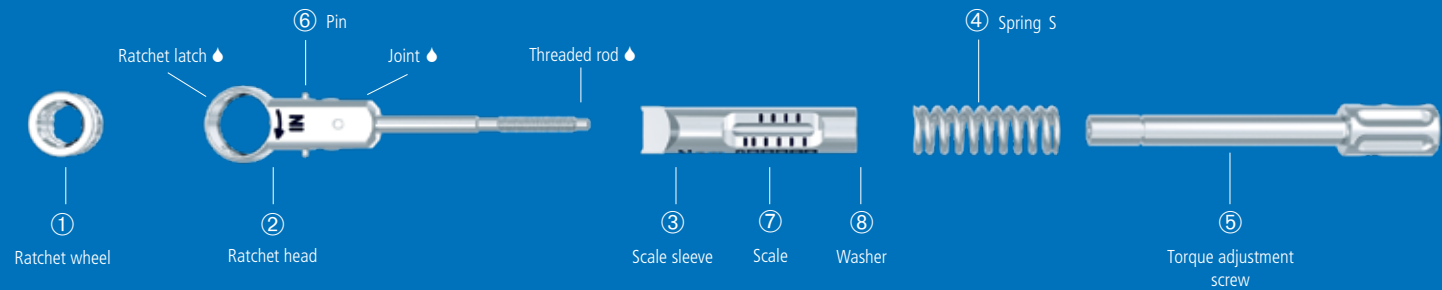


# Torque ratchet.



## Disassembly

Before cleaning (regardless of the selected cleaning method), the torque ratchet must be dismantled into the individual parts. This can be done without tools. Completely unscrew the torque adjustment screw ⑤, and remove the spring ④ and the ratchet head ② with threaded rod.

Take care not to lose the plastic washer ⑧ as this would have a negative impact on the instrument's precision. (The plastic washer needs only to be removed if there is visible contamination. It can be pulled off if necessary and replaced after cleaning).

## Remove ratchet wheel

Pull back the pin ⑥ in the direction of the arrow using your thumb and index finger and remove the ratchet wheel ①.

## Monitoring

The best method to identify and remove defect instruments is by examining them and carrying out functional tests before and after each use. Specific functional areas (e.g. connection for adapter, torque initiator) and moving parts require special attention. Allow the parts to cool down to room temperature. Parts with damaged surfaces, chippings, contamination, discoloration or corrosion must be removed. Discard any instruments that are deformed, worn in their functionality or otherwise damaged. Instruments that are still contaminated should be cleaned and sterilized again.

## Maintenance

If several torque ratchets are in use, do not interchange the individual parts. Each individual part belongs to one instrument.

## Lubricating points (♠)

Lubricate the areas marked with the "drop" symbol lightly with maintenance oil for instruments.

Ensure that only instrument oils (paraffinic white oil without corrosion inhibitor or other additives) are used, which – depending on the maximum sterilization temperature used – are approved for steam sterilization and are certified as bio-compatible. The oil should be used sparingly.

Reassemble the ratchet and perform a function test.

## Assembly

To assemble the torque ratchet correctly, connect the components in the following order: first pull back the pin ⑥ as described above and insert the ratchet wheel ①.

## Caution:

To avoid confusion, the ratchet wheel ① can only be inserted on one side.

Slide the spring ④ back over the torque adjustment screw ⑤.

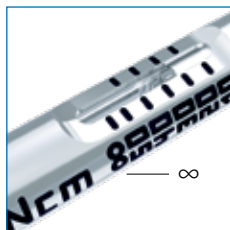
Pass the ratchet head ② with the threaded rod through the scale sleeve ③ and screw to torque adjustment screw ⑤.

After assembly and before each use, check the correct function of the torque ratchet. The instrument is ready for use when there is an audible regular ratchet noise and the mechanism of the torque limit functions.

After reassembly and before sterilization, the torque ratchet should be stress-relieved at max. 10 Ncm.

Additional information can be found at [www.dentaurum.com](http://www.dentaurum.com) (Processing Instructions Instruments and Accessories REF 989-801-09).

Blocking function – „∞“ mark.



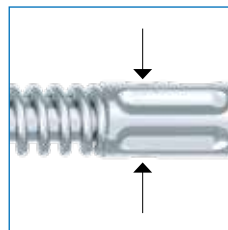
Ratchet head, assembled.



Ratchet head, disassembled.



Never loosen these screws as the ratchet will lose its torque function.
















# Torque ratchet

## Table – Tightening torques for implants.\*

The torque ratchet is intended for clinical use only.

Prosthetic screws should be tightened with care manually in the laboratory.



Implant		(depending on the bone density) max. 40 Ncm	
Closure screw Implant		15 Ncm or manually	
Closure screw bar		15 Ncm or manually	
Closure screw bridge		15 Ncm or manually	
Closure screw AngleFix		15 Ncm or manually	
Gingiva former		15 Ncm or manually	
Screw for impression post		15 Ncm or manually	
Retaining screw for closed impression		15 Ncm or manually	
AnoTite screw L 9.0 mm		30 Ncm	

Bar abutment		35 Ncm	
Bridge abutment		35 Ncm	
AngleFix abutment 0° GH 1.0 mm		35 Ncm	
AnoTite screw bar/bridge/AngleFix abutment L 6.0 mm		25 Ncm	
Ball abutment		35 Ncm	
tioloc abutment		30 Ncm	
AnoTite screw for angulated screw apertures		25 Ncm	

\* Primary stable and osseointegrated