

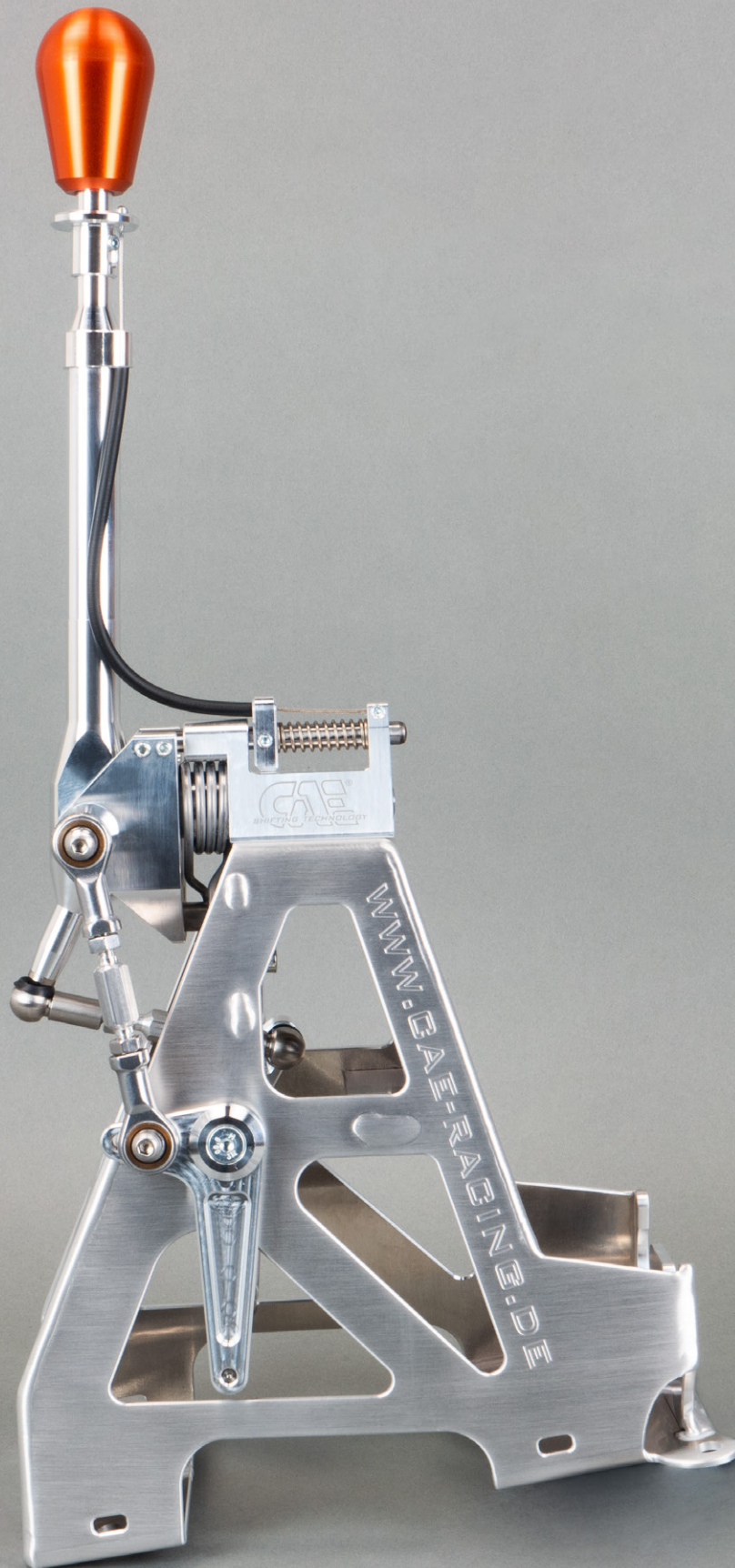


ULTRA SHIFTER

Installation instructions

📍 10042

Ford Fiesta
MK8 ST
6-speed gearbox



WWW.CAE-RACING.DE



FIESTA MK8

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.

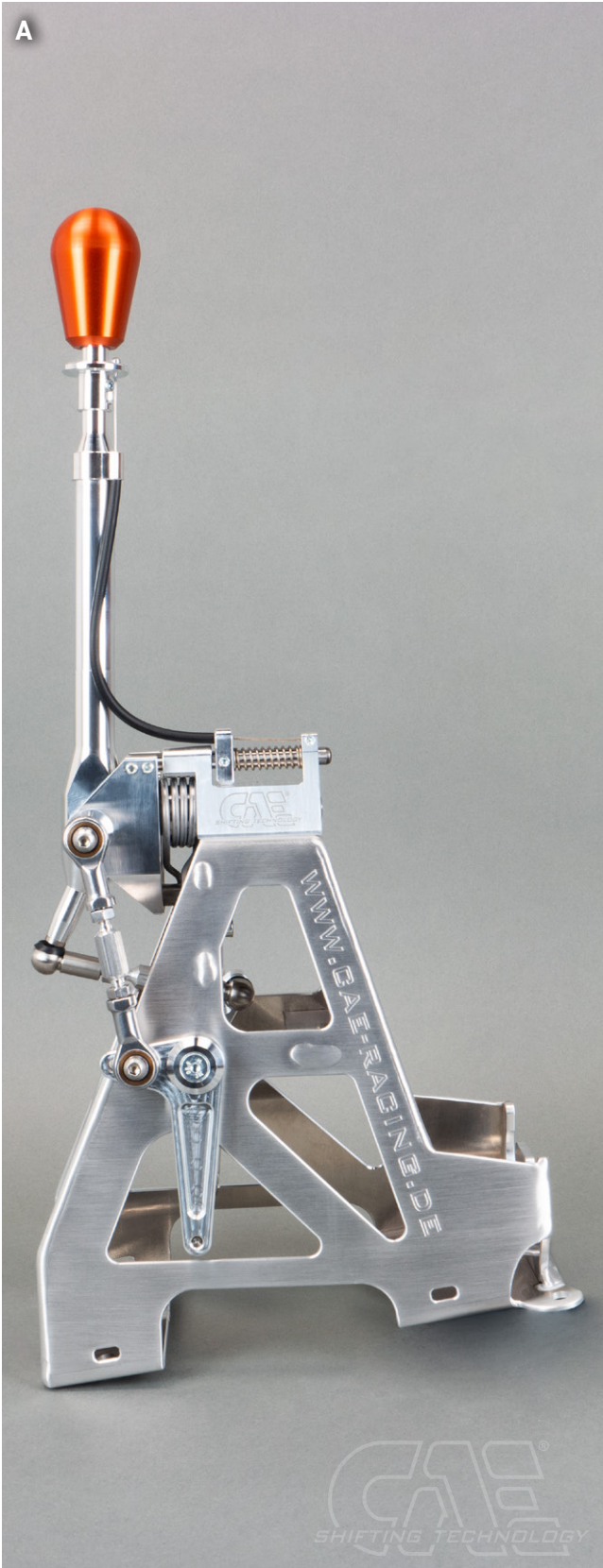
TIPS FOR GEAR SHIFTING

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 (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 completely assembled, 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)
- ▶ MK8 Performance Package (optionally available) (Picture D)

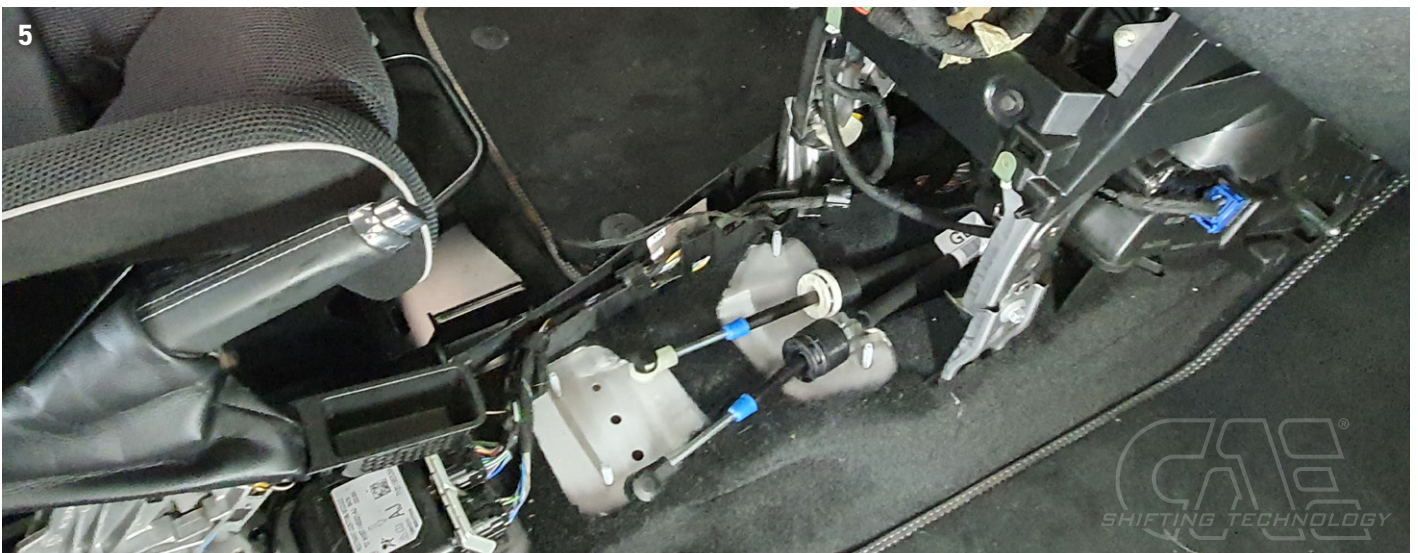
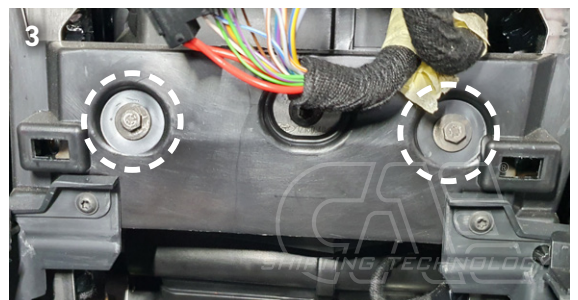
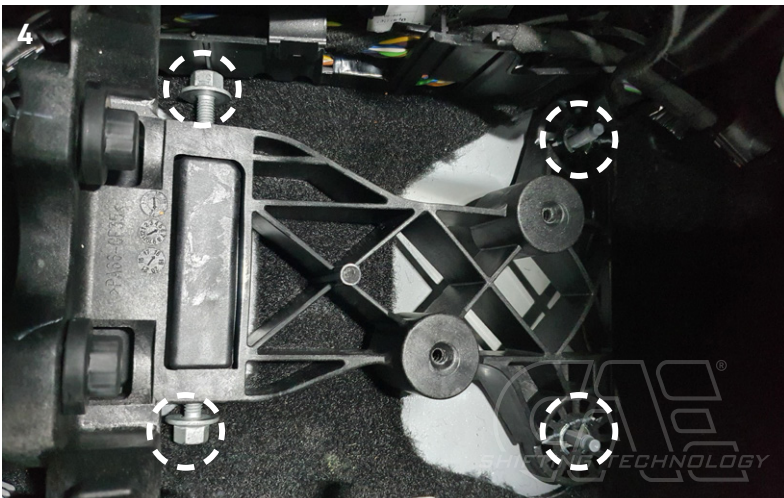


i The shifter is intended for vehicles with interior equipment. The center console remains in its original condition and does not need to be machined. The shift bag is omitted.

i PLEASE NOTE: No lift is required to install this shifter. All work is to be done in the interior and engine compartment.

The removal

- ▶ Pull up shift bag (Picture 1), loosen upper cover of center console (one screw in cup holder / plug from start button). Remove the handbrake bag with cover. There are two screws under the armrest. Loosen center console via the two hexagonal screws at the front and rear (Picture 2-4). Disconnect the connector at the front left and remove the center console.
- ▶ Detach the shift cables from the balls and remove them from the gearshift bracket (Picture 5). To do this, remove the sliding sleeves on the shift cables (in front of the gearshift bracket) by pulling them upwards out of the holder.
- ▶ Remove the gearshift bracket.



The installation

- ▶ Place the supplied spacers on the threaded bolts. (Picture 6)
- ▶ Place the CAE shifter on the threaded bolts (Picture 7), inserting the shift cables into the shifter.
- ▶ Tighten the shifter foot with the nuts supplied. (Picture 7)
- ▶ Push in the shift cables on the front plate from above until the sliding sleeves engage.

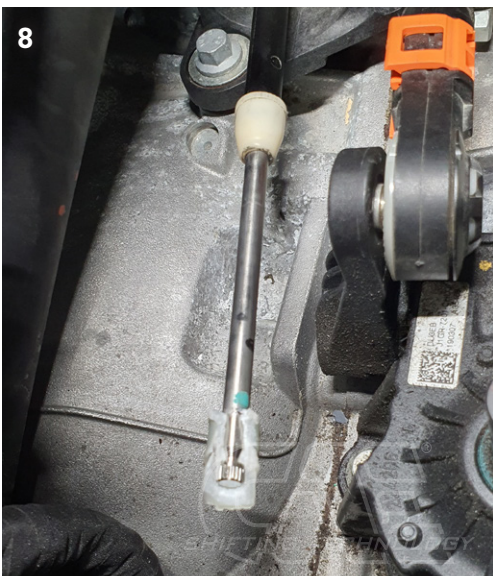
Then press the ball cups onto the lower balls of the L-levers. (Picture 7)

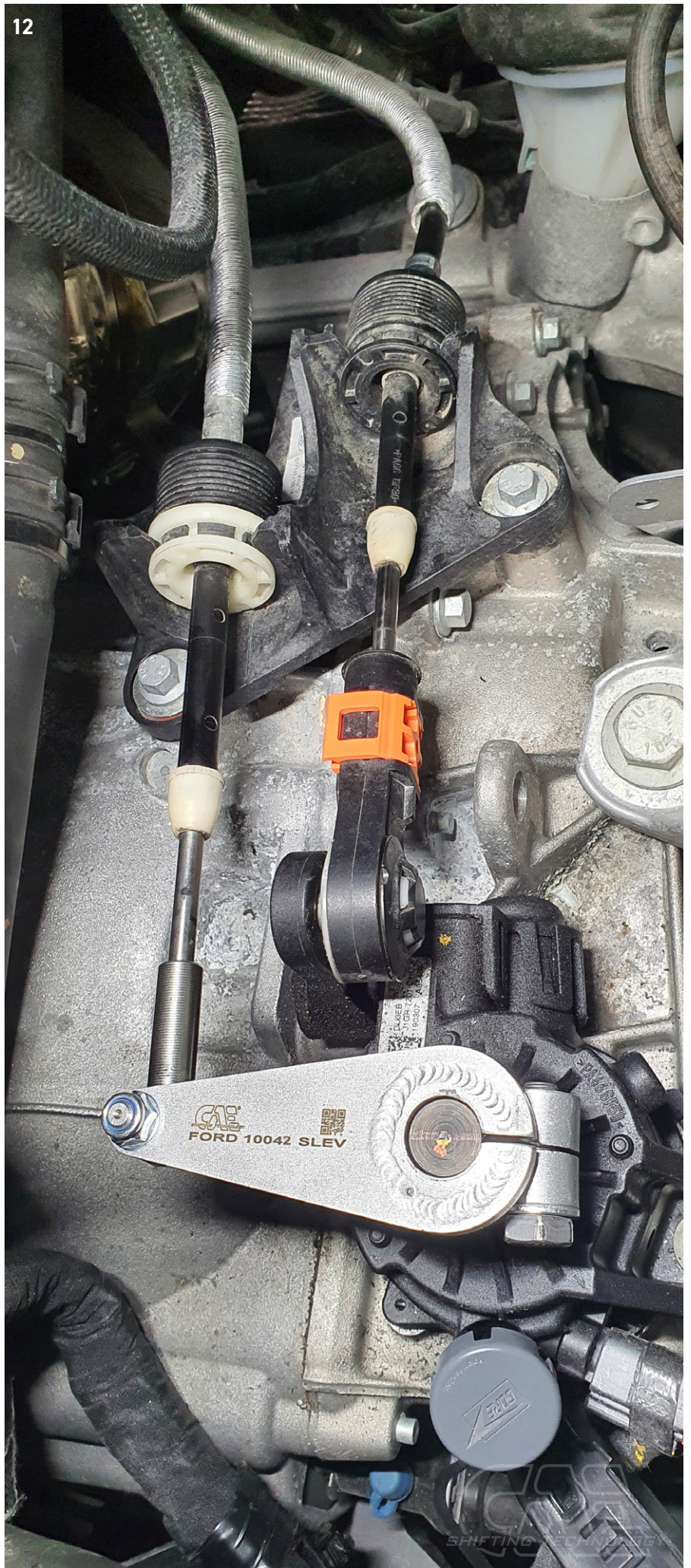
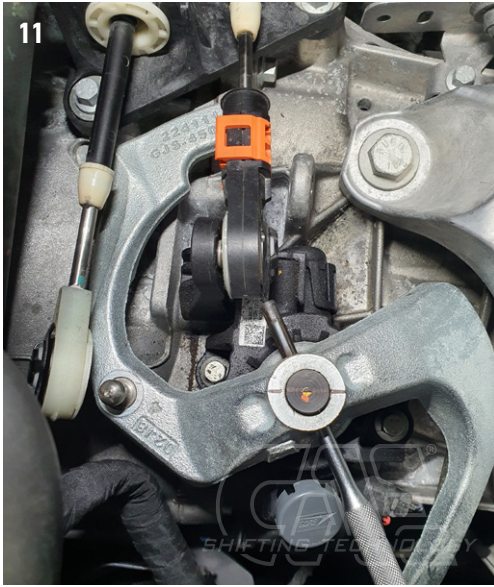
ⓘ PLEASE NOTE: When pressing the ball cups onto the balls on the levers, hold them in place, otherwise the housing may be deformed!



Installing the optional "CAE Performance Package 10042 PP

- ▶ Remove battery.
- ▶ Shift gearbox to neutral. Mark shaft (line with sharpie) Remove shift cable and remove ball socket. (Picture 8, 9, 10)
- ▶ Knock out locking pin from shift lever. (Picture 11)
- ▶ Replace CAE shift lever and tighten clamping screw with 35NM. Make sure that the lever is correctly aligned. Slide ball socket neck completely onto shift cable and tighten grub screws. (Picture 12)
- ▶ Press ball socket onto ball on lever and secure with bracket. (Picture 13)





Adjust the shift ranges 6-speed gearbox

- ▶ Adjust the center position of the shift lever: Loosen the spring stop (Picture 14) under the shift tower and align the shift lever. It should now be exactly vertical. Tighten the spring stop again. Only loosen this screw with an Allen key (SW 5 mm) (approx. 2 turns), but **never** unscrew it completely!
- ▶ Shift the gearbox to 3rd gear. To do this, move the shift lever forward without moving it sideways.
- ▶ Adjust the right coupling rod to the L-lever by turning it in such a way that 3rd and 4th gear can be changed cleanly.

! **CHECK:** When 3rd and 4th gear are engaged, the lateral play at the shift lever must be the same, otherwise readjust at the right coupling rod!



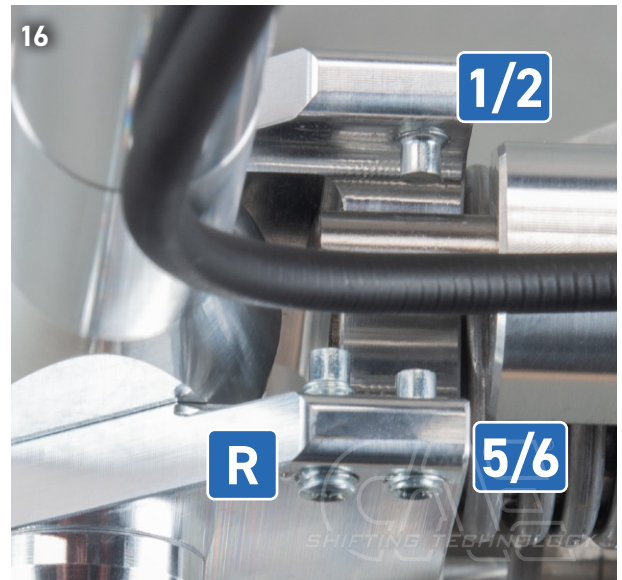
▶ Secure the short coupling rod for the shifting movement with the 2 safety clips supplied.
By changing the length of this coupling rod, the position of the V/R knob can be easily corrected, making sure that no part of the shift lever touches anything in the end positions.

▶ Secure all ball sockets of the coupling rods with the lock nuts.

ⓘ ATTENTION: The coupling rods have in each case 1x right-hand thread and 1x left-hand thread!

- ▶ Shift the gearbox to level 1/2 using the shift lever and screw in the stop screw, until the gears can be changed cleanly.
- ▶ Now shift the gearbox to gear level 5/6 using the shift lever and screw in the stop screw, also until the gears can be engaged cleanly.
- ▶ Proceed in the same way with reverse gear and the corresponding adjusting screw. Check the settings later during a test drive and readjust if necessary.

ⓘ PLEASE NOTE: The stop screws (Fig. 16) must never be in contact with the bolt when the gear is engaged. Approx. 0.5 mm distance is okay.



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!

Reassembly of the center console

- ▶ Die Mittelkonsole muss im Bereich der rechten Koppelstange leicht bearbeitet werden. Den Steg neben dem unteren Schraubenkopf ca 2 mm wegschneiden. (Bild 18)
- ▶ Die Mittelkonsole vorsichtig über den Shifter stülpen, alle Stecker wieder anstecken und Mittelkonsole befestigen. Ablagefach wieder einbauen.
- ▶ Der Abdeckrahmen muss für den Einbau entsprechend bearbeitet werden.



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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