

<i>Keep With Operator's Manual</i>

BACKHOE HYDRAULIC KIT NEW HOLLAND OR CASE IH TRACTORS

MODEL	BACKHOE	TRACTOR	LOADER
NEW HOLLAND	756C, 920GH, 930GH	WORKMASTER 45, 55	615TL
CASE IH	BHX172, BH90, BH102	FARMALL 45A, 55A	L530

Hydraulic kit can be installed on tractor and backhoe using tools ordinarily available. Tractor must be equipped with sufficient counterbalance at front, such as that provided by a front loader or front blade, to mount and operate backhoe.



WARNING: *Escaping hydraulic fluid under pressure can penetrate skin causing serious injury.*

- **DO NOT** use your hands to check for leaks. Use a piece of cardboard or paper to search for leaks.
- Stop engine and relieve pressure before connecting or disconnecting lines.
- Tighten all connections before starting engine or pressurizing lines.
- Make sure hoses are secure and will not rub on ground or tires.

If any fluid is injected into skin, obtain medical attention immediately or gangrene may result.

INSTALLING HYDRAULIC KIT (Figures 1 & 2)

1. Disconnect tank hose from loader valve at fitting in tank port. Install 7/8" JIC adapter tee fitting (6) to fitting installed in tank port. Reinstall tank hose from loader valve to tee fitting (6). Install 45° fitting (12) to tee fitting and 18" hose (3) to 45° fitting and route towards rear of tractor.
2. Install male coupler (9) and dust cap (10) to 18" hose. Secure hose to tractor with adjustable tie strap (11).

3. Remove backhoe cover plate. Install ½ x 112" (2) hose to inlet port on backhoe valve (see Figure 2).
4. Install ½" male quick coupler (9) to end of ½ x 112" hose (2).
5. Install ½ x 60" hose (1) to tank port on backhoe valve (see Figure 2). Install ½" female quick coupler (8) to end of ½ x 60" hose (1). Reinstall backhoe valve cover plate.
6. Route hoses (1 & 2) under backhoe footrest and out towards tractor. Secure hoses under footrest using tie strap (11). Route 112" hose (2) inside right subframe channel for protection.
7. Disconnect power beyond hose from loader valve at oil line running to rear of tractor under tractor platform. Install 7/8 JIC x ¾ o-ring straight adapter (7) to power beyond hose from loader valve. Install ½ female quick coupler (8) to straight adapter (7). See Figure 2.
8. Install 7/8 JIC x ¾ JIC straight adapter (4) to oil line running to rear of tractor. Install ¾ JIC x ¾ o-ring 45° fitting (5) to straight adapter (4). Point fitting up towards tractor platform. Install dust cap (10) and ½" male quick coupler (9) to 45° fitting (5).

NOTE: *Before mounting backhoe, connect power beyond hose from loader valve to oil line running to rear of tractor under tractor platform to enable adjustment of 3-point as necessary.*

MOUNTING BACKHOE TO TRACTOR

1. Adjust 3-point lift arms to level position. Back tractor slowly toward backhoe, parallel to subframe assembly, until hoses can be connected to tractor.

IMPORTANT: Shut off tractor.



WARNING: To prevent possible damage to hoses and backhoe valve, always shut off tractor engine when coupling or uncoupling hoses from backhoe. Make sure connections are complete at couplers.

2. Connect tank hose (1) to tractor tank hose (3). Disconnect power beyond hose from oil line under tractor platform. Connect pressure hose (2) to power beyond hose (from loader valve).

NOTE: After making this connection, 3-point hitch cannot be raised.

NOTE: Use dust cap (10) to prevent dirt accumulation on male quick coupler (9) on oil line.

3. Using backhoe controls, extend bucket and lower stabilizers to provide a base for raising subframe. Using backhoe controls, raise subframe to proper height to connect to tractor.

4. Slowly back tractor until subframe is engaged in rear mounting bracket and front mounting brackets.

NOTE: Check to be sure hoses are not pinched between tractor and subframe.

Connect subframe to front mounting brackets using pins provided in subframe kit.

5. Secure hoses (1 & 2) to subframe using tie strap (11). Make sure hoses are secure and will not rub on ground or tires.

6. After backhoe has been mounted to tractor, check all hydraulic connections. Slowly cycle backhoe cylinders several times to purge air from hydraulic system. Retract cylinders and shut off engine. Replenish tractor hydraulic system to bring level of hydraulic fluid up to full.

NOTE: After disconnecting backhoe, reconnect power beyond hose from loader valve to oil line under tractor platform. Supply hose (2) and tank hose (1) on backhoe can be connected together for storage to prevent dirt accumulation on couplers.

Figure 1
Mounting Backhoe to Tractor

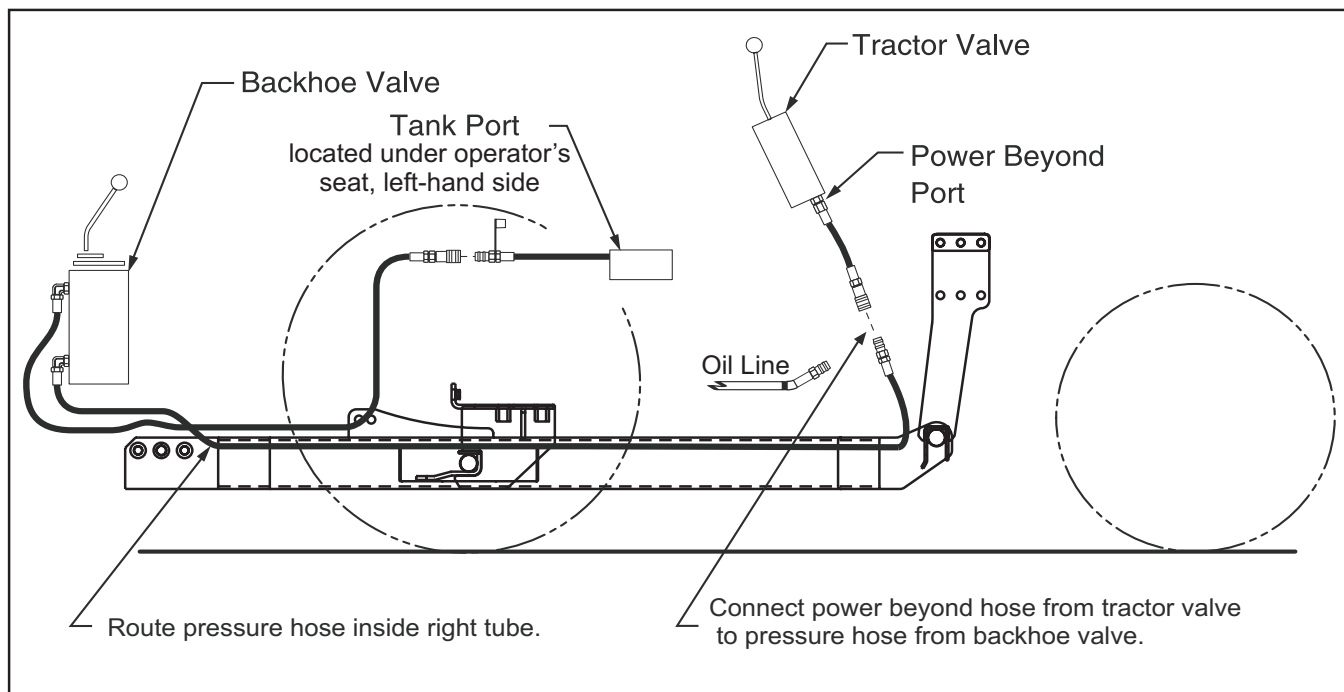
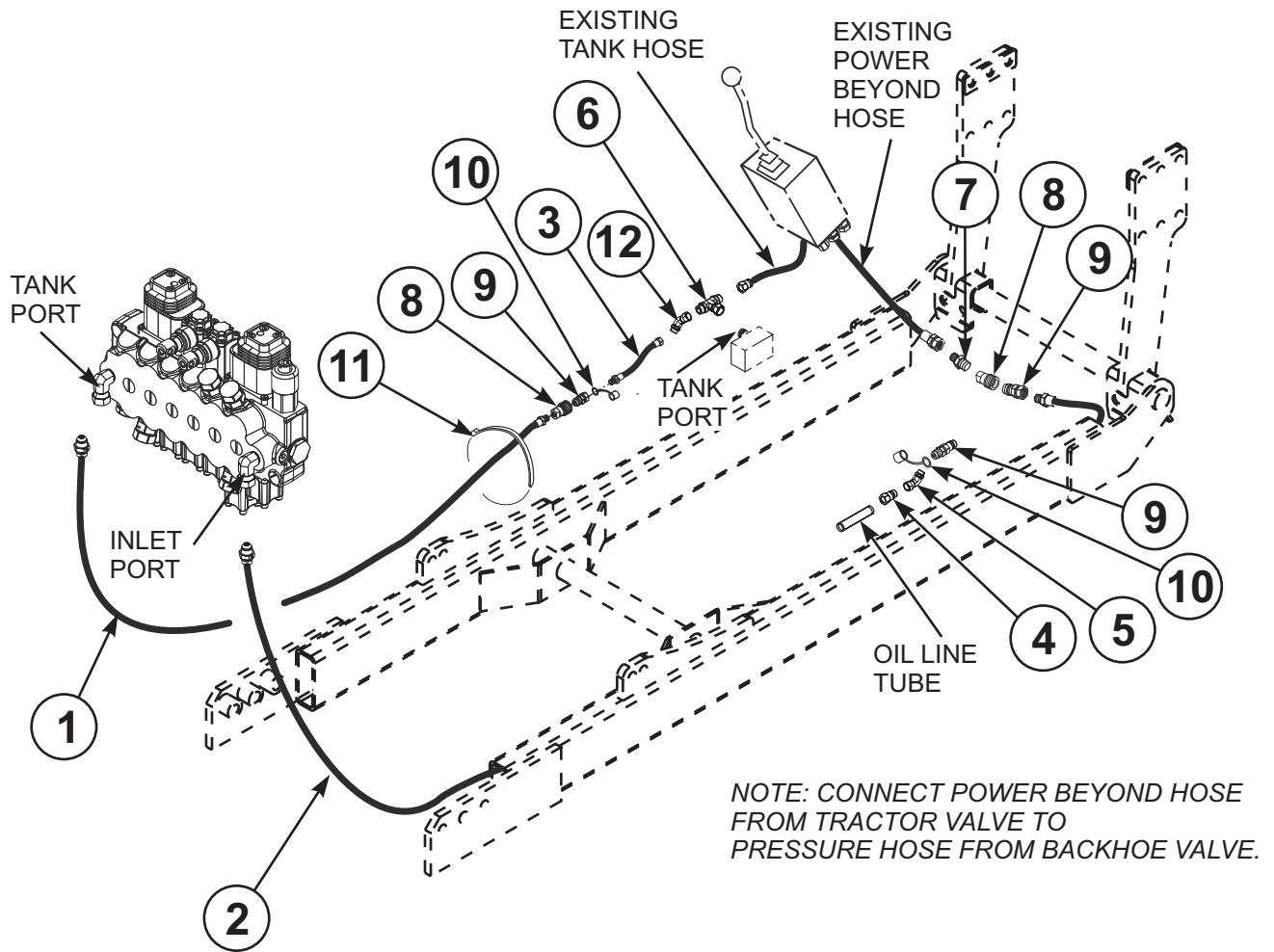


Figure 2
Hydraulic Kit Assembly



PARTS LIST - HYDRAULIC KIT

ITEM	PART NO.	DESCRIPTION	QTY.
1	42827-8	HOSE,#8 - 8MB - 8FJX - 60 LG	1
2	42827-6	HOSE,#8 - 8MB - 8FJX - 112 LG	1
3	42923-5	HOSE,#8 - 8MB - 10FJX - 18 LG	1
4	41054-1	ADAPTER, 10FJX - 8MJ	1
5	55877-1	ADAPTER, 8FJX - 8MB45	1
6	50476-2	ADAPTER, TEE, 10FJX - 10MJ - 10MJ	1
7	32844-17	ADAPTER, 10MJ-8MB	1
8	6147-10	COUPLER, FEMALE 1/2, 3/4-16 ORB	2
9	6137-10	COUPLER, MALE 1/2, 3/4-16 ORB	3
10	4838-19	CAP, DUST 1/2"	2
11	8137-6	STRAP,ADJUSTABLE (BLACK)	4
12	38226-6	ADAPTER, HYD ELBOW 10MJ - 10FJX45	1

GENERAL TORQUE SPECIFICATIONS

USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

Standard American and Metric Cap Screws

AMERICAN STANDARD CAP SCREWS									METRIC CAP SCREWS								
SAE Grade	5				8				Metric Class	8.8				10.9			
Typ. Head Markings									Typ. Head Markings								
Cap Screw	TORQUE				TORQUE				Cap Screw	TORQUE				TORQUE			
Size	FT·LBS		N·m		FT·LBS		N·m		Size	FT·LBS		N·m		FT·LBS		N·m	
Inches	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	Millimeters	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
1/4 - 20	6.25	7.25	8.5	10	8.25	9.5	11	13	M6 x 1.00	6	8	8	11	9	11	12	15
1/4 - 28	8	9	11	12	10.5	12	14	16	M8 x 1.25	16	20	21.5	27	23	27	31	36.5
5/16 - 18	14	15	19	20	18.5	20	25	27	M10 x 1.50	29	35	39	47	42	52	57	70
5/16 - 24	17.5	19	23	26	23	25	31	34	M12 x 1.75	52	62	70	84	75	91	102	123
3/8 - 16	26	28	35	38	35	37	47.5	50	M14 x 2.00	85	103	115	139	120	146	163	198
3/8 - 24	31	34	42	46	41	45	55.5	61	M16 x 2.50	130	158	176	214	176	216	238	293
7/16 - 14	41	45	55.5	61	55	60	74.5	81	M18 x 2.50	172	210	233	284	240	294	325	398
7/16 - 20	51	55	69	74.5	68	75	92	102	M20 x 2.50	247	301	335	408	343	426	465	577
1/2 - 13	65	72	88	97.5	86	96	116	130	M22 x 2.50	332	404	450	547	472	576	639	780
1/2 - 20	76	84	103	114	102	112	138	152	M24 x 3.00	423	517	573	700	599	732	812	992
9/16 - 12	95	105	129	142	127	140	172	190	M27 x 3.00	637	779	863	1055	898	1098	1217	1488
9/16 - 18	111	123	150	167	148	164	200	222	M30 x 3.00	872	1066	1181	1444	1224	1496	1658	2027
5/8 - 11	126	139	171	188	168	185	228	251	NOTE: These values apply to fasteners as received from supplier, dry or when lubricated with normal engine oil. They do not apply if special graphite or moly sulphide greases or other extreme lubricants are used.								
5/8 - 18	152	168	206	228	203	224	275	304									
3/4 - 10	238	262	322	355	318	350	431	474									
3/4 - 16	274	305	371	409	365	402	495	544									
7/8 - 9	350	386	474	523	466	515	631	698									
7/8 - 14	407	448	551	607	543	597	736	809									
1 - 8	537	592	728	802	716	790	970	1070									
1 - 14	670	740	908	1003	894	987	1211	1337									

37° JIC Fittings

Size	Thread Size	Assembly Torque		Tube Connection F. F. F. T.	Swivel Nut or Hose Connection F. F. F. T.
		in.·lb.	ft.·lb.		
-4	7/16 - 20	140 ± 10	12 ± 1	2	2
-5	1/2 - 20	180 ± 15	15 ± 1	2	2
-6	9/16 - 18	250 ± 15	21 ± 1	1 1/2	1 1/4
-8	3/4 - 16	550 ± 25	45 ± 5	1 1/2	1
-12	1 1/16 - 12	1000 ± 50	85 ± 5	1 1/4	1
-16	1 5/16 - 12	1450 ± 50	120 ± 5	1	1
-20	1 5/8 - 12	2000 ± 100	170 ± 10	1	1
-24	1 7/8 - 12	2400 ± 150	200 ± 15	1	1
-32	2 1/2 - 12	3200 ± 200	270 ± 20	1	1

O-Ring Face Seal Tube/

Hose Swivel Nut

Metric Tube O.D. (mm)	Dash Size	Thread Size (in.)	Swivel Nut Hex Size (in.)	Swivel Nut Torque	
				N·m	lb·ft
5	-3	--	--	--	--
6	-4	9/16 - 18	11/16	16	12
8	-5	--	--	--	--
10	-6	11/16 - 16	13/16	24	18
12	-8	13/16 - 16	15/16	50	37
16	-10	1 - 14	1-1/8	69	51
20	-12	1-3/16 - 12	1-3/8	102	75
22	-14	1-3/16 - 12	--	102	75
25	-16	1-7/16 - 12	1-5/8	142	105
32	-20	1-11/16 - 12	1-7/8	190	140
38	-24	2 - 12	2-1/4	217	160
50.8	-32	--	--	--	--

SAE O-Ring Fittings

Size	Swivel Nut or Hose	Assembly Torque		F. F. F. T.
		in.·lb.	ft.·lb.	
2	5/16 - 24	90 ± 5	7.5 ± 0.5	1 ± .25
3	3/8 - 24	170 ± 10	14 ± 1	1 ± .25
4	7/16 - 20	220 ± 15	18 ± 1	1 ± .25
5	1/2 - 20	260 ± 15	22 ± 1	1 ± .25
6	9/16 - 18	320 ± 20	27 ± 2	1.5 ± .25
8	3/4 - 16	570 ± 25	48 ± 2	1.5 ± .25
10	7/8 - 14	1060 ± 50	90 ± 5	1.5 ± .25
12	1 1/16 - 12	1300 ± 50	110 ± 5	1.5 ± .25
14	1 3/16 - 12	1750 ± 75	145 ± 6	1.5 ± .25
16	1 5/16 - 12	1920 ± 125	160 ± 6	1.5 ± .25
20	1 5/8 - 12	2700 ± 150	225 ± 12	1.5 ± .25
24	1 7/8 - 12	3000 ± 150	250 ± 12	1.5 ± .25
32	2 1/2 - 12	3900 ± 200	325 ± 15	1.5 ± .25

INSTALLATION INSTRUCTIONS