
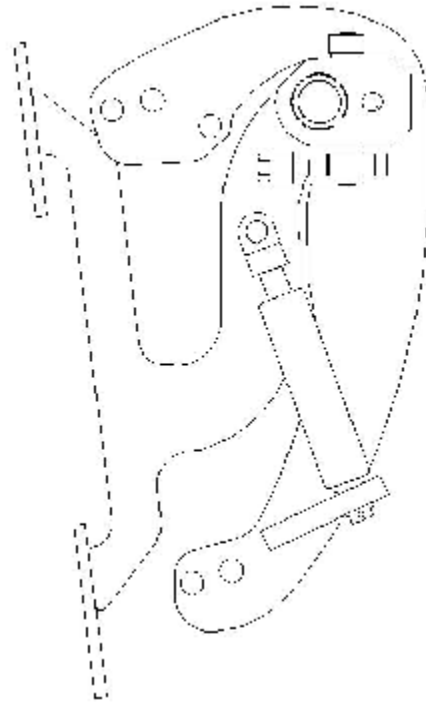
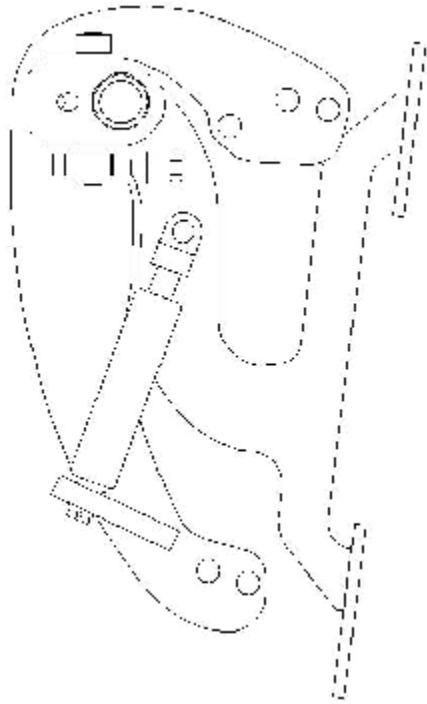




## **INSTRUCTIONS**



*US PATENT #6,808,223 & #6,845,547*



**THIS KIT INCLUDES:**

- Ø 8 BOLTS WITH WASHERS
- Ø 2 PINS
- Ø RIGHT AND LEFT HINGE ASSEMBLY

- Ø 2 SHOCKS 780 PSI
- Ø 2 SHOULDER BOLTS
- Ø USE 4 EXISITING DOOR BOLTS

**TOOLS REQUIRED FOR INSTALLATION:**

	<p>Ø AIR RACHET, GRINDER AND CUTTER.</p>
	<p>Ø 7MM, 8MM, 10MM, 11MM, 13MM, SOCKETS AND EXTENSION.</p>
	<p>Ø FORK AND PHILLIP'S SCREW DRIVERS</p>
	<p>Ø SPACERS FOR THE DOOR GAP.</p>
	<p>Ø 3/16 ALLEN WRENCH</p>
	<p>Ø 1/4 TORX BIT</p>
	<p>Ø 9/16 WRENCH</p>
	<p>Ø LOCKTITE RED</p>

***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.)**

1) Disconnect the battery.



2) Open door completely and loosen the door catch that is attached to the inner frame and the door. Later we'll remove it.

3) Remove fender:



Remove all 6 screws that are attached to the inner fender well.

Remove (2) 10mm bolts that secure the bumper to the fender.

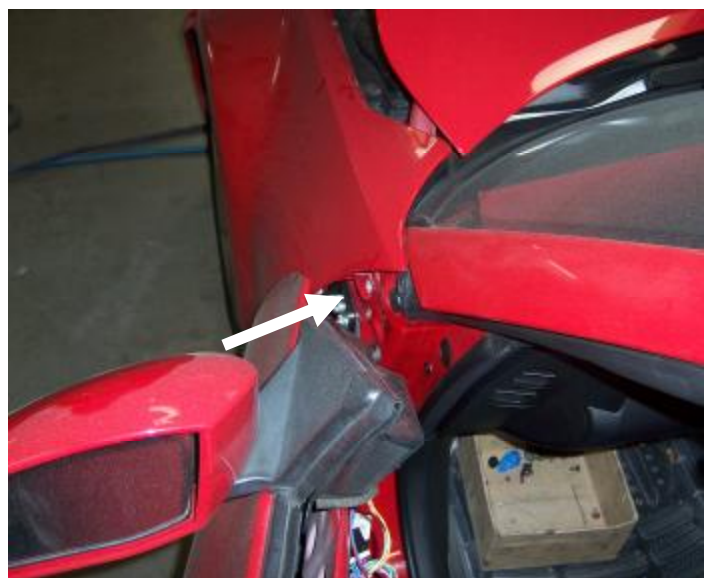


After removing the (2) 10mm bolts you will be able to pull on the bumper to gain access to (1) 10mm bolt securing the fender to the chassis.



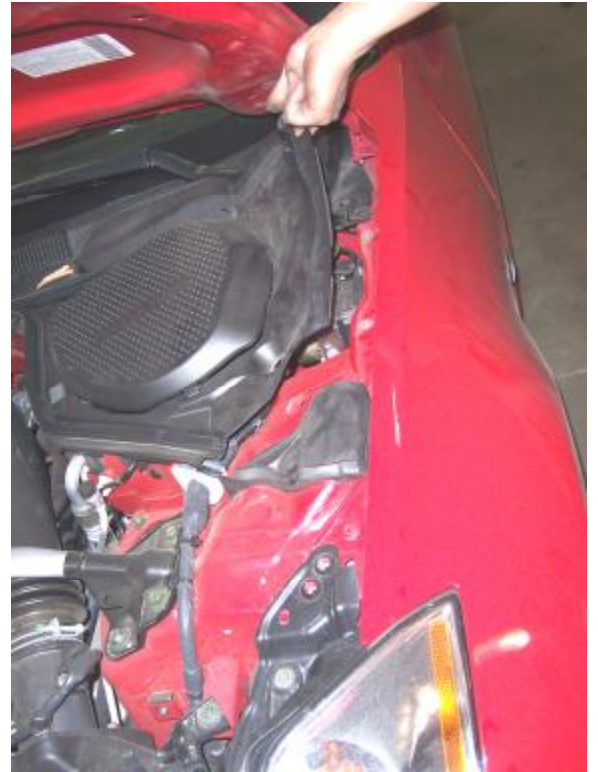
By the bottom of the door, you will have to pull on the skirt and remove (2) 10mm bolts securing the fender to the chassis.

At the bottom of the windshield pillar remove (1) 10mm bolts securing the fender to the body.



Remove (3) plastic clips this will allow you to lift up on the rubber cover and remove all the fasteners on top of the fender.

At this time you are ready to carefully remove the fender.



#### 4) Remove the door panel:



First take out the screw covers using the fork screw driver.

Using the 10mm socket take out the bolts that secure the door panel. This will allow you to remove the door panel.



**5) Remove the door catch:**

Remove the speaker this will allow you to remove the door catch through the speaker hole.



**6) Remove the wire harness from the firewall.  
(See pictures for details)**

**7) How to gain wire slack:**  
Follow the factory wiring thru the door and remove all necessary plastic fasteners to gain more wire slack.

*Hint\*(Two fasteners by the speaker and one in front of the door, by where the door stopper was)*





**8)** Close door and use painters tape to secure the door in preparation for factory hinge removal.

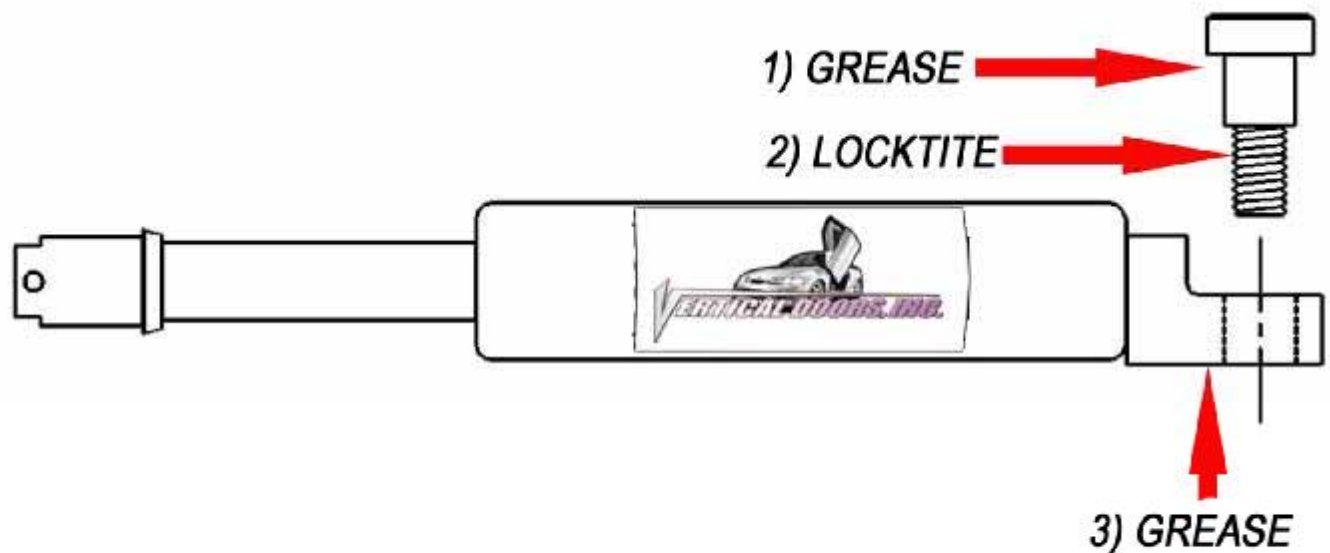
**9)** Remove factory hinges, and install door spacers



*Hint\* (You can make your spacer out of paint sticks and about 8-10 turns of blue painters tape)*



**10)** Install new hinge in place making sure is flat against all contact surfaces, insert new bolts on firewall side and factory bolts on door side. Once the new vertical door hinge is secure remove the painter's tape.  
*Hint\*(When locking hinge in place tighten bolts or nuts to door first then firewall bolts second.*

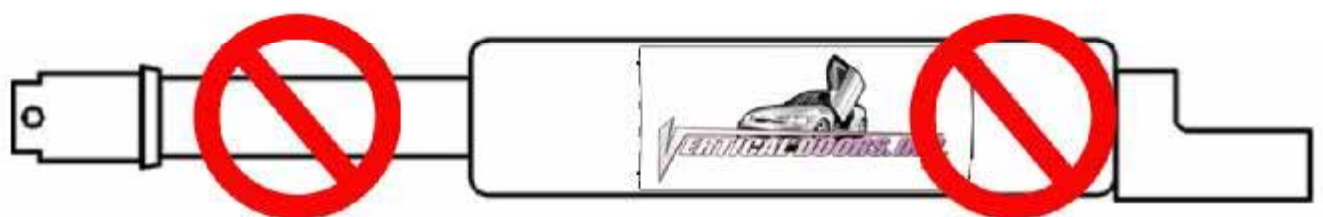


***\*IMPORTANT STEP: DO NOT SKIP THIS STEP. THIS STEP IS CRUCIAL IN YOUR INSTALLATION PROCESS, IF THIS STEP IS NOT COMPLETED WHEN INSTALLING THE VERTICAL DOOR KIT; ALL WARRANTIES ARE VOIDED, AND MAY CAUSE FUTURE PROBLEMS WITH YOUR VERTICAL DOOR SYSTEM.***

***1ST, make sure you put grease on the body of shoulder bolt where the arrow is pointing.***

***2ND, make sure you put red Locktite, where the arrow is pointing, on thread of shoulder bolt.***

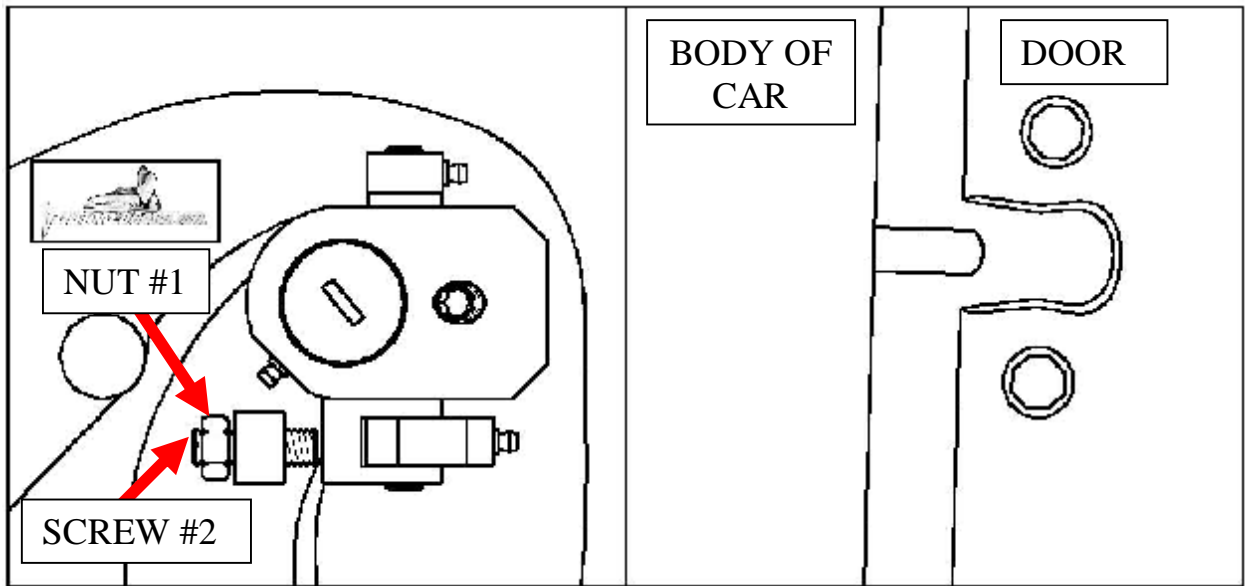
***3RD, make sure you put grease on the bottom side of the shock end.***



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

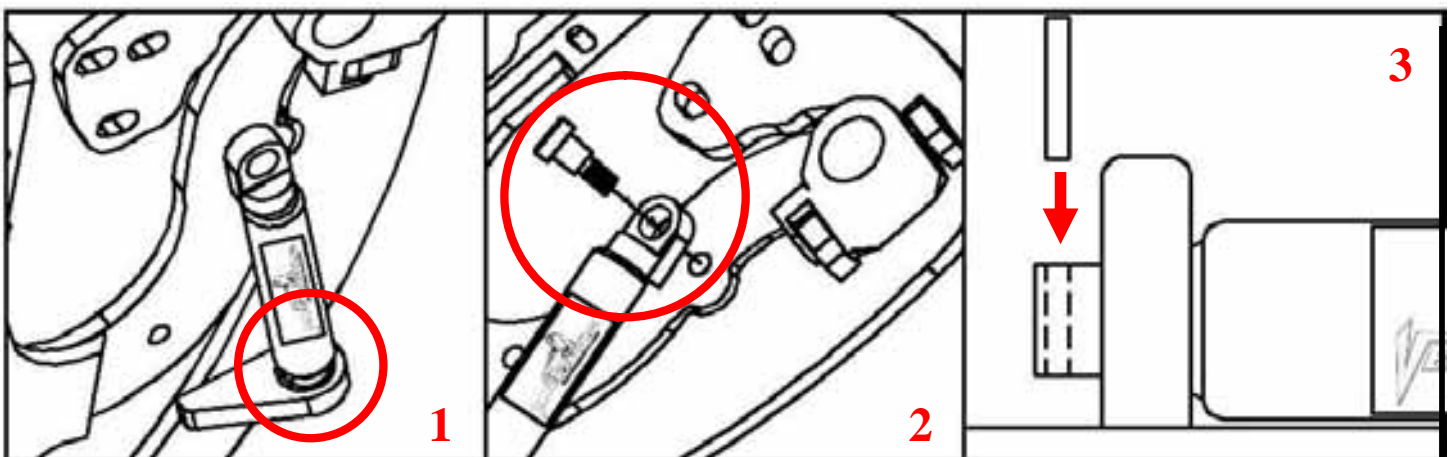


**11)** Once hinge is locked in place, break nut #1 then turn Allen set screw #2 on fig until it hits the block then open the door and continue to adjust until the door matches with the striker, open and close door making sure it closes like factory.



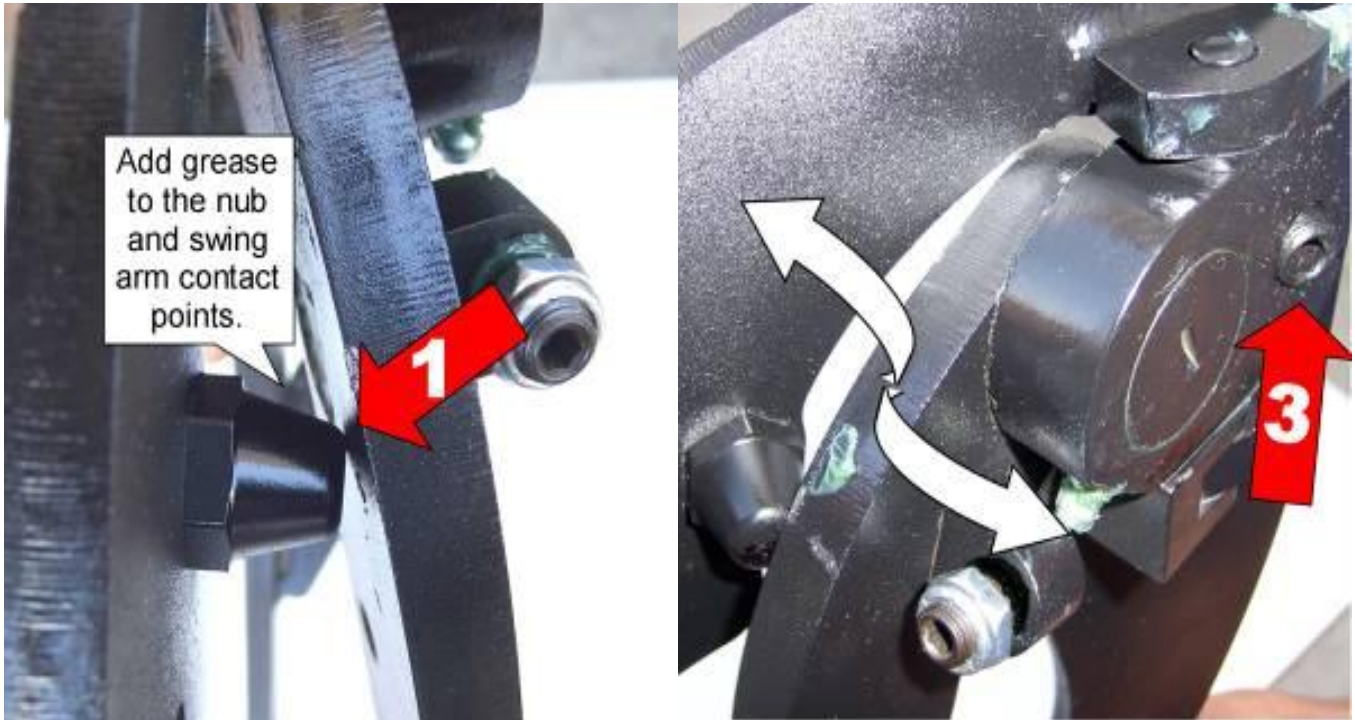
*Hint\** (leave #1 nut loose until shock is installed Allen set screw will have to be re-adjusted after shock is installed).

**12)** Install the shock.

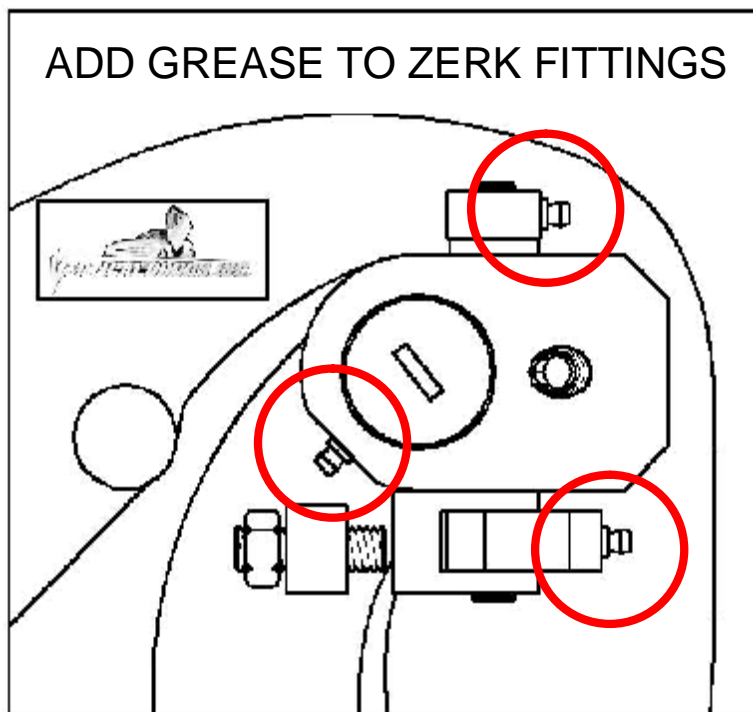


*Hint\** (You will need a helper to raise the door). (Slip the spherical rod mount into the spherical ball bearing (1). Using a 1/4 Allen wrench, tighten the screw into the swing arm (2). After the shock is installed secure it by installing the pin in the bottom shock end (3).

**13)** After shock is installed re-install door panel and lift the door. Adjust door opening set 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 Adjustment screw (#2) to realigned striker with door. After the door is align test door by opening and closing, lifting and lowering door several times.



**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 Locktite.

**14)** You will have to cut the inner lip of your fender to make room for the new Vertical Doors hinge.



**15)** Close the door and Replace the fender by reversing steps 3.

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

**16)** For the other side just follow steps 1-15.