#### **Technical Service Bulletin Number**

TSB130099





### **Technical Service Bulletin**

### **Subject**

ECM Calibration and Aftertreatment SCR Catalyst Compatibility on ISX12 CM2350 X102 and ISX15 CM2350 X101 Engines

#### Issue

Electronic control module (ECM) calibrations released after June 21, 2013 are **only** compatible with specific aftertreatment selective catalytic reduction (SCR) catalyst part numbers. Downloading newer versions of an ECM calibration may require the aftertreatment SCR catalyst to be replaced. To determine the appropriate repair direction, use the ISX12 CM2350 X102 and ISX15 CM2350 X101 Calibration Selection Tool.

#### Verification

Use the ISX12 CM2350 X102 and ISX15 CM2350 X101 Calibration Selection Tool on QuickServe® Online under the Related Information tab to determine if a replacement SCR catalyst is required following an ECM calibration download or if an alternate ECM calibration is available to address the issue on the subject engine. An alternate ECM calibration that does **not** require an SCR catalyst replacement may be available. See link below.

<u>NOTE</u>: https://quickserve.cummins.com/qs3/portal/service/scr\_evaluator/index.html

In addition, check the ECM calibration revisions history on QuickServe® Online under My Applications section for the specified ECM base code. See link below.

<u>NOTE</u>: https://quickserve.cummins.com/qs3/portal/ecm/spreadsheet\_display.html? header=false

Aftertreatment SCR catalyst compatibility with ECM Calibrations released after June 21, 2013 can be found in Table 1.

Aftertreatment SCR catalysts that are compatible with ECM Calibrations released after June 21, 2013 can also be visually identified by dimples in the aftertreatment SCR catalyst heat shield. These dimples go around the circumference of the aftertreatment SCR catalyst heat shield and can be found in 3 different locations equadistant around the circumference. See Figure 1.

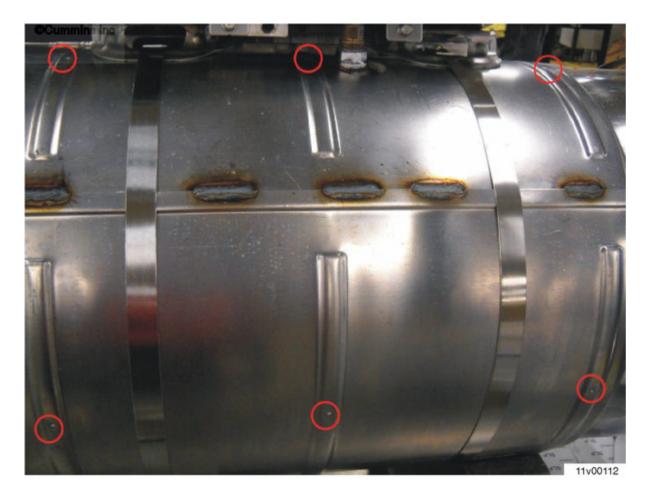


Figure 1, Aftertreatment SCR catalyst heat shield dimples

#### Resolution

Prior to performing any resolution which includes an ECM calibration and SCR catalyst part number update, troubleshoot any fault codes or symptoms included in the original complaint.

Follow the verification steps outlined above to determine an appropriate ECM calibration and aftertreatment SCR catalyst dependent on the level of repair being performed.

In addition, reference QuickServe® Online under the Service tab for any applicable Temporary Repair Practices (TRP) or Campaigns for the subject engine.

If the ISX12 CM2350 X102 and ISX15 CM2350 X101 Calibration Selection Tool directs replacement of the aftertreatment SCR catalyst, the compatible part numbers are located in Table 1.

Table 1, Aftertreatment SCR Catalyst Compatibility with ECM Calibration Revisions Released After June 21, 2013	
Non-Compatible	Compatible
5303895	4328791
5303897	4328792
5303893	4328793
5303865	4328794
5303910	4328795
5308328	4328796
5308330	4328797
5303914	4328798
5303912	4328799
5303917	4328800
4328765	4328801
5303811	4328802
5303813	5313981
4328754	5313982
4328755	5313983
4328756	5313984
4328757	5313985
4328758	5313986
4328767	5313987
5309391	5313988
5309557	5313989
5308460	5313990
5308401	5313991
5308405	5313992
5309247	5313993
5312174	5313995
5308417	5313996
5308439	5313997

Non-Compatible	Compatible
5311483	5313998
5309396	5313999
5309546	5314000
5309552	5314001
5309903	5314002
5308703	5314003
5308705	5314004
5308707	5314005
5311261	5314006
5310478	5314007
5310482	5314008
5310298	5314009
5308450	5314010
5308452	4328804
5309243	4328780
5308360	4328781
5311785	4328782
5310179	4328783
5308395	4328784
5312382	4328785
5312171	4328786
5312342	4328787
5310474	4328789
4328775	4328790
Stand-alone Part Numbers	5308751
	4328788
	5308454
	5309911
	5311328
	5311330

Table 1, Aftertreatment SCR Catalyst Compatibility with ECM Calibration Revisions Released After June 21, 2013		
Non-Compatible	Compatible	
	4329551	
	4353331	
	4353333	
	4323335	
	4353337	
	4353339	
	4353341	
	4353343	
	4353345	

# **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.

# **Document History**

Date	Details
2013-6-21	Module Created
2013-7-3	Added part number cross reference
2014-7-7	none
2014-10-6	Work Order 64494
2015-1-19	Added references to Calibration Selection Tool and updated Table 1.

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