2007-2009MY Medium Duty Trucks with Caterpiller C7S Turbodiesel Engine

Condition:

On June 22, 2010, Caterpillar filed a notice of safety defect with NHTSA regarding cracking concerns with the #5 and #6 cylinder high-pressure fuel injection pipes.

GM integrated this engine into some of it's vehicles.

Effect of the Condition:

Possible leakage of fuel from the pipes.

Root Cause of the Condition:

Cracks are believed to be caused by vibration and possibly clamping during assembly.

Correction:

A recall to replace the #5 and #6 high-pressure fuel injection pipes with redesigned parts.



Model Yr & Model

2006-2009MY GMC Kodiak and Chevrolet Topkick 6000 and 7000 series with Caterpiller C7S turbodiesel (LG5)

Field Population Affected:

356 Vehicles

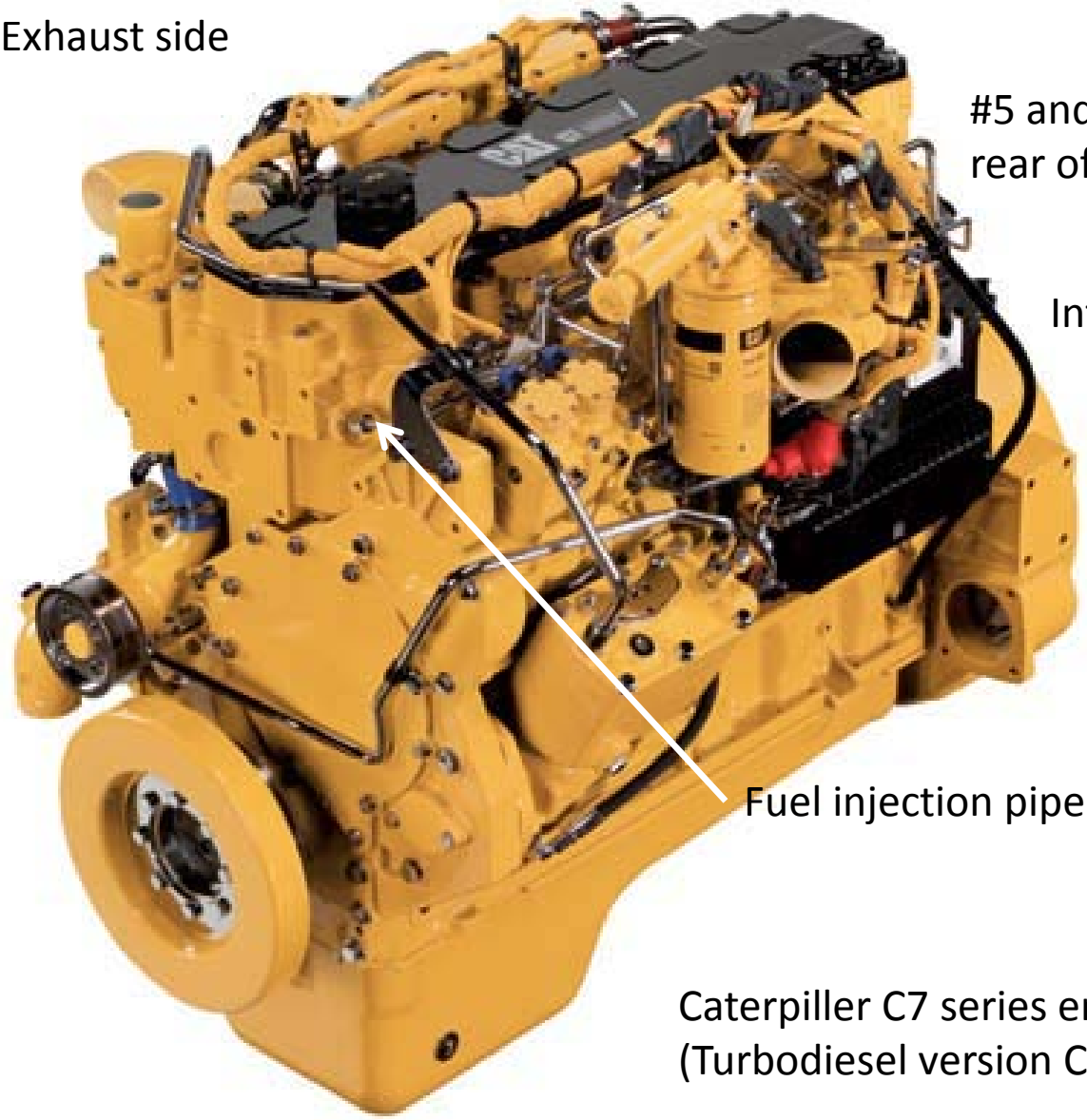
- **Estimated Cost :** $0

Potential Action: Safety Recall

11/8/2010

Jerry Hendler

N100215



Caterpiller C7 series engine
(Turbodiesel version C7S used as GM RPO LG5)

2007-2009MY Medium Duty Trucks with Caterpiller C7S Turbodiesel Engine

1) MANUFACTURER

Caterpillar Inc.
100 N.E. Adams St.
Peoria, IL. 61629-9240

Excerpts from Caterpillar's 573 letter

2) COMPONENT IDENTIFICATION

Model No.: C7 Diesel Engines produced by Caterpillar Inc.
Serial No. Prefixes: C7S
Manufacturing Build Dates: Mar 3, 2005 to Jan 6, 2009
Component Description: #5 & #6 Fuel Lines on the Common Rail High Pressure Fuel System of the 7L 6 cylinder turbocharged and air-to-air aftercooled diesel engine of 190 - 360 Horsepower.

3) NUMBER OF ENGINES POTENTIALLY CONTAINING DEFECT

5,920 total engines in the US (see the OEM Contact list for a detailed breakdown of the population including those engines remedied by a current campaign) **(350 GM usage)**

4) ESTIMATED PERCENTAGE OF ENGINES POTENTIALLY CONTAINING DEFECT

35% of the engine population (identified in 3 above) at 250,000 miles

5) DEFECT DESCRIPTION

The #5 and #6 fuel lines may crack at the fastening point to the common fuel rail and cause a fuel leak, which may result in a potential fire hazard.

2007-2009MY Medium Duty Trucks with Caterpiller C7S Turbodiesel Engine

Summary of Caterpillar investigation (573 content in backup slides):

1) Caterpillar was investigating leaks from the fuel pipes on the C7S engine

2) Concurrently Bluebird bus company experienced some underhood fires in vehicles using this engine

3) Bluebird issued a recall 09V-055 citing electrical issues as the root cause

4) 3 additional vehicles experienced fires after repair per the Bluebird recall
   a) No root cause was determined for these additional fires

5) NHTSA became aware of Caterpillar's investigation of fuel pipe leaks

6) NHTSA declared the fuel pipe leaks to be the cause of the Bluebird fires and instructed Caterpillar to recall the engines

   a) Caterpillar does not agree with the root cause analysis but complied with NHTSA's request

2007-2009MY Medium Duty Trucks with Caterpiller C7S Turbodiesel Engine

GM analysis of its vehicles with the Caterpillar C7S engine:

1) One warranty claim for a fuel rail replacement, 2007MY truck

2) No NISM's involving the LG5

3) No field reports, property damage claims, no VOQ's

4) GM FPA has no activity regarding these engines or vehicles relating to underhood fires

5) A technical assessment of the underhood thermal environment reveals no ignition risk from a fuel leak from #5 and #6 fuel pipes

    a) No hot surfaces nearby to provide ignition energy

2007-2009MY Medium Duty Trucks with Caterpiller C7S Turbodiesel Engine

Population Analysis

Matched?	Matched		
Count of VEH_IDENT_NBR	**Column Labels**		
Row Labels	**CA**	**US**	**Grand Total**
⊟2007		**1**	**1**
GMC		1	1
⊟2008	**32**	**276**	**308**
Chevrolet		116	116
GMC	32	160	192
⊟2009	**1**	**79**	**80**
Chevrolet		8	8
GMC	1	71	72
Grand Total	**33**	**356**	**389**

Janelle Kane

2007-2009MY Medium Duty Trucks with Caterpillar C7S Turbodiesel Engine

Recommendation:

Cooperate with Caterpillar's initiative to replace the #5 and #6 high pressure fuel pipes on the engine.

In GM's view this is not a safety-related matter (no practical risk from a fuel leak even if one were to occur).

GM has received a list of involved engine serial numbers from Caterpillar. GM will provide a list of VIN numbers and owner name and addresses, for the Chevrolet and GMC Medium Duty Trucks produced with the suspect engines to Caterpillar.

Caterpillar is responsible for conducting the recall and monitoring the recall completion performance ,including NHTSA Quarterly Reporting.