

CAE SHIFTING TECHNOLOGY GMBH

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INSTALLATION MANUAL CAE ULTRA-SHIFTER OPEL CORSA A/B F 13, F16, F 20 GEARBOXES

MODIFICATION TO CABLE-CONTROLLED SHIFTING

If center console is mounted, it must be dismantled or modified to achieve an acceptable space for the cables. The new unit should be mounted directly on to the floorboard, so part of the carpet must be removed.



WARNING!

Due to the design of motor sport and therefore missing rubber damping elements engine and transmission noises and vibrations may be transmitted into the interior

Delivery:

- 1 x Pre-mounted complete shift unit
- 1x Cover plate
- 1x Rubber stripe
- 1x Shiftcable (S) length 1150 with mounted ball pans
- 1x Selection cable (W) length 1150 with mounted ball pans (1Short inner side)
- 1x Gearbox Lever Unit plus Breather and Gasket
- 1x Gearbox cable bracket
- 2x Rubber caps for Ball Heads
- 6x Cotter pins
- 4x Screws M6x16 Washer and Nuts
- 4x Screws M7x30 and Washer
- Installation Instructions

GENERAL INFORMATION

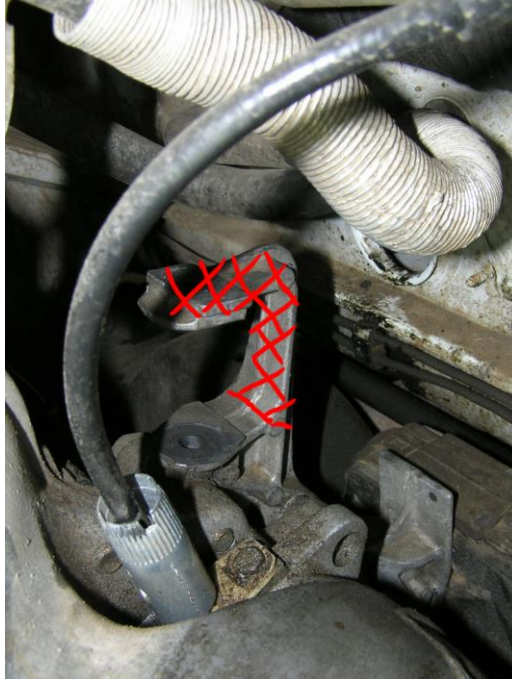
Before the assembly of the Balljoints lubricate the pans and balls with good grease. After completing the shifter, secure the Ballstud with a cotter pin. All screws and nuts on the shifter must have Lock-Tite or anything that keeps the screws or nuts from coming loose. Never bend the controller cables! To avoid rust film, clean the steel parts with oil ever so often. To clean the Alu-parts use ethyl alcohol

Remount

- Remove the original parts of the shifter completely.

Preparing the Parts:

- If mounted Cut off the top part of the stock Shift lever bracket:



Bodywork:

- Put the shifter to the middle tunnel and draw the positions of the holes to the Sheet, Drill 6,5mm Holes into the sheet and deburr them
- Cut off the former Sheet as shown on the next picture or press the sheet down for enough space for the cables in front of the shift unit
- For passing the cables through the firewall drill a hole into it as shown. Hole have to be not so big, just for the cables:



Pre mounting of the shift cables:

Fit the cables to the bracket as shown on the next picture. Pull over the blue heat cover tubes and the black hose pieces.

Selection cable (W)1150 has at the inner side a 12mm shortened M6 thread !!!!

Tighten the 24mm Nuts , M16x1,5 threads are shown 6-8mm



- At the inner side of the cables fit only one 24mm Nut and washer each cable
 - Fit the Breather **install a tube and reservoir**



- Remount the tacho shaft

Installation Gearbox Unit

- Fit the Gearbox unit with the new gasket into the gearbox. Be careful for don't destroy any gearbox interior. Screw in the Left front screw M7x30
- Fit in the cable/Bracket unit through the shift rod drilled hole into the car. Screw the cable bracket onto the Gearbox Unit with the 3 left Screws M7x30.
- Push the Ball pans to the Ball ends

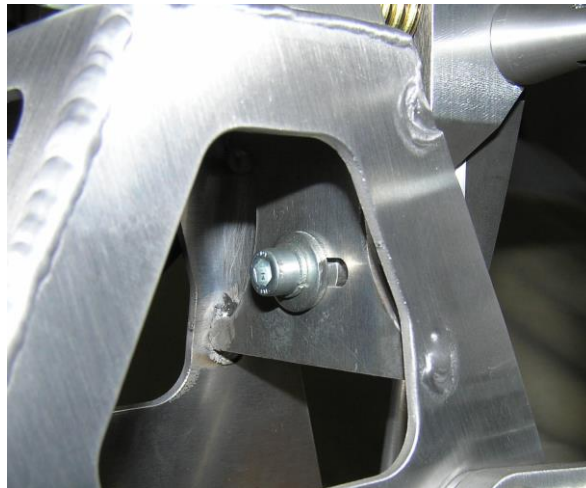
Installation of Main unit and Cables

- Put the Main unit onto the middle tunnel and fit in the cables already: Shiftcable (S) to the Middle; selection cable (W) to right side, **short M6 thread !!**
- don't forget a washer on each cable.
- Fix the Main Unit with the 4 special M6x 16 Inbus Screws to the floor, regarding to the Seat position it is possible to adjust it 3 cm fw/ bw
- Mount the last 24mm Nuts and washers to the cables inside the shift unit.
- The cables has to stand out as much as possible out of the case, inside there is no thread to see. >>example picture>>
- After this, mount the ballpans and press them on the balls
- **Pull off the coupling rod at the side of the shifter**
- (adjustment follows later)
mount the tacho shaft



Adjusting Shift Range

- **Loosen the Spring stop under the Shifter**



- Select the 3rd or 4th gear now
- For that pull or push the Shift Lever forward or backwards, the Selection cable (W) is inactive while this !!!
- In neutral position the lever should stand slightly to the right for reaching all ranges from R-5th gear, then fix the sprig stop again
- Now tune the length of side coupling rod that it fits perfect to the L-Lever Ball and the Ball at the Shiftlever expositor Ball
- Now 3rd and 4th gear have to be changed perfect by Gearlever now, otherwise readjust once more

- Select level 1 / 2 with Shiftlever and turn stop screw Z until the gears 1 and 2 can be selected well
- Gear 1/ 2 have to be changed perfectly by Shiftlever now, otherwise readjust once more



THE ADJUSTMENT SCREWS CAN BE TURNED STRONG FOR NO LOOSEN WHILE OPERATION USE HD 2.5mm INBUS

- Now search 5th gear by Shiftlever and turn stop screw **X** until these gear can be selected clearly.
- Pull the Reverse lock and search the Reverse gear by lever turn stop screw **Y** until these gear can be selected clearly.

[adjustment screws have to be fitted tight with minimum play otherwise the shiftcable will be stressed](#)

After complete installation, check all the essential functions of the Shifter while driving and adjust once more if necessary.

Wrong adjustment will destroy your gearbox

If shifter don't work "smooth" readjust the whole unit

Attention !!
***Protect shiftcables against thermic
overheat by delivered blue
heatresistant tube.***
***Protected cables **must not** contact
the exhaust system.***

CAE wishes having a good trip