

Installation instructions

FK8

9 10FK8

Honda Civic Type R FK8 6-speed gearbox

WWW.CAE-RACING.DE



SAFETY FIRST!

- Please only do the installation if you have appropriate experience in the automotive sector and have the right tools! An incorrectly installed Shifter can seriously damage the transmission or make the vehicle undriveable or not shiftable and lead to serious accidents!
- If work on the electrical system is necessary, please follow the manufacturer's specifications.
- It is essential to leave the ignition switched off when the plugs are disconnected.
 Do not leave the car key in the vehicle.
- Carry out all work with care and cleanliness! For the professional assembly of a shifter is no force required. All parts are designed to fit your vehicle.
- If you are unsure, please contact your trusted workshop about the installation!

BASICALLY

- Use ethyl alcohol/brake cleaner to clean all aluminum parts.
- Occasionally lubricate all moving parts with spray grease, which has good creeping properties. Our recommendation: Würth HHS 2000 (WD-40 or similar is unsuitable because it is too thin)
- All screws and nuts that are not self-locking or are fitted with tooth lock washers glue in during assembly!
- Never kink shift cables, please!

(i) SURFACES AND THEIR CARE

Please note that an untreated aluminum surface (ALU) is sensitive to aggressive Liquids to which i.a. Hand sweat also counts. Especially the high-strength 7075 aluminum we use has a tendency to form black spots of corrosion due to its high copper content. Under special circumstances, very salty air near the sea and coast can lead to corrosion. The surfaces should therefore be cleaned regularly and treated with care to prevent this. For this purpose, e.g. ethyl alcohol or brake cleaner. Only spray these onto a cloth and wipe the shifter with it, NEVER spray the shifter directly. If stains have already formed, they can be removed with commercially available aluminum polish, but that is also not allowed get into the movable parts of the shifter. The anodized versions of our shifters (EXS, EXGR) are more resistant to corrosion. The steel parts have to be also cared in all variants.

TIPS FOR GEAR SHIFTING

(i) FORCE DOESN'T MAKES YOU FASTER - IT ONLY HARMS THE TRANSMISSION

The question arises again and again: "Does a CAE shifter puts more strain on a gearbox than a standard gear lever?" The answer is clear: "No!" The things that are most stressful for a synchronizer ring in a transmission are excessive shifting forces or a wrong shift in gear. Basically, the shift travel with a CAE Shifter is significantly shorter than with the standard lever. We achieve 30 - 55 % reduction depending on the vehicle and transmission type. This can only be achieved by using the appropriate gear ratio on the shift lever. You can feel it through the precision of a CAE shifter engaging the gears is much better than with a standard gear lever designed for comfort. The force for this decreases in the same proportion - we put in the gears with significantly less load for the synchronizer rings. In addition, with a correctly adjusted CAE shifter put in the gears is very precise and shifting into the wrong gear is extremely rare. Even in motorsport, fast, precise, but still sensitive shifting leads to the goal! Everything else is pure tugging and tearing (often seen on various YT channels), which looks "important", but in no way makes it faster - but it puts a disproportionately high strain on a transmission and in the worst case causes a fatal wrong shift in gear!

Included in delivery

- 1x shifter completely assembled, design depending on ordered variant (Picture A)
- 1x Shift knob incl. counter screw M6x20 V2A, design depending on ordered variant (Picture B)
- Accessories package (Bild C)
- Base bar (already pre-mounted on the shifter)
 1 x 80 mm, 1 x 90 mm (Picture D)





- (i) The shifter is intended for vehicles with interior equipment. The center console must be removed and reinstalled for installation. Modifications to the center console are not necessary.
- (i) Lubricate all moving parts regularly with good spray grease, e.g. by tapping the rubber caps on the ball heads. We recommend Würth HHS 2000. For cleaning the aluminum parts, we recommend commercially available spirit. Never spray cleaner into the bearing points, as this will cause the bearings to seize up immediately.

The removal

- Remove center console completely. Shift the transmission to neutral.
- Disconnect the shift cables from the balls and the bulkhead. To release the cables from the shifter body, push back the pawl, then stretch the cables 90° and remove them.
- Remove the original gearshift.



Modification of the shift cables

The original ball cups of the shift cables must be sawed off/cut exactly with 12mm distance to the plastic part. Deburr the 6mm core of the shift cables. (Picture 2, 3, 4, 5)





- Slide the supplied steel ball cups onto the cables and tighten the grub screws; again, we recommend using a small drop of screw glue on each.
- In neutral, there must be at least 7mm of clearance at ball socket "W" to the black guide sleeve. (Picture 6)
- (i) CHECK: Push the cable all the way in (Level 1/2) Then there must be 1-2 mm of clearance left to the sleeve.
- When sliding on the ball sockets, pay attention to the alignment so that the cables do not have to be twisted later:
 - Opening of the ball socket Dial rope "W" points to the left.
 - Opening of the ball socket Switching cable "S points upwards.

Installation CAE Shifter

- Place the two base bars on the threaded holes and screw them on with the supplied countersunk screws, we recommend a small drop of screw adhesive per screw.
 - 90mm bar front
 - 80mm bar rear

Ensure correct alignment of the base bars of the basic ledgers. (Picture 7)



- Place the CAE shifter in position and insert the shift cables into the shifter housing; immediately slide the cables into their respective holders and fasten them by turning them 90°. (cables do not lock in place) This is best accomplished by placing the shifter on its side to the right or left. (Picture 8)
- Pay attention to the position of the lugs on the shifter cables. (Picture 9, 10)



- Then place the CAE shifter on the latches and tighten with the 4 nuts. (Picture 11)
- Grease the ball cups and press them onto the balls of the shifter and selector lever.
- The socket of the selector cable "W" should fit without moving the lever or the cable, otherwise readjust the spring stop or change the position of the ball socket on the selector cable. (see Adjustment of switching travel)
- Generally grease each ball socket and bearing bolts & bushings.
 Glue all nuts / bolts during assembly glue in!
 Never kink shift cables







Adjusting the shift travel of the 6-speed gearbox

- Determine the desired center position of the shift lever and tighten the lower spring stop under the shift bracket using a 5 mm Allen key. (Picture 12)
- The shift lever should be slightly tilted to the left in position 3/4. (Picture 13)
- (i) CHECK: With 3rd and 4th gear engaged, the lateral clearance on the shift lever must be the same. If this is not the case, the spring stop must be read-justed. (0.5 mm is already a lot here). This is the basic adjustment of the shifter and must be done very precisely.
- Now shift the gearbox to level 1 / 2 using the shift lever and adjust the stop screw until the gears in level 1 / 2 can be changed cleanly. The screw has no contact with the bolt when the gear is engaged (approx. 0.5 mm clearance) (Picture 14).
- Now shift gearbox to 5th /6th gear level using shift lever and screw in stop screw until 5th gear can be engaged cleanly. When the gear is engaged, the screw has no contact with the bolt, and the shifter returns as far as possible to 3rd/4th gear. (Picture 14)

 Actuate reverse gear locking bolt via cable and shift transmission into reverse gear.
 Screw in appropriate stop screw until reverse gear can be engaged cleanly. Screw has no contact with bolt when gear is engaged.
 (approx. 0.5 mm clearance) (Picture 14)

 Install cotter pin clamps on the ball cups. (Picture 15)









FINALLY! Check all functions and settings during the test drive and readjust if necessary!

Incorrect or inaccurate settings can cause damage to the gear box and consequential damage!

(i) We recommend to connect the switch panel completely for the driving tests in order to avoid electrical faults.

Installing the center console

After the test drive, install the center console. It may be necessary to shorten the plastic tab shown. This can easily be done with a cutter knife while the center console is still installed. (Picture 16, 17)



If you have any questions or problems, please be sure to contact us, we look forward to your feedback to improve our products.

RACE THE ORIGINAL

RACE THE ORIGINAL



Alte Bottroper Strasse 103 D-45356 Essen 0049. 201. 8 777 802 service@cae-racing.de

WWW.CAE-RACING.DE