

ECCENTRIC BEARINGS SERVICE

The eccentric shaft bearing utilizes an extreme pressure and temperature type grease for lubrication. There is no oil bath lubrication for Rammax eccentric shaft bearings.

Service Interval – The eccentric shaft bearing should be lubricated after 4 years or 1000 hours of operation.

FAULT SYMPTOMS

- Start-up of the eccentric shaft is slower at low temperatures.
- The machine requires a high amount of energy to accelerate the eccentric shaft via the vibration motor. The vibration is low and the engine is under heavy load.

SERVICING THE ECCENTRIC SHAFT BEARINGS



Safety precautions should be followed at all times when servicing this equipment. Consult operations manual for more safety information.



IMPORTANT: Before servicing machine, disconnect battery!

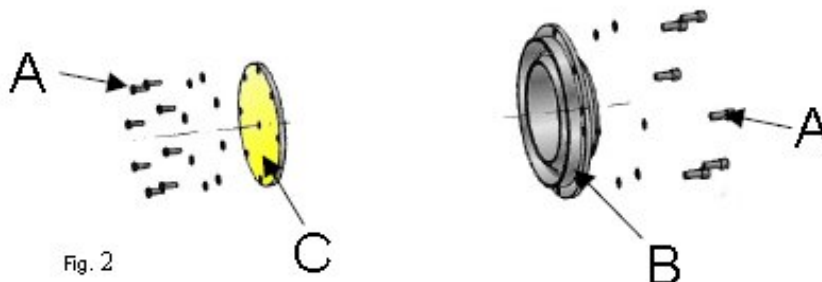


1. Remove the protective bar and the gear motor on the left-hand side of the roller.

NOTE: removing the hydraulic lines is not necessary. Carefully tie away the vibration motor.



2. Remove the screws (A) at the bearing cover (B) and seal cover.



3. After removing the fastening screws at the bearing cover, the cover must be completely removed from its seat using two Jack bolts (D), Jack Bolts = M12 - length 80mm

CAUTION: Eccentric shaft may come out with the bearing cover and is very heavy.

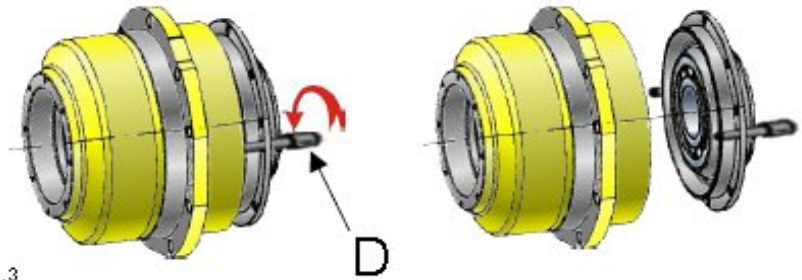


Fig. 3

4. After removing the bearing cover the eccentric shaft can be pulled out of the housing.

CAUTION: Eccentric shaft is very heavy.

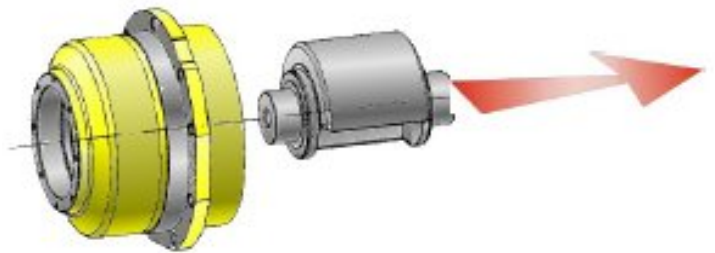
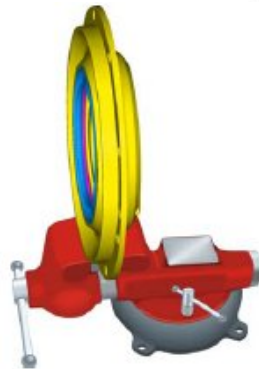


Fig. 4

5. The shaft end seals required at both ends of the shaft for sealing in the grease must be replaced. Remove the old seal.

NOTE: Fasten the bearing cover in a vice to secure the bearing cover for seal removal.



6. Press out the shaft end seal using a suitable pry tool.

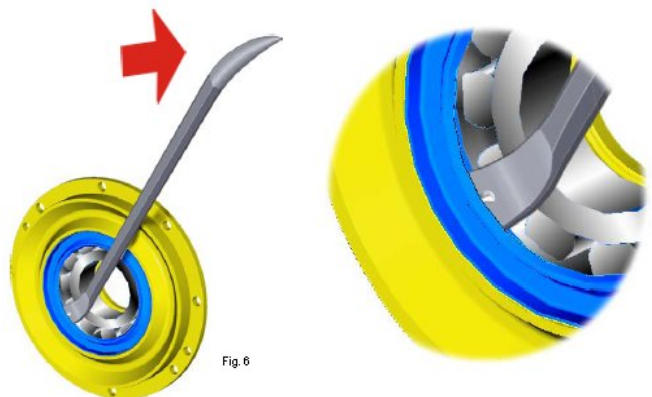


Fig. 6

- Remove the end seal from the exciter housing.

NOTE: The shaft end seal can be knocked out into the inside of the housing with a drift punch.

IMPORTANT: Remove all old grease residues using a solvent agent from the bearing rollers and completely dry and clean the entire bearing.

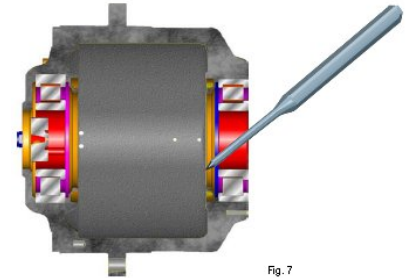
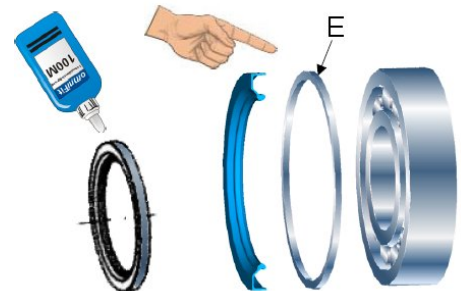


Fig. 7

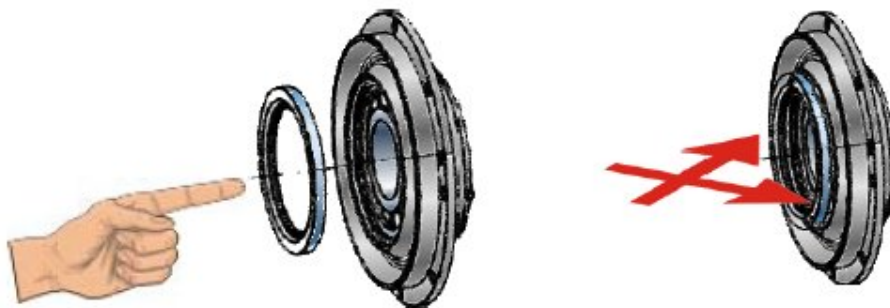


- Gluing in the new shaft seals. Both shaft end seals must be glued over the entire circumference with a medium strength thread lock.

IMPORTANT: Before gluing in the shaft end seal, install the distance ring (E).



- The shaft end seal must now be knocked in using a suitable tool in such a way that no damage is caused and the seal is installed squarely.



10. Before installing the eccentric shaft, both bearings must be greased. Use 100g Renolit H433-HD 88 bearing grease on both bearings. Locally sourced grease should be High Temp - High Pressure grease. Shell Darina EP Grease 2 –NLGI Grade 2.

NOTE: The bearing grease must be evenly spread in the intermediate spaces in the roller bearings and in the cavity of the shaft end seal. Do not over grease.

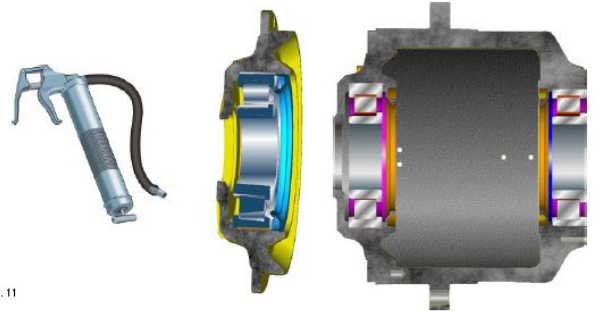
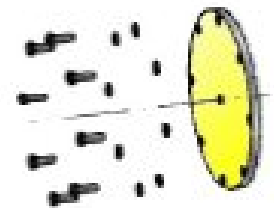


Fig. 11

11. Mounting the eccentric shaft – before installing, check the machined surface of the shaft ends to ensure they provide a smooth sealing surface for the shaft end seals.



12. Place the sealing lid on the exciter housing.

13. Insert the eccentric shaft – to insert the shaft properly 2 people are needed. With the aid of a tool the shaft can be guided into the bearing through the center hole in the sealing lid.

14. Mount the bearing cover, gear motor and the center plug on the sealing cover in reverse order.



Fig 13

NOTES:

- a) Clean the eccentric housing mount bolts that secure it to the main frame.
- b) Use the Jack bolts as an alignment tool for reinstalling bearing cover.

15. When installing bearing cover the eccentric weight has to be lifted, aligned and guided into the bearing as the cover is moved into place onto the two Jack bolts.

16. Check the eccentric housing mount bolts that secure it to the main frame.

NOTE: Re-torque to spec as needed.
Torque Specification (270 ft. lbs.)

