Step-by-step

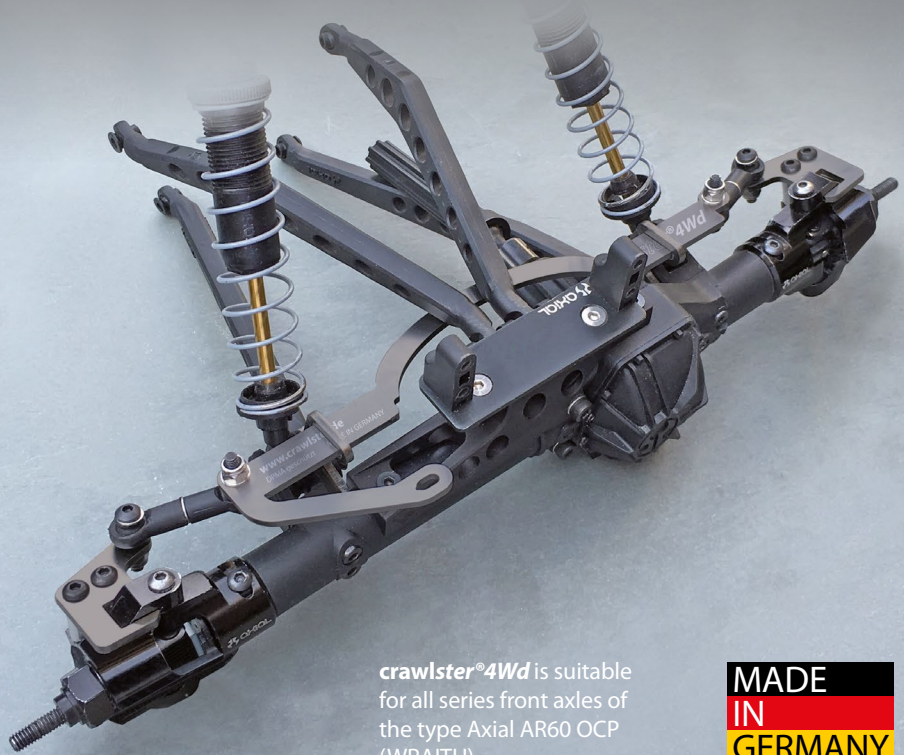
Please follow these steps…

crawlster®4Wd AX

The WRAITH dimension steering system.

The assembly of the crawlster®4Wd steering system on AXIAL knuckles

 # AX80061 (standard)
 # AX30760 (tuning)



crawlster®4Wd is suitable for all series front axles of the type Axial AR60 OCP (WRAITH)

MADE IN GERMANY

Step 1

Preparation

Dismantling of the complete front axle, wheels, steering and steering linkage, damper & servo connectors, servos themselves, knuckles, C-hubs, and upper and lower links...

Step 2

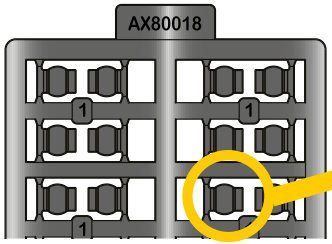
Preparation

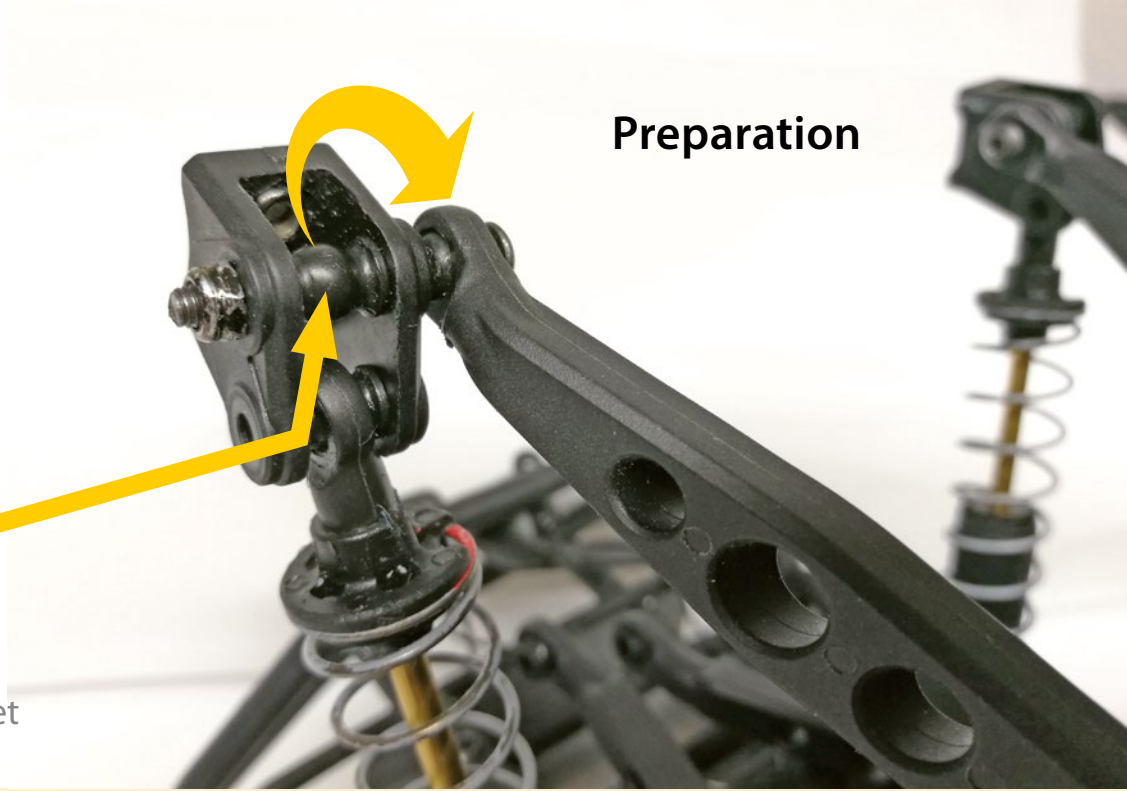
Make a small indentation of about 4 mm (from front right) in the central ridge of the differential housing

Step 3

Preparation

AX80018**



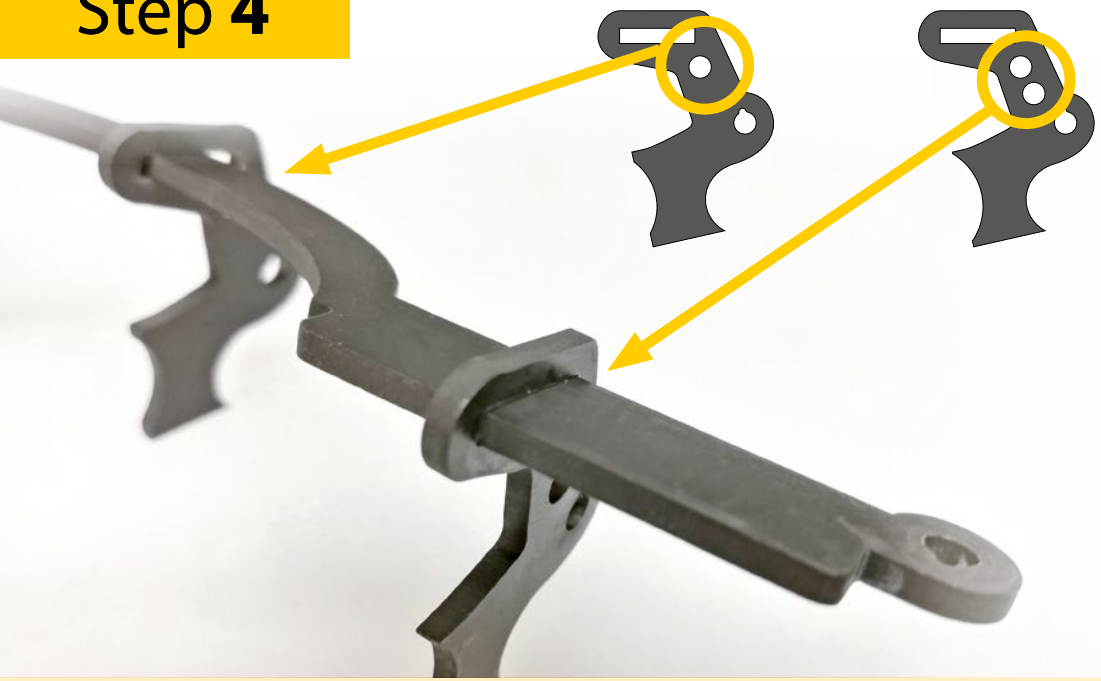


* incl. in crawlster®4Wd set
** incl. Axial RTR/KIT

Remounting the front / bottom link inwards,
with flathead screw M3x25* (from inside), spacer AX80018** in between and locking nut M3** (outside) to achieve the necessary larger steering angle on the inside wheel

Step 4

Steering System



CAUTION

Slide 2 steering bearings on the steering bracket from right to left
– first the bearing with 1 mark,
– then the one with 2 marks

Step 5

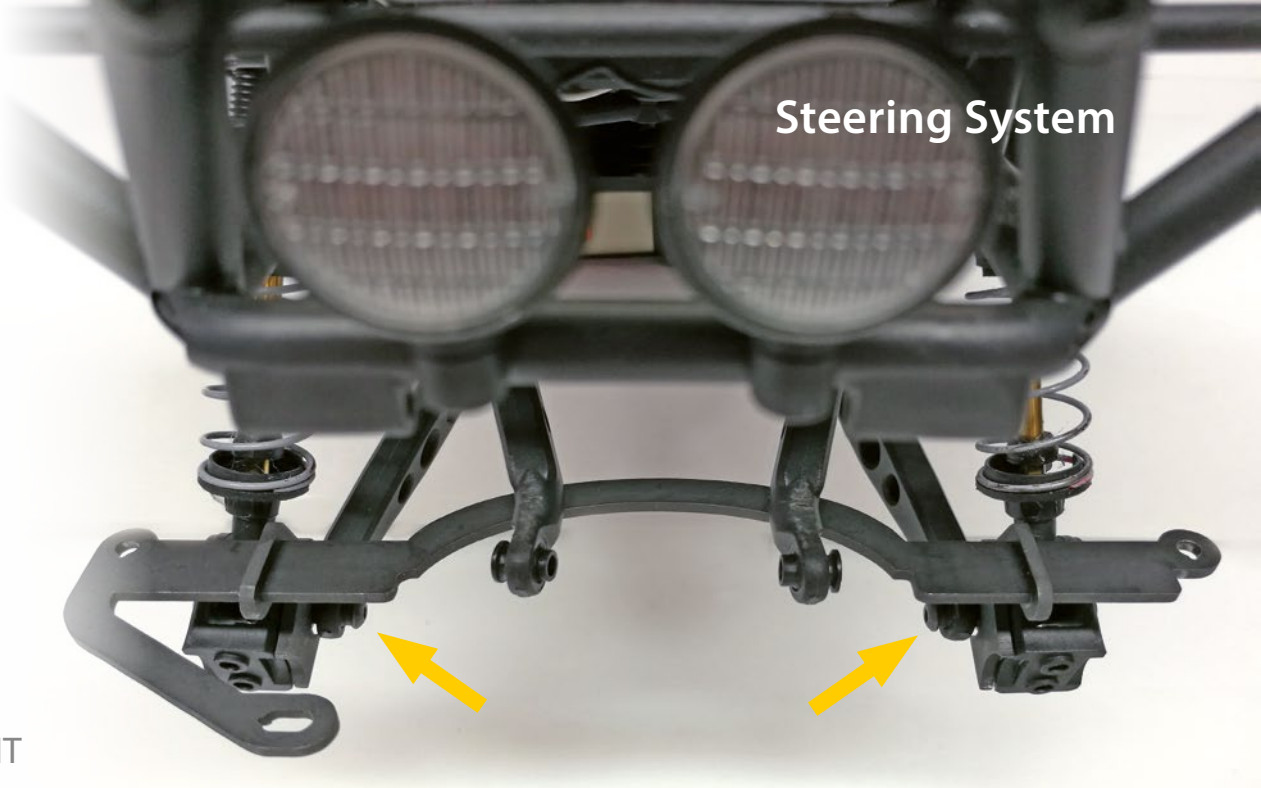
Steering System

CAUTION

Perfect sliding arises only with Step 14 !

Step 6

Steering System



** incl. Axial RTR/KIT

<u>Loosely</u> preassemble the two steering bearings of the assembled crawlster®4Wd steering system with existing pan head screws M3x20** to the damper housings.....

Step 7

Steering System

** incl. Axial RTR/KIT

„...from the inside through the shock absorbers to the outside“
with locknut M3**

Step 8

Axle / Knuckles

- **plastic** C-hubs = select **1st notch**

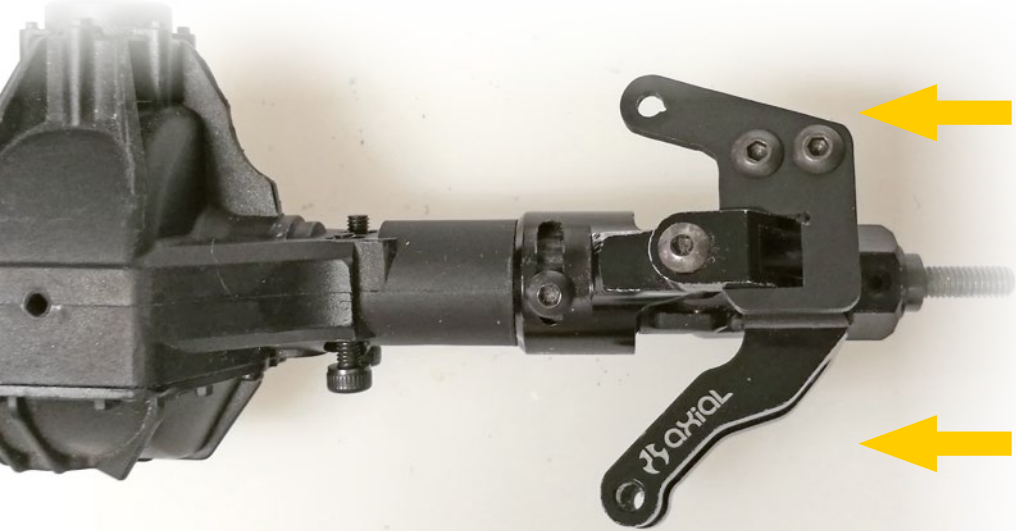
- **aluminum** C-hubs = select **2nd notch** (see fig.)

Positioning / fixing the C-hubs

CAUTION

Step 9

Axle / Knuckles



crawlster®
4Wd knuckles links
„to the back“

AX-knuckle arms
„to the front“

Mount each AX-knuckle swapped right / left
(knuckle arms at the front) on the C-hub carrier.

Step 10

Axle / Knuckles

* crawlster®4Wd set

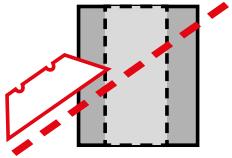
...using different-/bedlock wheels,
possibly slightly rework the knuckle links

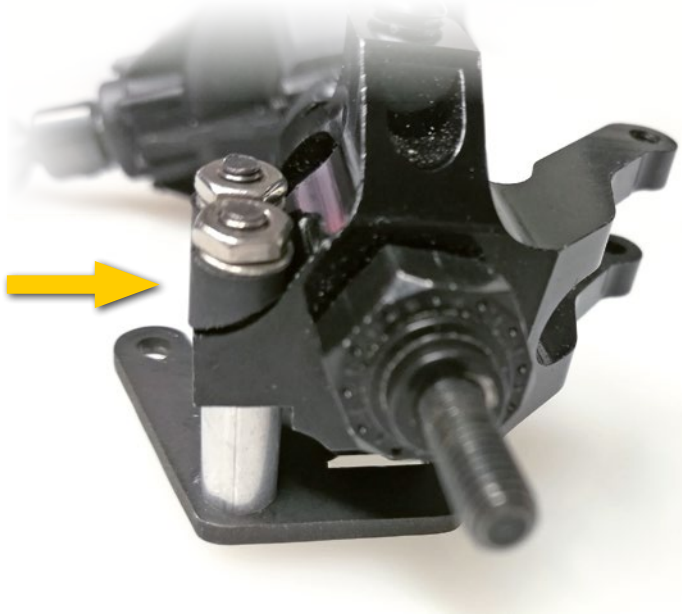
<u>Screw</u> the knuckles links with each of the 2
10 mm* spacer sleeves with M3x25* pan head screws
onto knuckles (AX30760 / AX80061)…

THX
Gery ;-)

Step 11

Axle / Knuckles

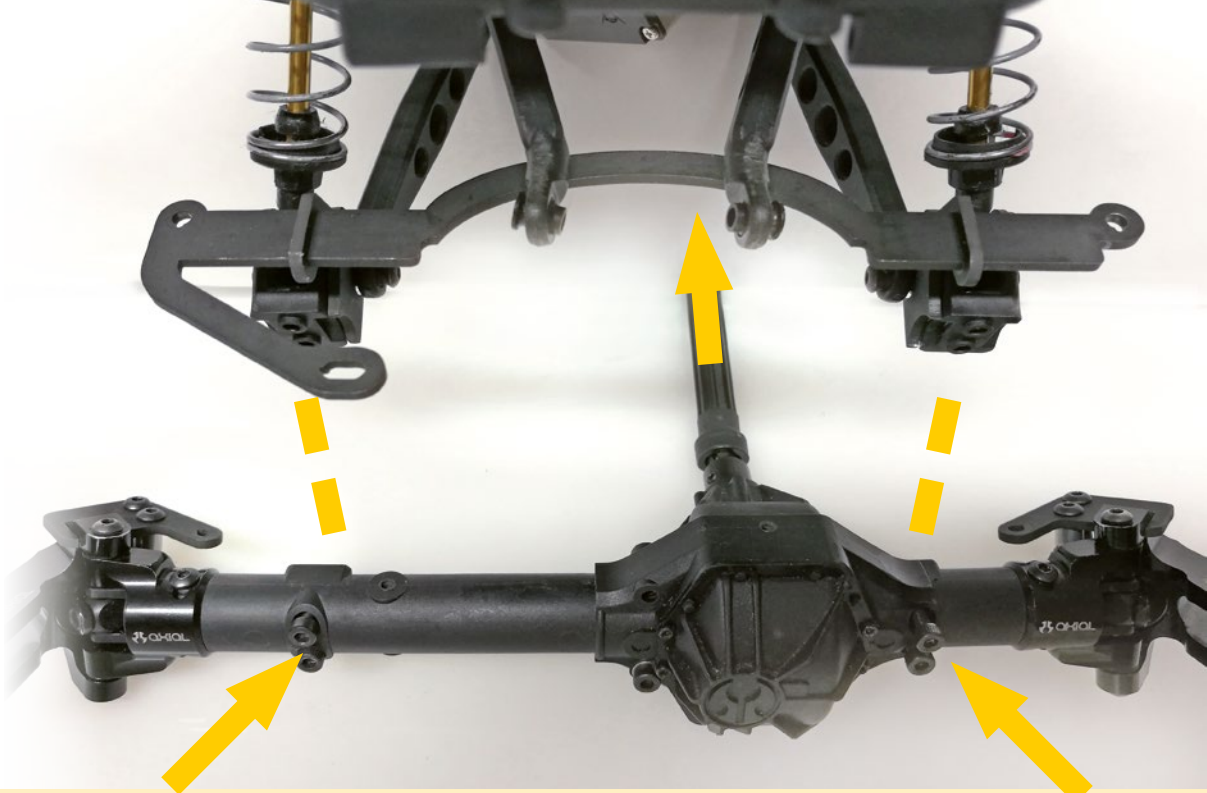




* crawlster®4Wd set
** incl. Axial RTR/KIT

....and secure behind with 45° oblique spacers (diagonally separate 6-7 mm* spacers from the KIT/RTR) and with washers* + M3* nuts.
Use thread lock !

Step 12

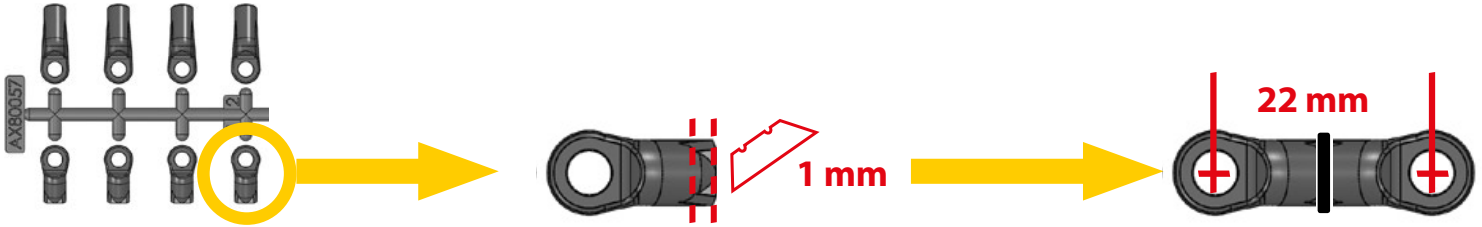


Take the axle with the exchanged knuckles and crawlster®4Wd knuckle links **and fix them** onto the shock-absorber connectors which have been prepared with the steering system. ***Remember assembling the drive shaft !***

Step 13

Axle / Knuckles

AX80057**



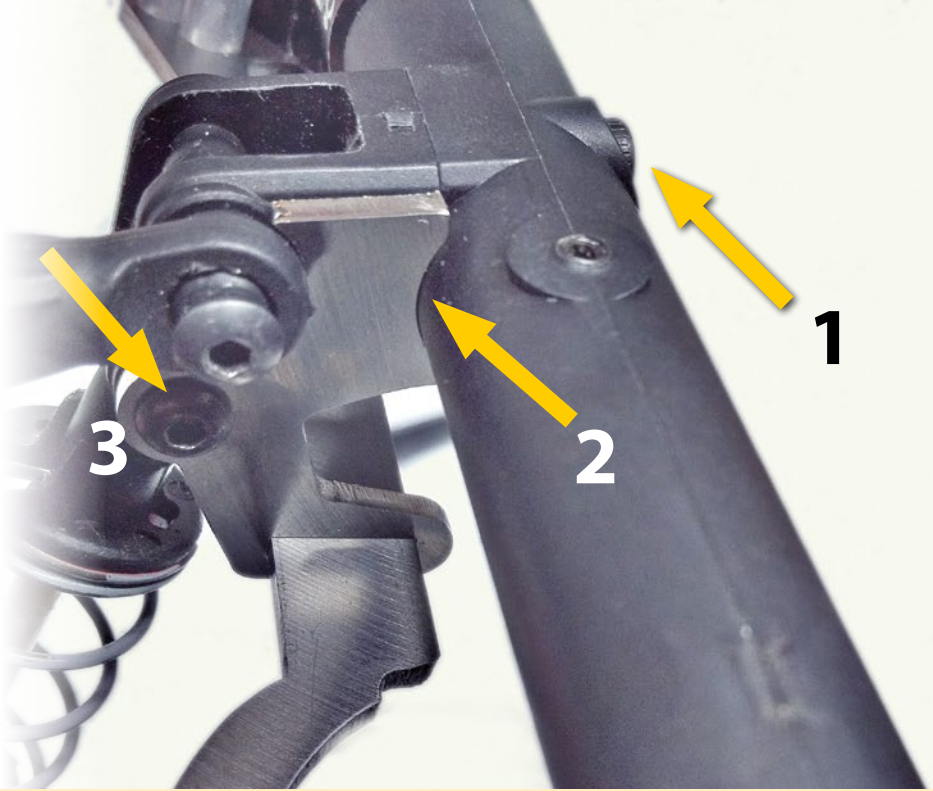
Make sure of equal dimensioning / total length
when using aluminum/steel rod ends

* crawlster®4Wd set
** incl. Axial RTR/KIT

Prepare 2 tie rods from 2 x short rod ends (from AX80057)**, shorten by 1 mm, connect with the 12 mm* threaded pin + O ring* and screw together giving a total length (eye-to-eye) of exactly **22 mm**

Step 14

Mounting

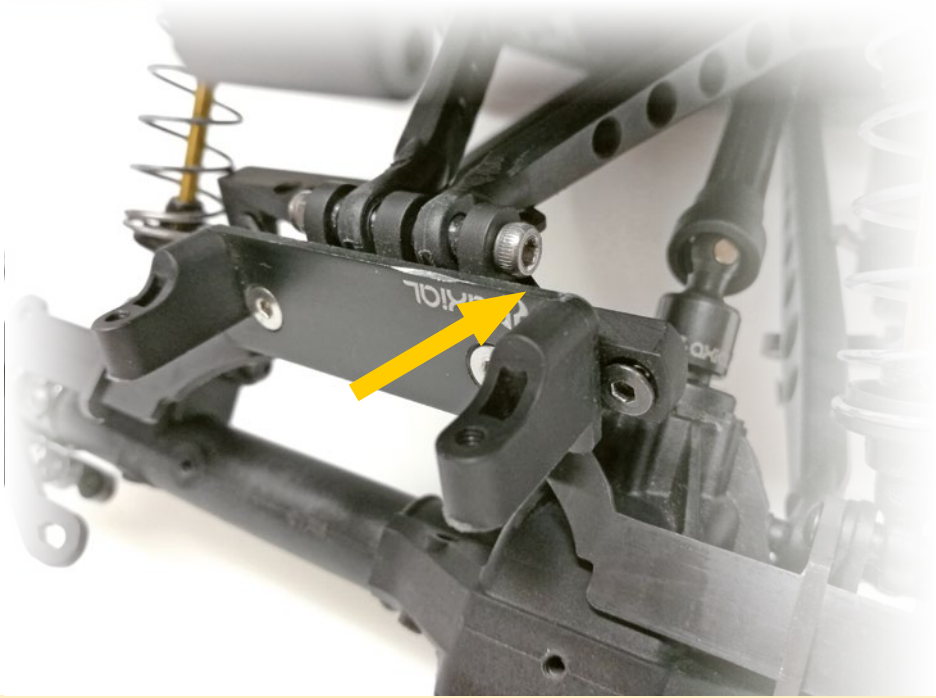


CAUTION

Ensure that the steering bearings **fit seamlessly**
when tightening the 4 front screws (1) **to the axle (2)** and align parallel.
***Then firmly tighten the screw* (3)**

Step 15

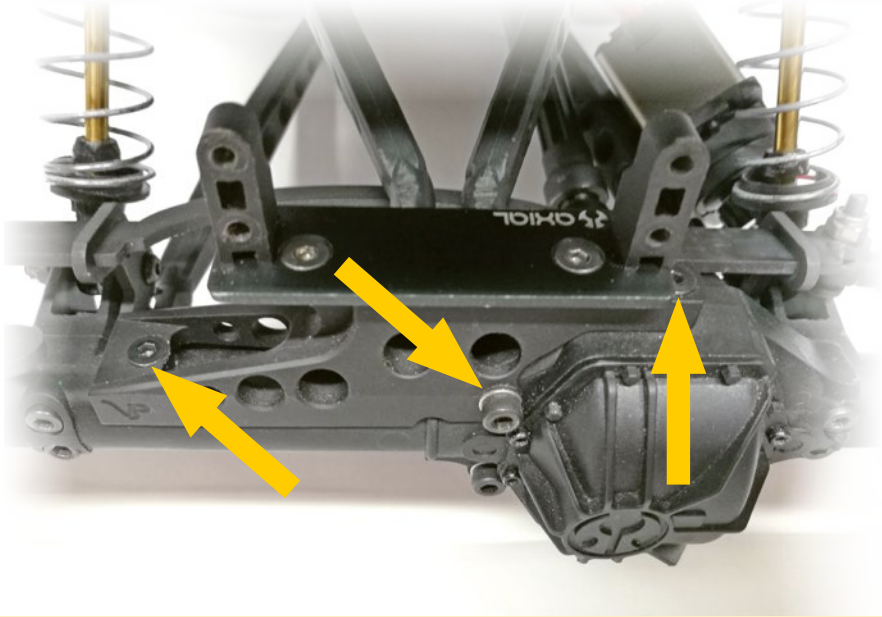
Mounting



Fix the front upper links to the servo mount...

Step 16

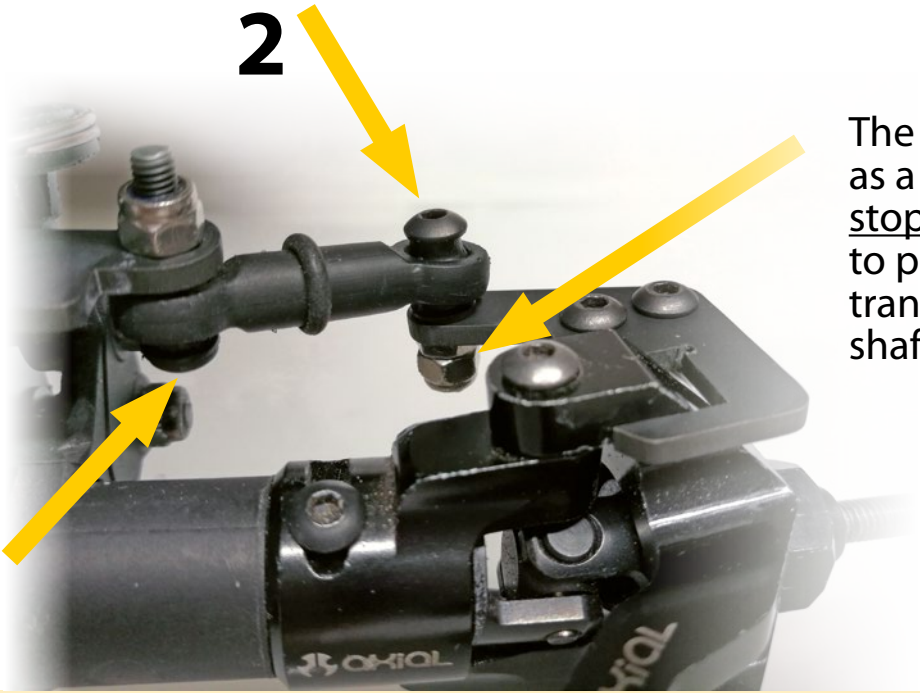
Mounting



...**and fix the servo mount** onto the prepared axle

Step 17

Mounting



The latter serves as a adjustable stop/angle limiter to protect the transmission shafts

* crawlster® 4Wd set

Tightly screw the **hinged brackets** with M3x15* flathead screw from below **(1)** onto the steering bracket – lock with lock nut M3* – and on the knuckle links with screw M3x15* from above **(2)**; tighten with counternut* plus locknut* below.

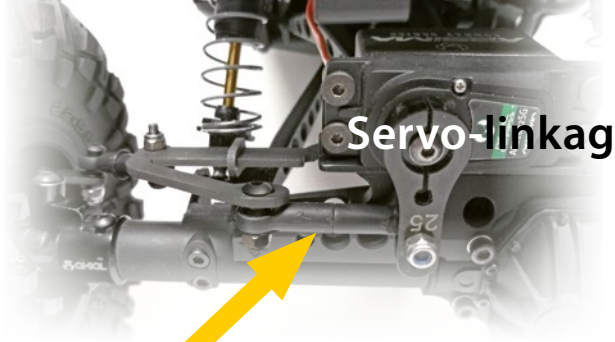
Step 18

Mounting

DRYFLUID EXTREME

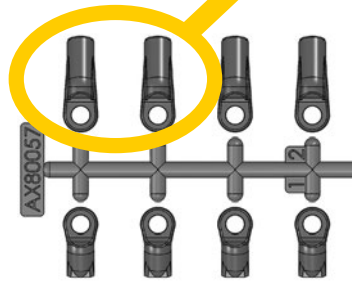
Dryfluid Extreme is recommended for all crawlster® steering systems – the high-performance lubricant for all movable elements such as shafts, joints etc.

Step 19



Mount the **steering servo** rotated 180° degrees – servo axis „left“ (viewed from the front)

Servo horn 20 mm – in the case of aluminum – possibly sand on the back to ensure sufficient freedom of movement

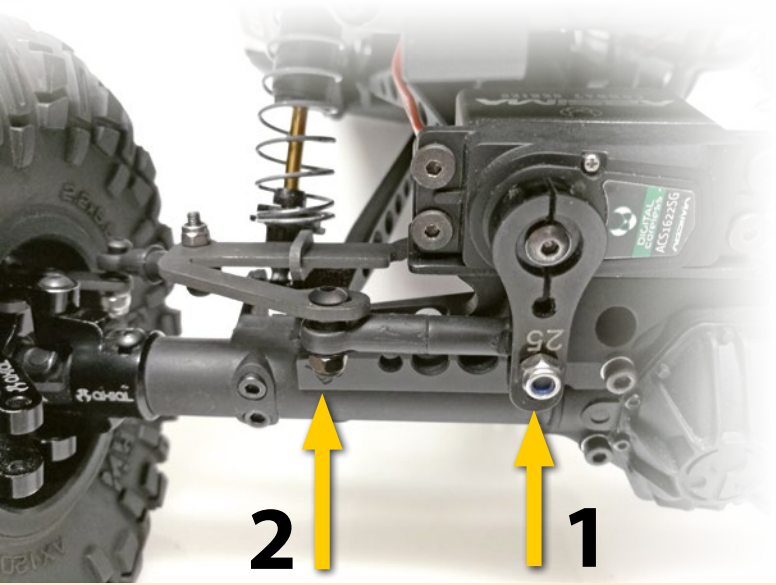


AX80057**

* crawlster®4Wd set
** incl. Axial RTR/KIT

Assemble the servo linkage
using 2 x long rod ends (of AX80057)** connect with threaded 12 mm* pin and screw together

Step 20



Servo-linkage

Servo-Position
electrically **(0%)** and mechanically set to neutral

Reverse movement direction of the steering servo at the transmitter if necessary

* crawlster®4Wd set
** incl. Axial RTR/KIT

Fix the articulation on the Servo from behind **(1)** and on the steering bracket from above **(2)**, each with 1 flathead screw M3x16* + lock nut M3*

...done !

crawlster® 4Wd

The WRAITH dimension steering system.

Recommended: superfluous steering arms can be cut off

If the crawlster®4Wd steering system has been properly assembled and the transmitter is set at 100%, the wheels should have reached their limit of movement, ie. the inner wheel should have stopped a few mm from the front/bottom links, the outer wheel on the stop of the front steering arms. Slightly adjust the movement limits if necessary.