**Keep With Operator's Manual** 

# MOUNTING KIT 2412 LOADER

MODEL	ROPS	CAB	2WD & FWD	SUSPENDED AXLE FWD Terra Glide™
NH TS 115A, 125A, 135A	Х	X	X	X
CIH MXU 125 & 135	Х	Х	X	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 8.

Front fenders, front weights and front weight bracket must be removed, if so equipped.

FWA tractors are equipped with front axle oscillation stops and must be used with loader installation. Tractor steering stops also 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. Refer to tractor operator's manual for steering stop adjustment.

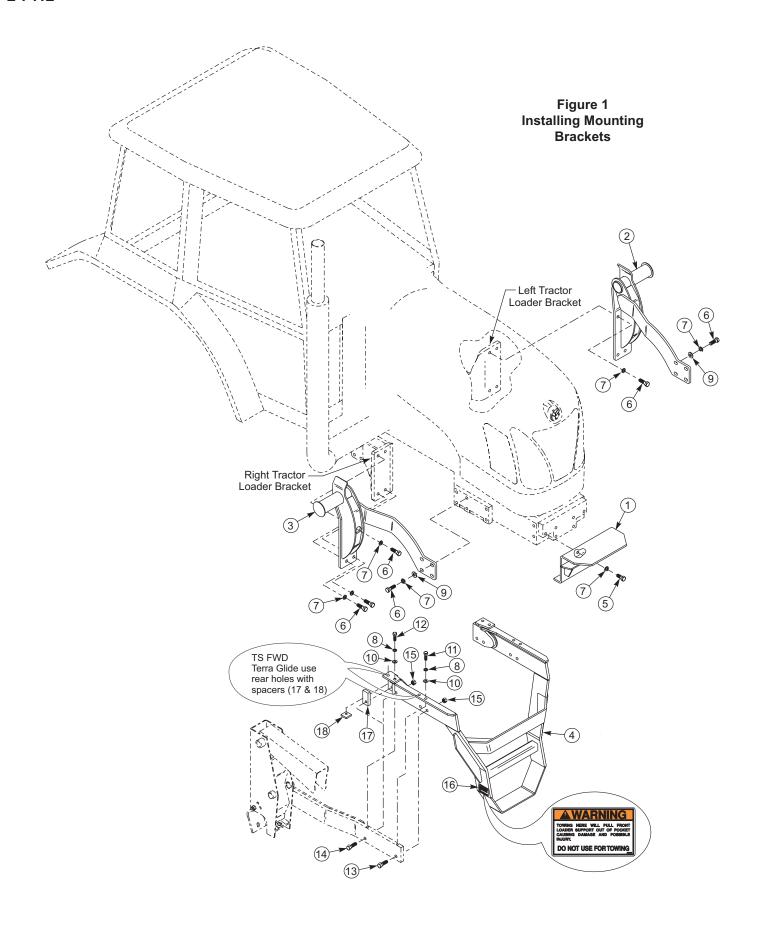
#### **INSTALLING MOUNTING BRACKETS** (Figure 1)

- Install front mounting bracket (1), with longer flange on top, to tractor using 20MM x 45MM cap screws (5) and 20MM lock washers (7).
- Install right and left mid mounting brackets (2 & 3) to tractor front casting using 20MM x 55MM cap screws (6), 3/4 flat washers (9) and 20MM lock washers (7) and to tractor loader bracket using 20MM x 55MM cap screws (6), and 20MM lock washers (7).

**NOTE:** Mounting hardware should be retorqued after initial 10 hours of use and after every additional 100 hours of use (per torque specifications on page 6).

#### PARTS LIST - MOUNTING KIT

ITEM	PART NO.	DESCRIPTION	QTY.
1	43994	BRACKET, Front Mount	1
2	52531-1	BRACKET, Mid Mounting, Left	1
3	52531-2	BRACKET, Mid Mounting, Right	1
4	48512	YOKE, Front, with Decals	1
5	42672-36	SCREW, Cap, 20MM-2.50 x 45MM CL 8.8	6
6	49040-14	SCREW, Cap, 20MM-2.50 x 55MM CL 10.9	16
7	48093-2	WASHER, Lock, 20MM	22
8	41837-7	WASHER, Lock, 5/8	4
9	42502-13	WASHER, Flat, 3/4	8
10	42502-12	WASHER, Flat, 5/8	4
11	41838-27	SCREW, Cap, 5/8-11 x 2.00	2
12	41838-64	SCREW, Cap, 5/8-11 x 2.50	2
13	41838-7	SCREW, Cap, 3/4-10 x 2.50	2
14	41838-43	SCREW, Cap, 3/4-10 x 3.50	2
15	41840-8	NUT, Lock, 3/4	4
16	39240	DECAL, Warning, Do Not Tow	2
17	48492	SPACER (use with suspended axle tractors only)	2
18	48549	SPACER (use with suspended axle tractors only)	2



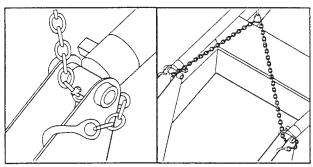
#### **INSTALLING YOKE - 2412 LOADER**

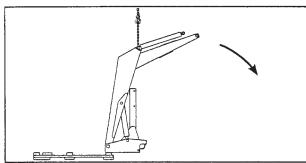
**WARNING:** To avoid injury during installation of quick attach loader, do not permit bystanders within ten feet of loader.

 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 (4) using 3/4 x 2-1/2 cap screws (13), 3/4 x 3-1/2 cap screws (14), and 3/4 lock nuts (15) in side holes and 5/8 x 2 cap screws (11), 5/8 x 2-1/2 cap screws (12), 5/8 lock washers (8), and 5/8 flat washers (10) in top holes. Use spacers (17 & 18) when installing with suspended axle tractors. Lower loader to the ground. Refer to Figure 1 for proper yoke (4) position.

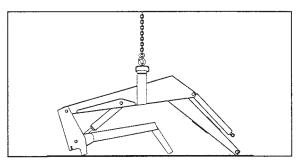
**NOTE:** It may be necessary to clamp sideframes together to align 5/8 inch holes in top of yoke with holes in side frames.

#### **INSTALL HYDRAULIC KIT TO LOADER**

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

# INSTALLING LOADER TO MOUNTING BRACKETS - 2412 LOADER

- 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.
- 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.-lbs. Torque.

- 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

#### **Standard American and Metric Cap Screws**

AMERICAN STANDARD CAP SCREWS						METRIC CAP SCREWS												
SAE Grade	e 5 8				Metric Class		8	.8			10	).9						
Typ. Head						Typ. Head	8.8			/10.9								
Markings	ings \			$\qquad \qquad \swarrow \nearrow$			Markings											
Cap Screw	p Screw TORQUE			TORQUE		Cap Screw	TORQUE			TORQUE								
Size	FT·I	LBS	N	·m	FT:	LBS	N	·m	Size	FT·	LBS	N	m	FT:	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										
5/8 - 18	152	168	206	228	203	224	275	304	NOTE	: The	se vali	ies an	nlv to	fastene	ers as	receiv	ed l	

**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 molysulphide greases or other extreme lubricants are used.

## 37° JIC Fittings

3/4 - 10

7/8 - 9

7/8 - 14

1 - 8

1 - 14

		Assembl	y Torque	Tube	Swivel Nut	
Size	Thread Size	in.·lb.	ft.·lb.	Connection F. F. F. T.	or Hose Connection F. F. F. T.	
-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			Swivel	Swive	el Nut
Tube	Dash	Thread	Nut Hex	Torque	
O.D.	Size	Size	Size		
(mm)		(in.)	(in.)	N⋅m	lb <sub>f</sub> ⋅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     or Hose     in.·lb.     ft.·lb.     F. F. F. T.       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		Swivel Nut	Assemb		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Size		in.·lb.	ft.·lb.	F. F. F. T.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	5/16 - 24	90 ± 5	7.5 ± 0.5	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	3	3/8 - 24	170 ± 10	14 ± 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	4	7/16 - 20	220 ± 15	18 ± 1	1 ± .25
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16 1 5/16 - 12 1920 ± 125 160 ± 6 1.5 ± .25 20 1 5/8 - 12 2700 ± 150 225 ± 12 1.5 ± .25	12	1 1/16 - 12	1300 ± 50	110 ± 5	1.5 ± .25
20 1 5/8 - 12 2700 ± 150 225 ± 12 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
24 1 7/8 - 12 3000 + 150 250 + 12 1 5 + 25	20	1 5/8 - 12	2700 ± 150	225 ± 12	1.5 ± .25
2.   1.70 12   0000 2 100   200 2 12   110 2 120	24	1 7/8 - 12	3000 ± 150	250 ± 12	1.5 ± .25
32   2 1/2 - 12   3900 ± 200   325 ± 15   1.5 ± .25	32	2 1/2 - 12	3900 ± 200	325 ± 15	1.5 ± .25

# **INSTALLATION INSTRUCTIONS**