

CAE SHIFTING TECHNOLOGY GMBH

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INSTALLATION INSTRUCTIONS FOR CAE ULTRA-SHIFTER

MAZDA MX5 NA 6-SPEED GEARBOX



The shifter is intended for vehicles with interior fittings.
The center console has to be slightly trimmed for installation until a freely moving for the shifter is guaranteed.

All moving parts lubricate with good spray grease! (Würth HHS 2000)
To clean the aluminum parts, we recommend commercial brake cleaner.

Deinstallation:

- Remove ashtray ; center console completely ; original shift boot.
- Unscrew and take out the original shift lever. Also the housing from the gearbox. (for this, the gearbox have tob e lowered)
- Claen and degrease the surface

Mounting of the Shifter

- Apply the supplied green sealant thinly to the sealing surface on the gearbox.

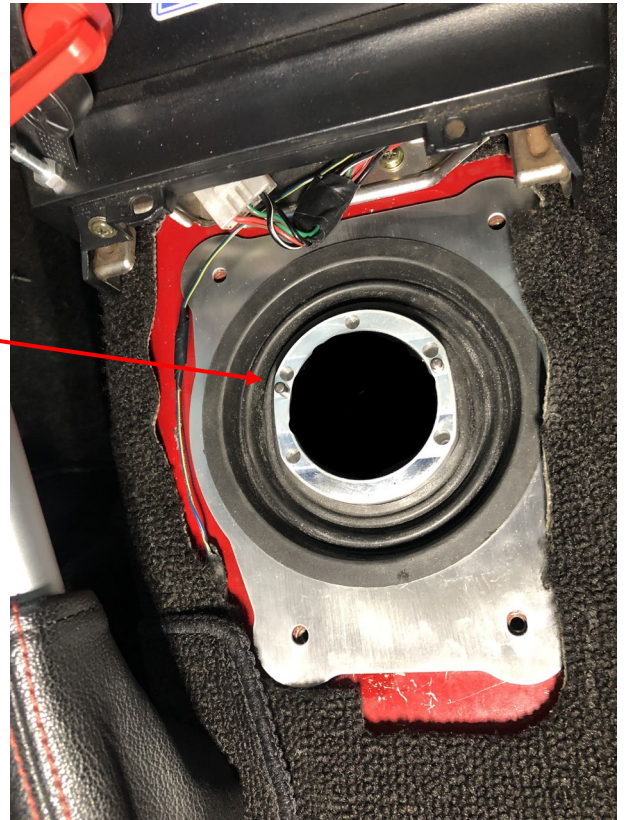


- Coat the front outer hexagon bolts with thread lock and insert into the holes of the shifter basement.
- before putting the foot into place, then align the basement and screw the screw.
- Place one toothed washer under the rear Allen screws.
- Tighten all 4 fixing screws.



- Now install the gearbox tunnel sleeve. Put the sleeve carefully over the shifter foot and screw it to the gearbox tunnel.

Now apply again the supplied green sealant thinly onto the upper sealing surface of the shifter foot.



- Lubricate the lower ball on the gear lever lower part with a little gear oil and place the upper part of the gearbox from above. Hold the gearshift vertically and carefully insert the ball into the gearbox.

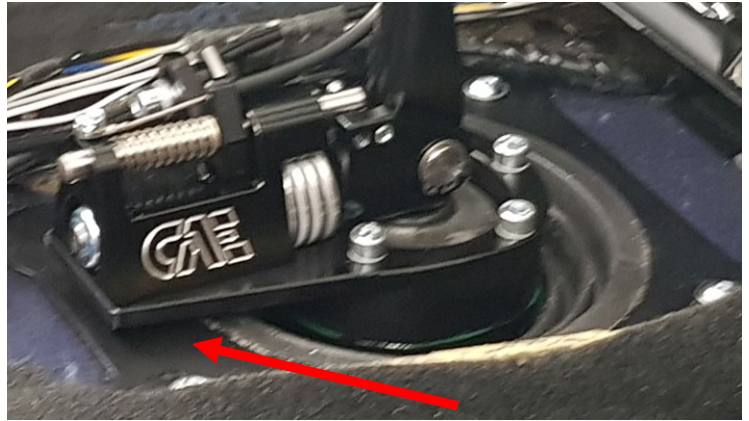


Important:
Always insert one toothed lock washer.



Important:

There must be a gap of approx. 5 mm between the shifter and the gearbox tunnel. If there is too little space, loose the 3 connecting screws of the PPF-Bracket on the gearbox slightly and lift up the gearbox a little bit. Then tighten the screws again and check if there is enough space between the shifter and the gearbox tunnel.



Generally grease each bearing regularly.

Secure all nuts or bolts with glue or toothed lock washer!

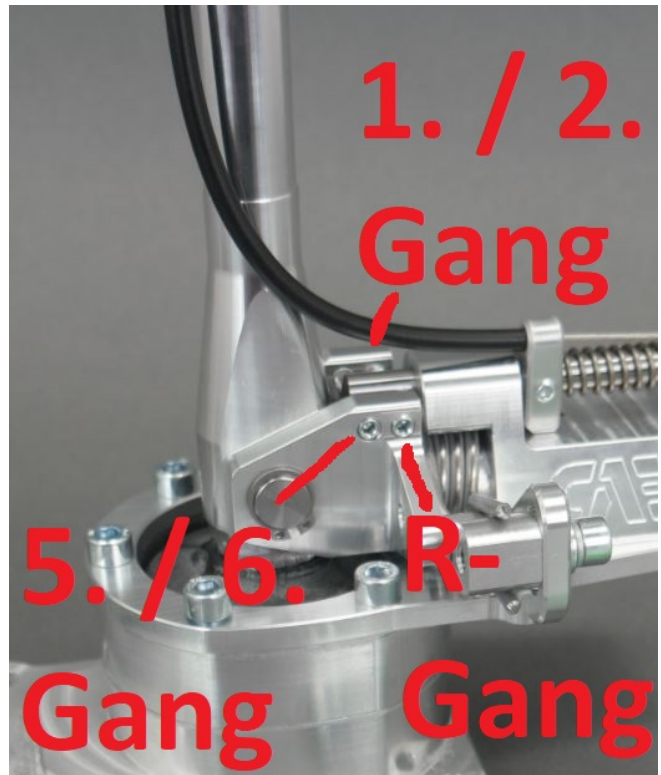
Adjust the shift range 6 speed gearbox



- Adjust center position gear 3/4
- release spring stop (allen key 5mm)
- Shift gearbox to 3rd or 4th gear.
- The 3rd and 4th gear is in neutral position. Move the shift lever forward or backward to engage them.
- Retighten spring stop
- Control:
- **When 3rd or 4th gear is engaged, the lateral play off the shift lever must be the same.** Otherwise. Readjust the spring stop.

THIS SETTINGS ARE THE BASICS FOR ALL OTHER SETTINGS

- Then shift gearbox in 1st / 2nd gear and screw stop screw until this gears change clean. (the set screw must not touch the locking pin when the gear is engaged, approx. 0,5 mm space is ok)
- Now shift gearbox in 5th / 6th gear and screw stop screw until this gears change clean. (the set screw must not touch the locking pin when the gear is engaged, approx. 0,5 mm space is ok)
- Pull the reverse locking pin, shift the gearbox to reverse gear level. Screw stop screw until this gear change clean. (the set screw must not touch the locking pin when the gear is engaged, approx. 0,5 mm space is ok)
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Check all functions and settings in the driving test and readjust if ist necessary.

Incorrect or inaccurate adjustment can lead to gear damage !!!

Machining the center console

Modify the center console according to the following pictures so that it can be mounted above the shifter:

- Remove the lightning from the ashtray. Cut out the center console in the marked area. The shifter must have some space tot he center console as it moves with the transmission during load changes.



- Drill a hole about 15 mm in the front of the ashtray to ensure the clearance for the reverse gear locking pin.



- If desired, you can also mount the shift bag again. For this you must cut out the plastic frame in the area of the ashtray and the bag at the top. The original shift bag can be left or to be used.



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

CAE wishes a good drive