

<i>Keep With Operator's Manual</i>

7214 LOADER MOUNTING KIT

McCormick MTX SERIES TRACTORS

MODEL	LESS CAB	CAB	2WD	FWA
MTX120	X	X	X	X
MTX135	X	X	X	X
MTX150	X	X	X	X
MTX165	X	X	X	X
MTX185	X	X	X	X

TRACTOR & LOADER GENERAL INFORMATION

Mounting kit can be installed using tools ordinarily available, including a hoist capable of lifting and supporting the loader for initial mounting, standard wrenches and a torque wrench, hydraulic oil, and a non-sparking drift and hammer (a shot-filled mallet is recommended).

Tractor-supplied hydraulic power is required for loader mounting and operation. Two hydraulic kits options are available for use with this loader:

2- 7432 is a mid-coupled, single- handle joystick control valve kit, which includes hoses and fittings required to plumb to tractor hydraulics. For MTX 120 thru MTX150. Larger tractors use 2-7433.

If optional grille guard 2-7372 is to be installed, install it during mid mounting bracket installation, before mounting loader. Refer to instructions provided with grille guard.

Check tractor tire pressure. Refer to tractor operator's manual for recommended pressures. With tractor on a firm, level surface, compare tractor rear axle height from left to right, measuring from axle center to ground. Adjust air pressure in rear tires until axle height measures same for both sides.

NOTE: *If rear axle on tractor is not level from side to side, cutting edge on loader bucket or similar loader-mounted attachments will not sit flat on ground.*

When loader mounting is complete, you will need to check front tire clearances and adjust tire track width as necessary. You will also need to verify tractor wheel and axle clearances and adjust steering stops accordingly to provide clearance between front tire and tractor hood and loader on full left and right turn with front axle fully oscillated. Be sure lift cylinders are fully retracted when checking tire clearances. Refer to tractor operator's manual for steering stop adjustment.

PREPARING TRACTOR

Shut off engine, engage brakes, and remove key during installation. If tractor is equipped with front weights, remove weights. It is not necessary to remove weight bracket.



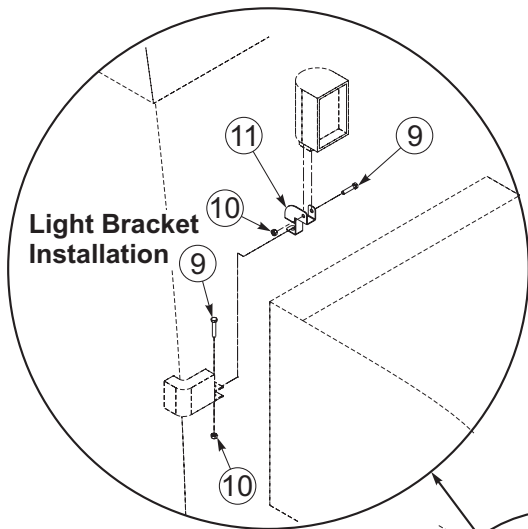
WARNING: *Front window of cab is very vulnerable to breakage when installing mid-mount assemblies. Steps should be taken to protect glass when attaching mid-mounts.*

INSTALLING LEFT & RIGHT MIDMOUNTING BRACKETS

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

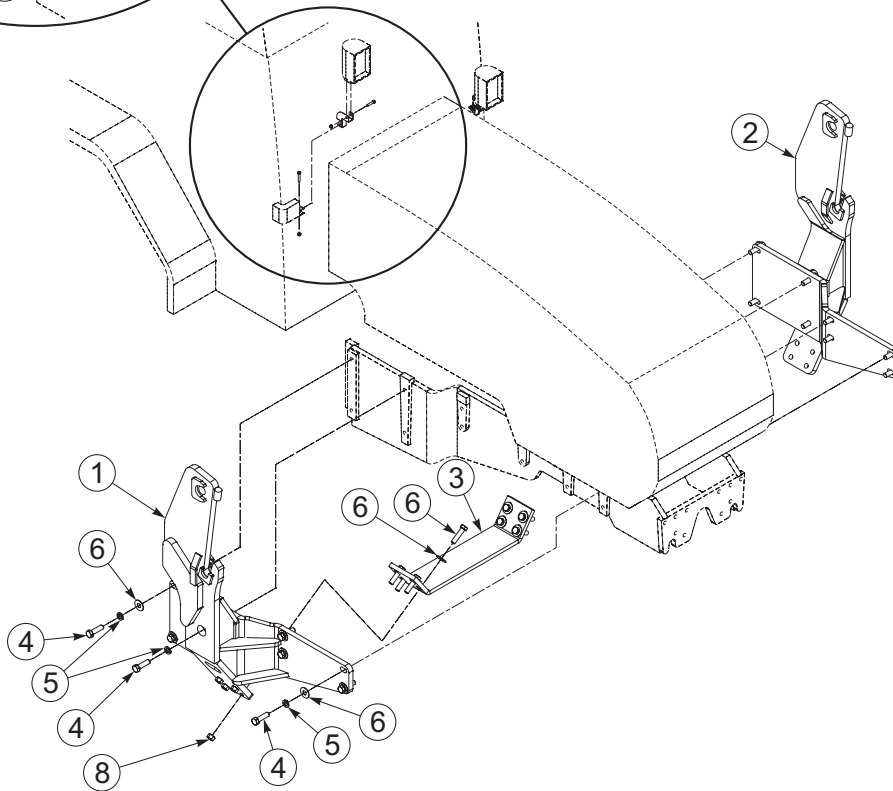
NOTE: *Support mid mounting brackets (1 & 2) when removing from shipping materials.*

1. Raise left midmounting bracket (1) with overhead hoist. Align mounting holes with holes in frame on left side of tractor. Attach mounting to frame using 20mm x 70mm cap screws (4), 3/4 flat washers (6), and 3/4 lock washer (5).
2. Raise right midmounting bracket (2) with overhead hoist. Align mounting holes with holes in frame on right side of tractor. Attach mounting to frame using 20mm x 70mm cap screws (4), 20mm flat washers (6), and 3/4 lock washer (5).
3. Install mounting crosstie (3) to loader left (1) and right (2) midmounting using 3/4" x 3" cap screws (7), 3/4 flat washers (6), and 3/4 lock nuts (8).
4. Tighten 20MM hardware to 301 ft. lbs. (408 N•M) and 3/4" hardware to 305 ft. lbs. (409 N•M) of torque.



LIGHT BRACKET INSTALLATION

To improve illumination with a loader installed remove cab mid height lights from existing hanger. Install light bracket assembly (11) using 5/16" x 1-1/2" cap screw (9) and 5/16" lock nut (10). Install light removed previously into opposite end of light bracket (11) using 5/16" x 1-1/2" cap screws (9) and 5/16" lock nut (10). Repeat for opposite side.



PARTS LIST - MOUNTING KIT

Item	Part No.	Description	Qty.
1	52126	BRACKET, Mounting, Mid, Right	1
2	52130	BRACKET, Mounting, Mid, Left	1
3	52125	CROSTIE	1
4	49040-3	HHCS, 20mm-2.5mm x 70mm	16
5	48093-2	WASHER, Lock, Metric, 20mm	16
6	42502-33+	WASHER, Flat, 3/4" W-STD	20
7	41838-55+	HHCS, 3/4" x 3" GR5	8
8	41840-8	NUT, Lock, 3/4"	8
9	41838-68	HHCS 5/16 x 1-1/2	4
10	41840-2	NUT, Lock 5/16	4
11	48924	LIGHT BRKT ASSY	2

MOUNTING 7214 LOADER TO TRACTOR (Figure 2-6)

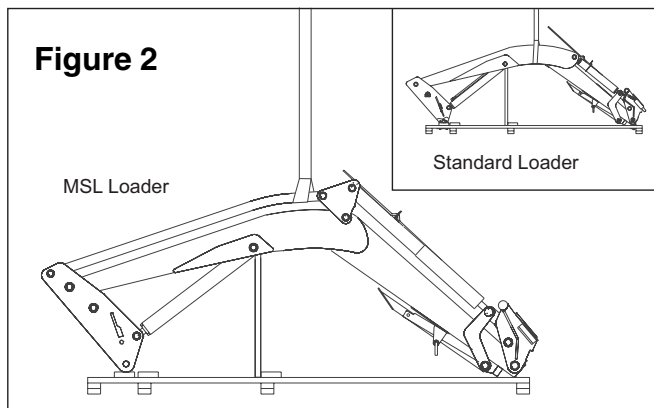


WARNING: To avoid injury during installation of quick attach loader, do not permit bystanders within ten feet of loader.



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 the attachment mounted. Bale spear or pallet fork alone do not provide enough weight.

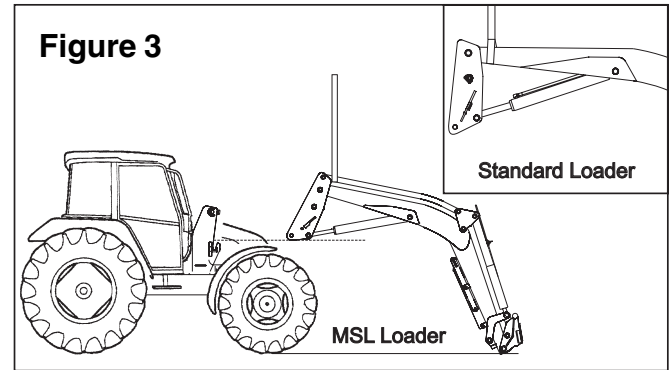
1. Using overhead hoist with nylon sling, lift loader at balance point (Figure 6). Remove hardware which secures loader to pallet. Remove linch pins and hitch pins from loader uprights (Figure 6).



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

2. Raise loader from shipping position and remove pallet, lower loader (scraps of cardboard may be used to protect paint).
3. Install hydraulic plumbing on loader and tractor. Tractors equipped with mid-mount valves require hydraulic plumbing kit (2-7432).

Follow instruction sheets provided with valve kit to install valve to tractor, and install hoses, hose sleeves, quick couplers, dust caps, and identification bands to loader boom oil lines.



4. Secure a hoist strap around the boom arm assembly or secure with a chain hook into hole provided in underside of boom arm. If using a strap, the strap should be located around the boom arm in about the same location (See figure 3).

Slowly raise loader with overhead hoist until loader upright will clear tractor tires or fenders (See figure 3).

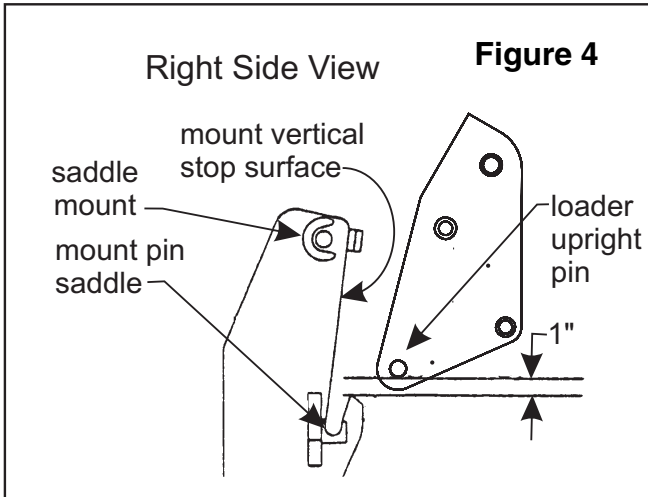
5. Drive tractor into loader until mounts and loader uprights are 10" to 14" apart. Shut off engine, set parking break, and remove key. Attach lift cylinder function hoses (color coded green and yellow) to corresponding tractor couplers. NOTE: Route hoses under tractor exhaust.

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.

6. 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, set parking brake, and remove key.

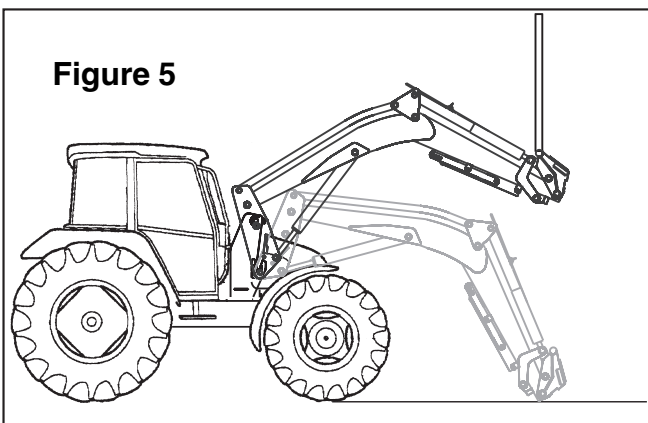
MOUNTING 7214 LOADER (Continued)

7. With overhead hoist, position loader upright pin to clear mount pin saddle by 1" (see figure 4). 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.



8. Remove hoist chain or strap from loader boom and secure to bucket quick attach assembly. Using overhead hoist raise front of loader to rotate loader upright into upper mount saddle (Refer to Figure 5). Continue to rotate loader upright until upright has fully seated into back of mount saddle. Insert two 1-1/2 x 8" pins and lynch pins which were removed from loader uprights in step 1. Remove hoist chain or strap from loader boom.

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



9. Attach tilt cylinder function hoses (color coded blue and red) to corresponding tractor couplers.

10. Start engine and slowly cycle all cylinders several times with full strokes to purge air from hydraulic system. Replenish hydraulic system using hydraulic oil as recommended in your tractor operator's manual.
11. 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 preparing tractor. Refer to tractor operator's manual for trade setting and steering stop adjustment procedures.

NOTE: Crosstie hardware must be retorqued after initial 10 hours of use and after every additional 100 hours.

ATTACH LEVEL INDICATOR FOR BUCKET OR ATTACHMENT

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 a true level.

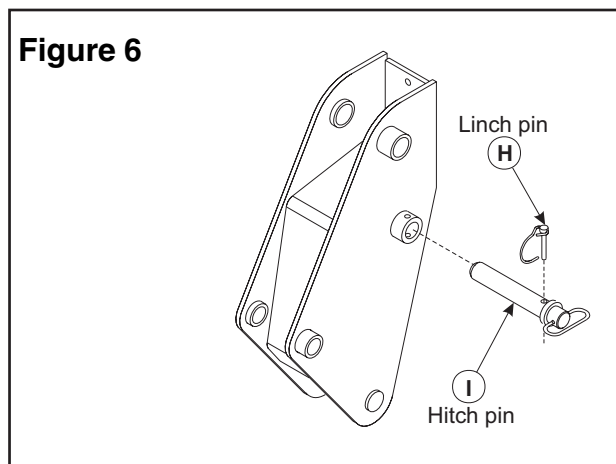
To adjust level indicator properly, locate tractor and loader attachment on a firm level surface with attachment resting on level surface in operating position.



INSTALLING BUCKET OR ATTACHMENT

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





WARNING: Always have an attachment mounted to loader when it is removed from tractor.



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