

## LOADER MOUNTING KIT 4211 LOADER MASSEY FERGUSON TRACTOR

MODEL	2WD	FWA	CAB	LESS CAB (ROPS)
471/481	X	X		X
271XE	X	X		X
281XE	X	X		X

### TRACTOR AND MOUNTING KIT GENERAL INFORMATION

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

Mounting kit is not compatible with front weights. If front weights are present, remove them before installing loader mounting brackets.

Tractor-supplied hydraulic power is required for loader mounting and operation. Two hydraulic kit options are available for use with this loader: a mid-coupled, single handle joystick control valve, which includes hoses and fittings required to plumb to tractor hydraulics; or a hose kit for use with existing tractor hydraulic control valves, which includes hoses and couplings to plumb to tractor rear remote valve couplers.

Tractor steering stops may need to be adjusted to allow adequate tire clearance. Refer to tractor operator's manual for information about adjusting tractor steering stops.

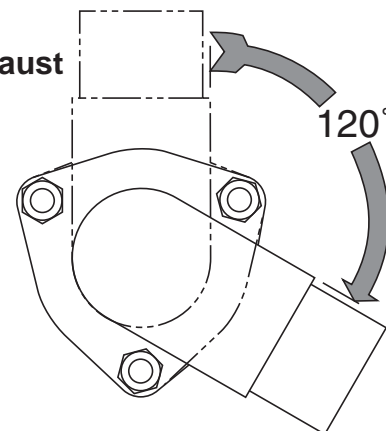


**WARNING:** Support mounting brackets when unbanding from pallet.

### PREPARING TRACTOR FOR LOADER MOUNTING BRACKET INSTALLATION

1. Remove vertical exhaust pipe and attaching hardware, retaining all parts to use again later. Loosen exhaust bracket and rotate clockwise 120° (see figure 1), then retighten exhaust bracket. Fasten exhaust extension pipe (16) to exhaust bracket using 2-1/4" muffler clamp (17). Place vertical exhaust pipe (originally removed from tractor) onto exhaust extension pipe (16) and fasten using previously-removed hardware.
2. Remove cover plate from underside of transmission housing.

**Figure 1  
Relocating Exhaust**

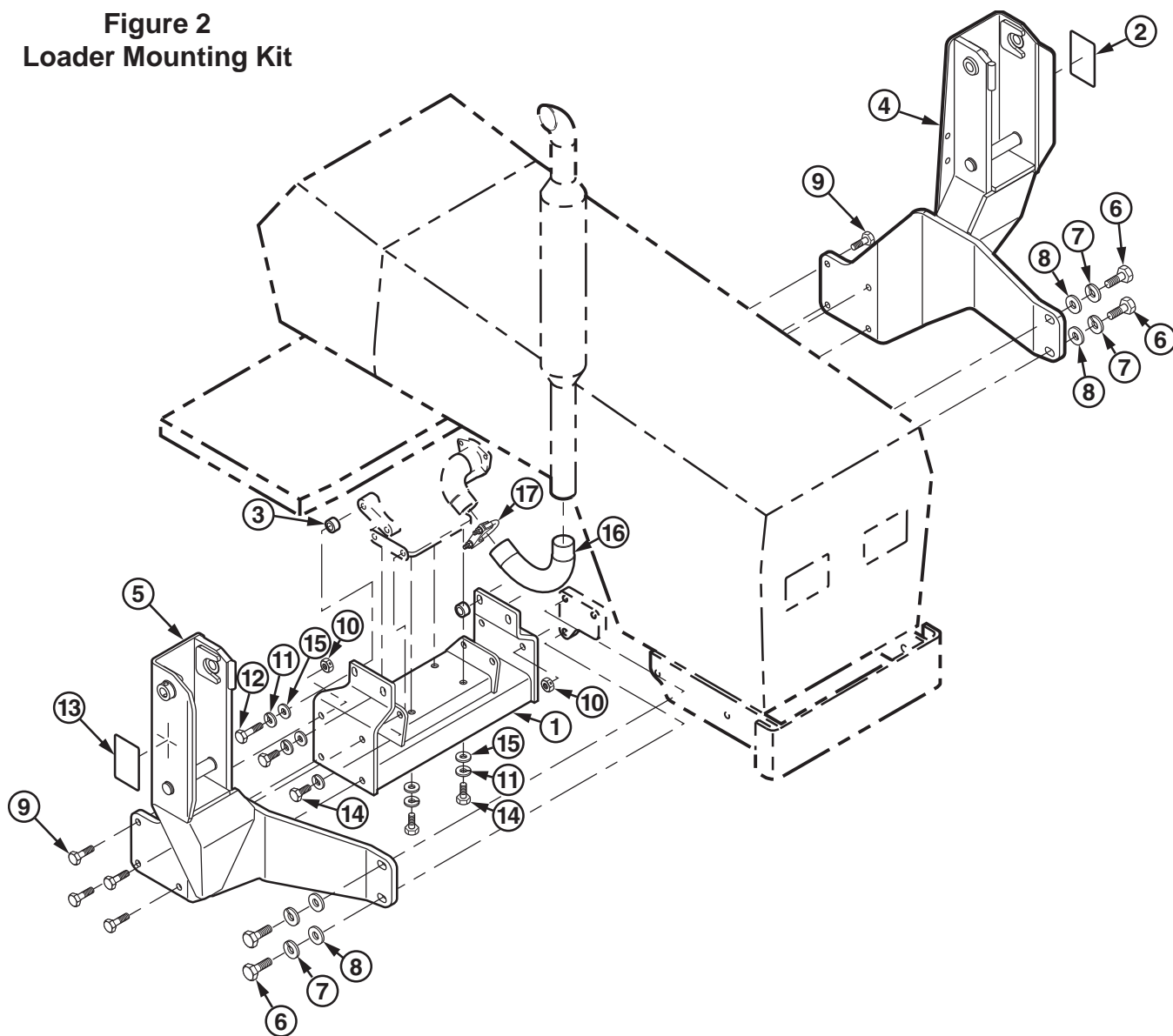


### INSTALLING LOADER MOUNTING BRACKETS (Figure 2)

**NOTE:** Install all attaching hardware loosely (unless noted otherwise) until mounting kit is completely assembled to facilitate assembly and proper alignment. Tighten all hardware to torques specified in general torque specifications table included in loader operator's manual.

1. Attach mid cross tie bracket (1) to underside of transmission housing using 5/8"-11 x 1-1/2" cap screws (14), lock washers (11), and flat washers (15) in bottom holes. Place spacers (3) between side plate of cross tie and transmission housing at rear holes and fasten using 5/8"-11 x 2-1/4" cap screws (12), lock washers (11), and flat washers (15). Use 5/8"-11 x 1-1/2" cap screws (14), and lock washers (11) to fasten mid cross tie bracket (1) to transmission housing in all remaining holes.
2. Attach left and right mid mounting brackets (4 & 5) to tractor frame casting using 3/4"-10 x 2" cap screws (6), lock washers (7), and flat washers (8) in slotted holes at front of mid mounting brackets (4 & 5).
3. Attach left and right mid mounting brackets (4 & 5) to mid cross tie bracket (1) using four 5/8"-11 x 2" cap screws (9) and four lock nuts (10) to fasten each mid mounting bracket to each cross tie side plate.

**Figure 2**  
**Loader Mounting Kit**



**PARTS LIST - MOUNTING KIT**

Item	Part No.	Description	Qty.
1	51622	BRACKET, Cross Tie, Mid	1
2	46776	DECAL, Warning, Loader Safety	1
3	42781-5	SPACER, .75 ID x 1.25 OD x .75L	2
4	51656-1	BRACKET, Mid Mounting, Left, with Decal	1
5	51656-2	BRACKET, Mid Mounting, Right, with Decal	1
6	41838-8	SCREW, Cap, 3/4\"-10 x 2\" Grade 5	4
7	41237-8	WASHER, Lock, 3/4"	4
8	42508-33	WASHER, Flat, 3/4"	4
9	41838-27	SCREW, Cap, 5/8\"-11 x 2\" Grade 5	8
10	41840-7	NUT, Lock, 5/8\"-11	8
11	41837-7	WASHER, Lock, 5/8"	12
12	41838-14	SCREW, Cap, 5/8\"-11 x 2-1/4\" Grade 5	2
13	48436	DECAL, WARNING, Avoid Injury, Read Manual	1
14	41838-29	SCREW, Cap, 5/8\"-11 x 1-1/2\" Grade 5	10
15	42505-12	WASHER, Flat, 5/8"	8
16	51630	EXTENSION, Exhaust Pipe	1
17	51629	CLAMP, Muffler, 2-1/4\", with hardware	1

**MOUNTING 4211 LOADER (Figures 3, 4 & 5)**

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

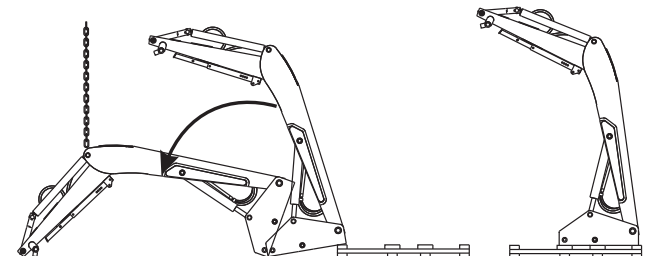
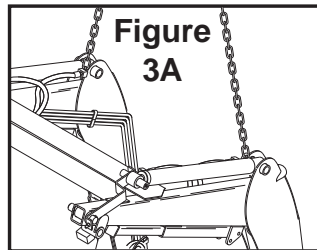


**WARNING:** To avoid injury during installation of quick attach loader, do not permit bystanders within ten feet of loader.



**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 attachment mounted.

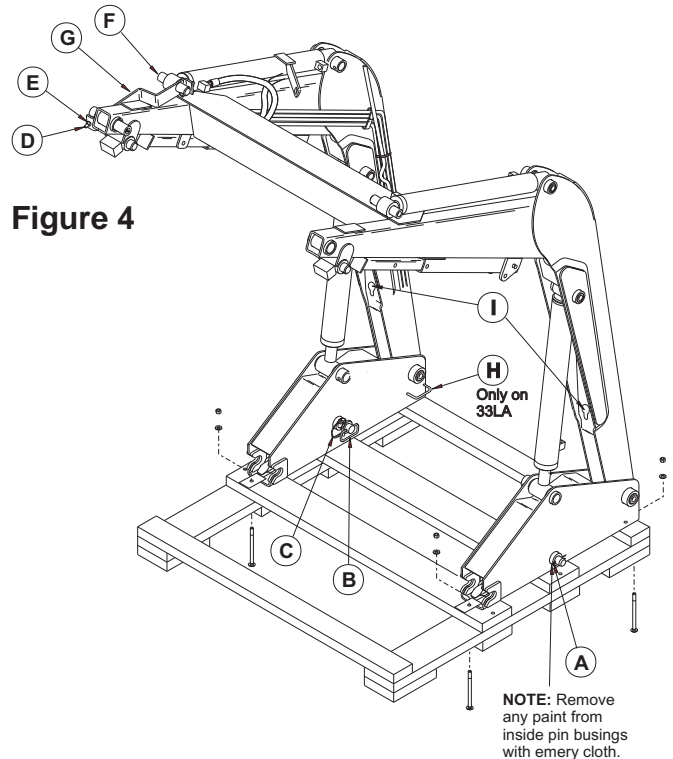
1. Loop chain under each bucket cylinder and hook on loader boom arm (see figure 3A). Using overhead hoist to support loader, remove cotter pins (A), hitch pins (B) and lynch pins (C) (figure 4). Discard cotter pins only. Remove hardware securing loader to pallet. Lift loader.

**Figure 3**

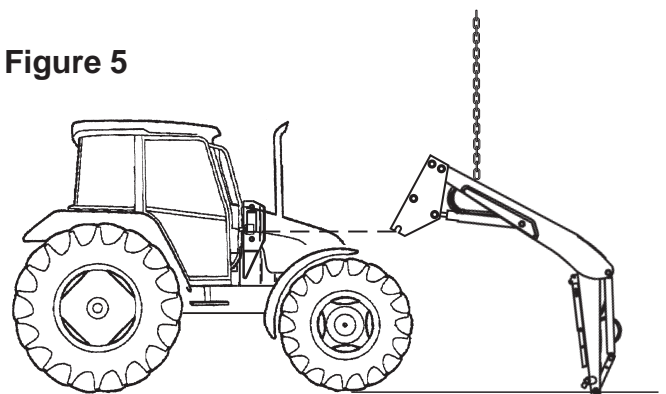
**WARNING:** Loader uprights may rotate downward when loader is lifted from pallet.

2. Position pallet at rear of loader to facilitate lowering (see figure 3). Lower loader from vertical shipping position to horizontal position (scraps of cardboard may be used to protect paint). Remove 3/8" cap screws (D figure 4), lock nuts (E), pins (F), shipping brackets (G). Discard shipping brackets, retain hardware for further use. Remove bucket level indicator rod, which is attached to oil lines for shipment.
3. Route hoses through hose loop (H) on inside of loader upright (shown in figure 4). Secure a hoist strap around boom arm assembly or secure with a

chain hook into hole (I), if so provided in underside of boom arm (figure 3). If using a strap, strap should be located around boom arm at approximately same location as chain shown in figure 5. Be sure to keep strap under oil lines on right side of boom.

**Figure 4**

4. Raise loader with overhead hoist as shown in figure 5.

**Figure 5**

**NOTE:** Install valve kit or hose kit onto tractor before proceeding to instruction 5 on page 5.

(Continued on Page 5)

## MOUNTING 4211 MSL LOADER (Figures 6, 7 &amp; 8)



**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.



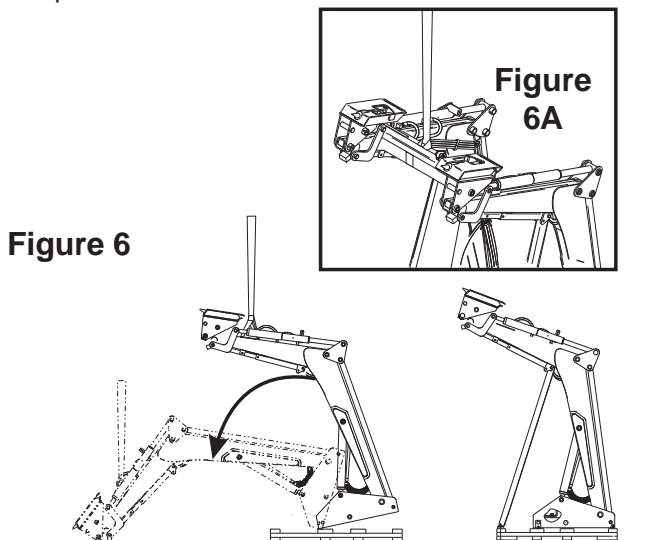
**WARNING:** To avoid injury during installation of quick attach loader, an overhead hoist must be used for initial mounting. Parking stands are not operational without attachment mounted.

1. Loop hoist strap or chain around crossmember (figure 6A). Using overhead hoist to support loader, remove shipping angle braces (B figure 7) by removing 1/2" lock nut (A), lift off brace (B), then reinstalling 1/2" lock nut (A).

**NOTE:** There is an additional 1/2" flat washer on outside of brace for shipping only. Remove and discard it with shipping angle brace.

**NOTE:** Do not over tighten lock nut (A). Parking stand tube must pivot freely.

Remove remaining hardware (C figure 7) from shipping braces (B) and discard braces and hardware. Remove cotter pins (D), hitch pins (F) and linch pins (E). Discard only cotter pins. Then remove nuts and washers (C) from bolts securing loader to pallet.



2. Lower loader from vertical shipping position to horizontal position (figure 6) (Loader may require slight push to start lowering). Packaging hardware may bend during lowering process, which is acceptable. Remove bucket level indicator rod, which is attached to oil lines for shipment.

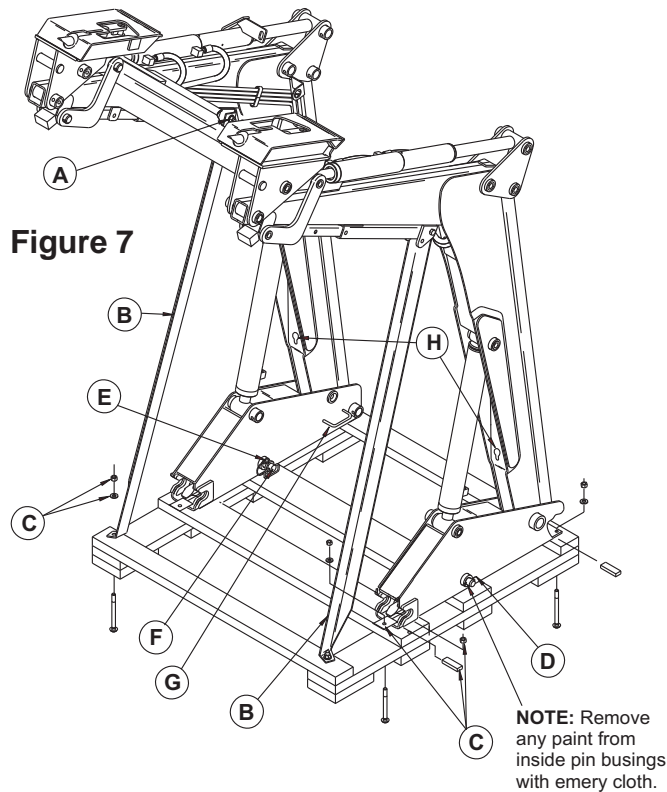


Figure 7

3. Route hoses through hose loop (G) on inside of loader upright (shown in figure 7). Secure a hoist chain hook into hole (H) provided in boom underside (refer to figures 7 & 8).
4. Raise loader with overhead hoist as shown in figure 8.

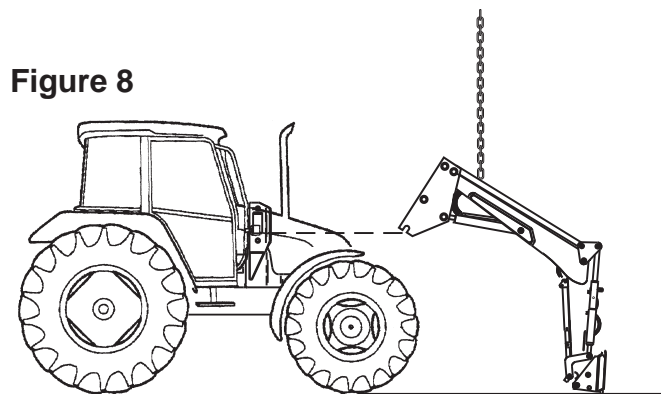


Figure 8

**NOTE:** Install valve kit or hose kit onto tractor before proceeding to instruction 5 on page 5.

(Continued on Page 5)

**MOUNTING 4211 & 4211 MSL LOADERS (Continued)**

**NOTE:** Examine pin bushings and remove any paint with emery cloth before mounting loader (see figures 2, 4 & 7).

**NOTE:** Before continuing mounting procedure, lubricate loader as instructed in loader manual.

5. A) If tractor is equipped with a hose kit, back tractor up to rear of loader. Attach lift cylinder function hoses (color-coded green and yellow) to tractor rear remotes. Retract lift cylinders fully and continue to activate control lever for approximately 10 seconds.
  
- B) If tractor is equipped with a valve kit, park tractor next to loader so right side of tractor cab window is parallel with rear of loader upright. Attach colored spiral bands to valve female couplers to identify hoses (Refer to valve kit instructions). Attach lift cylinder function hoses (color-coded green and yellow) to corresponding valve couplers. Retract lift cylinders fully and continue to activate control lever for approximately 10 seconds.
  

**NOTE:** It is important to attach lift cylinder hoses (color-coded yellow and green with identification bands) for loader to function properly.

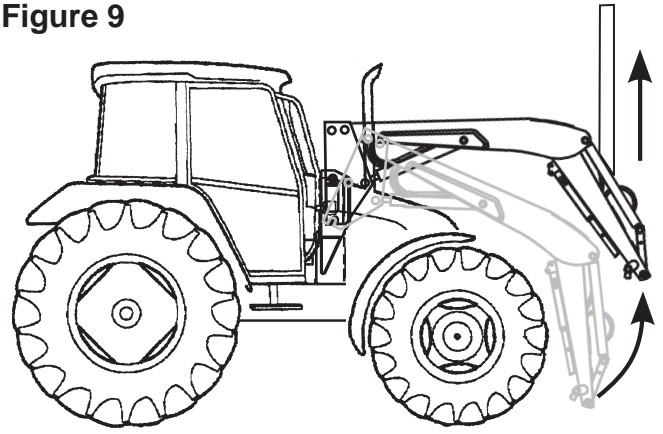
  

Extend lift cylinders about 2" from fully closed position. Shut off tractor and disconnect hydraulic hoses.

Position tractor directly behind loader. Slowly raise loader with overhead hoist until loader upright will clear tractor front tires.

  
6. Move tractor forward until loader upright saddles are centered over mounting shaft. Lower loader with overhead hoist until upright saddle straddles mounting shaft.
  
7. Remove hoist chain or strap from loader boom and secure around front crossmember (see figure 9). Using overhead hoist raise front of loader to rotate loader upright into mounting pocket. Continue to rotate loader upright until upright has fully rotated into back of mounting guide. Insert two 1" x 7-3/4" pins and linch pins which were removed from loader uprights in step 1, to secure loader to loader mountings.
  
8. Connect hoses to tractor hydraulics. Refer to instructions provided with hose kit for tractors using rear remotes. Refer to valve kit instructions for tractors with auxiliary valve kit.

**Figure 9**

9. Start engine and slowly cycle cylinders several times to purge air from hydraulic system. Refer to hydraulic oil specifications in tractor operator's manual to replenish tractor hydraulic system.
  
10. 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 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 attachment.







**ATTACH BUCKET LEVEL INDICATOR**

Refer to instruction sheet and assembly manual with bucket or optional attachment for instructions to attach and adjust level indicator for bucket or attachment.



## GENERAL TORQUE SPECIFICATIONS

USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

AMERICAN STANDARD CAP SCREWS									METRIC CAP SCREWS								
SAE Grade	5				8				Metric Class	8.8				10.9			
Typical Grade ID Markings on Head									Typical Grade ID Markings on Head	 				 			
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	274	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	<b>NOTE:</b> These values apply to fasteners as received from the supplier, dry or when lubricated with normal engine oil. They do not apply if special graphite or molydisulphide greases or other extreme pressure lubricants are used.								
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