

Keep with Operators' Manual

LOADER MOUNTING KIT 5211 LOADER JOHN DEERE TRACTORS

MODEL	2WD	FWA	ROPS	CAB
JD 6110, 6120	X	X	X	X
JD 6210, 6220	X	X	X	X
JD 6310, 6320	X	X	X	X
JD 6410, 6420	X	X	X	X
JD 6215, 6415	X	X	X	X

TRACTOR & LOADER GENERAL INFORMATION

Mounting kit can be installed using tools ordinarily available.

Tractor-supplied hydraulic power is required for loader mounting and operation. Hydraulic plumbing kit 2-7122 is required to plumb loader to tractor rear remotes.

Loader is not compatible with tractor front fenders.

PREPARING TRACTOR

Remove tractor toolbox.

Shut off engine and engage brakes during installation.

Check front tire clearances once loader is installed and adjust tire track width as necessary.

Tractor steering stops may have to be adjusted to provide clearance between front tire and loader on full left and right turn with front axle fully oscillated. Be sure lift cylinders are fully retracted when checking tire and fender clearance. Refer to tractor operator's manual for steering stop adjustment.

If tractor is equipped with front weights, they must be removed. The weight bracket can remain.

INSTALLING MID-MOUNT BRACKETS - 6010 SERIES TRACTORS (Figure 3)

- Place a clevis over hole at top of left mid mounting bracket (1) and pin in place. Using an overhead hoist, raise left mid mounting bracket (1) into position over six-hole pattern on left side tractor frame. Attach left mid mounting bracket (1) to tractor frame using 20mm cap screw (3) and 20mm lock washer (4) in lower front hole and 20mm cap screws (3), 20mm lock washers (4) and 20mm flange nuts (5) in other holes.

NOTE: Lock washers (4) are used between heads of cap screws (3) and mounting bracket (1).

- Place a clevis over hole at top of right mid mounting bracket (2) and pin in place. Using an overhead hoist, raise mid mounting bracket (2) into position over six-hole pattern on right side of tractor frame. Attach right mid mounting bracket (2) to tractor frame using 20mm cap screw (3) and 20mm lock washer (4) in lower front hole and 20mm cap screws (3) 20mm lock washers (4) and 20mm flange nuts (5) in other holes.

NOTE: Because access space is very limited, use duct tape to hold nut to open end wrench to aid in placing nut into proper position. Lock washers (4) are used between heads of cap screws (3) and mounting bracket (2).

INSTALLING MID-MOUNT BRACKETS - 6020 SERIES TRACTORS, 6215 & 6415 TRACTORS (Figure 3)

- Remove cap screw at lower rear hole of six-hole pattern in left side of tractor frame that matches hole pattern of mid mount.
- Place a clevis over hole at top of left mid mounting bracket (1) and pin in place. Using an overhead hoist, raise left mid mounting bracket (1) into place. Attach left mid mounting bracket to tractor frame using 20mm cap screw (3) and 20mm lock washers (4) in lower rear hole and 20mm cap screws (3), 20mm lock washers (4) and 20mm flange nuts (5) in other holes.

NOTE: Lock washers are used between heads of cap screws (3) and mounting bracket (1).
- Remove cap screws at lower rear hole of six-hole pattern in right side of tractor frame that matches hole pattern of right mid mounting bracket (2).

INSTALLING MID-MOUNT BRACKETS - 6020 SERIES TRACTORS, 6215 & 6415 TRACTORS (Continued)

- Place a clevis over hole at top of right mid mounting bracket (2) and pin in place. Using an overhead hoist, raise right mid mounting bracket (2) into place over six-hole pattern on right side of tractor frame. Attach right mid mounting bracket (2) to tractor frame using 20mm cap screw (3) and 20mm lock washer (4) in lower rear hole and 20mm cap screws (3) 20mm lock washers (4) and 20mm flange nuts (5) in other holes.

NOTE: Because access space is very limited, use duct tape to hold nut to open end wrench to aid in placing nut into proper position. Lock washers (4) are used between heads of cap screws (3) and mounting bracket (2).

MOUNTING LOADER (Figures 1, 2, 4, 5, 6 & 7)



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



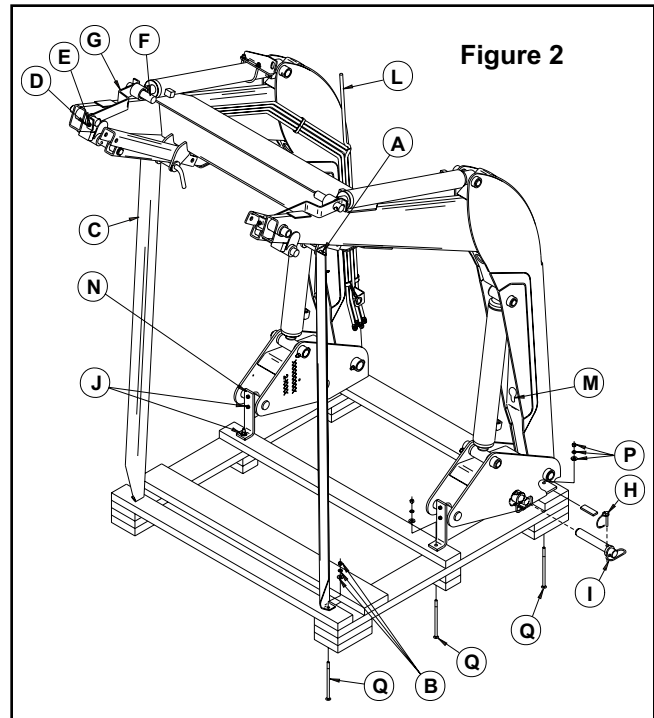
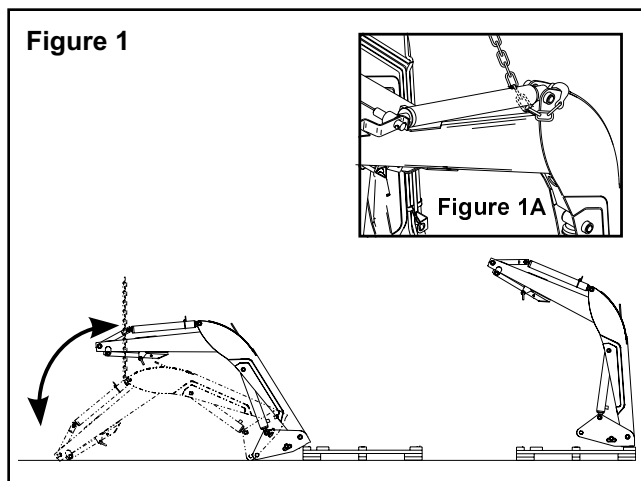
WARNING: To avoid injury during installation of quick attach loader, do not permit bystanders within ten feet of loader.



WARNING: To avoid injury during installation of quick attach loader, an overhead hoist must be used for initial mounting. Parking stands are not operational without bucket or heavy attachment mounted. (Bale spear or pallet fork alone do not provide enough weight.)

- Loop chain or sling under each bucket cylinder and hook on loader boom arm (see figure 1A). Using overhead hoist to support loader, remove shipping angle braces (C) (figure 2) by temporarily removing linch pins (A) to remove angle braces, then reinstall linch pins which hold parking stands in position.

Figure 1



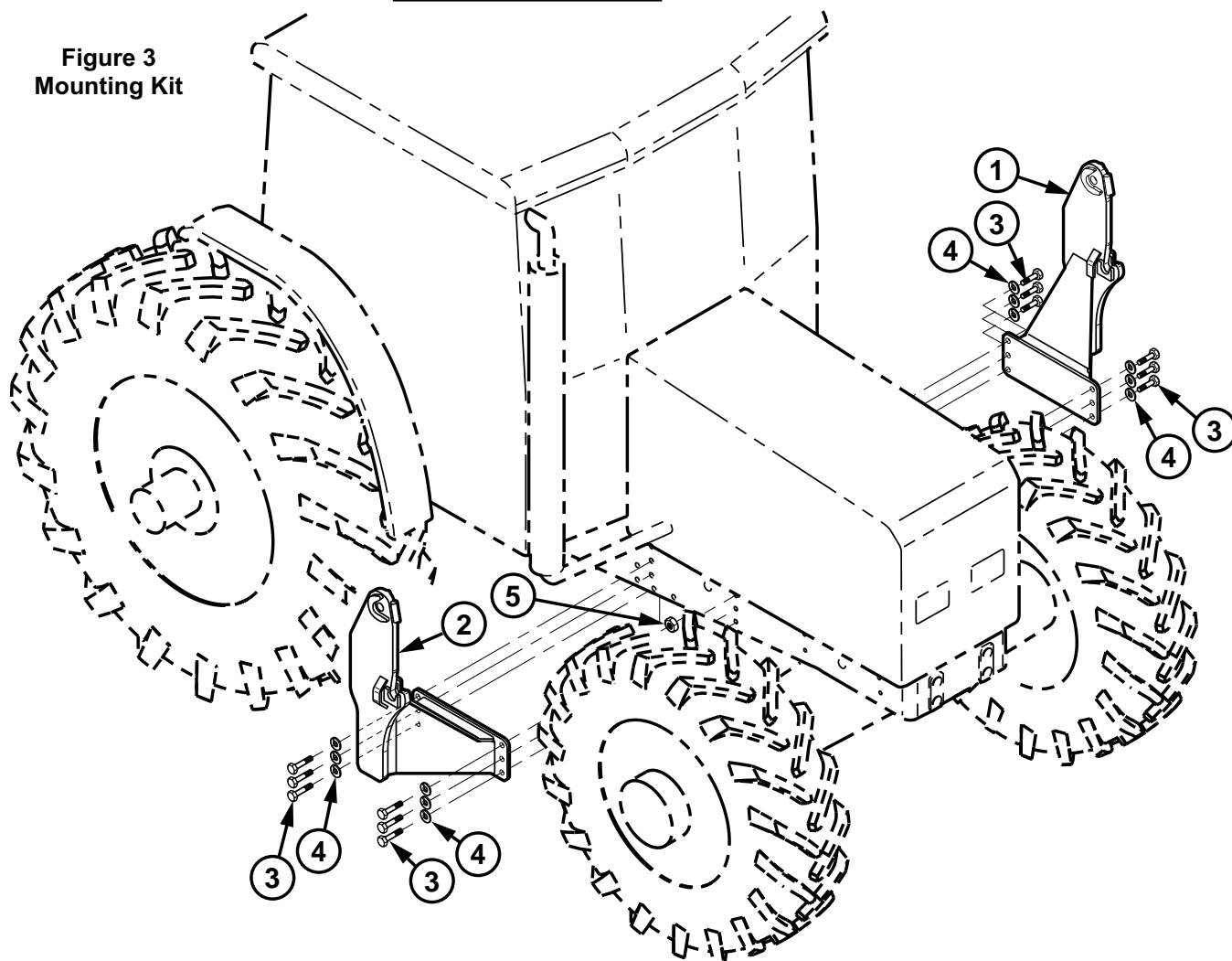
- Remove nut and washers (B) from shipping braces (C) and discard braces and hardware.
- Cut tie straps, remove linch pins (H) and hitch pins (I) (see figure 2) and keep with loader for securing uprights to mid-mounting brackets later.
- Remove hardware (J) from shipping bracket (N). Discard brackets and hardware. Remove nuts and washers (P) from bolts securing loader to pallet. Raise loader.



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

- Remove all six carriage bolts (Q) from pallet (see figure 2) and position pallet at rear of loader to facilitate lowering (see figure 1). Lower loader from vertical shipping position to horizontal position (scraps of cardboard may be used to protect paint). Remove bucket level indicator rod (L) attached to oil lines for shipment.
- Install hydraulic plumbing for loader to tractor using hose kit 2-7122, which is designed for use with this loader. Follow assembly instructions provided with hose kit to install hoses, sleeves, couplers, dust caps, and identification bands to loader boom oil lines.

FOR REFERENCE ONLY

Figure 3
Mounting Kit

PARTS LIST - MOUNTING KIT

Item	Part No.	Description	Qty.
1	50417-1	MID MOUNT, Left	1
2	50417-2	MID MOUNT, Right	1
3	49040-6	SCREW, Cap, 20mm-2.5 x 50mm	12
4	48093-2	WASHER, Lock, 20mm	12
5	47784-2	NUT, Hex, Flange Head, 20mm-2.5	10

MOUNTING LOADER (Continued)

7. Secure a hoist strap around the boom arm assembly or secure with a chain hook into hole (M) on underside of boom arm (see figure 2). If using a strap, the strap should be located around the boom arm near the same location as the chain hook hole, similar to figure 4. Slowly raise loader with overhead hoist until loader upright will clear tractor tires (see

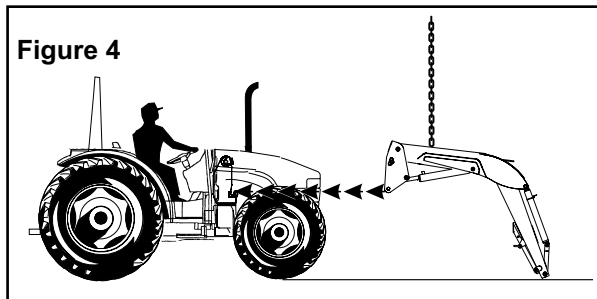


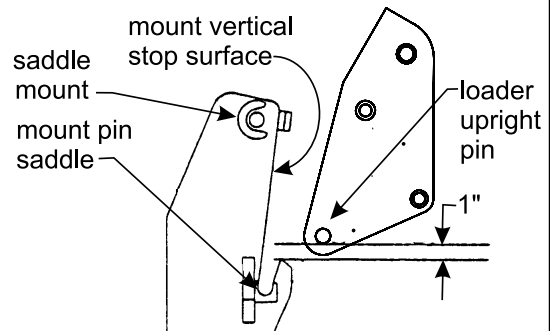
figure 4).

8. Drive tractor into loader until uprights of loader mounting brackets are within 12" to 18" loader uprights. Shut off engine. Attach lift cylinder function hoses (color coded green and yellow) to corresponding tractor couplers.

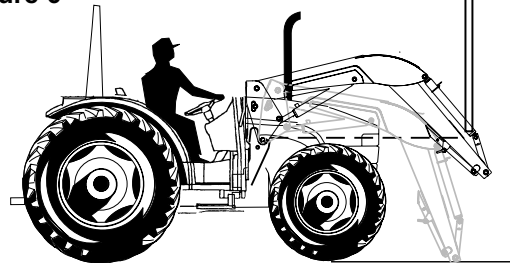
NOTE: It is important to attach lift cylinder hoses (yellow and green spiral band coded) for loader to function properly. Do not connect boom oil line hoses for tilt cylinder control at this time. (Connect these after shipping brackets are removed from attachment pin hubs instruction 12).

9. Start engine. Retract lift cylinders fully and continue to activate control lever for approximately 10 seconds. Cycle cylinders several times to remove air. Extend lift cylinders 10" to 12" from the fully closed position to ensure loader upright pin will be first part of loader upright to make contact with mount vertical stop surface. Shut off engine.
10. With overhead hoist, position loader upright pin to clear mount pin saddle by 1" (see figure 5). Move tractor forward until both loader upright pins come to rest against the flat vertical stop surface of both mounts. Lower loader with overhead hoist until both loader upright pins rest into mount pin saddles.
11. Remove hoist chain or strap from loader boom and secure to each bucket cylinder shipping brackets (G) (see figure 2). Using overhead hoist raise front of loader to rotate loader upright into upper mount saddle (see figure 6). Continue to rotate loader upright until upright has fully seated into back of mount saddle. Insert two 1-1/4 x 7" pins (I) and linch

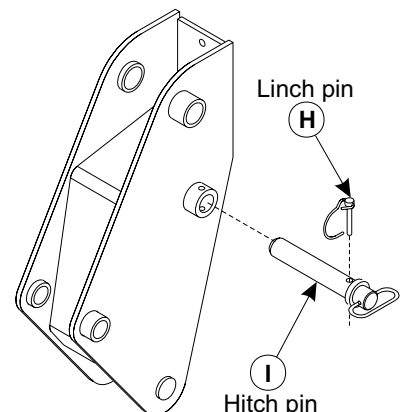
pins (H) which were removed from loader uprights in step 3. Remove hoist chain or strap from shipping brackets.

Figure 5 Right Side View

NOTE: In some cases a small amount of additional force may be required to insert the pins. If necessary, use a drift and hammer made of non-sparking material (a shot-filled mallet is recommended) to seat loader uprights into mount saddle.

Figure 6

12. Remove 3/8 cap screws (D), lock nuts (E), pins (F) and shipping brackets (G) (see figure 2). Discard shipping brackets, retain hardware for further use when installing bucket or attachment.

Figure 7

MOUNTING LOADER (*Continued*)

13. Attach tilt cylinder function hoses (color coded blue and red) to corresponding tractor couplers.
14. Start engine and fully extend and retract cylinders several times to purge air from hydraulic system. Add additional tractor hydraulic oil as specified in tractor operator's manual to bring level of hydraulic fluid up to full.
15. Adjust front wheel tread settings or steering stops, if necessary, to provide a minimum 3/4 inch 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 page 1 under tractor and loader general information. Refer to tractor operator's manual for tread setting and steering stop adjustment procedures.

INSTALLING BUCKET OR ATTACHMENT

Refer to loader operator's manual to install bucket or optional attachments.

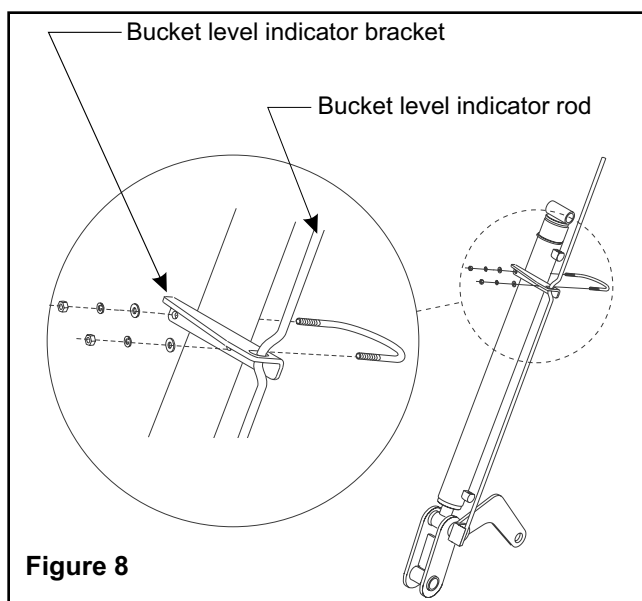


WARNING: Always have a bucket attachment mounted to loader when loader is removed from tractor. Pallet fork, bale spear or similar attachments are too light to safely counterbalance loader boom arms when loader is dismounted from tractor.

ATTACH LEVEL INDICATOR FOR BUCKET OR ATTACHMENT (Figure 8)

Refer to assembly instructions provided with bucket or optional attachments 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.



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