

# **Omni Wash Arches**



# **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 !!!!!



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# **Product Specifications**

- Unique shifting and oscillating motion provide thorough coverage.
- 4 inch square aluminum frame. Also available in stainless steel.
- Stainless steel spray bars.
- > Non-grease UHMW bushings throughout.
- Spray bar oscillation controlled by hydraulic motors requiring 3GPM maximum.
- > Directional shifting cushioned with air over oil circuits.
- > Available as arch mounted or free standing post mount.
- > Sized for solution delivery of 20GPM @ 650-800PSI.
- > 28 inches of tunnel length required.
- > 156 inches of tunnel width required.
- 96 inches unobstructed overhead clearance required with frame cross beam.



# Remove Dirt with Pinpoint Accuracy

#### **Problem:**

**Prepping:** You need to remove mud, bugs, or ice prior to pre-soak application.

Wheel Cleaning: You need to eliminate manual prepping and clean wheels online.

Side Cleaning: You need to remove dirt from wheel wells and clean side grooves including step plates and other side treatments on SUVs and trucks.

**Top Surface Cleaning:** You need to remove bugs from windshield "eyebrow" and clean roof racks on SUVs and trucks.

SONNY'S OMNI I Arches feature 2 to 5 pivoting stainless steel manifolds that track vehicles and blast away dirt with a high impact water stream created by exclusive aerated Zero Degree Plus nozzles.

- 4in x 4in QuadX Aluminum frame completely plumbed with stainless steel tubing for reliability and fast installation
- 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 hydraulic or electric motors oscillate
   manifolds for greater coverage



Dual Manifold Top Basket

Electric or hydraulic drive to meet your Requirements.

Independent hydraulic or electric motors for up & down oscillating manifold. Each manifold holds 10 Zero Degree Plus nozzles for greater impact and cleaning performance.

Each basket uses air cylinders to pivot and follow wheels and vehicle.

### Specifications OMNI | 50 - Inches

|                   | UMMI I SU - Inches | UMMI I SU - Meuric       |
|-------------------|--------------------|--------------------------|
| Footprint Length  | 28in               | 711mm                    |
| Footprint         | 154in              | 3.657m                   |
| Unit Height       | 96in               | 2.438m                   |
| Vehicle Clearance | 90in               | 2.286m                   |
| Water             | Max. 20GPM @600PSI | 1.3 ltr/s @ 42 kgs/sq cm |
| Hydraulic         | 2.5GPM             | .2 ltrs/sec              |

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|                             | OMNI            | I Wash      |                                      | ; <b>Includes:</b><br>• Zero Degree Plus n<br>• Air kits<br>• Solenoid | - Motor cont               | ure pump station<br>rols or hydraulic powe<br>nding on drive selectio |   |
|-----------------------------|-----------------|-------------|--------------------------------------|--|----------------------------|---|---|
|                             |                 | OMNI        | 150                                  | Single N   | Aanifold*                  | Dual Ma   | anifold*                                  |
|                             | L .             |             | Oscillating                          | Hydraulio  | Electric                   | Hydraulio   | Electric                                  |
| 1                           | OMNI150         |             | Side Blaster                         | \$7,547  | \$9,148.00                 | \$8,932.00  | \$10,980.00                               |
|                             | OMN130          |             | Wheel Blaster                        | \$7,647.00   | \$9,248.00                 | \$9,032.00  | \$11,080.00                               |
| <b>a</b> .                  |                 | I           | Material ID: OMNL_1                  | 150  |                            |   |   |
| R.                          |                 | OMNI        | 300                                  | Single I   | Aanifokt*                  | Dual M  | anifold*                                  |
| · _                         |                 |             | Oscillating                          | Hydraulio  | Electric                   | Hydraulic   | Electric                                  |
|                             |                 |             | Top Blaster<br>Side Blaster          | \$10,439.00  | \$13,325.00                | \$14,262.00   | \$16,663.00                               |
|                             |                 |             | Top Blaster<br>Wheel Blaster         | \$10,539.00  | \$13,425.00                | \$14,362.00   | \$16,763.00                               |
| T.                          | b               |             | Material ID: OMNI_                   | 300  |                            |   |   |
|                             | OMNI300         | OMN         | 300                                  |  | p Manifold<br>n Manifolds* |   | Manifold<br>m Manifold*                   |
| a                           |                 |             | Oscillating                          | Hydraulic  | Electric                   | Hydraulic   | Electric                                  |
| R.                          |                 |             | Top Blaster<br>Side Blaster          | \$11,824.00  | \$15,157.00                | \$12,877.00   | \$14,831.00                               |
|                             | 1               |             | Top Blaster<br>Wheel Blaster         | \$11,924.00  | \$15,257.00                | \$12,977.00   | \$14,931.00                               |
|                             | 1               |             | Material ID: OMNI_                   | 300  |                            |   |   |
|                             | ŧ٥              | OMN         | 500                                  | All Single   | Manifold*                  | All Dual I  | Manifold*                                 |
|                             | F               | 0:          | cillating                            | Hydraulio  | Electric                   | Hydraulic   | Electric                                  |
|                             | C 0 MNI500      | To          | p Blaster                            |  |                            |   |   |
|                             |                 | Side Bl     | aster (Middle)                       | \$15,613.00  | \$19,614.00                | \$18,517.00   | \$20,803.00                               |
|                             |                 | Wheel B     | laster (Bottom)                      |  |                            |   |   |
| <b>P</b>                    |                 | Material ID | : 0MNI_500                           |  | *Specify 1GPI              | M, 2GPM or 3GPM no  | zzles when orderi                         |
| MNI Option                  | 5               |             |                                      |  | Drive                      | Blocks fo   | or Side.                                  |
| Description                 | Pri             | _           |                                      |  |                            | , and Top   | -   |
| Danfoss High Pressure Water | Solenoid \$565. | Protect 8   | beautify your eq<br>owder coating. C | uipment with options<br>all for pricing.                               | <u>"</u>                   |   | -to-side oscillation                      |
| -                           |                 | H           |                                      |  |                            | that covers a   | all horizontal surface                    |
|                             |                 | 7           |                                      |  | 1                          | Side Blaster M<br>Features a full o                                   | ociels:<br>oscillation from the           |
| Octopus Mirror Bi           | aster Mir       | ror Blaster | Rain                                 | bar Mirror R   | Inse                       |   | he wheel to the botto<br>most windows.    |
| Description                 | Mounting        | Materi      | al                                   | Price  | 1                          | Wheel Blaster   | Modols:                                   |
| Mirror Blaster              | OMNI Arch       | DS & PS Ma  | nifolds                              | \$848.00   |                            | Features a restr  | icted oscillation<br>r stroke for greater |
| Octopus Mirror Blaster      | OMNI Arch       | DS & PS Ma  | nifolds                              | \$1,459.00   |                            |   | tion on wheels.                           |
| Rainbar Mirror Rinse        | OMNI Arch       | DS & PS Ma  | nifolds                              | \$480.00   |                            | 3 L   |   |
| aterial ID: MIRROR_RINSE    |                 |             |                                      |  |                            | *   |   |
|                             |                 |             |                                      |  |                            |   |   |

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#### Problem:

Prepping: You need to remove mud, bugs, or ice prior to pre-soak application.

Wheel Cleaning: You need to eliminate manual prepping and clean wheels online.

Side Cleaning: You need to remove dirt from wheel wells and clean side grooves including step plates and other side treatments on SUVs and trucks.

Top Surface Cleaning: You need to remove bugs from windshield "eyebrow" and clean roof racks on SUVs and trucks.

#### Solved:

SONNY'S OMNI I Attachments feature stainless steel manifolds that track vehicles and blast away dirt with a high impact water stream created by exclusive aerated Zero Degree Plus nozzles.

- 4in x 4in QuadX aluminum post
- ٠ 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 hydraulic or electric motors oscillate ٠ manifolds for greater coverage
- Shown with optional powder coating

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QUICK FIX - Omni Wash Arches.docx - Rev 2021-A

Side, Wheel, and **Top Blasters Tep Blaster Medels:** 

Features a full oscillation from the bottom of the wheel to the bottom

> Wheel Blaster Medels: Features a restricted oscillation with a shorter stroke for greater concentration on wheels.

**Drive Blocks for** 





Side Blaster Models:

Single Manifold PS Basket.

Mounting post not included

ELECTRIC

HYDRAULIC

Electric or Hydraulic Drive to Meet Your

Requirements



| OMNI Side Attachm  | ents                 | Includes:<br>- Zero Degree P<br>- Air kits<br>- Mounting kit | lus nozzles • Hig<br>• Ma | <b>uires:</b><br>sh pressure pump statio<br>otor controls or hydraulio<br>ck depending on drive s | power - Mounting |             |
|--|----------------------|--|---------------------------|---|------------------|-------------|
|  |                      |  | Single                    | Manifold*   | Dual M           | anifold*    |
|  |                      | ation  | Hydraulic                 | Electric  | Hydraulic        | Electric    |
|  | Side                 | Side Blaster   | \$7,224.00                | \$8,451.00  | \$10,509.00      | \$11,737.00 |
|  | Attachment           | Wheel Blaster  | \$7,224.00                | \$8,451.00  | \$10,509.00      | \$11,737.00 |
|  | Material ID: OMNI_BI | (t_side  |                           |   |                  |             |
| and the second s |                      |  |                           |   |                  |             |

Single Manifold PS Basket. Mounting post not included



**OMNI Top Attachments** 



| Includes:                                    |
|--|
| <ul> <li>Zero Degree Plus nozzles</li> </ul> |
| Air kits                                     |

Requires: High pressure pump station Motor controls or hydraulic power pack depending on drive selection

Requires:

Uigh pressure nump stations

Optionat Powder coating

|                | Single N   | lanifold*  | Dual Ma    | anifold*   |
|----------------|------------|------------|------------|------------|
| Oscillation    | Hydraulic  | Electric   | Hydraulic  | Electric   |
| Top Attachment | \$4,527.00 | \$5,141.00 | \$6,290.00 | \$6,904.00 |

Material ID: OMNI\_BKT\_TOP

\*Specify 1GPM, 2GPM or 3GPM nozzles when ordering

### **OMNI Pivoting Bumper Blaster**

Blast dirt and bugs from bumper and grills with no need for additional tunnel length.

- · Mounts in conveyor pit. Support leg easily adjusts for any conveyor pit depth
- · Independent hydraulic motor pivots manifold for increased coverage
- UHMV

Conveyor

| /W bearings require no maintenance   |                         | • Zero Degree Pil  | Power packs for hyd  |  |   |
|--|-------------------------|--|--|--|---|
|  | Item #                  | Drive  | Description  | Nozzies*   | Price   |
|  | 20006311                | Hydraulic Motors   | Bumper Cleaner, OMNI Plus, Single  | 10   | \$3619.00   |
|  |                         |  | *Specify 1GPM, 2GPM or   | 3GPM nozzles w   | then ordering   |
|  |                         | Connector  | Turbo Nozzie Barrel  |  |   |
|  |                         |  | Wash Jet Nozzle  | gement Distance Ap   | prox. 10 feet   |
| Mounted in the conveyor<br>10 Zero Degree Plus no<br>pivot and blast bumpen<br>front grills clean as veh<br>passes over the manifo | zzies<br>s and<br>licle | grime from the vehi<br>Their long barrel an<br>precise, powertul ar<br>are ideal where higi<br>without any <u>profilin</u> | now?<br>ater impingement, (which is defined as t<br>cle surfaces) the Tube Nozzles have a cle<br>d patented water aerating technology, al<br>d longer-distance impingement as demo<br>h prassure is required to reach all the su<br>g as in a SONNY'S OMNI. An array of tube<br>nd side OMNIs to ensure complete clean | ar advantage over<br>ow the water to flo<br>nstrated by the gra<br>faces and crevices<br>nozzles are positio | the Meg nozzles.<br>w with a more<br>phic above. They<br>of the vehicle |

includes:

Zoro Dogroo Plue pozzlas

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**Touch-Free** 

**Dirt Free** 

and

ELECTRIC

HYDRAULIC

Electric or Hydraulic

Each side manifold holds

nozzles for greater impact

and cleaning performance.

(10) Zero Degree Plus

drive to meet your requirements.

(2) Oscillating stainless

steel manifolds each able

to hold (10) Zero Degree

(20) nozzles.

Footprint Length

Footprint Width

Vehicle Clearance

Hydraulic (In Series)

Unit Height

Water

Plus nozzles for a total of

Specifications

### **Owner's Manual Omni Wash Arches**

#### Problem:

You need powerful high pressure cleaning either as the foundation of a touch-free wash or to complement the cleaning action in a light-touch friction tunnel system.

#### Solved:

Firing up to 60 of SONNY'S exclusive Zero Degree Plus nozzles at up to 1000PSI, the OMNI II Wash Arches are powerful. Each side manifold pivots to clean the front bumper, wheels, and rocker panel, as well as the rear of the vehicle. The top manifold pivots as the vehicle passes through the arch to clean all horizontal surfaces as well as windshields and rear windows. All manifolds oscillate to provide the necessary coverage to clean flat surfaces without the use of friction wash materials.

- 4in x 4in QuadX Aluminum frame completely plumbed with stainless steel tubing for reliability and fast installation
- Include greaseless UHMW bearings
- All OMNI II Arches feature a top carriage with (2) oscillating stainless steel manifolds each able to hold (10) Zero Degree Plus nozzles for a total of (20) nozzles
- Top and side manifolds are driven by independent hydraulic or electric motors and spray water at a maximum 1000PSI providing full coverage of all vehicle surfaces
- Overhead nozzle carriage rotates & follows vehicle travel for full coverage of roof, windshield, trunk, & rear bumper

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2.3 ltr/s @ 46 kgf/cm2

Steel sleeve attached

to manifold reduces

manifold wear.

OMNI II

Inch

66in

154in

127in

90in

2.5GPM

36GPM @650PSI

All OMNI II Wash Arches are

completely pre-plumbed

for reliability and fast

installation.

Metric

1.67m

3.91m

3.22m

2.28m

.2 ltrs/sec

with stainless steel tubing



# \*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 supplied 4-way air solenoid valve on the Air Distribution Manifold.
- Where applicable, the Customer's Electrician is to provide materials and install 208VAC or 230VAC or 460VAC, 3-phase, 60Hz power to the electric motor on the hydraulic power pack or VFD panel from a properly sized three pole circuit breaker and motor starter with three thermal overloads.

### Pneumatic

• The Customer's Plumber is to provide and install a 3/8 inch compressed air line (approximately 6CFM at maximum load) from the air compressor to the supplied 4 way air solenoid valve on the Air Distribution Manifold.

### **Technical Disclaimer**

• Although building codes have been considered in developing all drawings, verification of site-specific conditions and compliance with federal, state, and local building codes is the exclusive responsibility of the customer and/or architect and engineer.



# **Dimensions**



### Figure #1

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# **Equipment Installation**

# **Omni Wash Arch Installation**

### Tools

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

### Work Force

Two (2) persons

### Consumables

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

**Time (assuming no problems)** 2.00 - 3.00 hours

### **Installation Steps**

- 1. Determine where the Omni Arch is to be installed.
- 2. Sweep any debris from where the Omni Arch will sit.
- 3. Set the Omni side frames in place, to ensure the correct frame is placed on each side, check that the hydraulic motors are facing the tunnel exit.
- 4. Measure 72" from the center line to the outer edge of the upright frame as pictured in Figure #1 and in the tunnel layout diagram.
- 5. Install the top frame of the omni arch, leaving the interconnecting hardware slightly loose at this time.
- 6. Ensure the Omni frame is plumb and square and check positioning measurements using shim, as necessary.
- 7. Secure the passenger side base plate with one floor anchor.
- 8. Double check the frame is plumb and square and secure the driver side base plate with one floor anchor, then complete the base plates anchoring.
- 9. Tighten all interconnecting hardware of the top and side frames.

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- 10. Open the needle valves on each cylinder and air reservoir and fill to 3/4 each reservoir with fluid.
- 11. Physically pivot each manifold back and forth until no more bubbles appear in the reservoir while compressing the cylinder.
- 12. With the cylinder fully extended the reservoir should be at least ¼ filled with fluid.
- 13. Run and connect the 3/8" air lines from the air distributor to the air reservoir and the air cylinder on each Omni manifold. Apply air pressure to each manifold and ensure the position at rest is same as position #1 in Figure #2.
- 14. Run and connect the ½" hydraulic supply and return lines from the frame to the hydraulic power packs for the top and side manifolds.
- 15. Hydraulic requirements are approximately 3GPM at 75RPM; motors may rotate clockwise or counterclockwise.
- 16. Run and connect the high pressure water lines from the HP pump station to the Omni manifolds.





# **Adjustments and Testing**

#### Test Water, Hydraulic and Air

Using the 4-way air valves on the air distribution manifold, manually activate each air cylinder and ensure the Omni manifold pivots 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 hydraulic pump station for each Omni manifold and ensure it oscillates the manifold smoothly and there are no leaks. The speed of the motors should be adjusted for 60 to 70 cycles per minute.

At the tunnel equipment controller manually activate the high pressure water pump station for each Omni manifold and ensure the nozzles operate properly and there are no leaks. Water pressure should ready approximately 800PSI with all manifolds activated.

#### **Tunnel Controller Programming**

For Wheel Manifolds set the programming as follows (refer to Figure # 2)

- 1. Position #1. The high pressure water pump and hydraulic power pack start operating 2 feet front the front of the vehicle with the side Omni manifolds facing the oncoming vehicle.
- 2. Position #2. As the front tires come in range the 4-way air valve should be activated and the Omni manifolds should track the front tires as they pass by. The needle valve on the air/fluid reservoir 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 manifold to return to its forward position. The plastic air valve can be adjusted to prevent the manifold from slamming against the stop.
- 4. Position #4. As the rear tires come in range the 4-way air valve should be activated and the Omni manifolds should track the rear tires as they pass by.
- 5. Position #5. As the rear of the vehicle passes outside of the range of the spray pattern the 4-way air valve should deactivate, allowing the manifold to return to its forward position. High pressure water pump and the hydraulic power pack should also shut down unless there is another vehicle within 10' of coming into range.

For Top and Side Window Manifolds set the programming as follows

1. Position #1. The high pressure water pump and hydraulic power pack start operating 2 feet from the front of the vehicle with the top and side window Omni manifolds facing the oncoming vehicle.

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- 2. Position #2. After the windshield moves out of range of the spray pattern the 4-way air valve for the top Omni manifold should activate and the manifold should move to the rear facing position to clean the rear window as it passes. The needle valve on the air/fluid reservoir can be adjusted to control the speed of the tracking to occur quick enough to get the rear window on a pickup truck.
- 3. Position #3. As the rear of the vehicle passes outside of the range of the spray pattern the 4-way air valve should deactivate, allowing the manifold to return to its forward position. High pressure water pump and the hydraulic power pack should also shut down unless there is another vehicle within 10' of coming into range.

For Mirror Blaster Option set the programming as follows

- 1. The 2-way high pressure water valve should switch the high pressure water from the top Omni manifold to the Mirror Blaster Option as the vehicle's mirrors come within range of the Mirror Blaster nozzles.
- 2. With the proper adjustments to timing and aiming of the nozzles the mirror rinse could happen at the same time the top manifold is being rotated from the front facing position to the rear facing position. This would reduce the loss of cleaning action on the roof of the vehicle.

Speed and Torque Adjustment (where applicable)

- 1. Hydraulic
  - a. The speed can be adjusted on the flow control for the power pack.
  - b. To increase the speed move the handle on the flow control closer to the number 10.
  - c. To decrease the speed move the handle on the flow control closer to the number 1.
  - d. The torque must be set prior to operation and should be set between 600 and 900 PSI. For information on how to set the torque please refer to the Hydraulic Power Pack Manual.
- 2. Electric
  - a. The speed can be adjusted on the Variable Frequency Drive (VFD).
  - b. To increase the speed adjust the Hertz on the VFD to a higher number.
  - c. To decrease the speed adjust the Hertz on the VFD to a lower number.
  - d. The Overload on the Motor Starter protector(s) must be set at the lowest level to allow for operation. Adjust the amps in accordance with motor(s) name plate.

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# **\*GENERAL OPERATION\***

#### **Omni Manifolds**

Starting and stopping Omni manifold oscillation is controlled by the Customer's equipment programmer signal to the motor starter coil controlling three phase powers to the Customer's hydraulic power pack that is plumbed to the hydraulic motors. The speed of the oscillation of the motor(s) being driven may be changed by the flow control valve on the hydraulic power pack.

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

### Lubricants

Using lubricants like WD40 or any similar products on your Mac Valves and/or FRL's (FILTER REGULATOR LUBRICATOR) will void the manufacturer's warranty. A nondetergent Class 1 ISO VG32 oil is recommended for use on all lubricator bowls. This will ensure the airlines are properly lubricated and the polycarbonate bowls last beyond their one year warranty period.



# \*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. Carefully check the reservoirs and air cylinders; and ensure the reservoirs are at least <sup>1</sup>/<sub>4</sub> full when the cylinder is fully extended.
- 2. 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. Inspecting all hardware and fittings for tightness.
- 3. Thoroughly clean the framework and manifolds.

### ANNUALLY

1. Drain, flush and refill fluid in the reservoir and air cylinder, use Grade ISO #32 oil or Nontoxic Antifreeze.



# \*PARTS\*

| <ul> <li>Torqmoto</li> <li>SAE 0-Rin</li> </ul> | r TE Series                              | ),       | 10000961             | 0il Rese<br>10006690 | 100057                |  | SONNY'S   |
|---|--|----------|----------------------|----------------------|-----------------------|--|---|
| ltem #  | Description                              |          | Price                |                      | Item #                | Description  | Price   |
| 40010921  | Parker Hyd Motor TE0100FS100AAAC MF060   | 9B       | \$320.46             | F.R.                 | 10006690              | Oil Reservoir AOR2053-3 Maximum 80                               |   |
| 40011177  | Char-Lynn Hyd Motor 5.7 CL3586 MF0609R   |          | 308.09               |                      | 10005750              | Flow Control EF25B Deltrol 3/8in FPT                             | 46.29   |
| 10000961  | Connector 6400-8-10 JIC 1/2in x 7/8-14in |          | 1.48                 |                      | 10002183              | Elbow 28-268 Brass 3/8in MPT x 3/8in                             |   |
| 10000880  | Connector 2404 M JIC 1/2in x 1/2in MPT   |          | 1.32                 | $\bigcirc$           | 10003010              | Elbow 20-084 Swivel 3/8 Tube x 3/8 M                             |   |
| 10005402  | Bolt, Hex 3/8-16in x 1in SS 37C100HCSS   |          | 0.47                 |                      | 10002001              | SMC KQ2L11-35AS Elbow 3/8" T x 1/4"                              | (A) (A)   |
| 10001487  | Washer, Split Lock 3/8in Zinc 37NLOCOZ   |          | 0.13                 | 10003012             | 10003012              | Oil Reservoir Repair Kit 24428                                   | 5.94  |
| Drive Blo                                       |  | <b>S</b> | ONNY'S               | Cylinde              | 2276279461-60010-212. |  | -   |
|   | 20011105<br>Side Blaster)                |          | 011106<br>p Blaster) |                      |                       |  | SMC<br>SMC  |
| ltem #  | Description                              |          | Price                | 20001642             | _                     |  | 20001570<br>Price   |
| 20011105  | Omni Dr Block 1in Thick Side Blaster Kit |          | \$73.50              | 10006688             | Descript              | A550 1.5in Bore x 6in Stk SMC                                    |   |
| 20011115  | Omni Dr Block 2inThick Wheel Blaster Kit |          | 58.99                | 30.00000000000       |                       |  | \$95.19   |
| 20011106  | Omni Drive Block Top Blaster Kit         |          | 42.53                | 20001642             |                       | emale Eye w/3/8in Pin x 2-1/4in                                  | 24.61   |
| <b>Drive</b> Arm                                | n Manifold                               | ØS       | ONNY'S               | 10002001<br>20001570 |                       | 2L11-35AS Elbow 3/8" T x 1/4" MPT<br>Male w/5/16in x 2-3/4in Pin | 3.05  |
|   |  |          | 0                    | Air Flow             | w Control             | & Adapters   | ()<br>()<br>()<br>()<br>()<br>()<br>()<br>()<br>()<br>()<br>()<br>()<br>()<br>( |
| 20  | 001907 20011097                          |          | 20000572             |                      | 1tem #                | Description  | Price   |
| ltem #  | Description                              | Need     | Price                |                      | 1000513               |  |   |
| 20001907  | Omni, Drive Arm for Assembly Only        | 1        | \$72.45              |                      | 1000228               |  |   |
| 20011097  | Omni Drive Clamp 2in x 6in x 1in Kit     | 1        | 51.45                |                      | 1000220               |  |   |
| 20000572  | Bushing 5/8in I.D. for Omni Drive Arm    |          | 4.95                 | Diversit Of          | 0000000               |  | SONNY'S   |
| <b>Dual Ma</b>                                  | nifold Connector                         | S        | onny's'              | Pivot Si             | пап, веа              | ring & Collar  |   |
| -   |  |          | Î                    | and the second       | 10004301              | 20007266   | 10002664  |
|   |  |          | 8                    | Item #               | Descrip               |  | Price   |
| 200104  | 94 20011097                              | Ĭ.       | 20010993             | 10004301             |                       | roting Shaft SS 1in x 20.75in                                    | \$30.84   |
| ltem #  | Description                              | Need     | Price                | 20007266             | Bearing               | 2 Bolt 1in Bore for Mitter Axle                                  | 8.98  |
| 20010494  | Omni Manifold Connector 1/2 x 2 x 14in   | 1        | \$70.35              | 10002664             | Collar 1F             | C Clamp 1in ID Zinc Plated                                       | 6.6   |
| 20011097  | Omni Drive Clamp 2in x 6in x 1in Kit     | 2        | 51.45                | 10002826             | Nut, Hex              | Stover-Lock 3/8-16" Zn 37CNLS0Z                                  | 0.33  |
| 20010993  | Omni Drive Arm Pin w/Nut & Washer        |          | 10.89                | 10003875             |                       |  | 0.74  |

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| OMNI 2-H          | ole Manifold<br>3/äin ports  | SONNY'S           | OMNI 10-I  | Hole Manifold  | 1/4in port           | SONNY'S'    |
|-------------------|--|-------------------|--|--|----------------------|-------------|
| Item #            | Description  | Price             | ltem #   | Description  |                      | Price       |
| 20004952          | Omni 2 Hole Spinner Manifold Weldment  | \$174.10          | 20004128   | Omni 10 Hole Universa  | al Manifold Weldment | \$216.28    |
| OMNI Sid          | le Spinner<br>or Zero Degree Plus Tube n<br>10007194                         |                   | <ul> <li>Increases</li> <li>Provides</li> <li>Order elb<br/>separatel</li> </ul> | zle Kits<br>he water stream<br>s water impact<br>maximum cleaning<br>ow forged adapter | 20001261             | SONNY'S     |
| 151               |  | 1                 | ltem #   | Description  |                      | Price       |
| 1                 |  | Land Com          | 20002212*  | Nozzle Kit, Omni/Spinr   | ner w/02 Nozzle Tip  | \$45.00     |
| 10007232          | 10001975 10002438<br>(Nipple length offsets spinners, specify when ordering) | 10000879          | 10005836**   | Nozzle Kit, Omni/Spinr   | ner w/04 Nozzle Tip  | 45.00       |
| ltem #            | (https://engin/orisets/spinners, specify/when/ordering/<br>Description       | Price             | 20001261   | Nozzle Tube, Stainless   | Steel                | 37.37       |
| 10007194          | T-Bar 89.731 4 Arm 1/4 F Outlet 8x8in  | LOG ON            | 10003361*  | Nozzle, Wash Jet 0002  | EG                   | 9.09        |
| 10007232          | Swivel 36,163 DXL 3/8in FPT x G3/8 M   | LOG ON            | 10003364**   | Nozzle, Wash Jet 0004  | EG                   | 9.09        |
| 10001975          | Nipple 60-042 304 SS 3/8in x 2in   | \$2.51            | 10001888   | Elbow, Forged 1/2in M  | JIC x 1/4in MPT      | 3.23        |
| 10002438          | Nipple 60-044 304 SS 3/8in x 3 in  | 3.47              | * One pump confi   | iguration 🛛 ** Two pump configu  | ration               |             |
| 10000879          | Connector 2404 M JIC 1/2in x 1/4in MPT                                       | 0.72              | Zero Dea   | ree Nozzles  | ~                    |             |
| Nazzie options fe | eatured on the right of this page.<br>1-1/2in 0.D. Rubber S                  | ton               |  |  | 0                    |             |
|                   | Rod course thread 1/2-13in   | Top               | ltem #   | Description  |                      | Price       |
|                   | 1-1/2in stud length  |                   | 10002083   | GP Nozzle, HSS 0° 900  | 020M 1/4in MPT       | \$2.76      |
|                   | -  |                   | 10002085   | GP Nozzle, HSS 0° 900  | 040M 1/4in MPT       | 2.76        |
| Item #            | Description  | Price             | Manifold   | Water Hose & Fit   | tinas                | SONNY'S     |
| 10002240          | Rubber Stop 1.5in 0.D. x 1.25in Length                                       | \$5.51<br>SONNY'S |  | gth 30m  | ingo.                | 200 million |
|                   | Manifold Bearing & C   | ollar             |  |  |                      |             |
| Item #            | Description  | Price             |  | 20010643   | 10001991             | 10001396    |
| 20003729          | Bearing 2 Bolt 1-1/2in Bore for Omni   | \$9.29            |  |  |                      |             |
| 10003082          | Collar 2pc Clamp 1-1/4in ID Zinc Plated                                      | 8.49              | Item #   | Description  |                      | Price       |
| 10004230          | Bolt, Hex 3/8-16 x 2-1/4 Zc 37C225HCS5Z                                      | 0.34              | 20010643   | Omni, Manifold Water   |                      | \$43.10     |
| 10002826          | Nut, Hex Stover-Lock 3/8-16" Zn 37CNLS0Z                                     | 0.33              | 10001991   | Bulkhead 2701-8 Elbo   |                      | 2.55        |
| 10001333          | Washer, Flat SAE 3/8" Zn 37NWSA0Z  | 0.15              | 10001396   | Elbow 2501-8-8 M JIC   | ; 1/2in x 1/2in MPT  | 2.66        |

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# \*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.

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# \*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 <u>www.SonnysDirect.com</u>.

**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

