



Parts and Performance for BMWs

Monoball FCAB Troubleshooting.

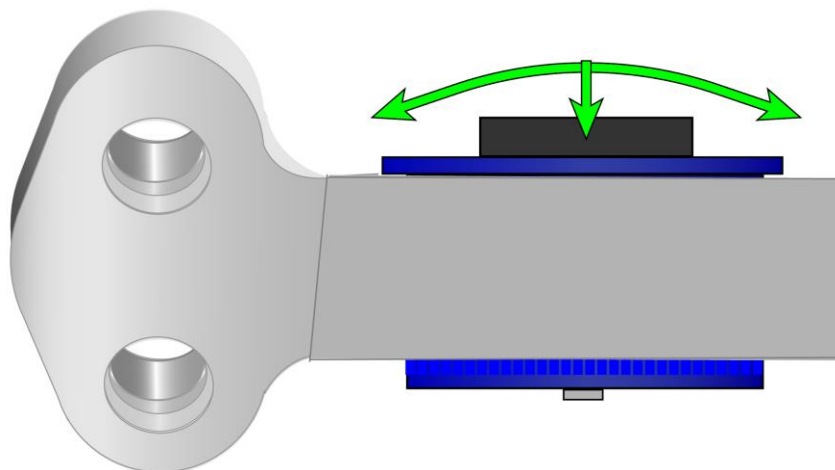
Since BMW used very forgiving rubber bushings in these locations there are quite a few tolerances that were not very tightly controlled. This can make the installation of the Turner Monoball bearings require a little more care on some vehicles. This troubleshooting guide may help resolve any potential problems associated with installation or adjustment errors, or fitment problems due to looser tolerances on mating components of these vehicles.

Creaking/Popping

Check the following in order:

Bearing Housing to Lollipop Housing

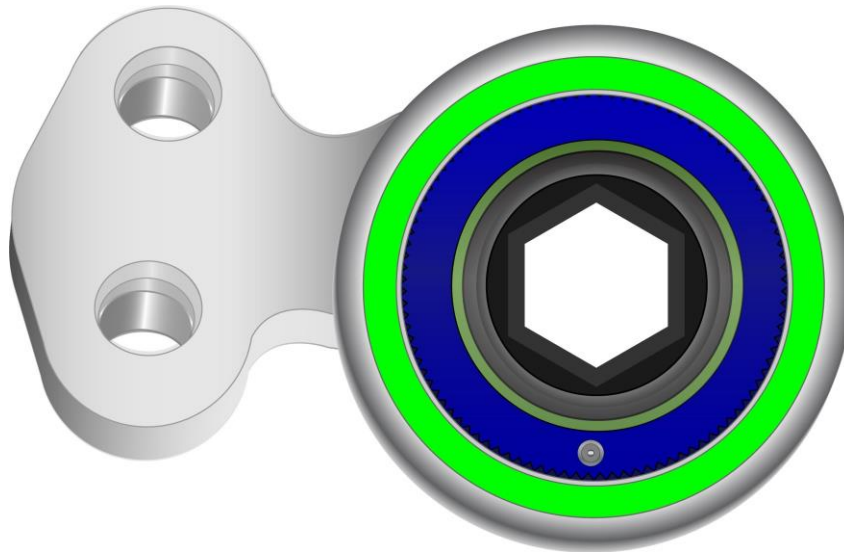
- When the bearing is pressed into the housing, but not yet installed on a control arm it must rotate freely in all directions.



- If the spherical bearing is binding after installation, press it back out, thoroughly clean all burrs from the OD of the bushing and bushing bore in the lollipop housing, then press the bushing back into place. In some cases, you may have to do this more than once, depending on variations in the tolerance of the bracket bore.

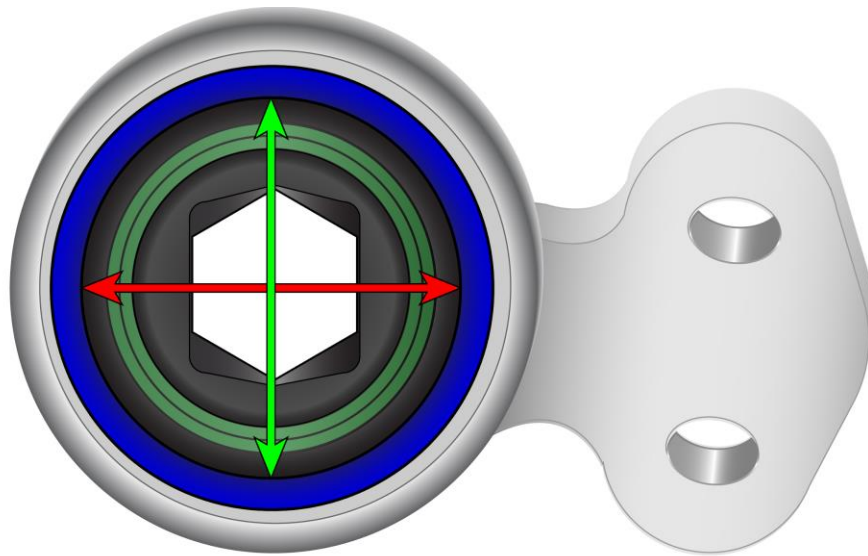
Bearing Insert to Control Arm

The bearing should require medium to light tapping with a hammer to be installed on the control arm. We do not recommend tapping on the bearing insert for install as that can push the insert out of the bearing as it goes on the arm. Instead, we prefer that the bearing assembly is tapped on from the lollipop housing as this assures that the complete assembly is fully seated. (Area shown in green)

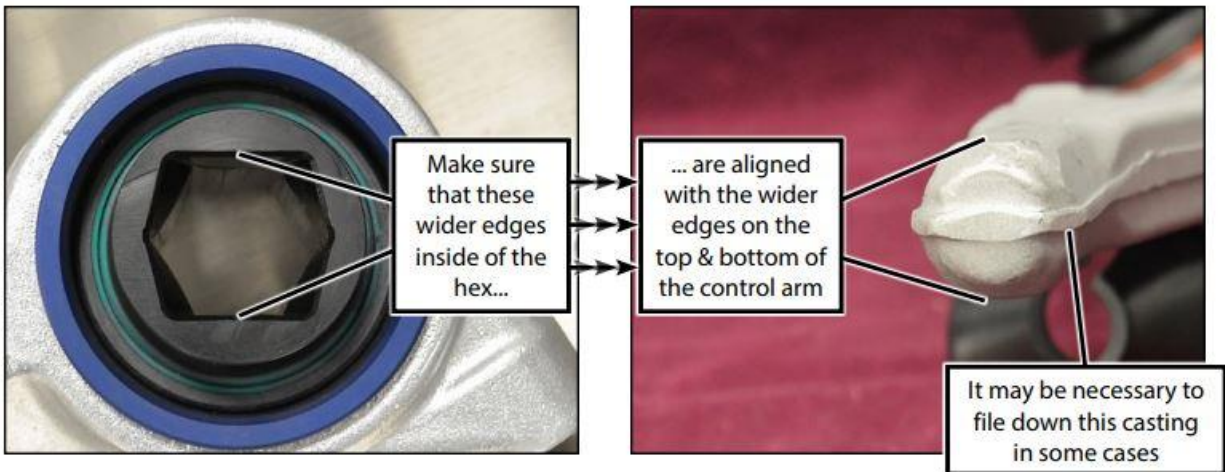


- When the bearing and housing are installed on the control arm the bearing's entire range of motion must remain. While uncommon, some control arms have been found to distort the insert and ID of the bearing, causing the bearing to lose complete spherical rotation.
 - If the bearing does not move freely by hand once installed on the control arm, the hex portion of the control arm will need to be altered. The areas that need to be modified can be located by finding the areas of the bearing that do not/ are difficult to move, these areas are causing the bearing ID to deform and will filed/ground down.

For example: If the bearing moves freely in the direction of the green arrow, but not in the direction of the red arrow, the hex portion of the control arm will need to be ground/filed in the flats/corners nearest to location of the red line.



- If the lollipop housing is very difficult/cannot be installed on the dowel pins of the body do not force it. Forcing the lollipop housing onto the dowel pins will thrust load the bearing and cause a creaking/popping noise. The most likely cause of dowel pin misalignment is a bearing that is not fully seated on the control arm. Instead, the bearing insert must be fully seated on the control arm to ensure easy alignment with the dowels on the body.
- On hex shaft applications such as the E46 M3, proper bearing insert orientation is critical to achieve full insert. Make sure that the hex insert is properly oriented with the hex of the control arm. The wider flats of the hex insert need to be aligned with the top and bottom of the control arm to fully seat.



- If the hex is correctly oriented and the issue still persists, the hex transition of the control arm may need to be filed/ground to allow the insert to be installed further.

Insert loose on control arm

In very rare cases we have found that the hex end of some control arms to be cast undersized. We have yet to find any newer stock that is undersized, so the assumption is that the casting dimension was updated to the current slightly larger size. We do not recommend wrapping the hex of the control arm to make these fit tighter. Instead we recommend newer control arms, please contact Turner customer service if this is the case.

We have found these to be the most common tips to aid in a smooth install. If you have any other issues please contact Turner customer service.