

For best results we recommend that the assembly of Thun bb-cartridges should follow the following rules:

- Both threads in the bb-shell (BS 6109:1990 ISO 6696:1989) are clean and do not show any grease, oil, or paint. Furthermore, both threads should be concentric to each other and deep enough. Thread-entry should show an appropriate chamfer (not too small or too big). The thread sizes of the bb-shell should be sized accordingly to plug gauges on both sides (LH/RH Go/Not go as per BS 6109:1990 ISO 6696:1989).
- Recommended assembly torques

Cups:25-30 Nm on both sides, no grease appliedBolts M8x1:42-45 Nm, no grease applied

- Recommendation: For all kinds of bb-systems (independently from maker and system), electronically controlled nut runners (e.g. Desoutter, Atlas Copco etc.) should be used (alternatively at least a manual torque wrench). Those allow precise pre-settings of the torque in both directions. The use of air compression tools such as impact wrenches is not recommended, as it could lead in all kinds of screw-connections to inconsistent results. If air compression tools must be used, they should be used for fast screwing in only. The final and precise tightening should be made with a manual torque wrench only.
- No grease to be applied if any, (little) grease should be applied exclusively inside the bb-shell and NOT on the threads of the cups. The same applies for bolts M8x1, where any (little) grease exclusively should be inserted into the bore, and never on the bolts` thread.
- In the case of grease application, the assembly torque should be **reduced from 25-30 Nm to 20-25 Nm for cups, and from 42-45 Nm to 38-41 Nm for bolts**. When dealing with greased bb-shells and spindles, we recommend the options "P19" treatment of cups resp. "LOCK" of bolts, which compensate the reduction of friction and thus prevent auto-loosening of the cups resp. bolts.

Troubleshooting in case of play

In case of any 360° or sectional play (which in most cases is a result of deformation or ovalisation of the bb-shell and its threads due to welding processes of the frame) the applied torque may be increased to 40 Nm. However, this process could be inefficient in case of sleeve-less bb-cartridges (HULA, LIMBO, MAMBO, DINKY, GOAL or TWIST) and shoulder-less lh-cups (BASIC and PASO-ML). In these cases, it is best practice to replace these with SHORTY, IBEX, JIVE or TANGO.

Ennepetal, 05.06.2024

© Alfred Thun GmbH