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INSTALLATION INSTRUCTIONS	69 GM A-BODY 2DR COUPE, HARDTOP & CONVERTIBLE POWER WINDOW INSTALL KIT
BUICK SKYLARK & GS CHEVROLET CHEVELLE & MONTE CARLO PONTIAC GTO & LEMANS OLDSMOBILE CUTLASS & 442	

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.

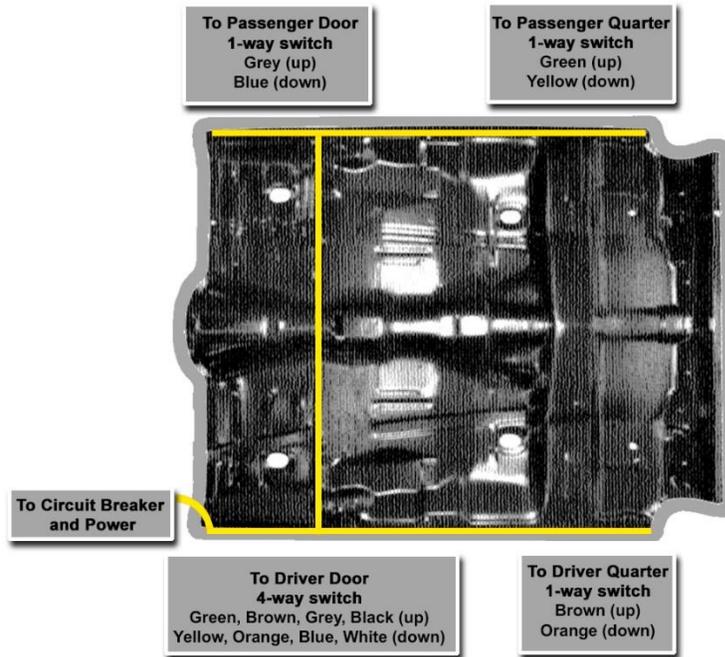
WIRING

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

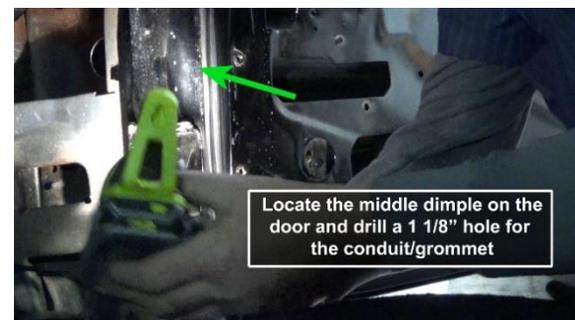
Start with either door

- Roll the window down part way to allow you access to the bolts holding the lower channel on the door glass.
- Mark all nut and bolt locations on the window guide, window stops, etc. with paint or a marker.
- It is not necessary to remove the door panel hanger brackets at the front and rear of the door, but you may choose to do so to aid in removing the window.

- It is also not necessary to remove the rear window channel/guide. You can remove the window without doing so but you may choose to do this to help aid in removing the glass more easily.
 - To remove the rear channel remove the bolt at the bottom of the guide towards the bottom of the door.
 - Remove the 2 bolts holding the guide to the bracket and remove it from the door or place it at the bottom of the door for safe keeping.
 - Remove the 2 bolts holding the bracket to the door and remove the bracket or place it at the bottom of the door for safe keeping.
- With the help of a friend hold the glass in place while you remove the bolts holding the channel on the bottom of the glass and remove it from the door or place in the bottom of the door for safe keeping.
- Rotate the window forward and down at the front. Lift the rear of the glass up through the opening at the top of the door and remove the glass back side first.
- Remove the 2 bolts holding the regulator arm slide channel on the door and remove it or place it in the bottom of the door for safe keeping.
- 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

- Locate the dimple located inside the kick panel and drill a 1 7/8" hole for the wiring conduit and grommet.
 - This hole is located opposite the middle dimple located on the door
- Locate the middle dimple on the door and drill a 1 1/8" hole for the wiring conduit and grommet.



- Run the wire through the kick panel and through those holes and into the door.



- Cut one side of large grommet (came installed on the conduit with the small grommet as well) and place it over the wires and install it into the large hole you cut in the kick panel area.
- Cut one side of the small grommet and place that over the wires and install it into the smaller hole you cut in the door.

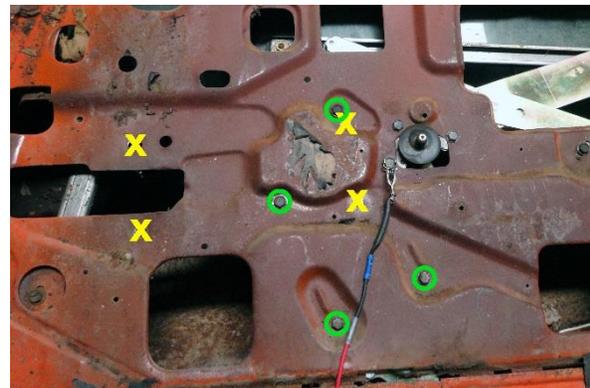


DOOR REASSEMBLY

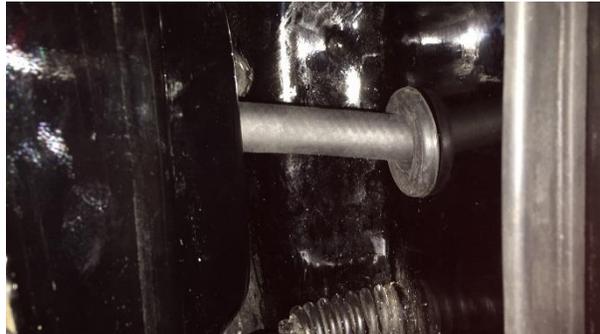
The picture shows the approximate orientation of the new regulator when it is installed in the door.



The manual regulator and power window regulators do not share any holes. The YELLOW Xs in this picture show the original manual regulator bolt locations. The GREEN circles are the locations of the 4 power window regulator holes. All the holes in the door are factory holes and no drilling is necessary.



- 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.*
- Slide the regulator arm slide channel onto the roller on the regulator arm and reinstall the slide on the door. You may need to move the arm up or down to get the arm in the correct position to bolt the slide in place. If you marked the location of the bolts for the slide before you removed it, bolt it in the same location.
 - Be sure to grease up the channel well using a grease like lithium grease.
- Place the window back into the door front first and rotate it back into position and have a friend hold it in place.
- Slide the channel that goes on the bottom of the glass onto the rollers on the regulator arms and then bolt the channel to the glass.
 - Be sure to grease up the channel well using a grease like lithium grease.
- If you removed the rear window channel/guide during disassembly reinstall it now. If you marked the location of the bolts be sure to bolt everything together exactly as it was to minimize any adjusting you may have to do.
- Test the window for smooth operation.
- If you removed any of the door panel hangers or window stops during disassembly reinstall them now, again placing them exactly where they were before disassembly.
- Cut the provided conduit and place it over the wires between the kick panel and door and through the grommets you installed.



REPEAT THESE STEPS ON THE OTHER DOOR

QUARTER PREP

- Locate the dimple inside the bottom hole of the body support and drill a 3/8" hole.



- Locate the dimple to the right of the body support about the same height from the floor as the previous step and drill a 3/8" hole.

These 2 holes will be your new holes for the bottom of the power window regulator.



- Drill a 1 1/8" hole 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.



QUARTER DISASSEMBLY

- Mark all the bolt locations for all the window slide mounting and adjusting brackets and window stops.
- Lower the window to its lowest position.
- Remove the lower window stop and lower slide mounting and adjusting bracket.
 - There is a bolt on the outside and inside on the bracket.
- Loosen the regulator bolts.
- Remove both upper window stops.
- Remove the upper slide mounting and adjusting bracket.
- Remove the regulator bolts.
 - **Be careful**, the window is going to be free to remove at this point. If you have not lowered the window to its lowest position have an assistant hold the window in place for you as you remove this hardware.
- Remove the regulator.
- Remove the window lifting it and tilting it inward toward the vehicle and remove it or lift and pull it forward and wedge it in place at the top of the quarter panel.



QUARTER REASSEMBLY

The power window regulator does not use the same holes as the manual regulator. This picture shows the approximate orientation of the new regulator when it is installed in the door.



Here are the bolt locations for the 2 regulators. The RED Xs were the locations of the factor regulator bolts and the GREEN are factory holes that you will now be using and the YELLOW are the holes you drilled at the beginning of the Quarter Prep.



Prior to placing the regulator in the quarter, plug the motor and switch in and rotate the regulator to a 90-120 degree angle from the mounting plate. This will aid you when you place it in the quarter and when putting the wheel from the regulator into the window channel.

- 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.
 - *You may need to install some washers on the bolts to act as shims so the bolts will clear the window regulator arm when it goes through its motions inside the panel. 2 washers is usually enough.*
- Place the glass back inside the quarter panel if you removed it or unwedge it if you chose that step. Place the roller from the window channel it the slide.
 - Be sure to grease up the channel well using a grease like lithium grease.
- Insert the roller on the regulator into the track on the bottom of the window channel.
 - Be sure to grease up the channel well using a grease like lithium grease.
- Place the upper slide mounting and adjusting bracket into the quarter and install it using your marked locations as a guide and just snug the bolts into place.
- Run the wire through the body support and through the hole you drilled toward the back of the quarter panel area and plug in the motor.

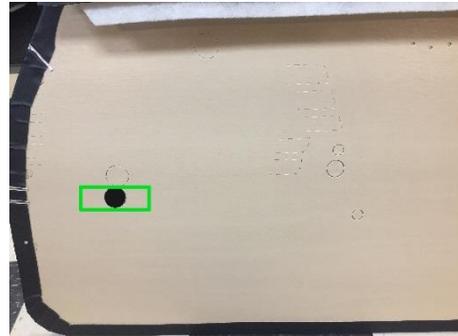
- Install the lower slide mounting and adjusting bracket using the marked locations to assist locating the slide in the correct location.
- Tighten the upper slide mounting and adjusting plate. Use the marked locations again to ensure the slide is in the correct location for smooth window operation.
- Test the window for smooth movement.
- Install all 3 window stops using the marks you made as a guide. You will likely need to adjust the locations of these stops after you complete the quarter install.
- Run the window up and down and adjust your stops as necessary. Do this until you are satisfied with the stopping point for the top and bottom motion of the window movement.
- Cut one side of the provided quarter grommet and place it over the wires and install it into the hole you drilled at the start of the quarter prep.

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 3/4" x 1 1/8" hole directly on center for the 4-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.



PASSENGER'S DOOR

- Locate the original window crank hole on the passenger's side door panel.
- Cut a 1 1/2" x 1 1/8" 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.



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.

