ASSEMBLY MANUAL

Keep with Operators Manual

SMC 2412 LOADER MOUNTING KIT MASSEY FERGUSON TRACTORS

MODEL	2WD	FWA	CAB	LESS CAB
4263	Х	X	X	X
4270	X	X	Х	X

Mount kit can be installed using tools ordinarily available. Shut off engine and engage brakes during installation..

NOTE: Leave all attaching hardware loose until loader is completely assembled to facilitate assembly and proper alignment. Torque hardware to torque specifications on page 5.

TRACTOR PREPARATION

- Shut off engine and engage brakes during installation of mounting kit.
- 2. If tractor is equipped with front weights and weight bracket, they must be removed before installing mounting.
- 3. To ease installation, if tractor is equipped with optional front fenders, they may be removed.
- 4. FWA Tractors- Remove factory installed front axle oscillation stops from each side of tractor and place three washers (15) between front axle casting and each factory oscillation stop as shown in figure 1. Reattach oscillation stops with existing tractor hardware. This will limit tractor front axle oscillation, thus providing adequate clearance between front tire and loader.
- 5. Tractor steering stops must be adjusted to provide a minimum clearance of 3/4" between front tire and any part of loader on full left and right lock with front axle fully oscillated. Adjustment must be made with lift cylinders fully retracted. Refer to tractor operator's manual for steering stop adjustment.

INSTALLING LOADER MOUNTING BRACKETS (Figure 1)

NOTE: Unless specified, leave all attaching hardware loose until mounting brackets are completely installed to

facilitate assembly and proper alignment of mounting brackets.

- 1. Fasten front mounting bracket (2) to front of the tractor casting using 20MM x 45MM cap screws (8) and lock washers (7). Secure sides of front mounting bracket (2) to tractor using 20MM x 45MM cap screws (8), lock washers (7) and 3/4" flat washers (11).
- 2. **FWA Tractors** Remove four 5/8" bolts from drive shaft hanger casting (located on bottom of tractor) without removing casting. Remove two lower 5/8" bolts and round spacers from cab or platform support on right and left side of tranmission casting. Retain 5/8" bolts from cab or platform support.

Attach crosstie (1) to underside of drive shaft hanger casting with four 5/8" x 2-1/4" cap screws (12) and lock washers (13). Attach crosstie between cab or platform support and transmission housing with 5/8" capscrews which were previously removed from tractor.

2WD Tractors- Remove four 5/8" bolts from cover plate (located on underside of tractor) without removing coverplate. Remove two lower 5/8" bolts and round spacers from cab or platform support on right and left side of tranmission casting. Retain 5/8" bolts from cab or platform support.

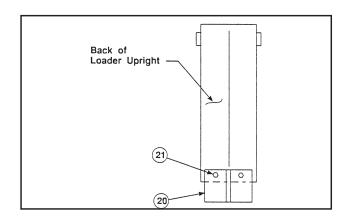
Attach crosstie (1) to underside of cover plate with four 15/16" long spacers (14), four 5/8" x 2-1/4" cap screws (12) and lock washers (13). Attach crosstie between cab or platform support and transmission housing with 5/8" capscrews which were previously removed from tractor.

INSTALLING LOADER MOUNTING BRACKETS (Figure 1) Cont.

- Attach right and left midmountings (4 & 5) to rear hole pattern in front tractor casting using two 20MM x 50MM cap screws (6) and lock washers (7) per mounting.
- 4. Attach right and left midmountings (4 & 5) to crosstie (1) using four 5/8" x 1-3/4" cap screws (9) and 5/8" lock nuts (10) per mid mounting.
- 5. Attach spacer plates (20) to back of each upright using 3/8" x 1" cap screws (21) and 3/8" lock nuts (22).

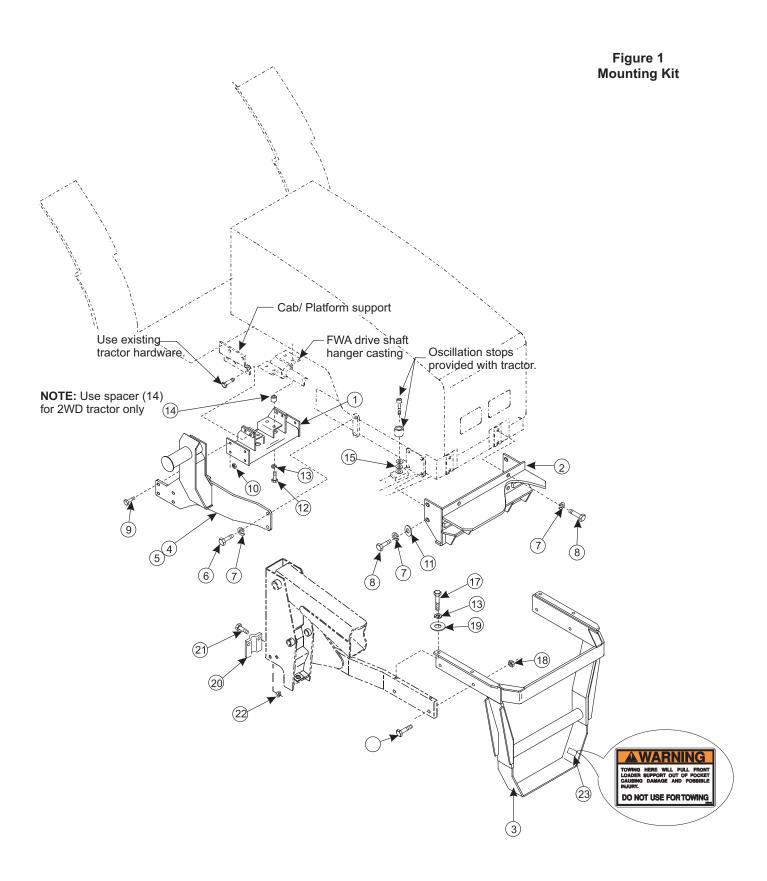


CAUTION: Spacer plates (20) keep hinge from opening too far. If spacer plates are not installed, left hinge will contact fuel tank filler spout.



PARTS LIST - MOUNTING KIT

ITEM	Part No.	DESCRIPTION	QTY.
1	49594	CROSSTIE, Assembly	1
2	49596	BRACKET, Front Mounting	1
3	49609	YOKE, Assembly, with Decals	1
4	49608-1	BRACKET, Mid Mounting, Left (not shown)	1
5	49608-2	BRACKET, Mid Mounting, Right	1
6	42672-37	SCREW, Cap, 20MM-2.50 x 50MM	4
7	48093-2	WASHER, Lock, 20MM	12
8	42672-36	SCREW, Cap, 20MM-2.50 x 45MM	8
9	41838-32	SCREW, Cap, 5/8-11 x 1-3/4	8
10	41840-7	NUT, Lock, 5/8-11	8
11	42502-13	WASHER, Flat, 3/4	4
12	41838-14	SCREW, Cap, 5/8-11 x 2-1/4, Gr. 5	4
13	41837-7	WASHER, Lock, 5/8	8
14	42787-4	SPACER, Tube (2WD Tractors only)	4
15	42502-30	WASHER (FWA Tractors only)	6
16	41838-7	SCREW, Cap, 3/4-10 x 2-1/2	4
17	41838-27	SCREW, Cap, 5/8-11 x 2	4
18	41840-8	NUT, Lock, 3/4-10	4
19	42502-12	WASHER, Flat, 5/8	4
20	44248	SPACER PLATE	2
21	41838-11	SCREW, Cap, 3/8-16 x 1, Gr. 5	4
22	41840-3	NUT, Lock,3/8-13	4
23	39240	DECAL, Do Not Tow	2



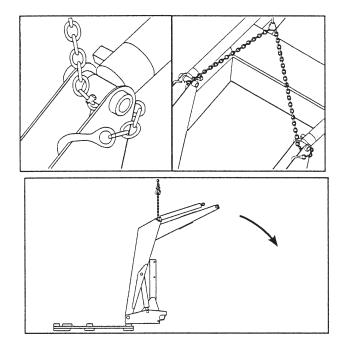
INSTALLING YOKE - 2412 LOADER

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

 Loop chain under each lift cylinder and hook on loader boom arm. Using overhead hoist to support loader remove hardware securing loader to pallet. Lift loader and remove pallet.



CAUTION: Do not damage grease fitting on end of cylinder. Be sure chain does not pinch lift cylinder hose.



2. Position pallet at rear of loader to facilitate lowering. Lower loader from vertical shipping position to horizontal position leaving enough room to install yoke (scraps of cardboard may be used to protect paint). Install yoke assembly (3) using 3/4 x 2-1/2 cap screws (16) and 3/4 lock nuts (18) in side holes and 5/8 x 2 cap screws (17), 5/8 lock washers (13) and 5/8 flat washers (19) in top holes. Lower loader to the ground.

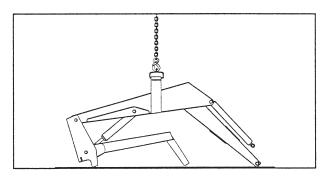
NOTE: It may be necessary to clamp sideframes together to align 5/8 inch holes in top of yoke with holes in side frames.

INSTALL HYDRAULIC KIT TO LOADER

Install hydraulics kit to loader. Refer to instruction sheet packed with kit.

INSTALLING LOADER TO MOUNTING BRACKETS

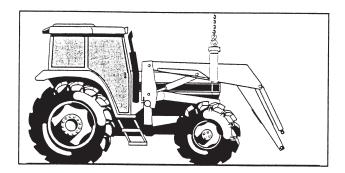
- 1. Back tractor directly behind loader facing in opposite direction.
- 2. Connect hoses from loader to tractor rear remotes.
- Using overhead hoist to steady loader, slowly cycle lift and bucket cylinders several times to purge air from system. Retract cylinders and shut off engine. Replenish fluid in tractor hydraulic system.
- 4. Disconnect hoses from tractor. Turn tractor around and position behind loader. Secure tractor brakes.
- Position a pair of nylon slings around upper boom directly in front of gussets. Using overhead hoist, lift loader off ground. Remove lock nut and washer from hinge and swing each hinge open.



6. Block hinge open using 3/4 x 3 cap screws and 3/4 flat washers. Store 3/4 flex lock nuts on extra threads of hinge bolts.

INSTALLING 2412 LOADER TO MOUNTING BRACKETS (Continued)

7. Using overhead hoist, lift loader and position on midmounting tubes. Move loader back until yoke tube engages front mounting bracket and hinges can clamp around midmounting tubes.



8. Clamp hinges to midmounting tubes with 3/4 x 3 cap screws, 3/4 flat washers and 3/4 flex-lock nuts.

IMPORTANT: Be sure to use flex-lock nuts to clamp hinge. Tighten flex-lock nuts against hinge securely, but not to more than 125 ft.-lb. torque.

- 9. Remove overhead hoist.
- 10. Connect hoses to tractor hydraulics. Refer to hydraulic kit instructions for proper connections.
- 11. Secure hoses under cab or platform to avoid interference with tires or other moving parts.
- 12. 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. Refer to tractor operator's manual for adjustment procedures.

INSTALLING BUCKET OR ATTACHMENT

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

GENERAL TORQUE SPECIFICATIONS

USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

AMERICAN STANDARD CAP SCREWS				T					METRIC CAP SCREWS								
SAE Grade			5		8			Metric Class	8.8				10.9				
		$\langle \rangle$	\rightarrow						8.8				(10.9)				
Cap Screw					TORQUE			Cap Screw	TORQUE			TORQUE					
Size		LBS	N	lm	FT-	LBS	N	m	Size	FT-LBS Nm		FT-	FT-LBS Nm		lm		
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	M6x100	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	215	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	555	61	55	60	74.5	81	M18 x 2.50	172	210	233	284	240	294	325	398
7/16 - 20	51	55	69	745	68	75	92	102	M20 x 2.50	247	301	335	408	343	426	465	577
1⁄2 - 13	65	72	88	975	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	MM24 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									
5/8 - 18	152	168	206	228	203	224	275	304								•.	
¾ - 10	238	262	322	355	318	350	431	474	NOTE	These	values	apply	to faste	ners as	receive	d from	the
¾ - 16	274	305	371	409	365	402	495	544	supplie	er dry d	or when	lubricat	ed with	normal	enaine a	oil They	, do
7/8 - 9	350	386	474	523	466	515	631	698		-					•	•	
7/8 -14	407	448	551	607	543	597	736	809	not apply if special graphited or molydisulphide greases or other								
1 - 8	537	592	728	802	716	790	970	1070	extreme pressure lubricants are used.								
1 - 14	670	740	908	1003	894	987	1211	1337	37								