

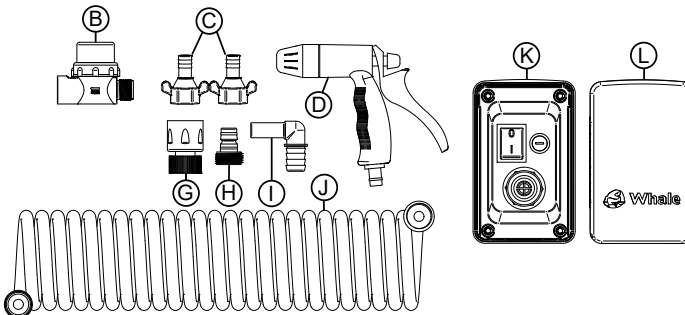
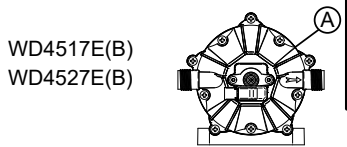
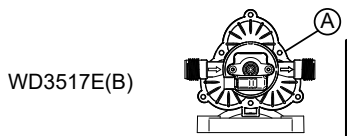
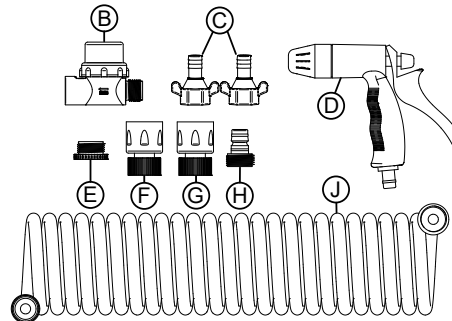
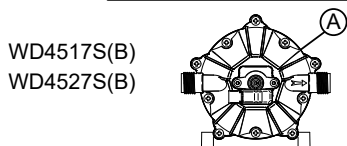
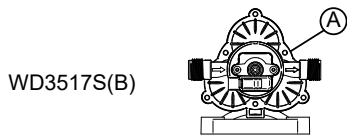
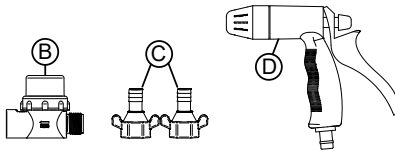
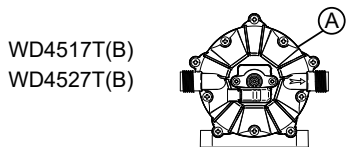
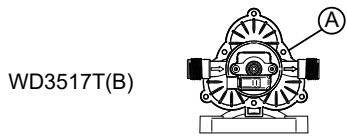
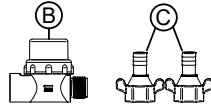
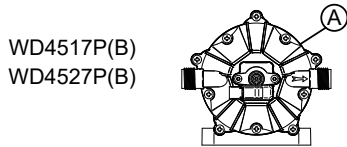
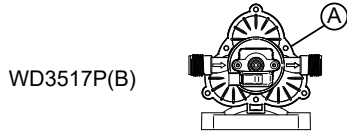


Whale®

Washdown Kits

Pump Kit, Pump and Trigger Kit, Standard Kit and Elite Kit

Installation and Operating Instructions



- (A) Washdown Pump
- (B) Filter
- (C) 1/2 inch Barb Fitting
- (D) Trigger Handset
- (E) Adaptor
- (F) Hose Coupling
- (G) Hose Coupling with Water Stop
- (H) Hose Coupling (male)
- (I) 1/2 inch Barbed Elbow
- (J) Hose (25 feet / 7.6m)
- (K) Deck Fitting (includes fuse, fuse holder, switch, hose connection)
- (L) Deck Fitting Lid

Specification

	Pump only models			Pump & trigger models		
Product Code	WD3517P(B)	WD4517P(B)	WD4527P(B)	WD3517T(B)	WD4517T(B)	WD4527T(B)
Voltage	12V d.c.		24V d.c.	12V d.c.		24V d.c.
Flow rate	3.5 US GPM / 13 LPM	4.5 US GPM / 17 LPM		3.5 US GPM / 13 LPM	4.5 US GPM / 17 LPM	
Pressure Switch Setting	60 psi (4 bar)	70 psi (4.8 bar)		60 psi (4 bar)	70 psi (4.8 bar)	
Recommended Automotive Fuse Size	15A		10A	15A		10A
Weight	5.1lbs (2.3kg)	6.2lbs (2.8kg)		5.3lbs (2.4kg)	6.4lbs (2.9kg)	
Inlet/ Outlet Size	½ inch NPT Male					
Semi Rigid Pipe-work Connections	½ inch barb connections only					
Materials In Contact With Liquid	Pump: stainless steel, EPDM, Santoprene, Fittings ABS, PVC, PP, PA, PC, POM					
Trigger Materials	N/A			ABS		
Minimum Wire Size	14 AWG (2.0 mm ²)					
Maximum Lift	6 feet (1.8m)					
Warranty	2 Year Limited Warranty					

	Standard Kit - with pump, trigger and hose			Elite Kit - with pump, trigger, hose, and 4 in 1 deck fitting		
Product Code	WD3517S(B)	WD4517S(B)	WD4527S(B)	WD3517E(B)	WD4517E(B)	WD4527E(B)
Voltage	12V d.c.		24V d.c.	12V d.c.		24V d.c.
Flow rate	3.5 US GPM / 13 LPM	4.5 US GPM / 17 LPM		3.5 US GPM / 13 LPM	4.5 US GPM / 17 LPM	
Pressure Switch Setting	60 psi (4 bar)	70 psi (4.8 bar)		60 psi (4 bar)	70 psi (4.8 bar)	
Recommended Automotive Fuse Size	15A		10A	15A		10A
Weight	6.8lbs (3.1kg)	7.9lbs (3.6kg)		7.7 lbs (3.5kg)	8.6lbs (3.9kg)	
Inlet/ Outlet Size	½ inch NPT Male					
Semi Rigid Pipe-work Connections	½ inch barb connections only					
Materials In Contact With Liquid	Pump: stainless steel, EPDM, Santoprene, Fittings ABS,PVC, PP, PA, PC, POM					
Trigger Materials	ABS					
Hose Materials	Hose: Polyurethane, Brass					
Minimum Wire Size	14 AWG (2.0 mm ²)					
Maximum Lift	6 feet (1.8m)					
Warranty	2 Year Limited Warranty					

Principle of Operation & Application

This pump is designed for supplying fresh or saltwater for targeted high pressure washdown on a leisure marine vessel only. If it is intended for use for any other purpose, it is the user's responsibility to ensure that the pump is suitable for the intended use. Models are available for either 12V d.c. or 24 V d.c. electrical supply only.

To the User

Please read the following carefully before installation.

WARNING: Please note that incorrect installation may invalidate the warranty.

To the Fitter

Check that the product is suitable for the intended application, follow these installation instructions and ensure all relevant personnel read the points listed below. Also ensure that these operating instructions are passed on to the end user.



Safety

- With all applications, it is important that a system of safe working practice is applied to installation, use and maintenance.
- **CAUTION:** Pump **not** intended for continuous use. Maximum duty cycle < 33%
- Fire hazard. Wiring **must comply** with applicable electrical standards and include a properly sized fuse or circuit breaker. Improper wiring can cause a fire resulting in injury or death. Switch off the power while making connections. Suggested wiring information is given as guidance only. For full information, refer to the USCG, ABYC and ISO regulations for marine applications and wiring gauges, connectors and fuse protection.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children **must be** supervised to ensure that they do not play with the appliance.
- Any alteration to the appliance, misuse or use of non-original Whale parts may invalidate the warranty. Non observation of the installation and operating instructions will lead to cancellation of the warranty and exclusion of liability claims.
- For use in recreational marine vessels only, for salt water or freshwater use only. Not suitable for use with any other liquid.
- For use in non-potable water systems in line with ABYC H-23 standards.
- Not suitable for pumping flammable liquids, diesel, chemicals etc.
- Incorrect installation may invalidate the warranty.

Pump Installation

- Preparation - Ensure the electric supply is turned off and water system is drained before installation.

Mounting Instructions (▶ 1-2)

NOTE: Pump **must NOT** be installed below the waterline when connected to an intake below the waterline.

1. Locate in a dry position with adequate ventilation, no more than 9 feet (3 metres) away from the tank or water source. NOTE ensure the pump cannot be submerged or sprayed by water.
2. Pump and deck socket **must be** fitted in areas isolated from a fuel source, e.g. gasoline, LPG, CNG etc. or any other flammable materials or fluids, in accordance to ISO10133 and ABYC E-11. Failure to comply may result in fire, resulting in injury or death.
3. **Do not** screw pump directly to the hull. **Must be** mounted on a bulkhead or additional board with a mounting surface minimum thickness of ¾ inch (19mm).
4. Use screws (not supplied) to fasten pump to solid surface.

Electrical Wiring (▶ 3a / 3b)

- Please note that wiring **must be** carried out by a qualified electrician.
- WARNING: Fire hazard. Wiring **must comply** with applicable electrical standards and include a properly rated fuse or circuit breaker (see specification table for fuse rating).
- WARNING: Improper wiring can cause a fire resulting in injury or death.
- NOTE: Switch off the power prior to making connections. Suggested wiring information is given as a guide only. For full information, refer to the USCG, ABYC and ISO regulations for marine applications and wiring gauges, connectors and fuse protection.

1. Use specified fuse in the circuit, as indicated on motor label and specification table.
2. Connect red wire to positive and black wire to negative - recommended wire size is 2.0 mm² (14 AWG).
3. Fit an isolating switch with adequate current rating on the positive side of the supply (except Elite Kits where this is included in the 4 in 1 deck fitting).
4. To prevent the pump running continuously, turn off at isolating switch when vessel is left unattended or water supply has been allowed to empty.

Installation And Plumbing

Pump Kits ▶ 5.1, 5.2, 5.3, connect to hose and trigger (not supplied)

Pump and Trigger Kits ▶ 5.1, 5.2, 5.3, connect to hose (not supplied), 5.6

Standard Kits ▶ 5.1, 5.4, 5.5, 5.6

Elite Kits ▶ 4.1-4.17, 5.1, 5.4-5.6, 8.1

- NOTE: **Never** use pipe sealant or sealing tapes on threaded adaptors, as these may enter the pump and cause failure.
- Check pump flow direction (as indicated on pump body) and ensure that the strainer provided is attached to the pump head inlet.
- Do not overtighten connections.

Instructions For Use

1. Ensure that pump installation is thoroughly tested before first use.
2. Once installed, run the pump ensuring all air is removed from the system.
3. Check the priming of the pump (the strainer should be filled with water).
4. Check the start and stop of the pump - by pressing the trigger.
5. Turn off at Isolator Switch when not in use.

Pump and Trigger Kits ▶ 6.5-6.6

Standard Kits ▶ 6.1, 6.5-6.6

Elite Kits ▶ 6.2-6.7

Maintenance

- WARNING: Ensure that the pump is disconnected from electrics and plumbing before and during maintenance. Before servicing pump, turn off pump and drain water from system, ensuring (where relevant), all seacocks are closed.
- This product is designed to only require minimal maintenance. For optimal performance, ensure the strainer is clear of debris.
- Annual Checks - The boat's plumbing system and pump electrics **must be** checked annually for leaks and obstructions.
- For Elite kits only, replacing the fuse ▶ 7.1

Troubleshooting

Problem	Possible Cause	Potential Solution
Pump does not run	No power to sensor	Check power supply. Attach leads / clean connections. For Elite Kits only - ensure switched on at 4 in 1 deck fitting.
	Fuse has blown	Replace fuse.
	Blockage in pipework	Check pipework for kinks.
Pump runs but no water flows / Pump runs but will not switch off	No water getting to pump	Check the seacock is open / water tank is not empty. Check strainer is not blocked. Check all connections from tank / seacock to inlet of pump are secure - any air leaks will prevent prime.
	Water leaking at outlet side of pump	Check pipework for leaks / repair. Check system drain plugs are closed. Check hose is connected properly.
Pump cycles on and off excessively when trigger is open	Excessive back pressure	Check pipework for kinks and filters etc. are clear. Adjust nozzle to full open jet setting.
Pump cycles on and off periodically when the trigger is closed	Leaking at outlet side of pump	Check pipework / fittings for leaks and repair. Check system drain plugs are closed.
Noisy operation	Pump drawing air	Refer to 'No water getting to pump' section.
	Noise created by vibration	Check pump is secured to solid surface. Check pump body is not in contact with hard surfaces. Locate away from interfering surfaces. Check pipework is securely supported.
Low flow	Power supply to pump	Check power supply to pump uses correct gauge wire (2.0mm ² /14 AWG) to give full voltage at pump. Check battery is not discharged. Check correct voltage at pump.
	Pipework/connections crushed due to over tightened jubilee clips	Replace damaged connections.
	Pump too far from water tank/ source	Pump must be situated no more than 9 feet (3m) from the water tank/ seacock.
	Water leaking at outlet side of pump	Check pipework/ fittings for leaks and repair. Check system drain plugs are closed. Turn off the isolator switch when not in use. Check that the hose is properly connected.
	Pump strainer clogged	Remove clear lid, rinse and replace to main strainer body (retain strainer mesh for lid).

Winterizing

In freezing conditions completely drain the water system, as serious damage to the pipe work and pump may occur if water freezes in the system.

1. Drain water tank or supply either using the pump or a drain valve.
2. Open the trigger (including drain valve) and allow pump to purge the water from the system and turn pump off.
3. Disconnect the pump and turn on to purge into an adequate container.
4. N.B. Leave the trigger open to avoid any damage.
5. Only reconnect the pump when the water system is to be used.

EU Declaration of Conformity

Declaration no.: EU-MSE026-000

We the undersigned:

Name of manufacturer: Munster Simms Engineering Ltd

Declare under our sole responsibility that the following apparatus:

Product description: Washdown Pump and Accessories

Model name: Washdown

Product codes: WDXXXXX(B)

Brand name: Whale

Is/are in conformity with the following relevant EU Legislation:

2014/30/EU

EMC directive

2011/65/EU

RoHS II

Based on the following harmonized standards:

EN55014-1:2006 + A2:2011

EMC Emissions

EN55014-2:1997 + A2:2008

EMC Immunity

And therefore complies with the essential requirements of that directive.

Additional information:

This product also conforms to the following standards:

ISO 10133:2012

Extra-low Voltage d.c. Installations

Technical file number: TF-MSE026-000

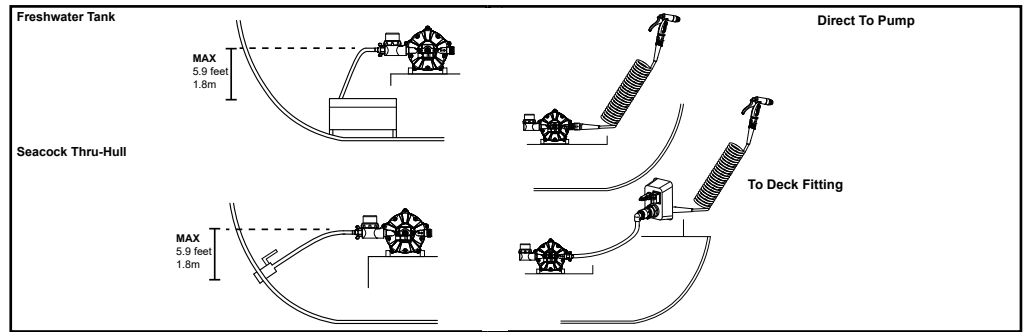
Location of technical file: Munster Simms Engineering Ltd

Name and position of person binding the manufacturer or authorized representative:

Name: Richard Bovill

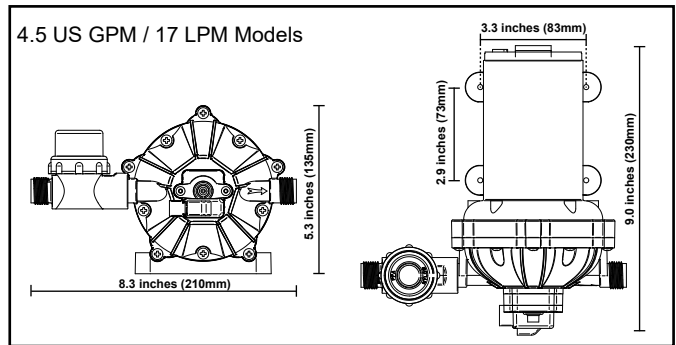
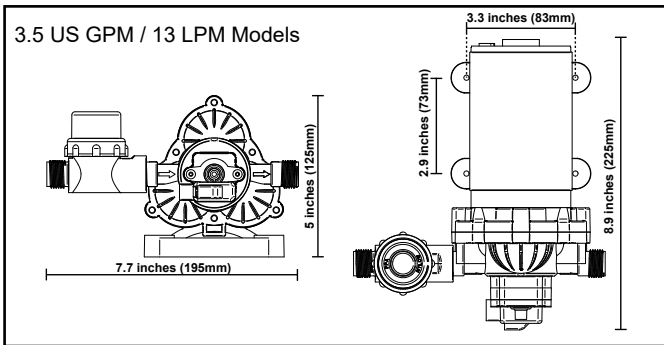
Function: Engineering Director

1- Typical Installation

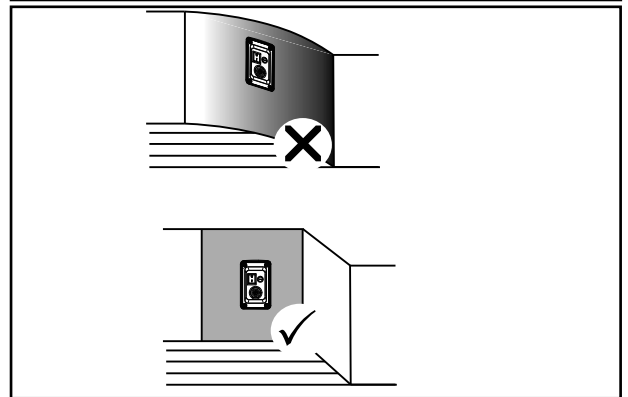
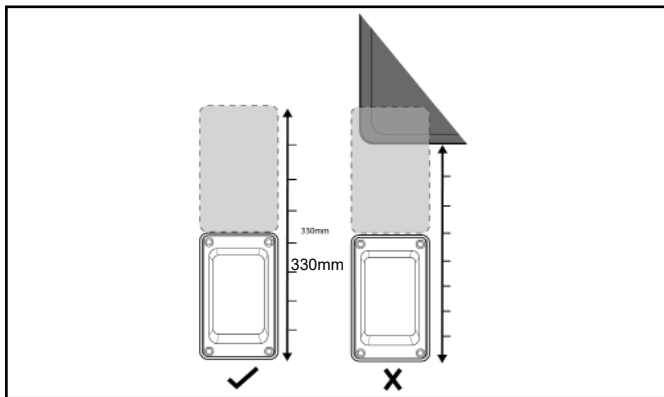
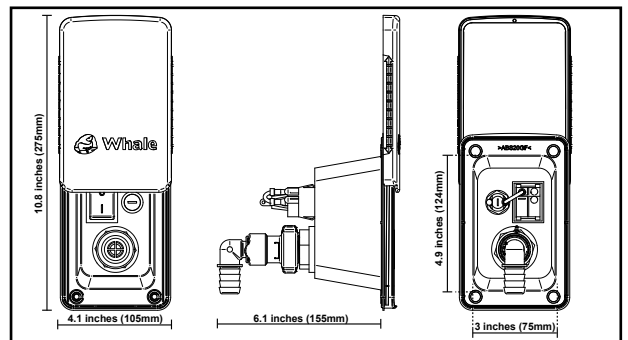


2a - Pump Dimensions

Dimensioni della pompa Pumpun mitat

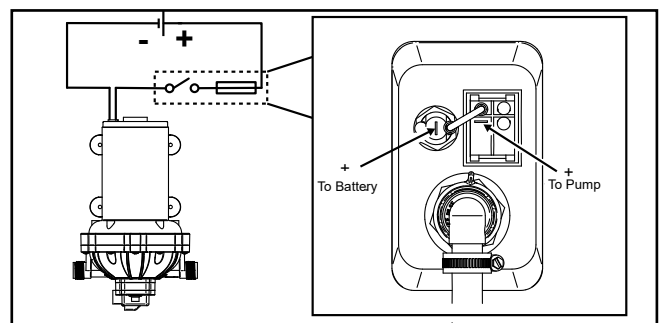
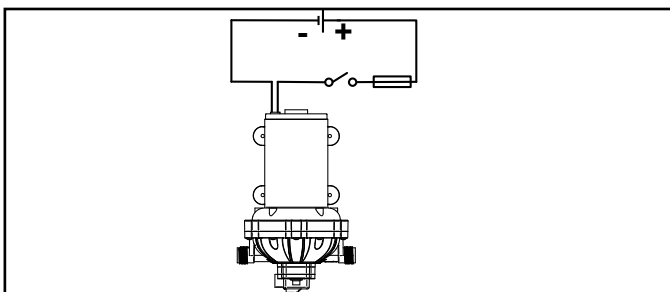


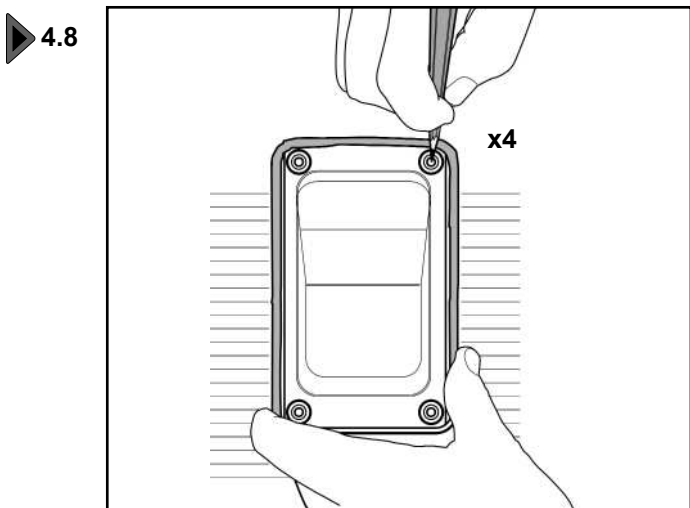
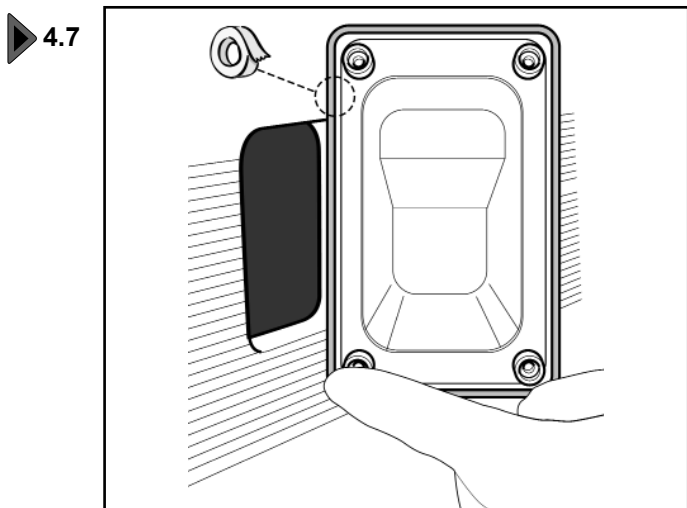
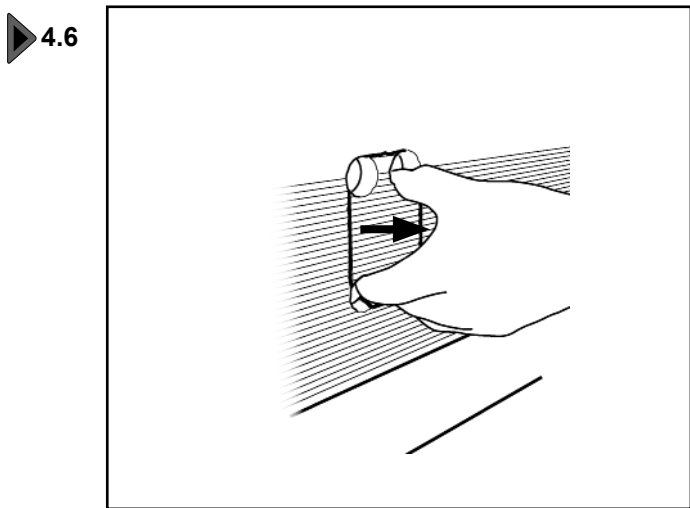
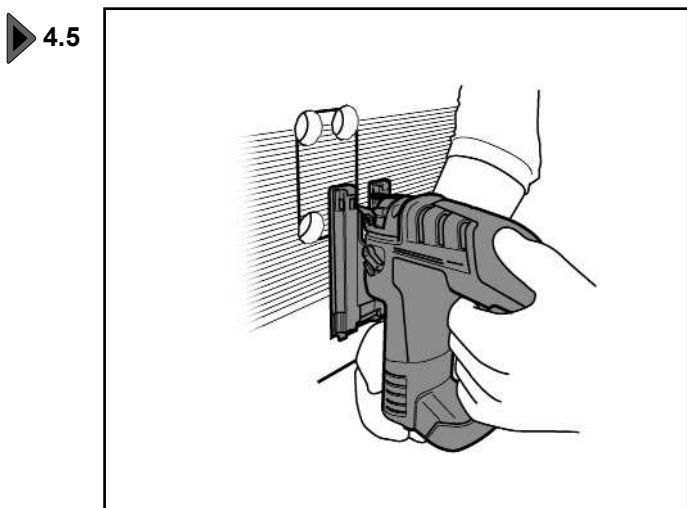
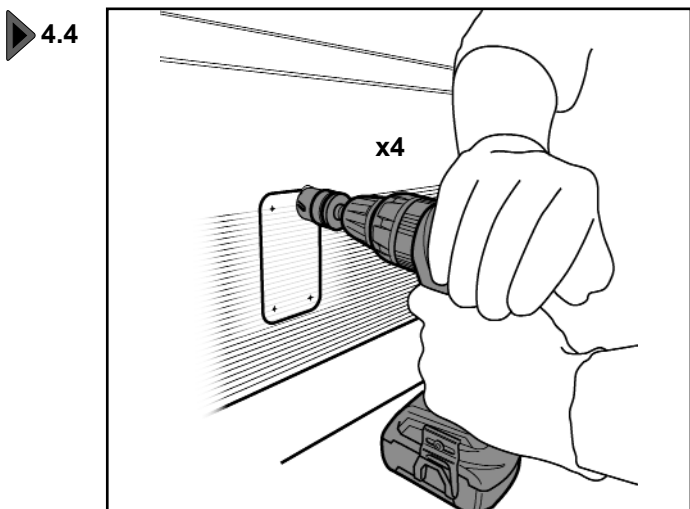
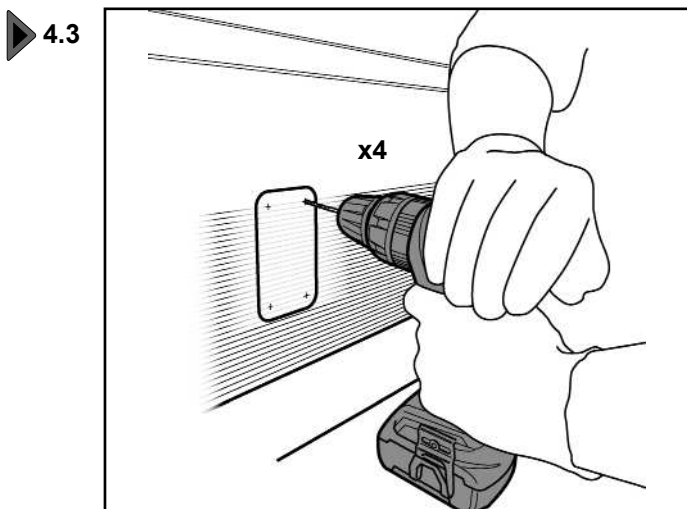
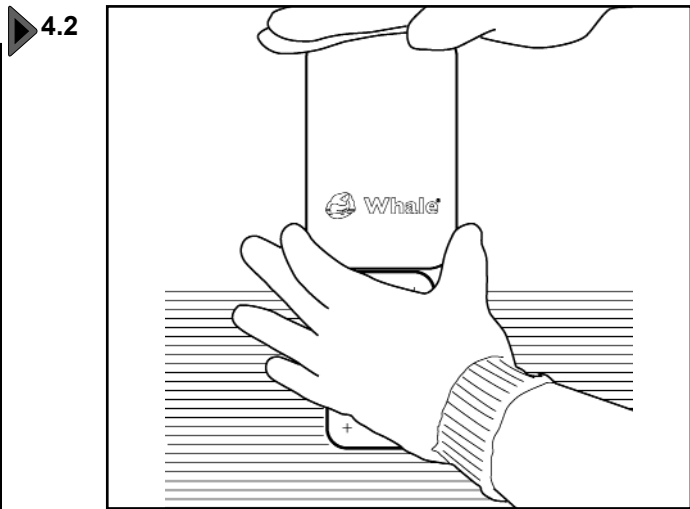
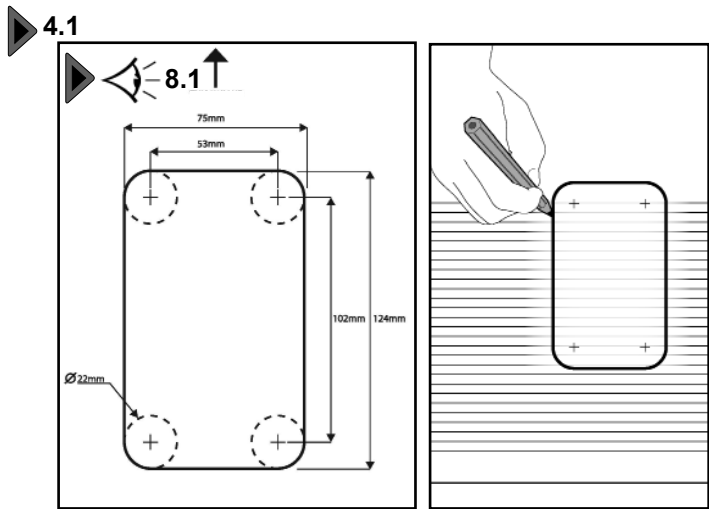
2b - 4 in 1 Deck Fitting Dimensions and Installation Restrictions

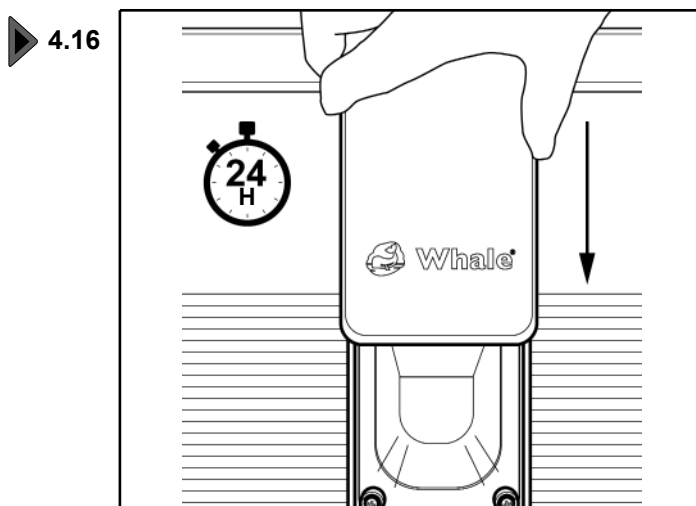
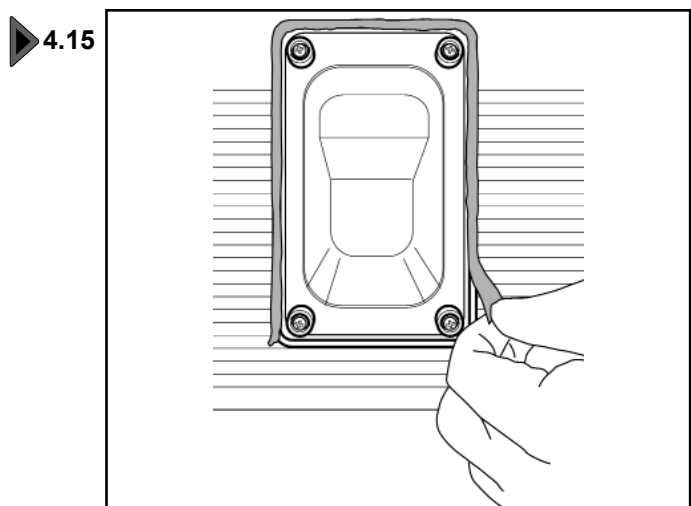
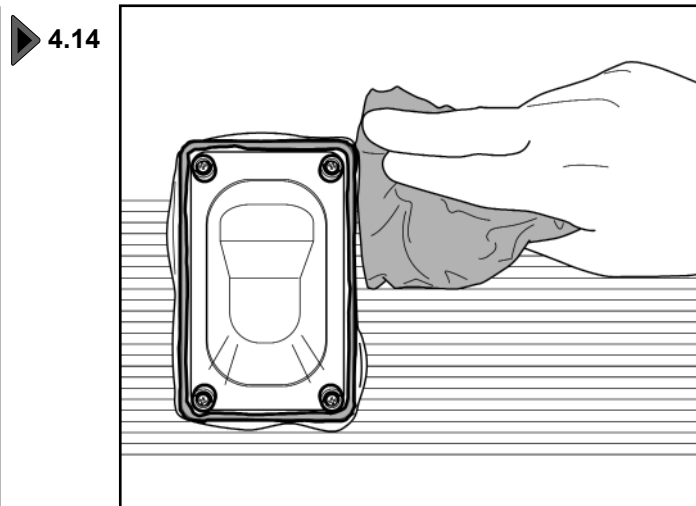
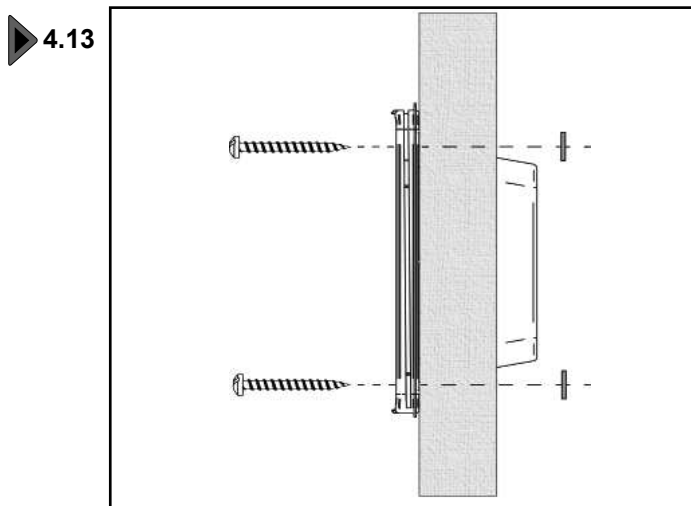
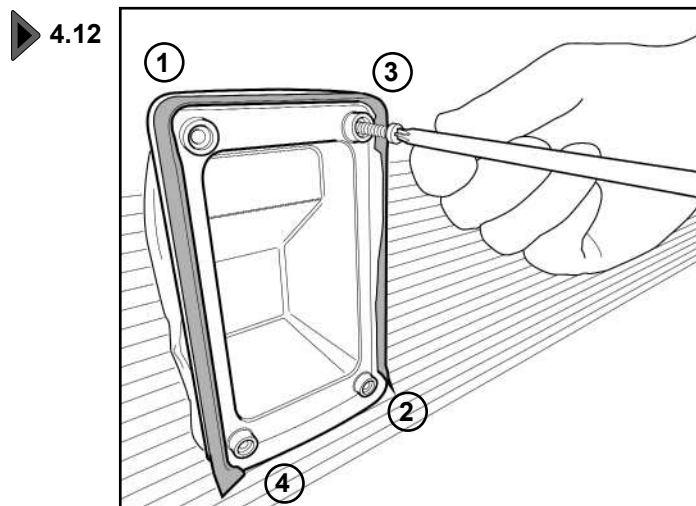
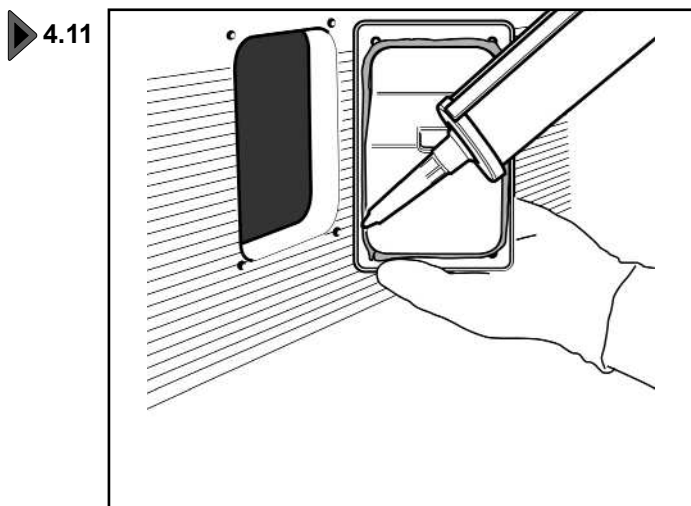
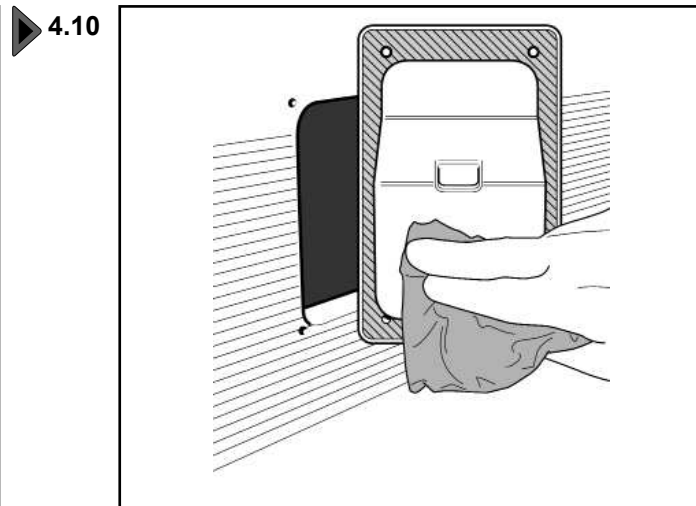
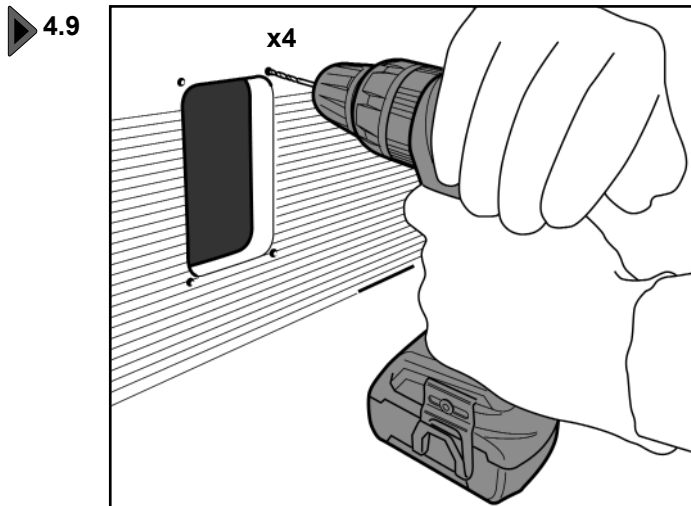


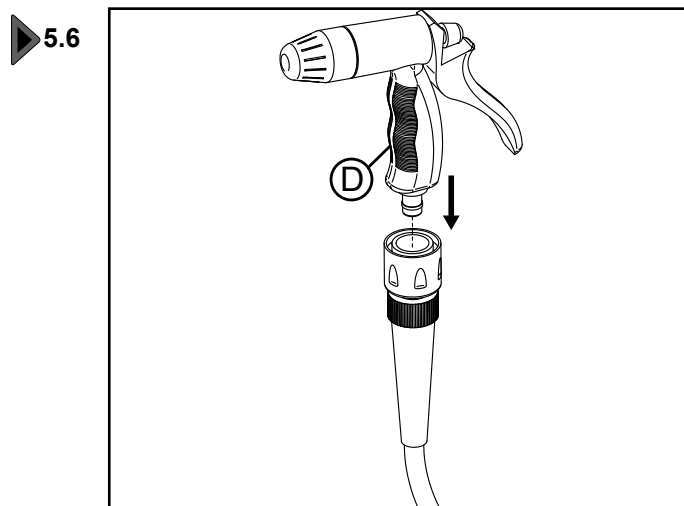
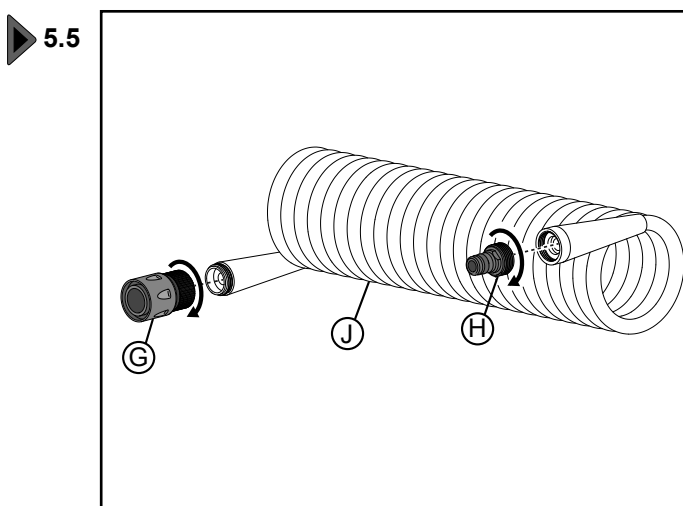
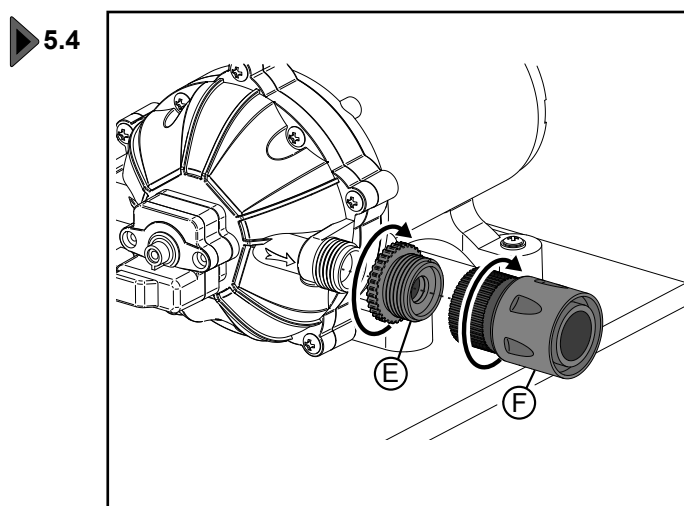
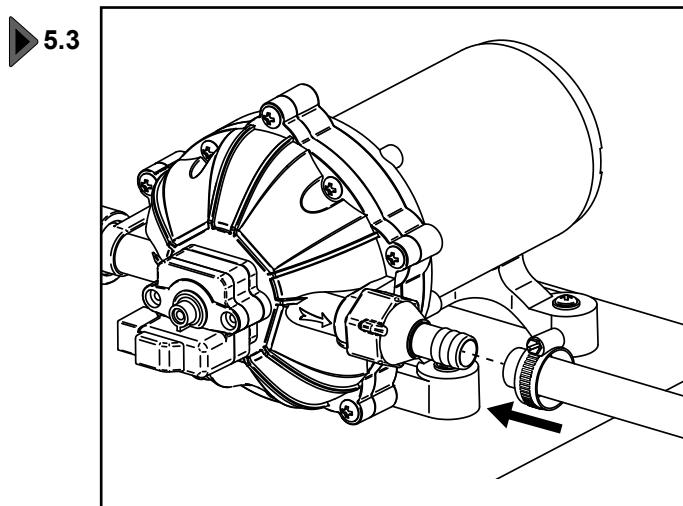
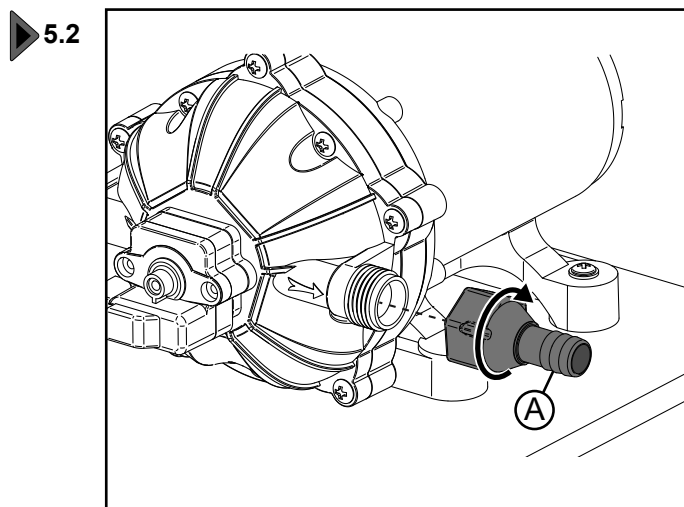
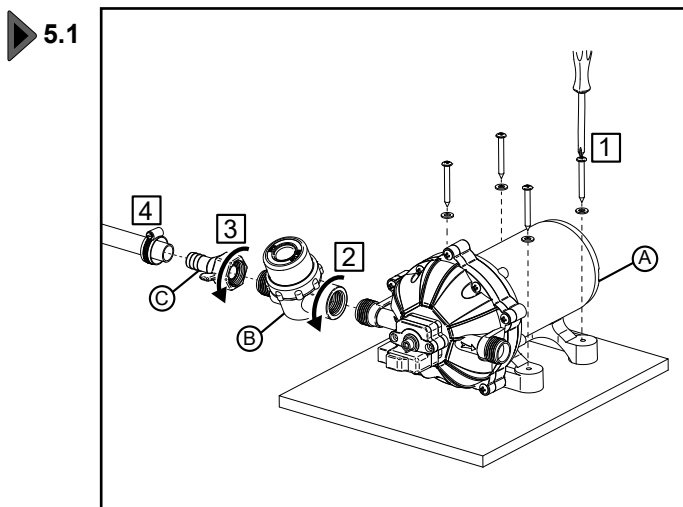
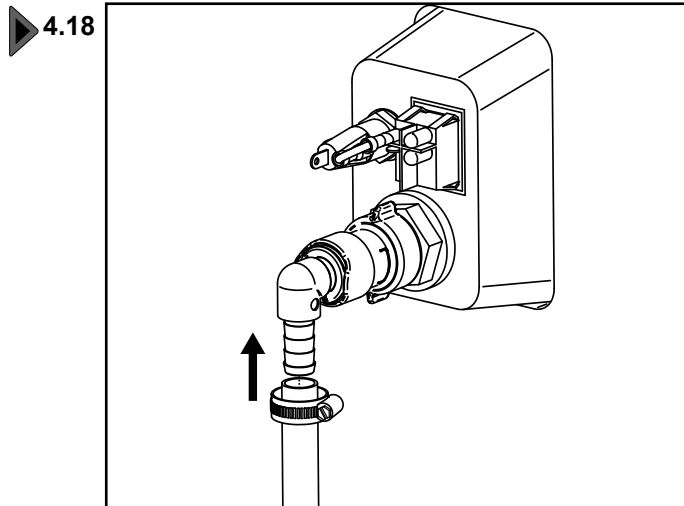
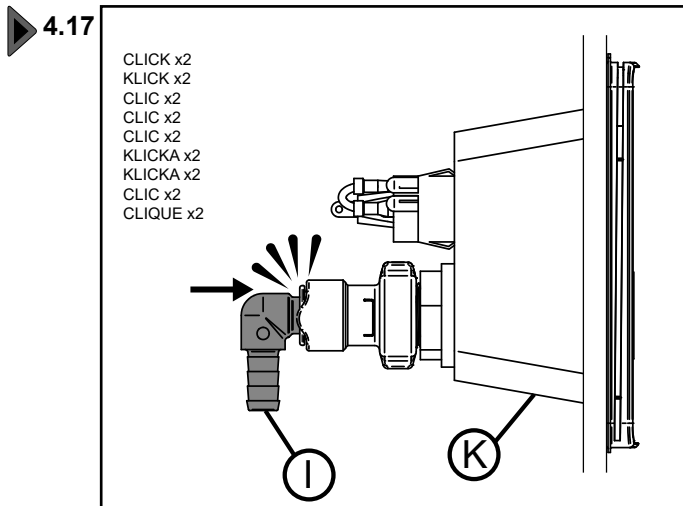
3a - Wiring for Pump Kits, Pump and Trigger Kits

3b - Wiring for Elite Kits and Standard Kits

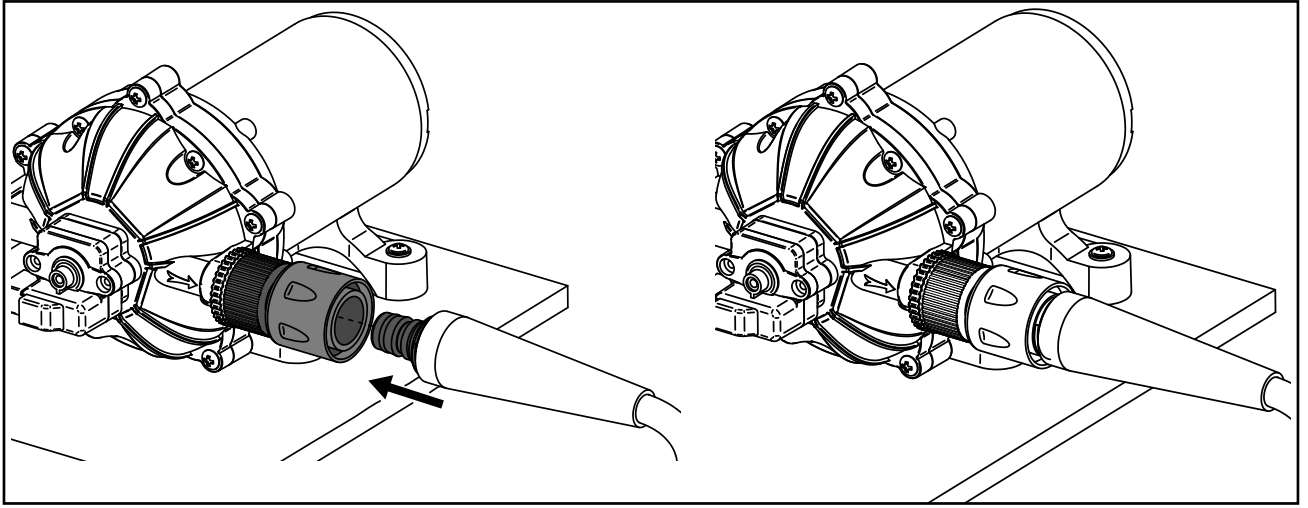




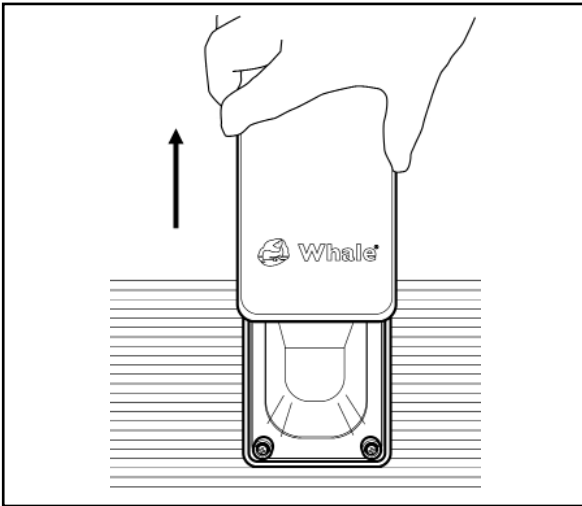




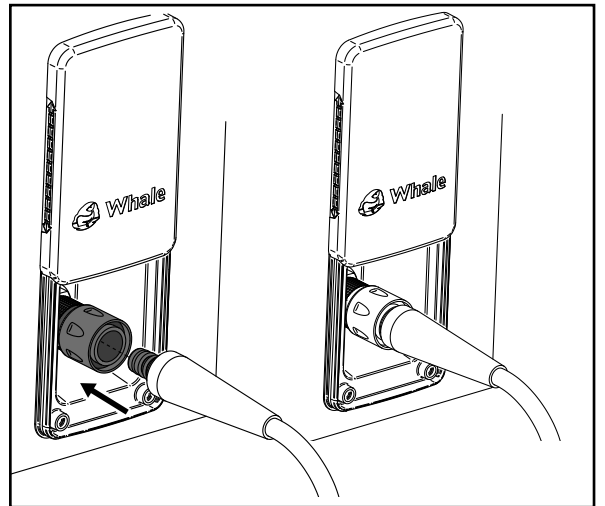
▶ 6.1



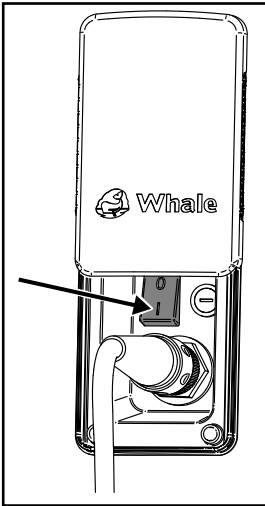
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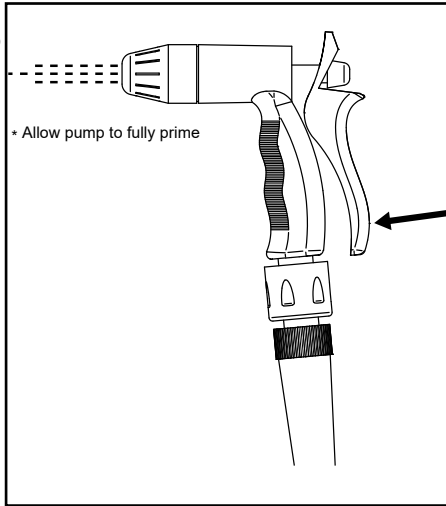
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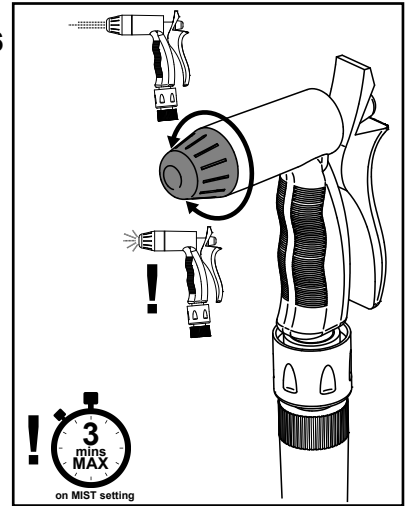
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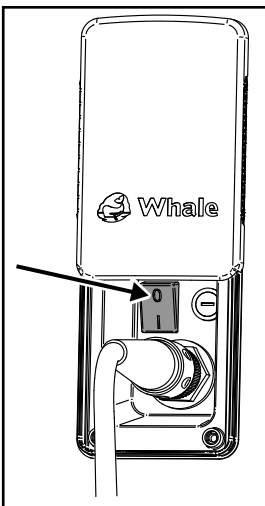
▶ 6.5



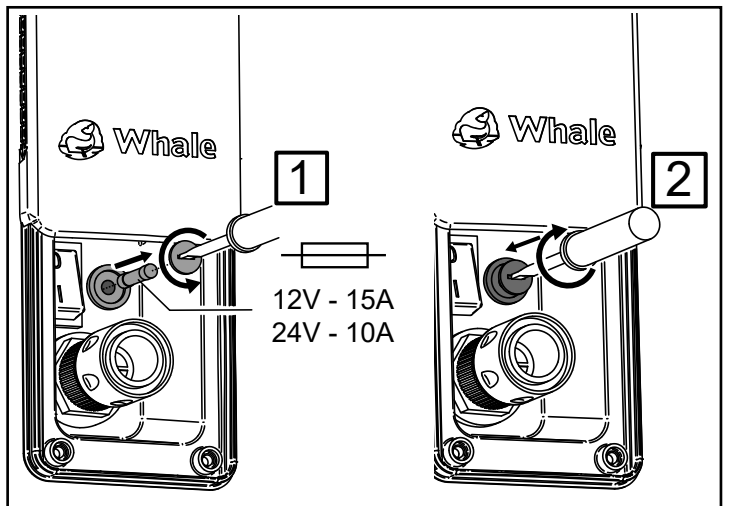
▶ 6.6



▶ 6.7



▶ 7.1



This Way Up  Esta Parte Arriba

