

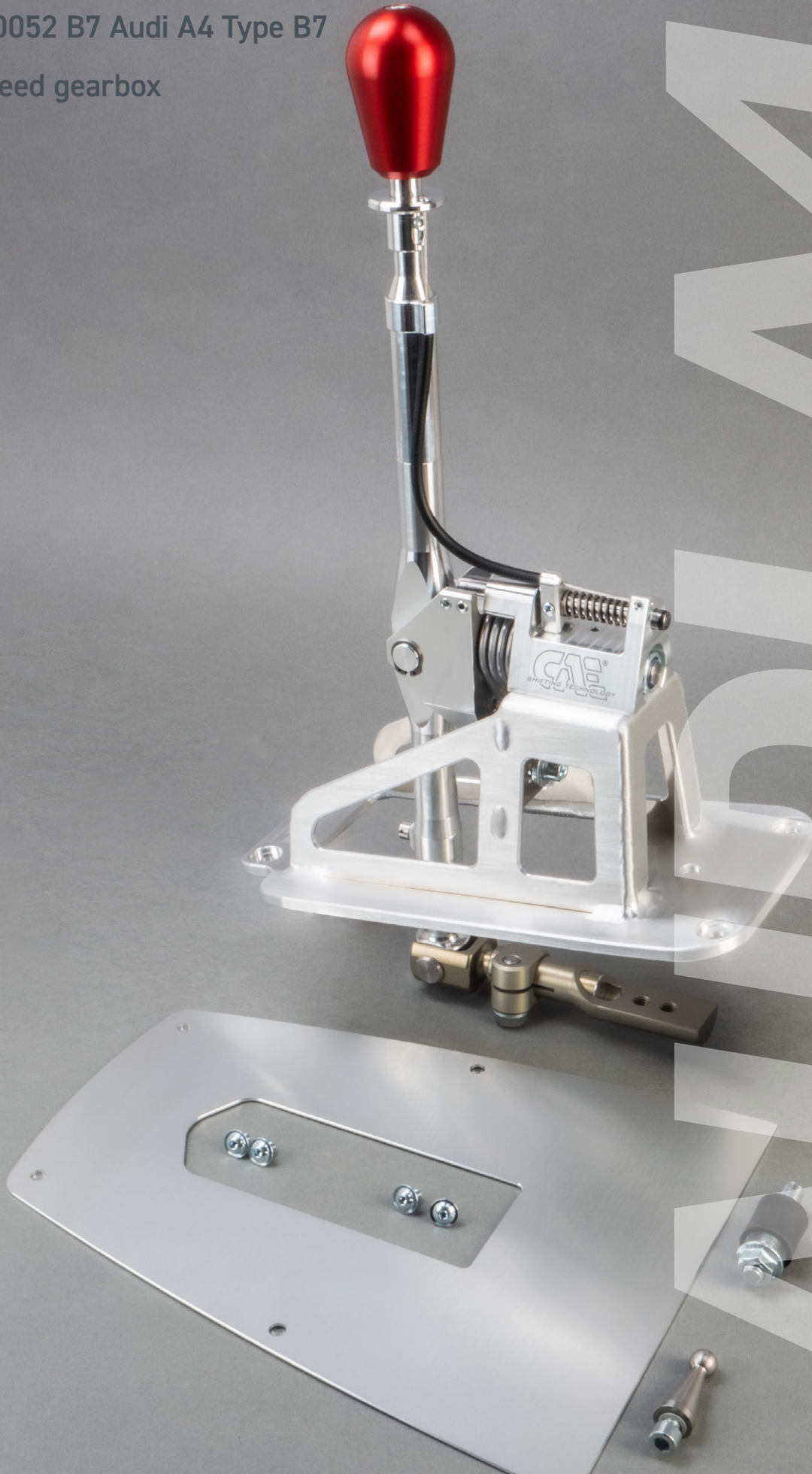
20  
YEARS  
EXPERIENCE

CAE<sup>®</sup>  
SHIFTING TECHNOLOGY

Installation  
instructions

📍 10052 B7 Audi A4 Type B7

6-speed gearbox



Audi A4 B7

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# PLEASE NOTE

## 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)
- 📍 Generally attach a sealing sleeve to all ball heads (if available on the model). Lift sealing sleeve very slightly to lubricate.
- 📍 All screws and nuts that are not self-locking or are fitted with tooth lock washers glue in during assembly!
- 📍 After installing the shifter, secure all ball heads (if available on the model) with the cotter pins provided!
- 📍 If CAE shift cables are included in the scope of delivery, please never kink them!

## **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.

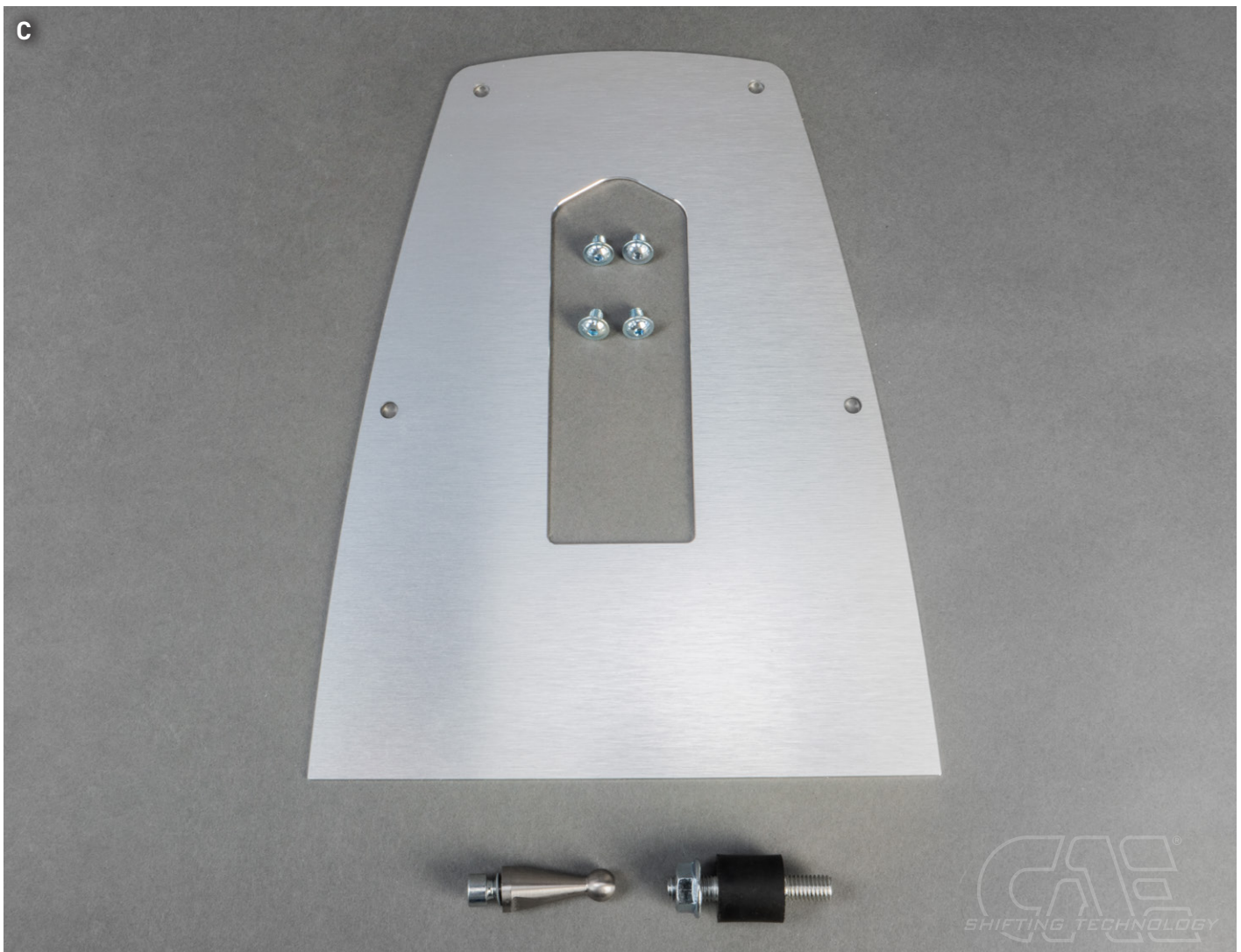
## TIPS FOR GEAR SHIFTING

### **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 mounted, design depending on ordered variant (Picture A)
- ▶ 1x gear knob incl. counter screw M6x20 V2A, design depending on ordered variant (Picture B)
- ▶ Cover plate with accessories (Picture C)



**i** The shifter is intended for vehicles with interior equipment.

There is no need to remove or machine the center console.

To install the shifter rod support, the left exhaust tract, if present (V6/V8 engines), MUST be uninstalled.

Lubricate all moving parts occasionally with good spray grease, e.g. by tapping the rubber caps on the ball heads.

For cleaning the aluminum parts we recommend commercial spirit.



## The removal

**i** Lift the vehicle safely on a car lift.

- ▶ Installation can be carried out on the installed transmission.
- ▶ Dismantle exhaust as far as necessary. (left exhaust tract)
- ▶ Remove original shift lever completely, shift rod and abutment rod can remain in the vehicle.
- ▶ Dismantle gearshift rod support/ball end on gearbox and replace with pin supplied.  
"CAUTION Fiddling" (Picture 1, 2)



## Setting up for the installation of the shifter

- ▶ Screw the rubber-metal bearing into the abutment rod. (Picture 3)  
This will be screwed into the shifter later and is used exclusively for flexible mounting of the support rod, because it cannot be removed without disassembling the transmission.
- ▶ Loosen the clamp of the CAE shift rod (SW13) and remove the shift rod adapter. (Picture 4)



## Der Einbau

- ▶ Install the shift rod adapter on the original shift rod, using the original screw and the curved washer. (Picture 5, 6)
- ▶ Pry out the plastic lug in the housing. (Picture 5, red circle)



- ▶ Place the shifter completely on the center tunnel, at the same time insert the shift rod into the adapter and also insert the rubber-metal bearing into the hole at the front of the shifter, fit the nut and lightly tighten the clamp on the shift rod. (Picture 8)
- ▶ Tighten the shifter with the original nuts.



- ▶ Tighten the clamp only lightly at first; the exact setting is made in the next section. (Picture 9)



## Adjusting the shifting travel of 6-speed gearbox

- ▶ Shift transmission to 3rd or 4th gear. The 3rd and 4th gears are in neutral zero position. To engage them, simply move shift lever forward or backward without load.
  - ▶ Now determine the desired center position of the shift lever (in the center position, the shift lever should be slightly tilted to the right approx. 5 degrees). (Picture 11)
  - ▶ Loosen the spring stop under the gearshift bracket by approx. 1 turn using an Allen key (Picture 10).
  - ▶ Loosen the clamp on the adapter piece until the shift lever can be aligned as shown in Picture 10.
  - ▶ Tighten the clamp and spring stop again. It should now be possible to engage 3rd/4th gear correctly.
- ❗ CHECK:** When 3rd or 4th gear is engaged, press the shift lever slightly to the left and right; the play must be the same in both directions, otherwise readjust.
- ▶ If this adjustment is correct, tighten the clamp with 40Nm.
  - ▶ Now shift the transmission to level 1 / 2 using the shift lever and screw in the corresponding stop screw until the gears in level 1 / 2 can be changed cleanly. (Picture 12)
  - ▶ Repeat this for level 5 / 6. (Picture 12)
  - ▶ Actuate reverse gear locking pin via pull and shift transmission to reverse gear level. Screw in the stop screw until reverse gear can be engaged cleanly.





**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!**

- ▶ Place the cover plate with the screws supplied, the screws only engage in the plastic.

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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ORIGINAL**



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