Temporary Repair Practice

TRP Number: t2084	Revision: C	Released Date: 18-Jun-2019
ISB and ISL CM2350 SCR Replacement TRP		Expiration Date (U.S. and Canada): 30-Sep-2020
		Expiration Date (International): 30-Sep-2020

Attention

- U.S / Canadian Dealers
- U.S / Canadian Distr./Branches and Div. Offices (Automotive)

This is to revise and replace TRP 2084-B, dated 26-Mar-2019. This revision is to:

- 1. Update the narrative to remove Wire Harness options, and
- 2. adding attachment D for connector plug installation, and
- 3. adding attachment E for Proof of correction Sample.

If additional information is required, please contact your Cummins Warranty Operations Group Leader.

Description

This field action authorizes certified repair locations to upfit certain ISB and ISL CM2350 engines with an improved SCR Catalyst, if the engine meets the criteria listed below. For MY2013 thru MY2014 engines that qualify for a new SCR Catalyst, a new wiring harness connector plug and a calibration update will be required.

Note : This field action provides for retroactive coverage of repairs, including customer billable repairs, completed by Cummins authorized repair locations prior to the release date of this field action. Previous repairs may be eligible for reimbursement of **ONLY** the work defined in this publication. Service providers should have invoice documentation of original repair ready for support of the retroactive claim. All Service Providers attempting to file claims for retroactive repairs should refrence Warranty Memo M1825 for instructions.

Note : If original repair was not completed by a Cummins authorized repair location, the labor amount is **not** reimbursable. **ONLY** parts will be reimbursed.

Action

In order to qualify for repair under this field action, an engine:

- 1. will be covered Regardless of coverage status, and
- 2. must show an OPEN status for this field action on QuickServe® Online, and

- 3. **must** experience a complaint or symptom in which troubleshooting results in the replacement of the SCR catalyst.
- 4. For ISB and ISL CM2350 (Model Year 2013 thru 2014 Product) the SCR Part Number must be compared with Attachment B. Any SCR Part Number found in the Affected Part Number Column should be replaced. If the SCR Part Number is not found in the Affected Part Number Column, the engine is not eligible for this action.

After verifying that the engine meets the above requirements, perform the following actions:

1. If all qualifying parameters detailed above are met, please refer to Attachment B for a listing of affected SCRs and related replacement SCR part numbers that must be used in completing this TRP and which takes precedence over any other prior published service/part guidelines, for the duration of this TRP.

Note : For eligible ISB CM2350 and ISL CM2350 (Model Year 2013 thru 2014 Product) the SCR catalyst **must** be replaced. Refer to procedure SCR Catalyst Remove and Install in section 011-036 of Service Manuals 2883567 (ISB6.7 CM2350 B101), 4332641 (ISB6.7 CM2350 B103),5411131 (ISB6.7 CM2350 142), 4310787 (ISL9 CM2350 L101), or 4367223 (ISL9 CM2350 L111). New SCRs delete the NH3 Sensor and move from a three (3) sensor to a NEW two (2) sensor configuration. This action provides coverage for a wiring harness connector plug to cap and secure the NH3 sensor connector that will no longer be used. The installation of a wiring harness connector plug in the NH3 sensor connector will require an ECM calibration update. Please refer to Attachment C for a table of ECM base codes and CPLs for your consideration. Please refer to Attachment D for instructions on installing and securing the wiring harness connector plug.

- Download the latest calibration available on QuickServe® Online. Recalibrate the ECM as described in Procedure 019-032 of Service Manuals 2883567 (ISB6.7 CM2350 B101), 4332641 (ISB6.7 CM2350 B103), 5411131 (ISB6.7 CM2350 142), 4310787 (ISL9 CM2350 L101), or 4367223 (ISL9 CM2350 L111).
- 3. As required, complete "Label, Authorized Change," Cummins Part Number 5297400. Clearly print or type "SCR Catalyst Update" in the center box. Fill in the Campaign Number, Distributor or Dealer Code and Date information. Peel off the backing material and install the label on the engine valve cover near the engine data plate. There is a clear protective cover on this label. Peel the backing off of this cover and push the clear cover over the printed material.
- 4. As required, an "Emissions Campaign Proof of Correction" form, Bulletin #4310621, must be filled out and provided to the customer. Inform the customer to retain this certificate as proof that the Emissions Campaign has been performed. This form may be required as proof of an Emissions Campaign by the State of California, for vehicles registered in that state, the next time the vehicle registration is renewed. Please refer to Attachment E for a representative sample of the Emissions Campaign Proof of Correction Bulletin.

Note : Certified repair locations outside of California, who elect to perform this campaign on engines installed in vehicles that are registered in the state of California, are authorized to do so if they have the two items noted above in their inventory.

5. File one claim for **only** the applicable parts and labor listed in this document. Any labor or parts for diagnostics, troubleshooting or repairs **not** listed in the parts and labor sections below cannot be filed to this field action.

Material Disposition

Materials removed as a result of this field action **must** be scrapped.

Reimbursements

Parts

Note : Claim **only** the parts required to complete the repair. Additional parts, such as o-rings, gaskets, and fasteners, that are required to complete the repair, but are **not** listed, may be claimed if sufficiently explained in the claim narrative. Please refer to Attachment B for replacement SCR part numbers.

The following parts are covered under this field action:

Part Number	Quantity	Description
286633700	1	GASKET,AFM DEVICE (OPTIONAL)
286663600	1	GASKET,AFM DEVICE (OPTIONAL)
288021400	1	GASKET,EXH OUT CNN (OPTIONAL)
288021500	1	GASKET,AFM DEVICE (OPTIONAL)
388639600	1	FLEET COUNT (OPTIONAL)
431062100	1	PROOF OF CORRECTION FORM (OPTIONAL)
529740000	1	LABEL, AUTHORIZED CHANGE (TAG OPTIONAL)
550686600	1	SERVICE KIT, WIRING HARNESS

Note : SRTs to gain access that are required to complete the repair, that are sufficiently explained in the claim narrative, may also be claimed on this action.

Note : All SRTs listed are OPTIONAL. Select **ONLY** the appropriate SRTs for the repair performed.

Labor Using Applicable Access Code and Time

SRT Code	Description	Time (hrs)
00-90X	Administrative time	
	AFTERTREATMENT SCR	
11-803	CATALYST - REMOVE AND	
	INSTALL (OPTIONAL)	
	STAMP ENGINE DATA	
17-901	PLATE/APPLY EMISSION	
	STICKER (OPTIONAL)	

SRT Code	Description	Time (hrs)
17-902	CAMPAIGN CHECK	
17-902	(OPTIONAL)	
	ENGINE CONTROL MODULE	
19-611	(ECM) CALIBRATION-	
19-011	TRANSFER (CM 2250/CM2350)	
	(OPTIONAL)	

Travel

Travel is covered under this field action. Towing is **not** covered under this field action.

Other Claimables

Consumables are covered under this field action.

Note : Please consolidate all consumables and claim them as one line item in Other Claimables titled "CAMPAIGN SUPPLIES". Please included brief summaries on the details of items claimed.

Claim Instructions

For Cummins Dealers, claims for this TRP **must** be filed via **RAPID**SERVE[™] Web (rsw.cummins.com). For information regarding **RAPID**SERVE[™] Web, please reference the "Warranty" tab in QuickServe® Online. If there are additional questions, please contact your local Cummins Distributor.

Claim	Claim Codes	
Description	Code	
Account Code:	65	
Pay Code:	Distributor = X	
Pay Code:	Dealer = D	
Pay Code:	International = I	
Failure Code:	WUSSCK	

Attachments

Click here to see t2084_esn-list-a.xls
(/service/english/attachments/t2084_esn-list-a.xls) Click here to see t2084_isb_isl_cm2350_scr_listing_attach-b.xls
(/service/english/attachments/t2084_isb_isl_cm2350_scr_listing_attach-b.xls) Click here to see t2084_isb_and_isl_cm2350_ecm_base_calibration_and_cpl_table_attach-c.pdf

(/service/english/attachments/t2084_isb_and_isl_cm2350_ecm_base_calibration_and_cpl_table_attach-c.pdf)

Click here to see t2084_nh3_sensor_wiring_harness_plug_and_fir_tree_installation_attach-d.pdf

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PDF Click here to see t2084_proof-of-correction_attach-e.pdf

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Engine Family	Fuel System
ISBe4 (6 Cylinder) QSB6.7 ISB ISDe, ISD4.5, ISD6.7 ISBe, ISB4.5, ISB6.7	
Design Application	Markat Application
	Market Application
Automotive	All

Last Modified: 18-Jun-2019

Service Instruction

Aftertreatment Ammonia (NH3) Sensor Wiring Harness Plug and Fir Tree Installation

<u>Product</u>

- ISB6.7 CM2350
- ISL9 CM2350

The purpose of this document is to guide the user through the steps involved in plugging off the NH3 sensor wiring harness electrical connector and mounting to the harness connector to the sensor table on the SCR (Selective Catalyst Reduction).

Parts Required

The material required to plug and mount Ammonia Sensor Wiring Harness is provided in Table 1. This is the only item approved for this procedure.

Table (1.) R	Required Parts
Part Description	Part Number
Kit, Electrical Connector Plug (FIR Tree and Connector)	5506866

Personal Protection Equipment (PPE)

- Completing a Job Safety Assessment (JSA) prior to performing work helps identify job safety hazards and prevent incidents.
- To reduce the possibility of personal injury, personal protective equipment (PPE) must be utilized. Reference General Safety Instructions Procedure 204-006 in Section I of the corresponding Service Manual.

Installation Tools

No special service tools are required to install Ammonia Sensor Harness Wiring Plug.

WARNING

Wait for the Aftertreatment system to cool down before working on the hot exhaust or exhaust components. Failure to do so could result in personal injury.

Preparation Steps:

 Refer to NH3 sensor and module service procedures to remove NH3 Module from sensor table, Aftertreatment Selective Catalytic Reduction (SCR) Intermediate NH3 Sensor, Procedure 019-479.



SCR Overview Figure 1

Installation:

 Install Ammonia Sensor Harness Plug into open wiring harness connector and attach the FIR Tree and zip tie to the outer rim of the plug to match the side view in Figure 2.

NOTE: Ensure the zip tie's self-locking mechanism is oriented to a corner. This will guarantee its secured and properly placed.

- 2. Insert FIR Tree into NH3 Module mounting location as shown in **Figure 3**.
- 3. Ensure the excess zip tie material has been removed before installation of the heat shield.



Side View Top View Plug and FIR Tree Installation Figure 2



Harness Mounting Location Figure 3

Finishing Steps

2. Refer to service procedures to install the heat shield, Heat Shield Procedure 011-032.

	Emissions Campaign - Proof of Correction	
	Engine Serial Number Vehicle Identification Number	
Manufactu	rer: <u>Cummins Inc.</u> Campaign Number: T2084	
The above	described engine has been repaired, modified and/or equipped with new emission control device plicable California Emission Control Laws.	15
Authorized Repa	r Location Name Address, City, State and Zip	
Date	Authorized Repair Location Signature	
	Retain this certificate as proof that the emissions campaign has been performed.	
	Bulletin 431	10621 Printed in U.S.A. 9
		A CONTRACTOR OF CO

Campaign Number for the Proof of Correction form