

HYTORC[®]

Technologies

Quick-Start-Guide HY-VECTOR

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EN

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General information

Valid for firmware versions:

- Electric control v1.00.17
- Pendant v2.04.03



```
graph TD; A([Preparation]) --> B([Power On]); B --> C[ ];
```

Preparation

- 1) Connect the tool to the pump and place it loosely on the floor. **IMPORTANT:** Do **NOT** apply it to the screws!

Power On


- 2) Connect the power plug to the main power supply. Then switch on the pump.




3) The pump starts to initialize all subsystems. Please wait until the general status LED changes from green pulsating to steady green.



4) At first start up the pump offers the possibility to choose the language, the torque unit and the pressure unit and to enter the current date and time. Else proceed with step 9.


Press  to select the language below.

Press  to select the language above.

Press **Trigger** to set the current selected language for the system.



5) Date entry.

Press  to decrease the highlighted part of the date.


Press  to increase the highlighted part of the date.

Press  to go back to the language selection.

Press **Trigger** to select the next part of the date.



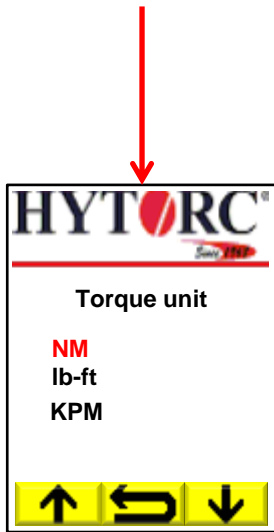
6) Time entry.

Press  to decrease the highlighted part of the time.


Press  to increase the highlighted part of the time.


Press  to go back to the date entry.

Press **Trigger** to select the next part of the time.



7) Torque unit selection.

Press  to select the torque unit below.

Press  to select the torque unit above.

Press  to go back to the time entry.


Press **Trigger** to set the currently selected torque unit for the system.



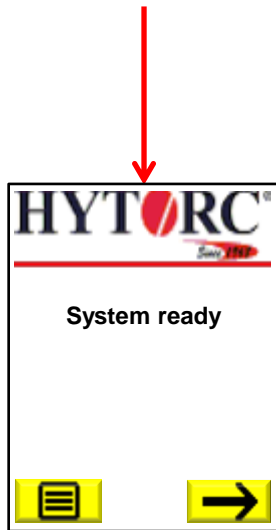
8) Pressure unit selection.

Press  to select the pressure unit below.

Press  to select the pressure unit above.

Press  to go back to the torque unit selection.

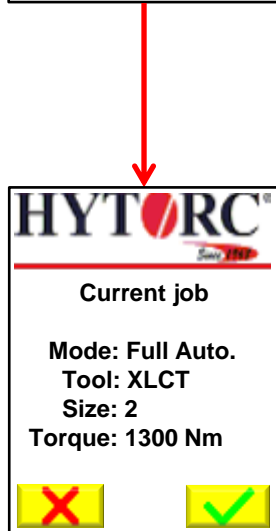
Press **Trigger** to set the currently selected pressure unit for the system.




9) The pump has finished the system initialization and is now ready to operate.


Press  to start a new bolting job.

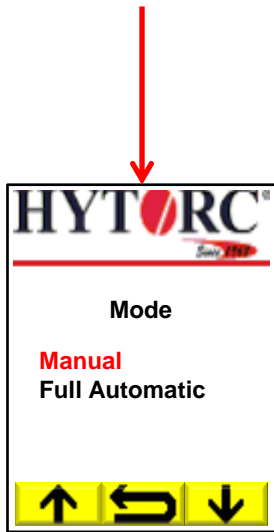
Press  to enter the settings menu.



10) A new bolting job is started. The pump offers the operator the opportunity to change the settings or continue with the current settings. If no settings are available proceed with next step.

Press  to continue with the current settings. Proceed with step 19.

Press  to delete the current settings. Proceed with next step.



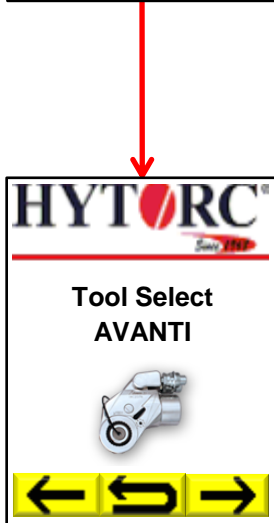
11) Choose the required mode for the bolting job.

Press  to select the mode below.


Press  to select the mode above.

Press  to go back to the start screen.

Press **Trigger** to set the currently selected mode for the bolting job.



12) Choose the required tool for the bolting job.

Press  to select the next available tool family.

Press  to select the previous available tool family.

Press  to go back to the mode selection.

Press **Trigger** to set the currently selected tool for the bolting job.



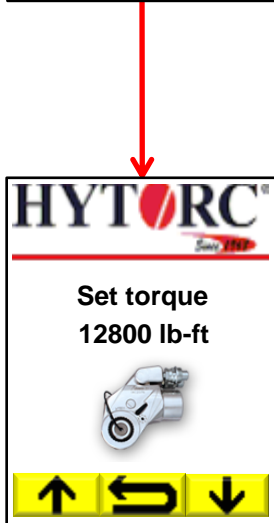
13) Choose the required tool size for the bolting job.

Press  to select the next available tool size.

Press  to select the previous available tool size.

Press  to go back to the tool selection.

Press **Trigger** to set the currently selected tool size for the bolting job.



14) Set the required torque for the bolting job.

Press and hold  to decrease the torque.


Press and hold  to increase the torque.

Press  to go back to the tool selection.

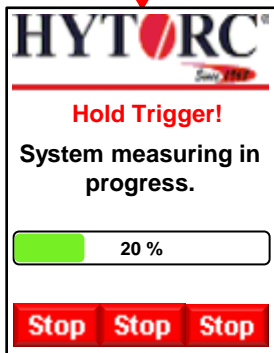
Press **Trigger** to set the currently adjusted torque for the bolting job.



15) Press and hold the **Trigger** to start system measuring.
Caution: Put tools on the ground!

Press  to enter the settings menu.

Press  to change the current torque value.



16) The pump starts to build up pressure and starts the system measuring. The status bar shows the progress of the system measuring on the fly. Still hold the **Trigger**.

Press **Stop** to switch off the motor and to depressurize the system.



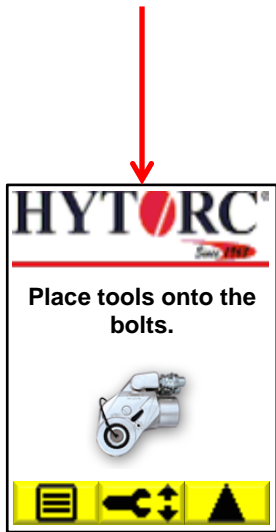
17) System measuring is complete and an acoustic signal sounds. Please release the **Trigger**.

Press **Stop** to switch off the motor and to depressurize the system.




18) Now the pump is ready to work. Place the tools onto the bolts.

Press and hold **Trigger** to start the bolting process. Press **Stop** to switch off the motor and to depressurize the system.




only visible in full automatic mode

19) In case of **Stop** was pressed, the motor is off and the system waits to resume operation.

Press  to enter the settings menu.

Press  to change the current torque value.

Press  to enter the release mode. As long as the release mode is active, the pump operates in the same way as the manual mode without documentation..

Press and hold **Trigger** to start the bolting process.

Manual bolting

proceed to step 20)

Full automatic bolting

proceed to step 22)

Manual bolting



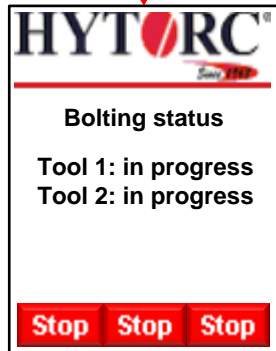
20) **Trigger** is pressed, the pump starts to build up pressure and the actual torque of the tool is displayed on the fly. Release the Trigger if the adjusted torque is achieved and the tool does not move.



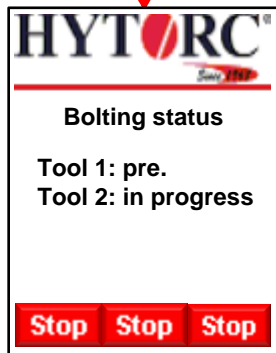
21) **Trigger** is released, the pump stops bolting and the tool retracts to its start position.

Press **Trigger** again to start the next bolting stroke (see step 20).

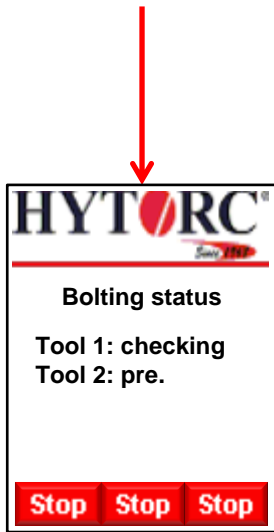
Full
automatic
bolting



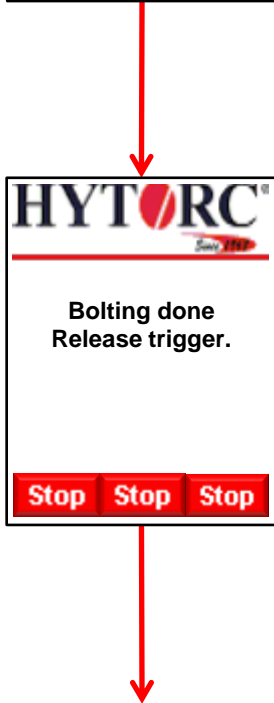
22) **Trigger** is pressed, the pump starts the full automatic process and the current status of each bolt is displayed on the fly. In case of active pre-tightening and more than one tool is connected, the pump is going to pre-tighten the bolts to a low torque level depending of type and size of the tools. Still hold the **Trigger**.



23) **Trigger** is pressed, one bolt is pre-tightened and is marked as “pre.”. If all bolts are pre-tightened, the pump will start to tighten the bolts till the set torque is reached.



24) **Trigger** is pressed, one bolt is tightened and is marked as “checking”. If all bolts are tightened, the pump will start to run the control strokes.



25) **Trigger** is pressed, control strokes are finished successfully and an acoustic signal sounds. Please release the **Trigger**.



26) **Trigger** is released, the full automatic process is finished. Now you can place the tools onto the next two bolts.

Press and hold **Trigger** to start the next bolting process (see step 22).