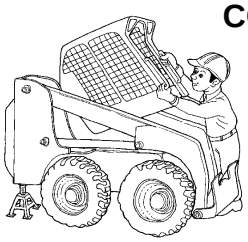
Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.

CORRECT

P-90216

Never service the Bobcat Skid-Steer Loader without instructions.

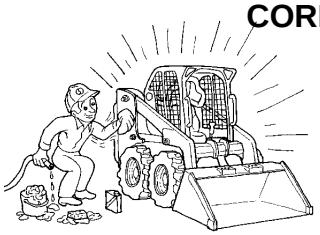
CORRECT



B-15590

Use the correct procedure to lift or lower operator cab.

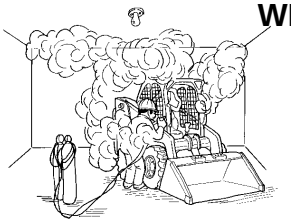
CORRECT



B-15591

Cleaning and maintenance are required daily.

WRONG



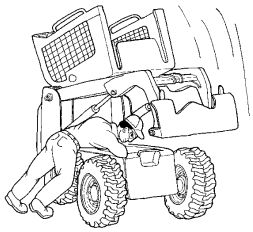
B-15592

Have good ventilation when welding or grinding painted parts.

Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.

Avoid exhaust fume leaks which can kill without warning. Exhaust system must be tightly sealed.

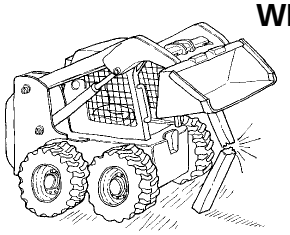
WRONG



B-15593

Disconnecting or loosening any hydraulic tubeline, hose, fitting, component or a part failure can cause lift arms to drop. Do not go under lift arms when raised unless supported by an approved lift arm support device. Replace it if damaged.

WRONG

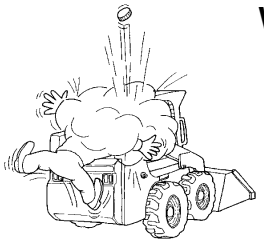


B-15599

Never work on loader with lift arms up unless lift arms are held by an approved lift arm support device. Replace if damaged.

Never modify equipment or add attachments not approved by Bobcat Company.

WRONG



B-15600

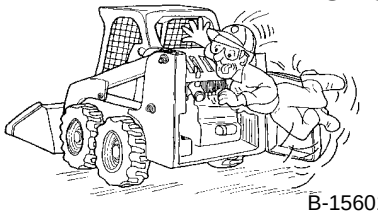
Stop, cool and clean engine of flammable materials before checking fluids.

Never service or adjust loader with the engine running unless instructed to do so in the manual.

Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate the skin or eyes.

Never fill fuel tank with engine running, while smoking or when near open flame.

WRONG



B-15601

Keep body, jewelry and clothing away from moving parts, electrical contact, hot parts and exhaust.

Wear eye protection to guard from battery acid, compressed springs, fluids under pressure and flying debris when engines are running or tools are used. Use eye protection approved for type of welding.

Keep rear door closed except for service. Close and latch door before operating the loader.

WRONG

B-6589

Lead-acid batteries produce flammable and explosive gases.

Keep arcs, sparks, flames and lighted tobacco away from batteries.

Batteries contain acid which burns eyes or skin on contact. Wear protective clothing. If acid contacts body, flush well with water. For eye contact flush well and get immediate medical attention.

Maintenance procedures which are given in the Operation & Maintenance Manual can be performed by the owner/operator without any specific technical training. Maintenance procedures which are **not** in the Operation & Maintenance Manual must be performed **ONLY BY QUALIFIED BOBCAT SERVICE PERSONNEL. Always use genuine Bobcat replacement parts.** The Service Safety Training Course is available from your Bobcat dealer.

MSW08-0409

BACK-UP ALARM SYSTEM

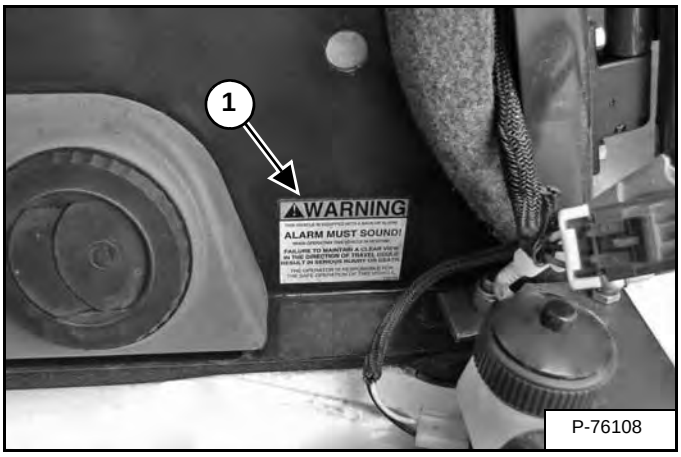
This machine can be equipped with a back-up alarm.

Description

The back-up alarm will sound when the operator moves both steering levers or joystick(s) into the reverse position. Slight movement of the steering levers into the reverse position is required with hydrostatic transmissions, before the back-up alarm will sound.

Inspecting

Figure 160



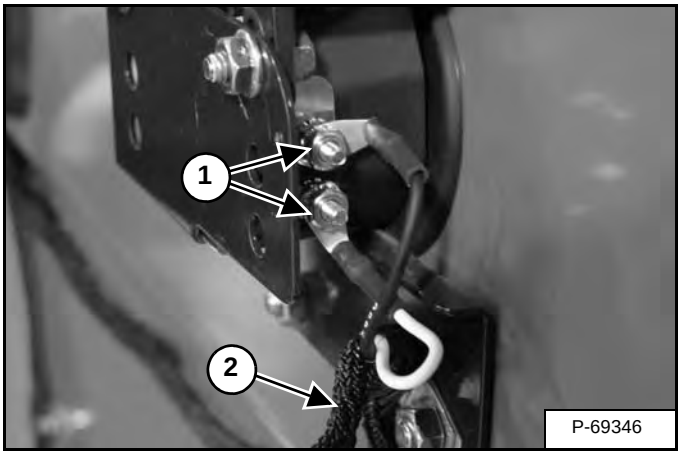
Inspect for damaged or missing back-up alarm decal (Item 1) **[Figure 160]**. Replace if required.

Sit in the seat and fasten the seat belt. Engage the parking brake. Pull the seat bar all the way down. Start the engine. Press the PRESS TO OPERATE LOADER button. Disengage the parking brake.

Move both steering levers or joystick(s) into the reverse position. The back-up alarm must sound when all wheels or both tracks are moving in reverse.

The back-up alarm is located on the inside of the rear door.

Figure 161



Inspect the back-up alarm electrical connections (Item 1), wire harness (Item 2) **[Figure 161]** and back-up alarm switches (if equipped) (Item 2) **[Figure 162]** for tightness and damage. Repair or replace any damaged components.

If the back-up alarm switches require adjustment, (See Adjusting Switch Position on Page 119.)

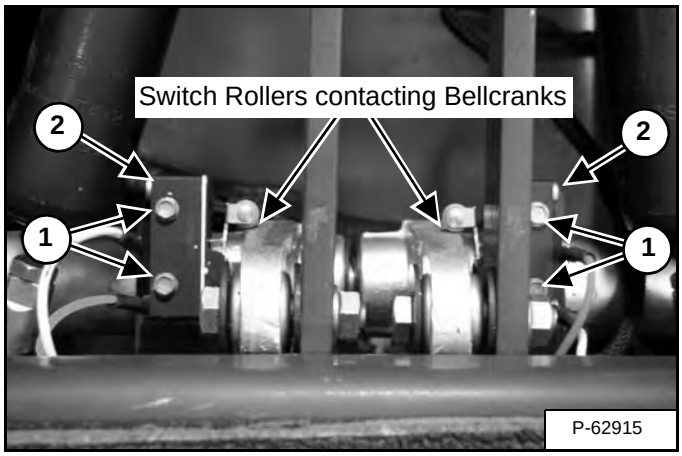
Adjusting Switch Position

NOTE: Joystick equipped machines do not have back-up alarm switches and cannot be adjusted. See your Bobcat dealer for service if your back-up alarm does not sound.

Standard Controls, ACS And AHC (If Equipped)

Stop the engine and raise the operator cab. (See Raising on Page 120.)

Figure 162



Place the steering levers in the neutral position.

Loosen the screws (Item 1) **[Figure 162]** securing the back-up alarm switches.

Position the back-up alarm switch rollers so that they just make contact with bellcranks without compressing the switch springs **[Figure 162]**. Torque the screws (Item 1) **[Figure 162]** securing the switches to the bracket to 1,6 - 2,1 N•m (14 - 19 in-lb).

Lower the operator cab. (See Lowering on Page 121.)

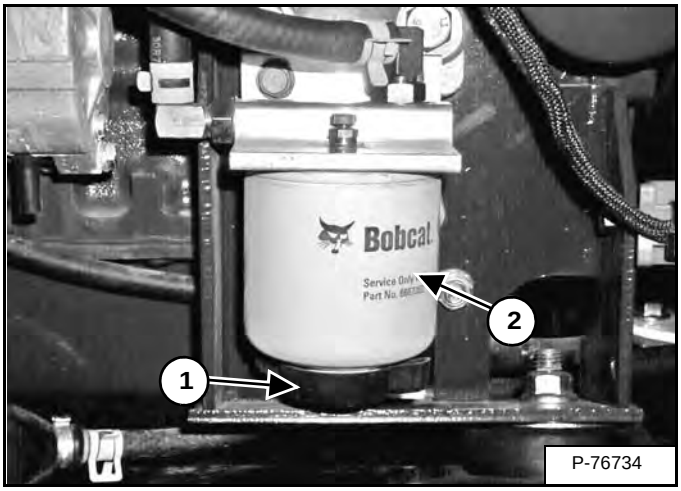
Inspect back-up alarm system for proper function. (See Inspecting on Page 119.)

Fuel Filter

For the service interval for removing water from, or replacing the fuel filter (See SERVICE SCHEDULE on Page 111.)

Removing Water

Figure 187



Loosen the drain (Item 1) **[Figure 187]** at the bottom of the filter element to remove water from the filter.

Replacing Element

Remove the filter element (Item 2) **[Figure 187]**.

Clean the area around the filter housing. Put clean oil on the seal of the new filter element. Install the fuel filter, and hand tighten.

Remove air from the fuel system. (See Removing Air From The Fuel System on Page 129.)

WARNING

AVOID INJURY OR DEATH

Always clean up spilled fuel or oil. Keep heat, flames, sparks or lighted tobacco away from fuel and oil. Failure to use care around combustibles can cause explosion or fire.

W-2103-0508

Removing Air From The Fuel System

After replacing the filter element or when the fuel tank has run out of fuel, the air must be removed from the fuel system before starting the engine.

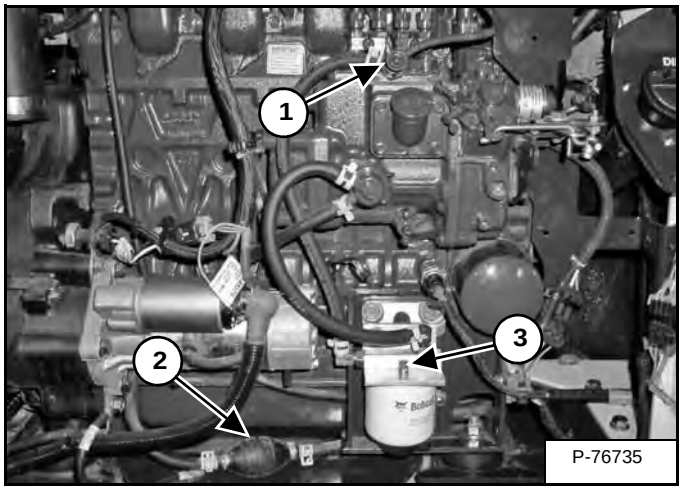
WARNING

AVOID INJURY OR DEATH

Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a doctor familiar with this injury.

W-2072-EN-0909

Figure 188



Open the vent (Item 3) **[Figure 188]** on the fuel filter housing.

Squeeze the hand pump (priming bulb) (Item 2) **[Figure 188]** until fuel flows from the vent with no air bubbles.

Close the vent (Item 3) **[Figure 188]**.

It can be necessary to open the vent (Item 1) **[Figure 188]** briefly while engine is running. Close the vent when the engine runs smoothly.

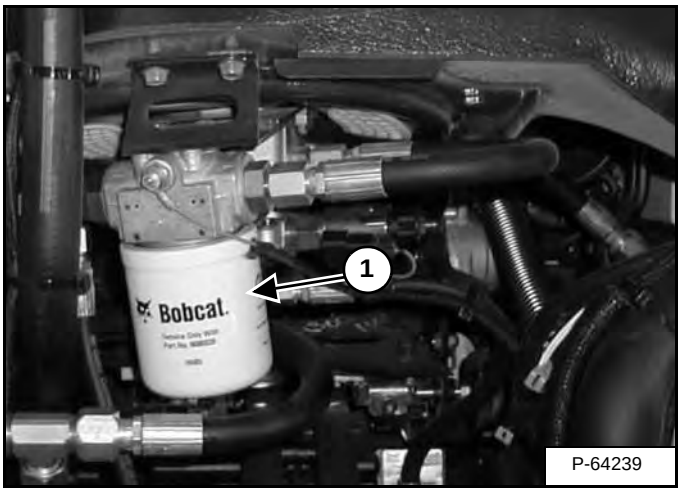
Removing And Replacing Hydraulic / Hydrostatic Filter

For the correct service interval (See SERVICE SCHEDULE on Page 111.)

Raise the operator cab. (See Raising on Page 120.)

Earlier Models

Figure 207



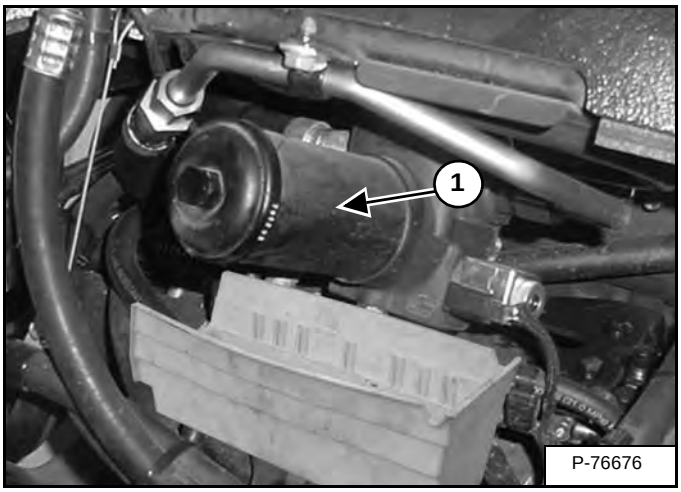
Remove the filter (Item 1) **[Figure 207]**.

Clean the surface of the filter housing where the filter seal contacts the housing.

Put clean oil on the seal of the new filter. Install and hand tighten the new filter.

Later Models

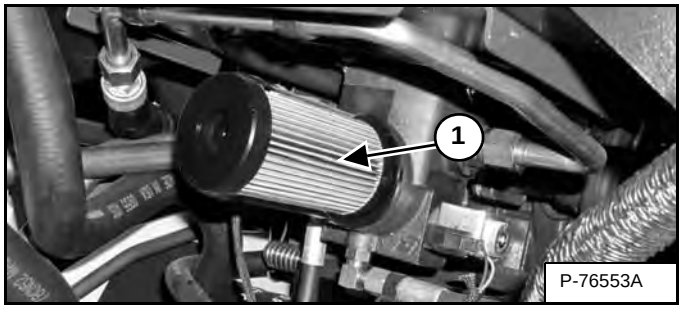
Figure 208



Place a suitable container below the filter housing and remove the filter housing (Item 1) **[Figure 208]**.

Recycle or dispose of used fluid in an environmentally safe manner.

Figure 209



Remove and discard the filter element (Item 1) **[Figure 209]**.

Clean the surface of the filter housing and the filter base where they contact the filter element seal.

Put clean oil on the seal of the new filter element. Install the element on the filter base. Install and hand tighten the filter housing to 47 - 54 N•m (35 - 40 ft-lb) torque.

All Models

⚠ WARNING

AVOID INJURY OR DEATH

Always clean up spilled fuel or oil. Keep heat, flames, sparks or lighted tobacco away from fuel and oil. Failure to use care around combustibles can cause explosion or fire.

W-2103-0508

Lower the operator cab. (See Lowering on Page 121.)

Start the engine and operate the loader hydraulic controls.

⚠ WARNING

AVOID INJURY OR DEATH

Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a doctor familiar with this injury.

W-2072-EN-0909

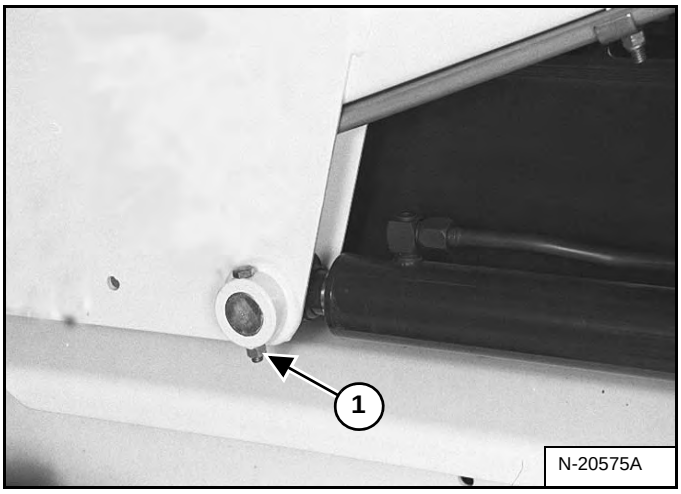
Stop the engine and check for leaks at the filter.

Check the fluid level in the reservoir and add as needed. (See Checking And Adding Fluid on Page 137.)

PIVOT PINS

Inspection And Maintenance

Figure 232



All lift arm and cylinder pivots have a large pin held in position with a retainer bolt and lock nut (Item 1) **[Figure 232]**.

Check that the lock nuts are tightened to 48 - 54 N•m (35 - 40 ft-lb) torque.

DIAGNOSTIC SERVICE CODES (CONT'D)

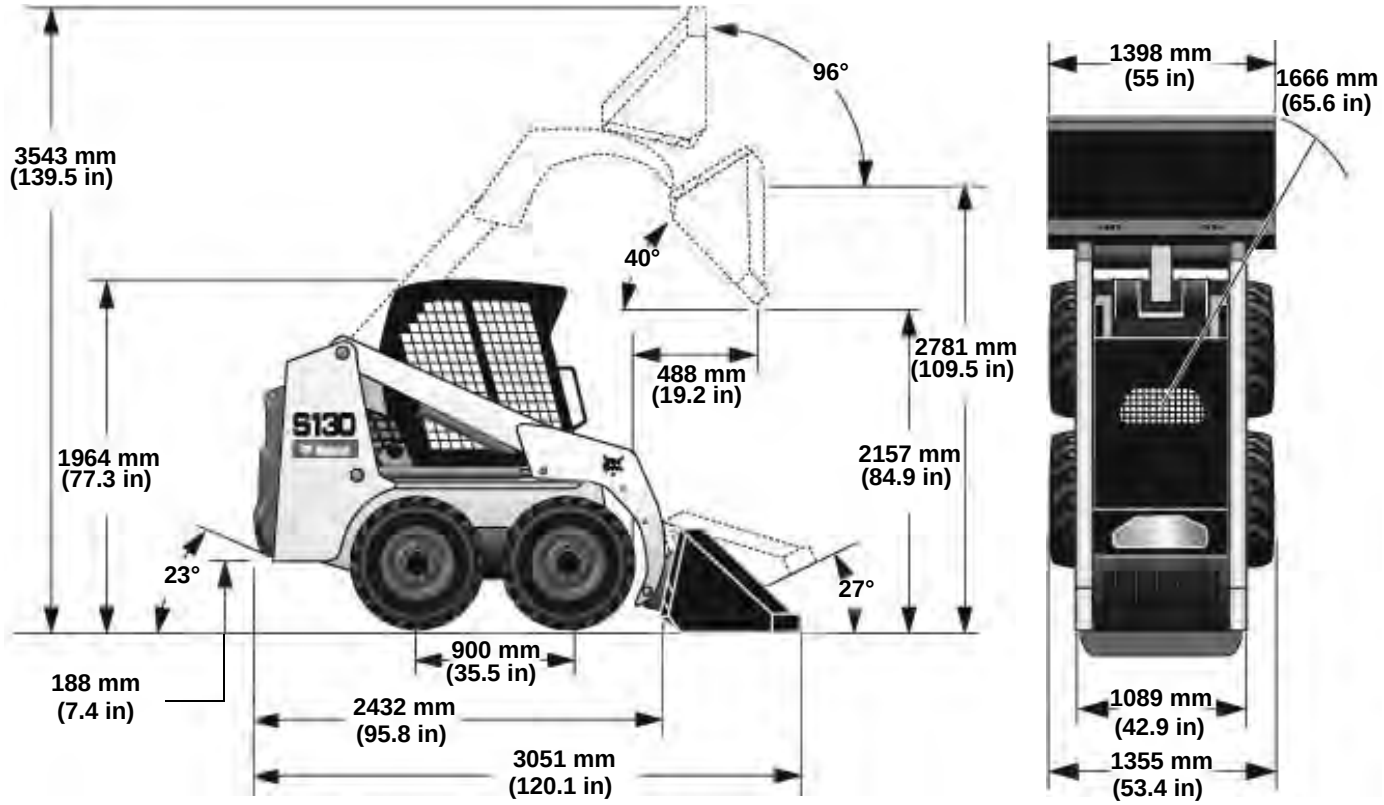
Service Codes List (Cont'd)

CODE	DESCRIPTION	CODE	DESCRIPTION
M1502	Traction lock pull output error ON	M3805	Auxiliary hydraulic lock short to battery
M1503	Traction lock pull output error OFF	M3806	Auxiliary hydraulic lock short to earth
M1507	Traction lock pull output open circuit	M3807	Auxiliary hydraulic lock open circuit
M1528	Traction lock pull output failure	M3832	Auxiliary hydraulic lock overcurrent
M1605	Traction lock hold solenoid short to battery	M4109	Alternator low
M1606	Traction lock hold solenoid short to earth	M4110	Alternator high
M1607	Traction lock hold solenoid open circuit	M4304	Keyless panel no communication
M1705	Hydraulic lock valve solenoid short to battery	M4404	Auxiliary no communication
M1706	Hydraulic lock valve solenoid short to earth	M4621	5 volt sensor supply out of range high
M1707	Hydraulic lock valve solenoid open circuit	M4622	5 volt sensor supply out of range low
M1732	Hydraulic lock valve solenoid overcurrent	M4721	8 volt sensor supply out of range high
M1805	Lift spool lock short to battery	M4722	8 volt sensor supply out of range low
M1806	Lift spool lock short to earth	M4802	Front light relay error ON
M1807	Lift spool lock open circuit	M4803	Front light relay error OFF
M1832	Lift spool lock overcurrent	M4807	Front light relay open circuit
M2005	Two-speed primary short to battery	M4902	Rear light relay error ON
M2006	Two-speed primary short to earth	M4903	Rear light relay error OFF
M2007	Two-speed primary open circuit	M4907	Rear light relay open circuit
M2032	Two-speed primary overcurrent	M5002	Front light output error ON
M2102	Glow plug output error ON	M5003	Front light output error OFF
M2103	Glow plug output error OFF	M5007	Front light output open circuit
M2107	Glow plug output open circuit	M5028	Front light output failure
M2128	Glow plug output failure	M5102	Rear light output error ON
M2202	Starter output error ON	M5103	Rear light output error OFF
M2203	Starter output error OFF	M5107	Rear light output open circuit
M2207	Starter output open circuit	M5128	Rear light output failure
M2228	Starter output failure	M5202	PTOL switch error ON
M2302	Starter relay error ON	M5221	PTOL switch out of range high
M2303	Starter relay error OFF	M5222	PTOL switch out of range low
M2402	Fuel pull relay error ON	M5305	PTOL LED short to battery
M2403	Fuel pull relay error OFF	M5306	PTOL LED short to earth
M2502	Traction pull relay error ON	M5405	Tilt spool lock short to battery
M2503	Traction pull relay error OFF	M5406	Tilt spool lock short to earth
M2602	Glow plug relay error ON	M5407	Tilt spool lock open circuit
M2603	Glow plug relay error OFF	M5432	Tilt spool lock overcurrent
M2721	Throttle primary out of range high	M6402	Switched power relay error ON
M2722	Throttle primary out of range low	M6403	Switched power relay error OFF
M2821	Throttle secondary out of range high	M6505	EEC power short to battery
M2822	Throttle secondary out of range low	M6506	EEC power short to earth
M3128	Interrupted power failure	M6507	EEC power open circuit
M3204	Workgroup no communication	M6604	EEC power no communications
M3304	Deluxe panel no communication	M7002	Switched power output error ON
M3505	Hydraulic fan short to battery	M7003	Switched power output error OFF
M3506	Hydraulic fan short to earth	M7007	Switched power output open circuit
M3507	Hydraulic fan open circuit	M7028	Switched power output failure
M3532	Hydraulic fan overcurrent	M7102	Electric fan 1 output error ON
M3705	Two-speed secondary short to battery	M7103	Electric fan 1 output error OFF
M3706	Two-speed secondary short to earth	M7128	Electric fan 1 output failure
M3707	Two-speed secondary open circuit	M7202	Electric fan 1 relay error ON
M3732	Two-speed secondary overcurrent	M7203	Electric fan 1 relay error OFF

(S130) LOADER SPECIFICATIONS

Machine Dimensions

- Dimensions are given for loader equipped with standard tyres and 54 inch Dirt bucket and can vary with other bucket types.
- Where applicable, specifications conform to SAE or ISO standards and are subject to change without notice.



B-24432
B-24433B

Changes of structure or weight distribution of the loader can cause changes in control and steering response and can cause failure of the loader parts.