

INSTALLATION INSTRUCTIONS

SUBJECT: DODGE CUMMINS COOLANT BYPASS KIT

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FITMENT: 1994 – 1998 12V Dodge Cummins

KIT P/N: FPE-CLNTBYP-S-CUMMINS-12V

ESTIMATED INSTALLATION TIME: 2-3 Hours

TOOLS REQUIRED: 18mm ratcheting wrench, 6mm Allen, 1" wrench, hammer, 5-gallon clean drain pan, 36" pry bar, Scotch-Brite™ pad (included in kit).

KIT CONTENTS:

Item	Description	Qty
1	Coolant bypass line	1
2	Coolant bypass thermostat housing and O-ring	1
3	M12 x 1.75, 40mm flange head bolt	2
4	M8 x 1.25, 20mm socket head cap screw	2
5	3/8" NPT to -10AN 90Deg	1
6	3/8" Female x 1/4" Male Pipe adaptor	1
7	1/8" NPT to 1/4" Hose Barb 45Deg	1
8	13/16" vinyl P-clamps	2
9	Scotch-Brite™ pad (not pictured)	1



WARNINGS:

- Use of this product may void or nullify the vehicle's factory warranty.
- User assumes sole responsibility for the safe & proper use of the vehicle at all times.
- 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.

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PROCEDURE:

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STEP 1: Disconnect the vehicle batteries.

STEP 2: Locate the engine coolant drain, located under the driver's side of the radiator. Drain the coolant system into a clean drain pan.

STEP 3: Remove the factory coolant fitting at the engine side of the upper radiator hose. Install the supplied fittings (items 5, 6, and 7) in the orientation shown in the image to the right.



STEP 4: Remove the large 58mm (2 1/4") diameter freeze plug at the rear of the engine block. This can be done from underneath the truck, using a 36" pry bar and hammer, drive the outer edge of the freeze plug in on the edge to rotate it in its bore. Remove the freeze plug from the block.

NOTE: Do not hit the freeze plug in the center.



STEP 5: With the freeze plug removed, use a Scotch-Brite™ pad and a degreasing solution to **thoroughly** clean the block surface area from the head down to the rear cover, as well as the bore where the freeze plug was previously installed. Be sure to remove all dirt and foreign debris to allow the coolant bypass thermostat housing to fully seat.



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STEP 6: Using a 1" wrench, thread the coolant bypass hose onto the fitting on the coolant bypass thermostat housing. Tighten the fitting.



STEP 7: With assembly grease or light oil, thoroughly lubricate the sealing O-ring on the coolant bypass thermostat housing and press it into place on the back of the engine block.

STEP 8: Slide the thermostat housing between the firewall and the back of the engine block. Align the thermostat housing with the original freeze plug hole location and press the housing against the engine to seat the housing. The coolant bypass hose should be oriented towards the passenger side of the vehicle and over the exhaust manifold.



STEP 9: Ensure that the coolant bypass thermostat housing is firmly seated onto the back of the engine block and fasten it securely into place using the supplied M12 flange head bolts using an 18mm socket.



STEP 10: Fit the vinyl P-clamps (item 8) over the coolant bypass line and fasten the clamps to the coolant tubes running parallel to the engine using the supplied M8 fasteners (item 4).

NOTE: Ensure the coolant line does not contact the exhaust manifold.



STEP 11: Ensure that the coolant drain plug has been reinstalled in the radiator and proceed to re-fill the coolant system. Re-use or replace coolant as necessary to properly fill the system with clean fluid.

STEP 12: Re-connect the vehicle batteries

STEP 13: Start the truck and allow the engine to idle. Inspect all fittings and split-lines for possible leaks. If no leaks are observed, bring the engine to a normal operating temperature and confirm that no leak is present. Repair any observed leaks.

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For Technical Assistance contact Fleece Performance Engineering at 855-839-5040.