

INSTALLATION INSTRUCTIONS

1963-1967 CHEVROLET CORVETTE COUPE & CONVERTIBLE POWER WINDOW INSTALL INSTRUCTIONS

IMPORTANT NOTICE!!!!

You will want to read these instructions in full prior to beginning any part of this install. Installing this power window kit on your 1963-67 Corvette is going to require you to drill and cut some parts of your car.

THE KIT INCLUDES

- 2) DOOR WINDOW REGULATORS
- 1) 2-WAY SWITCH
- 1) WIRE HARNESS
- 1) CIRCUIT BREAKER AND POWER WIRE WITH SELF-TAPPING SCREWS
- 2) DOOR CONDUITS WITH SELF-TAPPING SCREWS AND FLAT SPRING PLATES

(no additional hardware is included)

VEHICLE PREP

- Remove the center console cover and save the hardware for reinstallation.
- Remove all door handles, lock mechanism and door panels
- Remove both kick panels
- Tape any areas of the car you are worried about scratching

DOOR WINDOW DISASSEMBLY

Prior to removing the door glass mark the location of all channel bolts and the alignment bolt on the vent post. This will aid when you install and ensure you have little to no adjustment when you complete the install. You will need to save all the hardware you remove during disassembly for reassembly.

Have someone help hold the glass in place while you work to remove it.

- Roll the window up or down until the nuts on the lower door channel brackets are visible in the 2 access holes. See the image to the right. The GREEN arrows are pointing towards those holes to access the nuts.
- Remove the 2 bolts holding the lower channel to the door marked with YELLOW circles in this picture.
- Slide it off the roller on the regulator and place it in the bottom of the door for safe keeping or remove it from the door.
- Remove the 2 nuts holding the window channel to the brackets on the bottom of the window.
 - Do not slide the channel off the regulator rollers or remove it right now, it is more important to remove the window at this point.
- Remove the window by rotating it a little bit to get the 2 studs on the window brackets to come out of the channel and lifting it up and out of the door.
 - As you remove the window tilt it inward, toward the car, to clear the upper door frame.
- Now slide the channel off the rollers and place it in the bottom of the door for safe keeping or remove it completely from the door.
- Remove the 3 bolts holding the vent crank/regulator and bracket to the vent post.
- Remove the 1 bolt holding the vent crank/regulator to the bottom of the vent shaft and remove the crank/regulator and bracket.
- Remove the 4 bolts holding the vent window frame to the door frame.
- Remove the lower adjusting screw at the bottom of the vent post.
 - Be careful not to move the adjusting nut. This will allow you to finish your install with little to no adjusting.
- Remove the vent post assembly from the door.
 - At the bottom of the vent post is a bracket, you will need to twist the vent assembly a little bit to get that part out of the door.



COMPLETE THESE STEPS ON THE OTHER DOOR

DOOR PREP

To make room for the new conduit you will need to modify both the cowl/door jam and the door.

Cowl Modification

Using the diagram to the right as a guide you will be cutting a hole in the door jam/cowl to allow for free movement of the conduit when the door opens and closes. The overall opening that you will be cutting is approximately $3\frac{3}{4}$ " wide x $1\frac{3}{8}$ " tall.

These measurements and the location of the hole in this diagram and instruction is to be used as a guide. It is important that you use common sense when placing the hole location and cutting.

- Measure up 7" from the bottom of the door jam/cowl and make a mark.
- Measure $1\frac{3}{8}$ " up from that mark and make another mark.

These 2 marks are the approximate height of the opening you will cut for the conduit hole.

- Measure in $\frac{1}{4}$ " from the inside of the cowl where the flat of the cowl meets the curve toward the inside of the car and make a mark.
- Measure $3\frac{3}{4}$ " toward the outside of the car and make a mark.

These 2 marks are the approximate width of the opening you will cut for the conduit.

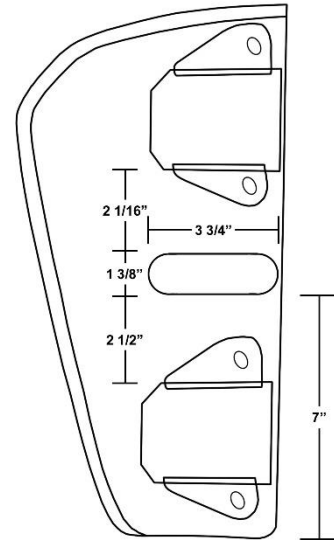
To confirm the approximate location of the hole you can measure up about $2\frac{1}{2}$ " from the top of the lower hinge and to see if the lower mark you made for the hole is close. And then measure down about $2\frac{1}{16}$ " from the bottom of the upper hinge and see if the upper mark is close.

Because this cut is so important you may want to look ahead in the instructions to the approximate location of the conduit on the door and place the conduit up near where it will be seated and see if the location of your hole makes sense.

You can begin your cut using a Dremel style tool. It may be a good choice to cut smaller than needed and open up from there as needed when installing the conduit. Furthermore, there may be some brackets or bracing inside the cowl that you encounter when cutting or testing the fit. Trim this as necessary, only removing what is need for conduit clearance.

When you have finished the hole and have confirmed the size and location and made your final cuts use 80grit sandpaper to smooth out the cut and even out the lines.

COWL



Door Modification

Like the cowl modification the location in these instructions is only approximate. Use these instructions as a guide to the location of the conduit but use common sense when placing it, drilling holes and installing it.

- Measure 3 ½" up from the top of the lower hinge on the door and make a mark.
- Measure 2" from the inside edge of the door and make a mark.

The intersection of these marks is the approximate location of the hole you will cut in the door. Place the conduit in place with the conduit hole for the wires centered over the mark and open and close the door a little bit to see if this location makes sense.

IMPORTANT!!!!

The conduit tubing will run parallel with the ground. The bracket on the conduit will be placed on the door at an angle. See the photo to the right for an example.

**The left and right are different and can be swapped out from left to right without any issue.*

You only want to drill 3 holes and you only want to drill these 3 holes one time and correctly the first time. You know the saying, "measure twice and cut once". This is the exact reason that saying was invented.



- If you are satisfied with the location of the mark you made for the wires to come through the door mark the 2 locations of the bolt holes from the conduit and drill 1/8" holes to mount the conduit.
- Locate the mark you made for the center of the conduit wiring hole and drill a 3/4" hole for the wire to enter the door.

DO NOT INSTALL THE CONDUIT JUST YET

You will not install the conduit permanently until the wiring has been run and the regulator has been installed and plugged in.

COMPLETE THESE STEPS ON THE OTHER DOOR

WIRING

Lay the wire harness out inside the car starting under the dash with the RED power wire with the wire connector on it along with the BLACK ground in the harness located under the dash near the driver kick panel and fuse box.

To ground the BLACK wire you can drill a small hole in the cross support bar under the dash and screw it to that bar or you can use the screw holding the accessory light in place. If you use the bar be sure to grind it clean to get a good ground.

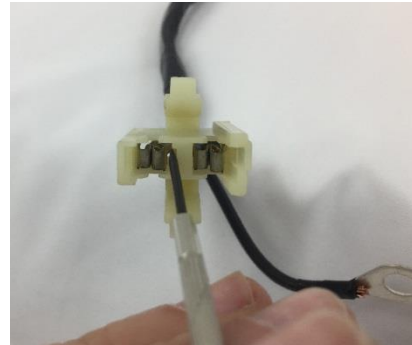
To install the circuit breaker drill 2 holes and use the supplied self-tapping screws to screw it to the kick panel area. Run the RED wire from the wire harness to the top post. Run the supplied RED wire with the connector on the end to the other post. DO NOT plug it into the fuse panel yet. You may choose to plug it in temporarily from time to time during install but you do not want to plug it in while working with the wires in future steps below. The final location of the wire in the fuse box will be the lower right slot on the fuse box.

The wires going to the driver's door are BLUE, GREY, and a BLACK ground wire. Run these through the driver side cowl hole you cut but not into the door just yet.

To run these wires through the conduit and then into the door you will need to remove the plug on the end of the wires to make them small enough to go through the conduit.

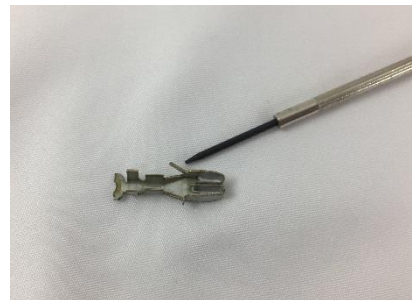
Prior to removing that plug be sure to make note of which wire went where. Failure to do this could cause the window to go up when the switch is activated to go down or vice versa.

- Place a small flat head screwdriver into the slot on the connector as show in the photo to the right.
- Gently depress the tab with the screwdriver to release the connector and gently pull the wire out from the plug. See the photo below to see what the keeper looks like for reference.
- Repeat this process on the other wire in the plug.



Continue to run the wires under the dash along the cross support bar and to the passenger side door zip tying as you go. In the middle of this run is the wiring for the switch. Run these wires down the transmission hump and toward the center console area.

You will need to repeat the process of removing the plug on the passenger side as well. Run the YELLOW, GREEN, and BLACK ground wire to the passenger kick panel area following the cross bar brace zip tying as you go, then through the hole you drilled into the cowl and remove the plug on the end of the wiring.



Notice there is a ground wire in this run prior to reaching the passenger door. Drill a small hole in the cross support bar near that ground wire and screw it to the bar. Be sure to grind the bar clean for a good ground.

Now that you have removed the plugs on the end of the wires you can run them through the conduit. The conduit tube is very narrow and can be tricky to run the wires through. Staggering the wires and taping them with electrical wire may help get them through. Also, using a smaller wire or string and pulling them through the conduit tube could be easier than trying to "shove" the wires through the tube.

Once you have gotten the wires through the conduit place the plug back on the end of the wires. To do this be sure you have gently bent the keeper tab back up on the end of the connector as shown in the picture on the previous page.

Gently push the connectors back into the plug until you hear/feel a soft click. Tug very gently on each wire to ensure it has locked into place.

After reinstalling the plugs continue to run the wire into the door through the hole you drilled for the conduit tube. Only pull as much as needed to get to the wire on the door motor. Estimate how much will be needed and you can pull the excess back into the car through the conduit later.

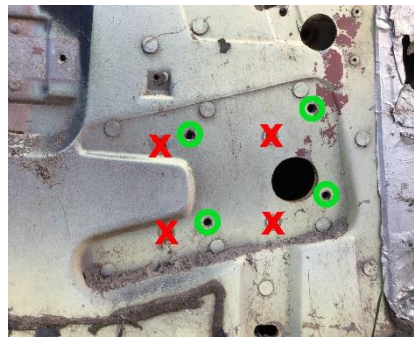
Again, do not install the conduit yet.

DOOR WINDOW REASSEMBLY

This picture shows the approximate orientation of the new regulator when it is installed in the door.



The manual regulator and the power window regulator do not share any of the same holes. The RED Xs in this picture show the original location of the 4 bolt holes for the manual regulator that you will no longer use. The GREEN circles are locations of 4 holes that are already in the door that were unused that you will now use to install the power regulators.



- Place the regulator into the door through the large access hole at the back of the door.
- Locate one of the 4 holes and install one of the bolts and snug it up.
- Locate the other 3 and install the 3 remaining bolts.
- Tighten the regulator bolts.

You will need to ground the motor using the BLACK ground wire in the wires that came into the door. There are multiple ways to do this.

Option 1 - Unscrew one bolt that holds the motor to the regulator and place that wire on that bolt.

Option 2 - Place the wire on one of the bolts holding the regulator to the door.

- Plug in the motor and place any excess wire toward the front of the door.
- Pull any excess wire out of the door, through the conduit, and back into the car.
 - Be gentle as not to unplug the wire on the motor.
- Mount the conduit to the door with the supplied self-tapping screws with the flat spring clips provided on the inside of the door.
 - Do not overtight as to strip the fiberglass or flat spring clips.
- Check for clearance one last time by opening and closing the door slowly.
- Place the vent post assembly back into the door.
- Reinstall the 4 bolts that hold the vent frame to the door frame.
- Reinstall the lower vent post adjustment bolt.
 - If you did not alter the adjusting bolt when you removed it you will have little to no adjustment needed for the front slide on the vent post.
- Place the vent crank/regulator back into place over the flat of the vent shaft and install the bolt you removed during disassembly.
- Place the vent crank/regulator and bracket back in place and install the 3 bolts you removed during disassembly and tighten
- With the help of a friend place the window back into the door and have them hold it in place for you.
- Slide the lower window channel onto the rollers on the regulator and slide it into position to accept the bolts on the lower window channel brackets.
 - If necessary, plug in the switch and run the window regulator up or down to get the regulator/channel in place to bolt it together.
- Reinstall the 2 nuts holding the window channel to the brackets on the bottom of the window and tighten them.
- Reinstall the small channel that attaches to the door by sliding it onto the roller on the regulator and then bolting it to the door using the 2 bolts you removed during disassembly.
 - If you marked the location of the slide and bolts when you removed it there will be little to no adjustment needed when you have finished the install.
- Test the window for smooth operation and adjust as necessary.

REPEAT THESE STEPS ON THE OTHER DOOR

SWITCH INSTALLATION

You will need to cut the floor/transmission tunnel to make room for the switch box protector. To do this we first need to determine which of 2 options you will use to install the switch. There are 2 ways to do the switch install, if you have an original style console bezel with a location for the switch or if you have an original style without the location for the switch.

Option 1 If you have the bezel with the switch location already stamped in it (if you have an original bezel without a cutout for a switch, skip to option 2 for switch installation instructions)

- Place the bezel in its location on the car. Using a sharp pencil outline the location of the switch hole through the hole onto the transmission tunnel.
- Remove the bezel and locate the center of the square you just made on the transmission tunnel using a “crosshair” pattern extending the lines well passed the square box you drew.
- Taking the fiberglass switch box protector locate the center of the box using a similar “crosshair” pattern and place it on the floor centered up using those lines.
- Outline the box on the transmission tunnel.
- Using a Dremel style tool cut the hole for the switch box protector.
- Check its fit and trim as necessary. It is not uncommon to have to trim the armrest bracket to get the box in place.
- Place the bezel back in place and look through the switch hole to confirm the placement of the box.
- When you are satisfied with the fit apply some silicon to the underside of the rim on the box and install it using small screws.
 - You may choose to apply a little more silicon to the seal after you have installed the box on the transmission tunnel to ensure a good seal.
- Plug the switch in if you haven’t previously done so.
- Screw the switch to the bezel
- Fold all the wires from the switch flat against the bottom of the switch and up around the edge.
 - The switch will take up almost all of the room inside the protective box so getting these wires tucked closely to the switch will help when placing the bezel back in place.
- If satisfied with the fit reinstall the bezel using the screws you removed during vehicle disassembly.
 - Be careful to place the wiring in a safe location to clear the shifter, ashtray, and all the screws used to reinstall the bezel.
- Test everything one last time for smooth operation before buttoning everything up.
- Reinstall the door panels, lock mechanisms, and handles.

Option 2 If you have the original bezel without a cutout for the switch

- Turn the bezel over and locate the premarked location for the switch cutout.
 - Notice the 2 “studs” or “pins” in the underside that are used to screw the switch into position.

- Cut out the switch hole using a Dremel style tool.
 - Be VERY careful and take your time when cutting this because there is no cover over the switch to hide any missteps.
- Place the bezel in its location on the car. Using a sharp pencil outline the location of the switch hole through the hole onto the transmission tunnel.
- Remove the bezel and locate the center of the square you just made on the transmission tunnel using a “crosshair” pattern extending the lines well passed the square box you drew.
- Taking the fiberglass switch box protector locate the center of the box using a similar “crosshair” pattern and place it on the floor centered up using those lines.
- Outline the box on the transmission tunnel.
- Using a Dremel style tool cut the hole for the switch box protector.
- Check its fit and trim as necessary.
- Place the bezel back in place and look through the switch hole to confirm the placement of the box.
- When you are satisfied with the fit apply some silicon to the underside of the rim on the box and install it using small screws.
 - You may choose to apply a little more silicon to the seal after you have installed the box on the transmission tunnel to ensure a good seal.
- Plug the switch in if you haven’t previously done so.
- Screw the switch to the bezel
- Fold all the wires from the switch flat against the bottom of the switch and up around the front edge.
 - The switch will take up almost all of the room inside the protective box so getting these wires tucked closely to the switch will help when placing the bezel back in place.
- If satisfied with the fit reinstall the bezel using the screws you removed during vehicle disassembly.
 - Be careful to place the wiring in a safe location to clear the shifter, ashtray, and all the screws used to reinstall the bezel.
- Test everything one last time for smooth operation before buttoning everything up.
- Reinstall the door panels, lock mechanisms, and handles.

MOTOR ISSUES

The regulator motors ground through the motor housing and the car. If the motor is not working or works intermittently it is most likely because of a ground issue. If there is not a sufficient ground your motor is not going to work properly.

It is uncommon but from time to time during testing or normal operation of the door motors they may not work properly. The most common cause of this is a ground issue.

If only one motor is not working your ground at the motor is not most likely not a strong ground. If both motors are not working it is most likely one of the main grounds in the middle of the harness. To test for a proper ground, temporarily run a simple ground wire from the motor housing to a good ground location on the car or car battery and try the switch again. If the motor works find a better ground option or grind/scrape paint away to make for a better ground.

If you have tested the grounding on the motor and it is still not working it could be a problem with the motor. To test just the motor, unplug the switch, run a simple ground wire to the motor housing and a hot 12v power source to either the red wire or black wire on the motor. The black and red wires are both hot power wires to the motor. One wire powers the motor to turn in one direction and the other powers the motor turn the opposite direction. If this does not work, tap the motor a few times with a light hammer and try again. Doing this helps seat the brushes on the motor. It is also helpful to run the motor up and down (both directions) a dozen times or so after it has gotten moving to assist more in seating the brushes.

If these tests do not work you may have a defective motor. Call 800-828-2212 for more assistance.

