Hercules
Instruction for PCB replacement
Level 4A and Level 4B

Necessary equipments:
  • Normal screw driver (NSD)
  • Tor-x screw driver (TSD)
  • A pair of pliers
  • Multimeter

NOTICE: When you test the cleaner under voltage, please do not touch the electrical parts!!!

Content

Identifying the root cause of the problem ................................................................. 2
  1. Checking the hose ....................................................................................... 2
  2. Checking the power outlet cable ................................................................. 2
  3. Quick test – leakage problem or PCB problem? ....................................... 3
  4. Checking the AUTO function of the cleaner ............................................ 4
Disassembling the cleaner ....................................................................................... 6
Changing the power supply board (1131182-01/1180121-01) ................................. 8
Changing the AUTO board (1131185-01/1180121-01) and main board (1131186-02) ...... 10
Testing .............................................................................................................. 11
Identifying the root cause of the problem

1. Checking the hose
   Attach the hose, plug in the cleaner and press AUTO button on the bent-end. Control lamps are flashing (MIN-AUTO-MAX) but the cleaner does not start. Unplug the cleaner.
   Please check with a multimeter whether there is no short circuit on the hose:

   normal value: 10 kOhm
   normal value: more than 10MOhm
   normal value: more than 10MOhm

   Please repeat the measurement while you turn around the bent-end on the hose.

   In this case you can be sure that there is no short circuit on the hose. (neither at the hose connection area nor at the bent-end.)

   Short circuit on the hose damages the power supply board (1131182-01/1180121-01) in the cleaner. Change the power supply board (see on page 9) and the hose.

2. Checking the power outlet cable
   Check whether there is no abrasion on the power outlet cable (1130958-01). Remove the wires from the power supply board.
Please follow point 1-4 in the Disassembling section. (see on page 6)

You need to measure 10 MΩ between brown and blue wire, brown and black and black and blue wire.

If the hose was OK but short circuit was found at the power outlet, then please change the power supply board (see on page 8) and the power outlet cable.

3. **Quick test – leakage problem or PCB problem?**

   Please follow point 1-4 in the Disassembling section (see on page 6).
   Please check that there is no leakage problem with the cooling hoses. Please remove
the cooling hose from the AUTO board:

[Image: Remove the cooling tube from here.]

Plug in the cleaner. Press AUTO button on the bent-end. When you test with static blowing (blow into the tube with your mouth and keep the sensor on stable pressure) the power should go down to minimum power until you release the pressure. In this case the PCBs work well and you need to check the cooling hoses and their fixing block.

[Image: Diagram showing 1 and 2]

Please clean the surfaces (no.1. and no.2.) and grease it before assembling the cleaner.

When you test with static blowing and the power does not change or badly changes, you should change the AUTO board (see on page 10).

4. **Checking the AUTO function of the cleaner**
   Please follow point 1-4 in the Disassembling section (see on page 6). Attach the hose and plug in the cleaner. The cleaner does not start and the control lamps are not flashing. Unplug the cleaner. Remove the connector of AUTO board (1131185-01) from the power supply board:
Plug in the cleaner. Please do not touch the electrical parts!
If the control LEDs on AUTO board start to flash, please change the power supply board (1131182-01/1180121-01) – see on page 8.
If the LEDs on AUTO board do not flash, change the main board (1131186-02) and the AUTO board (1131185-01) – see on page 10.
Disassembling the cleaner

1. Remove the display with a NSD as shown on the images

2. Remove the 2 screws from the rear cover with TSD

3. Open the dust bag cover and remove the dust bag holder and the dust bag

4. Remove the rear cover with a NSD as shown on the pictures
5. Remove the handle fixing clips with a special pair of pliers as shown on the photos from both sides. Remove the handle.

6. Remove the display from the control LEDs.
Changing the power supply board (1131182-01/1180121-01)

1. Disassemble the cleaner (please follow the points of Disassembling section – page 6 and 7)
2. Remove the connectors from the power supply board.
3. Remove the plug of AUTO board
4. Take out the power supply board and insert a new one.
   Please make sure that the cooling tube and the wire is in the right position as shown on the attached photo.
5. Plug in the plug of the AUTO board and attach the connectors.
   REMARK: If you changed the PCB due to short circuit on the hose, do not forget to replace the hose. If you do not change the hose, the power supply board will be damaged again.
6. Please make sure that the cooling hoses are attached properly.

7. Please check that the wire from the AUTO board to the main board led properly:

8. Assemble and test the cleaner (see Testing on page 11)
Changing the AUTO board (1131185-01/1180121-01) and main board (1131186-02)

1. Disassemble the cleaner (please follow the points of Disassembling section – page 6 and 7)
2. Remove the cooling tubes

3. Remove the AUTO board and filter/dust bag indicator board

4. Disconnect the main board
5. Attach the new main board (1131186-02)
Make sure that the cooling hose is properly attached to the board:

- wrong!!!
- correct

6. Change the AUTO board (1131185-01)
7. Insert the AUTO board and the filter/dust bag indicator board
Please make sure that the wire of the AUTO is led as shown on the picture

8. Attach the cooling tubes
9. Assemble and test the cleaner (see Testing on page 11)

**Testing**

Make sure that the cleaner works properly.
- Plug in the mains cord to the electrical network
- Press AUTO button on the bent-end
- The control lamps are flashing.
- Bag and filter indicator lamp is flashing and goes to Optimum
- Please check that remote control works properly
- Switch off the cleaner