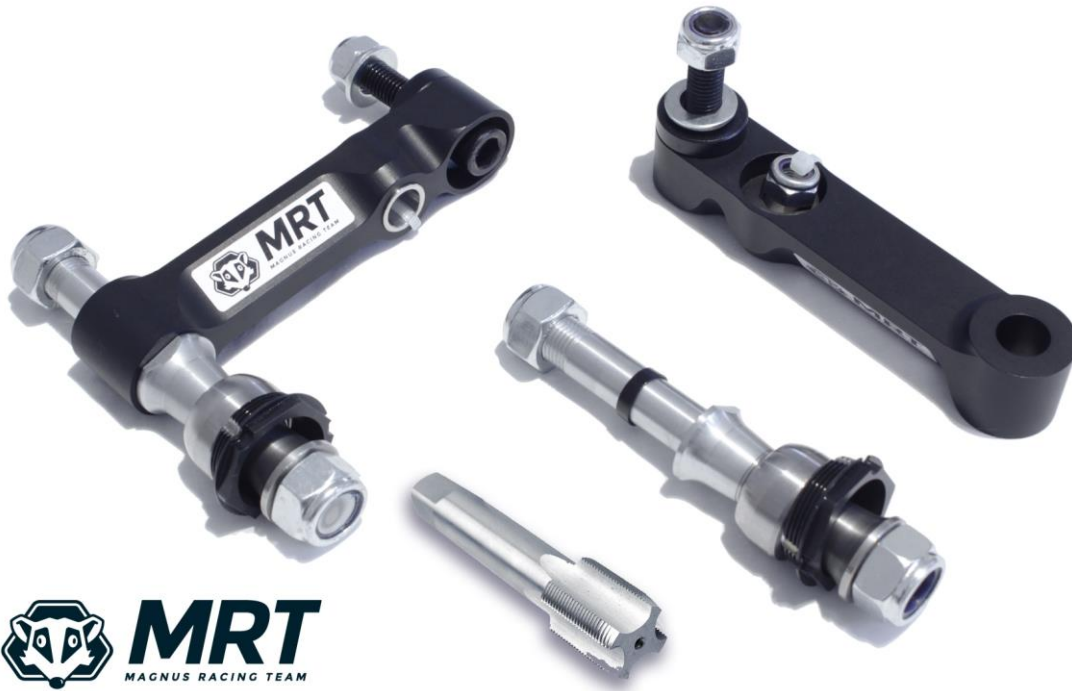


Instructions

MRT Engineering roll-center/bump steer/angle kit BMW E46 M3 / Z4M

Kit includes:

- 2x Outer joint
- 2x Steering adapter
- 1x M35x1,5 thread tap
- Mounting hardware as shown in the picture



Notes:

- Fits only BMW E46 M3 / Z4M OEM control arms with 33mm outer joint bore
- Minimum wheel size 16"
- Steering reducers highly recommended (see illustration on the last page)
- Racing part with NO warranty, not for use on public roads
- Manufacturer disclaims all liability for direct, indirect, incidental or consequential damages, including damage or loss of equipment, cost of purchase or replacement of goods, accident or injuries, or claims of the purchaser that result from the use of the part

Tools and accessories needed:

- 10mm allen key
- 17mm, 19mm, 24mm wrench and/or socket
- Torque wrench
- Angle grinder for removing OEM outer joint
- Blue thread locking adhesive

Torque specs:

- M12x1,5 tie rod nut 45Nm
- M12 socket cap screws 100Nm
- M12, M16 lock nuts 100Nm
- M35x1,5 retaining insert 120Nm

Installation:

STEP 1.

Remove old control arm assembly

- Unfasten tie rod
- Remove control arm

STEP 2.

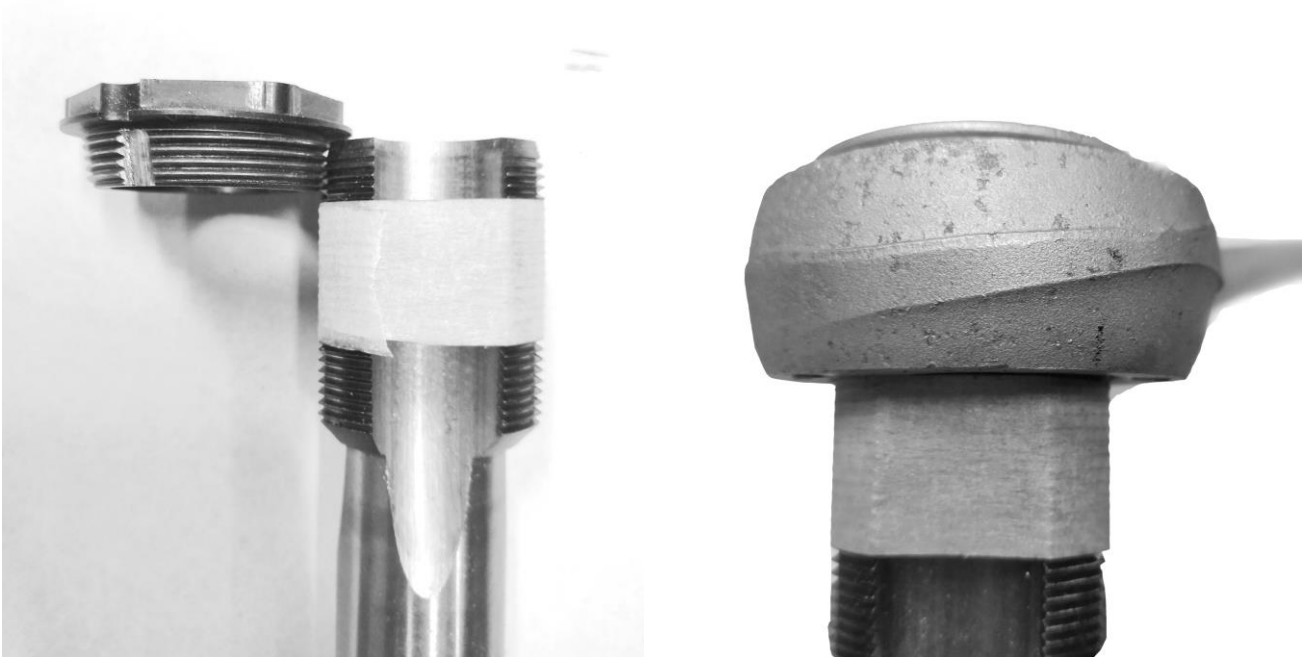
Grind off the outer joint retaining part on the bottom of the control arm

- Push the original outer joint out and clean the bore

STEP 3.

Tap the control arm bore with M35x1.5 thread tap

- Chamfer the bore before tapping
- Tap only for ~7mm (length of the retaining insert) so that the insert tightens into the bore
- Make sure the insert will lock the bearing
- Make final installation using thread locking adhesive on both bearing and the insert!**



STEP 4.

Install tie rod into the steering adapter

- Clean the tie rod taper and thread
- Put the washer convex side up
- Tighten the tie rod fine thread lock nut to 45Nm



STEP 5.

REMOVE ANY BUMPS BOTTOM OF THE STRUT MOUNTING SURFACES

- Install the 16mm pin with adapter into the strut and place the M16 nut on top



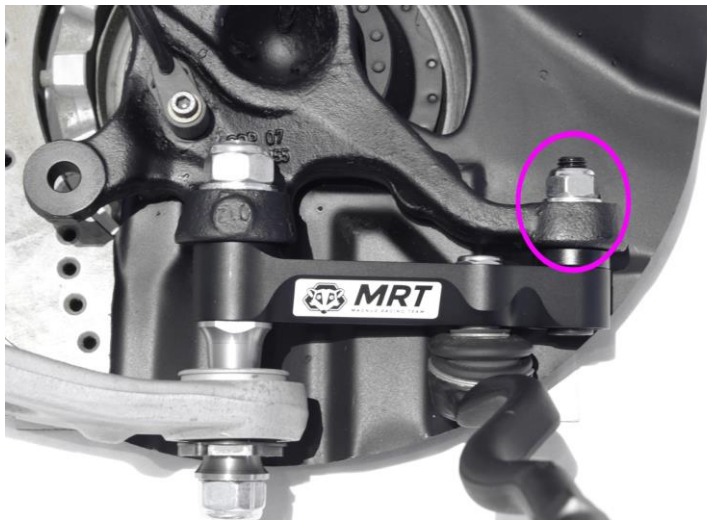
STEP 5.5

Insert the spacer between the strut and steering adapter



STEP 6.

-Insert the foremost M12 bolt and locknut with washers on both sides, **DO NOT fully tighten**



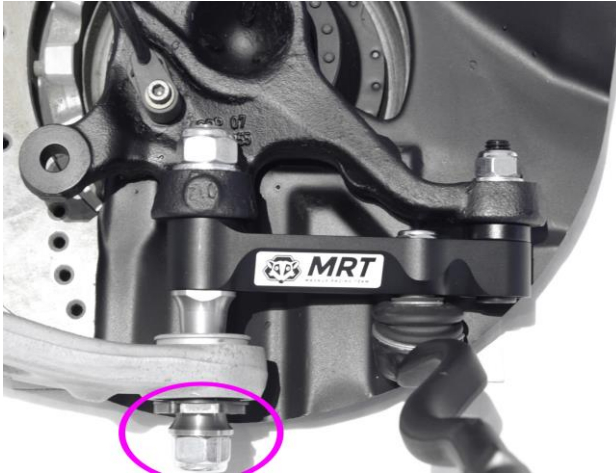
STEP 7.

Drop the assembly through the control arm outer joint



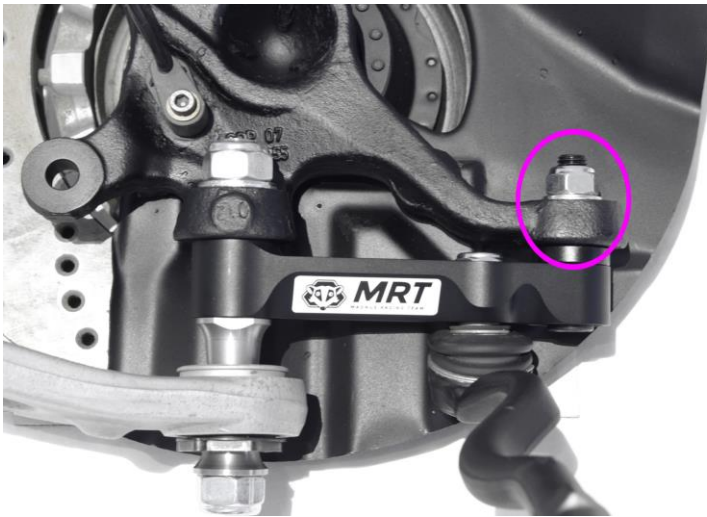
STEP 8.

Insert the spacer and locknut on bottom of the joint, tighten both M16 locknuts to 100Nm



STEP 9.

Tighten the foremost M12 bolt and locknut to 100Nm



STEP 10.

Check that all bolts and nuts are set properly, re-check the torque values!

STEP 11.

Mount control arm inner and rear ends back to the subframe/chassis. Fasten sway bar.

-These steps have shown to be effective way to install the kit

NOTE:

- Remember to check bolt tensions after first 100km/miles!
- Check bolt tensions occasionally
- Check adapter kit condition before and after every trackday
- Regular check, cleaning and maintenance can increase steering adapter kit lifetime significantly
- If you have any questions, problems etc, please contact us:
info@mrtengineering.fi

Steering reducer illustration

Use any tube/washer/spacer that fits over the steering rack axle and stops against the end seal

Reducer outer diameter smaller than
ID

Reducer inner diameter same as shaft
OD

Reducer length depends of the wheel
setup

