



Paddle Shift Retrofit Installation Guide

2004-2013 BMW 1 Series E81 E82 E87 E88
2006-2011 BMW 3 Series Sedan E90 E91
2007-2013 BMW 3 Series Coupe E92 E93
2010-2014 BMW X1 E84

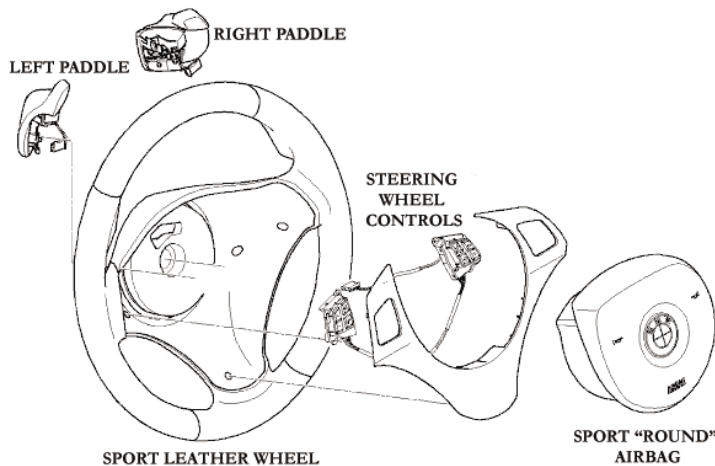
This retrofit only works with the exact vehicles listed above.

Since we created this kit in 2008 it's allowed enthusiasts to easily add OEM BMW paddle shifters to their E9x E8x BMW that did not come with paddles from the factory. This kit includes a custom made time saving plug and play harness which enables factory paddle shift without cutting, splicing and programming. Separately purchase a steering wheel, paddle shifters and the necessary steering wheel controls (MF buttons) and plug in our harness. It's that simple. The retrofit can be performed with common tools in about 2 hours at home by following our step by step printed install guide. The necessary OEM part numbers are included in the guide. MADE IN USA with OEM BMW Connectors.

The cost of the retrofit is about \$400-\$500 USD total if you get everything besides the harness used. ebay has many pre-owned steering wheels with paddles already in them.



BEFORE YOU START: If you do not acquire the exact part number of the "(1 QTY.) [Steering Wheel Controls/Switches BMW Part # 61319123287](#)" the retrofit will not work if you are using SSG Sport or M3 DCT paddles. You need this exact part number. BMW makes many different part numbers for the Steering Wheel Controls/Switches and only the one we have listed will work with our kit. Even if you have ones that look similar they will not work do to the lack of pins to engage the paddle wires and /or improper electronics to enable the retrofit. We do not sell any OEM parts. LCI paddles require modification.



If you plan to use LCI paddles (not shown below) and modify them you may not need part # 61319123287. This only pertains to LCI modified paddles. SSG and E chassis DCT paddles (shown below) will require part # 61319123287. Instructions: https://www.n54tech.com/instructions/BMW_LCI_Paddle_modification.pdf

Standard SSG Sport paddle shift parts:

- Paddle shift retrofit harness (included)
- Paddle shift retrofit install guide (included)
- (2) Paddle Torx Screws BMW Part # 32346759915
- (1) Shift Paddle, Chrome BMW Part # 61319182810
- (1) Shift Paddle, Chrome BMW Part # 61319182809
- (1) [Steering Wheel Controls/Switch BMW Part # 61319123287](#) (REQUIRED FOR NON-LCI PADDLES ONLY)
- (1) Sport Steering Wheel for paddles BMW Part # 32306777631 or 32306795572
(Optional Wheel) BMW M-Tech sports steering wheel for paddles with black smooth/punched leather. BMW Part #32307839115

M3 DCT Wheel and paddle shift Upgrade:

- (2) Paddle Torx Screws BMW Part # 32346759915
- (1) M3 Sport Steering Wheel for DCT Paddles BMW Part # 32342283738
- (1) Left Shift Paddle, Rocker type BMW Part # 61317840476
- (1) Right Shift Paddle, Rocker type BMW Part # 61317840477
- (1) [Steering Wheel Controls/Switch BMW Part # 61319123287](#) (REQUIRED FOR NON-LCI PADDLES ONLY)

BMW Performance Wheels are also available.

Vehicles without sport package:

If you don't have the sport "round" airbag in your car already you will need to purchase that also.

- Source a sport wheel (one that accepts the round airbag)
- (1) Sport Airbag BMW Part # 32306770353 or 32306779827 (vehicles without sport package only)
- (1) Airbag harness BMW Part # 32306777641 (vehicles without sport package only)
- * (1) Steering wheel Cover BMW Part # 32306772414 or 32306783048
(vehicles without sport package only)

Tools Needed:

- 10mm Wrench/socket to disconnect the battery (Included in the OEM BMW tool kit above the battery)
- Large flat head screwdriver (prying the center console up, steering column cover removal)
- Medium flat head screwdriver (removing the airbag)
- 16mm socket with extension (steering wheel removal)
- Wire coat hanger or equivalent to pull the harness through the dash
- T20 & T30 torx tools (steering wheel parts)

Instructions:

Step 1.) Make sure the steering wheel is straight and the front wheels are straight. Shift lever must be in the PARK (P) position for safety and will aid in the center console removal.



Step 2.) DO NOT SKIP THIS STEP. Using a 10mm socket/wrench disconnect the BLACK (-) **NEGATIVE** terminal from the battery located in the lower right hand side of the trunk. **DO NOT connect the battery at any-time during this procedure. This will cause the "AIR BAG" light to come on and will need to be reset it with the proper tools. Always use caution when working with airbags.**



Step 3.) Airbag removal. Look and feel the lower back of the steering wheel for dimples, there is one on each side. You go through them with a thin flat head screwdriver at an angle as seen in the pictures. Then push the internal clip (operates like a safety pin) until the airbag pops out on that side. Repeat on the other side.



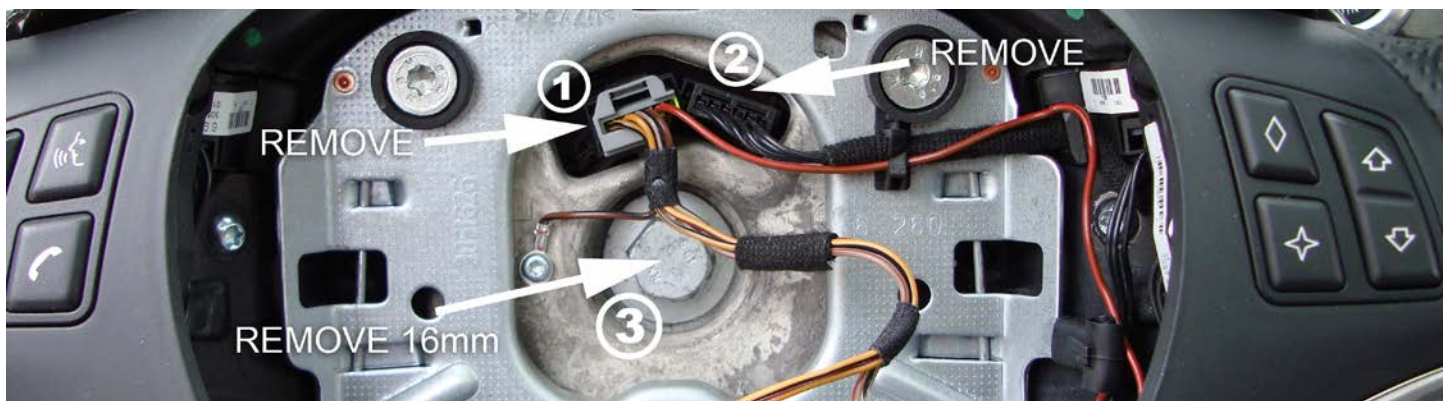
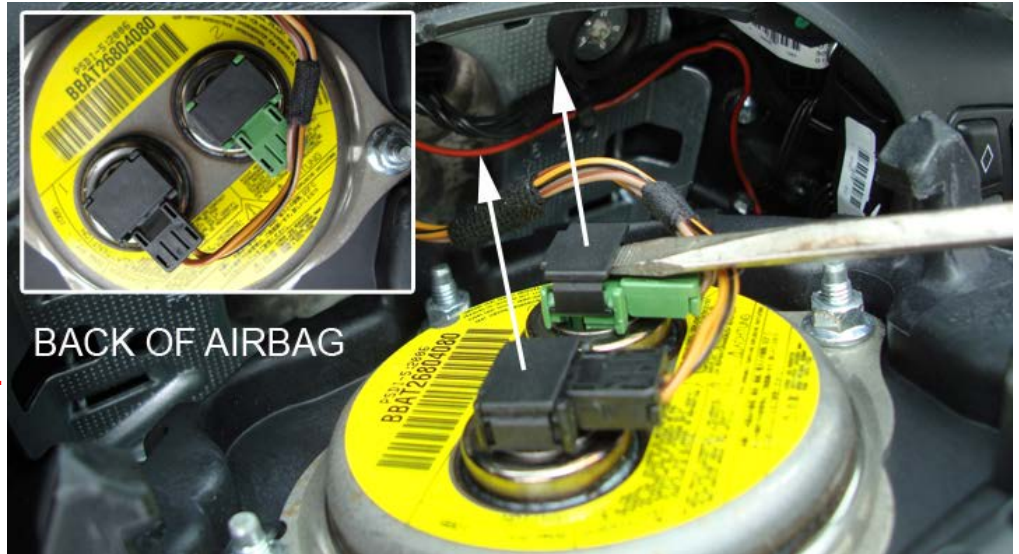
Step 4.) Disconnect the airbag.

Use a phillips head screwdriver to carefully pop each clip as seen in the picture. Carefully remove the airbag and put face up in a safe place.



WARNING

DO NOT connect the battery at anytime during this procedure. This will cause the "AIR BAG" light to come on and will need to be reset it with the proper tools. Always use caution when working with airbags.



Step 5.) Remove the steering wheel. First carefully remove the (1) grey and (2) black harnesses above the bolt. Use a 16mm socket with extension to remove large (3) steering column bolt. Carefully pull the steering wheel straight off of the steering column. **Please make sure the grey and black harnesses are disconnected before pulling the steering wheel off.**



Step 6.) Remove the 3 torx 20 screws on the back of the wheel to detach front beauty plate.



Step 7.) This is a very important step for NON-LCI paddles. If you don't have the BMW Part # 61319123287 the Sport or M3 DCT paddles will not work. Even if you have steering wheel controls that look similar, have plugs in the back or came with the used wheel you purchased. Attach the new [steering wheel controls BMW Part # 61319123287](#) with a torx 20 tool to the back of the beauty plate. Each paddle plugs into the back of each side of the steering wheel controls/switch. Using a different part number will cause the retrofit not work unless you use modified LCI paddles.



Step 8.) Remove the airbag bracket and airbag harness (If needed) from your old wheel to the new paddle shift wheel. Bolt in the right and left paddles to new wheel from the inside using (2) Paddle Torx Screws BMW Part # 32346759915. Reassemble the new wheel. Make sure everything is aligned and tight.



Step 9.) With the steering wheel off remove the lower steering column cover. Release the tilt steering lock on the left hand side of the lower column cover. Place your electrical tape covered large flat head screwdriver in the bottom cover from the front and carefully pry it off. Please study how this fits and aligns. It is difficult to put back on. There is a couple internal clips that need to line up on each side to reattach.



! WARNING

Be careful not to strike yourself in the face or hit something when removing the shift knob.

Step 10.) Remove the shift knob. With the vehicle in (P) park grab the shift knob with both hand and pull straight up hard. It will come right out.



1 Series



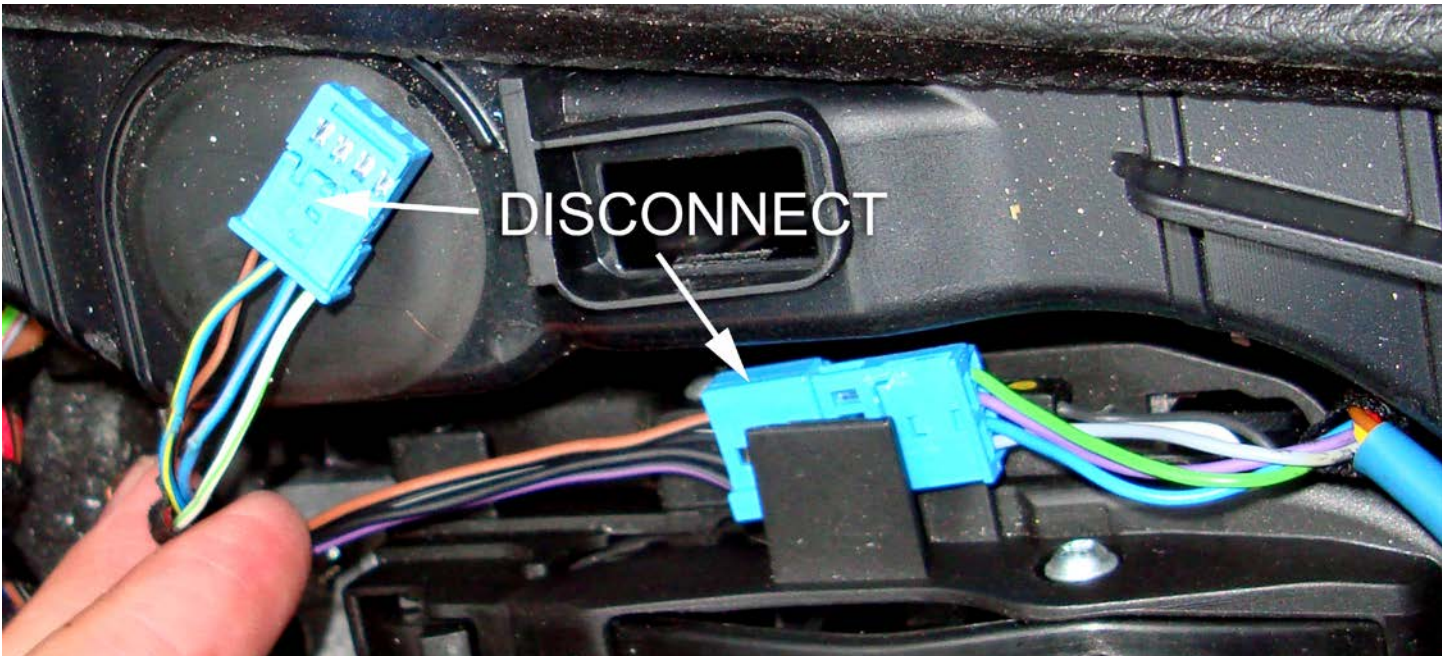
3 Series

Step 11.) Remove the center console cover. 1 Series and X1 are different but wire locations are the same. Open the center console armrest lid and place your electrical tape covered flat head screwdriver in the hole for the arm rest latch as shown in the above picture and carefully pry it up. This should pop the console up.



3 Series

You can now grab this end of the console and carefully pull up to release the side clips. Carefully guide the leather shift boot off of the shift pole to avoid damage to the leather. Disconnect the idrive (where applicable), Disconnect the blue harness and the white harness on the bottom sides of the shifter cover. Remove the white cigarette lighter connector on the left under the ashtray. Carefully remove the console cover.



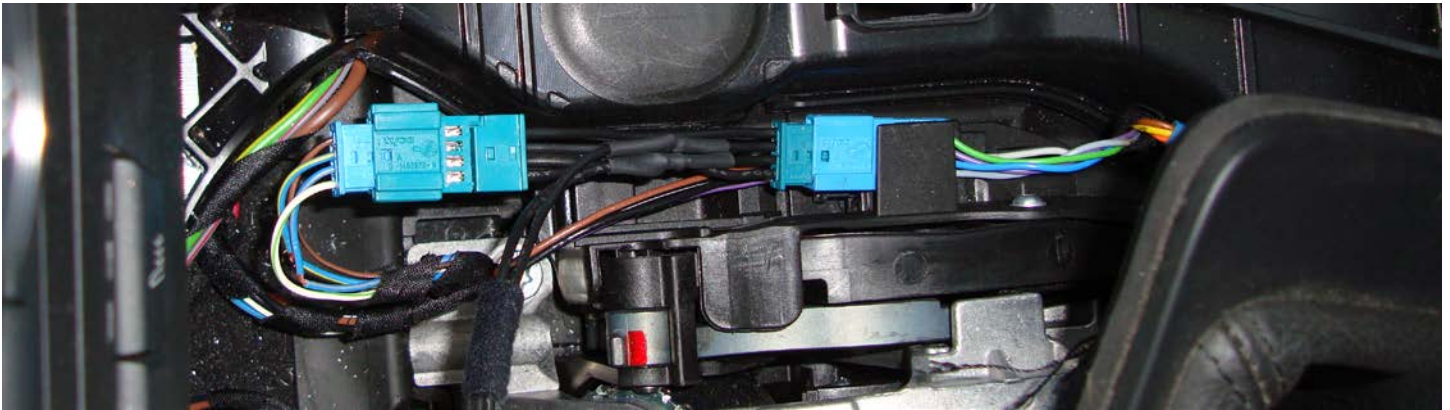
Step 12.) With the center console lid off, locate the blue connectors to the right of the shifter. Disconnect these two as shown in on the photo. This is where the blue connectors on the retrofit harness will connect.



Step 13.) Remove the 3 Torx screws below the drivers side dash and lower cover to ease harness guidance through the dash. Stay low, the harness should have a clean path below the black Styrofoam in the dash. The harness should come out where the blue dot is in the photo above.

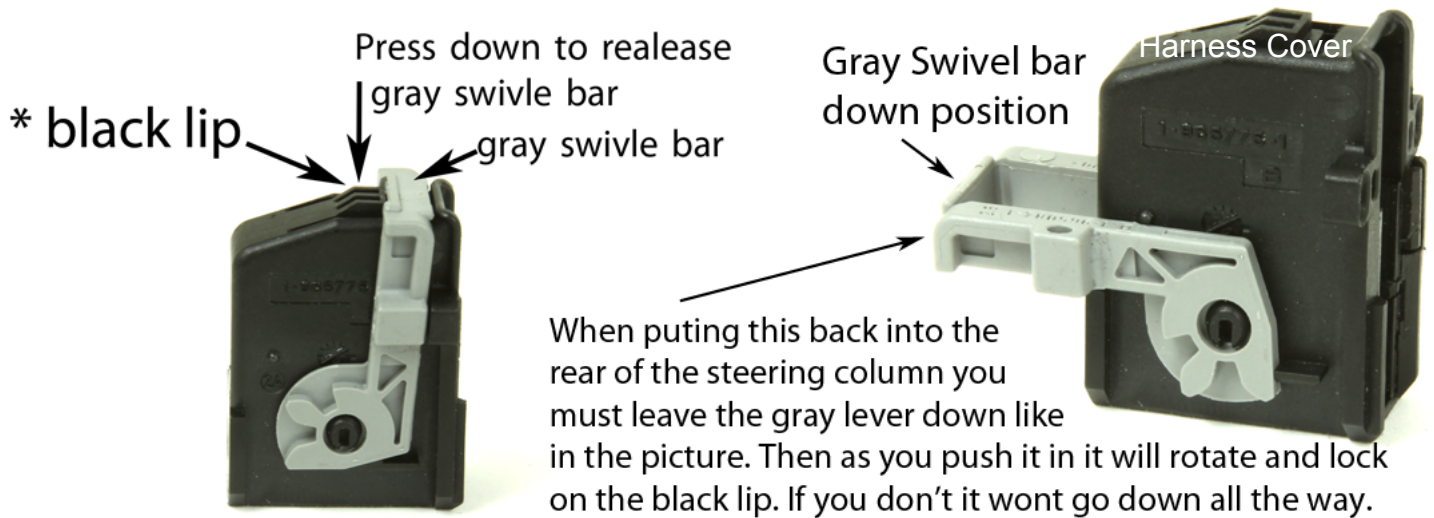


Step 14.) Guide the harness through the dash. Be careful when guiding the blue harness end through the dash not to damage the harness or anything on its way through the dashboard.



Step 15.) Plug the blue end of the harness into the blue connectors next to the gear selector. Make sure it snaps in tight.

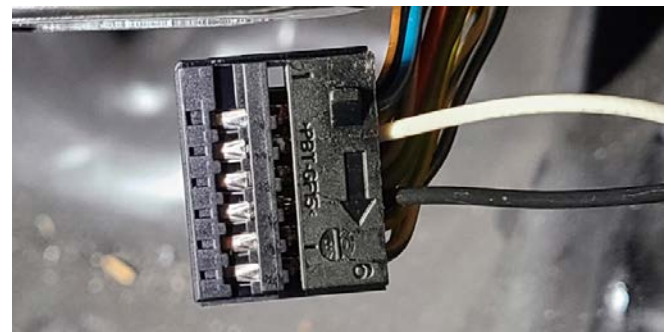
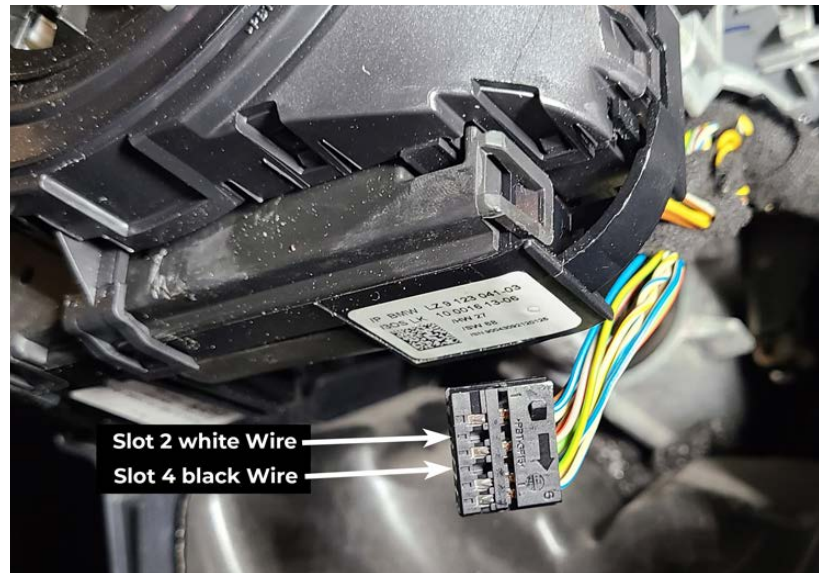
Step 16.) Locate the factory harness under the lower right side back of the steering column and remove it. There is a *black lip on the back that can be pressed and the *grey swivel bar will rotate to the left to eject the harness. Please see pictures below of the mechanism that holds the factory harness in the back of the steering column. Please pay attention to the removal of this part. Most problems occur when this harness end is put back in. Once out, take the harness cover off and attach it to the proper end of the retrofit harness. The next few steps will show you how to do that.



Step 17.) BMS Retrofit harness - Plug the white wire into the #2 slot on the black 12 pin connector you just removed. Plug the Black wire into the #4 spot. If there are existing wires here, remove them by carefully pushing down on the metal triangle part of the inner pin and pulling outward. A tooth pick can be used or similar tool. Tape the connectors off and place them aside.

Now make sure the retrofit harness plugs clicks all the way in. Compare them to the other connector pins.

Step 18.) Once the BMS Retrofit harness is plugged in slide the factory harness cover over the black 12 pin connector. The arrow on the harness should be pointing in. It will click in when secure. This end plugs in the back of the steering column where you removed the factory harness. The grey swivel bar on the harness end will snap into place when harness is secure.

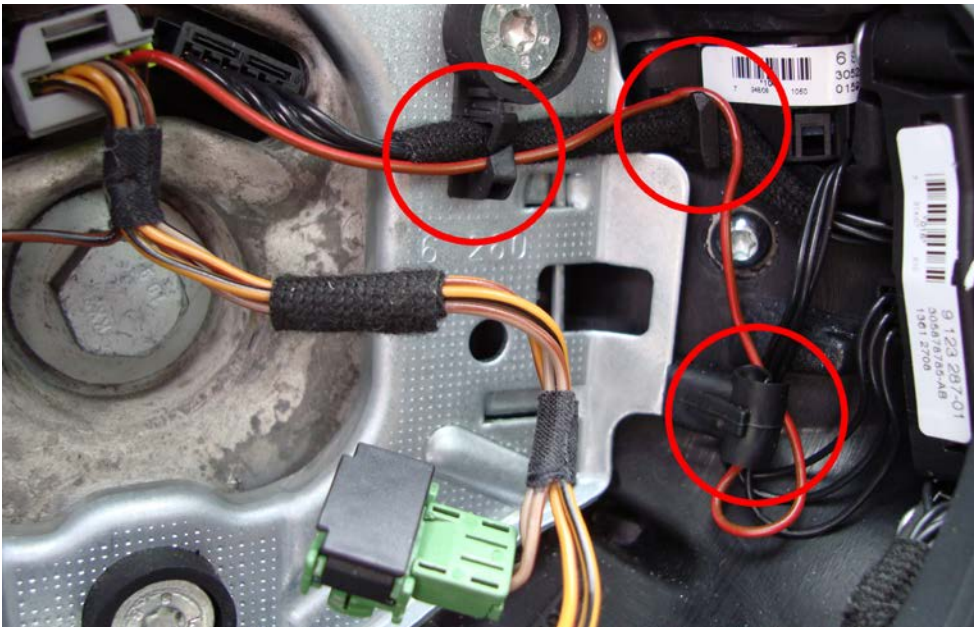


Step 19.) Carefully put the lower steering column cover back on. The alignment is tricky.

Step 20.) Place your new paddle shift steering wheel on the column. The wheel won't slide on unless it is lined up properly in the splines on the steering column. Replace and tighten the 16mm steering column bolt. Plug in grey and black connectors above the column bolt and make sure they are secure.



Step 21.) Before clipping the airbag back into the steering wheel make sure all wires are in their clips and out of the way as secured in both of the photos. Double check everything here. (see photo on the next page for a closer look)



This is a closer look at where the wires should clip.



If the wires are not properly clipped and tucked away the airbag will not sit properly.

Step 22.) Connect the black and green connectors to the back of the airbag. Carefully Click airbag in straight like you are honking the horn with 2 hands. It should click in nicely. Press the horn a couple times to make sure it feels right, and to make sure there are not wires in the way.

Step 23.) Before reattaching the center console cover, reconnect the white cigarette lighter connection and the black idrive connection. Carefully guide the leather shift boot over the shift lever to avoid damage to the leather. Connect the white and blue shift plate harnesses. Carefully click the center console cover down make sure the armrest is open when clicking this in or the clips can scratch the armrest. Check everything one more time. Connect the negative battery terminal. **Now you are done!**

TROUBLE SHOOTING:

Problem: Everything works except for the paddles.

Cause: Incorrect Steering wheel controls used. Incorrect part number used. Only [BMW Part # 61319123287](#) can be used with this retrofit or the paddles will not work. Purchase the correct steering wheel controls and it will work. They all look the same. Only one will work.

LCI paddles. In case of LCI paddles, [resistors will have to be modified to work](#). These paddles are not listed in our part numbers. If you do not have LCI DTC paddles then it is the steering wheel controls. 99% of the time it is incorrect steering wheel controls.

Problem: DTC error codes, erratic windshield wipers, and other malfunctions.

Cause: Harness cover with gray swivel bar loose, improperly connected, not locked in or harness inside is backwards. Factory harness is upside down on in steering column. Incorrect pins were removed.

Problem: (RARE) Airbag/Horn sits crooked, seems a little off, or takes more force to operate the horn.

Cause: Wiring is in the way and not properly stowed behind the airbag/horn (see above photo) or the silver airbag bracket in the wheel is bent. It is in the photo above behind the wiring. This is usually caused by a deployed airbag in the used wheel you bought. You must use the airbag bracket from your original wheel.