



**Rack Conveyor Dishmachine
Maintenance Instructions**

Pump Seal/Gasket Replacement

Jackson rack conveyor machines come equipped with powerful motors and pumps to ensure ware washing results. Occasionally, some of the parts on these components may need replacing to maintain optimum performance. Two components in particular are the wash pump gasket and the mechanical seal.

Jackson offers all of the repair parts necessary for performing this task.

The instructions provided here are for maintenance personnel only. Unauthorized persons should not attempt any of the steps contained in these instructions.

Warning: many of the instructions and steps within this document require the use of tools. Only authorized personnel should ever perform any maintenance procedure on the dishmachine!

PREPARATION

1. Power must be secured to the unit at the service breaker. Tag or lock out the service breaker to prevent accidental or unauthorized energizing of the machine.

2. Ensure that incoming water to the machine is secured either by use of a shut-off valve or disconnecting the incoming water line.

3. Ensure that the dishmachine has been completely drained of water and has been allowed to cool down prior to beginning this maintenance procedure.

TOOLS REQUIRED

The following tools will be needed to perform this maintenance evolution:

1. 7/16" socket and ratchet with extension
2. 9/16" socket and ratchet with extension
3. 5/16" Allen wrench
4. 5/16" nutdriver
5. Large flathead screwdriver

TIME REQUIRED

It is estimated that it will take (1) person one and a half hours to perform this task, not including all of the items indicated in the section entitled "PREPARATION".

IMPORTANT NOTES

1. Read these instructions thoroughly before attempting this maintenance procedure. Become familiar with the parts and what actions need to be taken. This will save time in the long run!

2. The procedures demonstrated in this manual are shown being performed on an AJ-44 rack conveyor dishmachine. The actual maintenance steps, however, apply to any wash, pre-wash or power rinse motor found on a Jackson rack conveyor dish-machine.

STEPS

1. **Note:** in this procedure, it is not necessary to always remove the wiring from the motor. However, the motor should be treated with the greatest of care when being pulled away and set on the floor for maintenance, as demonstrated in these instructions.

2. Remove the (4) nuts holding the mounting plate in position.



Removing the mounting plate nuts with the 9/16" socket

3. Loosen the band clamp on the back end of the motor.



Loosening the band clamp on the back end of the motor.

4. With the band clamp loosened, carefully remove it from the back end of the motor. Once the clamp is removed, examine it to determine if it needs to be replaced as well. If it is broken in any spots or shows signs of metal fatigue, it is best to order a new one. The purpose of the clamp and the attached support bracket is to keep the weight of the motor from pulling on the tub, damaging it. It is absolutely necessary that this component be replaced once the maintenance procedure is completed.



Removing the rear clamp

5. Remove the motor support bracket.



Removing the motor support bracket

6. With the motor support bracket removed, gently pull back on the motor. You may have to move it from side to side, but it should start to move back. Pull it completely away from the mounting studs on the tub and set down gently to work on it.

7. Remove the gasket from the tub. If you are going to replace it with a new one, do so at this time. Otherwise, carefully examine the gasket for tears and other damage. If it is acceptable, set to the side. If you are not going to replace the seal, go to step 16.



Removing the pump gasket

8. Using a large screwdriver (flathead preferred, but a phillipshead will work just as well) and the 7/16" socket, loosen and then remove the bolt holding the impeller to motor shaft. Refer to the picture below.



Removing the bolt that holds the impeller to the shaft

9. With the bolt and washer removed, grasp the sides of the impeller and pull up gently. The impeller should slide off of the shaft. Remove the woodruff key as well and set to the side.

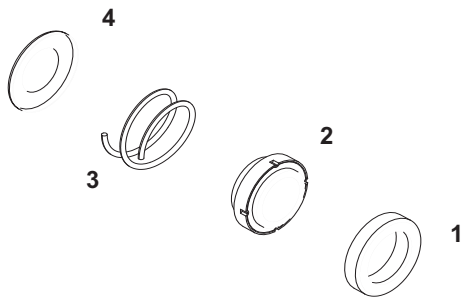


Removing the impeller



Removing the woodruff key

10. Note that the mechanical seal will consist of the following parts:



Mechanical Seal

1. A rubber seal with a ceramic ring set inside it that will seat in the center of the mounting plate.

2. A rubber seal with a stainless steel covering on the outside that seals the motor shaft and seats against the ceramic ring.

3. A spring.

4. A stainless steel spring cap to capture the top of the spring and hold it in place.

11. Most of the mechanical seal should simply come off, leaving the rubber seal with the ceramic ring inside the pump mounting plate.

12. Using a screwdriver, pry out the remaining part of the mechanical seal, taking care not to score or damage the motor shaft.

13. Once the hole is free of any parts of the mechanical seal, verify that the hole is clean and free of debris.

14. Gently press the new seal and ceramic over the shaft and slide down into the mounting plate hole. NOTE: Do not touch the surface of the seal with your bare fingers; place a rag or paper towel between your fingers and the seal. Gently slide the shaft seal over the shaft and push it down against the mounting plate seal. Place the spring and cap over the shaft.

15. Place the woodruff key back into the groove of the motor shaft and re-install the impeller, being careful to align the woodruff key with the slot in the impeller. Replace the bolt and washer, then tighten.

16. Install the motor by placing it on the studs and sliding it forward until it is against the wash tank wall. Replace the nuts and washers and tighten.

17. Re-install the pump motor support bracket and tighten down the nuts used to secure it to the tub.

18. Replace the band clamp on the motor and support bracket, tighten until snug.

AFTER MAINTENANCE ACTIONS

Reconnect the incoming water (if disconnected) and turn on. Then restore power to the unit. Run the unit for at least 10 minutes to ensure there are no leaks. If you hear any grinding sounds while the motor is running, immediately shut off the unit and secure power and water. There is a serious problem that must be addressed. If any problems arise you can contact Jackson Technical Service.

SPECIAL NOTES

Work performed on Jackson dishmachines by unauthorized or unqualified personnel may void the warranty. Before beginning this or any other maintenance evolution on a unit under warranty, you should contact a certified Jackson technician or Jackson Technical Service. You can find a list of qualified service agencies in the back of your unit's installation manual.

SPECIAL PARTS

Mechanical Seal

Part number 5330-011-71-98

Motor Mounting Gasket

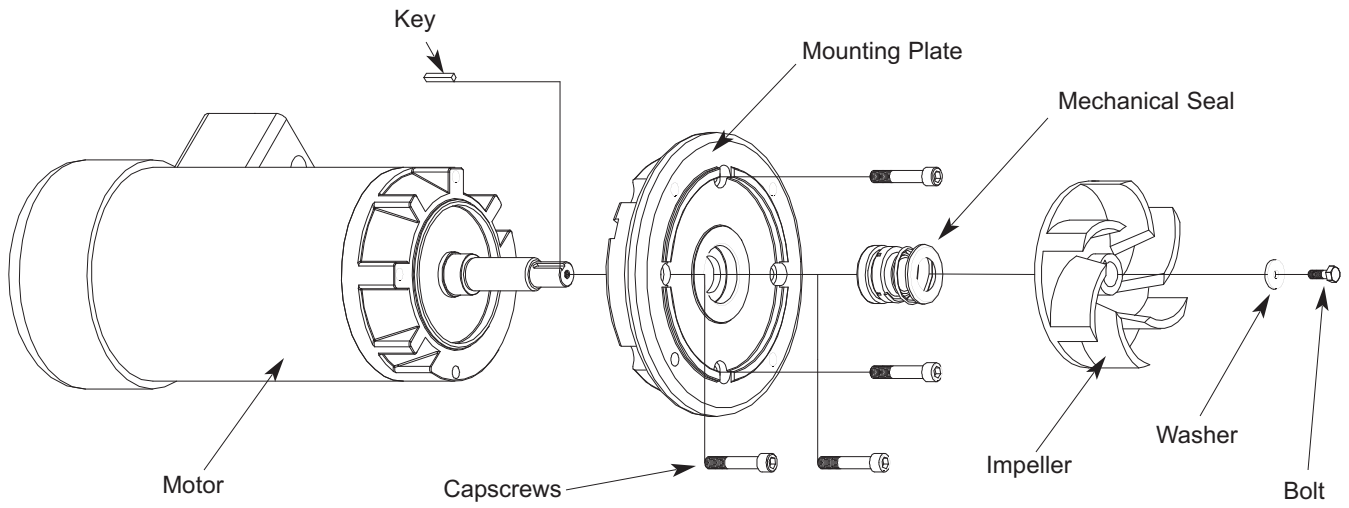
Part number 5330-011-71-62

Motor Support Clamp

Part number 4730-002-32-15

CONTACT INFORMATION

Jackson MSC Inc. provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is available from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Technical support is not available on holidays. Contact technical support toll free at 1-888-800-5672. Please remember that technical support is available for service personnel only.



Motor Assembly Diagram