

BACKHOE SUBFRAME KIT 910GH, 756C, BHX172 BACKHOE CASE IH & NEW HOLLAND TRACTORS

CASE IH MODEL	NEW HOLLAND MODEL
	TC18 (S/N UD33666 & Higher)
DX21, DX23	TC21D (S/N UF33357 & Higher), TC21DA, TC23DA
DX24, DX26	TC24D, TC24DA, TC26DA

Reference to right, left, front, and back refers to operator seated in tractor seat in normal operating position. Shut off tractor engine and engage tractor brakes during installation.

INSTALLING MOUNTING BRACKETS (Figure 2)

- Remove 3-point hitch lower adjusters and brackets bolted to rear axle casting. Save hardware for installing rear axle brackets.
- Install rear axle brackets (2 & 3) to rear axle casting using hardware previously removed.

IMPORTANT: *If tractor is equipped with turf tires, change wheels from left to right sides and reverse wheels to provide clearance for subframe.*

- Install center support brackets (13 & 16) to clutch housing area of tractor.

NOTE: *Center support brackets (13 & 16) are installed with through shaft on bracket toward rear of tractor as shown in figure 2.*

If mounting with the CNH 12LA, LX112, 230TL, or LX330 loader, the loader mounting is installed over center support brackets (13 & 16) and secured with 16mm x 50mm cap screws and 5/8 lock washers supplied with loader mounting. Torque bolts to 110-135 Ft. Lbs. (149-184 Nm).

If backhoe is being used with 702C, 702D or BMX160H Front Dozer, install center support brackets (13 & 16) to clutch housing area of tractor using 16mm x 40mm cap screws (14) and 5/8 lock washers (15). Torque bolts to 110-135 ft.-lbs. (149-184 Nm)

INSTALLING SUBFRAME (Figure 2)

- Install subframe (1) to backhoe mainframe using 7/8" x 3" cap screws (10), 7/8" lock washers (12) and 7/8" hex nuts (11) in rear holes and 3/4" x 2" cap screws (9) and 3/4" lock nuts (8) in front holes.

IMPORTANT: *Torque 7/8" hardware to 350-386 ft.-lbs. (474-523 Nm). Torque 3/4" hardware to 238-262 ft.-lbs. (322-355 Nm).*

- For 910GH backhoe only,** Install straight support brace (18) (supplied with backhoe) to left side of subframe and backhoe mainframe and curved support brace (19) (supplied with backhoe) to right side of subframe and backhoe mainframe using 3/4" x 2-3/4" cap screws (7) and 3/4" lock nuts (8). Use lock nuts (8) to double nut 3/4" x 2-3/4" cap screws (7).

For 756C and BHX172 backhoes, Install support braces (4) to subframe and backhoe mainframe using 3/4" x 2-3/4" cap screws (7) and 3/4" lock nuts (8). Use lock nuts (8) to double nut 3/4" x 2-3/4" cap screws (7).

IMPORTANT: *Torque 3/4" hardware to 238-262 ft.-lbs. (322-355 Nm).*

MOUNTING BACKHOE TO TRACTOR (Figure 1)

- Back tractor over subframe close enough to connect backhoe hydraulic system. Refer to instruction sheet packed with hydraulic kit to connect hydraulics.
- Using backhoe hydraulic controls, extend stabilizer cylinders and boom cylinder until shafts in subframe (1) are level with rear axle brackets (2 & 3) and front of subframe is on ground.
- Slowly back tractor until shafts on subframe (1) are seated in rear axle brackets (2 & 3).

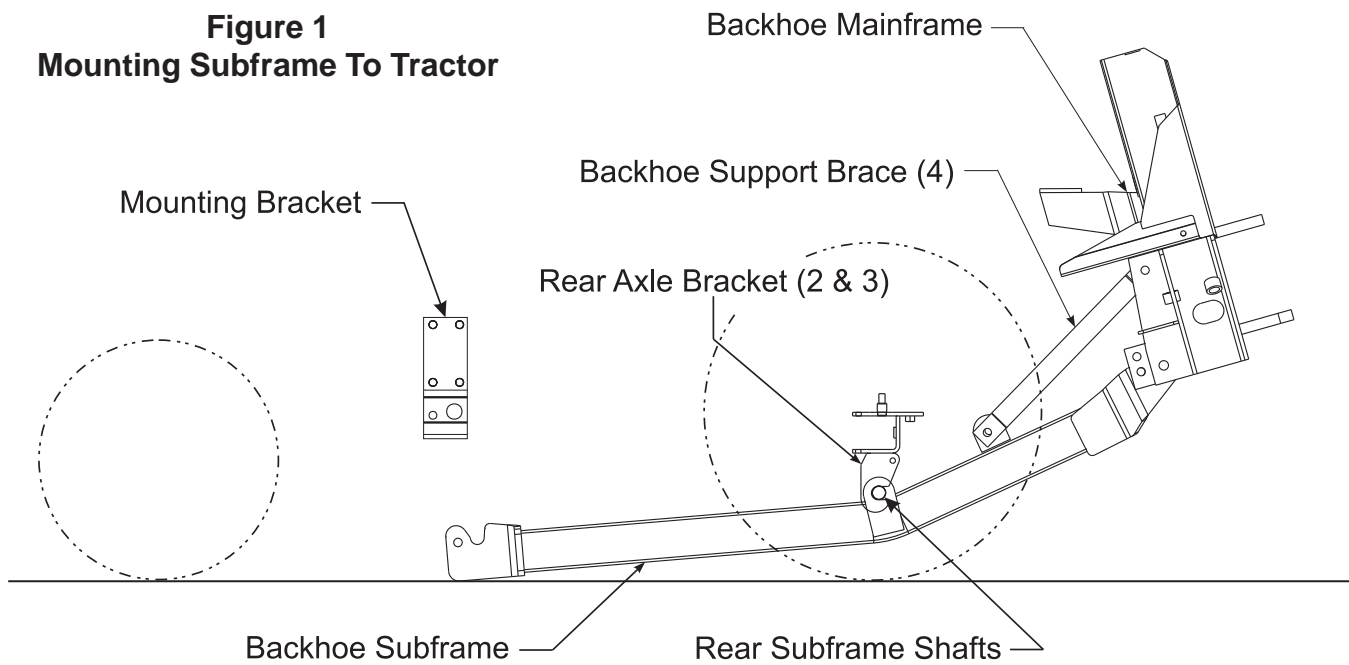
NOTE: *Tractor 3-point hitch arms should be on inside of support braces (4) and subframe (1).*

- Retract boom cylinder and stabilizer cylinders so front of subframe (1) swings up into center support brackets (13 & 16).
- Secure subframe (1) to center support brackets (13 & 16) using pin assembly (5) and linch pins (6).



WARNING: *If powering the backhoe using tractor rear remotes, the tractor 3-point arms MUST be disabled. Failure to disable 3-point arms could result in damage to backhoe if 3-point hitch is raised.*

Figure 1
Mounting Subframe To Tractor



PARTS LIST - SUBFRAME MOUNTING KIT

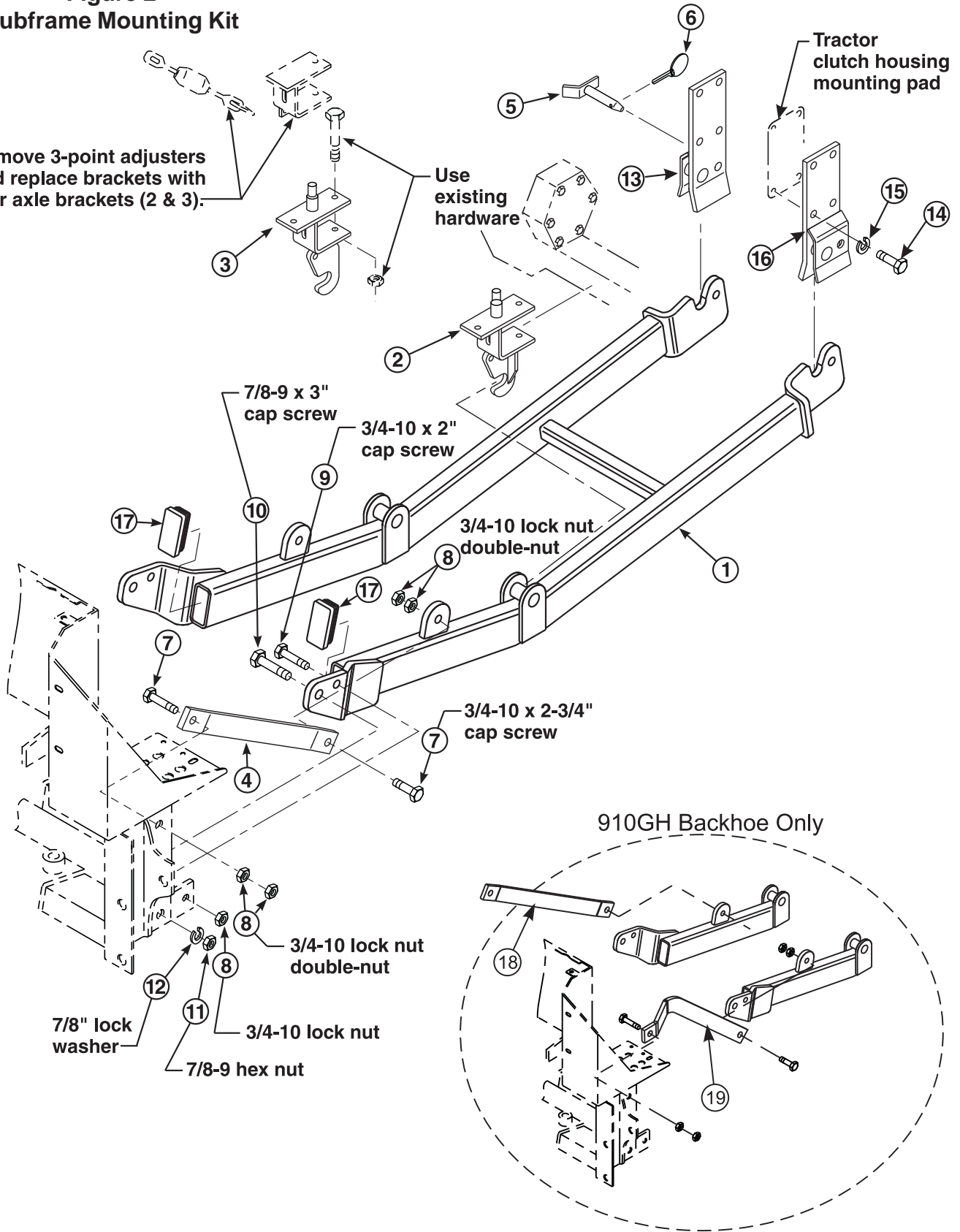
Item	Part No.	Description	Qty.
1	52790	SUBFRAME	1
2	46458-2	REAR AXLE BRACKET, Right	1
3	46458-1	REAR AXLE BRACKET, Left	1
4	44836	SUPPORT BRACE	2
5	44892	PIN ASSEMBLY	2
6	44756-1	LINCH PIN	2
7	42969-4	SCREW, Cap, 3/4"-10 x 2-3/4 (Grade 8) (Torque to 350 ft.-lbs.)	4
8	47264-8	NUT, Lock, 3/4"-10	10
9	42969-13	SCREW, Cap, 3/4"-10 x 2-1/2 (Grade 8)	2
10	41838-53	SCREW, Cap, 7/8"-9 x 3	2
11	41836-9	NUT, Hex, 7/8"-9	2
12	41837-9	WASHER, Lock, 7/8"	2
13	52796-1	BRACKET, Center Support, Left	1
14	42672-15	SCREW, Cap, 16mm -2.0 x 40mm	8
15	41837-7	WASHER, Lock, 5/8"	8
16	52796-2	BRACKET, Center Support, Right	1
17	52106-1	Plug, Rectangular tube	2
18		STRAIGHT SUPPORT BRACE (Supplied with 910GH Backhoe)	1
19		CURVED SUPPORT BRACE (Supplied with 910GH Backhoe)	1

Figure 2
Subframe Mounting Kit

Remove 3-point adjusters and replace brackets with rear axle brackets (2 & 3).

Use existing hardware

Tractor clutch housing mounting pad



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 _f ·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