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INSTALLATION INSTRUCTIONS

1958 CHEVY/PONTIAC 2DR HARDTOP & CONVERTIBLE POWER WINDOW INSTALL KIT

CHEVROLET IMPALA
PONTIAC BONNEVILLE

THE KIT INCLUDES

2) DOOR WINDOW REGULATORS
2) QUARTER WINDOW REGULATORS
1) 4-WAY SWITCH
3) 1-WAY SWITCHES
1) WIRE HARNESS
1) CIRCUIT BREAKER AND POWER WIRE WITH SELF-TAPPING SCREWS
2) DOOR CONDUITS WITH SELF-TAPPING SCREWS
2) QUARTER PANEL WIRING GROMMETS

(no additional hardware is included)

VEHICLE PREP

- Remove the front seat
- Remove the rear seat
- Remove both door panels and quarter panels
- Remove the both sill plates
- Remove both kick panels
- Remove quarter panel access panels
- Tape any areas of the car you are worried about scratching

WIRING

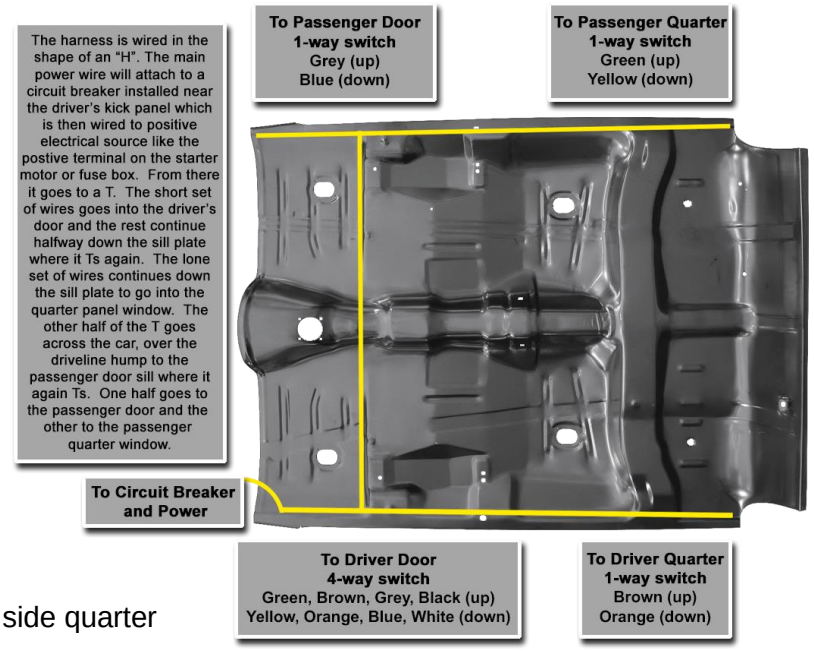
Lay the wire harness out inside the car. The wire harness is shaped like the letter H.

The RED power wire goes to the driver kick panel area.

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 seat 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 or the fuse panel.

DOOR WINDOW DISASSEMBLY

Start with either door

- Prior to removing the door glass mark the location of all guide and stopper bolts/screws on both the door glass and vent post assemblies.
- Remove the vent post assembly.
- Remove the door glass
- Remove the 4 bolts holding the door 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 door skin.

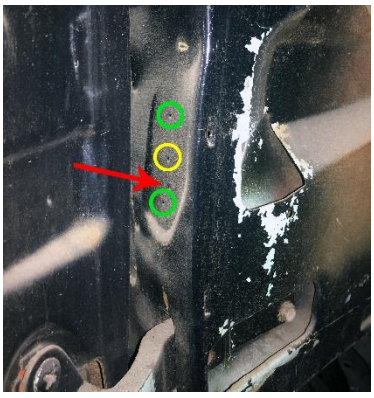
DOOR PREP

The manual regulator and the power window regulator do not share all the same holes. The RED Xs in this picture show the original location of 2 of the bolt holes for the manual regulator that you will no longer use. The GREEN circles are locations of 2 holes that were used for the manual regulator that you will use again for the power regulator. The YELLOW circles are the locations of 2 holes that are already in the door that were unused but you will now use to install the power regulators.

The regulators are modeled after the original factory power window regulators. There is a tab on the regulator that has no purpose other than alignment during the install. This tab, identified in this picture with a YELLOW circle, would require you to cut a slot in your door as the factory would have done. To avoid this you may bend that tab down flat or cut it off completely.

To make room for the new conduit you will need to drill some holes and modify both the door jam and the door.

- Locate 2 dimples on the door jam just above the lower door hinge marked in YELLOW on the picture. Drill a 1 3/8" hole centered on each of these dimple locations.
- After drilling each of the holes remove the area located in RED in the picture to make an oval hole to allow the conduit to move freely inside the door jam when opening and closing the door.



- There are 4 dimples on the inside of the door. Locate the 2nd dimple from the top marked in YELLOW in the picture and drill a 1 3/8" hole.
  Note: The RED arrow is pointing to the 3rd dimple from the top that will go unused.
- Run the wires through the door jam and door holes.

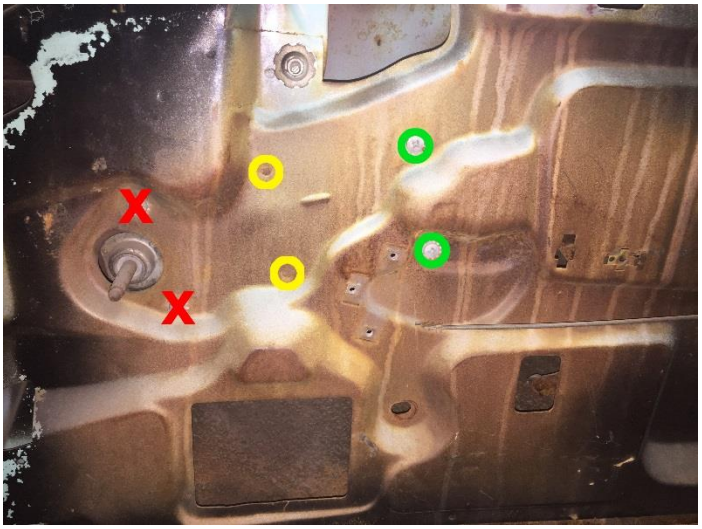
DOOR WINDOW REASSEMBLY

- Place the conduit over the wiring between the car and the door and complete the install of the conduit by lining up the top and bottom dimples located on the door marked GREEN in the picture with the 2 bolt holes in the conduit. Using the self-tapping screws secure the conduit to the door. The open part of the conduit with the tabs should be facing the ground. Do not fold over the tabs on the conduit just yet. You will do this when you complete the door regulator install.

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

As previously stated the power window regulator does not use all the same holes as the manual regulator.

Here are the bolt locations for the door regulators. The RED Xs in this picture show the original location of 2 of the bolt holes for the manual regulator that you will no longer use. The GREEN circles are locations of 2 holes that were used for the manual regulator that you will use again for the power regulator. The YELLOW circles are the locations of 2 holes that are already in the door that were unused but you will now use to install the power regulators.



- 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 and tighten.
- Take a moment to 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.*
- Insert the window into the door using your previous markings to locate all guide and stopper locations.

- Reinstall the vent post assembly using the marks you made prior to removing it to assist you in getting it in the right location and limiting any adjustment you may need to do. If you did not make any marks eyeball it the best you can and adjust as necessary.
- Test the window for smooth operation and adjust as necessary.
- Finish the door install by folding the tabs over on the conduit to hold the wiring in place between the car and door.

REPEAT THESE STEPS ON THE OTHER DOOR

QUARTER WINDOW DISASSEMBLY

On a convertible, you may need to put the top up and down several times to make the disassembly and install possible.

*The supplied **hardtop** template will be used for both left and right.*

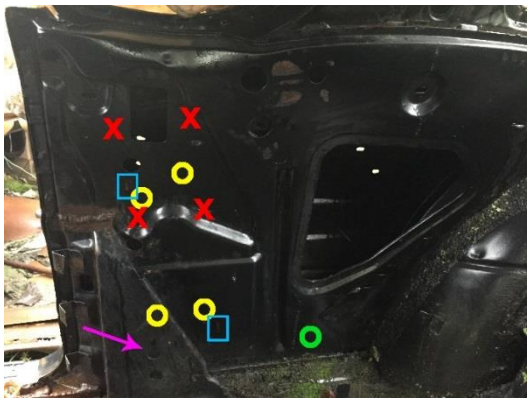
*The supplied **convertible** template is for the passenger side, for the driver side you will flip over the template and reuse it so it may be easier to start there to familiarize yourself with the install. To do the driver side flip the templates over and reuse them.*

- Before removing any hardware mark the locations of guides and stops to help you properly locate the glass when installing the kit.
- Remove the quarter window.
- 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 panel skin.

QUARTER PREP

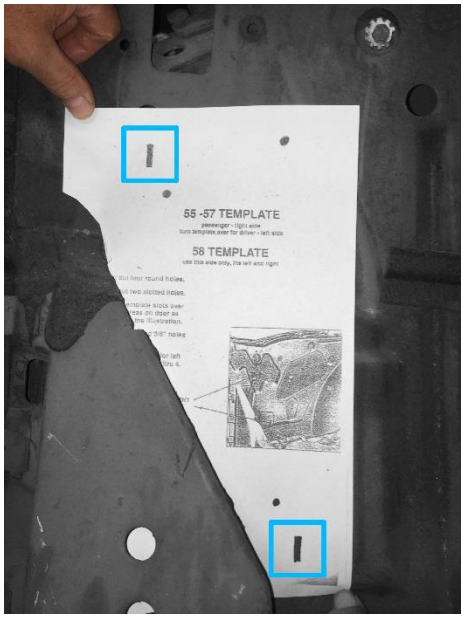
HARDTOP PREP

The manual 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 YELLOW circles are the approximate locations for 4 new holes that you will drill for the new power regulator. The bottom left YELLOW circle location in this picture is deceiving. It is actually located behind the body support and will be drilled through the top hole in the support indicated by the PURPLE arrow.



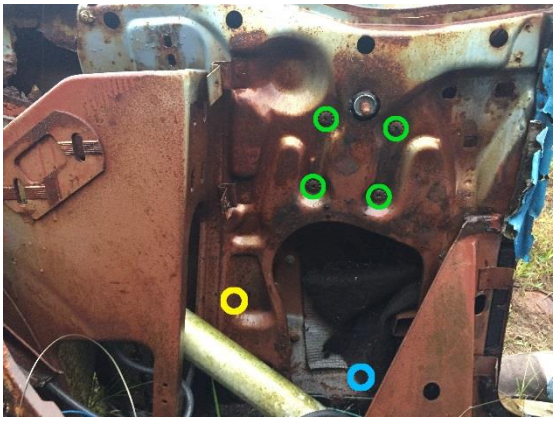
The GREEN circle is the approximate location of a hole you will drill to allow the wires to enter the quarter panel and the BLUE squares are locations of 2 raised bumps that will assist you to in lining up the provided template correctly and drilling the 4 new holes for the power regulator.

- Locate the hardtop quarter regulator template and tape the template in place with the marks on the template identifying the raised bumps (marked in BLUE in the picture) right over those bumps in the quarter.
  *NOTE: The **hardtop** template is the same for left and right sides*
- After locating the template in the correct location drill the 4) 3/8" holes for the new power regulator.
  - DO NOT flip the template over for the other side. You will use the same template for each side.
- There is no exact location for a hole to run the wires into the quarter panel. So locate an open space approximately where the GREEN circle is located in the picture on the previous page and drill a 1" hole for the wires to enter the quarter.



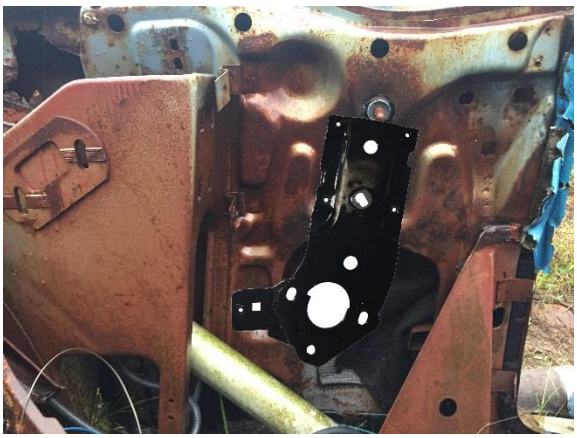
- Run the wires through the hole into the quarter panel using the hole you just drilled.
- Cut one side of one of the supplied grommets, place it over the wire and into the hole.

CONVERTIBLE PREP



Convertibles use the same 4 holes for manual and power quarter regulators. But unlike the hardtop there is a 5th bolt hole that can be drilled and used to install the power regulator. This bolt is not 100% necessary but it is a step you may want to take to authenticate your install. In this picture the GREEN circles are the location of the original manual regulator bolt holes. The YELLOW circle is the approximate location where you can drill the 5th bolt hole for the regulator. The BLUE circle is the approximate location where you will drill a 1" hole for the wires to enter the quarter panel. You may want to drill this hole in the quarter panel access plate for lack of a better flat surface location.

- Locate the convertible quarter regulator template and locate the 4 original regulator holes and line them up with the 4 holes on the template. *NOTE: (The **convertible** template is printed for the passenger side, for the driver side **flip** the template over and continue to use it for the other side)*
- Once you have properly located the template and taped it in place drill a 3/8" hole where indicated.
    - You will use the same template for the passenger and driver sides by turning the template over for the other side.



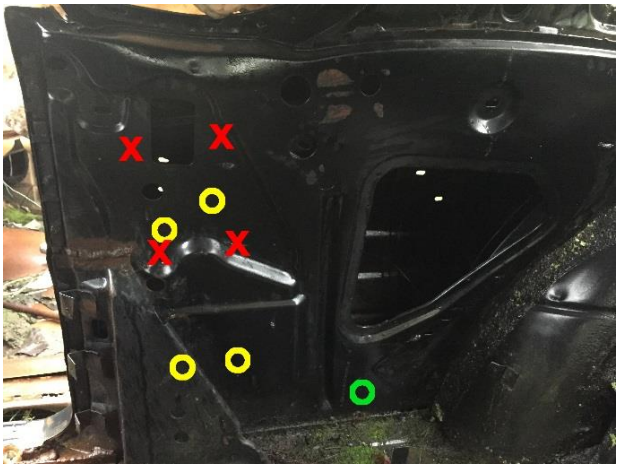
- To drill the hole for the wires to enter the quarter panel locate a flat spot and drill a 1" hole. In lieu of a flat location on the quarter area you can drill a 1" hole in the access cover that you removed during car prep.
- Run the wires through the hole into the quarter panel through the hole you just drilled.
- Cut one side of one of the supplied grommets, place it over the wire and into the hole.

QUARTER WINDOW REASSEMBLY

HARDTOP INSTALL

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

As stated before the hardtop power window regulator and manual regulator use different holes.



Here are the bolt locations for the hardtop quarter regulators. The RED Xs in this picture show the original location of the bolts for the manual regulator. The YELLOW circles are the approximate locations for 4 new holes that you drilled for the new power regulator. The GREEN circle is the approximate location of a hole you drilled to allow the wires to enter the quarter panel

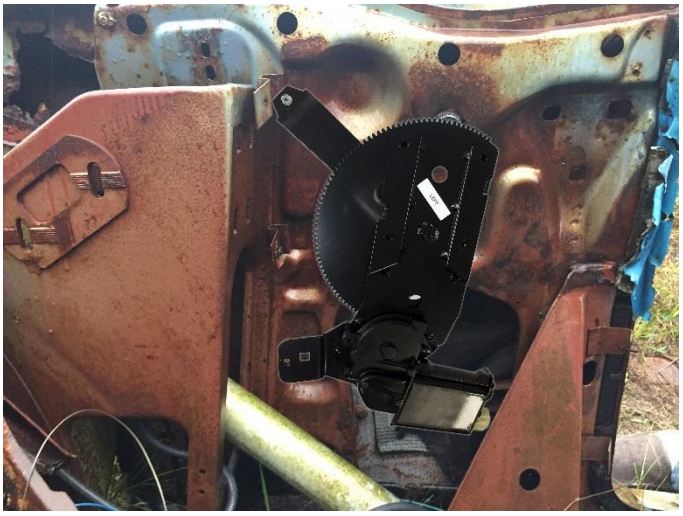
Prior to placing the regulator in the quarter, plug the motor in. It will be difficult to plug in once the regulator has been mounted into the quarter.

- 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 and tighten.
- Place the glass back inside the quarter panel and reinstall using all the original hardware and the locations you marked before removing any hardware during disassembly to help guide you.
- Run the window up and down checking for smooth movement. If you marked the hardware locations for stoppers and guides you will need to do little or no adjusting.

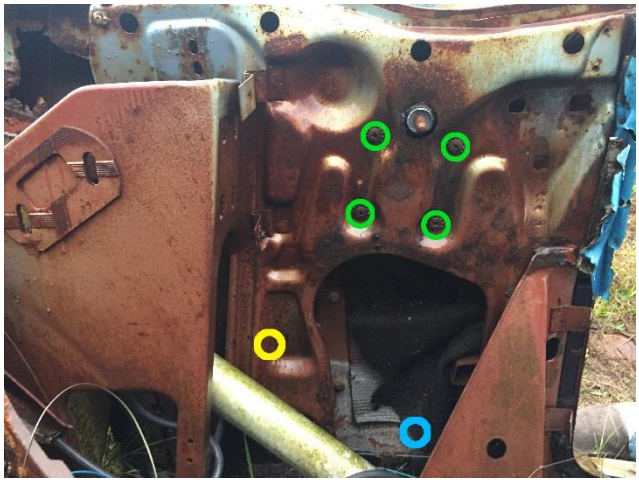
CONVERTIBLE INSTALL

The convertible power window regulator uses all the same holes as the manual window regulator with an additional 5th hole that you can drill if you desire. This picture shows the approximate orientation of the new regulator when it is installed in the quarter.

**Note: On a convertible it may be necessary to put the top up and down multiple times to complete the install.*



Here are the bolt locations for the convertible quarter regulators. The GREEN circles are factory holes that you will reuse to install the quarter regulator. The optional 5th hole is highlighted in YELLOW. The BLUE circle is the approximate location of a 1" hole you drilled for the wires to enter the quarter.



Prior to placing the regulator in the quarter, plug the motor in. It will be difficult to plug in once the regulator has been mounted into 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 and tighten. Install the 5th optional bolt if desired. (hardware is not included)
- Place the glass back inside the quarter panel and reinstall using all the original hardware and the locations you marked before removing any hardware during disassembly to help guide you.
- Run the window up and down checking for smooth movement. If you marked the hardware locations for stoppers and guides you will need to do little or no adjusting.

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.

DRIVER'S QUARTER

For a **hardtop** repeat the instructions above to cut and install your quarter switches.

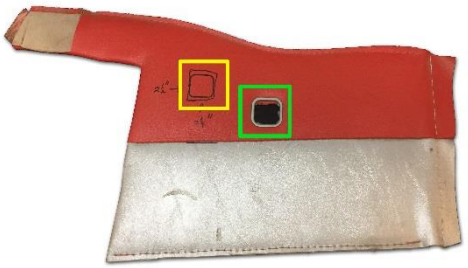
For a **convertible**, if you are using original manual window interior quarter trim panels follow the instructions below. If you are using new/uncut interior quarter trim panels skip to the next section titled New/Uncut Interior Quarter Trim Panel Switch Installation.

Manual Interior Quarter Trim Panel Switch Installation

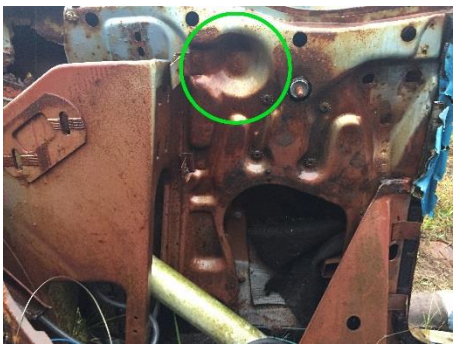
- Locate the original window crank hole on the passenger's side quarter panel.
- Cut a 1 3/8" x 1 3/8" hole directly on center for the 1-way switch and retainer.
- Install the retainer clip into the new hole and bend the tabs outward to hold it in place on the door panel.
  - *You may need to widen the 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.

New/Uncut Interior Quarter Trim Panel Switch Installation

Original 58 Chevy Power Window switches were located in a different location from where the manual window crank was located. On a manual interior quarter trim panel you would install the switch in the same location as the crank to cover the whole. But if you are using a new/uncut panel and want your install to be the same as it would have been from the factory the location of the switch is approximately 3 3/8" back and 1 3/8" above where the window crank would have been. On the picture to the right the manual location is marked in GREEN and the factory power location is marked in YELLOW.



- With the panel off, locate the circular indentation on the quarter panel sheet metal marked in GREEN in the picture. This is the location where GM would have put the power window switch during the production process. If you choose to use this location mark your interior trim panel at the center of this circle in the sheetmetal.
- Locate the center mark you just made and 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.*



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 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.