

# **INSTALLATION INSTRUCTIONS**

SUBJECT: REPLACEMENT HEATER CORE LINE KIT FOR 12V CUMMINS

FPE-2023-98 August, 2023

**FITMENT:** 1989-1998 Dodge 250/350 with 12 valve Cummins

**KIT P/N:** FPE-CUMM-SSHCL-12V

**EST. INST. TIME:** 3 hours



#### **KIT CONTENTS:**

Item	Description	Qty
1	Stainless steel heater tube (near valve cover)- replaces Cummins 3912086	1
2	Stainless steel heater tube (near fender)- replaces Cummins 3912087	1
3	Silicone heater hose (FPE-35323, straight tube to block) - replaces Cummins 3931522	1
4	Silicone heater hose (FPE-35324, 90 deg tube to block) - replaces Cummins 3957649	1
5	Silicone heater hose (FPE-35322, 45 deg tube to firewall)	2
6	Anodized billet aluminum hold down clamps	4
7	Mounting bracket for use with aftermarket manifolds only	1
8	Hose clamps	8
9	M8-1.25 x 70 hex flange bolt	1
10	M8-1.25 x 40 hex flange bolt	1
11	M8-1.25 nylock nuts	2
12	M8-1.25 x 45 hex flange bolt (used with aftermarket manifold mounting bracket only)	1
13	Aluminum Standoff	1

#### **WARNINGS:**

The purchaser and end user releases, indemnifies, discharges, and holds harmless Fleece Performance Engineering, Inc. from any and all claims, damages, causes of action, injuries, or expenses resulting from or relating to the use or installation of this product that is in violation of the terms and conditions on this page, the product disclaimer, and/or the product installation instructions. Fleece Performance Engineering, Inc. will not be liable for any direct, indirect, consequential, exemplary, punitive, statutory, or incidental damages or fines cause by the use or installation of this product.

# **INSTALLATION INSTRUCTIONS**

#### **APPLICATION NOTES:**

- This kit is intended for use with trucks originally equipped with air-conditioning. If your truck is not equipped with air conditioning, you will need to supply your own %" ID hose to run from the firewall ports to the stainless-steel heater lines.
- The silicone heater hose (FPE-35322, tube to firewall) may require trimming for certain applications or to accommodate modifications made previously to the engine.
- If your truck is equipped with an aftermarket exhaust manifold, the rear heater line standoff will not be utilized (items 9 and 13). The additional mounting bracket (item 7) provided in the kit will be used in place of the rear standoff.

#### PROCEDURE:

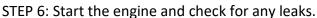
STEP 1: Drain all engine coolant from the cooling system.

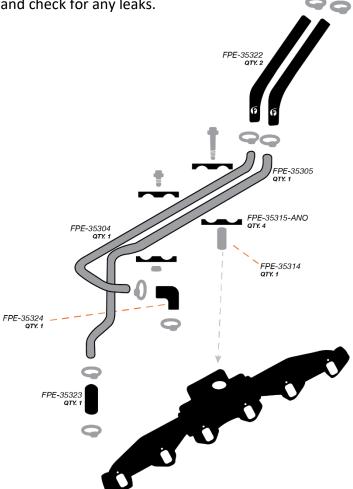
STEP 2: Remove all hose clamps and mounting brackets for the heater core lines routed from the firewall to the engine. Clean all hose connection points with Scotch Brite to remove any corrosion or build-up.

STEP 3: Layout the kit components for assembly. Reference the installed product images and notes in the following pages.

STEP 4: Install all components.

STEP 5: Refill the cooling system with new coolant.





#### **INSTALLATION OVERVIEW:**

The kit provides for a complete replacement of the hoses and tubes that supply coolant to and from the engine to the firewall connection for the heater core. This kit is designed to accommodate variations in the installation of the product and is shown in various installations in the instructions of this kit.

Configuration with Fleece Performance Coolant Bypass secured to the top of the two mounting clamps:



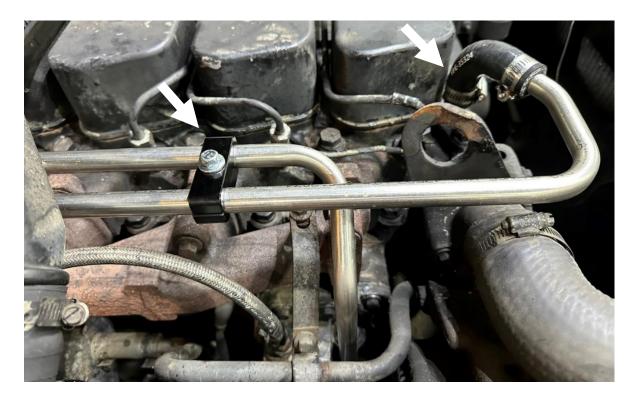
Configuration with an aftermarket vacuum controlled heater valve near the firewall.



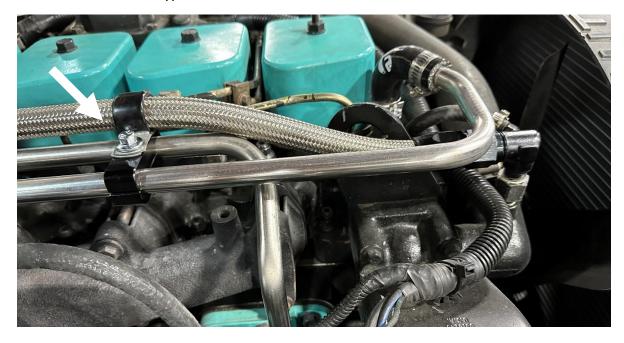
# **INSTALLATION INSTRUCTIONS**

Retain the two stainless lines in the forward position using two of the billet aluminum clamps (item 6), along with the M8-1.25x40 bolt (item 10)

FPE-35324: Install silicone hose to the cylinder head adapter fitting and tighten with new hose clamps provided in the kit.



For installations that contain a Fleece Performance Coolant Bypass, the forward clamp may be used as a support mount for the coolant bypass hose.



#### **TUBE TO FIREWALL CONNECTION:**

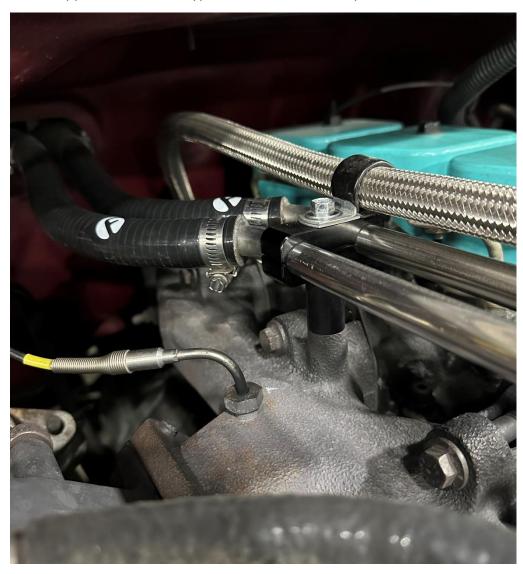
Install the two silicone hoses, part number FPE-35322 (item 5), between the firewall and the stainless-steel tubes. Trimming of the lines may be required based on your application. For reference, an installation is shown below at left that integrates an aftermarket heater valve. The image at right shows a standard installation.





## STOCK MANIFOLD, REAR MOUNTING BRACKET:

For stock manifold applications, use the supplied aluminum standoff (item 13) and 70m length bolt (item 9) to mount the hose clamps (item 6) and retain the coolant tubes at the rear of the engine. For installations that incorporate a Fleece Performance Coolant Bypass, this standoff may be used to support the coolant bypass hose with a P-clamp.



## AFTERMARKET MANIFOLD, REAR MOUNTING BRACKET:

An additional bracket (item 7) is supplied in the kit for use with aftermarket manifolds that do not contain the mounting provision for the rear standoff support. The bracket is designed to mount under the exhaust manifold stud nut on cylinder number three. The longer length M8-1.25x45 bolt (item 12) will be used in conjunction with the billet mounting clamps. Reference installed images of the bracket below.





### **TUBE TO BLOCK CONNECTION:**

Install silicone hose, part number FPE-35323 (item 3), between the block and new heater tube and tighten with the new hose clamps provided in kit.

