



The TEAL Handeman Xtra

12 and 24 volt vehicle hand wash units: installation and operating instructions, 2018

E11 Approval No: 10R-055528, Extension No: 01
VCA registration number: VCS377871



The Handeman Xtra

12v/220w (red label), 24v/250w (blue label)
and 12v/90w (purple label)

Specifications

| Product | Handeman 12v (red label) | Handeman 24v (Blue label) | Handeman 12v (Purple label) |
|------------------------------|--------------------------|---------------------------|-----------------------------|
| Height | 370 mm | 370 mm | 370 mm |
| Width | 310 mm | 310 mm | 310 mm |
| D (closed) | 220 mm | 220 mm | 220 mm |
| D (open) | 370 mm | 370 mm | 370 mm |
| Litres | 3.3 | 3.3 | 3.3 |
| Fuse | 30 amp | 20 amp | 15 amp |
| No. of 10 second hand washes | 15 | 15 | 15 |
| Weight (empty) | 3 kg | 3 kg | 3 kg |
| Weight (full) | 6.3 kg | 6.3 kg | 6.3 kg |

Installation details: units operating using a 3 wire connection system

Euro 6 compliant vehicles: (Non-Voltage Sensing)

- Red wire to battery + using 4mm \square (minimum 30 amp rated wire)
- Black wire to battery – or ground (chassis)
- White wire to ignition control
- In-line fuse – **must** be fitted to red + ve wire
- Wiring should be kept as short a practically possible to prevent voltage drop/loss.

The PCB inside the unit has been developed so it has a third white wire (this is connected into the ignition loom on EU6 vehicles). *This removes the need for a relay on most models.*

The unit operates when it sees a signal from the ignition and also when the battery voltage is above 12.7-12.8v.

The unit will cut out when the ignition is switched off **OR** if the battery voltage drops below 12.1v (*this is a fail-safe method in case the vehicle has the ignition switched on without the engine running*).

Some vehicles may require "Fuse Jumpers" if unable to access the ignition fuse.

EU2-EU5 compliant vehicles (Voltage Sensing)

- Red wire to battery + using 4mm \square (minimum 30 amp rated wire)
- Black wire to battery – or ground (chassis)
- White wire to battery +
- In-line fuse – **must** be fitted to the red +ve wire
- Wiring should be kept as short a practically possible to prevent voltage drop/loss.

TEAL standard voltage sensing software will operate.
Unit switches on at 13.8 volts and cuts out at 12.8 volts.

24 Volt vehicles with 3 wire connection system

- Red wire to battery + using 4mm (minimum 30 amp rated wire)
- Black wire to battery – or ground (chassis)
- White wire to ignition control
- In-line fuse – must be fitted to the red + ve wire
- Wiring should be kept as short a practically possible to prevent voltage drop/loss.

TEAL standard voltage sensing software will operate.
Unit switches on at 25.6 volts and cuts out at 25.1 volts.

TEAL 12 and 24 volt vehicle hand wash units: *operating instructions*

Water temperature

If the vehicle engine is running, the water temperature will reach 43° C – the unit will then cut out.

When the water temperature drops to 40° C, the unit will cut back in to heat the water again. The cycle will be repeated whilst the engine is running.

NB: In freezing temperatures, the unit should be drained overnight and/or at weekends. This will prevent damage to your unit.

Do not fill units above the inner baffle/water tank.

Mounting instructions

The units are fixed using four bolts - two located beneath the lid and two located behind the pull-down bowl.

Using the template provided, they should be fitted into an area that allows clearance for filling, washing and bowl/waste removal.

Cleaning instructions

Daily

Empty the bowl into a foul water drain. Rinse the bowl with clean water. The bowl is removable on the Handeman Xtra.

Monthly

Empty as above. Wipe all surfaces with a mild detergent. Flush waste bowl with mild detergent.

IMPORTANT

TEAL recommends cleaning and sterilising the unit regularly with Milton or a similar product is to minimise any possible build-up of water borne bacteria such as Pseudomonas. Pseudomonas can create the environment required for other bacteria such as Legionella.

LED fault indicator

All TEAL hand wash units are fitted with an LED fault indicator which remains on at **ALL** times (this draws 10Ma). The indicator is located at the front of the unit.

If the unit develops a fault there will be a series of flashes:

- **Single flash = no water.**
Fill with clean water, remove the fuse and replace after 60 seconds, or cycle the vehicle ignition. The unit will then reset
- **Double flash = PCB/thermistor issue**
Return to the manufacturer
- **Triple flash = over voltage**
Check the wiring and battery voltage
- **Quadruple flash = low vehicle battery**
Check the battery.

Warranty terms

2 years on a return to manufacturer basis.

NB - the water is not suitable for drinking



Motor vehicle products in the TEAL range



Handeman Xtra®

12v/220w (red label) and
24v/250w (blue label)



TEALwash®

12v/220w (red label) and
24v/250w (blue label)



Compact Classic®

12v/180w (red label) and
24v/250w (blue label)