FUNCTION-FIRST

PLEASE READ BEFORE INSTALLATION: These instructions serve only as a guideline – the installation process for each vehicle may vary depending on make/year/model/trim/etc. It is the sole responsibility of the user to check for suitable product fitment prior to beginning the installation process. The user also accepts that working on or around a vehicle is an inherently dangerous activity, and as such should only be attempted by a qualified automotive technician. By installing or using any Function-First Performance product, the user assumes and accepts all risks.

INSTALLATION INSTRUCTIONS

SHIFT-RIGHT Solution

986 / 996 / 987 / 997



TOOLS NEEDED

- Interior Trim Pry Bars (non-marring)
- Torx Screwdrivers: T20, T30
- Marking Pen
- Sockets: 10mm, extension
- Safety Glasses
- Utility Knife
- Pliers (adjustable head)
- Wrench: 8mm
- Allen Keys: 2.5mm, 3mm, 6mm
- External Retaining Ring Pliers (90° tips)
- Optional: Sandpaper (appx 120 and 320 grit); Lubricant (such as WD-40)

PREPARATION

- 1. Remove interior pieces to gain access to the shifter assembly:
 - 986 / 996, refer to pages 8-9
 - 987 / 997, refer to page 10
- 2. Slide the spring-loaded cable end locks up and twist clockwise to access the shifter cables. Mark the location of the shifter cable in each cable end with a marking pen before pulling them up and out. Next, squeeze the shifter cable block release levers (RED arrows) to dislodge them from the shifter cradle.



3. Unscrew the 4x 10mm nuts to remove the shifter assembly from the car, and transfer the shifter onto a workbench.

4. Carefully cut the plastic bushings out with a utility knife by rocking the knife back and forth. <u>WEAR SAFETY GLASSES!!!</u>
The plastic is brittle, so the shards can go flying. Cut 4 at a time from the top, and twist each bushing around to expose the remaining tabs. Once all tabs are removed, pry the bushings out from each end and remove the shifter shaft.

*** For bushing removal on a **996 Cup shifter** or **997.2 GT3** shifter, please see Appendix A (page 11) ***











5. Push the white pin outward from the inside of the shifter cradle to release the shifter yoke. Remove the cable end by pressing the black pin out from the back of the yoke.











INSTALLATION

VERY IMPORTANT: When torqueing the bearing fasteners, take care to tighten until just snug to remove the end play - over-torqueing the bearing fasteners can permanently damage the bearing raceways

<u>Install the new Sliding Block onto the shift lever lateral rod (DEM shifter only)</u>

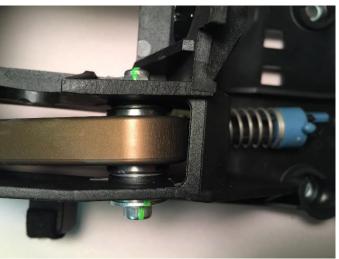
Remove the white plastic block from the OEM shifter lever's lateral arm ball-end. Lightly grease both the ball-end and
the inside of the new Sliding Block. Press the lever into the Block until it clicks past the circlip. Ensure the Block can
freely articulate about the ball-end.



Install Shifter Yoke

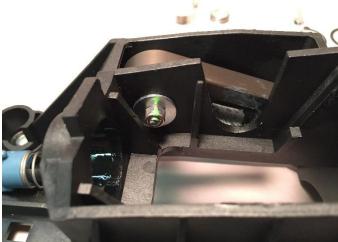
1. Grease the inner slot of the yoke – both top and bottom, where the Sliding Block will reside. Press the yoke shaft into the cradle while progressively layering the pieces as per the assembly order: Shim>Yoke>Shim.





2. Insert the 40mm cap screw thru the yoke shaft, then use the washer and locknut to torque the yoke assembly down. Tighten only until just snug so that the side-side play is removed. The locknut will prevent the fastener from loosening.





Install Bushings and Shifter

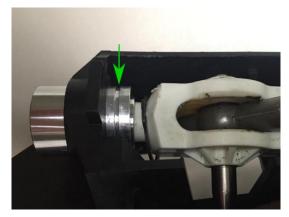
PLEASE NOTE for 996 and early 997 shifters: You need to apply the self-adhesive shim tape to the outside of the bushings as shown below, since those OEM shifter units use a larger inside diameter than later 997 units. If unsure what type of 997 shifter you have, test fit the bushings into the cradle - if fitment is very loose, apply the shims.

- Take care to ensure the bushing is clean before applying the adhesive shims
- Align the shim at the edge of the circumferential and perpendicular grooves so that it does not cover them
- Once aligned, affix the shim by rolling the bushing on a flat surface with adequate pressure to properly adhere





- 1. Be sure to place the retaining rings onto the fore and aft ends of the shifter BEFORE maneuvering the shifter shaft into the yoke and the shifter cradle.
- 2. Slide the bushing into the cradle and simultaneously around the shifter until the groove (GREEN arrow) clears the inside of the shifter cradle, making sure that the perpendicular cutout slot is facing bottom to clear the locating ridge inside the shifter cradle barrel. Then, affix the retaining ring into the bushing groove you can steady the retaining ring by holding it from the bottom through the cradle while snapping the ring in place.



(NOTE: The new bushings are intentionally tightly toleranced to the black cradle. If the fit is very tight, lightly sanding the inside of the cradle barrels and/or applying some lubricant inside the barrels will help ensure easier installation.)

3. Repeat the process above for the longer rear bushing. (Do not back the large set screw out of the bushing, as there is a plastic crush ball residing btwn the large set screw and small set screw that may fall out.) Tighten the large set screw to remove any endplay, making sure that the retaining rings are flush with the inside walls of the shifter cradle. Tighten until just snug - the inner rotating sleeve of the bearing should be just shy of the outer barrel edge, and not extending beyond it. Lock the large set screw down (RED arrow) by tightening the smaller top set screw (GREEN arrow).





4. Confirm there is no end play by rotating the shifter side to side, fore and aft, and also make sure there is no binding. Operation in all directions should be smooth. If not, loosen the large set screw until smooth operation is achieved.

Fasten the Shifter Cable End to the Yoke

I. Slide the side-side cable end onto the shifter yoke, making sure that the lip of the white plastic insert is on the outside and mounts flush with the black cable end. Fasten the screw with the fender and lock washer into the yoke.





Re-Assembly

- Install the shifter assembly into the car.
- 2. Snap the shifter cable blocks into the cradle. Then, snap the cables into the cable ends as per the marks made prior to removal, and slide the spring-loaded locks down. If you have a shifter alignment tool, now is a good time to reset the lever position based off that. You could also just eye-ball the lever position it should be standing perpendicular (straight upwards) relative to the center tunnel.
- 3. Ensure that all gears fully engage with no binding. Row through the gears several times to make sure operation is smooth and bind-free, and to check that there is no end play in any of the bearing pivot points. If loose, lightly re-tighten the connections until snug. Otherwise, the setup process is complete and you can re-install the interior.
- 4. Done! Enjoy!

986 / 996 Center Console Removal

1. Tilt seats all the way back. Remove E-brake cover (from top, pull slightly outward from its 2 clips, then lift straight up).



- 2. The center console is held down by 5 screws. Access and remove all fasteners (listed, in order, from front to rear):
 - Fastener #1: Remove shift knob and shift boot pry boot out from the 4 clips (circled in RED), pull boot rearward out from underneath center console, and slide knob up lever to remove and access fastener #1 (circled in GREEN).
 - Fastener #2: Remove ashtray/rubber mat and unscrew plastic anchors (circled in BLUE); pull entire bin upward and remove/unplug switches to access fastener #2 (circled in YELLOW).





Fastener #3: Remove coin holder from rear storage bin (insert small pry bar in slot at coin holder base and pry upwards) to access fastener #3 (circled in GREEN).

Fasteners #4 and #5: Remove rubber mat from the rear storage bin and unscrew fastener #5 (circled in BLUE); pull cover plate up to access fastener #4 (circled in YELLOW).





- Once center console is freed, slightly lift rear up and unplug wiring below (rear bin switch and ashtray light).
- Remove center console by lifting the rear upward and swinging it outward over the passenger seat, then lift the front section up and over the shifter, making sure to not scratch the front of the center console when sliding it out from underneath the center stack.

987 / 997 Center Console Removal

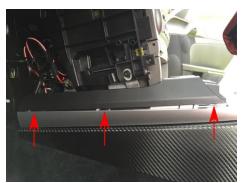
- 1. Disconnect the battery to ensure the airbag light is not tripped when the center console is removed.
- 2. Remove the carpeted side cover at the front of the center console held in by 1 screw (circled in BLUE). Remove the center stack side plate unscrew the 2 side screws (circled in RED), then slide the plates REARWARD to pop them out of their 3 retention clips (circled in GREEN). Repeat steps for other side.







- 3. Pry shift boot upwards at the front to release from clips, turn boot 90° CW, then slide shift knob upwards off the lever.
- 4. Remove the top plastic cover at the front of the center console by prying it upwards from the silver horseshoe trim. Next, remove the silver horseshoe trim – unscrew the 4 screws on top (circled in RED), then pull the trim rearward and over the shifter. Remove the 2 screws holding the front of the center console to the dash support (circled in GREEN).



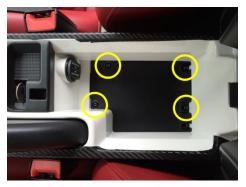




5. Remove the storage cubby bin via the 2 screws (circled in RED) and remove the screw (circled in GREEN). Pop the E-brake cover off by lifting from the rear and tilting it forward until fully released from the console, then remove the screw (circled in BLUE). Remove rubber mat from the rear storage bin to access and remove the 4 remaining screws (circled in YELLOW). Unplug the center console's wiring harness below the center stack prior to console removal.



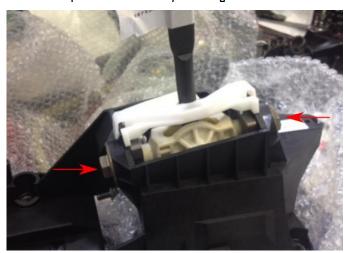




APPENDIX A - Bushing Removal on 996 Cup & 997.2 GT3 Shifters

996 Cup Shifter

Unscrew the 2 bushings (indicated by the red arrows) from the square retainers located inside the cradle. Be sure to counter the square retainers by sticking a screwdriver in the gap by by the retainer and inside of the cradle.





NOTE: Late model Cup shifters use 997 cradles, which Porsche Motorsport modified by sanding out the inner cradle barrels to fit the 996 Cup bushings. Depending on how much material they removed, you may need to lightly and evenly sand out the inside of the cradle barrels a bit more to provide sufficient clearance to fit the SHIFT-RIGHT bushings.

997.2 GT3 Shifter

Flip the shifter cradle over to expose the C-clip securing the front bushing inside the cradle. Take needle-nose pliers or 2 screwdrivers and simultaneously push each end of the C-clip (denoted by green arrows) out of the bushing groove. Remove the front bushing from the cradle, and slide the rear bushing toward the center of the cradle. Grab the top of the C-clip (denoted by the blue arrow) with locking vise-grip pliers and pull upwards to release from the groove.

