

Keep With Operator's Manual

## BACKHOE SUBFRAME KIT 65A, 75 & 85 BACKHOE CUB CADET AND KIOTI TRACTORS

Make	Model	ROPS
Cub Cadet	8454	x
Kioti	DK45, DK50, DK55	x

### BACKHOE AND SUBFRAME KIT GENERAL INFORMATION

Subframe can be installed on tractor and backhoe using tools ordinarily available. Tractor must be equipped with loader to provide adequate counter weight. 3-point linkage for 3-point must be removed (see caution below). Reference to front or rear used in these instructions refer to position when seated in the operating position on tractor.

Complete backhoe installation requires pump kit or hose kit to operate backhoe from Cub Cadet 8454 or Kioti DK45, DK50 or DK55 tractor hydraulic system and subframe channel kit 2-6509.



**CAUTION:** *If backhoe is being powered by an auxiliary pump kit or by a hose kit from tractor rear remotes, 3-pt hitch needs to be disabled by removing pins from hydraulic control arms.*

Read backhoe operators manual and become familiar with backhoe controls before installing subframe. Knowing how backhoe functions is necessary to attach subframe and backhoe to tractor.

Install swing lock pin so boom remains in straight back position.

### INSTALLING MOUNTING BRACKETS TO TRACTOR (Figure 1)

- On 8454, DK45, and DK50 tractors, remove six dust plugs from bottom of transmission casting. On DK55 tractor, remove two cap screws securing rear fuel tank support channel to bottom of transmission casting and four dust plugs from bottom of transmission casting.
- Install front subframe mounting bracket (2) to transmission housing using four 12mm x 30mm cap screws (13) and 1/2 lock washers (12) in four rear holes, and spacer plate (11), spacer bushings (9), 1/2 flat washers (8), 1/2 lock washers (12) and 12mm x 60mm cap screws (10) in front two slotted holes. On DK55, tractor spacer plate (11) is not used because fuel tank support channel takes up that space. Torque 12mm hardware to 70 ft.·lbs. (95Nm).
- Remove two rear and lower front 14mm x 35mm cap screws from each side of hitch assembly. Remove drawbar from hitch assembly.
- Install rear subframe mounting bracket (1) with ten 14mm x 45mm cap screws (14) and 9/16 lock washers (15). Torque 14mm hardware to 103 ft.·lbs. (140Nm). Reinstall tractor drawbar.

### INSTALLING MOUNTING TUBES ONTO SUBFRAME CHANNELS (Figure 1)

- Fasten rear tube bracket (4) to subframe channels (23 & 24) as shown in figure 2 using 1/2 x 1-1/4" cap screws (6) and lock nuts (7).

**IMPORTANT:** *Position subframe channels (23 & 24) so holes at rear, where backhoe mainframe fastens to channels, are offset toward **top** of channels.*

Use top holes of rear tube bracket (4) when installing backhoe onto 8454, DK45, or DK50 tractors.

Use lower holes of rear tube bracket (4) when installing backhoe onto DK55 tractor.

- Fasten channel weldments (5) to subframe channels (23 & 24) using 1/2 x 1-1/4" cap screws (6) and lock nuts (7).
- Fasten front tube weldment (3) to channel weldments (5) using 1/2 x 1-1/4" cap screws (6) and lock washers (12).

Use lower holes to fasten front tube assembly (3) to channel weldments (5) when installing backhoe onto 8454, DK45, or DK50 tractors.

Use upper holes when installing onto DK55 tractor. Torque 1/2" hardware to 72 ft.·lbs. (98Nm).

- Install assembled subframe to backhoe mainframe using 7/8 x 3" cap screws (20), lock washers (22), and nuts (21) in rear holes. Use 3/4 x 2" cap screws (16) and lock nuts (17) in front holes.

## 2-7343

### INSTALLING MOUNTING TUBES ONTO SUBFRAME CHANNELS (Continued)

5. Fasten support braces (25) to subframe and backhoe using 3/4 x 2-3/4" cap screws (26) and double nut with 3/4" lock nuts (27). Torque 3/4" grade 8 hardware to 350 ft.·lbs. (475Nm), 3/4 grade 5 hardware to 262ft.·lbs. (355Nm), and 7/8 hardware to 386ft.·lbs (500 Nm).

**NOTE:** Braces mount to rear holes in channels when mounting 75 or 85 backhoes.

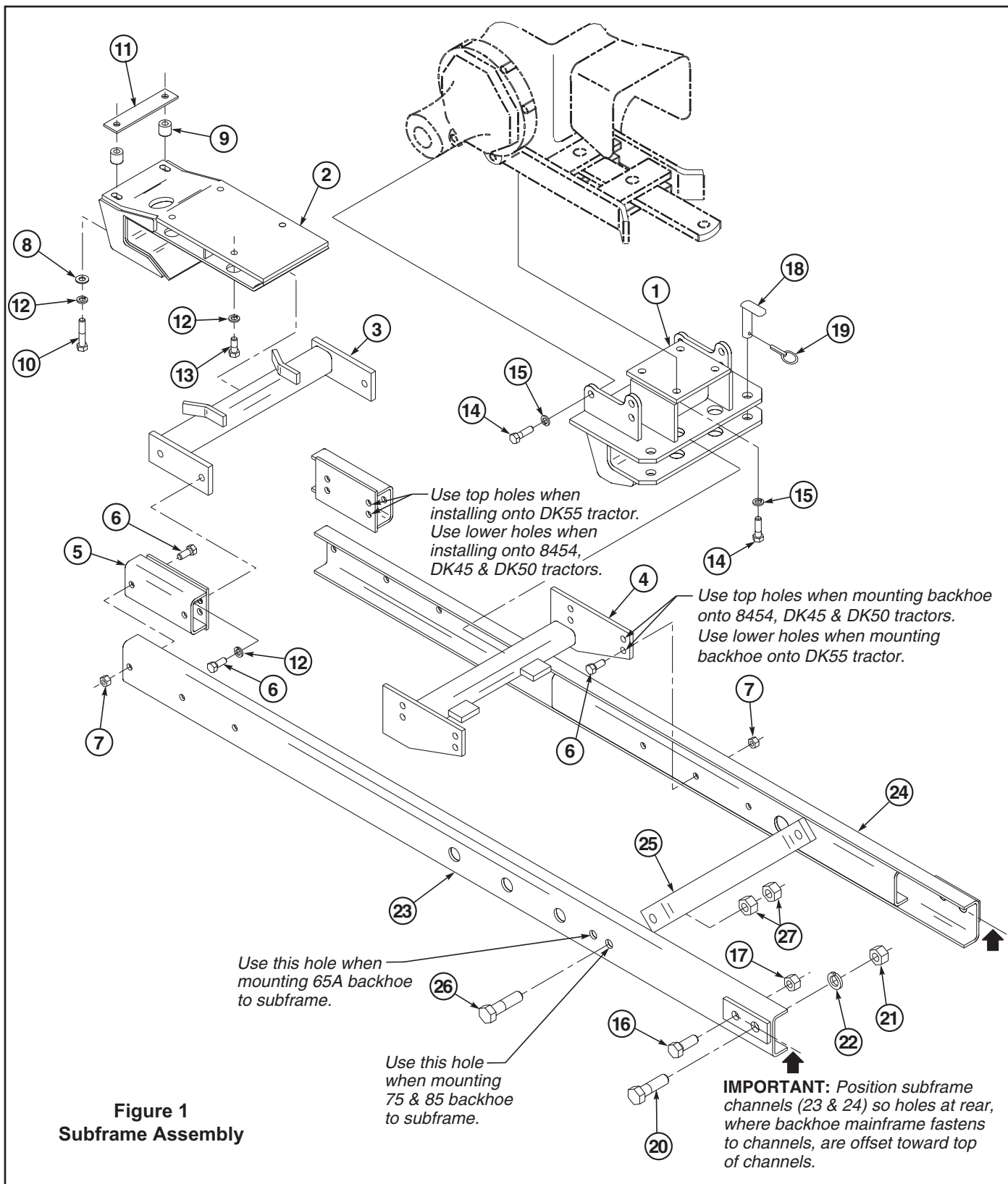
Install hydraulic components to backhoe according to instructions supplied with hydraulic kit.

### PARTS LIST - REPAIR PARTS

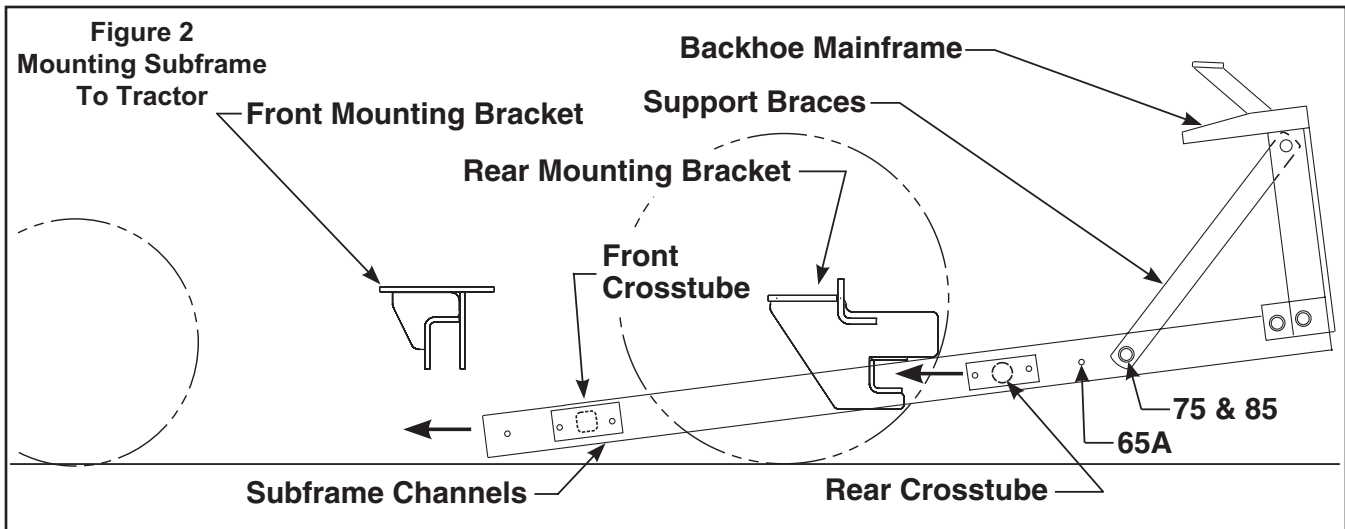
Item	Part No.	Description	Qty.
1	51725	BRACKET ASSEMBLY, Rear	1
2	51748	BRACKET ASSEMBLY, Front	1
3	51715	TUBE ASSEMBLY, Front	1
4	51717	TUBE ASSEMBLY, Rear	1
5	51721	CHANNEL ASSEMBLY	2
6	41838-2	SCREW, Cap, 1/2-13 x 1-1/4"	12
7	41840-5	NUT, Lock, 1/2"	8
8	42502-30	WASHER, Flat, 1/2" W-STD	2
9	46303-2	SPACER BUSHING	2
10	42672-49	SCREW, Cap, 12mm-1.25 x 60mm	2
11	51722	SPACER PLATE	1
12	41837-5	WASHER, Lock, 1/2"	10
13	42672-59	SCREW, Cap, 12mm-1.25 x 30mm	4
14	42672-60	SCREW, Cap, 14mm-1.50 x 45mm	10
15	41837-6	WASHER, Lock, 9/16"	10
16	41838-8	SCREW, Cap, 3/4-10 x 2"	2
17	41840-8	NUT, Lock, 3/4"	2
18	44892	PIN ASSEMBLY	2
19	44756-1	LINCH PIN	2
20	41838-53	SCREW, Cap, 7/8-9 x 3"	2
21	41836-9	NUT, Hex, 7/8"	2
22	41837-9	WASHER, Lock 7/8"	2

### PARTS LIST - SUBFRAME CHANNEL KIT - 2-6509 Order Separately

Item	Part No.	Description	Qty.
23	45700-2	CHANNEL ASSEMBLY, Right	1
24	45700-1	CHANNEL ASSEMBLY, Left	1
25	44836	MOUNT BAR	2
26	42969-4	SCREW, Cap, 3/4-10 x 2-3/4"	4
27	47264-8	NUT, Lock, 3/4"	8



**Figure 1**  
**Subframe Assembly**



**MOUNTING BACKHOE TO TRACTOR (Figures 2 & 3)**

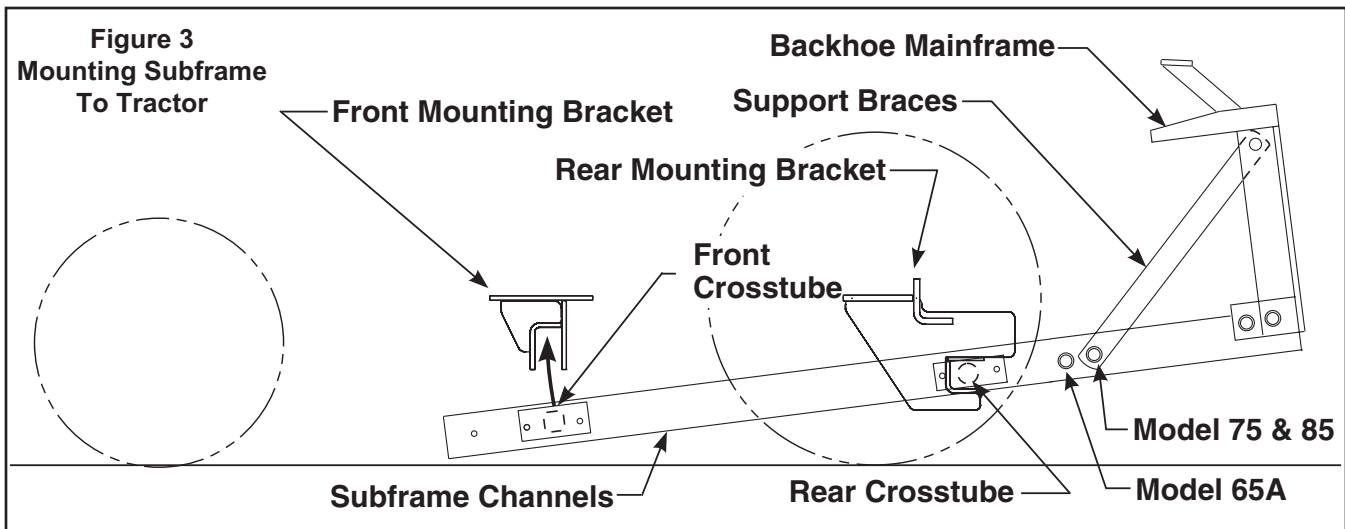
1. Back tractor toward backhoe, with tractor straddling subframe assembly, until positioned so that auxiliary PTO pump or hose kit can be connected to tractor. Turn off tractor, set brakes and make sure PTO is disengaged.
2. If auxiliary PTO pump kit is installed onto backhoe, connect pump to PTO. If hydraulic hose kit is installed onto backhoe, connect hoses to tractor hydraulics.
3. Start tractor. Engage PTO if backhoe is equipped with auxiliary PTO pump kit. Tractor should be running at low idle. Using backhoe controls, lower stabilizer and bucket to ground to provide a base for

raising subframe. Using backhoe controls, continue lowering stabilizers and backhoe boom to raise subframe to proper level height to connect to tractor.

4. Back tractor and position subframe so crosstube engages in rear mounting bracket (1) and front crosstube engages into front mounting bracket (2).
5. Install pins (18) through rear mounting bracket to secure subframe into place. Secure pins (18) using lynch pins (19).






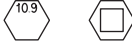
**CAUTION:** Raising 3-point lower hitch arms when backhoe is attached could damage backhoe. Remove or disable 3-point hitch by removing lower 3-point hitch arms.



# 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										

# INSTALLATION INSTRUCTIONS