



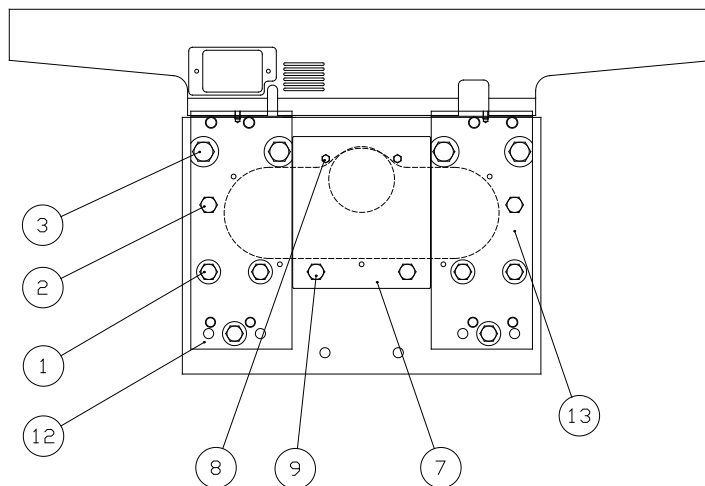
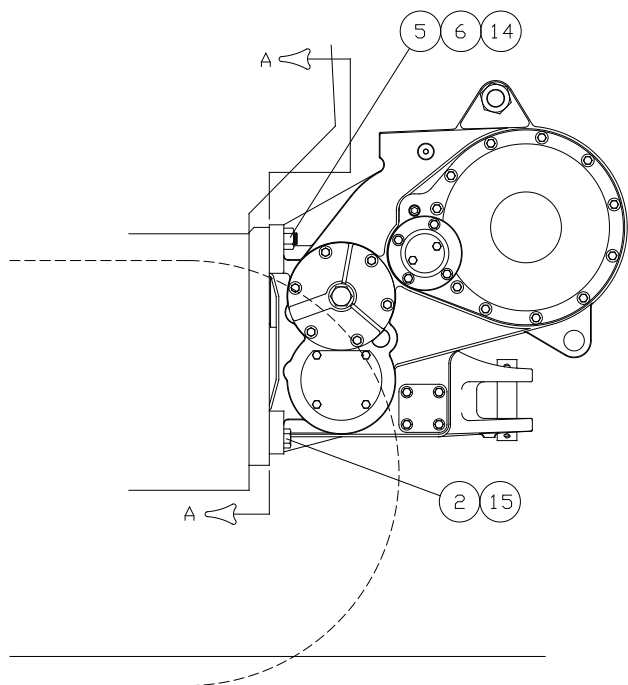
INSTALLATION AND PARTS MANUAL MODEL H60VS FOR JOHN DEERE 750J TRACTORS

NOTE: This manual covers winch installation and parts, specific to the tractor or tractors listed above. For all other common winch parts, refer to Carco Winch Parts Manual LIT2254.

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**H60VS
MOUNTING GROUP
JOHN DEERE 750J**



VIEW A-A
LOOKING AT REAR FACE OF TRACTOR

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	103332	CAPSCREW, HEX HD (1-8 X 2½, G8, Z)	6
2	102597	CAPSCREW, HEX HD (1-8 X 3, G8, Z)	6
3	31039	CAPSCREW, HEX HD (1¼-7 X 3¼, G8, Z)	4
5	70768	NUT, HEX (1-1/8 - 7)	4
6	27802	STUD	4
7	100396	DUST SHIELD	1
8	26216	SCREW, METRIC HEX HD (M12 X 1.75 X 30 mm, G8.8)	2
9	102883	CAPSCREW, HEX HD (1-8 X 1½, G8, Z)	2
11	70198	TRIM, 15 in (381 mm)	1
12	27767	SPACER, LH	1
13	27766	SPACER, RH	1
14	27803	WASHER, HARD (1¼ in)	4
15	101205	WASHER, HARD (1 in)	4

INSTALLATION INSTRUCTIONS



Cleanliness is of utmost importance when working on hydraulic equipment. Contamination may cause damage to close tolerances of the hydraulic components which may result in erratic operation and reduced service life.

1. Remove cover from tractor Hystat transmission access hole in rear face of tractor chassis.
2. Remove mounting adapter plates from winch. Retain capscrews and nuts for re-use. Discard shipping brackets.
3. Remove studs from mounting adapter plates. Retain studs for re-use.
4. Clean adapter plates, capscrews, studs and nuts.
5. Attach adapter plates to rear of tractor as shown using capscrews (1, 2 and 3). Leave capscrews finger tight.
6. Attach dust cover (7) to rear of tractor as shown using capscrews (8 & 9).
7. Tighten adapter plate capscrews per torque table.
8. Apply Loctite 243 or equivalent to threads on one end of studs (retained from step 3). Reinstall studs into top winch mounting holes in adapter plates as shown until the end of the stud thread bottoms on the edge of the holes.



The winch weighs approximately 2,500 lbs (1,134 kg). Ensure your lifting equipment has adequate capacity and use proper lifting techniques to eliminate the possibility of damage or injury.

9. Lift winch and guide top winch mounting holes over studs. Secure with nuts and washers (retained from step 2). Leave nuts finger tight.
10. Reinstall lower winch mounting capscrews and washers (retained from step 2) as shown.
11. Tighten winch mounting capscrews and nuts per torque table.
12. Fill winch with oil per winch operator's manual.

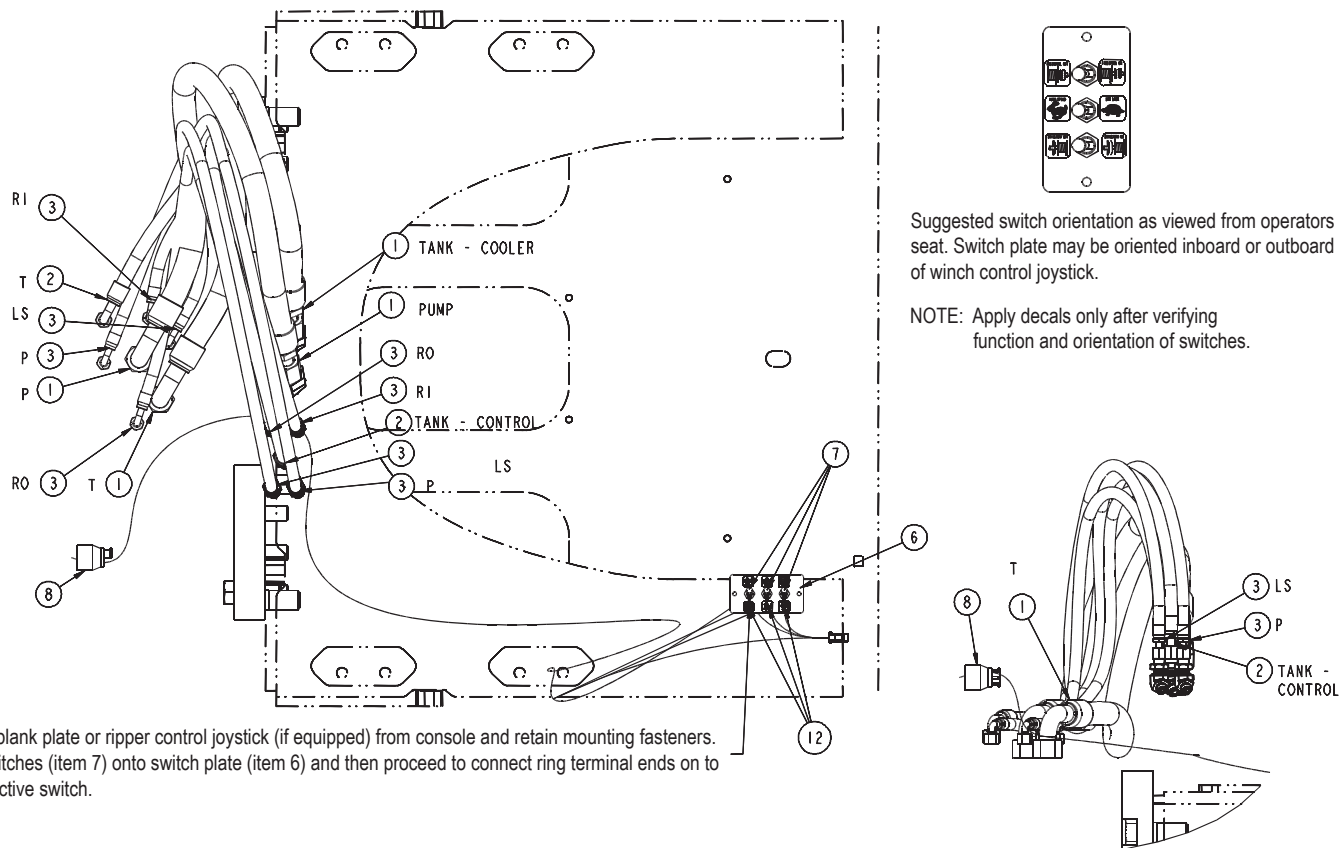


Fill the winch to the proper level with the recommended oil BEFORE operating the winch. Component damage may occur if the winch is operated without oil.

TORQUE SPECIFICATIONS

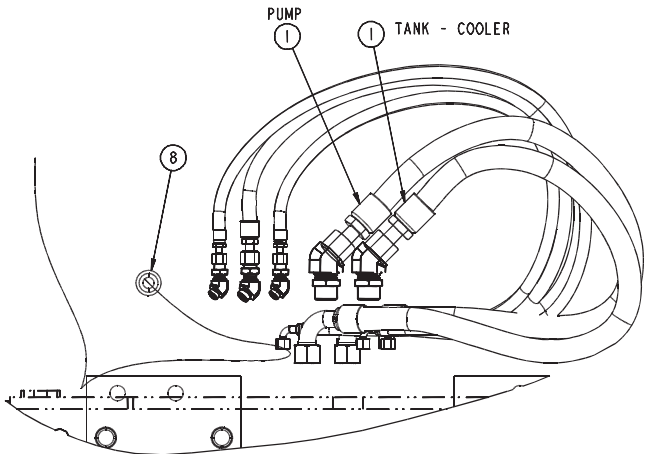
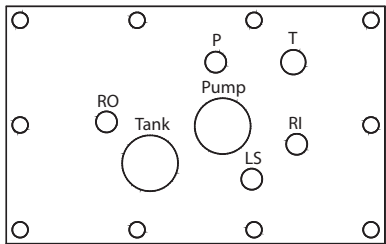
FASTENER SIZE	TORQUE (FT-LB)	TORQUE (NM)
1-1/4 - 7 UNC	1360	1850
1-1/8 - 7 UNC	960	1300
1 - 8 UNC	680	920

H60VS
Control Group
John Deere 750K



Remove blank plate or ripper control joystick (if equipped) from console and retain mounting fasteners. Install switches (item 7) onto switch plate (item 6) and then proceed to connect ring terminal ends on to the respective switch.

Effective 8/8/2012



ITEM	PART NO.	DESCRIPTION	QTY.
1	105973	HOSE ASSEMBLY - 16 ORFS 90° X 38 INCH (965mm)	2
2	105974	HOSE ASSEMBLY - 10 ORFS 90° X 50 INCH (1270mm)	1
3	105975	HOSE ASSEMBLY - 6 ORFS 90° X 50 INCH (1270mm)	4
-	103079	CABLE TIE	8
6	109390	SWITCH PLATE	1
7	109811	TOGGLE SWITCH	3
8	105972	WIRING HARNESS	1
9	32489	BLACK STRAP	4
12	105680	CONTROL DECAL	1
18	70198	TRIM	2 Ft.



Cleanliness is of utmost importance when working on hydraulic equipment. Contamination may cause damage to close tolerances of the hydraulic components which may result in erratic operation and reduced service life.

Notes:

- Observe general service methods and safety precautions given in John Deere tractor service manual
- Prior to installing winch system, tractor must be factor equipped or retrofitting with John Deere Winch Plumbing Installation AT31189 as directed in John Deere Instruction Manual T215517
- Install winch or tractor in accordance with Carco mounting group part number 63688 before installing control group
- On initial startup, winch control and operation may be slow or unstable until all air has been purged from the hydraulic control circuits. Clearing all air from the system may require several minutes of operation. In extreme conditions it may be desirable to manually 'bleed' the various hydraulic control connections

Installation Instructions

1. Remove block off plate or ripper control joystick if equipped from console. Retain mounting fasteners. Ripper control joystick may be removed completely or secured underneath console using cable ties.
2. Install switches (item 7) onto switch plate (6).
3. Install switch housing and switch assembly in cab operation console using factory hardware removed in step 1.
4. Connect wiring harness (item 8) power plug to tractor power socket underneath cab operator console.
5. Connect wiring harness leads with ring terminal to switch terminals as follows:
 - Red and Orange wire pair to Drum Clutch switch
 - Purple and Orange wire pair to Low Lock switch
 - Blue and Orange wire pair to Freespool switch
6. Remove lower rear fuel tank cover from the tractor.
7. Route winch end of wiring harness under fuel tank to rear of tractor and out to winch.
8. Remove host connection shipping caps from winch and tractor bulkhead plate.
9. Connect hydraulic power Pump and Return hoses (item 1) from bulkhead fittings on winch to bulkhead fittings in tractor bulkhead plate as shown in John Deere Instruction Manual T215517.
10. Connect hydraulic control hoses (items 2 and 3) from bulkhead fittings on winch to bulkhead fittings on tractor bulkhead plate as shown here and in John Deere Instruction Manual T215517.

11. Connect wiring harness (item 8) plug to winch electrical socket.
12. Check winch oil level and tractor hydraulic oil level. Top off as required.



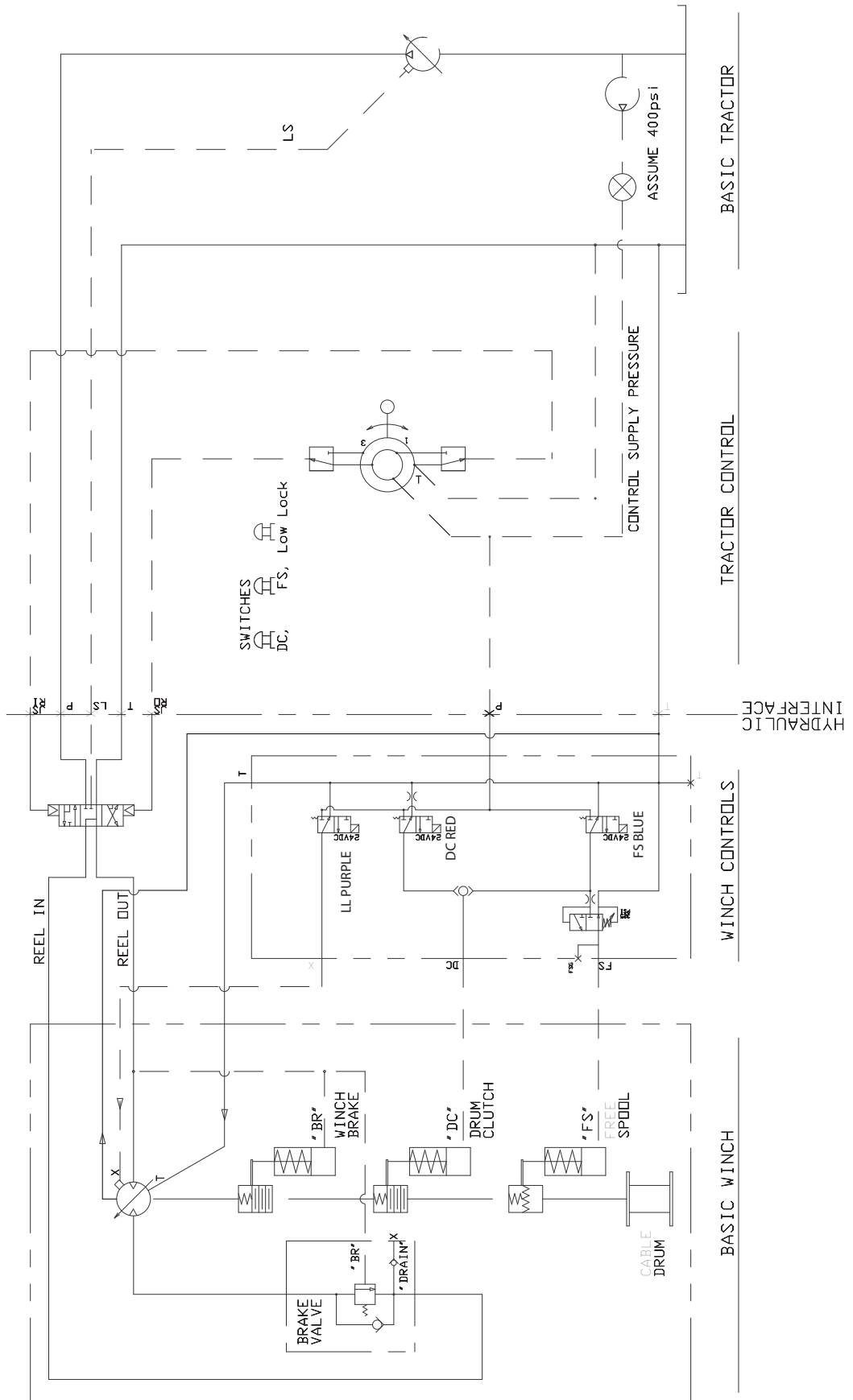
Fill the winch to the proper level with the recommended oil BEFORE operating the winch. Component damage may occur if the winch is operated without oil.

13. Start tractor and test all winch functions per winch Operator's Manual. Ensure Reel-in and Reel-out control operation is smooth. Confirm moving control lever towards the front of the tractor activates Reel-in, and moving the lever towards the rear of the tractor provides reel out. Ensure switch controlled winch functions and decal (item 12) orientation is correct.
14. Clean console and apply winch control decals (item 18)
15. Bundle and secure wiring harnesses and control hoses using Cable Ties (item 11 and 15).
16. Cut Trim (item 18) to appropriate lengths and install on sheet metal edges where hoses or wiring harnesses may rub.
17. Reinstall tractor lower fuel tank cover plate.

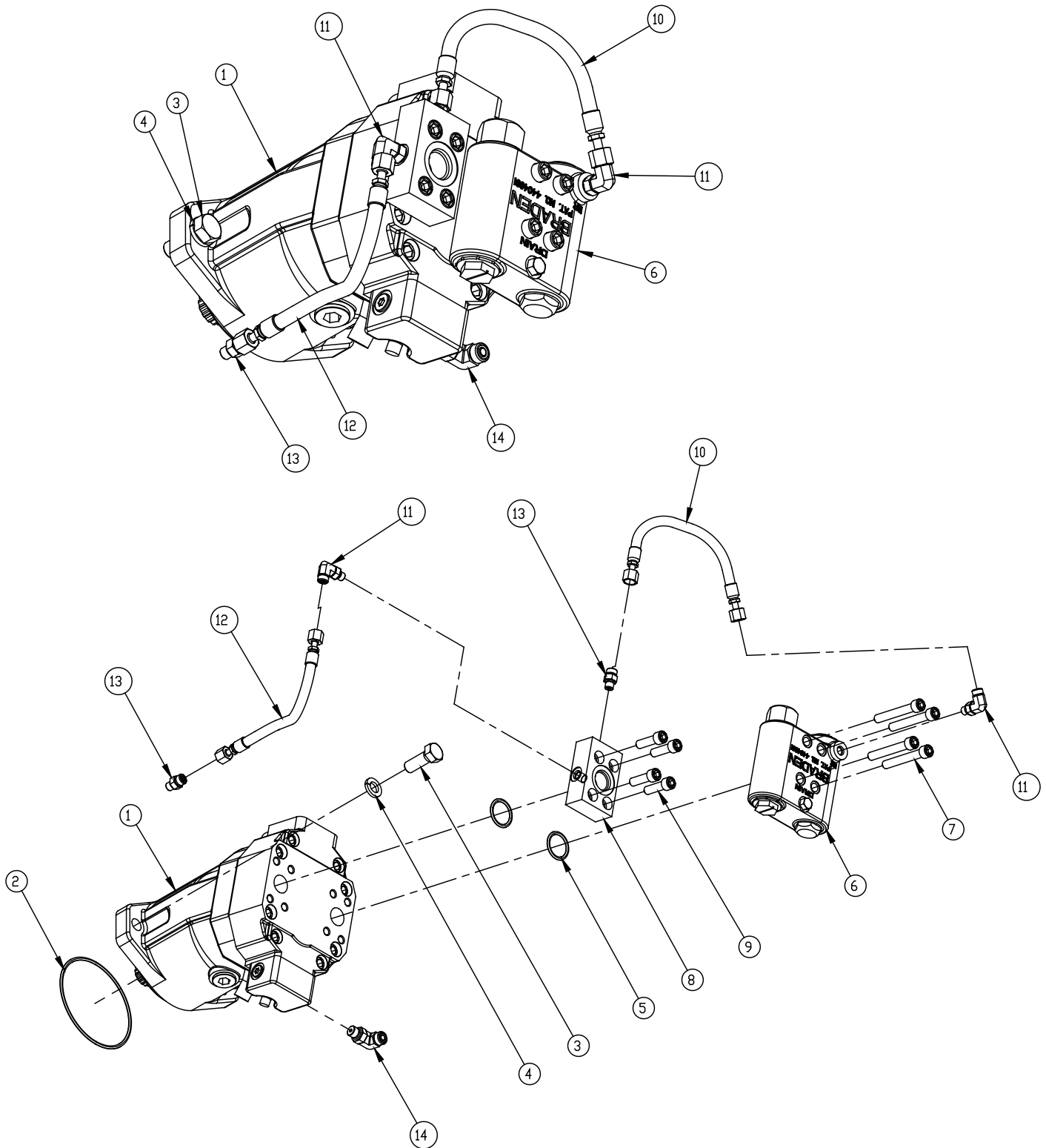
**H60VS
CONTROL GROUP
JOHN DEERE 750J**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	105973	HOSE ASSEMBLY -16 ORFS 90° X 42 in. (1067 mm)	2
2	105974	HOSE ASSEMBLY -10 ORFS 90° X 50 in. (1270 mm)	1
3	105975	HOSE ASSEMBLY -6 ORFS 90° X 50 in. (1270 mm)	4
4	103079	CABLE TIE	8
5	105980	ACCUMULATOR	1
6	109390	SWITCH PLATE	1
7	109811	TOGGLE SWITCH	3
8	105972	WIRE HARNESS	1
9	32489	STRAP, BLACK	4
10	11767	CAPSCREW, HEX HD (5/16 - 18 X 1, G8, Z)	2
11	100858	WASHER, HARD (5/16 in.)	2
12	105680	DECAL, CONTROL	1
13	36618	DRAWBAR PIN	1
14	70148	COTTER PIN	2
15	40107	ELBOW, 90°	1
16	101259	HOSE ASSY -6 ORFS 90° X 23 in. (584 mm)	1
17	102273	TEE	1
18	70198	TRIM, 24 in. (610 mm)	1

TYPICAL H60VS HYDRAULIC CIRCUIT



**H60VS
HYDRAULIC MOTOR GROUP
JOHN DEERE 750J**

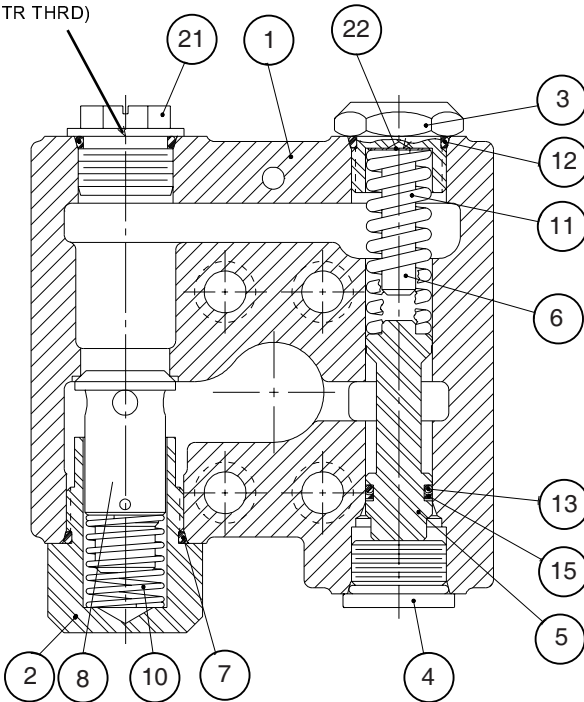


H60VS
HYDRAULIC MOTOR GROUP
JOHN DEERE 750J

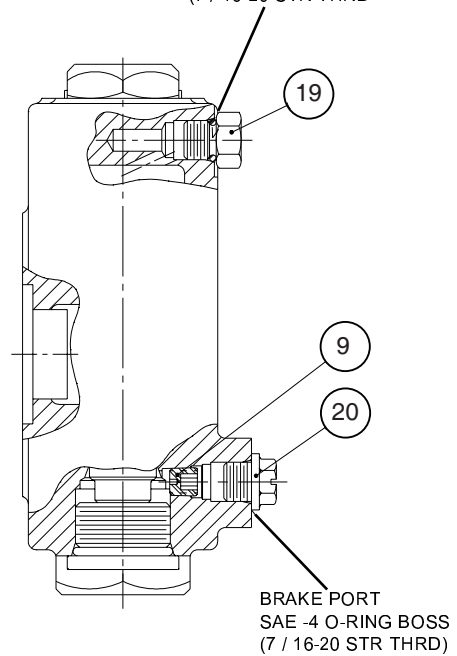
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	105141	HYDRAULIC MOTOR (048/024-3100)	1
2	10330	O-RING	1
3	103249	CAPSCREW, HEX HD (5/8 -11 X 1¾, G8, Z)	2
4	102423	LOCKWASHER (5/8 in.)	2
5	25366	O-RING	2
6	82133	BRAKE VALVE ASSEMBLY (Ref. Page 10)	1
7	21134	CAPSCREW, HEX SOCKET HD (7/16 - 14 X 3, G8)	4
8	28964	MANIFOLD	1
9	21135	CAPSCREW, HEX SOCKET HD (7/16 - 14 X 1½, G8, Z)	4
10	104505	HOSE ASSY, -4 ORFS X 10 in. (254 mm)	1
11	27430	ELBOW, 90° ORS/ORB	2
12	101919	HOSE ASSEMBLY, -4 ORFS X 14 in. (356 mm)	1
13	27428	ADAPTER, STRAIGHT ORS/ORB	2
14	40107	ELBOW, 90° ORS/ORB	1

**H60VS
BRAKE VALVE ASSEMBLY
JOHN DEERE 750J**

SAE -12 O-RING BOSS
(1 1/16-12 STR THRD)



SAE -4 O-RING BOSS
(7 / 16-20 STR THRD)



ASSEMBLY INSTRUCTIONS:

1. Tighten plug, item 19, to 25 lb•ft (34 N•m) torque.
2. Tighten plugs, items 2, 3 & 4 to 40 lb•ft (54 N•m) torque.

ITEM NO.	PART NO.	DESCRIPTION	QTY.
--	82133	BRAKE VALVE ASSEMBLY	1
1	NSS	BRAKE VALVE HOUSING	1
2	24424	VALVE SPRING RETAINER	1
3	104733	SPRING RETAINER	1
4	22450	PLUG	1
5	NSS	MAIN SPOOL	1
6	NSS	SPOOL STOP	1
7	24186	O-RING	1
8	24423	CHECK VALVE POPPET / RELIEF VALVE 6000 PSI (41,400 kPa)	1
9	24200	PILOT ORIFICE	1
10	24190	CHECK POPPET SPRING	1
11	104732	SPOOL SPRING	1
12	23601	O-RING	2
13	24193	O-RING	1
15	24195	BACK-UP RING	1
19	25663	PLUG	1
20	25403	SHIPPING PLUG	1
21	75288	SHIPPING PLUG	1
22	25661	SHIM, VALVE SPRING	AR

NSS - NOT SERVICED SEPARATELY
AR - AS REQUIRED