



## *installation instructions*



Adjustable strut bearings (uniball): **55514**

Errors and changes excepted. Current installation instructions for the respective product are also at [www.burkhardt-engineering.com](http://www.burkhardt-engineering.com) to find.

**Please note before installation:**

- The report must correspond to the technical data of the vehicle (axle load, vehicle type, &).
- The product must comply with the report and these installation instructions (Check marking on strut bearing 55514).
- The scope of delivery must be checked for completeness:

- 1. 2x strut mounts (left & right different)
- 2. 2x adapter sleeve lower (lower)
- 3. 2x adapter sleeve upper (upper)

- The table below is intended to provide an indication of the vehicles for which the Strut bearings are provided. However, this is not binding for the parts certificate, as identification is only legally permitted via the type approval number of the corresponding vehicle!

Manufacturer	Model	Designation
BMW	3rd	E46
BMW	Z4	E85, E86

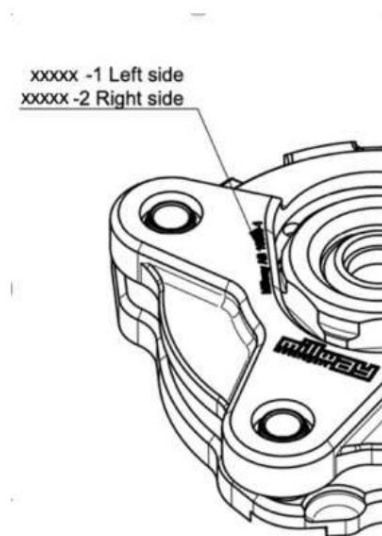
- Depending on the spring diameter and the variant purchased, there may be minimal deviations from the process described below, but the basic procedure remains the same.
- If you encounter any difficulties during installation, our support team is available during normal opening hours. Contact details can be found in the footer!

**Please note during installation:**

- The conversion may only be carried out by trained personnel using suitable tools
  - The following assembly instructions and the associated parts certificate must be strictly observed.
  - The locking nut of the piston rod must not be moved with an impact wrench under any circumstances.
  - The uniball bearing of the strut bearing for holding the piston rod must not be lubricated under any circumstances, as this can drastically reduce the service life of the bearing.

## The installation

1. Remove the front axle struts including the support bearings on both sides from the vehicle according to the manufacturer's specifications.
2. Secure the spring with a spring compressor and remove the existing support bearing from the damper tear down.
3. The spring plates (are reused) can remain on the spring 4. The adjustable strut mounts are not identical for both sides and must therefore be assigned to the correct side of the vehicle:



Compare Millway product number:

- Strut bearing with marking 1 goes on the left side (driver's side in left-hand drive vehicles)!
- Strut bearing marked 2 goes on the right side (passenger side in left-hand drive vehicles)!

5. Check that the original washer is on the spring plate and mount the adjustable strut bearing on the spring strut, observing the correct arrangement of the enclosed sleeves (different at the top and bottom). The tightening torque of the original lock nut can be found in the vehicle manufacturer's specifications. The following illustration should explain the scheme:



6. In the last step, the strut with strut bearing can be fitted, taking into account the tightening torque, whereby the camber should initially be set to a minimum, since it is easier from a mechanical point of view to increase the camber during later wheel alignment than to reduce it again.

reduce.



The nuts marked in red are used for screwing onto the vehicle dome (tightening torque: 25 Nm) and must be loosened to adjust the camber in order to be able to move the bearing laterally.

**Please note after installation:**

- The axle geometry must be measured after the strut mounts have been installed and adjusted if necessary, since a change in camber can also affect other parameters.

**Attention:** Camber values of more than 2° on the front axle are not permitted in road traffic

- It is important to ensure that the strut mount is moved using suitable tools and without using force, so that it is not damaged during the camber adjustment. The front axle may need to be relieved of load.
- All screw connections that had to be loosened to adjust the axle geometry must now be retightened using the tightening torque specified above.
- After installation, the vehicle must be presented to a technical service (such as TÜV, Dekra, etc.) with the enclosed parts certificate so that the correct installation can be verified.