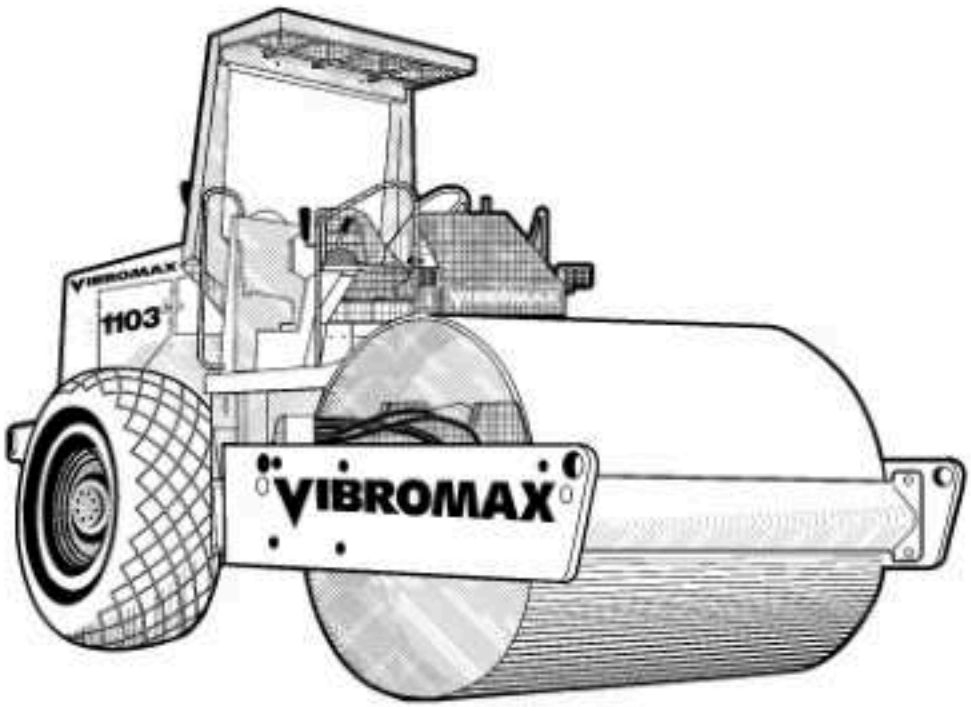
VIBROMAX

1103 SINGLE DRUM ROLLER

SERVICE MANUAL SM90001

July 1998



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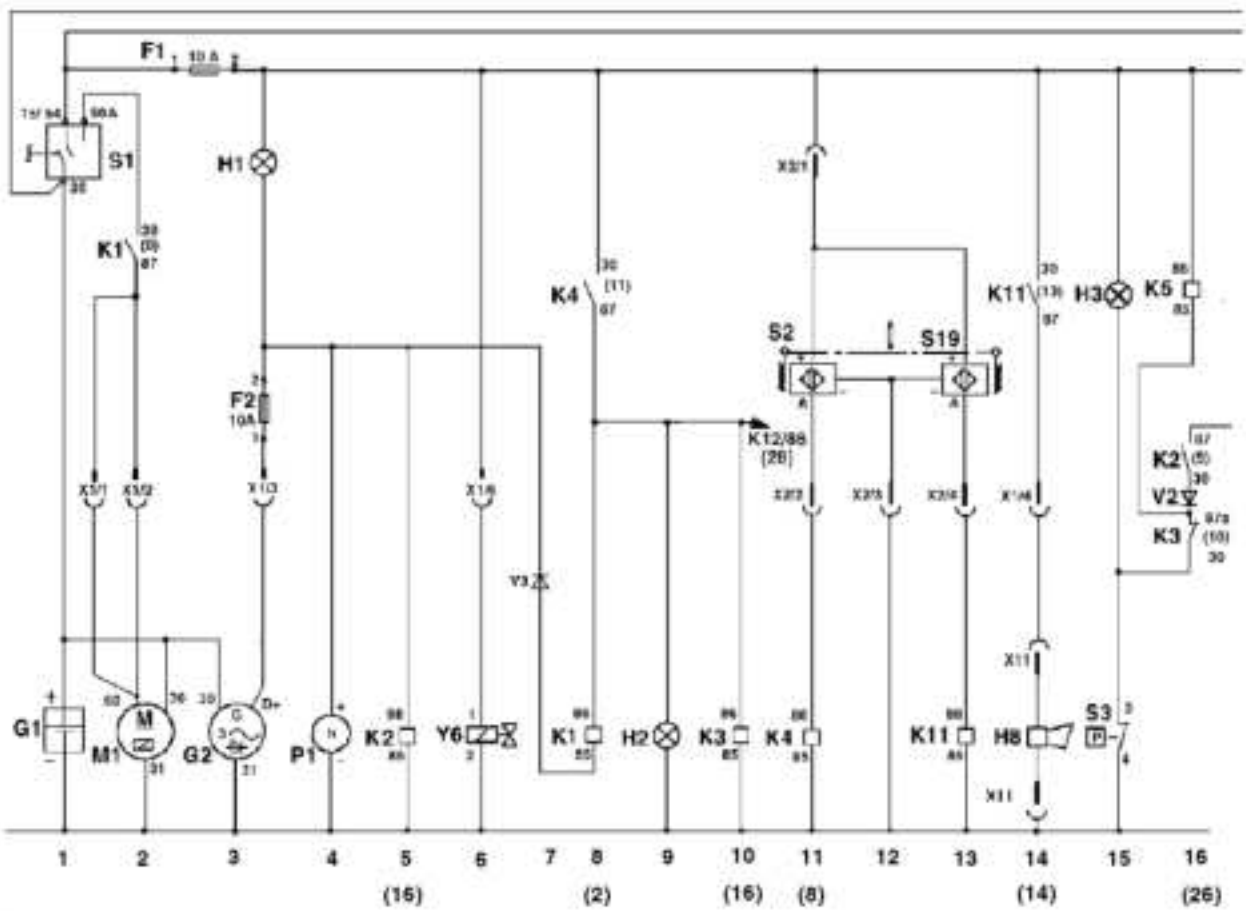
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FLUID SPECIFICATIONS

MACHINE PART	CAPACITY USA (metric)	SPECIFICATIONS
Fuel tank	74 gal (280 l)	see diesel fuel
Engine crankcase	15 qts(14.2 l)	engine oil API classification API-CD MIL-L-2104C multigrade engine oil (see oil chart) single grade engine oil (see oil chart)
Hydraulic system Reservoir only	29.1 gal (110 l) 18.5 gal (70 l)	cold weather HLP 46 DIN 51524/2 hot weather HLP 68 DIN 51524/2 Mobil DTE 25,26 Shell Tellus OL 46,68 Amoco Rykon HD 46,68 Texaco Rando HD 46,68
Vibration system	12.7 qts. (12 l)	CLP DIN 51517/3 Mobil Gear 629 Shell Omala 150 Texaco Meropa 150
Battery	as required	Distilled water
Grease	as required	KP3K DIN 51502 Mobil Oil - Mobilux 3 Shell Oil - Alvania 3 Texaco Oil - Starplex 3
Engine coolant	20 qts (19 l)	50% ethylene glycol and 50% water
Tire ballast	see chart	Calcium Chloride (77%$CaCl^2$)
Intermediate gear standard duty heavy duty Axle gear standard duty heavy duty Planetary gear standard duty heavy duty	 1.1 qts (1 ltr) 1.6 qts (1.5 ltr) 5.3 qts (5 ltr) 14.8 qts (14 ltr) 2.2 qts (2 ltr) 1.9 qts (1.8 ltr)	SAE 90 API GL-5 gear lubricant

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UNDERSTANDING ELECTRICAL SCHEMATICS



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REAR AXLE INSTALLATION

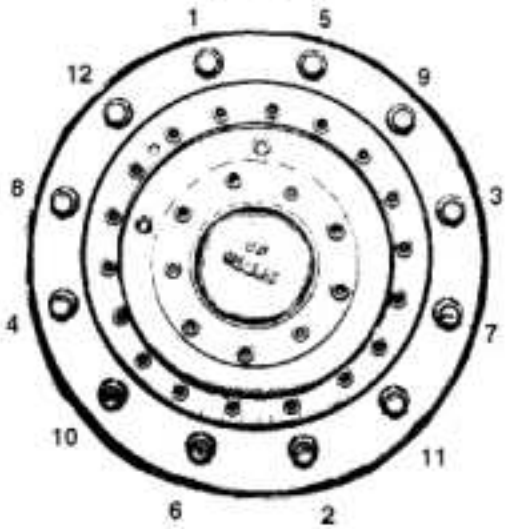
1. Position the axle under the machine frame rails. Install and tighten the axle bolts to 295 ft lbs. (400 Nm.).

2. Install both wheels with snug wheel lug nuts.

3. Remove the jack support stands from under the machine and allow the machine to sit on the ground.

4. Tighten and torque the wheel nuts to 288 ft lbs. (390 Nm.).
   NOTE: Re-tighten the wheel nuts every 8 hours until nut torque stabilizes.

Wheel torquing sequence



5. Reconnect the hydraulic lines to the axle drive motor. Use tie straps to group the hoses.
   NOTE: Be sure to fill the hydraulic motor case with oil!

6. Reconnect the electrical plug on the two speed valve.

7. Install the brake lever into the brake cylinder yoke and install the pin. Secure the pin with a new split pin.

8. Adjust the brake using the setting screw. The proper setting is measured between the cylinder end cap and the end of the cylinder rod. This measurement should be 1.0 inch (25.4 mm).

9. Refill the hydraulic reservoir with 18.5 gallons (70 liters) of filtered hydraulic fluid.

10. Fill the planetary drives with SAE 90 API GL-5 oil until it flows from the filler plug hole in the planetary drive hub. Be certain that the drain plug in the hub is located at the bottom of rotation during filling.

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