SUPER SHINER INSTALLATION MANUAL
Part #: SUPERSHINER0001 TUNNEL
SUPERSHINER0002 IN BAY

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Equipment Specifications

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<tr>
<td><strong>ELECTRICAL</strong></td>
<td></td>
</tr>
<tr>
<td>POWER:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>SIGNAL:</td>
<td>24VDC, 24VAC or 120VAC Available 30 WATTS</td>
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<tr>
<td></td>
<td>120 VAC UL ® CERTIFIED</td>
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<tr>
<td>SIGNAL:</td>
<td>24 to 250Volt AC or DC From Car Wash Or Point-Of-Sales 100 WATTS</td>
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<tr>
<td><strong>PNEUMATICS</strong></td>
<td></td>
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<tr>
<td>10 SCFM @ 100 PSI (max)</td>
<td>10 SCFM @ 100 PSI (max)</td>
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Equipment Features

- Two Super Shiner Applicators (D-S and P-S)
- Powder Coated Aluminum Construction
- Unique “On-Demand” Applicator Brush
- Corrosion Resistant Bearings throughout equipment
- 12” Replaceable Applicator Brush sections
- Compact Solution Delivery Station
- Pneumatic Control (No electrical to the Applicators)
- 144” Tunnel Space Required for the Driver Side Applicator
- 169” Tunnel Space Required for the Passenger Side Applicator
- 24VDC, 24VAC or 120VAC Control Panel available

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Suggested Installation Tools and Materials

- Hammer Drill with 5/8” Drill bit
- Sledge Hammer
- Set of Standard Combo Wrenches
- Measuring Tape
- Standard Screw Drivers
- 3/8” OD Polyflow Tubing
- (8) Wedge Anchor Bolts 5/8” x 6”
- Fasteners (to secure panel to wall)
- Screw Gun
- Safety Goggles
- Torpedo Level
- 1/2” ID Clear Braided Hose

Installation Instructions for Applicators SUPERSHINER0001 for TUNNEL

- Open all boxes and crates and verify that you have all the required components and all your installation materials.

- Locate the area where the Super Shiner Applicators will be installed and make sure there is enough room for both units when they are retracted or fully extended. Remove each Applicator from the shipping pallet. Position each Applicator in the wash bay according to the respective OPERATION ENVELOPE shown below (Pic #6).
Position the Passenger’s Side Applicator 105” from the inside edge of the inside guide rail to the back of the Applicator base plate as shown below. Using a marker, mark the location of both base plates to the floor.

Position the Driver’s Side Applicator 151” from the back of the Driver’s Side Applicator base plate to the back of the Passenger’s Side Applicator base plate. With the Driver’s Side Applicator FULLY RETRACTED make sure that the OUTSIDE EDGE of the plastic rail of the Applicator is LINED UP WITH THE INSIDE EDGE OF THE OUTSIDE GUIDE RAIL. If the plastic rail of the Applicator is not perfectly aligned with the guide rail, move the applicator base plate and relocate it. Using a marker, mark the location of both base plates to the floor.

Open and close each applicator and check for any interference with any existing equipment in your wash bay.

Extend the Driver’s Side Applicator completely and mark the conveyor outside guide rail on the Entrance End of the Applicator where the guide rail will have to be cut off in order to clear the Applicator push bar when fully extended.

Retract the Applicator and mark the conveyor outside guide rail on the Exit END of the Applicator when fully retracted. Verify also that the back plastic edge of the Applicator Brush is aligned with the inside edge of the outside conveyor guide rail when the applicator is fully retracted (see Picture #6 below).

Cut the inside guide rail between the two marks.

STOP! MAKE SURE THAT THE OUTSIDE EDGE OF THE PLASTIC RAIL OF THE DRIVER’S SIDE APPLICATOR IS ALIGNED WITH THE INSIDE EDGE OF THE CONVEYOR OUTSIDE GUIDE RAIL
Fasten each Applicator to the floor using 5/8” X 5 or 6” L WEDGE ANCHOR BOLTS. Level both Applicator base plates.

Adjust the bottom edge of the PASSENGER’S SIDE brush ABOUT 4” OFF THE FLOOR. Loosen the fasteners securing the bearings in each base plate and raise or drop the bearings according to the required height.

Adjust the height of the DRIVER’S SIDE brush ABOUT 4” OFF THE FLOOR or SLIGHTLY HIGHER than the height of one CONVEYOR ROLLER. Loosen the fasteners securing the bearings in each base plate and raise or drop the bearings according to the required height.

Weld some support to secure the guide rail properly if needed (see Picture #9 below). You may want to add a support weldment from the entrance guide rail to the base of the conveyor for added safety.
Open all boxes and crates and verify that you have all the required components and all your installation materials.

Locate the area where the Super Shiner Applicators will be installed and make sure there is enough room for both units when they are retracted or fully extended. Remove each Applicator from the shipping pallet. Position each Applicator in the wash bay according to the respective OPERATION ENVELOPE shown below (Pic #9).

Position the Passenger’s Side Applicator 81 1/2” from the WASH BAY CENTER LINE to the back of the Applicator base plate as shown on next page. Using 5/8” anchor bolt, secure the applicator to the floor. Level as needed both bases to the floor using shims or washers.
Position the Driver’s Side Applicator 163” from the back of the Passenger’s Side Applicator base plate to the back of the Driver’s Side Applicator Base Plate as shown in Picture #9. Using 5/8” anchor bolt, secure the applicator to the floor. Level as needed both bases to the floor using shims or washers.

Assemble both Photo-Eye assemblies and mount (facing each other) on the exit side Base Plate Top Mount as shown in Picture #11.

Secure the tape switch to the floor as shown in Picture #11.
Pic #11: In Bay Photo-Eyes and Tape Switch
Installation Instructions for the Solution Delivery Station:

The Super Shiner Delivery Station requires ONE ELECTRICAL CIRCUIT (CHANNEL) coming from the Car Wash Controller (or coming from the Super Shiner In-Bay Control Box). The circuit voltage may be 24 VAC, 24VDC or 120VAC.

STOP!
CONFIRM THE VOLTAGE OF YOUR UNIT BY CHECKING THE VOLTAGE SPECS OF THE “MAC” VALVES AND BOTH TIMERS LOCATED IN THE YELLOW ENCLOSURE.

The Delivery Panel also requires Compressed Air at 100 PSI and capable of at least 10 SCFM (See Picture #10).

Mount the Delivery Panel in the mechanical room or on any wall in a CLEAN AND DRY AREA. Secure the panel with the bottom 40" off the floor (see picture below). This measurement will allow sufficient room for a 55 Gallon drum to be stored under the panel.
Utilities Between the Delivery Panel and the Applicators:

- Pull TWO 1/2” ID CLEAR BRAIDED HOSES (ONE PER APPLICATOR), from the Panel to the wash bay. One hose from one of the DUMP valve manifold outlets to one of the APPLICATOR CHEMICAL INLETS located on the entrance side base plate (see Picture #12). Repeat the same procedure for the other applicator.

- Pull and connect ONE 3/8” RED AIRLINE TUBE from the P-S EXTEND AIR REGULATOR located on the Delivery Panel to the exit side base plate of the P-S APPLICATOR as shown in picture #12.

- Pull and connect ONE 3/8” BLUE AIRLINE TUBE from the D-S EXTEND AIR REGULATOR located on the Delivery Panel to the exit side base plate of the D-S APPLICATOR as shown in picture #12.

- Pull and connect ONE 3/8” YELLOW AIRLINE TUBE from the 4 WAY SOLENOID AIR VALVE (bottom fittings) to the wash bay, BETWEEN THE TWO APPLICATORS and tee off to EACH APPLICATOR at the entrance base plate.

- Pull and connect ONE 3/8” BLACK AIRLINE TUBE from the 4 WAY SOLENOID AIR VALVE (top fittings) to the wash bay, BETWEEN THE TWO APPLICATORS and tee off to EACH APPLICATOR at the entrance base plate.

- Finally, pull and connect ONE 3/8” BLACK AIRLINE TUBE from the 4 WAY SOLENOID AIR VALVE (top fittings) to the wash bay, BETWEEN THE TWO APPLICATORS and tee off to EACH APPLICATOR at the exit base plate.

Pic #12: Tubing Routing
Secure all the tubing properly with plastic ties. Ensure that none of the air lines interfere with the motion of each Applicator.

Finally, connect the main air supply to the MAIN AIR REGULATOR (see Picture #10). The air supply has to be capable of at least: 10 SCFM @ 100 PSI and no more than 150 PSI.

NOTE: IT IS IMPERATIVE TO SUPPLY THE DELIVERY PANEL WITH “CLEAN DRY COMPRESSED AIR”. ANY AMOUNT OF MOISTURE, VAPORIZED OIL OR ANY OTHER IMPURITIES WITHIN THE MAIN AIR SUPPLY MAY AFFECT THE PERFORMANCE OF THE EQUIPMENT AND LEAD TO PREMATURE WEAR OR MAJOR DAMAGE TO THE DELIVERY UNIT OR ITS COMPONENTS.

Flush-Out System Utilities:

Connect each FLUSH-OUT INLET BALL VALVE to a water supply using 3/8” air line and a 3/8” TEE FITTING (See Pictures #13, 14).

Picture #13: Manifold Ball Valve

Picture #14: Water Supply
Electrical Connection of the Delivery Panel:

If you are installing a Super Shiner in a Tunnel, connect one circuit coming from ONE CHANNEL of the CAR WASH CONTROLLER to the terminal #2 and #7 as shown in Picture #15.

NOTE: THE MATERIALS REQUIRED FOR CONNECTING THE DELIVERY PANEL IS THE CUSTOMER'S RESPONSIBILITY! ALL WORK HAS TO COMPLY WITH ALL LOCAL AND NATIONAL CODES!

Pic #15: Electrical Connection to Car Wash Controller
If you are installing an IN-BAY SUPER SHINER, connect the Dilution Station Timer to the IN-BAY CONTROL BOX, using the Electrical Schematic show on picture #16.

The Duration Timer in the In-Bay Control Box has been preset for ONE MINUTE (see Picture # 17A and B below). This value is the maximum time allowed for a customer to use the Super Shiner before both applicators retract. If a different time is needed, increase or decrease the value by turning the Duration Timer knob to the desired value.

STOP!
THE IN-BAY CONTROL BOX COMES IN TWO DIFFERENT VERSIONS (SEE PICTURE BELOW):
SET THE “DURATION” TIMER ACCORDING TO THE PROPER VERSION
**Initial Soaking of your Super Shiner Brushes:**

- **Remove** the BRUSH SECTIONS from one side applicator and lined them in the supplied MIXING TUB. Filled the bottom of the tub with MCWW SUPERSHINER TIRE DRESSING CHEMICAL. Ensure that all pads material is soaked in the chemical. Let it sit in the tub for one to two hours. Remove the pads from the tub and reinstall on the applicator. Repeat with the other side applicator.

**Starting-Up your Super Shiner System:**

- **Close** the flow control fittings for both Applicator’s Rotary Actuators and cylinders: TWO FITTINGS FOR EACH ROTARY ACTUATOR and ONE FITTING FOR EACH CYLINDER. Reopen each flow control fitting by unscrewing the knob 4 FULL TURNS.

- **Turn ON** the air supplies to the DELIVERY PANEL and SLOWLY raise the air pressure at the MAIN AIR REGULATOR TO 90 PSI. Check for air leaks and verify that both APPLICATORS are retracted and both BRUSHES are rotated back against the Applicator’s solution manifolds. If any one of the applicators are EXTENDED or the BRUSHES are rotated outward, shut off the air supply to the Panel, bleed the air from the system and switch air lines.

- **Press** and lock the manual override button on the APPLICATOR AIR SOLENOID VALVE and set both the D-S and P-S REGULATOR AT 20 PSI. Verify that both Applicators and brushes are extended and fully rotated. Check for air leaks. Release the manual override button.
Drop the two pump suction lines and the DUMP VALVE RETURN LINE (see Picture #19) in the wheel gloss chemical drum. Press and lock the manual override button on the PUMP'S AIR SOLENOID VALVE and set the PUMP PRESSURE REGULATOR AT 40 PSI. Observe the chemical being pulled through both suction lines. Keep the pumps running until both 1/2" hoses are primed and full and a steady stream of chemical is coming out of each nozzle for both applicators. Release the manual override button and stop the pumps.

Turn ON the Car wash Controller Channel or if you are using the In Bay Super Shiner, TURN ON the signal dedicated to the Super Shiner and observe the Applicators operation: The chemical pumps will inject chemical into the brushes for 2 SECONDS, then the pumps will stop while the DUMP VALVE will release the line’s pressure back to the drum for about 2 SECONDS, and then the Applicators will EXTEND and the brushes will ROTATE OUT (“FLIP OUT”). Adjust each flow control fitting for proper operation: For a quicker operation, OPEN the FLOW CONTROL. For a slower operation, CLOSE the FLOW CONTROL.

Program the Car wash Controller Channel to turn ON the Super Shiner about 4 FEET in front of each vehicle. Test with a vehicle and adjust the brush pressure against the tire by INCREASING or DECREASING the air pressure of the DRIVER'S SIDE or PASSENGER'S SIDE AIR REGULATOR.

Operation of Your Super Shiner System:

Your Super Shiner Applicators and Pumping Station have been designed for years of operation and trouble-free service. The unique GUIDE-RAIL/APPLICATOR brush design allows for the application only when called upon: no more half application on non-selected vehicle tires!

When a 120VAC signal is applied to the Super Shiner control box, first the solution manifolds (located under the brush covers) sprays a quantity of tire dressing solution to the brushes for about 1 SECOND (factory setting). When the application is finished, the brushes pause for another 1/2 second allowing the dump valve to relieve the line pressure, limiting the product being wasted at the nozzles. Then the brush rotates out and simultaneously the applicator extends to adjust to the width of the vehicle, applying tire dressing solution to the vehicle tires. When the car wash signal is removed, the applicator retracts back to its original position while the brushes rotate back under the cover, exposing the “guide-rail” side to the wash, avoiding any possibility that a vehicle not selected for the tire dressing service gets any coverage to it’s vehicle tires.

ADJUSTING THE QUANTITY OF TIRE DRESSING PER APPLICATION: The quantity of tire dressing per application can easily be changed with the time duration of the air pump application.

- To INCREASE the amount of tire dressing, turn CLOCKWISE the Left Timer knob (see Picture #20)
- To DECREASE the amount of tire dressing, turn COUNTER-CLOCKWISE the Left Timer knob.

You may also use the AIR PUMP REGULATOR to vary the amount of solution applied to the brushes. Originally set at 40 PSI, if you decrease the pressure, the pump will push fewer product to the brushes therefore, decreasing the amount of tire dressing per application. Increasing the pump pressure will increase the amount of solution per application.

The EXTEND REGULATORS Passenger and Driver side may have to be adjusted to two different pressure settings. The passenger side typically may require more pressure (30 PSI recommended) than the driver side (20 PSI recommended) unit for a proper application. Increasing the pressure at the regulator will increase the pressure of the brush against the vehicle tire. Decreasing the regulator air pressure reduces the pressure of the applicator against the tire. Start at this recommended PSI and adjust as needed.

Driver Side Positive Stop Installation:

After start up, verify the positive stop adjustment on the applicator when fully retracted. Make sure the exit end of the applicator is **FLUSH WITH THE INSIDE EDGE OF THE OUTSIDE GUIDE RAIL** (see Pic #21). Adjust the positive stop (mounted on the applicator) as needed.
**Daily Maintenance Procedures:**

- **Inspect DAILY** each applicator and Delivery Panel for proper operation. Check the **MAIN AIR FILTER** for presence of water.

- **Inspect DAILY** each brush for wear and/or visible damages. Replace damaged brush section. To replace any brush section, follow the procedures below:

  1. **Step 1:** Push the override button for the EXTEND valve and then shut the main air supply and drain the air from the system.
  2. **Step 2:** Remove the plastic guide rail from the exit end of the applicator.
  3. **Step 3:** Remove the end cap.
  4. **Step 4:** Remove the grease fitting.
  5. **Step 5:** Slide out the brush section and replace the used section.
  6. **Step 6:** Reinstall the grease fitting, the end cap and the guide rail. Open the air supply and release the extend valve override button.
Inspect DAILY each applicator and Delivery Panel for proper operation. Check the MAIN AIR FILTER for presence of water.

Monthly Maintenance Procedures:

- Clean Delivery Station MAIN AIR FILTER ONCE A MONTH.
- Grease all applicator bearings ONCE A MONTH. See below for greasing points.
Applicator Arm Bearings (8 Fittings)

Support Document:

Electrical Diagram
**Warranty and Return Procedure:**

Motor City Wash Works warrants this product to be free of defect in material and/or workmanship for a period of **one year**. During the warranty period MCWW will at its discretion, at no charge to the customer, repair or replace this product if found defective, with a new or refurbished unit, not to include costs of removal or installation. Any product returned to MCWW for warranty has to have a **Return Material Authorization Number**. All shipping costs to MCWW are assumed by the customer. This is only a summary of MCWW’s Limited Warranty. Please, communicate with MCWW for our complete warranty.

Prior to returning any product to MCWW, the customer must call in for a **Return Material Authorization Number** and a copy of our **Return Material Authorization** Form must be completed. The **RMA** number must be written clearly on the outside of the shipping package and a copy of the form must be included in the package.