DAVEY

DAVEY
PowerMaster® ECO

Swimming Pool and Spa Pump

Model: PMECO

Installation and Operating Instructions

WARNING: Failure to follow these instructions and comply with all applicable codes may cause serious bodily injury and/or property damage.

The installation of this product should be carried out by a person knowledgable in swimming pool plumbing requirements following the installation instructions provided in this manual.

Please pass these instructions on to the operator of this equipment.

Congratulations on the purchase of a quality product from the Davey Water Products range of Pool and Spa Equipment. You are assured of many years of reliable and super-efficient performance from your Davey PowerMaster ECO-Series pump.

Read these instructions in their entirety before switching on this pump. If you are uncertain as to any of these installation and operating instructions please contact your Davey dealer or the appropriate Davey office as listed on the back of this document.

Davey PowerMaster ECO has been designed to circulate swimming pool and spa water in conditions set out in the Australian Standard for swimming pool water quality AS 3633 or equivalent. They should not be used for any other purpose without first consulting your Davey Dealer or the Davey Customer Service Centre.

Every Davey PowerMaster ECO is thoroughly water tested against a number of flow, pressure, voltage, current and mechanical performance parameters. Davey`s advanced pump manufacturing technology provides reliable and efficient pumping performance that lasts and lasts.

Saving Energy with your Davey PowerMaster ECO-Series Pump:

The Davey PowerMaster ECO Series Pool & Spa pump is a 5 Star super efficient pump utilising a very clever, state of the art 3 speed brushless DC motor that provides lower operating costs and lower greenhouse emissions than traditional pool pumps.

Due to its ability to run at lower speeds than conventional pumps, your PowerMaster ECO Series pump will also experience less mechanical wear and tear due to less stress on the internal mechanical components.

To achieve energy efficient pumping is easy. Simply run the filtration pump at a low speed, but run it for longer (see table on page 9) than a conventional fixed speed pump to “turn over” your pool water for adequate filtration and sanitisation. The result is lower energy use and up to 70% lower operational costs. It’s like driving your car on a long distance trip at 80 kmh instead of 110 kmh. It will take you a lot more time, but you will use a lot less fuel!

The PowerMaster ECO Series has 3 speeds, so you can circulate the water at Eco speed, then switch to medium or high speed only if required. Medium speed will help to power an automatic pool cleaner, while high speed should be selected to backwash a media filter or when you want to manually vacuum your pool.

What to expect with Eco speed pumping (energy efficient operation) on your pool:

If your PowerMaster ECO-Series pump is replacing a traditional AC motor pump, you will need to run it longer than your old fixed speed pump. This is NORMAL and you will save energy when using Mid or Eco Flow settings.

You may also notice that the pressure gauge on your filter is indicating a much lower pressure than you are used to. This is also NORMAL. The lower system pressure is simply a result of the lower speed and flow rate produced by the pump.

Your power master ECO (PMECO) controller is capable of being programmed to suit individual condition's please refer to programming section for details.

Please note that Davey do not cover any potential damages created by incorrect programming of the controller.

Important Considerations for Low Flow Operations:

Many pool products rely on particular minimum flow rates for best operation and/or efficiency. If you are using a low flow pump on your pool, such as the PowerMaster ECO Series pool pump, Davey recommends that you check the compatibility of it with other pool equipment such as:

- Automatic and Robotic pool cleaners
- Ozone generators
- Pool Heaters
- Solar Heating systems
- Salt Water Chlorinator cells
- In-floor pool cleaning systems

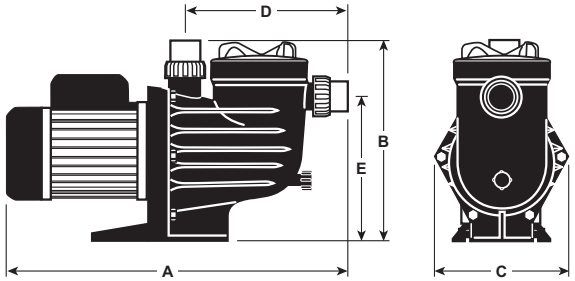
Technical Specifications:

Model	PMECO
RPM	Eco Flow Speed – 1500
	Mid Flow Speed – 2400
	High Flow Speed – 2850
Enclosure Class (IP)	IP24
Insulation Class	Class F
Voltage (VAC)	220-240
Supply Frequency (Hz)	50
Run Current (A)	6.4 amps @ High Flow
Motor Input Power (W / hp)	Eco Flow - 181W / 0.24 hp
	Mid Flow – 600W / 0.80 hp
	Hi Flow – 970W / 1.30 hp
Pump Output Power (W / hp)	Eco Flow - 145W / 0.19 hp
	Mid Flow – 480W / 0.64 hp
	Hi Flow – 776W / 1.04 hp

Operating Limits:

Max Water temperature	50°C
Max Ambient temperature	55°C

Dimensions:



Model	A	B	C	D	E	Mounting Holes Diam	Inlet / Outlet PVC	Net Weight (kg)
PMECO	705	330	250	305	246	10	*40/50	16.75

All dimensions in mm unless otherwise stated

*Pump supplied with barrel union sets for 40mm and 50mm PVC pipe.

Installation of the PowerMaster ECO Series Pumps:

Location

The pump should be located as close to the water as practicable and mounted on a firm base in a well drained position, high enough to prevent any flooding. It is the installer's/owner's responsibility to locate the pump such that the nameplate can be easily read and the pump can be readily accessed for service.

Weather Protection

It is recommended that the pump is protected from the weather. Enclosures should be ventilated to prevent condensation build-up and allow a free flow of air for the fan cooled motor.

Power Connection

Davey PowerMaster ECO is suitable for connection to a nominal 220-240 volt 50Hz power supply and are equipped with a flex and 3 pin plug. If a power outlet is not available within 2 metres of the pump, a 3 pin power point in a safe, dry place may need to be provided by an electrician. Extension cords are unsafe around pools - and should be avoided. If the supply cord of this product is damaged it must be replaced by the dealer or manufacturer, with genuine Davey spares.

This PowerMaster Eco Series pump incorporates motor overload detection designed to protect the motor from overheating. If the motor gets too hot during operation, it's operating speed will reduce to bring it within an acceptable operating temperature and then will speed up to the originally set speed.

To reset the motor, switch the power off for 30 seconds, and then return the power from the mains switch not the "STOP" button on the speed selection panel.

Davey Water Products recommends that all installations are fitted with earth leakage or residual current protection devices.

CAUTION: In the interest of safety, we advise that all brands and types of pool pumps must be installed in accordance with AS3000 wiring rules or equivalent.

If the pump and filter are located below pool water level, it is necessary to fit isolating valves in the pipe between the pump and skimmer box and in return pipe from the filter to the pool.

The fittings on this product are constructed of ABS. Some PVC jointing compounds are incompatible with ABS. Check compound suitability before use.

NOTE: PowerMaster® Pool Pumps are fitted with an internal check valve to reduce reverse flow of water through the pump.

Warning! Ensure that an electrical isolation switch is located with easy access so that the pump can be switched off in an emergency.

Warning! Ensure to wait 30 seconds when stopping and restarting pump to allow capacitors to properly dissipate energy.

Pipe Connection

50mm/40mm Tail components supplied	
	2x Universal locking collars
	2x 50mm Tails
	2x 40mm Tails
	2x Sealing O-Rings

When plumbing the discharge pipe, ensure that the pipework does not interfere with the touchpad's protective cover, which needs to fully open and close.

Ensure pipework from discharge does not interfere with protective cover.

The use of any pipe smaller than those specified above is not recommended. Suction piping should be free from all air leaks and any humps and hollows which cause suction difficulties.

The discharge piping from the pump outlet should be connected to the inlet connection on the swimming pool filter (usually at the filter control valve).

Barrel unions need to be hand tightened. No sealant, glues or silicones are required.

Prior to using this pump you must ensure that: *Checklist*

- Low Speed Setting is compatible with other pool equipment ☐
- The pump is installed in a safe and dry environment ☐
- The pump enclosure has adequate drainage in the event of leakage ☐
- The pipe-work is correctly sealed and supported ☐
- The pump is primed correctly ☐
- The power supply is correctly connected ☐
- All steps have been taken for safe operation ☐
- The filter has been plumbed with 40/50mm pipe ☐

To realise the best energy efficiency from your pump, please follow these installation recommendations:

- Suction pipe length should be kept as short as possible
- Install a straight pipe between 400mm and 2mts into the front of the pump
- Minimise the number of bends in the plumbing

Starting the Pump

To operate efficiently and prevent pump damage there must be a free flow of water to and from the pump. Before starting ensure that:

- All pipework is correctly sealed.
- The pool/spa water level is at the correct height (at least halfway up the skimmer base).
- All appropriate valves are open and there is nothing preventing the flow of water through the system.

The Davey PowerMaster ECO Series motor has 3 speed settings, Eco Flow, Mid Flow and High Flow. It will always start on High Flow setting to aid priming and after 3 minutes will automatically revert to the last used speed setting.

NOTE: During high speed start up, the LED for the last set speed will flash.

1. First prime the pump by removing the strainer basket lid and filling the strainer basket area with water. Replace the lid, ensuring that it seals on the large o-ring.
2. Connect to the power supply and switch on. Pump will automatically start in priming mode and run for 3 minutes, it will continue to run on high unless other flows are selected.
3. Allow the pump to run, so that any air trapped may be expelled. It will start in High Flow mode (high speed) for 3 minutes in order to prime effectively.
4. If prime is not established within approximately three minutes, as evidenced by a strong flow of water and no bubbles returning to the pool, switch off the pump and repeat the procedure. Continued evidence of air under the strainer basket lid indicates an air leak in the suction piping which should be rectified to avoid pump damage.

For optimum pump performance, the strainer basket housing should always be full of water and free from air bubbles. The water level of the pool should always be maintained to at least halfway up the skimmer box ensuring water is in the pump at all times. From time to time it may be necessary to re-prime the pump. This should be carried out as described above.

Never run pump dry. Running the pump with no water may damage the mechanical seals, causing leakage and flooding. Dry running damage and associated damage is not covered under warranty.

Low Energy Operation:

Your PowerMaster ECO Series pump has 3 speed settings which are also programmable:

1. Eco Flow – Lowest Speed
2. Mid Flow – Medium Speed
3. High Flow – Highest Speed

PMECO
Touch Pad

- Eco Flow mode provides the lowest speed and therefore the greatest energy savings.
- For programming speed and time options refer to programming section of this manual.

Operation	Recommended Speed Settings
Pool Filtration	ECO Flow
Automatic pool cleaner operation	Mid Flow
Backwashing your media filter	High Flow
Manually cleaning your pool	
Water Feature operation	
Spa Jet operation	
Solar pool heating	

Guidelines for Recommended Pump Operating Hours:

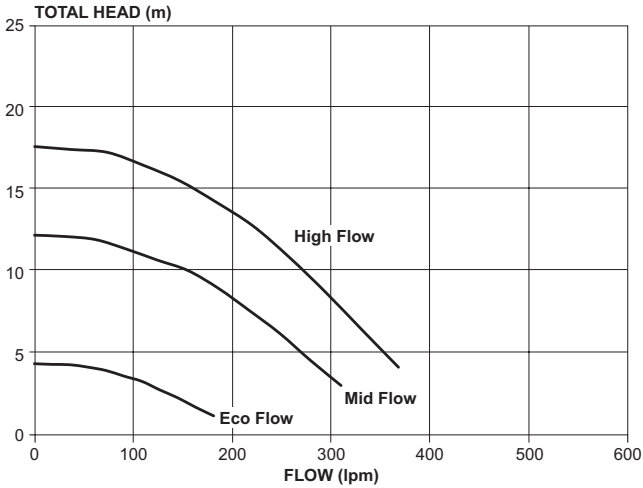
Australian Standards AS3633: “Private swimming pools - water quality” states that “The minimum turnover rate shall be a single turnover of the full volume of the pool water, within the period that the pump would normally be operating….”

Consult your Davey dealer to understand the specific requirements of your pool and how long to filter per day.

Using your PowerMaster 3 Speed pump with a Davey Salt Water Chlorinator:

Davey ChloroMatic and EcoSalt salt water chlorinators require a minimum flow rate of 80 litres per minute (lpm) through the chlorinator cell for best efficiency and cell life. Please refer to the performance graph below as a reference for the flow in your pool and refer to the pressure indicated by the gauge on the filter.

Ensure flow rate is sufficient to cover cell plates completely at all times of operation.



Operating your Automatic Pool Cleaner:

Before installing or purchasing a pool cleaner for use with your PowerMaster Eco series Pump, it is important to know the minimum flow rates required for it to operate effectively:

To operate a suction pool cleaner with your PowerMaster Eco Series pump:

1. Activate the High Flow setting and allow the pump to fully prime by running for around 3 minutes. You will know the pump is primed when you can see a strong flow of water through the clear leaf basket lid.
2. When all air is expelled from the leaf basket, connect the pool cleaner hose firmly into the skimmer plate or dedicated wall suction.
3. Select the speed setting that enables best performance from your automatic pool cleaner. Mid setting should be ample for most cleaners but if the cleaner requires better performance, activate the High Flow setting.
4. The cleaner should only be connected for as long as is required to clean the surface of your pool. When cleaning is complete, disconnect the cleaner and remove the skimmer plate from the skimmer box.

NOTE: To get optimum energy efficiency from your PowerMaster® ECO pump **DO NOT** keep the automatic pool cleaner connected when cleaning is not required.

5. Reactivate the most efficient speed setting for daily filtration. The ECO Flow setting is recommended.

Maintenance:
Emptying the Strainer Basket

The strainer basket should be inspected frequently through the transparent lid and emptied when a build up of rubbish is evident. The directions below should be followed.

1. Switch off pump.
2. Unscrew the strainer basket lid anti-clockwise and remove.
3. Remove the strainer basket by lifting upwards from its housing.
4. Empty the trapped refuse from the basket. Hose out with water if necessary.

NEVER knock the plastic basket on a hard surface as it will cause damage.

5. Check the strainer basket for cracks, replace the strainer basket in the pump if OK.
6. Replace the lid and ensure that it seals on the large rubber o-ring. **Firm hand tightness only is required.** The o-ring and thread can be lubricated with Hydra slip or other water based and non petroleum equivalent products.

Failure to undertake regular maintenance may cause damage not covered by warranty.

Power supply to this pump needs to be through an isolating transformer on RCD, having a rated operating current not exceeding 30mA.

Trouble Shooting

If the pump runs but there is no water flow or water flow is reduced, the following condition may apply:

1. The filter requires backwashing or it is blocked. Refer to the relevant section in the Filter Manual.
2. The pump is not primed. Re-prime as per instruction in 'Starting the pump'
3. There are air leaks in the suction piping. Check all piping and eliminate leaks, also check for a loose strainer basket lid. Air bubbles in the water flowing back to the pool would indicate a leak in the suction to the pump allowing air to enter the pipework.
4. A leaking pump shaft seal may also prevent operating. Evidence of this would be water on the ground under the pump.
5. The pump is not able to get water from the pool. Check that the valves to the pump are fully open and that the pool water level is up to the skimmer box.
6. Blockage in the piping or pump. Remove the strainer basket and check for any blockage to the pump impeller entry. Check the skimmer box for blockage.

If the pump does not operate, the following conditions may apply:

1. The power is not connected. For 220-240 volt only, check the power point by plugging in a portable appliance to ensure power is available. Also check fuses and the main power supply switch
2. Automatic overload is tripped. The pump has an in-built thermal overload which will re-set automatically after the motor has cooled following an overheating period. Determine the cause of the overload tripping and rectify. Re-set the pump by switching the power OFF for 30 seconds.
3. Blockage is preventing the pump from rotating.
4. Motor is burnt out - burning smell is evident. Replacement is required

If you are unable to resolve any installation or operation difficulties with your PowerMaster, contact the supplier from whom the pump was purchased or your nearest Authorised Davey Pool Equipment Service Centre. If any further assistance is required, contact the Davey Customer Service Centre at the address indicated in this manual.

Removal of the Pump from Pipework

Should it be necessary to remove the pump, follow these instructions:

1. Switch off the power and remove the plug from the power source.

NOTE: If the pump is wired into a time clock or another automatic control, the wiring should be removed by a qualified technician.

2. Close the water valves on the pool return and the pump inlet pipework.
3. Remove the discharge & suction barrel unions taking care not to lose the o-rings.
4. Move the pipework with the barrel unions attached until the pump can be pulled clear.

NOTE: When making any enquiries about your PowerMaster® be certain to quote the model number from the nameplate located on the motor.

Water Quality

Maintaining balanced water chemistry is important to the life of your pool pump. This pump is designed to be used with Pool & Spa water, balanced in accordance with Langlier Saturation Index, with a pH level of between 7.2 and 7.8 and is regularly treated with a chlorine sanitising agent with the level not exceeding 3.0 ppm.

Please consult your local pool shop regularly to have your water tested.

Control Programming

NOTE: The Davey Power Master Eco received a firmware modification, and as a result models produced between the the following dates / serial numbers vary:
R07F – From: serial no 23111 320323
R08G – From: serial no 24022 400006

Serial No can be found/identified on the pump label and cable tag lable - refer to examples pictured here.

PMECO Control programming function:

It is a function of your new Davey PowerMaster Eco pool pump that the pre-set programming can be adjusted to suit specific conditions. Davey recommend that you consult your dealer to correctly understand the conditions if you wish to alter the factory settings, to avoid undesired results.

MODBUS

This is a component connection setting that although is standard on the Davey PMECO motor, is not utilised by our other products. The on/off setting will not affect performance.

Programming Adjustment.

Note: Programming adjustment cannot be performed while pump is in the 3 min priming run time or in any run condition please stop before proceeding.

NOTE: to program the controller it requires constant power connection, when plugged into a chlorination device it may trigger the low flow option and subsequently cut the power to the pump.

R07F Firmware – Serial numbers from 23111 320323

Speed (rpm) adjustment:

1. Depress the flow button for the speed that is to be adjusted for 5 seconds, the display should blink and the rpm should be displayed to signify the control is ready to adjust.
2. Pressing the **ECO FLOW** button will lower the speed (rpm) by 25 Rpm at a time.
3. Pressing the **HIGH FLOW** button will increase the speed (rpm) by 25 Rpm at a time.
4. Pressing the **MID FLOW** button save the data and return to multispeed mode.

Note: High flow setting will not exceed 2850 rpm. Davey do not recommend lowering the priming speed as it may produce adversely affect pump performance.

Priming Enabled/Disabled:

1. Depress the stop button quickly 3 times in a row to disable priming feature, the display will show **"P oF"** and the **LED** will light up and not blink, depressing the **STOP** button quickly 3 times again will turn the priming back on **"P oN"** is displayed.
2. Resetting the control will restore the factory 3-minute priming feature.

Davey do not recommend disabling the priming feature as your system will not perform as expected.

Resetting to Factory Condition:

1. Depress and hold all three **FLOW** buttons for 5 seconds and all speeds and priming setting will return to factory conditions, all **LEDs** will light up momentarily.
2. Normal operation can then be utilised again.

The following programming steps are in a sequential flow.

Time (priming) adjustment:

1. Depress the **STOP** button for 10 seconds to enter time adjustment mode, **P3** will display on screen and green **LED** will blink twice every second.
2. Depressing the **ECO FLOW** button will lower the time period for priming by 1min increments.
3. Depressing the **HIGH FLOW** button will increase the time period for priming by 1min increments.
4. Depressing the **MID FLOW** button will save the adjusted time period and automatically proceed into Speed (priming) adjustment.

Note: Davey do not recommend the adjustment of the priming time as it may adversely affect pump performance.

Speed (priming) adjustment:

1. Depress the **ECO FLOW** button to decrease the speed by 25 rpm per button press.
2. Depress the **MID FLOW** button to save the adjusted speed and automatically proceed to turn the **MODBUS** (Not available on Davey PMECO) feature on or off.

Note: High Flow setting will not exceed 2850 rpm.

MODBUS Connection On or Off:

1. Depress the **ECO FLOW** button to turn the **MODBUS** connection to **‘ñb on’**.
2. Depress the **HIGH FLOW** button to turn the **MODBUS** connection to **‘ñb off’**.
3. Depress the **MID FLOW** button to save the setting.

Note: The MODBUS connection is not available on the Davey PMECO pool pump

R08G Firmware – Serial numbers from 24022 400006

Speed (rpm) adjustment:

1. Depress the appropriate **FLOW** button for the speed that is to be adjusted for 5 seconds, the display should blink and the rpm should be displayed to signify the control is ready to adjust.
2. Pressing the **ECO FLOW** button will lower the speed (rpm) by 25 Rpm at a time.
3. Pressing the **HIGH FLOW** button will increase the speed (rpm) by 25 Rpm at a time.
4. Pressing the **MID FLOW** button save the data and return to multispeed mode.

Note: High flow setting will not exceed 2850 rpm. Davey do not recommend lowering the priming speed as it may produce adversely affect pump performance.

Priming Enabled/Disabled:

1. Depress the stop button quickly 3 times in a row to disable priming feature, the display will show **"P oF"** and the **LED** will light up and not blink, depressing the **STOP** button quickly 3 times again will turn the priming back on **"P oN"** is displayed.
2. Resetting the control will restore the factory 3-minute priming feature.

Davey do not recommend disabling the priming feature as your system will not perform as expected.

Resetting to Factory Condition:

1. Depress and hold the **STOP** buttons for 10 seconds and all speeds and priming setting will return to factory conditions, all **LEDs** will light up momentarily.
2. Normal operation can then be utilised again.

The following programming steps are in a sequential flow.

Time (priming) adjustment:

1. Depress the **STOP** button for 5 seconds until the display flashes, while holding the **STOP** button depress the **MID FLOW** button to enter time adjustment mode, **P3** will display on screen and green **LED** will blink twice every second.
2. Depressing the **ECO FLOW** button will lower the time period for priming by 1min increments.
3. Depressing the **HIGH FLOW** button will increase the time period for priming by 1min increments.

4. Depressing the **MID FLOW** button will save the adjusted time period and automatically proceed into Speed (priming) adjustment.

Note: Davey do not recommend the adjustment of the priming time as it may adversely affect pump performance.

Speed (priming) adjustment:

1. Depress the **ECO FLOW** button to decrease the speed by 25 rpm per button press.
2. Depress the **MID FLOW** button to save the adjusted speed and automatically proceed to turn the **MODBUS** (Not available on Davey PMECO) feature on or off.

Note: High Flow setting will not exceed 2850 rpm.

MODBUS Connection On or Off:

1. Depress the **ECO FLOW** button to turn the **MODBUS** connection to **'ñb on'**.
2. Depress the **HIGH FLOW** button to turn the **MODBUS** connection to **'ñb off'**.
3. Depress the **MID FLOW** button to save the setting.

Note: The MODBUS connection is not available on the Davey PMECO pool pump

Software Error Codes

The interface control panel has a digital display and red error display LED to indicate operation issues. Normal operation is indicated by a single flash of this LED upon start-up. Any subsequent blink sequence of this LED indicates that a fault has been registered by the motor control, with the explanation of these faults given in the below table. This table also includes the cause for this fault as well as some potential actions to potentially resolve the issue.

Blinks/ Display	Fault	Software Cause	Action
1/ **Er01**	Micro controller failure	Micro controller is continually rebooting.	No action can be taken to resolve issue. Return motor for warranty.
2/ **Er02**	Under voltage	The line voltage has dropped below 180 volts AC running.	- Pump will resume operation on return of correct incoming voltage. Check electrical supply if problem persists, contact Davey dealer - Reduce distance between motor/pump and breaker. - Turn off any other non-critical equipment on the same breaker circuit.
3/ **Er03**	Temperature	Internal electronics detected an over temperature condition (+100C on sensor)	- Ensure the motor has sufficient air flow to cool the motor. - Check pump leaf basket for obstructions - Turn the power off at the timer / breaker and allow motor to remain off for at least 15 minutes before reapplying power.
4/ **Er04**	Over current trip	Over current protection has tripped.	- Inspect all equipment / piping in the system connected to pump for obstructions - Inspect the motor fan is clear from obstructions
5/ **Er05**	Over voltage	The line voltage has risen above 269 volts AC.	- Turn off power to pump for at least 30 seconds, and restart. If problem persists contact your Davey dealer.
6/ **Er06**	Output shaft seized	Motor failed to start.	- Manually rotate the shaft via the shaft access in the fan cover and check for obstructions - Inspect all equipment in-line with the pump for obstructions or locked pump parts.
7/ **Er07**	Self-check	One or more of the self-tests failed either at start up or while running.	- Turn the power off at the timer / breaker and allow motor to remain off for at least 15 minutes before reapplying power. - Return motor for warranty if error persists.
8/ **Er08**	Motor fault	One or more of the phases has become disconnected.	- Contact Davey dealer for repair or replacement

POWER CONNECTIONS AND WIRING MUST BE CARRIED OUT BY AN AUTHORISED ELECTRICIAN.

DANGER - Hazardous suction. Do not block water entry into filtration system with any part of your body as the pressure can trap hair or body parts, causing severe injury or death. Do not block suction.
Turn off pump immediately if someone becomes trapped.

Caution! Do not add chemicals directly to the pool skimmer. Adding undiluted chemicals may damage pump and filter and void warranty.

Routine Maintenance tasks - to maximise the life of your pool equipment & personal safety, use this checklist once a week. Turn pump off first.

a. Make sure that any pressure gauges are in working condition and the operating pressure is within limits as specified on the product.
b. Make sure that each suction inlet, and main drain has a cover that is securely attached and in safe working condition.
c. Make sure that all skimmer covers are securely attached and in safe working condition. These should be replaced every 3 to 4 years.
d. Remove any obstructions or debris from the main drain cover.
e. Ensure the skimmer baskets and the pump hair and lint pots are free of leaves and debris at least once a week.
f. Remove obstructions and combustibles from around the pump motor.
g. Make sure all wiring connections are clean and that all wiring and electrical equipment is in good condition. Damaged wiring must be repaired or replaced by a qualified electrician as soon as damage is discovered.
h. Check water balance and sanitiser levels at your local pool shop.

WARNING! Pump suction is hazardous and can trap and drown or disembowel bathers. Do not block suction. Do not use or operate swimming pools, spas or spa baths if a suction cover is broken, missing or loose. Two suction covers and inlets must be provided into every pump to avoid suction entrapment.

In accordance with AS/NZS60335.2.41 we are obliged to inform you that this device is not to be used by children or infirm persons and must not be used as a toy by children.

Davey Warranty

Davey Water Products Pty Ltd (Davey) warrants all products sold will be (under normal use and service) free of defects in material and workmanship for a minimum period of one (1) year from the date of original purchase by the customer as marked on the invoice, for specific warranty periods for all Davey products visit daveywater.com.

This warranty does not cover normal wear and tear or apply to a product that has:

- been subject to misuse, neglect, negligence, damage or accident
- been used, operated or maintained other than in accordance with Davey's instructions
- not been installed in accordance with the Installation Instructions or by suitably qualified personnel
- been modified or altered from original specifications or in any way not approved by Davey
- had repairs attempted or made by other than Davey or its authorised dealers
- been subject to abnormal conditions such as incorrect voltage supply, lightning or high voltage spikes, or damages from electrolytic action, cavitation, sand, corrosive, saline or abrasive liquids,

The Davey warranty does not cover replacement of any product consumables or defects in products and components that have been supplied to Davey by third parties (however Davey will provide reasonable assistance to obtain the benefit of any third-party warranty).

To make a warranty claim:

- If the product is suspected of being defective, stop using it and contact the original place of purchase. Alternatively, phone Davey Customer Service or send a letter to Davey as per the contact details below
- Provide evidence or proof of date of original purchase
- If requested, return the product and/or provide further information with respect to the claim. Returning the product to the place of purchase is at your cost and is your responsibility.
- The warranty claim will be assessed by Davey on the basis of their product knowledge and reasonable judgement and will be accepted if:
  - a relevant defect is found
  - the warranty claim is made during the relevant warranty period; and
  - none of the excluded conditions listed above apply
- The customer will be notified of the warranty decision in writing and if found to be invalid the customer must organise collection of the product at their expense or authorise its disposal.

If the claim is found to be valid Davey will, at its option, repair or replace the product free of charge.

The Davey warranty is in addition to rights provided by local consumer law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For any internet connected products the consumer is responsible for ensuring a stable internet connection. In the event of a network failure the consumer will need to address the concern with the service provider. Use of an App is not a substitute for the User's own vigilance in ensuring the product is working to expectation. Use of a Smart Product App is at the User's own risk. To the fullest extent permitted by law Davey disclaims any warranties regarding the accuracy, completeness or reliability of App data. Davey is not responsible for any direct or indirect loss, damage or costs to the User arising from its reliance on internet connectivity. The User indemnifies Davey against any claims or legal actions from them or others relying on internet connectivity or App data may bring in this regard.

Products presented for repair may be replaced by refurbished products of the same type rather than being repaired. Refurbished parts may be used to repair the products. The repair of your products may result in the loss of any user-generated data. Please ensure that you have made a copy of any data saved on your products.

To the fullest extent permitted by law or statute, Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Davey products. This limitation does not apply to any liability of Davey for failure to comply with a consumer guarantee applicable to your Davey product under local laws and does not affect any rights or remedies that may be available to you under local laws.

For a complete list of Davey Dealers visit our website (daveywater.com) or call:

DAVEY

Davey Water Products Pty Ltd
A member of the Waterco Group
ABN 18 066 327 517

daveywater.com

AUSTRALIA

Head Office
6 Lakeview Drive,
Scoresby, Australia 3179
Ph: 1300 232 839
Fax: 1300 369 119
Email: sales@daveywater.com

NEW ZEALAND

7 Rockridge Avenue,
Penrose, Auckland 1061
Ph: 0800 654 333
Fax: 0800 654 334
Email: sales@dwp.co.nz

EUROPE

7 rue Eugène Hénaff 69200
Vénissieux, France
Ph: +33 (0) 4 72 13 95 07
Fax: +33 (0) 4 72 33 64 57
Email: info@daveyeurope.eu

NORTH AMERICA

Ph: 1-888-755-8654
Email: info@daveyusa.com

MIDDLE EAST

Ph: +971 50 6368764
Fax: +971 6 5730472
Email: info@daveyuae.com

P/N 401925-13