Keep With Operator's Manual

# QUICK ATTACH DEVICE, SKID STEER ATTACHMENT COMPATIBLE FOR ML8090 LOADERS

Quick attach device can be installed using tools ordinarily available.

Torque all hardware to specifications listed in loader operator's manual.

Shut off the tractor engine and engage the tractor brakes during installation.

Only quick attach, skid steer compatible attachments can be used with the quick attach device. Pin on style attachments can be used on the loader, but necessitate removal of the quick attach device 4-bar linkage and relocation of the bucket level indicator.

All references to left and right used in these instructions are as they would appear to the operator standing at the rear of the unit facing forward.

#### ASSEMBLING QUICK ATTACH DEVICE (Figure 1A)

- 1. Quick attach device is pre-assembled at the factory.
- 2. Unband guick attach device (1) and wood blocks.
- 3. Disassemble 4-bar linkage by removing and discarding cotter pins and shipping tubes pins.

#### **INSTALLING QUICK ATTACH DEVICE (Figure 1 & 2)**



WARNING: Always use a drift and hammer made of non-sparking material (a shot-filled mallet is recommended) to install or remove pins. A steel hammer or drift could generate flying metal fragments and result in injury. Always wear safety glasses when using a hammer to remove or install pins.

- 1. Fasten quick attach device (1) to lower boom arms using 1-1/4 x 5-7/8 attachment pins, 3/8 x 2-1/4 cap screws, and 3/8 lock nuts (supplied with loader). Refer to figure 2.
- 2. Fasten 4-bar link (17) to quick attach frame (1) using 1-1/4 x 5-7/8 attachment pins, 3/8 x 2-1/4 cap screws, and 3/8 lock nuts (supplied with loader).
- 3. Attach 4-bar linkages (14 & 15) through hub on under side of loader boom, through 4-bar link (17) and through hub on rod end of tilt cylinder, as shown in figure 2.

**NOTE:** 4-bar linkages (14 & 15) must be installed from the outside of the loader, with longer leg of 4-bar linkage attached to hub on rod end of tilt cylinder (see figure 2).

- 4. Attach attachment level indicator rod (supplied with loader), to inside of right 4-bar linkage (15) and lug plate (16), as shown.
- Using 1-1/4 machine bushings (19) on all linkage pins other than pin securing attachment level indicator rod, secure lug plates (16) to 4-bar linkages (14 & 15) using 3/8 x 2 spring pins (18).
- 6. When assembly is complete, apply grease to all grease fittings (20) in linkage pins and to pivot link shaft (13) and pin. Refer to figures 1 & 2A.

## MOUNTING ATTACHMENT TO LOADER (Figure 1 & 2)



**WARNING:** To avoid injury during installation of the loader attachment, do not allow bystanders within 10 feet of loader or attachment.

 Locate tractor and attachment on level ground. Lower boom to rest on the ground. Extend the bucket cylinders slightly, while raising the boom to provide three to five inches of ground clearance, drive the tractor ahead slowly toward the attachment, aligning the loader quick attach device as shown in figure 2.

**NOTE:** To help guide loader quick attach device into attachment, reflective alignment marking tape has been applied to back of attachment as shown.

- While driving tractor ahead slowly to maintain contact with attachment, activate lift cylinders to raise loader until the quick attach engages under attachment lip.
- Activate bucket cylinders to retract, continuing to roll the attachment back completely.

## MOUNTING ATTACHMENT TO LOADER (Cont.) (Figure 1 & 2)

- 4. Place tractor in neutral, set parking brake, shut off tractor. Move latch pin handles to latch (down) position (refer to figure 2).
- 5. Start tractor and activate lift cylinders to raise attachment one or two feet off ground and extend bucket cylinders to tilt attachment at a slight downward angle, so quick attachment latch pins are visible. Visually inspect the attachment mechanism to verify that the pins are engaged through the latch plate on the back of the attachment.

**NOTE:** If the attachment is not securely attached, follow the instructions for detaching it and repeat the above procedure.

## DISMOUNTING ATTACHMENT FROM LOADER (Figure 1 & 2)



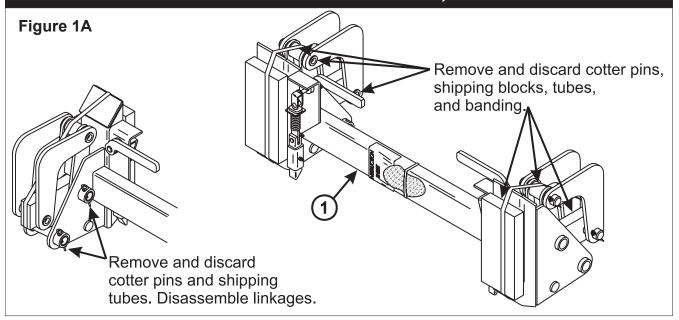
**WARNING:** To avoid injury during installation/removal of the loader attachment, do not allow bystanders within 10 feet of loader or attachment.

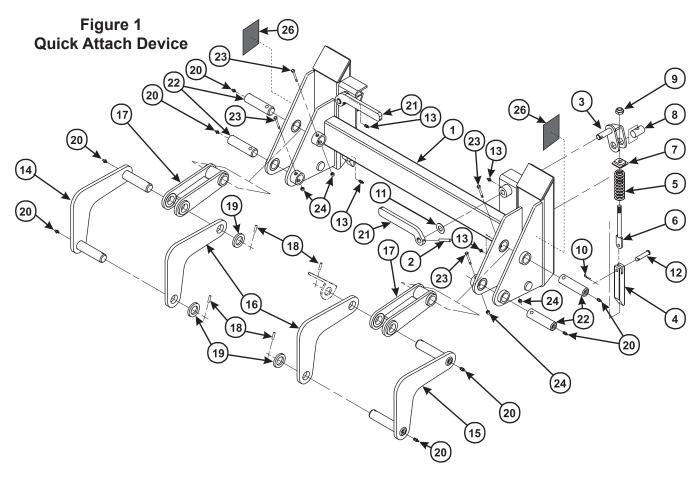
- 1. Locate tractor and loader on level ground.
- 2. Lower boom arms until the attachment is level and resting on ground.
- 3. Place tractor in neutral, set parking brake, shut off tractor engine and disengage quick attach device latch pins by moving handles to unlatch position (refer to figure 2).
- Start tractor engine, release brake and extend bucket cylinders while slowly backing the tractor away from attachment, until quick attach disengages from attachment.

#### PARTS LIST - QUICK ATTACH DEVICE (Figures 1 & 2)

ITEM	PART NO.	DESCRIPTION	QTY.
1	MT48690	MAIN FRAME, Quick Attach	1
2	MTG9413315	SPRING PIN, 1/4 x 1-1/2	2
3	MT47615	PIVOT LINK	2
4	MT48687	LATCH PIN	2
5	MT47614	SPRING	2
6	MT47618	SPADE BOLT	2
7	MT47526	SPRING GUIDE	2
8	MT47394	PIVOT PIN	2
9	MT65437	JAM NUT, 1/2	2
10	MT419031	COTTER PIN, 5/32 x 1	2
11	MT474081	DISC SPRING	2
12	MT4190214	CLEVIS PIN 3/8 x 1-3/8	2
13	MT60754	FITTING, Grease, 1/4-28	4
14	MT503441	4-BAR LINKAGE, Left	1
15	MT503442	4-BAR LINKAGE, Right	1
16	MT50347	4-BAR LUG	2
17	MT50343	4-BAR LINK	2
18	MT60152	SPRING PIN, 3/8 x 2	4
19	MT61205	BUSHING, Machine, 1-1/4	3
*20	MT60752	FITTING, Grease, 1/8-27 (4 fittings furnished with loader)	8
21	MT48686	HANDLE, Quick Attach	2
*22	MT46704	PIN, 1-1/4 x 5.88	4
*23	MTG180132	SCREW, Cap, 3/8-16 x 2-1/4	4
*24	MTG9413534	NUT, Lock, 3/8-16	4
25	MT469791	TAPE, Reflective, Alignment, White, 14"	4
26	MT55580	SHEET, DECAL (Includes two decals)	1
		* Items furnished with basic loader.	

**NOTE:** 4-BAR LINKAGE PICTURED HERE HAS BEEN <u>REVERSED</u> <u>FOR SHIPMENT ONLY</u>. BE SURE THAT 4-BAR LINKAGE IS ASSEMBLED AS ILLUSTRATED IN FIGURE 2, PAGE 4.



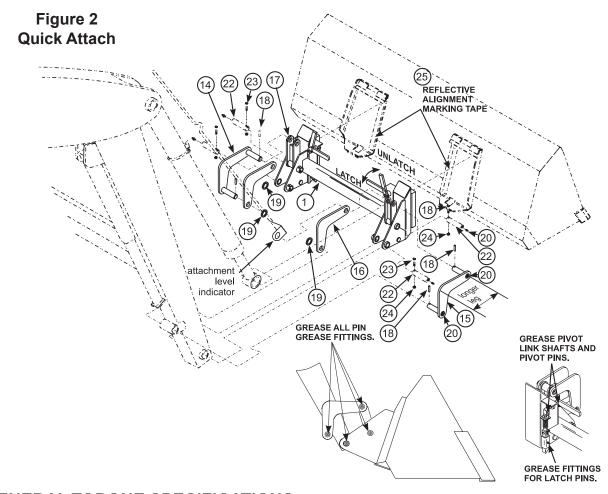


3/4 - 16

7/8 - 9

7/8 - 14

1 - 8



### **GENERAL TORQUE SPECIFICATIONS**

USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

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

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AMERICAN STANDARD CAP SCREWS								METRIC CAP SCREWS										
SAE Grade	5				8			Metric Class	8.8				10.9					
Typ. Head								Typ. Head	8.8			/10.9						
Markings	<u> </u>							Markings										
Cap Screw	TORQUE				TORQUE			Cap Screw	TORQUE			TORQUE						
Size	FT·LBS N·m		FT:	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										
5/8 - 18	152	168	206	228	203	224	275	304	NOTE: These values apply to fasteners as received									
3/4 10	338	262	322	355	319	350	431	171										

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.

# **INSTALLATION INSTRUCTIONS**