



# ULTRA SHIFTER

## Installation instructions

📍 10061

Renault Megane 3 RS  
6-speed transmission



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RENAULT MEGANE 3 RS

# 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!

- i** The shifter is intended for vehicles with interior equipment. The center console must be slightly trimmed for the installation until a corresponding clearance for the shifter is ensured.
- i** Lubricate all moving parts occasionally with good spray grease, our recommendation: Würth HHS 2000, e.g. by touching the rubber caps on the ball heads. For cleaning the aluminum parts we recommend brake cleaner.

## The removal

- ▶ Remove the center console completely.
- ▶ Disconnect the shift cables from the levers and the bulkhead plate.
- ▶ Remove the original shift lever.

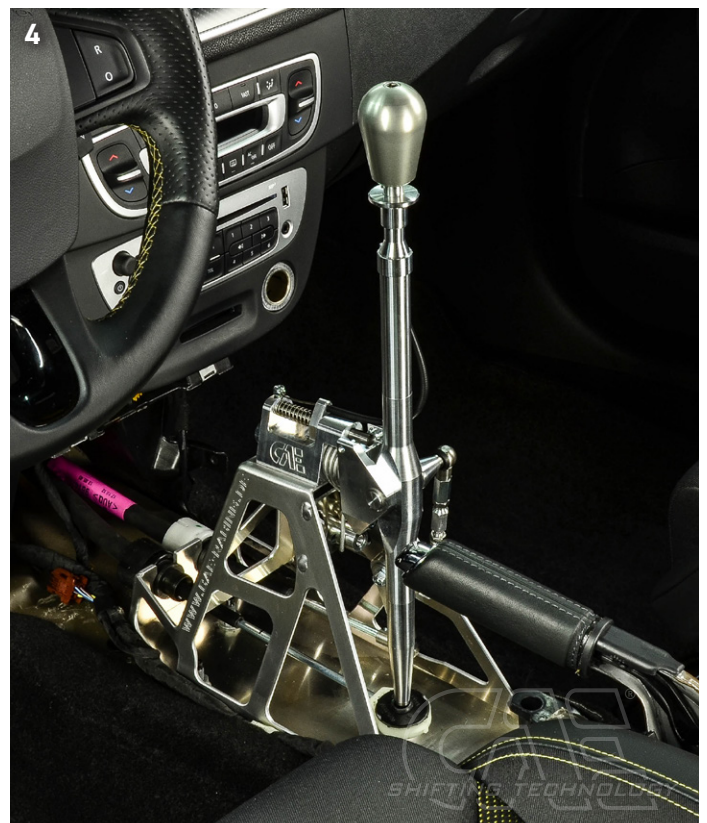
## Reworking the dial cable

- ▶ Replace the large ball socket of the dial cable with the CAE version. To do this, remove the standard socket and cut off the tip of the core: (Picture 1, 2)



## Installation CAE Shifter

- ▶ Place the 4 spacers (9mm high) on the threaded bolts. (Picture 3)
- ▶ Then place the CAE shifter, inserting the shift cables into the front housing opening. (Picture 4)
- ▶ Screw on shifter and then clip cables to bulkhead plate.
- ▶ Press the ball cups onto the shift and selector levers.

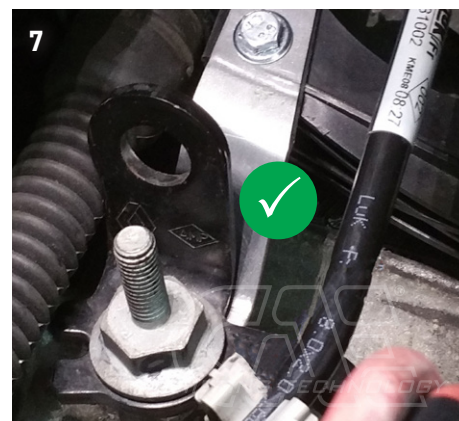
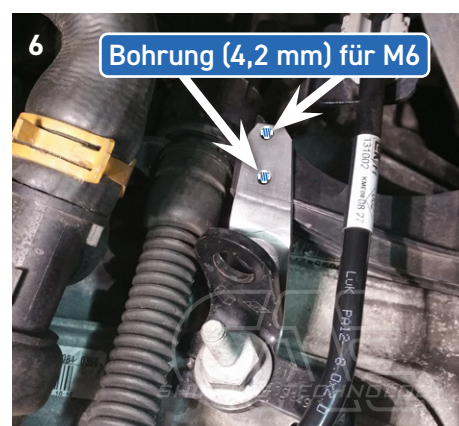
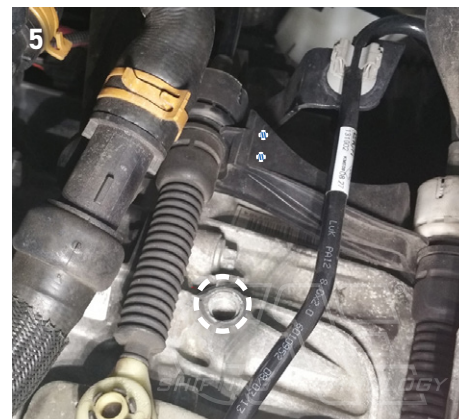


## Installation Reinforcement Transmission cable holder

**i** This is not absolutely necessary for the function of the shifter, but we strongly recommend it.

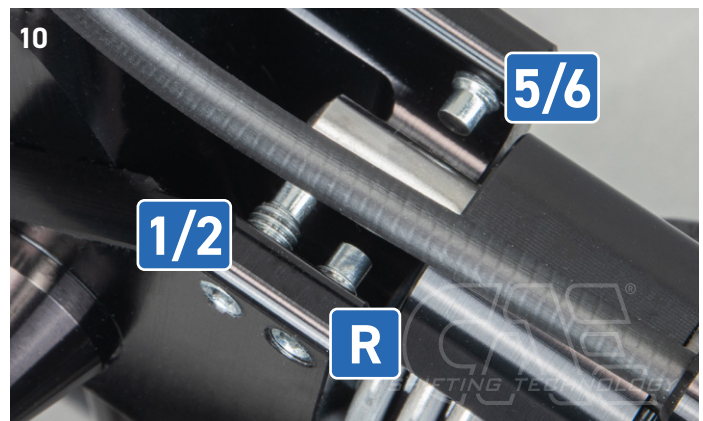
- ▶ Disconnect the battery and remove it including the battery tray.
- ▶ Remove the air filter.
- ▶ Unscrew the threaded bolt shown and remove it including the metal plate.
- ▶ Install the aluminum reinforcement plate under the metal plate and tighten the threaded bolt only slightly at first. (Picture 5, 6, 7)
- ▶ Mark the holes in the plastic holder and cut the M5 thread.
- ▶ If no angle drill is available, the complete cable holder must now be dismantled in order to create the two M5 threads.
- ▶ Then reassemble the M5 screws with Loctite and tighten them carefully.
- ▶ Reinstall the air filter, battery holder and battery.

**i** Generally mount a sealing sleeve on each ball and grease ball cups and sealing caps. After complete assembly of the shifter, secure the ball heads with the cotter pin clips. Glue in all nuts / screws during assembly! Never kink the shift cables!



## Adjust the shift range 6 speed gearbox

- ▶ Pull off the upper cup of the side coupling rod. (Picture 8)
- ▶ Adjust/check the center position of the shift lever, it should be as vertical as possible, or minimally inclined to the right, this is pos. 3/4.
- ▶ Adjust if necessary / desired by moving the spring stop as shown in the picture. (Picture 9)
- ▶ Now shift the gearbox into 3rd or 4th gear. The 3rd and 4th gears are in neutral zero position. To engage them, simply move the shift lever forward or backward without load.
- ▶ Now adjust the coupling rod (R/L THREAD) so that it fits exactly on the ball pin. With 3rd/4th gear engaged, the lateral play on the shift lever must be the same, otherwise readjust the coupling rod.
- ▶ Shift the gearbox to level 1 / 2 using the shift lever and adjust the stop screw until the gears in level 1 / 2 can be changed cleanly. (Fig. 10)
- ▶ Now shift gearbox to 5th/6th gear level using shift lever and screw in stop screw until 5th gear can be engaged cleanly. Actuate reverse gear lock pin via cable and shift transmission to reverse gear level. Screw in corresponding stop screw until reverse gear can be engaged cleanly.
- ▶ Install cotter pin clamps on the ball sockets (2x coupling rod and 1x selector cable) (Picture 11).



**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 and installation of the center console

- ▶ Process the center console according to the following pictures so that it can be mounted above the shifter. (Picture 12, 13, 14)



## Cover plate

- ▶ The cover plate supplied serves as a basis for customer adaptation. We recommend fastening by means of double-sided adhesive or Velcro tape. The visual adaptation to the vehicle can be achieved by painting or gluing. (Picture 15)



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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