



John Deere Rear Remote & Front Function Valve Kit

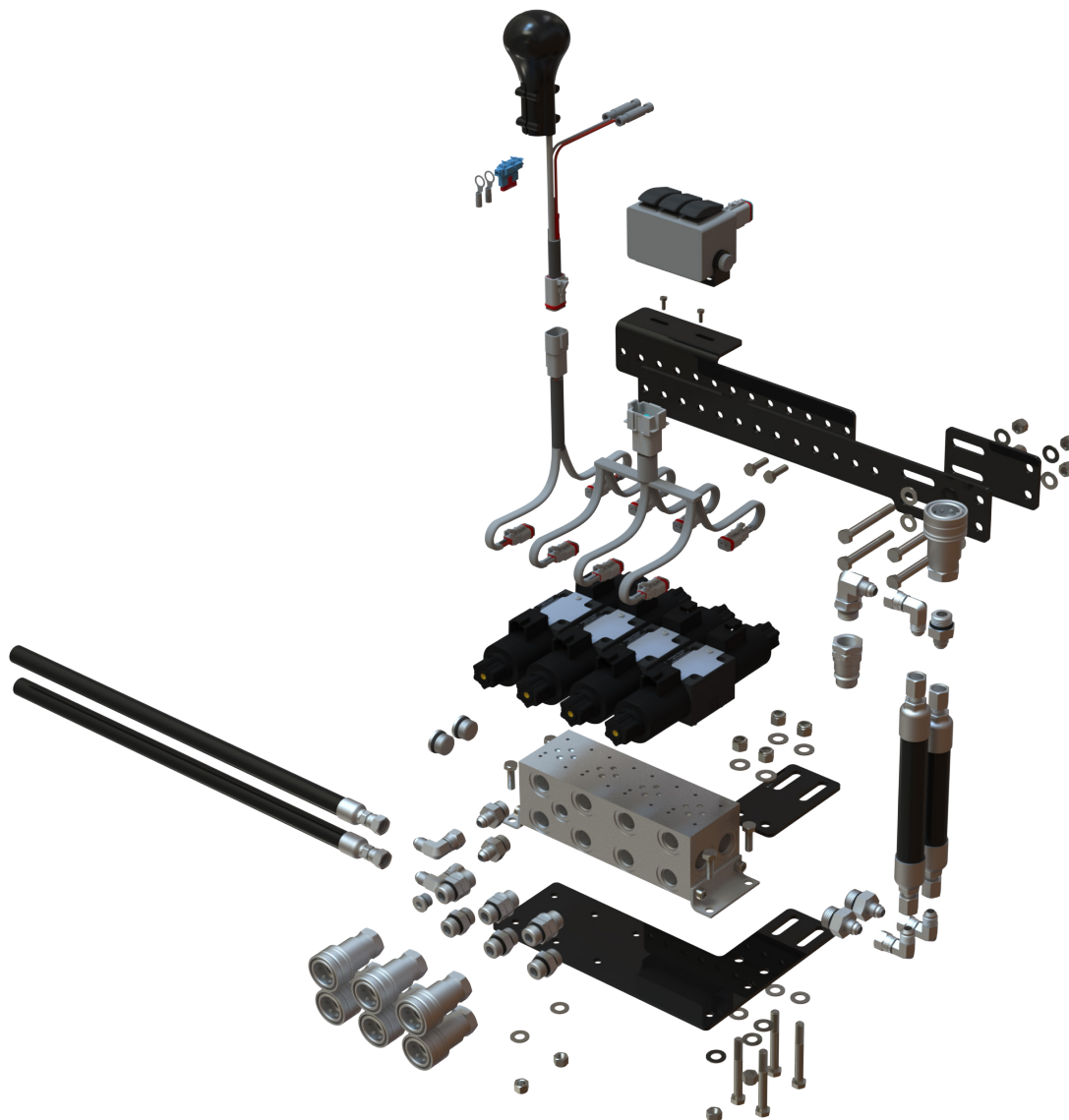
APPLICATIONS: 1023E, 1025R & 1026R

LOADERS: H120, 120R, 120R MSL & D120



Scan to Play Video

Model: FR4-JD1
Installation Manual



Need Help ?

Representatives are here to help with any questions concerning this product. Please email us with questions.

Summit-Hydraulics.com

Contact@Summit-Hydraulics.com

Opening Hours

Monday-Thursday

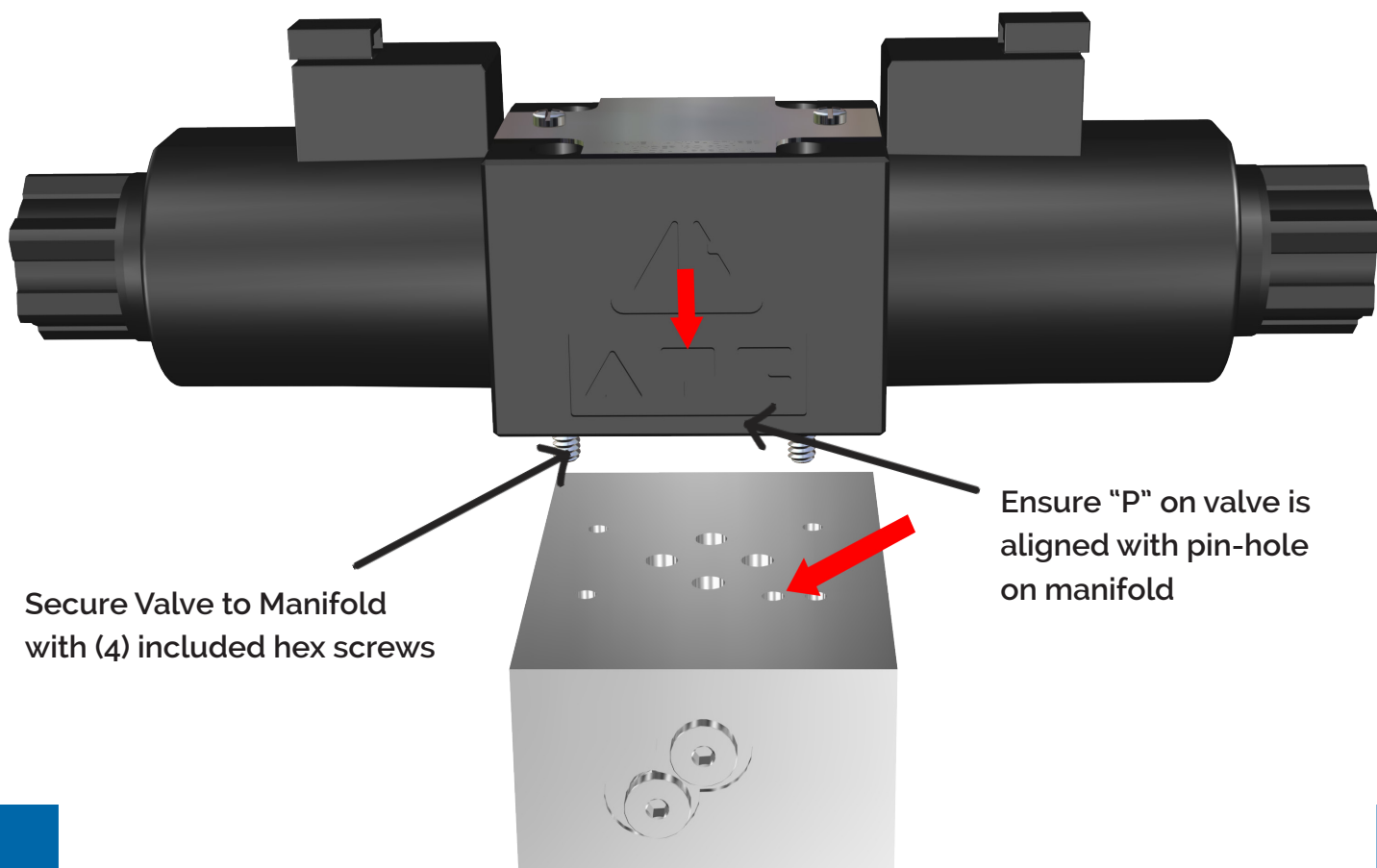
7:30 AM to 4:30 PM (MST)

Friday

8:00 AM to 12:00 PM (MST)



ATTENTION (Read Before Proceeding)



REMOVE AND DISCARD CARDBOARD PLATE

On valve (held in place by 4 yellow plastic inserts) before attaching baseplate.

(4) Hex Screws Torque Specs: 2 ft-lbs.



SKU: FR4-JD1

This all-in-one rear remote valve kit with front 3rd function is designed to install on your John Deere 2025R, 2026R Series Tractor (with power beyond kit installed) to add rear remote connections and a front third function.

Included:

- | | |
|--|---|
| 1. Control Valve | 6. Quick coupler dust caps |
| 2. Joystick & Valve Harness | 7. ROPS mounting bracket & hardware |
| 3. Switch Box | 8. Mid Mount Bracket |
| 4. 1/2" ISO 5675 Agricultural/Pioneer Style Couplers | 9. Hydraulic Pressure and Return Hose Lines |
| 5. 1/4" ISO 5675 Agricultural/Pioneer Style Couplers | 10. Installation instructions |

Recommended Tools & Supplies



Open-Ended Wrench Set



Impact Wrench



Crescent Wrench



5/32" & 7/32" Allen
Wrench



Zip-Ties



Open-Ended Wrench Set

We recommend all Summit Hydraulics products are installed by experienced professionals. With proper installation and maintenance, Summit Hydraulics products will provide exceptional longevity and durability. For any questions, please contact us immediately. Thank you for trusting Summit Hydraulics!

Replacement Part

For any OEM replacement hardware/ parts, please refer to OEM service. For all included hardware/parts, please refer to Summit Hydraulics' website. Please email Contact@Summit-Hydraulics.com for further questions.

Notes

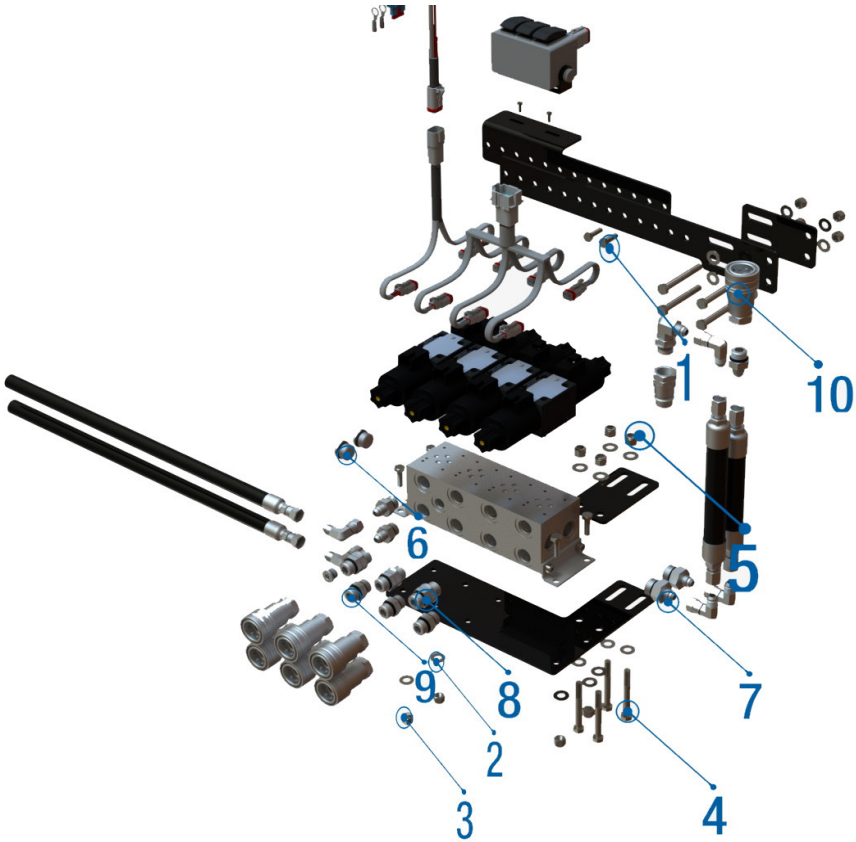
We recommend all Summit Hydraulics products are installed by experienced professionals. With proper installation and maintenance, Summit Hydraulics products will provide exceptional longevity and durability. For any questions, please contact us immediately. Thank you for trusting Summit Hydraulics!

Parts Breakdown

Figure 1

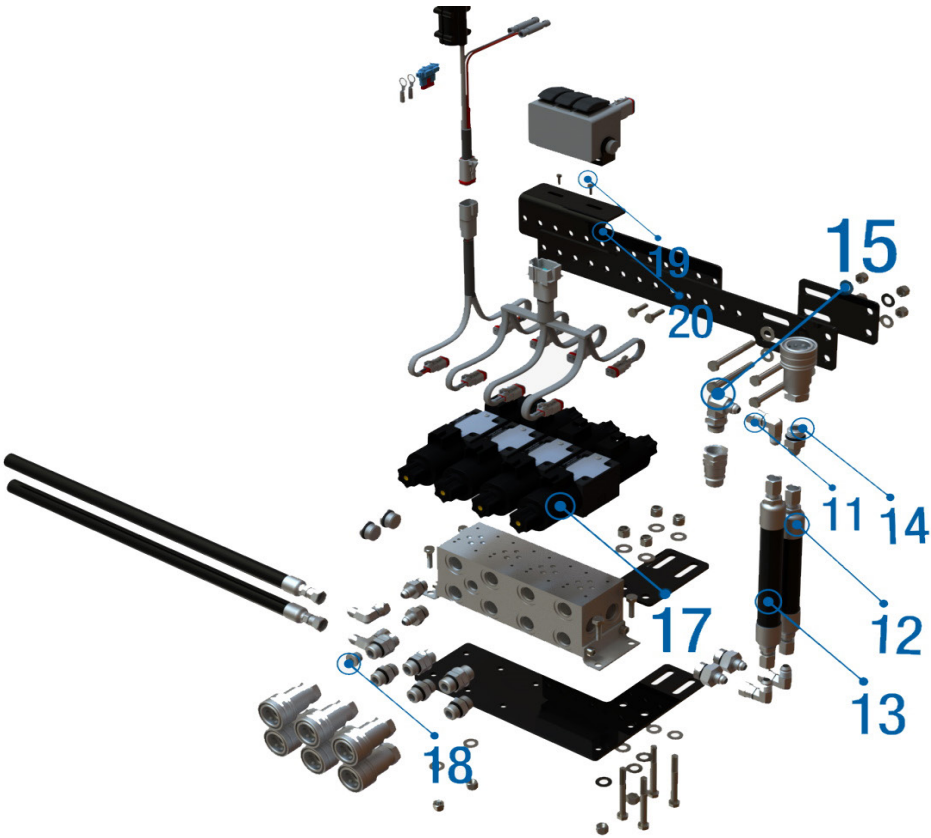
PARTS LIST

- 1 HW026 (x6)
- 2 HW008 (x6)
- 3 HW007 (x6)
- 4 HW011 (x16)
- 5 HW010 (x8)
- 6 6409-10 (x2)
- 7 6400-06-10-FG (x2)
- 8 3474-08-08-FG (x3)
- 9 N08S-08S (x3)
- 10 AG12F-08S (x7)



PARTS LIST

- 11 6500-06-06-FG (x3)
- 12 H06-06FJ-30 (x1)
- 13 H06-06FJ-36 (x1)
- 14 6400-06-08-FG (x1)
- 15 6801-06-08-FG (x1)
- 16 AG12M-08S (x1)
- 17 D03W-2A-12V (x4)
- 18 6409-06 (x1)
- 19 HW076 (x2)
- 20 HW075 (x2)



Parts Breakdown

Figure 2

PARTS LIST

21

D03S4-08S (x1)

22

SW-A-14 (x1)

23

SW-4P2S-3 (x1)

24

SW-J2 (x1)

25

SW-3RM (x1)

26

SW070 (x8)

27

BR018 (x1)

28

BR007 (x2)

29

BR020 (x1)

30

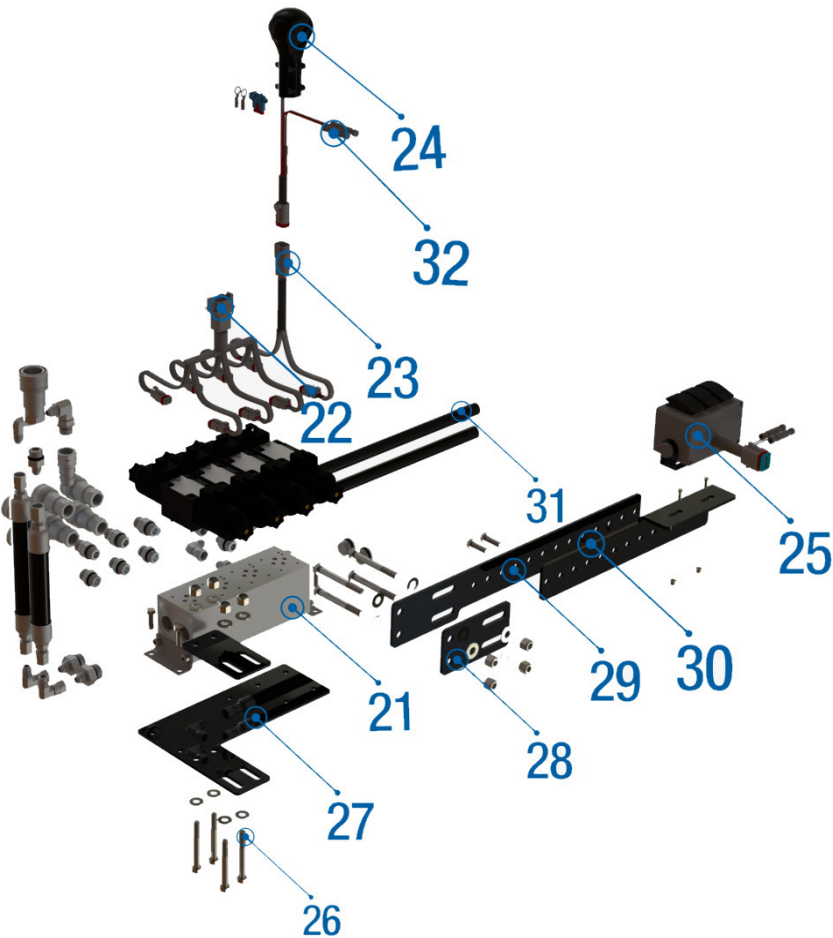
BR021 (x1)

31

ADD-JD1 (x1)

32

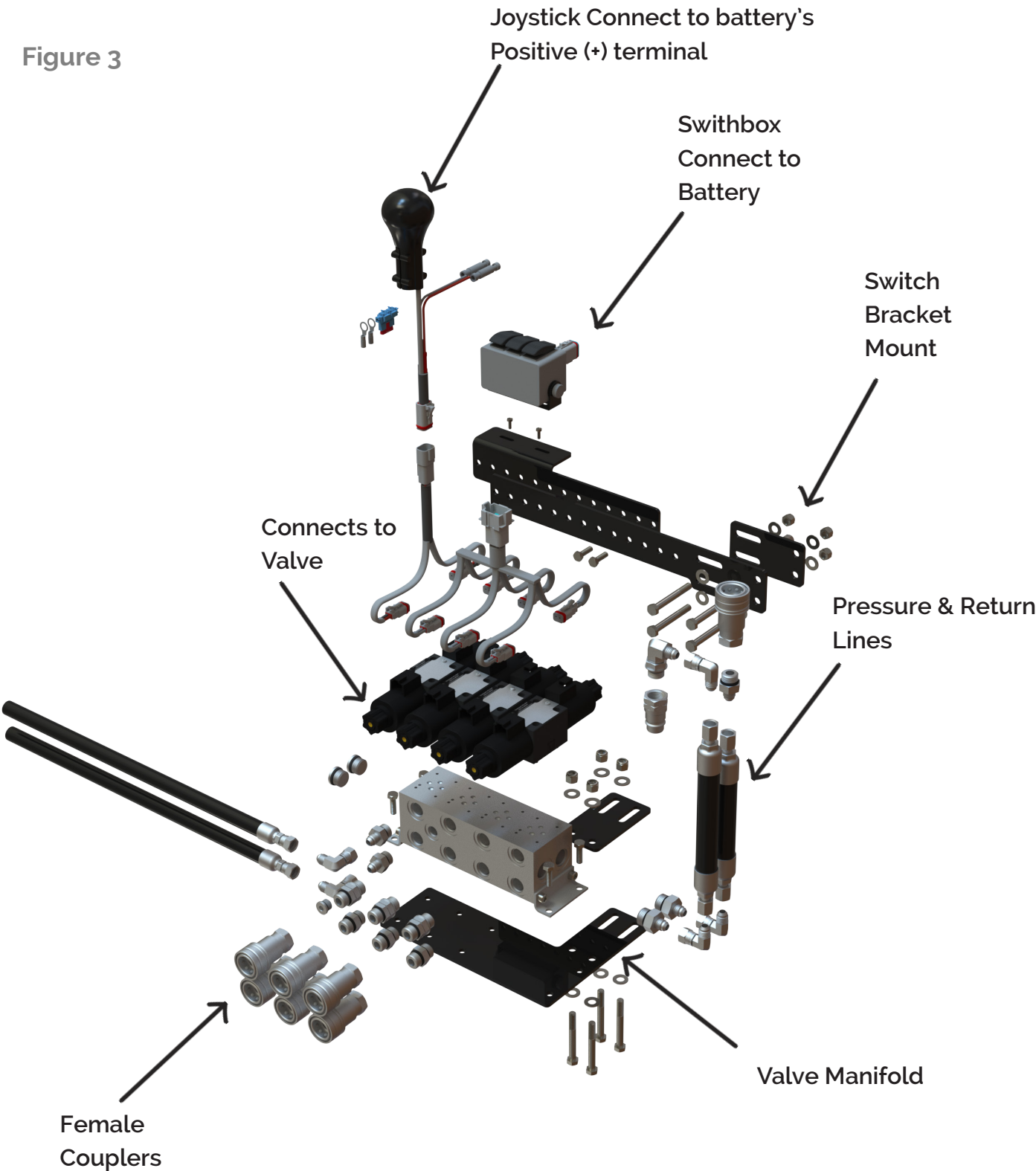
SW132 (x4)



ADD-JD1 Parts Breakdown
(See Page 18)

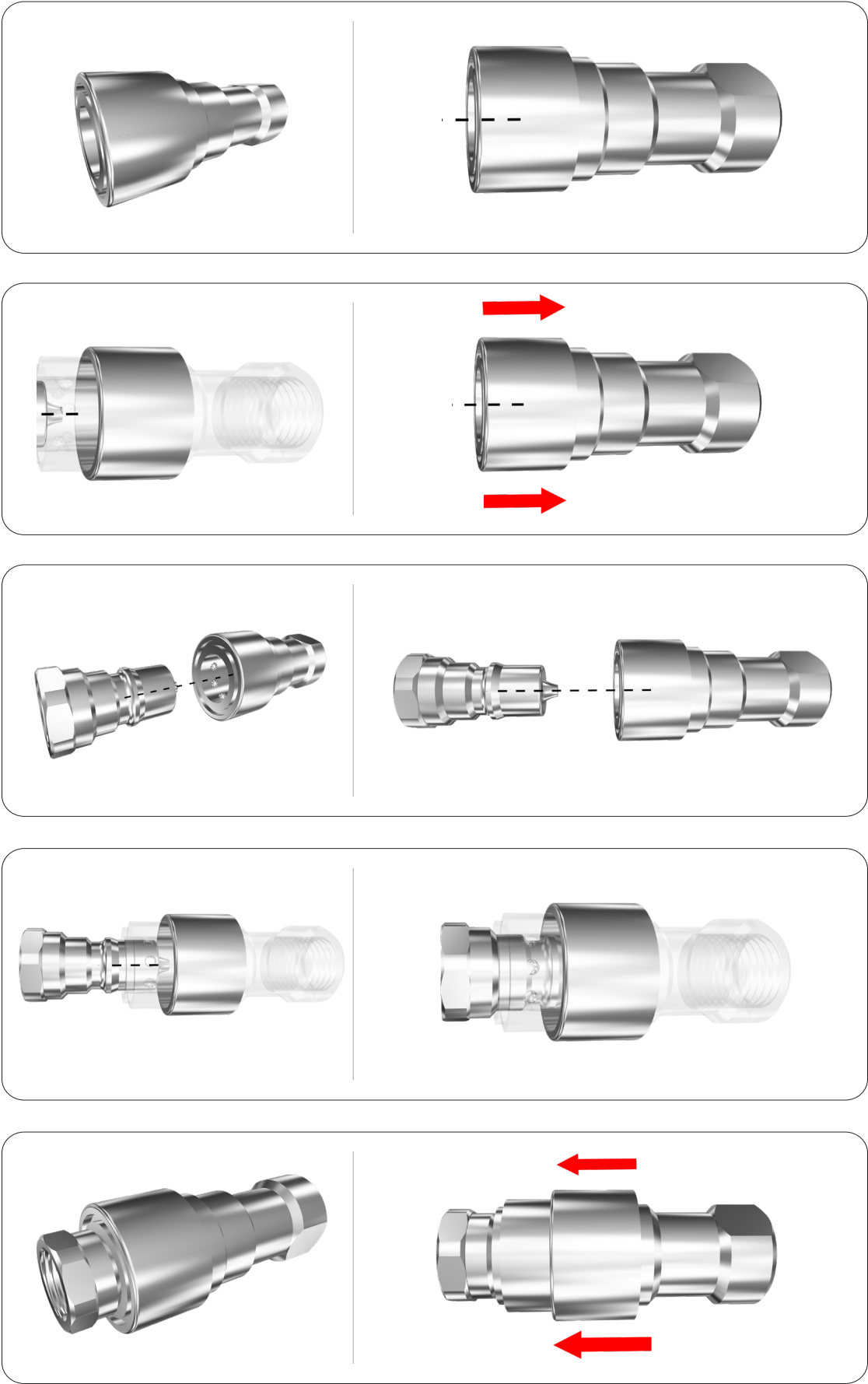
Front Third Function + Rear Remote

Figure 3



Hydraulic Quick Couplers Guide

Figure 4



WARNING:



1. Summit Hydraulics designed their hoses to be long enough to accommodate different factory options on tractors. If you have excess length, please identify the best routing scenario to accommodate it.
2. To ensure safe routing and prevent damage, Summit Hydraulics often routes their hoses along multiple factory hardlines, away from hot surfaces, moving parts, and sharp bends.
3. Following these routing guides will ensure proper support and protection for your tractor's hydraulic hoses, reducing the risk of accidents and promoting reliable long-term operation.

1. Identify the factory hardline: The first step is to identify the factory hardline on your tractor. This is the metal pipe or tubing that carries hydraulic fluid between the various components of the hydraulic system.
2. Separate the hoses: Once you have identified the factory hardline, you can determine the different pressure line, return line, and A & B work line (if applicable) that is provided by Summit Hydraulics. Identify the fitting, length, and size of each hydraulic line. This will ensure that the proper hose is routed to the correct location on the tractor.
3. Plan the hose routing: With the hoses being separated and identified, you can now plan the most appropriate hose route. Start by identifying the hose pathway along the hardline for each hose. Avoid sharp bends or kinks in the hose and keep the hose away from any moving parts or hot surfaces.
4. Install supports: To support the hoses along the factory hardline, install appropriate supports such as zip ties. Make sure that the supports are securely mounted to the tractor frame or the factory hardline.
5. Route the hoses: Begin routing the hoses one at a time, following the path of the factory hardline. Secure the hoses in place using the zip tie as supports, and make sure that the hoses are not stretched too tightly or compressed.
6. Connect the hoses: Once the hoses are routed, connect them to the appropriate components using the correct fittings.
7. Test the system: After the hoses are installed and connected, test the hydraulic system to ensure that it is working properly. Check for any leaks or abnormal noises, and make any necessary adjustments.
8. Inspect and maintain the hoses: Regularly inspect the hoses for signs of wear or damage, and replace them as necessary. Keep the hoses clean and protected from

Connect Implements to Rear Remote

WARNING:

1. Connecting implements to an electric rear remote kit involves following a series of steps to ensure a proper and safe connection. Electric rear remote kits are used to control hydraulic functions on various implements or attachments, like mowers, tillers, or sprayers, from the operator's seat. The kit typically includes electric control switches, wiring harnesses, and solenoid-operated hydraulic control valves.

1. Park the tractor on a level surface and engage the parking brake. Turn off the engine and remove the key from the ignition to ensure safety during the process.
2. Consult the operator's manual for the electric rear remote kit and your implement to familiarize yourself with the specific connection points, requirements, and any additional precautions.
3. Identify the hydraulic connections for your implement, which may include a combination of pressure, return, and case drain hoses. Ensure the hoses are the proper length and have the correct fittings for the tractor and implement.
4. Locate the hydraulic control valve(s) on the electric rear remote kit. These valves are usually mounted near the rear of the tractor and have quick-connect couplers for attaching hydraulic hoses.
5. Clean the hydraulic couplers on the tractor and implement to remove any dirt or debris that may contaminate the hydraulic system.
6. Connect the hydraulic hoses from the implement to the corresponding couplers on the electric rear remote kit's control valve. Ensure the connections are secure and free from leaks.
7. Route the wiring harness from the electric rear remote kit to the operator's seat, following the manufacturer's guidelines for proper routing and securing of the wiring.
8. Connect the wiring harness to the control switch(es) provided with the kit. The control switches should be mounted in a location that is easily accessible to the operator while seated on the tractor.
9. Test the hydraulic functions of the implement using the control switches to ensure proper operation and make any necessary adjustments.
10. Consult the implement's manual for any additional setup or adjustments that may be required for proper operation.

NOTE: Remember to follow all safety precautions and consult the specific manuals for your tractor, electric rear remote kit, and implement to ensure correct installation and operation.

Installation Procedure

WARNING:



1. Lubricate all threads and O-Rings with hydraulic fluid before installing fittings into the hydraulic manifold. All ports are SAE/O-Ring Boss Thread. Do not use Teflon tape or pipe dope.
2. We recommend hand tightening the fitting first, snugging the fitting using a wrench, and applying a quarter turn of torque to the fitting.
3. Unless stated otherwise, all fittings/adapters are right hand thread. Please tighten all fitting/adapters in the correct orientation. Right turn-tighten. Left turn-loosen. Damaged thread can lead to possible leaks and failure. Improper install of thread will result in warranty denial. Reference warranty page for details

Initial Preparations

NOTE: These steps need to be followed prior to installation of this valve kit.

1. Park tractor on a flat surface. Place gear shift lever in park. Turn off engine and remove ignition key.
2. Place chocks in front and behind tractor's left rear wheel.

Figure 5

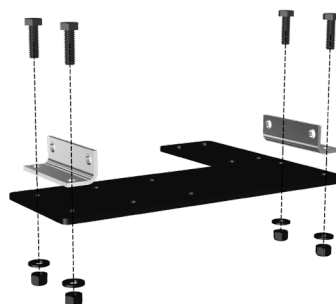
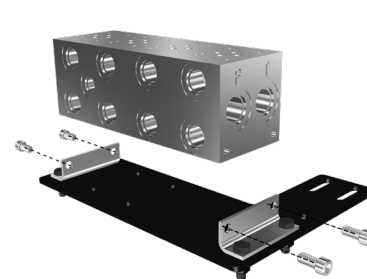


Figure 6



Initial Assembly

1. Install (4) 5/16-18 Hex Bolt to the ROPS D03 Valve Bracket. See (fig. 5).
2. Install (4) 5/16" Washer onto the (4) 5/16-18 Hex Bolt. See (fig. 5).
3. Loosely Install (4) 5/16-18 Lock Nut onto the (4) 5/16-18 Hex Bolt See (fig. 6).
4. Position the ROPS D03 Valve Bracket to the Valve Manifold. See (fig. 5). Fully Tighten (4) 5/16-18 Lock Nuts onto (4) 5/16-18 Hex Bolts.
5. Install Hex Socket Plug, #10 SAE ORB Male into both "P" and "T" ports on manifold. See (fig. 7).
6. NOTE: #10 SAE ORB Male can be installed on either side of the "P" and "T" ports on the manifold.
7. Install Hex Socket Plug, #6 SAE ORB Male into the Valve Manifold See (fig. 8).

Figure 7

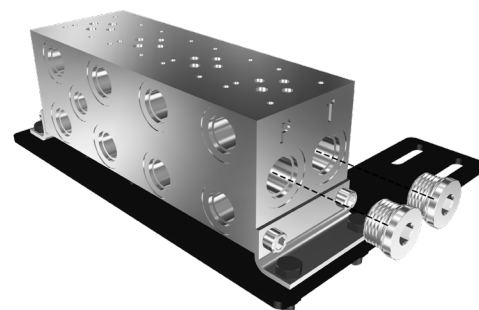


Figure 8



Initial Assembly

1. Install (3) #8 SAE/ORB Male Adapter to the Valve Manifold. See (fig. 9).
2. Install (3) #8 SAE/ORB (3/4-16 Thread) Male Adapter into the Valve Manifold. See (fig. 10).
3. Install (2) 3/8" JIC Male x #10 SAE/ORB Male Adapter into the Valve Manifold. See (fig. 11).
4. Install (4) Ag 1/2" Female Quick Couplers to the 1/2" SAE Threaded Adapters on the manifold. See (fig. 12).
5. Tighten the Bolt connected to the Valve Manifold to secure the Valve Manifold onto the Bracket. See (fig. 13).

Figure 9



Figure 10

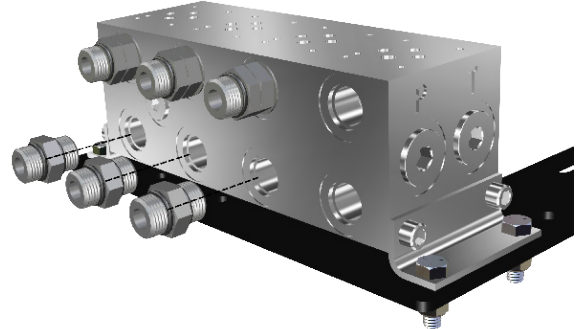


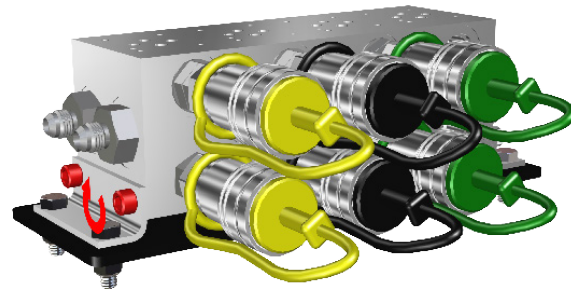
Figure 11



Figure 12



Figure 13



Valve Installation

1. Locate the Tractor Roll Over Protection Safety (ROPS) Bar. This ROPS Bar can be located towards the rear of the tractor.
2. The Valve Mounting bracket can be installed on either side of the ROPS Bar. We recommend installing it on the side with easy access to the Power Beyond Port or High Pressure Hydraulic Coupler.



Valve Installation

1. Locate the provided hardware from the Hydraulic Kit (fig. 14).
2. Install the hardware through the ROPS D03 Valve Bracket. See (fig. 15).
3. Locate the Clamp bracket for the ROPS D03 Valve Bracket and mount the Hydraulic Valve assembly onto the ROPS using the provided hardware. See (fig. 16).
4. Locate the provided hardware from the Hydraulic Kit. Secure the Clamp bracket to the ROPS Bar using the provided hardware. See (fig. 16).
5. Install (4) Solenoid Control Valve onto the Valve Manifold. Torque the Solenoid Control Valve Bolt to 2 ft-lbs. See (fig. 17).

" Please Reference Page #3 for Solenoid Control Valve to Install "

Figure 14

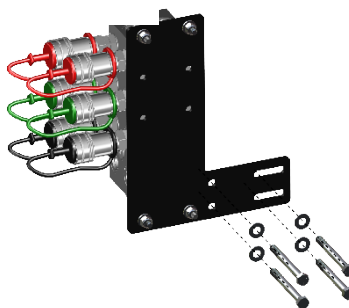


Figure 15

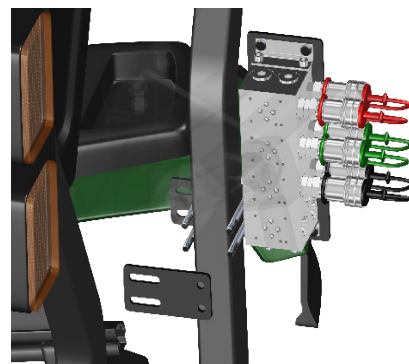


Figure 16

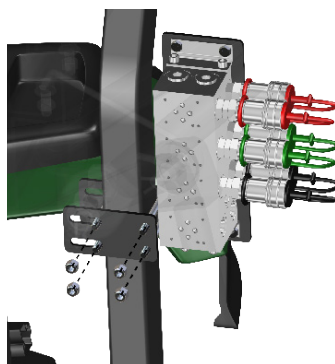
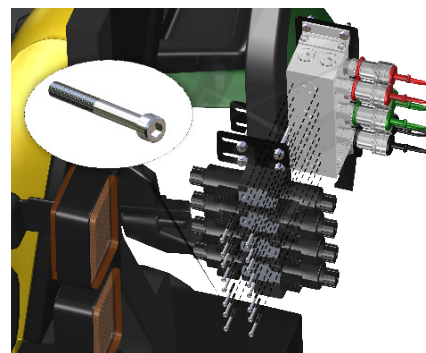


Figure 17

#15
Torque Specs: 2 ft-lbs.



Remove The Tractor Wheel

NOTE: If you have not already, place chocks in front and behind tractor's left rear wheel.

1. Loosen the lug nuts on the right rear wheel. Do not remove the lug nuts yet.
2. Lift the tractor to a safe height using the recommended factory lift points. Make sure to place safety jack stands where the factory recommends.
3. Once tractor is safely lifted, remove the lug nuts and the right rear wheel. Follow factory procedures to remove the inner fender to expose all of the hydraulic lines.



Power Beyond Connection Guide

1. Identify the Power Beyond System.

The Power Beyond System will appear at the rear of the tractor.

The Power Beyond System will be labeled (P) - Pressure Port (Female Couplers) (R) - Return Loop (Male Couplers) (T) - Tank Port (Larger Model Machine) The Power Beyond Loop is connected to the Pressure (P) Port. The Loop is responsible for returning the Hydraulic Fluid to the Hydraulic Tank.

NOTE: Power Beyond Loop must be attached to the Pressure Port if a rear implements is not being utilized. Operating the Tractor without the Return Loop connected to the Pressure loop can lead to Hydraulic System failure.

2. Disconnect the Power Beyond Loop from the Pressure (P) Port. See (fig. 18).
3. The Female Coupler will supply "High Pressure" Hydraulic Fluid to all rear implements. See (fig. 19).
4. The Male Coupler on the Return Loop will redirect the "High Pressure" Hydraulic Fluid to the hydraulic tank. See (fig. 19).
5. Identify the Pressure & Return Port on the Hydraulic Manifold. The Hydraulic Manifold will have a label with P (Pressure) & T (Tank)/R (Return).
6. See the "Pressure & Return Line Installation" to identify the hoses & couplers associated with the P (Pressure) & T (Tank)/R (Return). See (fig. 19).
7. Connect the associated hose & couplers for the Pressure P Port on the Hydraulic Manifold to the Female Couplers located on the Power Beyond System. See (fig. 20-27).

NOTE: The Power Beyond System in Figure 18 is an *EXAMPLE MODEL*. The RED arrow will indicate the Power Beyond Loop. Each Tractor Series & Model will have a different Power Beyond System, and the Power Beyond Loop will be located at the rear of the tractor.

Figure 18

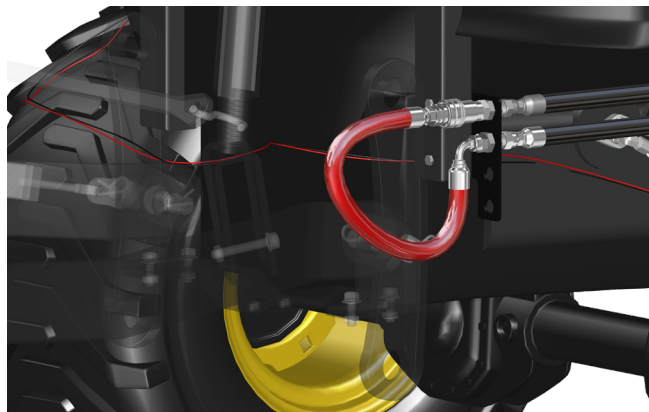


Figure 19

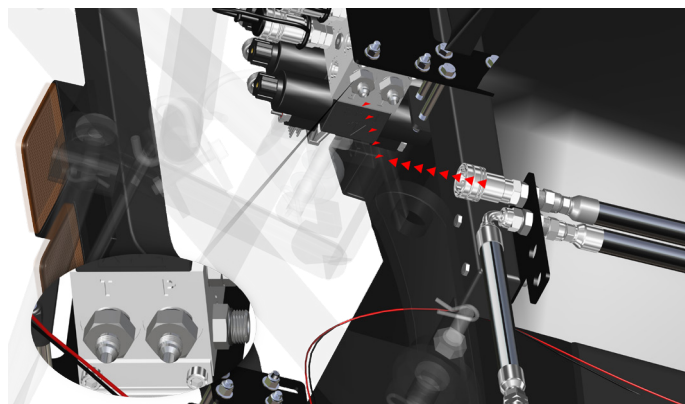
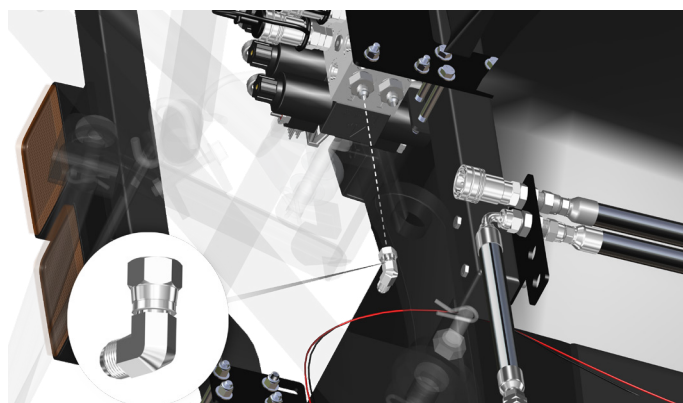


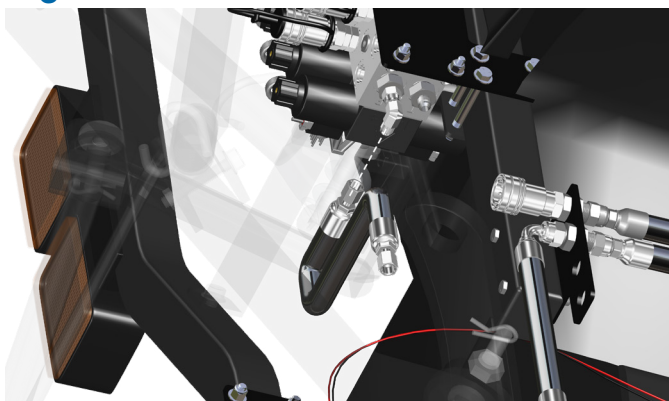
Figure 20

PART: 6500-06-06-FG



PART: H06-06FJ-36

Figure 21



Power Beyond Connection Guide

Figure 22

PART: 6500-06-06-FG

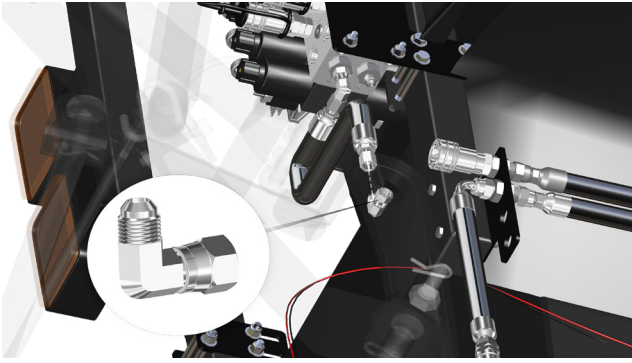


Figure 23

PART: 6801-06-08-FG

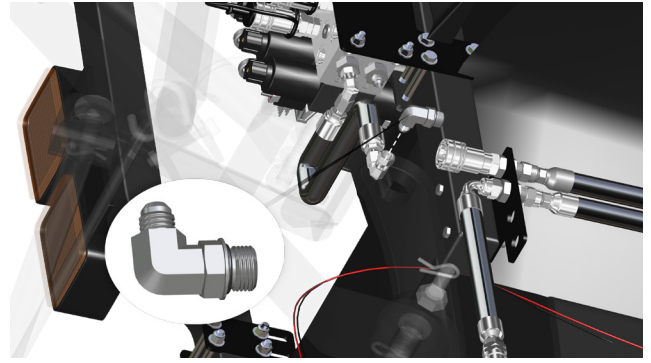


Figure 24

PART: AG MALE COUPLER

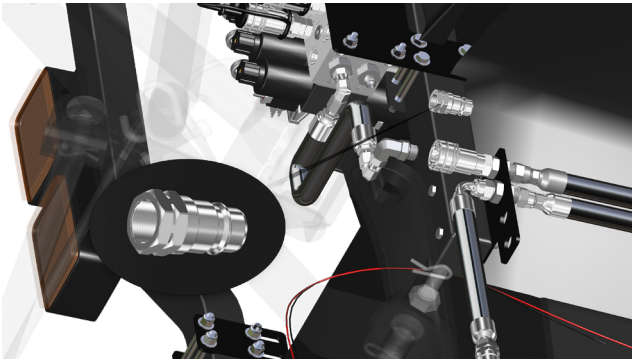


Figure 25

PART: 6500-06-06-FG

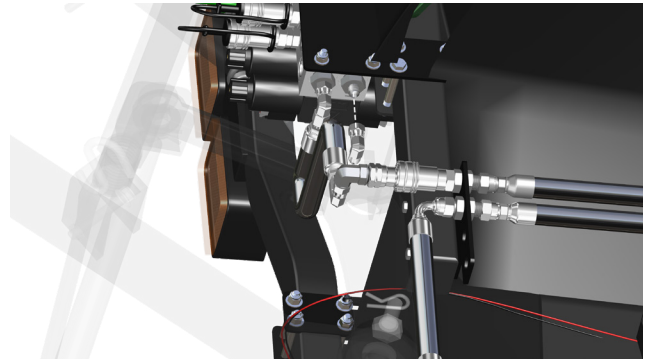


Figure 26

PART: H06-06FJ-30

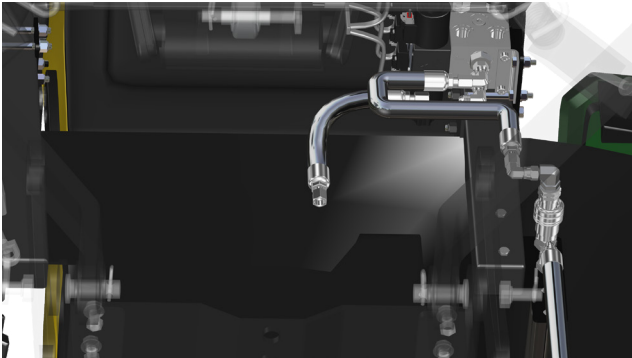


Figure 27

PARTS: 6400-06-08-FG & AG12F-08S

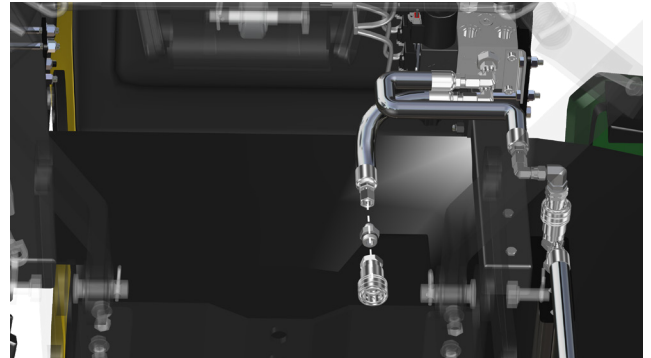


Figure 28

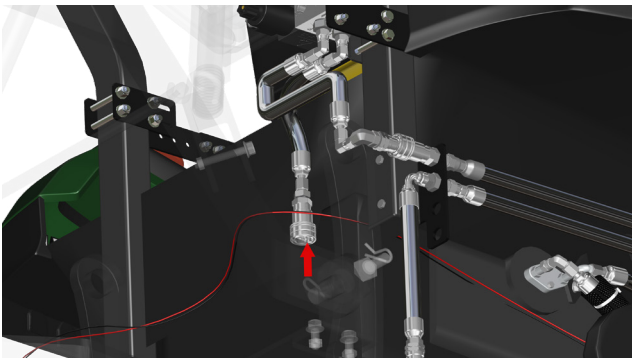
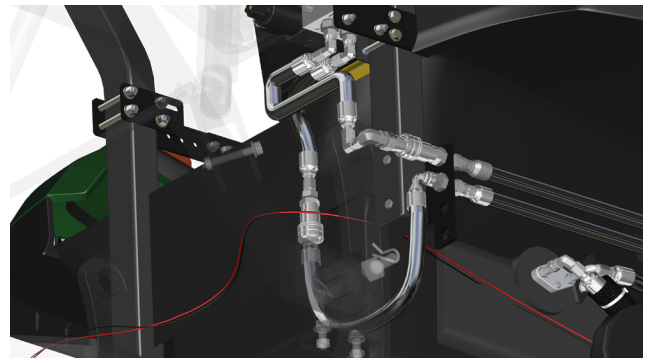


Figure 29

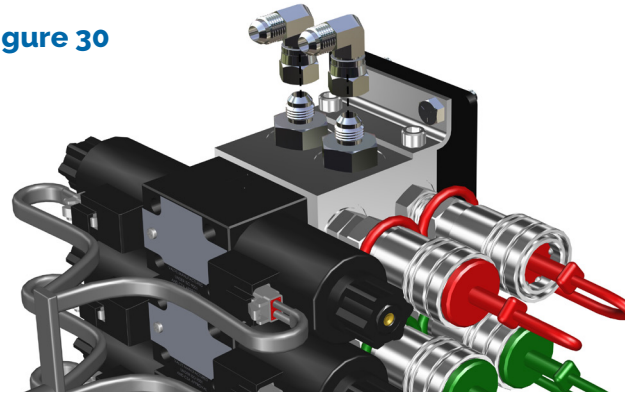


8) Connect the associated hose & couplers for the Tank T Port on the Hydraulic Manifold to the Male Couplers located on the Power Beyond Loop. See (fig. 28-29). Apply zip-ties as needed.

Pressure & Return Line Installation

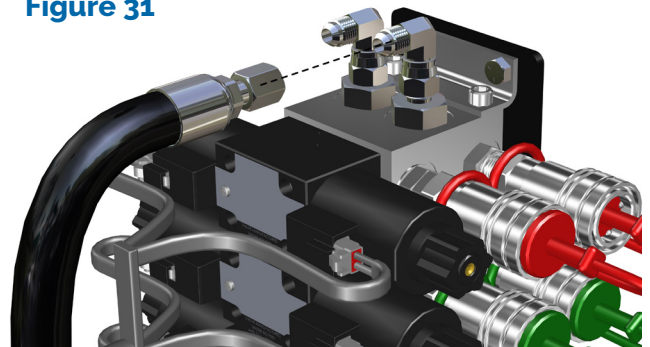
1. Locate the (2) 90 Degree Elbow, 3/8" JIC Male x 3/8" JIC Female fittings. Connect the (2) fittings to the Valve Manifold with a 3/8" JIC Male x #10 SAE/ORB Male adapters installed. See (fig. 30).

Figure 30



2. Locate the (1) Hydraulic Oil Lines with 3/8" Female. Thread the 3/8 Female JIC onto the (2) 90 Degree Elbow, 3/8" JIC Male x 3/8" JIC Female fittings. See (fig. 31).

Figure 31



3. Locate the (1) Hydraulic Oil Lines with 3/8" Female JIC. Thread the 3/8 Female JIC onto the (2) 90 Degree Elbow, 3/8" JIC Male x 3/8" JIC Female fittings. See (fig. 32).
4. Locate the (1) 90 Elbow, 3/8" JIC Male x 3/8" JIC Female. Thread the Adapter onto the (1) Hydraulic Oil Lines with 3/8" Female JIC. See (fig. 33 & 34).

Figure 32

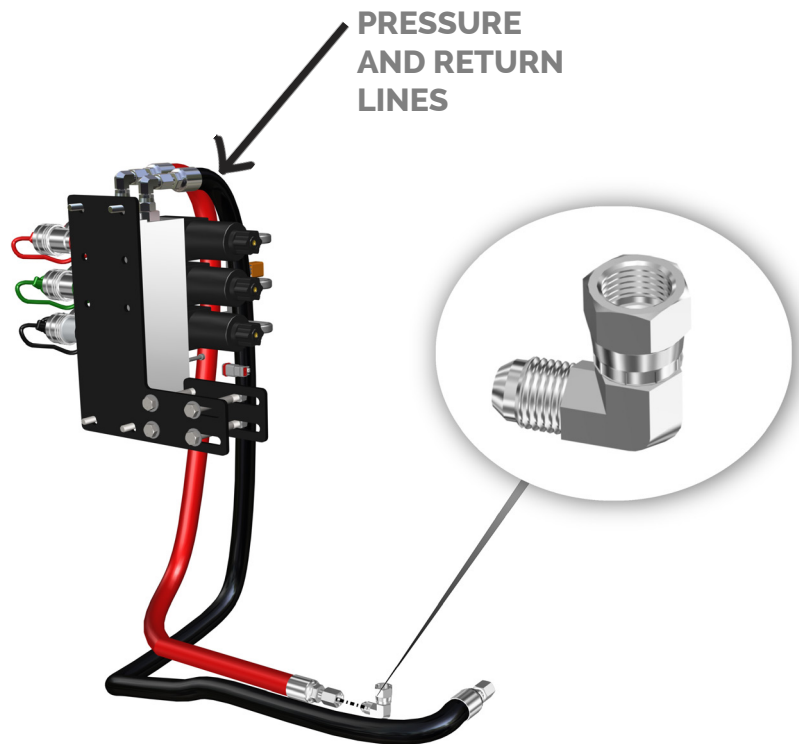
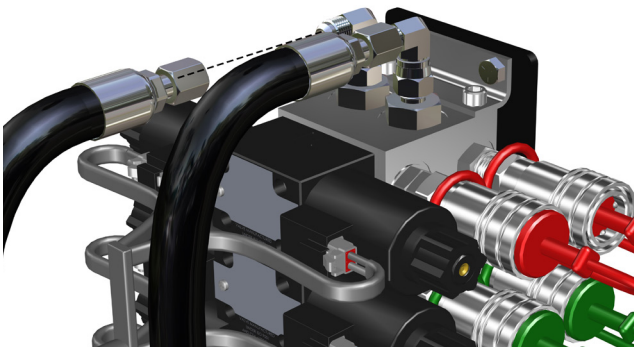
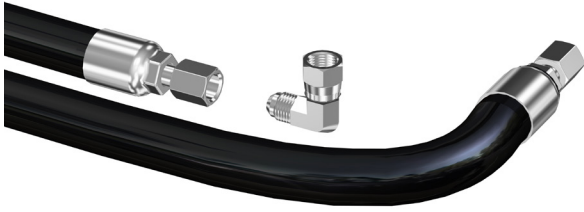


Figure 33

Pressure & Return Line Installation

Figure 34



1. Locate the (1) 3/8" JIC Male x #8 SAE/ORB Male Adapter (fig. 1 #14). Thread the Adapter onto the (1) Hydraulic Oil Lines with 3/8" Female JIC. See (fig. 35).
2. Install the (1) 90 Elbow, 3/8" JIC Male x #8 SAE/ORB Male (fig. 1 #15) onto the (1) 90 Elbow, 3/8" JIC Male x 3/8" JIC Female. See (fig. 36).

Figure 35



Figure 36



Figure 37

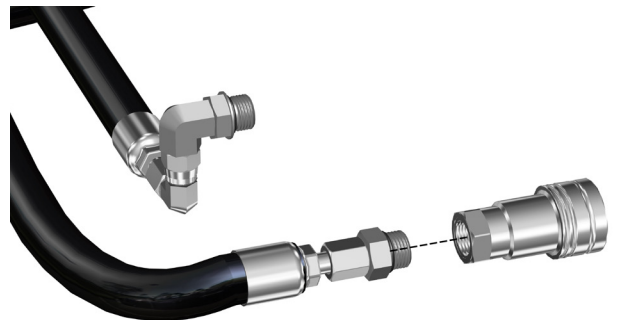


Figure 37



3. Locate the (1) 1/2" AG Female Coupler. Thread the 1/2" AG Male Coupler onto the (1) 3/8" JIC Male x #8 SAE/ORB Male Adapter. See (fig. 37).
4. Locate the (1) 1/2" AG Male Coupler. Thread the (1) 90 Elbow, 3/8" JIC Male x #8 SAE/ORB Male. See (fig. 38).

Switch Box Installation

1. Locate the Roll Over Protections Safety (ROPS) frame on the tractor. This ROPS can be located towards the rear of the tractor.
2. Locate the Switch Box Bracket. The Switch Box Bracket is adjustable to allow for proper clearance, and user preference. See (fig. 23).
3. The Switch Box Bracket can be mounted together using (2) Nuts & (2) Bolts. See (fig. 24).
4. Locate the provided hardware from the Hydraulic Kit. Attach the hardware through the ROPS Switch Box Clamp Bracket. See (fig. 25).
5. Locate the Clamp Bracket for the ROPS Switch Box Bracket and insert the bracket to the ROPS Switch Bracket Assembly. See (fig. 26).
6. Locate the provided hardware from the Hydraulic Kit. Secure the Clamp Bracket to the ROPS Bar using the provided hardware. See (fig. 26).
7. Locate the Switch Box from the Hydraulic Kit. Position the Switch Box above the ROPS Switch Box Bracket. See (fig. 27).
8. Locate the provided hardware from the Hydraulic Kit. Install the Switch Box to the ROPS Switch Box Bracket using the (2) bolt. See (fig. 28).
9. Secure the Switch Box to the Switch Box Bracket using the (2) Nut. See (fig. 28).

Figure 23

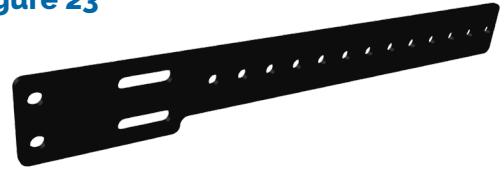


Figure 24

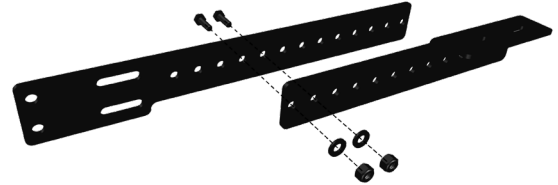


Figure 25

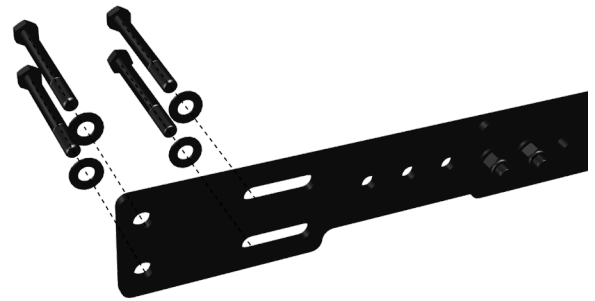


Figure 26



Figure 27

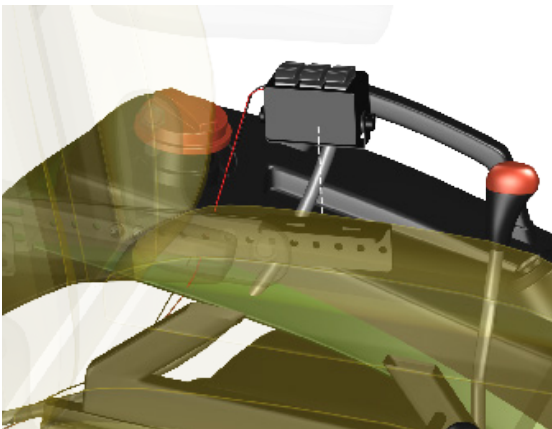
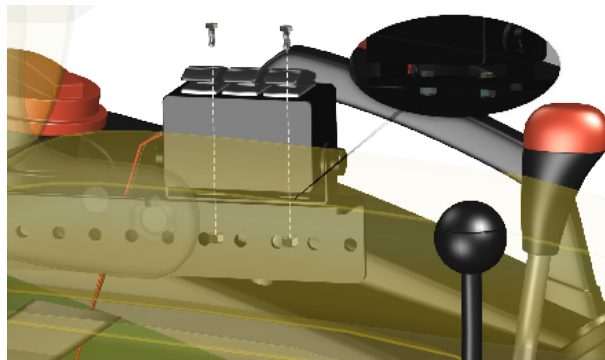


Figure 28



Switch Box Installation

1. Route the Battery Cables towards the front of the tractor, and route the Harness cables towards the Deutsch Connector. See (fig. 29).
2. Attach Harness Deutsch Connector to Switch Box Deutsch Connector. See (fig. 30).
3. Connect the red positive terminal end to battery's positive post.
4. Connect the black ground terminal end to ground source post.
5. The Switch Box has an Adjustment Knob and Bracket, Switches for Valve Activation.

Figure 29

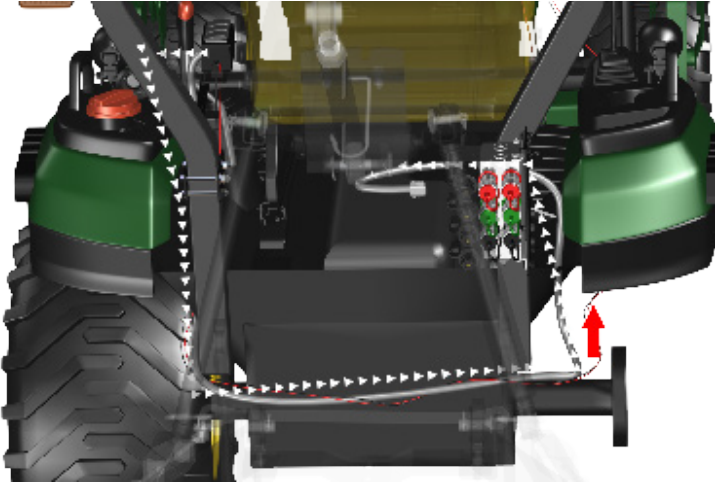
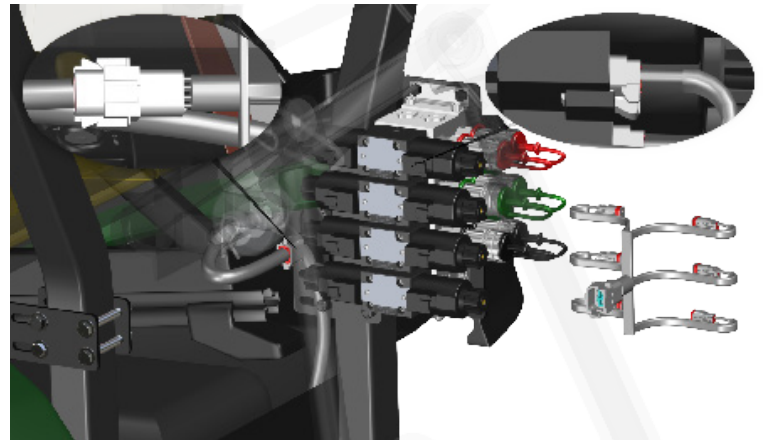


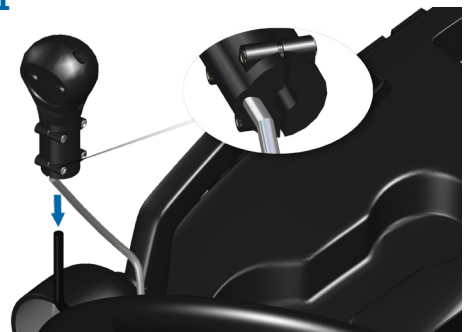
Figure 30



Joystick Switch Installation

1. Remove existing knob from end of control lever.
2. Loosen the 4 Tightening Bolts on side of Joystick Handle Switch.
3. Remove Bushing as needed to obtain a rough fit. See (fig. 31). NOTE: All bushings can be removed if needed.
4. Slide Handle and Bushing over control lever and tighten Bolts on side of Joystick Handle Switch. See (fig. 32).

Figure 31



Joystick Overview

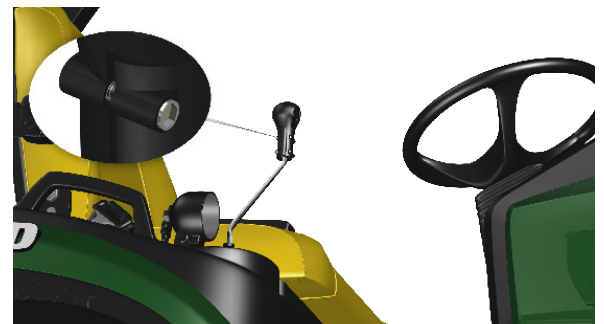
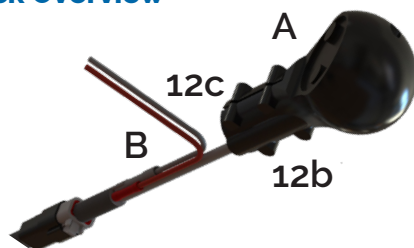


Figure 32

Joystick Switch Installation

1. Connect the red positive terminal end to battery's positive post. See (fig. 33).
2. Connect the black ground terminal end to battery's negative post. See (fig. 33).
3. Connect plastic Deutsch connectors on Wiring Harness to Valve Body. Secure with included Screws. See (fig. 34).
4. Attach Harness Deutsch Connector to Switch Deutsch Connector. See (fig. 35).
5. Properly route the wiring, and use zip ties to secure the routing in place.

Figure 33

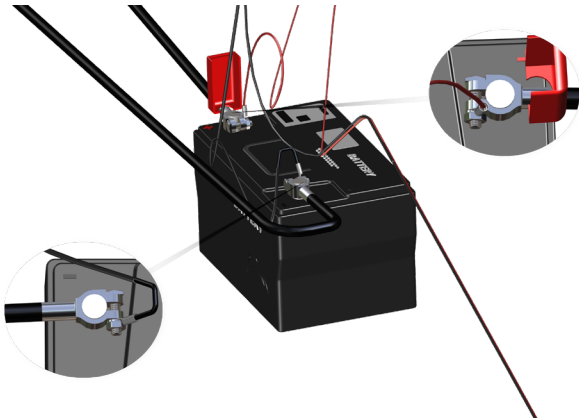


Figure 34

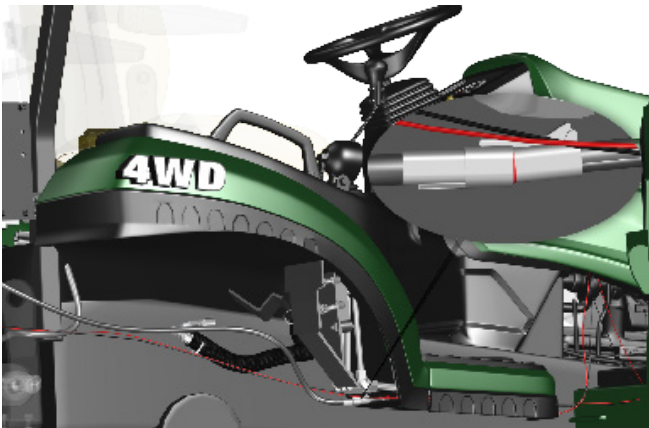
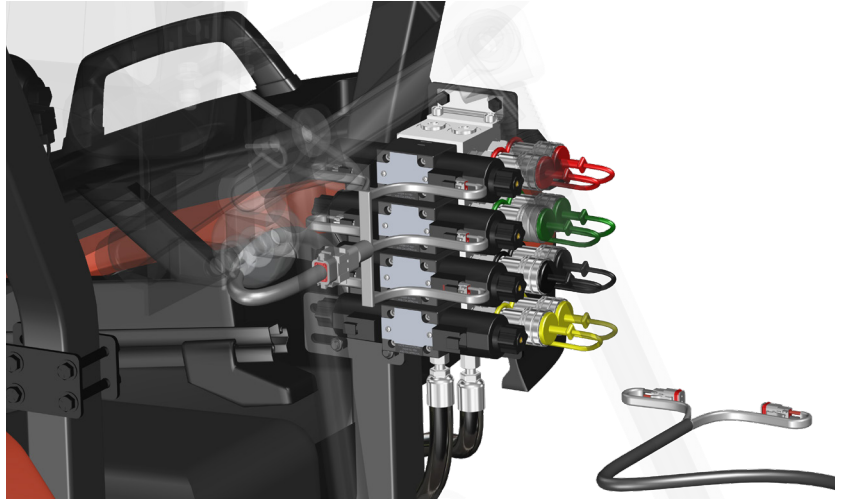


Figure 35

Operation Check

1. Upon completion of installation, ensure all connections are tight and secure.
2. Connect Hydraulic Implements Hoses to Quick Couplers on Cross Beam Coupler Mount.
3. Operate hydraulics using Two-Button Joystick. See (fig. 28 #A).
4. After hoses and cylinders are full of hydraulic fluid, check hydraulic fluid levels of your machine. If low, add hydraulic fluid.

NOTE: Air will be in hoses and cylinders. Continued actuation of cylinders will fill both hoses and cylinders with fluid and bleed air out of the hydraulic systems.

Parts Breakdown

Figure 1

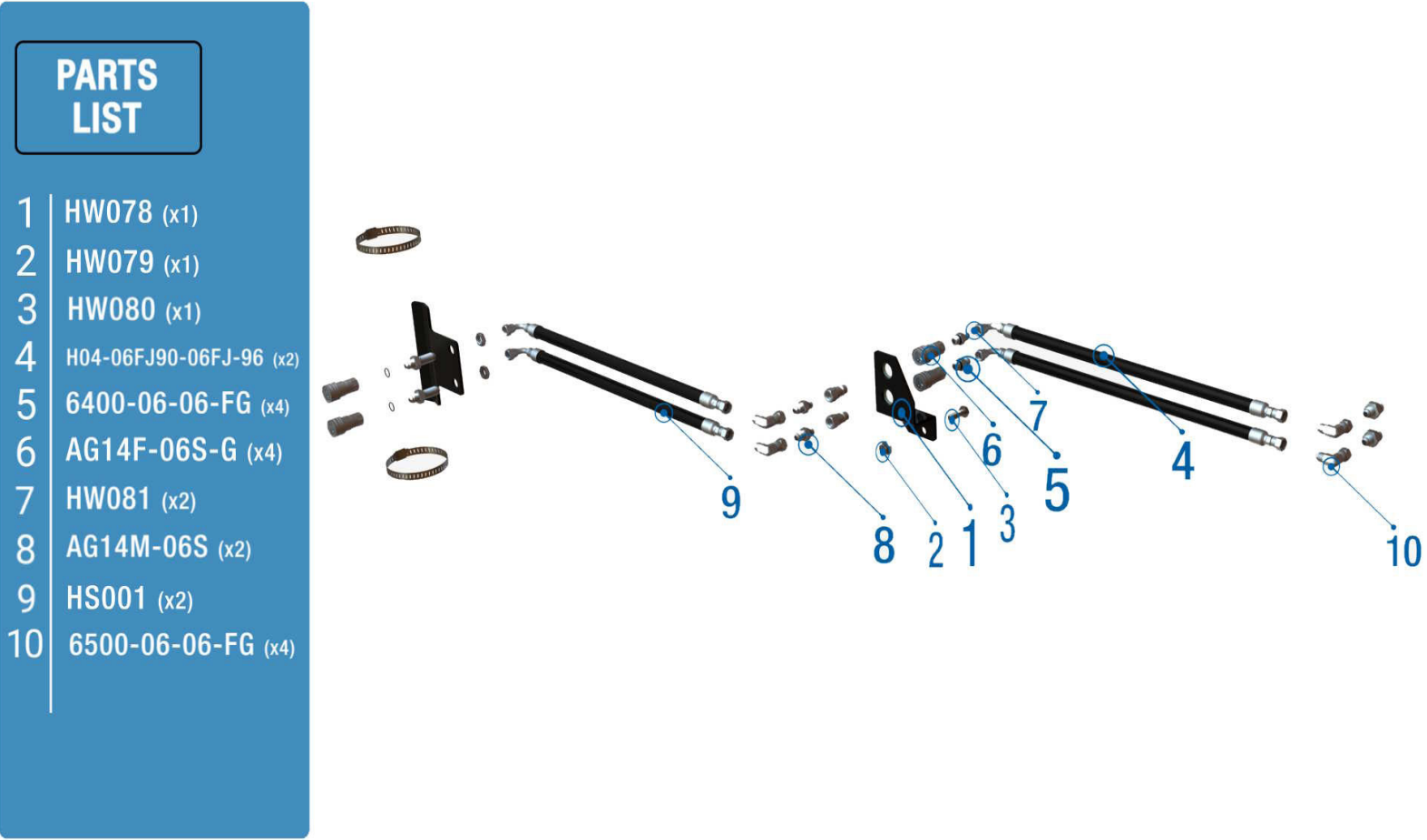
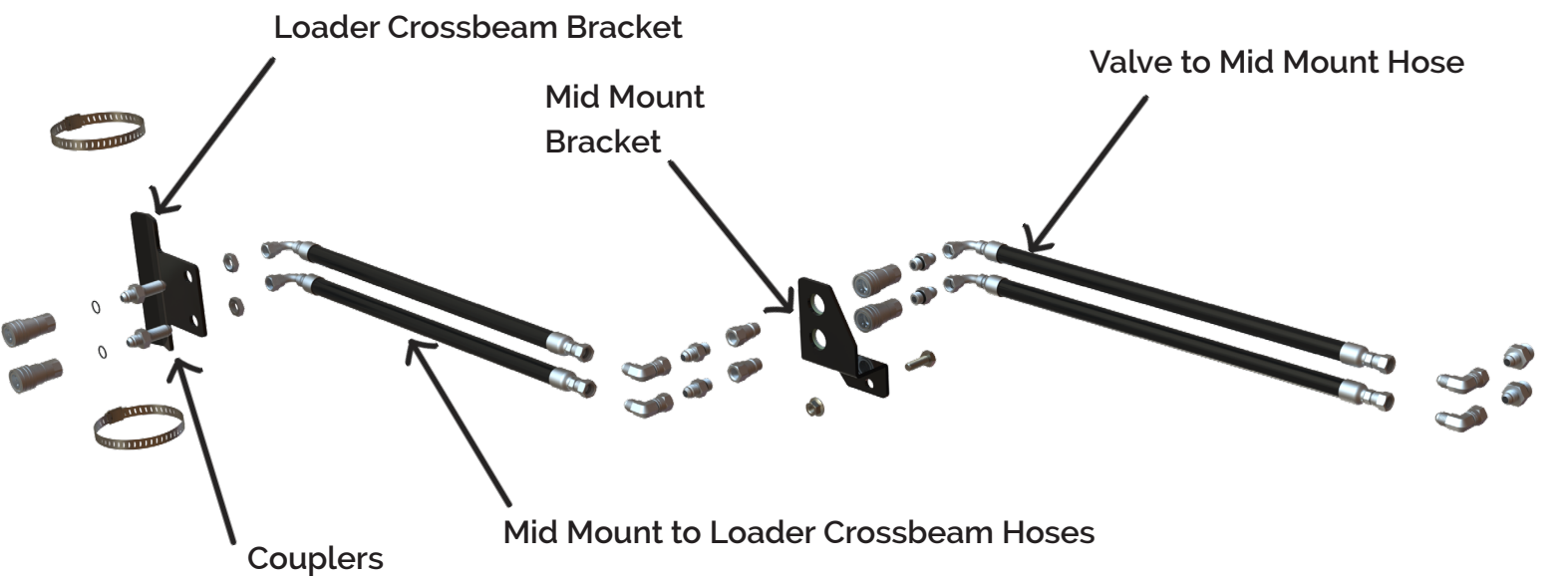


Figure 2



Mid-Mount Bracket Assembly

1. Locate the Hydraulic Mid Mount Bracket (fig. 3).
2. Install (2) AG 1/4" Couplers into the Mid Mount Bracket (fig. 1 #1). See (fig. 4).
3. Install (2) snap rings 7/8" to the existing groove on the (2) AG 1/4" Couplers (fig. 1 #6). See (fig. 5).
4. Install (2) 3/8" JIC Male x #6 SAE/ORB Male Adapters (fig. 1 #5) onto the (2) AG 1/4" Couplers. See (fig. 6).

Figure 3



Figure 4

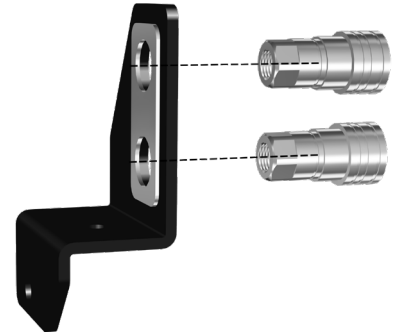


Figure 5

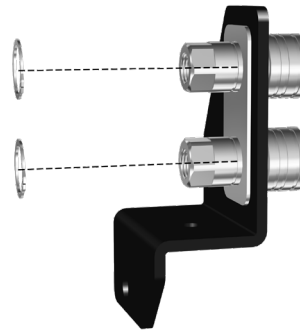
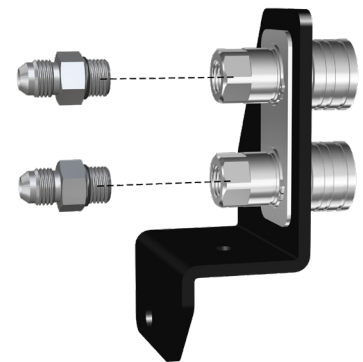


Figure 6



Mid-Mount Bracket Installation

1. Locate the frame plate located on the bottom of either the left or right side of the tractor near the front wheels. See (fig. 7)
2. Attach the Mid Mount Bracket to the existing holes surrounding the frame plate. Use (1) Nut (fig. 1 #2) and (1) Bolt to attach the bracket to the tractor frame plate. See (fig. 8). Torque the Mid Mount Bracket to 35 ft-lbs.

Figure 7

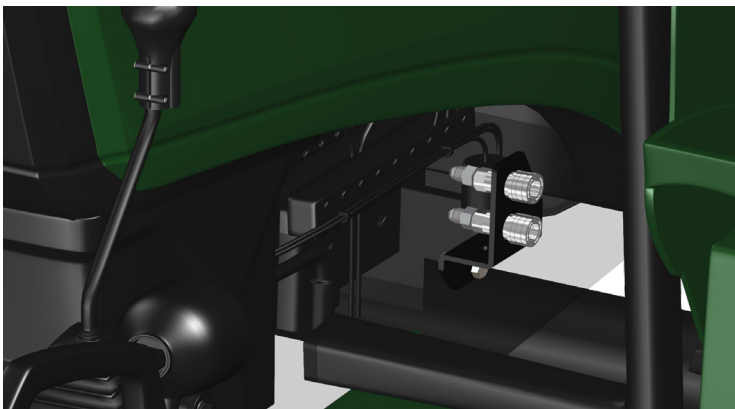


Figure 8

#8
Torque Specs: 35 ft-lbs.

Third Function Hose Installation

1. Install (2) 3/8" JIC Male x #8 SAE/ORB Male onto the Manifold. See (fig. 8).
2. Locate the (2) 90 Degree Elbow -6 JIC Male x -6 JIC Female Adapters, and thread the Elbow Fitting to the -6 JIC Male x #8 SAE/ORB Male Adapter. See (fig. 9).
3. Locate the (2) hydraulic oil lines with a Straight -6 JIC x 90 Degree -6 JIC, and thread the Straight Female -6 Fitting onto the 90 Degree Elbow -6 JIC Male x -6 JIC Female Adapter. See (fig. 10).
4. Loop the (2) hydraulic oil lines with a Straight -6 JIC x 90 Degree -6 JIC around the ROPS Bar as shown in (fig. 11).
5. Continue to route the hydraulic oil lines underneath the tractor. Connect the (2) hydraulic oil lines with a Straight -6 JIC x 90 Degree -6 JIC to the Mid Mount Bracket. (fig. 12).

Figure 8

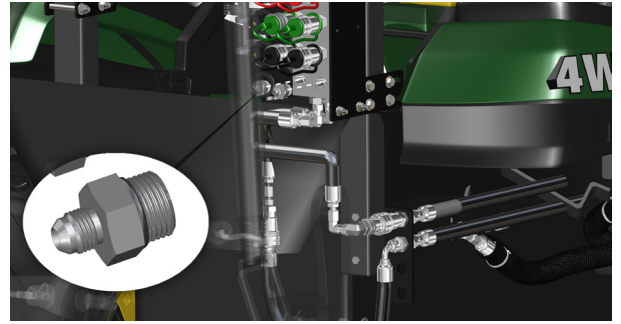


Figure 9

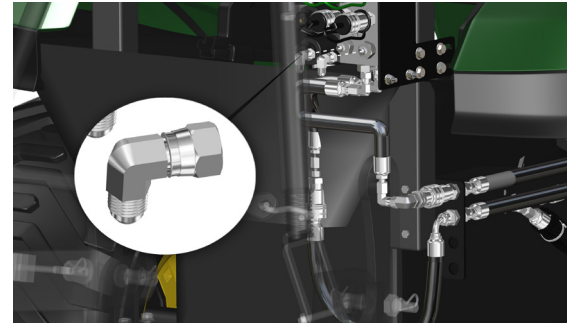


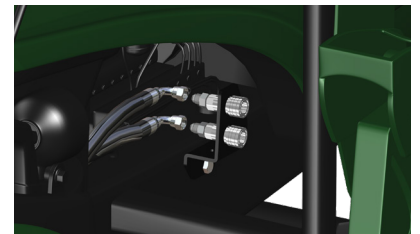
Figure 10



Figure 11



Figure 12



Cross Beam Coupler Mount

1. Install (2) 3/8" JIC Male x 3/8" JIC Bulkhead adapter to Quick Coupler Crossbeam Mounting Bracket as shown in (fig. 13).
2. Install (2) O-Ring for #6 SAE/ORB to the (2) 1/2" JIC Male x 1/2" JIC Bulkhead adapter. See (fig. 14).
3. Attach (2) Female 1/4" Coupler to Bulkhead Mount Coupler Adapter using (2) #6 O-Ring per Coupler as shown in (fig. 14).

Figure 13

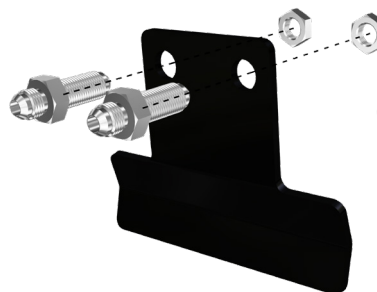
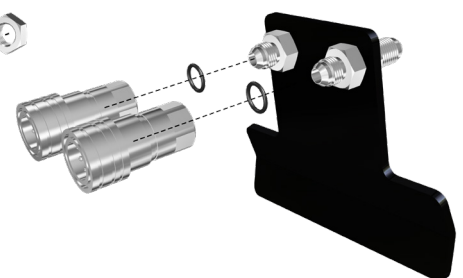


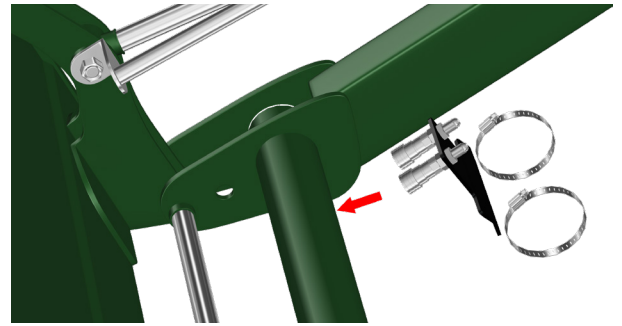
Figure 14



Cross Beam Coupler Mount

4) Attach Quick Coupler Mounting Bracket to right side of loader arm cross beam. Utilize the (2) clamps to tighten the Quick Coupler Mounting Bracket to the loader arm cross beam. See (fig. 15).

Figure 15



A & B Work Line Hose Installation

1. Locate the A & B work line hoses. See (fig. 16)
2. Locate the (2) hydraulic oil lines with a Female -6 JIC on both ends, and thread the (2) 90 Degree Elbow -6 JIC Male x -6 JIC Female Adapters onto the (2) hydraulic oil lines. See (fig. 17).
3. Locate the (2) -6 JIC x #6 SAE/ORB Male Adapters. Thread the Adapter onto 90 Degree Elbow -6 JIC Male x -6 JIC Female Adapter. See (fig. 17).
4. Locate the (2) AG 1/4" Male Couplers, and thread the (2) Male Couplers onto the (2) hydraulic oil lines with (2) -6 JIC x #6 SAE/ORB Male Adapters. See (fig. 17).
5. Route the A&B Work-Line Hoses along the loader arm and through the loader loop bracket to the Quick Coupler Mounting Bracket. See (fig. 18).
6. Connect the A&B Work-Line Hoses 3/8" JIC Female x 90 Deg 3/8" JIC Female to the 3/8" JIC Male x 3/8" JIC Bulkhead on the Quick Coupler Mounting Bracket on the loader arm cross beam. See (fig. 18).
7. Secure hydraulic hoses with zip ties as needed. See (fig. 19).

Figure 16



Figure 17

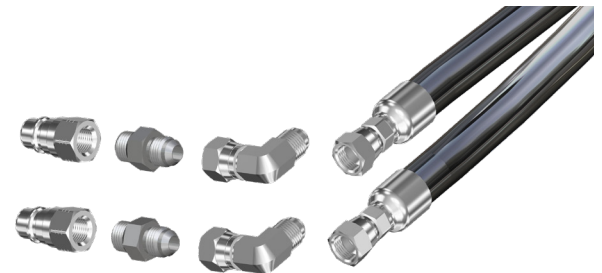


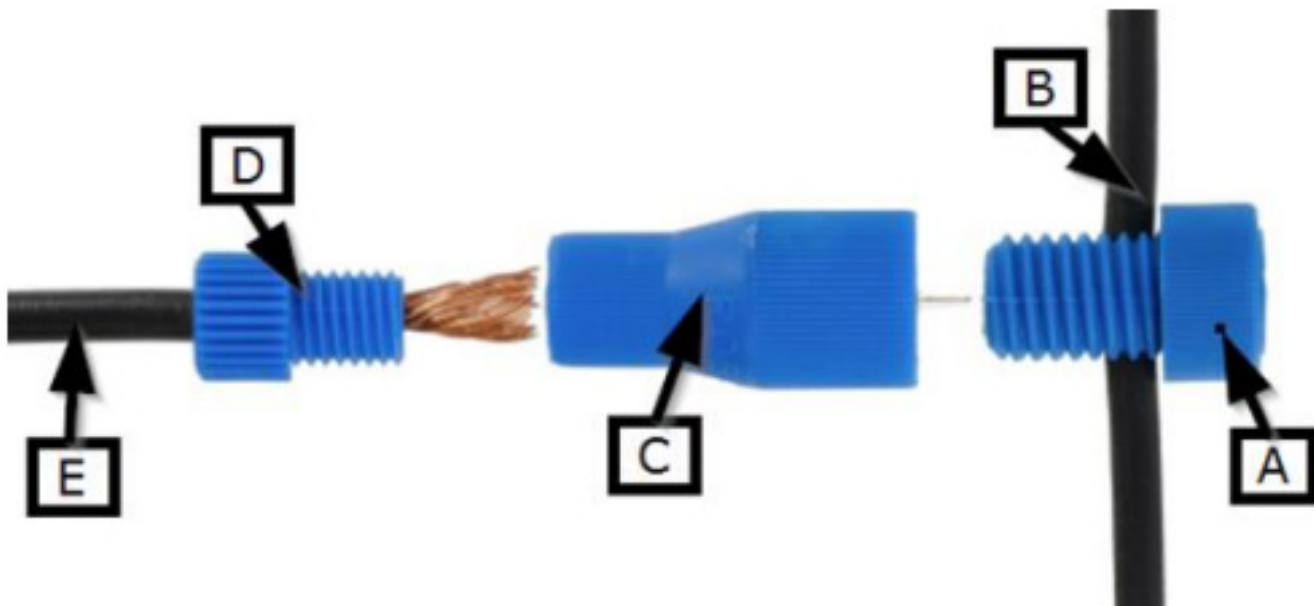
Figure 18



Figure 19



Installation Procedure



Posi-Tap Connectors Detail (fig. 1 #27)

1. Slide the large cap (A) over the wires (B).
2. Carefully thread the large cap (A) onto the Posi-Tap body (C). Ensure the pin is centered on the wire. Keep the Posi-Tap straight, and thread until the wire is tightly tapped.
3. Using a wire stripper. Strip 1/2-inch worth of wires €.
4. Unscrew the cap (D) from the Posi-Tap body (C).
5. Insert the strand of 1/2-inch stripped wires € through the cap. Ensure all of the strands are completely through the wires.
6. Twist the strand of 1/2-inch stripped wires in a rotational motion.
7. Insert the wire strands into one side of the metal core inside of the Posi-Tap body (C).
8. Push and turn the cap (D) until the thread are engaged. Tightly turn by hand until the cap sits flush with the Posi-Tap Body (C).

System Operation

1. In neutral state, fluid will flow in the "P" port and out of the "T" port with full pressure & flow, allowing the power beyond circuit to connect back to the hydraulic pump
2. When the Switch is pressed and held, fluid will flow out of the respective "A" or "B" work port, either extending or retracting that hydraulic cylinder.
3. When the Switch is released, that cylinder will stay in the position it was set to until the opposite Switch/Solenoid is activated, thereby retracting that cylinder.

Troubleshooting

Symptom	Possible Problem	Recommended Action
No Function	Electrical Issue/ Solenoid	1. Touch the large mounting nut on the top of solenoid coil with a screwdriver. 2. If screwdriver does not stick to top of coil, use a voltmeter to check for voltage (min. 11V) between the coil terminal and mounting nut. If screwdriver sticks, then this not an electrical issue. 3. If low voltage, check voltage at source where power wire for control was connected. 4. If no voltage is found, measure the voltage between coil terminal and tractor frame. If 5. voltage is indicated, the valve is not being grounded. Check the black ground wire. If no voltage is indicated between the coil wire and the ground, first check the fuse and then the hot wire to the control.
No Function: Non-Electrical	No Hydraulic Flow	1. If multiple valves are connected in-line, then Power Beyond Plug must be used (see section: "if connecting multiple valves in-line:"). 2. Ensure Valve is plumbed in-series and no pressurized lines have tees. 3) Ensure hoses are each connected to their corresponding cylinder. 3. Inspect couplers and tips for proper mating. 4. Ensure that you have an open center hydraulic system; if not, then a Closed Center Plug must be installed.
Slow Actuation	Low Voltage, Low Flow	1. Check voltage between coil terminal and mounting nut. If less than 11V, check all connections, battery and grounding. 2. Ensure pump is large enough to allow for enough flow to cylinders.

Maintenance

1. As with any pieces of equipment, periodic maintenance will help provide longer life and trouble-free operation of your valve.
2. Periodically inspect electrical connections which are exposed to the elements for signs of corrosion or other damage.
3. Replace any terminals that look as if they might fail in the field.
4. Inspect the cable connecting the switch to the valve.
5. Normal operation over time can cause a cable to move to a dangerous area. If the cable is in any danger of being crushed or cut, move it to a safer area and secure it.
6. Check the hydraulic hoses connected to the Valve.
7. Wipe the body of the Valve off and look for leaks. Tighten or replace any fitting you suspect of leaking. Inspect the hydraulic hoses for signs of leaking, cracking, or bulging. Replace any hose that shows these signs of impending failure.

Warranty

Summit Hydraulics' only obligation under this Limited Warranty shall be as follows: If Summit Hydraulics determines, in its sole judgment, that an operational failure has occurred in a Product manufactured by Summit Hydraulics, that the Product was being used properly, and that such operational failure was caused solely by defective materials or workmanship, Summit Hydraulics will, at its sole option, either refund the price paid by the Customer for the Product, or replace the Product or part and pay shipping charges incurred as a result thereof for the lowest round-trip transportation charges from Summit Hydraulics' Customer's location to a designated Summit Hydraulics location for return. An inspection fee, plus shipping and handling, will apply to all returns that do not result from an operational failure, as determined by Summit Hydraulics.

Unless otherwise specified, Summit Hydraulics warrants all valves manufactured by Summit Hydraulics for a period of one (1) year and all Quick Couplers for a period of (180) days from the date of purchase against operational failure solely to the extent caused by defective materials or workmanship, provided that: (a) such failure occurs during use of the Product in conformance with the Product Specifications provided by Summit Hydraulics, and (b) there has been no disassembly, damage during shipment, abuse, misuse, misapplication, maintenance, alteration, or improper installation or maintenance or repair of the Product. Warranty coverage is conditioned upon Customer: (a) advising Summit Hydraulics in writing of the warranty claim, within fifteen (15) days of the alleged operational failure, (b) obtaining from Summit Hydraulics warranty personnel an RGA and location for return of the Product, (c) complying with all applicable procedures and instructions from Summit Hydraulics regarding the return of Product, (d) providing to Summit Hydraulics a complete written report of the circumstances of the claimed operational failure of the Product, and (e) providing Summit Hydraulics a reasonable time to inspect the Product and investigate the claim.

Summit Hydraulics has the right to refuse a warranty claim if procedures are not met by the original consumer. Summit Hydraulics reserves the right to refuse any and all warranty claims from any Distributor which has not purchased the original Summit Hydraulics product directly from Summit Hydraulics. Summit Hydraulics reserves the right to refuse any Return Goods Authorization of said merchandise in which it is believed to be fraudulent or distressed merchandise not purchased originally from Summit Hydraulics. Summit Hydraulics also reserves the right to not cover any 3rd party costs, labor, or services for troubleshooting or installation of our product.

This warranty does not apply to any Summit Hydraulics' product which has been modified, customized, painted, dented, rusted, or improperly installed.

John Deere Rear Remote & Front Function Valve Kit

APPLICATIONS: 1023E, 1025R & 1026R

LOADERS: H120, 120R, 120R MSL & D120

Need Help ?

Representatives are here to help with any questions concerning this product. Please email us with questions.

Summit-Hydraulics.com

Contact@Summit-Hydraulics.com

