

Keep With Operator's Manual

## BACKHOE HOSE KIT 65A, 75 & 85 BACKHOES & KB1440, KB1550 & KB2085 BACKHOES CUB CADET & KIOTI TRACTORS WITH COMPATIBLE LOADER VALVE & PLUMBING KIT

Cub Cadet	8404, 8454
Kioti	DK35, DK35C, DK40, DK45, DK50, DK65

### GENERAL INFORMATION

Hydraulic kit can be installed on tractor using tools ordinarily available.

Tractor must be equipped with Alamo SMC or Rhino 22409 loader or Kioti KL249 loader with compatible valve and plumbing kit to 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.*

Shut off engine and engage brakes during installation.

### INSTALLING HYDRAULIC KIT (Figure 1)

1. Connect 3/8 x 112 hoses (8) to inlet and tank ports on backhoe control valve.
2. Install female coupler (2) to end of 3/8 x 112 hose (8) from tank port of backhoe valve. Install male coupler (1) to end of 3/8 x 112 hose (8) from inlet port of backhoe control valve. Route hoses (8) inside subframe channel (see figure 1).
3. Disconnect hose from elbow fitting in power beyond port on tractor hydraulic block.
4. Install adapter fitting (3) and female coupling (2) onto hose disconnected in step 3.
5. Install swivel adapter (4), dust cap (9) and male coupler (1) onto elbow in power beyond port on tractor hydraulic block.
6. Disconnect hose from adapter fitting in tank port of tractor hydraulic block. Install swivel nut run tee (5) onto adapter in tank port of hydraulic block and connect hose removed from tank port above onto swivel nut run tee (5).
7. Connect 90° elbow (6), dust cap (9) and male coupler (1) to swivel nut run tee (5). Couple hose from tank port of backhoe control valve to male coupler (1) as shown in figure 1.
8. Install male coupling (1) to hose feeding inlet port on backhoe control valve. Couple hose feeding inlet port on backhoe control valve to female coupler (2) on hose from loader control valve power beyond as shown in figure 1.
 

**NOTE:** When backhoe is removed both hoses (8) are disconnected and hose from loader control valve power beyond port must be coupled to power beyond port on tractor hydraulic block.
9. Secure hoses (8) to backhoe subframe with adjustable strap (7).

**MOUNTING BACKHOE TO TRACTOR**

1. Back tractor slowly toward backhoe, parallel to subframe assembly, until hoses can be connected to 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 (8) to tractor tank port coupler. Connect pressure hose (8) to hose from tractor valve power beyond port.

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 mounting brackets.

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

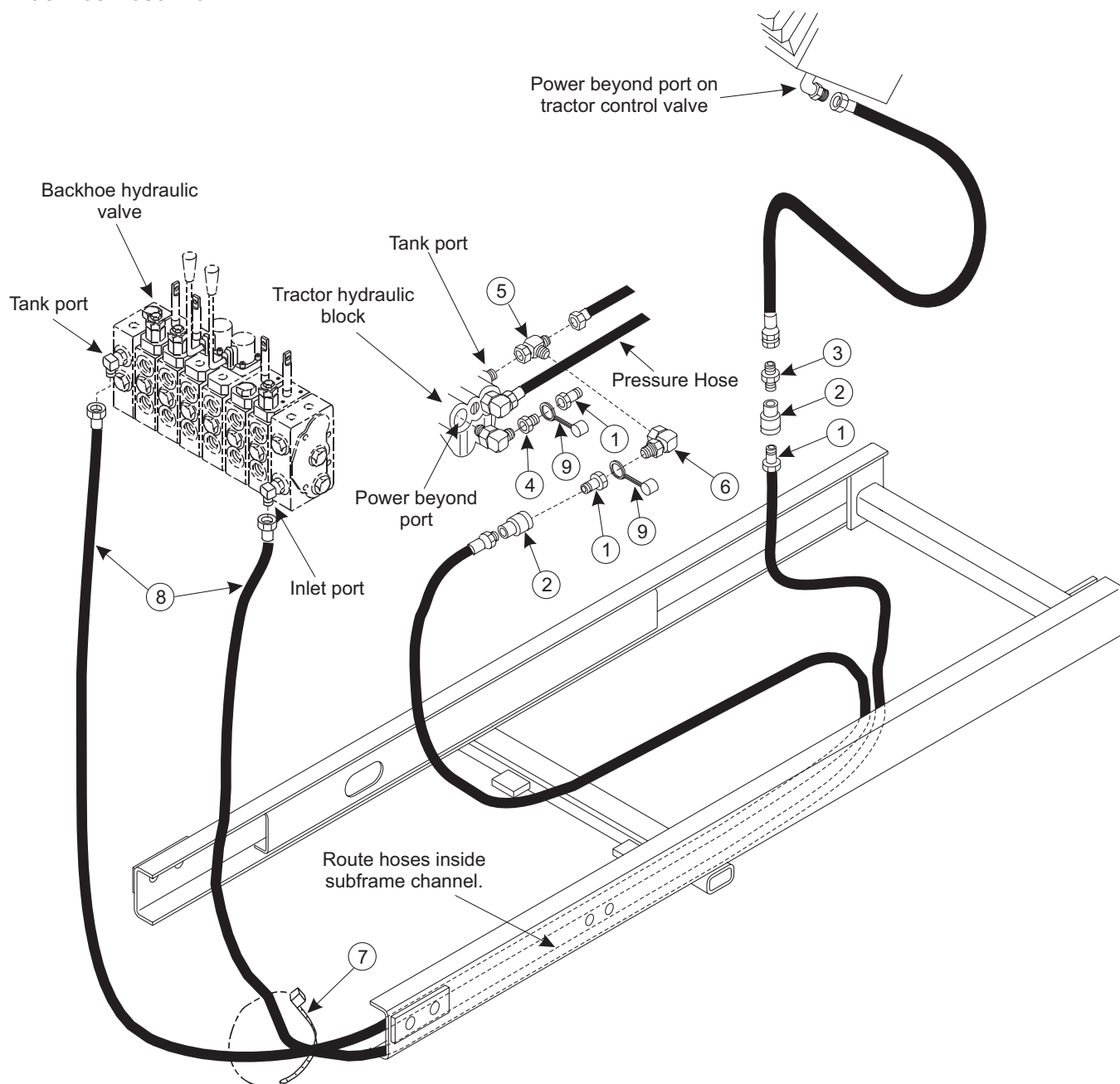
Connect subframe to brackets using pins provided in subframe kit.

5. 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

**PARTS LIST - REPAIR PARTS**

ITEM	PART NO.	DESCRIPTION	QTY.
1	SW6137-11	COUPLER, Male, 3/8, ISO	3
2	SW6147-11	COUPLER, Female, 3/8, ISO	2
3	SW32844-1	FITTING, Adapter, 9/16-18	1
4	SW42062-6	FITTING, Adapter, Swivel, 9/16-18	1
5	SW37850-3	FITTING, Swivel Nut Run Tee, 9/16-18	1
6	SW44277-2	FITTING, Elbow, O-ring, JIC, 90°	1
7	SW8137-6	STRAP, Adjustable, 5/16 x 11	1
8	SW47992-1	HOSE, 3/8 x 112	2
9	SW4838-18	DUSTCAP	2

**Figure 1**  
**Backhoe Hose Kit**



## 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	<p><b>NOTE:</b> 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 molysulphide greases or other extreme lubricants are used.</p>								
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