3RD EH Selective Control Valve

BLV10049

JOHN DEERE

INSTALLATION INSTRUCTIONS

LVU26954 13MAR14 (ENGLISH)

4044M, 4052M, and 4066M Tractors

John Deere Augusta Works
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BLV10049

Introduction

IMPORTANT: Read through this instruction thoroughly and familiarize yourself with the tractor before installing parts.

This instruction demonstrates procedures for installing the 3rd EH selective control valve (SCV) kit on 4M open station tractor.

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Recognize Safety Information

CAUTION: To prevent bodily injury, machine damage, or component failure:

- **Use proper tools for the job.**
- **Do not take shortcuts; follow procedure as listed.**
- **Read and heed all WARNINGS placed within instructions.**

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

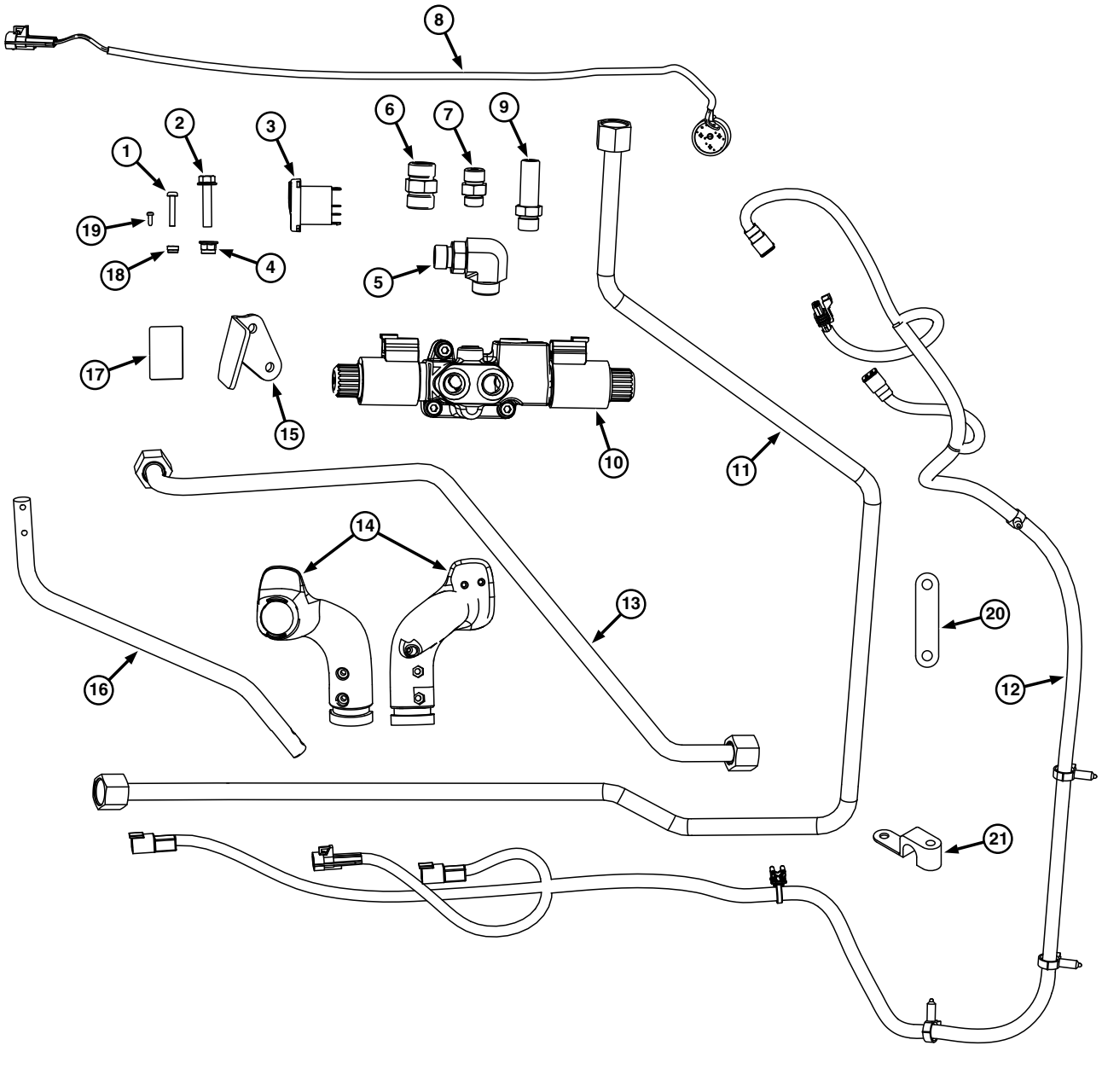
Follow recommended precautions and safe operating practices.



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Parts List



3rd Selective Control Valve Parts Kit

1— Pan Head Screw (2 used)
2— Cap Screw (4 used)
3— 3rd EH SCV Switch
4— Nut (4 used)
5— 90° Hydraulic Fitting
6— Straight Fitting
7— Straight Fitting
8— Grip Wire Harness
9— Straight Fitting
10— 3rd Selective Control Valve
11— Hydraulic Line
12— 3rd SCV Wire Harness
13— Hydraulic Line
14— Grip
15— 3rd SCV Label Bracket
16— Grip Handle
17— 3rd SCV Label
18— Nut (2 used)
19— Screw (2 used)
20— Bracket (4 used)
21— Clamp (4 used)

NOTE: Additional components may be needed to complete this kit installation, depending on tractor configuration. For installation instructions of additional components, refer to the following online instructions:

LVU28327—Kit Instruction, 4M Loader Version

LVU28328—Kit Instruction, 4M No Loader

NOTE: Assemble and torque oil lines and hydraulic fittings as per JDV 14.1.

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SW03989,0002048 -19-17MAR14-1/2

BLV10049

NOTE: Assemble and torque fasteners to JD Standards unless otherwise noted.

SW03989,0002048 -19-17MAR14-2/2

Parking Safely

1. Stop machine on a level surface.
2. Disengage PTO and stop attachments.
3. Lower attachments to the ground.
4. Lock park brake.
5. Stop engine.
6. Remove key.
7. Wait for engine and all moving parts to stop before you leave the operator station.
8. Close fuel shutoff valve if your machine is equipped.
9. Disconnect the negative (–) battery cable before servicing the machine.

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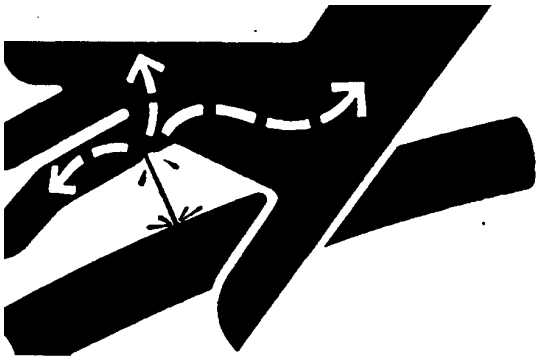
Prepare Machine

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.

NOTE: Retain all parts and hardware and return to customer unless specified differently in the procedure.

1. Relieve pressure from the hydraulic system by lowering the rockshaft and moving the SCV lever through all positions.



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Escaping Fluid

CAUTION: Avoid crushing injury. Use a safe lifting device and support machine securely on jack stands. Block front and rear of wheel not raised to prevent machine movement. Wheel can be heavy or difficult to handle when removing.

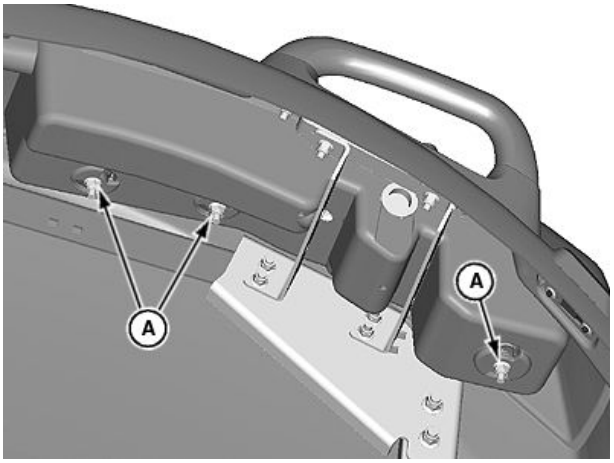
2. Remove rear wheel on right side of machine.

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3. Remove nuts (A) securing console cover to side panel. Do not remove console cover at this time.

A—Nut (3 used)

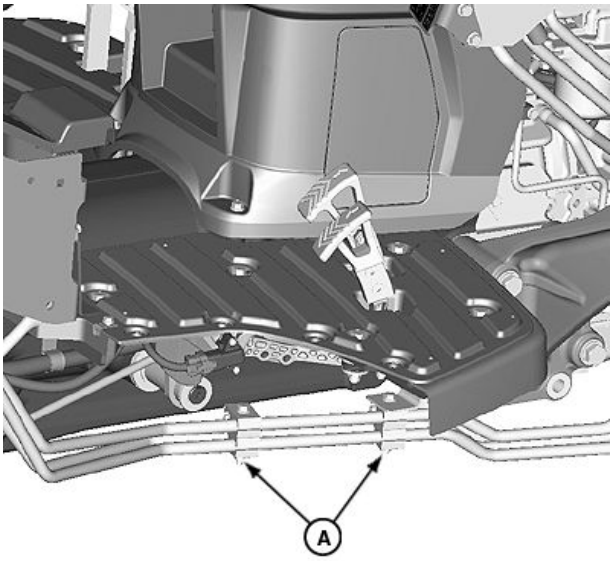


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4. Remove hydraulic line spacers (A) and retain for later use.

A—Hydraulic Line Spacers (2 used)



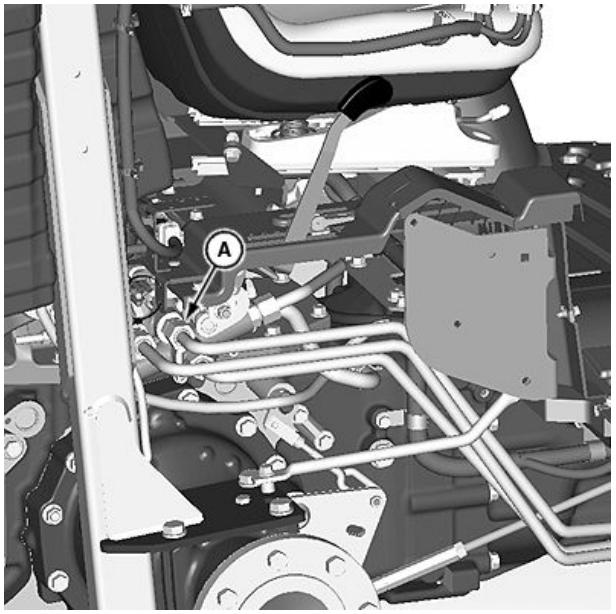
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5. Remove rockshaft-to-SCV hydraulic line fitting (A) at rockshaft.

A—Rockshaft-to-SCV Hydraulic Line Fitting



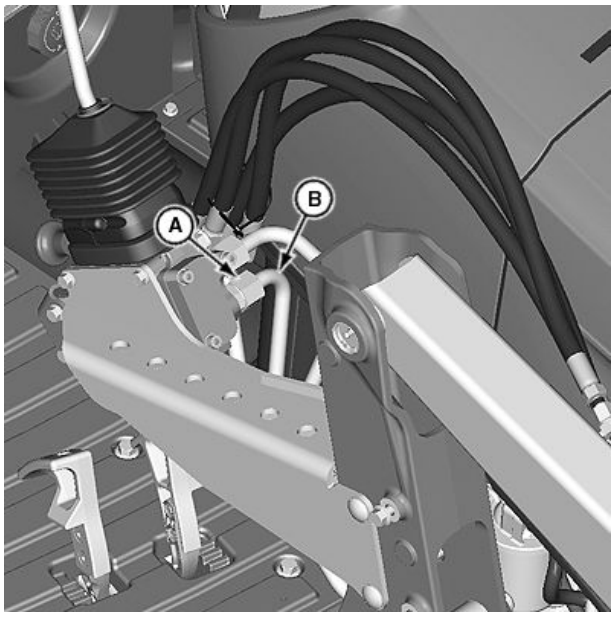
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6. Remove rockshaft-to-SCV hydraulic line fitting (A) at SCV valve and remove rockshaft-to-SCV hydraulic line (B).

A—Rockshaft-to-SCV Hydraulic Line Fitting

B—Rockshaft-to-SCV Hydraulic Line



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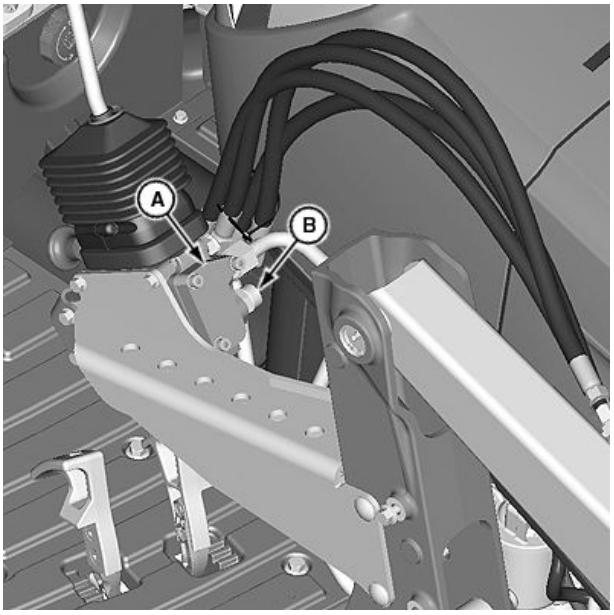
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7. Remove flange end cover (A) at selective control valve (SCV).
8. Remove straight fitting at SCV rockshaft input port (B).
9. Remove plug (C) from 3rd SCV PB1 outlet, and install it in SCV rockshaft input port (B) on SCV. Tighten to specification.

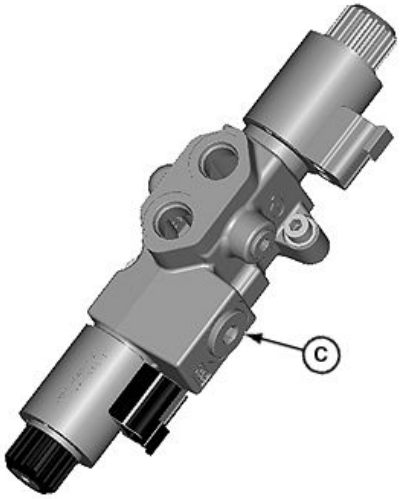
Specification

Plug—Torque.....24 N·m
212 lb.-in.

A—Flange End Cover
B—SCV Rockshaft Input Port
C—Plug



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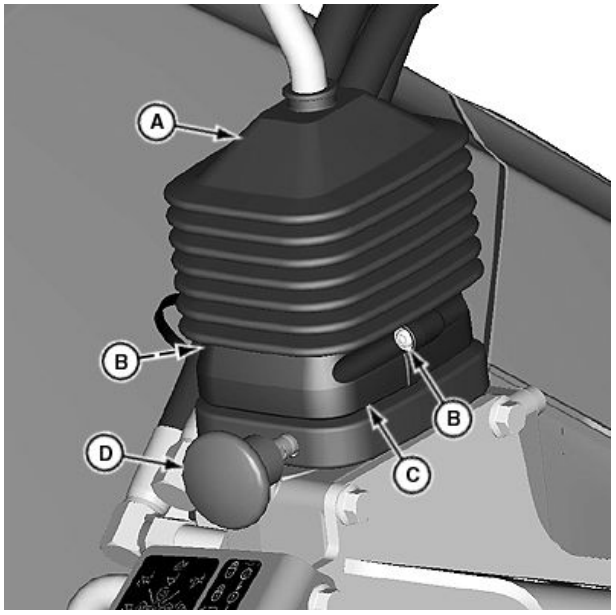
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10. Remove SCV lockout lever (D) handle.
11. Remove screws (B) and SCV cover clamp (C). Remove SCV cover (A).

A—SCV Cover
B—Screw (2 used)
C—SCV Cover Clamp
D—SCV Lockout Lever

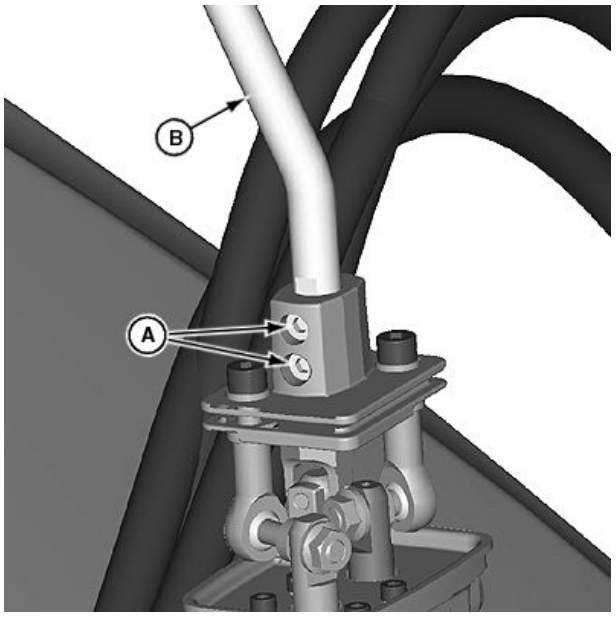


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12. Remove set screws (A) and remove SCV lever (B). Retain set screws (A) for later use.

A—Set Screw (2 used)
B—SCV Lever



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Install Selective Control Valve (SCV) and Hydraulic Lines

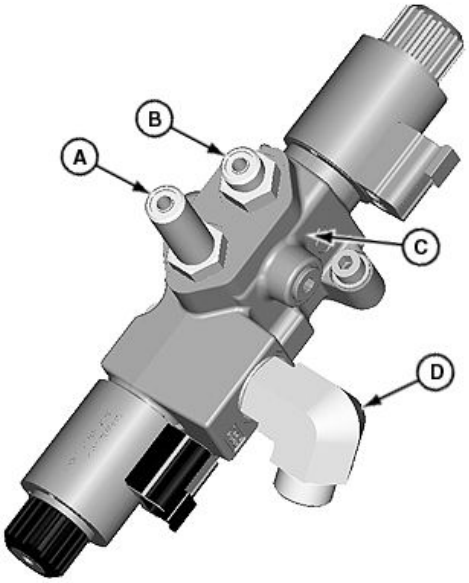
1. Install straight fittings (A) and (B) in 3rd selective control valve (C). Tighten to specification.

Specification

Straight Fittings—Torque.....50 N·m
37 lb.-ft.

2. Install 90° hydraulic fitting (D) on 3rd selective control valve (C). Do not tighten nut on fitting.

A—Straight Fitting (item 9 in parts list)
B—Straight Fitting (item 7 in parts list)
C—3rd Selective Control Valve (item 10 in parts list)
D—90° Hydraulic Fitting (item 5 in parts list)



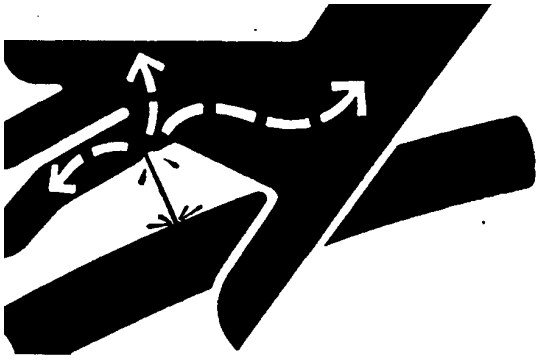
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CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.

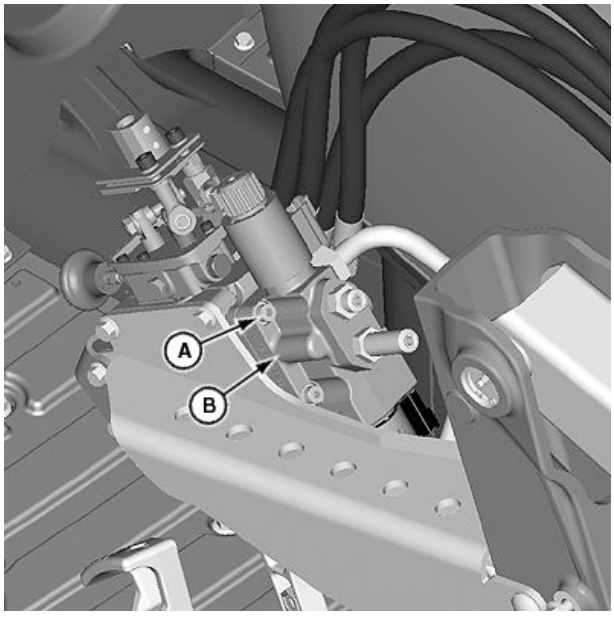


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3. Install 3rd selective control valve (B) on SCV and secure with cap screws (A). Tighten cap screws to specification.

Specification

Cap Screw—Torque.....24 N·m
212 lb.-in.



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A—Cap Screw (3 used)

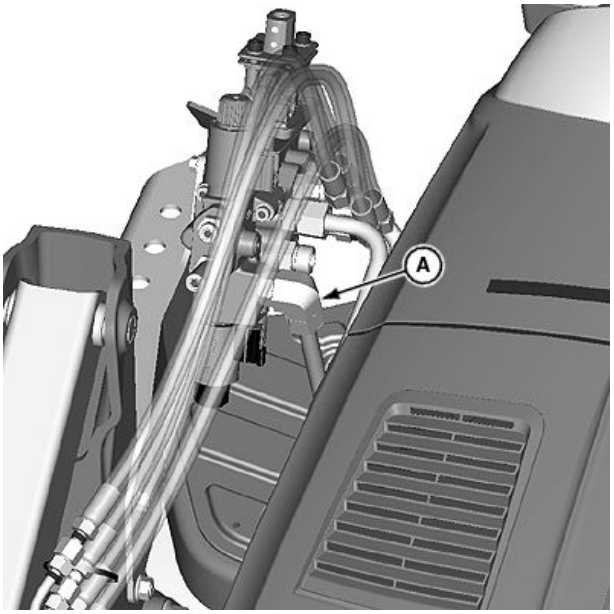
B—3rd Selective Control Valve (item 10 in parts list)

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4. Install hydraulic line (A) to 3rd SCV valve. Do not tighten at this time.

A—Hydraulic Line (item 11 in parts list)



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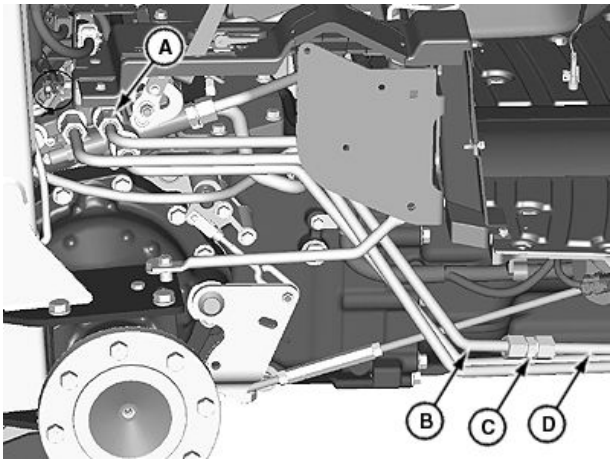
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5. Install straight fitting (C) in hydraulic line (D). Do not tighten at this time.
6. Install hydraulic line (B) to straight fitting (C) and to rockshaft valve (A). Tighten all lines and fittings to specification.

Specification

Hydraulic Line—Torque	50 N·m 37 lb.-ft.
90° Hydraulic Fitting—Torque	69 N·m 51 lb.-ft.

A—Hydraulic Fitting
B—Hydraulic Line (item 13 in parts list)
C—Straight Fitting (item 6 in parts list)
D—Hydraulic Line (item 11 in parts list)



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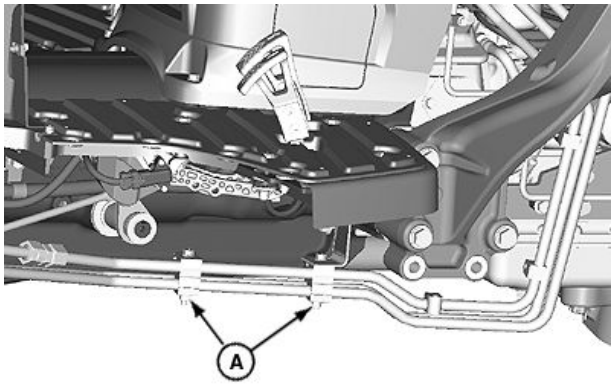
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7. Install hydraulic line spacers (A) that were removed earlier. Tighten hydraulic line spacer hardware to specification.

Specification

Hydraulic Line Spacer Hardware—Torque.....4 N·m (35.4 lb.-in.)

A—Hydraulic Line Spacer (2 used)



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Install Harness and Assemble Machine

1. Install grip wire harness (F) inside grip (B) and secure to grip handle (E) with pan head screws (A), nuts (D), and screws (C). Tighten pan head screws to specification.

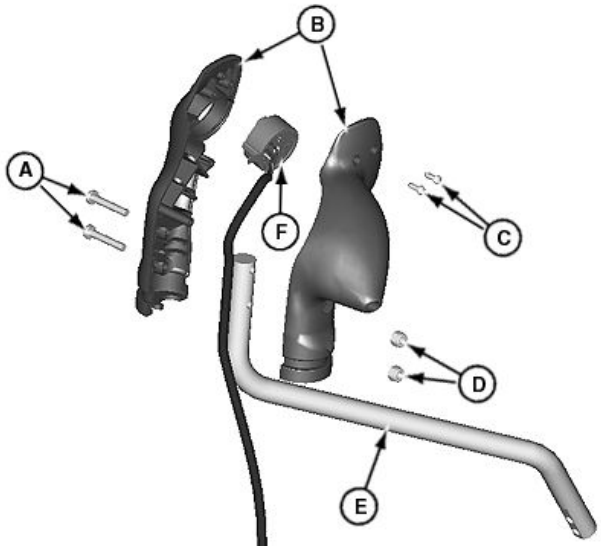
Specification

Pan Head Screw—Torque.....3.0—4.4 N·m (26.5—38.9 lb.-in.)

IMPORTANT: Avoid damage to the valve linkage caused by dust or water. The SCV cover is sealed to be weather tight. Route the grip wire harness outside of the SCV cover.

2. Install SCV cover to SCV lever and leave loose at this time.

A—Pan Head Screw (2 used) (item 1 in parts list)
B—Grip (item 14 in parts list)
C—Screw (2 used) (item 19 in parts list)
D—Nut (2 used) (item 18 in parts list)
E—Grip Handle (item 16 in parts list)
F—Grip Wire Harness (item 8 in parts list)



LV19664 —UN—07NOV13

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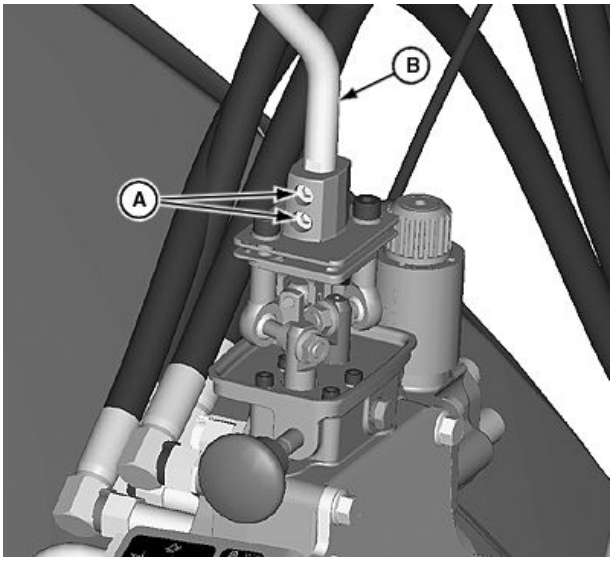
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3. Install grip assembly (B) into SCV and secure with set screws (A). Tighten set screws to specification.

Specification

Set Screw—Torque..... 13.6—20.4 N·m
120.3—180.5 lb.-in.

A—Set Screw (2 used) **B—Grip Assembly**

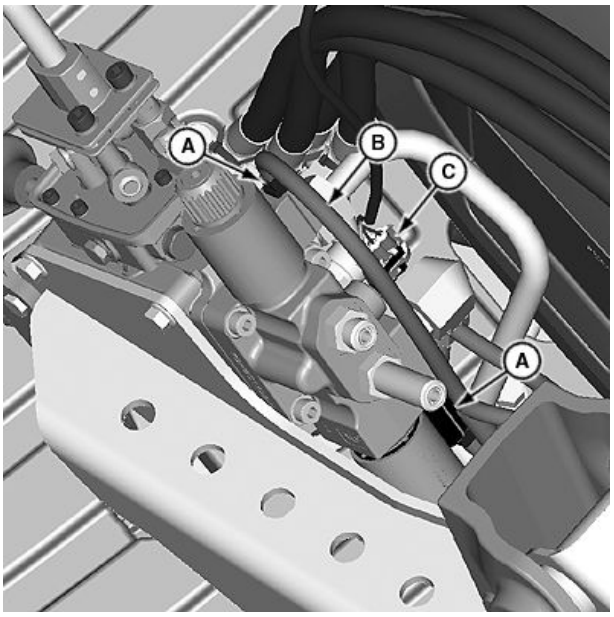


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4. Connect the 3rd SCV wire harness (B) to the 3rd SCV solenoids (A) and the grip wire harness (C).

A—3rd SCV Solenoid (2 used)
B—3rd SCV Wire Harness (item 12 in parts list)
C—Grip Wire Harness (item 8 in parts list)



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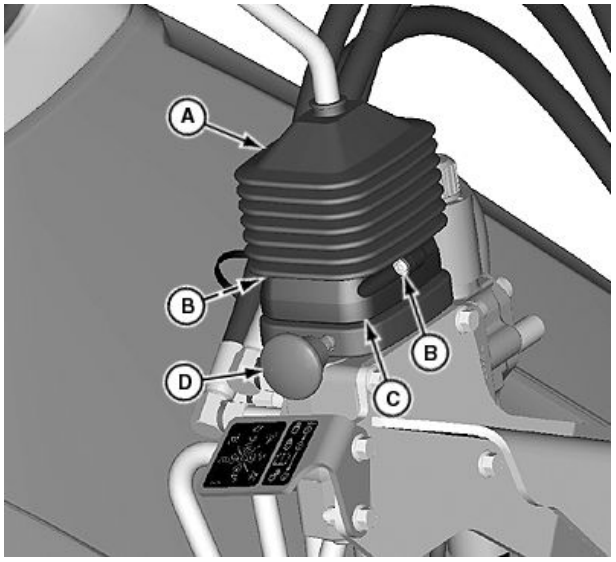
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NOTE: Ensure proper seating of SCV cover clamp (C) while tightening screws (B).

5. Install SCV cover (A) and secure with SCV cover clamp (C), screws (B), and tie strap.
6. Install SCV lockout lever (D) handle.
7. Secure grip harness as needed with tie straps.

A—SCV Cover
B—Screw (2 used)
C—SCV Cover Clamp
D—SCV Lockout Lever



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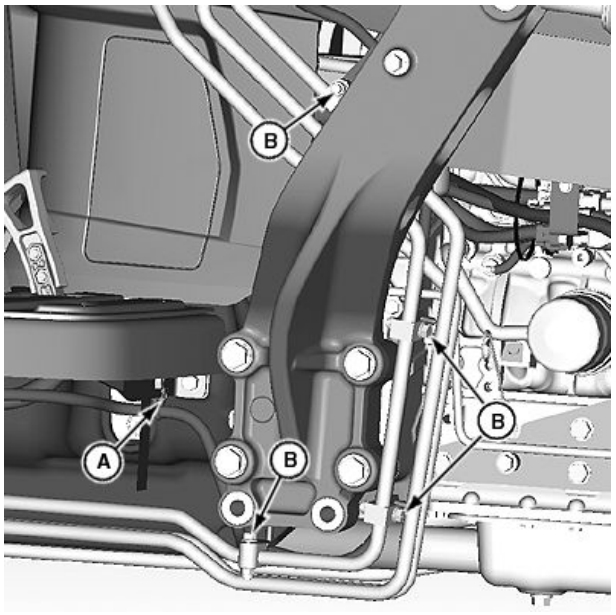
8. Route harness down hydraulic line and secure to clamps with cap screws (B). Tighten clamp cap screws to specification.

Specification

Clamp Cap Screw—Torque.....4 N·m
35.4 lb.-in.

9. Attach harness to underside of foot deck with harness clip (A).

A—Harness Clip
B—Cap Screw (4 used) (item 2 in parts list)



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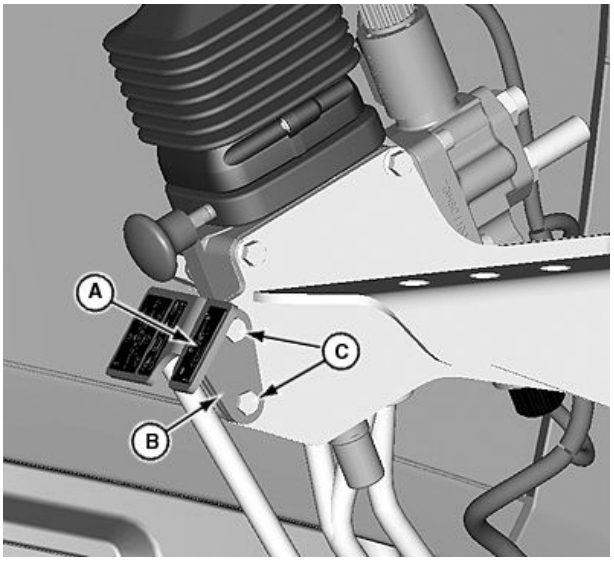
10. Remove cap screws (C) and install 3rd SCV label bracket (B). Secure with existing cap screws. Tighten 3rd SCV label bracket cap screws to specification.

Specification

3rd SCV Label Bracket Cap Screw—Torque.....37 N·m 27 lb.-ft.

11. Install 3rd SCV label (A) to label bracket.

A—3rd SCV Label
B—3rd SCV Label Bracket (item 15 in parts list)
C—Cap Screws (2 used)

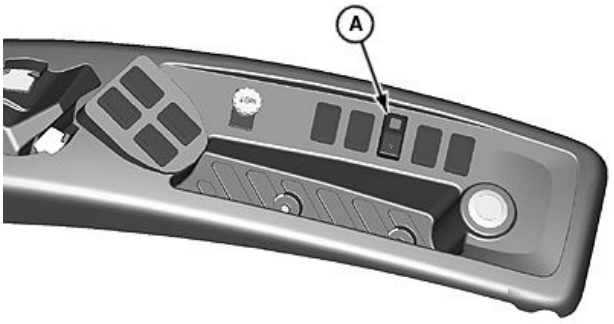


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12. Remove knockout from side console and install 3rd EH SCV switch (A).

A—3rd EH SCV Switch (item 3 in parts list)



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13. Connect harness connector to 3rd EH SCV switch to and secure console to fender with nuts (A).

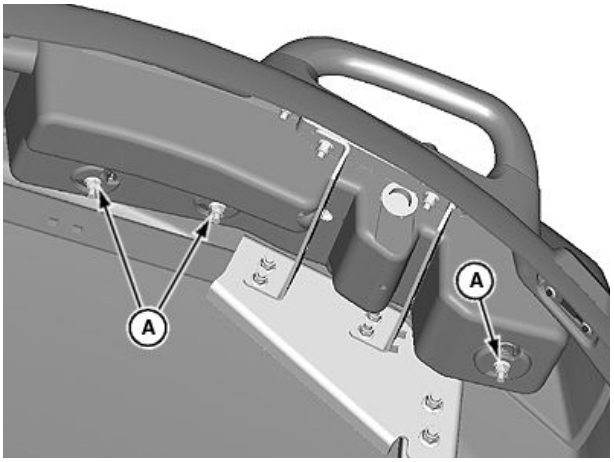
⚠ CAUTION: Avoid crushing injury. Use a safe lifting device and support machine securely on jack stands. Block front and rear of wheel not raised to prevent machine movement. Wheel can be heavy or difficult to handle when removing.

14. Install rear wheel on right side of machine. Torque fasteners to specification.

Specification

Wheel Fastener—Torque.....140 N·m 103 lb.-ft.

A—Nut (3 used)



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