

# Troubleshoot

# Engine Control Unit

## Haltech



Symptoms:

- Ski do not start.
- Ski do not spark.
- Ski do not inject fuel.
- Fuel pump do not prim on ignition on
- Oil pump controller showing Red light.

Causes:

- Defective ECU

## Requirement

Multimeter



## 1. Check the Power fuses

1. Remove the fuses from the fuse box
2. Visually check if the Power fuse is blown, if you are not sure you can use your multimeter as continuity mode and put the black probe on one pin of the fuse and the red probe on the other pin
3. If the Power fuse is blown or there is no continuity on the pins, **change the fuse**
4. If the fuse keeps blowing when Powering on the Engine by putting the lanyard in, **go to section 3 for “Check the Main Relay”**

## 2. Check the ECU fuse

1. Remove the fuses from the fuse box
2. Visually check if the start fuse is blown, if you are not sure you can use your multimeter as continuity mode and put the black probe on one pin of the fuse and the red probe on the other pin
3. If the ECU fuse is blown or there is no continuity on the pins, **change the fuse**
4. If the fuse keeps blowing
  - **Contact your local dealer**

## 3. Check the Main Relay

1. Remove the Cover on the Fuse box
2. Remove the Lanyard off the start Stop Switch
3. Put the lanyard back on the Start Stop switch to hear the Main relay clicking
4. If the Main relay do not click or not sure :
  1. Remove the Main relay from the fuse box
  2. Take a multimeter set in Ohm (“Ω”) measurement or “200” if manual
  3. Test the resistance value between the pins of the Main relay
  4. Result of the resistance test :



*Main Relay*

Black probe Red probe	Main Relay - Pin 85	Main Relay - Pin 86	Main Relay - Pin 87	Main Relay - Pin 30
Main Relay - Pin 85	x	50 – 120 Ω	Open Loop – “OL”	Open Loop – “OL”
Main Relay - Pin 86	50 – 120 Ω	x	Open Loop – “OL”	Open Loop – “OL”
Main Relay - Pin 87	Open Loop – “OL”	Open Loop – “OL”	x	Open Loop – “OL”
Main Relay - Pin 30	Open Loop – “OL”	Open Loop – “OL”	Open Loop – “OL”	x

**If one of the tests is not correct, Replace the Main Relay**

#### 4. Check the lights color on the ECU.

On the ECU Haltech Elite 550, there is 2 lights on the case:

- Power Light:

Color	Description	Diagnostic
Off	No Power	Check Power and ECU Fuse
Red	System Error	<b>Contact your local dealer</b>
Blue	Boot Mode / Firmware Update in Progress	<b>Contact your local dealer</b>
White	Normal Operation	

- Status Light:

Colour	Flashing Sequence	Description	Diagnostic
Off	Solid	No Power to ECU Or Normal Operation	If power light: White then OK Else Check Power and ECU Fuse
Red	Solid	System Error / Firmware Update in Progress	<b>Contact your local dealer</b>
Orange	Slow Flash	Map Upgrade in Progress	<b>Contact your local dealer</b>
Yellow	Solid	Hardware Error	<b>Contact your local dealer</b>

**If one of the results is not correct, there is an issue**

**Contact your local dealer**

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