

Keep with Operator's Manual

LOADER MOUNTING KIT

102QX LOADER

JOHN DEERE ROW CROP, STANDARD, AND UTILITY TRACTORS

MODEL	2WD	ROPS	CAB
2510, 2520, 3010, 3020	X	X	
4000, 4010, 4020, 4030, 4240, 4320, 4440	X	X	
4040, 4230, 4430, 4630	X	X	X

TRACTOR & MOUNTING KIT GENERAL INFORMATION

Mounting kit can be installed using tools ordinarily available, including an overhead hoist and sling for initial loader installation, floor jack, standard and metric wrenches, and a torque wrench.

Mounting kit is not compatible with John Deere front weight brackets. If front weight bracket or weights are present, remove weights and weight bracket before installing loader front mounting bracket.

Check front tire clearances once loader is installed and adjust tire track width as necessary to provide adequate tire clearance with loader and mounting brackets.

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

INSTALLING MOUNTING BRACKETS (Figure 1)

NOTE: Install all hardware loose (unless noted otherwise) until mounting kit is completely assembled to facilitate assembly and proper alignment. Unless specified otherwise, tighten all hardware to torques specified in General Torque Specifications table when assembly is complete.

INSTALLING MOUNTING BRACKETS (Figure 1)

1. Loosely attach front mounting bracket (1) to tractor front casting using 3/4 x 2" cap screws (7), lock washers (11) and flat washers (18) in front holes and to tractor engine casting using 5/8 x 2-1/4" cap screws (8), lock washers (10), flat washers (9) and spacer bushings (17) in side holes.

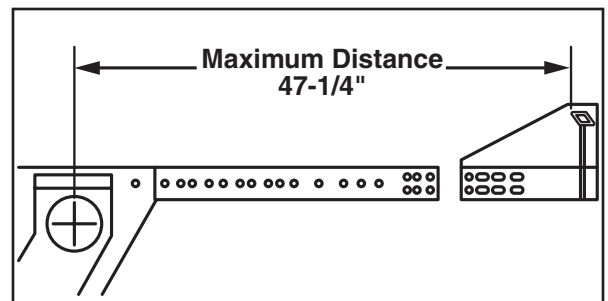
IMPORTANT: Support tractor front casting using a jack or blocks, because it will be necessary to remove cap screws fastening front casting to tractor frame at hole locations where spacer bushings (17) are used.

2. Install reinforcement plates (5) to sides of tractor frame and engine casting using 5/8 x 2-1/4" cap screws (8), lock washers (10), flat washers (9) and spacer bushings (17) in front holes and to tractor side rails using 5/8 x 1-1/2" cap screws (12), flat washers (9) and lock nuts (14).

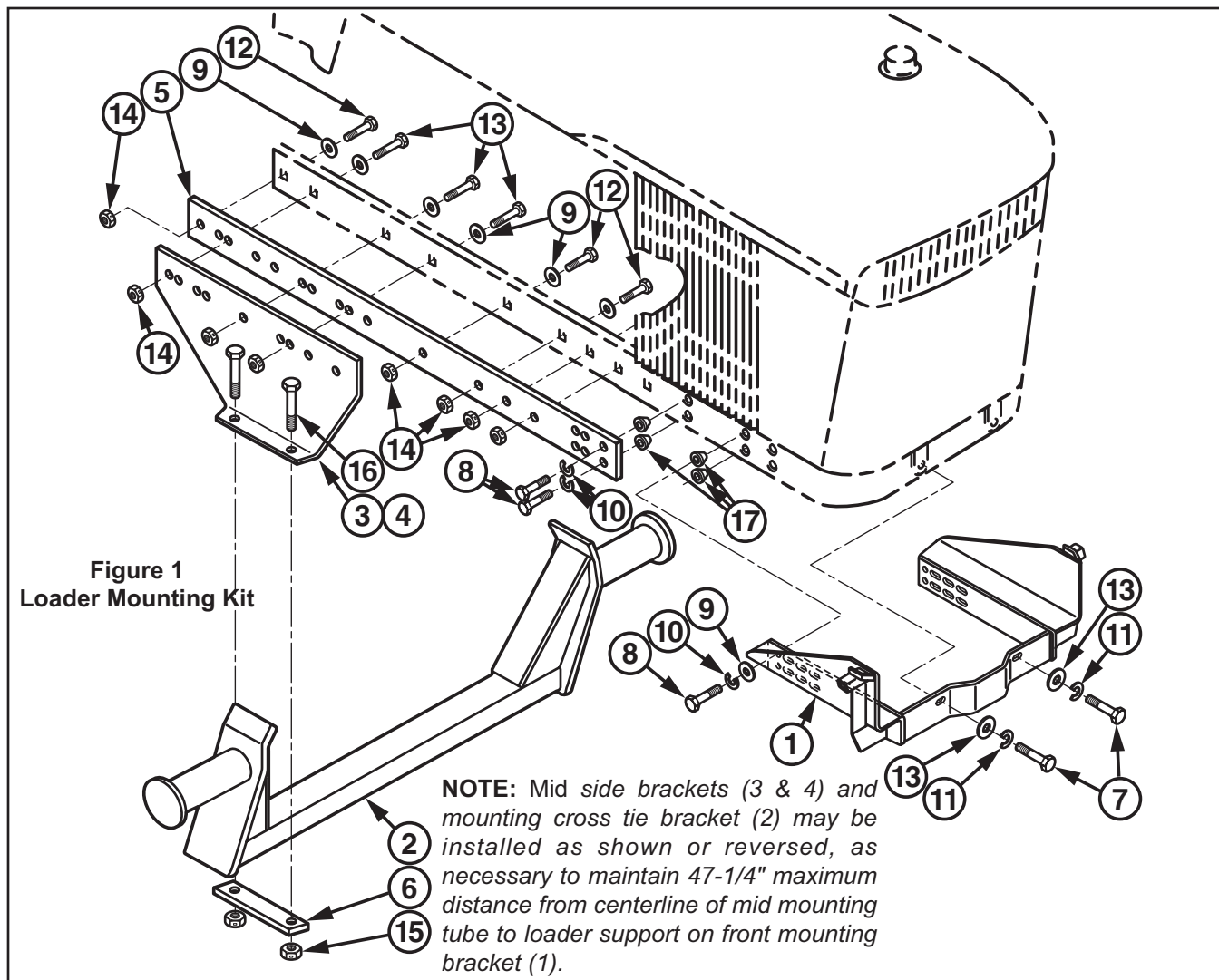
NOTE: Location of 5/8 x 1-1/2" cap screws (12) in tractor side rails will vary depending on tractor model and mid mounting bracket placement. Position reinforcement plates (5) to align with holes to use as many 5/8 x 2-1/4" cap screws as possible to distribute connecting forces evenly as possible along length of tractor side frame.

3. Install right and left mid mounting brackets (3 & 4) to tractor frame using 5/8 x 1-3/4" cap screws (13), flat washers (9) and lock nuts (14).

NOTE: Mid mounting brackets (3 & 4) may be mounted in different positions depending on tractor model and position of mid mounting tubes (toward front or rear of tractor). To ensure adequate clearance between hood of tractor and loader front bumper, minimum distance from loader support on front mounting bracket and center of mid mounting tubes is 47-1/4 inches.



4. Center mid mounting cross tie (2) and fasten to mounting brackets (3 & 4) using 3/4 x 2" cap screws (16), clamp flats (6) and lock nuts (15).
5. Tighten all hardware to torques specified in General Torque Specifications table.



PARTS LIST - LOADER MOUNTING KIT (Figure 1)

Item	Part No.	Description	Qty.
1	42330	BRACKET, Front Mounting	1
2	39496	BRACKET, Mid Mounting, Cross Tie	1
3	23314-2	BRACKET, Mid, Side, Right	1
4	23314-1	BRACKET, Mid, Side, Left	1
5	8152	PLATE, Reinforcement	2
6	36478	CLAMP, Flat	2
7	41838-8	SCREW, Cap, 3/4-10 x 2"	2
8	41838-14	SCREW, Cap, 5/8-11 x 2-1/4"	8
9	42502-12	WASHER, Flat, 5/8"	22
10	41837-7	WASHER, Lock, 5/8"	8
11	41837-8	WASHER, Lock, 3/4"	2
12	41838-29	SCREW, Cap, 5/8-11 x 1-1/2"	6
13	41838-32	SCREW, Cap, 5/8-11 x 1-3/4"	8
14	41840-7	NUT, Lock, 5/8-11	14
15	41840-8	NUT, Lock, 3/4-10	4
16	41838-65	SCREW, Cap, 3/4-10 x 5-1/2"	4
17	7832	BUSHING, Spacer	8
18	42502-13	WASHER, Flat, 3/4"	2

MOUNTING LOADER

WARNING: Loader must be supported before removing hardware securing loader to shipping pallet, or loader will tip over.

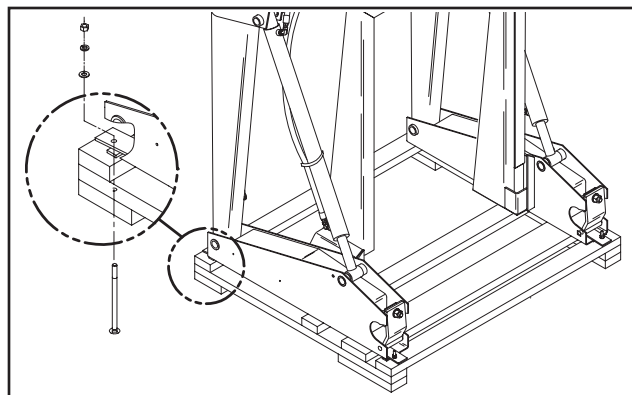


WARNING: To avoid injury during installation of quick attach loader, do not permit bystanders within ten feet of loader.



WARNING: To avoid injury during installation of quick attach loader, an overhead hoist must be used for initial mounting.

1. Loop nylon slings around loader front bumper and, using overhead hoist to support loader, remove shipping hardware (carriage bolts, hex nuts, lock washers, flat washers, and hold-down plates—one each corner) which secure loader to shipping pallet.



2. Use overhead hoist to lower loader to a horizontal position.



WARNING: Loader uprights may rotate downward when loader is lifted from pallet.

NOTE: Use scraps of cardboard under loader to protect paint.

3. Attach nylon slings around loader lift boom arms and use overhead hoist to lift loader uprights off ground. Temporarily remove hardware which clamps hinges closed at bottom of loader uprights.
4. Continue to raise loader and position loader uprights and side frame channels over support tubes of front mounting bracket. Carefully lower loader so side support tubes pass through notch in lower flange of channel and upper flange of channels rest on support tubes.



CAUTION: Make sure support tubes of front mounting bracket go inside loader side frame channels through notch in bottom flange of

channels at loader upright, to fully engage supports in loader side frame channels.

5. Slide loader to rear until side frame uprights are over mid mounting tubes and lower loader uprights to rest on mid mounting tubes.
6. Clamp hinges of loader uprights around mid mounting tubes and fasten securely using bolts, washers, and nuts removed earlier.

INSTALLING BUCKET OR ATTACHMENT

Saving pins and attaching hardware for reuse, remove angle brackets which fasten tilt cylinders to lower boom arms for shipping. Attach loader bucket or attachment to loader boom arms and tilt cylinders, re-using pins and hardware which were removed. Refer to loader operator's manual or instructions provided with loader bucket or attachment.



WARNING: Always have a bucket attachment mounted to loader when it is removed from tractor. Pallet fork, bale spear, or similar attachments are too light to safely counterbalance loader boom arms when loader is dismounted from tractor.

PLUMBING LOADER TO TRACTOR HYDRAULICS

Refer to instructions provided with hose kit. or valve and plumbing kit to plumb loader to tractor hydraulics.

ADJUST TRACTOR TREAD SETTING OR STEERING STOPS

Adjust front wheel tread settings or steering stops, if necessary, to provide a minimum 3/4" clearance between front tires and any part of loader with lift cylinders fully retracted and front axle fully oscillated. Be sure lift cylinders are fully retracted. Refer to tractor operator's manual for tread setting and steering stop adjustment procedures.

INSTALLING LEVEL INDICATOR

Refer to loader operator's manual or instructions provided with bucket or optional attachment to attach level indicator rod.







NOTE: Attachment level setting varies for each loader attachment. It is important to make sure level indicator is adjusted to indicate level whenever a different attachment is mounted, or else level indicator will not indicate true level.

To adjust level indicator properly, locate tractor and loader attachment on a firm, level surface with attachment resting on level surface in level operating position.

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