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GW-V-857-711-981

Decoupler or Locker Replacement Valve
1986-1991 Vanagon Syncro (4WD)

The original locker/decoupler valves are expensive and hard to find! Update your system with these new, high quality, AND lower cost manually-controlled pneumatic valves.

Tools Needed

- 15mm Wrench
- Step Drill (Up to 9/16")
- Rotary Tool with Cutoff Wheel
- Phillips Head Screwdriver



Parts List

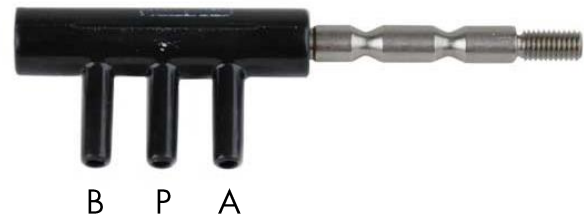
- Manual Pneumatic Control Valve (1)
- M12 Washer (1)
- Barbed Tee (1)
- Silicone Black Tubing (1 Foot)
- 1/8" NPT Barbed Elbow Fittings (3)



! NOTE: See Syncro decoupler installation guide for complete decoupler installation.

Installation Instructions

- 1) Begin by installing the elbow fittings into the valve body. The barbed fitting can be bent upward to allow the fitting to spin around and into place. The labels on the new valve correspond with the labels below on the original valve.



- 2) Next, remove the locker console and ventilation panel from your Syncro. If your console currently has or previously had an OE valve, you will need to drill out the hole 9/16" for the valve stem to accommodate the new, larger valve. Trim the ventilation panel along the dotted line as shown below using a rotary tool or cutoff wheel. A small rotary tool is recommended for a precise, clean cut.



Note: It is extremely easy to break the console. It is recommended that you use a step drill bit to avoid fracturing the console.



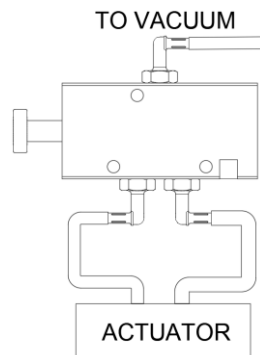
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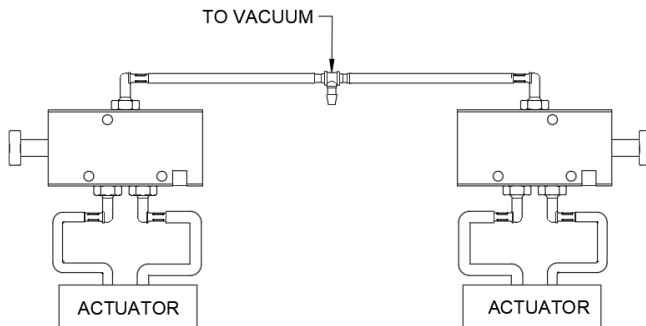
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- 3) Next, install the valves into the retaining bracket with the included washers and nuts. Loosely thread the nut by hand, as you will need to fine tune the valve position when reinstalling the console. Cut the black tubing into sections to allow you to connect the valve fittings to the semi-clear vacuum tubing routed to the vacuum reservoir and actuators. The goal is to connect the fitting installed at the port labeled "P" to vacuum, and the "A" and "B" ports to the actuator. It is recommended that you verify you have connected the tubing properly by testing the valve before moving forward. The decoupler or locker should be **disengaged** when the light is off and **engaged** when the light is on.

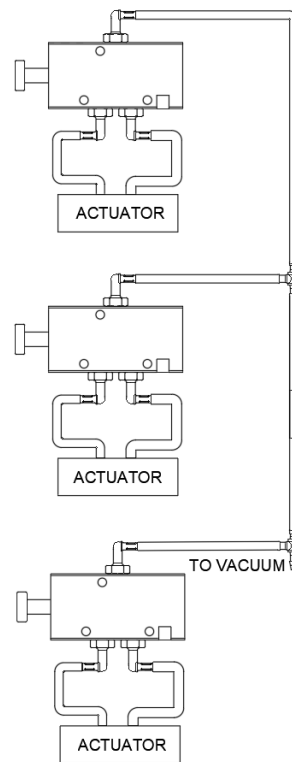
SINGLE VALVE SCHEMATIC



2 VALVE SCHEMATIC



3 VALVE SCHEMATIC



Note: When installing three valves, you will need to install the valves at an angle, as shown below.



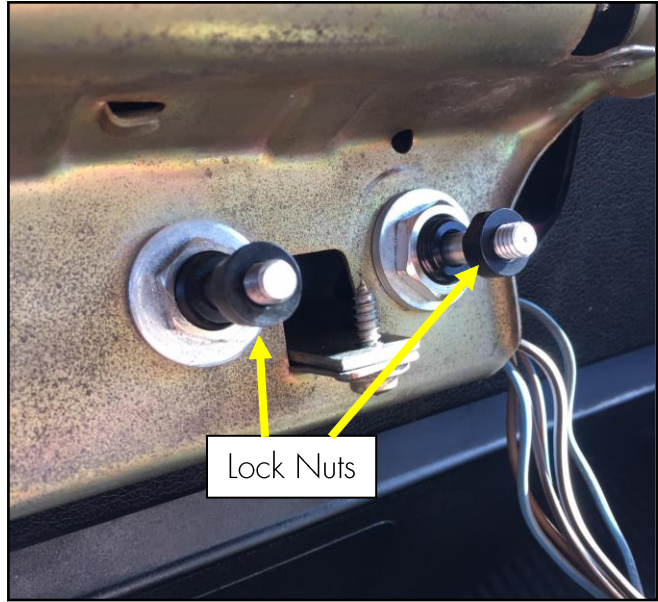
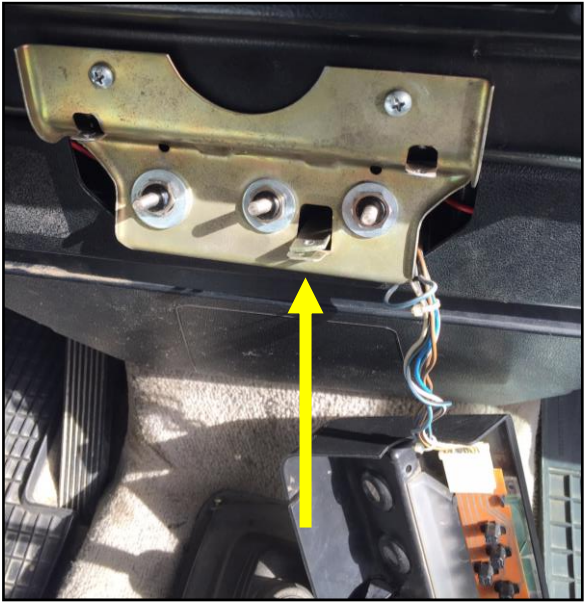


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- 4) Reinstall the retaining bracket and push the ventilation panel back into place. It is recommended that you leave the bottom screw out until you have pushed the ventilation panel back into place. Once the bracket and ventilation panel are installed, adjust and check the location of each valve with the locker panel installed. This will involve tightening and loosening the nut securing each valve between checks. It may be helpful to apply pressure on the valve stem in the required direction while tightening the nut. Once the valve stems are centered, install the lock nuts and ventilation panel. Screw the knobs on.



Time to go rock crawling!