



# Installation instructions

📍 10930

Porsche 930  
4-speed gearbox

4 speed



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# PLEASE NOTE

## SAFETY FIRST!

- ⚠ Please only do the installation if you have appropriate experience in the automotive sector and have the right tools! An incorrectly installed Shifter can seriously damage the transmission or make the vehicle undriveable or not shiftable and lead to serious accidents!
- ⚠ If work on the electrical system is necessary, please follow the manufacturer's specifications.
- ⚠ It is essential to leave the ignition switched off when the plugs are disconnected.  
Do not leave the car key in the vehicle.
- ⚠ Carry out all work with care and cleanliness! For the professional assembly of a shifter is no force required. All parts are designed to fit your vehicle.
- ⚠ If you are unsure, please contact your trusted workshop about the installation!

## BASICALLY

- ⚠ Use ethyl alcohol/brake cleaner to clean all aluminum parts.
- ⚠ Occasionally lubricate all moving parts with spray grease, which has good creeping properties.  
Our recommendation: Würth HHS 2000 (WD-40 or similar is unsuitable because it is too thin)
- ⚠ All screws and nuts that are not self-locking or are fitted with tooth lock washers glue in during assembly!
- ⚠ Never kink shift cables, please!

### **i SURFACES AND THEIR CARE**

Please note that an untreated aluminum surface (ALU) is sensitive to aggressive Liquids to which i.a. Hand sweat also counts. Especially the high-strength 7075 aluminum we use has a tendency to form black spots of corrosion due to its high copper content. Under special circumstances, very salty air near the sea and coast can lead to corrosion. The surfaces should therefore be cleaned regularly and treated with care to prevent this. For this purpose, e.g. ethyl alcohol or brake cleaner. Only spray these onto a cloth and wipe the shifter with it, NEVER spray the shifter directly. If stains have already formed, they can be removed with commercially available aluminum polish, but that is also not allowed get into the movable parts of the shifter. The anodized versions of our shifters (EXS, EXGR) are more resistant to corrosion. The steel parts have to be also cared in all variants.

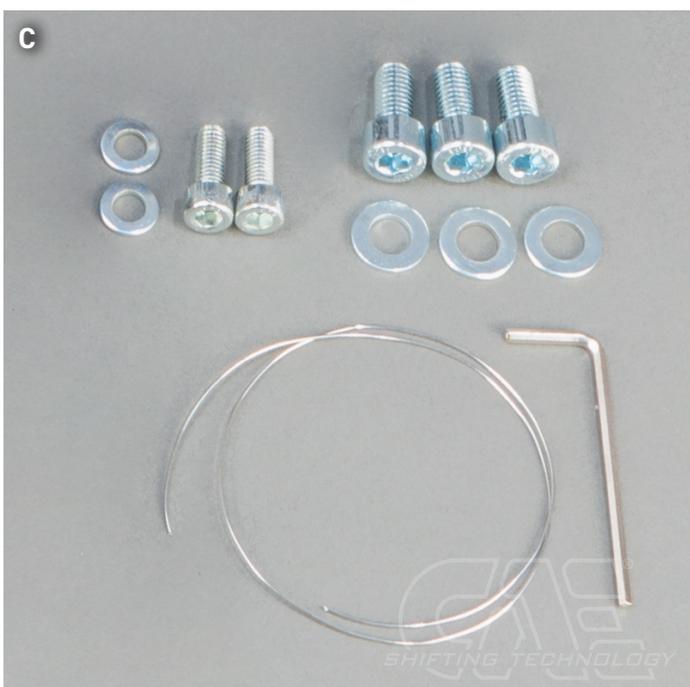
## TIPS FOR GEAR SHIFTING

### **i FORCE DOESN'T MAKES YOU FASTER - IT ONLY HARMS THE TRANSMISSION**

The question arises again and again: "Does a CAE shifter puts more strain on a gearbox than a standard gear lever?" The answer is clear: "No!" The things that are most stressful for a synchronizer ring in a transmission are excessive shifting forces or a wrong shift in gear. Basically, the shift travel with a CAE Shifter is significantly shorter than with the standard lever. We achieve 30 - 55 % reduction depending on the vehicle and transmission type. This can only be achieved by using the appropriate gear ratio on the shift lever. You can feel it through the precision of a CAE shifter engaging the gears is much better than with a standard gear lever designed for comfort. The force for this decreases in the same proportion - we put in the gears with significantly less load for the synchronizer rings. In addition, with a correctly adjusted CAE shifter put in the gears is very precise and shifting into the wrong gear is extremely rare. Even in motorsport, fast, precise, but still sensitive shifting leads to the goal! Everything else is pure tugging and tearing which puts a disproportionately high strain on a transmission and in the worst case causes a fatal wrong shift in gear!

## Included in delivery

- ▶ 1x shifter completely monted, design depending on ordered variant (Picture A)
- ▶ 1x Shift knob incl. counter screw M6x20 V2A, design depending on ordered variant (Picture B)
- ▶ Accessories package (Picture C)
- ▶ Switch rod connection (Picture D)



**i** The shifter is intended for racing vehicles without interior equipment. If the center console is installed, it must be removed or cut out so that the shifter can move freely.

**i** The shifter must be screwed directly onto the sheet metal of the center tunnel.

## The removal

- ▶ Remove the original shifter completely. Remove the shift rod head and degrease the shift rod. (Picture 1, 2)



**i** For the shifter to function properly, it is absolutely necessary that the rear shift rod joint and the front bearing of the shift rod are free of play. It is essential to check this and replace the corresponding parts if necessary. The shift rod clamp at the rear joint of the shift rod should be adjusted to the shortest length. (Picture 2a)



## The installation

- ▶ Place the CAE shift rod end (connection rod) on the shift rod and fix it with the original clamping screw. (Picture 3)
- ▶ Then grease the plastic guide bush of the shift rod well again. We recommend Würth HHS 2000.



- ▶ The shift rod end (connection rod) should now be perpendicular to the center tunnel. If this is not the case, the rear shift rod joint must be reworked. (Picture 4)
- ▶ Grease the ball on the lower part of the shifter. Now place the shifter on the center tunnel, inserting the ball of the shift lever into the shift rod end and the hole in the connection rod. (Picture 5)
- ▶ Place the shifter on the tunnel and tighten all screws (3x M8 and 2x M6 for the shift rod guide). Push the shifter all the way to the front and tighten all screws (Picture 5).



- ▶ Loosen lower spring stop of center position spring.
- ▶ Shift transmission by hand to 3rd or 4th gear.  
(This is the "zero position" of the gearbox, to do this move the shift rod forwards or backwards without rotating it).
- ▶ Determine the desired center position of the shift lever and tighten the lower spring stop under the shift bracket using an Allen key.  
The shift lever must be slightly inclined to the right in aisle 3/4.
- ▶ For the 4-speed gearbox, screw in the stop screw "3/4" until it is in position 3/4 (center position).
- ▶ Now shift the gearbox to level 1/2 using the shift lever and adjust the stop screw until the gears can be changed cleanly in level 1/2.
- ▶ Actuate locking pin via cable and shift gearbox to reverse gear level.  
Adjust stop screw until reverse gear can be cleanly engaged.



- ▶ It is essential to check the ball collar of the shift lever for collision in the pipe socket of the shift rod end. (Picture 10, 11)



- ▶ If necessary, some material must be removed or the head shortened. (Picture 12)



## Machining and installation of the center console

- ▶ If the center console is to be installed, it must be machined to provide clearance for all moving parts of the shifter.



**FINALLY!** Check all functions and settings during the test drive and readjust if necessary!

**Incorrect or inaccurate settings can cause damage to the gear box and consequential damage!**

If you have any questions or problems, please be sure to contact us, we look forward to your feedback to improve our products.

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