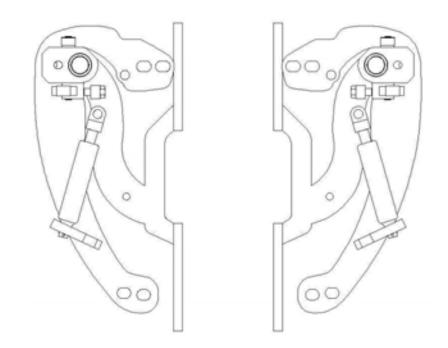




# 2004-2005

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



## THIS KIT INCLUDES:

- ➤ 16 M8-1.25X30MM BOLTS WITH WASHERS
- > 2 SHOULDER BOLTS WITH **WASHERS**
- ➢ WIRE LOOM

#### TOOLS REQUIRED FOR INSTALLATION:

- RIGHT AND LEFT HINGE ASSEMBLY
- > 2 SHOCKS 590 PSI
- ➤ 2 PINS
- > AIR RACHET, GRINDER AND CUTTER. -**-**> 7MM, 8MM,10MM, 11MM, 13MM, SOCKETS AND 0 EXTENSION. ➢ FORK AND PHILLIP'S SCREW DRIVERS 3 > SPACERS FOR THE DOOR GAP. > 3/16 ALLEN WRENCH > 1/4 TORX BIT Η ➢ 9/16 WRENCH > LOCKTITE RED

OTHER TOOLS MAY BE NEEDED DEPENDING ON YOUR VEHICLE.

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

- 1) Disconnect the battery.
- 2) Remove fender:

Remove all fasteners from the wheel well.



After you have removed all fasteners from wheel well remove (1) 10mm bolts from the bottom of the skirt, this will allow you to pull on it to access (2) 10mm bolts securing the fender to the body.

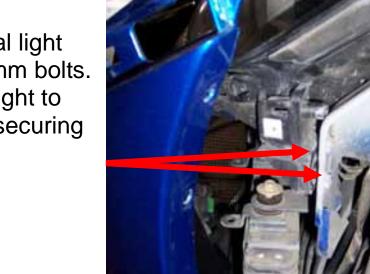
Open the door and remove (1) 10mm bolt.

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Use the fork to pull on the wheel well to gain access to (1) 8mm bolt securing the fender to the bumper. After removing the bolt use the fork to help you remove the signal light.

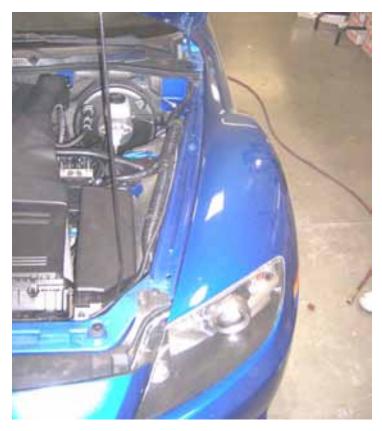
# After removing the signal light remove (2) 10mm bolts

After removing the signal light bracket, remove (2) 10mm bolts. one securing the head light to the body and the other securing the fender to the body.





Remove all 10mm bolts from the top of the fender. At this point you will be able to remove the fender.





4) Remove the door panel:

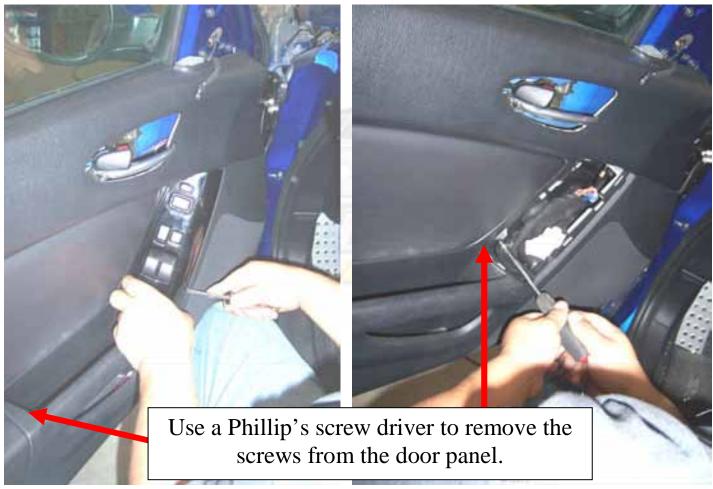
Use the fork to remove the plastic tweeter speaker cover. Then use the fork to remove the cover from the door handle and a Phillip's screw driver to remove the Phillip's screw.

3) Loosen the door catch:

Use a 10mm socket to loosen the door catch, after removing the bolts from the door and body let the door catch fall inside the door (later we'll take it out of the door). Reinstall the bolts to cover the door catch holes.



Use the fork to remove the plastic control panel and a Phillip's screw driver to remove the screws.



Now carefully remove the door panel and disconnect the (2) light harnesses.

Note: The door panel is secure by about (9) plastic clips so you might have to use a little bit of force.

Now that the door panel is off you can remove the door catch by removing the speaker. After removing the door catch reinstall the speaker.



#### 5) Modify wire layout:

Use the fork to pull on the factory wire loom, pull the wire harness from the body and disconnect them, put one side back in the body and the other side leave it outside.

Note: Be careful not to damage it.



You will need more wire slack with the door panel off, use a knife or any other type of cutter and cut (2) wire fasteners, so that you are able to pull on the wire.

Note: you only need about (1) inch of slack.





Cut the factory wire loom in half and add aftermarket wire loom to protect exposed wires. 6) Close the door and use painter's tape to secure the door to the body in preparation for factory hinge removal.

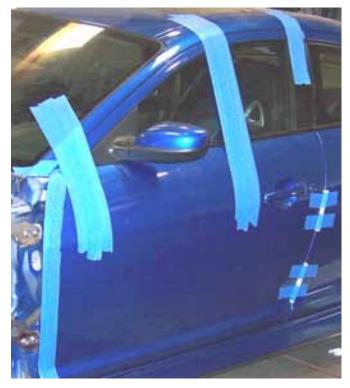
Use a 13mm socket to remove the factory hinges.

*Hint\** (You can make your spacer out of paint sticks and about 8-10 turns of blue painters tape) Note: Install the spacers after factory hinges have been removed.

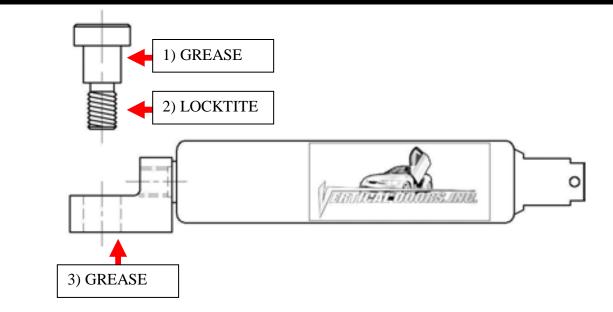
7) Install new Vertical Doors Inc. system:

Make sure the VDI system is flat against the inner fender. After the new VDI system has been installed reconnect the wire harness to the body

Hint\* Tighten the bolts on the door first and then install the bolts on the body.



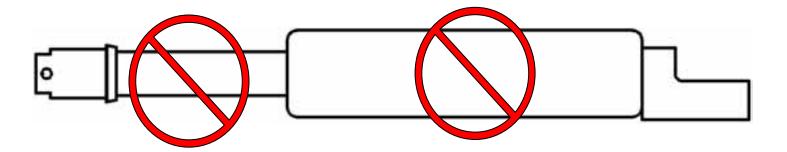




\*IMPORTANT STEP: DO NOT SKIP THIS STEP. THIS STEP IS CRUCIAL IN YOUR INSTALLATION PROCESS, IF THIS STEP IS NOT COMPLETED WHEN INSTALLING THE VERTICAL DOOR KIT; ALL WARRANTIES ARE VOIDED, AND MAY CAUSE FUTURE PROBLEMS WITH YOUR VERTICAL DOOR SYSTEM. 1<sup>ST</sup>, make sure you put grease on the body of shoulder bolt where the arrow is pointing.

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

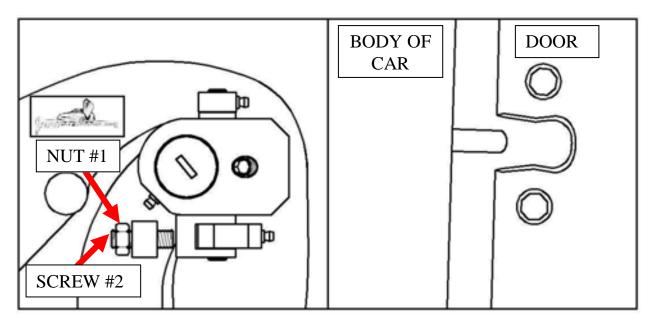
3<sup>RD</sup>, make sure you put grease on the bottom side of the shock end.



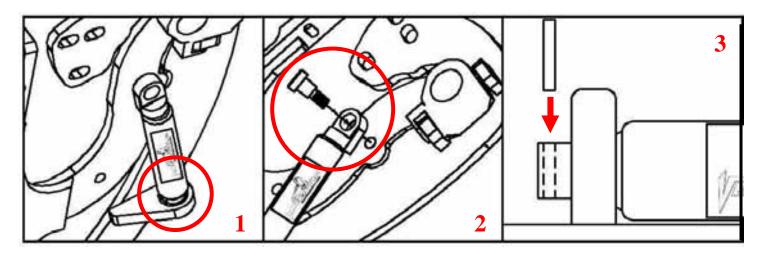
WARNING! THE USE OF ANY TYPE PLYERS, PAINT OR FOREING MATERIALS ON THE SHOCK'S BODY OR SHAFT WILL VOID THE WARRANTY.

8) 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.



9) Install the shock.

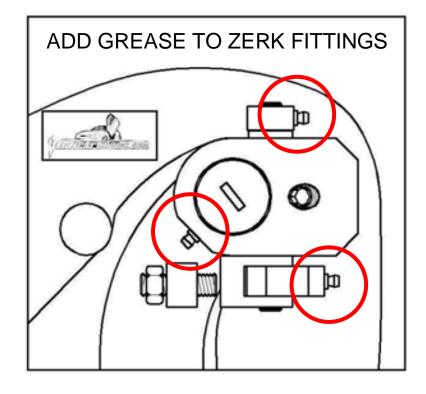


Hint\* (You will need a helper to raise the door). (Slip the spherical rod mount into the spherical ball bearing (1). Using a 1/4 Allen wrench, tighten the screw into the swing arm (2). After the shock is installed secure it by installing the pin in the bottom shock end (3).

**10)** 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.



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.

**11)** Cut the inner lip of your fender to make room for the new Vertical Doors hinge. Note: After you have cut the fender use a sander or grinder and make sure remove any sharp edges.



12) Lift the door and Replace the fender by reversing steps 2 and 4.

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

13) For the other side just follow steps 2-12,