

# Installation Guide Injector Body Holders - 3-10 Cylinder TDI

(1.2, 1.4, 1.9, 2.0, 2.5, 5.0)

Version 1.1



# **pumpe düse abhilfe.**

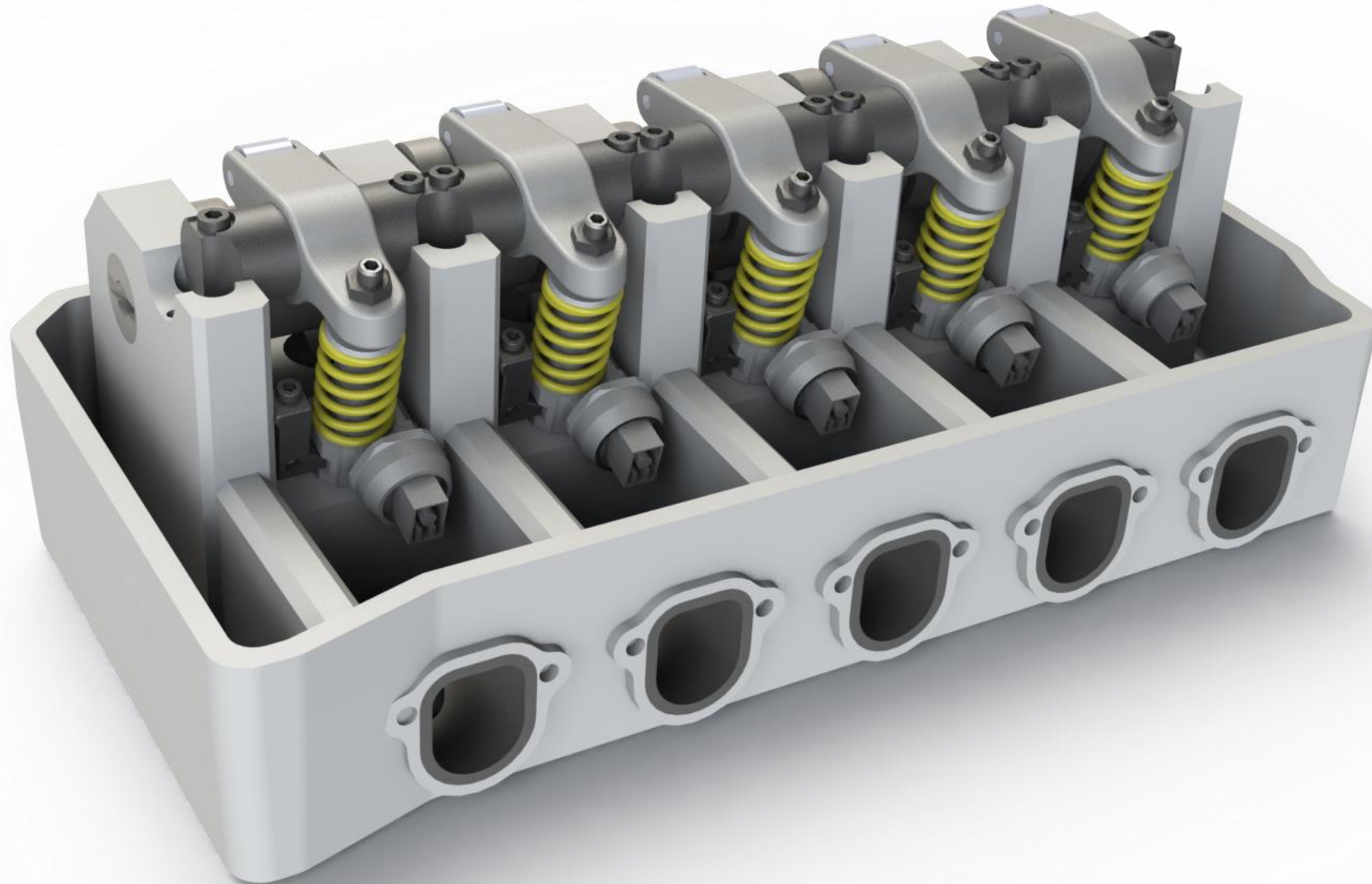
<https://07eins.com/products/pde-korpushalter-satz>

Note: The professional revision and disassembly of the unit injectors requires the use of new screws and sealing elements. If required, selected complete sets of consumables in excellent quality are available at the following link:

[Link - 07eins Assembly kits](#)

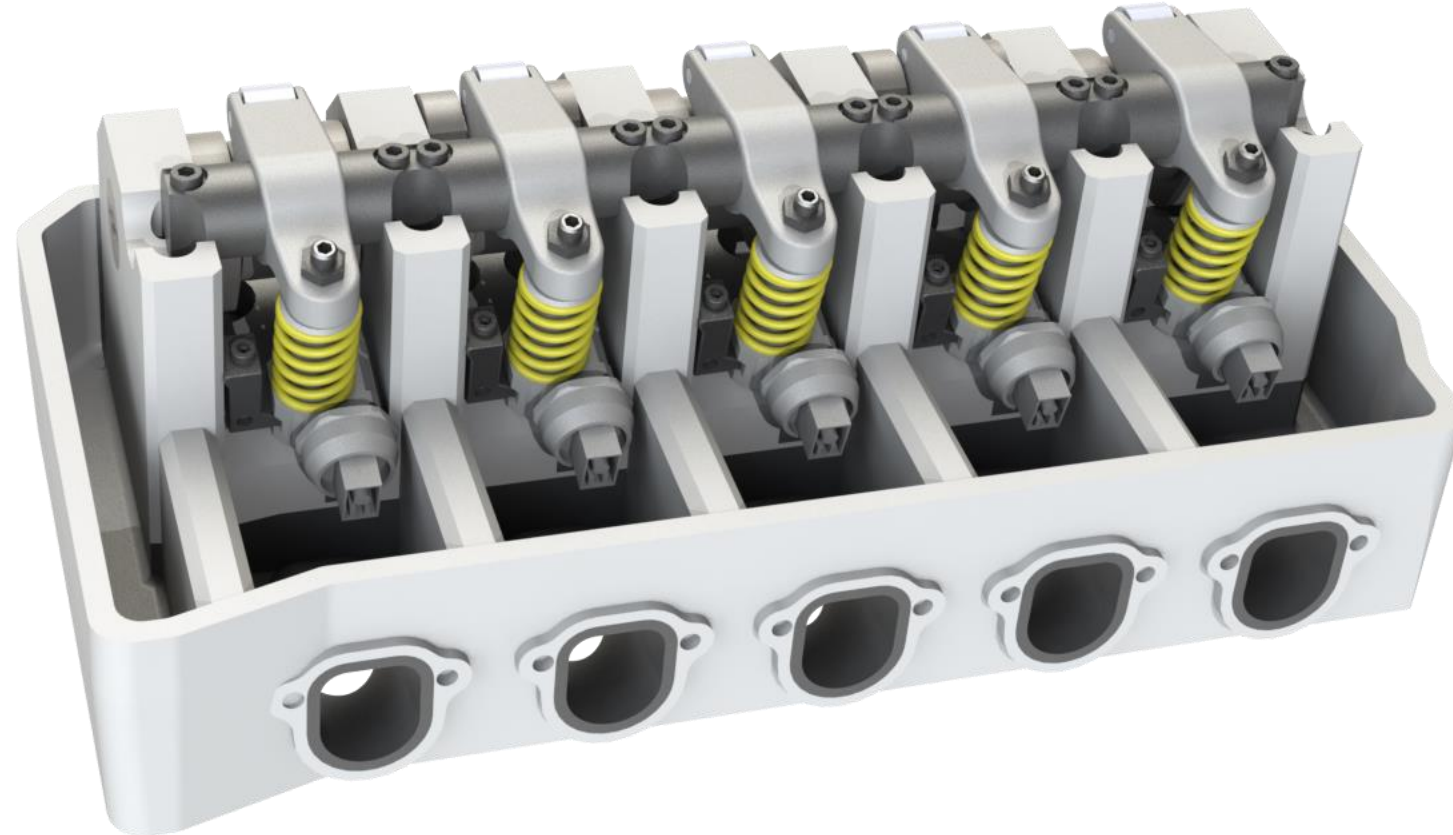


# Cylinder head symbolic representations

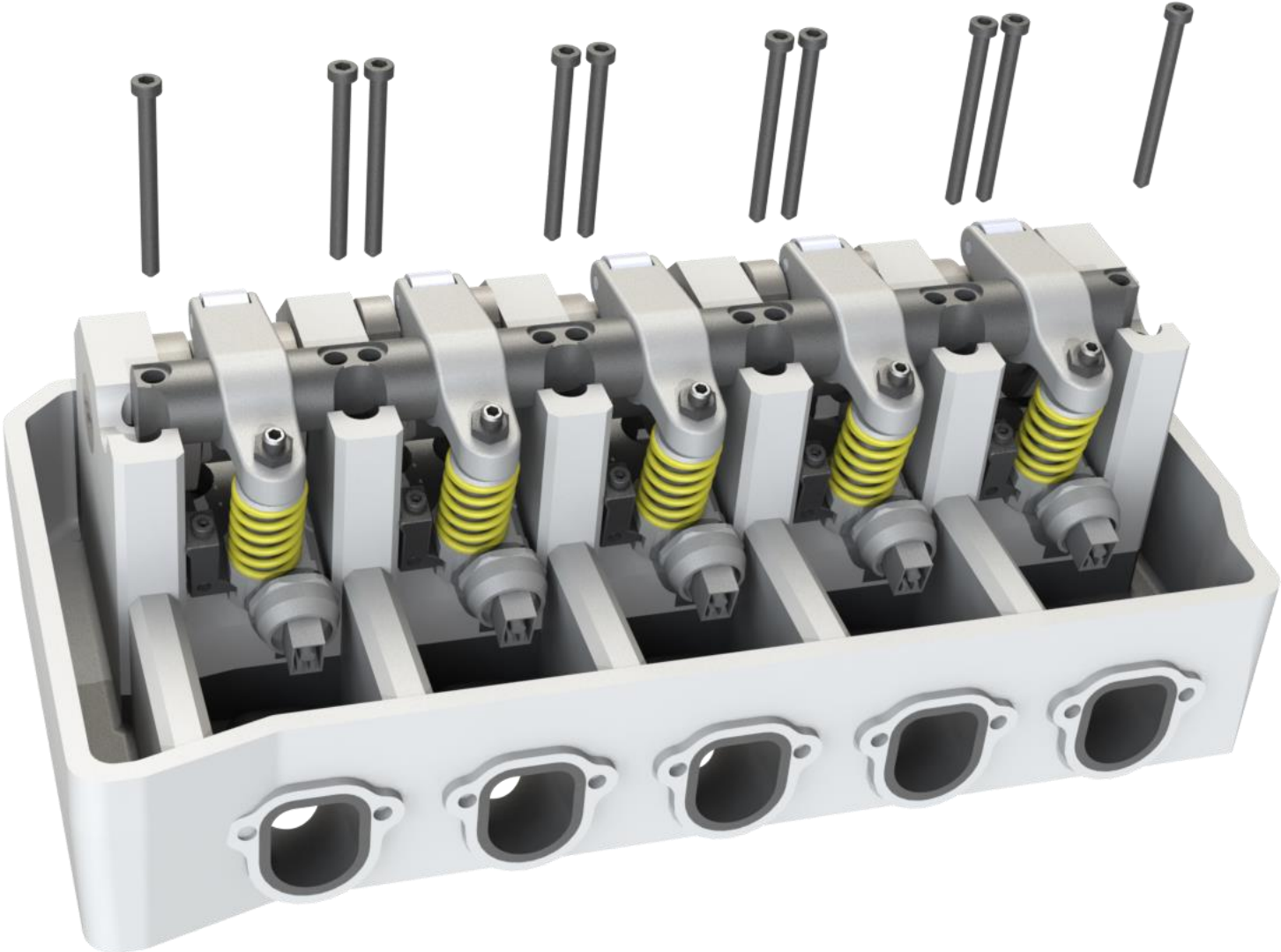


## Necessary preparation:

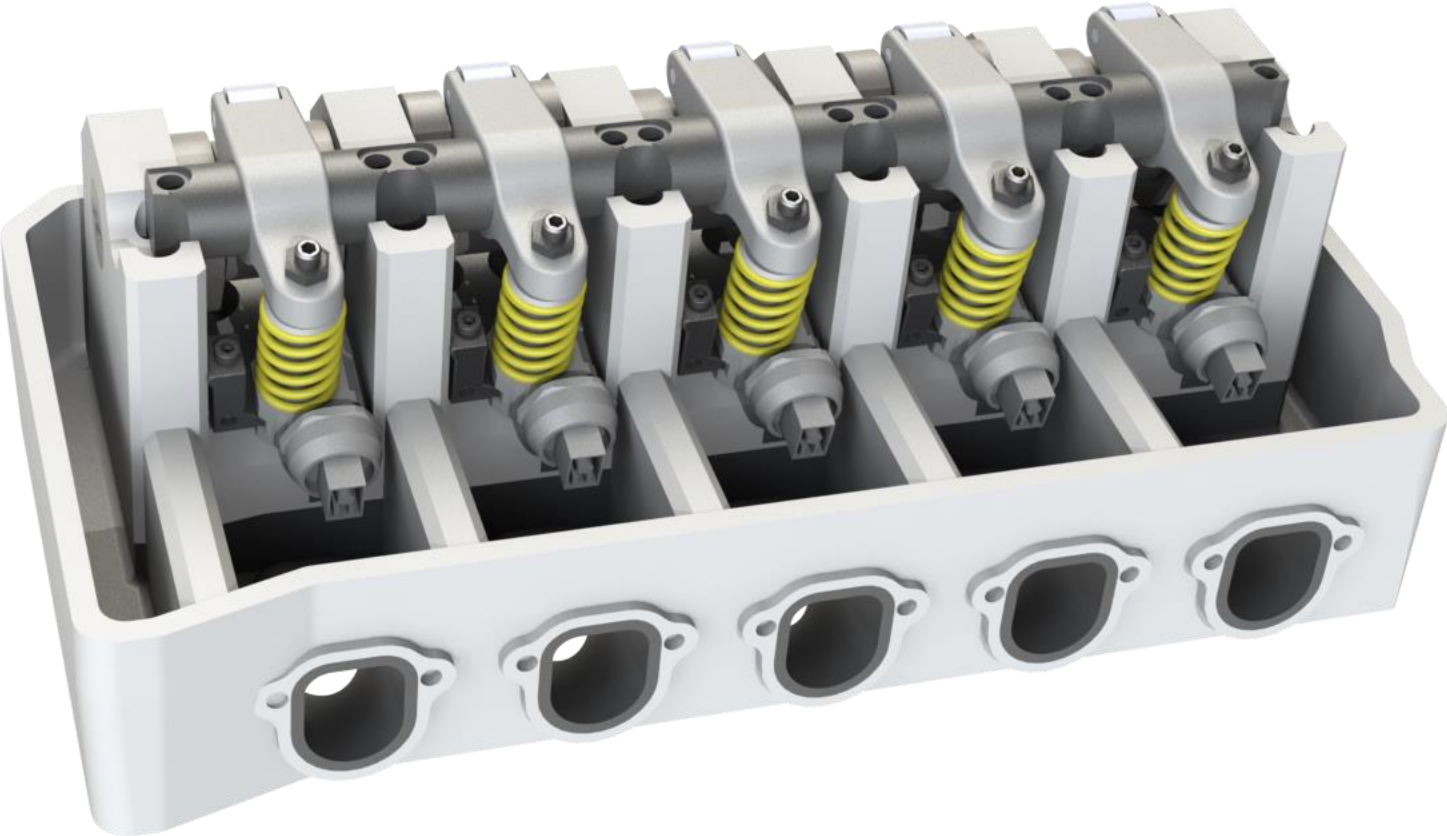
- Move radiator to service position
- Dismantle intake manifold
- Remove EGR valve
- Remove valve cover
- Dismantle electrical connecting strip



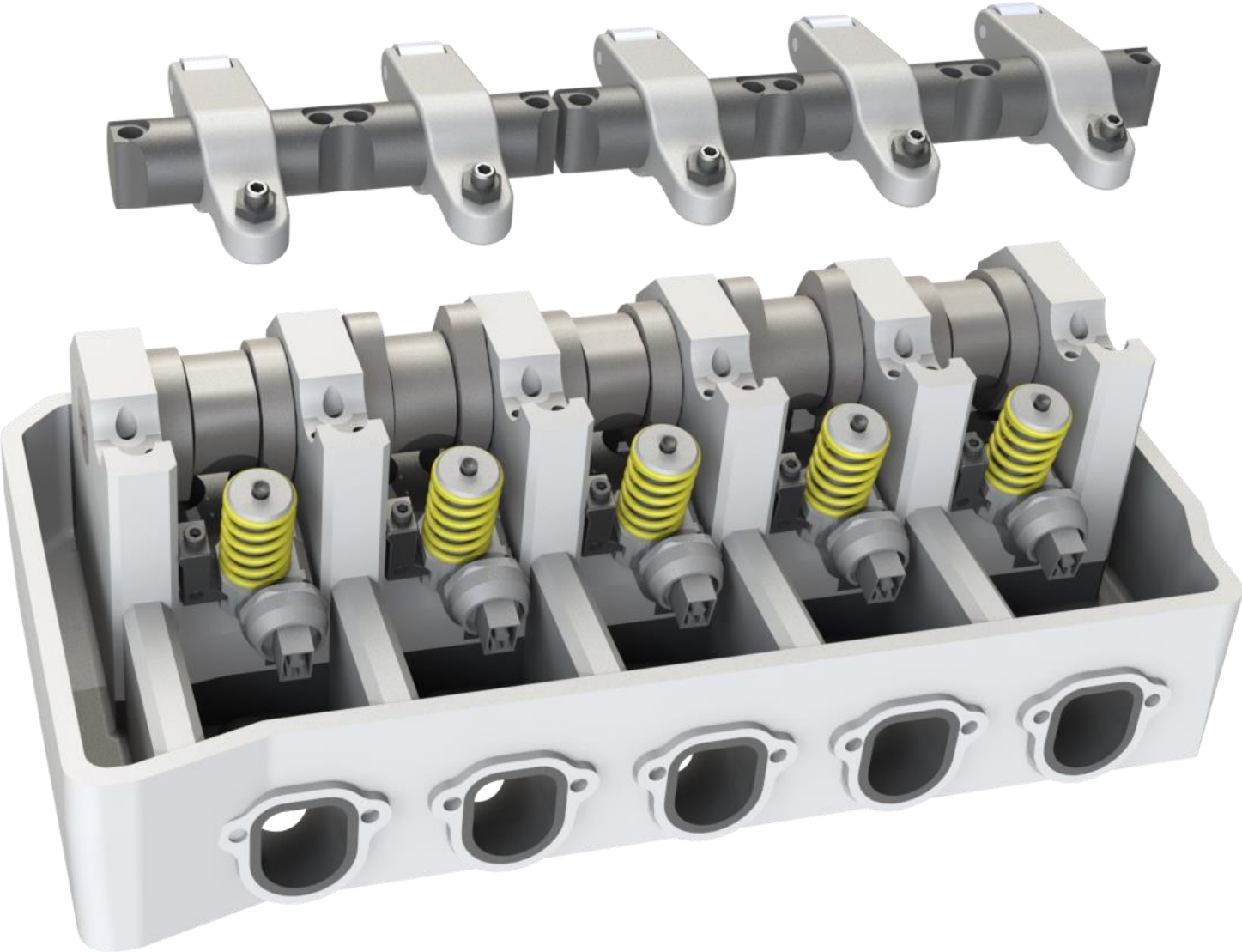
Step 1: Loosen the rocker shaft screws



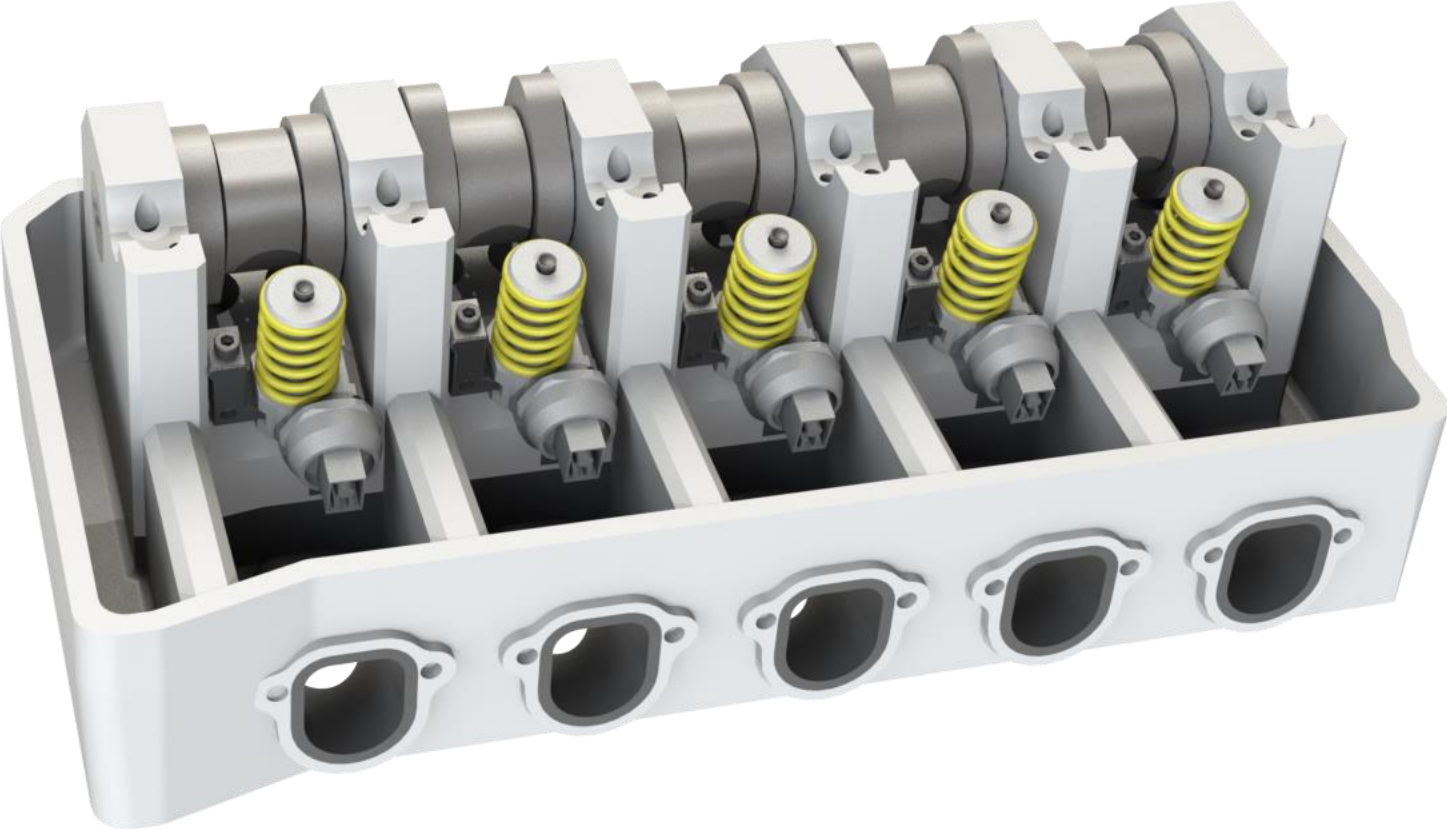
Step 1: Rocker arm shaft screws removed



Step 2: Dismantle rocker shafts

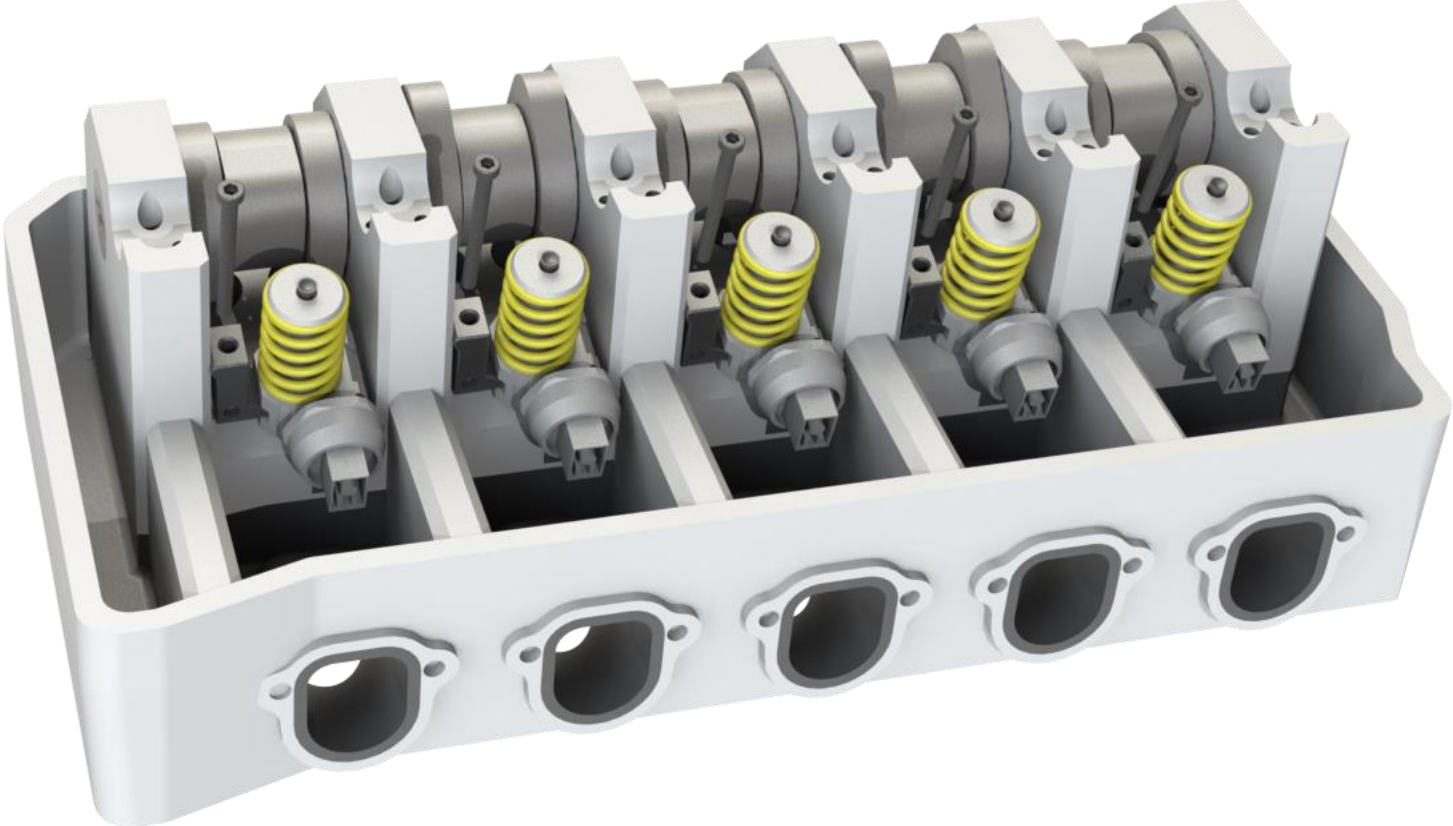


Step 2: Rocker arm shafts dismantled

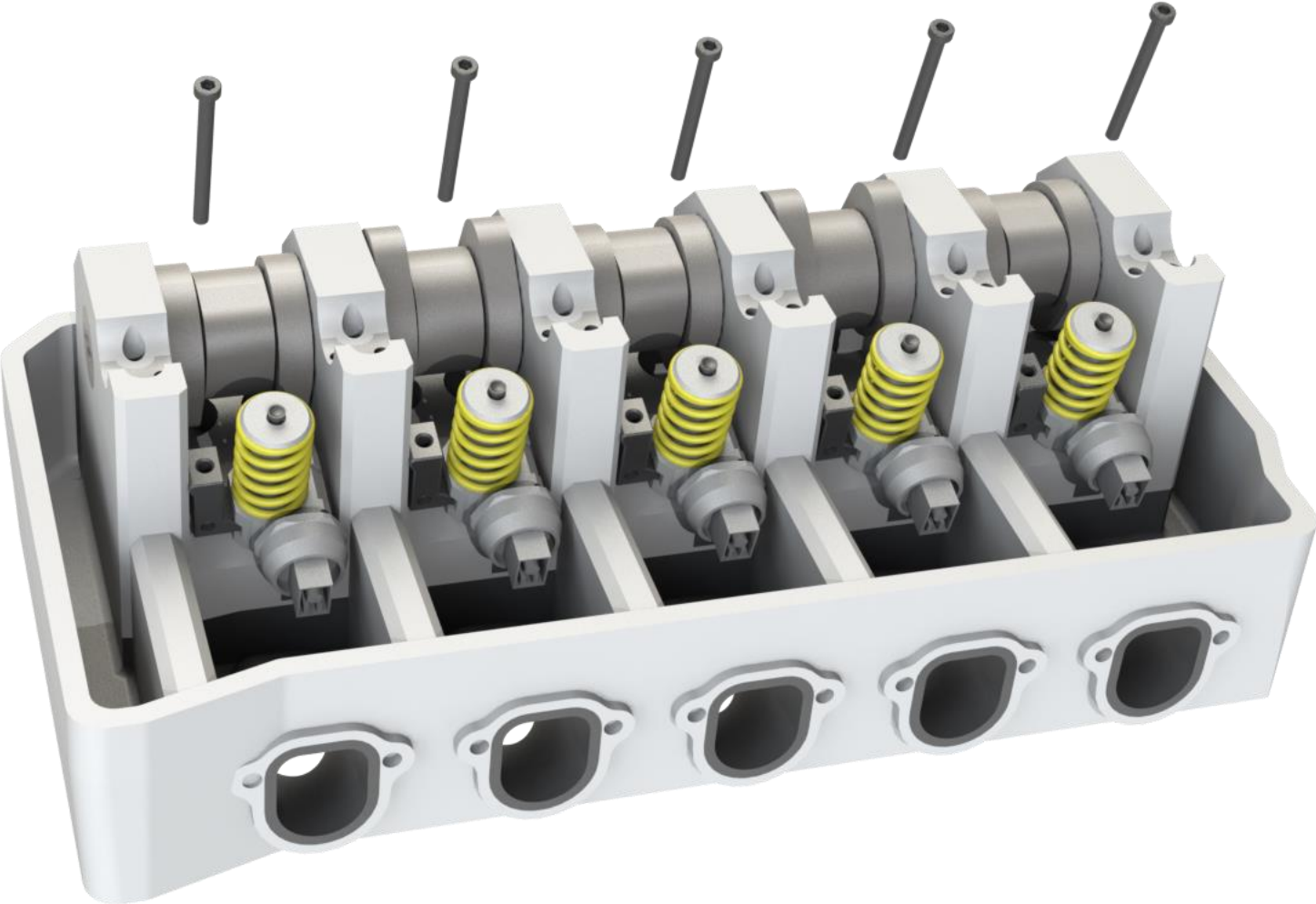




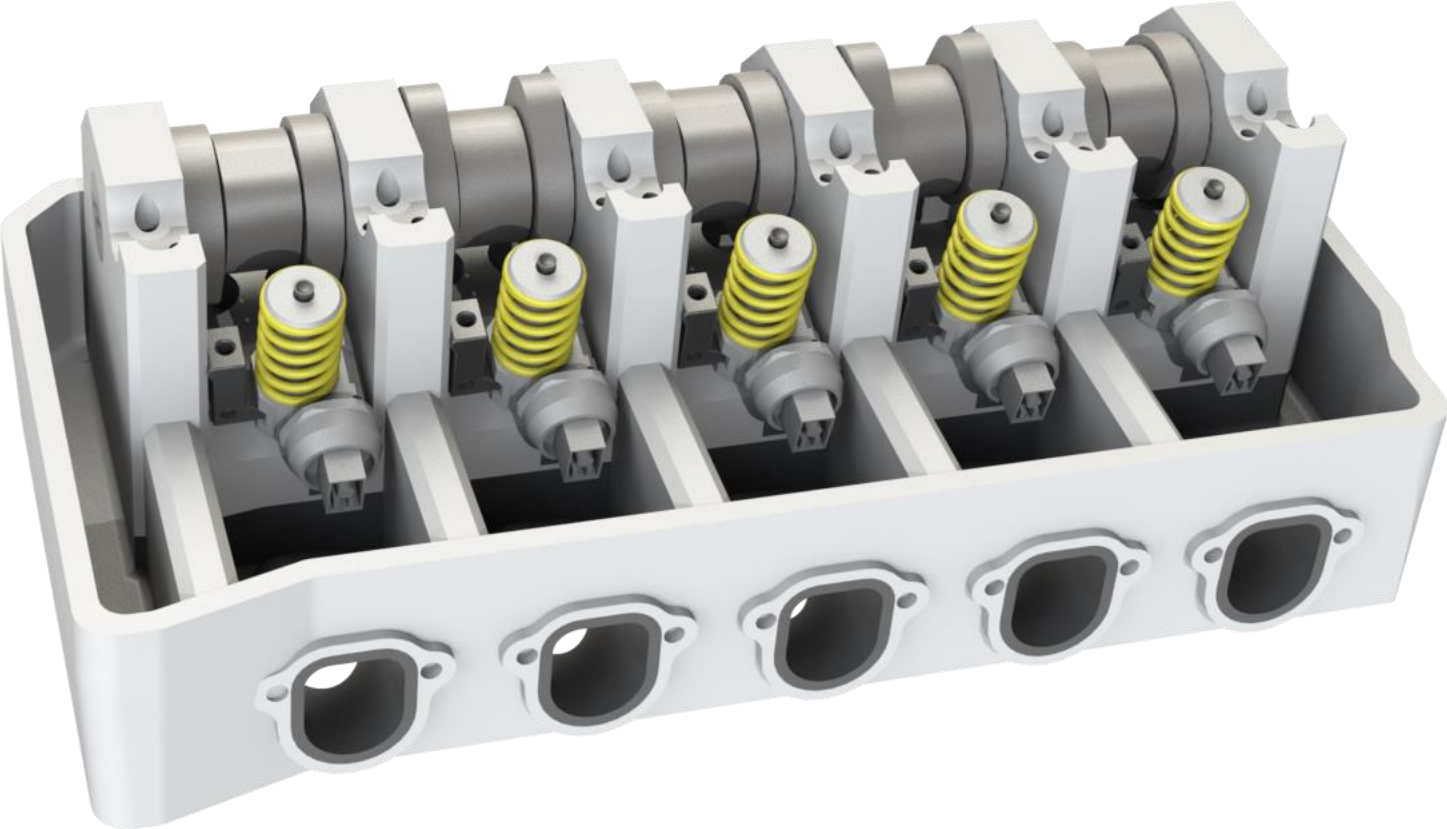
Step 3: Loosen unit injector screws



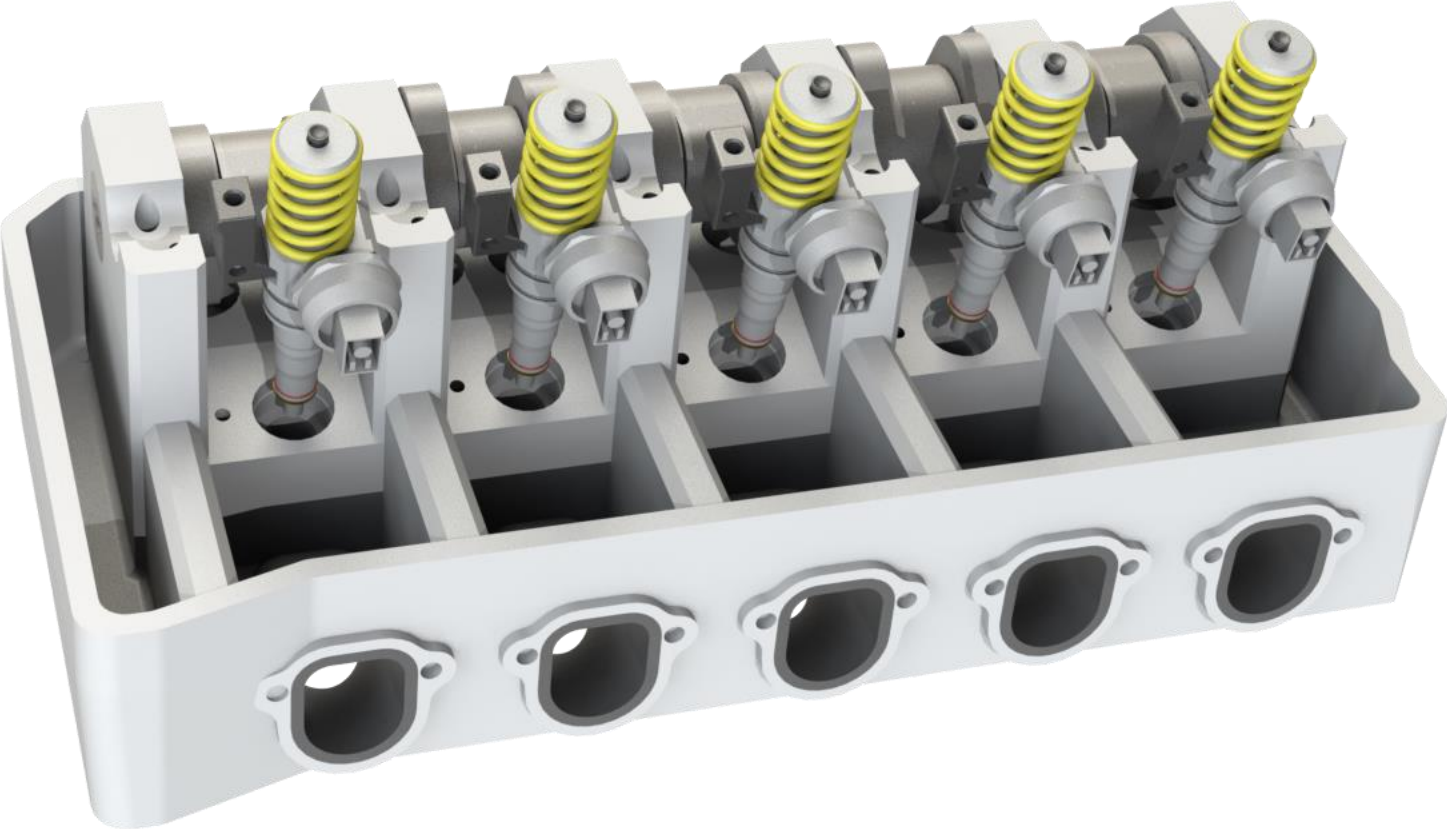
Step 3: Loosen unit injector screws



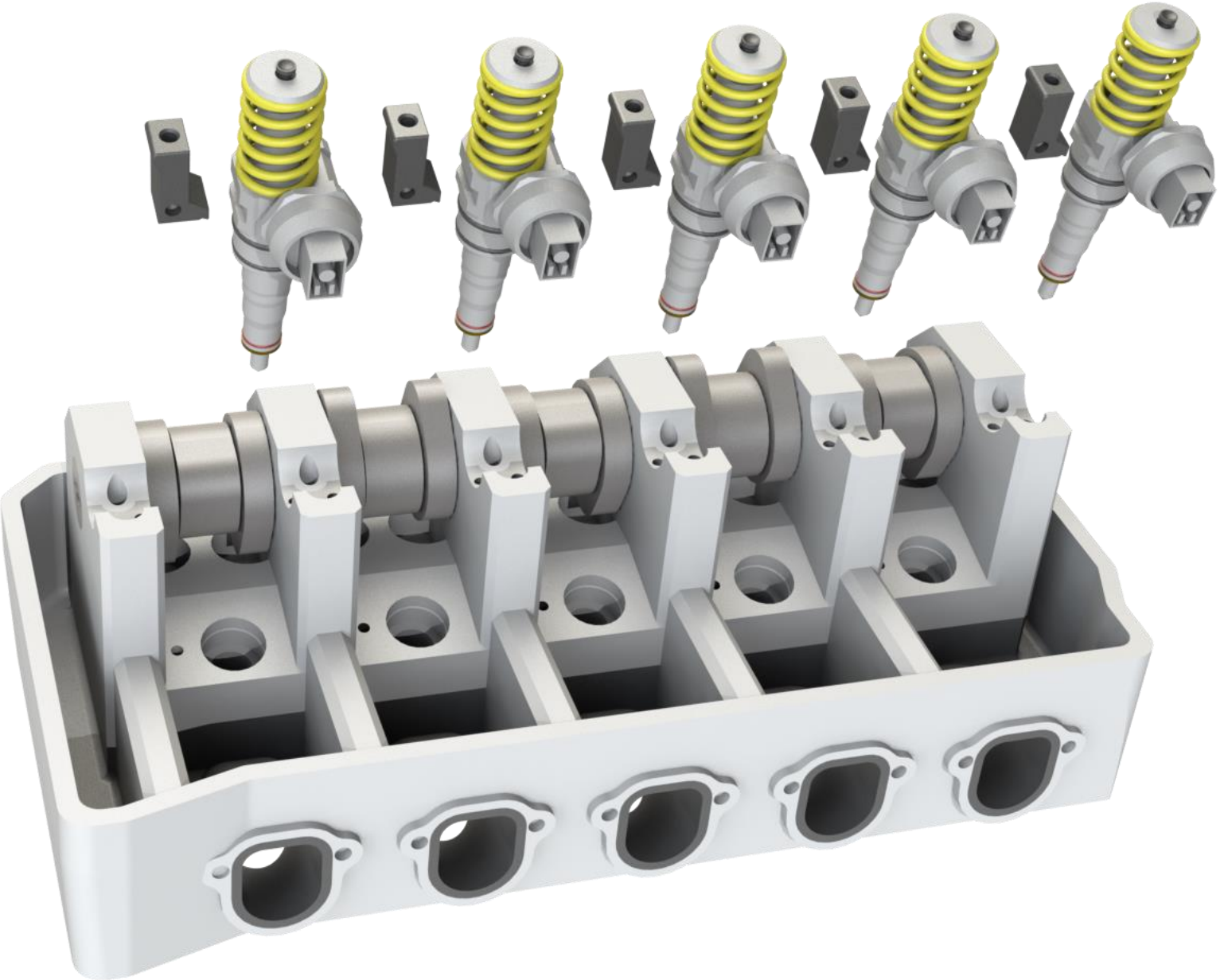
Step 3: unit injector screws dismantled



Step 4: Dismantle the injectors



Step 4: Injectors dismantled



## Step 5:

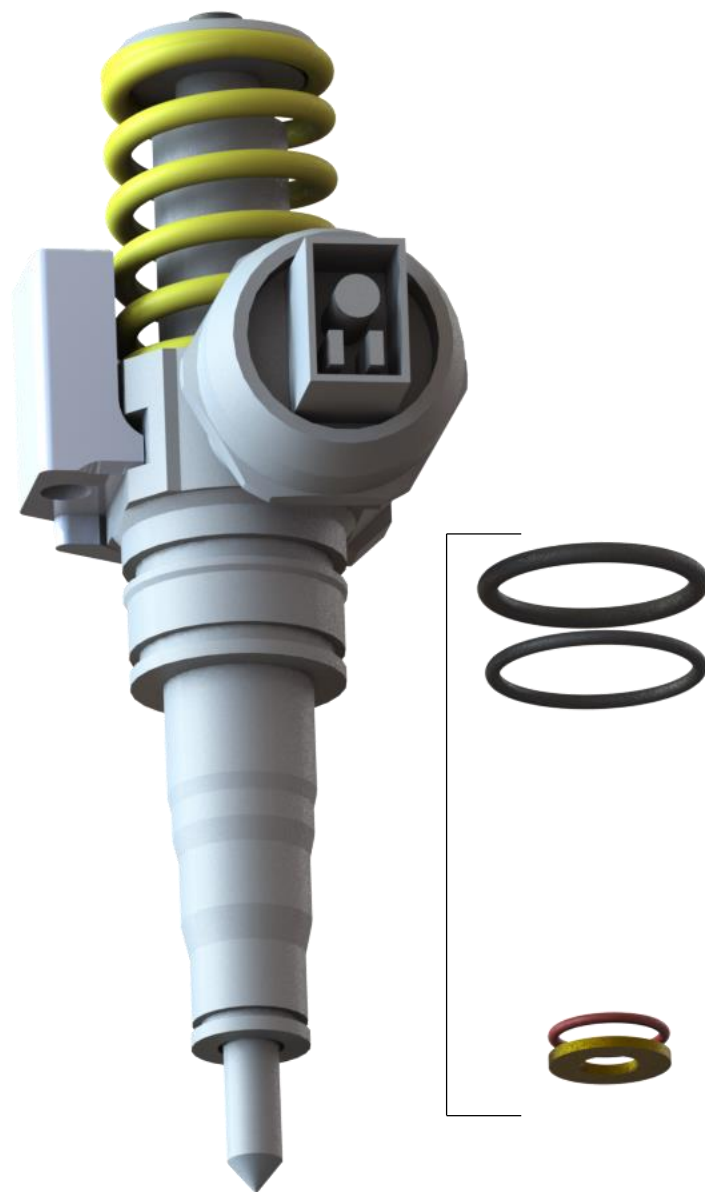
It is imperative that the sealing rings are replaced. Use high-quality products from reputable manufacturers!

In case of deep run-in marks in the cylinder head, reinforced VITON sealing rings for the two fuel seals are available in the online shop.

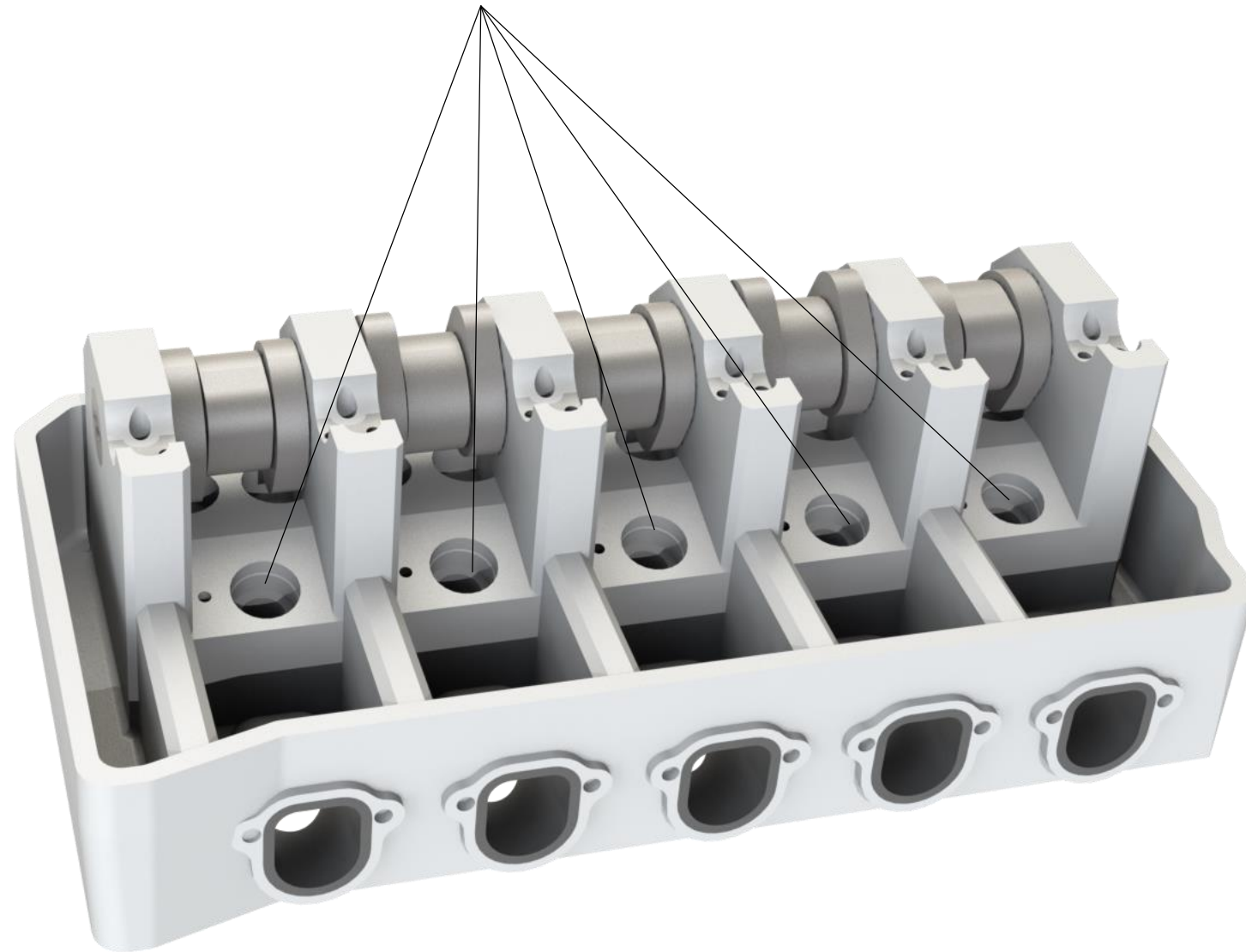
(despite remedial measures, the gaskets must eventually do the actual job!)

Matching assembly sets, as well as all individual components, can be found under the following link:

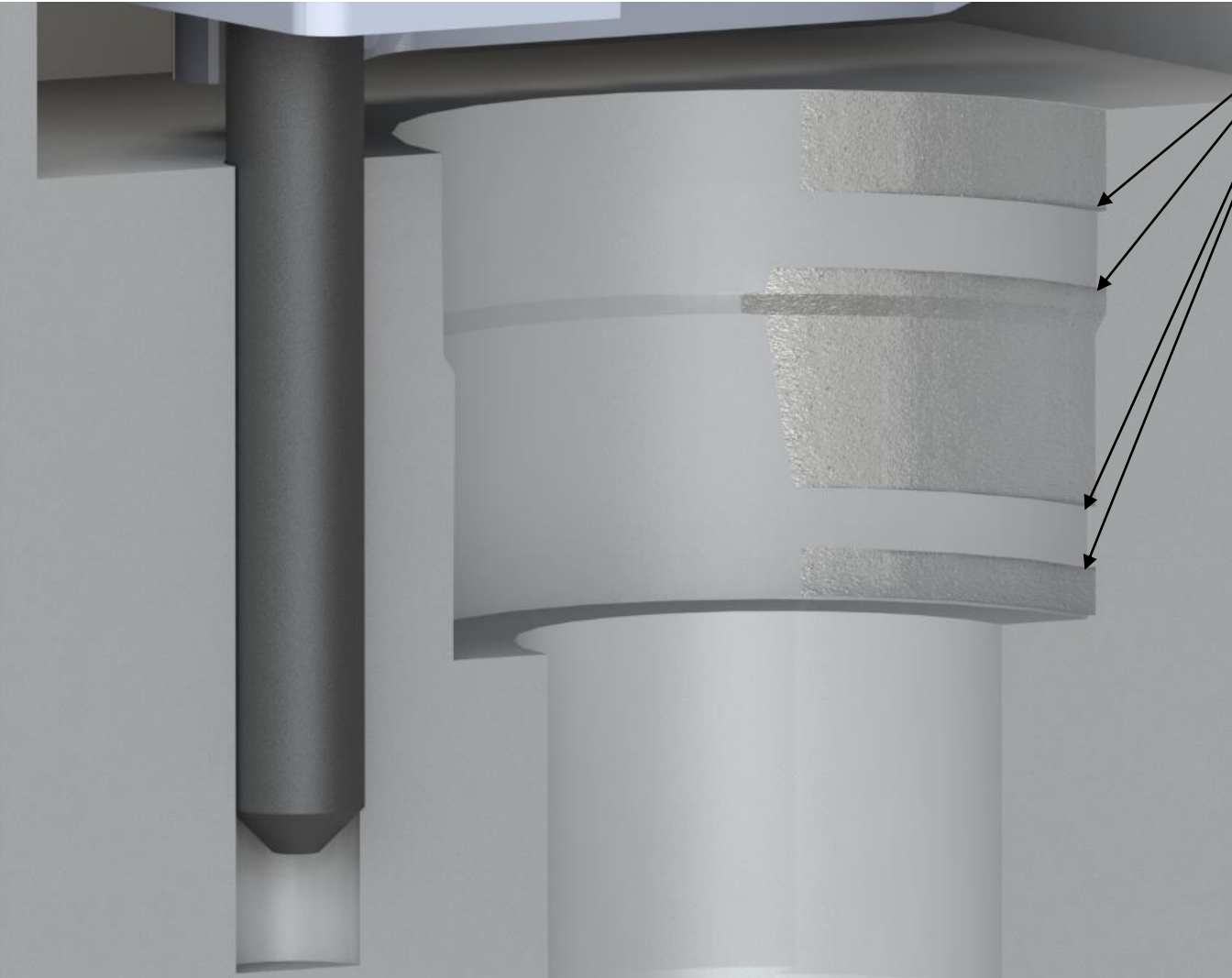
[07eins PDE mounting set for engines with pump-nozzle unit](https://www.07eins.com/pages/pumpe-duese-abhilfe)



Step 6: Check for damage to sealing surfaces - see the following slide



Usual damage pattern:



In case of sharp burr on these edges:  
smooth burr!  
(prevents damage to the new sealing rings during later installation)

Example:

- Abrasive cloth, moistened with oil, grit >800  
close the deep injector hole beforehand so that no abrasion  
can get into the combustion chamber  
meticulous attention to cleanliness!

**ATTENTION:** Never grind down elevations - these are the  
original sealing surfaces!

Only break sharp edges - do not remove any material!

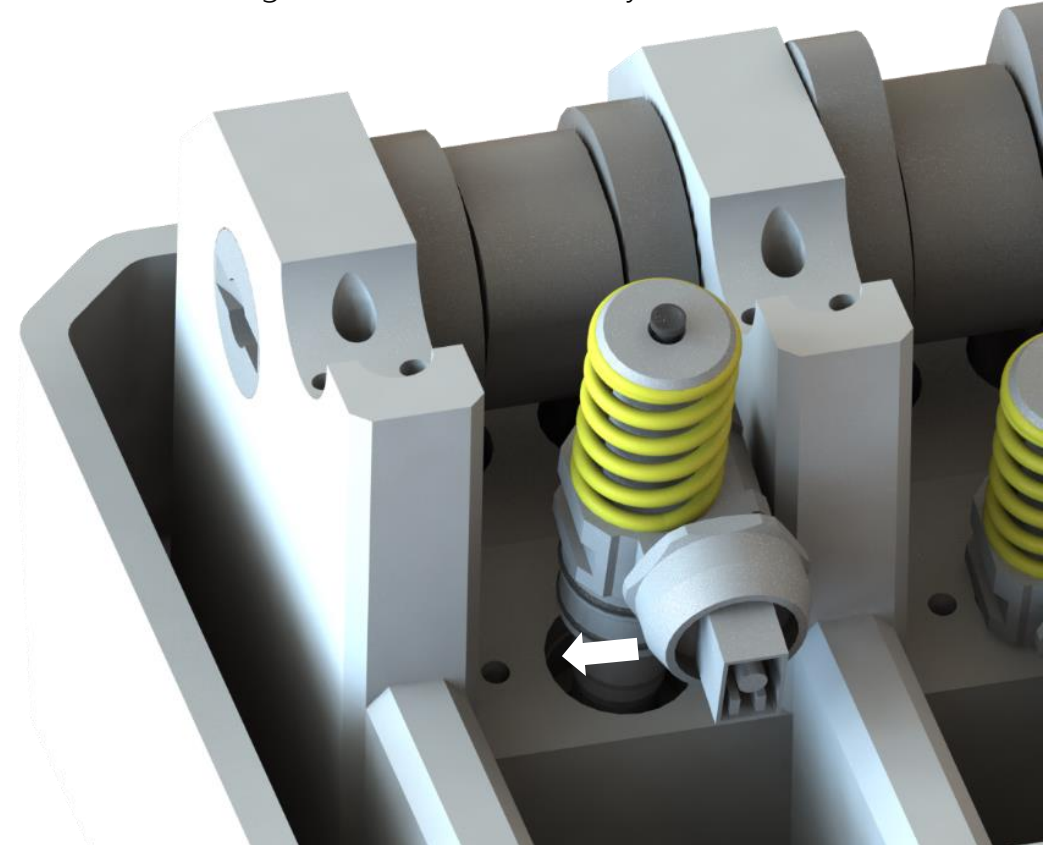
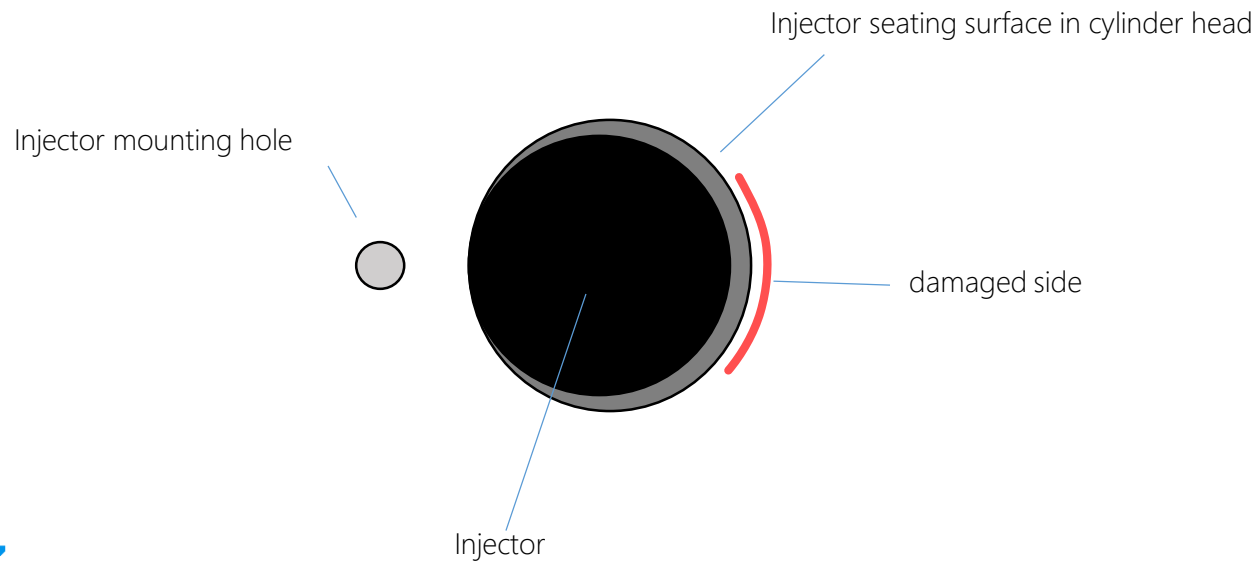


## Installation of the unit injectors

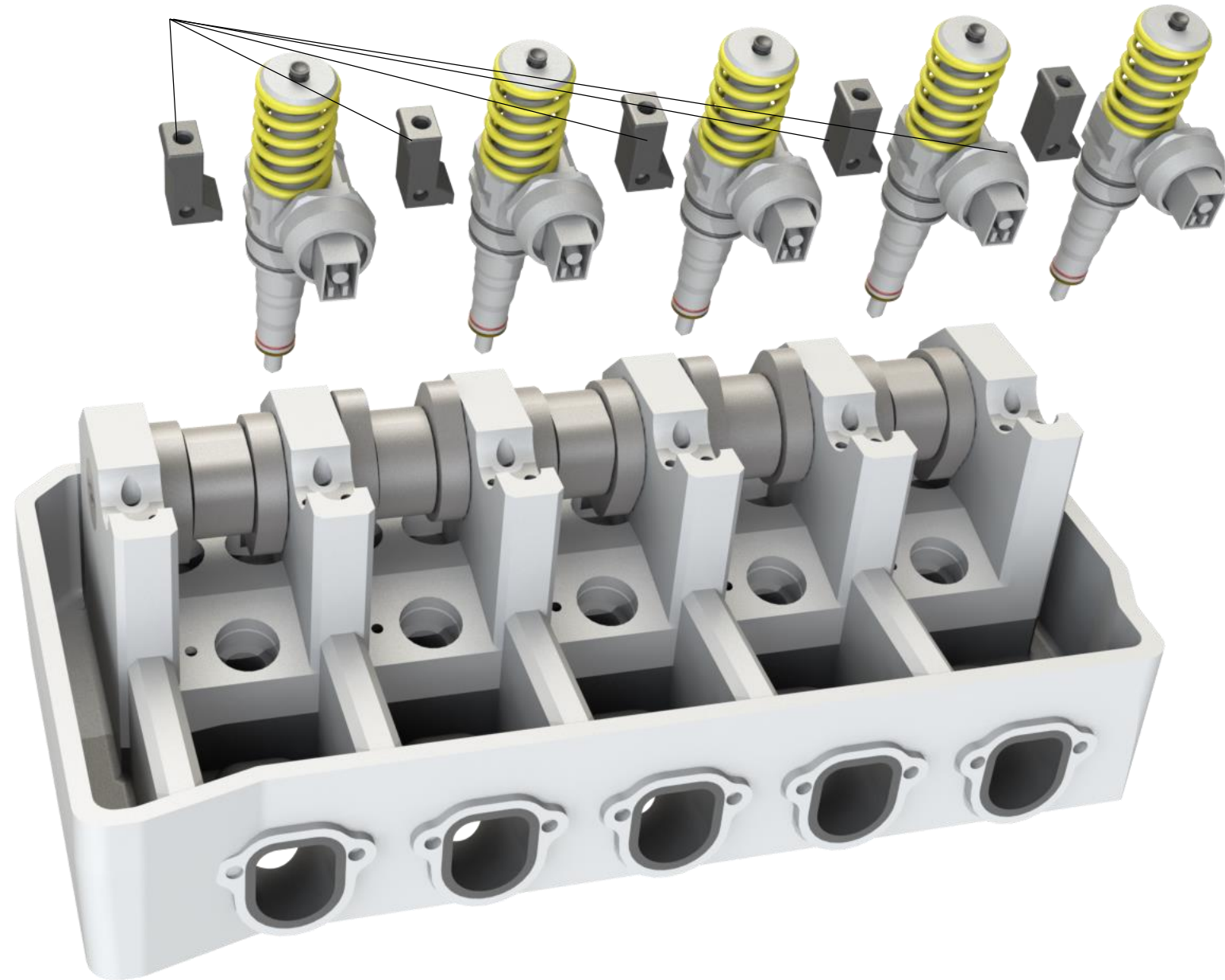
Attention! Careful insertion of the injectors represents a central point for the success of the repair. Injuries/damage to the ring seals lead to deviating injection quantity values of the injectors and are by far the most frequent cause of failed repair attempts. In the case of the reinforced sealing rings with enlarged cord diameter, additional attention must be paid to a clean and careful assembly, as the larger sealing rings can be injured even more easily at the existing inlet marks!

Assembly tip:

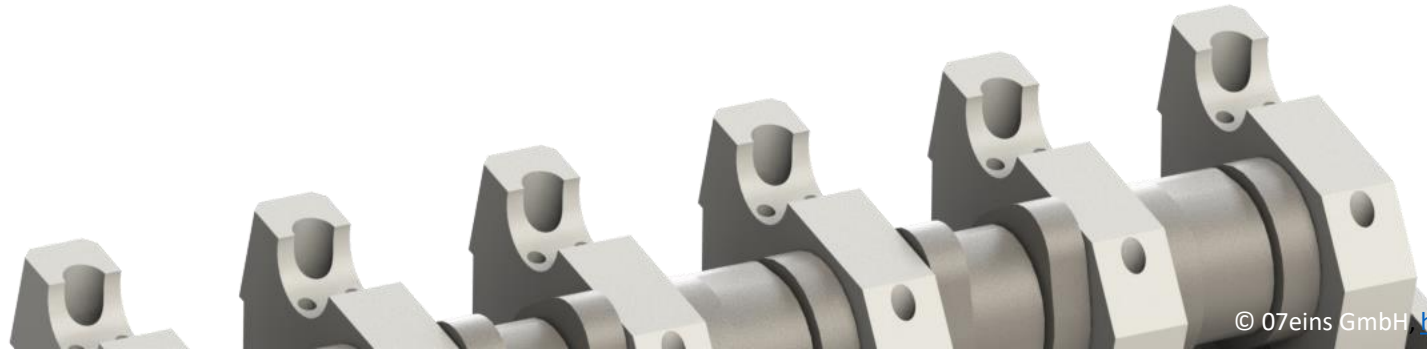
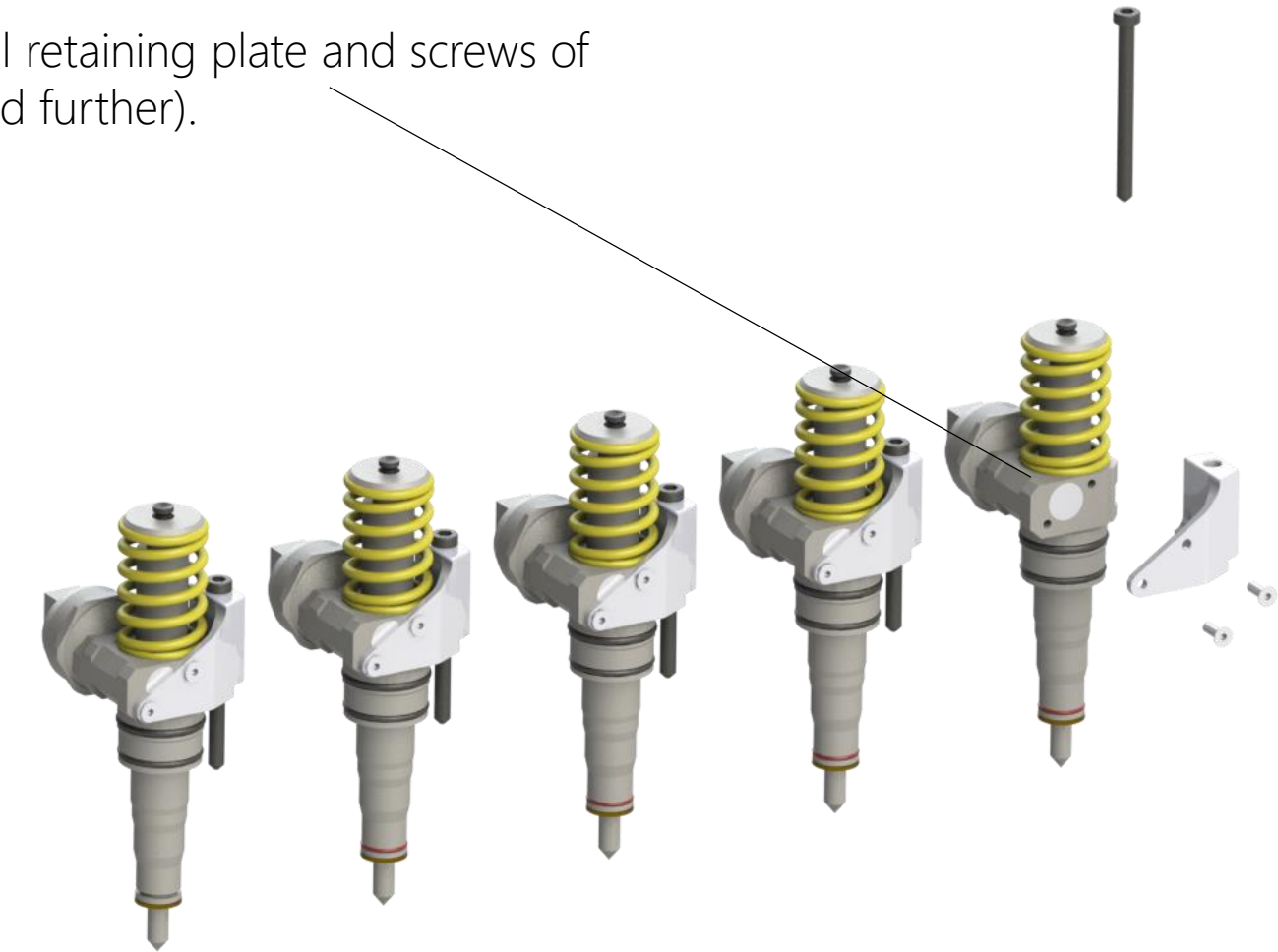
Move the injector to be inserted to the left side of the seating surface during insertion so that the grooves, which are always on the right, can exert as little pressure as possible on the sealing cord during insertion. Be sure to wet the seals and seating surfaces with engine oil before assembly to allow easier insertion.



Step 7: Remove clamping shoes (will not be used further)



Step 8: Remove the original retaining plate and screws of the injector (will not be used further).

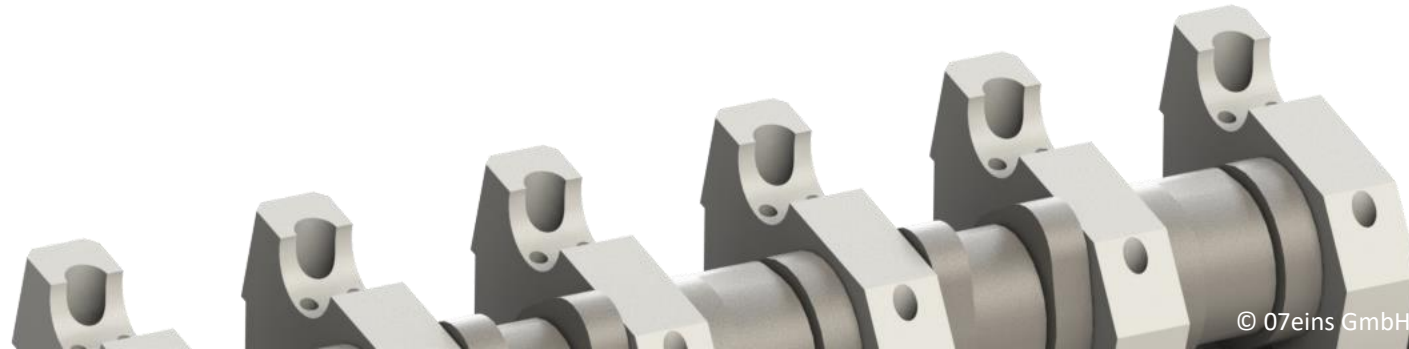
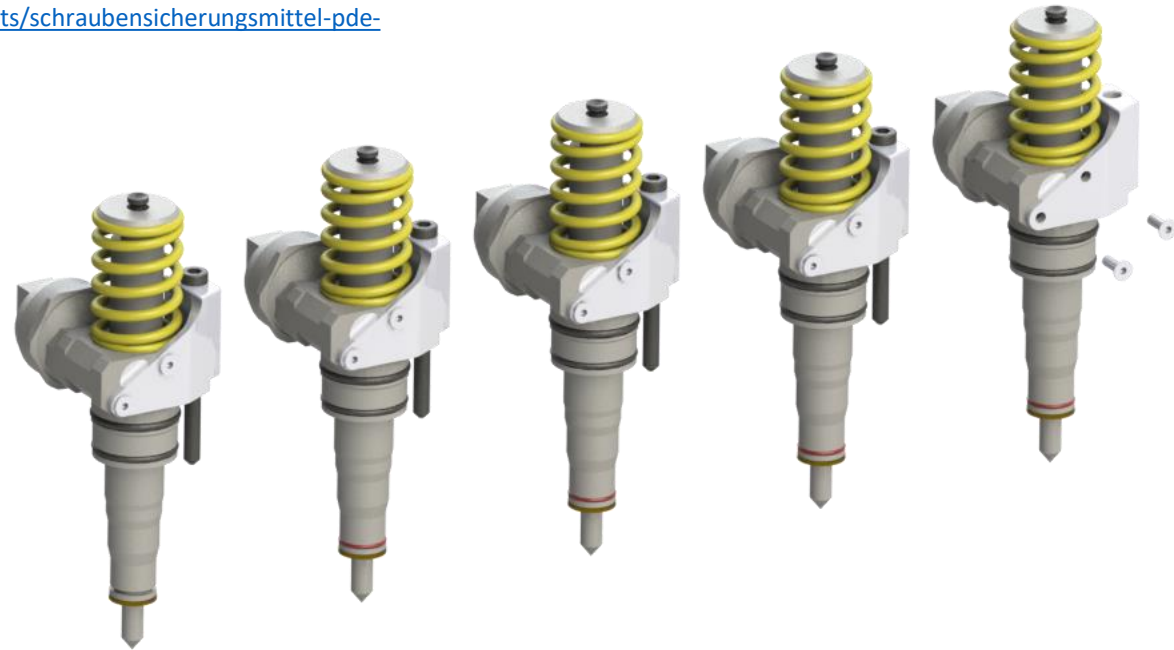


Step 9: Mount the body holder with the screws supplied.

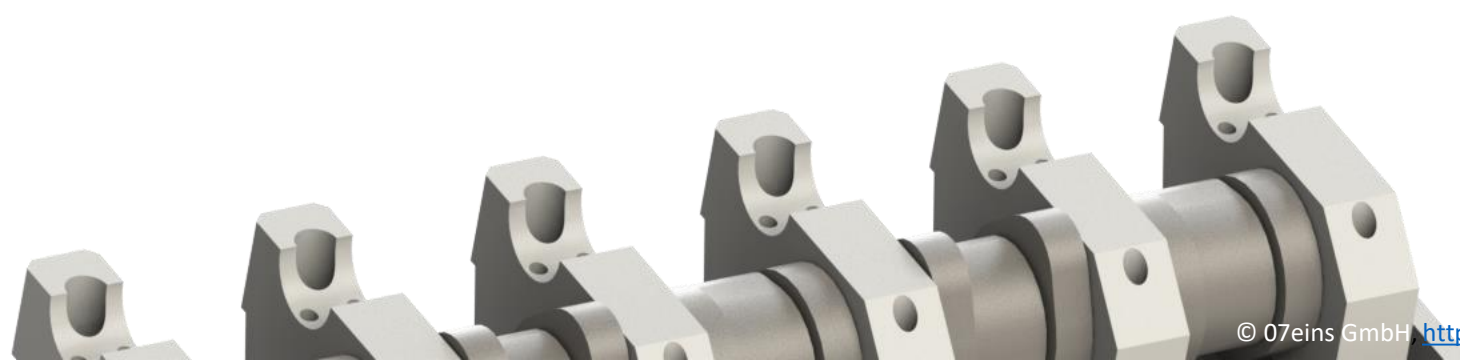
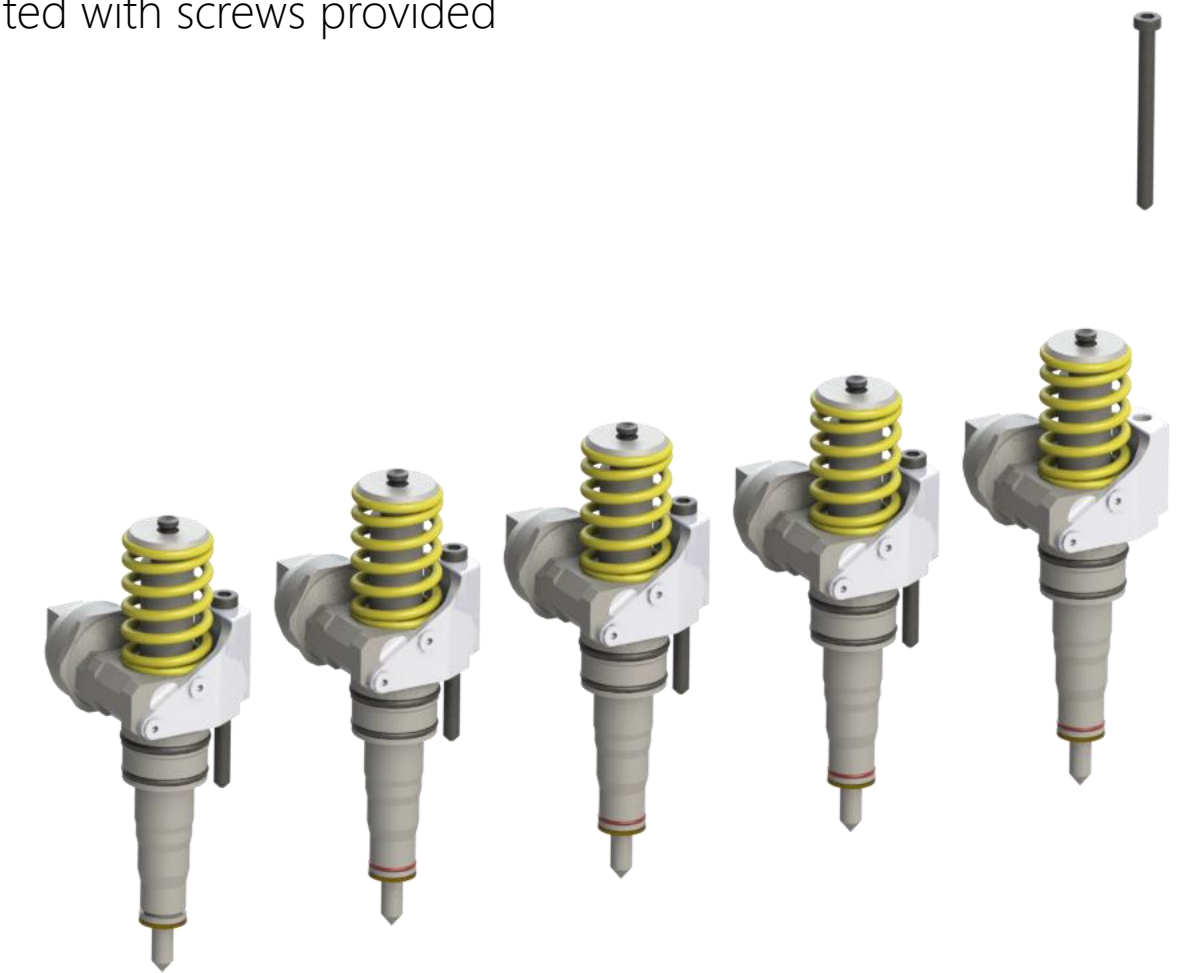
(Use screw lock e.g.: Loctite products - temperature resistance min. 180°C  
- recommended torque 2Nm)

[suitable products:](#)

<https://07eins.com/collections/frontpage/products/schraubensicherungsmittel-pde-bruecke-korpushalter-1ml>

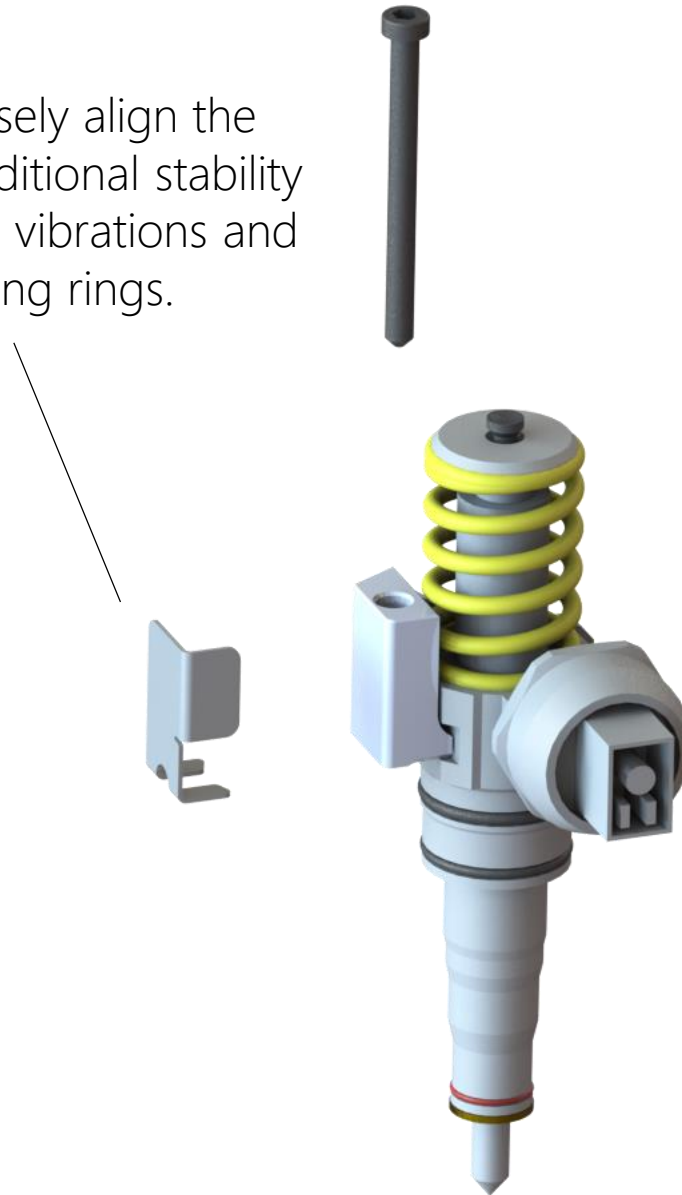


Step 9: Body holder mounted with screws provided



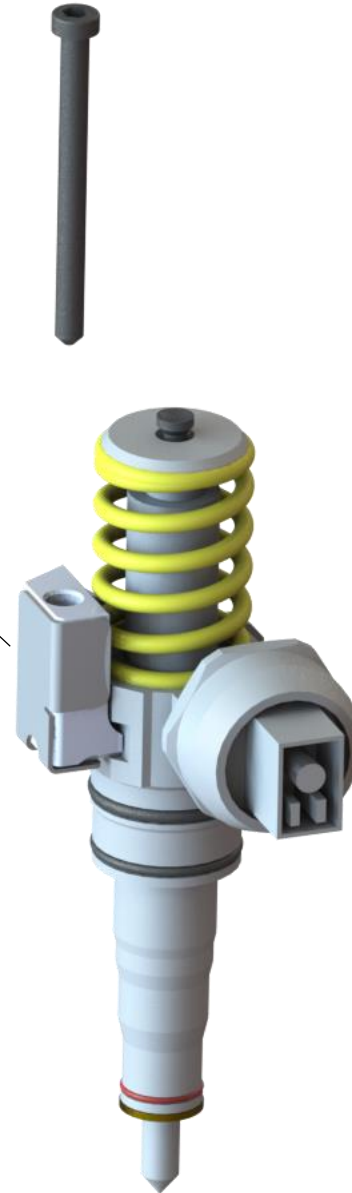
Step 10: Place the support plate on the side of the body holder.

Note: The support plates are used to precisely align the injector in the cylinder head and create additional stability for the respective injector unit, for reduced vibrations and improved pressure distribution on the sealing rings.



Step 10: Support plate placed on the side of the body holder.

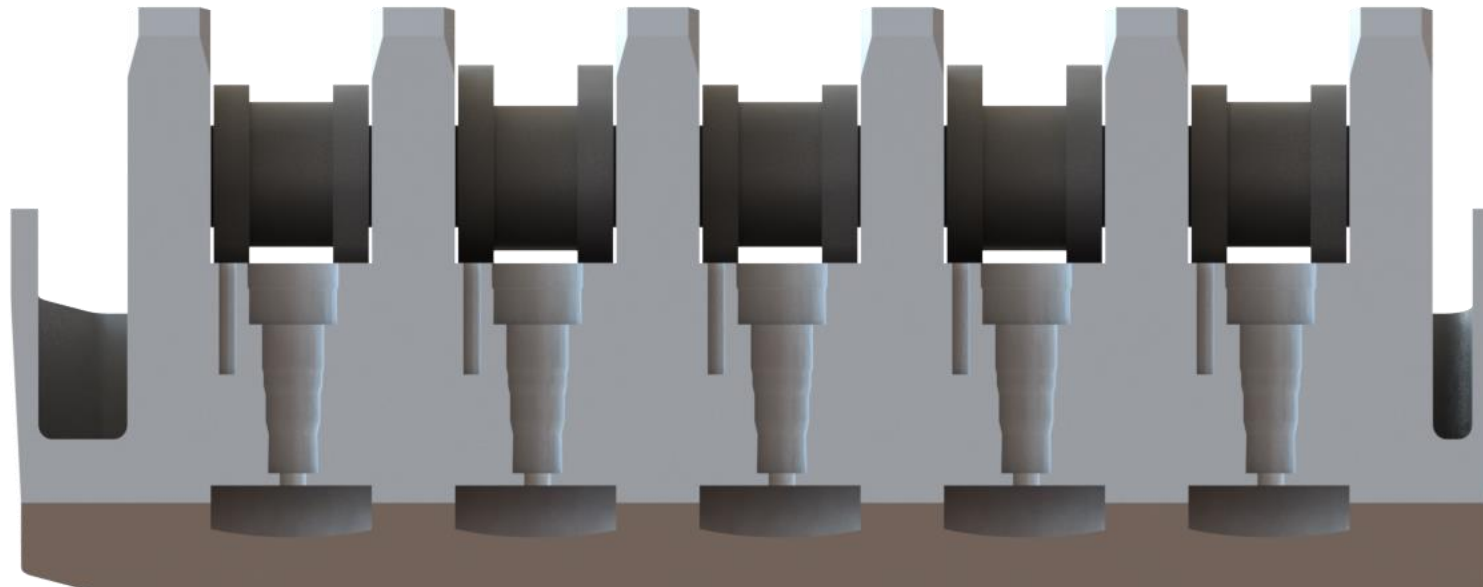
Note: The support plates are used to precisely align the injector in the cylinder head and create additional stability for the respective injector unit, for reduced vibrations and improved pressure distribution on the sealing rings.



## Step 11: Insert injectors with support plates into cylinder head (observe notes on protecting the seals!)



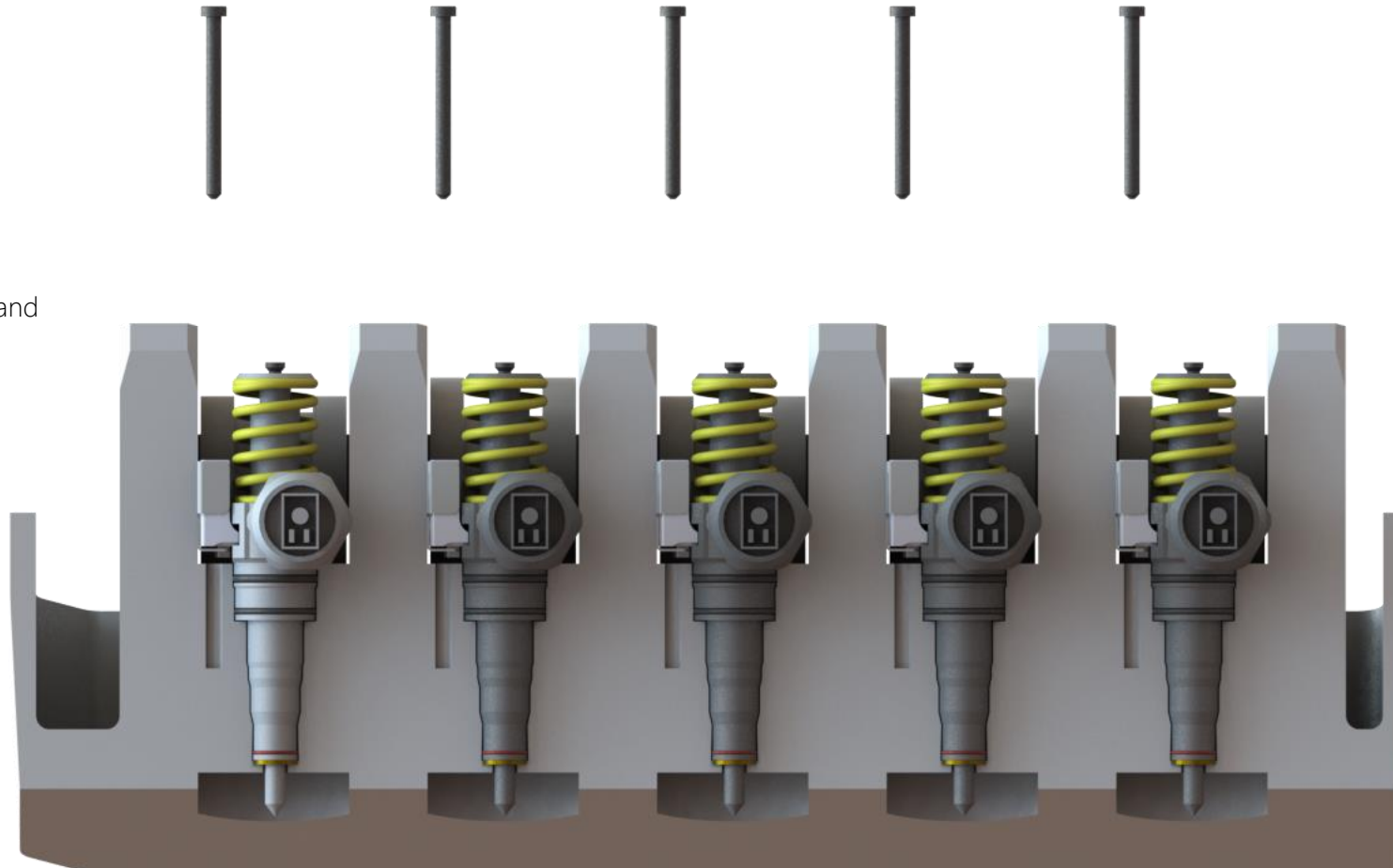
\*Note: on some engines, due to protruding bearing blocks of the camshafts, it may be necessary to first loosely bring the support plates into their final position before inserting the injector.





## Step 12: Insert injector screws

- New bolts are absolutely necessary for proper installation!
- Pay attention to the specified length, screws that are too long can lead to serious engine damage!  
(e.g. 2.5TDI M6x55mm - 1.9TDI M6x64mm)

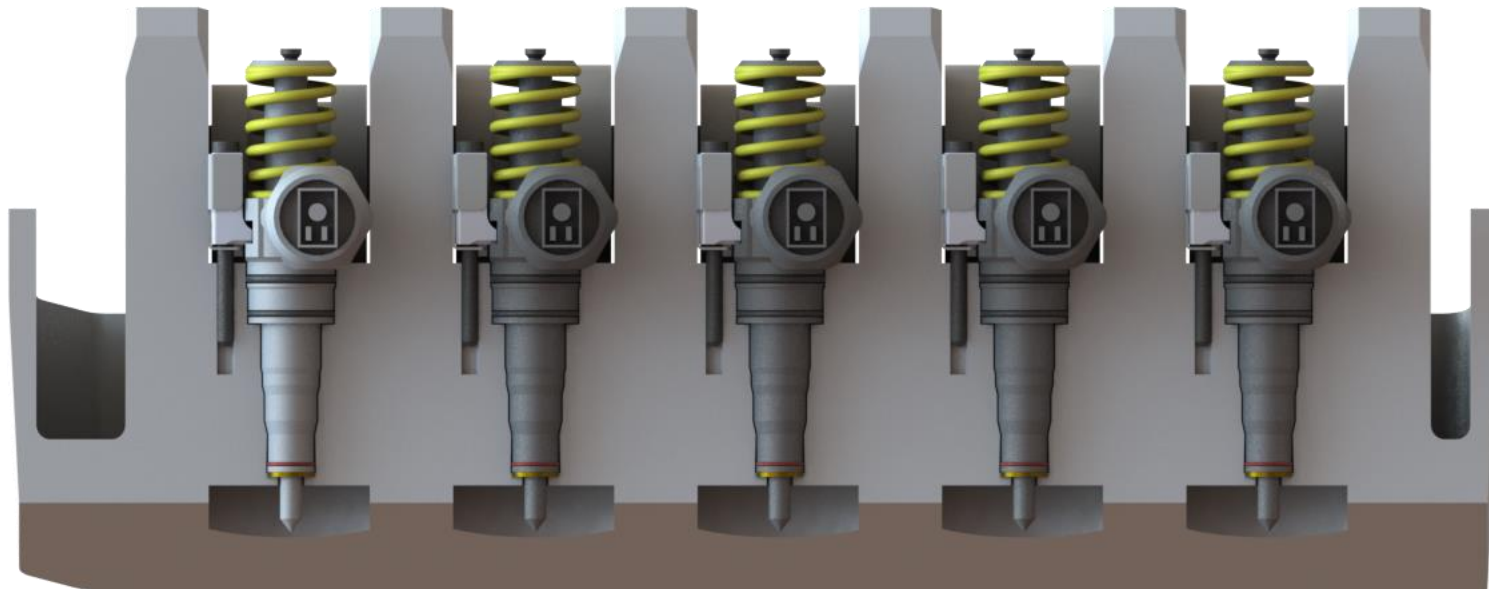


You can find matching assembly sets and all individual components under the following link:

[07eins Assembly Kits](#)

## Step 12: Insert injector screws

Tightening torque  
12Nm + 270°

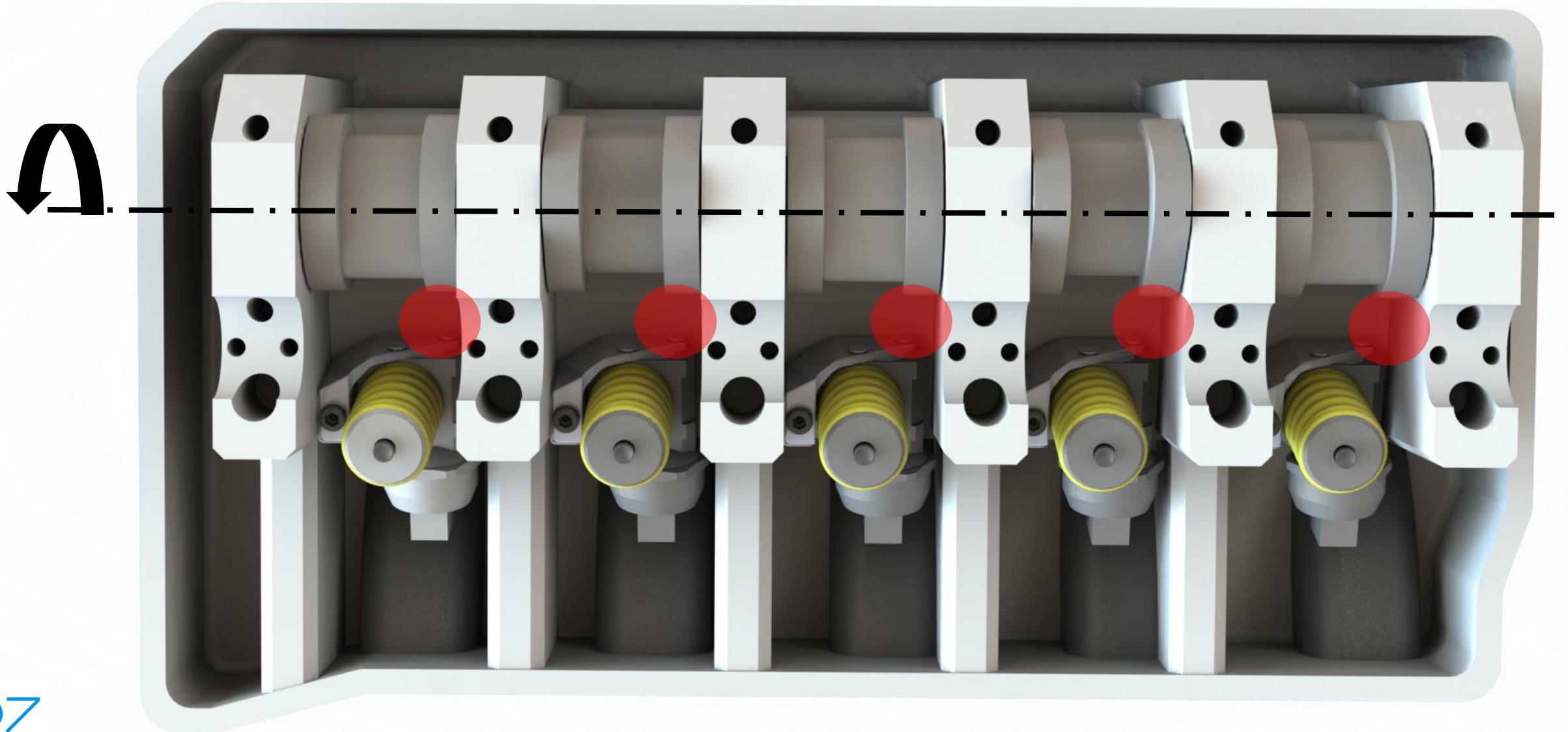


Symbolic installation state - position and rotation varies according to motor type

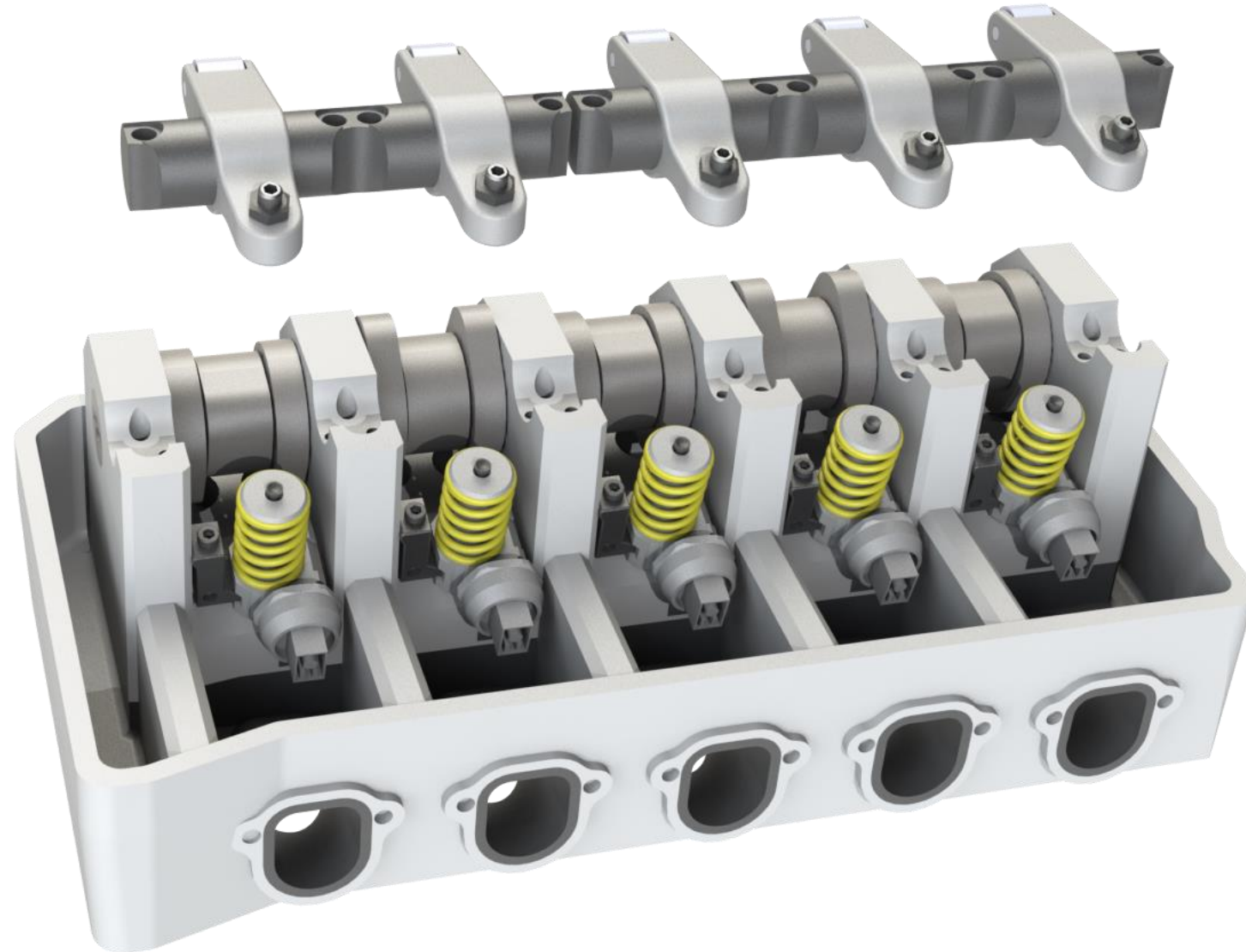


## Step 13: Spin the engine manually - check clearance

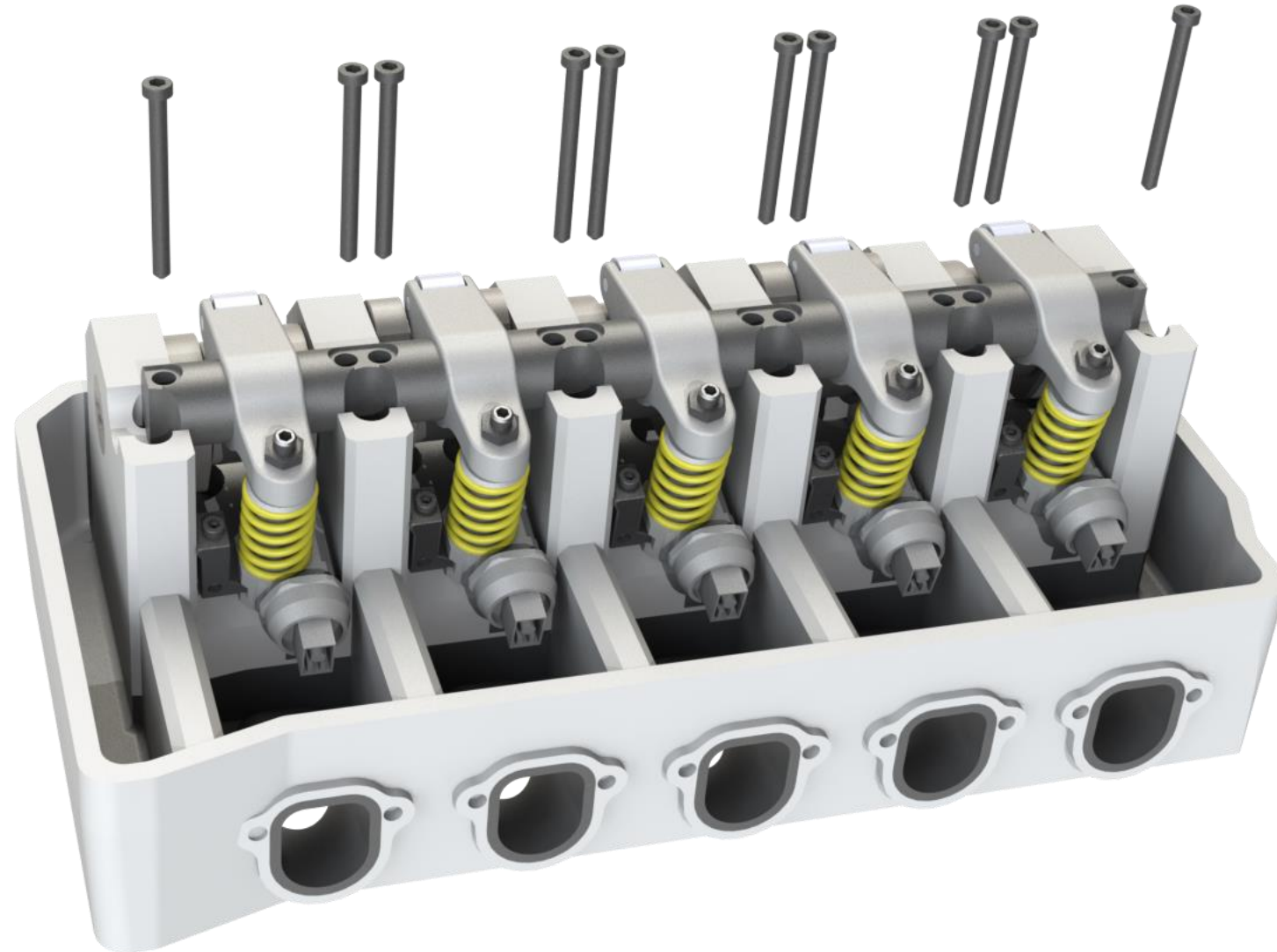
(Camshafts approach injector housing to <math><1\text{mm}</math> depending on engine type - watch out for replacement/sport camshafts with increased stroke!)



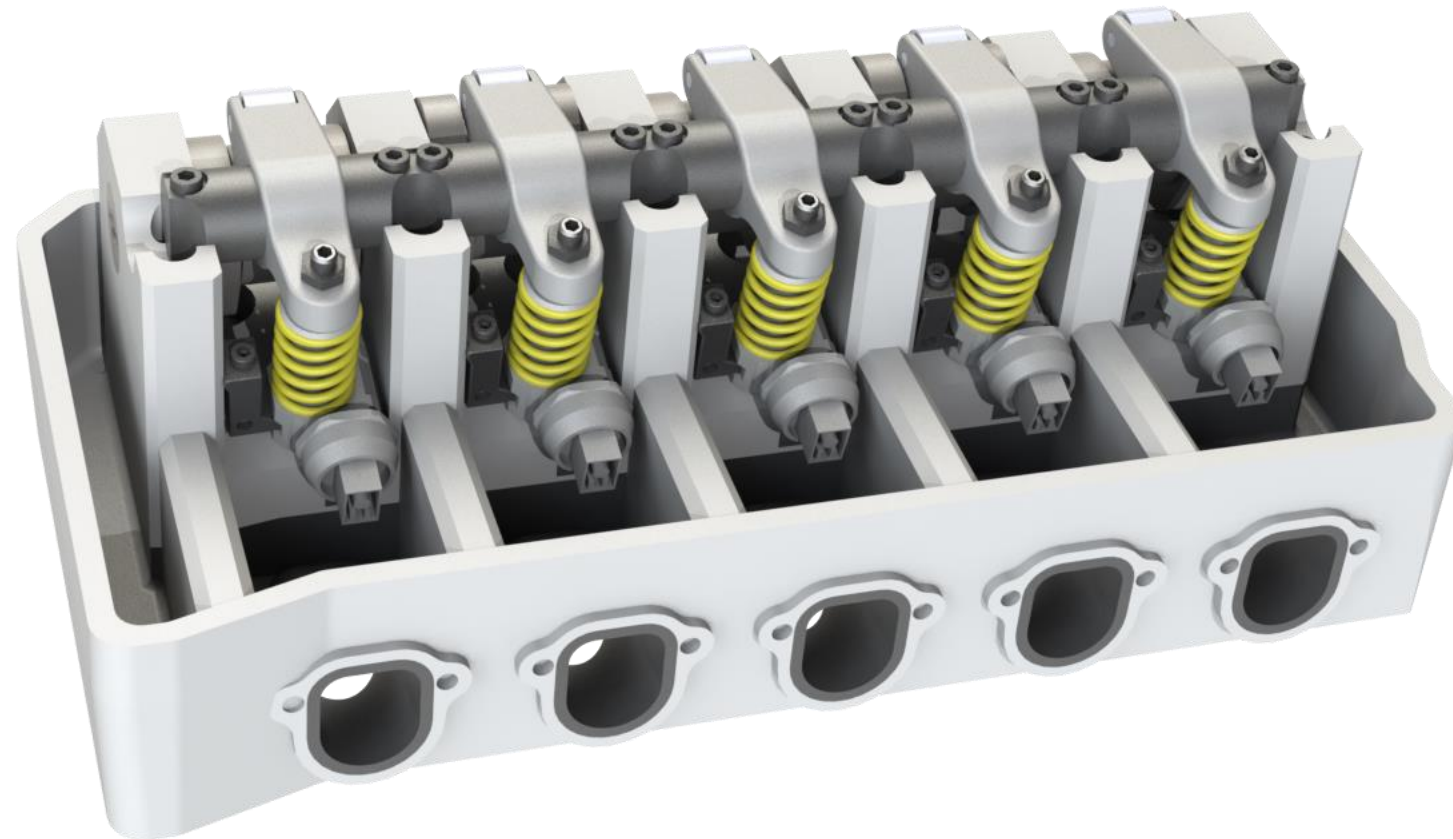
Step 14: Fit the rocker shafts



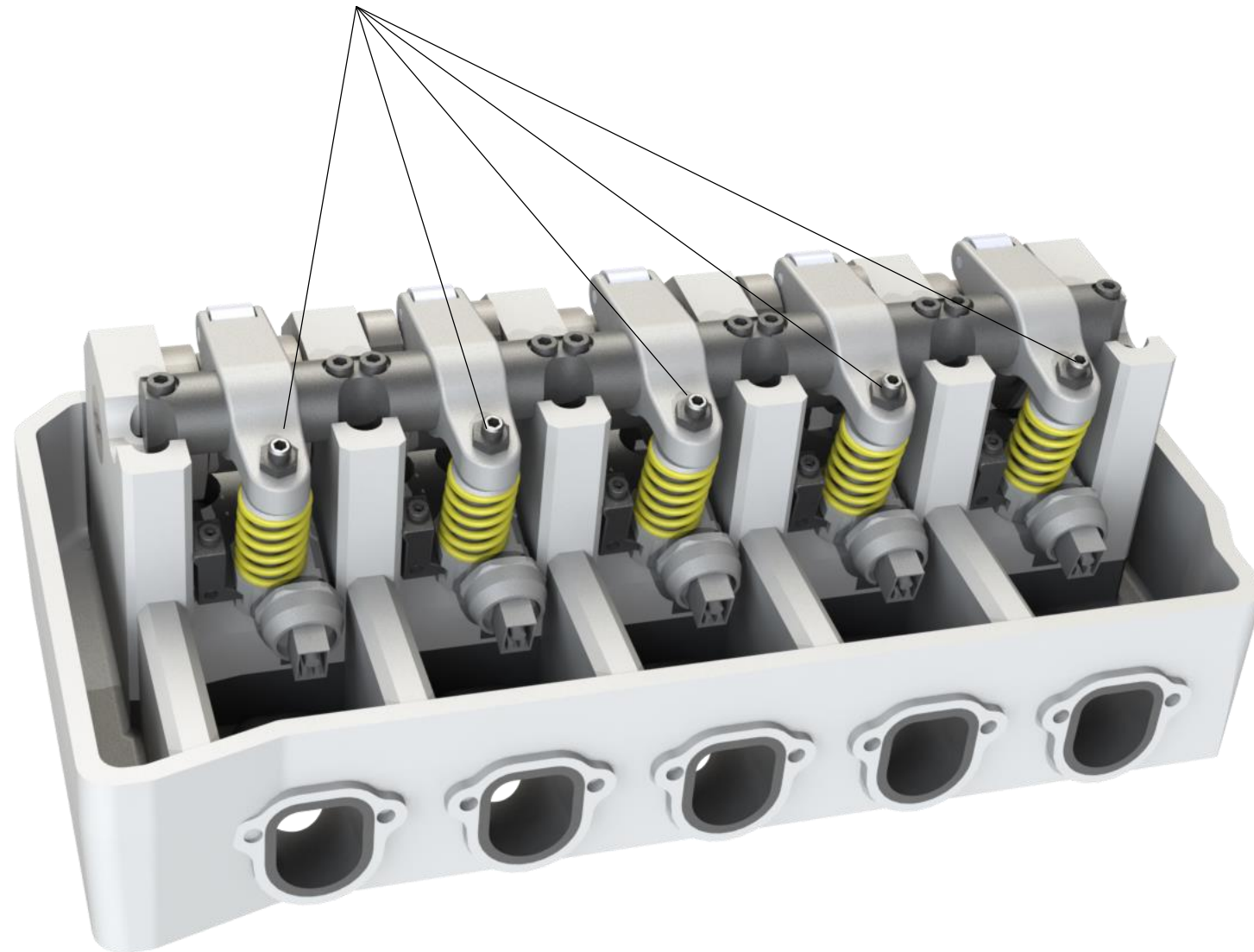
Step 15: Insert rocker arm shaft screws - screws must be replaced!



Rocker arm shaft screws tightening torque:  
20Nm +90°



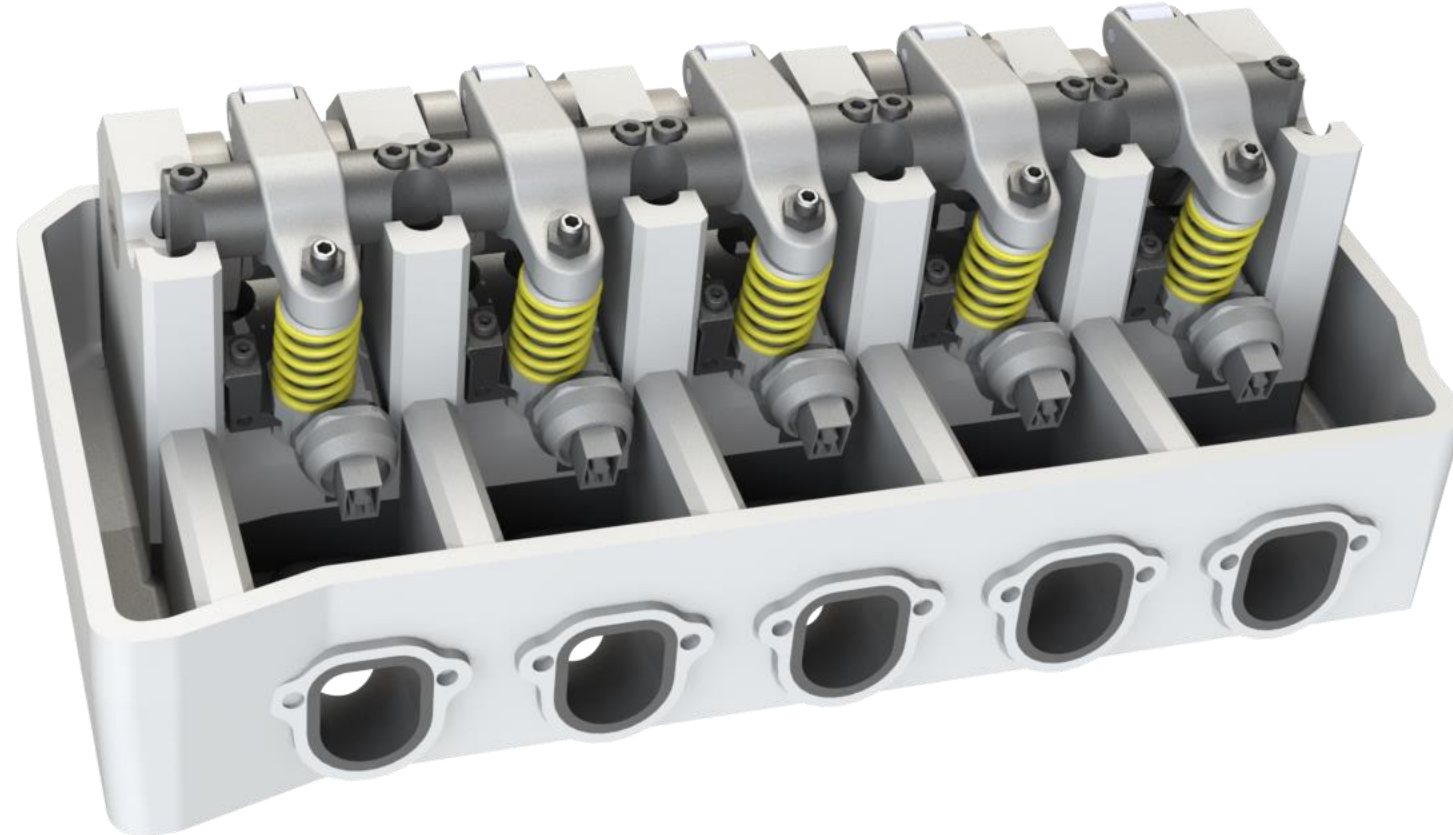
Step 16: Adjust the grub screws on the PDE stroke





Complete the vehicle:

- Fit electrical connecting strip
- Fitting the valve cover
- Fitting the EGR valve
- Fit intake manifold
- Remove service position





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