

MX54/6000 Third Function Valve Kit

Installation Instructions

Manual No. 380-329M

For Kubota MX5400 & MX6000 Series Tractors Before You Start



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!



California Proposition 65

WARNING: Handling passenger or off-highway motor vehicle parts can expose you to chemicals such as phthalates and lead, which can cause cancer and reproductive harm. To minimize exposure, service the vehicle in as well ventilated area, wear gloves, and wash your hands. For more information refer to: www.P65Warnings.ca.gov/motor-vehicle-parts

IMPORTANT: Before you begin, thoroughly read these instructions and check to be sure all parts are accounted for. Please retain these installation instructions for future reference and parts ordering information.

General Information

Your MX Third Function Valve Kit has been designed specifically for the Kubota MX5400 and MX6000 tractor series equipped with a Kubota LA1065 front loader. These assembly instructions apply to the Third Function Valve Kit Accessories listed below:

- **380-311A: 3FVK FF MX6000 CAB page 2**
- **380-330A: 3FVK PC MX6000 CAB page 2**
- **380-312A: 3FVK FF MX6000 ROPS page 20**
- **380-331A: 3FVK PC MX6000 ROPS page 20**

Further Assistance

Your Land Pride dealer wants you to be satisfied with your new MX Third Function Valve Kit. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. If you have any issues or questions with your new Third Function Valve Kit, please contact the service department at your local dealership to address your concerns.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the question/problem, and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060
E-mail address
lpSERVICE@landpride.com

Assembly Instructions

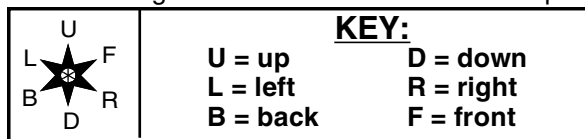
A detailed listing of parts for your Third Function Valve Kit is provided as a checklist to inventory parts received. Contact your local Land Pride dealer for any missing hardware. Refer to the parts list on the following pages:

Cab Tractors: Refer to page 17 when using flat face couplers and page 19 when using pioneer couplers.

ROPS Tractors: Refer to page 29 when using flat-face couplers and page 31 when using pioneer couplers.

Direction Reference

All directional references are made from the operator seat while facing the direction the machine will operate.



Directional Arrows Used in Illustrations

Initial Preparations

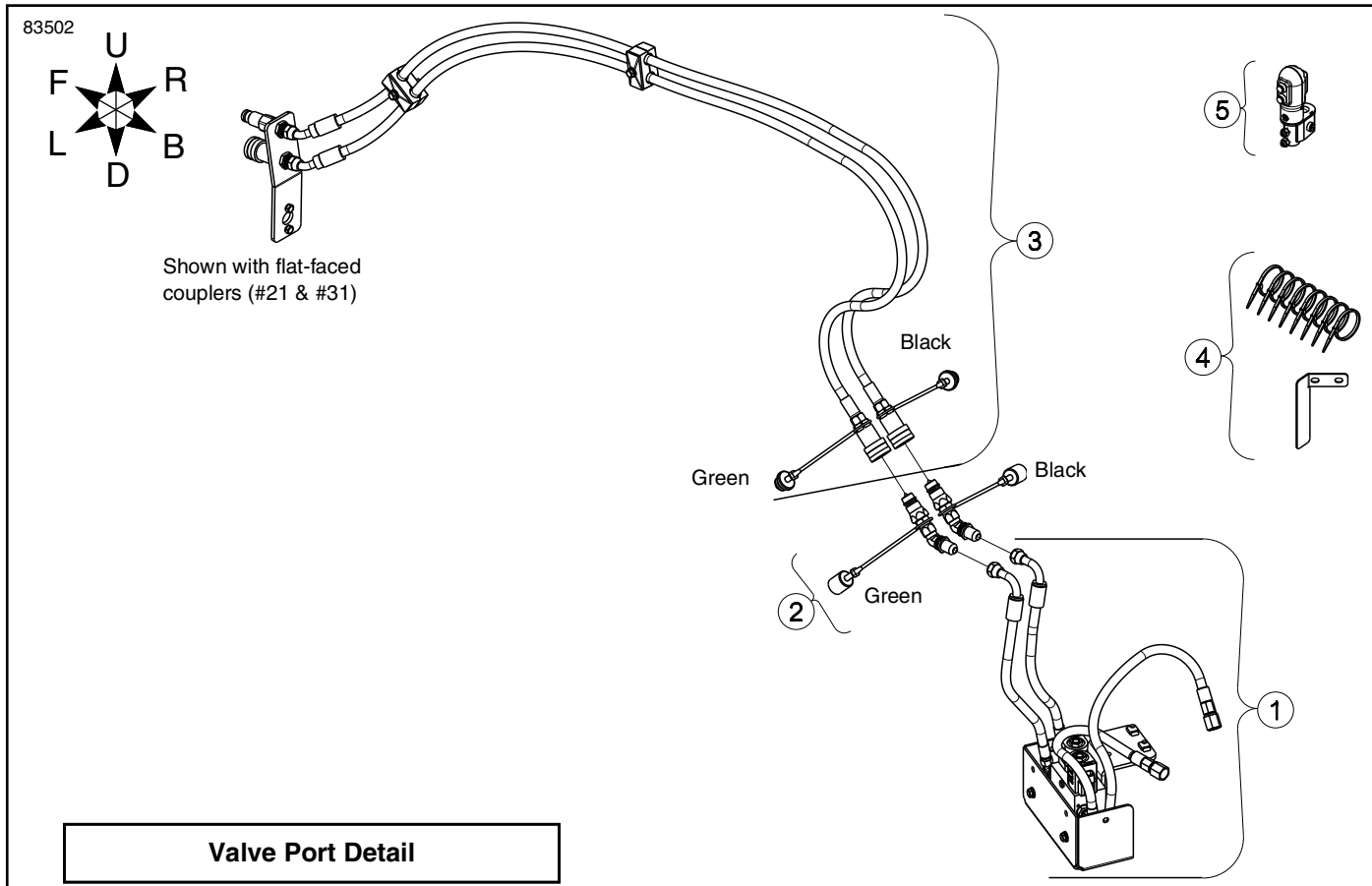


WARNING

To avoid serious injury or death: Hydraulic fluid under high pressure can penetrate the skin and/or eyes causing a serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.

If attached, disconnect front loader from the tractor as follows before installing this kit. If front loader is not connected, skip to step 6.

1. Park tractor with front loader on a level, solid surface. Prepare loader to support itself before disconnecting it from your tractor. Refer to your tractor's operator/loader manual for detailed instructions.
2. Turn tractor engine off, relieve all hydraulic pressure from the hydraulic lines by operating the loader control lever in all directions, and then lock control lever to prevent additional movement.
3. Remove ignition key to prevent unauthorized starting before dismounting the tractor.
4. Disconnect loader hydraulic lines as follows:
 - a. On cab tractors, disconnect loader hydraulic lines from coupler mount.
 - b. On ROPS tractors, disconnect loader hydraulic lines from the loader valve block.
5. Restart tractor and slowly back away from the loader.
6. Park tractor on a level, solid surface. Put tractor in park or set park brake, turn off engine, and remove ignition key to prevent unauthorized starting.



MX Third Function Valve Kit for Kubota Cab Tractor
Figure 1-1

Before You Start

The following instructions are for the Kubota MX5400 & MX6000 cab tractors. If installing a ROPS Third Function Kit on the MX Kubota ROPS tractor, skip to “**Section 2: Kit Assembly for ROPS Tractor**” on page 20.

Read and understand this Operator’s Manual. An understanding of how this Third Function Valve works will aid in its assembly and set-up.

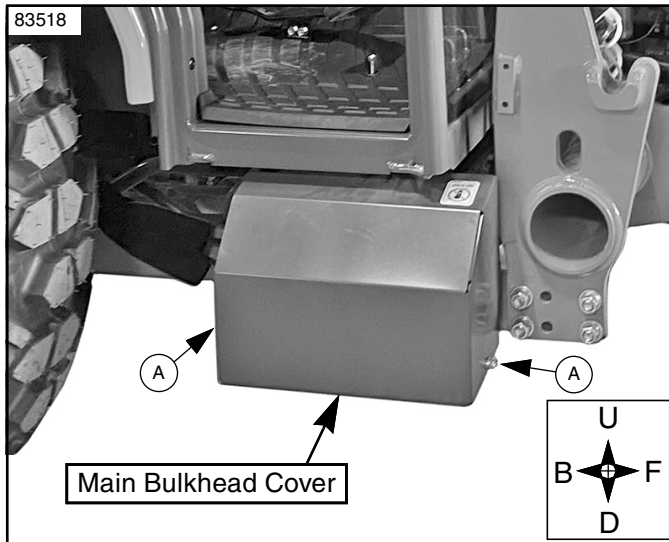
To speed up the assembly task and make the job safer, have all needed parts and equipment readily at hand.

This Cab Third Function Valve has been partially assembled into five sub-assemblies at the factory. Some additional preparations will be necessary to finish assembling the valve to the MX5400 or MX6000 Kubota cab tractor. The five sub-assemblies are as follows:

Refer to Figure 1-1:

NOTE: Figure 1-1 is provided to assist the customer while assembling the cab third function valve. Please refer to this illustration as needed.

Item	Description
1	Third Function Valve Sub-Assembly
2	Two Main bulkhead mounts
3	Loader Arm Hydraulic Hose Sub-Assembly
4	In Cab Wire Harness Cover with Zip Ties
5	Push Button Handle with Wire Harness and cable ties. (Wire harness and cable ties not shown).



Remove Valve Cover
Figure 1-2

Remove Main Bulkhead Cover

Refer to Figure 1-2:

Remove bolt (A) on the front side and two bolts (A) on the back side of the main bulkhead cover and remove the cover. Set main bulkhead cover and mounting hardware aside for reassembly.

Third Function Valve Assembly

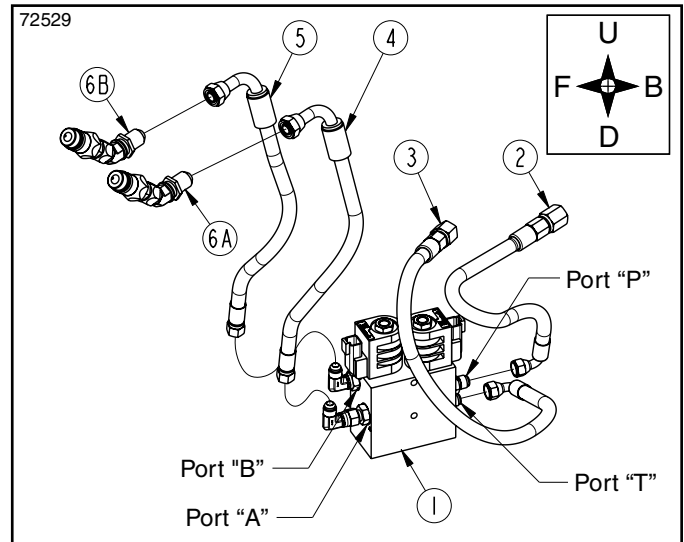
Refer to Figure 1-3:

NOTE: Identification letters have been engraved next to each port on the third function valve (#1). Once secured to the tractor, ports "P" and "T" face the back, while ports "A" and "B" face the front.

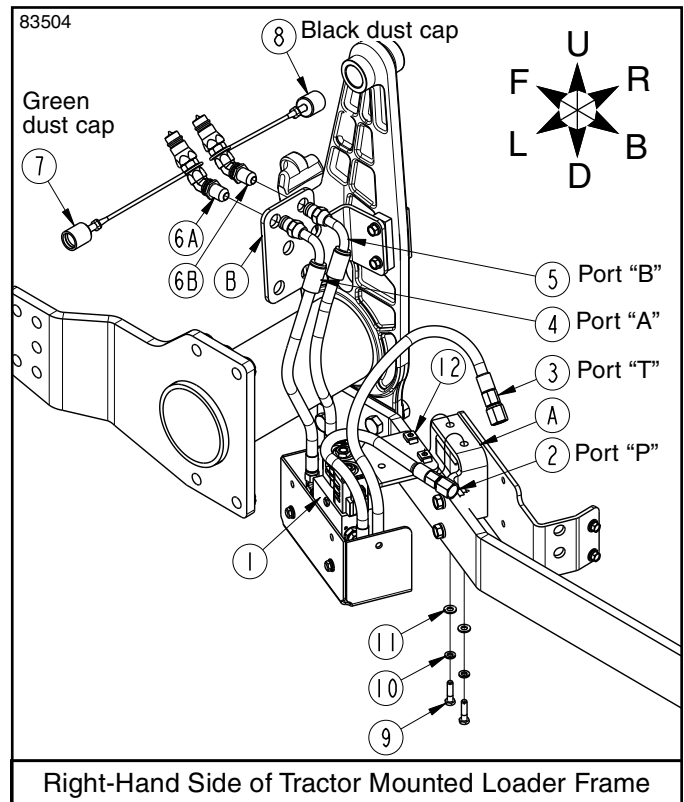
Use this illustration to identify which hoses are connected to which valve ports.

Refer to Figure 1-4:

1. Attach third function valve sub-assembly mount (#12) to loader valve stay (A) with two 5/16" x 1 1/4" GR5 bolts (#9), lock washers (#10), and washers (#11). Tighten bolts to 17 ft-lbs.
2. Remove jam nuts on bulkheads (#6A & #6B).
3. Attach bulkhead (#6A) with Green dust cap (#7) to the upper hole in bulkhead mount (B) that is closest to the tractor engine with removed jam nut.
4. Attach bulkhead (#6B) with Black dust cap (#8) to the upper hole in bulkhead mount (B) that is furthest from the tractor engine with removed jam nut.
5. Rotate bulkheads (#6A & #6B) as shown. Tighten jam nuts to secure the bulkheads in place.
6. Attach Hydraulic hose (#4) to bulkhead (6A) located closest to the tractor engine and tighten.
7. Attach hydraulic hose (#5) to bulkhead (#6B) located furthest from the tractor engine and tighten.

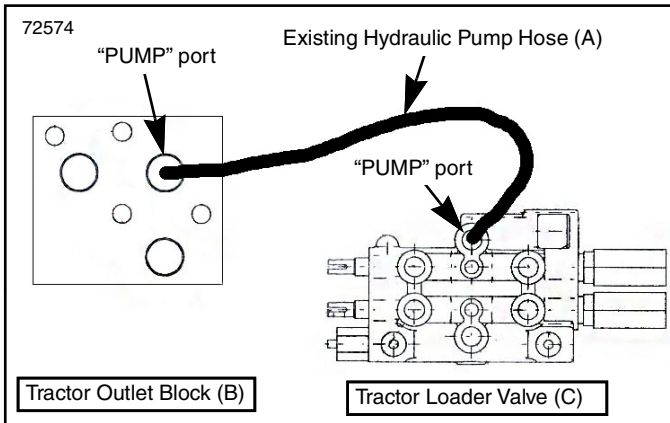


Third Function Valve Ports
Figure 1-3

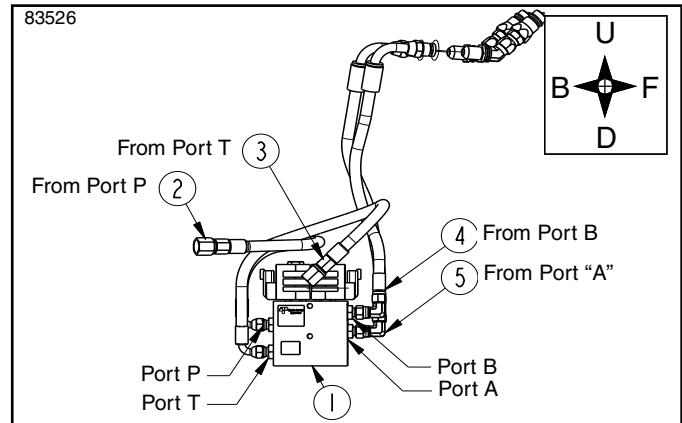


Right-Hand Side of Tractor Mounted Loader Frame

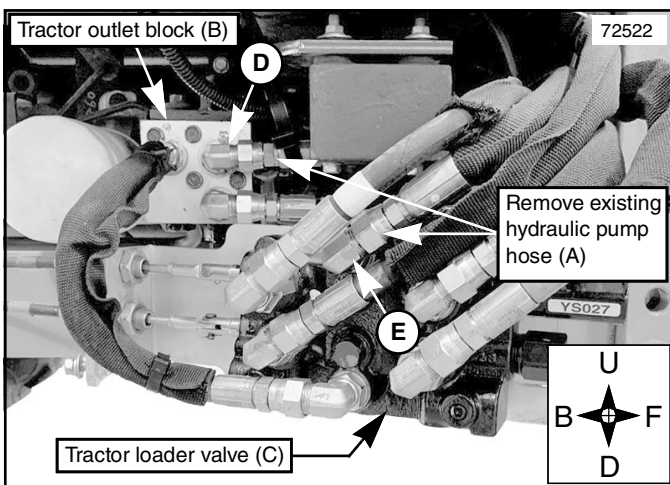
Main Bulkhead & Valve Assembly
Located on the Right-Hand Side of the Tractor
Figure 1-4



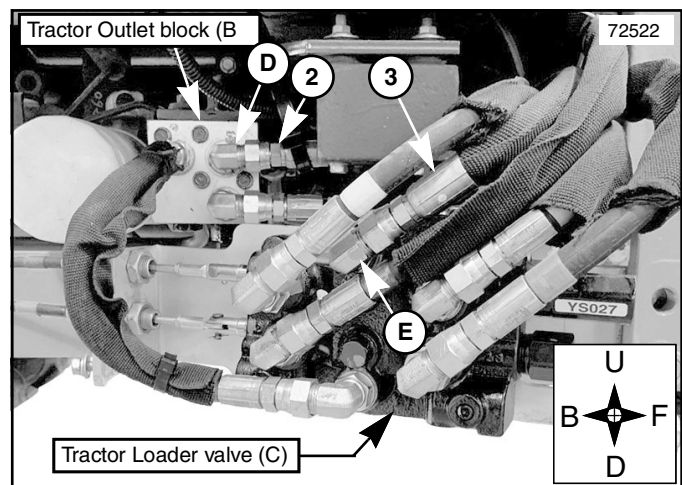
Cab Tractor Pump Ports
Figure 1-5



Hydraulic Hose Assembly to Third Function Valve
Figure 1-7



Remove Existing Hydraulic Pump Hose
Located on the Right-Hand Side of Tractor
Figure 1-6



Hydraulic Hose Assemblies to Pump Ports
Figure 1-8

Remove Existing Pump Hose

Refer to Figure 1-5 & Figure 1-6:

NOTE: Identify existing hydraulic pump hose (A) by its orange color marking.

1. Remove existing hydraulic pump hose (A) from tractor outlet block (B) and tractor loader valve (C). Do not remove elbow (D) and elbow (E) from the two valve blocks. Store removed hose for safe keeping.

Third Function Valve Hose Assembly

Refer to Figure 1-7 & Figure 1-8:

NOTE: Hydraulic hoses can be identified by a label placed on each hose. If the label is missing or is illegible, refer to the "Hydraulic Hose Identification Chart on page 16 to identify hoses by their length.

Assembly of Hydraulic Hose (#3)

Refer to Figure 1-7 & Figure 1-8:

1. Attach hydraulic hose (#3) to existing elbow (E) in loader valve (C). Tighten hose fittings on both ends.

Assembly of Hydraulic Hose (#2)

Refer to Figure 1-7 & Figure 1-8:

2. Attach straight end of hydraulic hose (#2) to existing elbow (D) on the tractor's outlet block (B). Tighten hose fittings at both ends.

Loader Arm Safety

DANGER

Do not go near or under raised loader arms without first securing loader arms in the raised position with an approved lift-arm support.

Loader Front Bulkhead Assemblies

Refer to Figure 1-9 for flat face couplers:

1. If installing Kit No. 380-311A, check couplers in bulkhead mount (#2). Verify the upper coupler is a male flat face coupler (#4) and lower coupler is a female flat face coupler (#3).

Refer to Figure 1-10 for Pioneer couplers:

2. If install Kit No. 380-330A, check couplers in bulkhead mount (#2). Verify the upper coupler is a male Pioneer coupler (#4) with a black dust cap (#6) and the lower coupler is a female pioneer coupler (#3) with a green dust cap (#5).

Loader Hydraulic Hose Assembly

Refer to Figure 1-11 & Figure 1-12 on page 6:

NOTE: Bolts (#1) with washers and lock washers are shipped assembled with push nuts retainers securing them to bracket (#2). Do not remove the push nuts retainers.

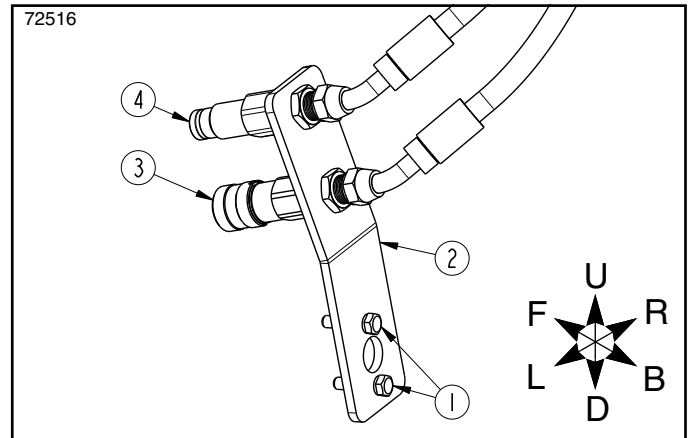
Start at the front of the loader and work your way back to the main bulkhead assembly (B) shown in Figure 1-4 on page 3.

1. Remove existing hardware (B) from mounting bracket (A). Existing hardware may be discarded.
2. Attach bulkhead bracket (#2) to existing mounting bracket (A) with bolts (#1). Tighten M8x1.25 GR8.8 bolts to 19 ft-lbs (26 N-m).

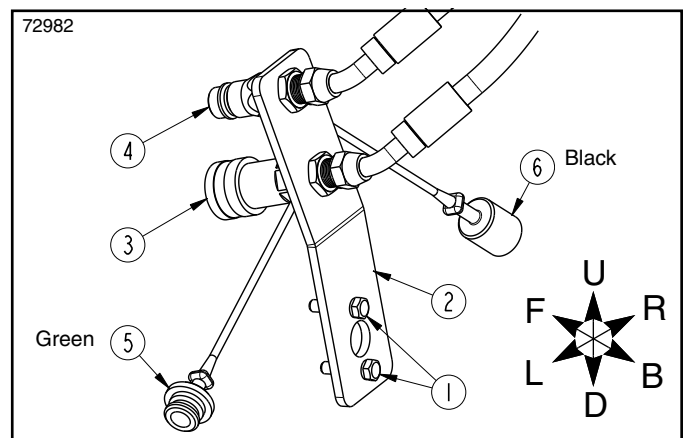
NOTE: The upper half of the bulkhead should be bent slightly forward as shown in Figure 1-11.

3. Verify the upper half of the bulkhead is bent slightly forward as shown in Figure 1-11. If it is not, disassemble the bulkhead fittings and reassemble them on the opposite side of mount (#2).

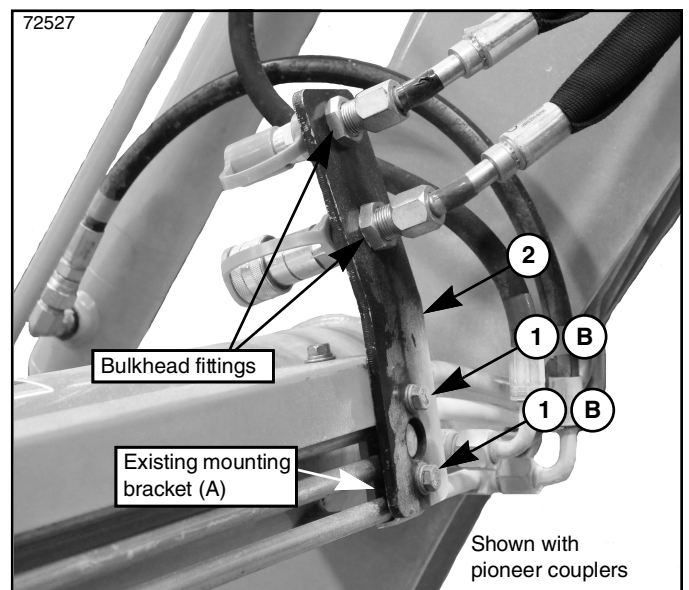
Continue with step 4 on page 6.



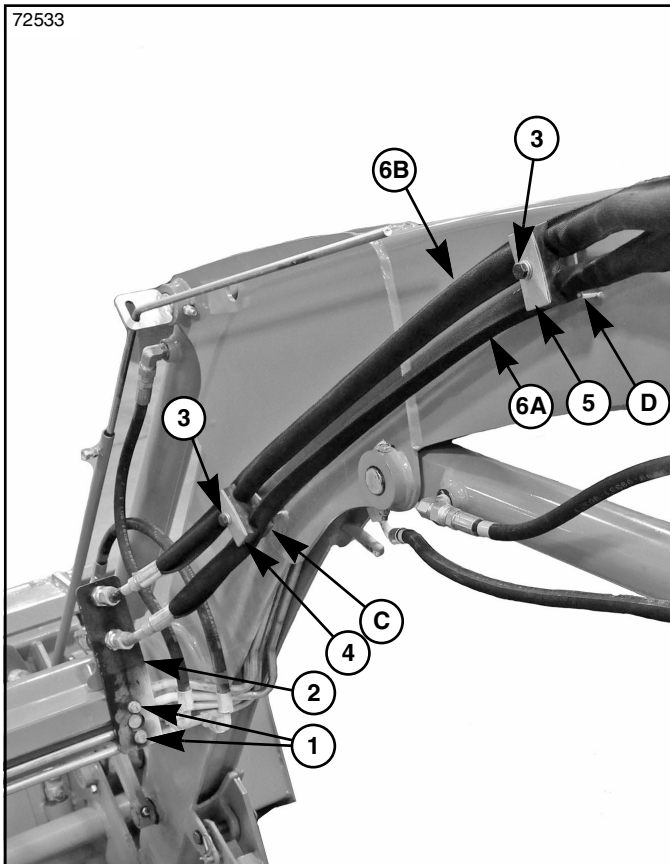
Front Bulkhead Assembly with Flat-faced Couplers
Figure 1-9



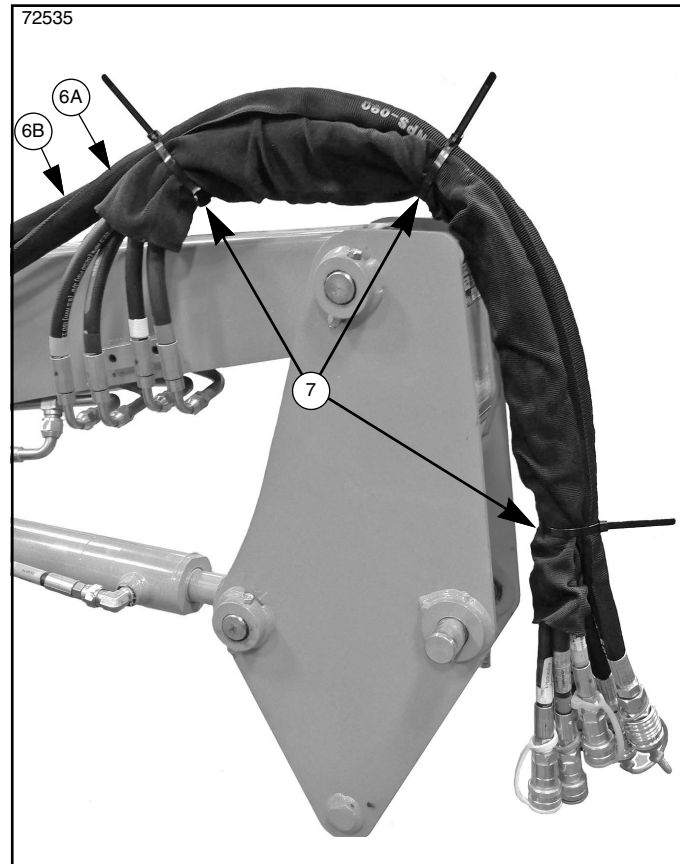
Front Bulkhead Assembly with Pioneer Couplers
Figure 1-10



Final Assembly of the Front Bulkhead
Figure 1-11



Hydraulic Hose Routing and Hose Clamp Assembly
Figure 1-12



Securing Hydraulic Hoses with Cable Ties
Figure 1-13

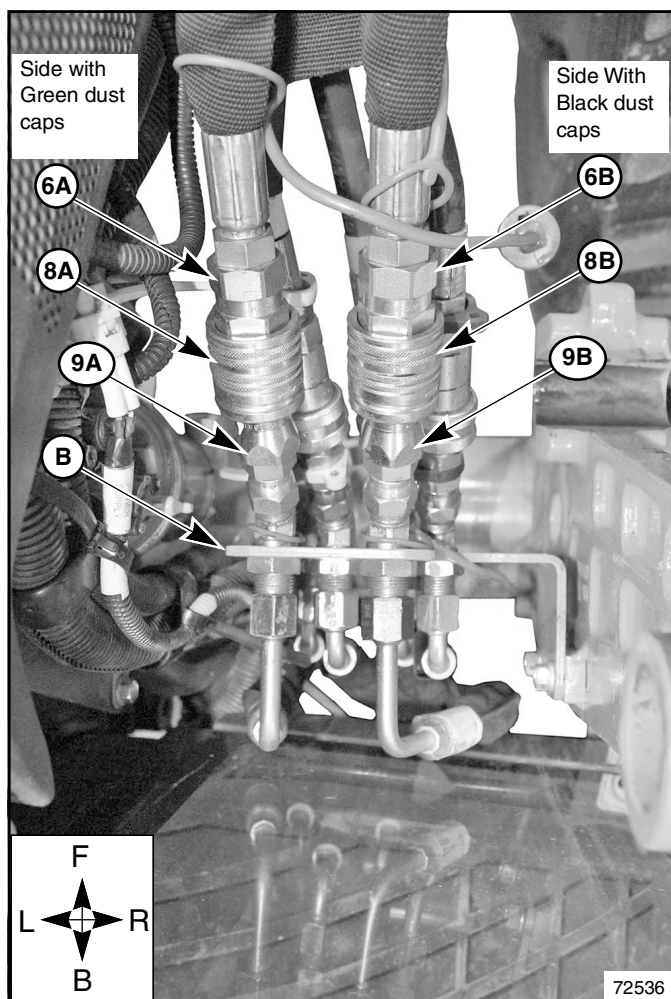
Refer to Figure 1-12:

NOTE: Clamp bodies (#4 & #5) are shipped assembled with push nut bolt retainers securing the assembled clamp bodies together. Do not remove the push nut retainers.

4. Attach clamp body (#4) to bracket (C) with bolt (#3). Draw bolt up snug, do not tighten at this time.
5. Attach clamp body (#5) to bracket (D) with bolt (#3). Draw bolt up snug, do not tighten at this time.
6. Adjust length of hydraulic hoses between bulkhead bracket (#2) and clamp body (#4). Tighten M8x1.25 GR8.8 bolt (#3) to 19 ft-lbs (26 N-m).
7. Adjust length of hydraulic hoses between clamp bodies (#4 & #5). Tighten M8x1.25 GR8.8 bolt (#3) to 19 ft-lbs (26 N-m).

Refer to Figure 1-13:

8. Tie hydraulic hoses (#6A & #6B) to existing hydraulic hoses with zip ties (#7).
9. If tractor front loader is disconnected from the tractor, reconnect loader to the tractor. Refer to Tractor/Loader Operator's Manual for connecting instructions.

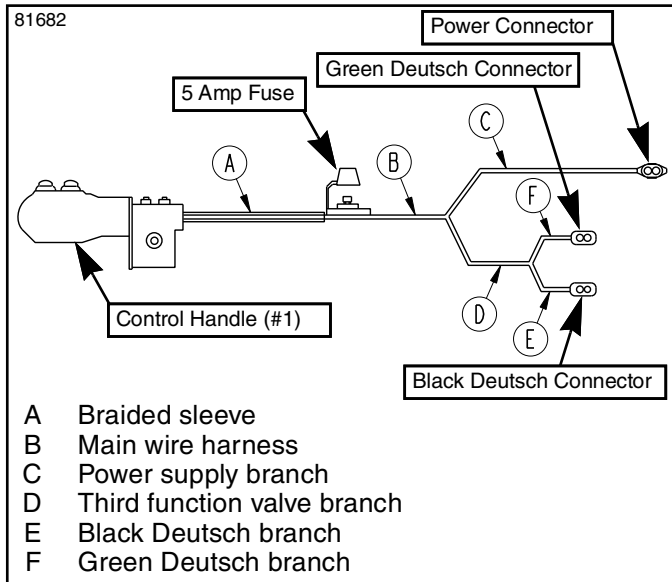


Coupler Connections at Loader bulkhead (B)

Figure 1-14

Refer to Figure 1-14:

10. On the side closest to the engine, connect female pioneer coupler (#8A) with a Green dust cap to male coupler (#9A) also with a Green dust cap.
11. On the side furthest from the tractor engine, connect female pioneer coupler (#8B) with a Black dust cap to male coupler (#9B) also with a Black dust cap.

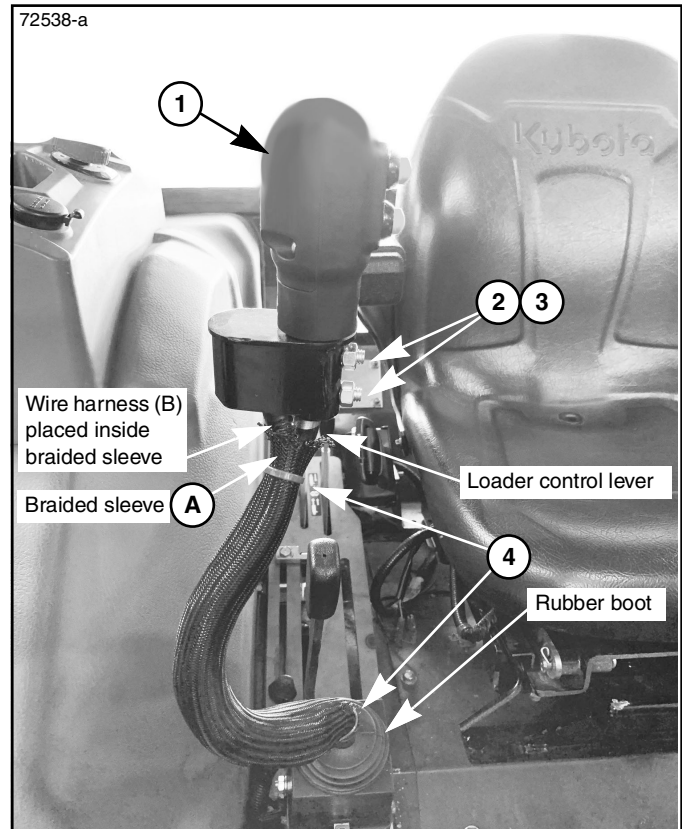


Schematic of Wire Harness
Figure 1-15

Schematic of Wire Harness

Refer to Figure 1-15:

Use this schematic to assist identifying the different parts of the wire harness while installing it.



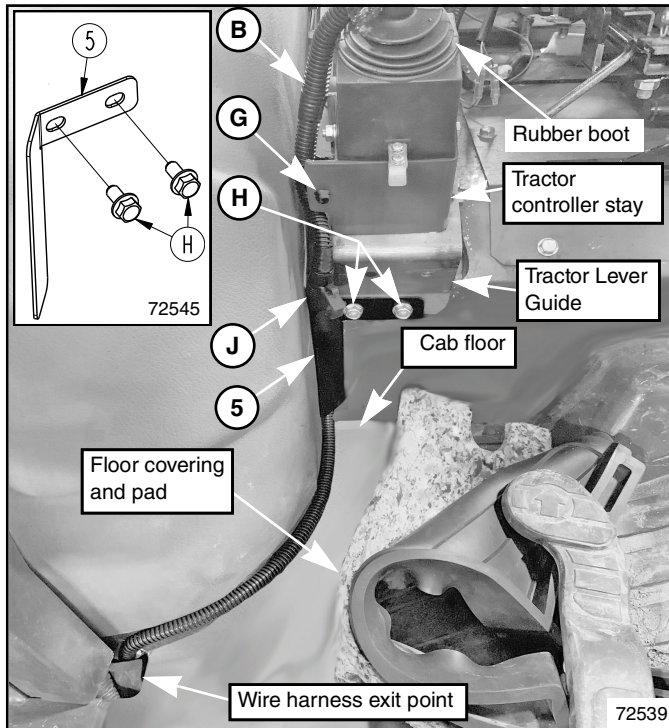
Control Handle Assembly
Figure 1-16

Control Handle Assembly

Refer to Figure 1-16:

NOTE: The existing loader control handle (not show) will be replaced with the new third function control handle (#1).

1. Remove existing control handle (#1) from the loader control lever.
2. The following should be completed before installing new control handle (#1):
 - a. Feed wire harness (B) completely through and out the opposite end of braided sleeve (A).
 - b. Slide braided sleeve (A) with wire harness (B) over the top of loader control lever and down to the rubber boot.
3. Position new control handle (#1) onto control lever with red switches facing left side of tractor.
4. Adjust control handle (#1) to operator's preference and then secure control handle to the control lever by tightening set screws (#3).
5. Tighten jam nuts (#2) to secure set screws (#3).
6. Secure braided wire harness (A) to loader control lever with two cable ties (#4) as shown.



Wire Harness Routing - Inside Cab

Figure 1-17

Third Function Wire Harness Routing

Refer to Figure 1-17 on page 9:

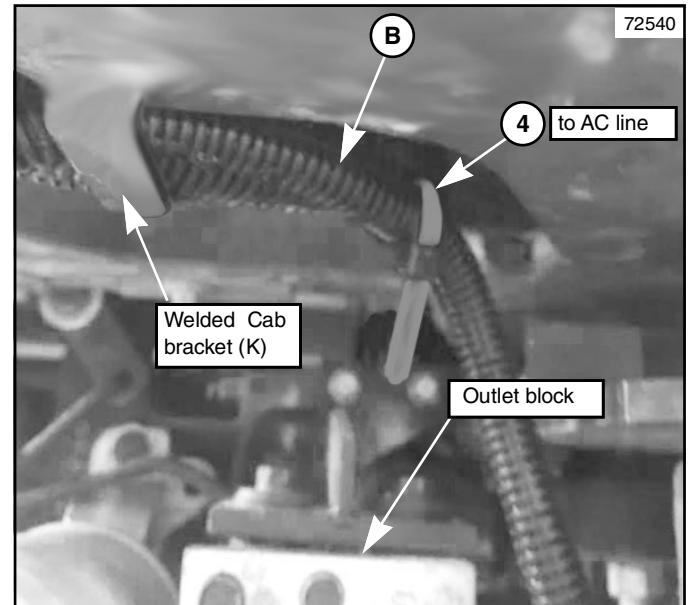
1. Start by placing main wire harness (B) behind the tractor controller stay.
2. Secure wire harness (B) to controller stay with push pin (G). Push pin is provided with the wire harness.
3. Route wire harness (B) down to the cab floor.
4. Using existing flange bolts (H), secure wire harness (B) to the cab with cover bracket (#5). Make sure harness fuse (J) is located above the cover bracket, then tighten the two flange bolts.
5. Pull back floor covering and pad. Continue to route third function wire harness (B) along the bottom of the floor to its exit point. Run harness through the exit point to the underside of the cab.
6. Adjust wire harness as needed to remove excess slack inside the cab and then return floor coverings to factory standard.

Refer to Figure 1-18:

7. Below the tractor cab, route third function wire harness (B) through welded cab bracket (K).
8. Secure wire harness (B) to the air conditioner line just under the cab with cable tie (#4).

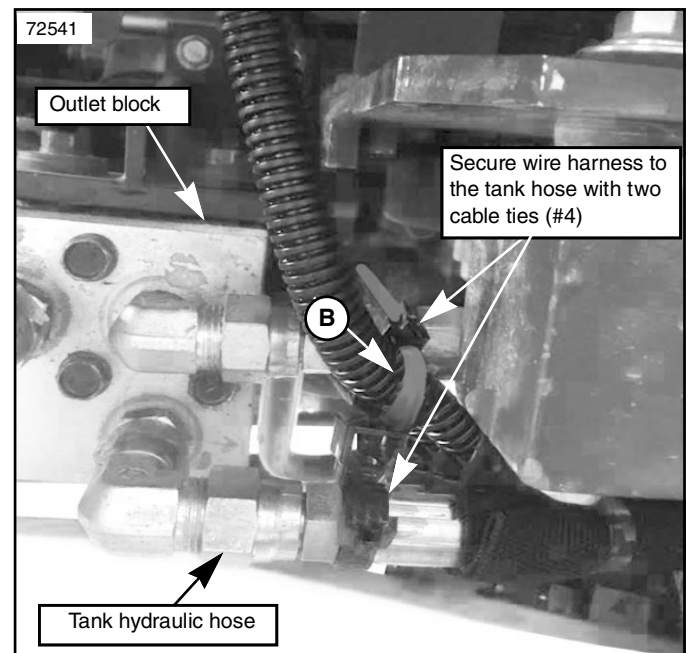
Refer to Figure 1-19:

IMPORTANT: Use two cable ties when attaching a wiring harness to a hot hydraulic hose. Loop the first cable tie around the hydraulic hose. Loop the second cable tie through the first cable tie and around the wiring harness. This will help protect the harness from hot hydraulic hoses.



Wire Harness Routing - Under Cab

Figure 1-18



Wire Harness Routing - Under Cab

Figure 1-19

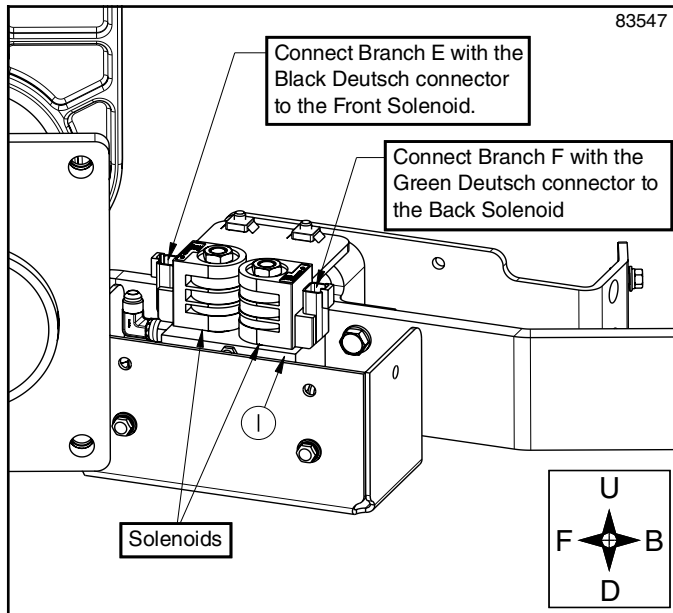
9. Continue routing wire harness (B) down to the tank hydraulic hose. Secure wire harness to the tank hose with two cable ties (#4) as follows:
 - a. Wrap lower cable tie (#4) around the tank hose only. Do not tighten.
 - b. Wrap upper cable tie (#4) through the closed loop in the lower cable tie and around wire harness (B). Draw upper and lower cable ties up tight.

Third Function Wire Harness Branch

Refer to Figure 1-15 on page 8:

At this point, the third function wire harness separates into two branches. They are:

- Power supply branch (C). This branch connects to the tractor's electrical power supply and will be discussed later.
- Third function valve branch (D). This branch divides into two branches (E & F). Branches E & F connect to the third function valve solenoids.

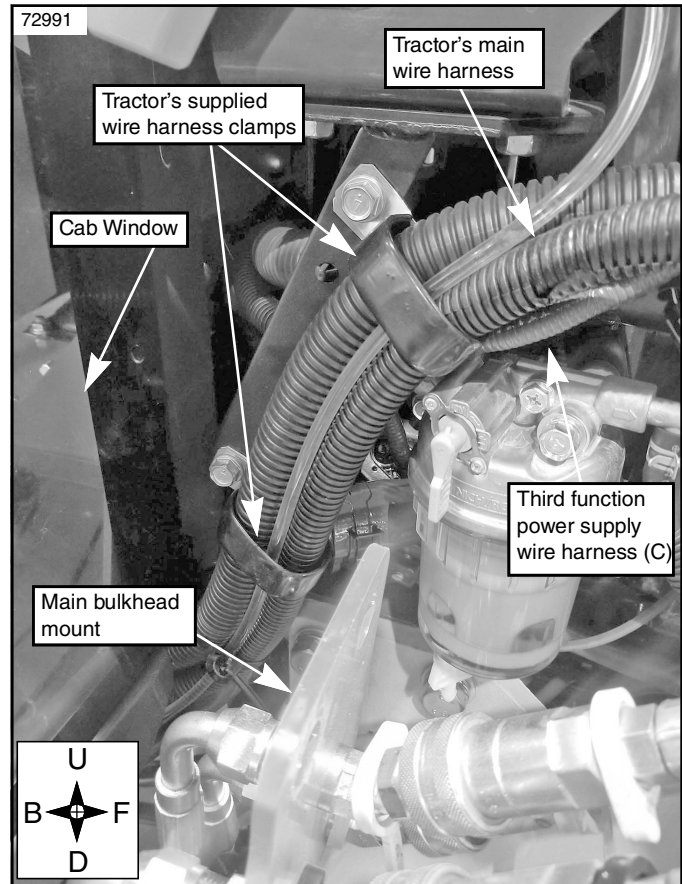


Deutsch Connectors to Third Function Valve Solenoids
Figure 1-20

Third Function Valve Branch (D)

Refer to Figure 1-20:

1. Connect Black Deutsch connector (Branch E) to the front solenoid on third function valve (#1).
2. Connect Green Deutsch connector (Branch F) to the back solenoid on third function valve (#1).



Securing Power Supply Wire Harness
Figure 1-21

Power Supply Branch (C)

Refer to Figure 1-21:

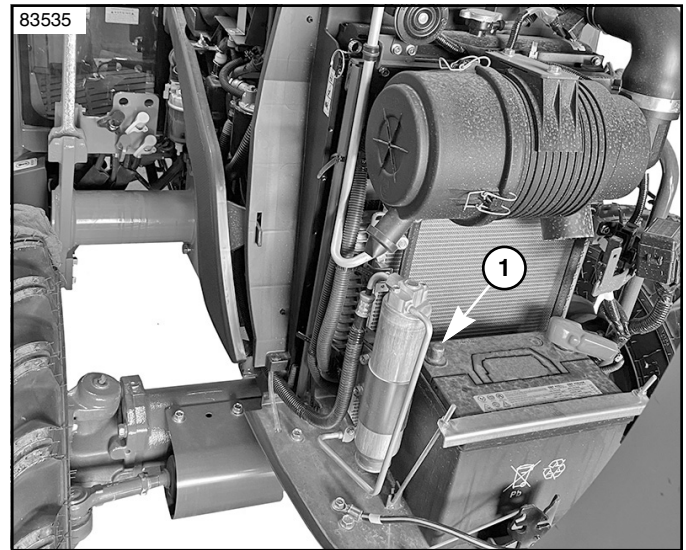
1. Route power supply branch (C) forward under the cab to meet up with the tractor's main wiring harness.
2. Secure wire harness with cable ties (#4) at the indicated points marked with tape.
3. Continue routing third function power supply harness, branch (C), up between the tractor cab windshield and main bulkhead coupler mount.
4. Secure wire harness branch (C) within the tractor supplied wire harness clamps.

Connect to Power Supply

Refer to Figure 1-22:

IMPORTANT: Disconnect negative (-) battery cable to eliminate potential risk of an electrical shock.

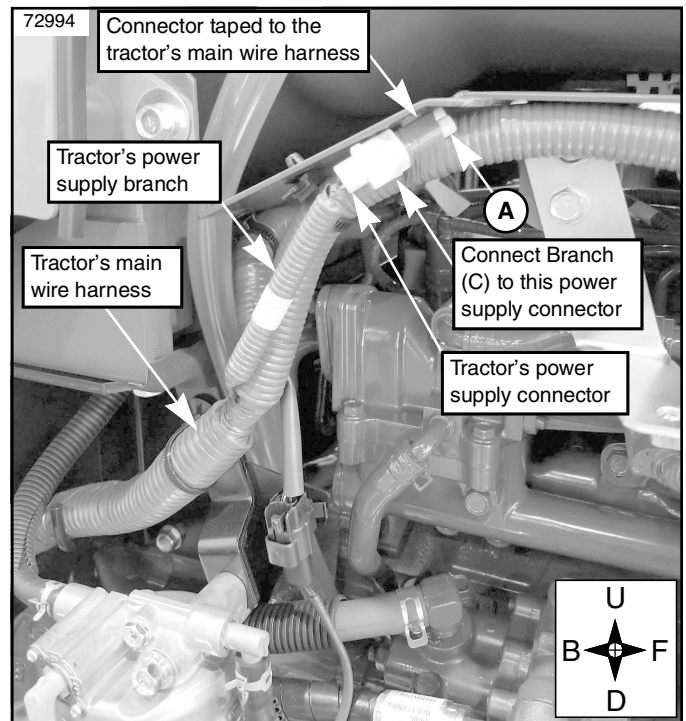
1. Raise the engine hood and disconnect negative battery cable from negative (-) battery post (#1).
2. Lay cable aside where it cannot make contact with the battery's (-) post (#1).



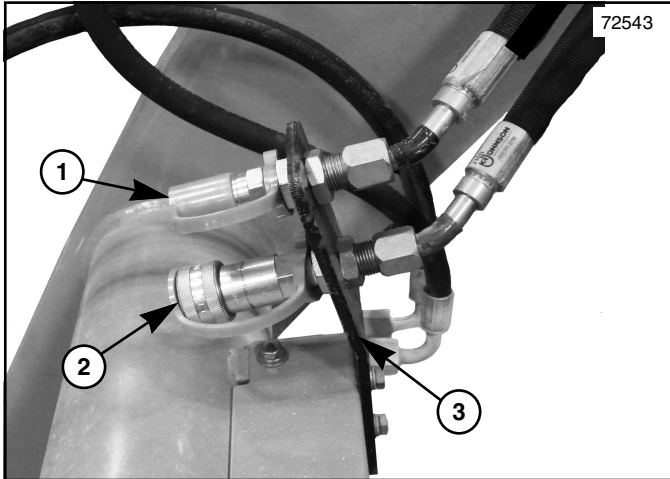
Disconnect Negative Battery Cable
Figure 1-22

Refer to Figure 1-23:

3. Locate the tractor's power supply branch underneath the side panel, taped to the tractor's main wire harness.
4. Locate tractor's power supply wire harness. It branches out of the tractor's main wire harness.
5. Remove cap (A) from the tractor's power supply connector.
6. Connect branch (C) (not shown) to the tractor's power supply connector.
7. Reconnect the negative battery cable to the negative (-) battery post (#1) shown in Figure 1-22.



Connecting the Power Supply Wire Harness
Figure 1-23



Connect Attachment Couplers to Bulkhead Couplers

Figure 1-24

Check Operation & Fluid Level

Refer to Figure 1-24:

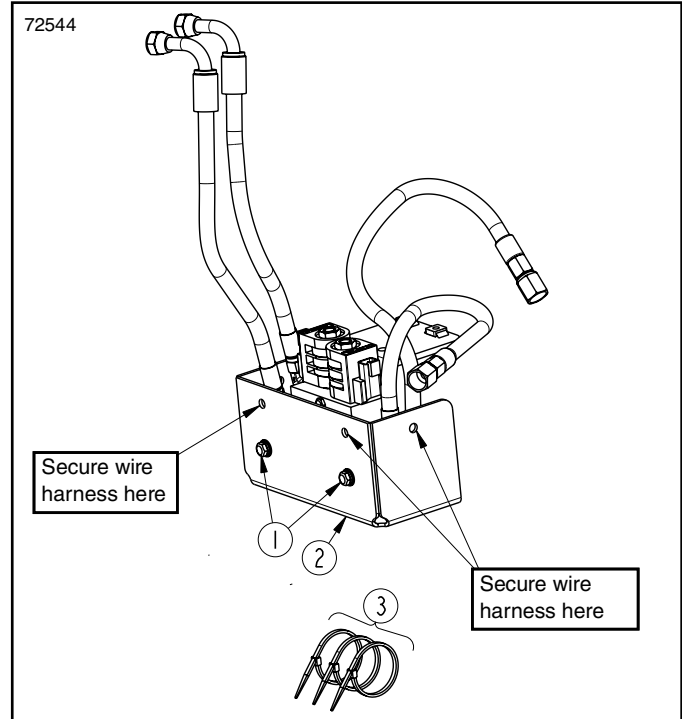
1. Mount attachment to the tractor's front loader. Connect attachment's hydraulic hoses to couplers (#1 & #2) found on bulkhead mount (#3).
2. Raise attachment off the ground and operate third function hydraulics using push-buttons on the newly installed control handle. Refer to "Operate Third Function Valve" on page 13.

Refer to Figure 1-20 on page 10:

3. If the attachment's hydraulic cylinder(s) operate in the opposite direction, as intended, switch Black Deutsch connector with the Green Deutsch connector at the valve solenoids.

IMPORTANT: Refer to your tractor Operator's Manual for recommended hydraulic fluid and procedure for checking hydraulic fluid level.

4. Once hoses and cylinder(s) are full of hydraulic fluid, check tractor hydraulic fluid level. If low, add recommended hydraulic fluid until correct levels are attained.
5. Check all connection points on the Third Function Valve Kit for hydraulic fluid leaks.



Attach Third Function Valve Cover

Figure 1-25

Third Function Valve Cover

Refer to Figure 1-25:

1. If a hydraulic hose is leaking oil around third function valve, remove bolts and associated hardware (#1).
2. Remove valve cover (#2) and re-tighten any hydraulic fitting that is leaking.
3. Replace valve cover (#2) and secure it with removed hardware (#1). Tighten bolts to 14 ft-lbs.

Refer to Figure 1-15 on page 8 and Figure 1-25:

4. Secure third function wire harness (D, E, & F) to cover plate (#4) with cable ties (#30) at the indicated holes.

Reattach Main Bulkhead Cover

Refer to Figure 1-2 on page 3:

Reattach main bulkhead cover with removed hardware. Tighten hardware to the correct torque.

Operate Third Function Valve

Refer to Figure 1-26:

Your Third Function Valve Kit is now ready to be used with a multitude of attachments. Be sure to familiarize yourself with a complete understanding of how to operate the Third Function Valve before attempting to do so.

DANGER

To avoid serious injury or death: Do not allow bystanders to be near the attachment, loader arms, or tractor during operation. They can become entangled, pinched, or crushed by the equipment. Disconnect and lockout power source before making adjustments or servicing tractor and attachment.

IMPORTANT: Refer to your tractor Operator's Manual for recommended hydraulic fluid, procedure for checking hydraulic fluid level, and procedure for adding the fluid.

1. Once hoses and attachment's hydraulic cylinder(s) are full of hydraulic fluid, check tractor hydraulic fluid level.
2. If fluid level is low, add recommended hydraulic fluid to the tractor's reservoir.

Power On Third Function Valve

IMPORTANT: The power switch on the control handle must be kept off unless the third function valve is being used. Leaving the power switch on while not using the third function valve can cause the hydraulic system to overheat and damage the tractor.

With tractor started, power the Third Function Valve by pressing the power switch to its compressed position.

- The LED light on the power switch will light up to indicate the switch is on. If LED light fails to light up, check the fuse panel.

Actuate Attachment Functions

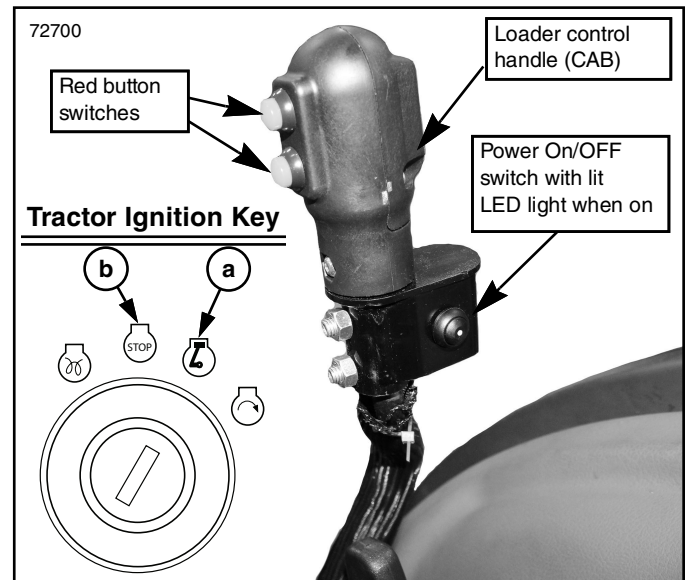
The two red button switches on the loader control handle will actuate the attachment functions.

- The top red button will actuate functions in one direction and the bottom red button will actuate functions in the opposite direction.

Power Off Third Function Valve

Turn power switch off by pressing the switch into its decompressed position.

- The LED light will go out to indicate the switch is off.



Operating Third Function Valve Kit
Figure 1-26

Relieve Hydraulic Pressure

Be sure to relieve all hydraulic pressure from the attachments hydraulic system before dismantling to disconnect its hydraulic lines:

1. Shut tractor down according to your tractor shutdown procedures provided in its Operator's Manual.
2. Without starting the tractor, turn tractor ignition key to its [ON] position (a).
3. On the loader control handle:
 - a. Press power ON/OFF switch to the ON position.
 - b. Press the upper red button until the attachment's hydraulic system pressure is released.
 - c. Press the lower red button until the attachment's hydraulic system pressure is released.
 - d. Once all hydraulic pressures are relieved, press power ON/OFF switch to the OFF position.

Turn tractor ignition key to its [OFF] position (b).

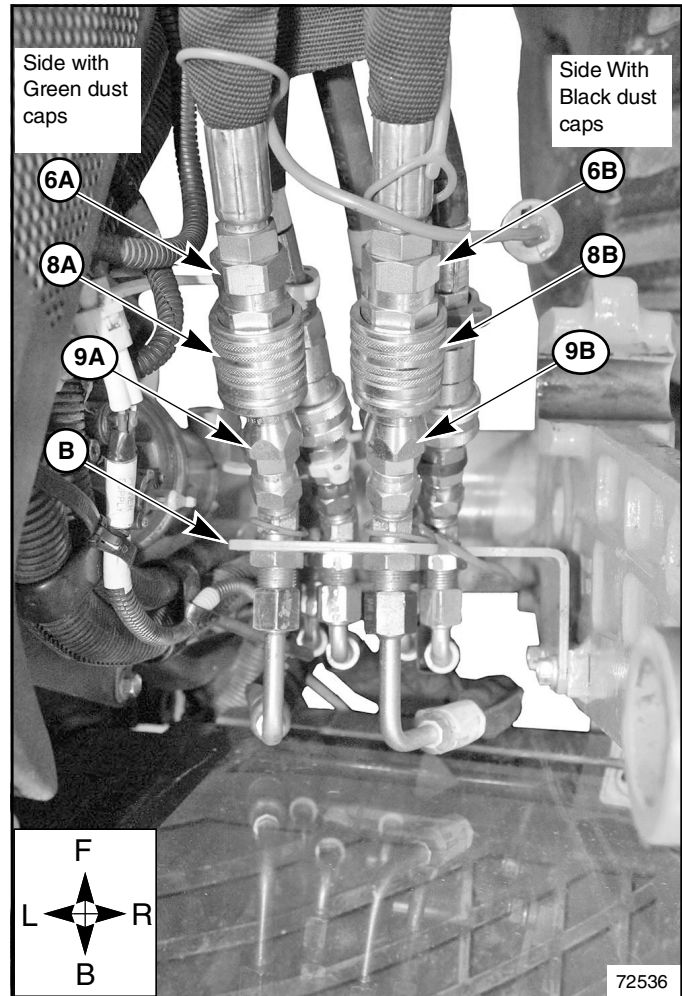
Disconnect Loader

Refer to Figure 1-27:

IMPORTANT: The instructions below are only for disconnecting the third function hydraulic hoses from the loader bulkhead (B).

Refer to Kubota's Tractor/Loader Operator's Manual for instructions on how to disconnect the front loader and its hydraulic hoses from the tractor.

1. Park tractor and front loader with or without attachment on level, solid ground.
2. Lower loader arms until the loader arms are fully down. If attachment is included, make sure attachment is resting fully on the ground.
3. Put tractor in park or set park brake.
4. Relieve all hydraulic pressures before disconnecting any hydraulic hoses. Refer to "**Relieve Hydraulic Pressure**" on page 13.
5. Disconnect hydraulic couplers (#8A & #8B) from loader main bulkhead couplers (#9A & #9B).
6. Cover male and female couplers (#8 & #9) with their attached green and black dust caps.
7. Refer to your Kubota tractor/loader operator's manual for additional instructions on how to disconnect the tilt cylinder hydraulic hoses, lift arm cylinder hoses, and front loader from the tractor.



Disconnect Couplers at Loader Bulkhead
Figure 1-27

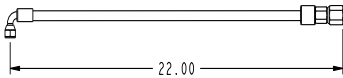
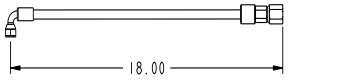
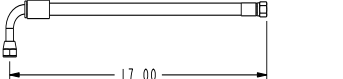
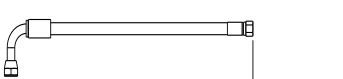


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72501

380-314S Control Handle Breakdown

72571

861-426C - (#27)	
861-462C - (#32)	
861-427C - (#28)	
861-471C - (#33)	

Exploded view diagram of a mechanical assembly. The diagram shows the following components and their assembly sequence:

- 47**: Main upper housing or cap.
- 46**: Protective cover or shield for the upper assembly.
- 45A** and **45B**: Two types of small cylindrical components, likely O-rings or seals, for the upper housing.
- 43**: A small circular component, possibly a pin or a small washer, located between the upper housing and the main body.
- 41**: A long, thin rod or pin passing through the upper housing and the main body.
- 48**: A small cylindrical component, possibly a pin or a small washer, located between the upper housing and the main body.
- 40**: A small cylindrical component, possibly a pin or a small washer, located between the upper housing and the main body.
- 38**: The main body or base of the assembly.
- 42**: Two small cylindrical components, possibly pins or small washers, located between the main body and the base.
- 49**: A small cylindrical component, possibly a pin or a small washer, located between the main body and the base.
- 39**: A small cylindrical component, possibly a pin or a small washer, located between the main body and the base.
- 50**: A small cylindrical component, possibly a pin or a small washer, located between the main body and the base.

72519

This diagram shows an exploded view of a mechanical assembly. The main component is a rectangular housing (23) with a top-mounted motor or actuator. Various parts are shown being installed into or onto this housing. Callouts 1 through 29 identify the following parts: 1. A small rectangular component (possibly a switch or sensor) mounted on the top of the housing. 2. Two screws (12) used to secure the top component. 3. The main rectangular housing. 4. A bracket (11) attached to the side of the housing. 5. Three different types of pins or fasteners used for mounting. 6. A vertical rod or shaft passing through the bottom of the housing. 7. Two different types of bushings or spacers. 8. Two screws (13) used to secure the bottom of the housing. 9. A small component (possibly a switch or sensor) mounted on the bottom of the housing. 10. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing. 11. A bracket attached to the side of the housing. 12. Two screws used to secure the bottom of the housing. 13. A vertical rod or shaft passing through the bottom of the housing. 14. A small rectangular component (possibly a switch or sensor) mounted on the bottom of the housing. 15. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing. 16. A vertical rod or shaft passing through the bottom of the housing. 17. A small rectangular component (possibly a switch or sensor) mounted on the bottom of the housing. 18. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing. 19. A small rectangular component (possibly a switch or sensor) mounted on the bottom of the housing. 20. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing. 21. A small rectangular component (possibly a switch or sensor) mounted on the bottom of the housing. 22. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing. 23. The main rectangular housing. 24. A small rectangular component (possibly a switch or sensor) mounted on the bottom of the housing. 25. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing. 26. A small rectangular component (possibly a switch or sensor) mounted on the bottom of the housing. 27. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing. 28. A small rectangular component (possibly a switch or sensor) mounted on the bottom of the housing. 29. A small rectangular component (possibly a switch or sensor) mounted on the side of the housing.

16 MX54/6000 Third Function Valve Kit Installation Instructions Manual No. 380-329M



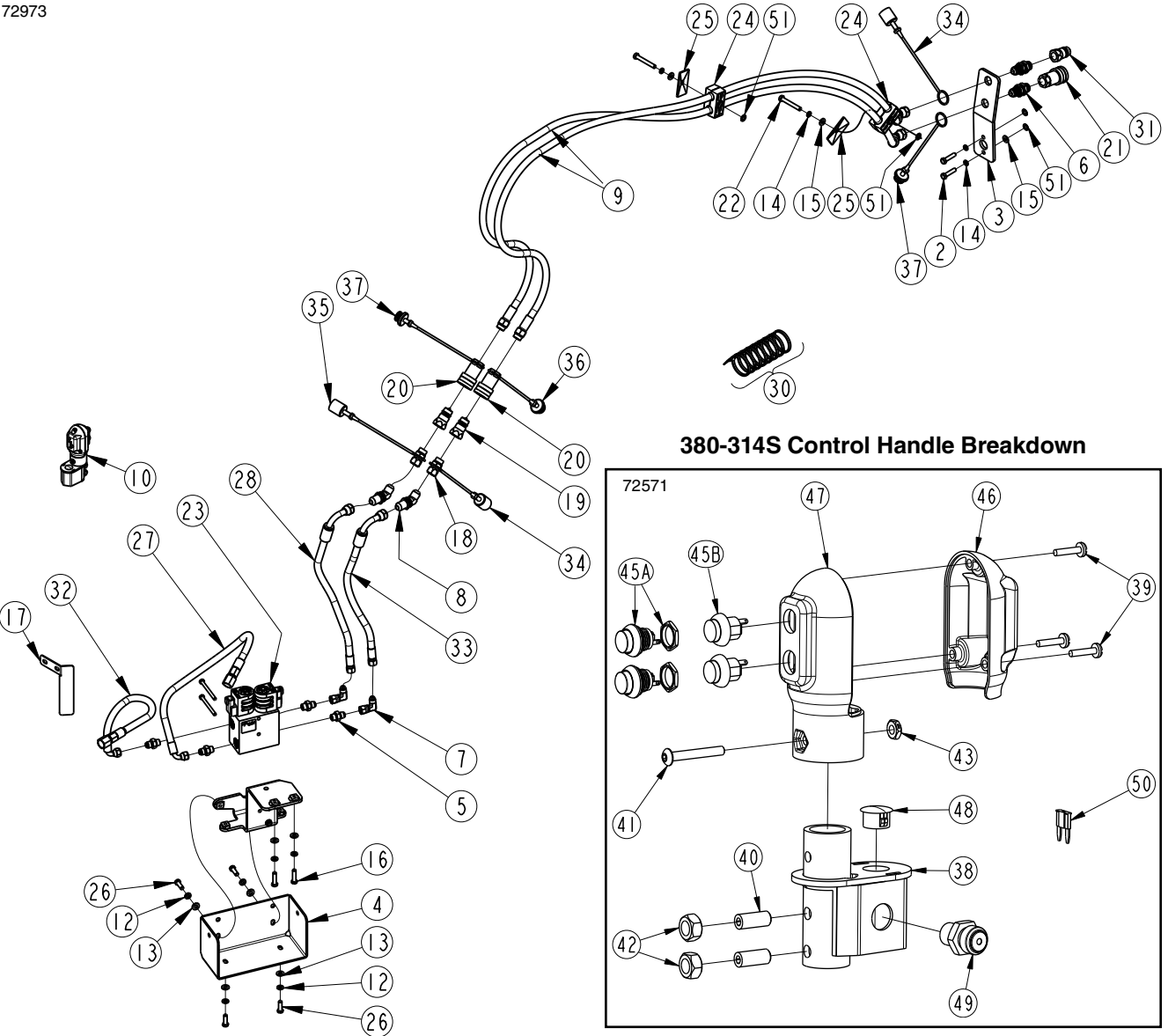
Kit No. 380-311A

MX THIRD FUNCTION VALVE KIT FOR CAB TRACTOR (Equipped with flat-faced couplers)

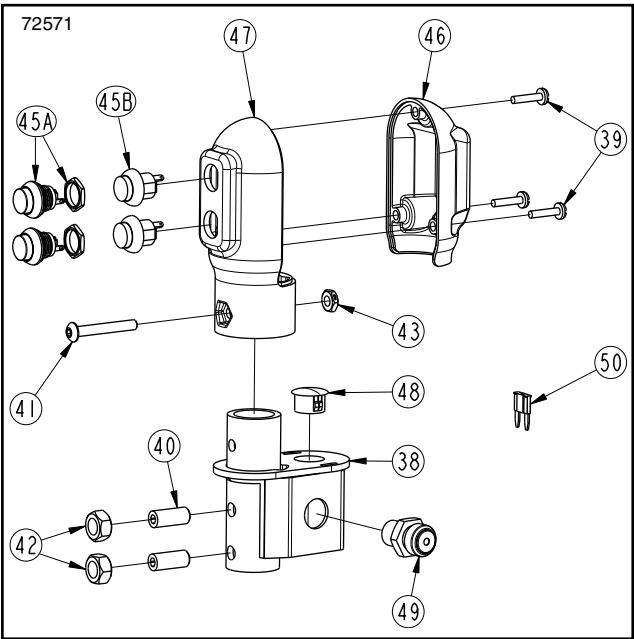
Item	Part No.	Description	Qty
1	380-310H	WMT, VALVE MNT BRKT	1
2	802-967C	HHCS M8X1.25X35 GR8.8	2
3	380-418D	PLATE, BULKHEAD MOUNT	1
4	380-419D	COVER PLATE, 3RD VALVE	1
5	811-170C	AD 9/16MORB 9/16MJIC	4
6	851-344C	AD 3/4MJIC 3/4MORB BLKHD W/ LN	2
7	811-169C	EL 9/16MJIC 9/16FJIC	2
8	851-481C	EL 3/4MJIC BLKHD 45 W/ LN	2
9	861-428C	HH3/8R2 090 3/4FJIC45 3/4MORBS	2
10	380-314S	ASY, PSH BUTTN CNTRL HNDL CAB WITH WIRE HARNESS	1
11	803-194C	NUT HEX WHIZ 1/4-20 PLT	2
12	804-009C	WASHER LOCK SPRING 5/16 PLT	6
13	804-036C	WASHER FLAT 5/16 SAE PLT	6
14	804-157C	WASHER SPRING LOCK M8 PLT	4
15	804-161C	WASHER FLAT M8 PLT	3
16	802-010C	HHCS 5/16-18X1 1/4 GR5	2
17	380-427D	COVER BRKT, WIRE HARNESS	1
18	811-324C	AD 3/4MORB 3/4FJIC	2
19	811-394C	CP 3/4FORB MALE QD POPPET TYPE	2
20	811-870C	CP 3/4FORB QD FEMALE (POPPET)	2
21	861-543C	CP 3/4FORB QD FML FLATFACE	1
22	842-017C	HHCS M8X1.25X60 GR8.8	2
23	850-313C	VALVE, THIRD FUNCTION (See page 32 for a parts breakdown)	1
24	851-241C	STAUFF CLAMP BODY 3D 0.79HOLE	2
25	851-245C	STAUFF COVER PLATE GROUP 3D	2
26	802-159C	HHCS 5/16-18X1 GR5	4
27	861-426C	HH3/8R2 022 9/16FJIC90 3/4FJIC	1
28	861-427C	HH3/8R2 017 9/16FJIC 3/4FJIC90	1
29	802-274C	HHCS 1/4-20X3 GR5	2
30	800-112C	CABLE TIE .19X7.25 1.75D 50LB	8
31	841-099C	CP 3/4FORB QD FLATFACE	1
32	861-462C	HH3/8R2 018 9/16FJIC90 3/4FJIC	1
33	861-471C	HH3/8R2 016 9/16FJIC 3/4FJIC90	1
34	861-539C	BLACK DUST CAP, 1/2" QD AG	1
35	861-540C	GREEN DUST CAP, 1/2" QD AG	1
36	861-541C	BLACK DUST PLUG, 1/2" QD AG	1
37	861-542C	GREEN DUST PLUG, 1/2" QD AG	1
38	380-313H	WMT, CONTROL HANDLE MOUNT	1
39	801-091C	CRPHMS 6-32X5/8 SS	3
40	801-204C	SCREW SET SCKT HD 5/16-18X3/4	2
41	801-250C	HSBHCS #10-32X1 3/8	1
42	803-008C	NUT HEX 5/16-18 PLT	2
43	803-538C	NUT HEX 10-32 LOCK PLT	1
44	NA		0
45A	843-713C	PUSH BUTTON W/NUT	2
45B	833-739C	SWITCH, P9 PB NO SPST MOM RED	2
46	837-053C	COVER, PUSH BUTTON CNTRL HNDL	1
47	837-054C	BASE, PUSH BUTTON CNTRL HNDL	1
48	837-365C	PLASTIC SNAP-IN PLUG	1
49	843-178C	POWER SWITCH ON/OFF	1
50	833-950C	FUSE, 5 AMP MINI BLADE	1
51	800-565C	PUSH NUT BLT RETAINER 5/16ROHS	4



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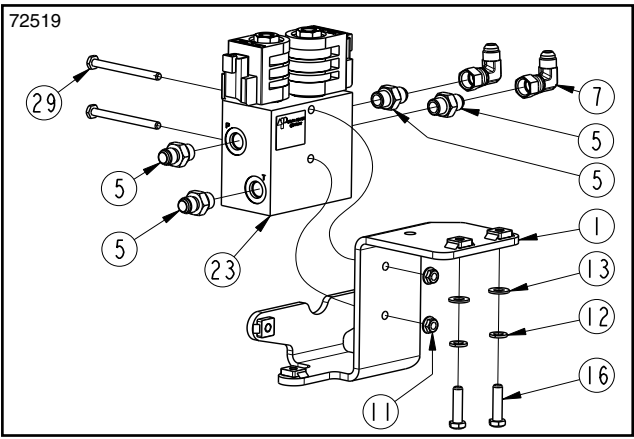
380-314S Control Handle Breakdown



Hydraulic Hose Identification Chart

861-426C - (#27)	
861-462C - (#32)	
861-427C - (#28)	
861-471C - (#33)	

Valve and Valve Mount Detail



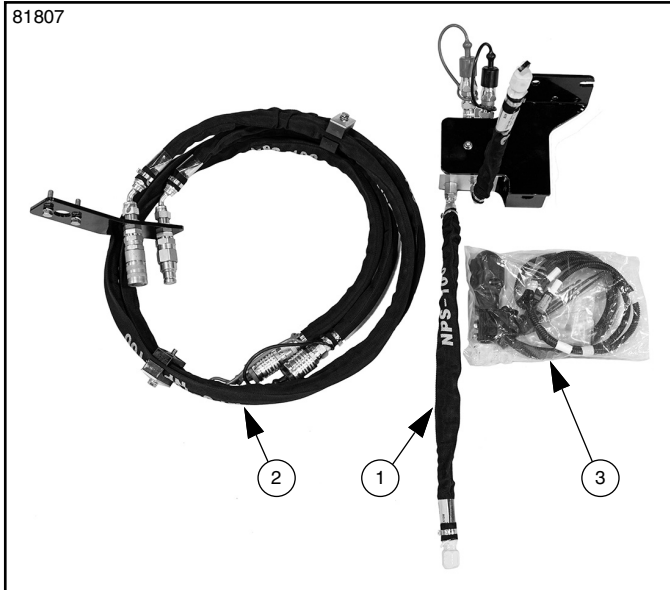
Third Function Valve Kit for Cab Tractor
Figure 1-28



Kit No. 380-330A

MX THIRD FUNCTION VALVE KIT FOR CAB TRACTOR (Equipped with pioneer couplers)

Item	Part No.	Description	Qty
1	380-310H	WMT, VALVE MNT BRKT	1
2	802-967C	HHCS M8X1.25X35 GR8.8	2
3	380-418D	PLATE, BULKHEAD MOUNT	1
4	380-419D	COVER PLATE, 3RD VALVE.	1
5	811-170C	AD 9/16MORB 9/16MJIC	4
6	851-344C	AD 3/4MJIC 3/4MORB BLKHD W/ LN	2
7	811-169C	EL 9/16MJIC 9/16FJIC	2
8	851-481C	EL 3/4MJIC BLKHD 45 W/ LN	2
9	861-428C	HH3/8R2 090 3/4FJIC45 3/4MORB.	2
10	380-314S	ASY, PSH BUTTN CNTRL HNDL CAB WITH WIRE HARNESS	1
11	803-194C	NUT HEX WHIZ 1/4-20 PLT	2
12	804-009C	WASHER LOCK SPRING 5/16 PLT	6
13	804-036C	WASHER FLAT 5/16 SAE PLT	6
14	804-157C	WASHER SPRING LOCK M8 PLT	4
15	804-161C	WASHER FLAT M8 PLT	3
16	802-010C	HHCS 5/16-18X1 1/4 GR5	2
17	380-427D	COVER BRKT, WIRE HARNESS	1
18	811-324C	AD 3/4MORB 3/4FJIC	2
19	811-394C	CP 3/4FORB MALE QD POPPET TYPE	2
20	811-870C	CP 3/4FORB QD FEMALE (POPPET)	2
21	811-870C	CP 3/4FORB QD FEMALE (POPPET)	1
22	842-017C	HHCS M8X1.25X60 GR8.8	2
23	850-313C	VALVE, THIRD FUNCTION (See page 32 for a parts breakdown)	1
24	851-241C	STAUFF CLAMP BODY 3D 0.79HOLE	2
25	851-245C	STAUFF COVER PLATE GROUP 3D	2
26	802-159C	HHCS 5/16-18X1 GR5	4
27	861-426C	HH3/8R2 022 9/16FJIC90 3/4FJIC.	1
28	861-427C	HH3/8R2 017 9/16FJIC 3/4FJIC90.	1
29	802-274C	HHCS 1/4-20X3 GR5	2
30	800-112C	CABLE TIE .19X7.25 1.75D 50LB	8
31	811-394C	CP 3/4FORB MALE QD POPPET TYPE	3
32	861-462C	HH3/8R2 018 9/16FJIC90 3/4FJIC.	1
33	861-471C	HH3/8R2 016 9/16FJIC 3/4FJIC90.	1
34	861-539C	BLACK DUST CAP, 1/2" QD AG	1
35	861-540C	GREEN DUST CAP, 1/2" QD AG	1
36	861-541C	BLACK DUST PLUG, 1/2" QD AG	1
37	861-542C	GREEN DUST PLUG, 1/2" QD AG	1
38	380-313H	WMT, CONTROL HANDLE MOUNT.	1
39	801-091C	CRPHMS 6-32X5/8 SS.	3
40	801-204C	SCREW SET SCKT HD 5/16-18X3/4	2
41	801-250C	HSBHCS #10-32X1 3/8	1
42	803-008C	NUT HEX 5/16-18 PLT	2
43	803-538C	NUT HEX 10-32 LOCK PLT	1
44	NA		0
45A	843-713C	PUSH BUTTON W/NUT	2
45B	833-739C	SWITCH, P9 PB NO SPST MOM RED	2
46	837-053C	COVER, PUSH BUTTON CNTRL HNDL	1
47	837-054C	BASE, PUSH BUTTON CNTRL HNDL	1
48	837-365C	PLASTIC SNAP-IN PLUG.	1
49	843-178C	POWER SWITCH ON/OFF.	1
50	833-950C	FUSE, 5 AMP MINI BLADE	1
51	800-565C	PUSH NUT BLT RETAINER 5/16ROHS	4



MX Third Function Valve Kit
Figure 2-1

Before You Start

The following instructions are for the Kubota MX5400 & 6000 ROP tractors. If installing a Cab Third Function Kit on the Kubota MX cab tractors, refer to “**Section 1: Kit Assembly for Cab Tractor**” on page 2.

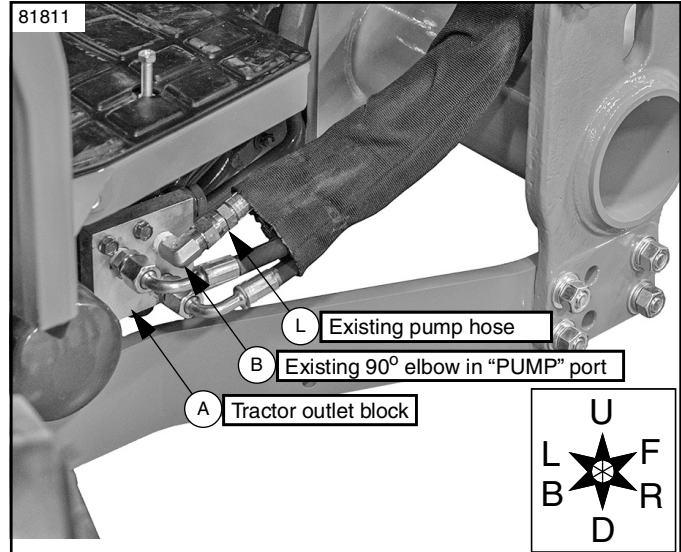
Read and understand this Operator’s Manual. An understanding of how this Third Function Valve works will aid in its assembly and set-up.

To speed up the assembly task and make the job safer, have all needed parts and equipment readily at hand.

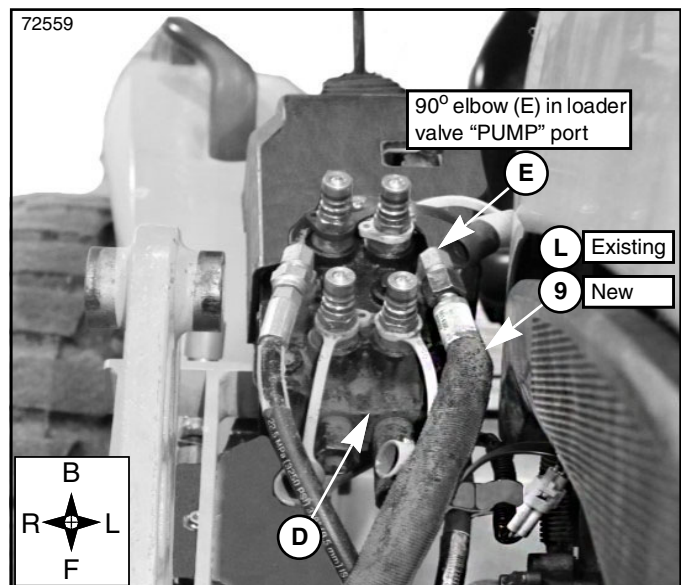
This ROPS Third Function Valve has been partially assembled into three sub-assemblies at the factory. Some additional preparations will be necessary to finish assembling the valve to the MX5400 or MX6000 Kubota tractor. The three sub-assemblies are as follows:

Refer to Figure 2-1:

Item	Description
1	Third Function Valve Sub-Assembly
2	Loader Arm Hydraulic Hose Sub-Assembly
3	Push Button Wire Harness Sub-Assembly



Existing Tractor Outlet Block Hose Assembly
Figure 2-2



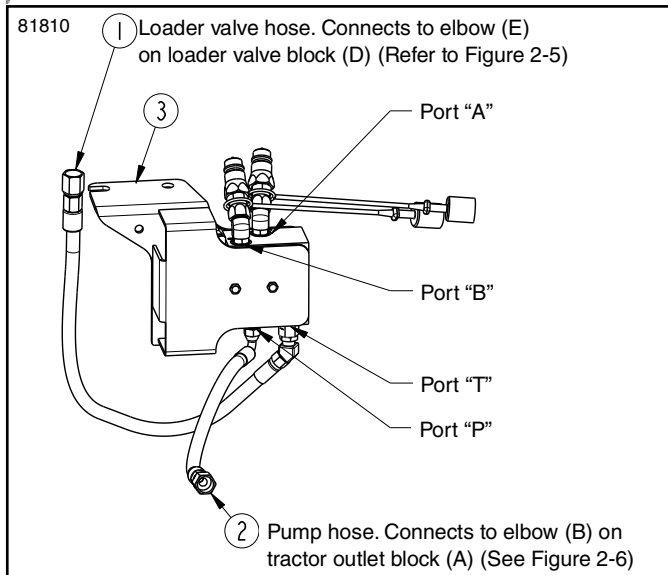
Existing Loader Valve Block
Figure 2-3

Remove Existing Pump Line Hose

Refer to Figure 2-2 & Figure 2-3:

NOTE: Identify existing pump hose (L) by its orange color marking. This hose is to be removed.

1. Remove existing pump hose (L) from elbow (B) on tractor outlet block (A) and from elbow (E) on loader valve block (D). Do not remove 90° elbows (B & E). Store removed hose.



Third Function Valve Port Locations
Figure 2-4

Third Function Valve Assembly

Refer to Figure 2-4:

NOTE: Identification letters have been engraved next to each port on the third function valve. Once secured to the valve mount, ports "A" & "B" face up and ports "P" and "T" face down.

Refer to Figure 2-5:

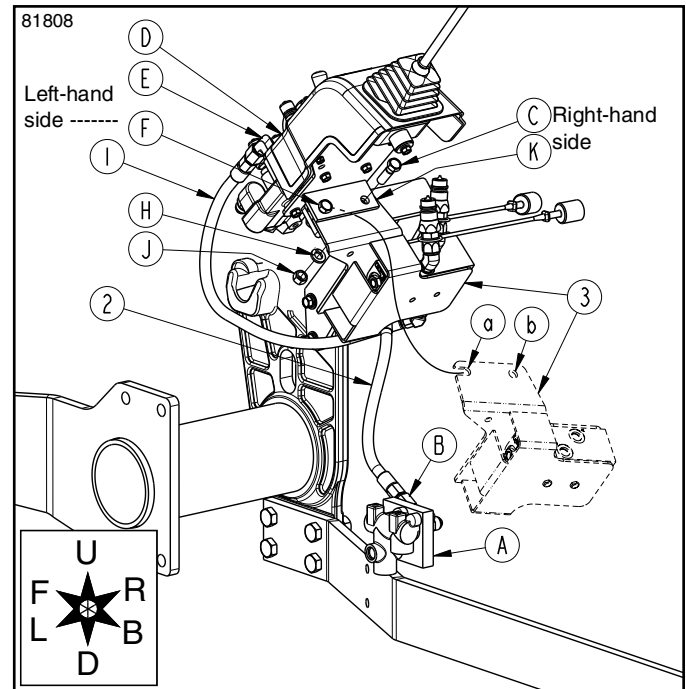
1. On the right-hand side of mount (K), remove existing nut (#J), lock washer (#H) and bolt (C).
2. On the left-hand side of mount (K), loosen bolt (F). Do not remove nut (J) from bolt (F).
3. Insert slot (a) in valve assembly (#3) under loader valve mount (K) and around bolt (F).
4. Rotate valve assembly (#3) counterclockwise to align hole (b) with hole in mount (K) for bolt (C).
5. Reinsert bolt (C) and secure it with existing lock washer (H) and nut (J).
6. Tighten nuts (J) on bolts (C & F) to 67 ft-lbs (91 N-m).
7. Attach loader valve hose (#1) to elbow (E) on loader valve block (D).

Refer to Figure 2-6:

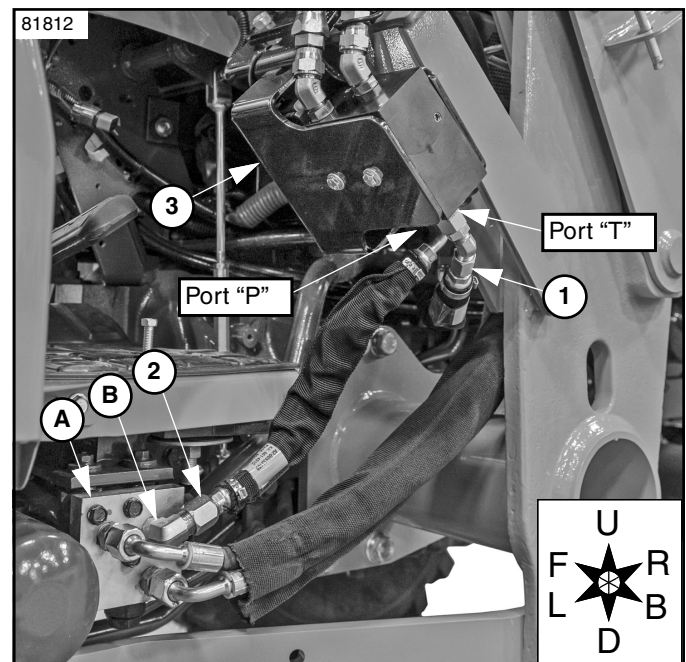
8. Attach pump hose (#2) to elbow (B) on tractor outlet block (A).
9. Tighten fittings in third function valve ports (T & P).
10. Tighten loader valve hose (#1) and pump hose (#2) to third function valve fittings.

Refer to Figure 2-5:

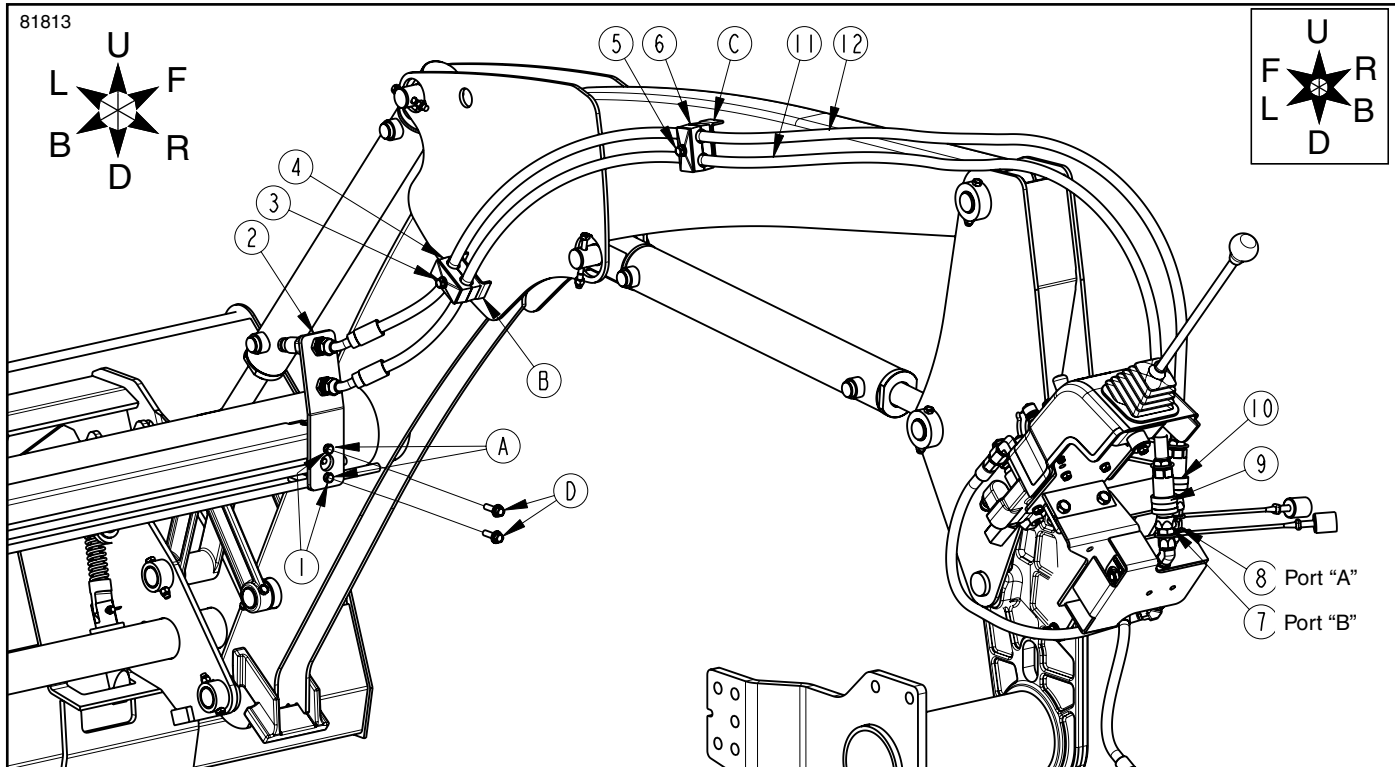
11. Tighten opposite end of hydraulic hoses (#1 & #2) to elbows (B & E).



Attach Third Function Valve Assembly
Figure 2-5



Third Function Valve Hoses
Figure 2-6



Loader Hydraulic Hose Assembly for ROPS Tractor

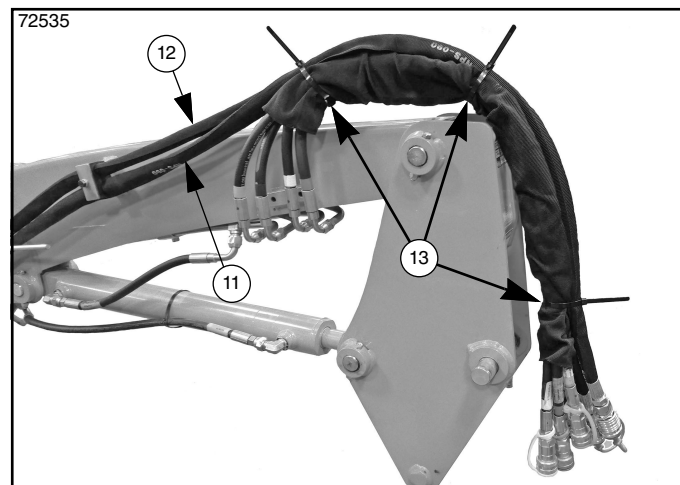
Figure 2-7

Loader Hydraulic Hose Assembly

Refer to Figure 2-7:

Start at the front of the loader and work your way toward Third Function Valve Assembly. The front bulkhead assembly (#2) and clamp bodies (#4 & #6) are shipped assembled with push nut bolt retainers securing the assemblies. Do not remove retainers.

1. Remove existing hardware (D) from mounting bracket (A). Existing hardware may be discarded.
2. Attach bulkhead bracket assembly (#2) to mounting bracket (A) with bolts (#1). Tighten M8x1.25 GR8.8 bolts to 19 fl-lbs (26 N-m).
3. Attach clamp body (#4) to bracket (B) with bolt (#3). Draw bolt up snug, do not tighten at this time.
4. Attach clamp body (#6) to bracket (C) with bolt (#5). Draw bolt up snug, do not tighten at this time.
5. Adjust length of hydraulic hoses between bulkhead bracket (#2) and clamp body (#4). Tighten M8x1.25 GR8.8 bolt (#3) to 19 fl-lbs (26 N-m).
6. Adjust length of hydraulic hoses between clamp bodies (#4 & #6). Tighten M8x1.25 GR8.8 bolts (#5) to 19 fl-lbs (26 N-m).
7. Connect lower hose coupler (#9) to coupler (#7) in valve port "B".
8. Connect upper hose coupler (#10) to coupler (#8) in valve port "A".



Securing Hydraulic Hoses with Cable Ties

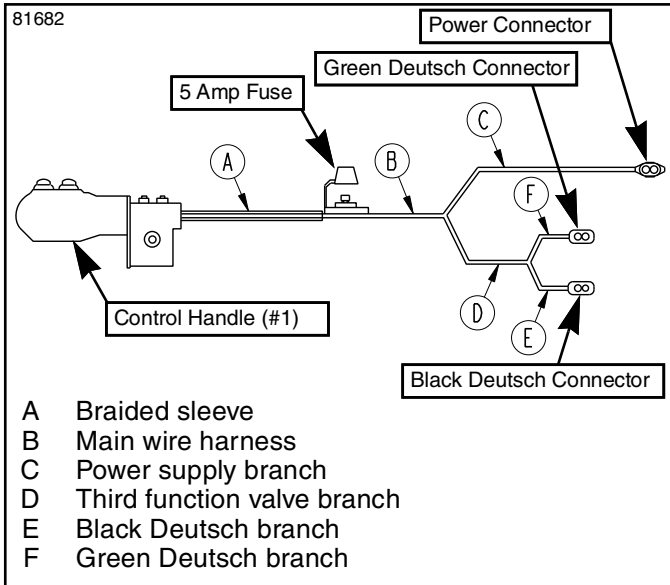
Figure 2-8

Refer to Figure 2-8:

9. Tie hydraulic hoses (#11 & #12) to existing hydraulic hoses with zip ties (#13).



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Schematic of Wire Harness

Figure 2-9

Schematic of Wire Harness

Use the schematic in Figure 2-9 to assist identifying the different parts of the wire harness while installing it.

Control Handle Assembly

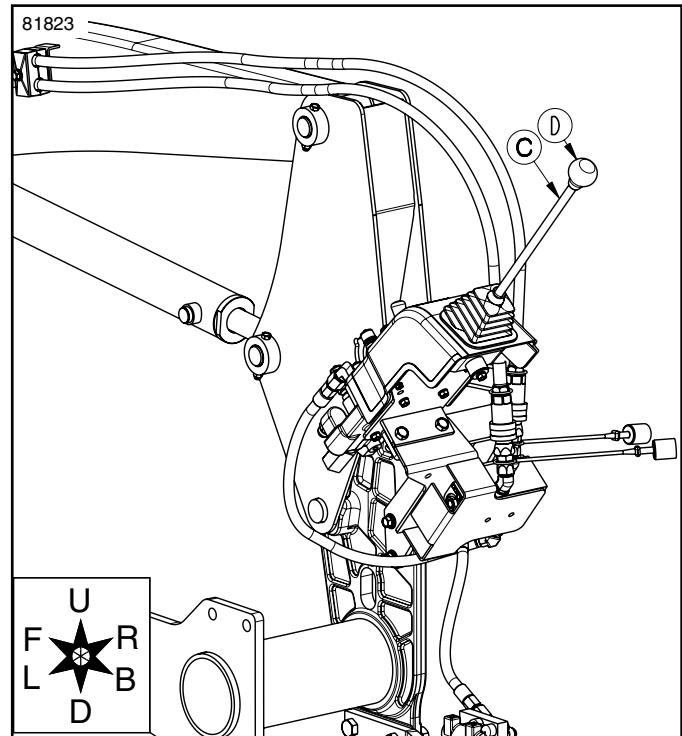
Refer to Figure 2-10:

NOTE: The existing loader control handle (D) will be replaced with a new third function control handle.

1. Remove existing control handle (D) from loader control lever (C).

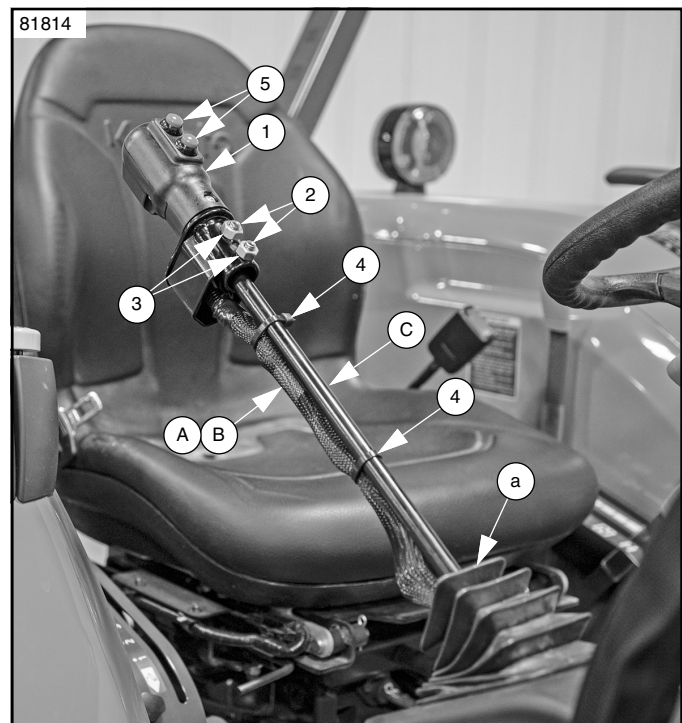
Refer to Figure 2-11:

2. Position new control handle (#1) on control lever (C) with red push button switches (#5) facing up.
3. Rotate control handle (#1) on lever (C) to operator's preference and then secure control handle by tightening set screws (#2).
4. Tighten jam nuts (#3) to secure set screws (#2).
5. If needed, make a relief cut in rubber boot (a) and thread braided sleeve (A) with main wire harness (B) through hole in the top of the rubber boot.
6. Secure braided sleeve and wire harness (A & B) to loader control lever (C) with two cable ties (#4).



Existing Loader Control Handle for ROPS Tractor

Figure 2-10



Control Handle and Harness Assembly

Figure 2-11

Route Wire Harness Branches

Refer to Figure 2-9 on page 24:

1. Pull wire harness (branch B) with 5 amp fuse out from under the loader valve block. Make sure the 5 amp fuse is accessible.
2. Not Shown. Secure main wire harness (branch B) to loader valve mount with a cable tie.

Refer to Figure 2-12:

3. Main wire harness (branch B) separates into two branches (C & D). Secure wire harness (branch D) with green and black Deutsch connectors to third function valve mount (#3) with cable tie (#4).
4. Connect green Deutsch connector on wire harness (branch F) to the top solenoid on valve (#5).
5. Connect black Deutsch connector on wire harness (branch E) to the bottom solenoid on valve (#5).
6. Route power supply harness (branch C) forward between tractor and loader main bulkhead.

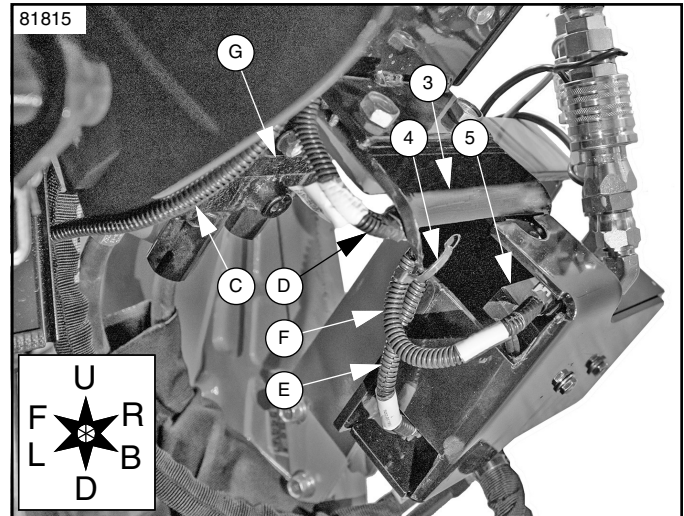
Refer to Figure 2-13:

IMPORTANT: Use two cable ties when attaching a wiring harness to a hydraulic hose. Loop the first cable tie around the hydraulic hose. Loop the second cable tie through the first cable tie and then around the wiring harness. Doing this will help protect the wiring harness from high temperatures produced in hydraulic hoses.

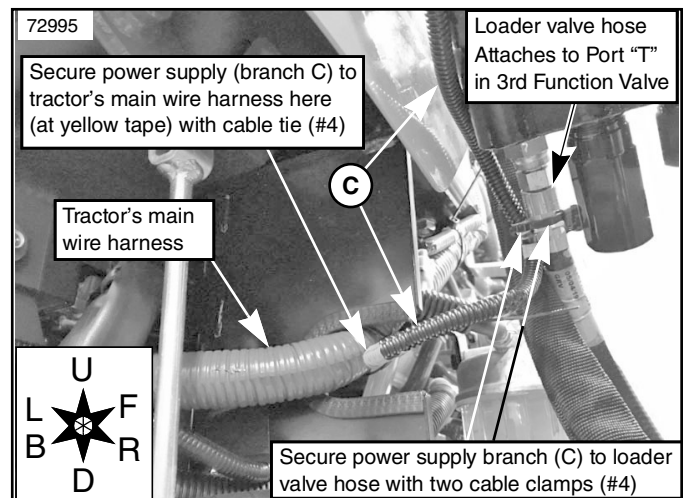
7. Secure power supply harness (branch C) to loader valve hose with two cable ties (#4) as follows:
 - a. Wrap first cable tie (#4) around the loader valve hose only. Do not tighten.
 - b. Wrap second cable tie (#4) through the closed loop in the first cable tie and then around power supply harness (branch C).
 - c. Draw the two cable ties (#4) up tight.
8. At the yellow tape, secure power supply harness (branch C) to the tractor's main wire harness with cable tie (#4).

Refer to Figure 2-14:

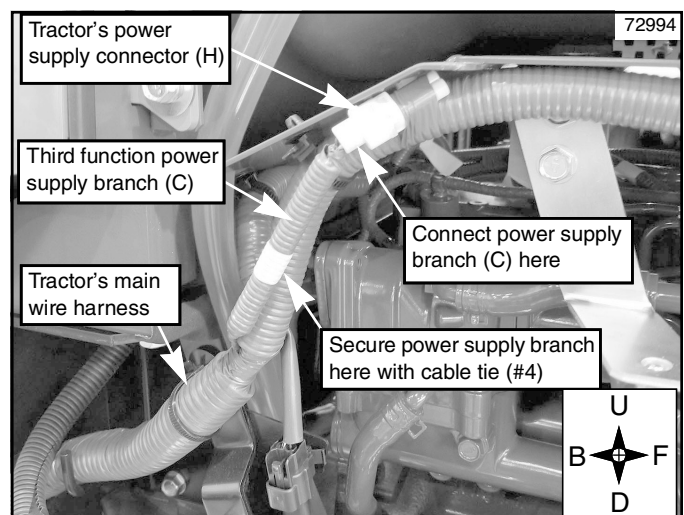
9. Connect power supply harness (branch C) to the tractor power supply connector (H).
10. At the yellow tape, secure power supply harness (branch C) to the tractor's main wire harness with cable tie (#4).



Route Wire Harness Branches
Figure 2-12



Third Function Power Supply Wire Harness Routing
Figure 2-13



Connect Power Supply Branch to Tractor Power
Figure 2-14

Check Operation & Fluid Level

Refer to Figure 2-15:

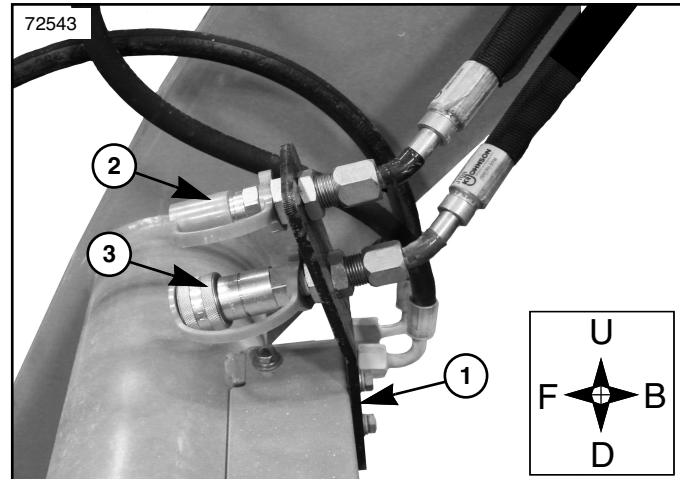
1. Connect a hydraulic operated attachment with quick connect couplers that will connect to the loader's quick connect couplers (#2 & #3).
2. Shut tractor down according to the tractor's shutdown procedure in the Tractor Operator's Manual.
3. Dismount tractor and lock the loader's quick hitch to the attachment.
4. Connect the attachment's hydraulic hoses to loader couplers (#2 & #3).
5. Raise attachment off the ground and operate third function hydraulics using push-buttons on the newly installed control handle. Refer to **"Operate Third Function Valve"** on page 27.

Refer to Figure 2-16:

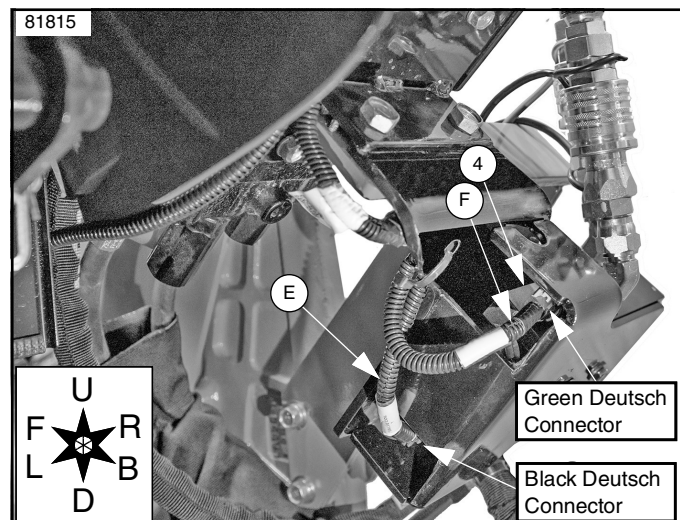
6. If hydraulic cylinder(s) operate in the opposite direction intended, switch wire harness branches (F & E) at solenoid valve (#4)

IMPORTANT: Refer to your tractor Operator's Manual for recommended hydraulic fluid and procedure for checking hydraulic fluid level.

7. Once hoses and cylinder(s) are full of hydraulic fluid, check tractor hydraulic fluid level. If low, add recommended hydraulic fluid until correct levels are attained.
8. Check all connection points on the Third Function Valve Kit for hydraulic fluid leaks.



Connect Attachment Couplers to Bulkhead Couplers
Figure 2-15



Route Wire Harness Branches
Figure 2-16

Operate Third Function Valve

Your Third Function Valve Kit is now ready to be used with a multitude of attachments. Be sure to familiarize yourself with a complete understanding of how to operate the Third Function Valve before attempting to do so.

DANGER

To avoid serious injury or death: Do not allow bystanders to be near the attachment, loader arms, or tractor during operation. They can become entangled, pinched, or crushed by the equipment. Disconnect and lockout power source before making adjustments or servicing tractor and attachment.

Refer to Figure 2-17:

Power On Third Function Valve

IMPORTANT: The power switch on the control handle must be kept off unless the third function valve is being used. Leaving the power switch on while not using the third function valve can cause the hydraulic system to overheat and damage the tractor.

With tractor started, power the Third Function Valve by pressing the power switch to on.

- The LED light on the power switch will light up to indicate the switch is on. If LED light fails to light up, check the 5 amp fuse shown in Figure 2-13 on page 25.

Actuate Attachment Functions

The two red button switches on the loader control handle will actuate the attachment functions.

- The top red button will actuate functions in one direction and the bottom red button will actuate functions in the opposite direction.

Power Off Third Function Valve

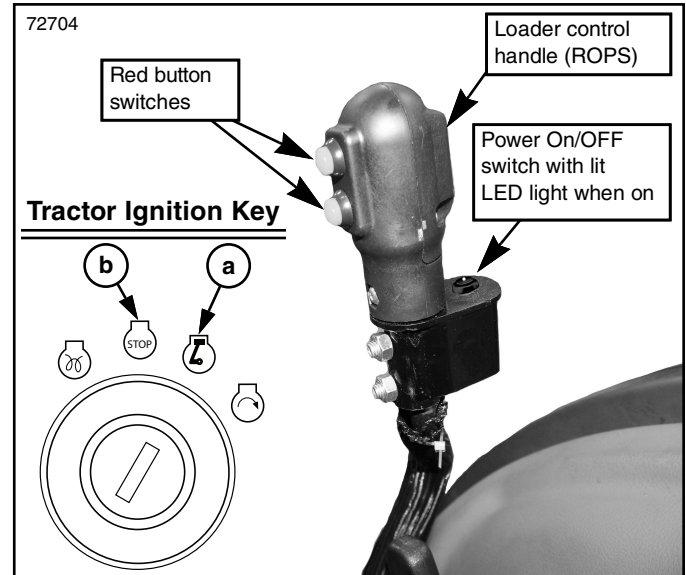
Shut power switch off by pressing the switch again.

- The LED light will go out to indicate the switch is off.

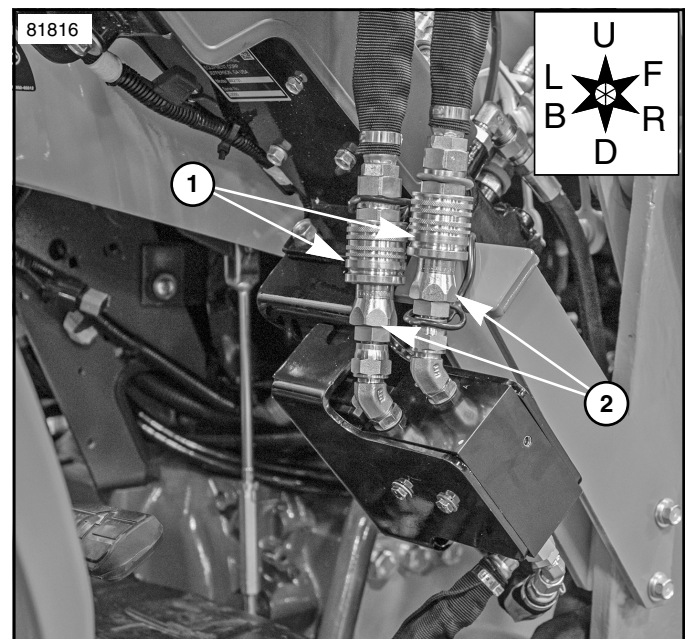
Relieve Hydraulic Pressure

Be sure to relieve all hydraulic pressure from the attachments hydraulic system before dismounting to disconnect its hydraulic lines:

1. Shut tractor down according to your tractor shutdown procedures provided in its Operator's Manual.
2. Without starting the tractor, turn tractor ignition key to its [ON] position (a).
3. On the loader control handle:
 - a. Press power ON/OFF switch to the ON position.
 - b. Press the upper red button until the attachment's hydraulic system pressure is released.
 - c. Press the lower red button until the attachment's hydraulic system pressure is released.
 - d. Once all hydraulic pressures are relieved, press power ON/OFF switch to the OFF position.
4. Turn tractor ignition key to its [OFF] position (b).



Operating Third Function Valve Kit
Figure 2-17



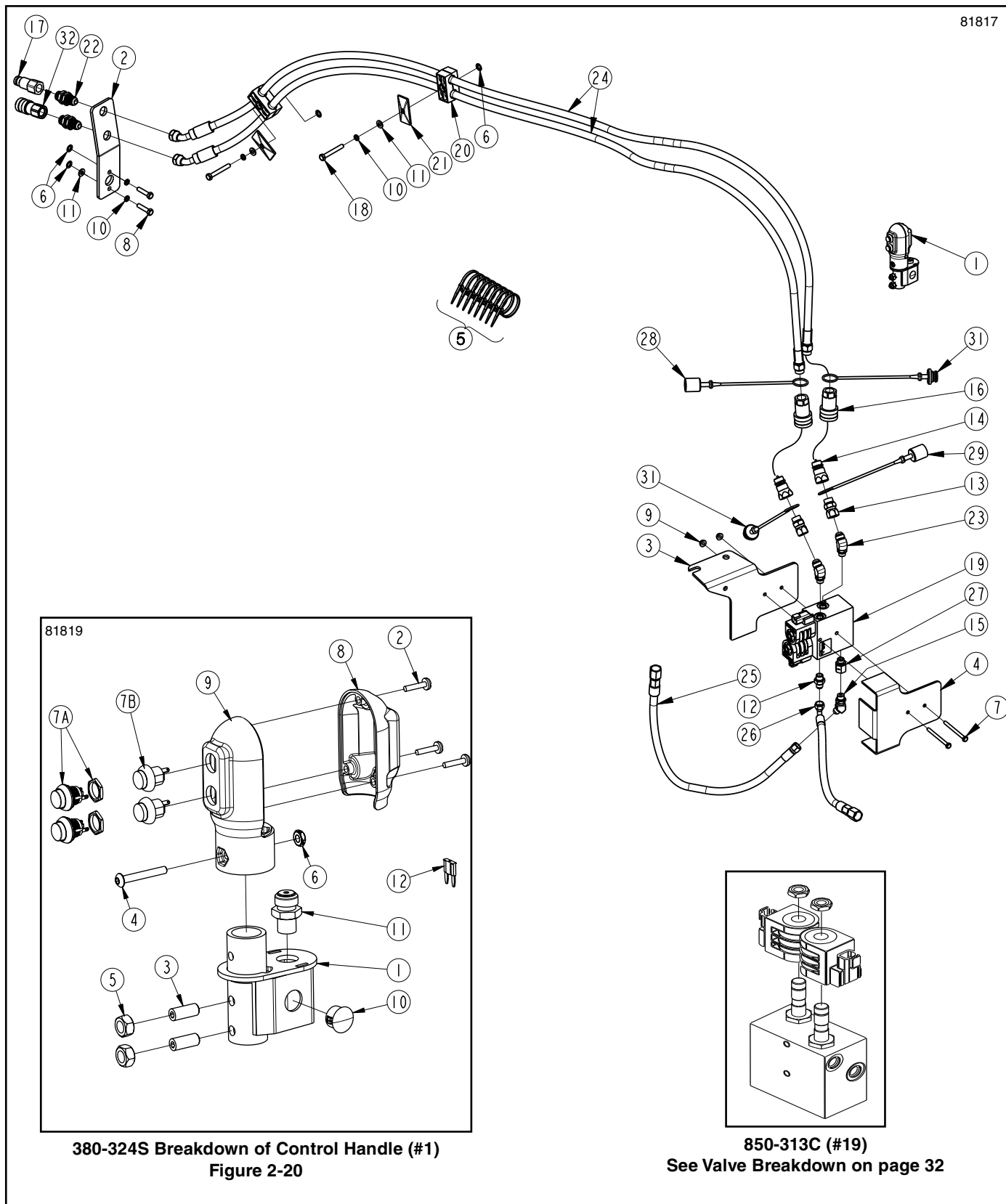
Disconnect Couplers at Third Function Valve
Figure 2-18

Disconnect Loader

Refer to Figure 2-18:

1. Relieve all hydraulic pressures before disconnecting any hydraulic hoses. Refer to “**Relieve Hydraulic Pressure**” on this page.
2. Before disconnecting the front loader, disconnect loader couplers (#1) from third function valve couplers (#2).
3. Cover male and female couplers (#1 & #2) with their attached green and black dust caps.

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MX Third Function Valve Kit for Kubota ROPS Tractor
Figure 2-19

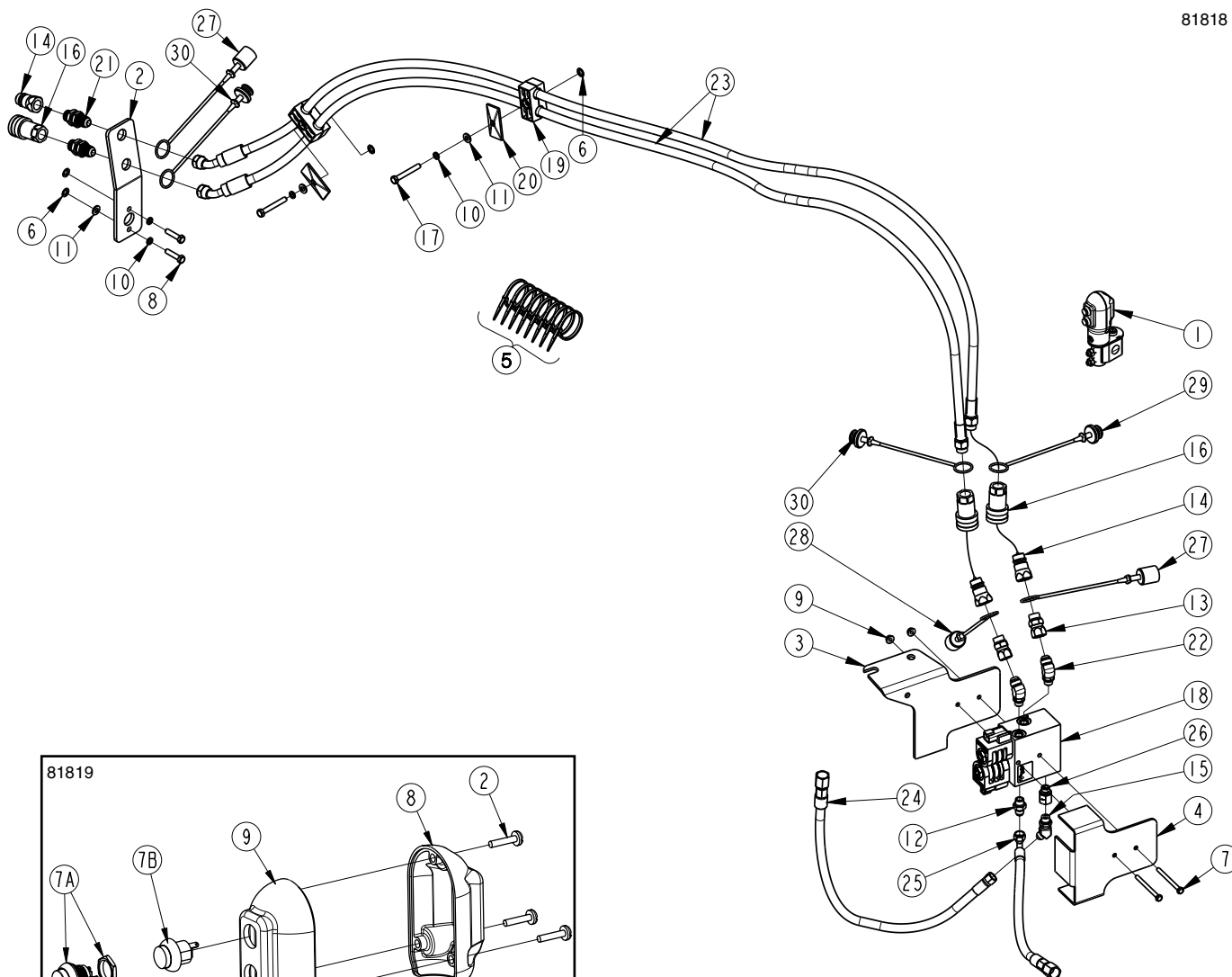
**Kit No. 380-312A****MX THIRD FUNCTION VALVE KIT FOR ROPS TRACTOR (Equipped with flat-faced couplers)**

Item	Part No.	Description	Qty
Refer to Figure 2-19 on page 28:			
1	380-324S	ASY, PSH BUTTN CNTRL HNDL ROPS WITH WIRE HARNESS (See breakdown below)	1
2	380-418D	PLATE, BULKHEAD MOUNT	1
3	380-421D	BRKT, VALVE MOUNT	1
4	380-422D	COVER, 3RD VALVE	1
5	800-112C	CABLE TIE .19X7.25 1.75D 50LB	8
6	800-565C	PUSH NUT BLT RETAINER 5/16ROHS	4
7	802-274C	HHCS 1/4-20X3 GR5	2
8	802-967C	HHCS M8X1.25X35 GR8.8	2
9	803-194C	NUT HEX WHIZ 1/4-20 PLT	2
10	804-157C	WASHER SPRING LOCK M8 PLT	4
11	804-161C	WASHER FLAT M8 PLT	3
12	811-170C	AD 9/16MORB 9/16MJIC	1
13	811-324C	AD 3/4MORB 3/4FJIC	2
14	811-394C	CP 3/4FORB MALE QD POPPET TYPE	2
15	811-416C	EL 45 9/16MJIC 9/16MORB	1
16	811-870C	CP 3/4FORB QD FEMALE (POPPET)	2
17	841-099C	CP 3/4FORB QD FLATFACE	1
18	842-017C	HHCS M8X1.25X60 GR8.8	2
19	850-313C	VALVE, THIRD FUNCTION	1
20	851-241C	STAUFF CLAMP BODY 3D 0.79 HOLE	2
21	851-245C	STAUFF COVER PLATE GROUP 3D	2
22	851-344C	AD 3/4MJIC 3/4MORB BLKHD W/ LN	2
23	851-647C	EL 45 9/16MORB 3/4MJIC	2
24	861-428C	HH3/8R2 090 3/4FJIC45 3/4MORB	2
25	861-430C	HH3/8R2 023 3/4FJIC 9/16FJIC	1
26	861-431C	HH3/8R2 013 3/4FJIC 9/16FJIC90	1
27	861-528C	AD 9/16MORB 9/16FORB	1
28	861-539C	BLACK DUST CAP, 1/2" QD AG	1
29	861-540C	GREEN DUST CAP, 1/2" QD AG	1
30	861-541C	BLACK DUST PLUG, 1/2" QD AG	1
31	861-542C	GREEN DUST PLUG, 1/2" QD AG	1
32	861-543C	CP 3/4FORB QD FML FLATFACE	1

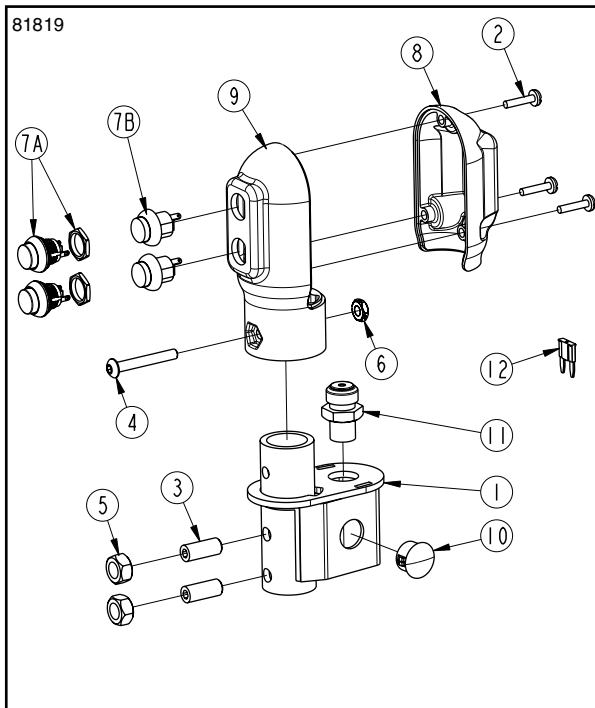
380-324S Push Button Control Handle With Wire Harness**Breakdown of Control Handle (Item #1 in the above parts list)**

Item	Part No.	Description	Qty
Refer to Figure 2-20 on page 28:			
1	380-313H	WMT, CONTROL HANDLE MOUNT	1
2	801-091C	CRPHMS 6-32X5/8 SS	3
3	801-204C	SCREW SET SCKT HD 5/16-18X3/4	2
4	801-250C	HSBHCS #10-32X1 3/8	1
5	803-008C	NUT HEX 5/16-18 PLT	2
6	803-538C	NUT HEX 10-32 LOCK PLT	1
7A	843-713C	PUSH BUTTON W/NUT	2
7B	833-739C	SWITCH, P9 PB NO SPST MOM RED	2
8	837-053C	COVER, PUSH BUTTON CNTRL HNDL	1
9	837-054C	BASE, PUSH BUTTON CNTRL HNDL	1
10	837-365C	PLASTIC SNAP-IN PLUG	1
11	843-178C	POWER SWITCH ON/OFF	1
12	833-950C	FUSE, 5 AMP MINI BLADE	1

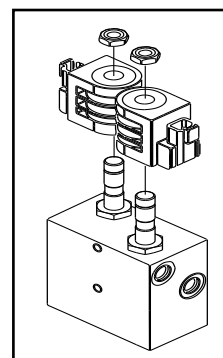
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380-324S Breakdown of Control Handle (#1)
Figure 2-22



850-313C (#18)
See Valve Breakdown on page 32.

MX Third Function Valve Kit for Kubota ROPS Tractor
Figure 2-21

**Kit No. 380-331A****MX THIRD FUNCTION VALVE KIT FOR ROPS TRACTOR (Equipped with pioneer couplers)**

Item	Part No.	Description	Qty
Refer to Figure 2-21 on page 30:			
1	380-324S	ASY, PSH BUTTN CNTRL HNDL ROPS WITH WIRE HARNESS (See breakdown below)	1
2	380-418D	PLATE, BULKHEAD MOUNT	1
3	380-421D	BRKT, VALVE MOUNT	1
4	380-422D	COVER, 3RD VALVE	1
5	800-112C	CABLE TIE .19X7.25 1.75D 50LB	8
6	800-565C	PUSH NUT BLT RETAINER 5/16ROHS	4
7	802-274C	HHCS 1/4-20X3 GR5	2
8	802-967C	HHCS M8X1.25X35 GR8.8	2
9	803-194C	NUT HEX WHIZ 1/4-20 PLT	2
10	804-157C	WASHER SPRING LOCK M8 PLT	4
11	804-161C	WASHER FLAT M8 PLT	3
12	811-170C	AD 9/16MORB 9/16MJIC	1
13	811-324C	AD 3/4MORB 3/4FJIC	2
14	811-394C	CP 3/4FORB MALE QD POPPET TYPE	3
15	811-416C	EL 45 9/16MJIC 9/16MORB	1
16	811-870C	CP 3/4FORB QD FEMALE (POPPET)	3
17	842-017C	HHCS M8X1.25X60 GR8.8	2
18	850-313C	VALVE, THIRD FUNCTION	1
19	851-241C	STAUFF CLAMP BODY 3D 0.79 HOLE	2
20	851-245C	STAUFF COVER PLATE GROUP 3D	2
21	851-344C	AD 3/4MJIC 3/4MORB BLKHD W/ LN	2
22	851-647C	EL 45 9/16MORB 3/4MJIC	2
23	861-428C	HH3/8R2 090 3/4FJIC45 3/4MORB	2
24	861-430C	HH3/8R2 023 3/4FJIC 9/16FJIC	1
25	861-431C	HH3/8R2 013 3/4FJIC 9/16FJIC90	1
26	861-528C	AD 9/16MORB 9/16FORB	1
27	861-539C	BLACK DUST CAP, 1/2" QD AG	2
28	861-540C	GREEN DUST CAP, 1/2" QD AG	1
29	861-541C	BLACK DUST PLUG, 1/2" QD AG	1
30	861-542C	GREEN DUST PLUG, 1/2" QD AG	2

380-324S Push Button Control Handle With Wire Harness**Breakdown of Control Handle (Item #1 in the above parts list)**

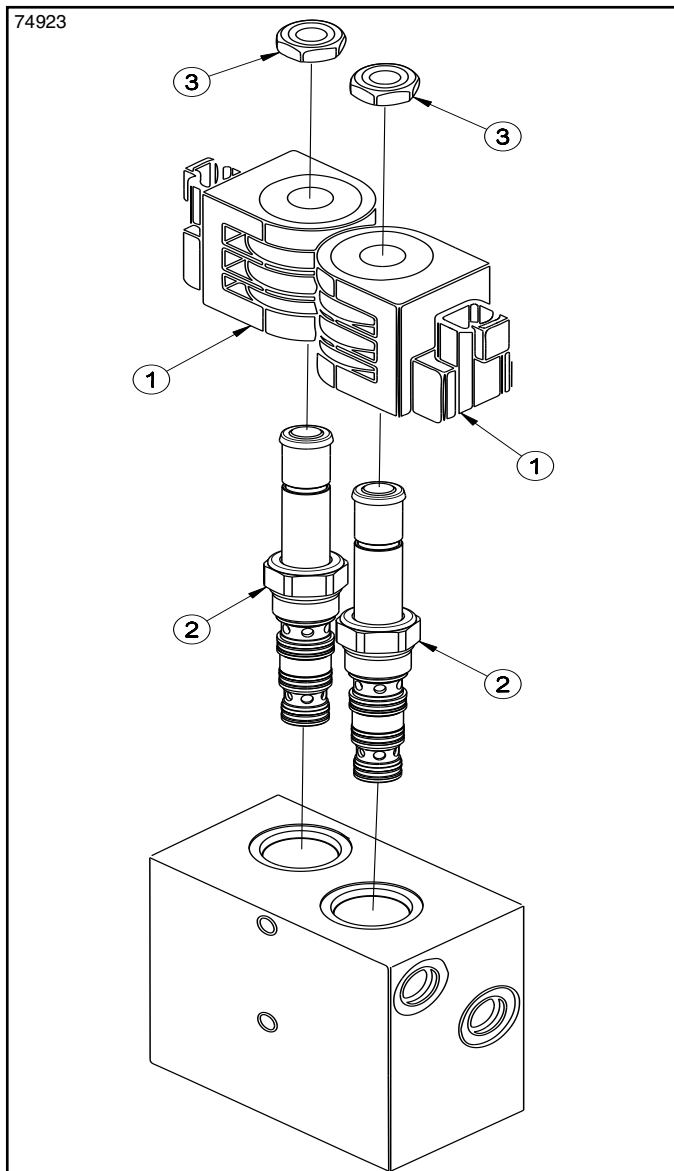
Item	Part No.	Description	Qty
Refer to Figure 2-22 on page 30:			
1	380-313H	WMT, CONTROL HANDLE MOUNT	1
2	801-091C	CRPHMS 6-32X5/8 SS	3
3	801-204C	SCREW SET SCKT HD 5/16-18X3/4	2
4	801-250C	HSBHCS #10-32X1 3/8	1
5	803-008C	NUT HEX 5/16-18 PLT	2
6	803-538C	NUT HEX 10-32 LOCK PLT	1
7A	843-713C	PUSH BUTTON W/NUT	2
7B	833-739C	SWITCH, P9 PB NO SPST MOM RED	2
8	837-053C	COVER, PUSH BUTTON CNTRL HNDL	1
9	837-054C	BASE, PUSH BUTTON CNTRL HNDL	1
10	837-365C	PLASTIC SNAP-IN PLUG	1
11	843-178C	POWER SWITCH ON/OFF	1
12	833-950C	FUSE, 5 AMP MINI BLADE	1

Third Function Valve Parts Breakdown

Used with Kit No's 380-311A, 380-330A, 380-312A, and 380-331A

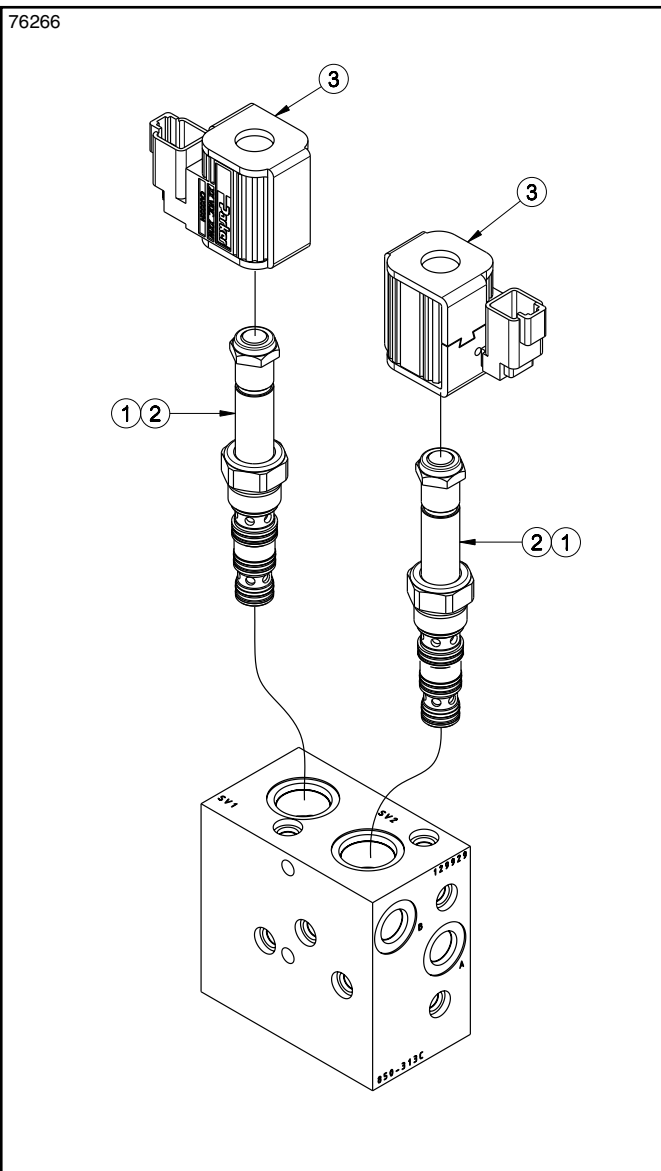
Your kit will include for 850-313C either a Delta Valve or a Parker Valve. Look for the brand name on the valve body. Purchase replacement parts using the part list provide below per your valve name.

Delta Valve Assembly #850-313C



No.	Part No.	Description	Qty
	850-313C	Delta Third Function Valve Assembly	
1	39680034	Delta 12VDC Solenoid Coil, DT04-2P . . . 2	
2	85002296	Delta 4-Way, 2-Position Solenoid Valve . 2	
3	36202020	Delta Coil Nut 2	

Parker Valve Assembly #850-313C



No.	Part No.	Description	Qty
	850-313C	Parker Third Function Valve Assembly	
1	SK10-4N	Parker Seal Kit, IC-8350 1	
2	DSL104E9N	Parker 2P4W C10 Spool Solenoid. . . . 2	
3	CAP012H	Parker Coil/0.625 /SHI/DT/012DC 2	

Warranty

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit: One year Parts and Labor

This Warranty is limited to the repair or replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Land Pride dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.



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