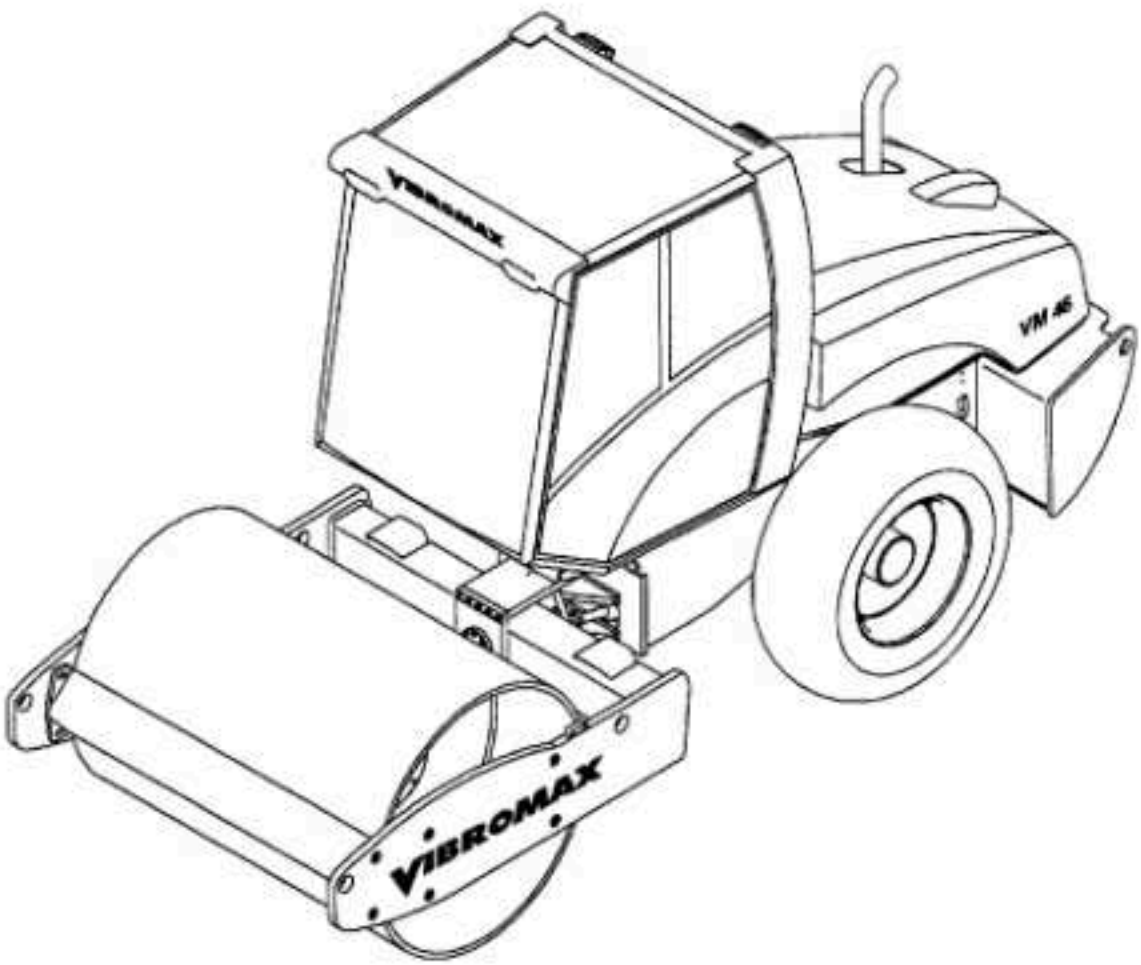
VIBROMAX

SINGLE DRUM ROLLER

SERVICE MANUAL SM86046

August 2004

Model VM 46



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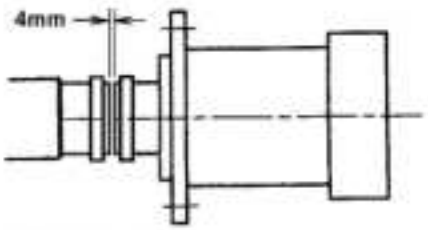
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19. Install the completed drive bearing housing assembly onto the drum using a new O-ring (#9). Care must be taken not to damage the exciter shaft and bearings. Install the 16mm capscrews using Loctite 271 and torque to 140 ft. lbs (190 Nm).

20. Check the vibration shaft for the proper end play (1.8mm to 3.8mm). With the drive coupling halves installed check for the 4mm shaft to motor clearance as shown below:



VIB. shaft to VIB. motor clearance

21. Install a new vibration motor o-ring and mount the vibration motor using capscrew and washer.

22. Reinstall the drum into the machine.

DRUM DRIVE MOTOR REPAIRS

This manual is not intended to supersede or replace Mannesmann Rexroth repair instructions for the model A10VM series drum drive motor. We strongly recommend that those wanting to rebuild the drive motor, obtain a copy of the manufacturer's repair manual from their local Rexroth distributor.

NOTE: During the machine warranty period, the Mannesmann Rexroth drum drive motor must be serviced by a certified repair center to receive warranty claim reimbursement.

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VIBRATION SYSTEM SCHEMATICS

The vibration circuit consists of a pump and control valve providing oil to a vibration motor. The pump is a fixed displacement gear design with single direction flow. The motor is a fixed displacement axial piston style. The Model VM46 has only one vibration frequency of 32Hz (1920 vpm). When the vibration system is not in use the oil from the gear pump is ported through the vibration control valve to the cooler and back to the hydraulic reservoir. When vibration is selected by the switch on the dash and activated with the forward/reverse lever button solenoid Y2 on the vibration control valve is energized. With solenoid Y2 energized flow from the vibration pump is directed to the vibration motor causing the exciter shaft to rotate. The return oil from the vibration motor is ported back into the vibration control valve and back to tank through the cooler. The vibration system is protected by a 180 bar (2560 psi) relief valve designed into the vibration control valve.

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JOINT DISASSEMBLY

NOTE: The following procedure is for a Model VM66.

1. Support the rear end of the machine's rear frame with the proper jack stands.
2. Support the front part of the machine's rear frame with the proper jack stands.
3. Support the machine's front roller frame with the proper jack stands.
4. Remove the roller drum. Remember to tag and cap all hydraulic lines.
5. Remove the hose clamps and hoses from the front drum frame.
6. Remove the split pins (#10) and washers (#9) from the two steering cylinder pivot pins.
7. Remove the cylinder pivot pins (#7).
8. Sling the front roller frame in preparation for removal. The roller frame weight is 1225 lbs (555 Kg).
9. Remove the 12 mm capscrews (#21) from the bearing cover (#22).
10. Remove the bearing cover (#22), spring washer (#23), and the thrust collar (#24).
11. Install a 12mm lifting eyebolt in the tapped hole provided in the link plate (#28) and support the plate for removal.
12. Remove the ten 16mm capscrews (#25) which secure the plate (#28) to the steering link (#31) and remove the link plate (#28).
13. Remove bearing cup (#26) from the link plate (#28) with an internal bearing puller.
14. Remove the machine's front roller frame from the steering link (#31).
15. Remove the sealing rings (#14) and pull the bearing cones (#27) from the roller frame lugs by use of an external bearing puller.
16. Remove capscrew (#30) from the steering link and install a 12mm lifting eyebolt and support the link for removal. Link weight is 205 lbs (93Kg).
17. Remove the lower bearing cover (#19), spring washer (#18), and thrust collar (#17) by removing capscrews (#20).
18. Remove the bearing cover (#3) by removing capscrews (#1).
19. Install the service bushing (see special tools) into the upper steering link bearing bore.
20. Install the bearing cover (#3) over the special bushing using two M12x120 capscrews.
21. Tighten the capscrews alternately until the bearing cover is drawn down to the steering link. This will force the link upward and expose the lower bearing cone (#15).

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