

Direction-Plus Fuel Manager Water Sensor Control Unit (WSC)

This document is to be used as a guide for the installation of the Direction-Plus™ water sensor control unit (WSC). The WSC has been designed to alert the user without being a driver distraction.

This WSC unit is only compatible with the Direction-Plus Fuel Manager Pre-filter kits.

The water sensor control unit (WSC) uses a water sensor to be fitted to the Fuel Manager filters. When water is detected the WSC will alert the operator that water is present.

The WSC has a memory of what the last alert stage was prior to tuning off and resumes that alert if the water has not been cleared on start up. The WSC has five stages of alert, see table below.

It is recommended that the WSC is installed by a qualified competent technician that is familiar with auto electrics.

Alerts and indications

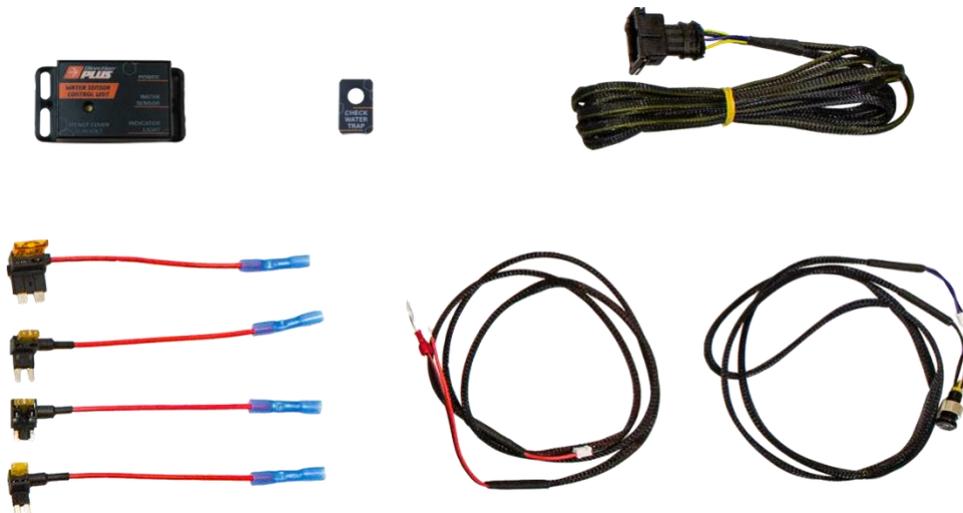
When power is first turned on for the engine the WSC will tone and flash the indicator briefly as a self-test confirming buzzer and indicator operation. If water is detected on power up the buzzer will sound for one second.

Stage	Beeps and flashes	Duration	Led indication
1st	4 beeps and flashes every 10 minutes.	1 hour.	Dim with slow fading flash.
2nd	6 beeps and flashes every 30 seconds.	30 minutes.	Dim with medium fading flash.
3rd	6 fast beeps and flashes every 30 seconds.	30 minutes.	Dim with fast fading flash.
4th	12 fast beeps and flashes every 30 seconds.	30 minutes.	Dim with rapid fading flash.
5th	1 second beep and flash every 5 seconds.	Until water cleared.	Constantly on full brightness.

Important before starting

- It is recommended that the vehicle battery be disconnected before starting work.
- The WSC is designed for **+12V systems ONLY**, connecting the WSC to a +24V system will damage the WSC.
- You have the correct tools to complete the fitment.
- Read the instructions in full and familiarize yourself with the installation, before commencing any work

Kit contents



1x control module	1x "check water trap" decal
1x power harness	1x add a circuit mini
1x indicator + indicator harness	1x add a circuit std
1x water sensor harness	1x add a circuit micro 1
1x water sensor	1x add a circuit micro 2

*Kit contents are subject to change based on component availability and/or refinement

Installation Guide

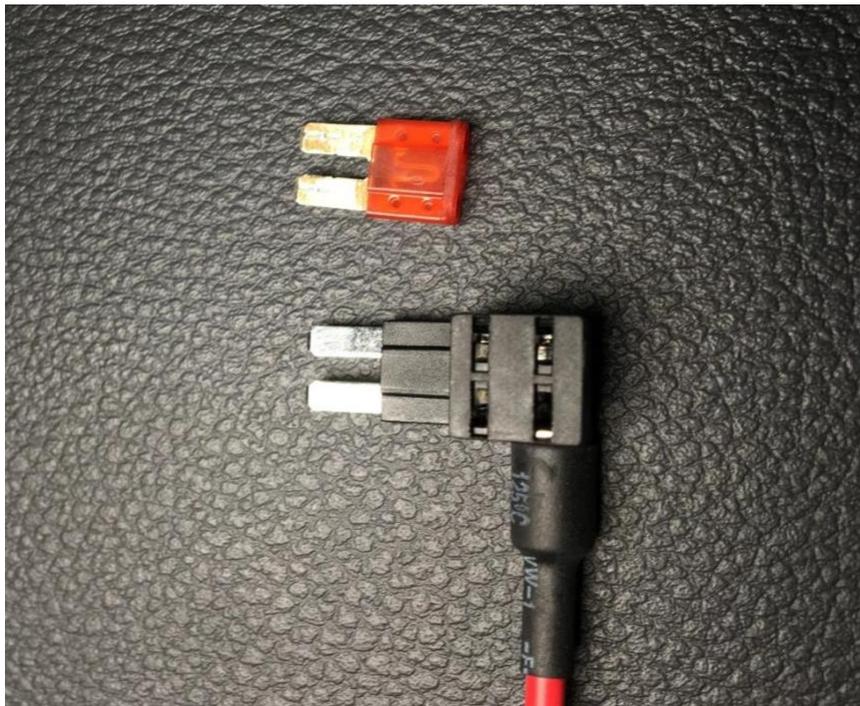
1. Remove existing drain cock from bottom of glass bowl.
2. Remove o-ring from drain tap and attach/reuse onto water sensor.
3. Attach/thread water sensor into glass bowl. Do not overtighten.



4. Connect the water sensor harness to the base of the water sensor.
5. Once connected, route the water sensor harness through the firewall. Most vehicles will have a grommet in which cable can be passed through to the cabin.



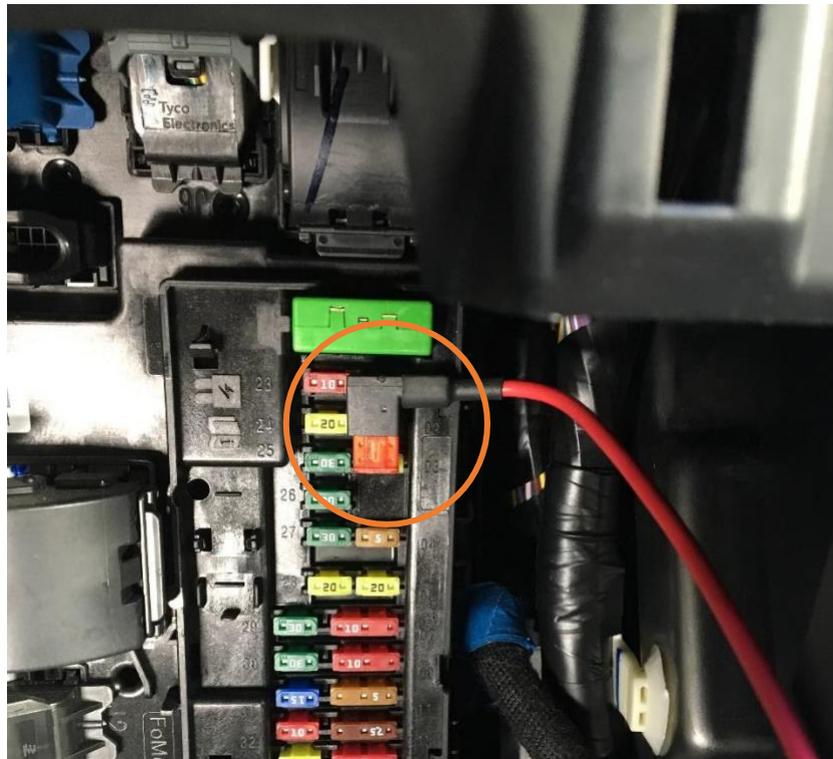
6. Once the water sensor harness is inside the vehicle, neatly route the cable under the dash to driver's side of the vehicle. Ideally located near the fuse panel.
7. Looking at the fuse panel, identify what style of fuses your vehicle use and select the appropriate add-a-circuit



8. Once the correct add-a-circuit has been identified, connect/crimp the add-a-circuit to the power harness for the WSC.



9. Identify a fuse in the factory fuse panel that can be used to install the add-a-circuit. It is recommended to use a fuse/circuit that is switched with either the accessories or ignition e.g., Cigarette fuse.
10. Once a suitable fuse/circuit is identified, install the add-a-circuit.



11. Locate a suitable earth location and attach the ring terminal of the WSC power harness. Ensure that

the earth has a metal-to-metal contact with the body of the vehicle.



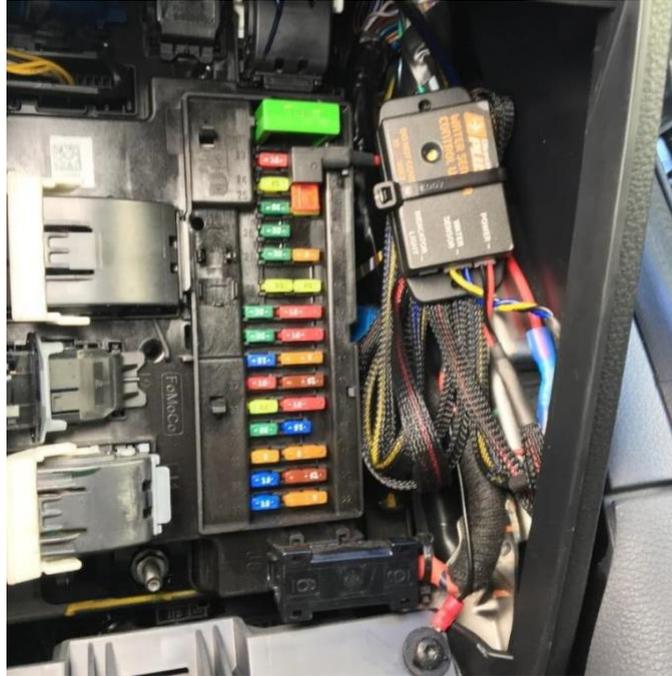
12. (Optional) Install the indicator light. Locate a switch blanking plate or other suitable location. Drill an 8mm hole to allow the installation of the indicator. Once the hole is drilled affix the "CHECK WATER TRAP" decal so that the drilled hole and the hole in the decal line up. Pass the indicator harness through the hole and use the nut to secure the light.



13. Connect the harnesses to the WSC. The harnesses are terminated so they can only be connected to each harness's respective socket. Refer the image below for clarification.



14. Identify a suitable location for the WSC to be mounted and secured. There are holes provided to assist in securing the WSC, adhesive tape is not recommended.



End of Installation Guide