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INNOVATION - QUALITY - RANGE

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ELECTRIC WATER PUMP (EWP®) & LCD EWP®/FAN CONTROLLER INSTALLATION INSTRUCTIONS

EWP80, EWP115, EWP130, & EWP150 Combo Packs

READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE YOU START INSTALLATION.

Congratulations on your purchase of the Davies, Craig EWP® LCD, EWP/Fan Controller Combo Pack. Your Combo Pack is designed to replace or complement the existing belt driven mechanical water pump and thermostat, and control your Thermatic® Fan. The major benefits of an Electric Water Pump (EWP®) are, removal of the parasitic power lost operating a mechanical water pump, reduction of engine warm-up time and elimination of heat soak by running the EWP after a hot engine shut down. Your new EWP® Combo Pack has the advantage of providing the best coolant flow rate independent of engine speed.

The LCD EWP® & Fan Controller is scientifically calibrated to manage the flow rate of engine coolant to lock onto a targeted engine temperature. From start-up, the EWP® & Fan Digital Controller will 'system check' the EWP® and will operate the pump for approximately 10 seconds. Low flow (10-on/30-off PWM) reduces engine warm-up time, arriving at your targeted/set temperature quicker. As the engine warms up the EWP® will increase 10-on/10-off PWM at -20c of targeted/set temp. EWP® Electric Thermatic® Fan/s will be deployed at +3°C above targeted/set temp. EWP® & Fan Digital Controller will continue operating for three minutes and/or till the engine temperature is reduced to 10c below targeted temperature to prevent damaging heat soak.

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COMBO PACK CONTENTS

EWP80 Nylon (12V)

EWP Components		
Part #	**Description**	**Qty.**
8105	EWP Pump Short Kit	1
8000	EWP & Fan Digital Controller	1
0415	Inline Adaptor	1
8411	Wiring Harness w/ 10A Fuse	1
8309	Elbow Adaptor 35mm (Nylon)	1
8307	Straight Adaptor 35mm (Nylon)	1
8509	O-Ring	2
8510	Rubber Sleeve 3mm	4
8512	Hose Clamps	4
8528	EWP Hardware Bag	1

Hardware Bag Components		
Part #	**Description**	**Qty.**
0513	Scotch Lock	1
0550	Ring Terminal	1
0574	Ring Terminal (Yellow)	1
0613	Self-Tapping Screw	1
8414	Temp Sensor Assembly	1
8507	Adaptor M5 Bolt	6
0552A	Adaptor M5 Nut	6
8514	M5 Cap Screw Long	6

EWP150 (12V), EWP115 Alloy (12V), EWP115 Nylon (12V)

EWP Components		
Part #	**Description**	**Qty.**
8160 or 8140or 8125	EWP150 Pump Short Kit or EWP115 Alloy Pump Short Kit or EWP115 Nylon Pump Short Kit	1
8000	EWP Digital Controller	1
0415	Inline Adaptor	1
8411	Wiring Harness w/ 10A Fuse	1
8510	Rubber Sleeve 3mm	4
8512	Hose Clamps	4
8530	EWP Hardware Bag	1

Hardware Bag Components		
Part #	**Description**	**Qty.**
0513	Scotch Lock	1
0550	Ring Terminal	1
0574	Ring Terminal (Yellow)	1
0613	Self-Tapping Screw	1
8414	Temp Sensor Assembly	1

EWP130 (12V/24V)

EWP Components		
Part #	**Description**	**Qty.**
8180 or 8181	EWP Pump Short Kit (12V) EWP Pump Short Kit (24V)	1
8000	EWP Digital Controller	1
0415	Inline Adaptor	1
8411	Wiring Harness w/ 10A Fuse	1
18301	L Adaptor 35mm (Alloy)	1
18302	Straight Adaptor 35mm (Alloy)	1
8509	O-Ring	2
8510	Rubber Sleeve 3mm	4
8512	Hose Clamps	4
8529	Hardware Bag	1

Hardware Bag Components		
Part #	**Description**	**Qty.**
0513	Scotch Lock	1
0550	Ring Terminal	1
0574	Ring Terminal (Yellow)	1
0613	Self-Tapping Screw	1
8414	Temp Sensor Assembly	1
8507	Adaptor M5 Bolt	12

Optional Accessories

Part #	Description	Suitable for	No.
1025	Flanged Adaptor	EWP115, EWP150, EWP80, EWP130	1
1129	AN-16 Adaptor	EWP115 (Alloy Only), EWP150	2
1024	90 Degree Adaptor	EWP115 (Alloy Only), EWP150	3
8700	EWP Mounting Bracket	EWP115, EWP115, EWP130	4


1.

2.

3.

4.

SECTION 1: INSTALLING YOUR EWP®

1. Your EWP® Electric Water Pump is best fitted in the lower radiator hose which connects the radiator to the existing mechanical water pump housing. The hose will carry the weight of your EWP® and insulate the EWP® from engine vibration. Check the area for available space. Further radiator hose may be required. Position the EWP® in the lower hose so the inlet, in the centre of the pump is connected to the radiator side and the outlet ***(marked with an arrow)*** is connected to the engine's mechanical water pump housing or your EWP® Adaptor (not supplied). The EWP® should be positioned as low as possible to maximise the gravity feed from the radiator and to avoid air entering and remaining in the pump.

Alternatively, the EWP® may be fitted in the upper radiator hose. In this case, coolant level is critical and bleeding of all air from the cooling system essential. Follow instructions above for correct EWP® fitment ensuring the pump outlet is connected to the hose going into the top of the radiator. The pump can be installed in any orientation but to assist air bleeding try to mount the outlet pointing upwards. (See Section 8 for bleeding instructions).

2. If you have either a EWP130 or EWP80, assemble the provided EWP Straight and L Adaptors to suit the configuration and space available. Ensure that the Straight and L Adaptors have the O-Ring fit securely between them and the flange faces on the EWP body. Six of the shorter Adaptor M5 Bolts (Part # 8507) should be used to attach the Adaptor to the EWP outlet. The remainder M5 bolts (Part # 8507 for EWP130) or (Part # 8514 for EWP80) can be used to attach the Adaptor to the EWP Inlet.

If necessary, add the rubber sleeves to the inlet and outlet of the EWP® to suit your particular hose diameter. If you need thicker sleeves, contact Davies, Craig and we can assist you with your installation.

3. Cut out the not required section of the radiator hose. Connect the pump inlet and outlets to the appropriate hose ensuring hose clamps are very firmly tightened.

Do not bleed EWP® until you install the digital controller and disable the mechanical pump.

SECTION 2: INSTALLING THE EWP®/FAN DIGITAL CONTROLLER

Do not begin the installation of the Digital Controller prior to the EWP® being installed.

1. The EWP® & Fan Digital Controller should be fitted inside the passenger compartment to minimise its ambient temperature. Locate a hole in the firewall (approx. 20mm in diameter) where the harness wiring (including the sensor & pump "T-connector") will be able to pass through. If a hole of adequate size cannot be located, then wires may be cut then re-joined as a last resort.

2. Pass the "T-connector" of the wiring harness though the firewall into the engine bay and connect to pump.

3. Pass the **black** sensor connector through the firewall and out to the thermostat housing/ Inline adaptor (Refer Section 3 on installing digital controller sensor)

4. Connect the wiring harness to the controller and mount the controller (using 2 of the screws provided) in an appropriate position such as near the fuse box so that there is access to the temperature adjustment button **--- avoid mounting the controller where it may be exposed to direct sunlight**. Ensure a good earth connection using the self-tapping screw provided. NOTE: The earth lead must be connected to a metal part of the car body.

5. An additional screw is provided for mounting the controller fuse holder where necessary.

6. Connect the **red** wire from the wiring harness to the battery **positive** using the ring terminal provided. Connect the **green** wire from the wiring harness to an ignition source – the wires may be spliced then soldered if necessary. Ensure no wire is exposed, by insulating the join with electrical tape.

   Connect the Black Striped **green** wire to the Fan relay if you wish to control the **Thermatic®** fan 3ºC above the set point (refer Page 8 & 9), setting the Digital Controller. ***Note**; the controller will earth the fan relays, not power it.

7. Mount 'Remote Test Light' in a location, which will be visible. The 'Test Light' may be fitted by inserting it through a 4.6mm dia. drilled hole in a plastic area of the interior/dashboard or simply with adhesive tape. The 'Remote Test Light has two pin connections to assist installation. Heat shrink or insulation tape can be applied to these pin connections once the test light is mounted. This will ensure the connection points are insulated and secure.

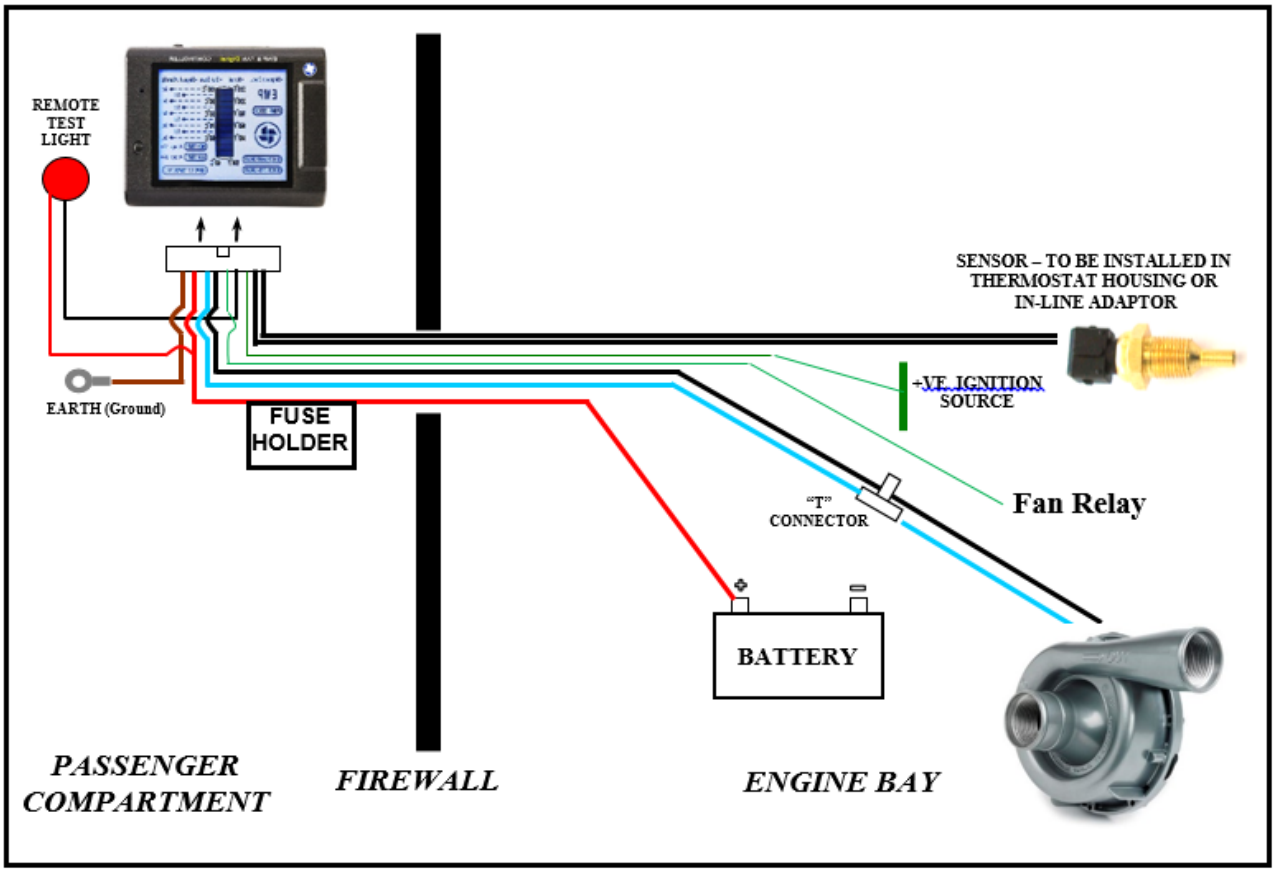
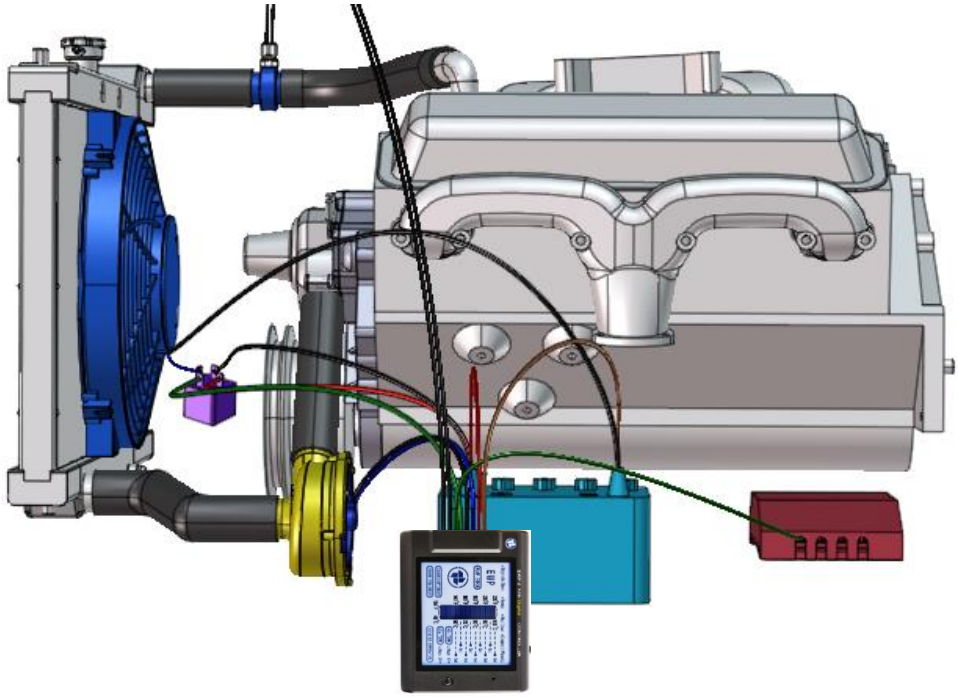


Figure 1: Digital Controller Wiring Diagram.

NOTE: In carrying out the wiring procedure, please bear in mind that it is advantageous to minimise voltage drop and this can be achieved by keeping the wiring as short as possible. Remove the engine thermostat from the thermostat housing and install the sensor using method A or B as shown below. Re-fit the thermostat housing without the thermostat and ensuring that there is no damage to the thermostat-housing gasket.



SECTION 3: DIGITAL CONTROLLER SENSOR INSTALLATION

There are two installation methods available.

METHOD 1: IN-LINE ADAPTOR METHOD (supplied & recommended)

As with other Davies Craig products the 'All-in-One' adaptor has universal application.

'ALL-IN-ONE' ADAPTOR INSTALLATION

Use the "O" ring supplied with the sensor.
Apply PTFE sealant tape (not supplied) on to the threaded body before tightening to the adaptor.

Figure 2: All-in-One Sensor and Inline Adaptor Installation

NOTE: Top Radiator Hose Measurements to Sleeve.

30 to **35** mm inside diameter (ID) – use adaptor without sleeves.

36 to **42** mm ID – use 2 sleeves included in the kit

42+mm ID – contact Davies, Craig Pty. Ltd.

1. Sensor Fitting

Apply a couple of layers of Teflon sealant tape around the threaded body of the sensor, Fit the sensor assembly into the threaded black nylon adaptor and tighten.

Do not over tighten, over tightening may damage the sensor body / adaptor.

2. Hose Fitting

When the cooling system is cold, remove top radiator hose and confirm that the inside diameter of your top radiator hose is between 30 to 42 mm prior to cutting hose.
If the parts (adaptor and sleeves) provided in the kit are not suitable for your top radiator hose diameter please contact Davies, Craig before proceeding any further.

If the parts supplied (adaptor and/or sleeves) are suitable, cut your radiator hose to remove around 17 mm in length at an appropriate location. Select a location in a straight section of the hose.

Temporarily slide radiator hose clamps on each end of the hose. Fit both cut ends of hose onto adaptor (with or without sleeves as appropriate). If fitting is tight, use silicon base grease or petroleum jelly to assist fitment of adaptor to hoses.

Refit top radiator hose, ensure no twisting of hose and tighten all hose clamps.

METHOD 2 - IN THERMOSTAT HOUSING

Please check wall thickness of thermostat housing as it is recommended that the Sensor assembly be installed only if there is a wall thickness of at least 3.0mm.

<u>If the thickness is less than 3mm, please proceed with installation method 'A'.</u>

We suggest removal of the thermostat housing before beginning the installation process so that metal shavings do not enter the cooling system.

1. Mark location on thermostat housing where sensor assembly is to be fitted – "top of dome is recommended".
2. Drill an 11.0mm (7/16") hole through the marked area. For your safety and to avoid drilling on an angle, please ensure thermostat housing is well secured before beginning the drilling process.
3. Using a ¼" NPT tap, tap the hole to allow the sensor assembly to "just" protrude the thickness of the thermostat housing (Refer *Figure 3*). It is recommended that the fitment of the sensor assembly be checked regularly to achieve the condition in the diagram.

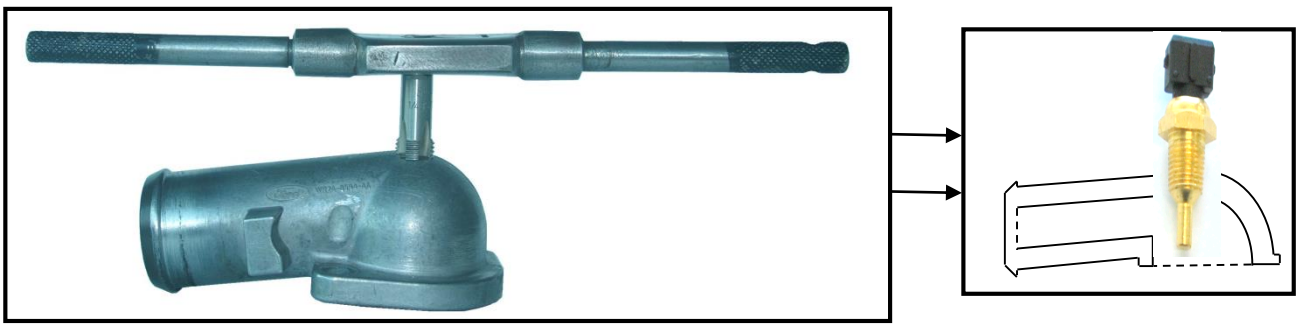


Figure 3: Sensor Installation in to Thermostat Diagram

SECTION 4: OPERATION OF EWP® & FAN DIGITAL CONTROLLER

CONTROLLER ALGORITHM-PUMP OPERATION

Figure 4 shows the operational curve of the EWP®. The 'set point' is the temperature at which full system voltage is supplied to the EWP®. The 'set point' can be programmed to any of the nine (9) 'set points' shown on the screen:
60ºC (140°F) 65ºC (150°F) 70C (160°F) 75ºC (165°F) 80ºC (175°F) 85ºC (185°F) 90ºC (195°F) 95ºC (205°F).

Area A - Pump pulsing at 6V: 10sec ON, 30sec OFF
Area B – Pump pulsing at 6V: 10sec ON, 10sec OFF
Area C – Pump voltage increases with increasing temperature, Fan begins the operation when the temperature reaches 3ºc above the set point

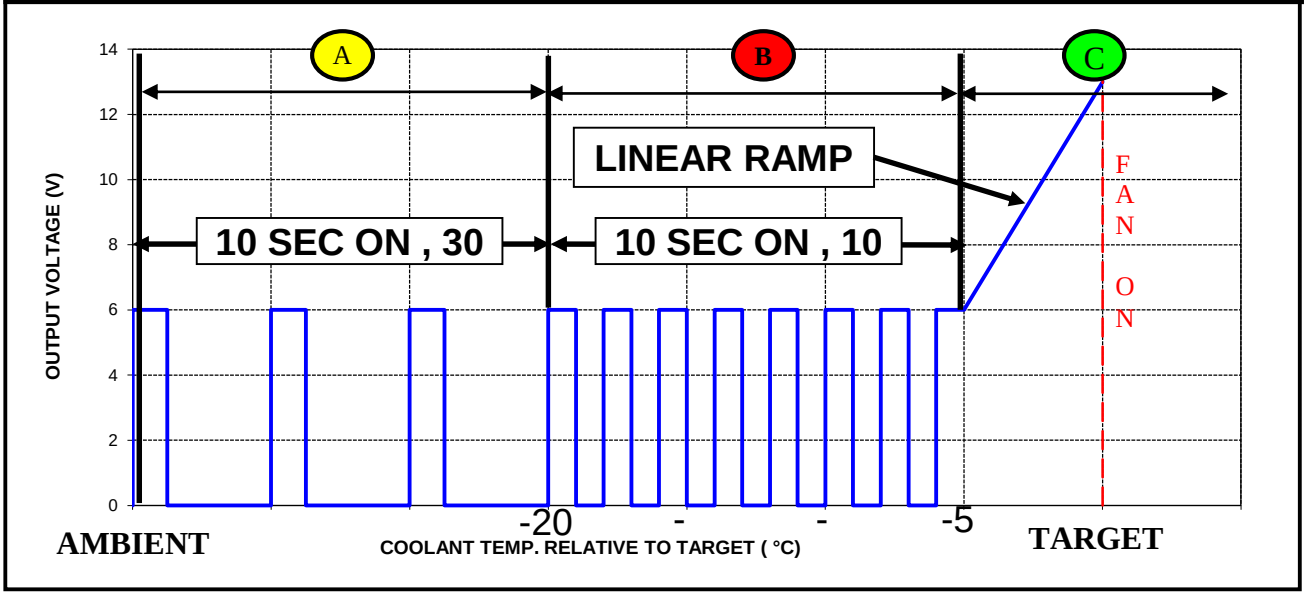


Figure 4: Digital Controller Operation Curve.

SYSTEM CHECK:

Every time the ignition is turned ON, all symbols will illuminate. This feature allows you to check all functions are operational.

SHUT DOWN MODE:

Your Digital Controller will continue to operate your EWP® for three (3) minutes or until the coolant temperature has reduced -10°C/-14°F below your targeted/set point – whichever occurs first. The "Shut down" feature will eliminate heat soak and reduce coolant and subsequent engine temperature more efficiently. This cooling efficiency can be improved further with the use of high performance Davies Craig Thermatic® Fan/s.

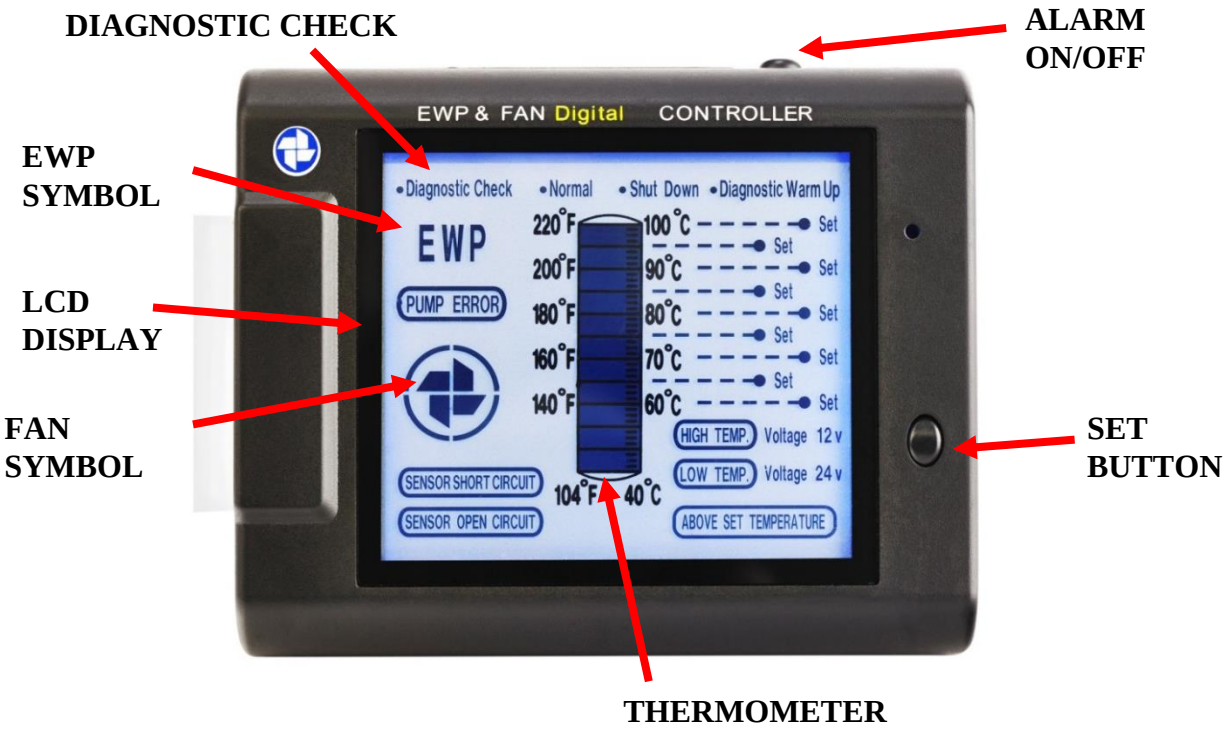


Figure 5: EWP LCD Digital Controller.

OPERATION ~ LCD ILLUMINATED SCREEN

The following identifies operational status:

THERMOMETER

Rising with increased engine temperature = Sensor temperature from 40ºC (104°F) to 100ºC (212ºF).

EWP SYMBOL

FLASHING = EWP® operating in 'pulsing' mode – Refer *Figure 4*, areas Ⓐ Ⓑ Ⓒ & .

ON = Electric Water Pump (EWP®) running between 6V – Battery Voltage.

FAN SYMBOL Circulating = in operation

DIAGNOSTIC CHECK

System warning has been triggered. Therefore, refer to "Diagnostic Chart" in order to determine possible cause, and take measures to correct the problem.

REMOTE TEST LIGHT (RED)

This light will "flash" whenever the Diagnostic Check is illuminated. The purpose of this remote light is to provide an indication when the Diagnostic Check becomes illuminated.

SETTING THE EWP® & FAN DIGITAL CONTROLLER

It's recommended the Digital Controller's targeted/set-point be fixed to that of the engine manufacturer's mechanical thermostat opening temperature. You may use a lower 'set-point' to run the engine colder or a higher 'set-point' to run the engine hotter if appropriate. Generally, running the engine slightly colder will increase the power and running the engine slightly hotter will improve the fuel efficiency.

The LCD EWP & Fan Digital Controller has been set at the factory at 85°C/185°F. This setting can be altered up or down by using the 'set-point' adjustment button on the right hand side as follows:

1. Pushing the 'set' button once will indicate the present setting.

2. When 'set-point' adjustment button is held down, the 'set-point' settings will be scrolled through. Button should be released when desired 'set-point' is reached.

3. The 'set' temperature will then illuminate and the setting must be confirmed ('locked in') by holding button down for 2 sec. until you hear a long beep. If the new setting is not confirmed within 5 sec, the Digital Controller will revert to previous 'set' temperature.

4. To check 'set' temperature, see Step **1** above.

An indication that your 'targeted/set' engine temperature is similar to the actual engine temperature, monitor the existing engine temperature gauge. Remember, the engine temperature sender unit is located in a different position than your EWP & Fan Digital Controller Thermal Sensor and there will be some temperature variation.

SECTION 5: DAVIES CRAIG THERMATIC® FAN WIRING TO THE DIGITAL CONTROLLER

Please follow the instructions 1&2 if you are using the wiring loom provided with Davies Craig Thermatic® Fan.

1. Cut the green wire from the Fan wiring loom to a sufficient length, this wire (with relay) to be joined with the black traced green wire from the Digital Controller

2. Cut the black wire before the ring terminals attached, and then join sufficient length of wire to connect the battery positive as shown in the diagram below (85). Please discard the ring terminal part.

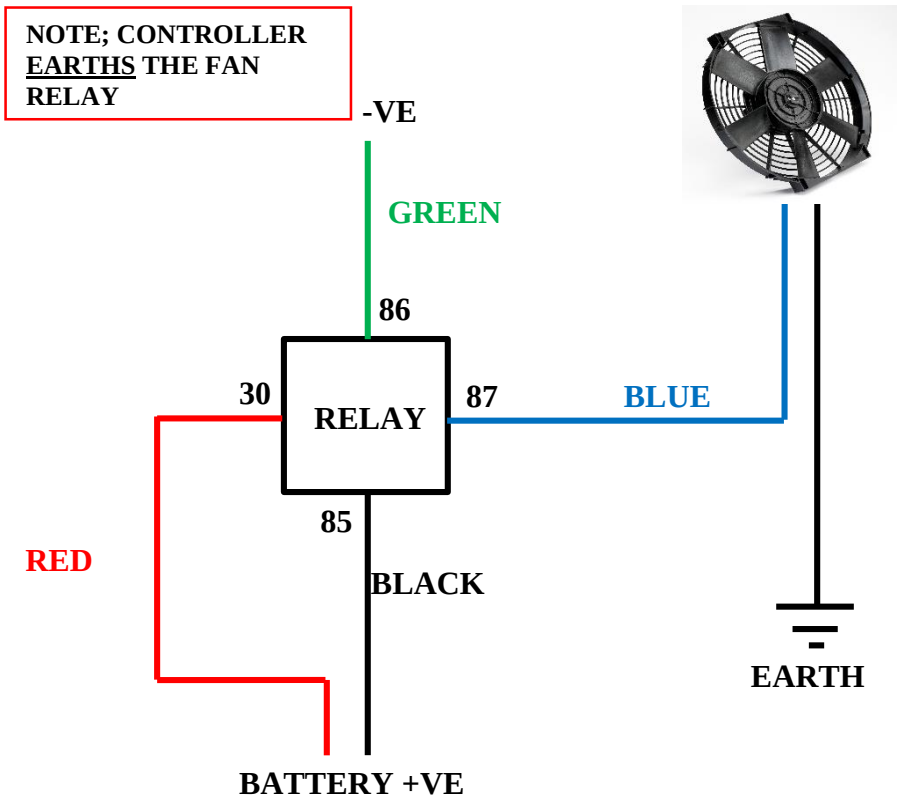


Figure 6: Fan Controller Wiring Diagram

EWP & FAN DIGITAL CONTROLLER TECHNICAL SPECIFICATION

Input Voltage	12VDC to 29VDC									
Output Voltage	6V to 29V									
Max. Current	12A									
Operating Temperature	-20ºC to 60ºC (-4ºF to 140ºF)									
Setting Temperatures	C	60º	65º	70º	75º	80º	85º	90º	95º	100º
	F	140º	150º	160º	165º	175º	185º	195º	205º	212º
Fan Cut in Temperature	+3ºC/5.4°F above the set temperature									
Sensor Type	Thermistor									
Time Out	3 Min. (or Set –10ºC/14°F) after ignition OFF									
Weight	100 grams (3.5 oz.)									
Dimensions	110mm (L) X 90mm (W) X 30mm (D) [41/3” (L) x 31/2” (W) x 1.1” (D)]									

SECTION 6: CONTROLLER DIAGNOSTIC CHART

Condition	**Troubleshooting**
Controller does not operate / No display	• **Blown fuse** • **Check all the wire connections**
12V voltage indicator flashing	• **Controller receiving low voltage < 10.5V** • **Controller receiving high voltage > 17.5V**
24V voltage indicator flashing	• **Controller receiving low voltage < 21.5V** • **Controller receiving high voltage > 27.5V**
Sensor open circuit	• **Check sensor wiring for any open circuits**
Sensor short circuit	• **Check sensor wiring for any short circuits**
Low Temp <40°C (104°F) after 5 Minutes High Temp >100°C (212°F)	• **Check engine temperature**
Above Set Temperature	• **Sensor temperature is at least 10°C (18°F) above the set temperature**.
Pump Error	• **Check pump wiring for open/short circuits**

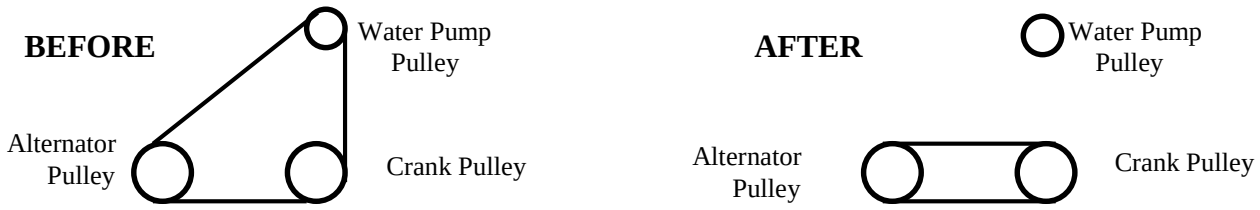
SECTION 7: MODIFYING EXISTING MECHANICAL WATER PUMP

Davies Craig has tailor made EWP Header-Adaptor Kits – visit the website for details.

1. You may choose to by-pass the belt-driven water pump pulley by installing a shorter belt. This option may not be possible if the crank pulley drives a belt-driven power steering and fan or unless you replace the mechanical fan with a Davies, Craig Thermatic® Fan. For example see Error! Reference ource not found. below:

2. Remove the thermostat from the thermostat housing.

3. Re-fit the thermostat housing ensuring that there is no damage to the thermostat-housing gasket.



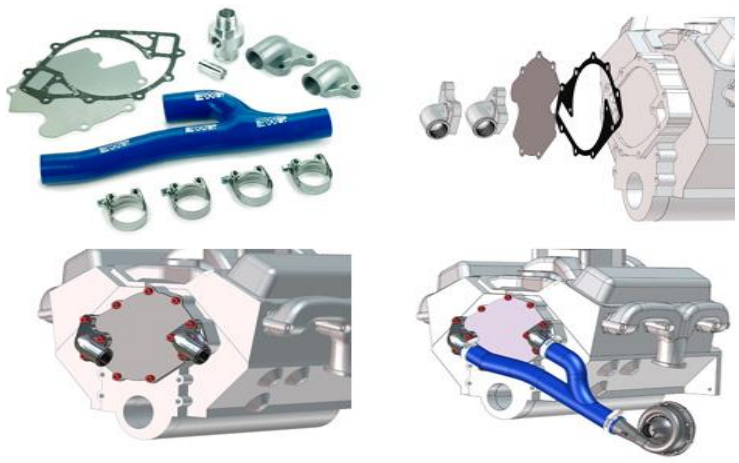
Belt Orientation Diagram

OR

1. Remove the existing belt-driven water pump housing.

2. Remove the water pump impeller from the pump shaft. (NOTE: You may need to drill holes through the impeller close to the drive shaft.) Alternatively, remove vanes from impeller. Mechanical water pumps differ from engine to engine and you need to take appropriate action that suits the specific water pump to disable the pump.

3. Re-fit the water pump housing without the impeller ensuring that there is no damage to the water pump gasket and the pump seal is still retained. Re-fit the water pump belt and tighten to manufacturer's specifications.



Part #8630 - EWP Header-Adaptor Kit (Ford Big Block)

SECTION 8: BLEEDING THE EWP®

For the EWP®80 ensure it is orientated correctly as shown below before continuing.

NOTE: This orientation is a temporary requirement for the purpose of bleeding the pump and ensuring there is no air entrapped within the seal housing of the pump. The pump can be set-up in another orientation upon completion of the bleeding procedure.

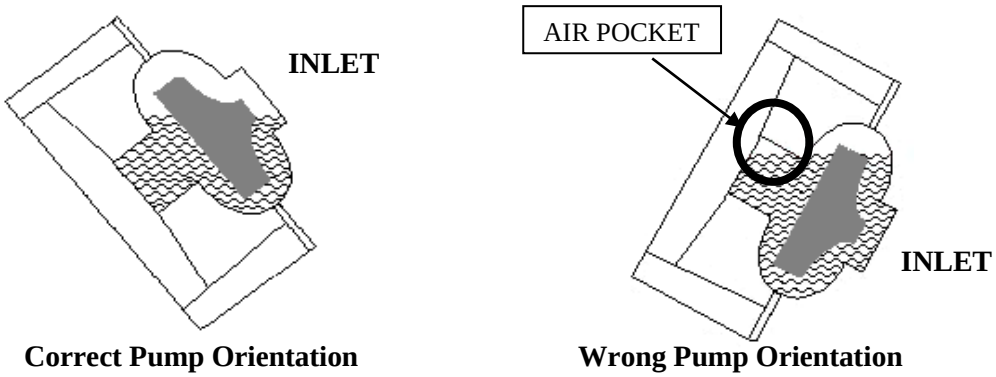


Figure 7: EWP80 Pump Orientation Diagram

FOR ALL EWPS:

1. Fill the engine cooling system with appropriate coolant.

2. Turn heater on full.

3. With the radiator cap off, hardwire the EWP® directly to the vehicle's battery or a 12v power source. Air trapped in the cooling system will exit at the top of the radiator.

4. Turn on engine and idle.

5. Top up the radiator with coolant with the EWP® running until all air is eliminated.

6. Turn off engine.

7. Replace the radiator cap and reconnect the EWP® to the wiring system supplied.

SECTION 9: OPERATING YOUR EWP®

Turn on your engine's ignition. Referring to the EWP® & Fan Digital Controller Instructions, digitally 'set' the engine temperature. We recommended the new 'set point' temperature be targeted at the existing engine thermostat opening temperature (approx.). Start engine, check all connections, top and bottom radiator hoses, Sensor and EWP® Alloy Electric Water Pump are secure, re-torque all hose clamps.

Monitor engine temperature observing the EWP® and Digital Controller operations as the engine temperature rises to your set/targeted temperature. Check lights on the Digital Controller are operating in accordance with the instruction manual. The electric fan/s (if fitted) should switch on at +3° over your set/targeted temperature.

Generally, operating the engine cooler will increase the power and operating the engine above the thermostat temperature will improve fuel efficiency. The EWP® & Fan Digital Controller has a in-built function to operate the EWP® Alloy Electric Water Pump after the ignition is switched off (engine shut-down) to prevent damaging engine heat soak.

Check all hose clamps for leaks after a few hours of engine operation at set/targeted temperature. Check your system again after approx. 20 hours of normal operation. Re-tension connections if and as required. The vehicle's heater may take more time than previously to warm up. Should you wish to boost coolant flow through your vehicle's heating system the Electric Booster Pump Kit, part #9001 can be fitted.

Continuous EWP® Operation

Continuous EWP® operation may be required for some road or race engine applications, in some very hot climatic conditions, and engines fitted with liquid petroleum/butane gas (LPG) conversions.
This option will provide maximum flow from your EWP® Alloy Electric Water Pump under all operating conditions without a Digital Controller or a Thermatic® Switch fitted. Should you choose this method you should retain the engine thermostat and drill one or two holes (suggest 5mm) in the plate to ensure a small volume of coolant flows through the cooling system during operation. Depending on the operating temperature required in some engines, the centre of the thermostat plate may need to be removed.

WIRING DIAGRAM: EWP® CONTINUOUS RUNNING:

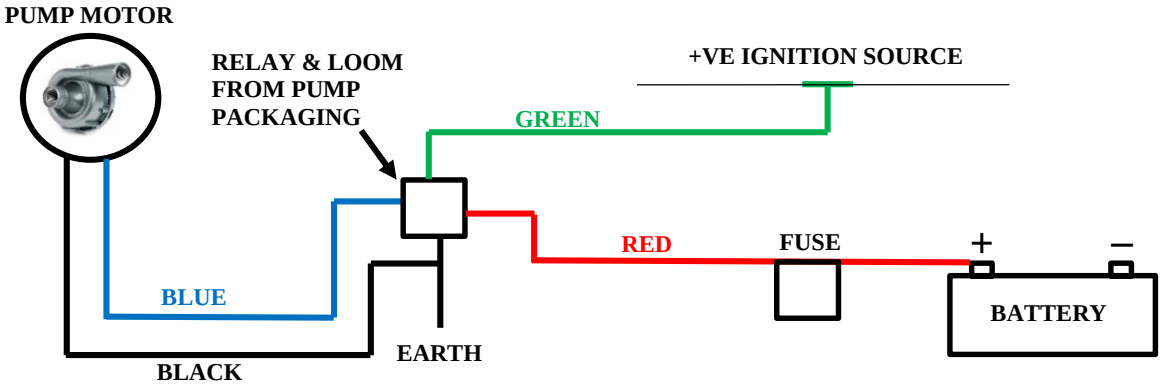


Figure 8: EWP Continuous Running Wiring Diagram.

EWP® INSTALLATION RECOMMENDATIONS

To ensure maximum life and optimum performance from your new EWP®, Davies, Craig recommends:

- **Storage** - If a EWP® is installed in your vehicle's engine cooling system, stored and/or not started or driven for more than 3 months, e.g. a show/static display or race car, it's strongly recommended the EWP® is operated for approximately 5 mins constant running every month. This will minimise the build-up of any sediment in the EWP® and also lubricate all parts within the pump.

- **Heater** - For improved heater performance on vehicles which have the heater inlet (return) and outlet ports in the mechanical pump housing (referred to in "Warnings"), Davies, Craig suggest the fitment of the Electric Booster Pump, EBP®, part # 9001. This unit fits into the heater hose and boosts coolant flow through the heater circuit and/or cylinder heads. Check out website www.daviescraig.com.au

- **LPG (Liquid Petroleum Gas or Butane)** vehicles require constant flow through the LPG converter and if the EWP® is used in conjunction with the EWP® & Fan Digital Controller, we recommend the installation of an Electric Booster Pump EBP® to overcome the converter body freezing at start-up. As a preventative measure, we strongly recommended you flush out your engine's cooling system every 6 months or 10,000kms to help remove any built up of sediment.

CAUTIONS

- **Do not operate your EWP® dry as seal damage may occur and your warranty may be jeopardised.**
- Use of the EWP® after removing the pump impeller or deleting the mechanical pump pulley from the belt system will increase maximum engine speed. Running an engine at higher than normal speeds may affect other engine components.
- Engine temperature must be monitored closely at all times more especially after installation and until your EWP® operational procedures have been confirmed.
- The EWP® can handle most rust particles, shale, and sludge found in cooling systems but large rust particles should be flushed from the radiator before the EWP® is installed.
- Some engines may require special bleeding procedures to remove all air from their cooling system. The EWP® must be completely full of coolant at all times to achieve the life expectations of your EWP® and to ensure your warranty is not jeopardised.
- Do not use the vehicle's engine management system or wiring connected to the vehicle's engine management system (ECU) as an ignition source as it may cause failure of the management system and/or the electrical system. The ignition source for your EWP® and EWP®/Fan Digital Controller Combo Kit must be a steady positive supply of 12-14V or 24-27V DC.
- Vehicles with both heater circuit inlet (return) and outlet ports in the mechanical pump housing will suffer reduced heater performance unless the heater returns position is relocated.
- The engine cooling system must use coolant as specified by the vehicle's manufacturer.
- The EWP® is a 'circulation' pump ideal for most 'closed circuit' pressurised automotive cooling systems.
- The EWP® is not a 'self-priming' water pump and therefore will not produce its full flow without a positive 'head' in an 'open' system.
- The EWP® impeller tip clearance has been designed to achieve maximum efficiency and is therefore very close to the housing. When new and bedding in, the impellor may touch the internal wall of the EWP® housing causing a slight noise. This sound will cease within a very short time after the impeller has bed-in.

These installation instructions will suit most vehicles but there are circumstances surrounding some engine designs, environments, and the nature of motoring involved, which may require other installation arrangements not outlined here. Frequently Asked Questions are listed on our website www.daviescraig.com.au Davies Craig Pty Ltd appreciates customer feedback. Emails can be directed to info@daviescraig.com.au or telephone +61 (0) 3 9369 1234.

WARRANTY

We warranty that for a period of two years or 2000 hours continuous running (whichever is the lesser) from the date of purchase, we shall carry out, free of cost, any repairs that are reasonably necessary to correct any fault in the operation of your Electric Water Pump provided that such a fault is directly attributable to a defect in the workmanship or materials used in the manufacture of the part(s) and is not due to installation other than described in these instructions. Labour and consequential costs are excluded.

DAVIES, CRAIG PTY. LTD.

REGISTER YOUR WARRANTY AT:
www.daviescraig.com.au