
# Direct Treater Air - Troubleshooting Guide

## Bottom LED strip not turning on when turning on the machine:

1 - Ensure the Red Emergency Stop Switch is turned Off.  Turn clockwise to turn off.

**E-Stop Switch:**


If bottom LED lights are still not turning on when plugged into a proper outlet, it could likely be a power issue.

2 -  Inspect power supply and ensure all cable connections are inserted properly.  Measure voltage at +/- terminals with a multimeter to make sure they are within range(23.5 - 25.0V)

## Not Spraying evenly, one side of garment missing pretreatment:

This is likely a clogged nozzle/mesh filter.

1 - Inspect and replace nozzle and mesh filter if covered in pretreatment.  Make sure to run the cleaning cycle to improve longevity of filter/nozzle.

2 - If the filter and nozzle are new and the problem persists, check for any leaks in lines and ensure all tube connections are properly seated into the connectors.

3 -Finally, the solenoid can be replaced and the machine can be retested.

## Pretreatment not spraying out of nozzle during purge/clean/spray cycle:

This could have several different causes.  Ensure there is no air in the lines.  Run a purge cycle with the blue Purge Valve Open.  Inspect the lines while purging to check for any air:

**A.  If there is air in the lines leading to the pump:**

1 - Ensure there is enough pretreatment liquid in the bottle(Fill halfway).

2 - Check connectors to ensure plastic tubes are inserted fully into the connectors from bottle to pump input:

**Connections from bottle to Pump:**

3 - Inspect and replace black filters inside the bottle as they have a tendency to clog over time. Remove black filters from the tubing and run a purge cycle again to confirm clog.

**Black Filter:**

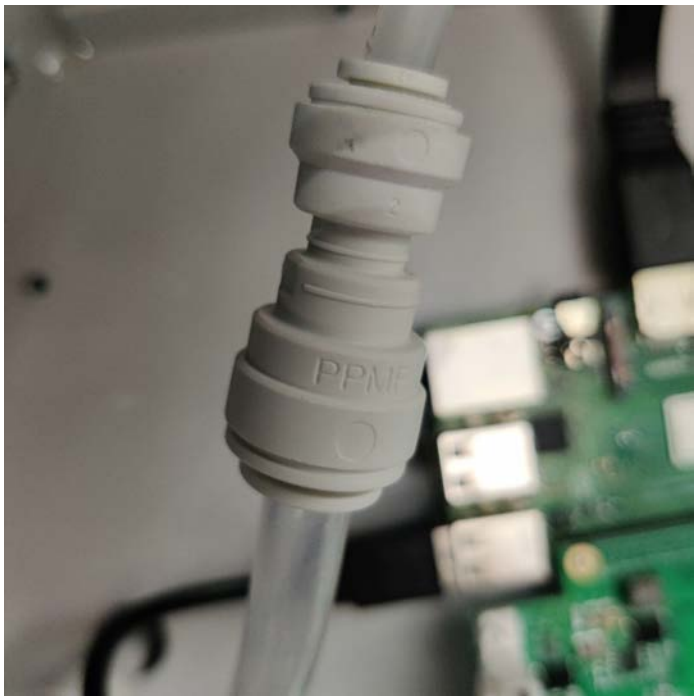
4 - Check for any leaks in the lines.

**B.  If there is no air and lines are full up to the pump**:

1 -  Inspect the output side of the pump and ensure the line out of pump output up to the purge valve is filling up. If you don’t see pretreatment filled up from pump output to purge valve:

Check connections from pump to the purge valve:

**Connections: Pump to Purge Valve:**



**C.  If there is no air and lines are full up to the purge valve:**
1 - Remove the line from the input side of the pump.

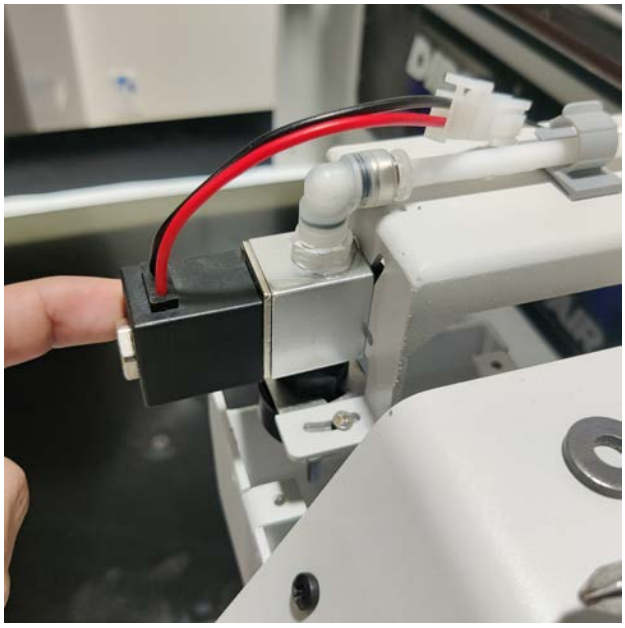
**Input to Pump:**


2 - FIll a big syringe with water/liquid and squeeze through the input side of the pump while running the Purge/Clean cycle.  Ensure the purge valve is closed while doing this:

-  If you see nozzle spraying while pushing water manually through the syringe:
 The pump may be clogged or there was some air remaining in the lines.  Insert the input line back into the pump and run another purge cycle.  Inspect pump for clogging if still not spraying

- If you feel resistance when inserting liquid/water from the input side with a syringe while the line up to the solenoid is filled and there is still no spray out of the nozzle, inspect the solenoid:

**Solenoid:**



Run a spray cycle by hitting the start button.  Listen for solenoid clicking during the spray cycle.  Sometimes, even if the solenoid clicks, it may be faulty.  If the nozzle is not spraying when you insert a syringe through the pump and there is resistance, replace solenoid and retest.

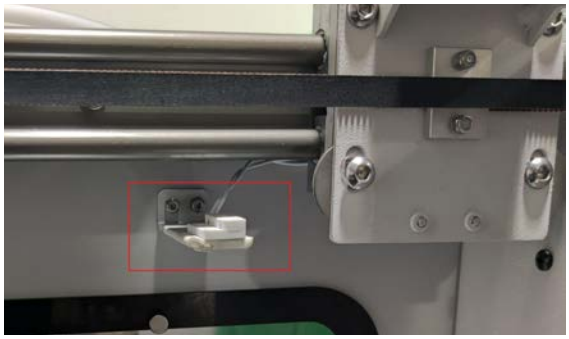
## Machine sprays full area of garment even when half or partial area is selected:

- This is likely to be a faulty solenoid. Replace and retest.

## Nozzle assembly doesn't stop/hits wall during initialization:

Check that the home sensor mounted on the machine is screwed in properly and  placed close to the magnet on the nozzle assembly carriage.  If still not initializing correctly, inspect the cable and connector of the home sensor to the main board.  Replace home sensor and retest.

**Home Sensor (in red):**



*If nozzle assembly is jammed on path while initializing(not hitting wall) see next section.

## Nozzle assembly gets jammed on path while running a spray cycle:

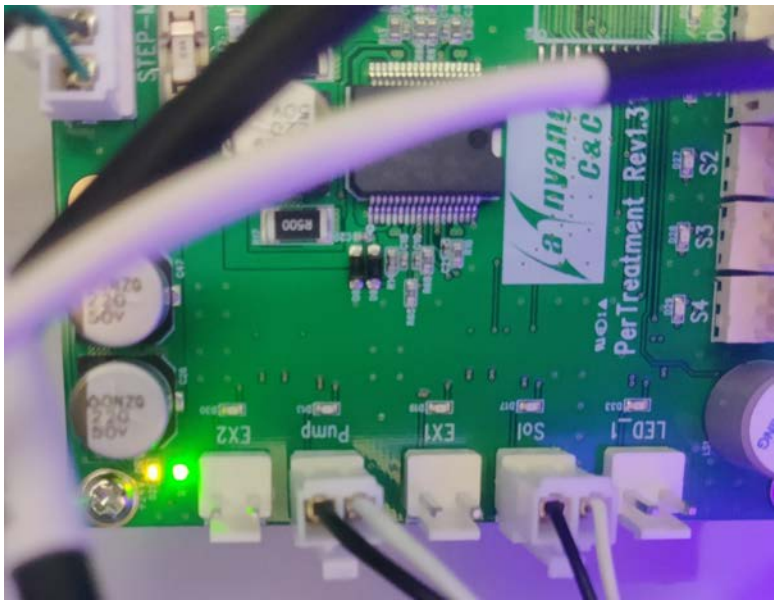
1 - Check for corrosion on the rails. Clean off if it exists. Retest.
2 - Check how well the rails are lubricated. Apply grease over the entire rail assembly.
3 - Check the condition of drive belt. Replace, Retest
4 - Check belt tension. Loosen slightly if there is high tension.

## Bottom LED's turn on but screen doesn't turn on and machine doesn't initialize:

1 - Check Power cable connections to the main control board.
2 - Ensure main board pins are fully seated to the control sub board.
3 -Check LED's on the control sub board and Main board, when functioning properly:

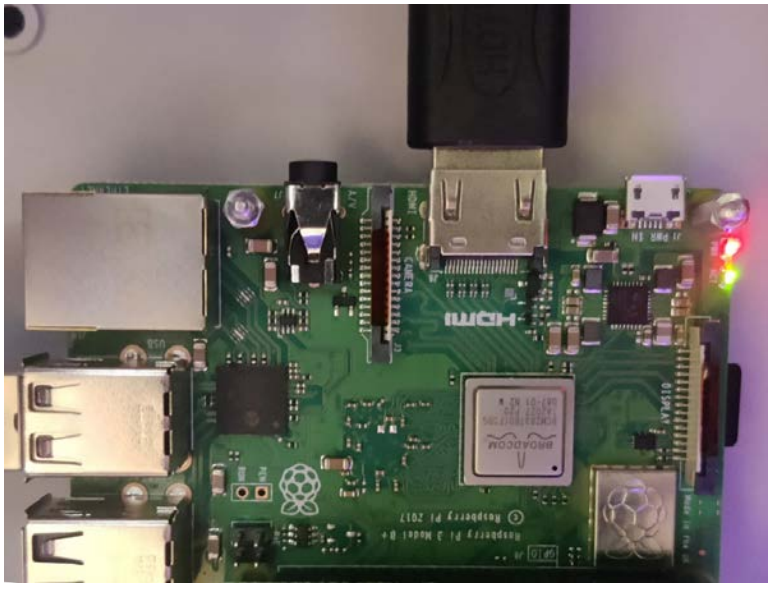
**- DTA Control Sub board:**

**Green and amber LED's on the bottom left corner when the power is on:**




**- Main Board:**

**Static Red light when power is applied and a blinking Green light while booting up:**



If there is an LED missing in either the Main board or the control sub board, replace the specific board and test again. The Control sub board has a 8A nano fuse that can be replaced and retested.

## Black Screen but machine powers on and initializes:

Check if the touch screen is getting power.

**A. If the screen is getting power:**

1 - Inspect and change HDMI cable.
2 - Inspect and change USB cable as it may not be sending proper output power.
3 - Swap screens and test again.

**B. If the screen is not getting power:**

1 - Inspect and change USB cable
2 - Swap out screen and retest

## Screen has No Touch:

1 - Inspect and change USB cable
2 - Swap out screen and retest

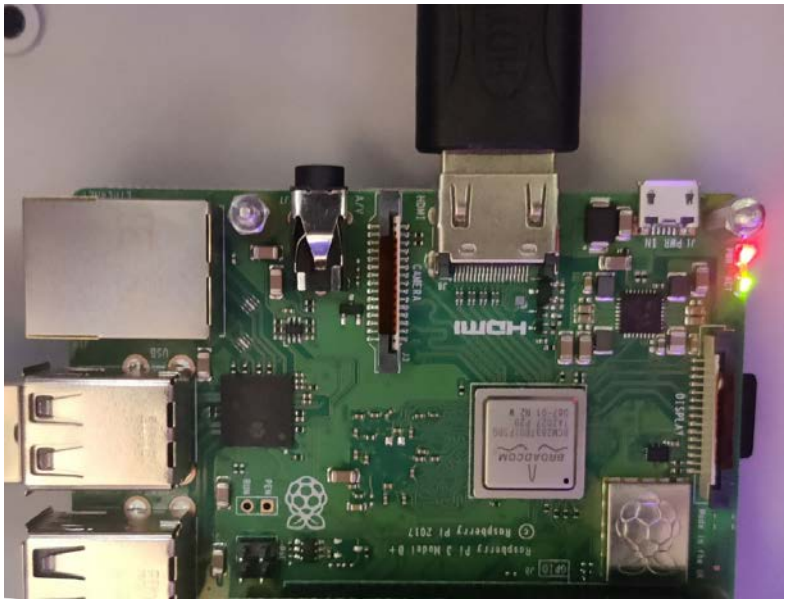
## Flickering Screen:

1 - Inspect and change HDMI cable
2 - Inspect and change USB cable
3 - Swap out screen and retest

## Identifying Failing boards:

### 1 - Main Board:

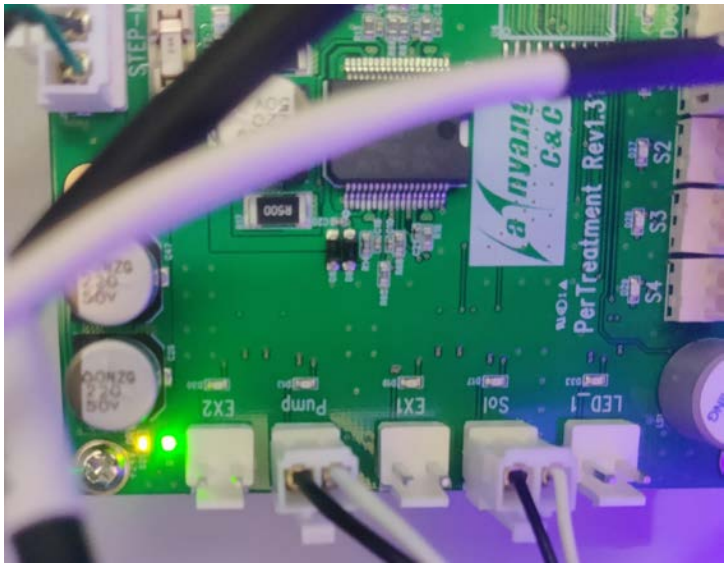
Turn on power to the machine.  Check for static Red light when power is on and blinking Green Light while booting up. If the green light is not blinking during boot up, the Main Board is likely failing.  If there are no lights, inspect pins that connect it to the control board and the power cable to the power supply.  Replace and retest if no power.  Make sure the SD card is inserted into the board.



### 2 - DTA Control Sub Board:

There should be a green and amber light while the power is on and the board is functioning properly.

If one of the lights is missing, replace the 8A nano fuse adjacent to the Stepper Motor connector and test again.



## Checking for failing connections:

While running a component(Pump, solenoid, motor), examine the control board for the corresponding green LED light on the control board.  If there is no light when the component is activated, check connections of the component to the control board.

**Component LEDs on control Sub Board(in red):**