WRAP LICENSE PLATE BUMP INSTALLATION MANUAL

Part # 7WRAPLICENSE001
120VAC CONTROL

TABLE OF CONTENT

Equipment Utilities ..... Page: 1
Equipment Specifications ..... Page: 1
Suggested Tools and Installation Materials ..... Page: 2
Installation Instructions ..... Page: 2
Operation ..... Page: 5

Equipment Utilities

	7WRAPLICENSE001
ELECTRICAL	**TWO OUTPUTS CAPABLE OF 115 VAC, 1 AMP**
PNEUMATICS	**2 SCFM @ 100 PSI**

Equipment Specifications and Features

- ☐ Convenient 115VAC Air Solenoid Valves (Optional 24VAC available)
- ☐ Compact Design: Utilize No Additional Space
- ☐ Retract Both Wheel up to 18” off Center Line

Suggested Installation Tools and Materials

- ☑ Set of Standard Combo Wrenches
- ☐ Standard Screw Drivers
- ☐ 6FT Step Ladder
- ☐ 3/8” OD Polyflow Tubing
- ☐ Set of Standard Ratchet and Sockets
- ☐ Plastic Ties

Notes and safety Symbols

Where necessary, important points will be highlighted in this manual, using the following symbols:

NOTES: **PROVIDES FURTHER INFORMATION!**

STOP! **PRECAUTION TO TAKE TO AVOID EQUIPMENT MALFUNCTION OR ERROR!**

WARNING! **DANGEROUS SITUATION WHICH MAY CAUSE EQUIPMENT DAMAGES, PERSONAL INJURIES OR FATALITIES!**

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Always follow all "Notes", "Warning" and instructions. Not doing so may have serious consequences on the overall performance of the washing equipment and/or the safety of the people working on the equipment!

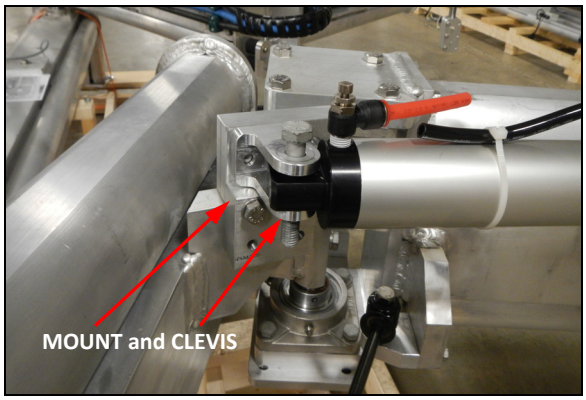
Installation Instruction for Cross-Over™ Wrap Around

☑ **Open** all boxes and crates and verify that you have all the required components as well as all your installation material.

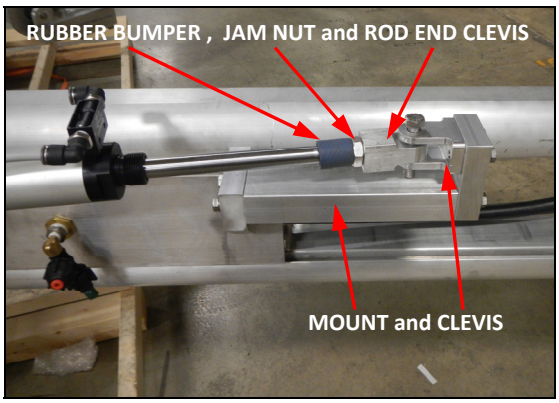
☐ **If** you have purchase your optional **WRAP LICENSE PLATE BUMP** separate from your **Cross-Over™ Wrap Around,** you have to install the system into your existing wrap around module.

☐ **Remove** the **PASSENGER SIDE SECONDARY CYLINDER** and the **CLEVISES** from the arm

☐ **Remove** also **ROD END CLEVIS, JAM NUT** and **RUBBER BUMPER** from the cylinder and reassemble on the **NEW BUMP RETRACT CYLINDER** (see Picture #2)



Pic 1: Cylinder End Attachment

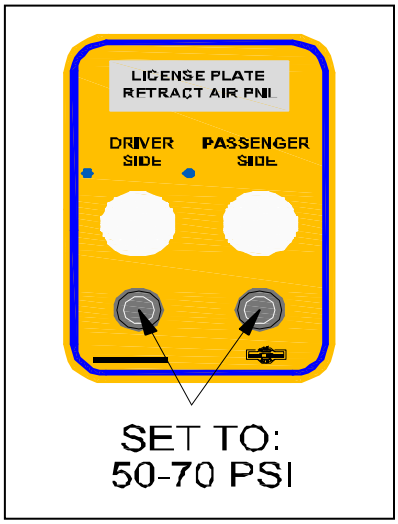


Pic 2: Cylinder Rod End Attachment

☐ **Secure** the front and rear mount on the arm and mounts the cylinder like shown on Pictures #1 and 2.

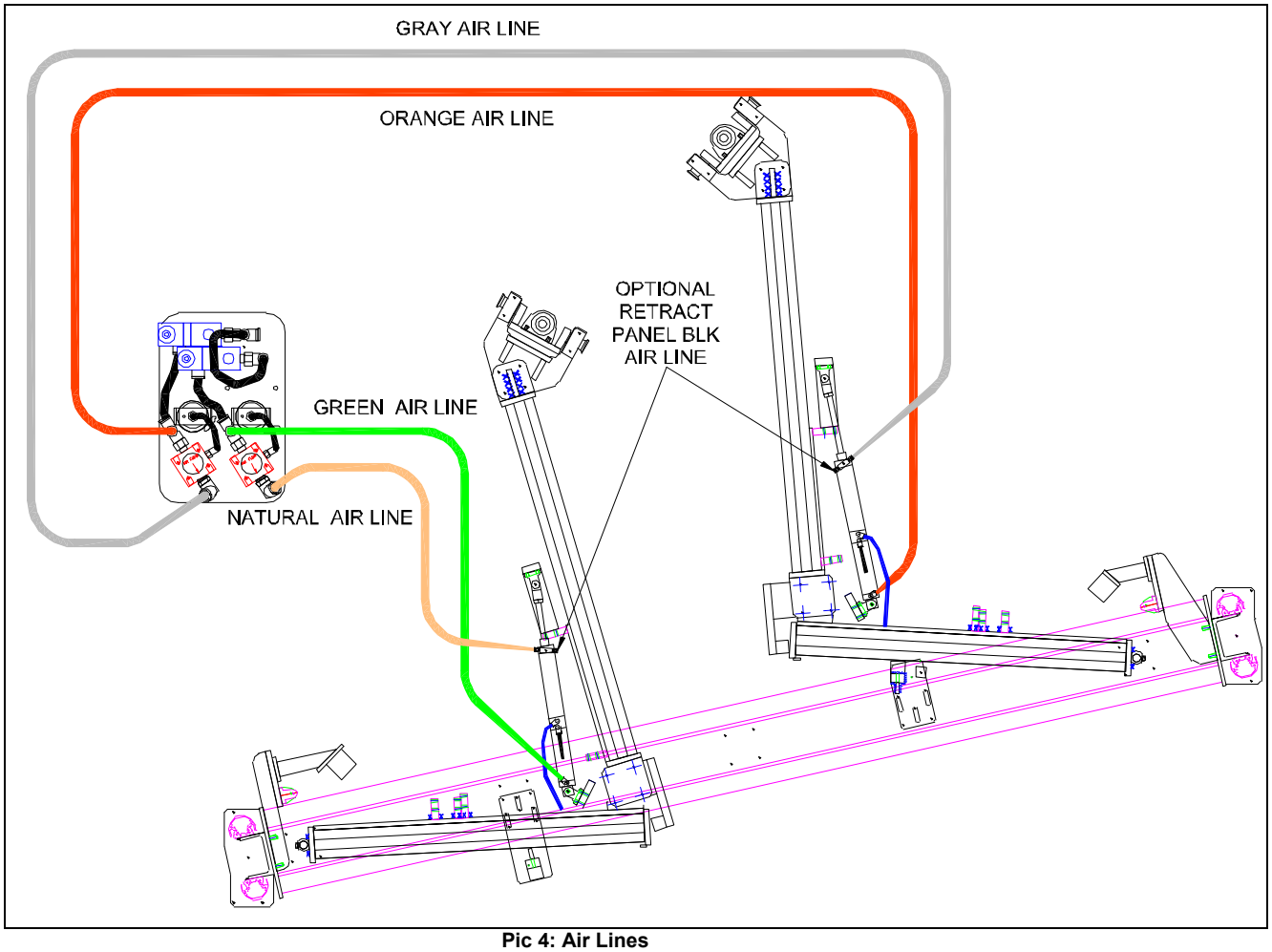
☐ **Repeat** same with **DRIVER SIDE**.

☐ **Locate** in the mechanical room and secure the air panel to the wall (see Picture #3).



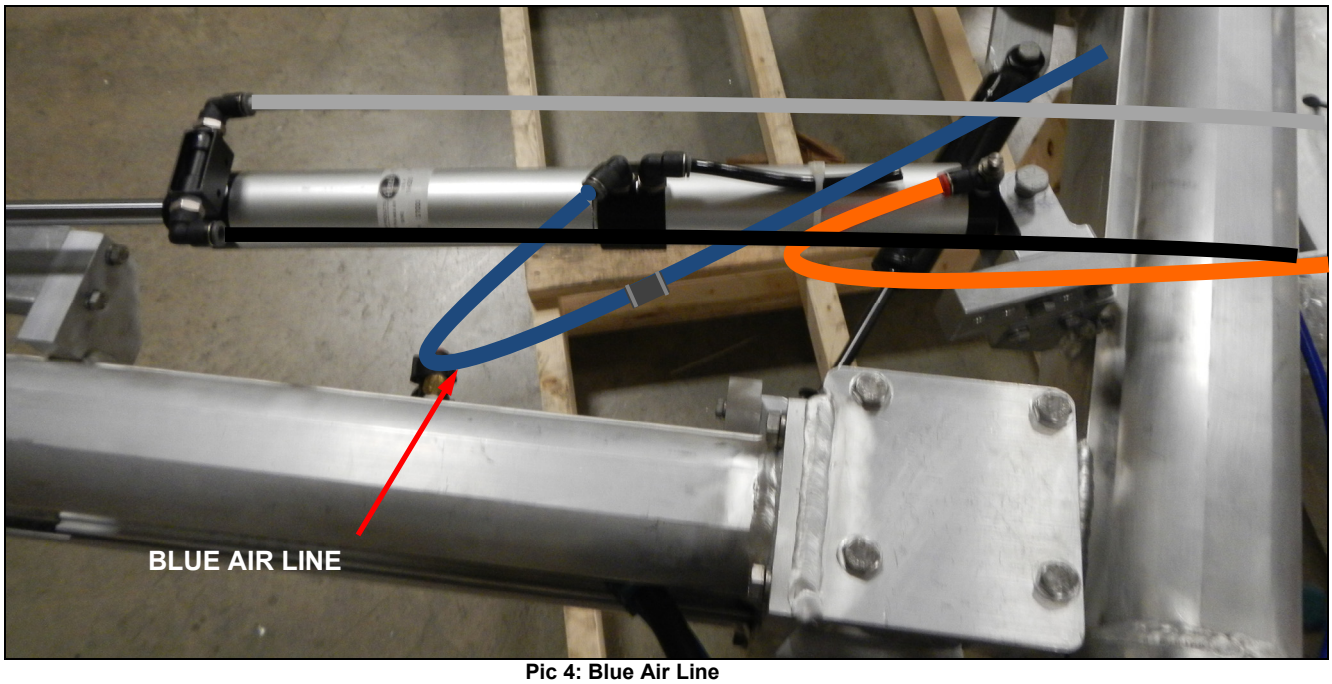
Pic 3: Air Panel

☐ **Pull** air lines from the air panels to the cylinders like shown on Picture #4.



Pic 4: Air Lines

☐ **Connect** the existing blue air line to the blue line coming from the new cylinders (see picture bleow).



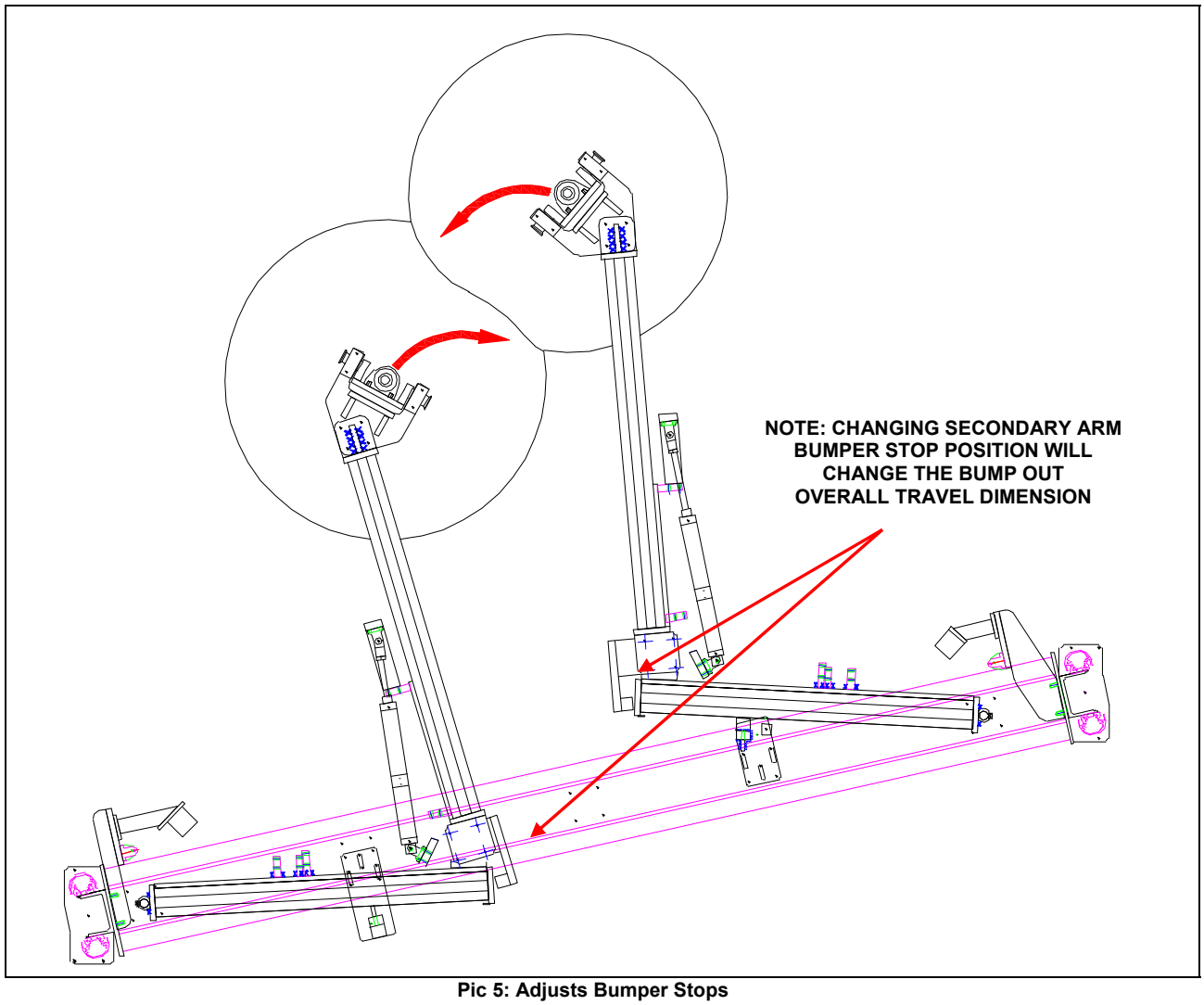
Pic 4: Blue Air Line

☐ **Connect** the air panel valves to **TWO OUTPUT FUNCTIONS: DRIVER SIDE** and **PASSENGER SIDE LICENSE PLATE BUMP-OUT.** You may also chose to connect the valves to the same output has driver side and passenger side mirror bump: The timing of the license plate and the mirror bump being the same, using the same output may simplify the functions programming.

WARNING!

VERIFY THAT THE VOLTAGE ON THE VALVES IS COMPATIBLE WITH THE CONTROLLER'S VOLTAGE BEFORE CONNECTING!

☐ **Finally** verify that the secondary arms bumper stops are adjusted allowing the two arms to extend to the far out position and the brushes overlapping when fully extended (see picture below).



Pic 5: Adjusts Bumper Stops

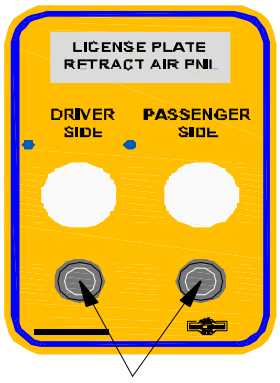
Operation:

☐ **Turn** the panel air supply **ON**. Adjust the regulators pressure between 50 and 70PSI (see Picture #6).

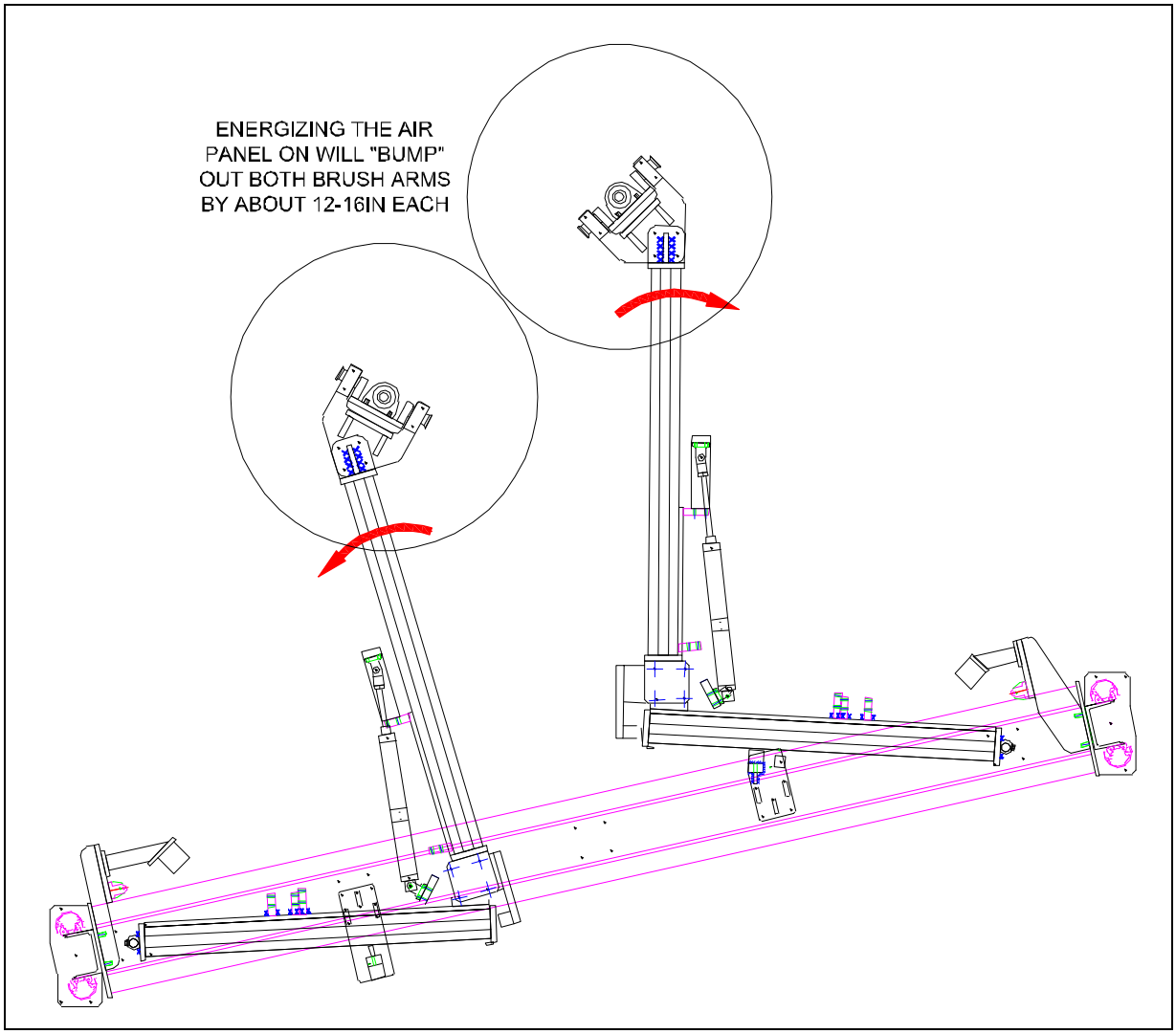
☐ **Turn** the **WRAP RETRACT OUTPUT ON** and verify that both brushes are extended in their ready position (in the center-line of the wash bay).

☐ **Manually** turn the air valve **ON** one at a time and confirm that each valves is controlling the appropriate cylinder (**DRIVER** or **PASSENGER SIDE**).

☐ **Manually** turn the **OUTPUT ON** for **EACH VALVES** and, one at a time, confirm that each output is controlling the appropriate valve (**DRIVER** or **PASSENGER SIDE**) and both brushes are moving out like shown on picture #7 below.

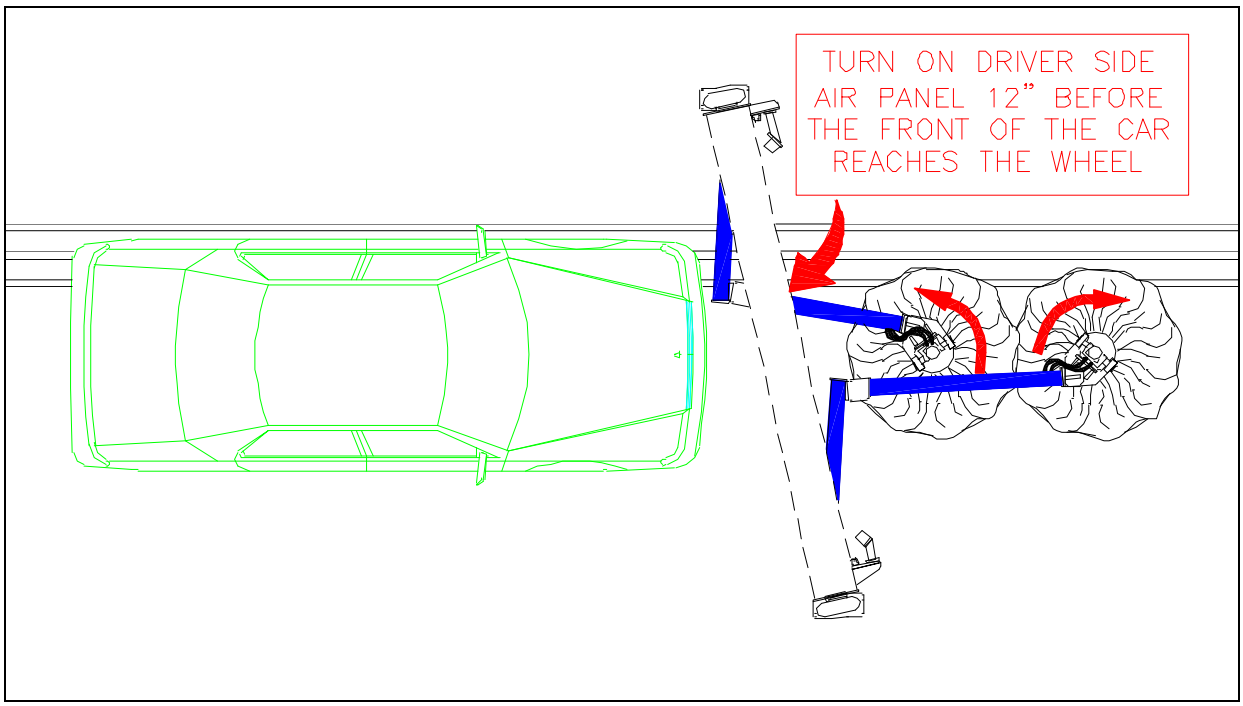


Pic 6: Air Panel

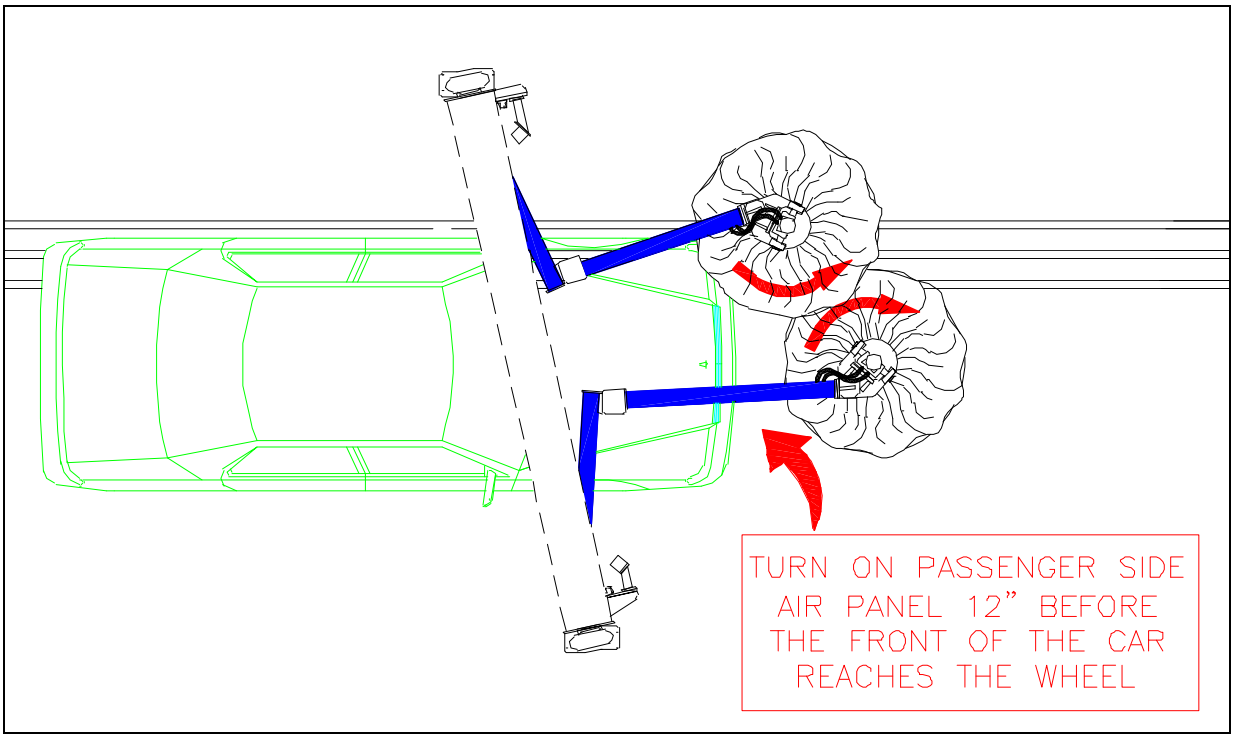


Pic 7: Test Bump Out

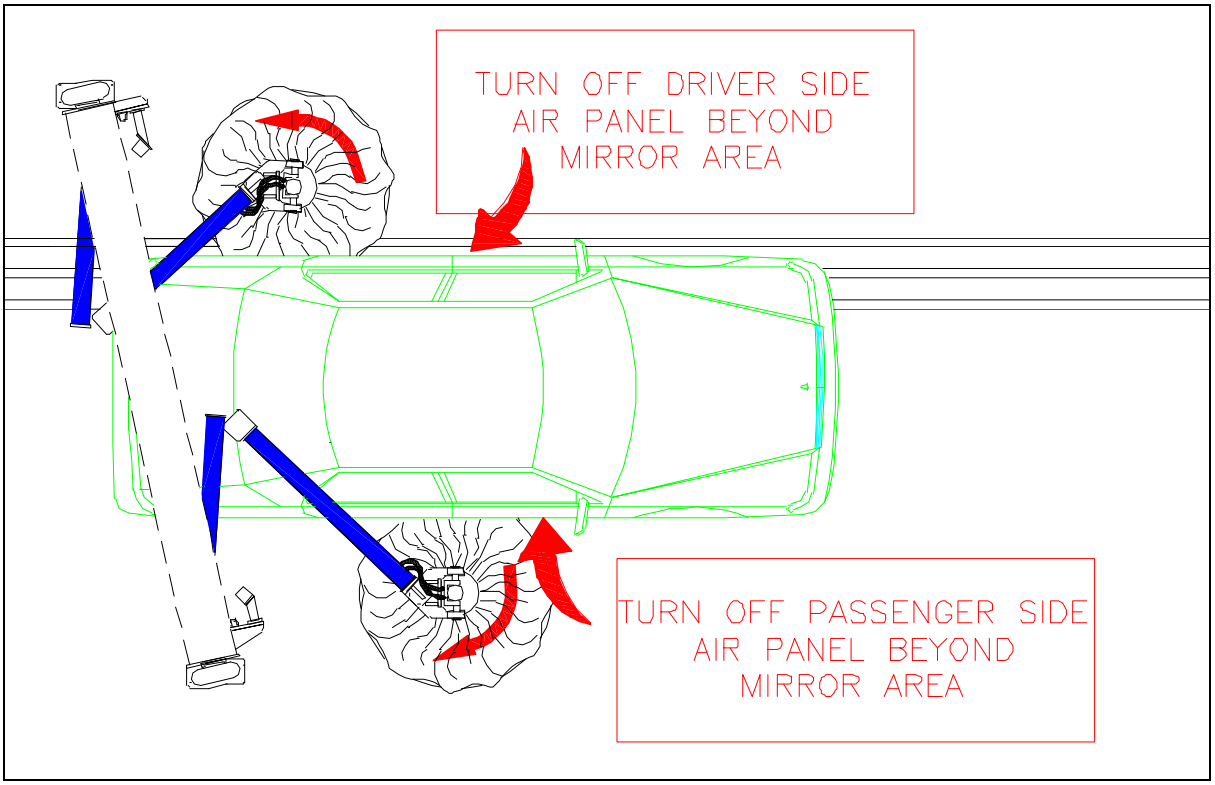
☐ **Program** each output to **TURN ON 12' BEFORE THE FRONT OF THE CAR AND STAY ON UNTIL THE DRIVER SIDE WHEEL IS PASSED BEYOND THE MIRROR AREA (ABOUT 9' LONG).**



Pic #8 Turn ON DRIVER SIDE Air Panel 12" Before Front of Car



Pic #9 Turn ON PASSENGER SIDE Air Panel 12" Before Front of Car



Pic #10 Turn Air Panel OFF Beyond Mirror Area

☐ **Test** with a car and confirm that each air valves are turned ON in front of the vehicle and are turned OFF on the side of the vehicle, forcing the brushes to **"BUMP OUT"** in front of the car but are bumped OFF after the mirror area, ready to clean the rear of the vehicle.

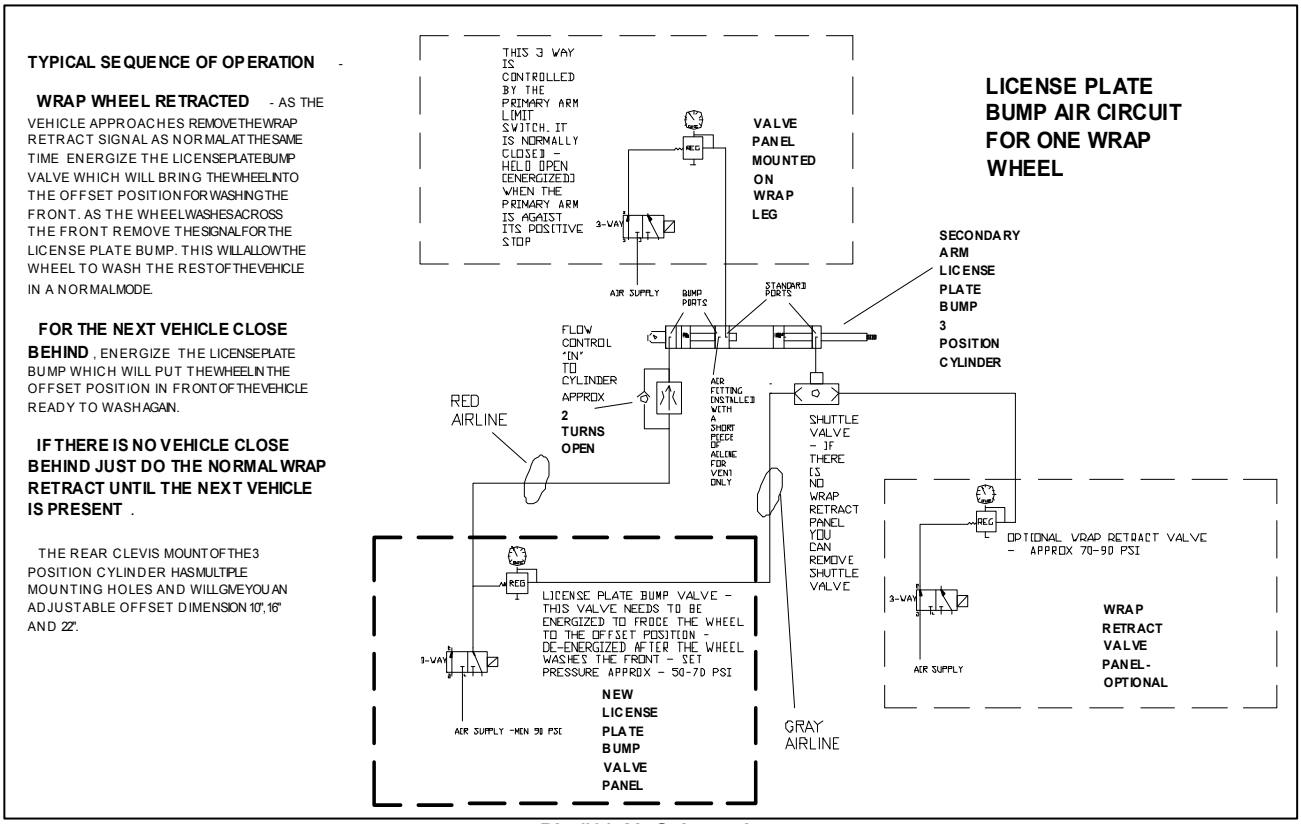
TYPICAL SEQUENCE OF OPERATION -

WRAP WHEEL RETRACTED - AS THE VEHICLE APPROACHES REMOVE THE WRAP RETRACT SIGNAL AS NORMAL AT THE SAME TIME ENERGIZE THE LICENSE PLATE BUMP VALVE WHICH WILL BRING THE WHEEL INTO THE OFFSET POSITION FOR WASHING THE FRONT. AS THE WHEEL WASHES ACROSS THE FRONT REMOVE THE SIGNAL FOR THE LICENSE PLATE BUMP. THIS WILL ALLOW THE WHEEL TO WASH THE REST OF THE VEHICLE IN A NORMAL MODE.

FOR THE NEXT VEHICLE CLOSE BEHIND , ENERGIZE THE LICENSE PLATE BUMP WHICH WILL PUT THE WHEEL IN THE OFFSET POSITION IN FRONT OF THE VEHICLE READY TO WASH AGAIN.

IF THERE IS NO VEHICLE CLOSE BEHIND JUST DO THE NORMAL WRAP RETRACT UNTIL THE NEXT VEHICLE IS PRESENT .

THE REAR CLEVIS MOUNT OF THE 3 POSITION CYLINDER HAS MULTIPLE MOUNTING HOLES AND WILL GIVE YOU AN ADJUSTABLE OFFSET DIMENSION 10", 16" AND 22".



Pic #11 Air Schematic

Warranty and Return Procedure:

Motor City Wash Works warrant this product to be free of defect in material and/or workmanship for a period of **one year** from the date of the purchase by the customer from MCWW. During the warranty period MCWW will at its discretion, at no charge to the customer, repair or replace this product if found defectives, with a new or refurbished unit, but 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 cost to MCWW is assumed by the customer. This is only a summary of **MCWW Limited Warranty**. Please, communicate with MCWW for our complete warranty.

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