

Keep with Operators Manual

LOADER MOUNTING KIT NEW HOLLAND 7310 LOADER NEW HOLLAND TRACTORS

MODEL	2WD	FWA	Less Cab	With Cab
TN55, TN60A, TN65, TN70, TN70A, TN75, TN75A	X	X	X	
TN55D, TN60DA, TN65D, TN70D, TN70DA, TN75D, TN75DA	X	X		X

Mounting kit can be installed using tools ordinarily available.

PREPARING TRACTOR

Shut off engine and engage brakes during installation.

Check tire clearances once loader is installed and adjust tread width if necessary. A minimum front tread setting of 64" is required on FWA tractors..

FWA - tractors require axle oscillation stops and must be used with loader installation (see figures 1 & 3). Attach oscillation stop (14 & 15) with 20mm x 40mm cap screw (7) and 20mm lock washer (5).

FWA -Tractor steering stops (figure 2) must also be adjusted to provide clearance between front tire and any part of tractor or 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 along with weight bracket.

Use caution when installing mid-mount assemblies to right and left side of tractor to prevent damage of lower front cab window.

Figure 1

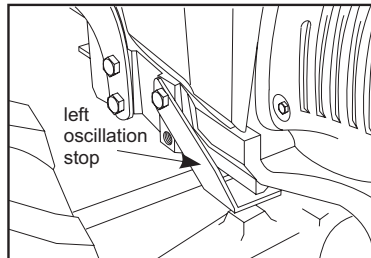
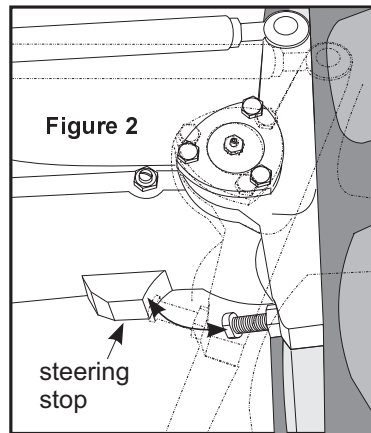


Figure 2



NOTE: If installing optional grille guard (715825006), install grille guard and front mounting bracket at the same time.

INSTALLING MOUNTING BRACKETS (Figure 3)

NOTE: Leave all attaching hardware loose until mounting kit is completely installed to facilitate proper alignment. Torque hardware to torque specifications on page 7.

FRONT MOUNTING ASSEMBLY

1. Fasten front mounting bracket (1), with longer flange on top, to tractor front casting using 20mm x 50mm cap screws (12) and 20mm lock washers (5) in front holes and 20mm x 50mm cap screws (12), 20mm lock washers (5) and 7/8 flat washers (6) in side holes.

RIGHT MID MOUNT ASSEMBLY

NOTE: For TN Standard tractors proceed to step 12.

1. Remove air-conditioner hose clamp from right cab support channel. Discard cap screw and save clamp for further use if not equipped with mid-mount couplers. Save cap screw and clamp for future use if equipped with mid-mount couplers.
2. Remove step from right cab support channel by removing two cap screws.

NOTE: If tractor is equipped with mid mount couplers, remove support bracket.

3. Loosen right cab support channel bracket by loosening all 4 cap screws. Remove only the front two cap screws and spacers.

NOTE: Be sure not to remove rear two cap screw to prevent bracket and spacers from falling out.

4. Fold floor mat down from firewall to expose rubber plug in tractor cab. Remove plug and reinstall when finished. Remove plastic thread protector from bolt hole in side of transmission.

5. Bend starter cable clamp attached to tractor casting toward tractor to prevent interference with mid-mount.
6. Using an overhead hoist to lift and steady the right mid mount assembly (3), slide right mid mount assembly behind cab channel support bracket.

NOTE: Air-conditioner hoses should be positioned on the outside of mid mount. Be sure to keep starter cable and throttle cable from pinching between tractor casting and mid mount assembly.

7. Fasten right mid mount assembly (3) with 20mm x 50mm cap screws (12) and 20mm lock washers (5) in front holes and cap screws removed from channel support bracket in lower rear holes. Install top rear 20mm x 45mm cap screw (11) and 20mm lock washer (5) through access hole exposed in cab.

NOTE: Torque hardware to torque specifications on page 7.

8. If tractor is equipped with mid mount couplers, reinstall support bracket with hardware removed earlier.
9. Install step to right cab support channel.
10. Secure air-conditioner hoses with hose clamp (which was removed from cab support channel) to right mid mount assembly (3) with 3/8 x 1 cap screw (10) and 3/8 lock nut (13). Refer to Inset in Figure 3.
11. Install 6" plastic trim (17) on edge of cab to protect loader hoses.

NOTE: Steps 12, 13 and 14 refer to mounting on TN55, TN60A, TN65, TN70, TN70A, TN75 and TN75A tractors only.

12. Remove plastic thread protectors from bolt holes in tractor casting.
13. Using overhead hoist, lift right mid mounting and position over mounting holes on tractor casting.
14. Fasten right mid mount assembly (3) with 20mm x 50mm cap screws (12) and 20mm lock washers (5) in front holes. Install 20mm x 45mm cap screw (11) and 20mm lock washer in top rear hole. Slide spacer block (18) between tractor casting and lower two holes at rear of mounting. Fasten with 20mm x 75mm cap screws (19) and 20mm lock washers (5). Torque hardware to 301 ft. lbs.

LEFT MID MOUNT ASSEMBLY

NOTE: For TN and TNA Standard tractors proceed to step 9.

1. Support fuel tank with floor jack and remove fuel tank strap and step from left cab support channel by removing cap screws.. Lower fuel tank to expose left cab support channel bracket.



CAUTION: Fuel tank filler neck may separate from tank if tank is lowered too much. Be sure to support fuel tank to insure that tank does not fall off its supports.

2. Remove heater hose clamp from left cab support channel. Save cap screw, nut and clamp for further use.
3. Loosen left cab support channel bracket by loosening all 4 cap screws. Remove only the front two cap screws and spacers.

NOTE: Be sure not to remove rear two cap screws to prevent bracket and spacers from falling out.

4. Fold down cab floor mat to expose rubber plug in tractor cab. Remove plug and reinstall when finished. Remove plastic thread protector from bolt hole in side of transmission.
5. Using an overhead hoist to lift and steady the left mid mount assembly (2), slide left mid mount assembly behind cab channel support bracket.

NOTE: Heater hoses should be positioned between mid mount and tractor.

6. Fasten left mid mount assembly (2) with 20mm x 50mm cap screws (12) and 20mm lock washers (5) in front holes and cap screws removed from channel support bracket in lower rear holes. Install top rear 20mm x 45mm cap screw (11) and 20mm lock washer (5) through access hole exposed in cab.

NOTE: Torque hardware to torque specifications on page 7.

7. Raise fuel tank and install fuel tank strap and step to left cab support channel.
8. Secure heater hoses with hose clamp, cap screw and nut (which was removed from cab support channel) to left mid mount assembly (2).

NOTE: Steps 9, 10 and 11 refer to mounting on TN55, TN60A, TN65, TN70, TN70A, TN75 and TN75A tractors only.

9. Remove plastic thread protectors from bolt holes in tractor casting.
10. Using overhead hoist, lift left mid mounting and position over mounting holes on tractor casting.
11. Fasten left mid mount assembly (2) with 20mm x 50mm cap screws (12) and 20mm lock washers (5) in front holes. Install 20mm x 45mm cap screw (11) and 20mm lock washer (5) in top rear hole. Slide spacer block (18) between tractor casting and lower two holes at rear of mounting. Fasten with 20mm x 75mm cap screws (19) and 20mm lock washers (5). Torque hardware to 301 ft. lbs.

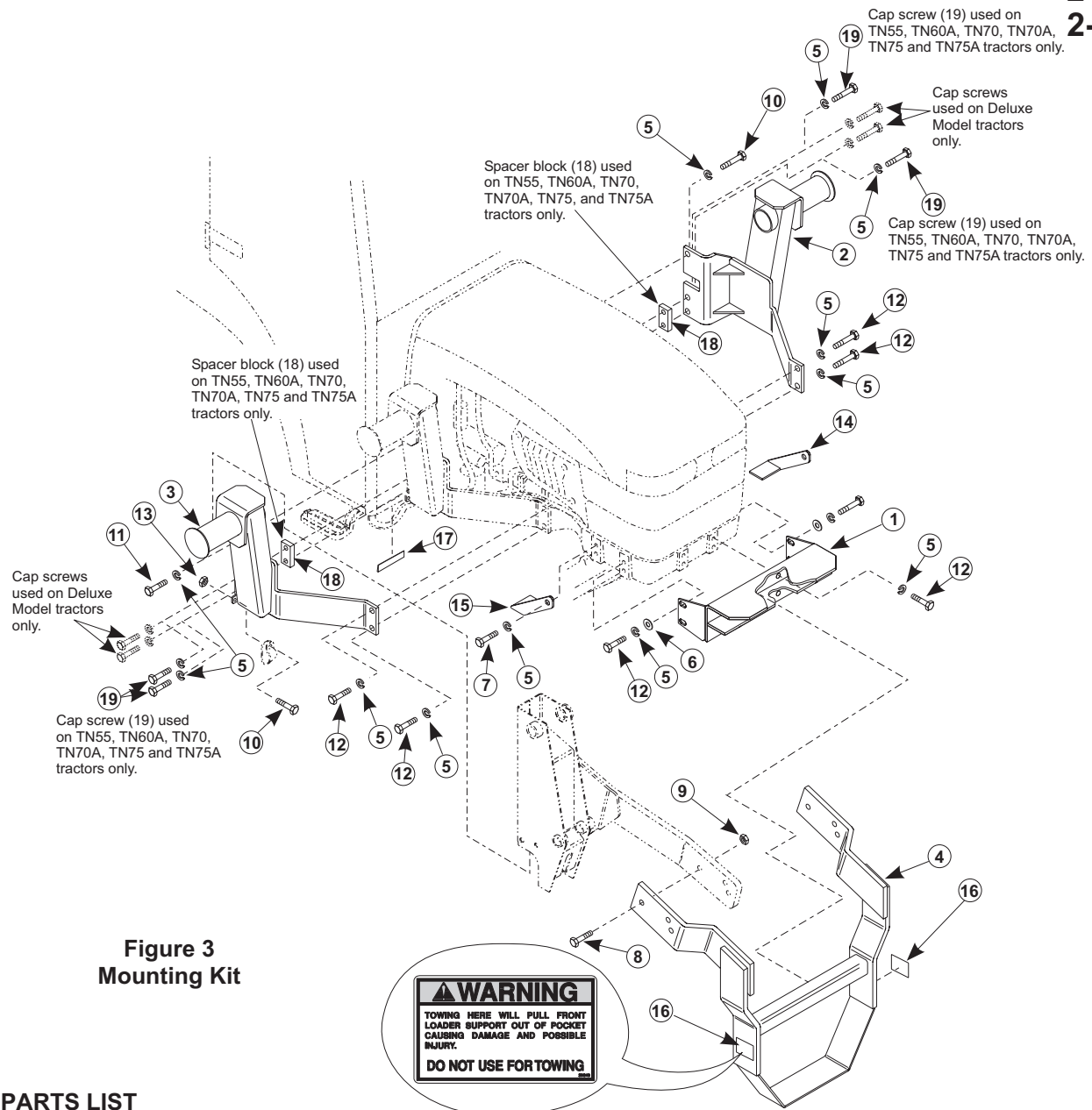


Figure 3
Mounting Kit

PARTS LIST

ITEM	SMC NO.	NH NO.	DESCRIPTION	QTY.
1	46650	86582424	FRONT MOUNT BRACKET	1
2	46660-1	86582425	MID MOUNT ASSEMBLY, Left	1
3	46660-2	86582426	MID MOUNT ASSEMBLY, Right	1
4	46642	86582427	YOKE ASSEMBLY	1
5	G 11500166	9847025	WASHER, Lock, 20mm	20
6	G 131018	87366	WASHER, Flat, 7/8	4
7	6090-67	9512573	SCREW, Cap, 20mm-2.5 x 40mm	2
8	G 271773	9706701	SCREW, Cap, 3/4-10 x 2-1/2	6
9	G 9414076	9626598	NUT, Lock, 3/4-10	6
10	G 180122	88206	SCREW, Cap, 3/8-16 x 1	1
11	6090-127	86508588	SCREW, Cap, 20mm-2.5 x 45mm	2
12	6090-107	9847023	SCREW, Cap, 20mm-2.5 x 50mm	12
13	G 9413534	9637692	NUT, Lock, 3/8-16	1
14	46710-1	86582428	OSCILLATION STOP ASSEMBLY, Left	1
15	46710-2	86582429	OSCILLATION STOP ASSEMBLY, Right	1
16	39240	86582430	DECAL, Warning	2
17	24765-1	86582431	TRIM, Black, Plastic, 6"	1
18	47299	86582432	SPACER BLOCK	2
19	6090-129	394877	SCREW, Cap, 20mm-2.5 x 75mm	4



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

INSTALLING LOADER TO MOUNTING BRACKETS

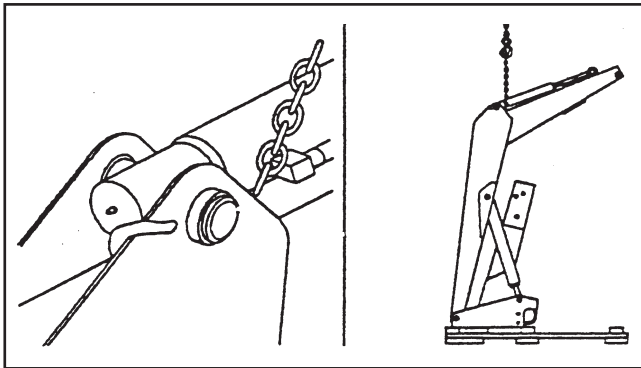


WARNING: To avoid injury during installation of quick attach loader, do not permit bystanders within ten feet of loader.

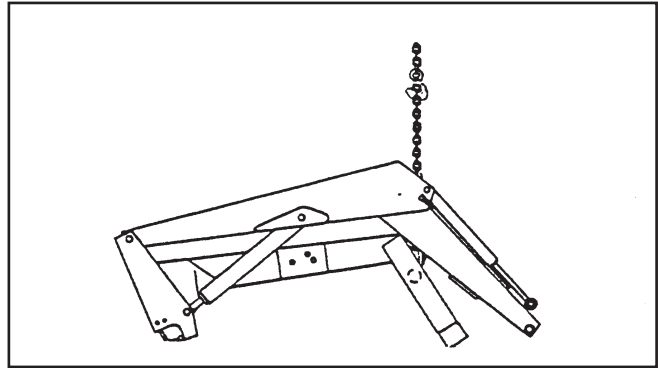
1. Loop chain under each tilt cylinder and hook on loader boom arm. Using overhead hoist to support loader remove hardware securing loader to pallet. Lift loader and remove pallet.



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

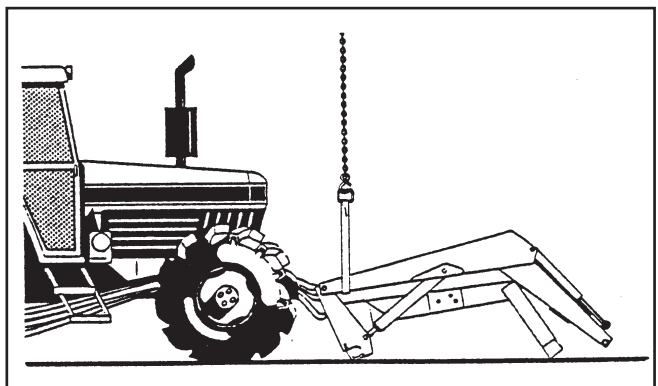


2. Using overhead hoist, lower loader from vertical shipping position to horizontal position leaving enough room to install yoke (scraps of cardboard may be used to protect paint). Install yoke assembly (4) using 3/4 x 2-1/2 cap screws (7) and 3/4 lock nuts (8). Lower loader completely to the ground.

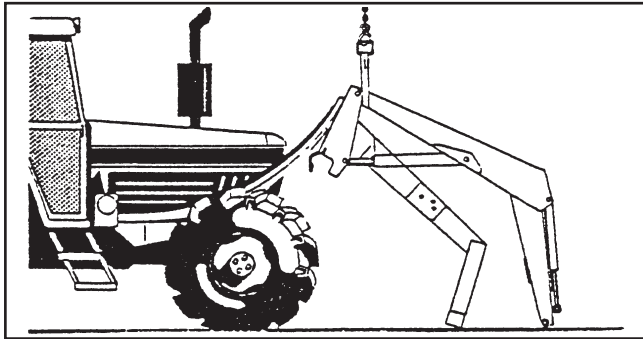


NOTE: Hardware connecting yoke to loader sideframes should be snug but do not torque completely. After loader has been mounted to tractor and aligned with mid mounting brackets and front mounting brackets, torque hardware to specifications in loader operators manual.

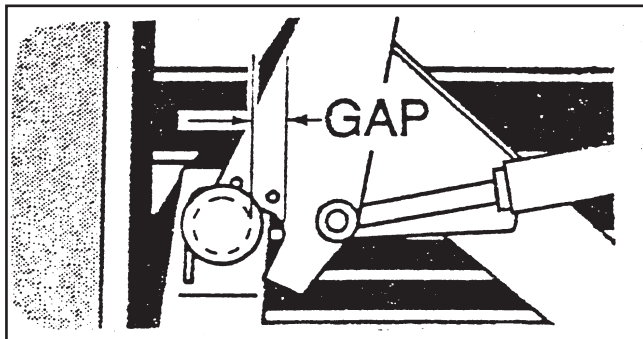
3. Install hose or valve kit to tractor and loader. Refer to assembly manual provided for installation instructions.
4. Position tractor close enough so plumbing can be connected to tractor. Route hoses loosely to allow maximum reach. Using nylon straps reposition overhead hoist to loader boom arms near pivot point to side frames.
5. Operate loader control valve to extend lift cylinders until front yoke is resting on ground and side frame uprights will clear front tires. Shut off tractor engine and engage tractor brakes. Reroute loader hoses to inside of right mid mount bracket. Remove lock nut and washer from loader hinge and swing each hinge open.



INSTALLING LOADER TO MOUNTING BRACKETS (Continued)



6. Start tractor engine, release tractor brakes and slowly drive forward while operating lift control levers to retract lift cylinders. Position loader so hinges hook over mid mounting tubes. Use of overhead hoist will facilitate positioning loader into mid mounting tubes.



IMPORTANT: Position loader uprights so mid mounting tubes are tight against hinges until loader has finished rotating so loader front bumper tube does not hit lower flange of front mounting channel.

7. With tractor in neutral, retract lift cylinders, bringing side frame up so front yoke tube contacts upper flange of front mounting bracket channel. Move tractor ahead until front yoke tube engages in front mounting channel and upright hinges can clamp around mid mounting tube. Engage tractor brakes and shut off tractor engine.
8. Clamp hinges to mid mounting tubes with 3/4 flat washers and 3/4 flex-lock nuts (supplied with loader).

NOTE: Only one washer per side is necessary for mounting. Second washer is for shipping purposes only.

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.

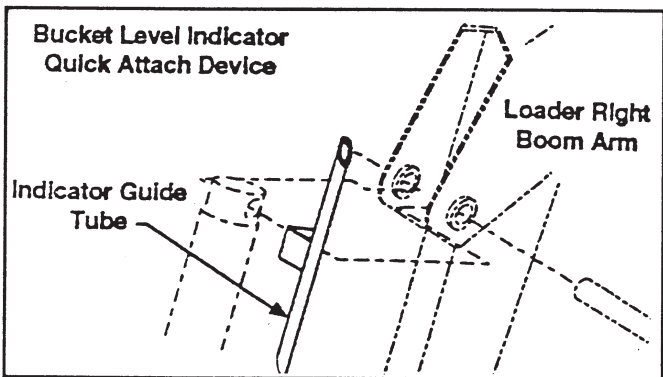
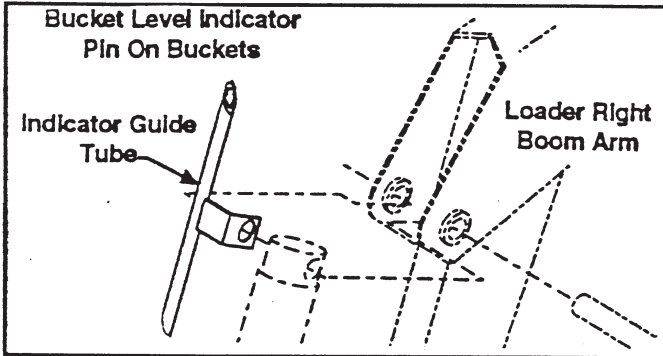
9. Adjust front wheel tread settings or steering stops, if necessary to prevent interference between tires and loader. Refer to tractor operator's manual for adjustment procedures.

INSTALLING BUCKET OR OPTIONAL ATTACHMENT

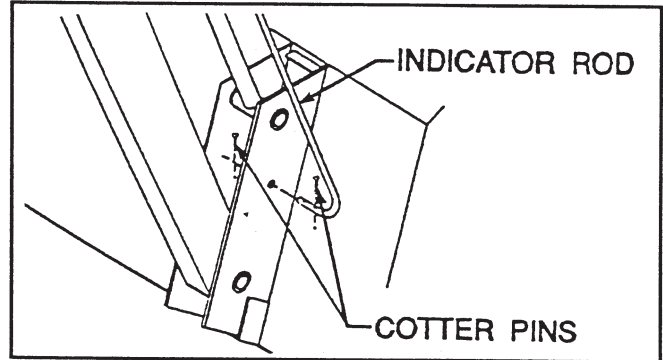
Refer to loader operator's manual for instructions on installing bucket or optional attachment.

INSTALLING BUCKET LEVEL INDICATOR

1. Attach indicator guide tube to cylinder pin. Guide tube is positioned to outside of boom for pin on attachments and inside of boom when quick attach device is used.









2. Slide bucket level indicator rod through guide tube. Attach other end of rod with 1/8 x 1 cotter pins and 3/8 flat washers. If pin on bucket is used, attach lower end of rod to bucket ear. If quick attach device is used, attach lower end of rod to quick attach device.



3. Locate tractor and loader on level surface. With bottom of bucket resting on surface, cut off excess rod flush with end of guide tube or paint exposed rod a contrasting color.

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 Grade	8.8				10.9			
										 				 			
Cap Screw	TORQUE				TORQUE				Cap Screw	TORQUE				TORQUE			
Size	FT-LBS		Nm		FT-LBS		Nm		Size	FT-LBS		Nm		FT-LBS		Nm	
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	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	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									
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									

NOTE: 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.

INSTALLATION INSTRUCTIONS