Keep With Operator's Manual

LOADER MOUNTING KIT
2408TL LOADER
KUBOTA TRACTORS

MODEL	2WD	FWA	ROPS	CAB
L2800	X	X	X	
L3400	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-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 front mounting bracket installation (1), 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 must also be removed

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

PREPARING TRACTOR

Shut off engine, engage brakes, and remove key during installation. If tractor is equipped with front weights, remove weights. It is necessary to remove weight bracket.

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.

INSTALLING LOADER ONTO TRACTOR AND MOUNTING BRACKETS (Figure 1)

NOTE: *Leave all attaching hardware loose until mounting brackets are completely assembled to facilitate assembly and proper alignment. Tighten all hardware to torques specified in general torque specifications table.*

NOTE: *Support mid mounting brackets (1 & 2) when removing from shipping materials.*

1. Fasten axle mount brackets (3) to underside of tractor rear axle using 14mm x 30mm cap screws (5) and 9/16” lock washers (9). Fasten axle mount brackets (3) to ROPS support bracket using 5/8 x 1-1/2” cap screws (6) and lock nuts (10).

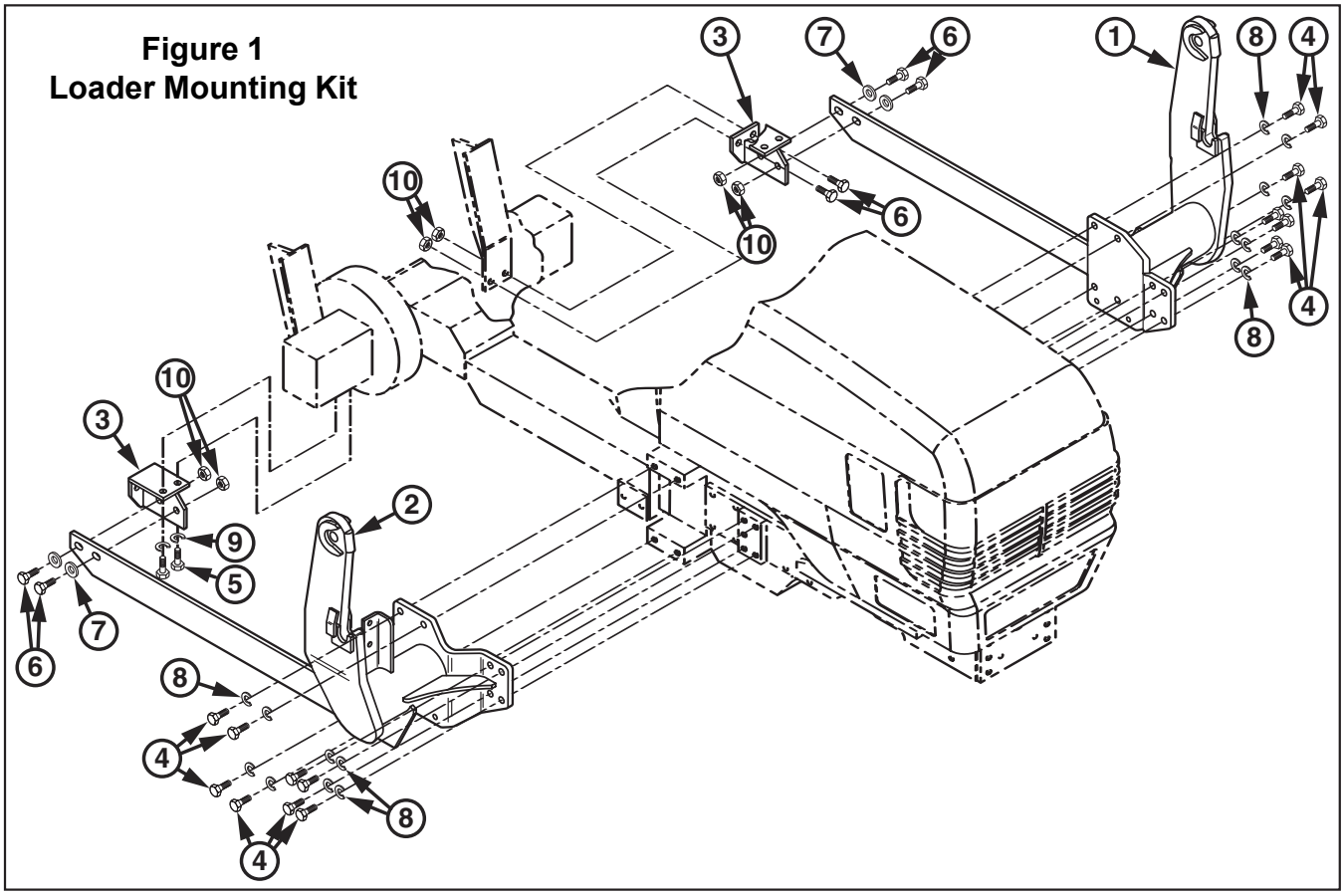
2. Raise left mid mounting bracket (1) with overhead hoist. Fasten left mid mounting bracket (1) to left side of tractor casting and frame using 16mm x 45mm cap screws (4) and 5/8” lock washers (8).

3. Raise right mid mounting bracket (2) with overhead hoist. Fasten right mid mounting bracket (2) to right side of tractor casting and frame using 16mm x 45mm cap screws (4) and 5/8” lock washers (8).

4. Fasten rear reinforcement rails of mid mounting brackets (1 & 2) to axle mount brackets (3) using 5/8 x 1 1/2” cap screws (6), 5/8” flat washers (7) and 5/8” lock nuts (10).

NOTE: *Tighten and torque hardware to specification found in torque char.*

Figure 1
Loader Mounting Kit



PARTS LIST – MOUNTING KIT

Item	Part No.	Description	Qty.
1	52545	BRACKET, Mid Mounting, Left	1
2	52544	BRACKET, Mid Mounting, Right	1
3	52552	BRACKET, Axle Mount	2
4	42672-66	SCREW, Cap, 16mm-1.50 x 45mm	16
5	42672-32	SCREW, Cap, 14mm-1.50 x 30mm	4
6	41838-29	SCREW, Cap, 5/8-11 x 1.50”	8
7	42502-12	WASHER, Flat, 5/8"	4
8	41837-7	WASHER, Lock, 5/8"	16
9	41837-6	WASHER, Lock, 9/16"	4
10	41840-7	NUT, Lock, 5/8-11	8

MOUNTING LOADER (Figures 2, 3, 4, 5, 6, 7 & 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 loader, an overhead hoist must be used for initial mounting. Parking stands are not operational without bucket or heavy attachment mounted. (Bale spear or pallet fork alone do not provide enough weight.)*

1. Loop chain or sling under each tilt cylinder, around loader outer knee plate and hook to each outer knee plate (see figure 2). Put slight tension on overhead hoist to prevent loader from tipping.
2. Temporarily remove linch pins (B) and hitch pins (A) (see figure 2) and keep with loader for securing loader uprights to mid mounting brackets later.
3. Remove 3/8" lock nuts (E) and flat washers (D) which fasten loader uprights to pallet and can be found inside uprights near top end. Remove 3/8" lock nuts (E) which fasten shipping angle brackets (G) to pallet. Remove 5/16" lock nuts (H) from U-bolts (J) to remove shipping angle brackets (G) from loader. Discard shipping brackets and hardware. Raise loader off pallet and remove pallet with bucket (see figure 3a).

   WARNING: *Loader uprights may rotate downward when loader is lifted from pallet.*
4. Lower loader from vertical shipping position to horizontal, positioning scraps of cardboard on floor under loader to protect loader paint (see figure 3b).

Figure 2
Removing Loader From Shipping Pallet

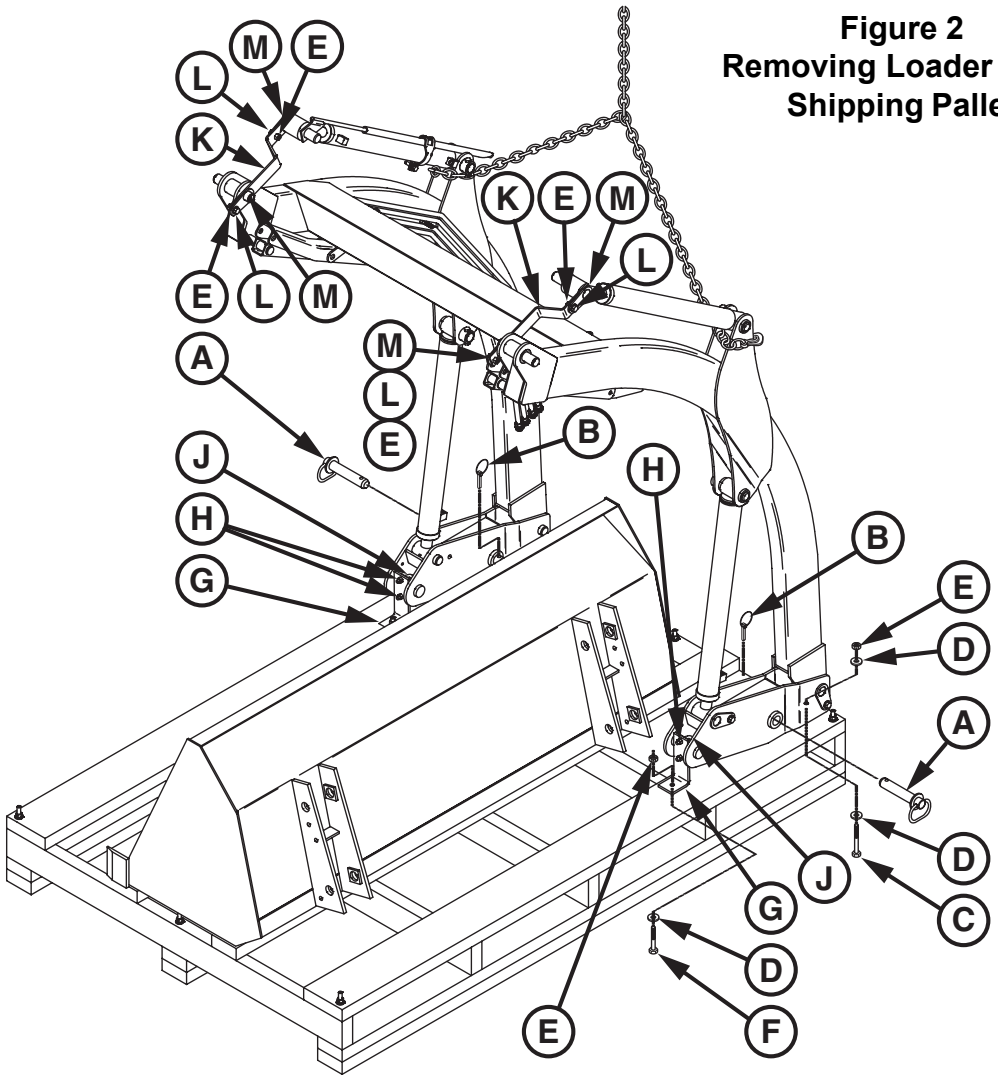


Figure 3a
Remove Bucket and Pallet

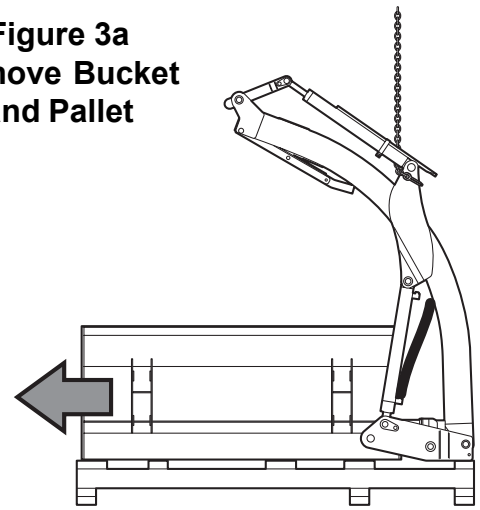
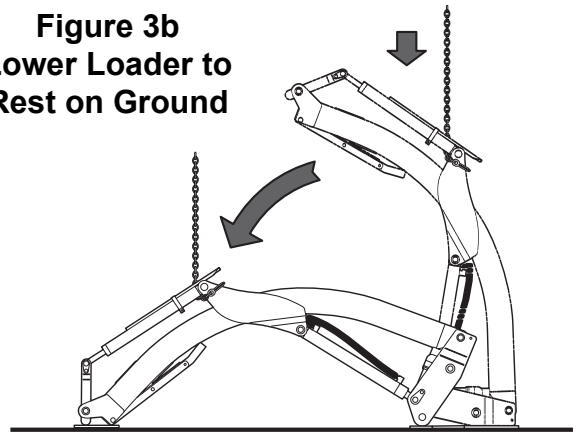


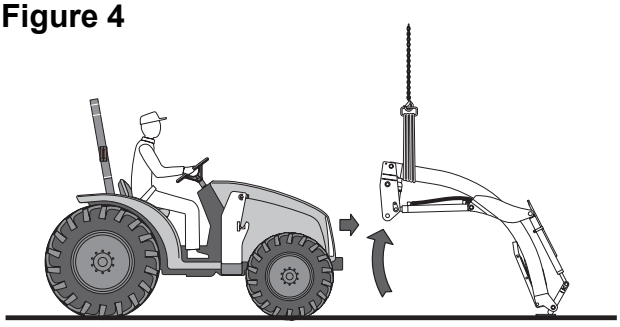
Figure 3b
Lower Loader to Rest on Ground



5. Install hydraulic plumbing for loader to tractor using either kit for mid-mount valve or hose kit for rear or mid remotes.

6. Secure a hoist strap around loader upper boom arms similar to figure 4. Slowly raise loader with overhead hoist until loader upright will clear tires (see figure 4).

Figure 4

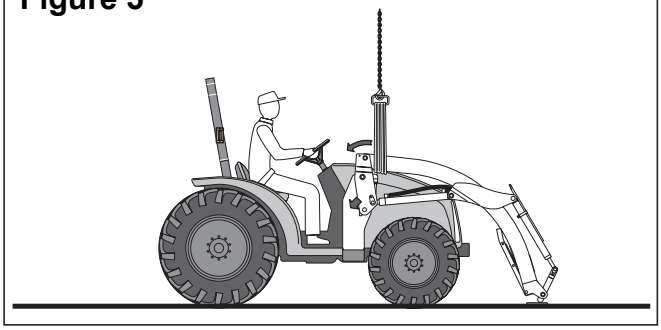


7. Drive tractor into loader until uprights of loader mounting brackets are within 12" or 18" of loader uprights. Shut off engine. Attach lift cylinder function hoses (color coded green and yellow) to corresponding tractor or valve couplers.

NOTE: *It is important to attach lift cylinder hoses (coded with yellow and green bands) for loader to function properly. Do not connect boom oil line hoses for tilt cylinder control at this time. Connect these after shipping brackets are removed from attachment pin hubs in instruction 12).*

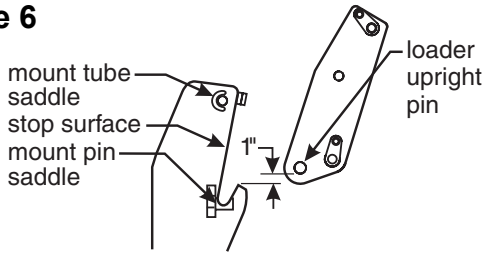
8. Start tractor engine. Retract lift cylinders fully and continue to activate control lever for approximately 10 seconds. Cycle cylinders several times to remove air. Extend lift cylinders four to five inches from the fully closed position to ensure loader upright pin will be first part of loader upright to make contact with stop surface of loader mounting brackets. Shut off engine and set brakes.

Figure 5



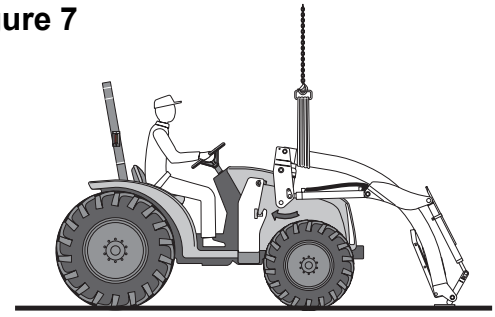
9. With overhead hoist, position loader upright pin to clear mount pin saddle by 1" (see figure 6). Start tractor engine and move tractor forward until both loader upright pins come to rest against flat vertical stop surface of both mounting brackets. Shut off engine and set brakes.

Figure 6



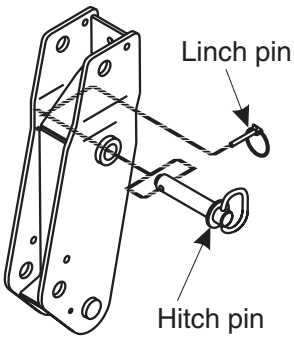
10. Lower loader with overhead hoist until both loader upright pins rest into mount pin saddles. Start tractor engine and retract lift cylinders, rotating loader uprights until uprights are fully seated into back of mount tube saddles (see figure 7).

Figure 7



11. Shut off tractor engine and set parking brakes. Insert two 1" x 4-7/8" pins (A) and linch pins (B), which were removed from loader uprights in instruction 2. Remove hoist chain or strap from loader boom arms.

Figure 8



NOTE: *In some cases a small amount of additional force may be required to insert pins. If necessary, use a drift and hammer made of non-sparking material (a shot-filled mallet is recommended) to seat loader uprights into mount tube saddles.*

12. Remove 3/8" shoulder bolts (L) and lock nuts (E) to temporarily remove anti-rotation pins (M) to remove shipping brackets (K) (see figure 3). Discard shipping brackets (K), retaining anti-rotation pins and hardware for later reuse when installing bucket or attachment.

13. Attach tilt cylinder function hoses (color coded blue and red) to corresponding tractor or valve couplers.

14. Start engine and fully extend and retract cylinders several times to purge air from hydraulic system. Add additional tractor hydraulic fluid as specified in tractor operator's manual to bring level of hydraulic fluid up to full.

15. Adjust front wheel tread setting or steering stops, if necessary to provide a minimum 3/4" 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 page 1, under preparing tractor. 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 attachments. See instructions below for installing level rod with right tilt cylinder pin.

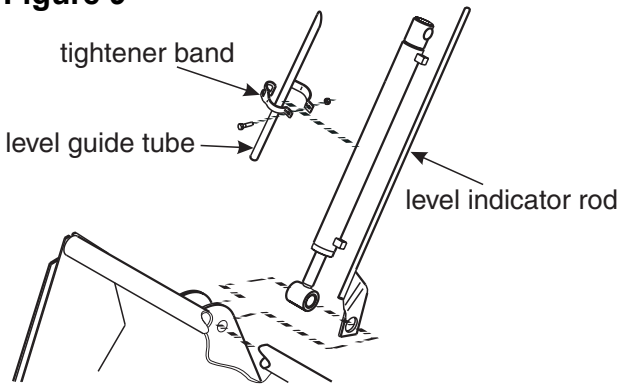
WARNING: *Always have a bucket or heavy attachment attached to loader when it is removed from tractor. Pallet fork, bale spear, or similar attachments are too light to safely counterbalance loader boom arms when loader is dismounted from tractor.*

INSTALLING LEVEL INDICATOR FOR BUCKET OR ATTACHMENT (Figure 9)

Insert level rod into level indicator tube on right tilt cylinder. Pin level rod to rod end of right tilt cylinder by sandwiching level rod pivot angle between left side of cylinder cross tube and inside of attachment ear.

To adjust level indicator properly, locate tractor and loader attachment on a firm level surface with attachment resting on level surface in operating position. Loosen clamp bolt that fastens level indicator tube to right tilt cylinder and position it so end of level rod is at top end of tube.

Figure 9

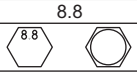
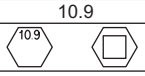


GENERAL TORQUE SPECIFICATIONS

USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

Standard American and Metric Cap Screws

AMERICAN STANDARD CAP SCREWS								
SAE Grade	5				8			
Typ. Head Markings								
Cap Screw	TORQUE				TORQUE			
Size	FT·LBS		N·m		FT·LBS		N·m	
Inches	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
1/4 - 20	6.25	7.25	8.5	10	8.25	9.5	11	13
1/4 - 28	8	9	11	12	10.5	12	14	16
5/16 - 18	14	15	19	20	18.5	20	25	27
5/16 - 24	17.5	19	23	26	23	25	31	34
3/8 - 16	26	28	35	38	35	37	47.5	50
3/8 - 24	31	34	42	46	41	45	55.5	61
7/16 - 14	41	45	55.5	61	55	60	74.5	81
7/16 - 20	51	55	69	74.5	68	75	92	102
1/2 - 13	65	72	88	97.5	86	96	116	130
1/2 - 20	76	84	103	114	102	112	138	152
9/16 - 12	95	105	129	142	127	140	172	190
9/16 - 18	111	123	150	167	148	164	200	222
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

METRIC CAP SCREWS								
Metric Class	8.8				10.9			
Typ. Head Markings								
Cap Screw	TORQUE				TORQUE			
Size	FT·LBS		N·m		FT·LBS		N·m	
Millimeters	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
M6 x 1.00	6	8	8	11	9	11	12	15
M8 x 1.25	16	20	21.5	27	23	27	31	36.5
M10 x 1.50	29	35	39	47	42	52	57	70
M12 x 1.75	52	62	70	84	75	91	102	123
M14 x 2.00	85	103	115	139	120	146	163	198
M16 x 2.50	130	158	176	214	176	216	238	293
M18 x 2.50	172	210	233	284	240	294	325	398
M20 x 2.50	247	301	335	408	343	426	465	577
M22 x 2.50	332	404	450	547	472	576	639	780
M24 x 3.00	423	517	573	700	599	732	812	992
M27 x 3.00	637	779	863	1055	898	1098	1217	1488
M30 x 3.00	872	1066	1181	1444	1224	1496	1658	2027

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.*

INSTALLATION INSTURCTIONS