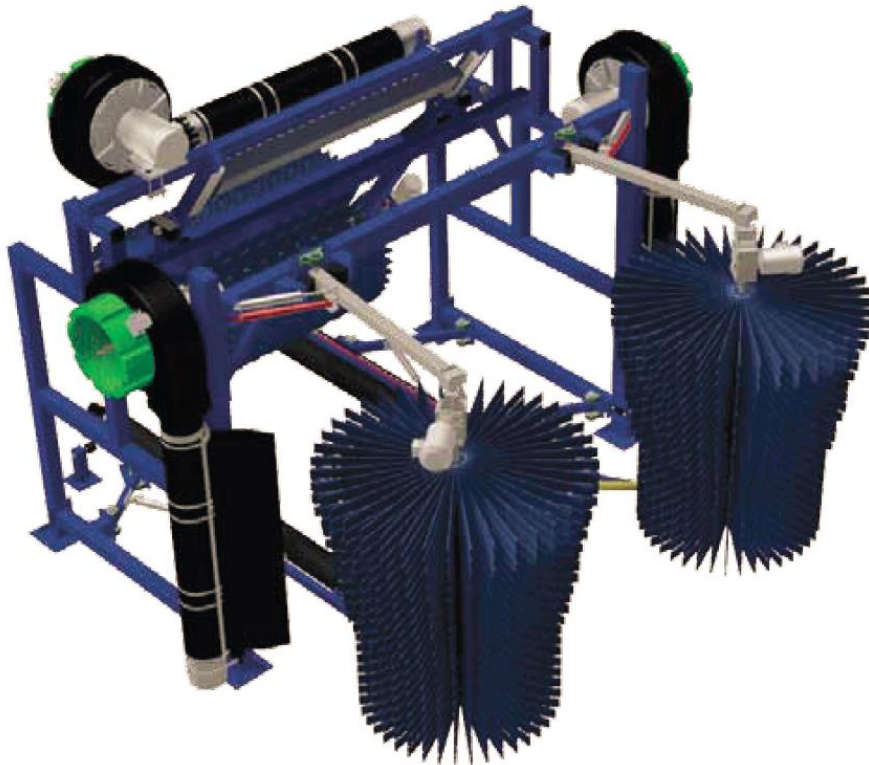




PermaDry™ Cloth



Owner's Manual

Sonny's Enterprises, Inc.
5605 Hiatus Road
Tamarac, Florida 33321
15v2



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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.



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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.
14. 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.
15. 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 Owner's Manual contains information that is vital to the successful installation, operation and maintenance of your a 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.

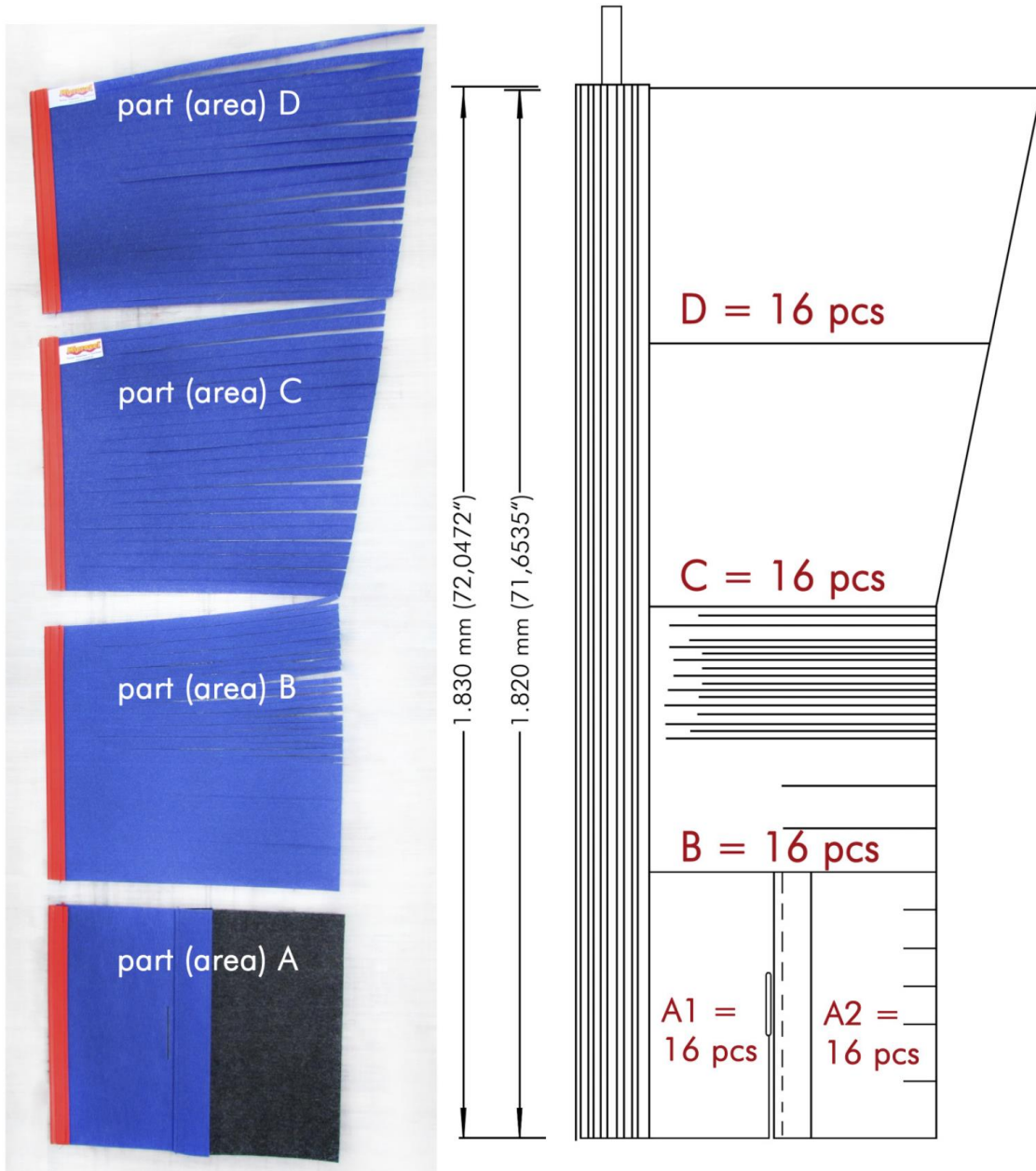
5605 Hiatus Road

TAMARAC, FLORIDA 33321

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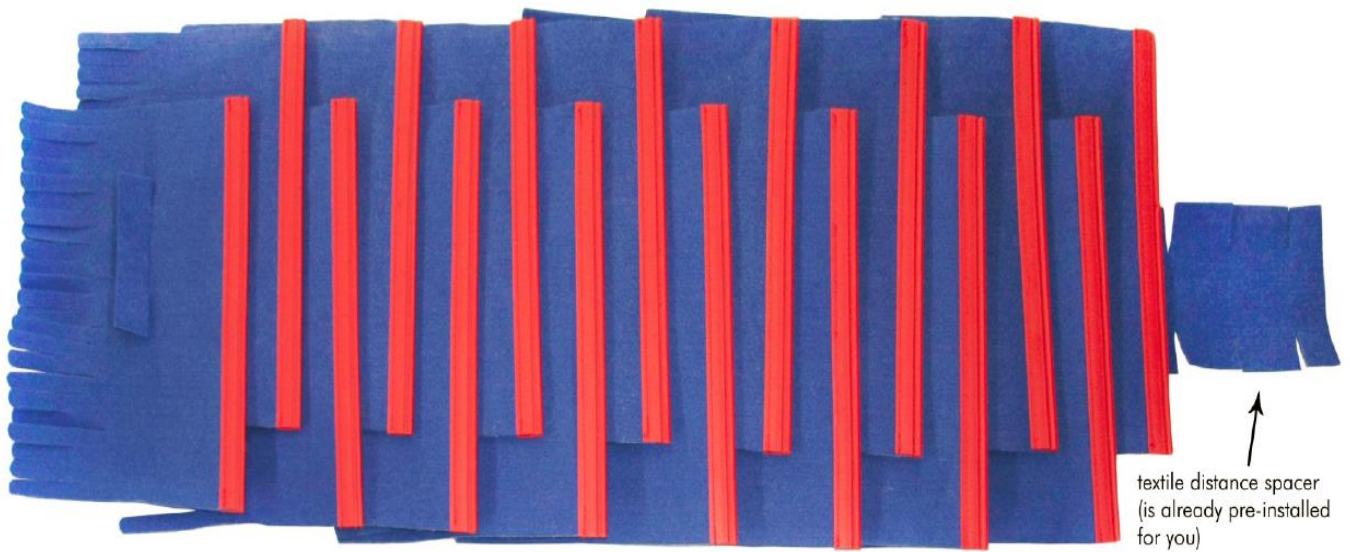
Cloth Installation



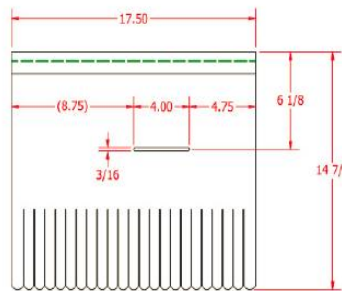


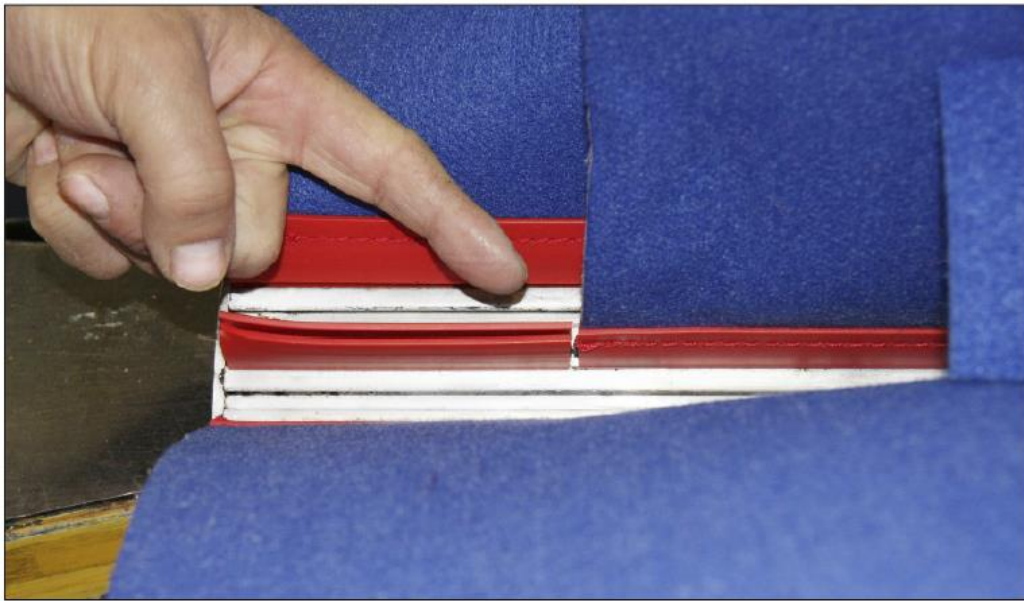
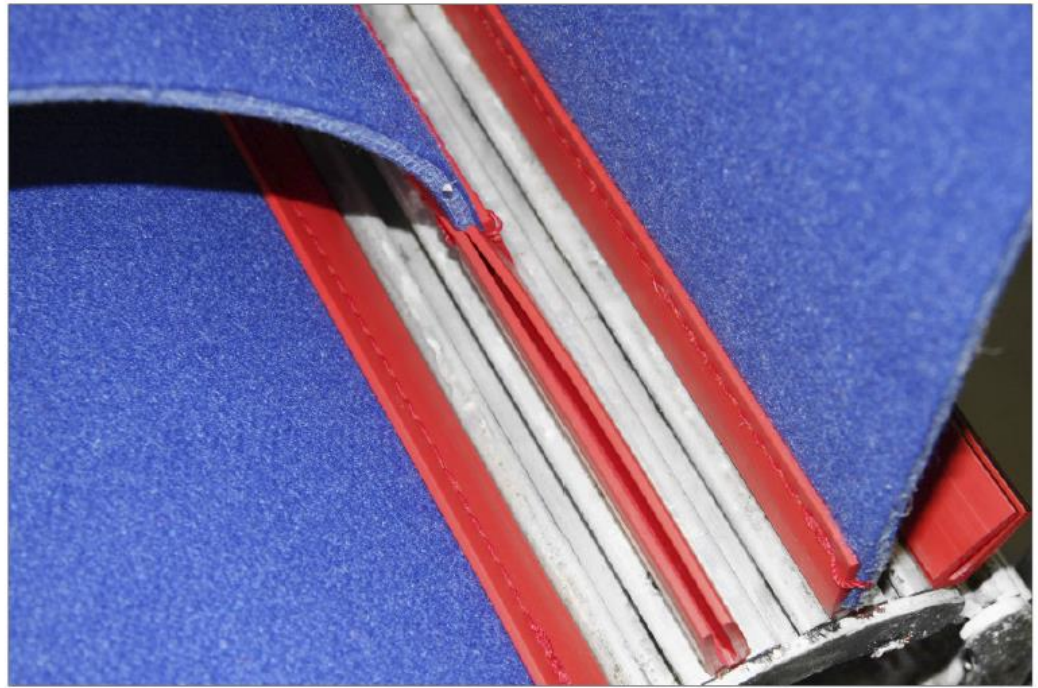
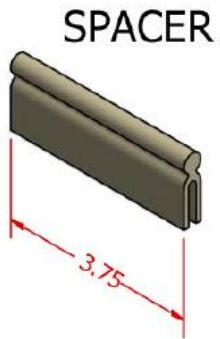
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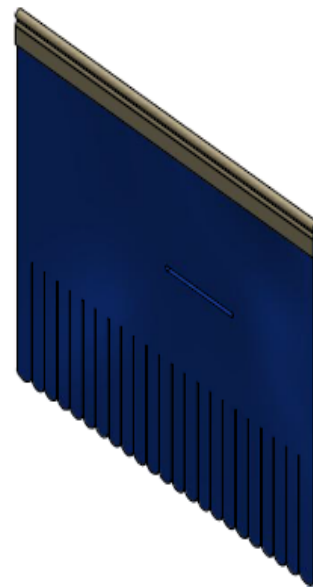
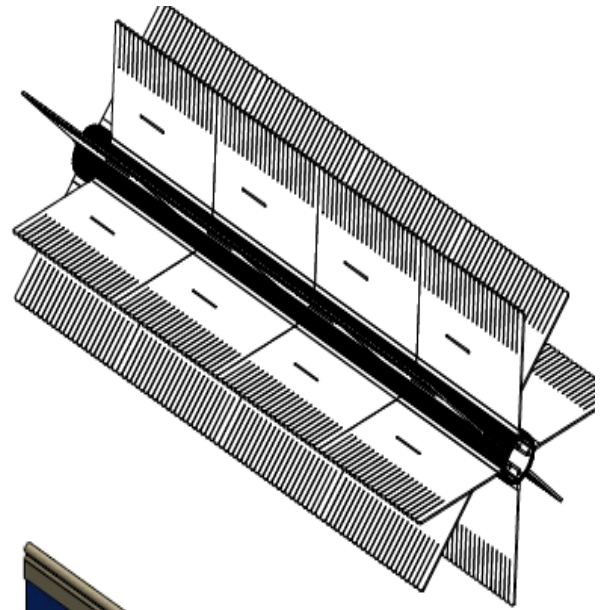
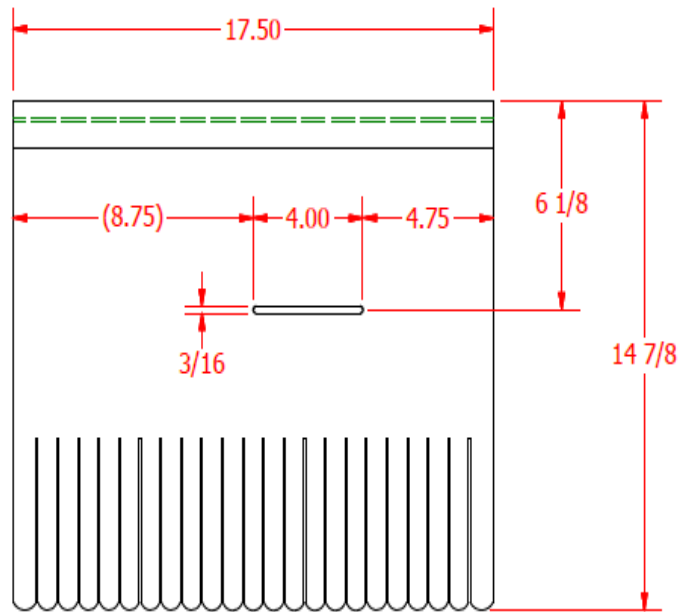
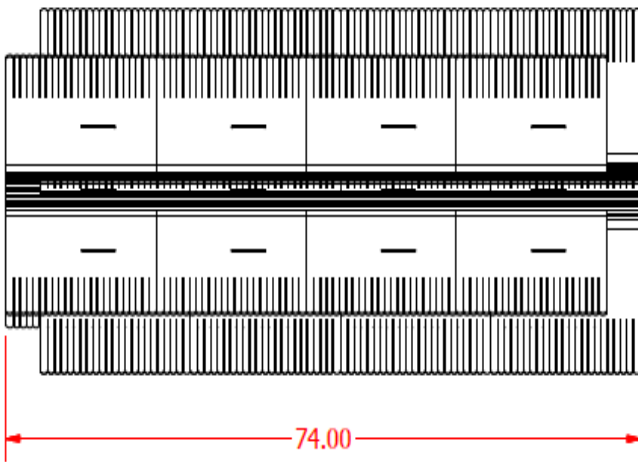




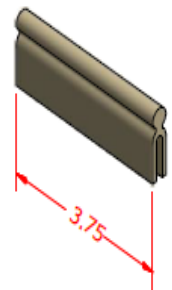
textile segments for roof brush







SPACER





Adjustments and Testing

Adjust the Cleaning Pressure of the Top Brush

Ensure the air solenoid is manually put in the wash position so there is no air pressure applied to the retract cylinder. Adjust the position of the counterweight so that when the counterweight is released the brush slowly moves downward. After initial adjustment manually activate and deactivate the air retract. When deactivated the brush should fall smoothly to the down position. Final adjustment of the counterweight can be accomplished while running test vehicles. Once adjusted properly the cloth penetration should be about three to four inches across the entire vehicle. If brush bounces too much the counterweight has been adjusted to far out. Adjustment is easiest if made in small amounts, approximately 1/4" to 1/2" at a time.

Adjust Top Brush for Smooth Retract Operation

To adjust the retract operation the air pressure regulator should be adjusted for approximately 30PSI in the retract position. The tunnel controller should be adjusted so that the brush is put into the wash position prior to the front of the car arriving at the brush. This will entail deactivating the retracts before the vehicle reaches the brush and setting the look ahead to check for the proximity of the next car.

Mechanical Adjustment of the Wrap Hanger Arms

1. Install the unit so that the legs are plumb, the hanger arms are level when at the rest position and the mounting bearings are positioned perpendicular to floor (no pitch).
2. The rest position will vary with operator preference and region. If front license plates are present the brushes should be open slightly to clear the plate, approximately one inch between when spinning. If there are no front plates then when spinning the tips of the cloth should be penetrating about one inch.
3. The two brushes should return to the rest position (middle of the tunnel) with no air pressure and no pitch to the bearings.

Operating Speeds Chart

Chain Speed	Wrap Speed	Top Speed	Wrap Air Pressure Driver	Wrap Air Pressure Pass
50-70CPH	70-75RPM	75-85	0PSI	0PSI
70-80CPH	80-85RPM	75-85	0-5PSI	0-5PSI
80-90CPH	85-90RPM	75-85	5-10PSI	5-15PSI
90-125CPH	90-95RPM	85-95	10-15PSI	15-25PSI



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Two Solenoid valves, one for each retract, are recommended for 80 or more cars per hour.

To adjust the operation of the brushes without air pressure you may adjust the position of the pillow block bearings.

1. TO INCREASE THE PRESSURE ON THE SIDE AND BACK OF THE VEHICLE: Adjust the bottom pillow block bearing away from the center of the tunnel. Move in 1/8 inch increments at a time.
2. TO DECREASE THE PRESSURE ON THE SIDE AND BACK OF THE VEHICLE: Adjust the bottom pillow block bearing towards the center of the tunnel. Move in 1/8 inch increments at a time.

Cloth penetration should be about three to four inches on the flat surface of the car. Each of the brushes should cover about two thirds of the back of the vehicle, overlapping in the center.



GENERAL OPERATION

The brushes on the unit need to spin anytime the conveyor is in operation.

Top Brush Operation

Brush rotation starts and stops with a signal from the Customer supplied Controller system to the Customer's hydraulic power pack which drives the hydraulic motors on the brushes.

BE CERTAIN THAT THE BRUSHES ROTATE AGAINST VEHICLE TRAVEL

With the brush rotating (against the direction of vehicle travel and at proper RPM) the vehicle's front hood contacts the brush and brush travels across the vehicle maintaining steady contact while cleaning the hood, roof and trunk of the vehicle.

Proper cloth penetration on flat vehicle surfaces should be 3 to 4 inches. As the brush rounds corners, such as on windshields, the cloth penetration may be greater, but not deeper than half the distance to the aluminum brush core.

Retract Operation

When there is no vehicle approaching the brush the tunnel controller will retract the brush from the wash position, toward the ceiling. This can also be set up in the controller to retract for the beds of trucks to avoid problems.

It is recommended that the brush be retracted for:

1. Sun visors mounted over the windshield.
2. Any racks mounted on the roof.
3. Rear wipers on Acura Integra's and Mazda RX-7's unless they are taped down.
4. Open bed pickup trucks.

Wrap Around Washer Operation

With the brushes rotating (with the direction of vehicle travel and at proper RPM) the vehicle front bumper contacts the driver side brush first and then the passenger side brush. The brushes move evenly across the front of the vehicle, each drying one half of the front, and gear around the front fenders to maintain steady contact while drying the sides of the vehicle.



As the rear of the vehicle approaches the brushes they individually gear themselves around the rear fenders so that each brush dries one half of the vehicle rear vertical surfaces. As the vehicle departs the wraparound brush area the brushes are fully extended toward the center of the wash tunnel ready to accept another vehicle.

NOTE: Proper cloth penetration on flat vehicle surfaces should be 3 to 4 inches. As the wraparounds gear around corners, such as fenders, cloth penetration may be greater, but not deeper than half the distance to the aluminum brush core.

Wrap Retract Operation

When selected by the Operator's remote Programmer push button station the wraparound brushes will retract from the center of the wash tunnel toward the tunnel outer walls. This can be done individually if one solenoid is used for each arm.

This is accomplished, when the push button is pressed, by completing an electrical circuit through the equipment Programmer to pass single phase power at the preset pulse count of the Programmer to the retract air solenoid valve. The air solenoid valve now opens and allows compressed air to pass through to the rod end port of each air cylinder causing the brush hangers to retract.



PREVENTIVE MAINTENANCE

Clean the cloth as needed.

Cleaner Mix: The best solution for cleaning the material is a mixture of water and mild, free-rinsing glass cleaner. Before mixing the solutions make sure you use all the proper Personal Protective Equipment (PPE). Mix the solution in a spray applicator.

- One gallon of water
- ¾ gallon of mild, free-rinsing glass cleaner

Cleaning Process:

1. Saturate the cloth to be cleaned with a water hose (don't use high pressure).
2. Spray the cleaner mixture on the cloth and let it sit for 30 minutes.
3. After the 30 minute dwell time rinse ALL the solution off the cloth.
4. Let the cloth spin all night and it will be dry in the morning.



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.

DEPARTMENT

Toll Free Main Line
Equipment Department

PHONE NUMBERS

800-327-8723
954-720-4100

FAX NUMBERS

800-495-4049
954-720-9292

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

