

EWP Header-Adaptor Kit – Installation Instructions

Part # 8630 – Ford Big Block V8 Engines

Congratulations on your purchase of the Davies, Craig EWP® header-adaptor kit which has been designed for use with EWP® electric water pumps, parts #8025, 8040 or 8060 and combo kits, parts #8030, 8050 or 8070) to replace your existing belt-driven, mechanical water pump on Ford Big Block v8 engines. Further, if your belt-driven, mechanical water pump has a mechanical fan, you will need to replace it with a Davies Craig Thematic Fan. If you've purchased one of the EWP® electric water pump combo kits, then your EWP/fan digital controller has a built-in thermal switch that will control an Electric Thematic fan in unison with your new Electric Water Pump. Details relating to the most suitable Davies, Craig thematic fan for your vehicle are listed on the Davies, Craig website www.daviescraig.com.au.

If your vehicle is not listed you may follow the guidelines listed to identify the most suitable thematic fan for your vehicle. Remember, a strong air flow, cubic feet/min. (CFM) through your engine's radiator is the one vital factor that helps achieve efficient engine cooling. Ensure the electric thematic fan you select has sufficient air flow, (CFM). Some fan manufacturers inflate air flow rate figures. If you're not able to confirm the CFM of the fan you plan to purchase – don't buy it!

Kit contents

Item	Description	Quantity
1	Hose Clamps, WH	4
2	Silicon Adaptor Hose	1
3	Screws (Four Sizes)	11
4	Heater Hose Return Fitting	1
5	Heater Hose Return Adaptor	1
6	Gasket	1
7	Inlet Header-Adaptors	2
8	Blanking Plate	1



Figure 1

Hose fitting sizes: all Davies, Craig EWP®115/150 electric water pumps are manufactured with 38mm (1 ½ inch) OD inlet and outlet. The alloy versions of the ewp®115/150 electric water pumps have been manufactured with an-16 internal threads should you wish to fit screw-in hose fittings. If your radiator hoses have a larger outside diameter (OD), Davies Craig can supply 3mm (part no. 8510) and 6mm (part no. 8511) rubber adaptor sleeves to suit.

Before commencing, read these installation instructions thoroughly. Don't rush - ensure you have a full understanding of the work ahead and you have all the tools and components required for completion of your EWP® header-adaptor conversion.

Installation guidelines

1. Remove the radiator cap then remove the bottom radiator hose to drain the coolant from both the radiator and engine. If the coolant is clean and free of foreign matter it may be reused.
2. Loosen appropriate hardware and remove all belts i.e. Water pump, alternator, air conditioning and power steering (if fitted). Disconnect heater return hose from the mechanical water pump.
3. Remove mechanical water pump, clean up the face on the timing cover where the mechanical water pump used to be. Retain the bottom radiator hose; you may require a section of this hose to complete your EWP® conversion.
4. Clean timing cover surface around the coolant inlet ports to ensure they are free of old gasket.
5. Fit the new gasket (supplied) on to the timing cover surface. Ensuring the screw holes align with those on the timing cover, secure the plate and the gasket using 5 of the screws supplied to you.

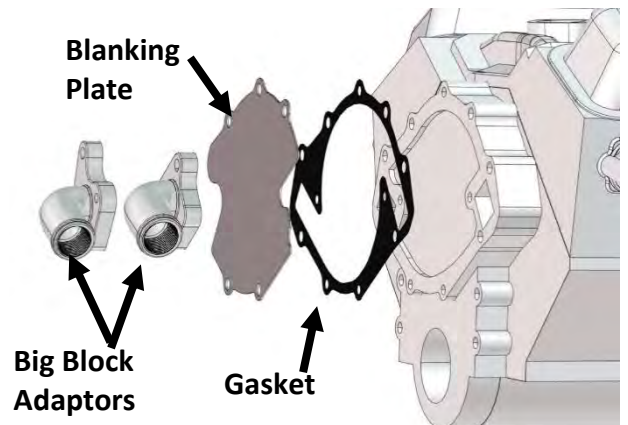


Figure 2

6. Fit both adaptors to the timing cover and secure each adaptor to the engine block with the screws supplied (*refer to screw size chart*). **NOTE: All hex cap screws in the left adaptor should be pre-installed before assembly.** Ensure both inlet adaptors are pointing towards the bottom radiator outlet (figure 3).

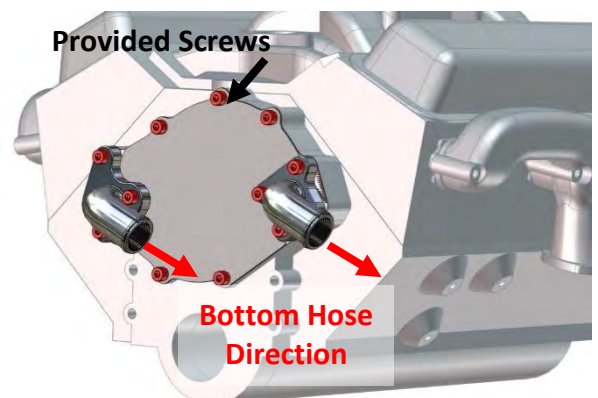


Figure 3

7. The silicon adaptor hose has been supplied with extra length to ensure it fits all ford v8 engines. You may need to shorten either or all three ends to ensure a satisfactory fit of your EWP® conversion.

8. Pre-assembly - take three hose clamps and slide one loosely over each end of the silicon adaptor hose. Pre-fit the silicon adaptor hose, slide the respective ends over the two header-adaptor outlets (refer figure 4).

9. Slide the adaptor hose over your EWP® outlet (refer figure 6). Screw the heater return adaptor & hose fitting (figure 5, if applicable) into the EWP® inlet then position and align the EWP® with the bottom radiator outlet. Secure heater return hose to hose fitting. Check you have enough length of bottom connector hose (refer figure 5). A section of your current bottom radiator hose may be suitable for this purpose. Connect the radiator hose with the fourth hose clamp to the EWP® inlet, and then fit the other end to the bottom radiator outlet.

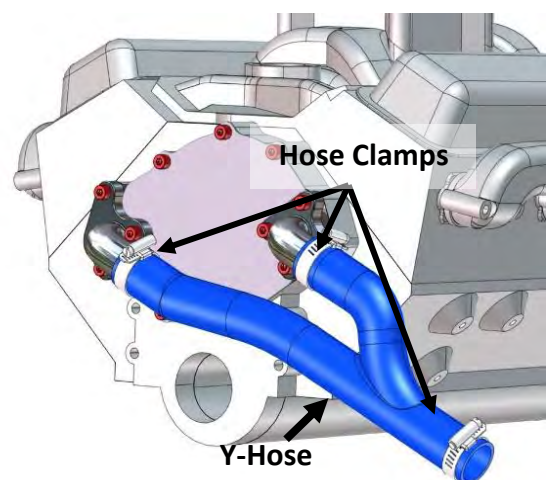


Figure 4

10. Assembly – once you are satisfied with the initial pre-assembly and alignment of your EWP[®] electric water pump and header-adaptor kit conversion, proceed with the final assembly. Your EWP[®] may require Teflon tape to seal the heater return adaptor and hose fitting threads (if fitted). Next, ensure all hose clamps and hex cap screws are sufficiently tightened to prevent leakage. Do not over-tighten.

11. Follow the EWP[®] and EWP[®]/fan digital controller installation instructions to complete your conversion. *(failure to adhere to the correct installation instructions may cause failure of vital components, including the digital controller)*

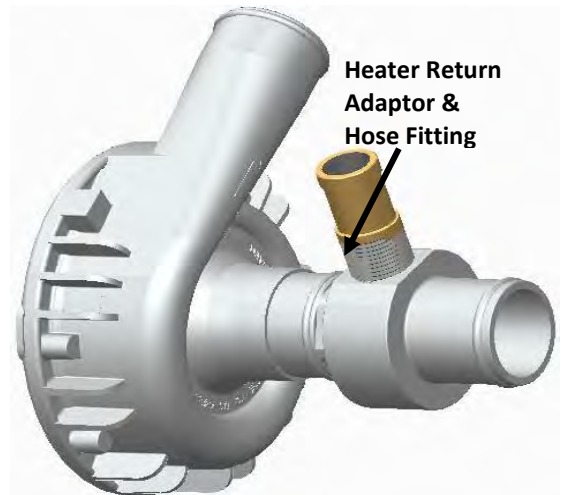


Figure 5

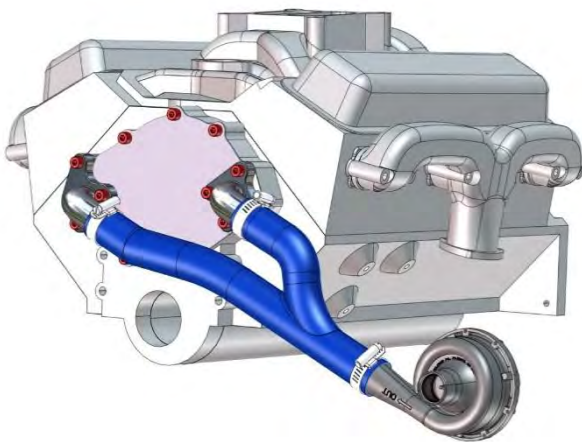


Figure 6

12. Refill the radiator. With the radiator cap off, start your engine. Your EWP[®] and EWP[®]/fan digital controller combination will commence its pre-programmed 'test' mode which consists of these two units and the thermatic fan operating at full power for 10-15 seconds. Run engine for 10 minutes approx. While carefully monitoring engine temp. Top up coolant level. Switch off engine. If you are satisfied your cooling system is completely free of air, replace the radiator cap. Restart engine, run up to operating temperature checking all fittings are secure and observe for any leaks. Switch off engine and re-torque any fittings and hose clamps if required.

Conduct a 'test run' with your vehicle. Turn on the heater (if applicable) to assist clearing air from the cooling system. Top up coolant if required once engine has cooled down. Please repeat the above process until you are satisfied your engine's cooling system is totally free of air, all hose clamps and hex cap screws are torqued up satisfactorily and there are no leaks. You should check your system again after another 20 hours operation.

Warranty

Davies, Craig Pty Ltd hereby warrants these products for a period of two (2) years, 40,000km or 2000 hours continuous running (whichever is the lesser) from the date of purchase. Davies, Craig Pty Ltd will carry out any repairs/replacements to the electric water pump, EWP[®]/fan digital controller and/or EWP[®] header-adaptor kit free of cost provided that such fault is directly attributable to a defect in the workmanship or materials used in the manufacture of the product. Labour and consequential costs excluded.

Davies, Craig Pty Ltd

Register your warranty at: <http://www.daviescraig.com.au/warranty-content.aspx>



Screw sizing chart for your supplied screws

Location	Screw type	Length	Quantity
A	UNC 5/16	3 ½ inch	4
B	UNC 5/16	3 inch	2
C	UNC 5/16	1 ¼ inch	2
D	UNC 5/16	¾ inch	3

