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INSTALLATION INSTRUCTIONS	1965-1968 CHEVY/PONTIAC FULLSIZE 2DR HARDTOP & CONVERTIBLE POWER WINDOW INSTALL KIT
CHEVROLET IMPALA & CAPRICE PONTIAC BONNEVILLE & CATALINA	

THE KIT INCLUDES
<ul style="list-style-type: none">2) DOOR WINDOW REGULATORS2) QUARTER WINDOW REGULATORS1) 4-WAY SWITCH3) 1-WAY SWITCHES1) WIRE HARNESS1) CIRCUIT BREAKER AND POWER WIRE2) DOOR CONDUIT AND GROMMET ASSEMBLIES2) QUARTER PANEL WIRING GROMMETS <p>(no hardware is included)</p>

VEHICLE PREP
<ul style="list-style-type: none">• Remove the front seats.• Remove the rear seat.<ul style="list-style-type: none">• Both the backrest and lower seat will need to be removed.• Remove both door panels and quarter panels.• Remove both kick panels.• Remove the sill plates.• Tape any areas of the car you are worried about scratching.

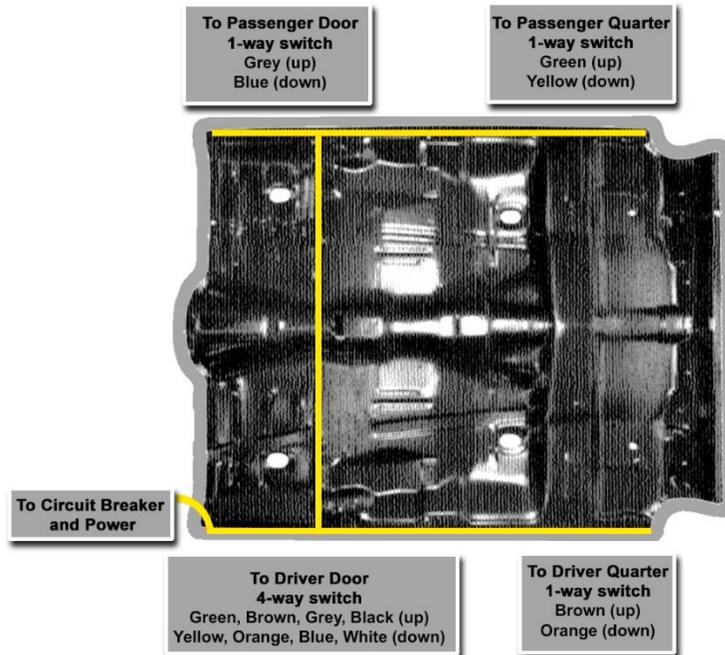
WIRING

Lay the wire harness out inside the car. The wire harness is shaped like the letter H.

The main wire for the 4-way switch and power wire go to the driver's side door. These wires are GREEN, BROWN, GREY, BLACK, YELLOW, ORANGE, BLUE & WHITE and the RED power wire.

The BROWN & ORANGE wires go to the driver's side quarter window.

The GREY & BLUE wires go across the car to the passenger's door and the GREEN & YELLOW to the passenger side quarter window.



The wires crossing the car T off at the driver door sill and crosses the car in front of the front seats to the passenger side door sill plate and hides under the carpet. The RED wire in this wire run is for a power seat option and will be unused in most instances.

Install the supplied circuit breaker to the kick panel area of the driver's side and run the main RED power wire to one post on the circuit breaker. From the other post run the supplied RED power wire to a power source such as the positive terminal on the starter.

DOOR DISASSEMBLY

Start with either door

Before you begin you will want to mark the location of all the nuts/washers/bolts that you remove with paint or a marker. If you are unsure if you should mark a location, mark it! Doing so will help make your reassembly easier and limit adjustments necessary when finished.

- To begin lower the door glass all the way down into the door.
- Loosen the bolt holding the pivot post on the bottom of the vent window to the vent window regulator.
- Remove the 3 bolts holding the vent regulator in place and remove the regulator.

- Remove the screw at the top of the door that is holding the vent assembly to the door and front upper vent bolt/washer both identified in this image with YELLOW arrows. Be sure to mark the location of the bolt/washer on the door with paint or a marker to assist with reassembly.
- Remove the 2 nuts/washers on the upper and lower vent adjusting studs identified with GREEN arrows in this image. Be sure to mark the location of each nut/washer on the door with paint or a marker to assist with reassembly.



Have a friend hold the vent assembly in place for the next steps.

- Using a flathead screwdriver, screw the adjusting screws out of the vent post assembly. Be sure to mark the thread location of the adjusting studs prior to screwing them out to assist with reassembly.
- At this point the vent assembly is free to be removed. Lift the assembly up and out of the door by lifting it up and back as you pull it out.

Have a friend help hold the door glass while you complete the next couple of steps.

- Slowly roll the door window up until you can see the rear window slide channel bolt through the access hole near the back of the door. The image to the right shows the location of the access hole.
- Remove the 2 bolts holding the lower regulator slide channel to the door identified with GREEN arrows in this image and slide it off the roller and place it in the bottom of the door for safe keeping. Be sure to mark the location of the bolts prior to removing them to assist with reassembly.
- Remove the 2 bolts holding the rear window slide/window stop in place and remove it from the bottom of the glass and place it in the bottom of the door for safe keeping. Again, prior to removing the bolts be sure to mark the location of bolts to assist with reassembly.
- Remove the bolt holding the front window stop in place on the bottom of the window bracket.



This image of the door glass, outside of the car, shows the 2 bolts for the rear window slide/stop and front window stop, identified with YELLOW arrows, that you are removing. Carefully roll the window up or down as necessary to get to each bolt.



You will not need to remove the rear upper window stop to remove the glass from the door though you may choose to do so. If you do be sure to mark the bolt location prior to removing it to assist with reassembly.

- You can now remove the door glass from the door. To do so rotate the front of the door glass down into the door and pull the glass up and back to remove it from the rollers on the regulator and out of the door.
- Remove the bolts holding the regulator in place and remove the regulator from the door.
 - *Hold the regulator in place as you remove the last bolt so the regulator does not fall against the door.*

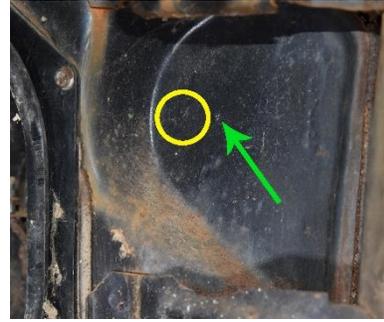
DOOR PREP

Original power windows came from the factory with an accordion style wire conduit that would go between the cowl and the door. The original would use the knockouts located in the cowl and door to install.

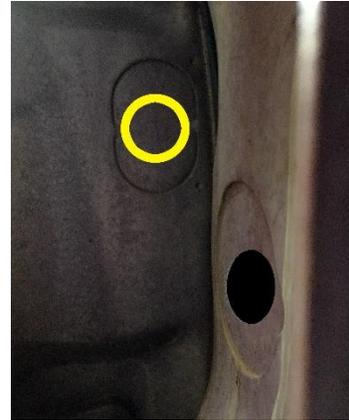
This kit comes with a tube style conduit with grommets that will require you to drill some holes to install.

The first hole you will drill is on the inside of the kick panel inside the car. The second hole will be drilled directly through this hole and through the cowl. You do not want to just drill straight through though. You will want to drill the inside and confirm the location on the outside before continuing. The third hole will be drilled in the door.

- Locate the dimple on the inside kick panel identified with a GREEN arrow in this picture.
- Measure forward 1" and make a mark. Drill a 1 3/8" hole on center with that mark using a hole-saw.
- Drill a 1 1/8" hole straight through the hole you drilled in the kick panel from the inside to the outside using a hole-saw. This hole should come through very close to the center of the knockout plate on the cowl.



- Drill a 1 1/8" hole centered on the knock out panel on the door. You will drill this hole from inside the door.
- Run the wire through the kick panel and cowl holes and through the hole in the door.
- Cut one side of one of the small grommets (came installed on the conduit) and place it over the wires and install it into the hole you cut in the cowl area.
- Cut one side of the other small grommet and place that over the wires and install it into the hole you cut in the door.



No grommet will be used on the kick panel hole.

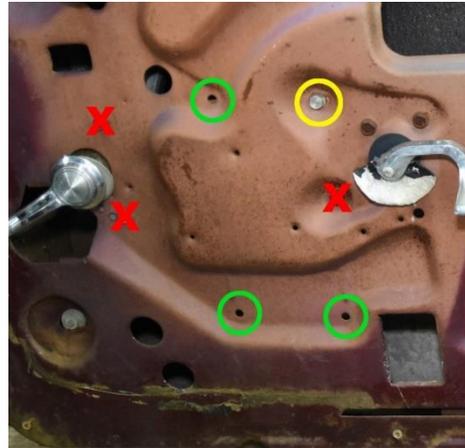
Do not install the conduit itself just yet. You will do this at the end of the door reassembly.

DOOR REASSEMBLY

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



The manual window regulator and the power window regulator only share one hole. The RED Xs in this picture show the original location of 3 bolts for the manual regulator that are no longer going to be used for the power regulator. The YELLOW circle is the location of the 4th manual regulator hole that you will use again for the power regulator. The GREEN circles are locations of 3 other holes that are already in the door that were unused by the manual regulator that will now be used for the power regulator.



- Place the regulator in the door and locate one bolt hole and install a bolt. After installing that one bolt locate the other 3 and complete installing the hardware to hold the regulator in place.
- Plug in the regulator and window switch and test the regulator. **If it does not work you may have a ground issue. Proceed to the MOTOR ISSUES section at the end of these instructions for additional information on ground/motor issues.*
- Place the glass back into the door from the backside of the door with the front of the glass tilted down and slide the lower glass channel onto the 2 regulator rollers.
 - Be sure to grease up the channel well using a grease like lithium grease.

If you removed the rear upper window stop it is time to place it back into the door. Be sure to use the mark you made earlier to locate it in the same position it was before disassembly to help minimize adjustment needed at the end of the reassembly.

- Reinstall the rear window slide/window stop by installing the 2 bolts you removed and place them in the same location they were in prior to removal using the marks you made during disassembly.
- With a friend helping you to move the glass up and down as necessary, reinstall the lower regulator slide using the 2 bolts you removed during disassembly. Place it in the same position it was in before disassembly using the marks you made when removing it to minimize adjustment when finished with the reassembly.
- Place the vent assembly back into the door and have a friend hold it in place while you complete the next steps. You may need to roll the door window down to make enough room for you to place the vent assembly into the door.
- With a flathead screwdriver screw the upper and lower adjusting screws back into the vent post and into the same position they were in prior to disassembly using the marks you made.
- Reinstall the nuts/washers on the adjusting studs, again making sure they are in the same position they were in prior to disassembly. Do not tighten these nuts yet.
- Reinstall the screw at the top of the door holding the vent assembly to the door and upper front bolt/washer holding the assembly to the door. Be sure to place these in the same position as they were before disassembly using the marks you made. Do not tighten these yet.
- Tighten the adjusting stud nuts ensuring they are in the correct location.

- Tighten the upper bolt and screw on the vent assembly ensuring all 4 have aligned to the location they were in prior to disassembly.
- Place the vent regulator into the door and reinstall the 3 bolts holding the regulator in place.
- Tighten the bolt on the vent regulator that holds the pivot post on the bottom of the vent in place.
- Test the window for smooth operation and adjust as necessary.
- Cut the provided conduit and place it over the wires between the kick panel and door and through the grommets you installed.

**Be sure enough of the conduit goes into the car that it goes into the 1 3/8" hole you drilled in the kick panel and protects the wires from that sharp surface.*



REPEAT THESE STEPS ON THE OTHER DOOR

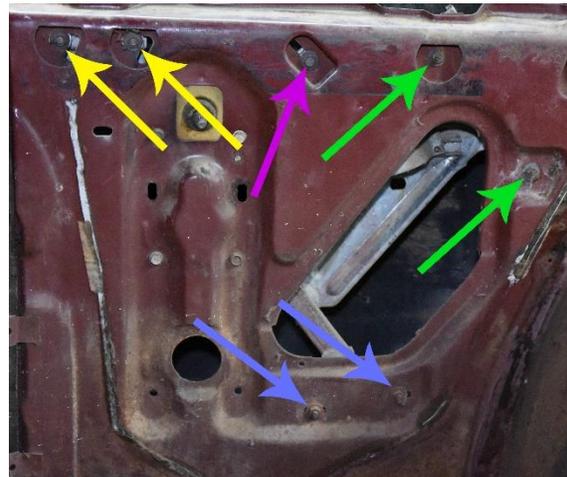
QUARTER DISASSEMBLY

Start with either quarter.

Installing the quarter power window regulator will require you to adjust the track locations and the window stop. It is helpful to mark the location of any nuts/washers/bolts before you remove them but these locations would only provide you a starting point to properly adjusting your quarter glass. If you are unsure if you should mark a bolt location, mark it!

Start with either side with the window in the full up position

- Remove the bolt holding the regulator stop marked in this picture with a PURPLE arrow and remove it.
- Remove the 2 nuts holding the rear quarter window guide channel and slide it off the roller on the quarter window and remove. The nuts are identified with GREEN arrows in this picture.



- Remove the bottom 2 nuts identified in the image on the previous page with BLUE arrows and loosen 2 upper nuts identified with YELLOW arrows on the front quarter window guide channel.

**Doing this should give you enough play to remove the quarter window. You may need to remove these completely and let the channel move freely to get the window out.*

Have a friend help you hold the glass during the next steps.

- Carefully roll the window up or down as necessary to access the 2 screws holding the lower window guide channel to the bottom of the bracket on the glass and remove those 2 screws.
- At this point the quarter window is free to come out of the quarter. Remove the glass by lifting the glass up and off the front guide channel. You may find it is easier to lift it almost all the way out and then forward towards the front of the car and out.
- Slide the window guide channel off the rollers on the regulator arm and set it aside for reassembly.
- Remove the 2 upper nuts that you previously loosened holding the front guide channel in place and remove it.
- Remove the 4 bolts holding the quarter window regulator in place and remove the regulator.
 - Be sure to hold the regulator in place when removing the last bolts so it does not drop against the quarter skin.

QUARTER PREP

The manual window regulator and the power window regulator do not share any holes. The RED Xs in this picture show the original location of the bolts for the manual regulator. The GREEN and YELLOW circles are locations of 4 bolt holes that went unused by the manual regulator that will now be used for the power regulator. You may need to make some modification for the upper holes marked with the YELLOW circles. Test fit your regulator to see if the upper and lower holes match up. If they do not match up use the following instructions to correct that. If they do line up skip the next 2 steps.



If your regulator does not match up to all 4 holes follow these instructions:

- Locate the upper holes identified with YELLOW arrows on the previous page and drill a 3/8 hole exactly one hole width below each of the original holes.
- Use a file or Dremel style tool to clear out the metal between the new and old holes so they end up looking like the holes in this picture identified with YELLOW arrows.
- Use a hole saw to drill a 1 1/8" hole in the general vicinity of the PURPLE circle in the picture on the previous page for the wire to enter the quarter panel. It should be located near the bottom of the quarter area just ahead of the wheel well.
- Run the quarter wires through this hole and into the quarter panel.
- Cut one half of the one of the supplied quarter window grommets and place it over the wires and into the hole you just drilled.



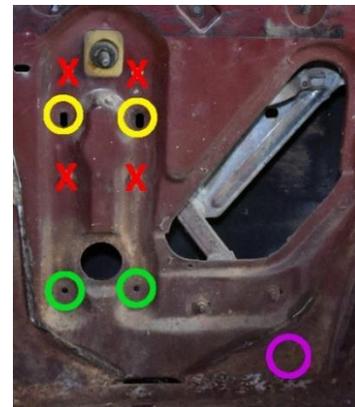
QUARTER REASSEMBLY

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

Here are the bolt locations for the manual and power regulators. The RED Xs were the locations of the manual regulator holes that you will no longer use and the GREEN and YELLOW circles are holes that were already in the quarter that were unused that you will now be using.

Prior to placing the regulator in the quarter it would be helpful to plug in the motor. It is more difficult to plug it in once it is in the quarter.

- Place the regulator in the quarter and locate one bolt hole and install a bolt. After installing that one bolt locate the other 3 and complete installing the hardware to hold the regulator in place.



- Plug in the window switch and test the regulator. **If it does not work you may have a ground issue. Proceed to the MOTOR ISSUES section at the end of these instructions for additional information on ground/motor issues.*
- Reinstall front guide channel using the 2 upper nuts you removed during disassembly. Leave them loose and do not install the lower nuts at this time. You will want the guide free to move a little bit.
- Put the glass back into the quarter by sliding the roller onto the front guide channel and down into the quarter.
 - Be sure to grease up the channel well using a grease like lithium grease.

Have a friend help you hold the glass in place and move it up and down as necessary for the next few steps.

- Reinstall the lower nuts on the front guide channel and tighten those and the upper nuts. You will have to adjust this when you are done with the reassembly, but you can place them close to where they were before disassembly to give you a starting spot.
- Reinstall the rear window guide channel using the nuts you removed during disassembly. Again, place it in a position close to where it was prior to disassembly.
- Reinstall the regulator stop with the bolt you removed during disassembly. Place it close to the same position it was in prior to disassembly.
- Run the window up and down and adjust your channels and stop as necessary. Do this until you are satisfied
**Do not run the window up and down without regard. You need to be aware of where the window is and adjust as needed. If you are not careful here you will break something.*
**It is suggested that you run the window up and down with a bump bump motion on the switch rather than a solid up or down motion until you have your adjustments done.*

REPEAT THESE STEPS ON THE OTHER QUARTER

SWITCH INSTALLATION

DRIVER'S DOOR

- Locate the original window crank hole on the driver's side door panel.
- Cut a 3 1/2" x 1 1/4" hole for the 4-way switch.
 - Use the door cutout as a guide to ensure you cut the hole in the correct location.
- Install the retainer clip into the new hole and bend the tabs outward to hold it in place on the door panel.
 - *You may need to widen the hole a little bit to install the retainer.*
 - *If you cut your hole and it is not located in the correct location for the switch to go into the door then you may need to cut the door a little bit to allow for room.*
- Reinstall the door panel on the car with the wiring pigtail coming through the hole.
- Plug in the switch and press it into the retainer until it clicks.

PASSENGER'S DOOR

- Locate the original window crank hole on the passenger's side door panel.
- Cut a 1 3/8" x 1 3/8" hole directly on center for the 1-way switch and retainer.
- Install the retainer clip into the new hole and bend the tabs outward to hold it in place on the door panel.
 - *You may need to widen the hole a little bit to install the retainer.*
- Reinstall the door panel on the car with the wiring pigtail coming through the hole.
- Plug in the switch and press it into the retainer until you feel it click.

REPEAT THE SAME PROCESS FROM THE PASSENGER DOOR ON BOTH QUARTER PANELS

MOTOR ISSUES

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.

The regulator motors ground between the motor housing and the door and the door then grounds to the car through the hinges. 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 between the motor housing and the door or the door and the car your motor is not going to work properly.

To test for a proper ground run a simple ground wire from the motor housing to a good ground location on the door. If the motor then works your ground between the motor housing and door is not good. In this case clear some paint between the bolt on the regulator and the door and make sure to make an effective ground surface.

If that test does not work then run a simple ground wire from the motor housing to a good ground location on the car. If the motor then starts working it is a ground issue between the door and the car. This can be attributed possibly to new paint or excess grease on the door hinges. In this case you will need to permanently install a dedicated ground wire attached to the door, run it through the wire conduit, and attached it to a good ground location inside the car near the kick panel.

If you have tested the grounding of both and it is still not working it could be a problem with the motor. Testing the motor is easy. 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 with a light hammer a few times 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 further assist in seating the brushes.

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

