

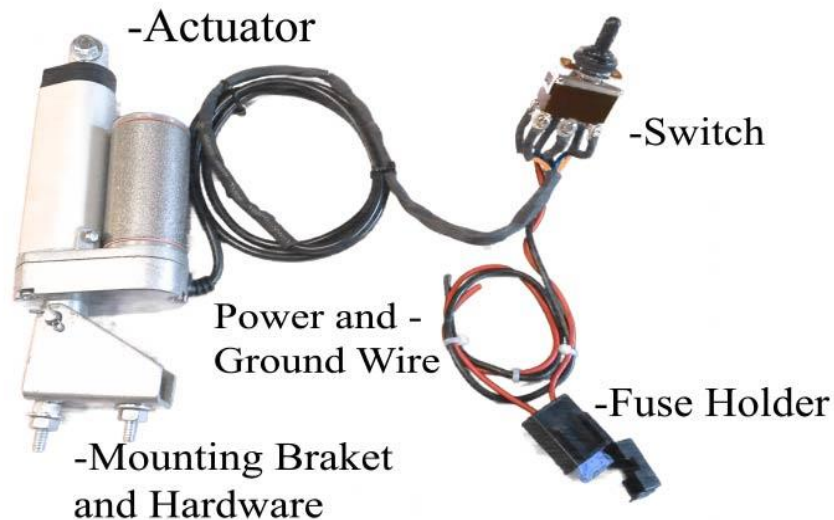
Millstone Automotive

Power Cowl Air Vent (PCAV)

Installation Manuel v1.0

1. PCAV and its components.
2. Tools required.
3. Removing stock handle and linkage.
4. Installing PCAV actuator.
5. Installing PCAV switch.
6. Connecting PCAV to battery.
7. Operating the PCAV up and down.

1. PCAV and its components



- Switch; Operates the actuator up and down.
- Actuator; Moves the cowl air vent up and down.
- Fuse Holder; Holds 30 amp in-line fuse, (included)
- Mounting Bracket; Mounts actuator to firewall.
- Power and Ground Wires; Attach to battery.

2. Tools Required



1- Hand Drill

1- Black Marker (or other color that stands out).

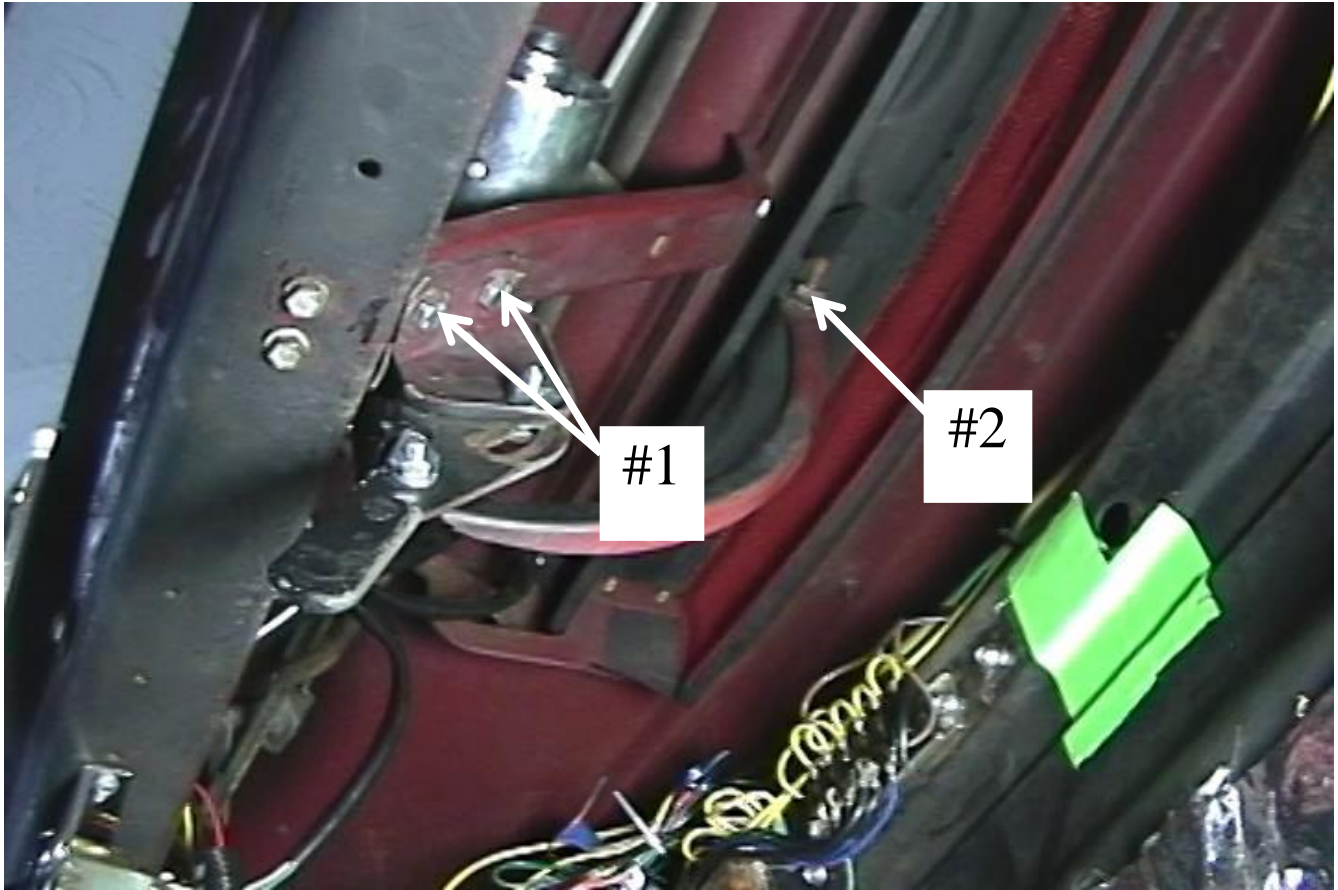
1- 5/16" Drill Bit

1- 1/2" Box-end Wrench

2- 7/16" Box-end Wrenches

Eye Protection

3. Removing Stock Cowl Handle and Linkage



- #1- Remove two 7/16” bolts located on the Windshield Wiper support bracket. This will remove the handle.
- #2- Remove one flat head bolt on Cowl Vent Tab. This will remove linkage from Cowl Vent tab and free linkage and handle for removal.

4. Installing the PCAV Actuator



#1. Install 1/4" bolt with one washer through the cowl vent tab.

#2. Put a second washer on other side of vent tab.



Note: Cowl Vent tab should be captured between the two washers, one on each side of vent tab.

#3. Install the actuator onto 1/4" bolt.



#4. Install lock washer and nut.

Note: Do not over tighten the actuator nut; only tighten enough to compress the lock washer. The actuator should move freely with a slight resistance.

#5. Make sure cowl vent is completely closed. Swing the actuator down until the Mounting Bracket rest on the firewall. Visually line up the Actuator vertically. Mark the Mounting Bracket holes with a marker.

Note: It may be simpler to place a light colored piece of tape over the area where the holes should be drilled to better define the location.



#6. Remove actuator for safety during drilling.

#7. Drill marked holes in firewall with 5/16" drill bit.
Don't forget eye protection.

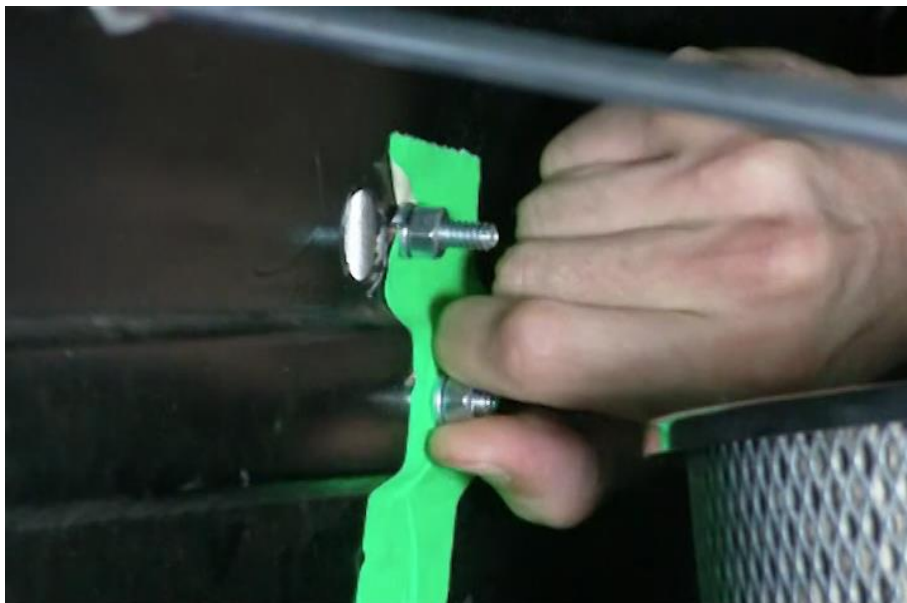


#8. Install actuator, Mounting Bracket, and hardware.



Note: The bottom hole of the Mounting Bracket has two nuts to compensate for the ledge on firewall.

#9. Install lock washers and nuts on engine firewall side.



5. Installing the Switch



Note: the Switch has white dots to indicate the switch up position and black dots to indicate the Switch down position. Install the Switch in dash with the white dots facing vertically up.

#1. Remove the Switch black Lever cover, nuts, Indicator plate, and washers.



#2. Install the Switch into the dash empty choke hole

from the backside of the dash.



- #3. Install the larger washer onto the Switch threads.
- #4. Install On-Off-On Indicator Plate.
- #5. Install small washer over the Indicator Plate.
- #6. Install the Switch nut.
- #7. Install black waterproof Switch Lever cover.

6. Routing Power and Ground Wires



- #1. Next to the actuator foot is a stock hole located in the firewall, push wires through this hole.
- #2. Route both wires (red and black) to where your battery is located.

7. Connecting Battery



- #1. Take the nut off the battery Positive (+) post connector, place the Red wire eyelet on the Positive post bolt, and replace the nut.
- #2. Take the nut off the battery Negative (-) post connector, place the Black (ground) wire eyelet on the Negative post bolt, and replace the nut.

8. Operating the PCAV up and down



- #1. To open the Cowl Vent, lift the Switch Lever up (vertically) until PCAV stops, (the Actuator has internal stops).
- #2. To close the Cowl Vent, push the Switch Lever down, (vertically), until PCAV stops, (the Actuator has internal stops).
- #3. To operate the Cowl Vent to a position between open or closed, bump the switch in the desired direction.

An installation video and other information is available at www.millstoneautomotive.com