

HEADER ADAPTOR LS SERIES INSTALLATION INSTRUCTIONS

Congratulations on your purchase of the Davies, Craig Header Adaptor LS Series. Your Header Adaptor is designed to replace the belt driven mechanical water pump and thermostat to complement the installation of Davies Craig remote-mounted Electric Water Pump (EWP®). **Suitable for most 3rd and 4th Generation GM Small Block Engines Including LSX.**

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.

HEADER ADAPTOR COMPONENTS

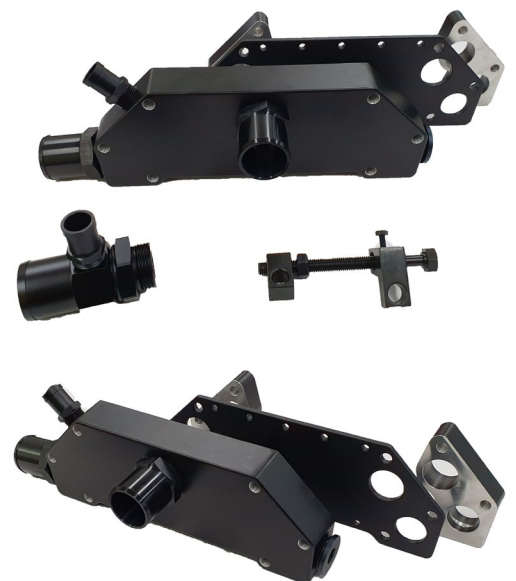
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|---|---|
| <ul style="list-style-type: none"> 1 - Adaptor Block 1 - Adaptor Back Plate 2 - Adaptor Spacer 1 - Plate Gasket 4 - Spacer Gasket 1 - Outlet Fitting -16AN to 38mm (1 1/2") Hose 1 - Inlet fitting -12AN to 38mm (1 1/2") Hose | <ul style="list-style-type: none"> 1 - Inlet Plug -12AN 2 - 1/2" NPT 19mm (3/8") Hose fitting 1 - Heater Return fitting 2 - Hose Clamps 1 - Screw Tensioner 1 - 6PK1560 Belt 11 - M5 Flange Bolt |
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ADDITIONAL COMPONENTS (NOT SUPPLIED)

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|--|---|
| <ul style="list-style-type: none"> Davies Craig EWP150 Combo #8970 (recommended) Top/Bottom Radiator Hose (Retained) | <ul style="list-style-type: none"> Mechanical Water pump Bolts (Retained) Heater Hose and joiners (if required) |
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OPTIONAL COMPONENTS (AVAILABLE SEPARATELY)

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| <ul style="list-style-type: none"> #1024 - Swivel Elbow, -16AN to 38mm (1 1/2") Hose #8505 - Elbow Hose, 38mm (1 1/2") ID - 90° | <ul style="list-style-type: none"> #8700 - EWP® Mounting Bracket Thermostat and inline housing |
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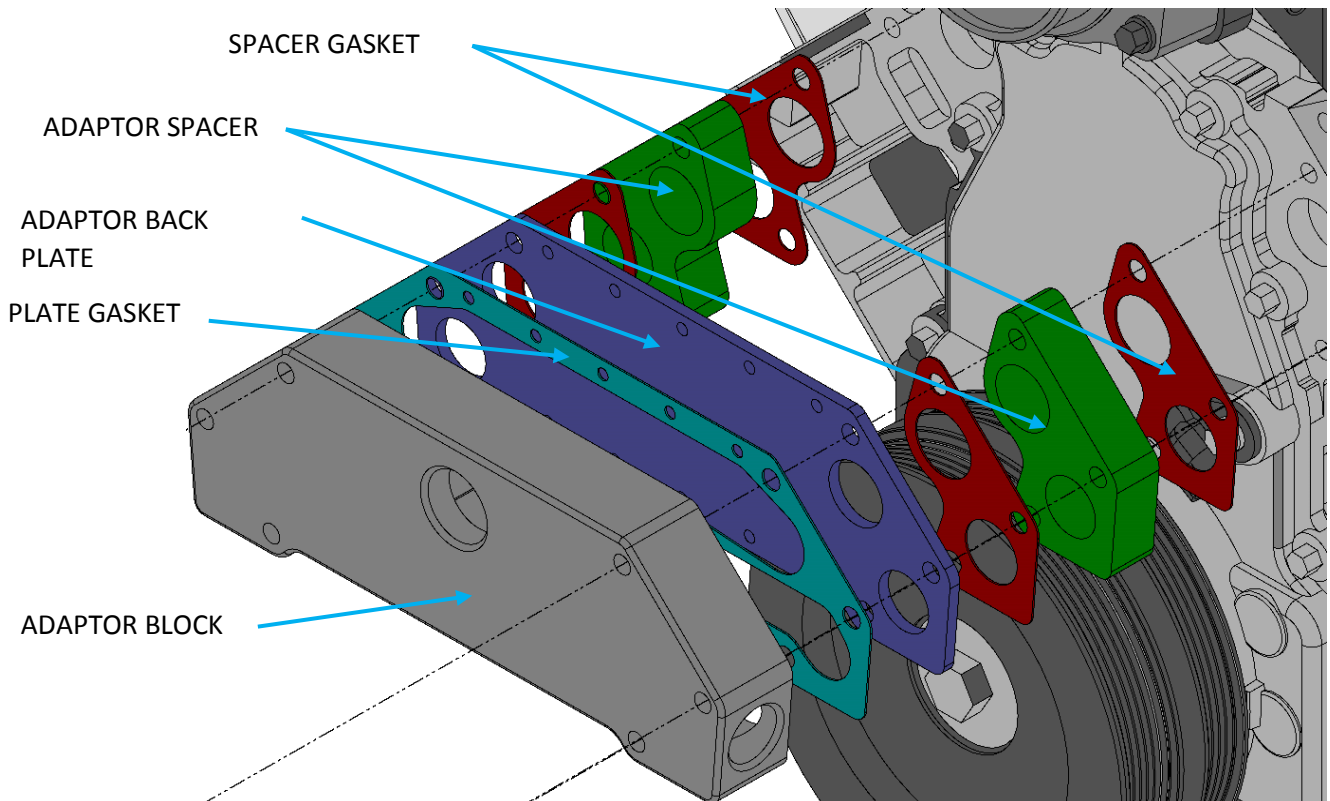


INSTALLATION PROCEDURE

- Remove radiator cap, remove bottom radiator hose, drain coolant into a clean vessel remove the mechanical water pump. You will need to retain the six (6) mounting bolts and top and bottom radiator hoses, to assist in the installation of your Header Adaptor.

PLATE GASKET INSTALLATION

- Place the Plate Gasket on the rear surface of the Adaptor Block.
- Place a few M5 Flange Bolts into the holes of the Adaptor Back Plate to help align the gasket with the bolt holes in the Adaptor Block. Once aligned, insert and screw the remaining Flange Bolts and torque all eleven (11) Flange Bolts to 5Nm (3.6 Ft lbs).



HOSE FITTING INSTALLATION

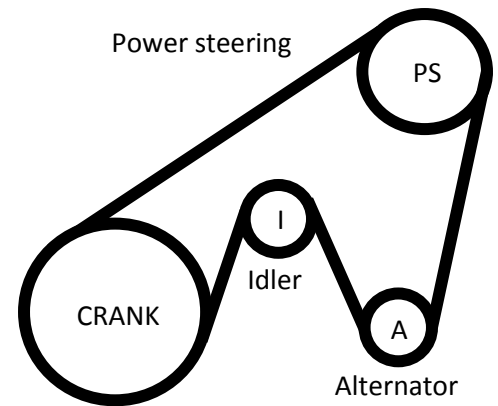
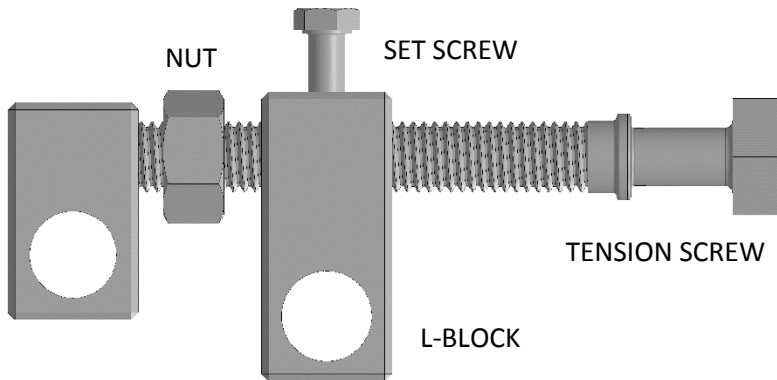
- Screw one ½" NPT 19mm Hose Fitting into the ½" NPT port on the side of the Adaptor Block. You may require thread tape or sealant to achieve a watertight seal. Do not overtighten.
- Install the inlet fitting (-12AN) into the left or right port of the Adaptor Block. In the remaining port install the inlet plug (-12AN).
- Install the outlet fitting (-16AN) into the port on the front of the Adaptor Block.
- Install the remaining ½" NPT 19mm (3/8") Hose Fitting into the Heater Return Fitting. You may require thread tape or sealant to achieve a watertight seal. Do not overtighten.
- Screw the Heater Return Fitting into the inlet of the EWP® with the O-ring on the underside of the Nut and tighten the nut to lock the fitting in position.

HEADER ADAPTOR INSTALLATION

- Ensure all gasket surfaces are clean before installing the Adaptor Assembly.
- Take the Adaptor Assembly and place the Spacer Gasket and Spacer onto the backside of the Assembly. To help line up the Gaskets and Spacers the mounting bolts can be inserted.
- With the Spacers and Spacer Gaskets in place install the entire Adaptor Assembly onto the engine block using the 6 mounting bolts retained from the removal of the mechanical water pump.

SCREW TENSIONER INSTALLATION

- Remove top alternator bolt and retain. Loosen the lower mounting bolt of the alternator to allow the alternator to rotate freely.
- Assemble the screw tensioner as shown and install into the top hole of the alternator bracket using the retained bolt. Using the provided nut and bolt, install the L-block to the alternator but do not tighten fully. Install the provided belt as shown.



- Tighten the nut until it is flush with the L-block then tighten the alternator bolt so the L-block can't move. Holding the nut stationary tighten the tension screw fully until the nut and tension screw rotate together.
- To apply tension, loosen the tension screw whilst allowing the nut to rotate freely. Tension will be applied only when the nut is rotating.
- Once satisfied with the belt's tension check that the set screw is not going to contact any of the threads of the tension screw and tighten to lock the tension screw in place. Finally, tighten the bottom bolt of the alternator to lock the alternator in position.

EWP® INSTALLATION

- Install your EWP® as per the instructions provided with your chosen EWP, road test the vehicle allowing the engine to reach normal operating temperature.
- Once the engine has cooled sufficiently, check coolant level again and top up if required.
- For some applications, cold climates or when running the EWP continuously you may require a thermostat to help control the coolant temperature. In this case, you will need to install an inline thermostat housing and drill 2 x 3mm (1/8") holes into the thermostat plate.
- The installation of an EWP® may affect coolant flow through auxiliary coolant loops. This change in flow may affect the performance of auxiliary systems like the heater, LPG converter and Turbo cooling. In these cases, you may require a Davies, Craig Electric Booster Pump (EBP) to provide constant flow to these systems.

These installation instructions will suit most applications but there are circumstances surrounding some engine designs, environments, and the nature of the system involved, which may require other installation arrangements not outlined here. Frequently Asked Questions (FAQ) are listed on our website www.daviescraig.com.au . Emails can be directed to info@daviescraig.com.au or Telephone +61 (0) 3 9369 1234 during business hours.

WARRANTY

Davies, Craig Pty Ltd warrants for a period of two years or 2000 hours continuous running (whichever is the lesser) from the date of purchase. Davies, Craig 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). This warranty is void if the product is misused, altered, tampered with or is installed or used in a manner that is inconsistent with Davies, Craig's written recommendations and/or installation instructions. Labour and consequential costs are excluded. **DAVIES, CRAIG PTY. LTD.**

Register your warranty at: daviescraig.com.au under the support tab.



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