

Keep With Operator's Manual

**LOADER MOUNTING KIT
4211SS LOADER
MASSEY FERGUSON TRACTORS**

MODEL	2WD	FWA	ROPS	CAB
4225	X	X	X	X
4233	X	X	X	X
4235	X	X	X	X
4325	X	X	X	X
4335	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, torque wrench, hydraulic oil, and a non-sparking drift and hammer (a shot-filled mallet is recommended).

Tractor must be equipped with rear loader ready bracket kit. Tractors prior to Serial No. ACP222919 did not have bracket factory installed and you must order 87436770 kit from CNH dealer.

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

A mid-coupled, single-handle joystick control valve kit, which includes hoses and fittings required to plumb to tractor hydraulics.

A hose kit for use with existing tractor hydraulic control valves, which includes hoses and couplings to plumb to tractor rear remote valve couplers.

If optional grille guard 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.

Tractor steering stops may have to be adjusted to provide clearance between front tire 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.

If tractor is equipped with front weights, they must be removed. The weight bracket can remain.

Reference to left and right used in these instructions refer to position when seated in the operating position on tractor.

TRACTOR PREPARATION

1. Shut off engine and engage brakes during installation of mounting kit and remove key.
2. If tractor is equipped with front weights, they should be removed.
3. If tractor is equipped with toolbox, it will be necessary to relocate it where it will not interfere with loader.

TRACTOR PREPARATION (Continued)

4. To ease installation, if tractor is equipped with optional front fenders, they may be removed.
5. 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.

6. 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.
7. Remove plastic thread protectors from holes on left and right sides of tractor.

Important: Clean threaded holes in tractor chassis thoroughly using a tap of proper size. Paint, rust, or debris in the threads may not permit cap screws to be installed and tightened correctly.

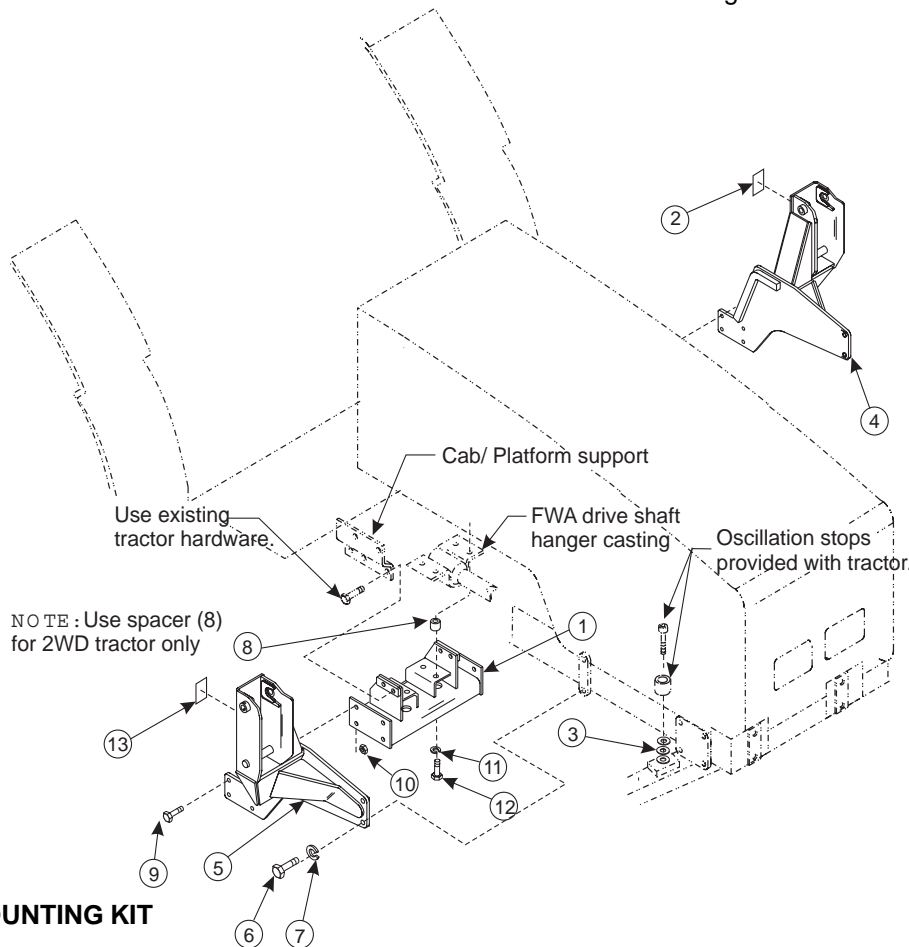


Figure 1

PARTS LIST - MOUNTING KIT

ITEM	Part No.	DESCRIPTION	QTY.
1	49361	CROSSTIE, Assembly	1
2	46776	DECAL, Warning	1
3	42502-30	WASHER (FWA Tractors only)	6
4	53368-1	BRACKET, Mid Mounting, Left, with Decal	1
5	53368-2	BRACKET, Mid Mounting, Right, with Decal	1
6	49040-14	SCREW, Cap, 20MM-2.50 x 55MM, Gr.8	4
7	48093-2	WASHER, Lock, 20MM	4
8	42787-4	SPACER, Tube (2WD Tractors only)	4
9	41838-32	SCREW, Cap, 5/8-11 x 1-3/4	11
10	41840-7	NUT, Lock, 5/8	8
11	41837-7	WASHER, Lock, 5/8	8
12	41838-14	SCREW, Cap, 5/8 x 2-1/4, Gr. 5	4
13	48436	DECAL, Warning	1

INSTALLING LEFT & RIGHT MIDMOUNTING BRACKETS (FIGURE 1)

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. **FWA Tractors-** Remove four 5/8" bolts from drive shaft hanger casting (located on underside 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 transmission 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 (11). 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 transmission casting. Retain 5/8" bolts from cab or platform support.

Attach crosstie (1) to underside of cover plate with four 15/16" long spacers (8), four 5/8" x 2-1/4" cap screws (12) and lock washers (11). Attach crosstie between cab or platform support and transmission housing with 5/8" capscrews which were previously removed from tractor.

2. Loosen tractor fuel tank strap. Slide fuel tank outward approximately 1" to allow left midmount (4) installation. Note: Strap hardware is found directly behind tractor step.
3. Raise left midmounting bracket (4) with overhead hoist. Align mounting holes with holes in tractor loader bracket on left side of tractor. Attach mounting to bracket using 20MM x 55MM cap screws (6) and 20MM lock washers (7).

4. Raise right midmounting bracket (4) with overhead hoist. Align mounting holes with holes in tractor loader bracket on right side of tractor. Attach mounting to bracket using 20MM x 55MM cap screws (6) and 20MM lock washers (7).
5. 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.
6. Slide tractor fuel tank back into position and secure with fuel tank strap and hardware.
7. Tighten 20MM hardware to 301 ft. lbs. (408 N•m).



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

MOUNTING 4211SS LOADER (Figures 2, 3 & 4)



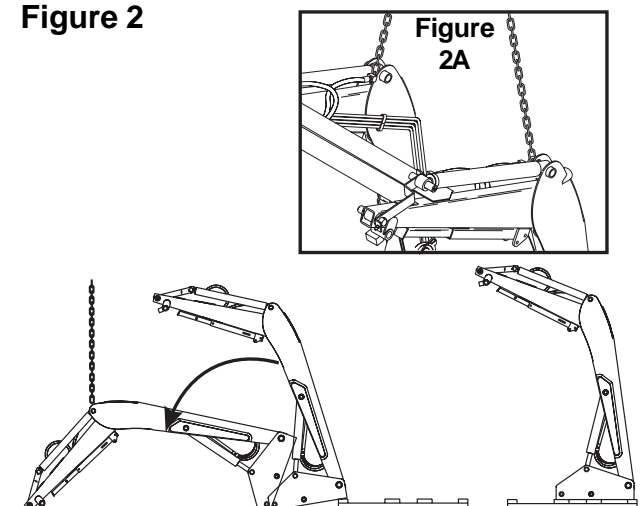
WARNING: To avoid injury during installation of quick attach loader, do not permit bystanders within ten feet of loader.



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 2A). Using overhead hoist to support loader, remove cotter pins (A), hitch pins (B) and linch pins (C)(see figure 3). Discard only the cotter pins. Then remove hardware securing loader to pallet. Lift loader.

Figure 2





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

2. Position pallet at rear of loader to facilitate lowering (see figure 2). Lower loader from vertical shipping position to horizontal position (scraps of cardboard may be used to protect paint). Remove 3/8 cap screws (D), lock nuts (E), pins (F), shipping brackets (G). Discard shipping brackets, retain hardware for further use. Remove bucket level indicator rod attached to oil lines for shipment.
3. Remove tie straps (H) from hydraulic hoses. Route hoses through hose loop (I) on inside of loader upright (refer to figure 3). Secure a hoist strap around the boom arm assembly or secure with a chain hook into hole (J), if so provided in underside of boom arm (see figure 3). If using a strap, the strap should be located around the boom arm in about the same location as the chain shown in figure 4. Be sure to keep strap under the oil lines on the right side of the boom.

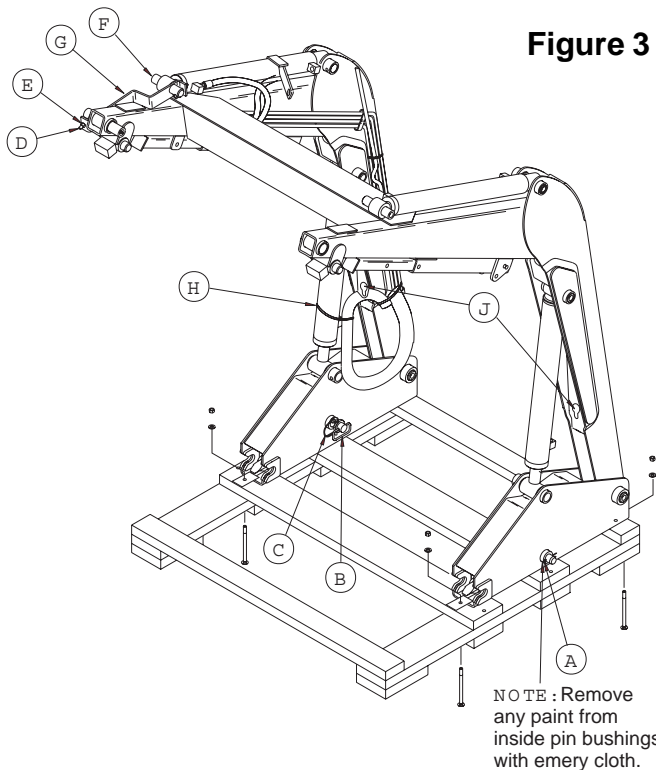
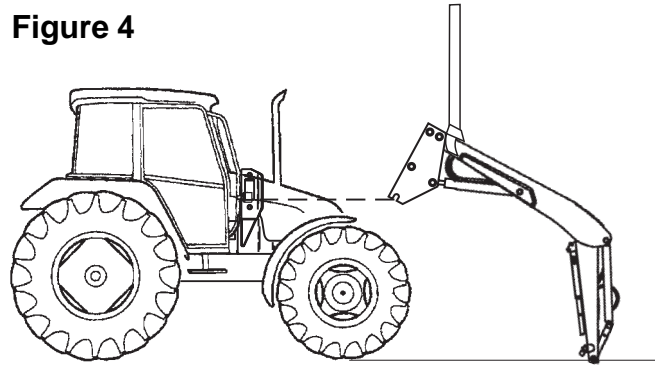


Figure 3

Raise loader with overhead hoist as shown in figure 4.

Figure 4



NOTE: If the tractor is not equipped with mid-mount couplers, hose kit 2-6859 needs to be installed before completing the next step.



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

MOUNTING 4211SS-MSL LOADER (Figures 5, 6 & 7)



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 (see figure 5A). Using overhead hoist to support loader, remove shipping angle braces (C) (figure 6) by removing 1/2" lock nut (A), lift off brace (C), then replace 1/2" lock nut (A). **NOTE:** There is an additional 1/2" flat washer on outside of brace for shipping only, remove and discarded with shipping angle brace.

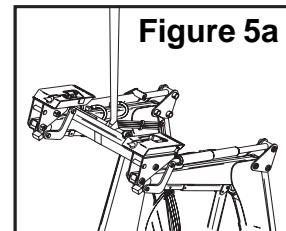
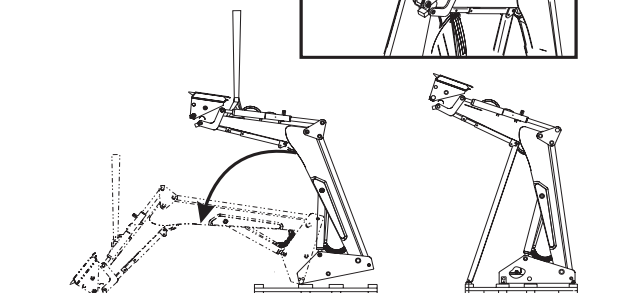


Figure 5



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

Remove remaining hardware (D) from shipping braces (C) and discard braces and hardware.

Remove cotter pins (E), hitch pins (G) and linch pins (F)(see figure 6). Discard only the cotter pins. Then remove nuts and washers (D) from bolts securing loader to pallet.

2. Lower loader from vertical shipping position to horizontal position (figure 5) (Loader may require slight push to start lowering). Packaging hardware may bend during lowering process, which is acceptable. Remove bucket level indicator rod attached to oil lines for shipment.

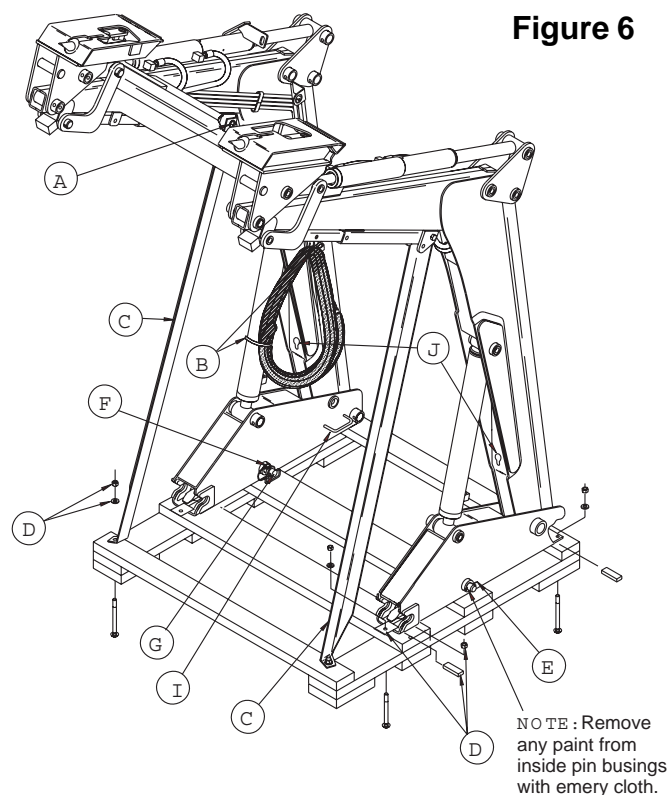


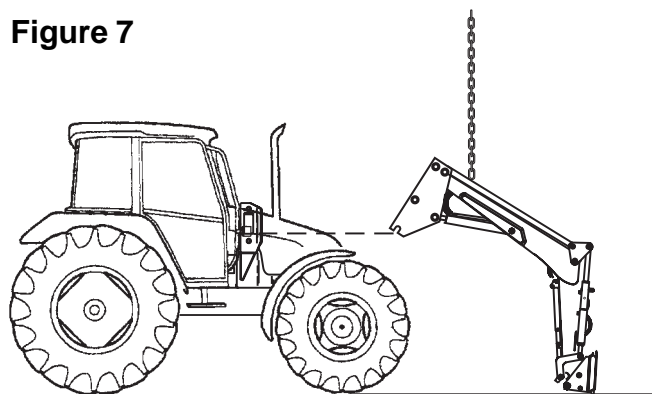
Figure 6

3. Remove tie straps (B) from hydraulic hoses. Route hoses through hose loop (I) on inside of loader upright (refer to figure 6). Secure a hoist chain hook into hole (J) provided in boom underside (refer to figures 6 & 7).

Raise loader with overhead hoist as shown in figure 7.

NOTE: If the tractor is not equipped with mid-mount couplers, hose kit 2-6859 needs to be installed before completing next step.

Figure 7



NOTE: Examine pin bushings and remove any paint with emery cloth before mounting loader (see figures 1, 3 & 6).

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

4. A) If the tractor is not equipped with mid-mount couplers, 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 mid-mount couplers, park tractor next to loader so right side of tractor cab window is parallel with rear of loader upright. Attach colored spiral bands to tractor female couplers to identify hoses (Refer to Figure 9). Attach lift cylinder function hoses (color coded green and yellow) to corresponding tractor couplers. Retract lift cylinders fully and continue to activate control lever for approximately 10 seconds.

NOTE: Important to attach lift cylinder hoses (yellow and green spiral band coded) for loader to function properly.

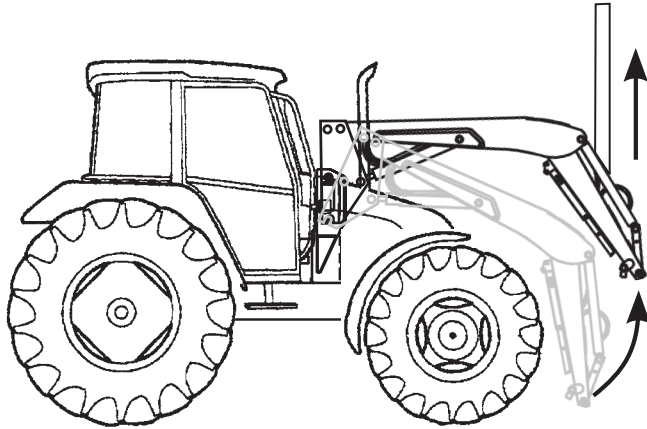
Extend lift cylinders about 2" from the fully closed position. Shut off tractor and disconnect hydraulic hoses.

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

5. Move tractor forward until loader upright saddles are centered over mounting shaft. Lower loader with overhead hoist until upright saddle straddles mounting shaft.

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

- Remove hoist chain or strap from loader boom and secure around front crossmember (Refer to Figure 8). 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 1x 7-3/4 pins and linch pins which were removed from loader uprights in step 1, to secure loader to loader mountings.



- Connect hoses to tractor hydraulics. Refer to hose kit instructions (2-6859) for tractors using rear remotes.
- Start engine and slowly cycle cylinders several times to purge air from hydraulic system. Replenish hydraulic system using New Holland 134 hydraulic oil.
- 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.

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