Work instruction:
Maintenance of the hydraulic fixture

Preliminary remark

The hydraulic system of the articulated stand develops high forces. Therefore, the hand-wheel should only be tightened as much as necessary to avoid damage to the seals.

Preconditions for proper function and maximum clamping force are:

a) hydraulic oil filled up and without air pockets
b) all seals intakt
c) both joint balls are dry and free of oil

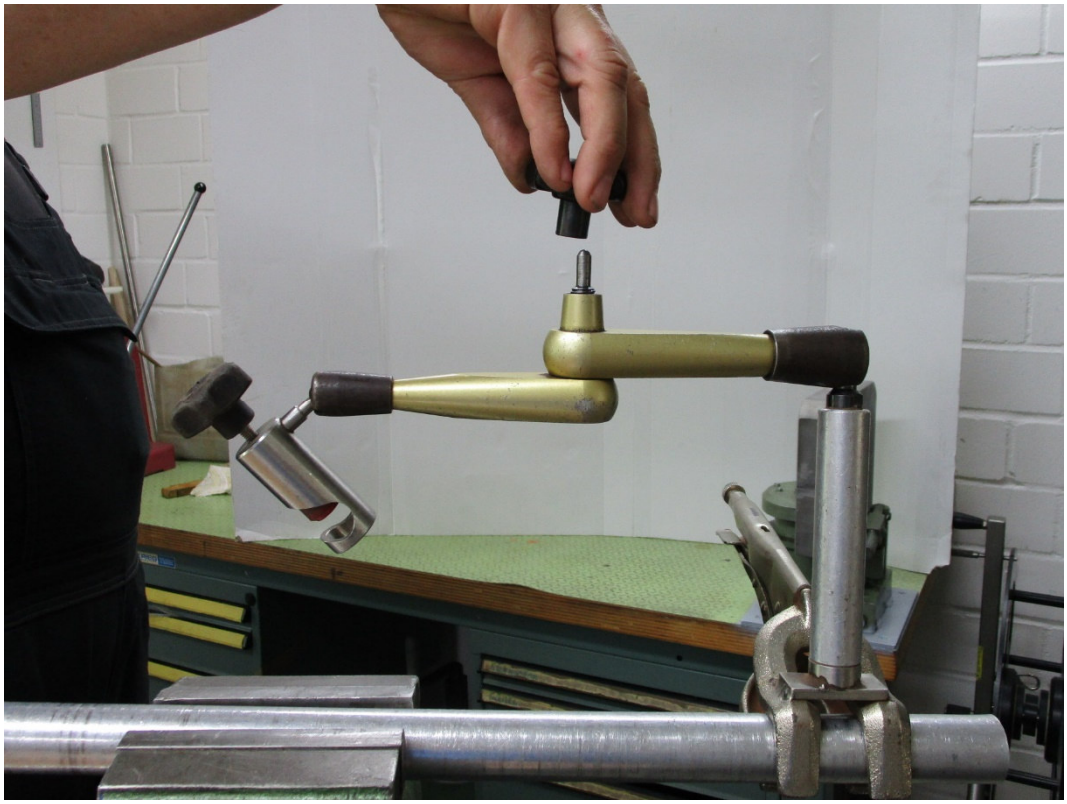
No hydraulic oil should leak out during normal use. This could be due to excessive load or a defective seal.

Below you will find a step-by-step guide on how to

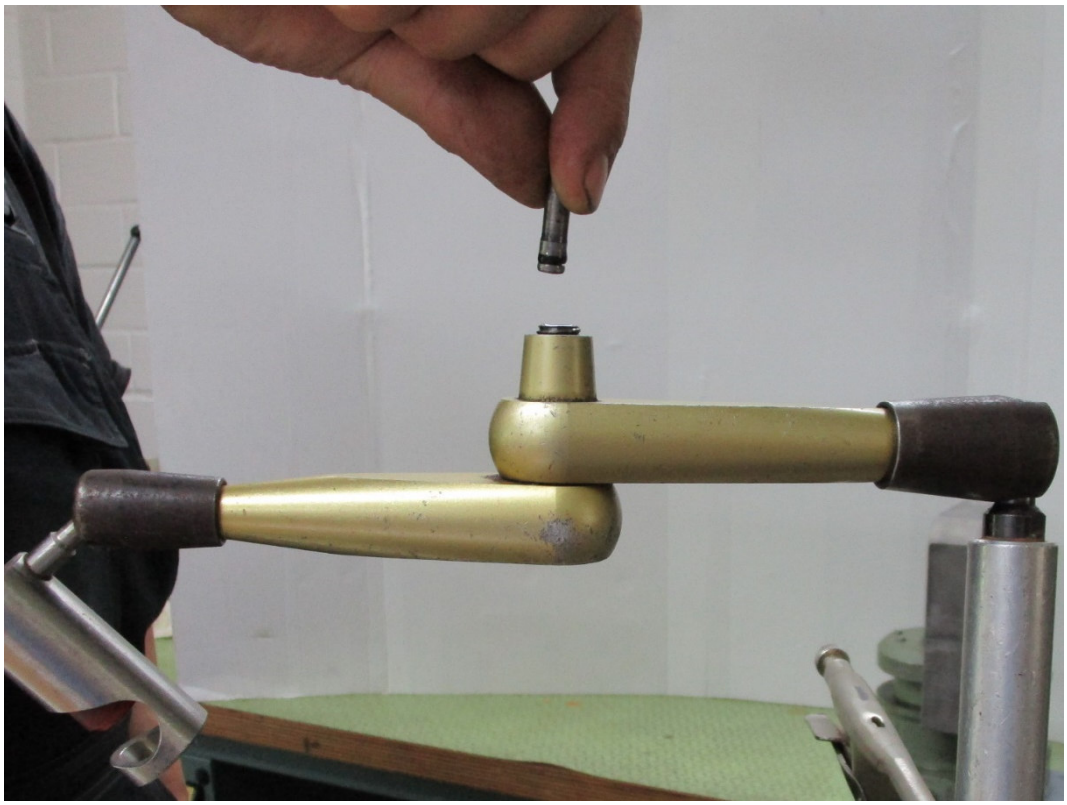
- **fill up the hydraulic oil** (1 – 8) and then
- **degrease the hydraulic fixture** (10 – 16).

1) Material required: Hydraulic oil, cleaning spray for degreasing, absorbent cloth

2) Preparation: Fix the grip tongs, let the fixture rest on.



3) Open hydraulics: Loosen the handwheel.



4) Remove the central piston.

5) Visual inspection of the seal: Is the X-ring OK? - Replace the hydraulic piston if necessary.

6) Push the articulated stand together: Grasp the ball joints from outside and move them inwards as far as possible.

7) This causes the oil level in the opening to rise visibly.

8) Fill hydraulic oil to the brim.

9) Wet the seal with oil and insert the hydraulic piston without trapping air, if necessary repeat from step 4).

Important: There should be <u>no</u> air bubbles in the oil phase, this reduces the clamping force!

10) Clean and degrese the joint.

11) Degrease the interspace.

Remove the excess cleaner.

12) Degrease the handwheel.

13) Let the handwheel dry (with compressed air if available).

14) Screw on the handwheel.

15) Clean and degrease both joint balls.

16) Done!

The joint balls and sleeves will rust over time. This is due to the material and intended, it favours adhesion.

In case of leaking or broken ball joints, send the ellipse clamping tongs to us for repair.

METRITEC GmbH

Revision	Date	Processor	Remark
1.0	07.04.2022	H. Christiansen, R. Andersen	Creation of the work instruction
1.1	12.04.2022	R. Andersen	Text corrections p.1