

CAE SHIFTING TECHNOLOGY GMBH

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INSTALLATION MANUAL CAE ULTRA-SHIFTER

FOCUS RS MK I GEARBOX MTX75 5-SPEED
ART NO: 10035



The shifter is intended for race cars without interior. When the center console is installed, it must be removed or cutted until a suitable clearance for the shifter is ensured. The shifter should be screwed directly onto the center tunnel, possibly existing carpet must be cut out.

Removing of the original parts:

- remove the original shift lever and shift cables completely

Note:

Generally mount a sealing collar on each ball and grease the ball cups. After complete installation of the shifter, secure the ball heads with the split pin clamps. Glue all nuts & screws during assembly!

Never bend the cables!

Installation

mount the Cables to the Shifter:

Selection cable(W) L1160mm

- short ball socket and short M6 thread -

From the L-lever on the shifter (right) to the selector lever on the gearbox

Short pan = selection cable



Shiftcable (S) L=1200mm - long ball cups and long M6 threaded with bronze extension sleeve -

from the shift lever inside to the new shift lever of the transmission

Conversions on the gearbox

!! Switch gearbox to neutral !!

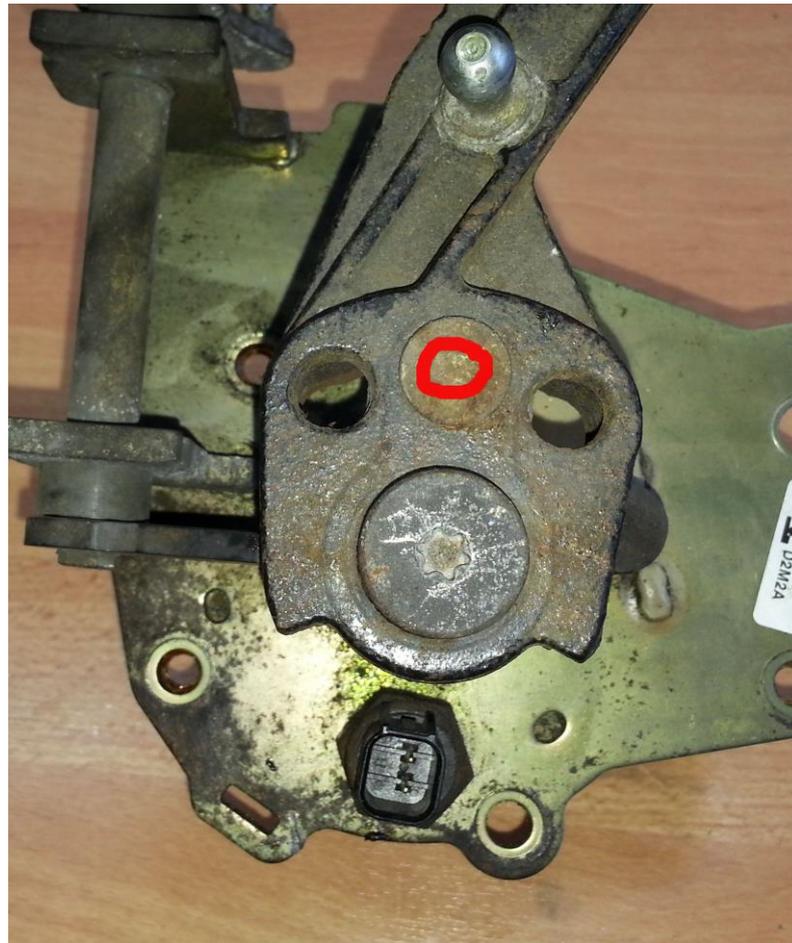
Remove the original cable bracket and re-work as shown::



Mount the aluminum cable holder on the gearbox with the supplied screw, then replace the re-worked steel holder



The original gear shifter must be removed from the stem:



To do this, first drill out the rivet (red circle) (dia 12mm), then loosen the Torx screw and pull the lever off the selector shaft. Install the CAE shifter and tighten with the original Torx screw.

Installation / installation of the shift cables

put the ropes through the cover plate. With the shift cables already mounted, bring the shifter to its installation location, passing the shift cables through the bushing to the engine compartment and routing the cables over the transmission. Screw shifter to the tunnel and secure cover plate. Mount the protection-hoses over the cables in the engine compartment



Caution!!

It is important to protect the cables against the effects of heat with the blue-grey heat protection hoses.

The protected cables **must not** touch the exhaust !!!

Assembly of the shift cables on the gearbox



Mount the sealing collar on the selector lever ball head, grease the ball heads well

Attach the selector cable to the original holder; Use large washers and centering disc.

Attach the shift cable to the new aluminum holder

Cables should not be laid "tight"

Check cables for "end position clearance"

When the gear is engaged, there must still be a remaining distance on the cable!

A hard metallic noise when inserting the gear is always a sign of a not enough free space in cable movement !!!

Testing: With the gear engaged, remove the ball socket from the gearbox and check whether the cable can be moved at least 2-3 mm further. This applies to the "front" gears R, 1,3,5 with the cable retracted and the "rear" gears 2,4 (6) with the cable extended.

By screwing in or unscrewing the ball cups on the M6 thread of the cable, the end position can be corrected

Tuning the shift range 5 Speed „MTX75“

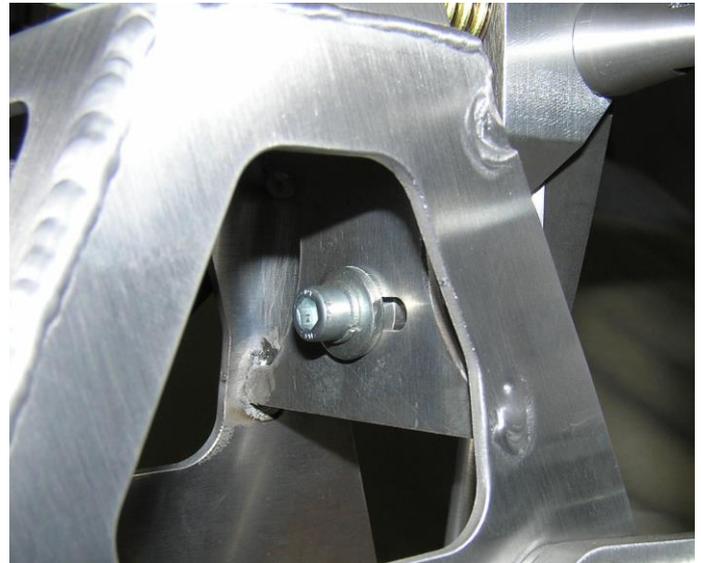


Pull off the side tie rod on the shifter from one of the balls

- Shift gearbox to 3rd gear.
To do this, move the shift lever forward without lateral movement

- Loosen the Centering screw under the shift tower and align the shift lever. He should now stand exactly straight and screw spring stop again
- Adjust the L-lever by turning the lateral connecting rod so that the ball socket can be pressed on without length change.

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



- Secure all ball sockets on the shift cables in the shift tower with the locknuts.
- Shift the gearbox to level 1/2 using the gearshift lever and screw in the right stop screw until the gears can be changed cleanly in level 1/2



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- Now shift the 5th gear using the gearshift lever and screw in the left stop screw until the 5th & R. gear can be inserted neatly.

- **ATTENTION**

The reverse gear can only be engaged from neutral !!!!
Gearbox has an internal stop mechanism

- Check the settings by test drive / test run, adjust if necessary.
- Press on all splint clamps and retighten all screws

If problems occur during installation, please contact us.
We rely on your feedback to constantly optimize our products.

CAE wishes you a good trip