

3rd EH Selective Control Valve (SCV) Update Kit (Cab)

BLV10961



JOHN DEERE

INSTALLATION INSTRUCTIONS

LVU34218 09NOV17 (ENGLISH)

3033R, 3038R, 3039R, 3045R, and 3046R

John Deere Augusta Works
LVU34218 (09NOV17)

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Moline, Illinois

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A John Deere ILLUSTRATION™ Manual

LVU34218-19-09NOV17

Introduction

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

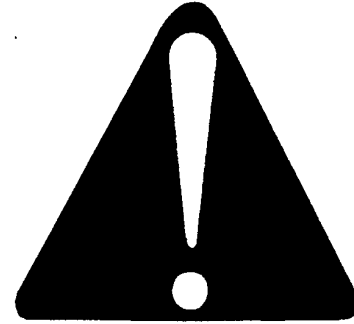
This instruction demonstrates procedures to install the Rear EH 1st SCV update kit on a 3R cab tractor.

PR59899,000040D -19-25OCT17-1/1

Recognize Safety Information

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.



T81389 —UN—28JUN13

DX,ALERT -19-29SEP98-1/1

Understand Signal Words

DANGER; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards. DANGER or WARNING safety signs are located near specific hazards. General



▲ WARNING

▲ CAUTION

precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

TS187 —19—30SEP88

DX,SIGNAL -19-05OCT16-1/1

Follow Safety Instructions

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.



TS201—UN—15APR13

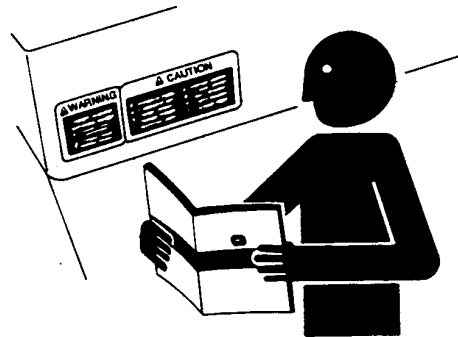
If you do not understand any part of this manual and need assistance, contact your John Deere dealer.

DX,READ -19-16JUN09-1/1

Replace Safety Signs

Replace missing or damaged safety signs. Use this operator's manual for correct safety sign placement.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.



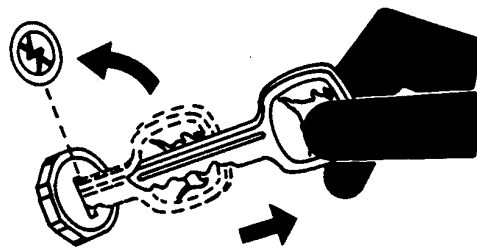
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DX,SIGNS -19-18AUG09-1/1

Park Machine Safely

Before working on the machine:

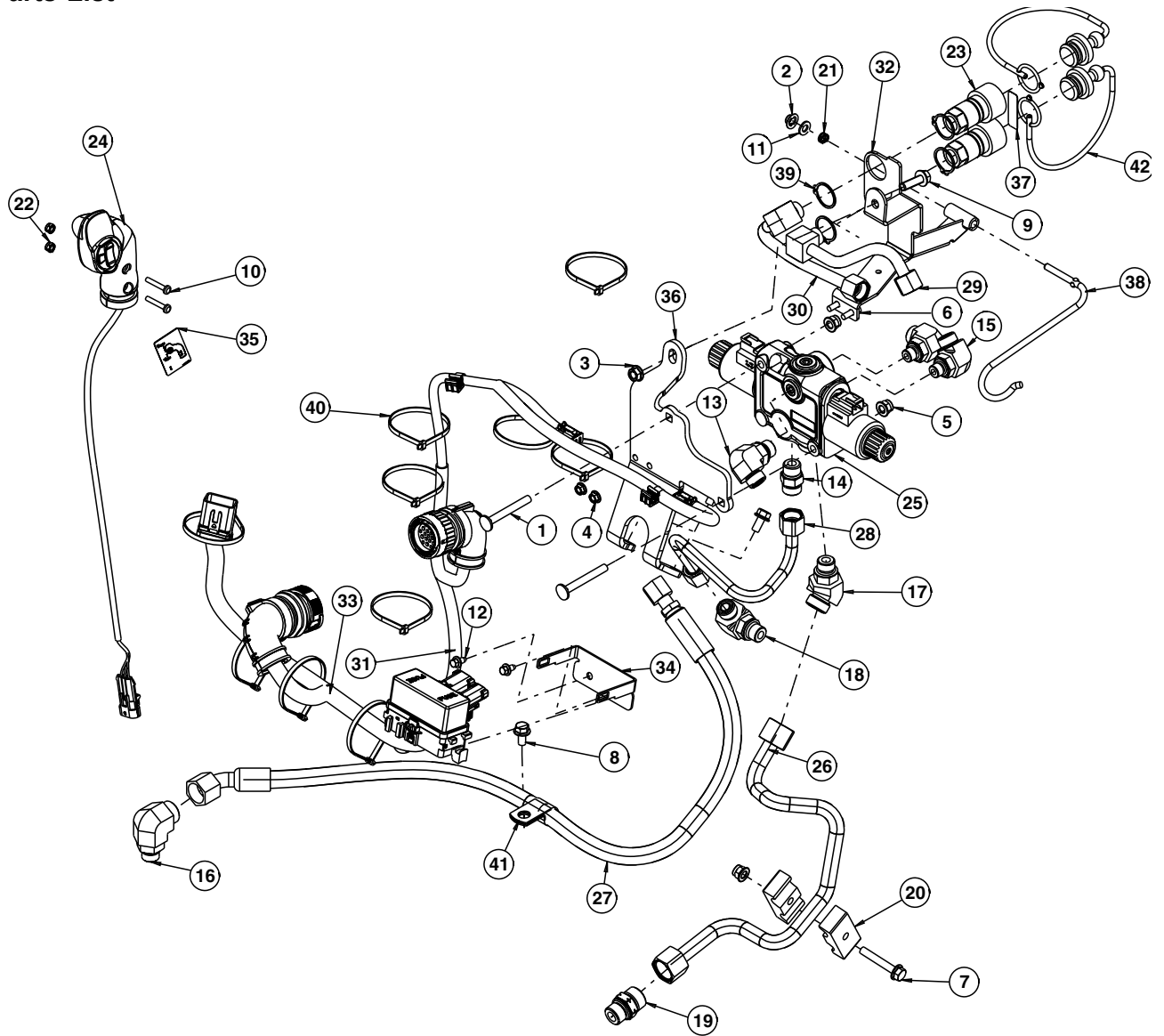
- Lower all equipment to the ground.
- Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.



TS230—UN—24MAY89

DX,PARK -19-04JUN90-1/1

Parts List



PY46545 —UN—24OCT17

Continued on next page

PR59899.000040E -19-24OCT17-1/2

Item	Part Number	Description	Quantity
1	03M7224	Bolt, M8x65	2
2	A16491	Push Nut	1
3	14M7298	Nut, M8	1
4	14M7303	Nut, M6	2
5	14M7396	Lock Nut M8	3
6	19M7775	Screw, M6x16	2
7	19M7800	Screw, M8x50	1
8	19M7865	Screw, M8x16	3
9	19M7868	Screw, M8x30	1
10	21H1486	Screw	2
11	24M7055	Washer M8	1
12	37M7089	Screw, Self-Tapping	2
13	61H1005	Fitting, Elbow 90°	1
14	61H1161	Adapter with O-Ring	1
15	61H1314	Fitting, Elbow 90°	2
16	61H1405	Fitting, Elbow 90°	1
17	61H1680	Fitting, Elbow 45°	1
18	61M5017	Fitting, Elbow 90°	1
19	AM123226	Hydraulic Fitting	1
20	H111730	Block Clamp	2
21	L207519	Compression Ring	1
22	LVA12162	Lock Nut	2
23	LVA13231	Quick Coupler, 1/2"	2
24	LVA17519	Grip with Harness	1
25	LVA19598	Valve	1
26	LVA19756	Hydraulic Line (3rd SCV to Rockshaft)	1
27	LVA22640	Hydraulic Hose (EH solenoid valve to dual spool control valve)	1
28	LVA19761	Hydraulic Line (3rd SCV to Tank)	1
29	LVA19793	Hydraulic Line (Port B to Coupler)	1
30	LVA19794	Hydraulic Line (Valve to Coupler)	1
31	LVA19967	Wiring Harness	1
32	LVA23398	Rear SCV Coupler Bracket	1
33	LVA21172	Wiring Harness	1
34	LVU24790	Load Center Bracket	1
35	LVU27655	SCV Label	1
36	LVU27964	EH Solenoid Valve Bracket	1
37	LVU28489	SCV Label	1
38	LVU31371	Spring Clip	1
39	M42702	Snap Ring	4
40	R105388	Tie Strap	10
41	T28949	Hose Clamp	1
42	W42420	Dust Cap, Green	2

PR59899,000040E -19-24OCT17-2/2

Prepare Machine

NOTE: To install the 3rd EH selective control valve (SCV) kit, a dual SCV kit must already be installed on the 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.

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

⚠ CAUTION: Avoid injury! Remove wheels safely. 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. Raise rear of machine, support on stands, and remove right rear wheel.

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Prepare Valve Assembly

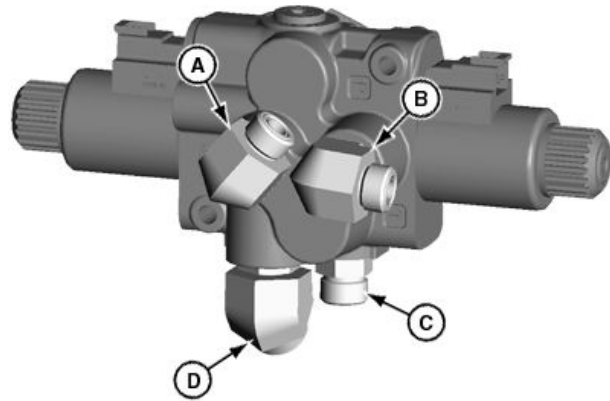
NOTE: Assemble and torque oil lines and hydraulic fittings as per JDV 14.1. Make sure that adapter O-rings and face seals are properly installed. Inspect the fitting sealing surfaces and O-ring. They must be free of dirt or defects. Lubricate O-rings and install into groove using petroleum jelly to hold in place.

NOTE: The 3 o'clock position on the EH valve is the zero degree reference mark.

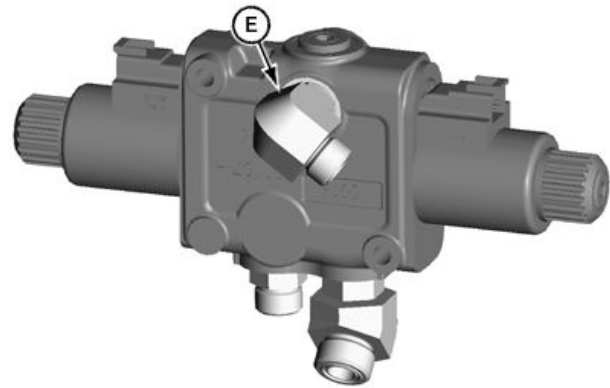
1. Install 90° elbow fitting (A) up at 50°.
2. Install 90° elbow fitting (B) down at 5°.
3. Install straight adapter fitting (C).
4. Install 45° elbow fitting (D) with EH port facing front.
5. Install 90° elbow fitting (E) down at 35°.

A—90° Elbow Fitting (Item 15 on Parts List)
 B—90° Elbow Fitting (Item 15 on Parts List)
 C—Straight Fitting (Item 14 on Parts List)

D—45° Elbow Fitting (Item 17 on Parts List)
 E—90° Elbow Fitting (Item 16 on Parts List)



LV22280 —UN—30JUN14



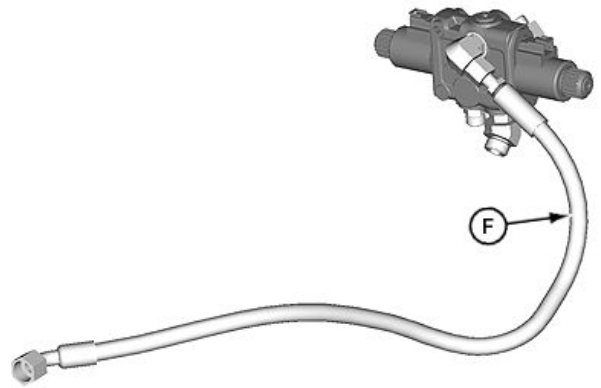
LV22281 —UN—30JUN14

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PR59899,0000410 -19-24OCT17-1/2

6. Install hydraulic hose (F) to EH SCV assembly.

**F—Hydraulic Hose (Item 27 on
Parts List)**



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Install Hydraulic Lines and Valve Assembly

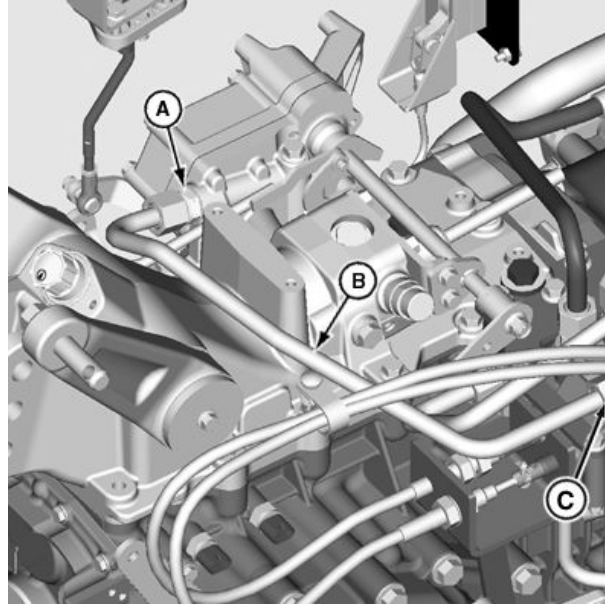
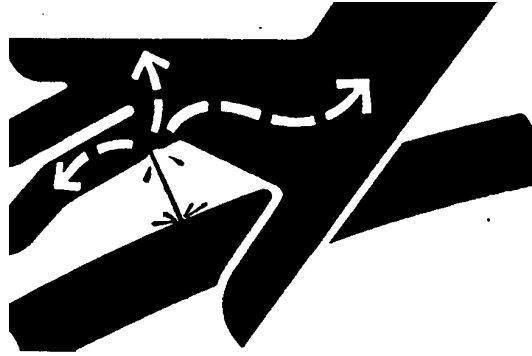
⚠ CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high-pressure 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. Assemble and torque oil lines and hydraulic fittings as per JDV 14.1. unless otherwise noted.

1. Disconnect and remove rockshaft to dual spool control valve hydraulic line (B).
2. Remove straight fitting from rockshaft and install straight fitting with screen (A).
3. Remove elbow fitting from dual spool control valve and install 90° elbow fitting (C) from update kit.

A—Straight Fitting (Item 19 on Parts List) C—Elbow Fitting (Item 16 on Parts List)
 B—Hydraulic Line



X9811—UN—23AUG88

PY41309—UN—24OCT17

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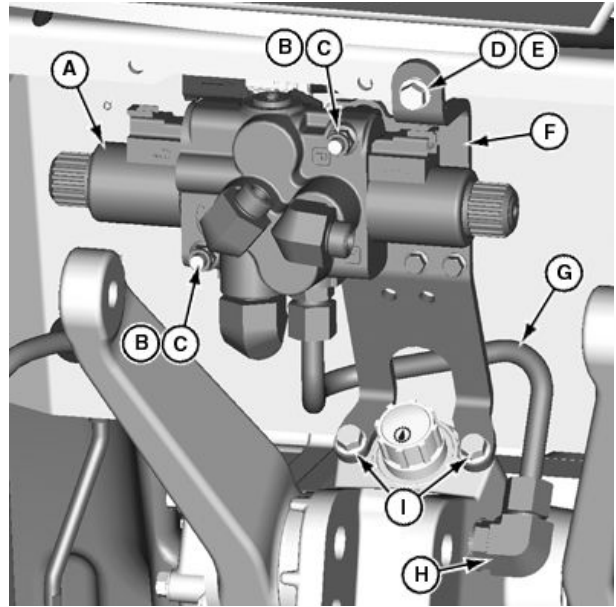
4. Remove plug and install 90° elbow fitting (H) with port facing front of tractor at 45°.
5. Install EH solenoid valve mounting bracket (F) to rockshaft with two cap screws (I).
6. Install EH solenoid valve (A) to mounting bracket using two round head square neck cap screws (B) and nuts (C). Tighten to specification.

Specification

M8 Nut—Torque..... 20 ± 4 N·m (15 ± 3 lb.-ft.)

7. Secure mounting bracket to cab support using cap screw (D) and nut (E).
8. Install and connect EH SCV to tank hydraulic line (G).

- | | |
|--|--|
| A—EH Solenoid Valve (Item 25 on Parts List) | F—EH Solenoid Valve Mounting Bracket (Item 32 on Parts List) |
| B—M8 Round Head Square Neck Cap Screw (2 used)(Item 1 on Parts List) | G—Hydraulic Line (Item 28 on Parts List) |
| C—Nut (Item 5 on Parts List) | H—90° Elbow Fitting (Item 18 on Parts List) |
| D—M8 Cap Screw (Item 9 on Parts List) | I— M8 Cap Screw (2 used)(Item 8 on Parts List) |
| E—Nut (Item 3 on Parts List) | |



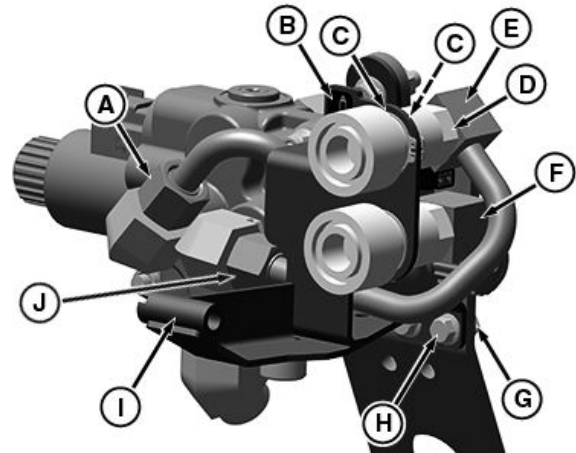
LV22283 —UN—08JUL14

PR59899.0000411 -19-24OCT17-2/5

9. Install snap ring (C) into first groove of each quick coupler (D).

NOTE: For picture clarity, dust caps are not shown.

10. Insert quick coupler (D) into the bottom hole of rear SCV coupler bracket (I) and lock it into place with a snap ring in the second groove. Install dust cap.
11. Connect and torque quick coupler with bracket to hydraulic line (F).
12. Attach rear SCV coupler bracket (I) to EH solenoid valve mounting bracket with two cap screws (H) and flange nuts (G).
13. Connect hydraulic line (E) to port A (J) on the EH solenoid valve. Do not completely tighten line at this time.
14. Insert quick coupler (D) into the top hole of rear SCV coupler bracket (I) and position snap ring and dust cap onto cylinder of quick coupler but do not place snap ring into second groove at this time.
15. Connect quick coupler to hydraulic line (E) and lock it into place with the snap ring in the second groove.
16. Connect hydraulic line (F) to port B (A) on the EH solenoid valve. Do not completely tighten at this time.
17. Tighten and torque hydraulic line (E) at port A (J).
18. Tighten and torque hydraulic line (F) at port B (A).



- | | |
|---|---|
| A—Port B | F—Hydraulic Line (Item 29 on Parts List) |
| B—SCV Label (Item 37 on Parts List) | G—Flange Nut (2 used)(Item 4 on Parts List) |
| C—Snap Ring (4 used)(Item 39 on Parts List) | H—Cap Screw (2 used)(Item 6 on Parts List) |
| D—Quick Coupler (Item 23 on Parts List) | I— Rear SCV Coupler Bracket (Item 32 on Parts List) |
| E—Hydraulic Line (Item 30 on Parts List) | J—Port A |

19. Install SCV decal (B).

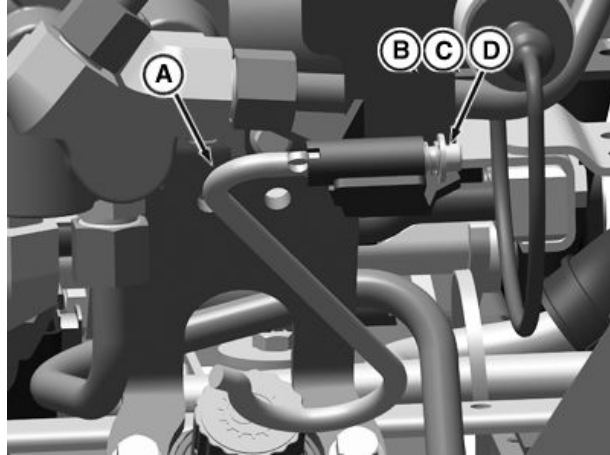
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PY46546 —UN—24OCT17

20. Insert spring clip (A) into rear SCV coupler bracket and install compression spring (B), washer (C), and push nut(D).

- | | |
|--|---|
| A —Spring Clip (Item 38 on Parts List) | C —Washer (Item 11 on Parts List) |
| B —Compression Spring (Item 21 on Parts List) | D —Push Nut (Item 2 on Parts List) |

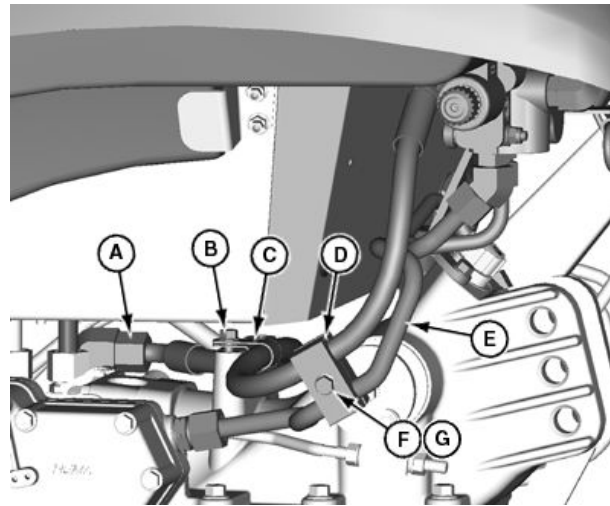


PY41307—UN—24OCT17

PR59899,0000411 -19-24OCT17-4/5

21. Install EH SCV to rockshaft hydraulic line (E).
 22. Route and connect hydraulic hose to dual spool SCV (A).
 23. Secure hydraulic hose to hydraulic line (E) using two block clamps (D) and a cap screw (F) and nut (G).
 24. Secure hydraulic hose to rockshaft using hose clamp (C) and cap screw (B).

- | | |
|---|--|
| A —Dual Spool SCV | E —Hydraulic Line (Item 27 on Parts List) |
| B —Cap Screw (Item 8 on Parts List) | F —Cap Screw (Item 7 on Parts List) |
| C —Hose Clamp (Item 41 on Parts List) | G —Nut (Item 5 on Parts List) |
| D —Block Clamp (Item 20 on Parts List) | |



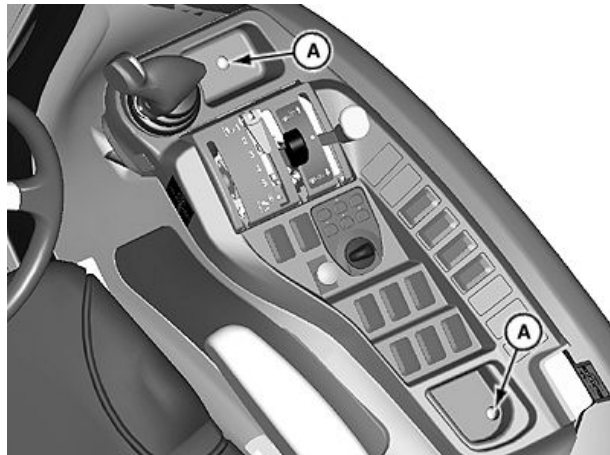
LV22287—UN—08JUL14

PR59899,0000411 -19-24OCT17-5/5

Install Load Center and Wiring Harness

1. Remove cap screws (A) securing console cover to side panel, do not remove console cover.

- A**—Cap Screw (2 used)



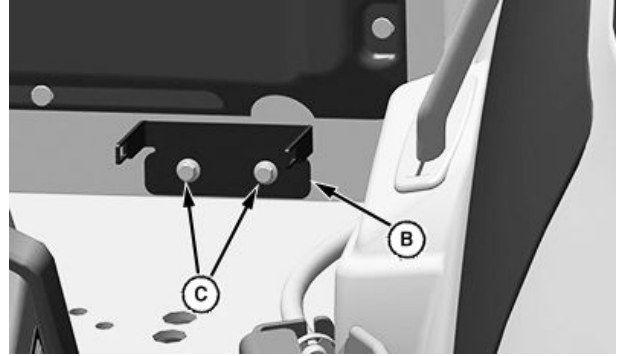
LV19230—UN—01OCT13

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PR59899,0000412 -19-26OCT17-1/9

2. Using load center bracket (B) as a template, drill holes in the rear cab plate using a #3 drill bit.
3. Install load center bracket (B). Secure with self-tapping screws (C).

B—Load Center Bracket (Item 34 on Parts List) **C—Screw, Self Tapping**

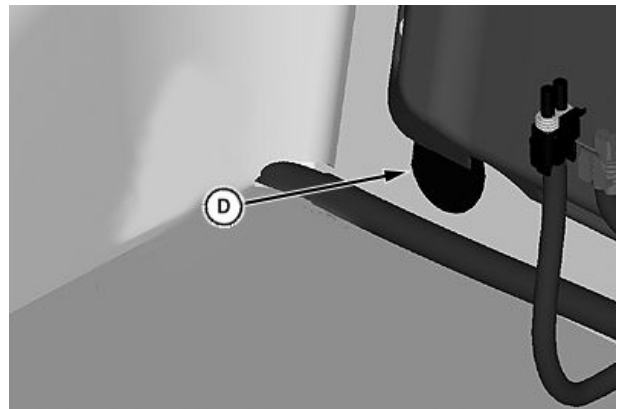


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4. Remove seal (D) from rear cab wall.

D—Seal



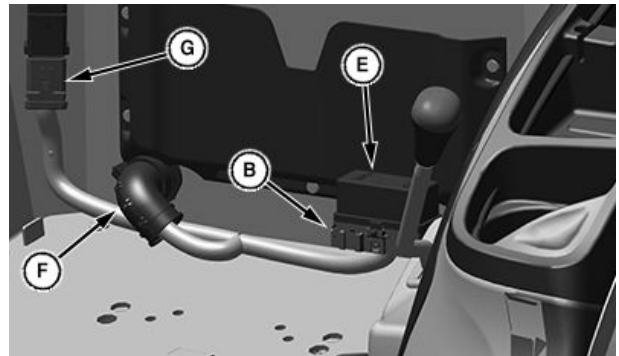
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PR59899,0000412 -19-26OCT17-3/9

5. Install load center wiring harness (E) in load center bracket (B).
6. Install load center harness wire shield (F) in rear cab panel through access hole.
7. Raise console cover and reposition inner fender to route and connect load center harness (G) to lower cab harness.

B—Load Center Bracket
E—Load Center Wiring Harness

F—Load Center Harness Wire Shield
G—Load Center Wiring Harness (Item 31 on Parts List)



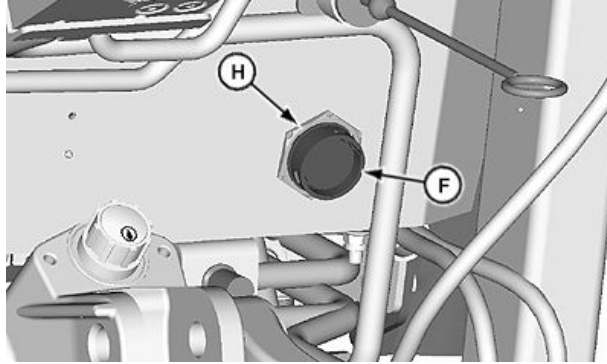
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PR59899,0000412 -19-26OCT17-4/9

8. Secure load center harness wire shield (F) with nut (H).

F—Load Center Harness Wire Shield H—Nut



LV19234—UN—01OCT13

PR59899,0000412 -19-26OCT17-5/9

9. Connect EH SCV wiring harness (K) to load center harness.

10. Twist collar on connector to lock in place.

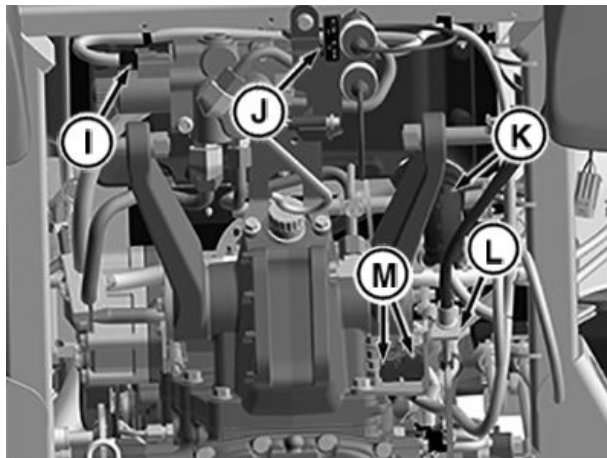
11. Connect wire labeled A to right solenoid (J) on the rear EH valve.

12. Connect wire labeled B to the left solenoid (I) on the rear EH valve.

NOTE: If MBR bracket is not present, secure diverter and creep-to-position connectors (M) to the right-hand cab support with tie straps.

13. Connect diverter and creep-to-position connectors (M) to horizontal support (L).

14. Secure actuator harness to right-hand cab support with tie straps.



PY41310—UN—26OCT17

I— Left Solenoid
J— Right Solenoid
K—EH SCV Wiring Harness
(Item 33 on Parts List)

L—Horizontal Support
M—Diverter and Creep-to-
Position Connectors

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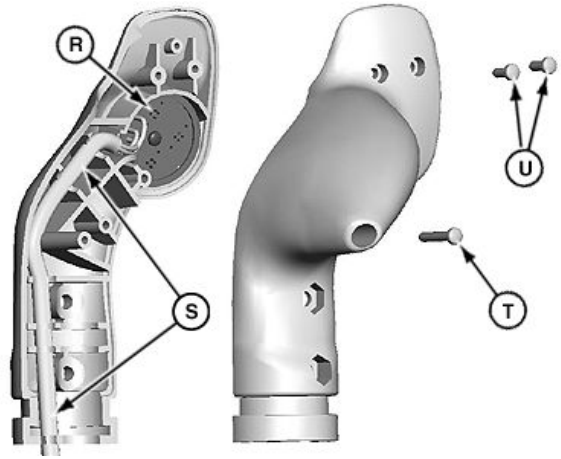
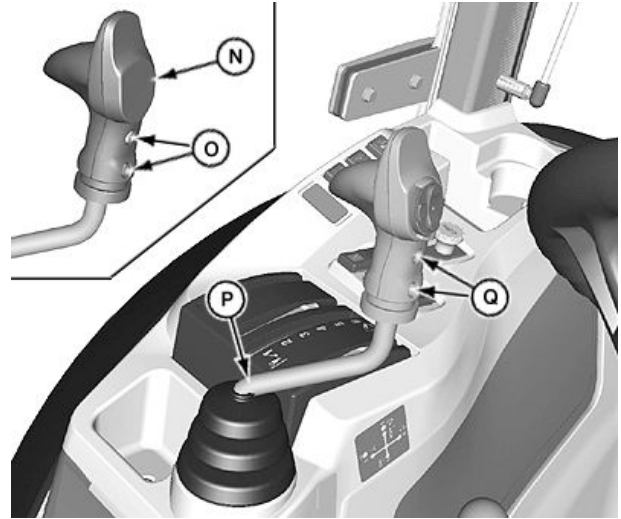
PR59899,0000412 -19-26OCT17-6/9

15. Remove two screws (O) and nuts from the original grip (N) on the multi-function lever. Lift the grip to remove it from the machine.
16. Install the grip harness switch (R) in the replacement outer grip housing and route the switch harness (S) through the bottom of the grip.
17. Assemble the replacement inner and outer grips together and secure with one M3.5 x 20 self-tapping screw (T) and two M3.5 x 10 self-tapping screws (U).
18. Position the grip assembly on the SCV lever. Install two 3/16 x 1-1/8 in. screws (Q) and locknuts and tighten.
19. Route the wiring harness down the multi-function lever and insert the connector through the end of the boot (P). Secure the harness to the lever using tie straps.

NOTE: The three-pin connector will have to be removed and reinstalled after routing the harness through the cup of the multi-function lever assembly.

20. Connect three pin connector from switch harness (S) to lower cab harness connector under SCV lever boot.

N—Grip	R—Grip Harness Switch
O—Screw (2 used) (Item 10 on Parts List)	S—Switch Harness
P—Boot	T—M3.5x20 Self-Tapping Screw
Q—3/16 x 1-1/8 in. Screw (2 used) (Item 10 on Parts List)	U—M3.5x10 Self-Tapping Screw (2 used)



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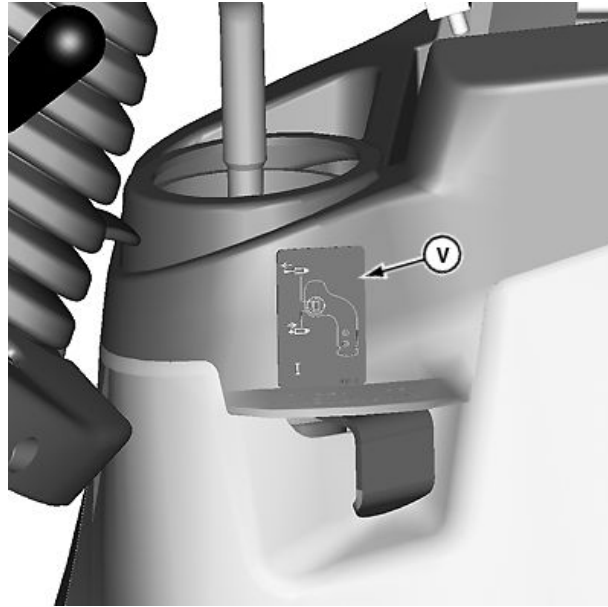
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LV19237—UN—01OCT13

LV19238—UN—01OCT13

21. Install SCV controller label (V).

V—SCV controller label (Item 35 on Parts List)

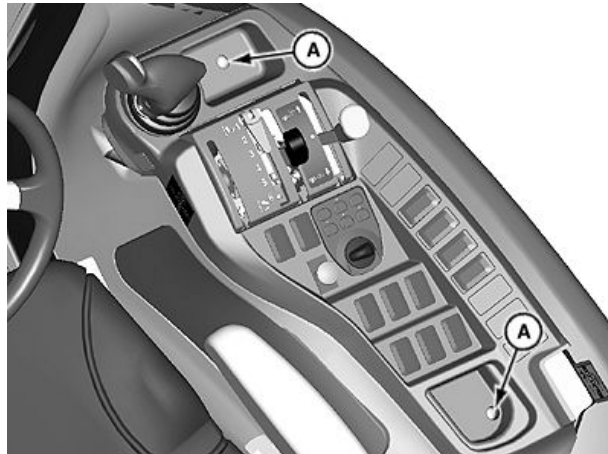


LV22322 —UN—08.JUL.14

PR59899,0000412 -19-26OCT17-8/9

22. Secure console cover to side panel with cap screws (A).

A—Cap Screw (2 used)



LV19230 —UN—01OCT13

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Complete Installation

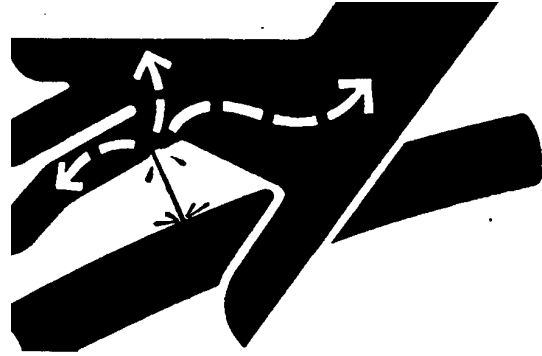
1. Install rear wheel. Tighten lug bolts to specification.

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

2. Connect negative battery cable.

! 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.

3. Start engine and check for leaks.
4. Check hydraulic oil level. Add oil if necessary.

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X9811—UN—23AUG88

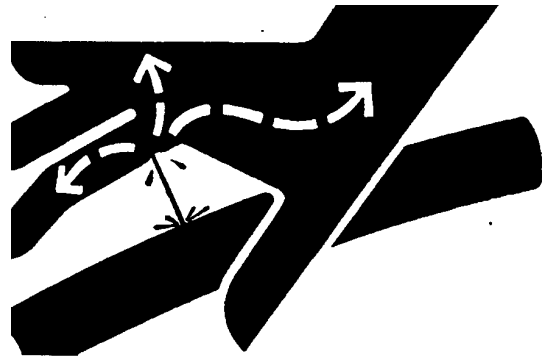
Operating the Selective Control Valve (SCV)

! 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.

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This machine model series can be equipped with an optional 3rd EH SCV kit to operate hydraulically driven implements from one set of rear mounted outlets.

The machine-mounted hydraulic outlets are female quick couplers.



IMPORTANT: Avoid damage! To prevent contamination of female quick couplers, color-coded hose ends should be installed in the couplers when not being used.

NOTE: See your implement Operator's Manual for implement functions which correspond to quick couplers used.

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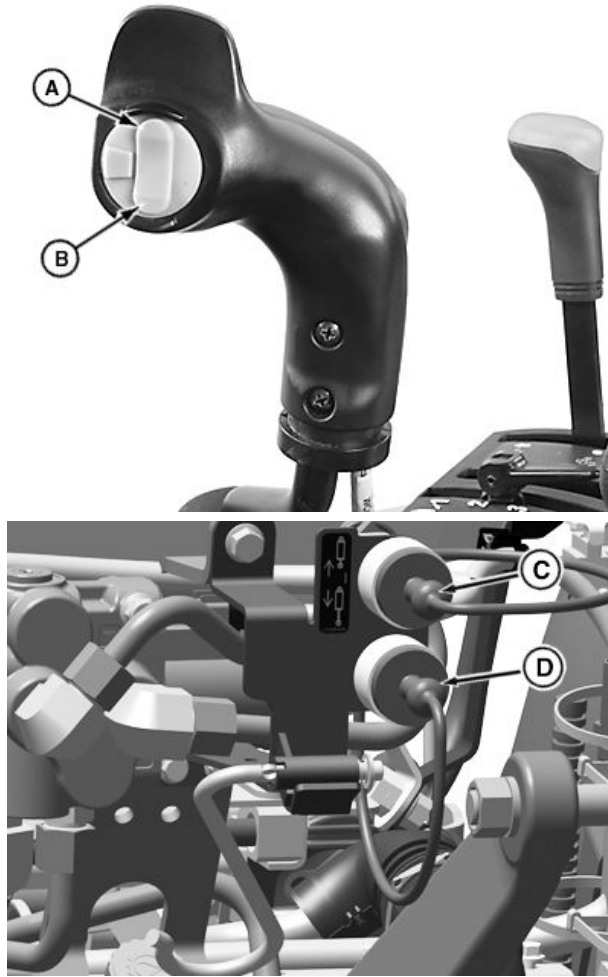
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X9811—UN—23AUG88

1. Depress the top of the control switch (A) to allow flow from the circuit out the upper outlet (C) and return to the machine through the lower outlet (D).
2. Depress the bottom of the control switch (B) to allow flow from the circuit out the lower outlet (D) and return to the machine through the upper outlet (C).

A—Control Switch (upper outlet flow)
B—Control Switch (lower outlet flow)

C—Upper Outlet
D—Lower Outlet



LV19031—UN—09SEP13

PY41308—UN—24OCT17

PR59899,0000414 -19-24OCT17-2/2

