



**TIPS ON CARE AND USE OF THE PIN TOOL ROBOT
VP 903**

WARNING: Keep hands and clothing clear of any moving parts when in operation.

Initial Setup:

1. Attach the labeled connection cords on the Pin Tool Robot to the corresponding connections on the back of the control box. Tighten only hand tight.
2. Place the Power switch in the OFF position and place the Stop/Run switch in the STOP position.
3. Plug the power cord into 110V outlet.
4. Clean the pin tool with the VP 110 Pin Cleaning Solution. (See Technical Note 40)
5. Insert the pin tool onto the arm of the Pin Tool Robot. The top mounting plate of the pin tool will rest on top of the arm of the robot.

Home Deck Position (This should only be done after shipping or if alignment problems are a suspected issue)

6. Insert 96 well plate into Deck Position 1.
7. Turn Power switch to the ON position then turn the Stop/Run Switch to the RUN position.
8. Turn the Power switch to the OFF position just before pins of the pin tool touch the bottom of the 96 plate.
9. Visually inspect that the pins of the pin tool are centered in the outside wells.
10. If pins are not aligned, loosen the four screws located on the top of the circular deck. Only loosen the screws till the deck rotates manually. Do not take the screws out.
11. Once the pins are centered in the wells of the 96 well plate tighten the screws.
12. Turn the Stop/Run switch to the STOP position then turn the Power switch to the ON position.
13. Turn the Stop/Run switch to the RUN position and test to ensure proper deck position alignment.

Use:

Deck Setup:

1. Deck position 1 Mother plate (plate liquid is being transferred from)
2. Deck position 2 Daughter plate (plate liquid is being transferred to)
3. Deck position 3 VP 540DB (Omni Tray with pad and Lint-Free Blotting Paper)
4. Deck position 4 VP 540L Reservoir with VP 540LF Baffles (Wash Station 1)
5. Deck position 5 VP 540DB (Omni Tray with pad and Lint-Free Blotting Paper)
6. Deck position 6 VP 540L Reservoir with VP 540LF Baffles (Wash Station 2 - Alcohol)
The level of alcohol should be above the level of the wash solution in the Wash Station 1 to ensure proper pin cleaning.
7. Deck position 7 VP 540DB (Omni Tray with pad and Lint-Free Blotting Paper)

Operation

1. Set up the deck as outlined above and fill the wash stations.
2. Insert the Pin Tool onto the robotic arm.
3. Turn Power switch to the ON position.
4. Turn the Stop/Run switch to the RUN position. The robot will keep repeating the program cycle till the Stop/Run switch is turned to the STOP position.

Operator manual control functions

1. To pause the Pin Tool Robot turn the Stop/Run switch to the STOP position and it will pause once it finishes the steps for the deck position. When the Stop/Run switch is turned back to the RUN position it will continue with the program where it left off.
2. For an emergency stop turn the Power switch to the OFF position.
3. To home the rotational axis (deck position 1) and reset the program, turn the Stop/Run switch to the STOP position. Wait until the green Process Complete light comes on, and then press the blue Reset button.
4. If step 7 is preformed while the deck is changing positions problems may occur. If this happens turn the Power switch to the OFF position. Then turn the Stop/Run switch to the STOP position and turn the Power switch to the ON position. This will home the deck position and reset the program.
5. To rotate the deck, turn the Stop/Run switch to the STOP position. Wait until the green Process Complete light comes on, and then press the green TURNTABLE JOG button.
6. To shutdown the Pin Tool Robot, turn the Stop/Run switch to the STOP position. Turn the Power switch to the OFF position when the green Process Complete Light comes on.
7. Use mild detergent and a damp cloth to clean the surface of the Pin Tool Robot.