



# **Spinner Wheel Blasters**

## **SP Series**



# **Owner's Manual**

**Sonny's Enterprises LLC**  
5605 Hiatus Road  
Tamarac, Florida 33321



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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 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 !!!!**

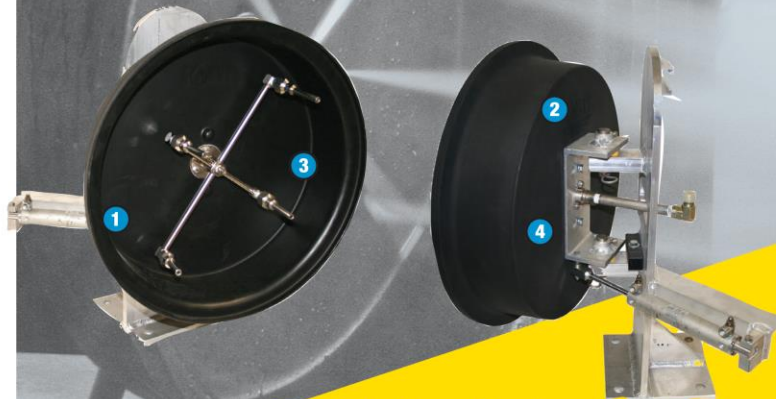




## Product Specifications

- Free-standing pivot design & free standing stationary design
- 4 – zero degree plus nozzles & 1 – 15 degree on each spinner
- Also available as a turbo with 4 – zero degree nozzles & 1 turbo nozzle in center
- Stainless steel spray bars
- Non-grease UHMW bushings throughout
- Available as arch mounted or free standing post mounted
- Optional independent cylinders pivot for greater coverage
- Long lasting ceramic swivels
- Non-corrosive aluminum and plastic construction

# Less Wheel Prepping, More Wheel Cleaning



Pivoting Spinner with Zero Degree Plus Nozzles and 15-Degree Center Nozzle



Pivoting Turbo Wheel Blaster with 5 turbo nozzles



5 Nozzles: (4) Zero Degree Plus and (1) 15-degree, provide full coverage.



Pivoting Spinner uses maintenance free UHMW bearings.



Non-corrosive aluminum and plastic construction.



Long lasting ceramic swivel.

**Problem:**

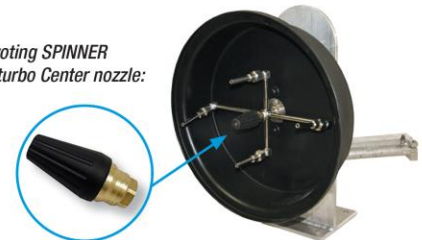
You need help washing wheels online without prepping.

**Solved:**

Using 5 nozzles, SONNY'S Pivoting Spinner blasts the front bumper of the vehicle, pivots to follow the front wheel, returns to its starting position to blast the rocker panel, and then pivots again to follow the rear wheel. The unit remains in this position to blast the rear of the vehicle and then adjusts back to its starting position to ready itself for the next vehicle.

- Free-standing design
- SONNY'S exclusive Zero Degree Plus nozzles for maximum impact and better cleaning
- Greaseless UHMW bearings for low maintenance
- Manifolds constructed of stainless steel for durability
- Independent cylinders pivot manifolds for greater coverage
- Long-lasting ceramic swivel

Pivoting SPINNER w/turbo Center nozzle:



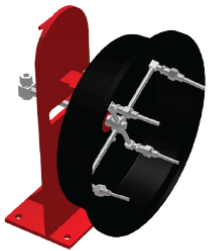
**Specifications**

	SPINNER		TURBO	
	Inch	Metric	Inch	Metric
Footprint Length	28in	711mm	28in	711mm
Footprint Width	154in	3.657m	154in	3.657m

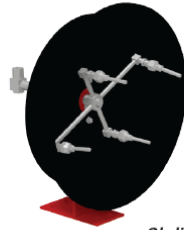
Water	Max. 20GPM @ 600PSI	1.3 ltrs/s @ 42 kgs/sq cm	Max. 20GPM @ 600PSI	1.3 ltrs/s @ 42 kgs/sq cm
Pneumatic	2CFM		2CFM	



# Owner's Manual Spinner Wheel Blasters SP Series



*Pivoting Spinner*



*Stationary Spinner*

## Pivoting and Stationary Spinner Wheel Blasters

**Includes:**

- Zero Degree Plus Nozzles
- 15° #04 Center Nozzle or Turbo
- Air Kits (Pivoting Spinners)

**Requires:**

- High Pressure Pump Station

**Optional:**

- Powder Coating



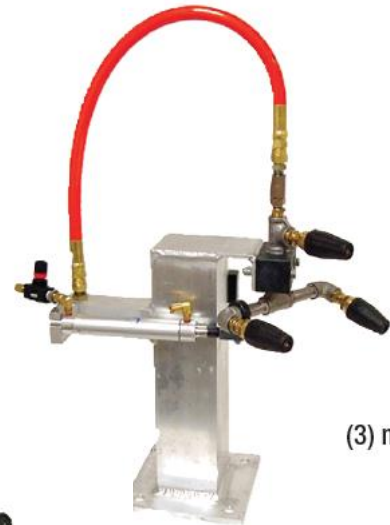


# Owner's Manual Spinner Wheel Blasters SP Series

## SONNY'S Pivoting Turbo Wheel Blasters

Uses 3 or 5 high-Impact, high pressure Turbo Nozzles designed to Increase Impact and area of coverage.

- The unit blasts the front bumper of the vehicle and then pivots to follow the front wheel, returns to its starting position to blast the rocker panel, and then pivots again to follow the rear wheel
- The unit remains in this position to blast the rear of the vehicle and then adjusts back to its starting position to ready itself for the next vehicle
- High-impact rotating nozzles eliminate the need for swivels
- Greaseless UHMW bearings require no regular maintenance



(3) nozzle



(5) nozzle



# **\*INSTALLATION\***

## **Utilities Requirements**

**UTILITIES INTERCONNECTION AND THE MATERIALS REQUIRED FOR INTERCONNECTION TO SONNY'S EQUIPMENT ARE THE RESPONSIBILITY OF THE CUSTOMER !**

**PERFORM ALL TRADES WORK TO ALL APPLICABLE LOCAL AND NATIONAL CODES !**

### **Electric**

The Customer's Electrician is to provide materials and install single phase power (24VAC or 110VAC - specify at the time of order) from the tunnel equipment controller to high pressure pump controls, hydraulic power pack control, and the (optional) supplied 4-way air solenoid valve on the air distribution manifold.

### **Pneumatic For Optional Pivoting Spinners**

The Customer's Plumber is to provide and install a 3/8 inch compressed air line (approximately 6CFM at maximum load) from the to the 4-way air solenoid valve on the air distribution manifold.

# Dimensions

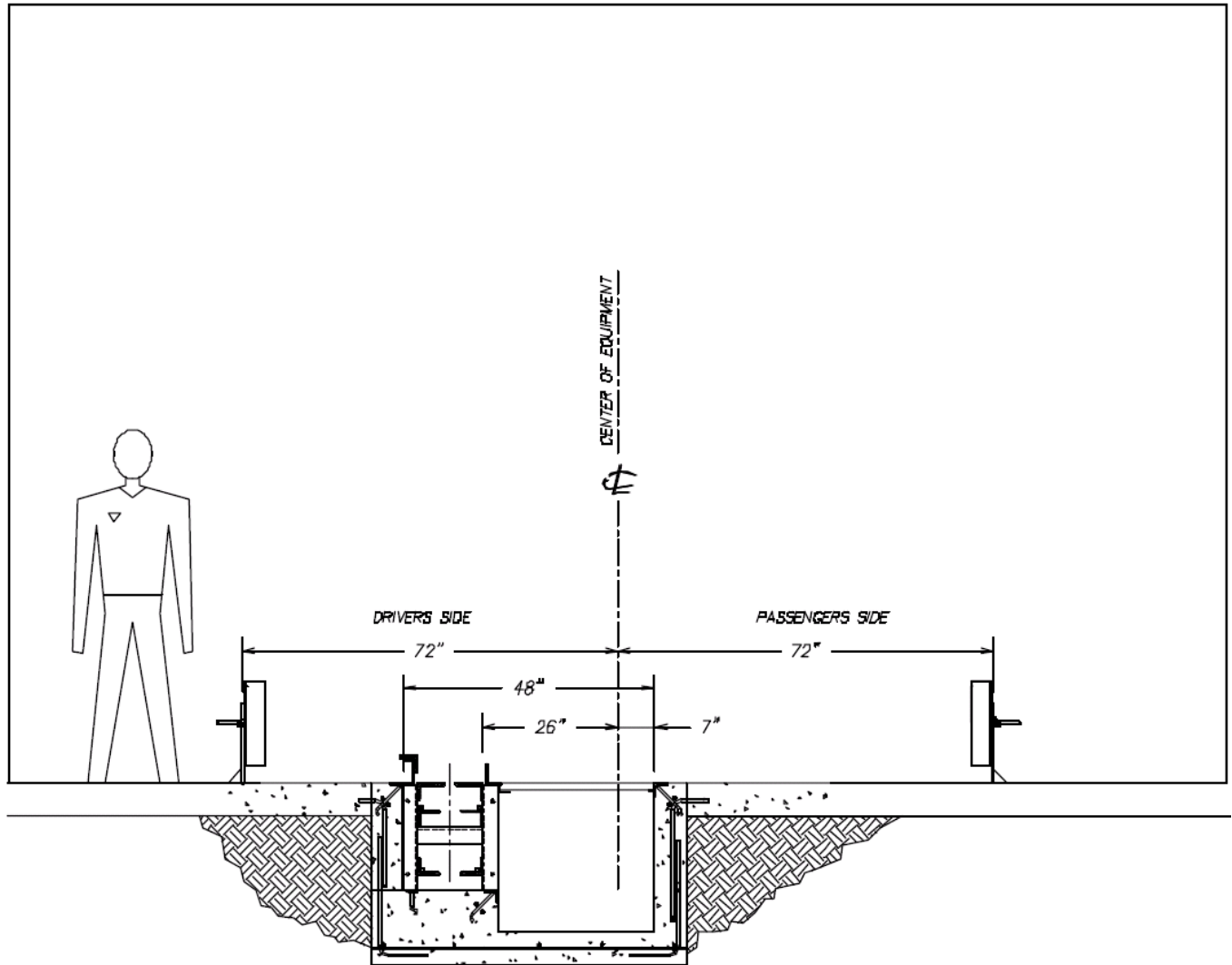
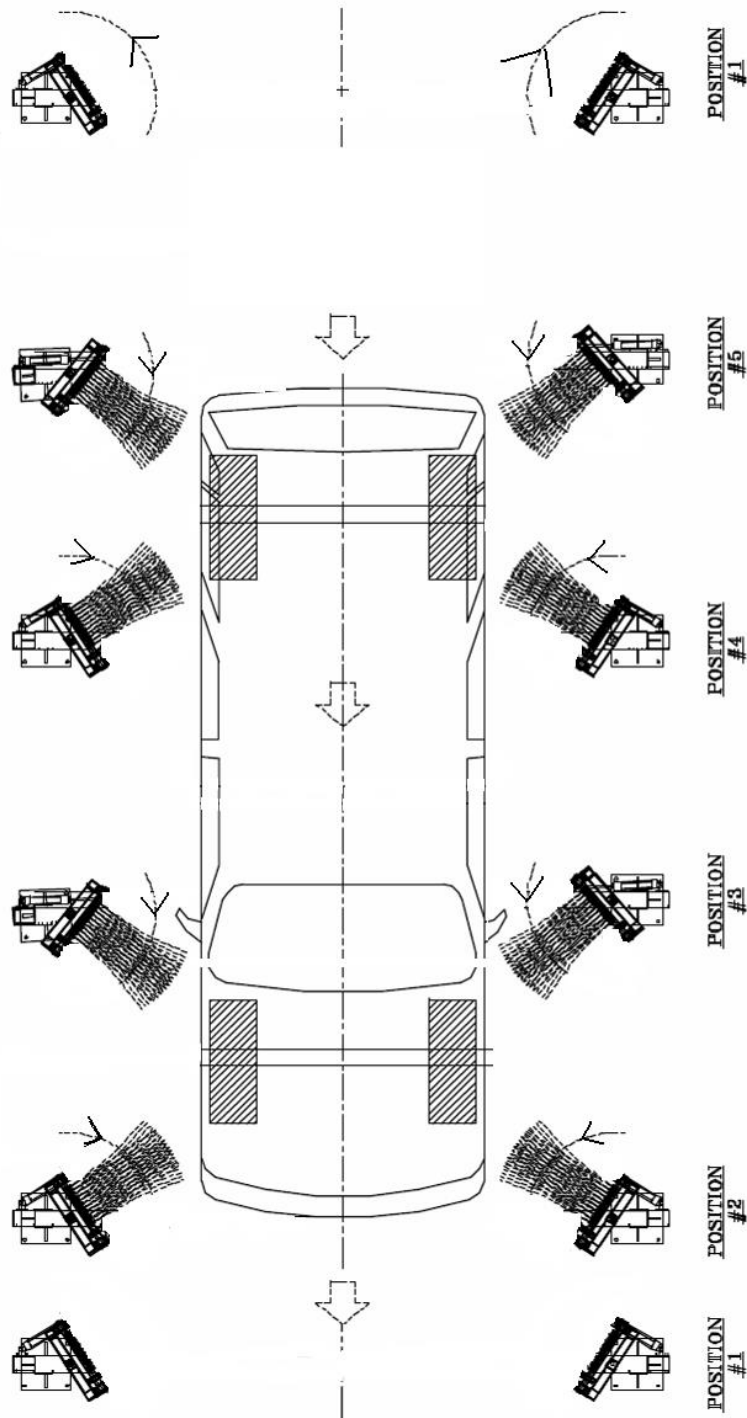


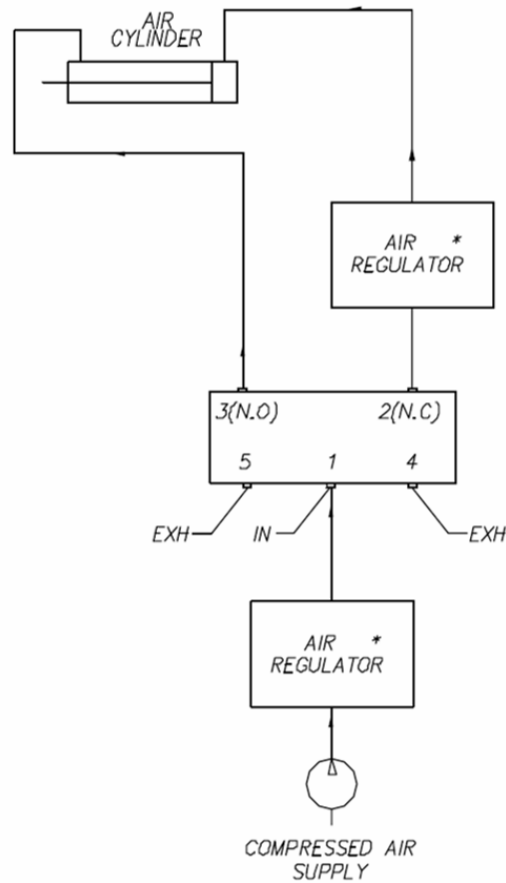
Figure #1



**Figure #2**

PROGRAMMABLE EXTEND INTERCONNECTION DIAGRAM

TYPICAL EACH CYLINDER



**Figure #3**



# Equipment Installation

## Spinner Wheel Blasters

### Tools

1. Safety Glasses
2. ½" Drive Ratchet Set
3. Standard Combo Wrenches
4. Standard Screwdriver
5. 1" Hammer Drill
6. Sledgehammer
7. Tape Measure

### Consumables

1. Stainless Shims
2. PTFE Tape
3. PTFE Paste

### Work Force

Two (2) persons

### Time (assuming no problems)

2.00 - 3.00 hours

### Installation Steps

1. Determine where the Spinner Wheel Blasters are to be installed.
2. Sweep any debris from the area.
3. Set the spinner wheel blasters in place. To ensure the correct unit is placed on each side, check that the air cylinder points towards the tunnel exit.
4. Measure 72" from the center line to the back plate of the spinner as pictured in Figure #1 and in the tunnel layout diagram Figure #2.
5. Secure the base plates to the floor with anchor bolts, ensuring that the base is square with the conveyor.
6. Run and connect the 3/8" air lines from the air distributor to the air cylinder on each spinner. Apply air pressure to each ensuring that the at rest position is the same as position #1 in Figure #2.
7. Run and connect the high pressure water lines from the HP pump station to the spinners.



# Adjustments and Testing

## Test Water and Air

Using the 4-way air valves on the air distribution manifold, manually activate each air cylinder and ensure the spinners pivot properly and that in the OFF position it is facing as in Position #1 in Figure #2.

At the tunnel equipment controller manually activate the high pressure water pump station for the spinners and ensure the nozzles operate properly and there are no leaks. Water pressure should read approximately 800PSI.

## Tunnel Controller Programming

Set the programming as follows (refer to Figure # 2)

1. Position #1. This is the rest position of the spinners when they are waiting for the next vehicle.
2. Position #2. The high pressure water pump starts operating as the front tire/wheel comes within range. As the front tire passes, the 4-way air valve should be activated, and the spinners should track the front tires as they pass by. The needle valve on the cylinder can be adjusted to control the speed of the tracking.
3. Position #3. As the front tires pass outside of the range of the spray pattern the 4-way air valve should deactivate, allowing the spinners to return to their forward facing position.
4. Position #4. As the rear tires come in range the 4-way air valve should be activated and the spinners should track the rear tires as they pass by.
5. Position #5. As the rear tires of the vehicle pass outside of the range of the spray pattern the 4-way air valve should deactivate, allowing the spinners to return to their forward position. High pressure water pump should also shut down.



## **\*GENERAL OPERATION\***

### **Spinner Wheel Blasters**

Starting and stopping of the spinners is controlled by the customer's equipment programmer signal to the motor starter coil controlling three-phase power to the high pressure water pump. The speed of the rotation of the spinners being driven may be changed by the bypass/regulator adjustment on the pump.

The needle valves on the reservoir and cylinder can be adjusted to accurately track the wheels of the vehicle thereby increasing the cleaning time on the wheels.





## **\*PREVENTIVE MAINTENANCE\***

### **DAILY**

1. Check all lines and fittings for leaks. Repair or replace, as needed.
2. Check for proper operation, listening for any unusual noises and checking for proper tracking.

### **WEEKLY**

1. Inspect the spray nozzles for excessive wear, replace if necessary.

**FOR THE FIRST MONTH OF OPERATION CHECK ALL HYDRAULIC FITTINGS FOR TIGHTNESS EACH WEEK. PERFORM THIS INSPECTION TO THE SCHEDULE SHOWN BELOW AFTER THE FIRST MONTH OF OPERATION.**

### **MONTHLY**

1. Check all plastic bushings for wear and schedule replacement if necessary.
2. Inspect all hardware and fittings for tightness.
3. Thoroughly clean the framework and manifolds.
4. Spray cylinder rod end and clevis with lubricant.



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Tunnel length/width required for all types of spinners is 28" and 154" respectively. Water usage is up to 20GPM@800PSI. Pneumatic is 2CFM.

Determining the nozzle size needed for (1) set of spinners to produce a proper application: Spinners have 5 nozzles per side for a total of 10 nozzles

1. Identify the pump that will be feeding the spinners.

- A Single H-25 is rated @ 20GPM @ 1000PSI (use 800PSI)
- A Double H 25 Station would be 40GPM @ 1000PSI (Use 800PSI)
- A Single D-35 is rated @ 36GPM @ 1200PSI (Use 1000PSI)
- A Double D-35 Station would be 72GPM @ 1200PSI. (Use 100PSI)

2. Nozzles should not draw more GPM that the pump is rated for.

- A single H-25 Pump station can deliver 20GPM.
  - Divided that by 10 nozzles = 2GPM per nozzle (02 Nozzle)
- A dual H25 Pump station can deliver 40GPM.
  - Divided that by 10 nozzles = 4GPM per nozzle (04 Nozzle)
- A single D35 Pump station can deliver 36GPM.
  - Divide that by 10 nozzles = 3.6GPM per nozzle (06 Nozzle)

For other pumps use the same method. Take the GPM that the pump can deliver and divide by how many nozzles the equipment has. Reference the nozzle chart to determine the appropriate nozzle size. Nozzles should be cleaned regularly, especially if using reclaim water. Particles that get lodged in nozzles will cause the nozzle to not deliver the appropriate GPM and therefore not apply the appropriate application.

- Precision ceramic orifice and matching seat
- No gears, teeth, or bearings
- 1/4in FPT inlet
- Comparable to a 25° pattern with 0° impact
- 3600PSI maximum



Item #	Description	GPM@ 1000PSI	Price
10005913	Nozzle, ST-357 Turbo 3.0GPM 3600PSI	1.50	\$47.70
10005914	Nozzle, ST-357 Turbo 3.5GPM 3600PSI	1.75	47.70
10005915	Nozzle, ST-357 Turbo 4.0GPM 3600PSI	2.00	47.70
10005916	Nozzle, ST-357 Turbo 4.5GPM 3600PSI	2.25	47.70
10005918	Nozzle, ST-357 Turbo 5.0GPM 3600PSI	2.50	47.70
10005917	Nozzle, ST-357 Turbo 5.5GPM 3600PSI	2.75	47.70
10000959	Nozzle, ST-357 Turbo 6.0GPM 3600PSI	3.00	47.70
10005877	Nozzle, ST-357 Turbo 7.0GPM 3600PSI	3.50	47.70
10005921	Nozzle, ST-357 Turbo 8.0GPM 3600PSI	4.00	47.70

Nozzle #	Orifice Diameter	40PSI	100PSI	250PSI	500PSI	600PSI	700PSI	800PSI	1000PSI
02	.034	0.20	0.32	0.50	0.71	0.77	0.84	0.89	1.00
03	.043	0.30	0.47	1.75	1.06	1.16	1.25	1.34	1.50
04	.052	0.40	0.63	1.00	1.41	1.55	1.67	1.79	2.00
05	.057	0.50	0.79	1.25	1.77	1.94	2.09	2.24	2.50
06	.062	0.60	0.95	1.850	2.12	2.32	2.51	2.68	3.00
08	.072	0.80	1.26	2.00	2.83	3.10	3.35	3.58	4.00



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Zero degree nozzles have 3 holes at the base and a 3" long shaft. The holes break the water, and the shaft reassembles it into larger drops in a tighter stream. The results are a stronger & greater impact for better cleaning.



## **\*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](http://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](mailto:sales@SonnysDirect.com)

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

*From all of us here at*

