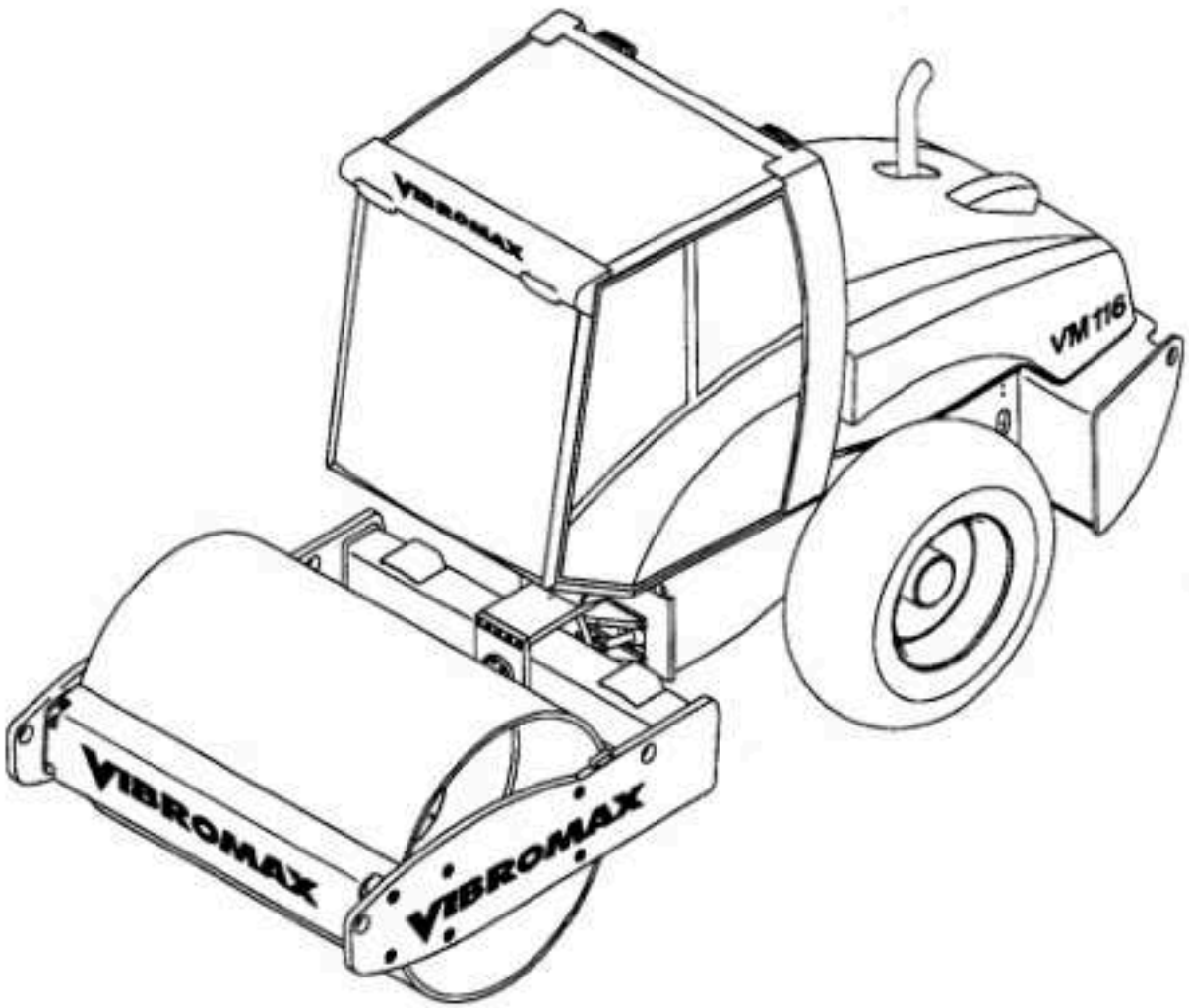
VIBROMAX

SINGLE DRUM ROLLER

SERVICE MANUAL SM96116

May 2004

Models VM 116 - 146 - 166 - 186



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STANDARD TORQUE DATA

Where no special torque data is specified, the following torque figures should be applied. Threads should be lubricated with engine oil or grease.

STANDARD TORQUE SPECIFICATIONS +/- 10%

	GRADE 8.8		GRADE 10.9		GRADE 12.9	
SIZE	ft-lbs	Nm	ft-lbs	Nm	ft-lbs	Nm
5mm	4	5.5	5.5	7.5	6.6	9
6mm	6.6	9	9.2	12.5	11	15
8mm	16.5	22.5	23	31.5	26.5	36
10mm	32	44	45	62	55	75
12mm	57	77.5	81	110	95	130
14mm	88	120	125	170	155	210
16mm	140	190	195	265	236	320
18mm	192	260	269	365	320	435
20mm	273	370	383	520	457	620
22mm	369	500	516	700	619	840
24mm	471	640	665	900	796	1080
27mm	702	950	996	1350	1195	1620
30mm	955	1300	1328	1800	1593	2160

NUTS FOR TUBES AND HOSES

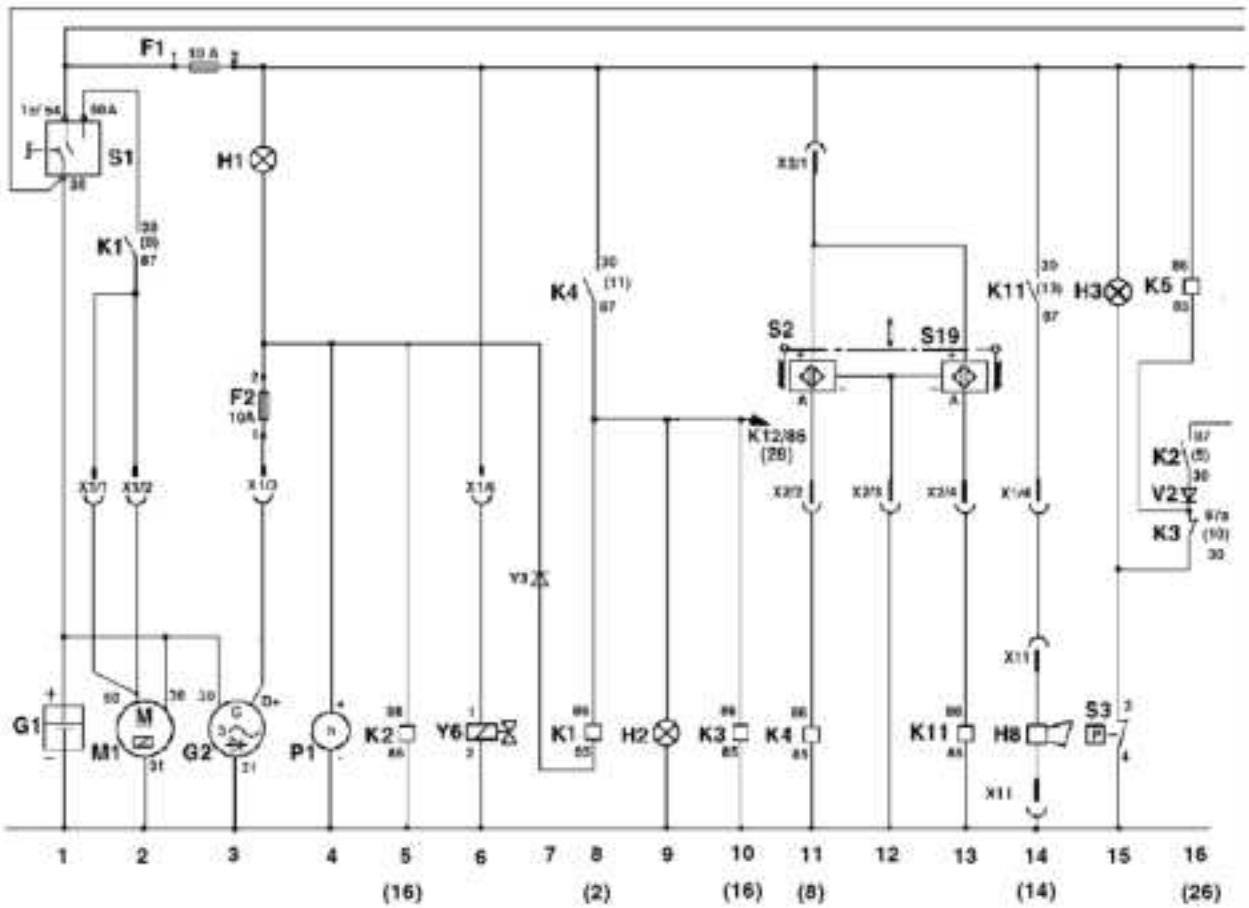
DIAMETER & PITCH	NEWTONS/METER	POUNDS/FOOT
16MM X 1.5	20	14.5
18MM X 1.5	35	26
20MMX1.45	45	33.2
24MM X 1.5	60	44

FITTINGS, CONNECTIONS AND PLUGS

DIAMETER & PITCH	NEWTONS/METER	POUNDS/FOOT
10MM X 1	20	14.5
12MM X 1.5	35	26
14MM X 1.5	45	33.2

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UNDERSTANDING ELECTRICAL SCHEMATICS



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DRUM REMOVAL

1. Disconnect, tag, and cap the hydraulic lines for the drum drive motor on the left side of the machine. Plug the motor ports.

2. Disconnect, tag, and cap the hydraulic lines for the vibration motor on the right side of the machine. Plug the motor ports.

3. Block and support the front frame of the machine.

4. Remove the drive motor adapter to frame bolts on the left side of the machine.

5. Remove the front and rear buffer brackets on the right side of the machine.

6. Lift the front frame and roll the drum out of the front frame (on the VM166, 146 the front scraper can be removed and the drum rolled out without lifting the frame).
   VM116 Smooth drum = 9,372 lbs (4250 kg) Padfoot drum = 10,848 lbs (4920 kg)
   VM146 Smooth drum = 11,356 lbs (5250 kg) Padfoot drum = 13.120 lbs (5950 kg)
   VM186 Smooth drum = 14,112 lbs (6400 kg) Padfoot drum = 14,333 lbs (6500 kg)

DRUM INSTALLATION

1. Roll the drum into position in the machine's front frame. The drum must be positioned for alignment of the drive motor bracket to the left side frame bolt holes.

2. Install the bolts in the front and rear buffer brackets on the right side of the machine. This will allow the machine frame to be lowered or raised as needed to complete alignment of the drive motor bracket on the left side of the machine.

3. Tighten and torque the motor bracket and buffer bracket bolts to 313 ft. lbs (425 Nm).

4. Install the hydraulic hoses on both the vibration and drive motors. **NOTE: Fill all motor ports with clean hydraulic oil prior to hose installation.**

5. Start the machine engine and allow the hydraulic systems to develop charge pressure. Allow the engine to run at low idle for several minutes without loading to fill and flush the system.

6. On machines which have a brake in the drum drive it may be necessary to bleed the brake system at the gearbox brake port.

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