



**BLUE
HEELER** Mining and
Construction
Services Pty Ltd
ABN 94 083 509 184

PO Box 2036
Woonona East NSW 2517
Unit 3/7 Pioneer Drive
Bellambi NSW 2517
0418 832 553
W'shop 02 4283 8550
Fax 02 4283 8551
daryl@blueheeler.net.au
www.blueheeler.net.au

Procedure for using the Blue Heeler Megabolt Tensioner

This procedure should be used in conjunction with existing work practices

*If changing head plates from cup and saucer plates to flat plates.
Unscrew the bolts from the jack head. Place jack head over clevises on
the rams. Replace bolts and tighten just enough to allow some
movement of the head plate.*

1. Check level of hydraulic oil in the pump tank. If top up is required use SAE 30 or thinner oil. SAE 10 to give best results (*available from Blue Heeler*)
2. Check hose for cuts, abrasions, kinks. Do not use if hose is bulging or leaking. Do not use if protective guards are not in place. Do not bend hose less than 100mm radius.
3. Check cleanliness and condition of all hydraulic fittings. Clean if necessary. Screw quick connect hose couplings tightly to pump and jack.
4. Check that the oiler fitted to the air end of the hydraulic pump is full of compressed air tool oil before operating the system. **Do not use rock drill oil.** Blow out compressed air hose and connect to tensioner pump.
5. If the thread of the Megabolt is dirty or rusty clean with a wire brush and use a lubricant such as penetrene.
6. Screw the pull-rod on to the Megabolt. **The pull-rod coupling must engage 30mm of the Megabolt thread.** This is because the first 15mm of the Megabolt head has a thin wall and is not strong enough to take the full load required for tensioning. **P.T.O.**

7. The pull rod is to be screwed on the Megabolt until the thread is visible in the sight slot. If the Megabolt nut prevents the pull rod from being screwed on sufficiently. Pump to a maximum of 1000 psi. then screw Megabolt nut and pull rod on to the Megabolt until thread is sighted in the slot before using full tensioning pressure.
8. Slide the jack over the pull-rod and hold against the Megabolt plate. Screw the nut onto the pull-rod to hold the jack against the Megabolt plate. *If using Megabolts with a flat plate turn jack head diagonally to Megabolt plate to fit into retainers on top jack head. This will stop head plate binding onto Megabolt nut.*
9. Tension the Megabolt by pressing the pedal on hydraulic pump (PUMP). **Each 1,000 psi increment on the gauge is equivalent to 3 tonne of load on the Megabolt.** Tension the Megabolt to the load stated in the Megabolt installation procedures of your mine.
10. The pump will automatically bypass at 10,000 psi (30 tonnes) which is the maximum capacity of the jack. **Never stand in line with the jack during tensioning operations.**
11. Screw up the lock nut on the Megabolt. **Do not place fingers on the upper side of the nut.** If pressure is suddenly released the nut will be pulled hard against the Megabolt plate.
12. When the Megabolt locknut contacts with the bearing plate release the pressure on the jack by pressing the raised part of the pedal on the hydraulic pump (RELEASE). Hold down the 'release' pedal to retract the rams. Keep hands clear of the jack when releasing pressure.
13. If the jack runs out of stroke before the Megabolt reaches the required tension perform steps 10 and 11 and then repeat steps 7 to 11.
14. Remove the nut from the pull-rod and slide off the jack.
15. Remove pull-rod from Megabolt.

Note: In the event that pressure is not released when the 'release' pedal is pressed send tensioning unit to an authorised workshop to have pressure released.