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# EWP FORD WINDSOR HEADER-ADAPTOR KIT Installation Instructions

Kit Part #8640 - Suitable for Ford 221, 260, 289, 302, 351 Windsor engine.

Congratulations on your purchase of the Davies, Craig EWP® Windsor Header-Adaptor Kit. It has been designed for use with EWP® Electric Water Pumps and Davies, Craig Thermatic® Fans to replace your belt-driven mechanical fan and pump.

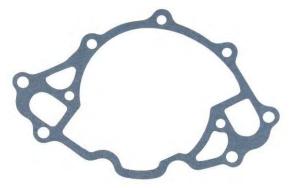


Figure 1: Gasket profile suitable for Davies Craig Windsor Kit models. Application.

This enables you to replace your existing belt-driven, mechanical water pump on Ford Windsor V8 engines. You will find details for identifying the most suitable EWP® and Thermatic® Fan on our website www.daviescraig.com.au.

**Note:** that the Header-Adaptor Kit for Windsor Engine is designed to fit onto the Ford 221, 260, 289, 302, and 351 timing cover, see the profile (Figure 1). This design may suit alternate Windsor models.

PLEASE READ ALL THESE INSTRUCTIONS THOROUGHLY BEFORE YOU START WORK.

DON'T RUSH - ENSURE YOU HAVE FULL UNDERSTANDING OF THE WORK AHEAD BEFORE YOU

COMMENCE. ENSURE YOU HAVE ALL TOOLS AND COMPONENTS REQUIRED.

#### **KIT CONTENTS:**

Item	Description	Qty
1.	Windsor Gasket	1
2.	Windsor Adaptor Plate	1
3.	38mm Elbow Adaptor	1
4.	M5 Screws	6
5.	O-Ring	1
6.	Installation Instructions	Not Shown



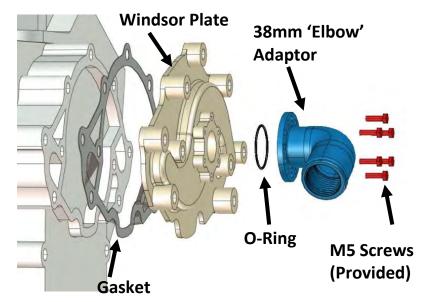
Figure 2: Windsor Header Adaptor Kit Components.

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#### **Installation Guidelines:**

(We have an instructional video on the Davies, Craig website: www.daviescraig.com.au)

**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. Retain the bottom radiator hose; you will require a section of this hose to complete your EWP<sup>®</sup> conversion.



- **2.** Loosen appropriate hardware and remove all belts i.e. water pump, alternator, air conditioning and power steering (if fitted). Disconnect heater return hose and dismantle the Mechancial Water Pump from the Engine Block.
- **3.** Retain the screws from the detached Mechanical Water Pump as these will be used later in the installation. Retain the bottom radiator hose; you may require a section of this hose to complete your EWP® conversion.

Figure 3

- **4.** Clean the timing cover surface and around the coolant inlet ports to ensure they are free of the old gasket and any grime or coolant.
- **5.** Pre-Assembly take the Windsor Adaptor Plate and place the O-Ring provided to you over the surface of the inlet. Secure the 38mm Elbow Adaptor onto the Windsor Adaptor Plate with the 6xM5 Screws provided to you in the kit. We recommend using a small amount of 'Loctite' or appropriate thread sealant to ensure leaking does not occur. Take care when applying the Straight Adaptor so that the O-Ring will not be displaced.
- 6. Fit the new gasket (supplied) on to the timing cover surface with gasket glue or

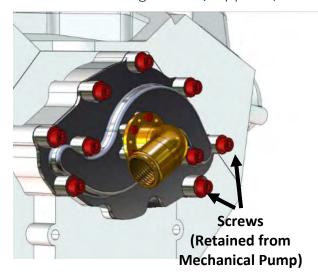


Figure 4

- appropriate adhesive (not supplied), ensure the screw holes align with those on the timing cover. Place the Pre-Assembled Windsor Adaptor Plate on the Timing Cover and secure in place with the screws used previously on the Mechanical Water Pump (refer Figure 4).
- **7.** Connect a section of the Bottom Radiator Hose to the 38mm Straight Adaptor. If the current radiator hose is in good condition you may utilise this to fit in your installation. Slide one Hose Clamp over the Bottom Radiator Hose section, and secure at the Inlet tightly. Slide another Hose Clamp over the Bottom Radiator Hose but do not tighten.

- **8.** Slide the secured Bottom Radiator Hose over your EWP® outlet (refer Figure 5) and secure with the loose Hose Clamp as described in Step 7. Screw the Heater Return Adaptor & Hose Fitting (refer Figure 6, if applicable) into the EWP® inlet then position and align the EWP® with the bottom radiator outlet. Secure the Heater Return Hose to hose fitting. **NOTE: Ensure your EWP® is located as low as possible relative to the Radiator outlet to avoid trapped air.**
- **9.** Check you have enough length of bottom connector hose, (the remainder of your current bottom radiator hose may be suitable for this purpose,) connect the Radiator Hose with a Hose Clamp to the EWP<sup>®</sup> inlet. Then fit the other end to the bottom radiator outlet, securing tightly with a Hose Clamp.

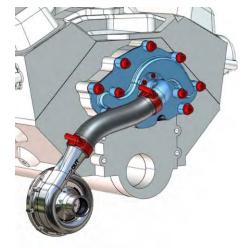
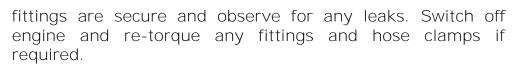


Figure 5

- **10.** Once you are satisfied with the initial assembly and alignment of your EWP® and Header-Adaptor kit conversion, proceed with the final assembly. Ensure all hose clamps and screws are sufficiently tightened to prevent leaks. Do not over-tighten. You may wish to use Teflon tape for added security to ensure no leaks occur.
- **11.** Follow the EWP® and EWP®/Fan Digital Controller installation instructions to complete your conversion.
- **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 will run the EWP at full speed for 5 seconds. Turn heater on maximum setting (if applicable). Run engine for approximately 10 minutes while carefully monitoring engine temperature. 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



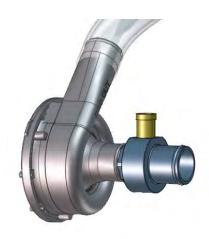


Figure 6

**13.** Conduct a 'test run' with your vehicle. Turn on the heater to assist purging 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.



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

## **WARRANTY**

We warrant 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 Davies, Craig product 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

