## CAE SHIFTING TECHNOLOGY GMBH

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# INSTALLATION MANUAL CAE ULTRA-SHIFTER FOCUS MK3 RS/ ST 6 SPEED GEARBOX ART NO: 10054



The shifter is intended for cars with complete interior.

The center console remains mostly in original condition, the shift boot can not be mounted or have tob e modified

#### Note:

Generally mount a sealing collar on each ball and grease the steel balls & pans. After complete installation of the shifter, secure the ball heads with the split pin clamps.

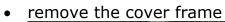
Glue all nuts / screws during assembly! Never bend the shift Cables!

# Removal of the original shifter:

• Pull up the shift boot

• Remove the side cover of the center console:

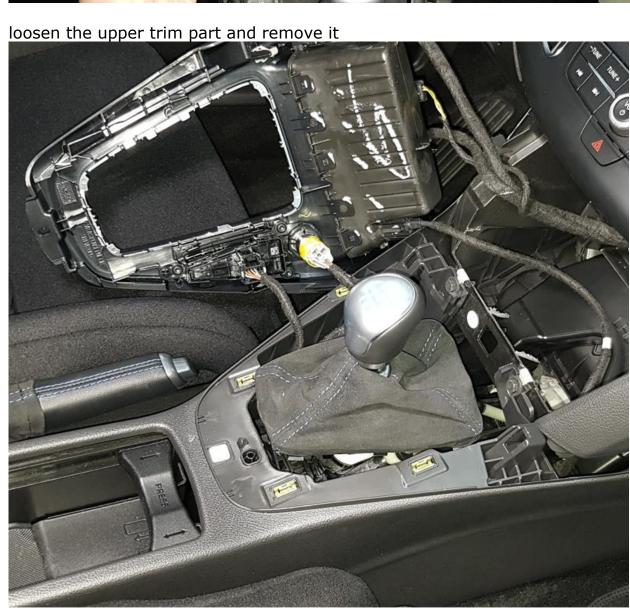






remove the front panel



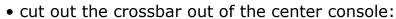


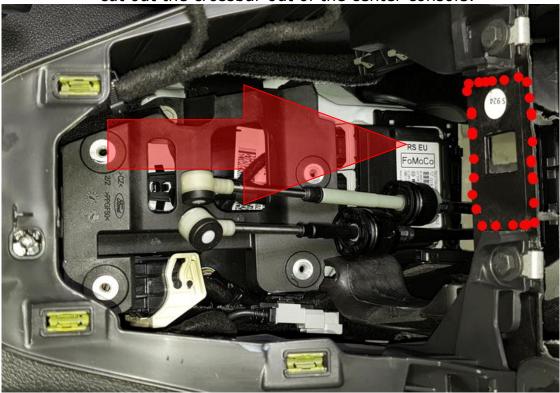
• Pull off the shift cables and release them from the control unit by pushing the sliding sleeves on the shift cables to the front and lifting the cables





remove the original shift lever (4 screws)

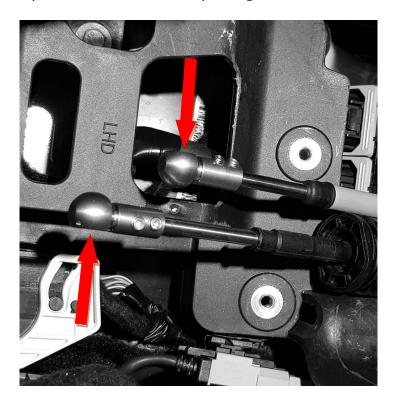




### **Reworking of the Cable ends**

Remove the original plastic pans from the Cables
This is best done with a pair of pliers, the plastic parts will be destroyed.
(If the shifter is refitted, the steel pans must remain on the cables)
Only the steel souls of the cables remain on which then the new ball pans are completely pushed.

Tighten the grub screws and grease the ball pans. Note the positons of the Pan openings while fstaen the grub



We also recommend the conversion of the ball socket on the gearbox because it ex works has a lot of backlash in order not to transmit vibrations. (This is optional and not absolutely necessary for the pure function of the shifter)







For better shift feeling we also recommend to remov the absorber weights on the gear lever, this is not mandatory for the function





## **Installation CAE shifter**

• mount the cotter pins to the connection rod inside the shifter and Lock the nuts and also mount the cotter pins to the sidely Rod to the LOWER Pan





 set the CAE shifter on his position and align it with the threads, already insert the shift cables into the shifter housing at this step

- Insert the cables in the seats of the shifter from the top until the sliding sleeves engage, then press the ball sockets of the cable ends onto the heads
  - (the side coupling rod will be adjusted later)

### **Setting the shift travel 6-speed transmission**

Adjust the center position of the shift lever:

 Undo the center screw below the gearshift tower and align the gearshift lever.

the lever should now stand exactly straight; tighten spring stop again.

Shift the transmission to 3rd gear.
 To do this, only move the gear lever forward without any lateral movement





Turn the right (long) coupling rod to the Llever by turning it so that the ball socket can be pressed on without length change.

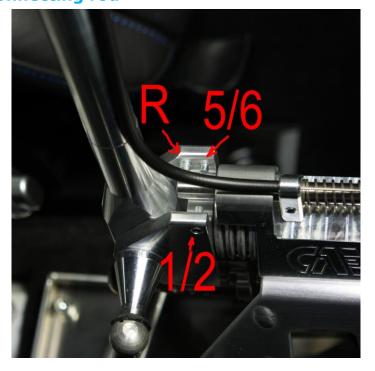
The pan with ring groove on the neck has left-hand thread !!!

#### check:

With 3rd or 4th gear <u>engaged</u>, check the lateral play on the gearshift lever; it must be the same size to the right and left, otherwise adjust it on the connecting rod

Tighten all lock nuts of the ball cups to the tie rods and install the cotter pin

 shift by shiftlever in level 1/2 and screw stop screw until the gears in level 1/2 clean.



- Now shift the gearbox to the 5th / 6th gear level using the shiftlever and screw in the left front stop screw until the 5th gear can be inserted neatly.
- Proceed in the same way with the reverse gear and the left rear adjustment screw
- Check the settings later during a test drive, readjust if necessary.
- Mount all trim parts again
- If problems occur during installation, please contact us.

We rely on your feedback to constantly optimize our products.

CAE wishes you a good trip