



Technical Service Bulletin

Technical Service Bulletin: TSB190042	Released Date: 24-Jun-2019
New Vented Coolant Drain Line Kit to Reduce Variable Geometry Turbocharger Actuator Overheating: FC2636 and FC1894	

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Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected

Engines:

- ISL9 CM2350 L101
- L9 CM2350 L123B

Original Equipment Manufacturer (OEM):

- Pierce
 - Fire Truck
- Nova
- Gillig
- MCI
- ADL
- EL-DORADO
- NABI
- Autocar
 - Transit
 - Fire Truck

Issue

Symptom:

- STOP ENGINE light with FC2636
- Amber lamp with FC1894

Root Cause:

- Turbocharger actuator overheating.

Verification

- Active or logged occurrences of fault codes 2636 or 1894.
- Verify unit is **not** equipped with new vented turbocharger coolant drain line kit part number. See Table 1 below.

Resolution

Replace turbocharger actuator vented coolant drain line with corresponding kit.

Service Instructions

- New turbocharger actuator vented coolant drain line kits are available with a horizontal or vertical outlet.
- Turbocharger actuator vented coolant drain line orientation **must** be determined in order to determine correct service kit to be ordered. See Figures 1, 2, 3, and 4 for existing product and service kit layouts.
- See Figure 5 for new production routing.
- See Table 1 for kit part numbers.
- For new turbocharger actuator coolant drain line kit installation, see corresponding Service Manual. Reference Procedure 008-017 in Section 08.
- Dips or sags of the coolant vent line below the bottom surface of the actuator should be avoided. If the coolant vent line to the OEM top tank, dips or sags below the bottom surface of the turbocharger actuator, the coolant vent line **must** be shortened and raised to be above the top surface of the turbocharger actuator. See Figure 1 below.

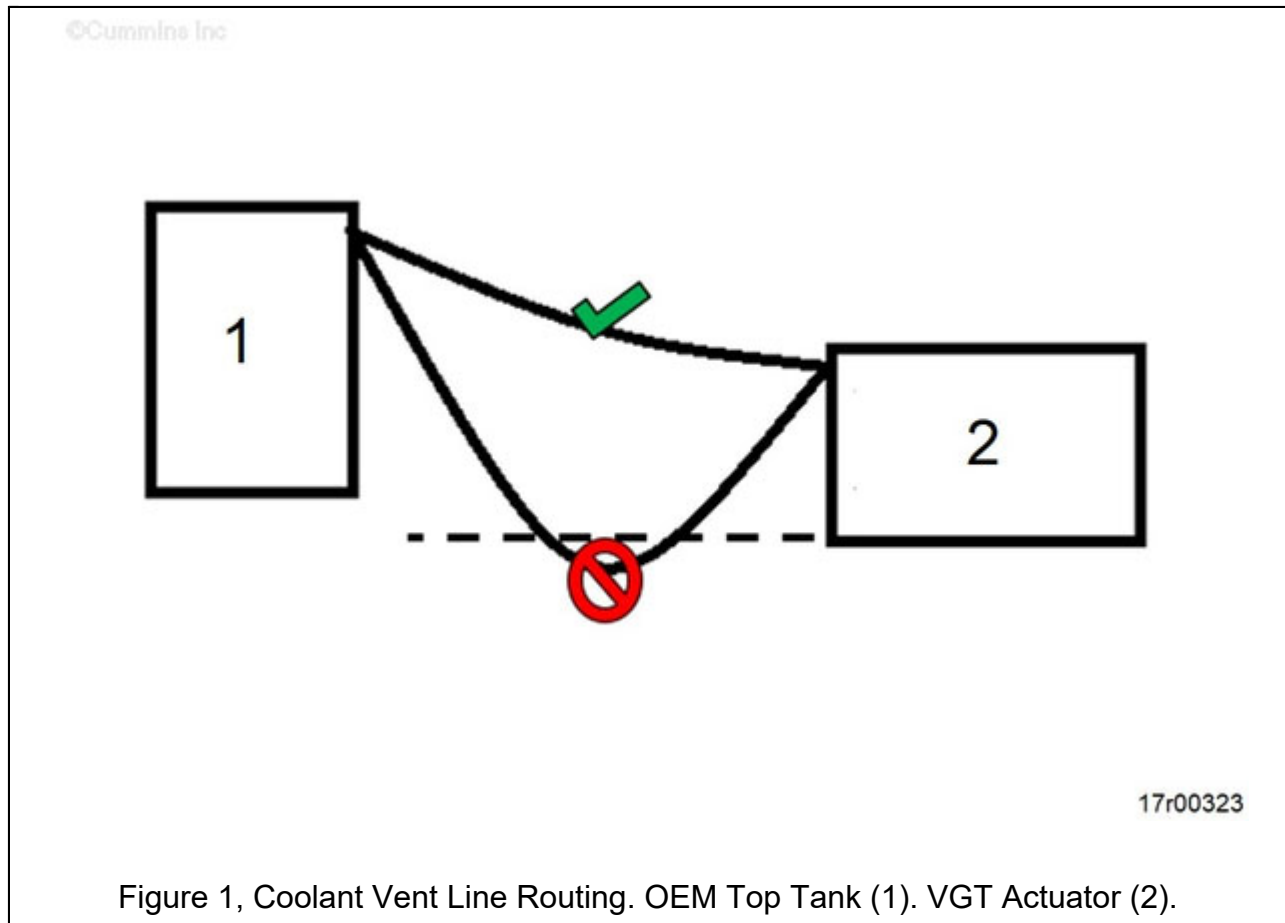
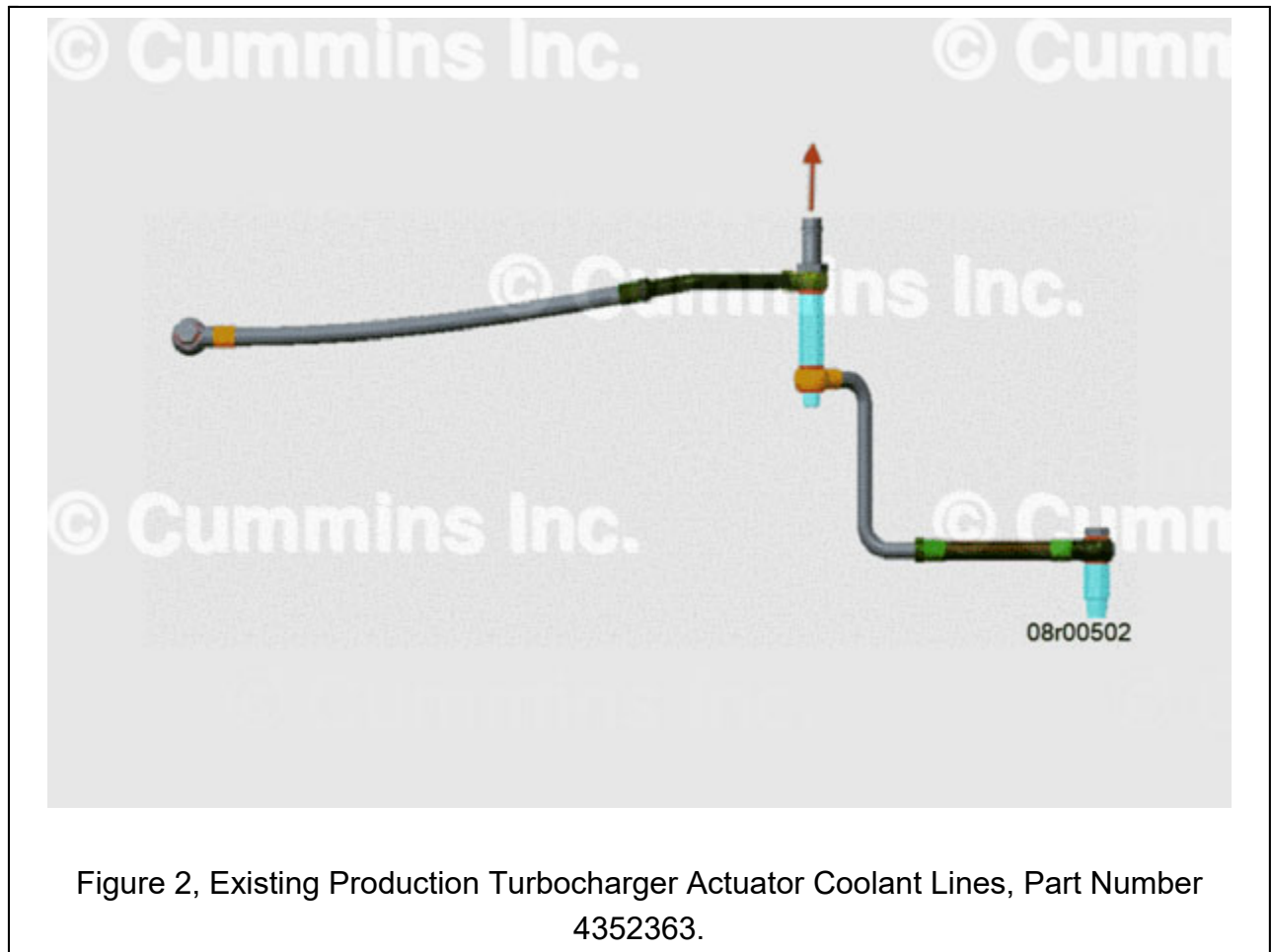


Figure 1, Coolant Vent Line Routing. OEM Top Tank (1). VGT Actuator (2).

Service Parts Availability

Service kits contain a new turbocharger actuator vented coolant drain tube with vent accommodation, turbocharger vent line and associated hardware.



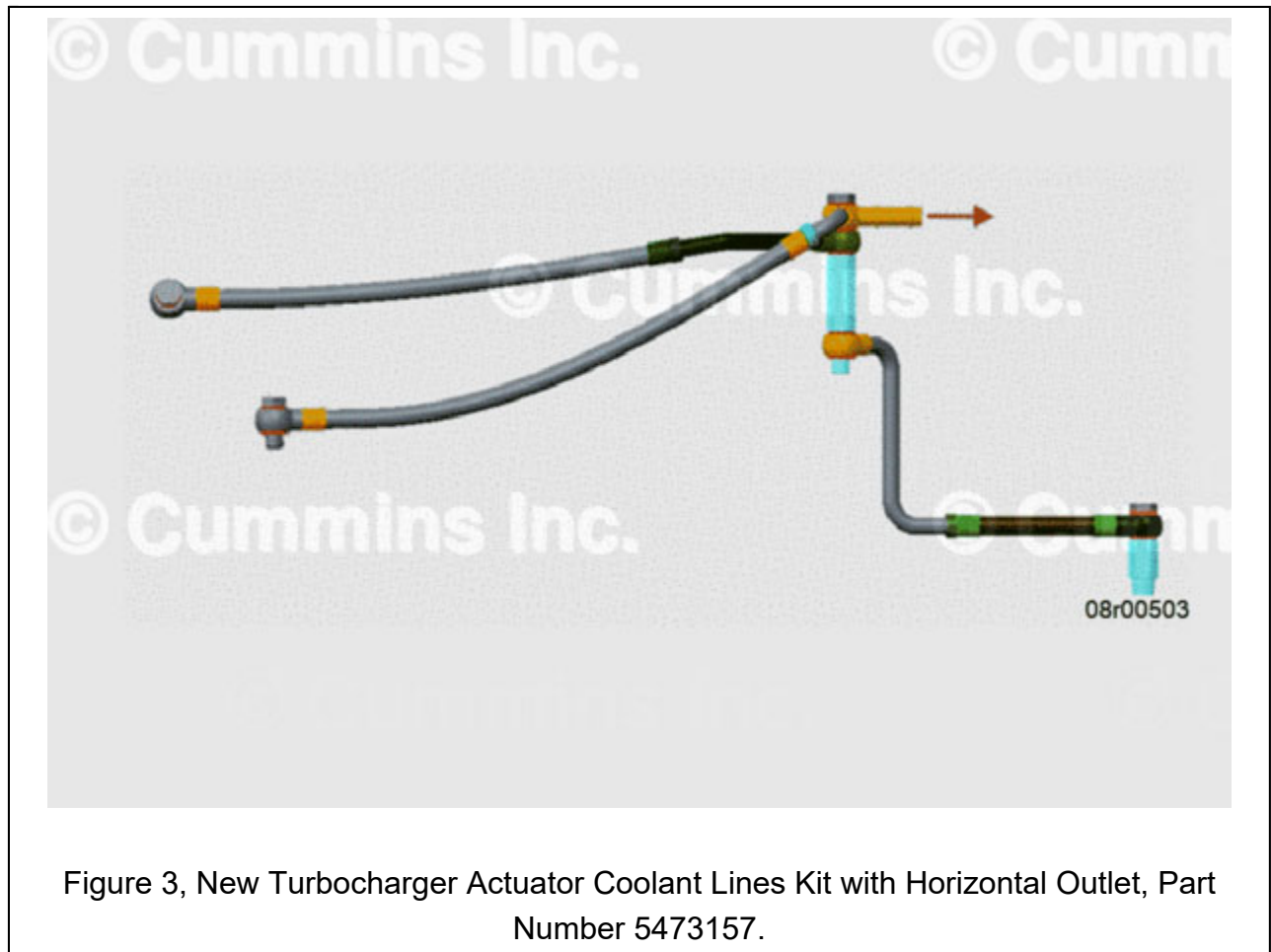




Figure 4, New Self-Assembled Turbocharger Actuator Coolant Lines Kit, Part Number 5473159.

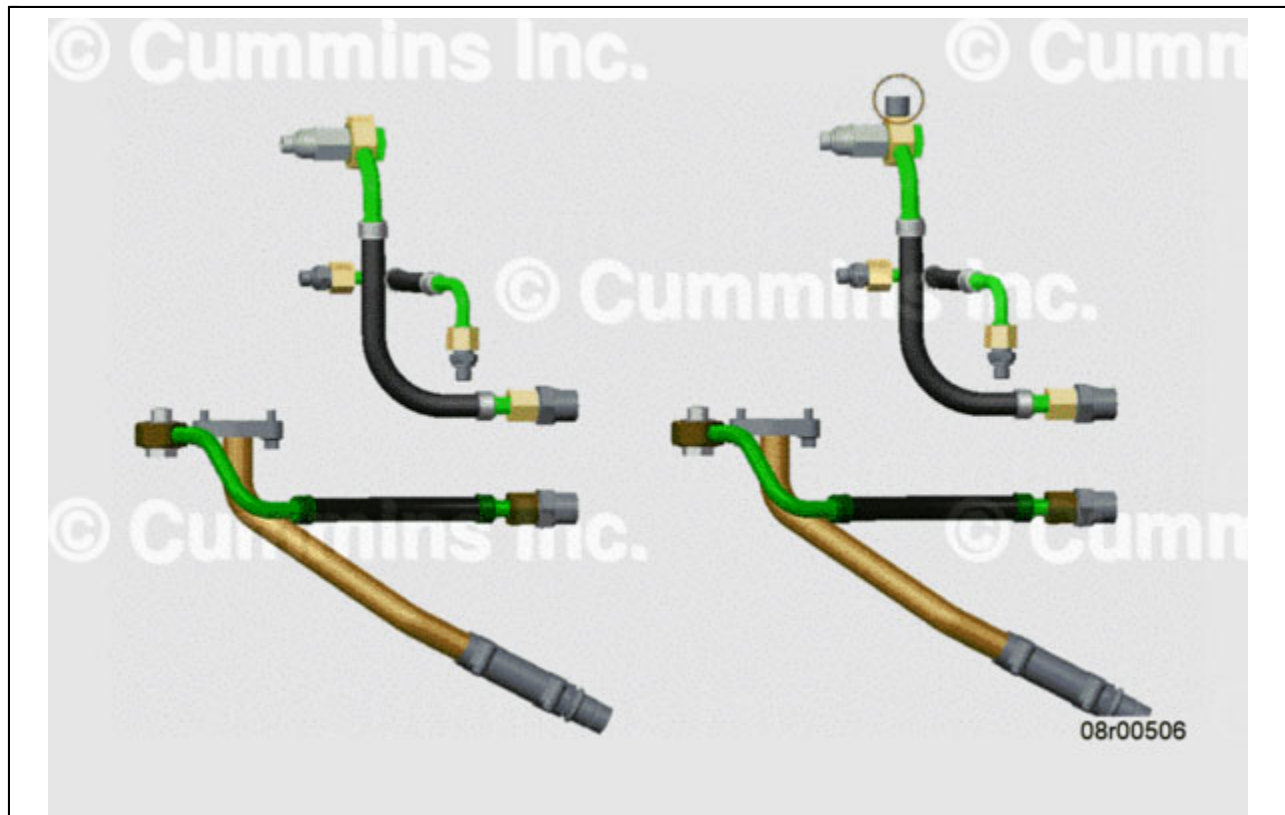


Figure 6, Existing Production Turbocharger Actuator Coolant Drain Tube With Vent Accommodation (Left), Part Number 5302803. New Production Turbocharger Actuator Coolant Drain Tube with Vent Accommodation (Right), Part Number 5446929.

Service Parts Availability

Service parts are available. See Table 1 for part numbers.

Table 1, Service Parts				
Part Description	Existing Part Number	Obsolete	Superseded	New Part Number
Horizontal vented coolant drain Out Kit	4352363	No	No	5473157
Vertical vented coolant drain Out Kit	4352363	No	No	5473158
Self-Assembled Kit	4352363	No	No	5473159

Table 2, Kit Part Number and Confirmed Application Compatibility	
Kit Part Number	OEM
5473157	Pierce Fire Trucks
5473158	Nova Gillig MCI ADL EL-DORADO NABI
5473159	Autocar

Production Status

Implemented for production. See Table 2.

Table 3, Production Information		
ESN First	Build Date¹	Plant
74287491	16 March 2018	Rocky Mount Engine Plant
¹ Engine build date can be found on engine dataplate.		

Document History

Date	Details
2019-3-19	Module Created
2019-6-20	Product Problem Solving (PPS)

Last Modified: 24-Jun-2019
