



# The TEAL Handeman

## 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

12v/180w (red label), 24v/180w (blue label)  
and 12v/90w (purple label)

### Specifications

Product	Handeman 12v (red label)	Handeman 24v (Blue label)	Handeman 12v (Purple label)
Height	325 mm	325 mm	325 mm
Width	300 mm	300 mm	300 mm
D (closed)	170 mm	170 mm	170 mm
D (open)	315 mm	315 mm	315 mm
Litres	2.5	2.5	2.5
Fuse	20 amp	15 amp	10 amp
No. of 10 second hand washes	12	12	12
Weight (empty)	3 kg	3 kg	3 kg
Weight (full)	5.5 kg	5.5 kg	5.5 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.

# Handeman 12 and 24 volt vehicle 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

Using the template provided, the Handeman 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.

### 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**



## Other 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)