Instruction for changing bearings
WE/FLE 220

471 1597-37

NOTICE TO SERVICE PERSONNEL

INSTALLATION

Improper installation of Wascomat laundry and wet cleaning equipment can result in personal injury and severe damage to the machine.

REFER INSTALLATION TO QUALIFIED PERSONNEL!

RISK OF ELECTRIC SHOCK

The equipment utilizes high Voltages. Disconnect electric power before servicing.
The use of proper service tools and techniques, and the use of proper repair procedures, is essential to the safety of service personnel and equipment users.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

RISK OF PERSONAL INJURY

This equipment contains moving parts, and some components that may have sharp edges. Improper or careless service procedures may result in serious injury to service personnel.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

ABOUT THIS MANUAL

This manual is intended to provide service guidance to qualified service personnel. Wascomat and its authorized dealers make no determination regarding the qualification of individuals requesting this service manual. The service provider assumes all risks inherent to the servicing of this equipment and any risks that arise as result of the lack of knowledge or ability of any person servicing this equipment.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

NOTE:

Improper installation or servicing of Wascomat equipment will void the manufacturer's warranty!

Data

Drum volume	220 litres.
Bearing type	Ball bearing facing drive side Roller bearing towards drum side
Grease	SKF 65

Description

The inner drum is journalled to the outer drum by two robust bearings in a bearing housing which is bolted to the rear plate. The bearing unit supports the drum without any support being needed at the front. Shaft seals of the V-type, as well as O-rings, seal against leakage.

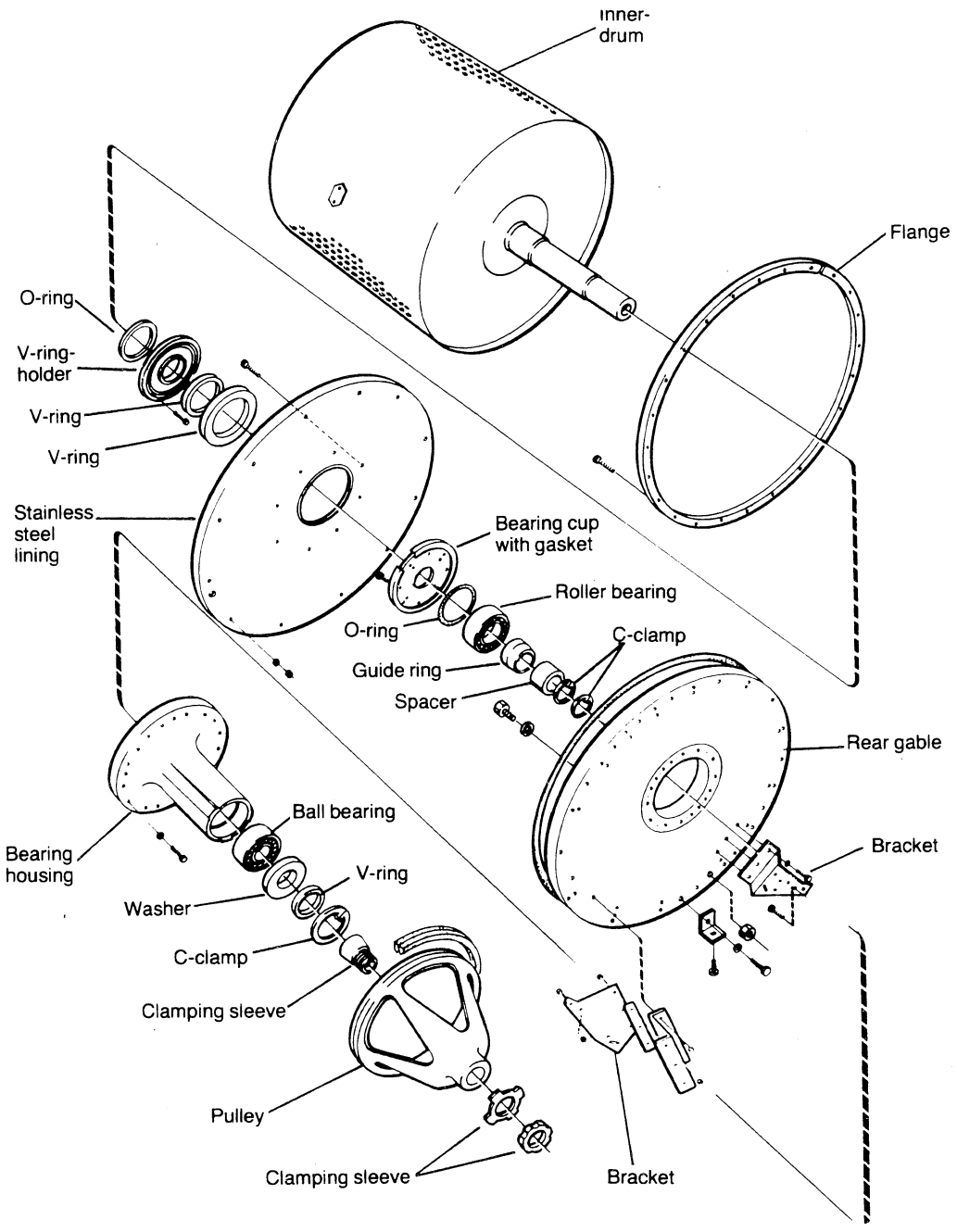
The space between the bearing is packed with grease during assembly. No topping is required.

The inner drum shaft is continuous, and the V-belt pulley is attached to the protruding journal by an adapter sleeve.

The outer drum end plate consists of two parts, the inner and outer and plates which are botled to the bearing housing with through bolts. NOTE! The inner and outer end plates must not be taken apart when the bearings are replaced.

The outer drum and rear plate are held together by 3 straps.

The outer drum is connected to its resilient suspension by four supports, bolted to the end plates. It is important that these supports are not loosened from the rear plate during repairs.



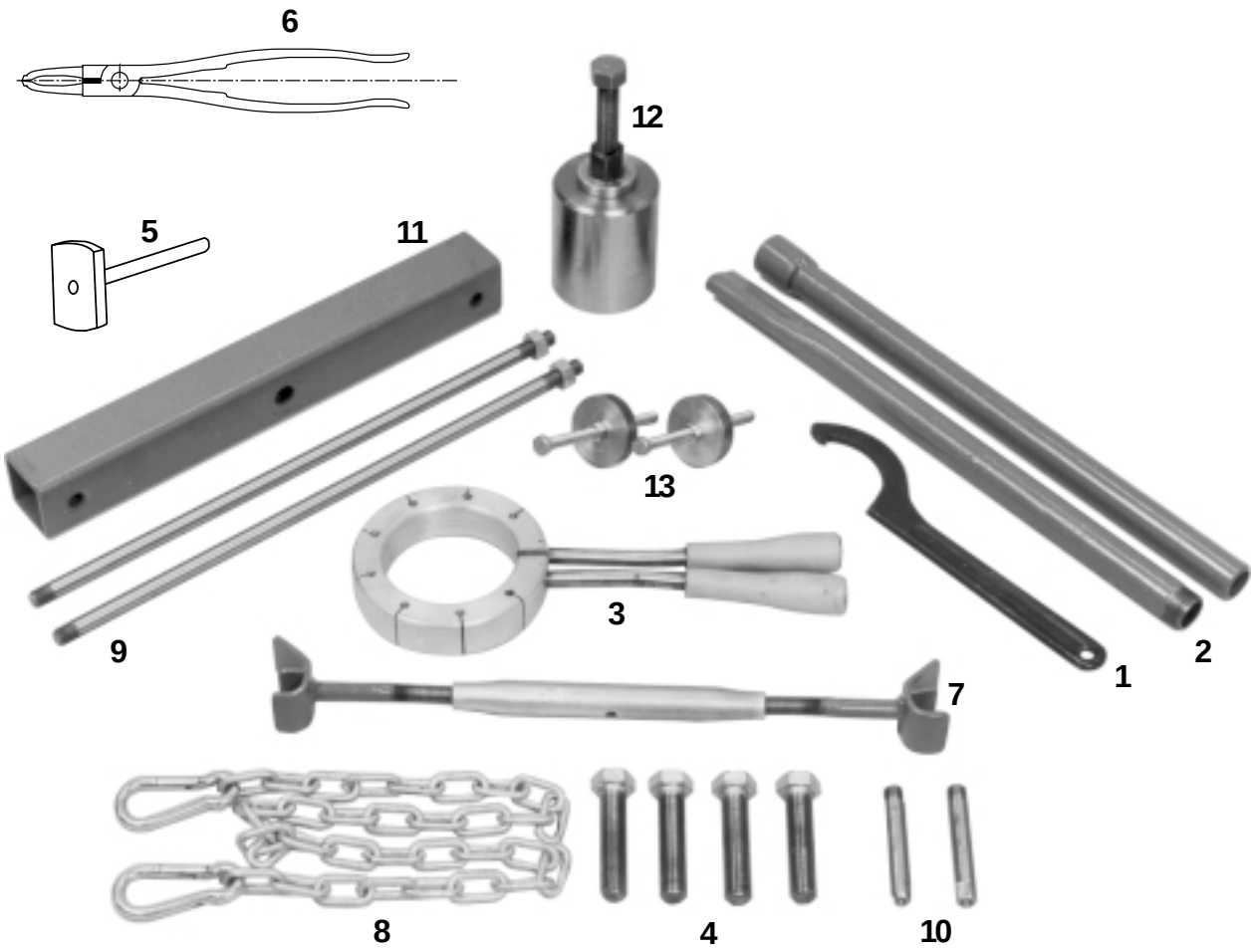
220 litres drum with bearings

Repair instructions

Bearing replacement, 220 l machine

Special tools, complete kit: Part No. 471 6683-82 comprise the following:

Description	Description
1. Peg spanner	8. Locking chain
2. Extension for peg spanner	9. Yoke rod guide bar
3. Inner ring heater	10. Guide journal
4. Pressure screw	11. Yoke
5. Bearing dismantling tool	12. Counterforce, inner drum
6. Cirlip pliers	13. Inner drum support
7. Turnbuckle	14. Assembly tool, rear wall

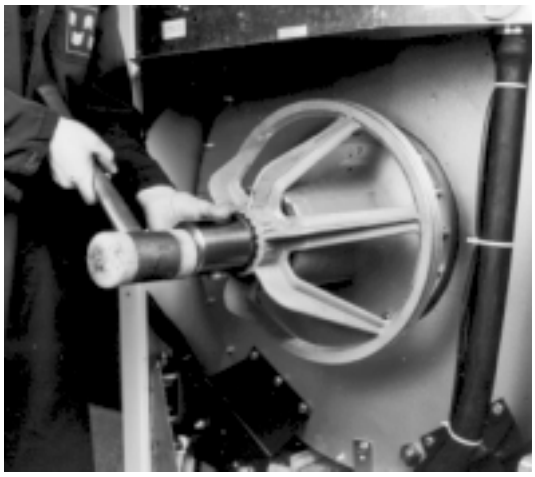


1. Undo and remove all sevices connections for electricy, water, steam and drainage.

2. Remove the rear plate and the drive belts betwwen the drum and the spin motor

3. Dismantling the drum pulley:
   - Lock the pulley with the locking chain (8).
   - Bend up the tab on the lock washer.
   - Undo the nut two turns with the peg spanner (1). Use the extension for the pegs spanner (2) to provide sufficient leverage.

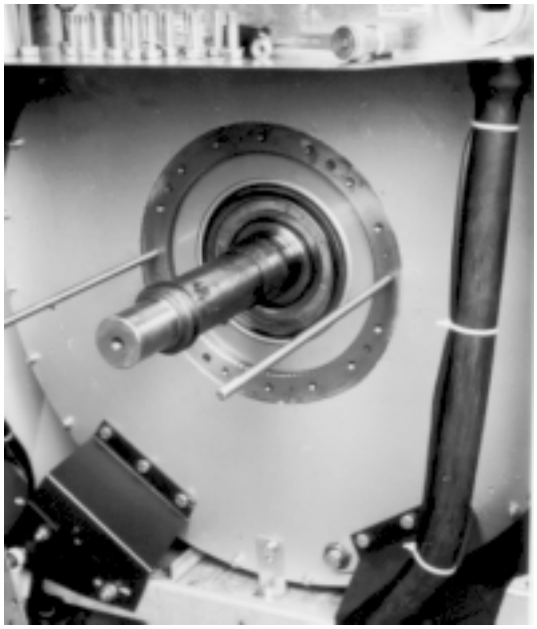
   - Hold the sleeve for the inner drum´s counterforce (12) against the clamping sleeve´s nut and knock the clamping sleeve inwards.
   - Pull off the pulley with the nut, washer and clamping sleeve.



4. Screw in the two supports (13) for the inner drum (M8x100). The screw shall be screwed in so that they reach the outer drum to provide sufficient support. Lock the screws with the nut. Fit the turnbuckle (7) in the opening so that the inner drum is locked.

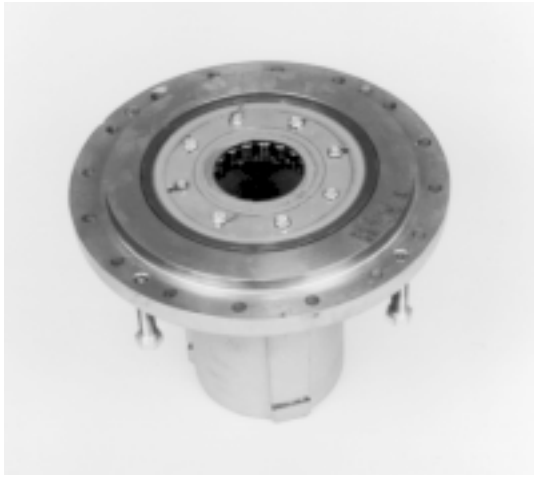
5. Remove all the screws which sit in the bearing housing´s flange and the fit the four pressure screws (4) (M16 x 70) in the flange´s four withdrawal holes. Fit the two yoke bars (9) and the yoke (11) with the screw, nut and washer from the inner drum counterforce tool (12). Pull off the bearing housing with the four pressure screws by successive tightening so that the pressure is even.

6. Lift out the bearing housing carefully. Check that there are no shims left on the shatf or the bearing housing. Note that the shims are to be re-used when the bearing housing is refitted. The number of shims is stamped on the end of the shaft.

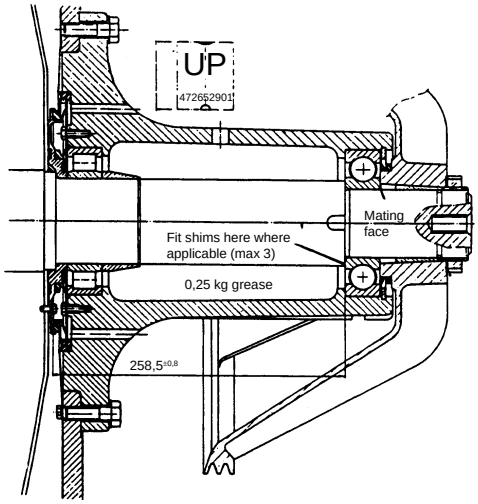


7. Removing the bearing race from the shaft.
Remove the circlip fromthe groove. Pull off the tapered sleeve. Heat the inner ring heater (3) to approximately 150°C on a hotplate. Place the inner ring heater (3) around the bearing race and clamp the handle together. After about 10 seconds, sufficient will have been transferred to the bearing race to allow it to be ramoved from the shaft. Change the V-ring seals. Replace the V-ring holder if necessary (see section 9). Fit a new bearing race in the reverse order.
CAUTION! Do not damage the bearing race.

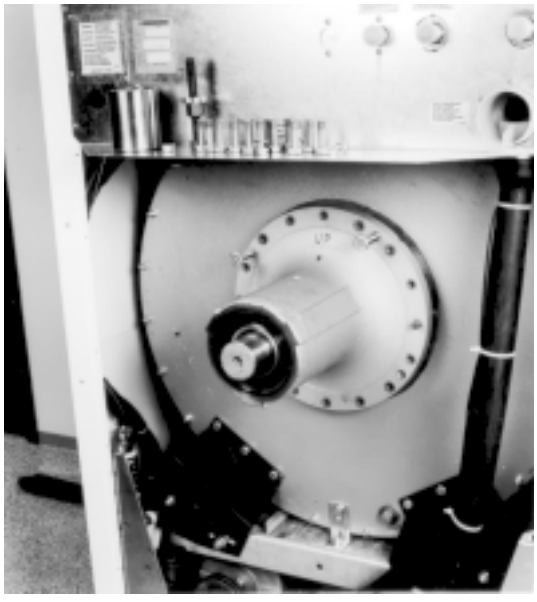
8. Remove the bearing housing´s bearing cover and seal. Place the bearing housing with the flange downwards on two pieces of wood so that the roller bearing can pass between the pieces of wood.. Place the bearing dismantling tool (5) on the bearing housing´s outer ring and knock it out of the bearing housing.Remove the circlip for the roller bearing and remove the cover washer. Turn the bearing housing over and stand it with the flange upwards on a few spacers so the roller bearing can pass through. Place the dismantling tool (5) on the bearing and knock it out of the bearing housing. Fit new bearings in the reverse order.



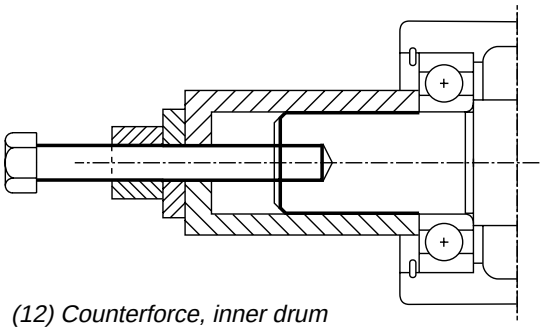
9. Any shims fitted to shaft or in the bearing housing when dismantling are fitted to the shaft. If the V-ring holder is replaced, the distance between the V-ring holder and the rear bearing´s mating face must be measured and adjusted to 258,5±0,8 mm with shims. See the figure.
NOTE! The screw for the V-ring holder must be sealed with silicon paste and must not be tightened so that the it bottoms. Spread bearing grace on the sealing lip of the V-rings.
Grease the roller bearings and other bearings and insert about 0,25 kg od grease in the bearing housing. Make sure taht the vent and drain holes are clear.



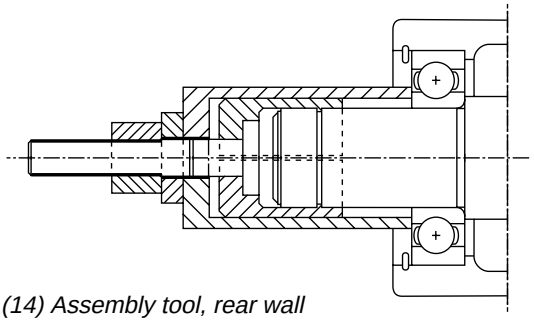
10. Fit the two guide journals (10) in the rear wall. Fit the bearing hosing. Lift the bearing housing´s falnge end to provide a staright axial movement so that the bearings is not damaged. Slide the bearing housing onto the two guide journals (10). NOTE! Make sure that the letters UP on the bearing housing face upwards.



11. Fit No. 12 or 14 according to the design of the shaft. Tool No. 12 is for shafts with a threaded hole. Tool No. 14 is for shafts with a groove. Fit the washers and the flange screws which must not be longer than 40 mm. Press the bearing houseing into position with the aid of the screws and tool No. 12 or 12. Pressure must be applied succesively around the housing with the tool. Undo both guide journals and place the two reamaining screws with washers in the holes that are left. The tightening torque during the final tightening shall be 8,25 kpm and shall be applied diametriacally.

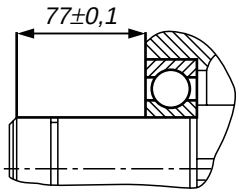


(12) Counterforce, inner drum



(14) Assembly tool, rear wall

12. Remove tool No.12 or 14 and check that the drum is correctly fitted in the bearing position by checking the tolerance of dimension 77 mm. Remove the turnbuckle (7) from the drumopening and remove the supports (13) from the inner drum. Remove any burrs from the inner drum where it was used as a support



13. Fit the belt pulley with V-ring, nut, washer and clamping sleeve on the shaft: Push in the belt pulley until there is metal-to-metal contact with the bearing´s inner ring. Prevent the belt pulley from rotating with the locking chain. The nut´s thread and sliding flank shall be lubricated with Molycote Paste 1000 and tightened with the peg spanner (1) and extension (2) with a toque od 40 kpm. Bend down a suitable tab into the nut´s recess. Remove the locking chain.

14. Fit the drive belts between the drum and the spin motor. Check the tension. Refit the rear piece in place and connect all services.