

FLA COE  
FLB COE  
FLD Conventional  
Business Class

FLC 112 Conventional  
Century Class Conventional  
Argosy COE  
Cargo

> Columbia  
Coronado  
Business Class M2  
Cascadia

Freightliner  
Service Bulletin

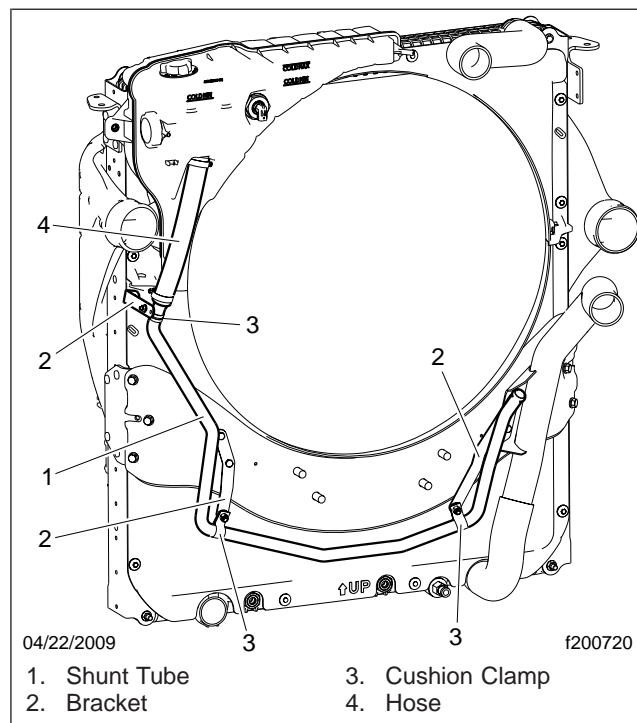
**Description of Revisions:** *This bulletin replaces the version dated May 2009. The Group reference for bumper removal has been corrected, and the warranty tables have been updated.*

## General Information

The shunt tube on some Columbia vehicles with EPA07 equipped Caterpillar C13 or C15 engines may be pinched between the radiator brace and the front crossmember. A redesigned shunt tube, and associated support brackets, are now available. If the shunt tube is found to be damaged, replace it with the new shunt tube and support brackets.

## Procedure

1. Set the parking brake, shut off the engine, and chock the tires.
2. Remove the bumper. See **Group 31** of the *Columbia Workshop Manual* for instructions.
3. Drain the coolant. See **Group 20** of the *Columbia Workshop Manual* for instructions.
4. Disconnect the shunt tube from the hoses at both ends, then remove the tube, the two mounting brackets on the radiator brace, and all the associated cushion clamps. See **Fig. 1**.



**Fig. 1, Shunt Tube Installation**

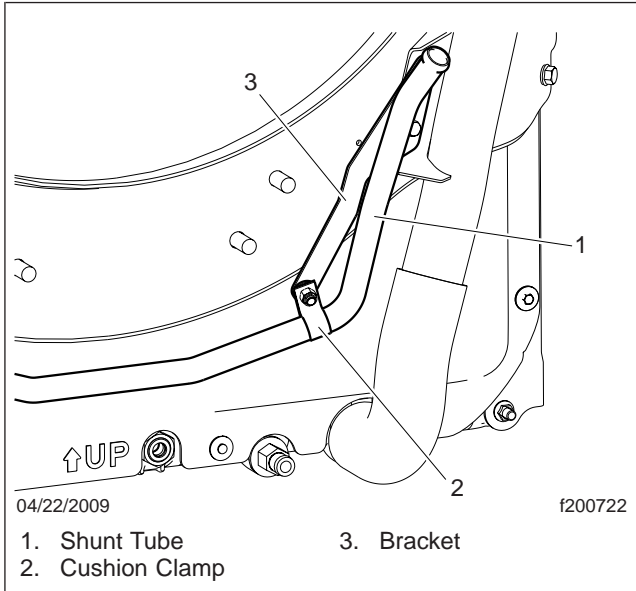
5. Install the new shunt tube mounting bracket (A05-27730-000) on the passenger side of the radiator brace. See **Fig. 2**.
6. Install the new shunt tube mounting bracket (A05-27643-000) on the driver's side of the radiator brace. See **Fig. 3**.

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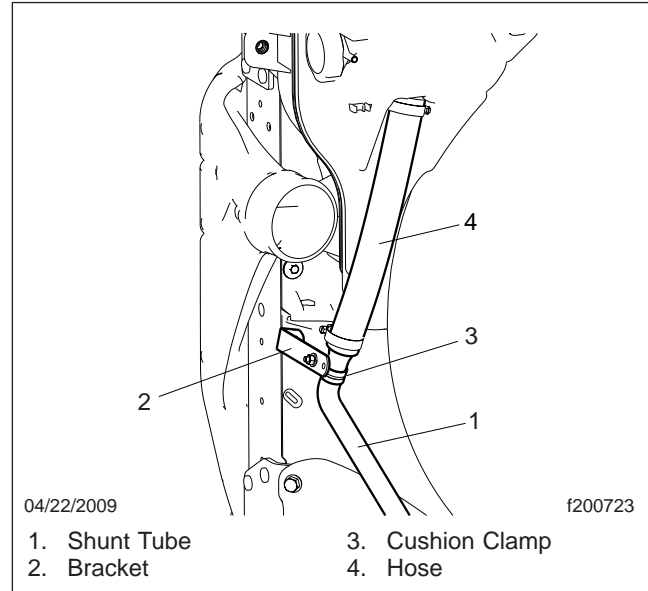
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**Fig. 2, Passenger Side Bracket Installation**



**Fig. 3, Passenger Side Bracket Installation**

7. Loosen the shunt tube mounting bracket directly under the surge tank and rotate it to align with the new shunt tube.
8. Install the new metal shunt tube using the supplied cushion clamps. See [Fig. 1](#).
9. Tighten the mounting bracket directly under the surge tank.
10. Close the radiator drain valve, and fill the cooling system as needed. See **Group 20** of the *Columbia Workshop Manual* for instructions.
11. Start the engine and check for leaks.
12. Install the bumper. See **Group 31** of the *Columbia Workshop Manual* for instructions.

## Parts

Replacement parts are available from the PDCs. [Table 1](#) lists the required parts for replacing a damaged shunt tube.

Shunt Tube Replacement Parts	
Part	Part Number
Shunt Tube, Revised CAT	05-27642-000
Left-Hand Tube Support Bracket	A05-27643-000
Right-Hand Tube Support Bracket	A05-27730-000

**Table 1, Shunt Tube Replacement Parts**

# Replacement Shunt Tube, EPA07 Caterpillar C13 and C15 Engines

# 20-61

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## Warranty

Normal warranty applies. See [Table 2](#) and [Table 3](#) for damage code and labor allowance information, and refer to this bulletin by number in the story of the claim. Warranty will only be paid if the factory-installed parts described in this bulletin have failed. Preventive repairs will not be paid.

QuickClaim Damage Code and Labor Allowance			
Damage Code	SRT Code	Description	Time: Hours
270-001251609	27F-5010A	CAT Shunt Tube, R/R	1.0

**Table 2, QuickClaim Damage Code and Labor Allowance**

OWL VMRS Codes and Labor Allowance				
Component Code	Cause Code	SRT Code	Description	Time: Hours
042-002-083	03	27F-5010A	CAT Shunt Tube, R/R	1.0

**Table 3, OWL VMRS Codes and Labor Allowance**