

Installation instructions



Mini Classic until year of construction 2000

4-speed gearbox



SAFETY FIRST!

- Raise the vehicle safely with a vehicle lift for installation. Improper lifting can cause damage to the vehicle and/or personal injury or even death!
- 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.
- 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!

(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 (often seen on various YT channels), which looks "important", but in no way makes it faster - but it 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 (The shifter is pre-assembled for shipping with 2 screws from the accessory package). Design depending on ordered variant (Picture A)
- ▶ 1x Shift knob incl. counter screw M6x20 V2A, design depending on ordered variant (Picture B)
- ▶ Shift rod (Picture C)







(i) PLEASE NOTE:

The shifter is designed for vehicles without interior equipment. The center console must be removed or cut out until appropriate clearance is ensured.

- The shifter should be screwed directly onto the sheet metal of the center tunnel, any existing carpet must be cut out.
- (i) Glue all nuts / screws during assembly! Never kink shift cables!

 Lubricate all moving parts occasionally with good spray grease.

 For cleaning the aluminum parts we recommend commercial spirit...

The removal

- ▶ Detach the shift lever boot including frame from the center console.
- Completely remove the standard shift lever. (Picture 1, Picture 2)
- ▶ Raise vehicle safely on vehicle lift. Shift transmission to neutral.
- ▶ Then replace the rubber elements with the supplied ones as shown. (Picture 3, Picture 4)



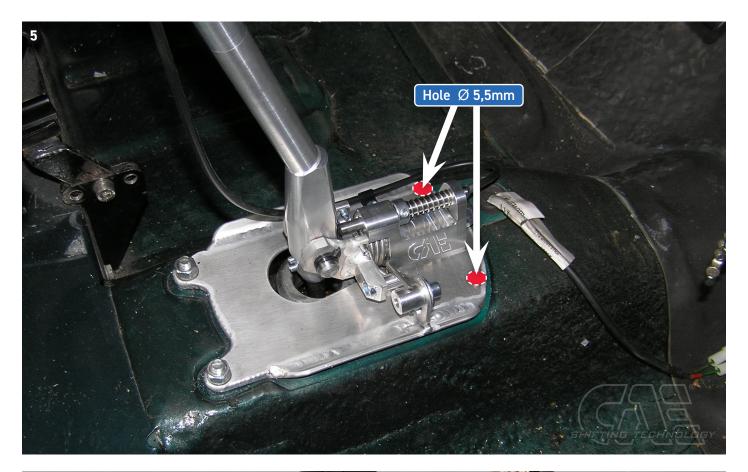






Installation CAE shifter

- ▶ Place the shifter on the center tunnel and mark the front 5.5mm holes. (Picture 5)
- ▶ Take the shifter down, drill, deburr and paint the holes.
- ▶ Mount the shifter finally. The rubber boot will stand up on the neck of the gearbox and seal it. (Picture 6)





Adjusting the shifting travel of the 4-speed gearbox

- Loosen the spring stop with a 5mm Allen key so that it can be moved.
- ▶ Shift the gearbox to 3rd or 4th gear, simply move the shift lever forwards or backwards to do this.
- Now screw the adjustment screw 3/4 up to the locking bolt. Then tighten the spring stop again with a 5mm Allen key. This is the basic setting for the shifter. (Picture 7)
- ▶ Shift the gearbox to gear level 1/2 using the shift lever and screw in the stop screw until 1st and 2nd gear can be engaged cleanly. (Picture 7)
- Operate the locking bolt via the cable and shift the transmission to the reverse gear level. Screw in the stop screw until the reverse gear can be engaged cleanly. (Picture 7)



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!

Machining center console

▶ The center console must be machined.



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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