

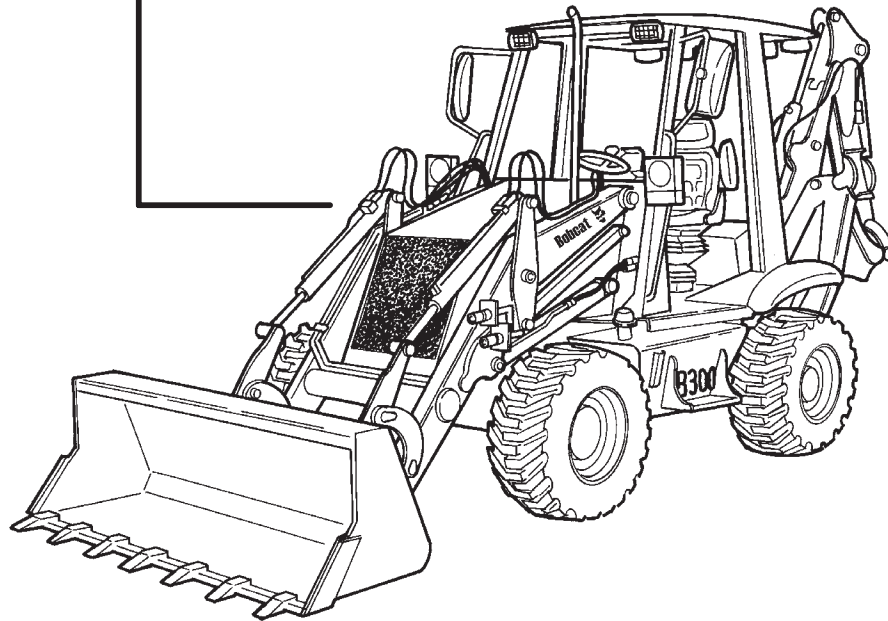


Bobcat®

B300

Operation & Maintenance Manual

S/N 571711001 & Above



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FEATURES AND ACCESSORIES

Model B300 Bobcat loader backhoes are equipped with the following standard items:

Machine

- Adjustable seat, 180° rotation
- Back-up alarm
- Battery disconnect
- Emergency shut-off switches (one on steering console and another near backhoe controls)
- External hydraulic oil temperature/quantity site gauge
- Glow plugs
- Hydraulic oil cooler
- Instrumentation: hourmeter, engine temperature, hydraulic temperature, fuel gauges, and warning lights
- Parking brake
- Operator cab (ROPS/FOPS)
- Seat belt
- Tires (31.5/1300-16.5 (front), 31.5/1300-16.5 (rear))
- Travel Direction and two-speed control lever
- Turn Indicators
- Working lights, front and rear

Backhoe

- Boom lock
- Sideshift backhoe
- Stabilizers
- Two-stick control
- X-Change™ (Attachment Mounting System)

Loader

- Bob-Tach
- Bucket float positioning (Bucket not included)
- Lift arm support

Below is a list of some equipment available from your Bobcat Loader dealer as Dealer and/or Factory Installed Accessories and Factory Installed Options. See your Bobcat dealer for other available options, accessories and attachments.

- Street pads
- Cab (enclosed with heater)
- Front and rear windows

Specifications subject to change without notice

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**OPERATING
INSTRUCTIONS**

REAR INSTRUMENT PANEL IDENTIFICATION (STANDARD CONTROL PATTERN)

The instrument panel has the following:

BOOM AND SWING LEVER – (Item 1) **[A]** controls the backhoe boom functions.

ARM AND BUCKET LEVER – (Item 2) **[A]** controls the arm and bucket functions.

STABILIZER LEVER – (Item 3) **[A]** raises and lowers the left stabilizer.

STABILIZER LEVER – (Item 4) **[A]** raises and lowers the right stabilizer.

HORN BUTTON – (Item 5) **[A]** operates the horn.

EMERGENCY STOP BUTTON – (Item 6) **[A]** will stop the engine.

REAR INSTRUMENT PANEL IDENTIFICATION (ISO CONTROL PATTERN)

The instrument panel has the following:

BOOM AND BUCKET LEVER – (Item 1) **[B]** controls the backhoe boom and bucket functions.

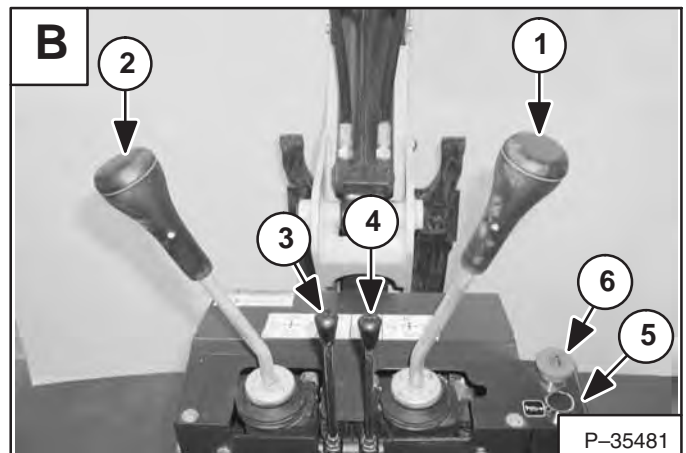
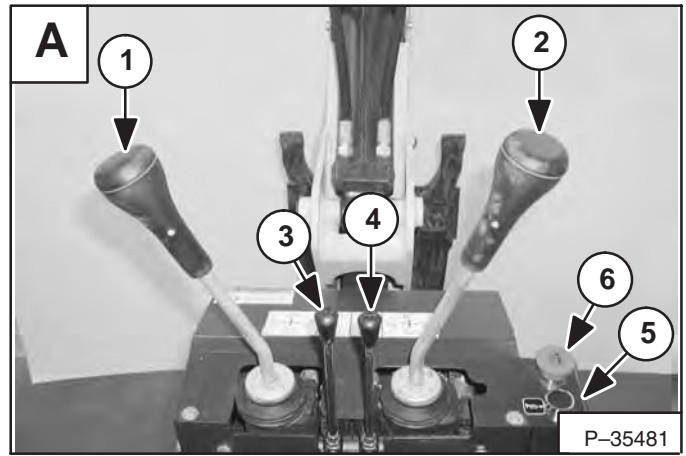
ARM AND SWING LEVER – (Item 2) **[B]** controls the arm and swing functions.

STABILIZER LEVER – (Item 3) **[B]** raises and lowers the left stabilizer.

STABILIZER LEVER – (Item 4) **[B]** raises and lowers the right stabilizer.

HORN BUTTON – (Item 5) **[B]** operates the horn.

EMERGENCY STOP BUTTON – (Item 6) **[B]** will stop the engine.



PRE-STARTING PROCEDURE (Cont'd)

Backhoe Operation

Use the step and grab handle to get on and off the loader backhoe [A]. Do not jump.

Read and understand the Operation & Maintenance Manual and the Operator's Handbook before operating the loader.

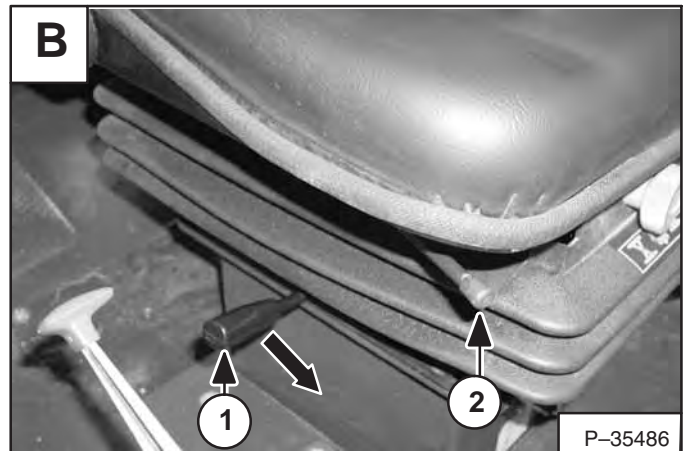
WARNING

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. Untrained operators and failure to follow instructions can cause injury or death.

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Release the seat lever (Item 1) [B] to rotate the seat for backhoe operation. Release the seat lever (Item 2[B] and adjust the seat position for comfortable operation of the backhoe controls. Make sure the seat is in the locked position before operating.

Fasten the seat belt [C].



OPERATING PROCEDURE (Cont'd)

Before going into underpasses or tunnels, check for obstacles **[A]**.

Check for hidden holes, drop-offs or obstacles that could cause tipping.

Moving The Loader Backhoe While Digging

When the trench is the desired depth, move the loader backhoe in the following manner:

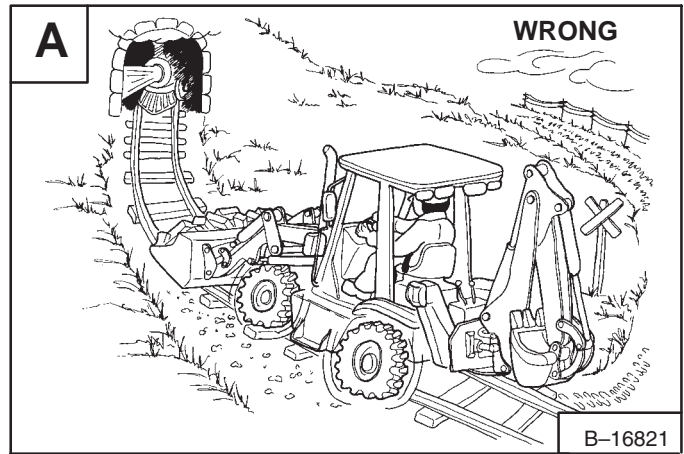
1. Lift the backhoe boom so the bucket is above the ground **[B]**.
2. Move the speed control lever to a low RPM.
3. Rotate the operator seat 180° to the forward position **[C]**. Make sure the seat is in the locked position.
4. Raise the lift arms so the bucket is above the ground **[C]**.
5. Raise the stabilizers (Item 1) **[C]** until they are both off the ground.
6. Drive the loader backhoe forward as straight as possible along the trench line. **DO NOT** move forward too far; this will change the trench depth. Moving the boom too far out decreases deep digging ability.
7. Lower the lift arms until the front wheels are off the ground approximately 2 inches (50 mm) **[B]**. Engage the parking brake.
8. Rotate the operator seat 180° to the rear position **[B]**. Make sure the seat is in the locked position.
9. Lower the stabilizers until the rear of the machine is level. If the machine is on a slope, lower the stabilizer on the down hill side first **[B]**.
10. Move the speed control lever to desired RPM.

WARNING

AVOID INJURY OR DEATH

To prevent accidental machine movement: Always put the directional control lever in **Neutral** and engage parking brake **before** moving to the backhoe operating position or leaving the operator seat.

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PREVENTIVE
MAINTENANCE

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FUEL SYSTEM

Fuel Specifications

Use only clean, high quality diesel fuel, Grade No. 2 or Grade No. 1.

The following is one suggested blending guideline which should prevent fuel gelling during cold temperatures:

Temp. F° (C°)	No. 2	No. 1
+15° (9°)	100%	0%
Down to -20° (-29°)	50%	50%
Below -20° (-29°)	0%	100%

Contact your fuel supplier for local recommendations.

Filling The Fuel Tank



Remove the fuel fill cap (Item 1) [A].

Use a clean, approved safety container to add fuel of the correct specifications. Add fuel only in an area that has free movement of air and no open flames or sparks. **NO SMOKING!** [B].

Install and tighten the fuel fill cap (Item 1) [A].

Fuel Filter

Raise the lift arms and install an approved lift arm support device. (See page 46.)

See the *SERVICE SCHEDULE*, Page 45 for the service interval for removing water from, or replacing the fuel filter

Open the engine cover.

Removing Water

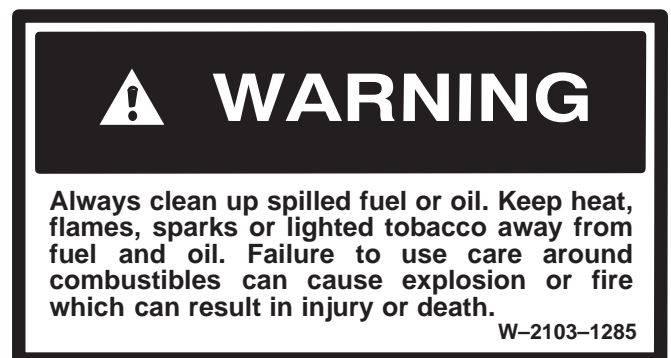
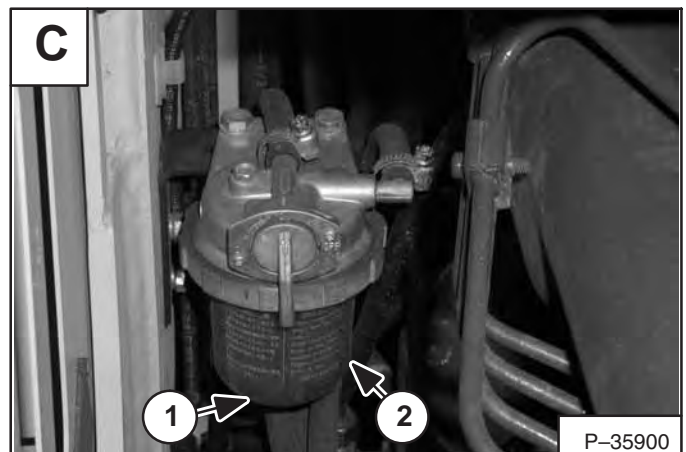
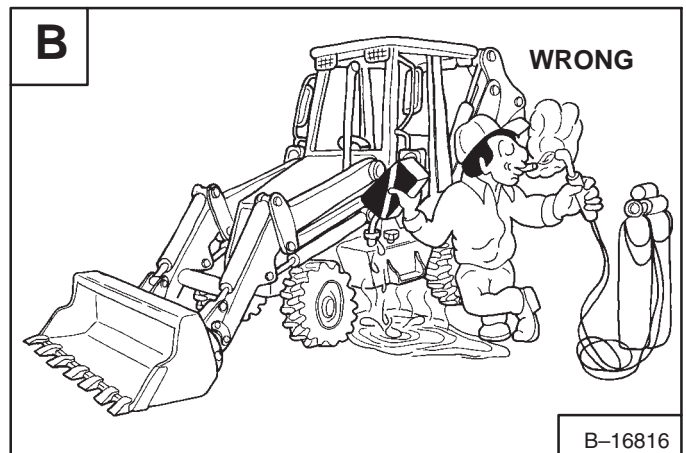
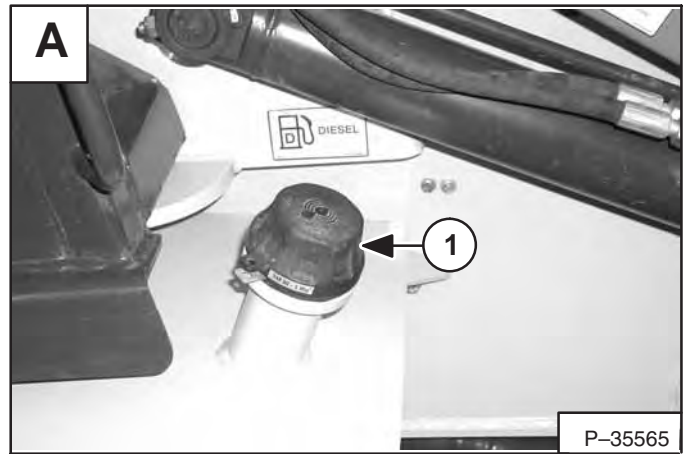
Loosen the drain (Item 1) [C] at the bottom of the filter element to remove water from the filter.

Replacing Element

Remove the filter element (Item 2) [C].

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 the air from the fuel system. (See page 52.)



HYDRAULIC/HYDROSTATIC SYSTEM

Checking And Adding Fluid

Use only recommended fluid in the hydraulic system. (See *SPECIFICATIONS* Page 77.)

Put the loader backhoe on a level surface.

Remove the backhoe boom lock. (See page 18.)

Retract the arm and bucket cylinders, put the bucket on the ground.

Lower the lift arms and tilt the Bob-Tach fully back.

Stop the engine.

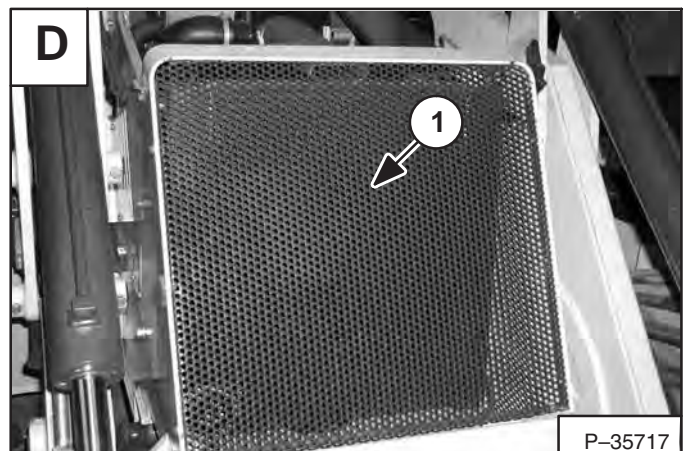
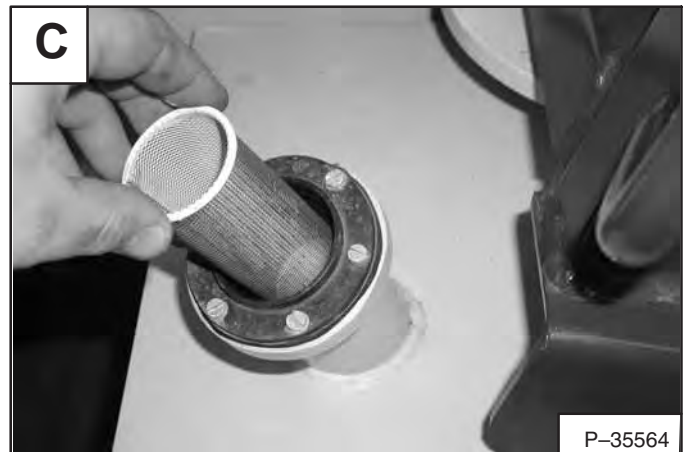
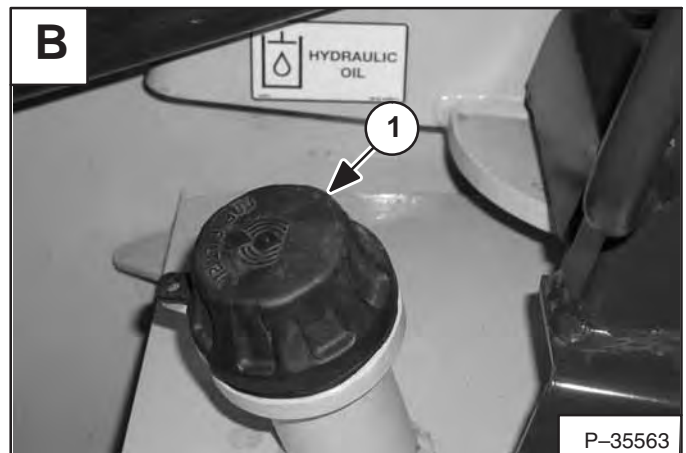
Check the fluid level in the sight gauge **[A]**.

Remove the fill cap (Item 1) **[B]**.

Check the condition of the fill strainer **[C]**. The screen must be installed in the fill neck when adding oil.

Add the fluid as needed to bring the level on the sight gauge to 2/3 to 3/4 full.

Install the fill cap (Item 1) **[B]**.



WARNING

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 which can result in injury or death.

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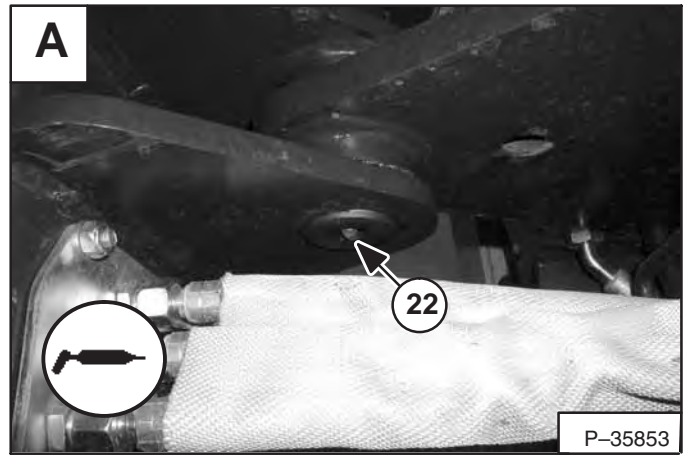
Cleaning The Cooler

The hydraulic oil cooler (Item 1) **[D]** is located under the radiator.

Use low air pressure or water pressure to clean the oil cooler.

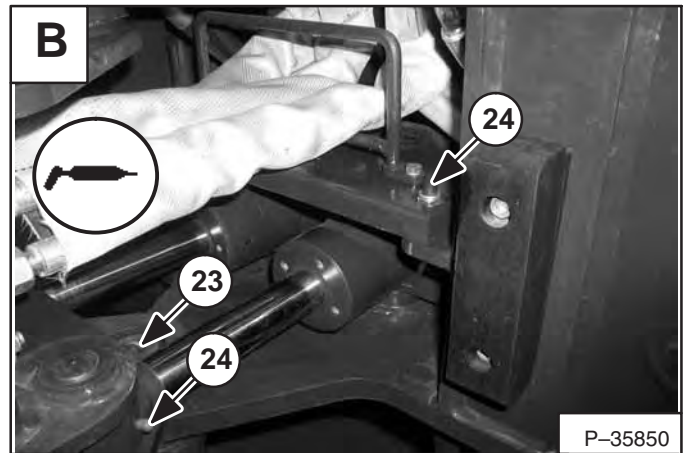
LUBRICATING THE LOADER BACKHOE (Cont'd)

22. Boom Swing Pin (Upper) [A]

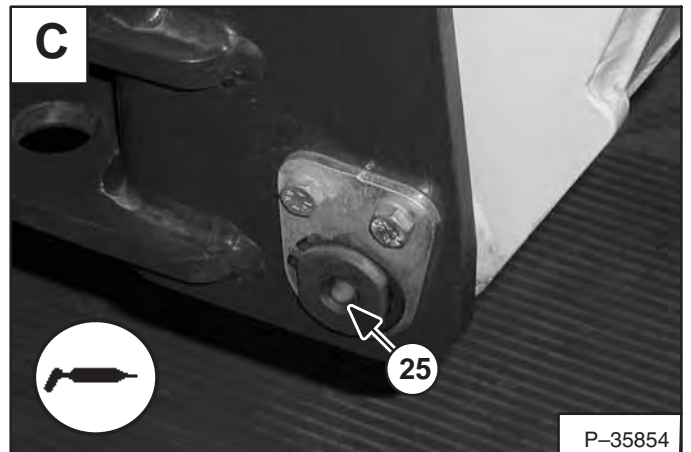


23. Boom Swing Pin (Lower) [B]

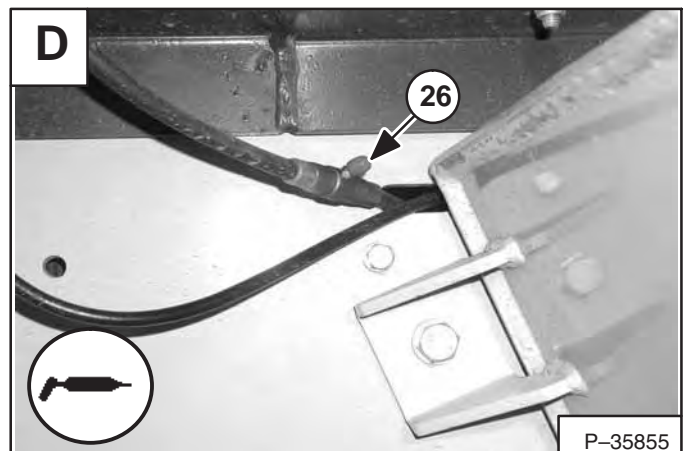
24. Boom Swing Cylinder (Both Sides) [B]



25. Boom Pivot [C]



26. Parking Brake Cable [D]



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