## **CATHEADLIGHTS**

- 1. Unplug headlights
- 2. Remove clips on vacuum motor arms to headlight doors.
- 3. Remove 2 springs on each headlight door (4 total)
- 4. Remove 4 bolts holding the center grill panel to the hood latch support.
- 5. Remove 4 bolts holding right and left grill sections to hood latch support.
- 6. Remove 2 nuts on back of each grill, located on bottom middle and end of grill (4 nuts total)
- 7. Remove bolt on top of grill under the fender extension pass driver (2 bolts)
- 8. Cover bumper, stone guard, carefully remove bolt on top of center of grill, holding on to grill, (may require 2 people) do this for passenger and driver sides.
- 9. Unplug vacuum hoses from motors, remove 2 nuts holding each vacuum motor (4 nuts, bolts total) Remove motors.
- 10. Disconnect vacuum hose at intake manifold and install a plug.
- Optional-Remove all vacuum hoses and vacuum reservoir under driver fender.
- 11. Motor arms should be lined up in the area painted gray on the motor mount and motor arm. **DO NOT connect any wires to power at this point, the motor could rotate automatically.**
- 12. Mount electric motor with mount on driver side, using original holes for vacuum motor. Push motor completely to rear then tighten nuts.
- 13. Mount pass motor mount in original vacuum motor holes, mark 3<sup>rd</sup> hold and drill a 5/16 hole, tighten nuts.
- 14. Run wire harness to each motor, relay could be mounted on drivers or pass fenderwell. DO NOT connect any wires to power yet.
- 15. Reinstall grills in reverse order, adjust headlight cover bumpers all the way in, do not reuse springs, they are no longer needed.
- 16. Ensure the headlight covers are aligned, with the covers closed, check the gray mark on the motor arm and the motor mount and align them by rotating the motor knob, **THIS IS CRITICAL**, it is the start, closed position. Measure cover arms, shorten them as needed, attach the cover arms with bolts provided, **bolts should point toward the center of car**, tightening them will reduce slack and provide a better adjustment, you may have to do this step a few times for adjustment.
- 17. Make sure the motors **ARE NOT** connected to power, then, by hand, rotate the knob

**counter clockwise** to open the cover, continue turning **counterclockwise** Do this for both sides. Check for binding. Make adjustments to headlight cover arms as needed. Adjust cover arms, motor mount, grill, headlight cover bumper stops can be adjusted to ¼ inch from hitting the stops, but not needed ...BEFORE POWER IS CONNECTED. When covers are closed, the motor arm and mark on motor mount should be aligned, failure to align them could burn motors, blow a fuse or damage your grill.

## **ELECTRICAL CONNECTIONS**

## DO NOT CONNECT WIRES UNTIL MANUAL OPENING AND CLOSING HAS BEEN COMPLETED BY ROTATING KNOB <u>COUNTERCLOCKWISE</u> COMPLETELY, check for alignment of gray start position.

- 18. Connect wires, red wire to constant positive ie; battery positive or starter solenoid positive terminal. Black wire to a good ground.
- 19. Simple test. Once the hot wire and ground are connected, you can test the opening and closing of the covers by touching the blue(or yellow) signal wire to the positive side of your battery. Holding the wire on the positive will open the covers, taking the wire off the positive will close them. (IF COMFORTABLE DOING THIS) KEEP HANDS AWAY FROM HEADLIGHT COVERS. THE MOTORS ARE STRONG AND WILL SMASH THEM. THE MOTORS WILL NOT STOP.
- 20. Connect the signal wire, blue (or yellow) wire to headlight dimmer switch wire... red w/ yellow stripe, wire should come from headlight switch,(67 Cougars with external vacuum switch may have a signal wire in engine bay located under windshield washer bag red w/ yellow stripe,check this wire for power with headlights on, no power when headlights are off., or use dimmer switch)
- 21. Turn the headlights on, covers should open. Ensure they are completely open. If they are too tight, the headlight cover arms may need to be adjusted, if they are too tight when open, lengthen the cover arm...shorten the cover arm if they are not open fully. Some headlight cover sag can be fixed by shortening the arms. Make

adjustments to motor arms with power wire disconnected!!! Motors can rotate automatically and smash your hand!! Use headlight cover arms and stops to adjust covers. Motor arms can moved *slightly* for more adjustment but usually not needed.

## **DISCLAIMER**

These items are considered race only, or off-road. Improper installation or any type of headlight ,headlight door failure can cause serious injury or death. Car owner assumes all risk of failure of any kind upon installing these headlight door parts.

Catheadlights (Joshua Duitman) is not responsible for any consequences should a failure of any kind occur. These parts must be installed by someone who is competent in installing and modifying automobile headlight systems.

A portion of all profits is given as gifts of love to the following: Compassion International & World Vision (child sponsorship program) Air1 (The positive alternative) Way-FM