C6-A6 Paddle Swap

Purpose: To make the right paddle up-shift when pulled and the left paddle down-shift when pulled.

This modification was originally posted to the Corvette Forum on 11-24-2006, 06:11 PM --

http://forums.corvetteforum.com/c6-corvette-general-discussion/ 1555475-reprogram-paddle-shift.html -- Post #22

I have provided the instructions to simplify them based on others who have also made this mod.

Also, others have chosen to purchase a new right-side paddle that does the same thing. I went with free as it is more cost effective.

However, you must use caution and be patient during the process as to not damage any wires or connectors.

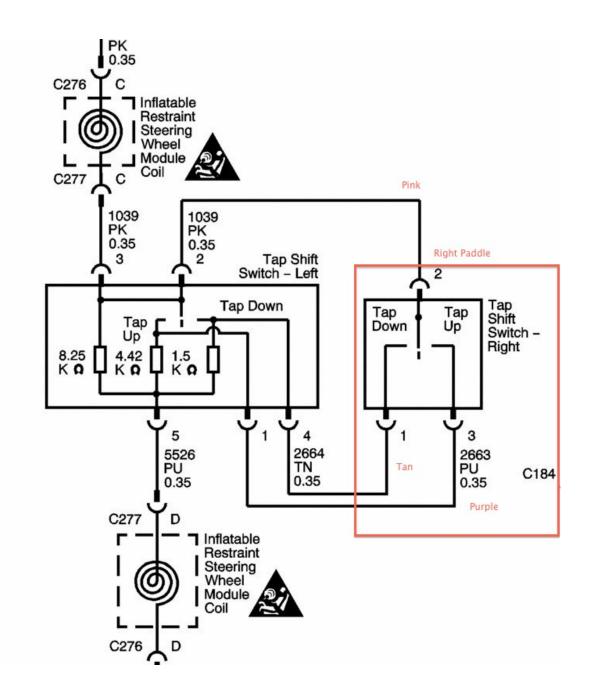
The F1 Mod alone does not dismantle the paddle switch other than removing the two Torx screws from the steering wheel.

Here's the story --

I wanted to be able to pull up on the right paddle to up-shift while being able to downshift by pulling up on the left paddle.

I had guessed that it would just be a matter of switching some wires and that turned out to be true. A wiring diagram was posted to the Corvette Forum and the solution seemed near. I set out to see how to swap the wires.

Below the right paddle is shown in red and the wire colors marked on the schematic.



PLEASE NOTE YOU DO THIS MOD AT YOUR OWN RISK. YOU MUST FOLLOW THE FIRST STEPS TO PREVENT DAMAGE OR SERIOUS HARM.

First and MOST IMPORTANT thing for your own safety is to disable the airbag in the steering wheel.

This is done by:

1. You must <u>disconnect both battery terminals</u> for complete safety, NO EXCEPTIONS!

Wait at least 10 minutes before working with the airbag. You cannot bypass this first step.

(This is so any capacitive charge in the system is dissipated.)

(You can use the stopwatch timer on your cell phones as I do to make sure you have waited the appropriate amount of time.)

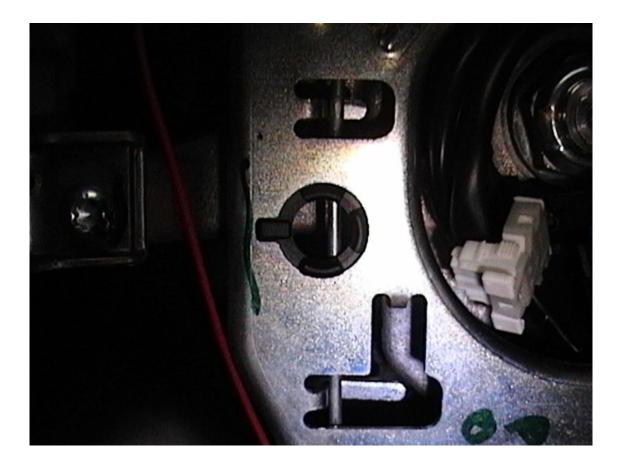
After your 10 minute timer has expired you can move on to the next step. Next step is to remove the airbag in the center of the wheel. There are two access holes -- one on each lower side of the wheel.



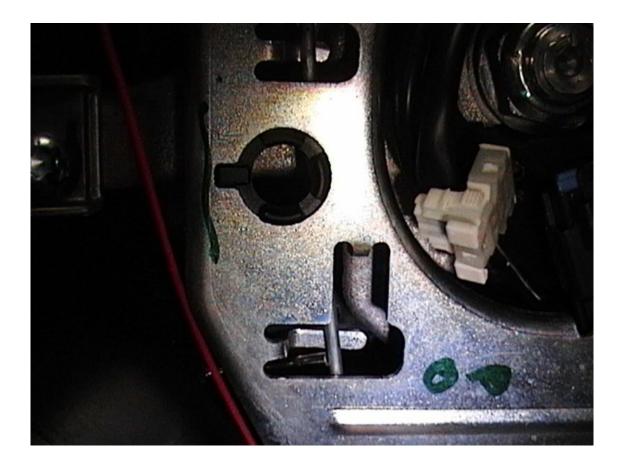
You need to insert a blunt object to press on a spring-wire holding a tapered retaining pin on each side. I used a small punch or a small flat head screwdriver will also work.



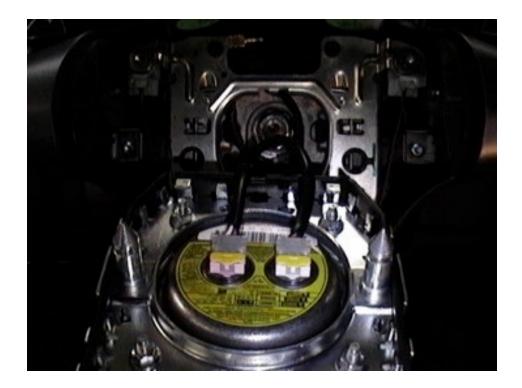
Here you see the spring-wire that locks the airbag in place (notice the center hole.)



The next photo below shows the spring-wire pushed back that allows the airbag to pull out. You can see the punch inserted.



Pull the airbag toward you as you press the spring-wire and it will release as shown below.

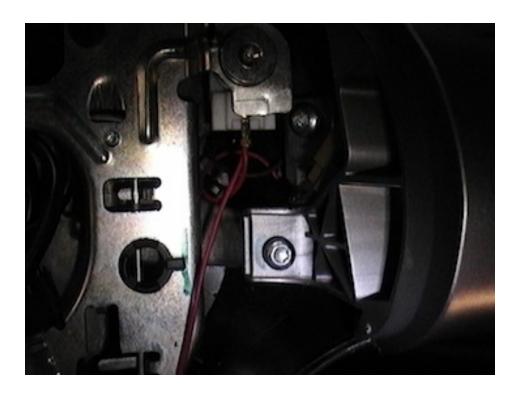


Some have found it easiest to get the airbag out of the way, but many others have not -- it's your choice. As I was doing this for the first time, I allowed the air bag to rest on the lower half of the steering wheel without removing the connectors The wires are long enough to just move it to the side if you prefer.

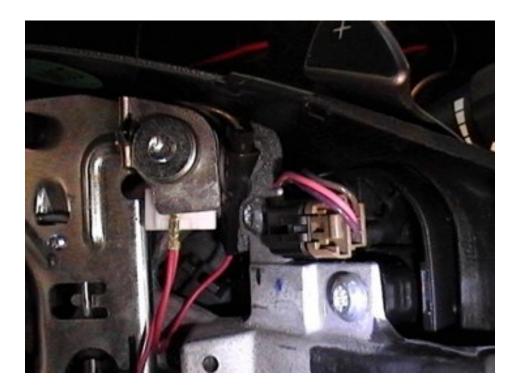
There are two connectors that need to come off if you remove it. Pry up the yellow retaining clips and with them removed pinch in the side tabs while lifting the connectors. The connectors are color-coded for easy reassembly.



You will need to remove the cover over the right paddle which is held on by one #20 Torx.



You'll then be able to see the right paddle and its connector. To remove the paddle -- as it may be necessary to unplug the connector -- unscrew the two #20 Torx, unplug the connector and remove.



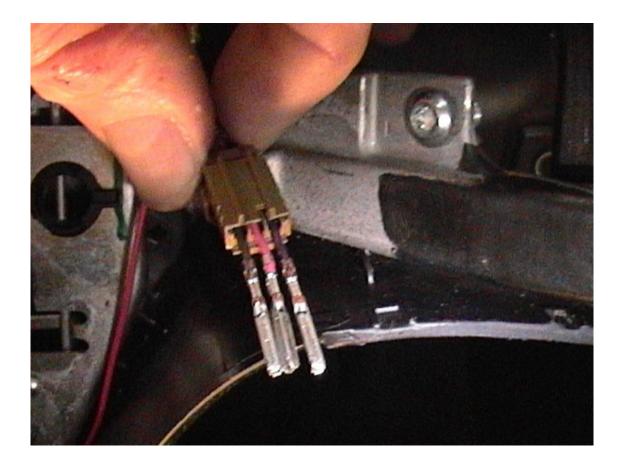
Here's the paddle removed and the brown plug removed (that contains the wires you need to swap.)



Here's the brown plug that is removed to work on.



I then opened up the connector by sliding the white retaining clip out by pressing in on the sides. Here's a close up showing the wires (brown/tan, pink, purple.)



I was then able to push in a small punch enough to release whatever clip is holding the wires in and slide them out the back. When I inserted the punch (a wire would also work) into the connector to release the wires it flattened whatever was stopping the wires from pulling out. I was able to remove the tan and purple wires, switch their location, and push them back into the connector. They are now able to slide out but holding them in place when you reconnect the paddle will provide a secure connection. You can also re-bend the locking tap to secure them.



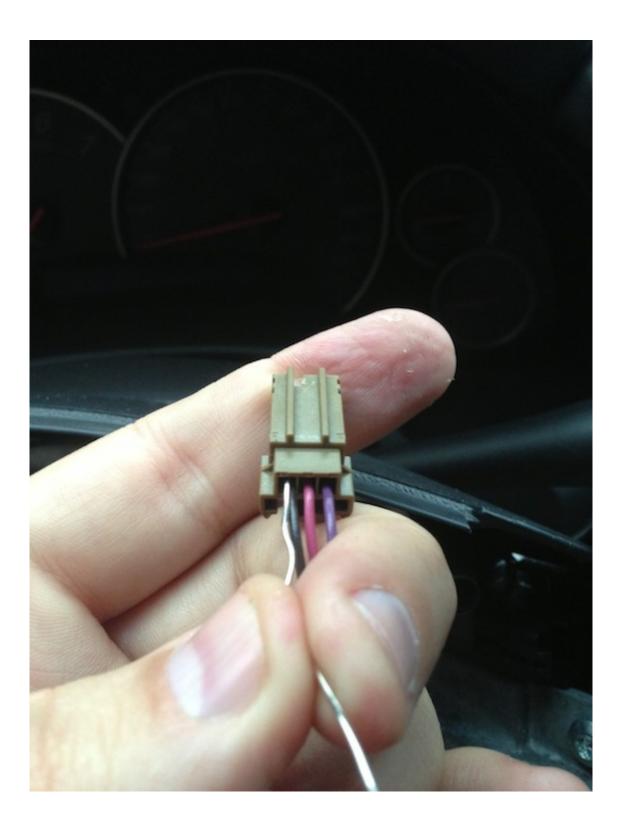
I also found this this tip and a couple of pictures by **akcraig85** on the Corvette Forum --

I just did this myself and it worked great. I've used these connectors before and know how to get them out without messing them up.

Take a paper clip and beat the end of it flat. This might be hard to see in this image as its already skinny and you will have to use a metal surface to hammer against. I tried to take a picture but it doesn't look very flat but it is.



Then insert the paper clip in the back of the connector on top of the wire. When the paper clip is inserted correctly the wire will slide right out. Its hard to explain but you can kind of feel a pop when its correct. Don't pull on the wire until the paper clip is inserted because that will make it harder to come out.



To reassemble -- reverse your steps. Connect the right paddle to its wire connector and mount it with the two #20 Torx (if removed.) Replace the cover with one #20 Torx.

Reinstall the airbag connectors (if removed) and push in the yellow retaining clips to lock them in place. Check that your wires aren't crimped and place the tapered pins into the holes on the horn ring. Push in on the airbag to lock into the retaining spring-wire.

Reconnect the battery cables and you're done.

You'll need to re-index your windows by holding the up switch for 5 seconds.

I tried it out after getting everything back together. Pulling up on the left, downshifted and pulling up on the right, up-shifted. Pressing down on the thumb buttons on the top still work as opposites on each side.

This comes in handy if you are driving along with only one hand on the wheel and need to change gears.

I've used this mod now for six months with no problem. I use the paddles most of the time I drive in either the D mode or the S Mode. In all cases, I find it much more intuitive to use them in this manner rather than as supplied.

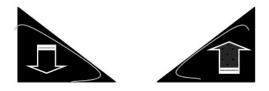
As with any change, you'll need to keep using the paddles to become comfortable with this change.

Another tip I found posted by **LV2TOUR** on Corvette Forum is to label the thumb paddles --

You can change the (+) (-) indicators with arrows. Here is a pic of that.



I've added a PDF of the Arrows (which look like this) --



If you have questions or if I missed anything that you feel would help others please let me know and I'll add it to this page. Happy shifting your C6 - A6

Roger.

raecer27@icloud.com

If you would like to take this Mod to the next level please see the following Article Part 2 - Adding Paddle Extensions.

Part 2 – Paddle Shift Extension for C6 -A6

I was playing around with the idea of installing different paddle shifters on my C6. I loved the idea, but the only products available are +\$200. While looking for a different option, I came across paddle shifter "extensions" that are made for a variety of cars, including the C7. Single-piece machined aluminum in many different style-options and colors.

Most of them come with a unique shaped plastic piece that 3M tapes to the back of the intended car's paddle. I browsed around and eventually came across a set for a VW Golf GTI that unscrew from the molded mount and also match the appearance of my steering wheel.

I found on the internet a 3D printed set of adapters to mount them and they worked perfectly complementing the "F1" wiring mod I had previously done, so the paddles shift according to the markings on them these would add a great touch and the option I was looking for.

I will provide all links to the Adapters and the Paddle Extension that will fit and work perfectly with this mod.

The Paddles/Fitment:

The paddle shifter extensions I used are for a Volkswagen Golf GTI MK5/6. These are made by RyanStar and by WANWU. I thought these were the best size, feel, and option for the cost. Available on Amazon and eBay.

-You will need to buy your own paddles!

If you'd like a kit that includes paddle shifters as well, please check out Modifiedvettes.com/product/c6-paddle-shifter-extensions.

(You will save quite a bit if you just do the modifications on your own.)

There are a variety of different paddles out there and these can possibly be used for a different set, with modification. The only main requirement is that the paddle is flat and removable from the molded part/mount. Bear in mind that these adapters are made only for the paddles I have listed above.

These will fit any 2006 - 2013 Corvette C6 with the A6 automatic transmission and will work with any aftermarket steering wheel as long as the OEM paddle shifters are still usable.

Installation:

The install is very straightforward and shouldn't take you more than an hour. Here are the basic steps involved. Note you will have to remove the airbag and disassemble the paddle assembly to do this.

As the per the instructions on the previous Tech Article "C6- A6 F1 MOD"

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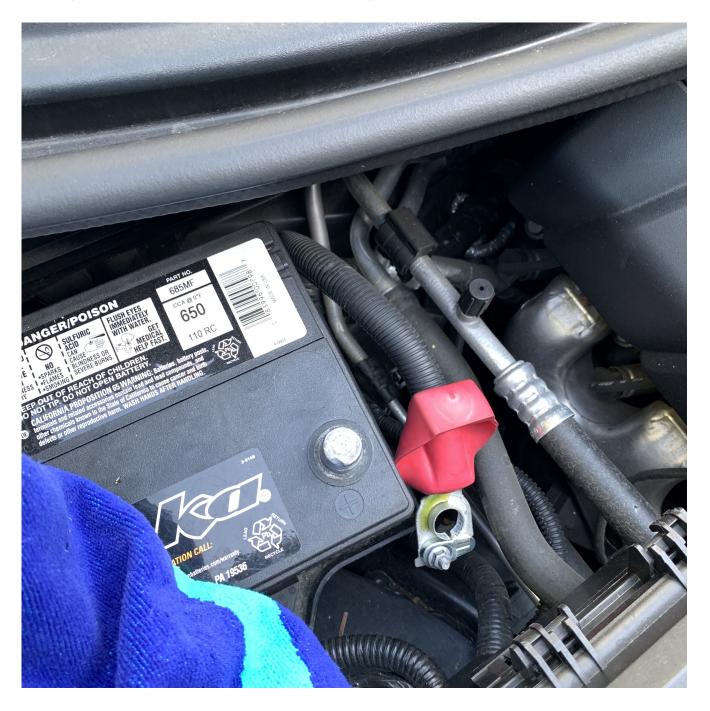
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Wait at least 10 minutes before working with the airbag. You cannot bypass this first step.

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(You can use the stopwatch timer on your cell phones as I do to make sure you have waited the appropriate amount of time.)

After your 10 minute timer has expired you can move on to the next step.



2: Pop out and remove the steering wheel airbag.



3: Disconnect and unscrew the paddle-shift switch assemblies.



4: Remove the three cover screws and pull off the cover.



5: Pry out the lever assembly from the post mounts using a flat head and unscrew the paddle.



#8. Using a small Flathead screwdriver, pop-up the shifter pivot am retainer. Insert the Flathead screwdriver and pry the pivot arm out and then up to remove the arm from the assembly. Please be careful not to lose the retainer, or damage the arm, or the housing.





IP. Remove the Phillips screws holding the pivot arm to the factory paddle shifter. Slide the pivot arm out of the paddle shifter assembly

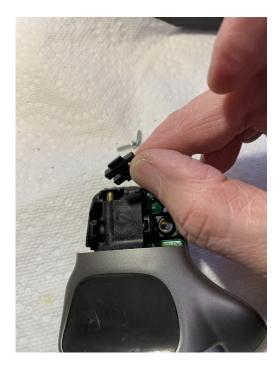
#10. Install the pivot arm into the new S2T Performance Paddle Shifter using the supplied Allen screws.



5.a – I am providing some additional images of the dismantling process of the switch below.







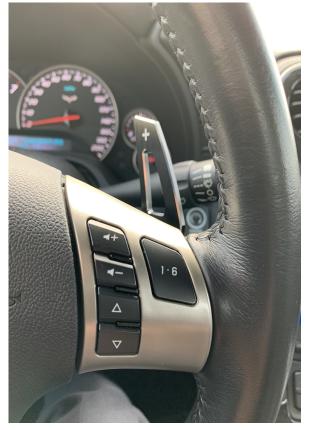


6: Install the adapters and reassemble. The paddles themselves are screwed into the adapters using the screws they came with.









If anyone has any additional questions or would like me assisting them on this mod please contact me.

Here are the links to the Adapters and the Paddle Extensions used in this article.

Adapter :

https://www.ebay.com/itm/Corvette-C6-06-13-3D-Printed-Paddle-Shifter-Adapters/323981636239?hash=item4b6ecf728f:g:T-UAAOSwT9ZdzxQP

Paddle Extensions – Please note these come in Silver, Matte, Black and the Gloss Blacks with side edge trim you see in the images above.

Example Matte Black below for comparison.



I had these on first then switched to the Gloss one in the instructions above. Just simply loosening two Torx screws on the adapters.

I had purchased the all Silver ones as well for comparison but in my opinion they did not satisfy the quality finish I was looking for.

Matte Black Paddle Extensions;

https://www.amazon.com/gp/product/B074NZTVR1/ ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1

Silver Paddle Extensions;

https://www.amazon.com/gp/product/B074NRGDYD/ ref=ppx_yo_dt_b_asin_title_o05_s00?ie=UTF8&psc=1

Gloss Black Paddle Extensions – (On my 2011 GS);

https://www.amazon.com/gp/product/B01DEVVHB2/ ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&psc=1

If you haven't already, be sure to do the "F1" wiring mod as well so the paddles shift according to the markings.

Please check Part 1 article C6-A6 Paddle Swap F1 MOD

Enjoy,

Cheers,

Roger Espinosa raecer27@icloud.com