

CAE SHIFTING TECHNOLOGY GMBH

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INSTALLATIONS INSTRUCTIONS FOR CAE ULTRA-SHIFTER

MAZDA MX5 ND 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.

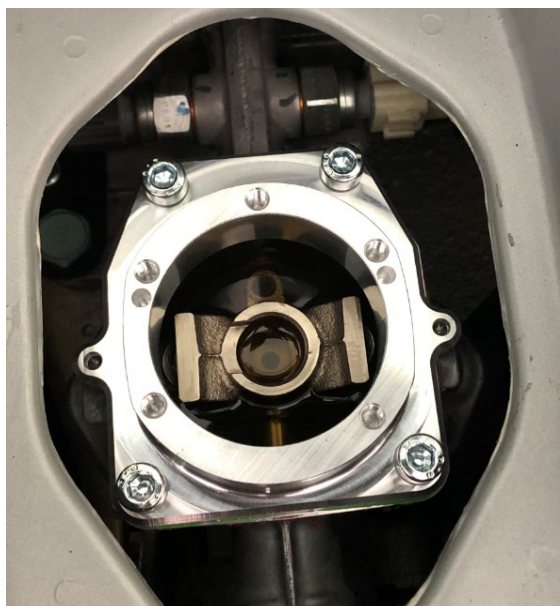
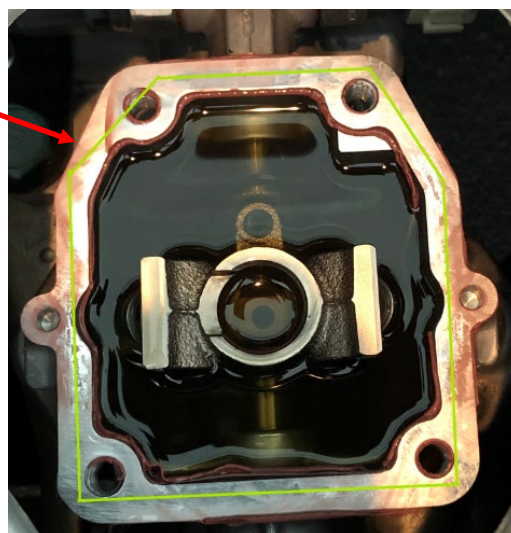
All moving parts lubricate with good spray grease! (Würth HHS 2000)
To clean the aluminum parts, we recommend commercial brake cleaner.

Deinstallation:

- Completely remove the center console.
- Remove original shift boots ; original shift lever and housing.
(the housing is glued with sealing compound in the factory)
- Clean and degrease flange surface

Mounting of the Shifter

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

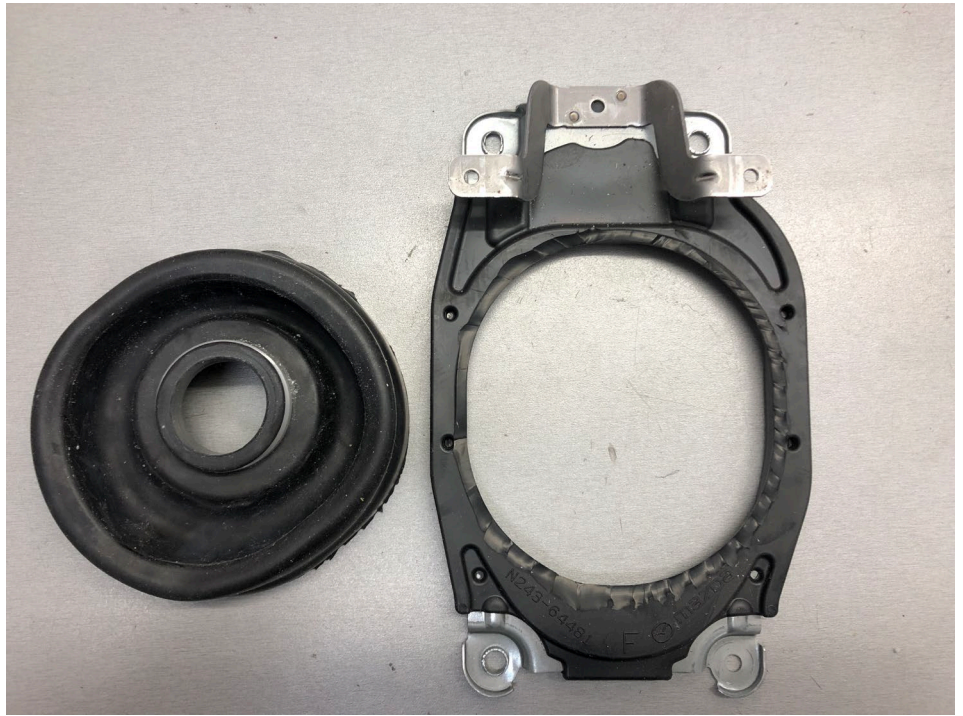


- Place one toothed washer under the Allen screws.
- Tighten all 4 fixing screws.

- Now mount the lower gear tunnel sleeve.
- **Turn the lower original sleeve over** with the actual top side down.
- Pull the sleeve carefully over the shifter basement.



- Now modify and install the upper transmission tunnel sleeve.
- First cut off the rubber bellows with a sharp knife.

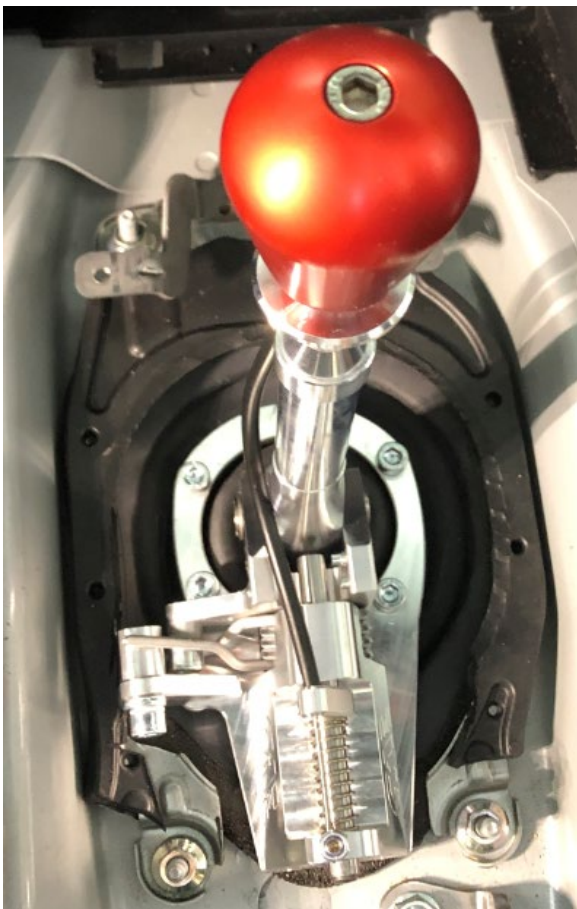
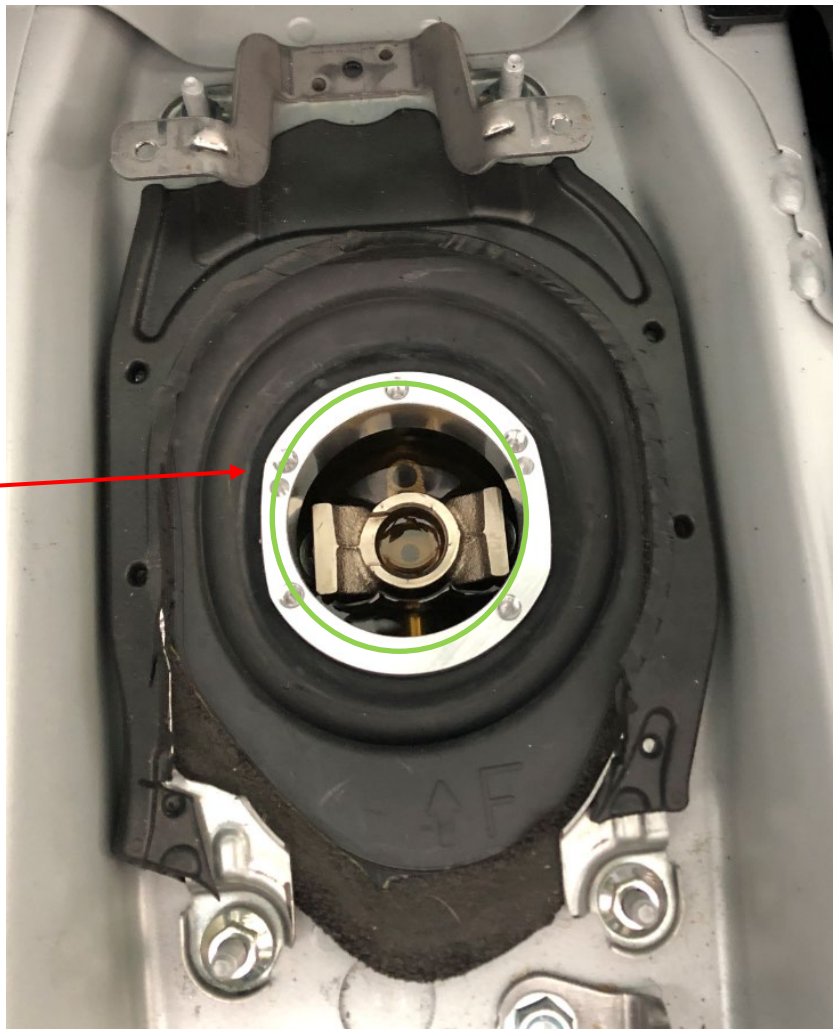


- Then cut out the frame in the red marked area.



- Now mount the frame over the sleeve. Make sure that the lower sleeve sits properly. The frame must press the sleeve firmly onto the transmission tunnel to make it tight.

- Now apply the supplied green sealant thinly to the upper sealing surface of the shifter socked.



- Lubricate the 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.

- Now tighten the upper part with the 5 pcs M6 allen screws. **(12NM)**

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 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!

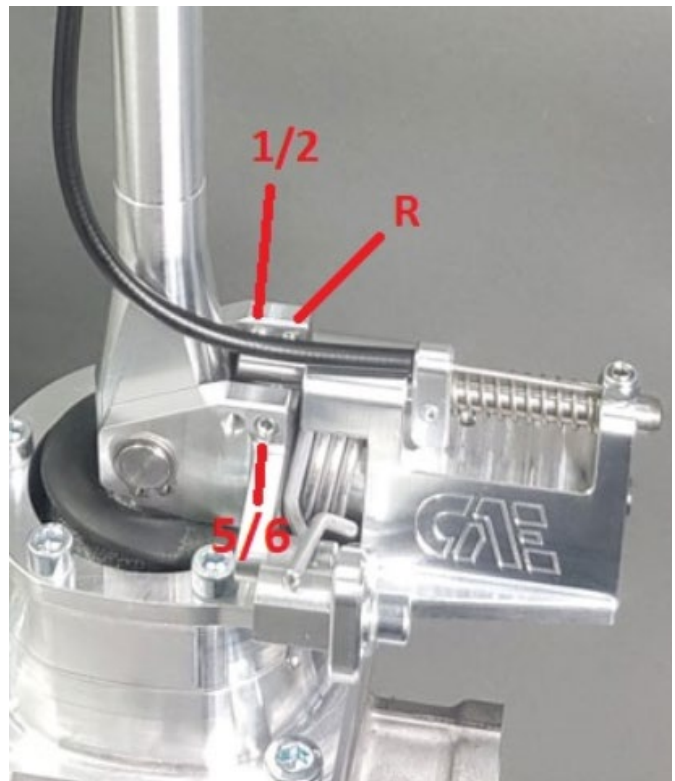
Adjust the shift distance 6 speed gearbox



- 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 of the shifter must be the same.** Otherwise, readjust the spring stop.

THESE SETTING ARE THE BASIS 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)



Check all functions and settings in the driving test and readjust if ist necessary.
Incorrect or inaccurate adjustment can lead to gear damage
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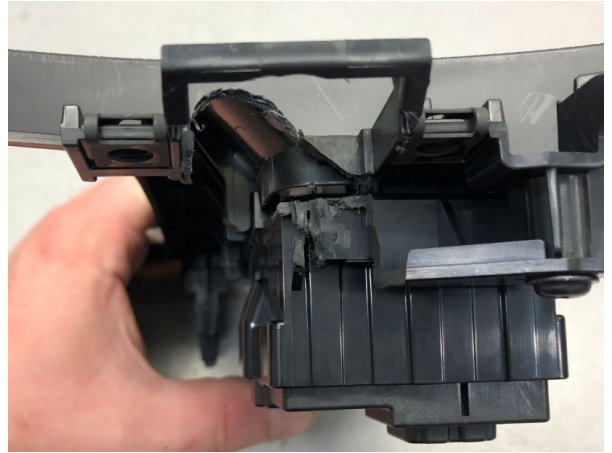
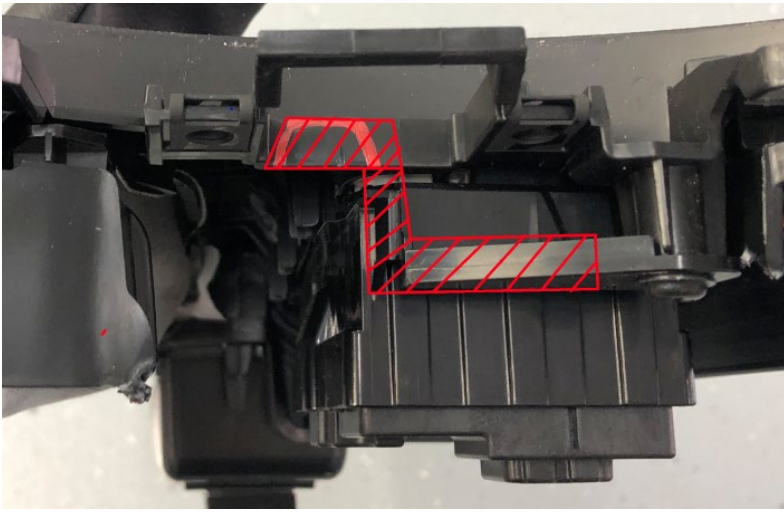
Modifying the center console

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

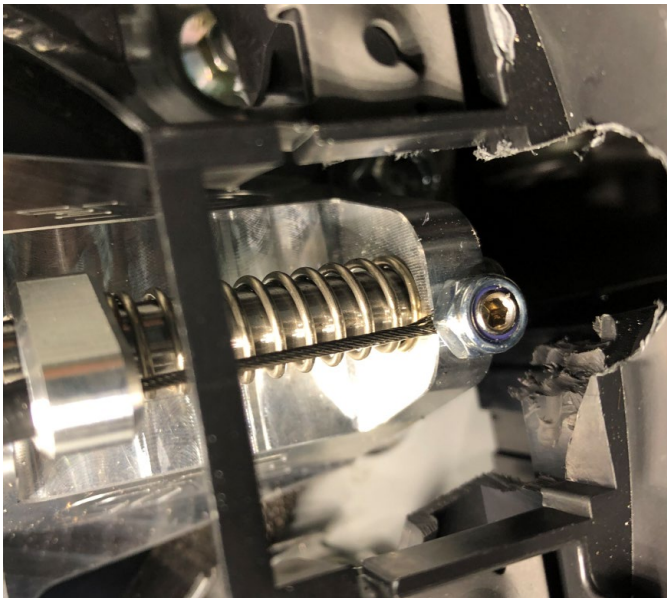
- Cut out the connecting bridge of the center console in the area of the switch unit. (red marked area)



- Cut out the switch unit of the center console in the red marked area.



- The shifter must have enough space to disguise as it moves with the gearbox.



- Reinstall the center console with switch panel.
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 constatly optimize our products.

CAE wishes good drive