

📍 10029

Mitsubishi Lancer
EVO 5-9
5-speed gearbox

WWW.CAE-RACING.DE



LANCER

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.

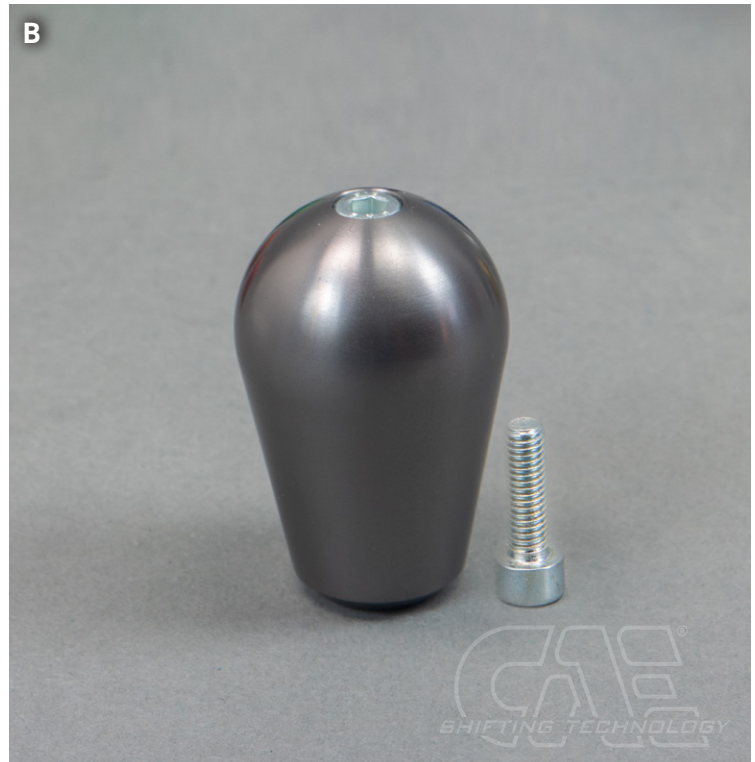
TIPS FOR GEAR SHIFTING

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 (Bild C)



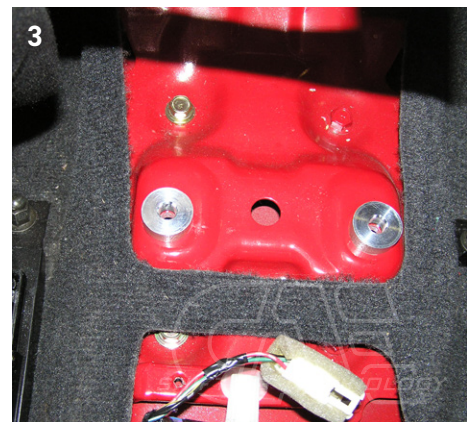
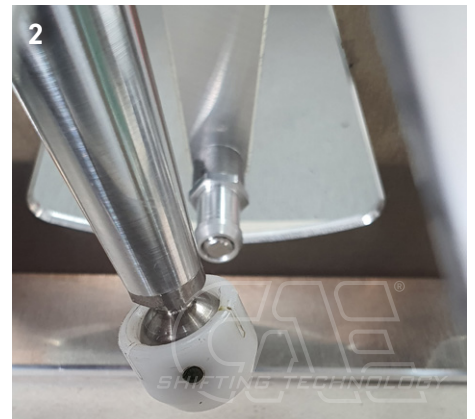
- i** The shifter is intended for racing vehicles without interior equipment. If the center console is installed, it must be removed or cut out until appropriate clearance is ensured.

The removal

- ▶ Completely remove the original shift lever, the shift cables can remain in the vehicle. (Picture 1)
To release the shift cable from the shift lever, pull the steel clasp backwards. Press the shift cable down.
Remove the plastic cup from the shift lever ball and install it later on the CAE shifter accordingly. (Picture 2)
To release the selector cable, pull the cotter pin and remove the selector cable from the side.
- ▶ The cables are clipped into the front panel and are pulled out upwards. Unthread the cables when removing the original switching unit.

The installation

- ▶ Place the 9 mm spacer sleeves on the rear two threaded holes; they serve as height compensation for the base plate. (Picture 3)
- ▶ Thread the gearshift cables into the gearshift bracket, fix the gearshift bracket on the center tunnel with the original screws. Make sure that the spacers do not slip. Clip in the cables and attach the shift and selector cables to the shift lever or the bell crank. (Picture. 4, 5, 6)
- ▶ When mounting the end of the cable on the side L-lever, make sure that the white clip is facing inwards, otherwise it will rub against the shifter housing. (Picture 5/6)





Adjusting the shifting range 6-speed gearbox

- ▶ On the left of the shifter, pull the coupling rod off one of the balls, shift the gearbox to 3rd or 4th gear by hand. (Picture 7)

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 gearshift lever and tighten the lower spring stop under the gearshift bracket with a 5mm Allen key. tighten the lower spring stop. (Picture 8)

❗ The shift lever should be exactly vertical in the center position.

- ▶ Now press the coupling rod back onto the ball on the L lever. Adjust the R/L spindle between the L lever and the side arm so that the shift lever does not move sideways when the ball socket is pressed on. It must now be possible to engage 3rd/4th gear correctly. (Picture 9)

❗ Tighten the nuts on the coupling rod only slightly. The cup with the turned groove has LEFT THREAD. The coupling rod is made of aluminum!!!

- ▶ Shift the gearbox to level 1 / 2 using the shift lever and screw in the stop screw (1/2) until the gears in level 1 / 2 can be changed cleanly. (Picture 10)
- ▶ Now shift gearbox to 5th gear level by shift lever and screw in stop screw (5/6) until 5th and reverse gear can be engaged cleanly. (Picture 10)
- ▶ Please note that the reverse gear can only be shifted from neutral (internal gearbox lock).



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!

Waterspray

- The original switch for the water spray can be attached to the shifter by means of cable ties. (Picture 11, 12)



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

RACE THE ORIGINAL



Alte Bottroper Strasse 103
D-45356 Essen
0049. 201. 8 777 802
service@cae-racing.de

WWW.CAE-RACING.DE