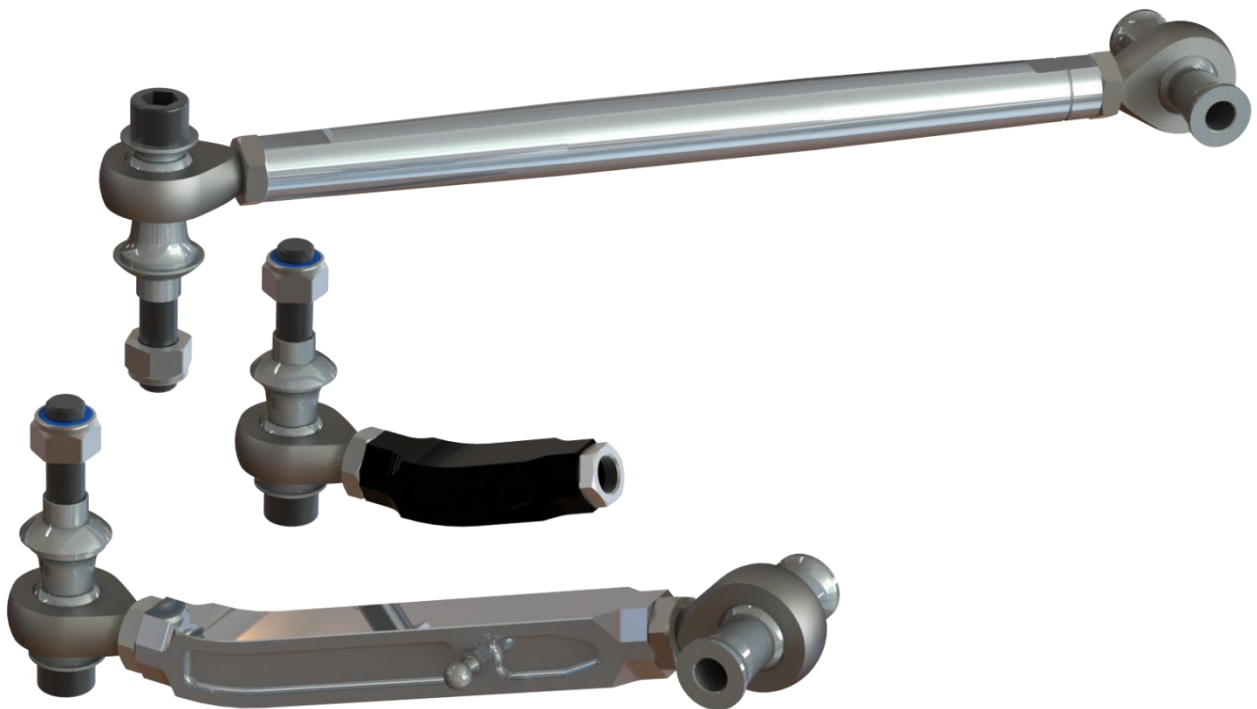


MRT-20004 RACE front control arm kit, BMW E8X / E9X

Kit content:

- 2x Control arm and / or Tension arm and / or Tie rod (pre-assembled)
Mounting hardware (as in the picture)



Disclaimer:

- *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 / equipment required for installation:

- 12mm hex key
- 18mm / 22mm / 24mm wrenches or sockets
- Torque wrench

Torque rates for the bolts / screws / nuts:

- | | |
|-------------------------------|-------|
| • M6 ball joint | 10Nm |
| • M14 nyloc nuts / hex bolts | 120Nm |
| • M14x1.5 / M16x1.5 lock nuts | 100Nm |

Important notes:

- **Minimum recommended wheel size 17"**

Installation:

1. Remove old control arms and / or tension arms and / or tie rods

2. Set desired control arm width. Base lengths as below:

- a. Control arms 290mm
- b. Tension arms 405mm
- c. Tie rod M16x1.5 rod end at shortest position, length must be determined by toe re-alignment

3. Adjustment

a. Track width / camber

Track width can be adjusted from control arm M16x1.5 rod ends that connect to subframe and spindle / knuckle, adjustment also affects camber, **minimum thread engagement 1xD**

b. Caster / wheel position

Tension arm length can be adjusted while in the car by loosening the lock nuts, **tension arm end marked with a groove is LH thread whereas the other end is RH thread, minimum thread engagement 1xD**

c. Toe in / out

Tie rod M16x1.5 rod end can be adjusted for increased track width, **minimum thread engagement 1xD**. Normal adjustment is made from tie rod inner end

d. Geometry properties can be adjusted via different length spacers on the outer end:

i. Control arm end height setting affects roll-center:

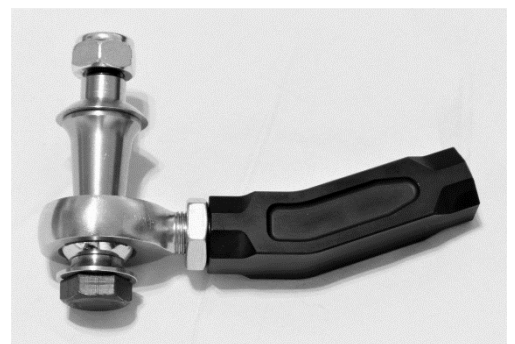
Longer spacer between spindle / knuckle and rod end gives lower roll-center and vice versa. Medium length spacer equals original geometry

ii. Tension arm end height affects anti-dive / weight transfer:

Longer spacer between spindle / knuckle and rod end gives front more weight transfer and vice versa. Medium length spacer equals original geometry

iii. Tie rod end height affects bump steer:

Optimal geometry must be measured. Medium length spacer equals original geometry



4. After all adjustments torque all fasteners

See torque values on Page 2

5. Remember to check and inspect all fasteners after first 100km and occasionally after every 500km until the fasteners have set properly. Repeat inspection before and after every trackday

If you have any questions, feedback or other comments regarding the kit please reach us via email / WhatsApp or social media direct message:



MRT Engineering



mrtengineering



+358 45 783 636 66



info@mrtengineering.fi

If you have problems / issues with the kit, please state where you have bought the kit, original Order No. and / or exact model of the kit you have / you supposed to have to ensure we can give you an accurate response.

All spare parts are available on our webshop and dealerships around the world:

<https://mrtengineering.fi/collections/spare-parts>

<https://mrtengineering.fi/pages/dealers>



MRT
Engineering

MRT Engineering Oy, FI31033454
Kuukuja 12
33420 Ylöjärvi, Finland
info@mrtengineering.fi
+358 45 783 636 66