



Troubleshoot

# Fuel Pump

Symptoms :

- The fuel pump do not prime when turning on the ski
- The engine suddenly run lean
- Ski does not start after cranking a few times

Causes :

- Faulty Main Fuse
- Faulty Fuel pump Fuse
- Faulty Fuel pump Relay
- Faulty Fuel Loom
- Faulty Fuel Pump

## Requirement

### Multimeter



## 1. Check the Main fuse

1. Remove the main fuse from the fuse box
2. Visually check if the Main fuse is blown, if you are not sure you can use your multimeter in continuity mode and put the black probe on one pin of the fuse and the red probe on the other pin
3. If the Main 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, **Contact your local dealer**

## 2. Check the Fuel fuse

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

## 3. Check the Fuel Relay

1. Remove the Cover on the Fuse box
2. Turn off the ski
3. Turn on the ski to hear the Main relay and the Fuel Pump relay clicking
4. After 4 seconds the Fuel pump relay should click again
5. If the fuel pump relay does not click or not sure :
  1. Remove the fuel pump relay from the fuse box
  2. Take a multimeter set in Ohm ( $\Omega$ ) measurement or "200" if manual
  3. Test the resistance value between the pins of the fuel pump relay
  4. Result of the resistance test :



Fuel Pump Relay

Black probe Red probe	Fuel Pump Relay - Pin 85	Fuel Pump Relay - Pin 86	Fuel Pump Relay - Pin 87	Fuel Pump Relay - Pin 30
Fuel Pump 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 Fuel pump Relay**

*Tips : If not sure or do not have the possibility to check the resistance of the fuel pump relay:*

- Turn off the ski
- swap the main relay and the fuel pump relay
- Turn on the ski

*if the devices (like the ECU, oil pump controller) do not turn on then **the Fuel pump relay is faulty.***

#### 4. Check the Fuel loom

1. Turn off the ski
2. Disconnect the fuel pump connector from the fuel pump
3. Set the multimeter in DC voltmeter (V)
4. Connect the Red Probe of the multimeter to the pin connected to the red wire (pin 3 in the plug) and the Black Probe of the multimeter to the pin connected to the black wire (pin 4 in the plug)
5. Turn on the ski
6. The multimeter should show battery voltage for 4 seconds.
7. If the multimeter does not show voltage, **contact your local dealer.**

#### 5. Check the Fuel Pump

1. Disconnect the fuel pump

2. Take a multimeter set in Ohm ( $\Omega$ ) measurement or “200” if manual
3. Connect the Red Probe of the multimeter to the pin 3 of the fuel pump (internal blue wire) and the Black Probe to the multimeter to the pin 4 of the fuel pump (internal Black wire).
4. The multimeter should show a value between 10 and 20  $\Omega$
5. If the multimeter does not show a correct value, **change fuel pump**.

## Fuel pump Troubleshoot

