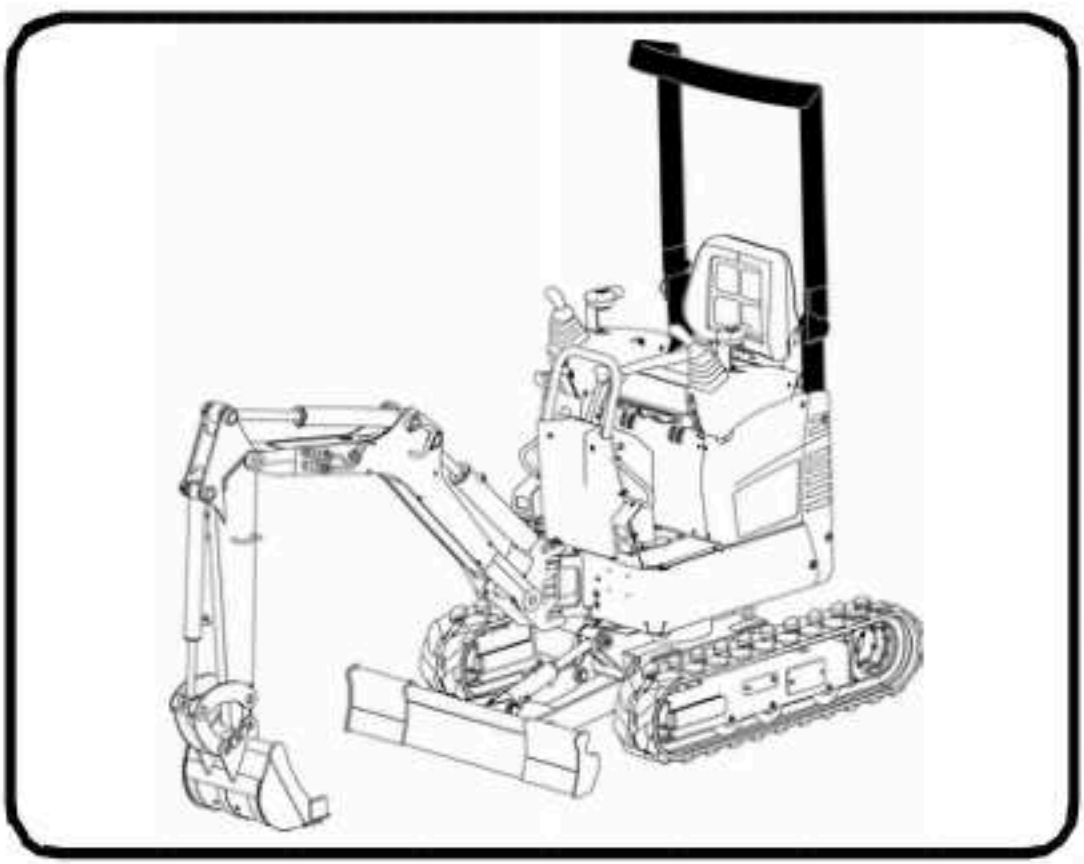
Bobcat®

Service Manual
418 Compact Excavator

S/N AB4711001 & Above



6986853 (10-10)

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Joystick Console Frame Removal And Installation

Remove the joystick console cover. (See Joystick Console Cover Removal And Installation on Page 40-50-1.)

Remove the microswitch. (See Left Console Microswitch Removal And Installation on Page 50-60-1.)

Remove the compression spring. (See Compression Spring Removal And Installation on Page 40-50-2.)

Remove the gas spring. (See Gas Spring Removal And Installation on Page 40-50-2.)

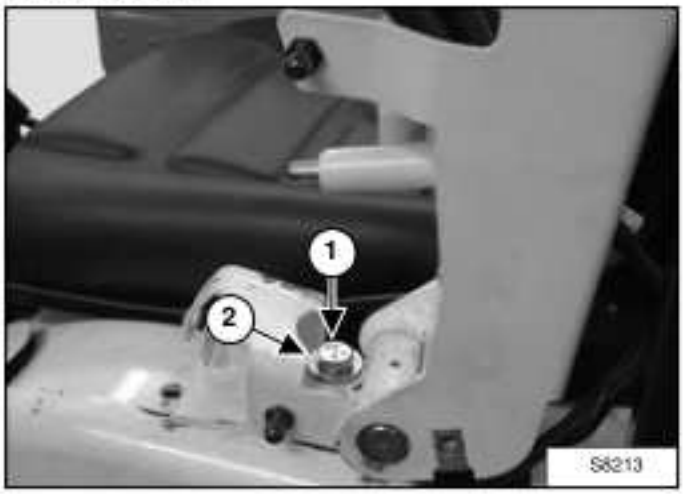
Remove the lever. (See Lever Removal And Installation on Page 40-50-3.)

IMPORTANT

When repairing hydrostatic and hydraulic systems, clean the work area before disassembly and keep all parts clean. Always use caps and plugs on hoses, tubelines and ports to keep dirt out. Dirt can quickly damage the system.

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Figure 40-50-11

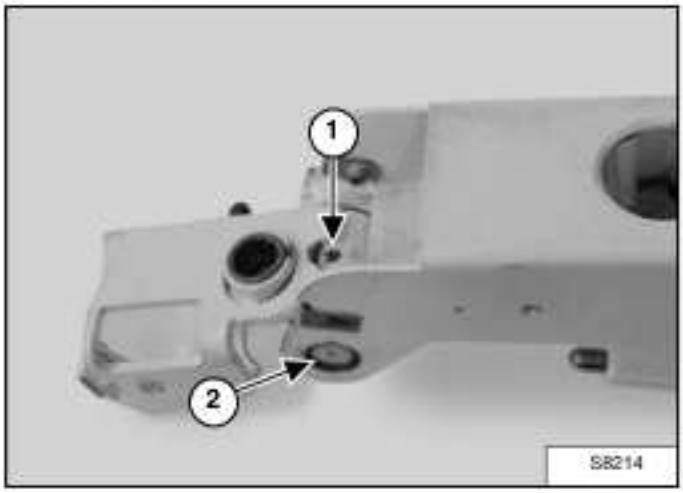


Remove the bolt (Item 1) and washer (Item 2) **[Figure 40-50-11]** from the console frame.

Remove the console frame from the excavator.

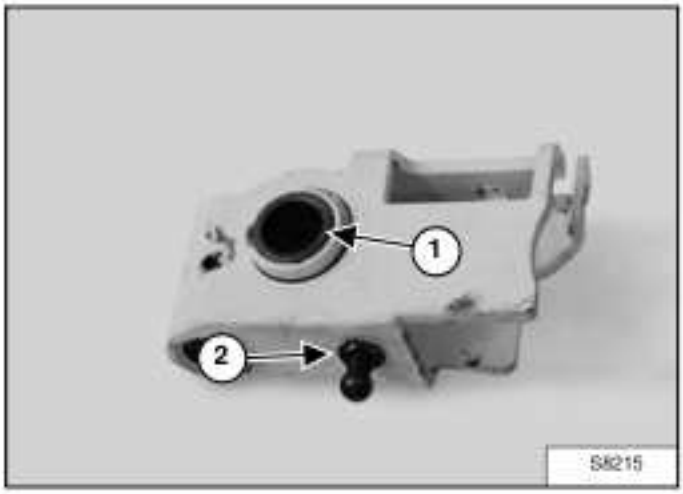
Joystick Console Frame Disassembly And Assembly

Figure 40-50-12



Remove the roll pin (Item 1) and pivot pin (Item 2) **[Figure 40-50-12]**.

Figure 40-50-13



Remove the bushing (Item 1) **[Figure 40-50-13]**.

Remove the pin and nut (Item 2) **[Figure 40-50-13]**.

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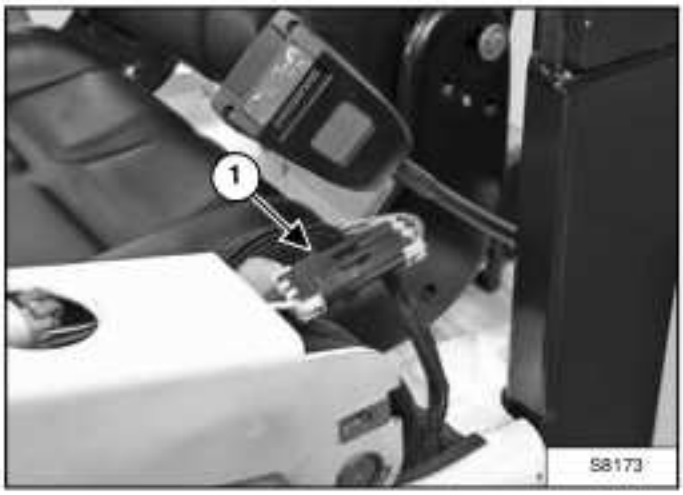
MICROSWITCH

Testing Left Console Microswitch

Remove the joystick console cover. (See Joystick Console Cover Removal And Installation on Page 40-50-1.)

Lower the control console.

Figure 50-60-1



Disconnect the microswitch harness (Item 1) **[Figure 50-60-1]** from the control harness.

Figure 50-60-2



Use a continuity tester to check the microswitch prior to removal. Test the continuity between the black and white wire pins (Item 1) **[Figure 50-60-2]**.

The microswitch is normally open.

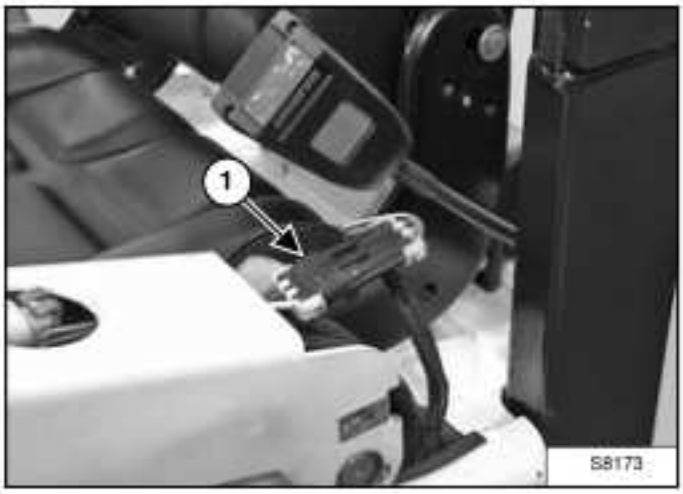
With the console raised the gauge reading should show no current.

By pushing the actuator on the microswitch, the gauge reading should show a completed circuit. If not, the microswitch is faulty and must be replaced.

Left Console Microswitch Removal And Installation

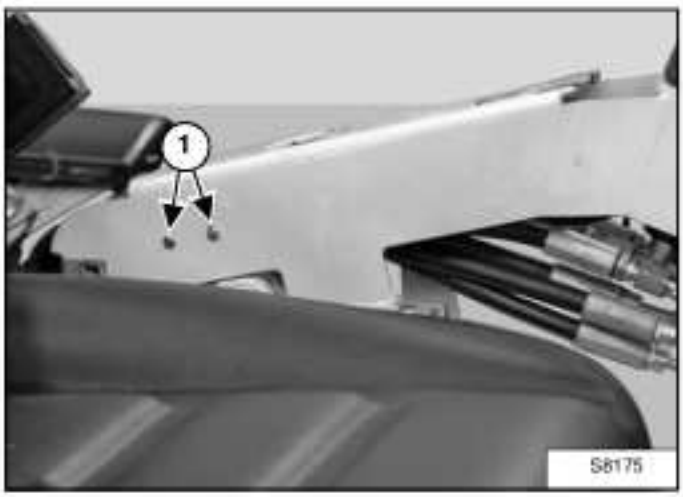
Remove the joystick console cover. (See Joystick Console Cover Removal And Installation on Page 40-50-1.)

Figure 50-60-3



Disconnect the microswitch harness (Item 1) **[Figure 50-60-3]** from the control harness.

Figure 50-60-4



Remove the nuts, lock washers and bolts (Item 1) **[Figure 50-60-4]** fastening the microswitch.

Remove the microswitch.

NOTE: The microswitch does not have an adjustment procedure. The microswitch is mounted to the frame in a fixed location.

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Hydraulic system

Pump - Hydraulic	Double gear pump
Pump Capacity	2 @ 10.0 L/min (2.64 GPM)
Auxiliary flow	20.0 L/min (5.28 GPM)
Control valve	9 spool, parallel type open center
Fluid Type	Bobcat Fluid, Hydraulic/Hydrostatic 6903117 - (2.5 Gal.) 6903118 - (5 Gal.) 6903119 - (55 Gal.)
System Relief Pressure	19 MPa (190 bar) (2756 psi)
Slew Relief Pressure	8,4 MPa (84 bar) (1218 psi)
Joystick Pressure	3,0 MPa (30 bar) (435 psi)
Port Relief Arm Base	22,5 MPa (225 bar) (3263 psi)
Port Relief Boom Base	23,2 MPa (232 bar) (3365 psi)
Hydraulic Filter Bypass	0,2 MPa (1,72 bar) (25 psi)

Hydraulic cylinders

	Bore	Rod	Stroke
Boom (Cushioned - Boom Up)	63,5 mm (2.50 in)	31,8 mm (1.25 in)	312,4 mm (12.30 in)
Arm	50,8 mm (2.00 in)	31,8 mm (1.25 in)	325,6 mm (12.82 in)
Bucket	44,5 mm (1.75 in)	25,4 mm (1.00 in)	385,1 mm (15.16 in)
Boom Swing	57,1 mm (2.25 in)	31,8 mm (1.25 in)	274,6 mm (10.81 in)
Blade	50,8 mm (2.00 in)	31,8 mm (1.25 in)	96,8 mm (3.81 in)
Undercarriage	44,5 mm (1.75 in)	25,4 mm (1.00 in)	400,1 mm (15.75 in)

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Safety Alert Symbol

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

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-2003-0903

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

I-2019-0284

DANGER

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

D-1002-1107

WARNING

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

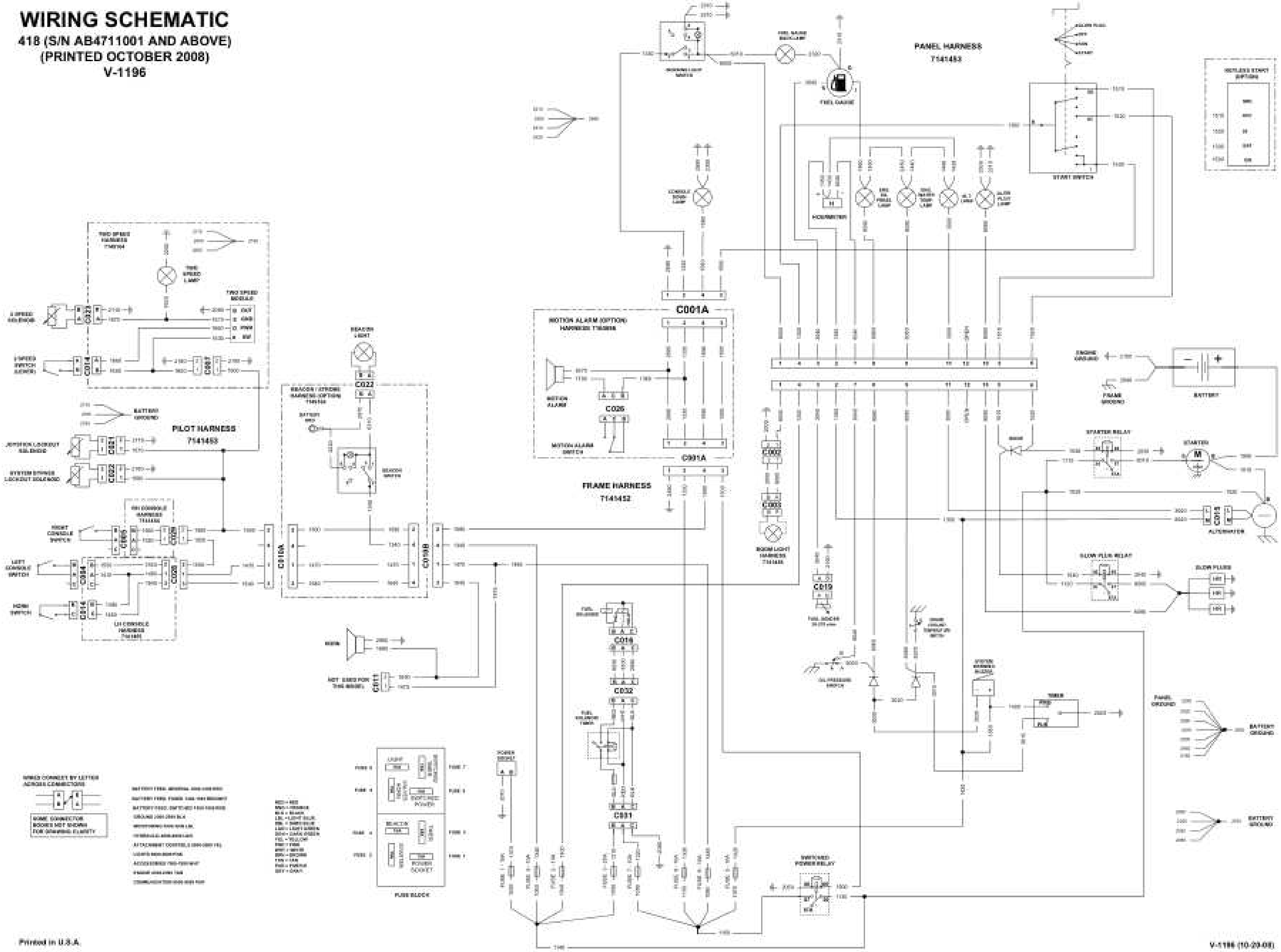
W-2044-1107

The following publications provide information on the safe use and maintenance of the Bobcat machine and attachments:

- The Delivery Report is used to assure that complete instructions have been given to the new owner and that the machine is in safe operating condition.
- The Operation & Maintenance Manual delivered with the machine or attachment contains operating information as well as routine maintenance and service procedures. It is a part of the machine and can be stored in a container provided on the machine. Replacement Operation & Maintenance Manuals can be ordered from your Bobcat dealer.
- Machine signs (decals) instruct on the safe operation and care of your Bobcat machine or attachment. The signs and their locations are shown in the Operation & Maintenance Manual. Replacement signs are available from your Bobcat dealer.
- An Operator's Handbook fastened to the operator cab. It's brief instructions are convenient to the operator. The handbook is available from your dealer in an English edition or one of many other languages. See your Bobcat dealer for more information on translated versions.
- The AEM Safety Manual delivered with the machine gives general safety information.
- The Service Manual and Parts Manual are available from your dealer for use by mechanics to do shop-type service and repair work.
- The Compact Excavator Operator Training Course is available through your local dealer or at **www.training.bobcat.com** or **www.bobcat.com**. This course is intended to provide rules and practices of correct operation of the Bobcat excavator. The course is available in English and Spanish versions.
- Service Safety Training Courses are available from your Bobcat dealer or at **www.training.bobcat.com** or **www.bobcat.com**. They provide information for safe and correct service procedures.
- The Bobcat compact excavator Safety Video is available from your Bobcat dealer or at **www.training.bobcat.com** or **www.bobcat.com**.

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