## CAE SHIFTING TECHNOLOGY GMBH

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#### INSTALLATION MANUAL

#### CAE ULTRA-SHIFTER

#### HYUNDAI I30N / I30N PERFORMANCE



The shifter is intended for cars with complete interior equipment. The center console must be removed and reinstalled for installation. center console needs to be trimmed just minimally

Lubricate all moving parts regularly with good spray grease, e.g.
Lift the rubber caps on the ball heads.
We recommend Würth HHS 2000

To clean the aluminum parts, we recommend commercially available alcohol.



Never spray degreaser into the bearing points, this will cause the bearings to seize immediately

#### Removing the stock shifter:

- Remove the center console completely
- Shift the transmission into neutral
- Detach the shift cables from the balls and the bulkhead
- Unscrew and remove the original shift lever

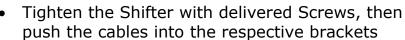
## **Mounting the CAE Shifter**

Place the Spacer onto the thread bolts
 ( 24 mm high)

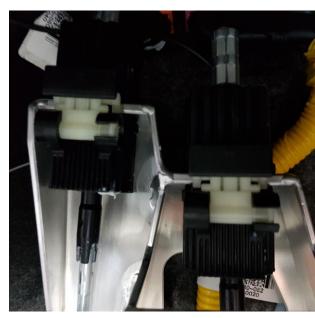




 Place the CAE Shifter in position and insert the shift cables into the shifter housing; Immediately insert the cables into the respective bracket







• Fix the Shiftcable to the lower ball of the Shift lever

Connect the Selection Cable to the Joint and fix it with the stock cotter pin



Generally grease each ball socket and bearing pin & bushings.



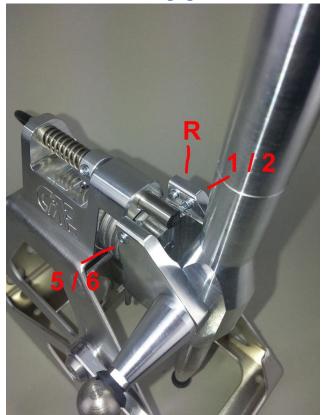
Glue in all nuts / screws during assembly! Never bend the shift cables

#### Adjustment of the Shifter 6-speed

 Adjust / check the middle position of the shift lever, it should be inclined approx. 3-5° to the left side, this is position 3/4 (middle position)

Adjust the sidely Unibal connecting rod fitting to it

If the spring stop and Connection Rod is setted correctly, the lateral play is the same to the right and left side when the gear 3 or 4 is engaged





This is the basic setting of the shifter and must be carried out correctly !!

- Now use the gear lever to shift gear in level 1/2 and adjust the stop screw until the gears in level 1/2 can be changed cleanly.
   (When the gear is engaged, the screw has no contact with the bolt (approx. 0.5 mm play)
  - Now use the gear lever to shift in  $5^{th}$  /  $6^{th}$  level and screw in the stop screw until  $5^{th}$  /  $6^{th}$  gear can be engaged properly. (The screw has no contact with the bolt when the gear is engaged, the shifter largely resets in  $\frac{3}{4}$ )
  - Operate the reverse gear locking pin by pulling and shift the gearbox to the reverse gear level. ( leftmost ) Screw in the appropriate stop screw until the reverse gear can be engaged properly.

(Screw has no contact with the bolt when the gear is engaged (approx. 0.5mm play)

Check all functions and settings in the driving test and adjust if necessary. Incorrect or inaccurate setting can lead to gearbox damage, damage to the shifter or the shift cables !!!

For an optimal shifting experience, the shifter must be set correctly.

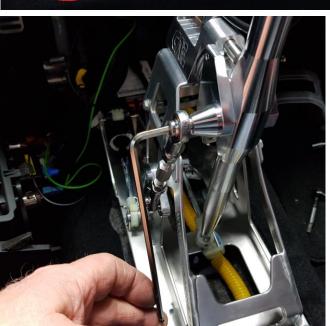
We recommend completely connecting the switch console for driving tests

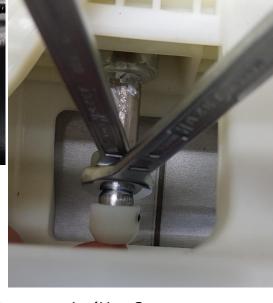
#### **Modifying of the Center Console**

Center Console hast to be modified for fitting above the Shifter like following pictures :







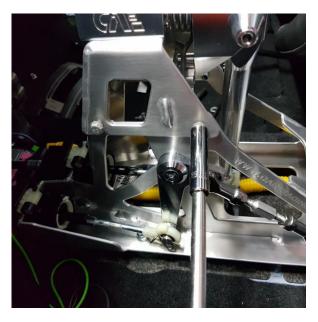


Loosen the Ball Joint at the Bottom

of the Shift lever again (Use 2 gear wrench for it)

 Loosen the Upper screw of the Connection Rod and also the 4 sidely Screws to take of the upper shifter part completely





Install the modified center console completely

• Put on the upper part of the shifter and use the pliers or tweezers to attach the side fastening screws, then tighten the two front screws with an 8 mm wrench. Tighten the two rear screws with an 8 socket wrench through the two holes in the center console.

Now screw the upper unibal back on and glue the screw in with a small drop of Loctite.

check all settings once more

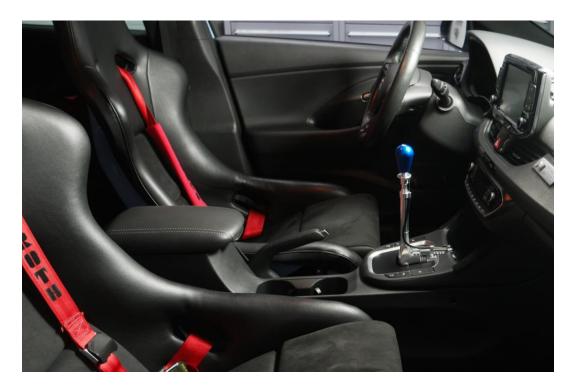


## **Cover Sheet**

The supplied cover plate serves as the basis for customer fitment.

We recommend fastening with double-sided adhesive or Velcro tape
The visual adaptation to the vehicle can be done by painting or





If problems occur during installation, please contact us.

We rely on your feedback to continuously optimize our products.

# CAE wish you a good trip