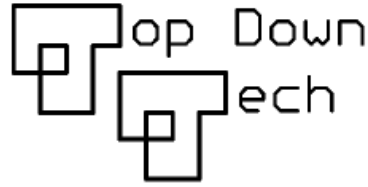




Fuel Door Valet™

Box Contents:

- * one (1) Fuel Door Valet™ Module
- * one (1) 15A mini-fuse, pre-installed
- * one (1) cable wiring harness
- * five (5) t-wire taps
- * five (5) cable ties (not required for install)
- * one (1) instructional document



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Description:

The Fuel Door Valet™ module provides remote controlled fuel door release from the stock remote key FOB for the 1997-2004 Corvette, while still allowing normal use of the standard release button and emergency pull cord.

Background:

The C5 has an electric release for the fuel door. The release button is located inside the center console; easy enough to access unless the driver is outside the car or the console is kept locked. Reaching inside the car to activate the release is difficult from outside the car as the console is low and opens away from the driver's side. By providing access via remote control, the Fuel Door Valet™ allows the driver to access the fuel tank by simply clicking a special lock-unlock sequence on the stock remote. There's never a need to get back into the car or to unlock the center console when refueling.

Usage:

To release the fuel door via the remote key fob, simply **press lock, unlock, and unlock** again, all in rapid succession. If there is more than a one second pause between two key presses, the sequence must be repeated in order to trigger the fuel door's release.

Installation:

[tools: 10mm socket, needle nose pliers, flathead, (T15 torx for convertibles)]
The Fuel Door Valet™ connects to the fuel door release switch leads under the trim inside the center console area. It also requires a ground connection and a connection to the OBDII serial data line. All safety precautions for automotive electrical wiring should be followed. If you do not have electrical wiring experience, any qualified stereo/alarm installation facility should be able to install the module for you. Please read the "Terms of Use, Warranty, and Liability Waiver" on the right before proceeding to the installation directions on the next sheet.

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This Product is for your personal and non-commercial use. You may not modify, reproduce, reverse engineer, or create derivative works from this Product.

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This agreement is governed by the laws of the Commonwealth of California, USA. You hereby consent to enter into arbitration all disputes arising out of or relating to the use of this Product. Arbitration will take place in Santa Clara County, CA. Use of this Product is unauthorized in any jurisdiction that does not give effect to all provisions of these terms and conditions, including without limitation this paragraph.

8. Modification of Terms and Conditions.

Top Down Tech reserves the right to change the terms, conditions, and notices under which this Product is offered.

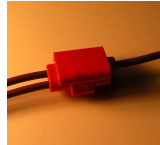
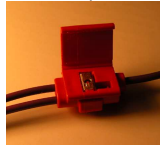
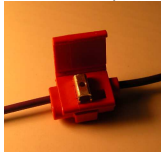
Installation (continued):

Be sure that the battery is disconnected before attempting to wire any new accessories. An inadvertent short could blow a fuse or cause extreme heating or melting of metal tools. This can be very dangerous. A ring or loose jewelry could short and melt causing severe burns.

The Fuel Door Valet™ requires a constant +12V supply. Be sure this line is properly fused. (The orange wire at the Fuel Door Release Switch in the C5 meets this requirement perfectly.) The pre-installed fuse inside the Fuel Door Valet™ only protects the Fuel Door Valet™ and it's fuel release actuator output from shorts, so the main supply line still needs its own fuse.

Be sure that all new wiring is routed to avoid any moving parts, such as gear shifters and foot pedals, where repetitive motion or vibration can wear wiring and cause electrical damage or interfere with driver safety.

Wiretaps are supplied to make connecting the Fuel Door Valet™ quick and easy. These connectors are made by 3M and are UL listed. They can be slipped around an existing wire without having to cut or splice into it. The side is folded up and snapped closed to hold the main wire in place. The new connection is made by sliding the end of an unstripped wire fully into the remaining port and pressing the metal clip with a pair of pliers until the clip is flush with the plastic body. The lid snaps closed to insulate the connection.

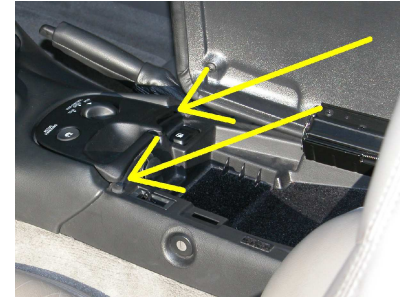


Recommended procedure for installation in a C5:

Step 0: (convertibles only) For convertible C5's, the "waterfall" must be removed to gain access to the center console area. Let the top down and leave the deck lid up. Begin by removing the four T15 torque-head screws (two per side), and then slide the painted body panel up and off the convertible latching hardware. Set this piece safely aside.



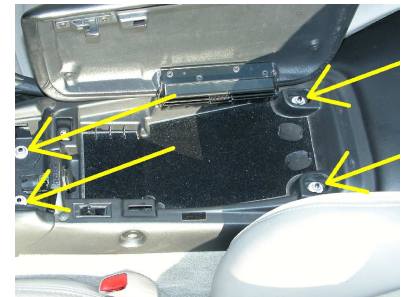
Step 1: Disconnect power and proceed with caution. Open the center console storage lid. Then, pop out the center console control panel very carefully. The service manuals suggest using a flat screwdriver with a protective cloth to prevent damage to the console panel's finish. Alternately, it can be done bare handed with a careful,



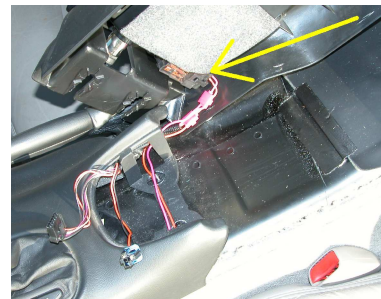
strong grip by prying upward on the edges that are towards the console storage area. Then remove the cable connector to free the console panel and set the panel safely aside. Also disconnect the storage area's accessory power connector. Note that each connector has a locking tab.



Step 2: Remove the two fastener covers at the rear of the storage area. The covers can be removed by hand or by using a small flathead screwdriver for leverage. Remove the two exposed 10mm nuts with a socket wrench. Then remove the other two nuts that were revealed when the console control panel was removed. Lift the rear of the console just enough to clear the bolts and slide the panel rearward until it clears the front of the console area.

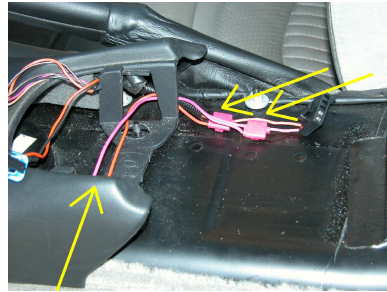


Lift the whole assembly up and reach underneath and inside the fuel switch area and disconnect the connector (this connector also has a locking tab) from the switch housing. Lift the entire console out and set it aside. A second person may make an easier job of disconnecting the fuel release switch cable.



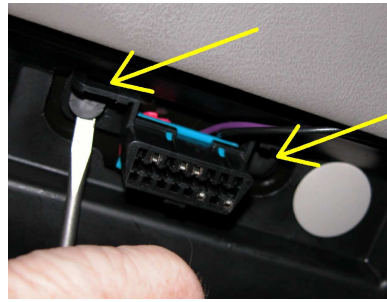
Step 3: With the center console storage area out of the way, the Fuel Door Valet™ can be easily wired into the fuel release switch's cable. Slide the orange and pink wires from the Fuel Door Valet™'s wiring harness kit

underneath the trim on the driver's side near the center console panel area (following the vertical yellow arrow in the picture). Run the two wires between the support members, across the open area and in between the two support members on the passenger side, and then route rearward towards the fuel door switch connector.

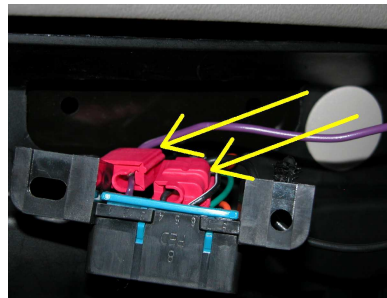


Using one 3M wire tap, connect the pink wire to the pink wire of the fuel door switch cable, and then with a second 3M wiretap, connect the orange wire to the orange wire of the fuel door switch cable.

Step 4: There are two plastic fasteners that hold the OBDII connector in place. These fasteners can be pried outwards with a flathead screwdriver and then pulled straight out with a small set of needle nose pliers. These are "ridged" plastic and can be stripped out of the holes and then reused. Once the fasteners are out, the OBDII connector's wires can be pulled to get just a little slack from the wiring harness feeding the connector.



Step 5: Attach the purple Fuel Door Valet™ wire (pin 6) to the purple wire (pin 2) of the OBDII connector. Be sure to attach the wires as far away from the connector as possible so that the wiretaps can be manipulated to make room for the connector to go back into its original place. Also connect the black wire (pin 4) of the Fuel Door Valet™ harness to the black wire (also pin 4) of the OBDII connector, again making room to manipulate the completed connections. If the wiretaps are very close to the connector, the connector may have difficulty sitting flush again, unless both wiretaps are laid perfectly flat. Give yourself more room than the photo.



** (You may skip to Step 10 to test the circuitry before reassembly, but be sure to disconnect the battery again before continuing on to Step 6.)

Step 6: Place the wiretaps adjacent to each other and flat against the OBDII connector and hold the connector snugly in place. Push the plastic fasteners back into place as tightly as they'll go. The connector should fit as snug and flush as before.

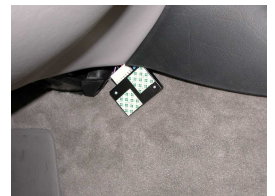
Step 7: Replace the center console and be sure to **reconnect** the fuel door switch cable. Slide the console forward until it's flush in its old location, but be sure to hold the rear upward until it clears the connector bolts. Once in place, secure and tighten all four nuts and cover the rear two with their lids.

Step 8: Take the center console control panel and **attach** its connector cable. **Reattach** the accessory power connector. Then snap the center console control panel carefully back into place.

Step 9: (convertibles only) Carefully slide the waterfall back over the top release hardware. Align the panel so that all four torque screws can be reinserted. Reinstall, but do not over tighten.

Step 10: Reconnect the battery and test the circuitry. Be sure that the car's remote lock and unlock buttons still work. If the key FOB is no longer in sync with the vehicle because of the loss of power, press and hold the lock and unlock buttons together on the FOB for more than 10 seconds or until the horn blows. This will usually restore FOB synchronization. If it does not, please see your car's owner's manual for reprogramming a key FOB. Then, to test the Fuel Door Valet™, simply press lock, unlock, and unlock in rapid succession (with less than one second between subsequent presses). The fuel door should pop open. Also check that the manual fuel door release button inside the center console still operates properly, if the center console is back in place.

Step 11: The final step is to securely mount the Fuel Door Valet™ so it does not fall or rattle. This can be done with the double-sided sticky foam. Simply slide the unit up inside the trim as shown and find a place it easily fits, noting the orientation and routing of the cables, then remove the backing from the foam tape, and reinstall. There is a support "boss" underneath the trim. An easy fit is just along its edge and toward the front of the car. Make sure the fit is fairly flat and that there is not a lot of tension in the wiring. Enjoy!



Troubleshooting:

Since the Fuel Door Valet™ only connects to power, ground, OBDII data, and the fuel release actuator, any possible problems will likely be easy to isolate. Here's a few tips on troubleshooting system issues related to the connections:

* Be sure the battery has been reconnected.

* If the fuel door release button inside the center console does not operate, the connector to the switch may not be seated properly. Also, if a short between power and ground occurred when the circuits were live, the fuse for the fuel release system may be blown.

* If the key fob no longer operates the door locks, be sure that the OBDII data line is not shorted. An easy test for this is to lock/unlock the doors from the driver door panel. If the OBDII line is shorted, the passenger door lock will not respond, but the driver lock may continue to work. If this is the case, review the wiring to be sure the OBDII data line is not shorting to power, ground, or another wire.

* If the key fob still does not operate the door locks, be sure that the fob did not lose synchronization with the car's security system while the battery was unplugged. Holding down both lock and unlock on the key fob simultaneously for about 10 seconds will usually resync the fob; the horn will toot if this is successful. There is a more detailed synchronization procedure in the car's owner's manual if the simple resync does not work.

Support:

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Electrical wiring diagram:

