

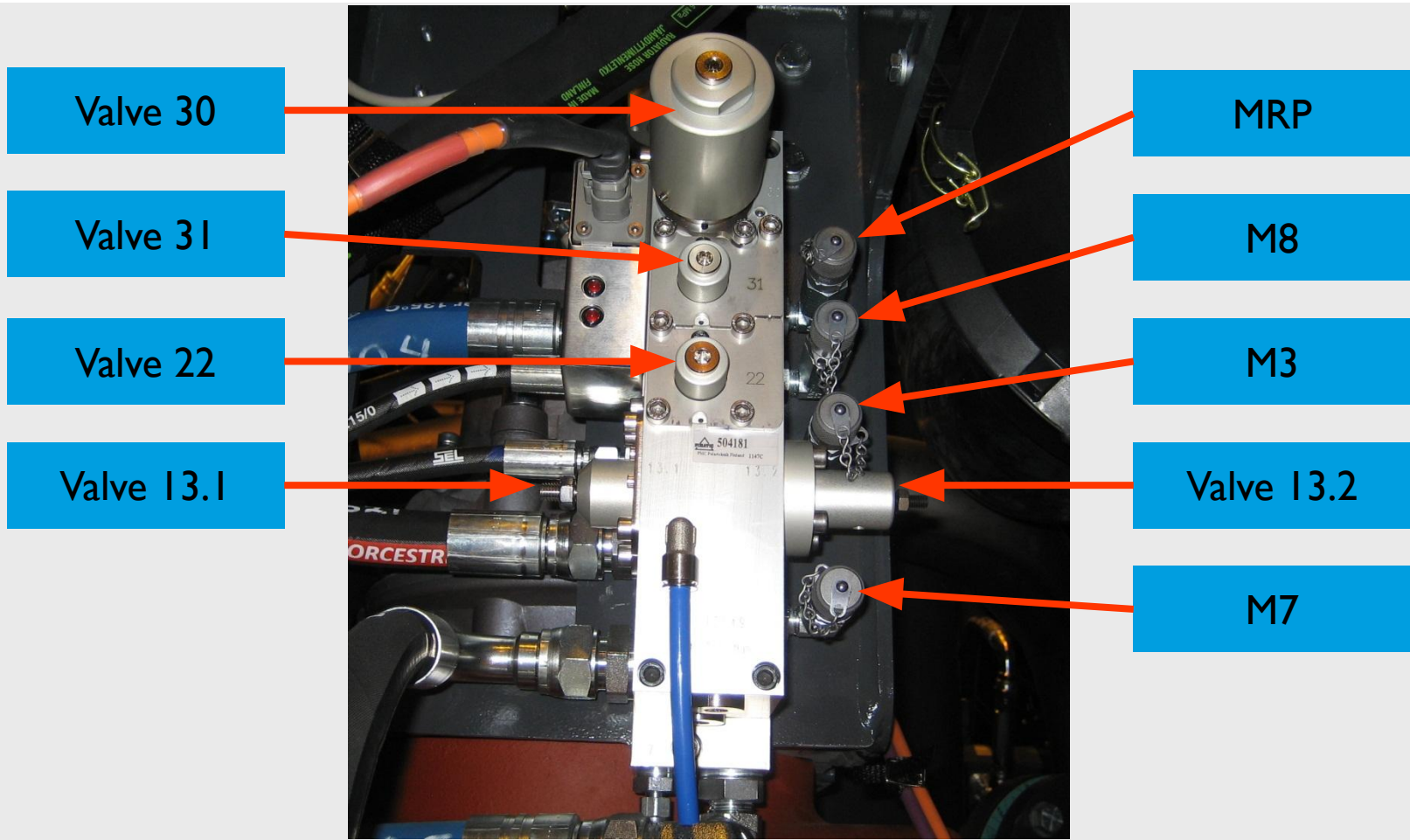
DI550

Adjustment procedure Compressor control block

Juergen Traussnig, 20.05.2013

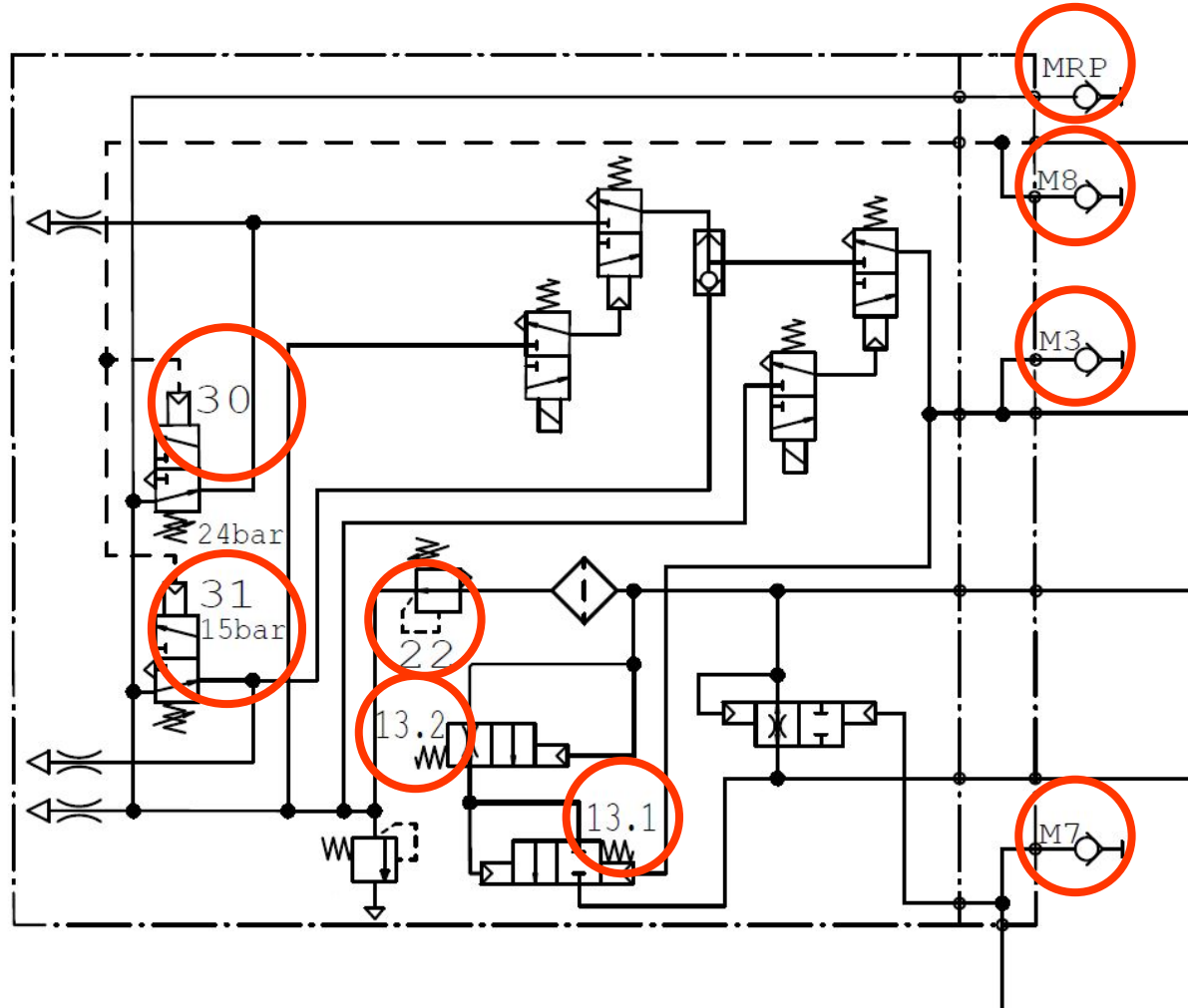
Adjustment procedure Compressor control block

Overview compressor control block



Adjustment procedure Compressor control block

Overview compressor control block



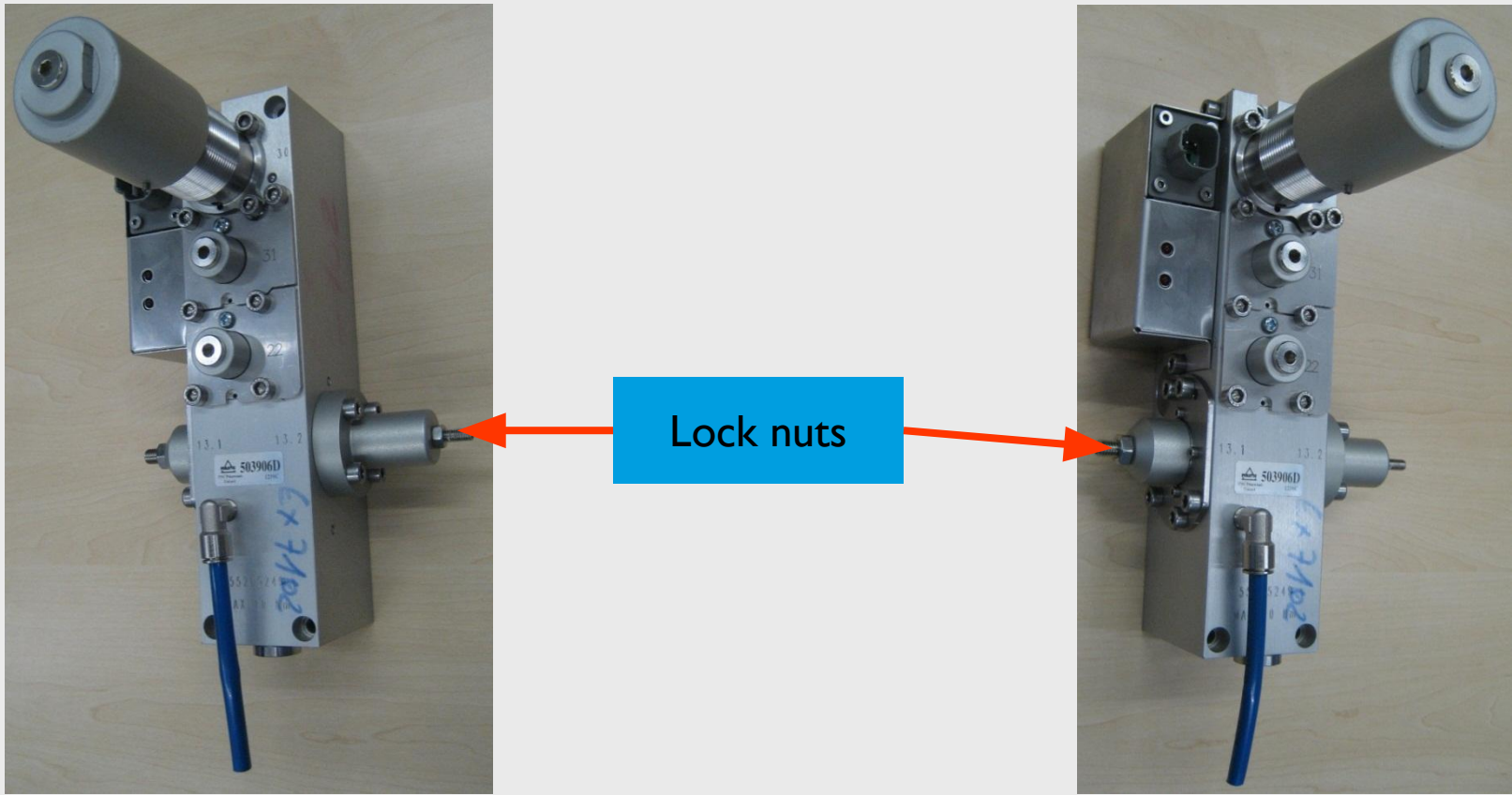
Adjustment procedure Compressor control block

- The compressor control block normally comes already adjusted but in case this adjustment is not correct or further fine adjustment is needed, just follow this procedure
- Adjustment sequence:
 1. Running blowdown valve 13.1 and 13.2
 2. Internal control pressure valve 22
 3. Pressure regulator 15 bar valve 31
 4. Pressure regulator 24 bar valve 30
- Never forget: Obey all Sandvik and local safety rules and have the rig checked before starting the procedure

Adjustment procedure Compressor control block

Running blowdown valve 13.1 and 13.2

- Before starting the engine open the lock nuts and fully open both valves



Adjustment procedure Compressor control block

Running blowdown valve I3.1

- From fully open (loose) turn the adjustment screw of I3.1 clockwise until you have contact between the adjustment screw and the valve
- Then turn the screw 1/8 turn clockwise
- Secure the position with the lock nut



Adjustment procedure Compressor control block

Running blowdown valve I3.2

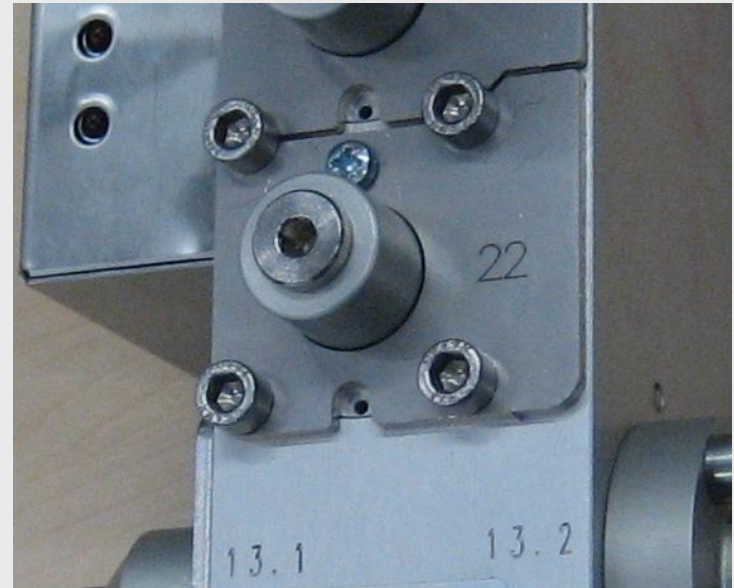
- From fully open (loose) turn the adjustment screw of I3.2 clockwise until you have contact between the adjustment screw and the valve
- Then turn the screw 2 turns clockwise
- Connect a pressure gauge to test point M8 (receiver tank pressure)
- Start the engine and wait until the pressure has settled
- Adjust the pressure to 6,5-7 bar and secure the position with the lock nut



Adjustment procedure Compressor control block

Internal control pressure valve 22

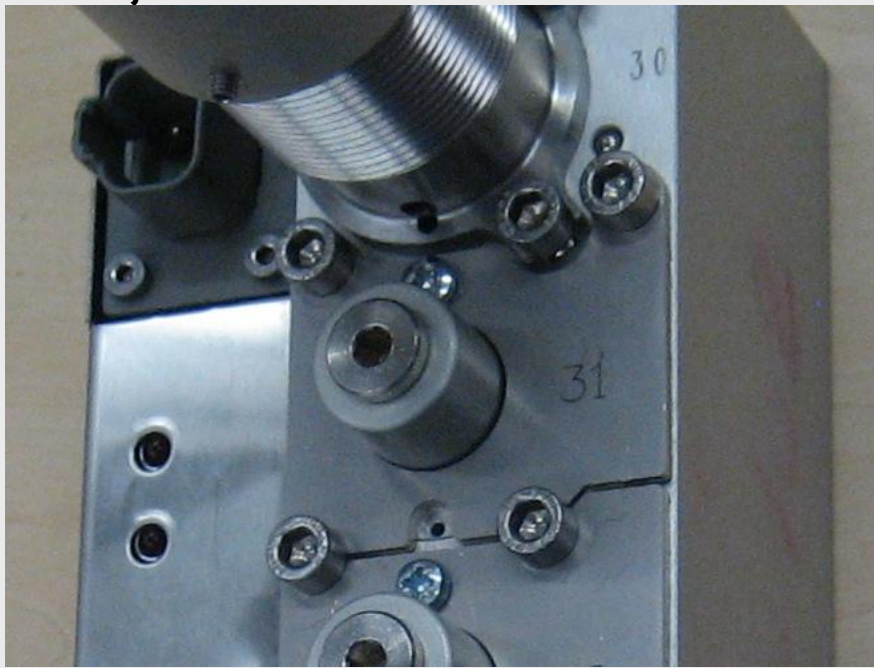
- Connect a pressure gauge to MRP (internal control pressure)
- Remove the protective cap
- Adjust the pressure to 4 bar



Adjustment procedure Compressor control block

Pressure regulator 15 bar valve 31

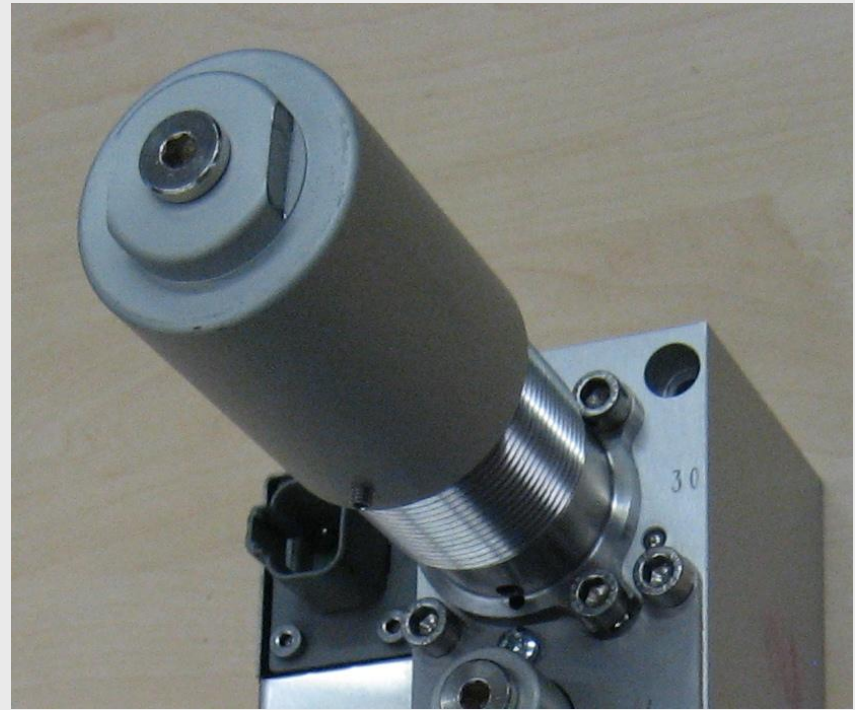
- Switch the compressor on by pressing the button on the right control panel
- Connect a pressure gauge to M8 (receiver tank pressure)
- Remove the protective cap
- Adjust valve 31 to 15 bar



Adjustment procedure Compressor control block

Pressure regulator 24 bar valve 30

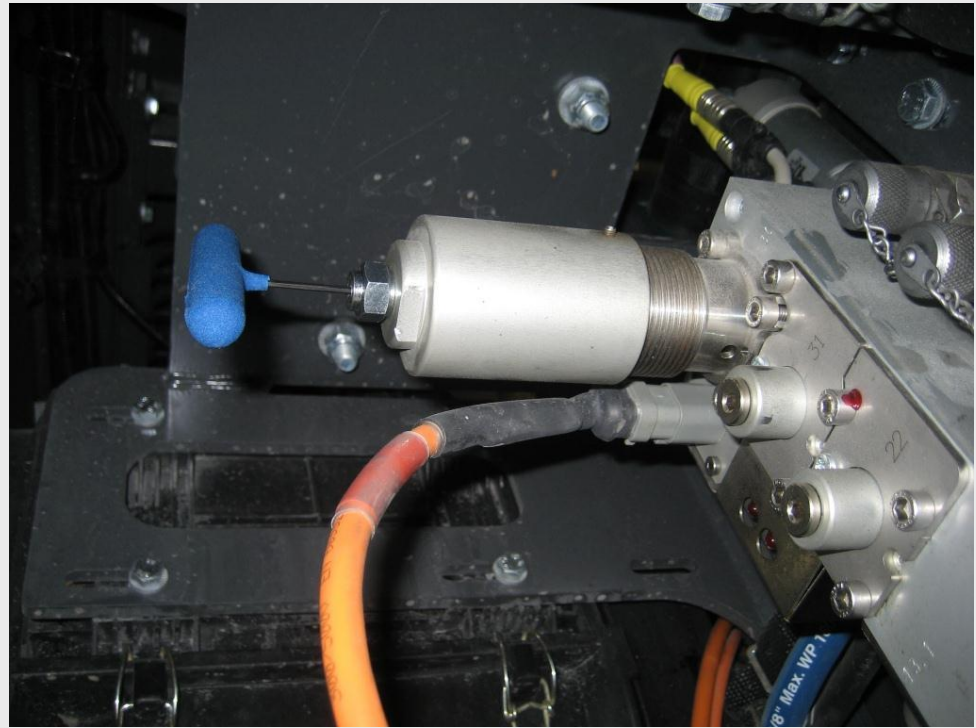
- This adjustment is done during drilling (observe the flushing level)
- Connect a pressure gauge to M8 (receiver tank pressure)
- Remove the protective cap
- Adjust valve 30 to 24 bar



Adjustment procedure Compressor control block

Pressure regulator 24 bar valve 30

- A special tool is available for this adjustment
- Part number: BG00198398



Adjustment procedure Compressor control block

Drilling with different size hammers



Adjustment procedure Compressor control block

Drilling with different size hammers

- DI550 was initially designed for 5” hammer drilling
- When using 3” or 4” hammers flushing air fluctuations can occur
- To prevent this fluctuations we have two different cartridges

Old standard,
good for 5“ hammer

New standard,
good for 3“ to 5“ hammer



Adjustment procedure Compressor control block

Drilling with different size hammers

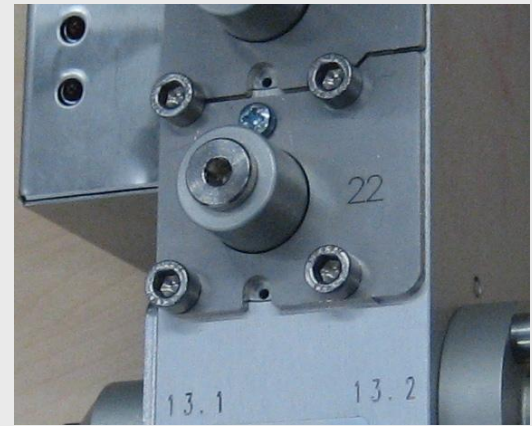
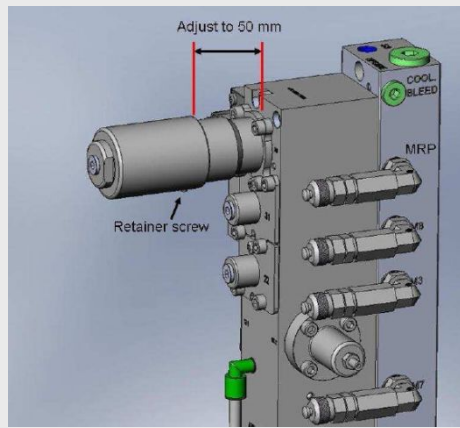
- The new cartridge is standard in the compressor control block from now on
- If you experience fluctuations, first check the setting of the block, then check what cartridge is installed



Adjustment procedure Compressor control block

Drilling with small size hammers

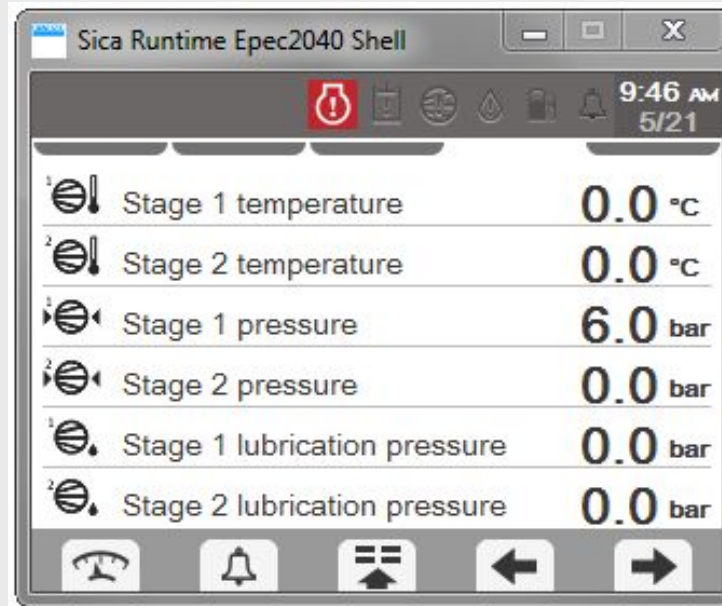
- When drilling with 3” or 4” hammers:
 1. Check/change to the new type cartridge
 2. Adjust the spring tension of 24 bar valve 30 to 50mm
 3. Set the internal control pressure (valve 22) from 4 bar to 3 bar
(this could cause that the inlet valve does not open anymore, in that case you should try to find a setting between 4 bar and 3 bar)



Adjustment procedure Compressor control block

Additional information

- As we use the receiver tank pressure to lubricate the compressor, always make sure that the standby pressure is higher than 6 bar to have proper lubrication
- This is also the reason to screw valve 13.2 clockwise 2 turns before starting the engine



End of presentation