

HYTORC[®]

Technologies

Quick-Start-Guide HY-VECTOR Documentation

..... Update 2017-05-09

EN

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document no. BA-0024-EN00

revision no. 00

document type operating instructions

release date 2017-05-09

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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.



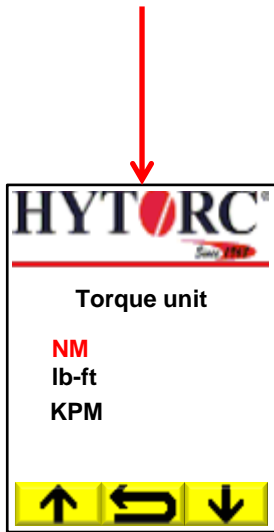
6) Time entry.

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.

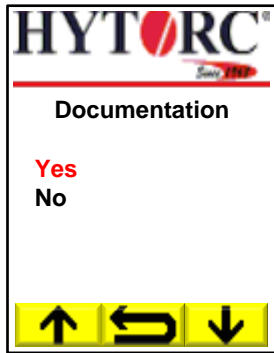


9) The pump has finished the system initialization and is now ready to operate.

Press  to start a new bolting job.

Press  to enter the settings menu.

proceed to step 10)



10) After pressing **→** the pump offers the operator the opportunity to start a documentation.

Press **↓** to select the option below.

Press **↑** to select the option above.

Press **↶** to go back to the start screen.

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



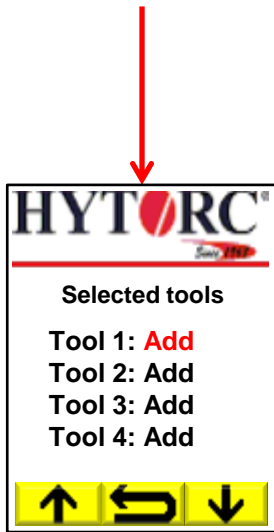
11) Choose the required mode for the bolting job.

Press **↓** to select the mode below.

Press **↑** to select the mode above.

Press **↶** to go back to the list of documentation options.

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



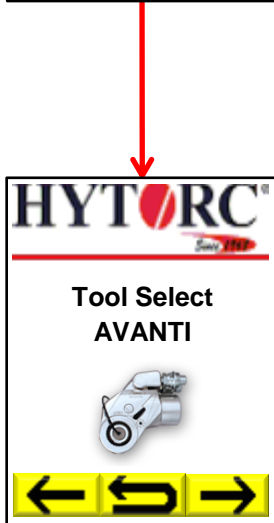
12) Allocate all needed tools for the job.

Press  to select the option or tool below.

Press  to select the option or tool above.

Press  to go back to the mode selection.

Press **Trigger** to chose the currently selected option or tool.



13) 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 selected tools list.

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



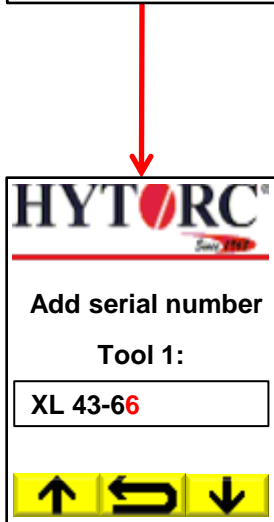
14) Choose the required tool size for the bolting job.

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.



15) Add the serial number for tool 1. The red marked character can be modified by the **↓** and **↑** buttons.

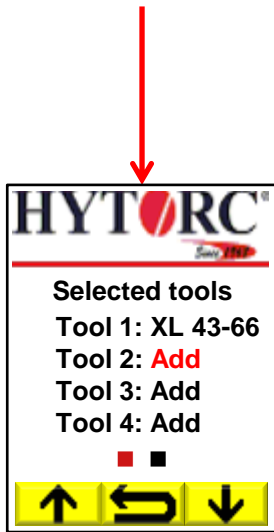
Press **↓** to change the space to 0 > 1 > 2 ... 9 > _ > . > - > , > Z > Y > X

Press **↑** to change the space to A > B > C >... Z > , > - ...

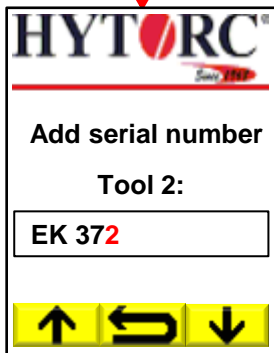
Press **↵** to delete the last character. Press and hold **↵** to go back to the selected tools list.

Press **Trigger** to set the currently adjusted character and advances to the next one.

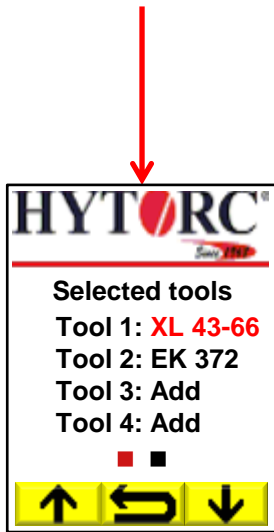
Press and hold **Trigger** to finish the entry for tool 1.



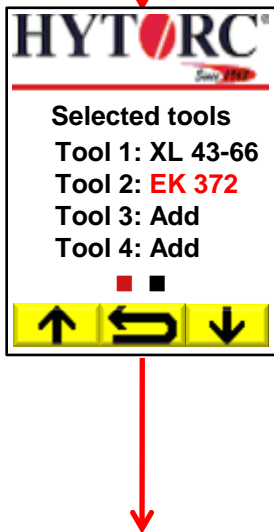
16) Allocate all needed tools for the job (see step 12).



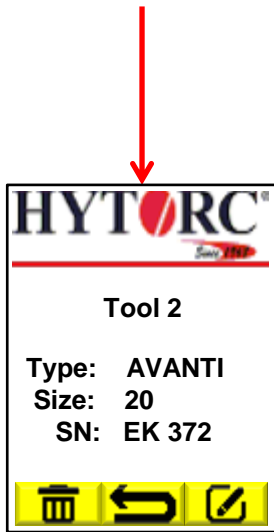
17) Add the serial number for tool 2 (see step 15).



18) Allocate all needed tools for the job (see step 12).



19) To modify a serial number or to delete an added tool select it and press **Trigger**.

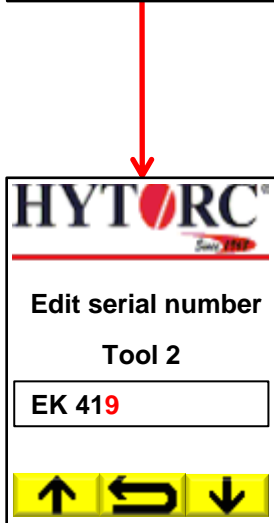


20) Description of tool 2.

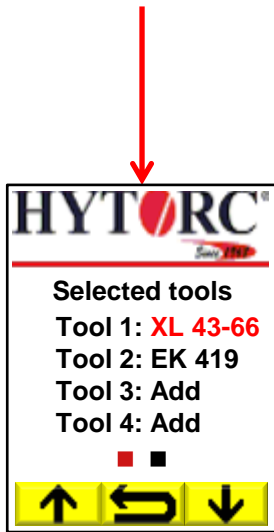
Press  to change the serial number.

Press  to remove the tool.

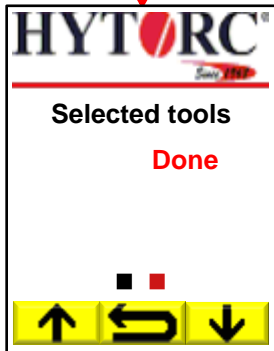
Press  to go back to the selected tools list.



21) Edit the serial number for tool 2 (see step 15).



22) Allocate all needed tools for the job (see step 12).



23) When you have allocated all needed tools scroll down to the option „Done“ and press the **Trigger**.



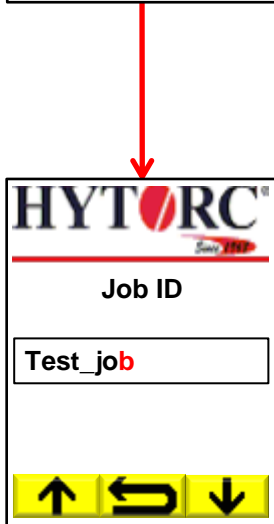
24) Set the required torque for the bolting job.



Press and hold  to decrease the torque.


Press and hold  to increase the torque.

Press  to go back to the selected tools list.



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



25) Enter the ID of the bolting job. The red marked character can be modified by the  and  buttons.



Press  to change the space to 0 > 1 > 2 ... 9 > _ > . > - > , > Z > Y > X

Press  to change the space to A > B > C > ... Z > , > - ...


Press  to delete the last character. Press and hold  to go back to the torque selection.

Press **Trigger** to set the currently adjusted character and advances to the next one.


Press and hold **Trigger** to finish the entry.



Part ID



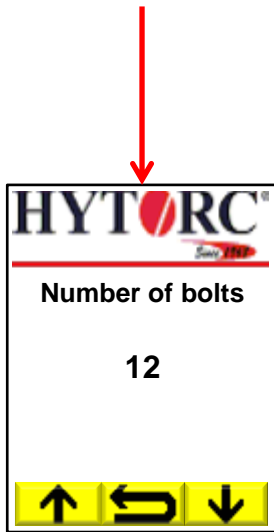
26) Enter the part ID of the bolting job (see step 25).

Personal ID

27) Enter the personal ID (see step 25).



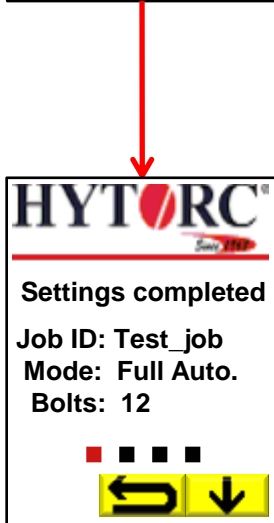
28) Enter the bolt number for the bolting job.

Press and hold  to decrease the number of bolts.


Press and hold  to increase the number of bolts.

Press  to go back to the personal ID (see step 27).

Press **Trigger** to set the currently adjusted number of bolts for the bolting job.

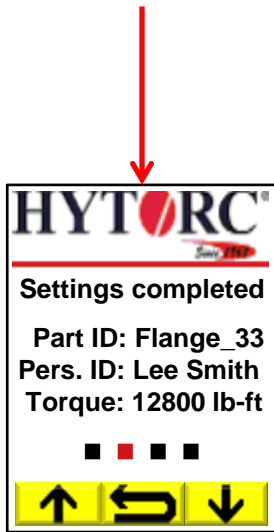


29) Overview about the bolting job settings (page 1 of 4).


Press  to see the next settings page.

Press  to go back to the bolt number entry.



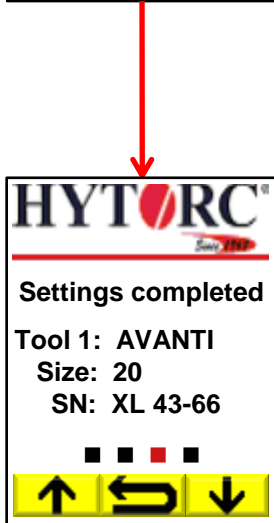


30) Overview about the bolting job settings (page 2 of 4).

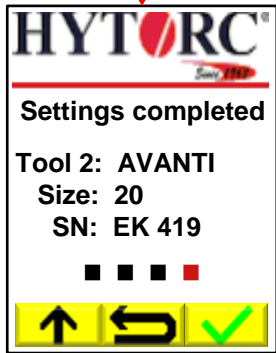
Press  to see the next settings page.

Press  to see the previous settings page.

Press  to go back to the bolt number entry.




31) Overview about the bolting job settings (page 3 of 4)
(see step 30).



proceed to step 33)

32) Overview about the bolting job settings (page 4 of 4).

Press  to confirm the current settings.

Press  to see the previous settings page.

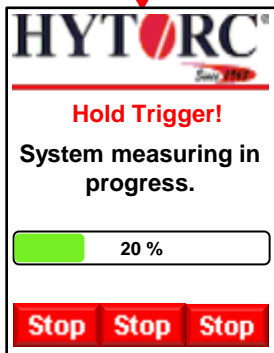
Press  to go back to the bolt number entry.



33) 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.



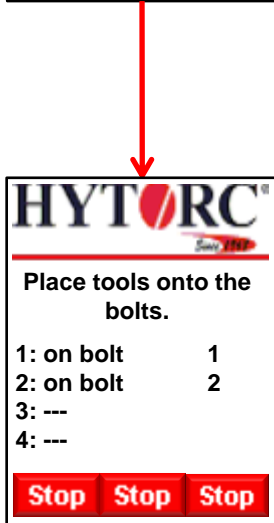
34) The pump starts to build up pressure and starts the system measuring. The status bar shows the progress of the system measuring on the fly. Still hold the **Trigger**.

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



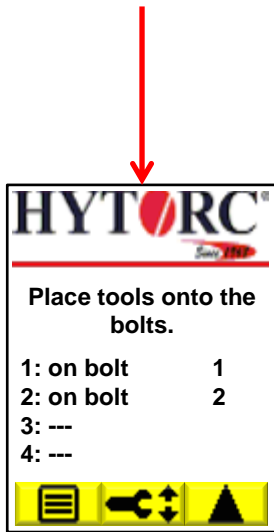
35) System measuring is complete and an acoustic signal sounds. Please release the **Trigger**.

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



36) Now the pump is ready to work. Place the tools onto the bolts. (Screen example for a bolting job with 2 tools)


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



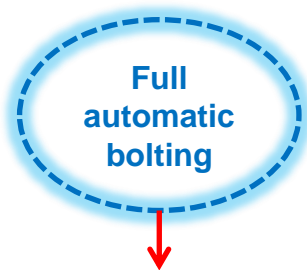
37) In case of **Stop** was pressed, the motor is off and the system waits to resume operation.

Press  to enter the settings menu.

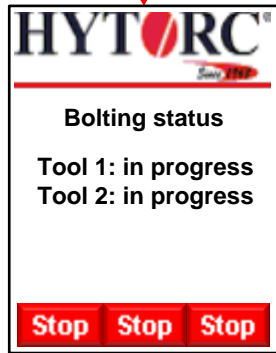
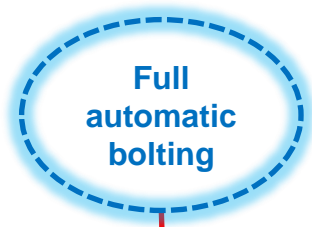
Press  to change the current torque value.

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

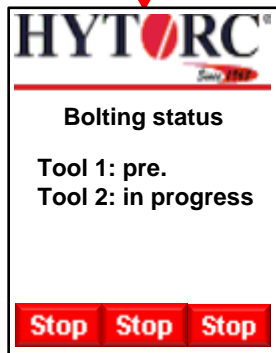
Press and hold **Trigger** to start the bolting process.



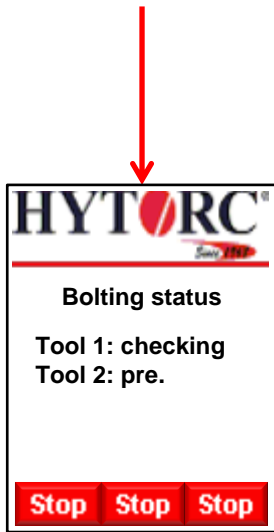
proceed to step 38)



38) **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**.



39) **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.

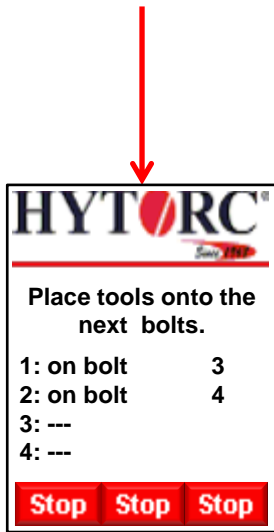


40) **Trigger** is pressed, one bolt is tightened and is marked as “checking”. If all bolts are tightened, the pump will start to run the control strokes.



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

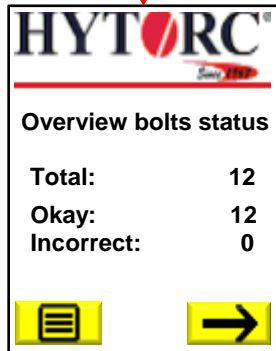
When the number of bolts is reached, proceed to step 43.




42) **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 38).

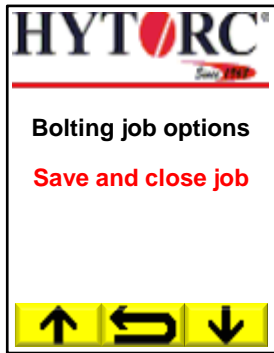
Number
of bolts
reached



43) **Trigger** is released and the motor is off. An overview of the bolts status is displayed.

Press  to get an options menu for the current bolting job.


Press  to enter the settings menu.



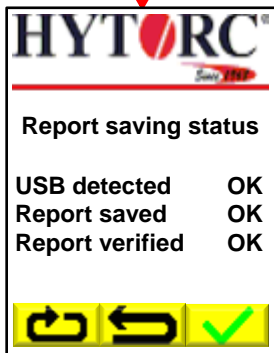
44) Choose an option for the bolting job.

Press  to select the option below.

Press  to select the option above.


Press  to go back to the overview of the bolts status.

Press **Trigger** to select the highlighted option.



45) If the USB flash drive is attached, the pump will save and verify the report.

Press  to close the overview and to go to the start screen (see step 9).

Press  to save the report again (only visible when the report saving process fails).

Press  to go back to the list of bolting job options.

proceed to step 9)