Impeller Replacement

Owner’s Manual

Sonny's Enterprises, Inc.
5605 Hiatus Road
Tamarac, FL 33321
## *Table of Contents*

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARNING <em>SAFETY REQUIREMENTS</em> WARNING</td>
<td>3</td>
</tr>
<tr>
<td><em>INTRODUCTION</em></td>
<td>5</td>
</tr>
<tr>
<td><em>EQUIPMENT INSTALLATION</em></td>
<td>6</td>
</tr>
<tr>
<td>Replace Impeller</td>
<td>6</td>
</tr>
<tr>
<td><em>WARRANTY</em></td>
<td>11</td>
</tr>
<tr>
<td><em>CUSTOMER SERVICE</em></td>
<td>12</td>
</tr>
</tbody>
</table>
WARNING *SAFETY REQUIREMENTS* WARNING

1. All employees must be thoroughly trained in safe operation and standard maintenance practices. All employees must review this entire manual monthly.

2. Do not enter the wash tunnel when the equipment is operating. Death or dismemberment may occur.

3. Do not wear loose fitting clothing or jewelry around moving equipment. Do not allow any part of your body or other objects (including ladders, hoses or tools) to come in contact with moving equipment. Entanglement may result causing death or dismemberment.

4. Do not leave a ladder or any other items such as wash down hoses or tools in the wash tunnel while equipment is running. Vehicle damage and injury, including death, can occur.

5. Always exercise caution when walking (never run) through the wash tunnel as there may be slippery conditions. Be careful so you do not bump into or trip over equipment.

6. Only those employees specifically instructed and trained by the location management are permitted to enter the wash tunnel to perform inspections or maintenance. At least two qualified maintenance people must be present when performing equipment repairs or preventive maintenance.

7. Do not perform any maintenance or work on equipment unless you first perform Lock-Out Safety Precautions. All electrically powered equipment must have manually operated disconnects capable of being locked in the “OFF” position. Equipment that has been “locked out” for any reason must be restarted only by the person who performed the “lock out” operation.

8. When working on any equipment that is higher than your shoulders, always use a fiberglass ladder that is in good condition.

9. Do not attempt to repair or adjust any pressurized liquid or pneumatic part, hose, pipe or fitting while that equipment is in operation.

10. Electrical connections and repairs must be performed by a Licensed Electrician Only.

11. Emergency “STOP” buttons must be well marked and their location and proper use reviewed with all personnel. Any activated “STOP” button must be reset only by the person who activated it. Clear the wash tunnel of any people, ladders, hoses, tools and other loose items before restarting the equipment. An audible device must sound to warn people that the equipment is starting.

12. Do not operate any piece of equipment that requires safety covers with those covers removed or improperly installed. Do not operate any piece of equipment if any component of that piece is suspected to be defective or malfunctioning.
13. Store all cleaning and washing solutions and oils in a well-ventilated area. Clean up fluid spills immediately to prevent hazardous safety conditions. Be certain to follow all safety procedures on SDS Sheets for each chemical product used. All hydraulic and electric systems in the wash tunnel equipped with a torque relief or overload should be checked and set at the minimum amount that will allow for proper functionality under normal washing conditions.

14. No unauthorized people should ever be permitted in the wash tunnel or near the equipment at any time.

***

!! CAUTION !!

When a piece of equipment must be in operation during inspection or maintenance, one qualified technician must stay at the power disconnect switch while another qualified technician performs the inspection or maintenance.
*INTRODUCTION*

This Manual contains information that is vital to the successful installation, operation and maintenance of your SONNY’S vehicle washing equipment.

Please read, and understand, the full contents of this manual before installation and operation of the equipment. Keep this booklet in a location where it may be used for ongoing reference.

Should you have any questions on the operation or servicing of this equipment please contact

TECHNICAL SERVICES DEPT.
SONNY’S ENTERPRISES, INC.
5605 Hiatus Road
TAMARAC, FLORIDA 33321
TELEPHONE: 800-327-8723   FAX: 800-495-4049

THANK YOU FOR YOUR CONFIDENCE IN SONNY’S   !!!!!  

© SONNY’S The CarWash Factory
This document is confidential and proprietary to SONNY’S and cannot be used, disclosed or duplicated without prior written consent. Content, prices and availability subject to change without notice.

SonnyDirect.com
Page 5 of 12
6.7.2016

OwnersManual_Dryer_ImpellerReplacement_16v1
*EQUIPMENT INSTALLATION*

Replace Impeller

Tools
1. Safety Glasses
2. ½” Drive Ratchet Set
3. Standard Combo Wrenches
4. 8’ Ladder
5. Torque Wrench
6. Bearing Punch
7. Sledge Hammer

Consumables
1. Anti-Seize Compound
2. Penetrating Oil

Work Force
Two (2) persons

Time (assuming no problems)
1.00 - 3.00 hours

Repair Steps

Caution: You must shut off all power to the conveyor and lock out the Motor Control Center before starting this repair.

1. Shut off all power to the conveyor and lock out the Motor Control Center.
2. Remove bolts holding the inlet screen to the dryer housing.
3. Apply a generous amount of penetrating oil to the existing taper lock bushing.

4. Note the position of the impeller on the shaft.

5. Remove the three bolts that mount the taper lock bushing to the impeller.

Note: Be careful tightening the bolts to remove the taper lock bushing. If necessary use bearing punch and sledge to loosen the hub of the impeller, and then tighten the bolts more. This will eventually drive the impeller off of the bushing.
6. On the taper lock bushing there are two threaded holes. Thread two of the bolts, removed in the previous step, into the holes and alternate tightening them down.

7. Once the taper lock bushing and impeller separate, back the two bolts out to an equal distance. Using the impeller as a hammer, pull it towards you until the taper lock comes off the shaft, then remove the impeller.

Note: Be careful not to pull the impeller off the shaft when removing the taper lock.

8. Place the new impeller on to the shaft of the new motor.

9. Place a small amount of anti-seize compound onto the shaft of the motor and the taper lock bushing.

10. Place the key stock in the slot of the shaft.

11. Slide the bushing on the shaft and the key stock.

12. Line up the bolt-hole pattern on the bushing and on the impeller. Line up the punch mark on the impeller hub with the keyway on the taper lock bushing.
13. Ensure the position of the bushing is correct using the position noted in Step 4.

14. Bolt the taper lock bushing onto the impeller. Using the torque wrench, alternate tightening the bolts in a circular motion to 18 ft-pounds. Repeat several times.

15. Spin the impeller. If it is in contact with the mounting plate at any point it must be adjusted until it runs free and true.
16. Replace the inlet screen on the dryer housing.

**Caution:** Before returning power to the conveyor and removing lock out from the Motor Control Center all personnel are clear of the operational area.

17. Remove all tools and equipment from the tunnel.

18. Turn power on and return the tunnel to normal operation. Listen for any unusual noises.
*WARRANTY*

SONNY’S ENTERPRISES, INC.
FACTORY LIMITED
LIFETIME WARRANTY

Equipment manufactured by SONNY’S ENTERPRISES, INC. is warranted to be free from defect in material and workmanship. Welded metal framework and other non-moving, non-wearable fabricated metal components manufactured by SONNY’S are warranted for the life of the equipment to the original purchaser. Fabricated metal wearable surface and moving components manufactured by SONNY’S are warranted for a period of one (1) year to the original purchaser of the equipment.

All components assembled to SONNY’S equipment that are manufactured by others are warranted by the appropriate manufacturer and subject to that manufacturer’s limited warranty. Contact SONNY’S for the specific information on other component manufacturer’s warranty terms. All new cloth shipped with new SONNY’S equipment is warranted for a period of one (1) year or 80,000, whichever occurs first.

This warranty is not assignable or transferable. The warranty period begins the first day following installation or 30 days from the original invoice date, whichever occurs first. The Seller’s liability shall be limited to repair or replacement of materials found to be defective within the warranty period. In the event of repair or replacement this limited warranty is noncumulative. The Purchaser must supply the Seller with immediate written notice when any defects are found. The Seller shall have the option of requiring the return of defective material to establish the Purchaser’s claim. Neither labor nor transportation charges are included in this warranty. Transportation damage claims are to be submitted to the carrier of the damaged materials.

This warranty is based upon the Purchaser’s reasonable care and maintenance of the warranted equipment. It does not apply to any equipment which has been subject to misuse, including neglect, accident or exposure to harsh chemicals or chemicals that react violently with: water, organic acids (e.g. acetic acid), inorganic acids (e.g. hydrofluoric acid), oxidizing agents (e.g. peroxides), and metals (e.g. aluminum). Chemicals corrosive to: aluminum alloys, carbon steel, and other metals. Nor does it apply to any equipment which has been repaired or altered by anyone not so authorized by SONNY’S. Further, the equipment must be properly installed with proper accuracy of all specified plumbing, electrical, and mechanical requirements. This warranty does not apply to normal wear and tear or routine maintenance components.

EXCEPT AS EXPRESSLY STATED HEREIN, SONNY’S SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND IN CONNECTION WITH THE PURCHASE, MAINTENANCE, OR USE OF THIS EQUIPMENT INCLUDING LOSS OF PROFITS AND ALL CLAIMS FOR CONSEQUENTIAL DAMAGES. THE LIMITED WARRANTY EXPRESSED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. SONNY’S NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION HEREWITH.
*CUSTOMER SERVICE*

Please contact SONNY’S Equipment Department for installation and/or operational questions regarding this piece of equipment.

Please refer to the Parts Catalog and contact SONNY’S Customer Service Order Entry Department for any replacement parts for this piece of equipment.

You can also visit the web at www.SonnysDirect.com.

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>PHONE NUMBERS</th>
<th>FAX NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toll Free Main Line</td>
<td>800-327-8723</td>
<td>800-495-4049</td>
</tr>
<tr>
<td>Equipment Department</td>
<td>954-720-4100</td>
<td>954-720-9292</td>
</tr>
</tbody>
</table>

Or you can email Sales at sales@SonnysDirect.com

Thank you for being a SONNY’S car wash equipment owner!

From all of us here at