

ALAMO SMC & RHINO 65A, 75 & 85 BACKHOE MOUNTING KIT KIOTI DK35 TRACTORS

TRACTOR AND SUBFRAME KIT GENERAL INFORMATION

Subframe kit can be installed on tractor using tools ordinarily available, including standard and metric wrenches and a torque wrench.

Complete backhoe mounting requires subframe channel kit 2-7253. Tractor must be equipped with Alamo SMC or Rhino loader.

IMPORTANT: Remove lynch pins and disconnect supports to disable 3-point hitch arms.

Reference to left and right used in these instructions refer to position when seated in operating system on backhoe. Shut off engine and engage brakes during installation.

NOTE: Unless otherwise specified, leave all attaching hardware loose until mounting kit is completely assembled to facilitate assembly and proper alignment. Tighten all hardware to torques specified in general torque specifications table.

TRACTOR PREPARATION

1. Remove drawbar from tractor hitch bracket.
2. Remove tractor hitch bracket from tractor. Retain nuts from studs. Temporarily remove pins which secure lower 3-point arms at rear axle housing. Temporarily remove PTO shield.

INSTALLING MOUNTING BRACKETS (Figure 3)

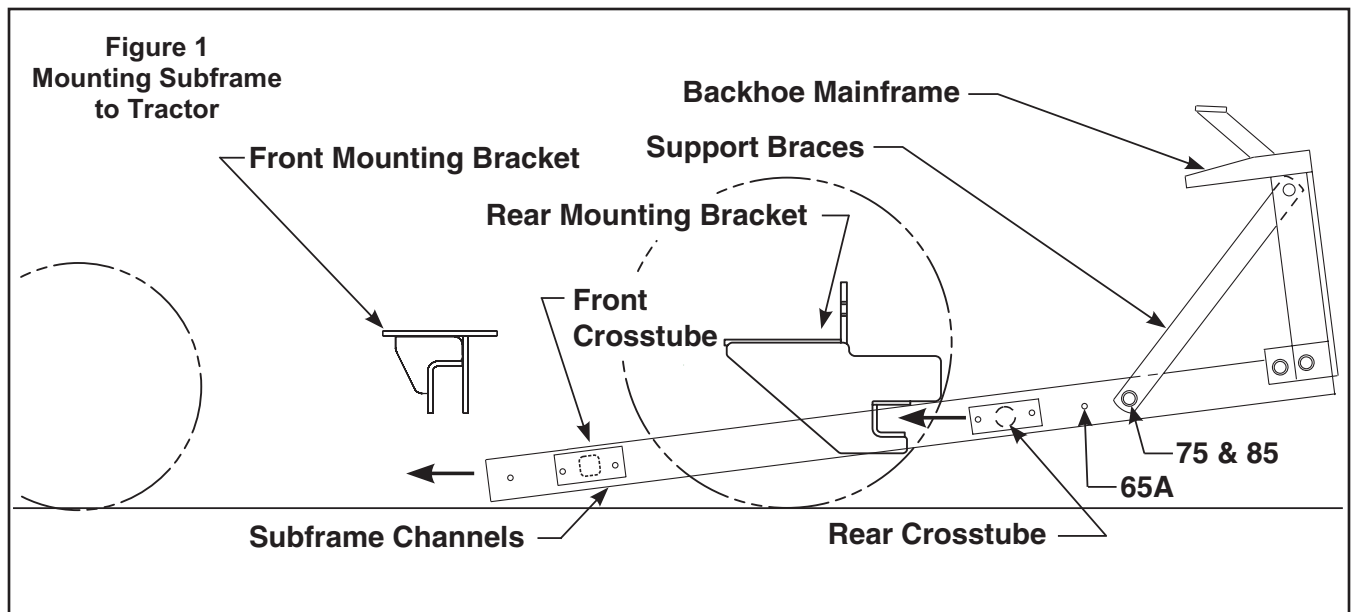
1. Install front mounting bracket (2) to underside of transmission casting using 12mm x 25mm cap screws (11) and 1/2" lock washers (12).
2. Install rear mounting bracket (1) to rear of tractor using 14mm x 40mm cap screws (9) and 9/16" lock washers (10). Reuse nuts removed from studs to secure rear mounting bracket (1) to studs. Reinstall PTO shield over rear mounting bracket (1) using 12mm x 35mm cap screws (18) and 1/2" lock washers (12).
3. Reinstall pins securing lower 3-point arms at rear axle housing.
4. Install tractor drawbar into rear mounting bracket (11).

INSTALLING SUBFRAME (Figure 3)

1. Install front and rear crosstubes (3 & 4) to channels (18 & 19) using 1/2 x 1-1/2" cap screws (8) and lock nuts (7).

NOTE: Install front and rear cross tubes (3 & 4) in holes as illustrated in Figure 3. Cut off excess length of channel ahead of front cross tube (3).

2. Install subframe assembly to backhoe mainframe using 7/8 x 4" cap screws (15), lock washers (17), and nuts (16) in rear holes and 3/4 x 3-1/2 cap screws (13) and lock nuts (14) in front holes.



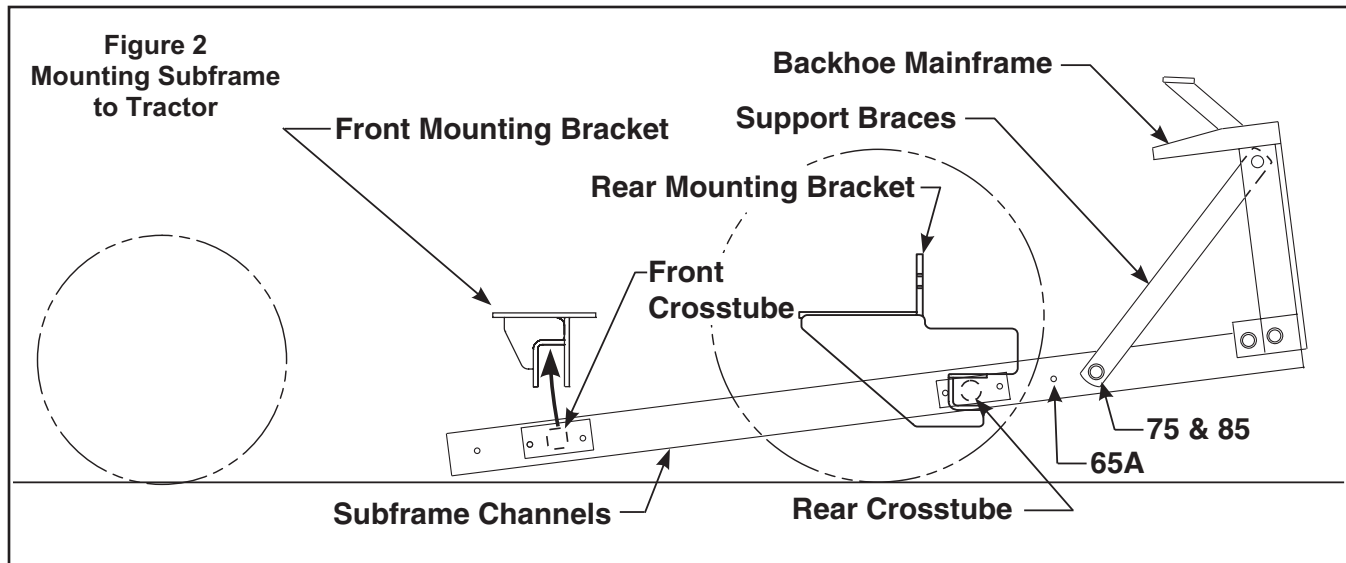
INSTALLING SUBFRAME (Continued)

3. Install support braces (20) onto subframe using 3/4 x 2-3/4" cap screws (21) and lock nuts (22) in channels (18 & 19) on backhoe mainframe. See Figure 2 for proper location depending on backhoe used.

NOTE: Double nut cap screw (22) after torquing first nut to 350 ft.·lbs.

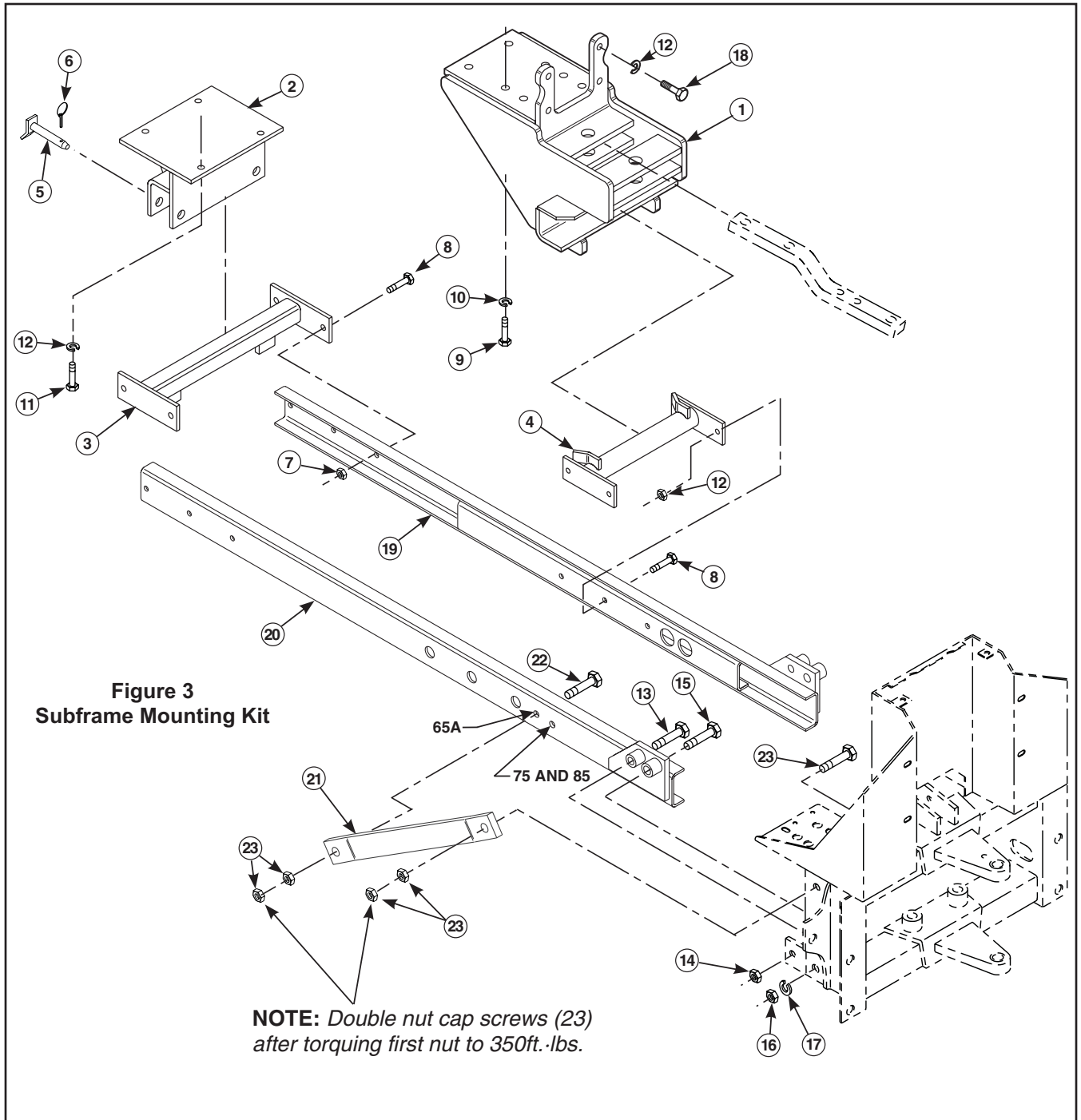
MOUNTING BACKHOE TO TRACTOR

1. Back tractor over subframe close enough to connect to backhoe hydraulic system.
2. Using backhoe hydraulic controls, extend stabilizer cylinders and boom cylinder until rear cross tube (4) is level with rear mounting bracket (1) and front of subframe is on ground (Figure 1).
3. Slowly back tractor until rear cross tube (4) is seated in rear mounting bracket (1).



PARTS LIST – SUBFRAME MOUNTING KIT

Item	Part No.	Description	Qty.
1	53120	MOUNTING BRACKET, Rear	1
2	50394	MOUNTING BRACKET, Front	1
3	50399	CROSSTUBE BRACKET, Front	1
4	50400	CROSSTUBE BRACKET, Rear	1
5	44892	PIN, Hitch	2
6	44756-1	PIN, Linch	2
7	41840-5	NUT, Lock, 1/2-13, Type-N	8
8	41838-33	SCREW, Cap, 1/2-13 x 1-1/2", Grade 5	8
9	42672-23	SCREW, Cap, 14mm-1.5 x 40mm, Class 8.8	8
10	41837-6	WASHER, Lock, 9/16"	8
11	42672-47	SCREW, Cap, 12mm-1.25 x 25mm, Class 8.8	4
12	41837-5	WASHER, Lock, 1/2"	6
13	41838-43	SCREW, Cap, 3/4-10 x 3-1/2", Grade 5	2
14	41840-8	NUT, Lock, 3/4-10, Type-N	8
15	41838-46	SCREW, Cap, 7/8-9 x 4", Grade 5	2
16	41836-9	NUT, Lock, 7/8-9	2
17	41837-9	WASHER, Lock, 7/8"	2
18	42672-24	SCREW, Cap, 12mm-1.25 x 35mm, Class 8.8	2









PARTS LIST – SUBFRAME CHANNEL KIT – 2-7253 – Order Separately

Item	Part No.	Description	Qty.
19	51195-1	CHANNEL, Subframe, Left	1
20	51195-2	CHANNEL, Subframe, Right	1
21	44836	BAR, Support Brace	2
22	42969-4	SCREW, Cap, 3/4-10 x 2-3/4, Grade 8	4
23	47264-8	NUT, Lock, 3/4-10, Grade C	8

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>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.</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