**28433 HWY 65 NE**
**ISANTI, MN 55040**
**763-444-5880**
**800-828-2212**
***www.autocityclassic.com***

| INSTALLATION INSTRUCTIONS | 1955-1957 CHEVY/PONTIAC<br>2DR HARDTOP/CONVERTIBLE/NOMAD<br>POWER WINDOW INSTALL KIT |
|---|---|

## 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 both sill plates
- Remove both kick panels and vent covers
- Remove both door access panels and quarter panel access panels
- Tape any areas of the car you are worried about scratching

## WIRING

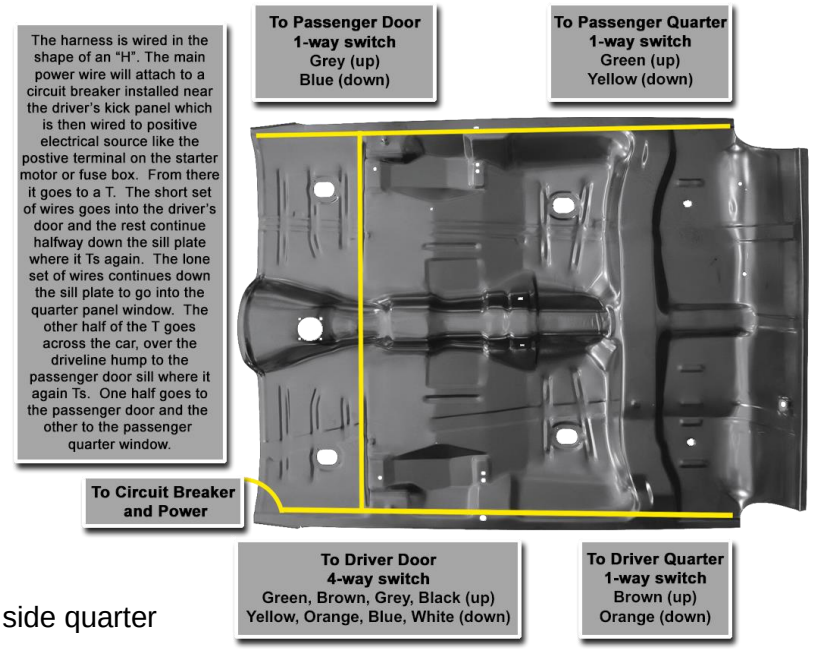
Lay the wire harness out inside the car. The wire harness is shaped like the letter H.

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.



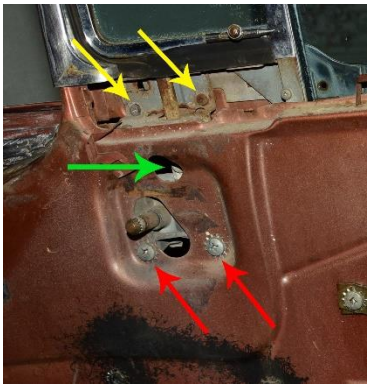

The wires crossing the car T off at the driver door sill and crosses the car in front of the front seat to the passenger side door sill plate and hides under the carpet. The RED wire in this wire run is for a power seat option and will be unused in most instances.

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

- Before removing any hardware mark the locations of guides and stops to help you properly locate the glass when installing the kit and save all the hardware.



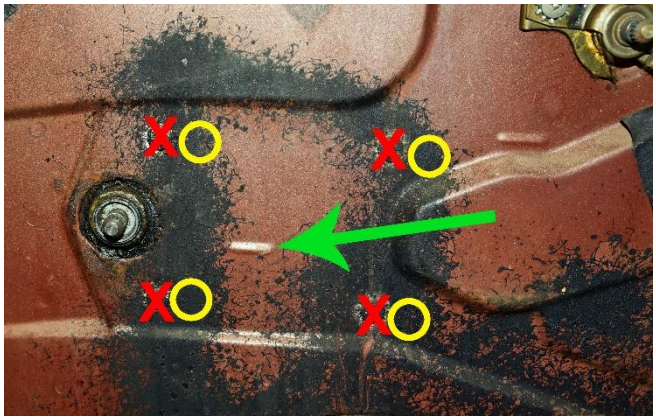
- Remove the bolt attached to the bottom of the vent glass pivot rod that attaches it to the vent window crank/regulator through the access hole just above the vent window crank identified with a GREEN arrow in this picture.
- Remove the 2 top bolts on the vent window crank/regulator identified with YELLOW arrows in this picture. (You will leave the 2 bolts holding the bracket to the door.)
- Remove the 2 bolts near the vent crank identified with RED arrows in this picture and remove the vent regulator from the door.
- Remove the lower bolt holding the vent post slide rail in place.
    - Be sure to mark the location of the bolt on the door and on the vent post inside the door to assist with adjustment when you reinstall the vent window post.
- Remove the screws holding the chrome beauty panel on the front of the vent post assembly and remove the screws holding the top of the vent assembly to the door.
    - Hold the vent post assembly in place as you remove these screws so the vent assembly cannot move and damage the glass, post, or door.
- Remove the vent post assembly from the car. As the bottom of the post reaches the top of the door you will likely need to rotate the vent post 90degrees to remove it from the door.

- Remove the rear screw on the armrest bracket identified with a YELLOW arrow in this picture and loosen the front screw identified with a GREEN arrow in this picture so that it can swing out of the way to remove the screws holding the holding the roller channel to the door.
- Remove the 2 screws holding the lower channel to the door identified with the RED arrows in this picture and slide it off the regulator roller.
    - While you do this have a friend hold the door glass in place so that it does not move and break.
    - You can place the channel in the bottom of the door for safe keeping.
- Remove the door glass through the top of the door by rotating it slightly and pulling it off the regulator roller.
- 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

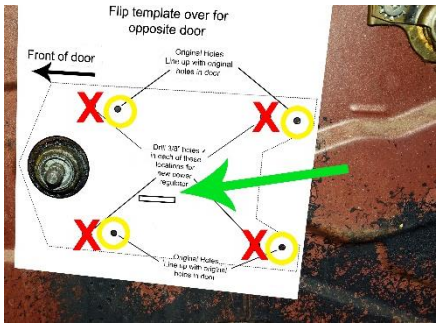
The 2dr HT and convertible have the same door layout. So the door instructions are the same for both.

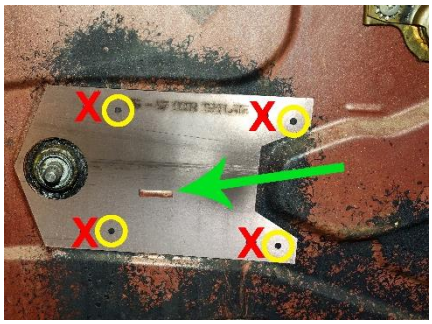
The manual regulator and the power window regulator do not share any holes. The RED Xs in this picture show the original location of the bolts for the manual regulator. The YELLOW circles are the locations of 4 holes you will need to drill in the door to install the power window regulator. You will use the supplied template to locate these holes.



*The supplied template will be used for both left and right. You will just need to flip it over for the other side.*

- Locate the raised dimple that is about 3/4-1" long located just to the rear of the hole where the window crank was located. This dimple is identified with a GREEN arrow in this picture.
- This raised dimple along with the original regulator holes are the landmarks you will use to locate the template in the right location.
- Place the door template in place, lining up the square slot on the template with that dimple and the 4 holes of the original factory regulator. Below is a picture showing both a metal template and a paper template being used.



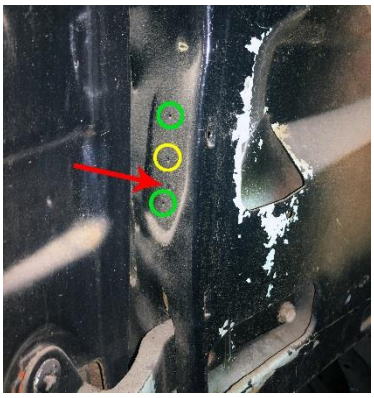



- Be sure the template is in the EXACT location before you proceed. IF you are using the metal template you can actually bolt the template to the original regulator holes to hold it tightly in place if you wish.
    - If the template is flipped upside down the original bolt holes will not line up with the template if the raised dimple is in the square slot on the template.
- Once you are satisfied the template is in the right location and **secured** drill a 3/8" hole in each of the 4 locations for the new bolt holes.
    - If you find your holes are slightly off when you put your regulator in place during install you can make the holes larger and use a washer if needed.

The regulators are modeled after the original factory power window regulators. There are a 3 tabs on the regulator that have no purpose other than ensuring proper alignment during the install. There are dimples in the door allowing room for these tabs. But if you find that the regulator plate is not laying flat you can grind these tabs off the regulator. These tabs are identified in this picture with YELLOW circles.

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 this 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.



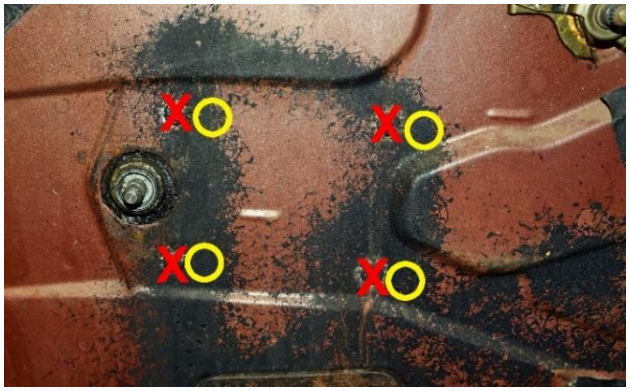
- There are 4 dimples on the inside of the door. Locate the 2nd dimple from the top marked with a YELLOW circle in the picture and drill a 1 3/8" hole.
  *Note: The RED arrow is pointing to the 3rd dimple from the top that will go unused. The top and bottom dimples will help you locate your conduit in the correct location in the next section.*
- Run the wires through the door jam and door holes.
- 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 above, 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.

## DOOR WINDOW REASSEMBLY

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 any of the holes used for the manual regulator.

Here are the bolt locations for the door regulators. 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 YELLOW circles are the locations of 4 holes that you just drilled that will be used to install 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 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.*
- Reinstall the regulator roller channel to the door using your previous markings to locate it in the correct location and limiting any adjustments you will need to do.
    - Be sure to grease up the channel well using a grease like lithium grease.
- Reinstall the hardware on the armrest bracket.
- Reinstall the glass.
- Reinstall the vent post assembly in reverse order from disassembly 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.

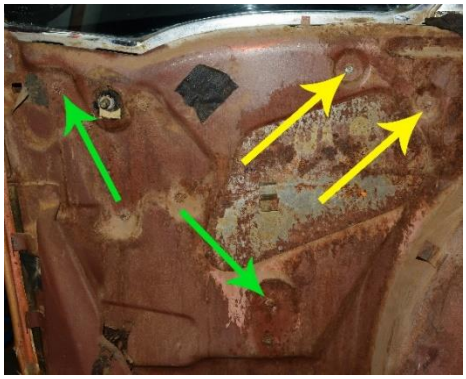
**REPEAT THESE STEPS ON THE OTHER DOOR**

# QUARTER WINDOW DISASSEMBLY

The 2dr Hardtop and the Convertible have different quarter regulators so the instructions differ slightly.

## HARTOP DISASSEMBLY

- Before removing any hardware mark the locations of guides and stops to help you properly locate the glass when installing the kit.
- Remove the 2 bolts identified with YELLOW arrows in this picture holding the rear roller channel in the quarter panel and slide it off the quarter window roller.
- Remove the 2 bolts identified with GREEN arrows in this picture holding the front roller channel in the quarter panel and remove it from the quarter window roller.
    - As you do this step be sure to hold onto the glass so that it does not drop and break the glass or damage the car.



- Remove the quarter window glass.
- 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.

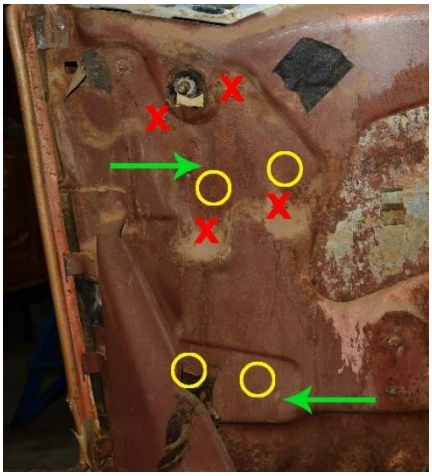
## CONVERTIBLE DISASSEMBLY

- Before removing any hardware mark the locations of guides and stops to help you properly locate the glass when installing the kit.
- Remove the bolt holding the quarter window to the pivot bracket, located in the area of the YELLOW circles inside the quarter panel in this picture.
    - You may choose to remove the 3 bolts holding the quarter window pivot bracket in place identified with YELLOW circles and remove it from the glass.
    - While you do this step be sure to hold the glass firmly so that it does not move and cause damage or break.

- Remove the quarter window glass.
- 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.
    - You may choose to remove the lower slider channel to make it easier to remove the regulator through the whole.

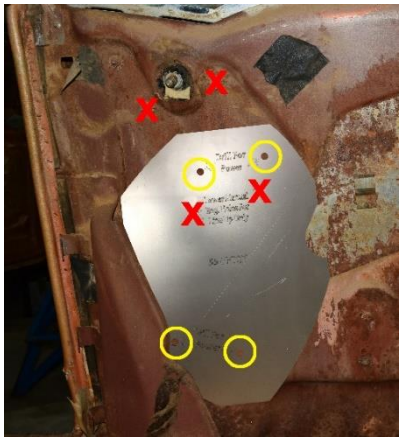
# QUARTER PREP

**HARDTOP PREP**



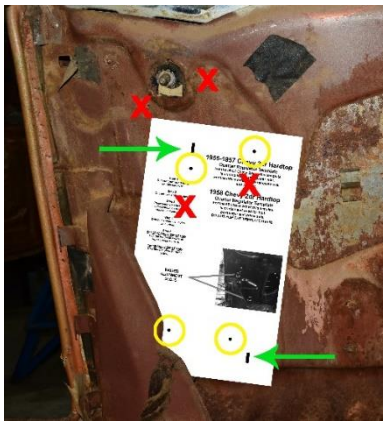
The manual regulator and the power window regulator do not share any holes. The RED Xs in this picture show the original location of the bolts for the manual regulator. The YELLOW circles are the approximate locations for 4 new holes that you will drill for the new power regulator using the supplied template to assist in locating the holes.

*The supplied template will be used for both left and right. You will just need to flip it over for the other side,*



If you are using the metal template locate the 2 lower manual regulator holes and line the template up with 2 holes marked “lower manual regulator holes” on the template. You can bolt the template into place to help you hold it in the proper location. This picture shows the metal template in the approximate location needed for drilling.

- Once you are satisfied the template is in the right location and **secured**, drill a 3/8” hole in each of the 4 locations for the new bolt holes with the approximate locations marked with YELLOW circles in this photo.
    - Drilling pilot holes might be helpful for you so you can test fit the regulator and see how closely your new holes line up with the regulator before drilling larger holes.
    - It is very difficult to get these holes EXACTLY where they need to be because of the curves in the quarter panel. So, if your holes are off by a little bit you may need to widen or oblong the holes when installing the regulator and use a washer if necessary.



If you are using the paper copy of the template, locate the 2 raised dimples that are about 3/4-1” long. The approximate location of these dimples are marked with GREEN arrows in this photo.

- Line up those raised dimples with the dimple markings on the paper template and secure the template in place.
- Once you are satisfied the template is in the right location and **secured**, drill a 3/8” hole in each of the 4 locations for the new bolt holes with the approximate locations marked with YELLOW circles in this photo.

- Drilling pilot holes might be helpful for you so you can test fit the regulator and see how closely your new holes line up with the regulator before drilling larger holes.
- It is very difficult to get these holes EXACTLY where they need to be because of the curves in the quarter panel. So, if your holes are off by a little bit you may need to widen or oblong the holes when installing the regulator and use a washer if necessary.

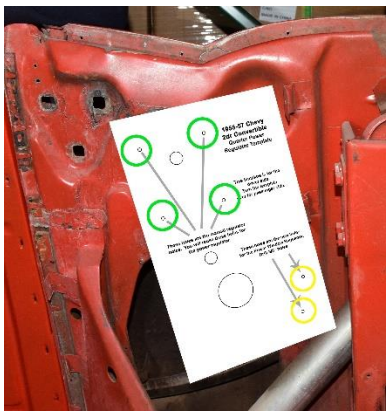
There is no exact location for a hole to run the wires into the quarter panel. So, using common sense and logic locate an open space near the bottom of the quarter panel and drill a 1" hole for the wires to enter the quarter panel. In this picture the YELLOW Circles are the approximate location of the 2 bottom regulator holes that you just drilled in the previous steps for reference. The GREEN arrow is pointing to an area that might be a good location for your wires to enter the quarter panel. Be careful when drilling a hole so you do not damage the outside panel of your quarter panel.

- Once you have drilled the hole run the wires through the brace between the quarter and floor and through the hole into the quarter panel.
- Cut one side of one of the supplied grommets, place it over the wire and into the hole.

**CONVERTIBLE PREP**

The manual regulator and the power window regulator share the 4 original holes but also require you to drill 2 additional holes. The GREEN circles in this picture identify the 4 holes that were used for the manual regulator that will again be used for the power window regulator. The YELLOW circles are the approximate locations of 2 new holes that you will drill for the new power regulator using the supplied template to assist in locating the holes.

*<u>The supplied template will be used for both left and right. You will just need to flip it over for the other side.</u>*



Using the supplied paper template, locate the 4 original holes in the quarter panel used for the manual regulators and line it up with the holes marked on the template.

- Once you are satisfied the template is in the right location and **<u>secured</u>**, drill a 3/8" hole in each of the 2 locations for the new bolt holes with the approximate locations marked with YELLOW circles in these photos.

- Drilling pilot holes might be helpful for you so you can test fit the regulator and see how closely your new holes line up with the regulator before drilling larger holes.
- It is very difficult to get these holes EXACTLY where they need to be because of the curves in the quarter panel. So, if your holes are off by a little bit you may need to widen or oblong the holes when installing the regulator and use a washer if necessary.

There is no exact location for a hole to run the wires into the quarter panel. So, using common sense and logic locate an open space near the bottom of the quarter panel and drill a 1" hole for the wires to enter the quarter panel. Be careful when drilling a hole so you do not damage the outside panel of your quarter panel.

- Once you have drilled the hole run the wires through the brace between the quarter and floor and through the hole into the quarter panel.
- Cut one side of one of the supplied grommets, place it over the wire and into the hole.

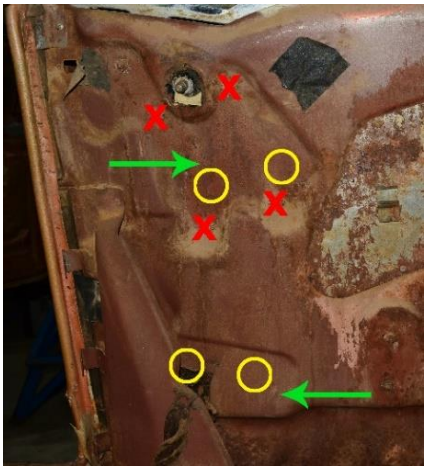
## QUARTER WINDOW REASSEMBLY

**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 that you will no longer use. The YELLOW circles are the approximate locations for 4 new holes that you drilled for the new power regulator.



**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.

- Reinstall the rear roller channel and the front roller channel.
    - If you marked the location of the bolts and adjusters, be sure to get them in the same position to limit adjustments. If not, just eyeball it and adjust as necessary when you finish your install.
    - Be sure to grease up the channel well using a grease like lithium grease.
- Reinstall the quarter glass.
- 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**

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

As stated before, the manual regulator and the power window regulator share the 4 original holes but also required you to drill 2 additional holes.

Here are the bolt locations for the convertible quarter regulators. The GREEN circles in this picture identify the 4 holes that were used for the manual regulator that will again be used for the power window regulator. The YELLOW circles are the approximate locations of 2 new holes that you drilled for the power regulator.

**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 5 and complete installing the hardware to hold the regulator in place and tighten.
- Reinstall the quarter glass back into the quarter panel and bolt the quarter window to the pivot bracket.
    - If you removed the pivot bracket in previous steps, install the quarter glass and the pivot bracket.
    - If you marked the location of the bolts, be sure to get them in the same position to limit adjustments. If not, just eyeball it and adjust as necessary when you finish your install.
    - Be sure to grease up the channel well using a grease like lithium grease.
- 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 2" x 1 3/8" hole for the 2-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 to 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.