



TR (Technical Report)

Ref. No : [REDACTED]

Status : Closed

Responsible :

Subject 2016 A61 Cummins Engine Noise / No Start Due to Separated Crankshaft

General

Local Ref No.	[REDACTED]	Incident Country	United States	Claim No.	-
Model	A61	Model Year	2016	Taskforce Report	No
No Action Reason	-	Info Source	DBS-DBS Open R.O.	Classification	-
Explanation	<u>Request</u> PRCM -Production C/M <u>Priority & request comments</u> (No text)				
Issue Coverage	<input type="checkbox"/> 3MIS <input type="checkbox"/> 12MIS <input type="checkbox"/> Durability <input type="checkbox"/> QCS <input type="checkbox"/> IQS <input type="checkbox"/> Breakdown				

Vehicle Details

VIN	1N6BA1F4XG [REDACTED]	Plant Code	N-NNA (Canton)	Color Code	NAH
Model Variation	TTN	Sold Date	18/03/2016		
Prod Date	10/12/2015	Engine No.	[REDACTED]		
Engine Type	CD50	Transmission No.	-	Battery Pack No.	-
Transmission Type	A	DC Converter No.	-	On Board Charge No.	-
Inverter No.	-	E-PKB ECU No.	-		
PBW ECU No.	-	E-PKB ATR No.	-		
Electric Heater Unit No.	-				

Incident Details

Dealer No. - Name	5432-Nissan of Newnan	County/State	GA	Contact	-
City/Town	Newnan				
Date of Incident	15/06/2016	Incident Mileage	5,586 Miles		

Customer Complaint Customer states going down the road the truck idled-up and wouldn't pull, heard a loud noise and shut the truck off.

Details of Incident 1.How did the customer notice the incident

Customer was driving incident vehicle when the engine lost power and made a loud noise, Customer pulled to the side of the road and turned the ignition off. Engine would not restart.

Incident Conditions 2.What are the incident conditions

See above and below.

Field Investigation 3. Inspection done & result

TSM informed of incident by FQI A61 engine task force and TSM investigation was requested.

TSM contacted dealer, Headquarter Nissan of Columbus, where the incident vehicle was towed on 6/3/16. TSM learned that their Cummins certified technician was no longer at the dealership and another technician had removed the incident engine oil pan and found debris. No further repairs were performed.

TSM requested a dealer with Cummins certified technicians, Nissan of Newnan, arrange for the vehicle to be picked up and brought to their dealer on 6/14/16.

TSM visited Nissan of Newnan on 6/15/16 and inspected the incident vehicle.

After pushing the incident vehicle into the shop for inspection, technician still had foot on brake while attempting to turn ignition off. The engine cranked with a loud grinding and banging noise but would not start.

TSM confirmed there were no related DTCs with Consult III+.

TSM confirmed Cummins engine number 81003011 (see photo 1 in attached photo summary).

TSM and dealer technician removed the incident engine oil pan (which was previously removed by other dealer) and confirmed metallic debris in the pan (see photos 2 - 5 in attached photo summary).

TSM and dealer technician observed excessive crankshaft end play at the back side of the incident engine and found that the back end of the crankshaft was moving freely from the front end.

TSM and dealer technician found the crankshaft was separated just before the number 7 & 8 connecting rod journal (see photo 6 in attached photo summary).

TSM and dealer technician attempted to manually rotate both the front and rear ends of the crankshaft and found that they would rotate and were not seized.

TSM discussed incident with Cummins resident engineer at FQC and Cummins sent replacement engine assembly.

No further disassembly was performed, and engine oil pan was reinstalled to engine.

Dealer technician completed engine replacement and TSM informed Cummins resident engineer that incident engine was ready to be picked up by Cummins for further investigation.

Repair Action & Results

- Repairs done
Dealer technician replaced incident engine assembly (provided by Cummins).
- Results
Incident was resolved.

Parts Details

Part No.	Part Name	Quantity Available
1 10102-EZ40A	Engine Assy - Bare	1

Coding Block

PFP 10102-ENG ASSY-BARE **Additional PFP** - **Tread Code** 06-Engine & Engine Cooling

DTC None

f, s, s, s No

CS Code AA-hard start / no restart (except HA) **CT Code** 01-broken / cracked (hard material)

Related Documents

Status	Responsible	Elapsed Days
Closed	-	-
Closed	-	-
Closed	-	-
Closed	-	-

Workflow & History

Date	Old Status	Old Responsible	Action	New Responsible	New Status	Comments
24/08/2016	Linked	Mark MULLINS_NA_NNA_PEI	(close by MREP)		Closed	
12/07/2016	Public	Mark MULLINS_NA_NNA_PEI	(Link to Project from Proj	Mark MULLINS_NA_NNA_PEI	Linked	
07/07/2016	Public	Brian JOHN_NA_NNA_PEI	Reassign	Mark MULLINS_NA_NNA_PEI	Public	
30/06/2016	Public	Jerry PUETZ_NA_NNA_PEI	Reassign	Brian JOHN_NA_NNA_PEI	Public	
30/06/2016	Awaiting Approval	Jerry PUETZ_NA_NNA_PEI	Publish	Mark MULLINS_NA_NNA_PEI	Public	
30/06/2016	Draft	Chris CHILDRESS_NA_NNA_PEI	Request Approval	Jerry PUETZ_NA_NNA_PEI	Awaiting Approval	
30/06/2016	Initiated	Chris CHILDRESS_NA_NNA_PEI	Save	Chris CHILDRESS_NA_NNA_PEI	Draft	

Project Member

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Pre-Select Destination -

Notification Brian John(NA-NNA-FIELD QUALITY-TCS)
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Comment