

BX Third Function Valve Kit

#380-137A & 380-337A Installation Instructions



For Kubota 60 & 70 Series Tractors

Manual No. 380-145M

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: Cancer and reproductive harm.
www.P65Warnings.ca.gov

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 BX Third Function Valve Kit is exclusively designed for your Kubota 60 & 70 series BX tractors. Please read these installation instructions thoroughly before assembling this kit to your Kubota tractor and loader. Especially read information relating to safety concerns.

These assembly instructions apply to the Third Function Valve Kit Accessories listed below:

• 380-337A: 3FVK FF BX2670 page 2

Further Assistance

Your Land Pride dealer wants you to be satisfied with your new BX 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. Discuss any problems you have with your Third Function Valve Kit with your dealership service personnel so they can address the problem.
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:

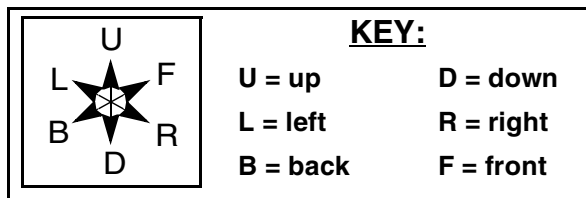
Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060
E-mail address
lpservicedept@landpride.com

Assembly Instructions

A detailed listing of parts for this kit is provided on page 8 for kits. Use the list that is for your specific Third Function Valve Kit as a checklist to inventory parts received. Please contact your local Land Pride dealer for any missing hardware.

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



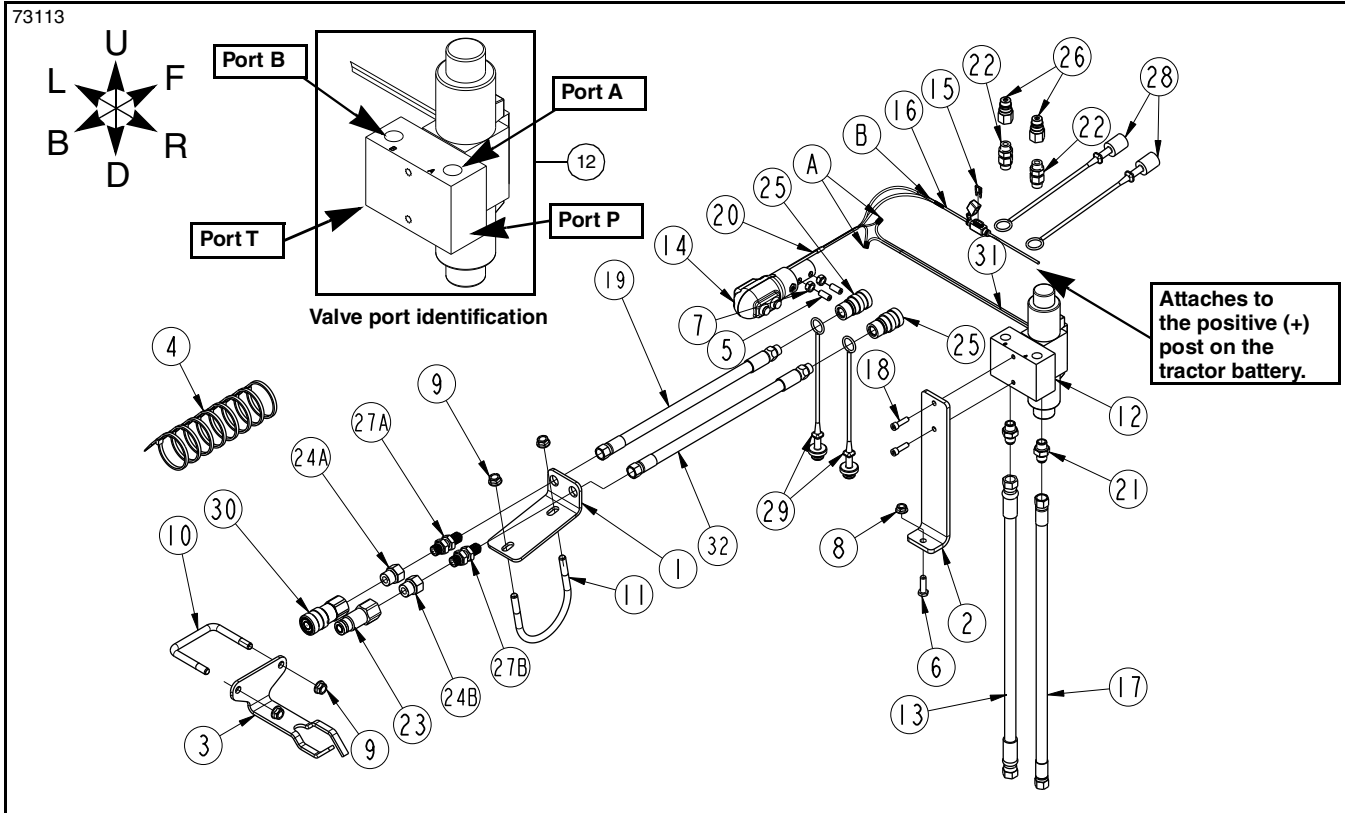
WARNING

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.

The steps listed below must be followed before installing this kit:

The steps listed below must be followed before installing this kit:

1. Reduce engine speed. Park tractor and attachment on solid, level ground.
2. Unhook the attachment from the loader arms, back away from attachment several feet, and lower loader arms until they are fully down.
3. Put tractor in park or set park brake, turn off engine, and remove ignition key to prevent unauthorized starting.
4. Relieve all hydraulic pressure to auxiliary hydraulic lines.
5. Wait for all components to come to a complete stop before leaving the operator's seat.
6. Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.
7. As a safety precaution, disconnect the negative battery cable from battery terminal. Move cable away from terminal to avoid accidental contact.

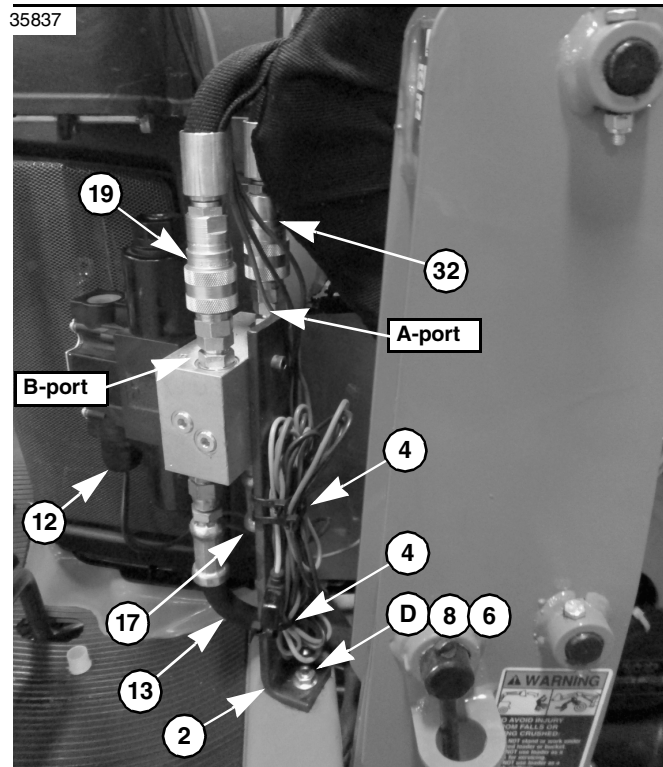


Third Function Valve Kit
Figure 1

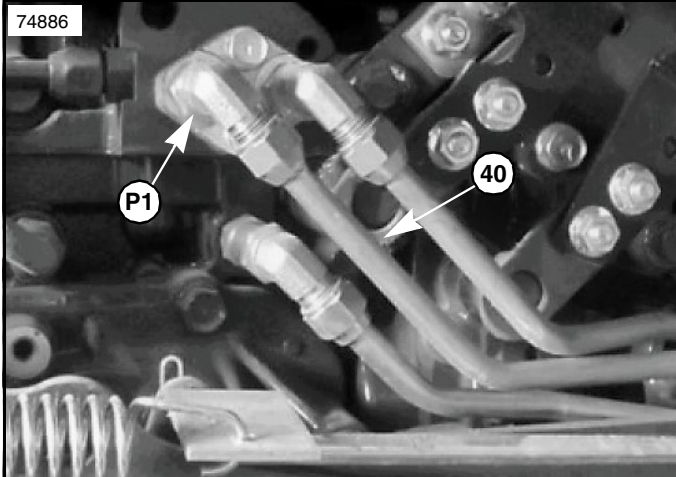
Valve Mount & Valve Assembly

Refer to Figure 1 & Figure 2:

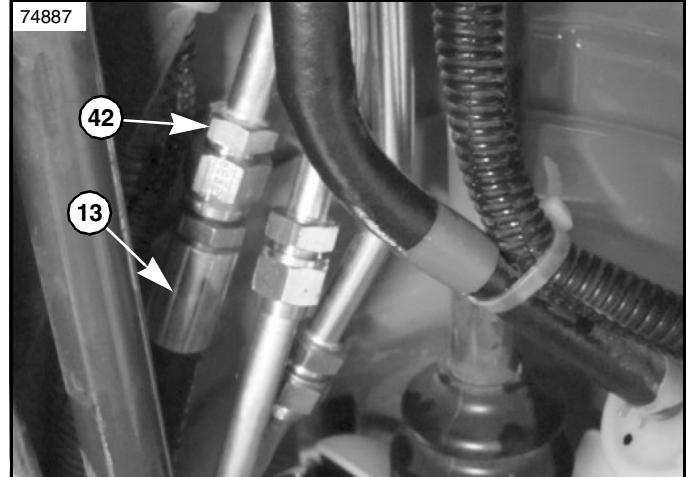
1. Bolt the valve mount plate (#2) to existing hole "D" in tractor platform with 5/16" x 1" bolt (#6) and hex whiz nut (#8). Tighten hex whiz nut to 17 ft-lbs.
2. Attach valve (#12) to valve mount plate (#2) using 1/4" x 7/8" bolts (#18). Tighten bolts to 8 ft-lbs.
3. Attach 62" long hose (#13) to "T" port in valve (#12) using adapter (#21).
4. Attach 48" long hose (#17) to "P" port in valve (#12) using adapter (#21).
5. Route hydraulic hoses (#13 & #17) left of valve mount plate (#2) and down beneath tractor platform.
6. Install adapters (#22) and red dust caps (#28) to "A" & "B" ports on valve (#12). Attach quick couplers (#26) to adapters (#22).
7. Tighten installed fittings and hydraulic hoses.



Valve Location
Figure 2



Power Beyond Block
Figure 3



Front Short Steel Line
Figure 4

Connect to Power Beyond

Refer to Figure 1, Figure 3, & Figure 4:

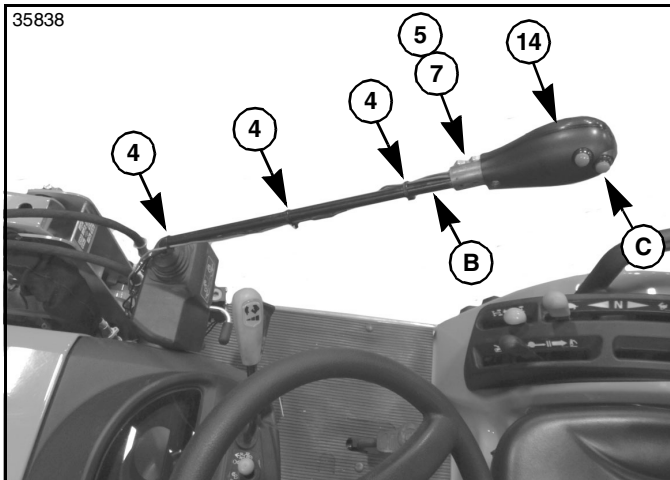
IMPORTANT: Land Pride recommends that your dealer connect hydraulic hoses (#13 & #17) to your tractor's power beyond port and loader valve port. Improper hook-up could cause damage to your tractor.

IMPORTANT: DO NOT connect hydraulic hoses (#13 & #17) to the loader valve and power beyond port if the outer block feeds equipment mounted on the back of the tractor such as a backhoe. The instructions below do not apply in this situation. Have your nearest dealer hook-up these hoses. Improper hook-up can damage your tractor.

1. Place chocks in front and back of tractor's left rear wheel.
2. Loosen lug nuts on right rear wheel. Do not remove lug nuts at this time.
3. Jack right rear wheel off the ground and place a jack stand under the right rear wheel axle.
4. Lower right rear axle onto the jack stand. The wheel should still be slightly off the ground. Make sure jack stand is secure and will not slip out from under the tractor axle.
5. Remove lug nuts and right rear wheel.
6. Locate steel line (#40) connected to power beyond port (P1) at the outlet block. The outlet block is directly behind the right rear tire. The steel line is two shorter lines (#40 & #42) connected together to make one long steel line. Remove the rear short line (#40).
7. Connect free end of hydraulic hose (#17) to power beyond port (P1) on the outlet block.

Refer to Figure 4:

8. Connect free end of hydraulic hose (#13) to the remaining front short steel line (#42), which is connected to the loader valve.
9. Secure hoses to underside of tractor with cable ties (#4).
10. Replace right rear wheel and screw lug nuts on until snug.
11. Jack axle up and remove jack stand.
12. Lower tractor down and tighten lug nuts in a crisscross pattern. Refer to tractor Operator's Manual for proper torque value.
13. Remove chocks.
14. Check tractor hydraulic fluid level. If low, add recommended hydraulic fluid. Refer to your tractor Operator's Manual for recommended hydraulic fluid and procedure for checking hydraulic fluid level.



Control Stick Assembly
Figure 5

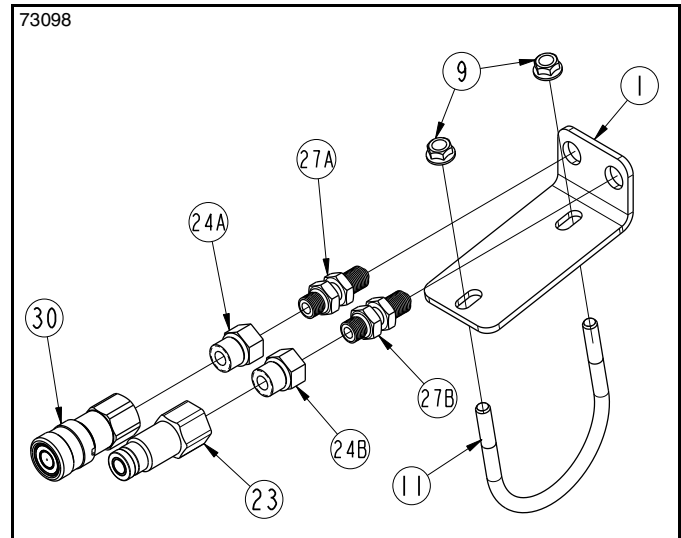
Control Lever Assembly

Refer to Figure 5:

1. Remove existing knob (not shown) from end of control lever "B".
2. Install new control handle (#14) over end of control lever "B" with push buttons "C" facing operator as shown.
3. Tighten set screws (#5) against control lever "B". Tighten jam nuts (#7) to secure set screws.

Refer to Figure 2:

4. **Reference Connections "A":** Connect one black wire in harness (#20) to one black wire in harness (#31) and the other black wire in harness (#20) to one white wire in harness (#31).
5. **Reference Connection "B":** Connect the two red wires from harness (#20) to wire harness (#16) with fuse holder (#15). Connect opposite end of fuse holder wire (#16) to the positive (+) post on the battery.
6. Secure wiring with cable ties (#4) as needed.
7. Reattach the disconnected negative battery cable to the negative (-) terminal on the battery.

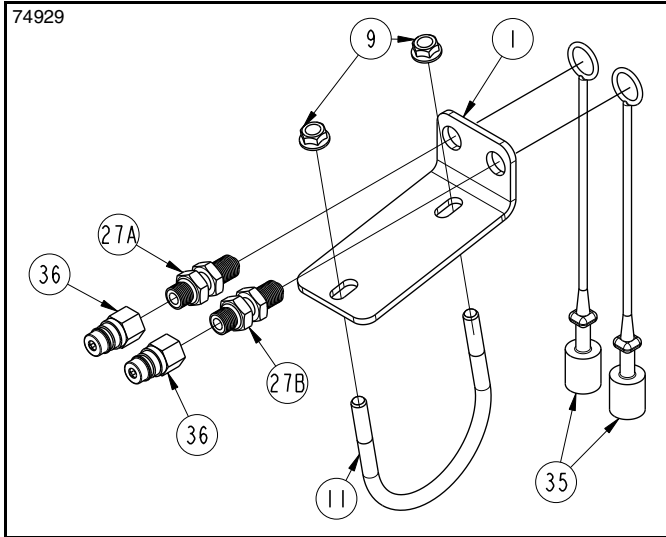


Bulkhead Mount Shown with Flat Faced Couplers
Figure 6

Bulkhead Mount Assembly with Flat Faced Couplers

Refer to Figure 6 & Figure 8 on page 5:

1. Attach bulkhead fittings (#27) to bulkhead mount (#1). Tighten bulkhead locknuts to bulkhead mount.
2. Install adapters (#24) to bulkhead fittings.
3. Attach female coupler (#30) to adapter (#24A). Tighten and secure coupler.
4. Attach male coupler (#23) to adapter (#24B). Tighten and secure coupler.
5. Attach hose (#19) to fitting (#27A) & hose (#32) to fitting (#27B).

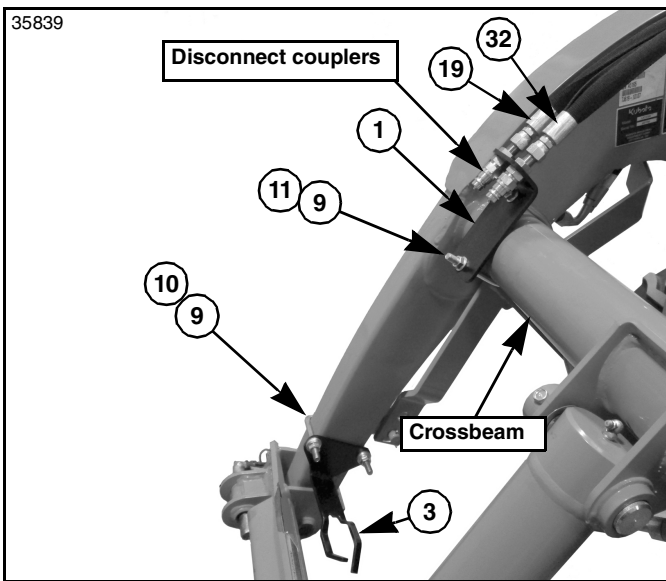


Bulkhead Mount Shown with Pioneer Couplers
Figure 7

Bulkhead Mount Assembly with Pioneer Couplers

Refer to Figure 7:

1. Attach bulkhead fittings (#27) to bulkhead mount (#1). Tighten bulkhead locknuts to bulkhead mount.
2. Slide red dust plugs (#35) on bulkhead fitting.
3. Attach male couplers (#36) to bulkhead fittings. Tighten and secure coupler.
4. Attach hose (#19) to fitting (#27A) & hose (#32) to fitting (#27B).

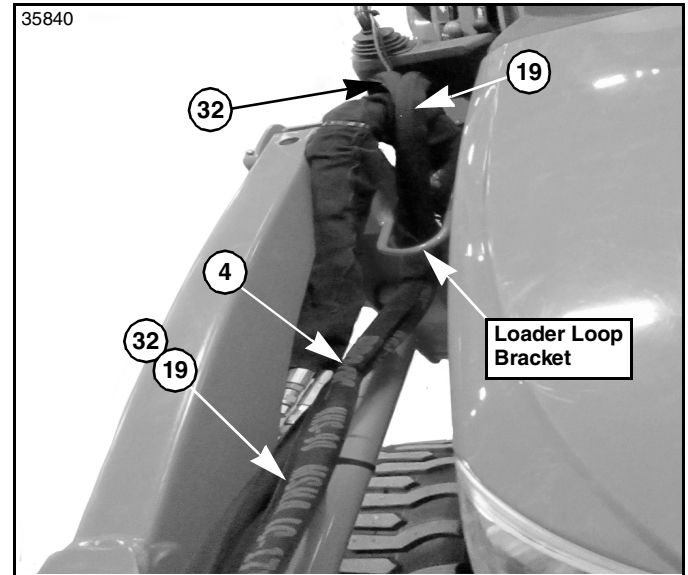


Cross Beam & Hose Holder Assembly
Figure 8

Cross Beam Mount Assembly

Refer to Figure 1 on page 2, & Figure 6 on page 4, & Figure 8:

1. Orient bulkhead mount (#1) as shown in Figure 8, attach mount to the right-hand side of loader crossbeam with u-bolt (#11) and hex whiz nuts (#9). Tighten hex whiz nuts to 20 ft-lbs.



Hose Route Along Loader Arm
Figure 9

Hydraulic Hose Routing

Refer to Figure 1 on page 2, Figure 8, & Figure 9:

2. Route hoses (#19 & #32) along loader arm and through loader loop bracket to third function valve (#10).
3. Install female couplers (#25) and black dust plugs (#29) to hoses (#19 & #32).
4. Connect hose (#32) to port "A" on the left-hand side of valve block (#12).
5. Connect hose (#19) to port "B" on the right-hand side of valve block (#12).
6. Secure hydraulic hoses (#19 & #32) as needed with cable ties (#4).

Hose Holder Bracket Assembly

Refer to Figure 1 on page 2 & Figure 8:

1. Attach hose holder bracket (#3) to the loader's right-hand arm as shown in Figure 8 with 3/8"-16 x 3 1/32" x 2 3/4" u-bolt (#10) and hex whiz nuts (#9).
2. Tighten whiz nuts to the correct torque.

Check Operating and Fluid Level

The Third Function Valve 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 Kit.

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.

1. Hook attachment to the tractor front loader and couple hydraulic hoses to the bulkhead couplers at the front of the loader.
2. Raise attachment off the ground and operate the third function hydraulics using the push-buttons on the newly installed control handle.
 - The top red button switch will actuate the attachment in one direction.
 - The bottom red button switch will actuate the attachment in the opposite direction.
3. **Refer to Figure 1 on page 2:** Switch hoses (#19 & #32) at couplers (#25) if the attachment's hydraulic cylinder(s) operate in the opposite direction intended.

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.
5. If low, add recommended hydraulic fluid.

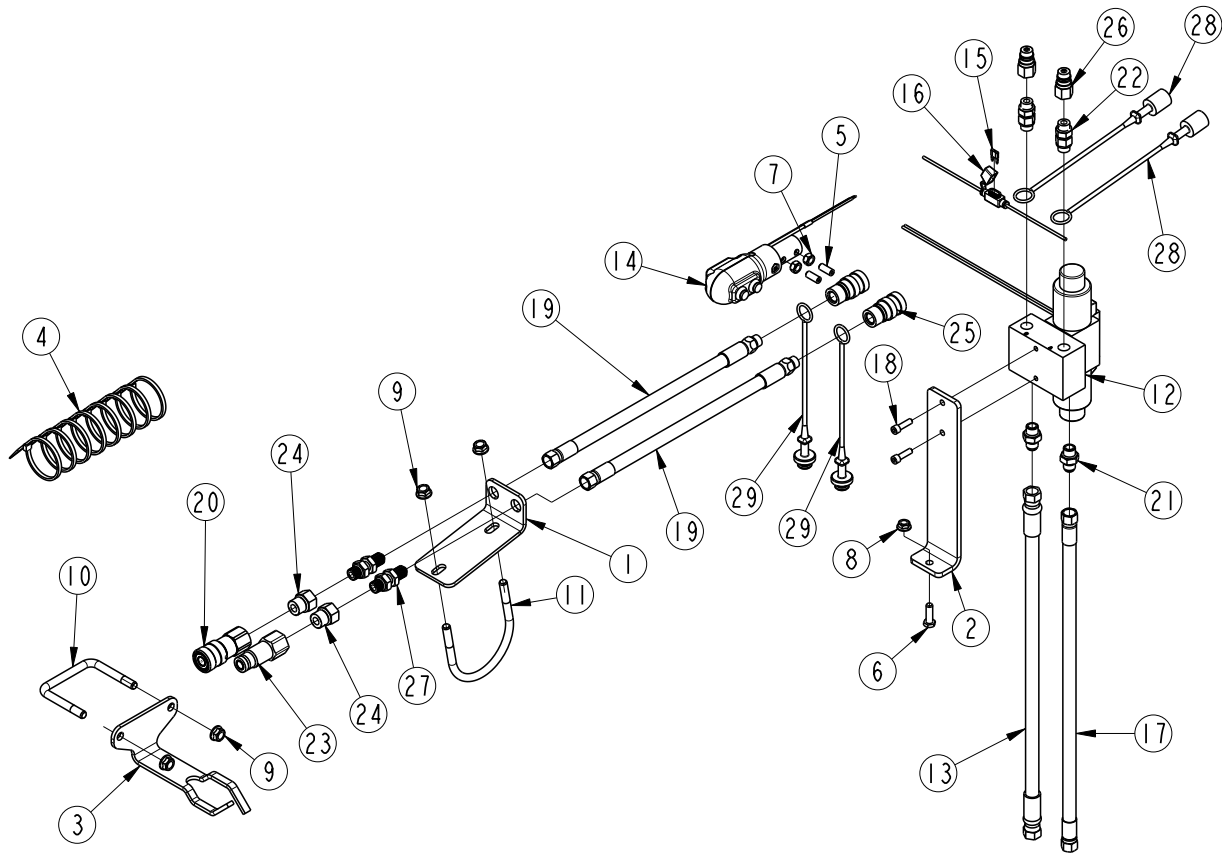
Relieve Hydraulic System Pressure

Be sure to lower the attachment to the ground and to relieve all hydraulic pressure to the attachment before leaving the tractor seat. Relieve hydraulic pressure to the attachment as follows:

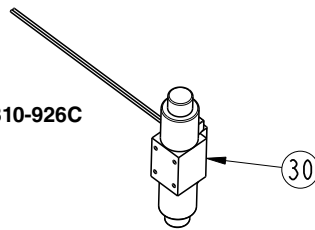
1. Turn tractor switch key to off.
2. Press and hold both red buttons down on the control handle until all movement at the attachment stops.

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73118



Replacement valve (#30) for 810-926C
(valve only)



Hydraulic Hose Identification Chart

811-253C - (#13)	
811-277C - (#19)	
841-563C - (#17)	

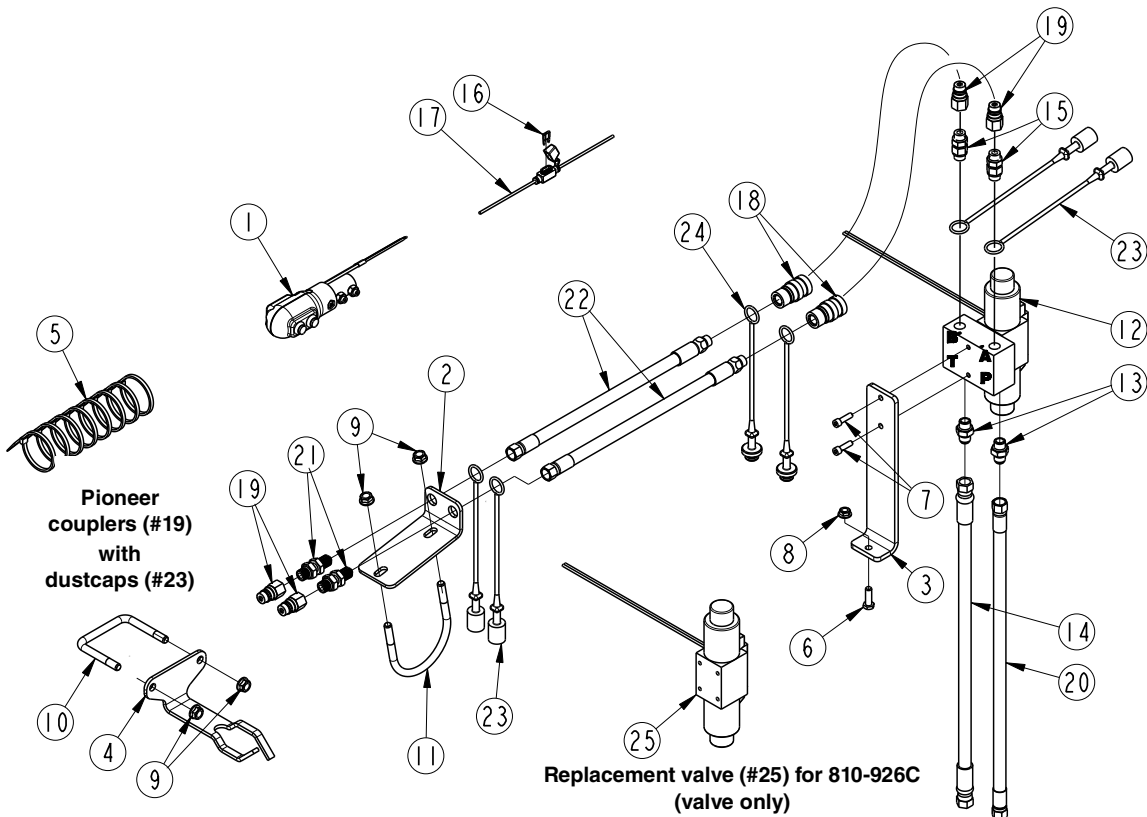
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**Third Function Valve Kit for Cab Tractor
Figure 10**

**Kit No. 380-337A BX THIRD FUNCTION VALVE KIT
(Equipped with flat faced couplers)**

Item	Part No.	Description	Qty
1	380-223D	PLATE, BX BLKHD MOUNT	1
2	380-224D	PLATE, BX VALVE MOUNT.	1
3	380-226D	BRKT, HOSE HOLDER.	1
4	800-112C	CABLE TIE .19X7.25 1.75D 50LB	8
5	801-204C	SCREW SET SCKT HD 5/16-18X3/4	2
6	802-159C	HHCS 5/16-18X1 GR5	1
7	803-008C	NUT HEX 5/16-18 PLT	2
8	803-043C	NUT HEX WHIZ 5/16-18 PLT	1
9	803-198C	NUT HEX WHIZ 3/8-16 PLT	4
10	806-132C	U-BOLT 3/8-16 X 3 1/32 X 2 3/4	1
11	806-256C	U-BOLT 3/8-16X3 1/2X4 1/8 RND.	1
12	810-926C	VALVE, THIRD FUNCTION.	1
13	811-253C	HH3/8R2 062 9/16FJIC	1
14	380-165S	ASY, PUSH BUTTON CNTRL HNDL.	1
15	833-495C	FUSE, 10 AMP MINI BLADE.	1
16	833-650C	BLADE FUSE HOLDER, MINI	1
17	841-563C	HH3/8R2 048 9/16FJIC	1
18	802-418C	HSHCS 1/4-20X7/8.	2
19	851-277C	HH1/4R2 054 9/16MORB 9/16FJIC	2
20	861-543C	CP 3/4FORB QD FML FLATFACE	1
21	811-170C	AD 9/16MORB 9/16MJIC	2
22	811-636C	AD 9/16MORB STRAIGHT UNION.	2
23	841-099C	CP 3/4FORB QD FLATFACE	1
24	841-103C	AD 3/4MORB 9/16FORB.	2
25	841-466C	CP 9/16FORB QD 1/4BODY FEMALE	2
26	841-467C	CP 9/16 FORB QD 1/4 BODY MALE.	2
27	851-276C	AD 9/16MJIC9/16MORB BLKHD W/LN.	2
28	851-976C	DUST CAP, 1/4" QD AG	2
29	851-977C	BLACK DUST PLUG, 1/2" QD AG.	2
30	850-472C	HYDRO-TEK VALVE REPLACEMENT.	1

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Hydraulic Hose Identification Chart

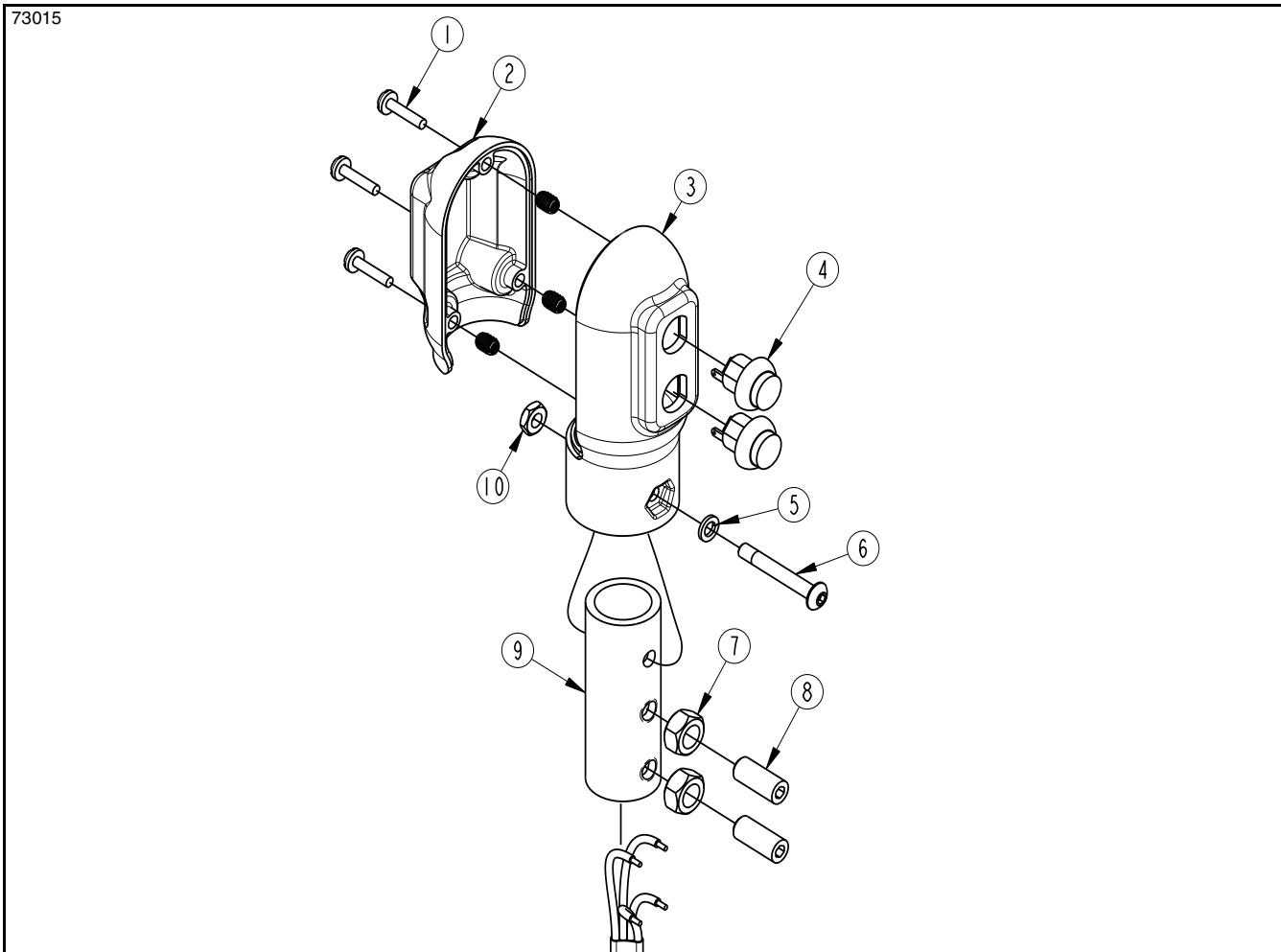
811-253C - (#14)	<p>62.00</p>
811-277C - (#22)	<p>54.00</p>
841-563C - (#20)	<p>48.00</p>

73117

Third Function Valve Kit for Cab Tractor
Figure 11

**Kit No. 380-137A BX THIRD FUNCTION VALVE KIT
(Equipped with pioneer couplers)**

Item	Part No.	Description	Qty
1	380-165S	ASSEMBLY, PUSH BUTTON CONTROL HANDLE	1
2	380-223D	PLATE, BX BLKHD MOUNT	1
3	380-224D	PLATE, BX VALVE MOUNT	1
4	380-226D	BRKT, HOSE HOLDER	1
5	800-112C	CABLE TIES	8
6	802-159C	HHCS 5/16-18X1 GR5.	1
7	802-418C	HSHCS 1/4-20X7/8	2
8	803-043C	NUT HEX WHIZ 5/16-18 PLT.	1
9	803-198C	NUT HEX WHIZ 3/8-16 PLT.	4
10	806-132C	U-BOLT 3/8-16 X 3 1/32 X 2 3/4	1
11	806-256C	U-BOLT 3/8-16X3 1/2X4 1/8 RND	1
12	810-926C	VALVE, THIRD FUNCTION	1
13	811-170C	AD 9/16MORB 9/16MJIC.	2
14	811-253C	HH3/8R2 062 FJIC9/16	1
15	811-636C	AD 9/16MORB STRAIGHT UNION	2
16	833-495C	FUSE, 10 AMP MINI BLADE	1
17	833-650C	BLADE FUSE HOLDER, MINI.	1
18	841-466C	CP 9/16FORB QD 1/4BODY FEMALE.	2
19	841-467C	CP 9/16 FORB QD 1/4 BODY MALE	4
20	841-563C	HH3/8R2 048 9/16FJIC	1
21	851-276C	AD 9/16MJIC9/16MORB BLKHD W/LN	2
22	851-277C	HH1/4R2 054 9/16MORB 9/16FJIC	2
23	851-976c	DUST CAP, 1/4" QD AG.	4
24	851-977C	DUST PLUG, 1/4" QD AG	2
25	850-472C	HYDRO-TEK VALVE REPLACEMENT	1



Control Handle
Figure 12

380-165S Push Button Control Handle

Item	Part No.	Description	Qty
1	801-091C	CRPHMS 6-32X5/8 SS	3
2	837-053C	COVER, PUSH BUTTON CNTRL HNDL.	1
3	837-054C	BASE, PUSH BUTTON CNTRL HNDL	1
4	833-739C	SWITCH, P9 PB NO SPST MOM RED	2
5	804-054C	WASHER LOCK #10	1
6	801-250C	HSBHCS #10-32X1 3/8.	1
7	803-008C	NUT HEX 5/16-18 PLT	2
8	801-204C	SCREW SET SCKT HD 5/16-18X3/4	2
9	380-225D	MOUNT TUBE, CONTROL STICK	1
10	803-269C	NUT HEX 10-32 PLT.	1

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