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## CORVETTE "C7" 2014-2019 Vertical Door Kit

U.S. PATENTS #6,808,223; #6,845,547; #7,140,075; #7,059,655 PATENTS AGGRESSIVELY ENFORCED! PLEASE CAREFULLY READ ALL INSTRUCTIONS BEFORE ATTEMPTING TO INSTALL THIS PRODUCT. FOR QUESTIONS PLEASE CALL (951) 245-8669



#### THIS KIT INCLUDES:

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8 M8-1.25X60MM BOLTS WITH WASHERS	> 2 LONG SHOCKS 600 PSI
6 M8-1.25X40MM BOLTS WITH WASHERS	> 2 SHOULDER BOLTS
➤ 16 WASHERS	➤ 2 PINS
➢ RIGHT AND LEFT HINGE	> 2 FENDER BRACKETS
ASSEMBLY	2 M8-1.25X20 BOLTS
> 5 1FT. LENGTH WIRE	10 BUTT CONNECTORS
TOOLS REQUIRED FOR INSTALLATION:	
	AIR RACHET, GRINDER AND CUTTER.
	7MM, 8MM,10MM, 11MM, 13MM, SOCKETS AND EXTENSION.
	FORK AND PHILLIP'S SCREW DRIVERS
	SPACERS FOR THE DOOR GAP.
	> 3/16 ALLEN WRENCH
	> 1/4 & T15 TORX BIT
	> 9/16 WRENCH
	> LOCKTITE RED

#### OTHER TOOLS MAY BE NEEDED DEPENDING ON YOUR VEHICLE.





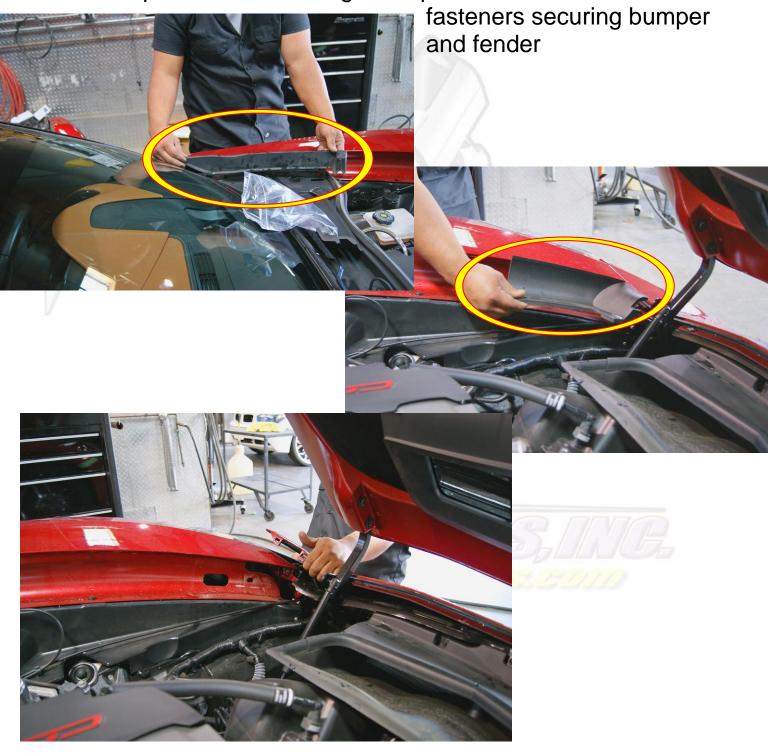
#### (Note: The pictures on the manual are for reference only they may not match your vehicle.)

#### Disconnect the battery.

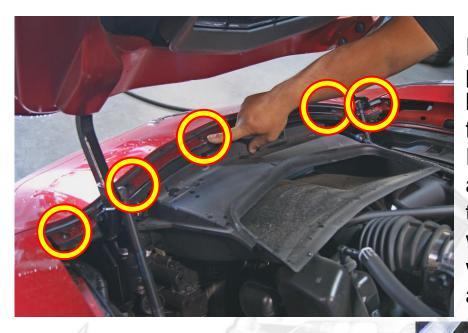
Pull the rubber cover over the door catch out from its location. Unbolt the door catch from the apron.



Remove the Front Bumper: Remove the plastic covers along the top of the fender to reveal the





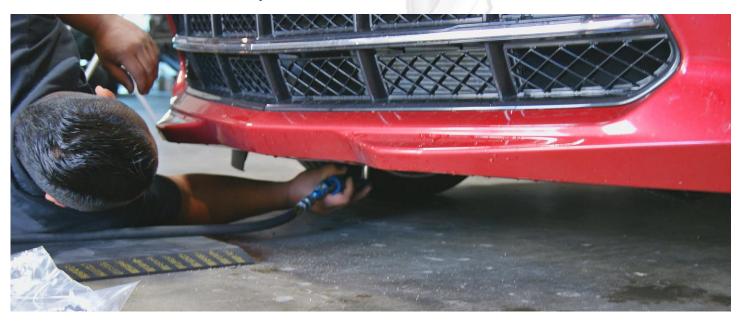


Remove all the bolts and plastic clips securing the bumper to the body and fenders Remove the 3 screws

attaching the bumper at the front of the wheel well. Turn the steering wheel all the way for access.



You will need to remove the fasteners under the front bumper to be able to release it. When removing the bumper, carefully unplug all wire harnesses that may be attached to it.





#### **Remove the Headlights:**

Unplug the wire harness and remove the rectangular bracket just above the headlight.



Remove all the bolts securing the headlight to the body. Marked by O circle. After removing the bolts pull forward on the

headlight to remove it

#### **Remove the Fender:**

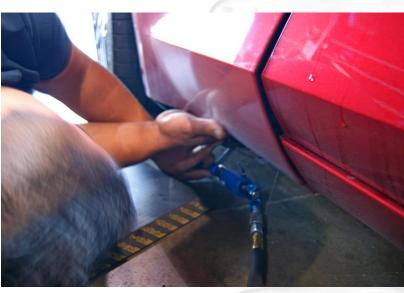
Remove all the bolts and fasteners from the fender. You will have to remove a couple of weather strip brackets to get access to the bolts that are hidden by them.





You will need to un-clip the splash guard by pulling on it towards the front of the car. Then you can Remove all the screws from around the wheel well.





Remove the bolts at the bottom of the fender.

Pull on the bottom of the fender as shown and use an extension to remove the bolt securing the fender from the inside.

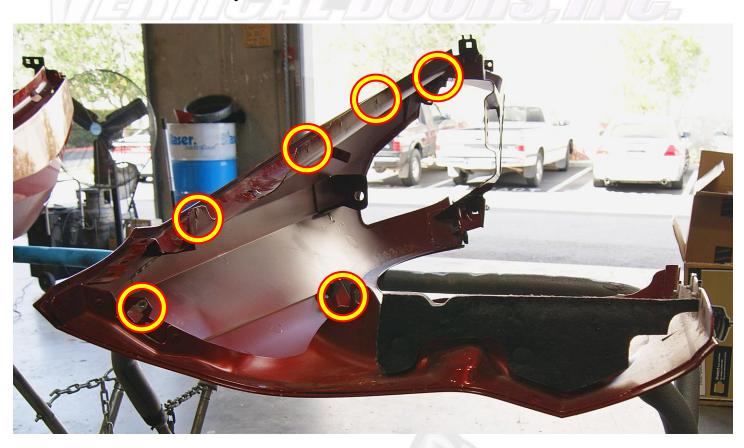




Open the door and remove the bolt securing the fender to the body as show.



Remove all the plastic brackets and the rest of the bolts securing the fender to the body.





Now you should be able to carefully remove the fender.

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#### **Preparing the car for the New Vertical Door Hinge:**

You will have to do some minor trimming so that the hinge can sit flat against the body. Trim the pieces outlined by dashed lines



On the passenger's side you will want to remove the ECU to give you more room to work before you trim the fender bracket and install the new VDI Lambo Door hinge.



You will need to remove the door panel and the speaker to be able to remove the door catch. Two nuts secure it from the door jamb side.







## Gain Extra Slack in the Wiring:

After removing the door panel, you will have access to the wire harness. You must undo the hold downs securing the wiring and remove the tape covering the wires. There is one wire in the top of the door that runs all the way to the back of the door (Door release switch) You must release this wire. You may also need to extend it in some cases. Use duct tape or another means to secure this wire to the inside of the door (Outer door skin) so that it will not interfere with the window.

You will have to extend the wires that lead to the AirBag sensor in each door. 2 in the driver's side and 2 in the passenger's side.

You will also have to extend the speaker wires about 6" or you can turn the speaker.



In the image we have removed the sensor to show how to extend the wires but you do not have to remove the sensor, just unplug it.

(Kit comes with butt connectors but we recommend you use solder and heat shrink)

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Cut the rubber wire boot in half as shown.



Use friction tape / cloth wire loom tape to protect the exposed wires. If you use regular electrical tape, the wires will not retain their shape and will end up getting pinched between the door and the fender. If you use wire loom it must be stretched tight over the wires and be sure to use the smallest diameter possible.

Secure each end of the boot around the wires with a zip-tie so that it is watertight as shown to the right.

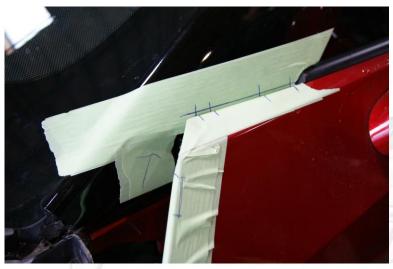






#### Prepare to Remove the factory hinges.

Before removing the factory hinges, use painters' tape to mark the factory door location on the car.





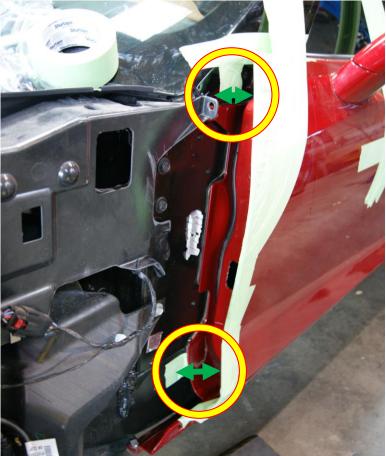
Make sure to measure and mark the distance between the body and the outer door skin at the front of the door by the bottom and top hinge as shown to the right.

\*\*It is very important you mark the exact location of the door before you remove the factory hinges. This will make the install and alignment a lot easier.

After making sure you have the factory location marked use several strips of 2" painters' tape to secure the

door to the vehicle.

Use paint sticks wrapped with painters' tape as shims so the door does not move (circled to the right)

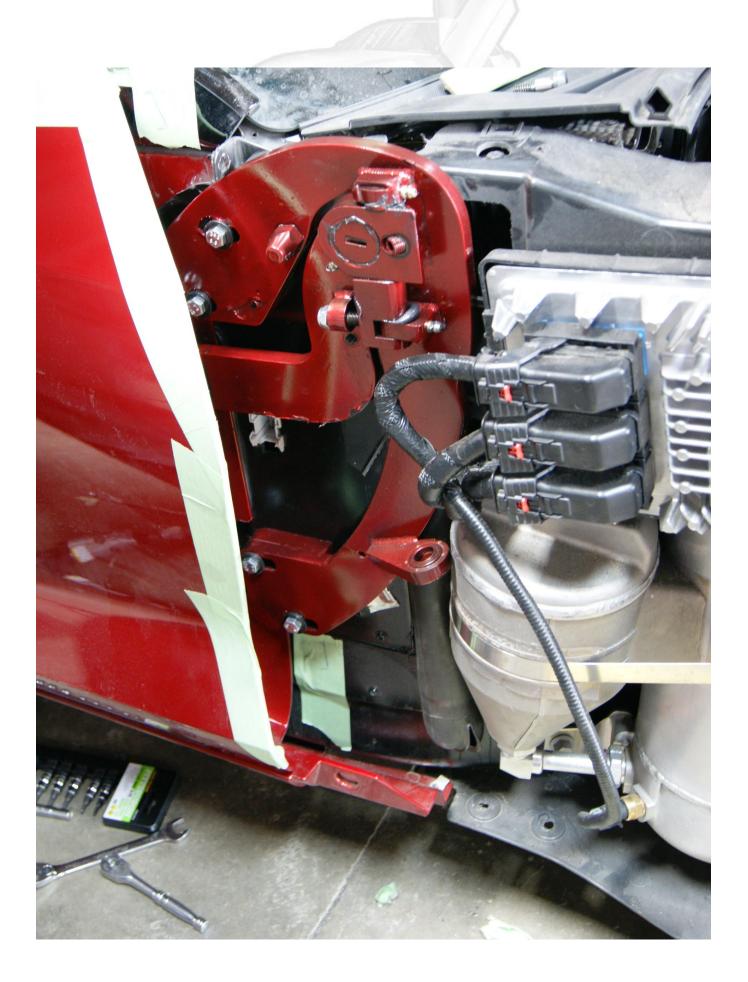






After you have marked the door location, secured the door to the body, and installed the shims, you can then remove the factory hinges and install the VDI Hinge.

For the passenger's side do not replace the CPU until after the new hinges have been fully install.



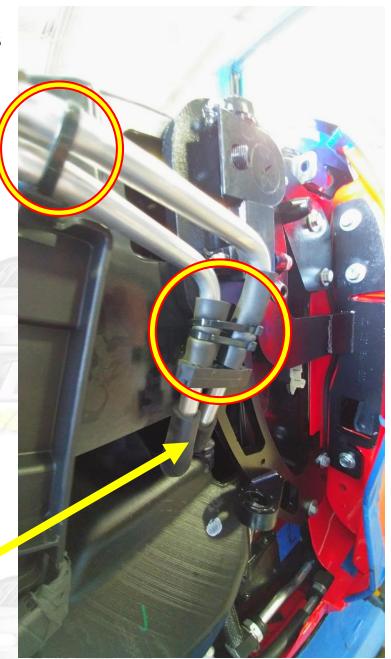


On Z06 and Grandsport models you must re-locate the trans cooler lines

You must pull the lines an inch or so towards the front of the car to avoid interference with the VDI Hinge.

Re-secure lines with zip ties as shown.

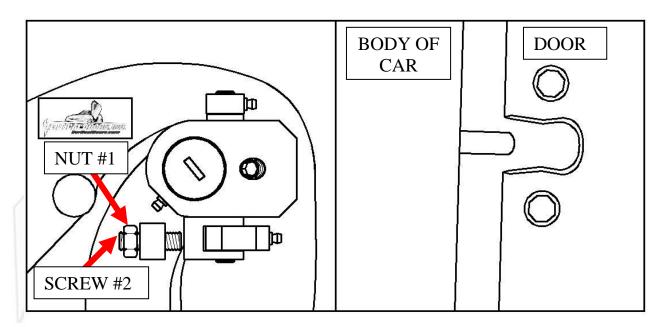
Unbolt the lower bracket



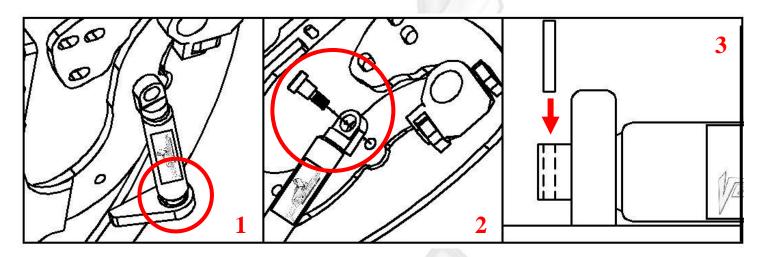




Once hinge is locked in place, break nut #1 then turn Allen set screw #2 on fig until it hits the block then open the door and continue to adjust until the door matches with the striker, open and close door making sure it closes like factory.



Hint\*(leave #1 nut loose until shock is installed Allen set screw will have to be re-adjusted after shock is installed. Install the shock.

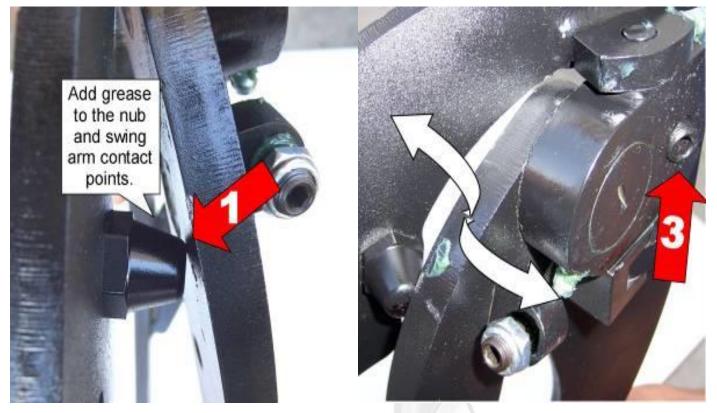


Hint\* (You will need a helper to raise the door). (Slip the spherical rod mount into the spherical ball bearing (1). Using a 1/4 Allen wrench, tighten the screw into the swing arm (2). After the shock is installed secure it by installing the pin in the bottom shock end (3).

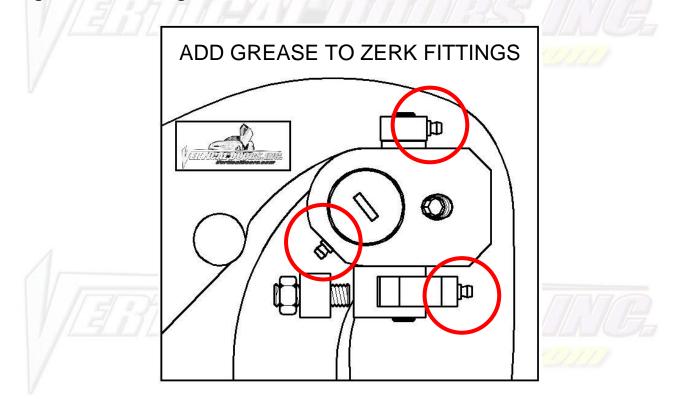




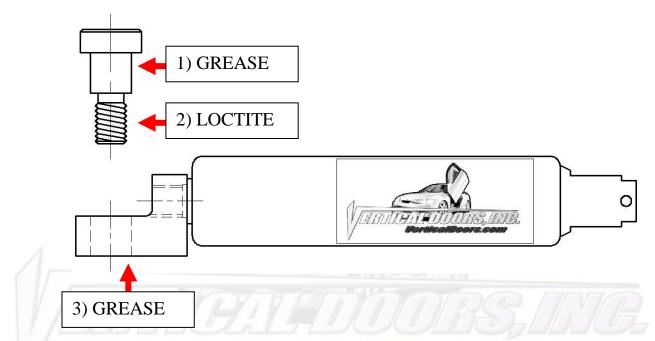
After shock is installed re-install door panel and lift the door. Adjust door opening screw #3 clockwise until distance between nub and swing arm is enough so that the swing arm moves up and down freely.



Hint\* (Fine tune the Allen set screw (#2) to realigned striker with door. After the door is aligned, test door by opening and closing, lifting and lowering door several times.





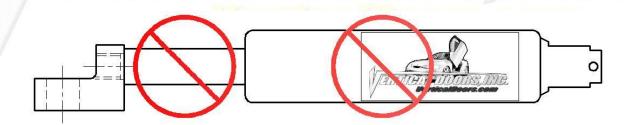


#### \*IMPORTANT STEP: DO NOT SKIP THIS STEP. THIS STEP IS CRUCIAL IN YOUR INSTALLATION PROCESS, IF THIS STEP IS NOT COMPLETED WHEN INSTALLING THE VERTICAL DOOR KIT; ALL WARRANTIES ARE VOIDED, AND MAY CAUSE FUTURE PROBLEMS WITH YOUR VERTICAL DOOR SYSTEM.

1<sup>ST</sup>, make sure you put grease on the body of shoulder bolt where the arrow is pointing.

 $2^{ND}$ , make sure you put red Loctite, where the arrow is pointing, on thread of shoulder bolt.

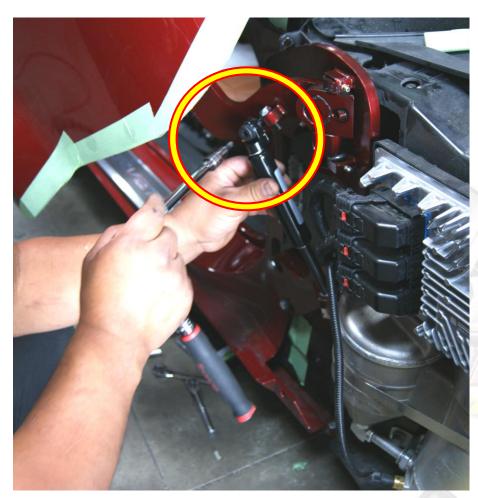
3<sup>RD</sup>, make sure you put grease on the bottom side of the shock end.



#### WARNING! THE USE OF ANY TYPE PLYERS, PAINT OR FOREING MATERIALS ON THE SHOCK'S BODY OR SHAFT WILL VOID THE WARRANTY.







After installing the hinge and adjusting it, you can now install the shock.

(It helps to have a friend to hold the door up during this process)

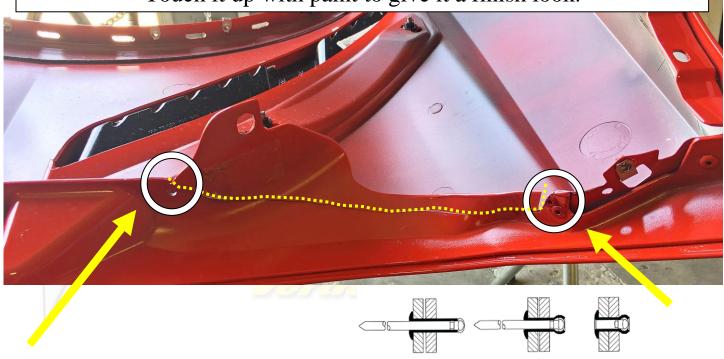
You will have to re adjust the hinge after the shock gets installed.





Cut the inner lip of your fender as shown below. (Dashed Line)

Use a power cutter and grinder to cut and take any sharp edges off. Touch it up with paint to give it a finish look.



Add a Rivet to add strength to the fender bracket.

Drill a hole for the new fender Bracket (Supplied with kit) Be sure to bolt the new fender bracket (small L bracket) to the vertical door hinge with the supplied bolt before replacing the fender.



Re-use the OEM speed clip and bolt from the fender bracket that you trimmed off to secure the fender to the supplied fender bracket



Replace the fender and headlight by reversing the steps.

For the other side just follow the same steps.

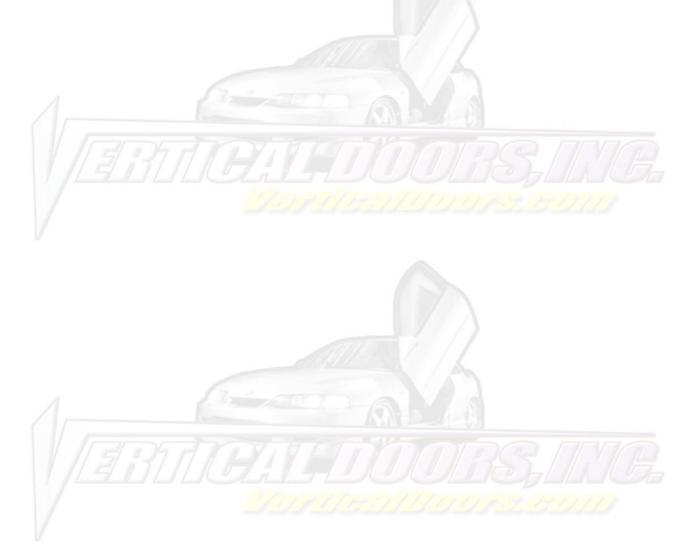
Reinstall the bumper last reversing the steps above

*Hint\*(Make sure the electrical wires don't get pinched enough to damage wires)* 

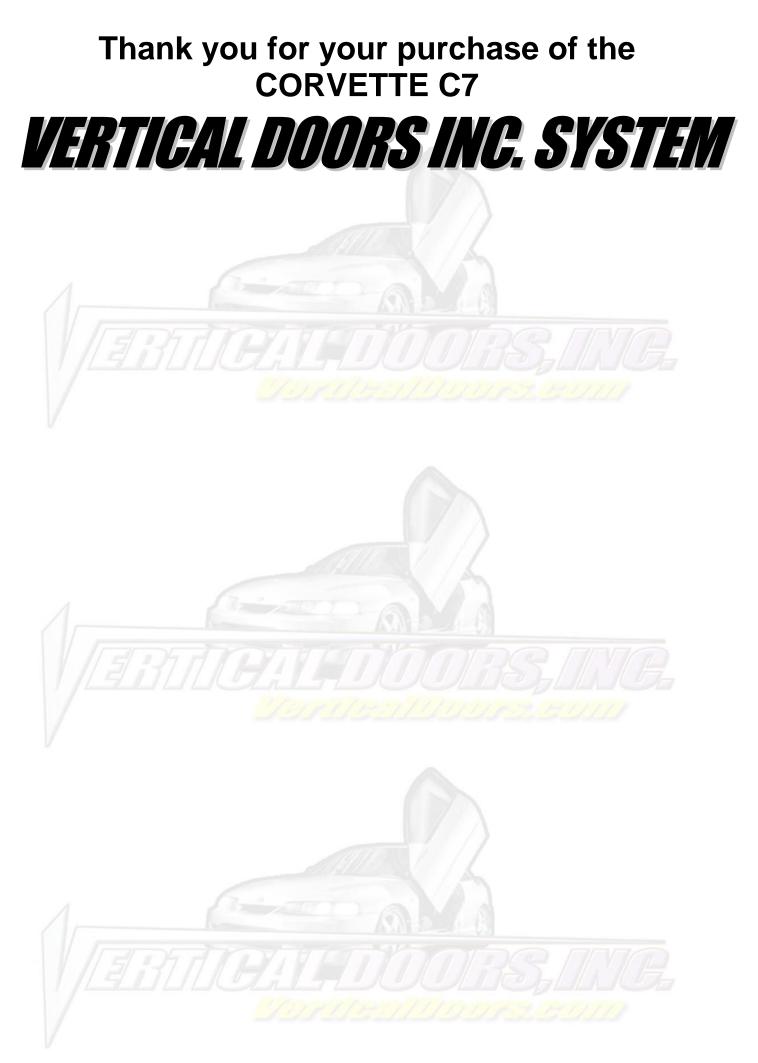
# Note: Do not install fender until the adjustment of the door is accurate, and the set screw is tightly secure. Also make sure everything is tight, adjustment is set and everything is Loctite.

How to reset your Window Sensor:

Make sure both plugs are connected. Close both doors with the car on. Roll both windows up and hold the window switch up for 10 sec and roll down and hold for 10 sec. this should reset the window sensor. For more details contact your local Chevrolet dealer.







NOTE:

Vertical Doors Inc. assumes no responsibility for any damages caused by improper installation.

