# Instructions for replacing bearings W/FL 160, W/FL 230, 1203 and 1803

471 1597-17

## 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!

- Fig. Tool kits have been developed to make bearing replacement easier.
- 1 If you already have tool kit 471 3406-00 for the W/FL 71, 73, 74, 121 etc., this will only need to be supplemented by two M16 full-thread puller rods and an M16 tap.



Pos.	No.	Art. No.	Description
		472 9902-29	Complete tool kit
1	1	471 3406-31	Puller
2	1	471 3406-29	Sleeve
3	1	471 3406-05	Ring
4	1	471 3406-06	Ring
5	2	471 4670-37	Puller rod
	4	438 6020-05	Nut
6	1	471 3406-01	Sleeve
7	1	471 3406-02	Sleeve
8	1	471 3406-07	Spacer
9	2	471 3406-33	Block
10	2	471 3406-35	Puller rod
11	1	438 6020-04	Тар









Fig. • Release and lift off panels complete with other components. 4

Remove the washers around the opening where the door is fitted.



Undo the two bolts in the straps over the outer drum. Fig. ٠



- Disconnect the drain valve from the outer drum and the earth cable in the frame.
- Fig. Undo the mounting bracket at the rear between outer drum and frame.
- Lift off the entire drum unit and lay it on its front. Use planks to prevent the front of the outer drum from being damaged.



Fig. • Mark the relative positions of rear gable and outer drum, and also (7) positions of securing straps.



- Fig. Remove securing straps around rear gable.

  If the drum unit out of outer drum and place from the drum and place
  - Lift drum unit out of outer drum and place front on planks.
  - Remove circlip at end of shaft (W/FL 160, 1203 only).



Fig. Pull the pulley off the shaft with a three-armed puller. Make sure that its arms get a good grip under the pulley (W/FL 160, 1203 only).







Fig. • Fit puller (1), block (9) and puller rods (5) and remove bearing housing. (12)



Fig. • Use the puller to remove the rear bearing. (13)





- Fig. Release locking ring for spacing sleeve and remove sleeve.
- (14)



Fig. Fit puller and puller rods (10) and remove inner bearing and rear gable from shaft.



Fig. • Break or grind bushing off shaft. Be careful not to damage the shaft.



- Heat up the new bushing to about 150°C on a hotplate or in an oven. Position it on the shaft. Make sure the bushing goes all the way home into its correct position.
- Fig. Install sealing rings in drum rear end. About the opening of the sealing rings, see bearing drawing.







- Fig. Carefully tap the sealing rings into place.
- <sup>(18)</sup> Grease the sealing rings with Amblygon grease.



- Fig. Put tool (2) onto the shaft and then the rear gable. Be careful not to
- (19) damage the sealing rings.



Fig. • Grease the front bearing and put it on the shaft. Tap it carefully home.

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Fig. • Grease the shaft and fit the spacing sleeve.

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- Fig. Fit the locking ring for the spacer sleeve. Check that the locking ring is
- aligned correctly in the groove.



Fig. • Install the bearing housing on the rear gable. Pay attention to the relative positions of bearing housing and rear gable as marked earlier.



Fig. • Put a small amount of Loctite type B on the threads. Tighten opposing bolts in turn.

Tightening torques: 8.8 kpm for the 160 and 1203 models, and 22 kpm for the 230 and 1803.



- Fill the bearing housing 1/3rd with grease.
- $\frac{\text{Fig.}}{(25)}$  Position the bearing on the shaft.





Fig. • Using the sleeve, tap the bearing carefully into its home position. <sup>(26)</sup>



Fig. • Fit the wedge in the groove (W/FL 160, 1203 only).



Fig. • Carefully tap the pulley into position (W/FL 160, 1203 only).

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Fig. Fit the circlip on the shaft. Check that it is positioned correctly in the groove. 29







- Install pulley complete with clamping sleeve etc on shaft. Tighten locking nut to a torque of 25 kpm. Lock the nut with the locking washer. (W/FL 230, 1803 only)
- Fit new seal around circumference of rear gable. Use contact adhesive.
- Fig. (30) Put inner and outer drum together. Pay attention to the markings made earlier.
  - Fit the securing straps. Tap them gently into the correct position.



Fig. • Position the drum unit in the frame. Check the locking pin at the front of the frame.



Fig. • Tighten the securing straps around the outer drum. Check the blocks.



- Put all other parts back in their proper places.
- Test the machine by running a program. Check that there are no leaks or abnormal noises.