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# ECPB Late C3-74 to 79 Corvette Electric Headlight Actuator Mounting Bracket

## **Installation Instruction**

#### Read this second

Use the bracket marked with "LEFT" on the driver side. Use a C clamp or locking pliers to hold the bracket to the bottom of the bumper support bracket, align the bracket so the center of the hole to the outside of the car measures 2 7/8 inches to the end of the bumper support bracket and the



hole closer to the middle of the car should measure 4 inches to the end of the bumper support bracket. Both mounting holes are very close to the edge of the bumper support bracket. Now drill both  $\frac{1}{4}$  inch holes and fasten with the supplied bolt and the flat bar (if needed install flat bar under support bracket) to the bumper support bracket. An alternative way to find the mounting location is to fasten the bracket to the bottom of the actuator and let it swing down to locate the holes to be drilled; they should be in reference to the dimension above. Repeat the same for the RIGHT or passenger side.



This is the end to measure to on the bumper support bracket

Align the electric actuator in between the mounting tabs and install the  $\frac{1}{4}$ " hex bolt with the lock nut. Do not fasten tight, make sure it has free play and a little of movement.

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## ECPB C3 Corvette Electric Headlight Actuator Installation Instructions

#### READ THIS ALL THE WAY THROUGH BEFORE BEGINNING!

Congratulations! You have purchased the long awaited and much needed ECPB electric headlight actuators. You will improve the value of your Corvette and say goodbye to the hassle of its sleepy or lazy eyes. There will be no more complicated vacuum lines, expensive switches, or operators to replace. You will turn your headlights on and off smoothly even without the engine running. You will only need house-hold tools and approximately 2-3 hours of your time, and then you will enjoy the trouble free operation of your updated headlights.

Now, let us get started and remove the unnecessary parts you will no longer need.

Remove the two small grills under the bumper to make installation easier.

Remove all vacuum lines from the headlight operators to the air tank. Then remove the vacuum lines from the headlight switch and the carburetor. You will no longer need them. Cap off the port on the carburetor you just removed the hose from. Now, test run your engine. Chances are you have eliminated some vacuum leaks and she runs much more smoothly now. Turn the engine off.

(If you also purchased the electric wiper door actuators for your 68 to 72 Corvette, you can remove all vacuum lines and the tank. If you are still going to use the old vacuum system on you wiper door, do not remove the tank or vacuum line to the carburetor, just cap off the port on the tank.)

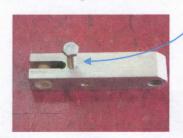
Next, remove the vacuum operator from the headlight assembly and throw it is as far as you can, or leave it in place to keep that original look. Remove the operator arm (see Figure 1 below) and all springs and pins.

Figure 1



Remove the adjuster screw from the operator arm you see in Figure 1 and install it into your new square aluminum control arm (Figure 2). Insert the adjuster screw or hex bolt as shown in picture.

Figure 2



If you cannot remove the adjuster screw, install a new 5/16" - 24 hex bolt. This screw adjusts the height of the headlight housing when in the closed position.

Remove the pre-installed pin from the new control arm and insert it (with the new supplied bushing) into your existing "L" shaped bracket on the headlight assembly in the upper hole.

Figure 3



Reinstall the short pin with the bushing (removed previously from the mounting bracket) and install using the cotter pin in to the other hole of the aluminum actuator arm. Check for free movement. Now is a good time to clean and lubricate all pivot points.

Now you will install the electric actuator mounting bracket.

Please lay these instructions to the side and read the instructions supplied with the mounting bracket specific for your year model.

Welcome back! Now that the mounting bracket is installed, you can continue.

Route your new actuator wiring harness through the opening in the radiator support and install the control module on the driver side inner fender, drill the two holes with the provided template.

We know you cannot wait to see the actuators in action. Fasten the black wire to a good ground on the radiator support or directly to the alternator mounting bracket. Connect the actuators to the wiring harness. Permanently fasten the red wire to the battery terminal on your alternator. Touch and hold the yellow wire to the same terminal on the alternator (the actuator will extend) remove the wire and the actuator will retract.

Now, check to see if the actuators' internal limit switches are turned off. You will hear the actuator humming if it did not fully extend or retract. If it is humming, remove the yellow wire and turn the piston clockwise to extend or counter-clockwise to shorten. Also check the alignment of the headlight assembly with the top of the fender/nose. If the assembly rests to low or to high, adjust it with the 5/16" adjuster screw in the new operator arm.

Repeat the same mechanical steps for your second headlight.

If your test is successful, route the yellow wire through the fire wall to the center pin of your head light dimmer switch on the floor, or to the yellow wire (turn your head lights on and check with a test light if it is on and off with the head light switch) coming from the steering column and splice it with the supplied dual terminal.

Now, step back and admire your hard work. Show your neighbors and friends how easy the installation was and how smooth the actuators work. Say goodbye to all the headlight problems you had in the past.

For any technical questions, comments or suggestions please email us at <a href="mailto:ecpbtech@comcast.net">ecpbtech@comcast.net</a> or call (706) 639-9493.

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# CHANGING THE FUSE TO A HIGHER RATING THAN 5 AMPS WILL BURN THE ELECTRIC ACTUATOR AND VOIDS ANY WARRANTY.

If the 5 Amp fuse opens (or blows) please find the problem before replacing the fuse.

Check for free movement of the headlight bucket and alignment of the actuator, the fuse only opens when the actuator is over loaded do to a mechanical issue or a dead short in the wires.

DO NOT REPLACE IT WITH A HIGHER RATING THAN 5 AMPS!!!

#### Control Module Template



Please cut this template on the outside lines and tape to the left inner fender.

Ensure there is no interference with the hood hinge when closing.

Drill two holes 5/16 inch, install the control module with the wires exiting from the bottom of the module or if you would like to install the module horizontal and have your wires exiting to the front of the car.

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