



# Technical Service Bulletin

<b>Technical Service Bulletin:</b> TSB150105	<b>Released Date:</b> 20-Jun-2019
<b>Three-Bung Aftertreatment Selective Catalytic Reduction (SCR) Catalyst to a Two-Bung Aftertreatment SCR Catalyst Replacement</b>	

## Three-Bung Aftertreatment Selective Catalytic Reduction (SCR) Catalyst to a Two-Bung Aftertreatment SCR Catalyst Replacement

### 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.

### Contents

This document announces new aftertreatment Selective Catalytic Reduction (SCR) catalyst part numbers and supporting parts.

Verify if your unit is eligible for an SCR related TRP or Campaign. If so, coverage parameters, repair instructions, parts and labor reimbursements as defined in the TRP/Campaign documents will take precedence over repairs, parts and labor outlined in this document.

#### Product Affected

- ISB4.5 CM2350 B104
- ISB6.7 CM2350 B101
- ISB6.7 CM2350 B103
- ISL9 CM2350 L101

#### Reason for Change

This document details how to identify an obsolete 3-bung (ammonia (NH<sub>3</sub>) sensor) Selective Catalytic Reduction (SCR) part number, corresponding 2-bung (no ammonia (NH<sub>3</sub>) sensor) SCR replacement part number, corresponding engine control module (ECM) code and Critical Parts List (CPL) replacement numbers, and 2-bung SCR wiring harness replacement part numbers.

### Aftertreatment SCR Catalyst Part Number Identification

- The aftertreatment SCR catalyst has three part numbers on the canister. The correct aftertreatment SCR catalyst part number (also known as the weldment part number) taken from the third (or last) position **must** be used when referencing Table 1 below. See Figure 1 below.
- For more information on identifying the aftertreatment SCR catalyst, Reference Procedure 100-001 in Section E of the corresponding Service Manual.

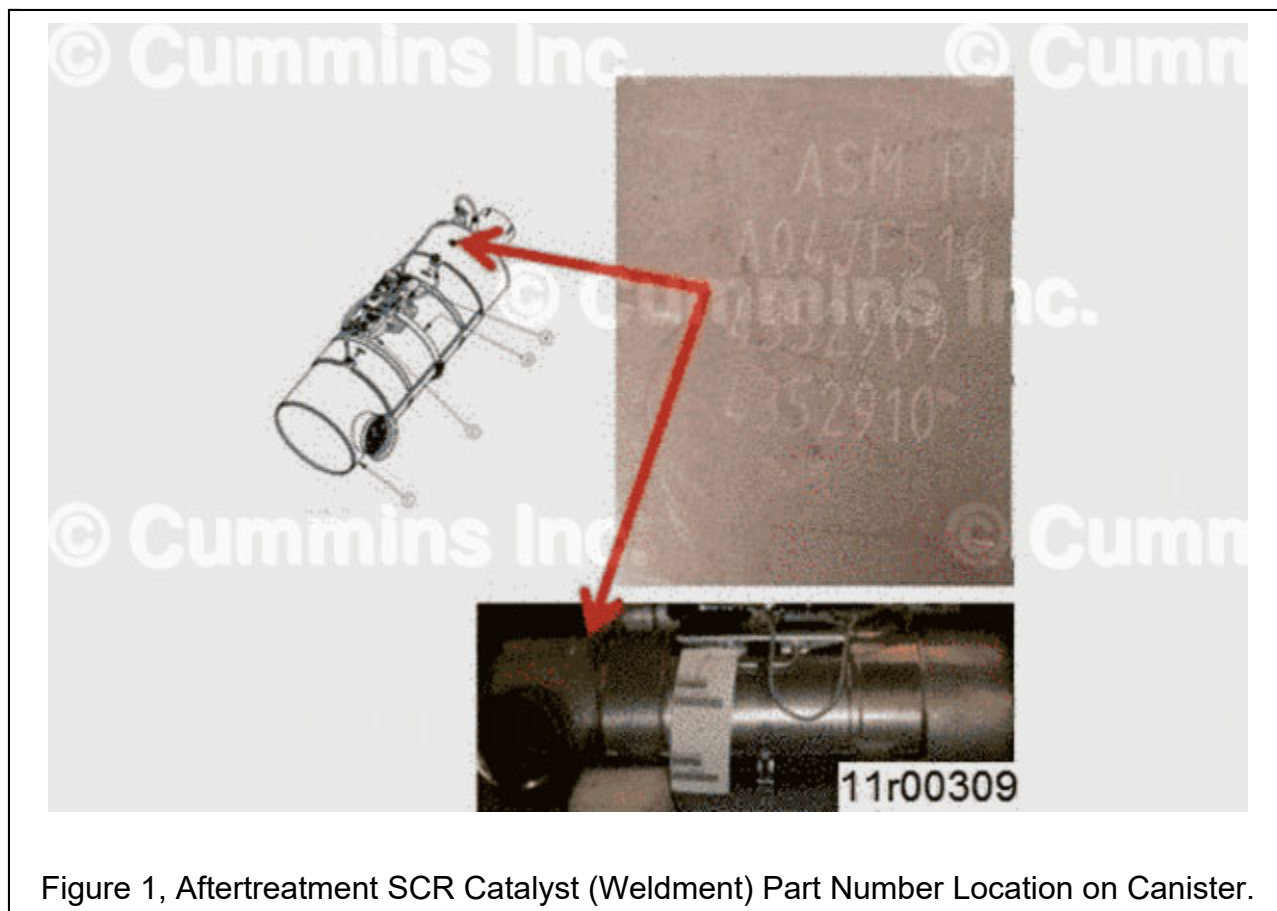


Figure 1, Aftertreatment SCR Catalyst (Weldment) Part Number Location on Canister.

**Note :** For technical assistance contact your Cummins® parts specialist for the following:

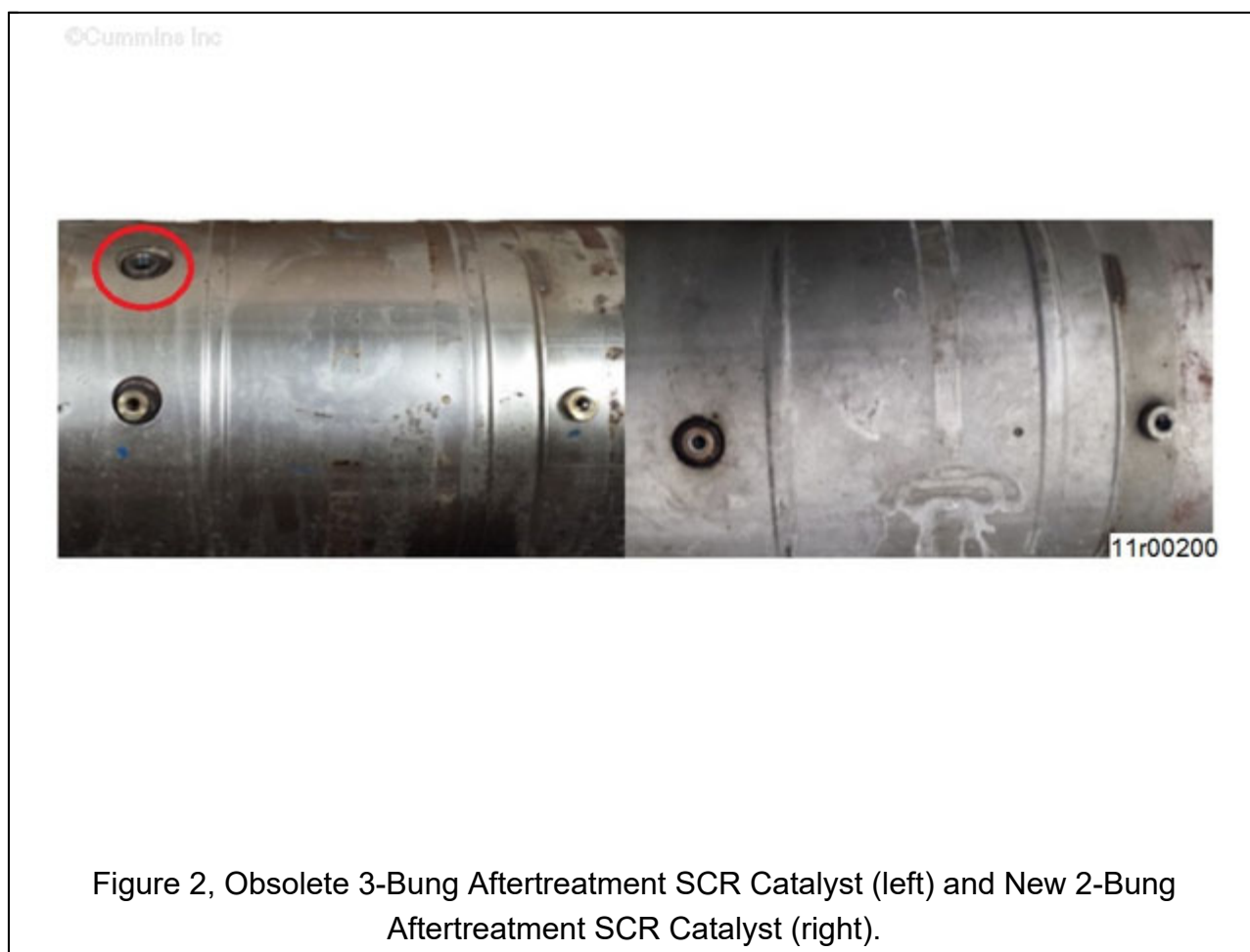
- The aftertreatment SCR catalyst weldment part number is not able to be obtained from the canister but the assembly part number (middle part number) is available.

- The SCR catalyst weldment part number is not found in Table 1. Part number identified may be aftertreatment SCR catalyst assembly part number and further breakdown is needed.

**Description of Change**

Aftertreatment SCR Catalyst

- The 3-bung aftertreatment SCR catalyst uses an ammonia (NH3) sensor whilst the 2-bung aftertreatment SCR catalyst does **not** use an ammonia (NH3) sensor. Refer to Figure 2 below for a visual identification.
- Table 1 below cross references the aftertreatment 2-bung and 3-bung SCR catalyst weldment part numbers with the same orientation.



<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	2871627	5505922	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	2871612	5505923	-
Aftertreatment SCR Catalyst	2871603	5505924	-
Aftertreatment SCR Catalyst	2880256		-
Aftertreatment SCR Catalyst	4354241	5505925	-
Aftertreatment SCR Catalyst	2880617		-
Aftertreatment SCR Catalyst	2880593	5505926	-
Aftertreatment SCR Catalyst	2871629	5505927	-
Aftertreatment SCR Catalyst	2880619	5505928	-
Aftertreatment SCR Catalyst	5284624	5505929	-
Aftertreatment SCR Catalyst	2871624	5505930	-
Aftertreatment SCR Catalyst	5291477		-
Aftertreatment SCR Catalyst	2880403	5505931	-
Aftertreatment SCR Catalyst	2880378	5505932	-
Aftertreatment SCR Catalyst	2871604	5505933	-
Aftertreatment SCR Catalyst	2871621	5505934	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	2871630	5505935	-
Aftertreatment SCR Catalyst	5272451	5505936	-
Aftertreatment SCR Catalyst	2880433		-
Aftertreatment SCR Catalyst	5291476	5505937	-
Aftertreatment SCR Catalyst	2880288		-
Aftertreatment SCR Catalyst	5291480	5505938	-
Aftertreatment SCR Catalyst	2880404		-
Aftertreatment SCR Catalyst	5291479	5505939	-
Aftertreatment SCR Catalyst	2880402		-
Aftertreatment SCR Catalyst	2880216	5505940	-
Aftertreatment SCR Catalyst	2871622	5505941	-
Aftertreatment SCR Catalyst	2871631	5505942	-
Aftertreatment SCR Catalyst	2871628	5505943	-
Aftertreatment SCR Catalyst	5272453	5505944	-
Aftertreatment SCR Catalyst	5272455	5505945	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	2880621		-
Aftertreatment SCR Catalyst	2880240	5505946	-
Aftertreatment SCR Catalyst	2871833	5505947	-
Aftertreatment SCR Catalyst	2885882	5505948	-
Aftertreatment SCR Catalyst	2880591	5505949	-
Aftertreatment SCR Catalyst	2885886	5505950	-
Aftertreatment SCR Catalyst	2885873	5505951	-
Aftertreatment SCR Catalyst	5274439	5505952	-
Aftertreatment SCR Catalyst	2880622	5505953	-
Aftertreatment SCR Catalyst	2871814	5505954	-
Aftertreatment SCR Catalyst	2888260	5505955	-
Aftertreatment SCR Catalyst	5284264	5505956	-
Aftertreatment SCR Catalyst	2885885	5505957	-
Aftertreatment SCR Catalyst	5271626	5505958	-
Aftertreatment SCR Catalyst	5283431	5505959	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	2880478		-
Aftertreatment SCR Catalyst	5292750	5505960	-
Aftertreatment SCR Catalyst	2880594	5505961	-
Aftertreatment SCR Catalyst	4328751	5506064	-
Aftertreatment SCR Catalyst	4328811	5506120	-
Aftertreatment SCR Catalyst	4328959	5506098	-
Aftertreatment SCR Catalyst	4329056	5506123	-
Aftertreatment SCR Catalyst	4329456	5506082	-
Aftertreatment SCR Catalyst	4329536	5506119	-
Aftertreatment SCR Catalyst	4329546	5506094	-
Aftertreatment SCR Catalyst	4329710	5506100	-
Aftertreatment SCR Catalyst	4329722	5506142	-
Aftertreatment SCR Catalyst	4330177	5506101	-
Aftertreatment SCR Catalyst	4330178	5506102	-
Aftertreatment SCR Catalyst	4353003	5506103	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	4353064	5506095	-
Aftertreatment SCR Catalyst	4329622		-
Aftertreatment SCR Catalyst	5303867		-
Aftertreatment SCR Catalyst	5301741		-
Aftertreatment SCR Catalyst	4353066		-
Aftertreatment SCR Catalyst	4328766	5506065	-
Aftertreatment SCR Catalyst	5303412		-
Aftertreatment SCR Catalyst	4353068		-
Aftertreatment SCR Catalyst	5303592	5506066	-
Aftertreatment SCR Catalyst	5309559		-
Aftertreatment SCR Catalyst	4353070		-
Aftertreatment SCR Catalyst	5303021	5506077	-
Aftertreatment SCR Catalyst	5308447		-
Aftertreatment SCR Catalyst	4353072	5506075	-
Aftertreatment SCR Catalyst	5308443	5506075	-



<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	5302775	5506075	-
Aftertreatment SCR Catalyst	4353814	5506099	-
Aftertreatment SCR Catalyst	4329708		-
Aftertreatment SCR Catalyst	4354267	5506140	-
Aftertreatment SCR Catalyst	4377176	5506143	-
Aftertreatment SCR Catalyst	5303809	5506056	-
Aftertreatment SCR Catalyst	5301263		-
Aftertreatment SCR Catalyst	5303869	5506057	-
Aftertreatment SCR Catalyst	5301344		-
Aftertreatment SCR Catalyst	5303871	5506058	-
Aftertreatment SCR Catalyst	5301681		-
Aftertreatment SCR Catalyst	5303873	5506059	-
Aftertreatment SCR Catalyst	5301475		-
Aftertreatment SCR Catalyst	5303889	5506060	-
Aftertreatment SCR Catalyst	5303891	5506061	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	5302114		-
Aftertreatment SCR Catalyst	5303921	5506062	-
Aftertreatment SCR Catalyst	5301732	5506062	-
Aftertreatment SCR Catalyst	5306223	5506067	-
Aftertreatment SCR Catalyst	5308311	5506068	-
Aftertreatment SCR Catalyst	5308316	5506069	-
Aftertreatment SCR Catalyst	5308318	5506070	-
Aftertreatment SCR Catalyst	5308320	5506071	-
Aftertreatment SCR Catalyst	5308323	5506139	-
Aftertreatment SCR Catalyst	5301397		-
Aftertreatment SCR Catalyst	5308361	5506118	-
Aftertreatment SCR Catalyst	5301739		-
Aftertreatment SCR Catalyst	5308363	5506072	-
Aftertreatment SCR Catalyst	5308365	5506104	-
Aftertreatment SCR Catalyst	5308367	5506105	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	5302248		-
Aftertreatment SCR Catalyst	5308389	5506106	-
Aftertreatment SCR Catalyst	5302247		-
Aftertreatment SCR Catalyst	5308391	5506116	-
Aftertreatment SCR Catalyst	5302658		-
Aftertreatment SCR Catalyst	5308393	5506114	-
Aftertreatment SCR Catalyst	5308397	5506121	-
Aftertreatment SCR Catalyst	5308399	5506131	-
Aftertreatment SCR Catalyst	5308403	5506130	-
Aftertreatment SCR Catalyst	5301729		-
Aftertreatment SCR Catalyst	5308407	5506128	-
Aftertreatment SCR Catalyst	5308410	5506127	-
Aftertreatment SCR Catalyst	5302644		-
Aftertreatment SCR Catalyst	5308411	5506129	-
Aftertreatment SCR Catalyst	5302984		-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	5308415	5506073	-
Aftertreatment SCR Catalyst	5303417		-
Aftertreatment SCR Catalyst	5308441	5506074	-
Aftertreatment SCR Catalyst	5308445	5506132	-
Aftertreatment SCR Catalyst	5308456	5506137	-
Aftertreatment SCR Catalyst	5308458	5506138	-
Aftertreatment SCR Catalyst	5308462	5506107	-
Aftertreatment SCR Catalyst	5308464	5506083	-
Aftertreatment SCR Catalyst	5308470	5506084	-
Aftertreatment SCR Catalyst	5304441		-
Aftertreatment SCR Catalyst	5308472	5506085	-
Aftertreatment SCR Catalyst	5308474	5506135	-
Aftertreatment SCR Catalyst	5308476	5506134	-
Aftertreatment SCR Catalyst	5308695	5506086	-
Aftertreatment SCR Catalyst	4377023		-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	5309980		-
Aftertreatment SCR Catalyst	5305246		-
Aftertreatment SCR Catalyst	5308697	5506089	-
Aftertreatment SCR Catalyst	5308701	5506141	-
Aftertreatment SCR Catalyst	5308710	5506093	-
Aftertreatment SCR Catalyst	5303415		-
Aftertreatment SCR Catalyst	5308711	5506144	-
Aftertreatment SCR Catalyst	5303414		-
Aftertreatment SCR Catalyst	5308758	5506136	-
Aftertreatment SCR Catalyst	5308761	5506133	-
Aftertreatment SCR Catalyst	5309245	5506111	-
Aftertreatment SCR Catalyst	5309342	5506124	-
Aftertreatment SCR Catalyst	5309550	5506126	-
Aftertreatment SCR Catalyst	5309899	5506090	-
Aftertreatment SCR Catalyst	5305249		-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	5309908	5506122	-
Aftertreatment SCR Catalyst	5310300	5506108	-
Aftertreatment SCR Catalyst	5310476	5506110	-
Aftertreatment SCR Catalyst	5310493	5506091	-
Aftertreatment SCR Catalyst	5305252		-
Aftertreatment SCR Catalyst	5311256	5506092	-
Aftertreatment SCR Catalyst	5311480	5506117	-
Aftertreatment SCR Catalyst	5311709	5506112	-
Aftertreatment SCR Catalyst	5311860	5506109	-
Aftertreatment SCR Catalyst	5311936	5506125	-
Aftertreatment SCR Catalyst	5311940	5506113	-
Aftertreatment SCR Catalyst	5302205		-
Aftertreatment SCR Catalyst	5312117	5506096	-
Aftertreatment SCR Catalyst	5312177	5506097	-
Aftertreatment SCR Catalyst	5313092	5506076	-

<b>Table 1, Aftertreatment SCR Catalyst Part Numbers</b>			
<b>Part Description</b>	<b>Obsolete Part Number (three-bung)</b>	<b>New Part Number (two-bung)</b>	<b>ReCon® Part Number (two-bung)</b>
Aftertreatment SCR Catalyst	5313571	5506115	-
Aftertreatment SCR Catalyst	4377747	5506063	-
Aftertreatment SCR Catalyst	5301395	5506063	-
Aftertreatment SCR Catalyst	5308324	5506063	-
Aftertreatment SCR Catalyst	5309328	5506133	-

#### Aftertreatment SCR Catalyst Wiring Harness

Obsolete aftertreatment 3-bung aftertreatment SCR catalyst wiring harness has three connectors:

- One connects to ammonia (NH<sub>3</sub>) sensor module.
- One connects to exhaust gas temperature sensor (EGTS) module.
- One connects to outlet NO<sub>x</sub> sensor module.

There is an available electrical connector plug that adapts the 3-sensor harness to become a 2-sensor harness:

- Electrical connector plug plugs off the NH<sub>3</sub> sensor and allows mounting of plugged off connector to the SCR (Selective Catalytic Reduction) sensor table.
- Electrical connector plug kit must be used if directed via an SCR related TRP or Campaign and if the kit is available. If either the electrical connector plug kit is not available, or if not instructed to use kit through an SCR related TRP or Campaign, use the correct replacement harness part number as referenced by Table 2.
- No special service tools are required to install Ammonia Sensor Harness Electrical Connector Plug
- Reference Table 2 for electrical connector plug part number and figures 6, 7, and 8 for visuals to assist with installing electrical connector plug onto SCR harness.

Installing electrical connector plug onto 3-sensor SCR harness:

**⚠ WARNING ⚠**

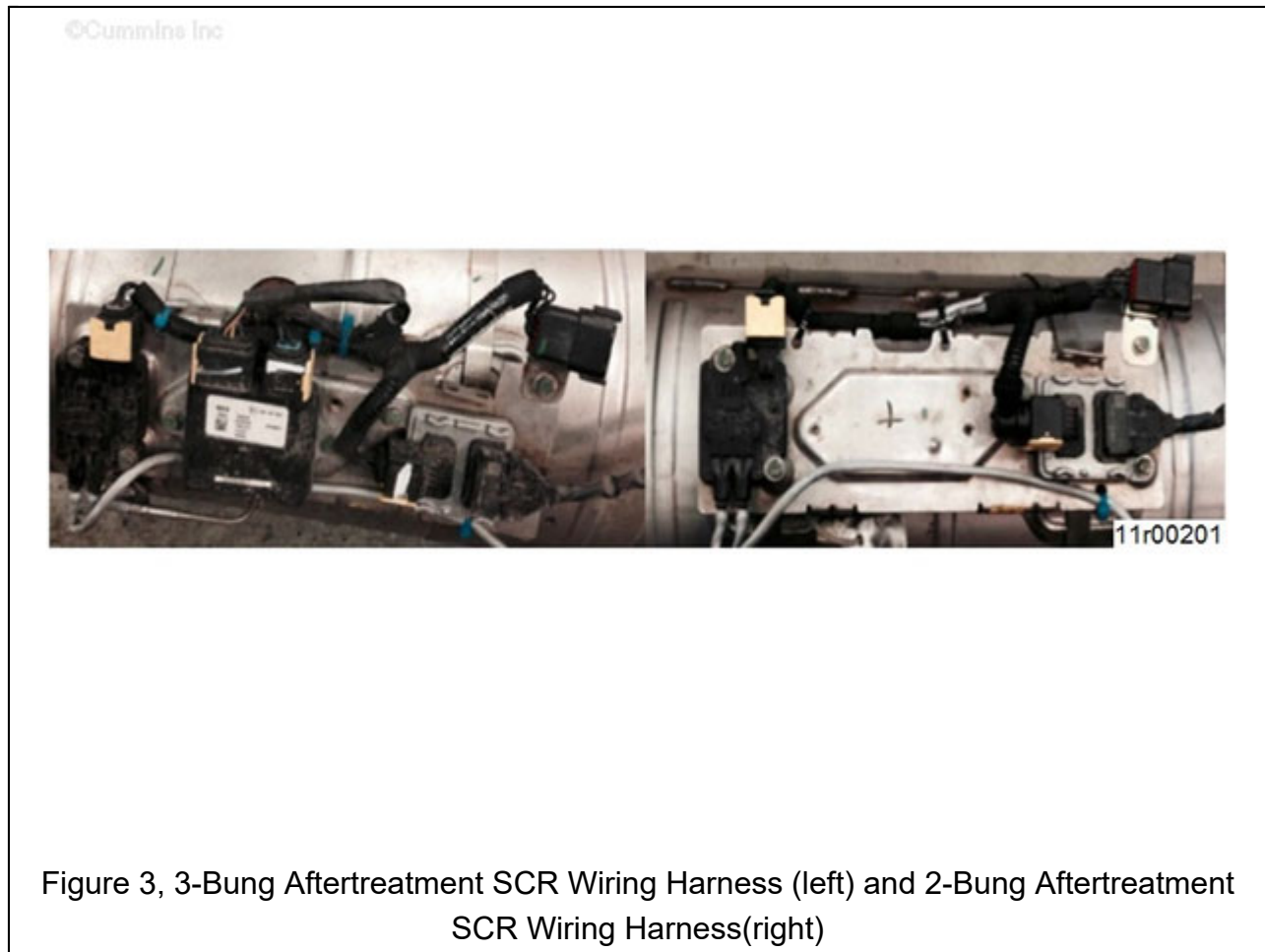
**Ensure aftertreatment system has cooled down before working on hot exhaust or exhaust related components. Failure to do so could result in personal injury.**

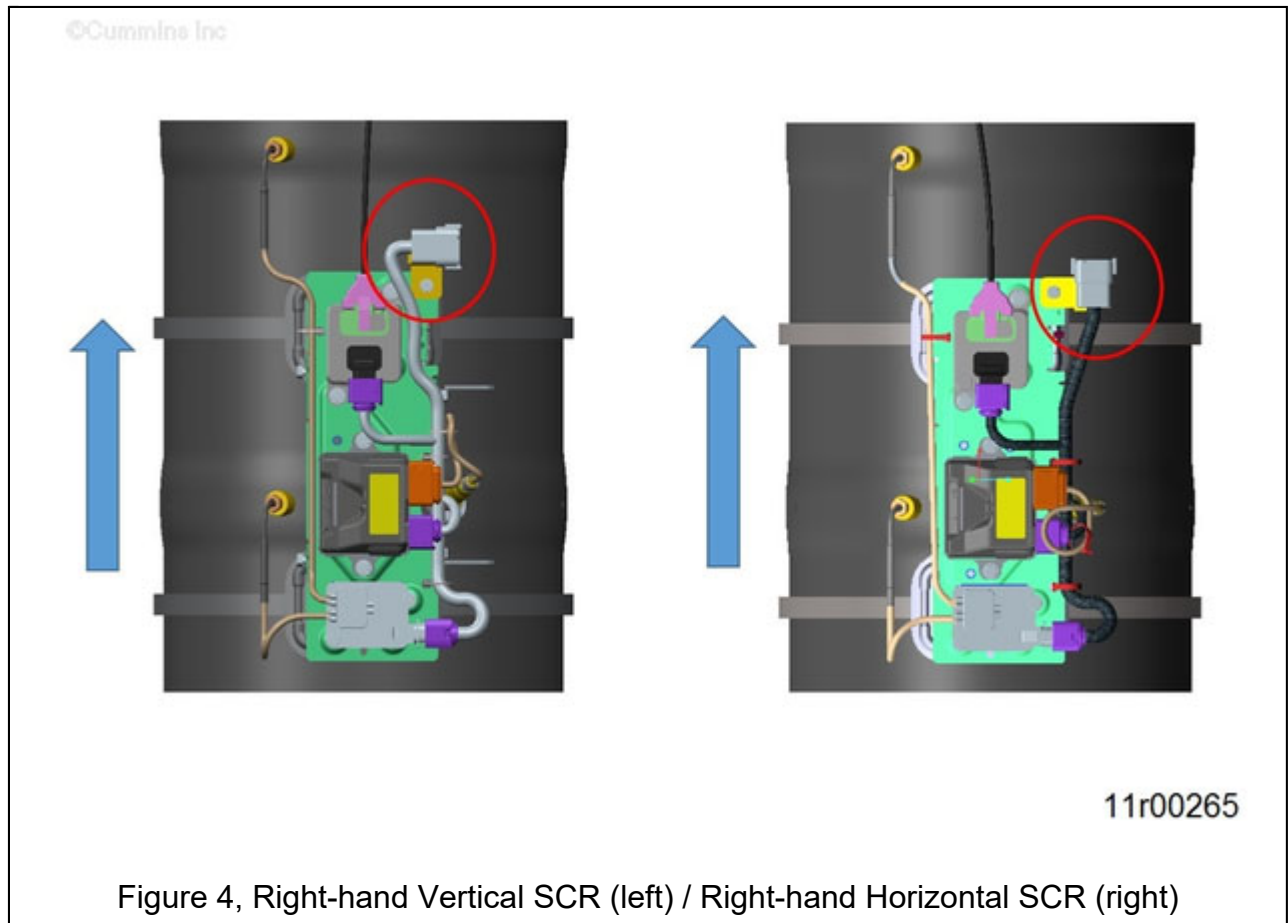
- Remove NH3 module from SCR sensor table. Refer to Procedure 019-479 in the Service Manual. Refer to Figure 6 for location of Ammonia Sensor module on SCR sensor table.
- Install Electrical Connector Plug into open ammonia sensor harness connector. Attach the FIR Tree and zip tie to the outer rim of the plug.
- Ensure the zip tie's self-locking mechanism is oriented to a corner. This will guarantee the zip tie is secured and properly placed. Refer to figure 7 for proper orientation reference.
- Insert FIR Tree into NH3 module mounting location. Refer to figure 8 for reference.
- Remove any excess zip tie material prior to installing heat shield.
- Install the heat shield onto the SCR. Refer to Procedure 011-032 in the Service Manual.

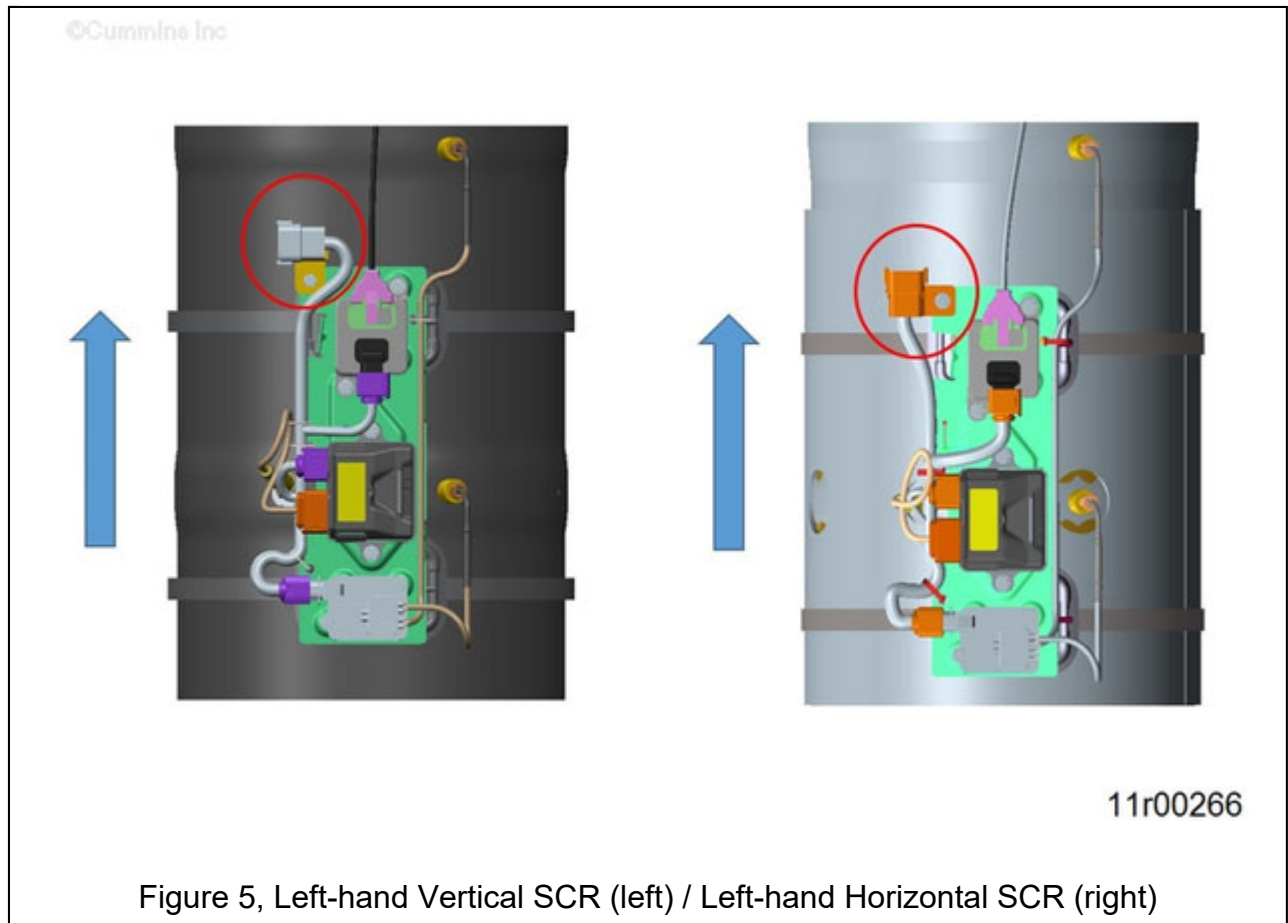
New 2-bung aftertreatment SCR catalyst wiring harness will have two connectors:

- One connects to the EGTS module.
- One connects to the outlet NOx sensor module. Refer to Figure 3 below for a visual identification.
- Figures 4 and 5 provide a visual of the different options that aftertreatment SCR catalyst wiring harnesses have. The "horizontal" and "vertical" nomenclature describes the orientation of the wiring harness connector (circled in red) relative to the aftertreatment SCR catalyst with direction of exhaust flow shown by the arrows.
- When replacing a 3-bung aftertreatment SCR catalyst with a 2-bung aftertreatment SCR catalyst, reference Table 2 to identify the correct replacement wiring harness part number.









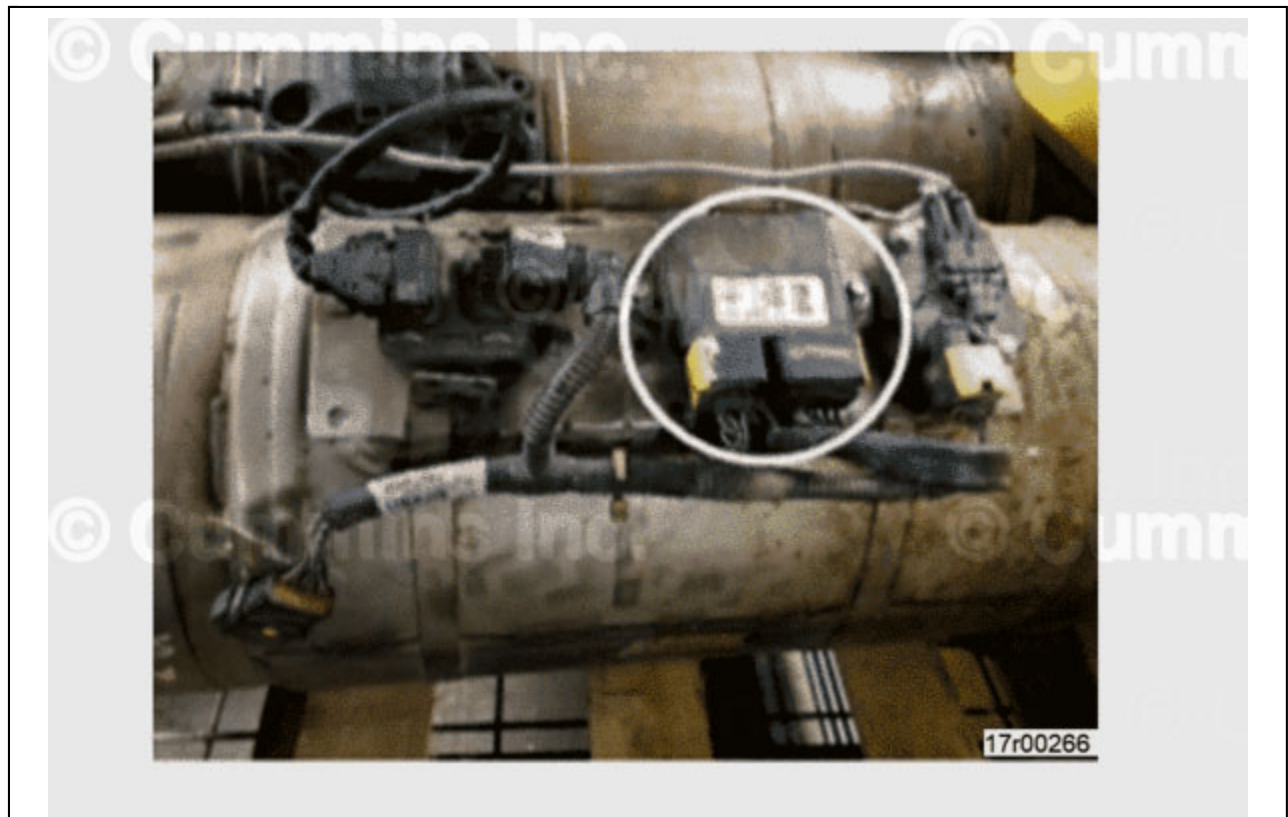


Figure 6, Location of Ammonia Sensor Module on SCR Sensor Table

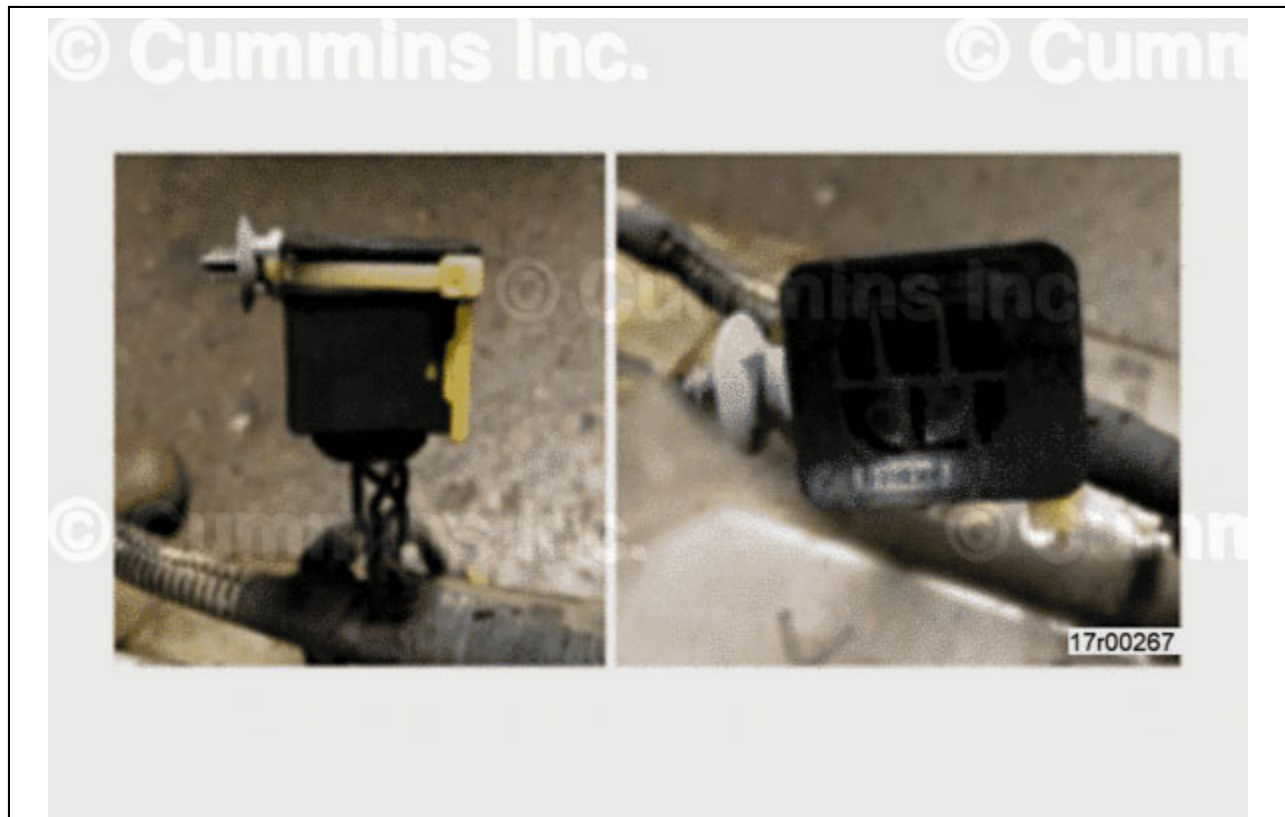


Figure 7, Side View (left) and Top View (right) of SCR Ammonia Sensor Connector

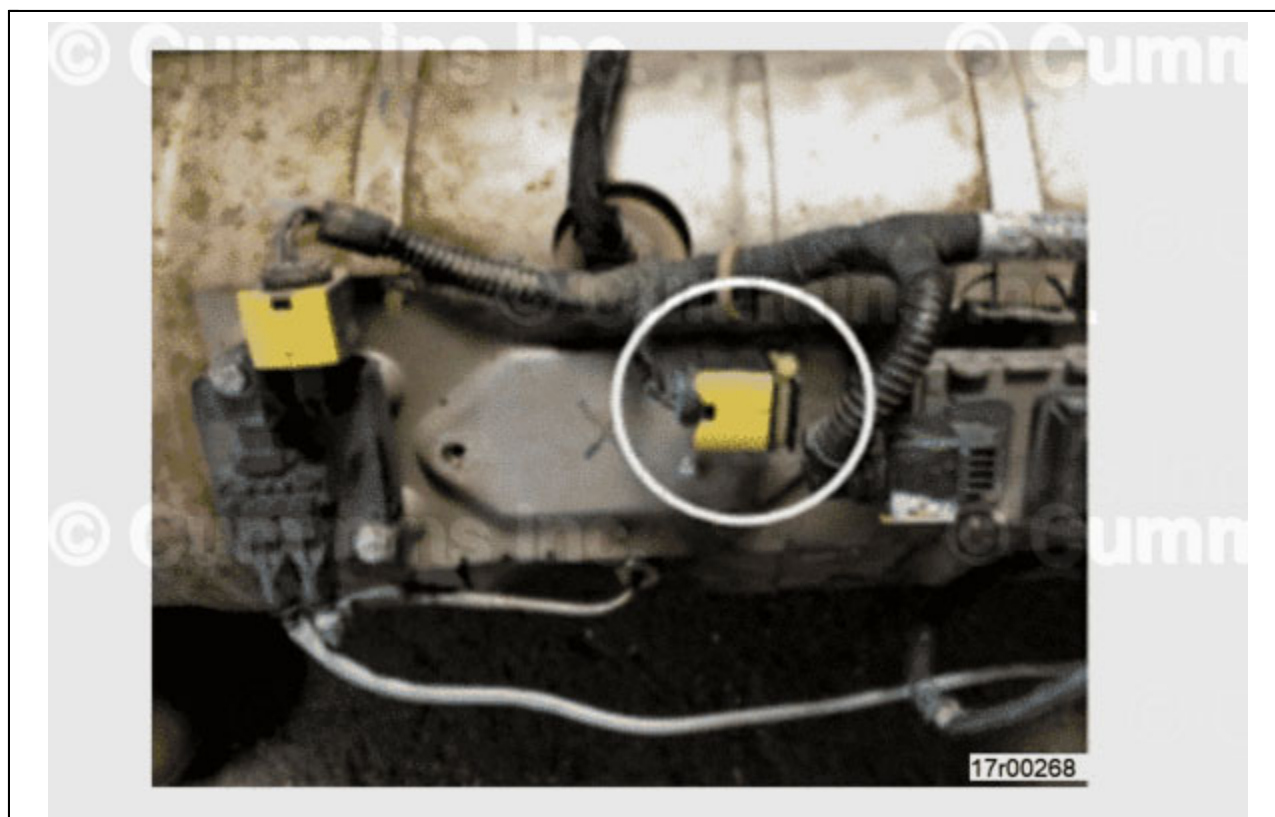


Figure 8, Location of Plugged Ammonia Sensor Connector Attachment on SCR Sensor Table.

**Table 2, Wiring Harness and Electrical Connector Plug Part Numbers**

Part Description	Previous 3-Sensor Wiring Harness	New 2-Sensor Wiring Harness
12V Right Hand Horizontal Harness	5301897 or 4377399	4377407
12V Left Hand Horizontal Harness	5301985 or 4377400	4377408
24V Right Hand Horizontal Harness	5301987 or 4377401	4377411
24V Left Hand Horizontal Harness	5301899 or 4377402	4377412
12V Right Hand Vertical Harness	5304060 or 4377403	4377409
12V Left Hand Vertical Harness	5304062 or 4377404	4377410

<b>Part Description</b>	<b>Previous 3-Sensor Wiring Harness</b>	<b>New 2-Sensor Wiring Harness</b>
24V Right Hand Vertical Harness	5304061 or 4377405	4377413
24V Left Hand Vertical Harness	5304331 or 4377406	4377414
Kit, Electrical Plug Connector (FIR Tree and Connector)	5506866	

### Engine Control Module (ECM) Calibration

- When replacing a 3-bung aftertreatment SCR catalyst with a 2-bung aftertreatment SCR catalyst, the engine control module (ECM) calibration code **must** be updated. Cross reference Table 3 (ISB) and Table 4 (ISL) to identify correct ECM calibration code.
- When calibrating the ECM, the new control parts list (CPL) and new ECM calibration base code **must** be recorded on an authorized change label, Part Number 5297400, and installed on the engine near the engine dataplate. Cross reference Table 3 (ISB) and Table 4 (ISL) below to identify the correct CPL.
- After calibrating the ECM if fault code 4585 is active replace the SCR exhaust gas temperature sensor module. See corresponding Service manual. Reference Procedure 019-449 in Section 19.

<b>Existing ECM Base Code</b>	<b>New ECM Base Code</b>	<b>New CPL</b>
DT90082	DT90443	CPL4784
DT90083	DT90447	CPL4786
DT90084	DT90445	CPL4784
DT90085	DT90355	CPL4782
DT90086	DT90352	CPL4782
DT90087	DT90353	CPL4782
DT90008	DT90357	CPL4783
DT90015	DT90358	CPL4783

<b>Table 3, ISB (All Displacements) CM2350 (B101, B103, and B104) ECM Base Calibrations and CPLs</b>		
<b>Existing ECM Base Code</b>	<b>New ECM Base Code</b>	<b>New CPL</b>
DT90043	DT90359	CPL4783
DT90044	DT90360	CPL4783
DT90059	DT90361	CPL4783
DT90009	DT90364	CPL4784
DT90016	DT90365	CPL4784
DT90001	DT90366	CPL4783
DT90017	DT90367	CPL4783
DT90045	DT90368	CPL4783
DT90046	DT90369	CPL4783
DT90060	DT90370	CPL4783
DT90002	DT90373	CPL4784
DT90018	DT90374	CPL4784
DT90019	DT90384	CPL4783
DT90020	DT90385	CPL4783
DT90047	DT90386	CPL4783
DT90048	DT90387	CPL4783
DT90061	DT90388	CPL4783
DT90021	DT90391	CPL4784
DT90022	DT90392	CPL4784
DT90023	DT90393	CPL4783
DT90024	DT90394	CPL4783
DT90049	DT90395	CPL4783
DT90050	DT90396	CPL4783
DT90062	DT90397	CPL4783
DT90025	DT90400	CPL4784
DT90026	DT90401	CPL4784
DT90003	DT90402	CPL4783
DT90011	DT90403	CPL4783
DT90027	DT90404	CPL4783



<b>Table 3, ISB (All Displacements) CM2350 (B101, B103, and B104) ECM Base Calibrations and CPLs</b>		
<b>Existing ECM Base Code</b>	<b>New ECM Base Code</b>	<b>New CPL</b>
DT90051	DT90405	CPL4783
DT90052	DT90406	CPL4783
DT90063	DT90407	CPL4783
DT90075	DT90408	CPL4783
DT90004	DT90411	CPL4784
DT90028	DT90412	CPL4784
DT90005	DT90413	CPL4785
DT90012	DT90414	CPL4785
DT90029	DT90415	CPL4785
DT90053	DT90416	CPL4785
DT90054	DT90417	CPL4785
DT90064	DT90418	CPL4785
DT90006	DT90419	CPL4786
DT90030	DT90420	CPL4786
DT90031	DT90421	CPL4785
DT90032	DT90422	CPL4785
DT90033	DT90423	CPL4785
DT90055	DT90424	CPL4785
DT90056	DT90425	CPL4785
DT90065	DT90426	CPL4785
DT90034	DT90427	CPL4786
DT90035	DT90428	CPL4786
DT90036	DT90429	CPL4785
DT90037	DT90430	CPL4785
DT90038	DT90431	CPL4785
DT90057	DT90432	CPL4785
DT90058	DT90433	CPL4785
DT90066	DT90434	CPL4785
DT90039	DT90435	CPL4785

<b>Table 3, ISB (All Displacements) CM2350 (B101, B103, and B104) ECM Base Calibrations and CPLs</b>		
<b>Existing ECM Base Code</b>	<b>New ECM Base Code</b>	<b>New CPL</b>
DT90040	DT90436	CPL4785
DT90041	DT90437	CPL4786
DT90076	DT90438	CPL4786
DT90007	DT90439	CPL4785
DT90042	DT90440	CPL4785
DT90013	DT90441	CPL4786
DT90077	DT90442	CPL4786
DT90164	DT90362	CPL4783
DT90174	DT90363	CPL4783
DT90161	DT90371	CPL4783
DT90175	DT90372	CPL4783
DT90162	DT90389	CPL4783
DT90176	DT90390	CPL4783
DT90163	DT90398	CPL4783
DT90177	DT90399	CPL4783
DT90165	DT90409	CPL4783
DT90178	DT90410	CPL4783
DT90166	DT90375	CPL4783
DT90167	DT90376	CPL4783
DT90168	DT90377	CPL4783
DT90169	DT90378	CPL4783
DT90170	DT90379	CPL4783
DT90171	DT90380	CPL4783
DT90172	DT90382	CPL4784
DT90173	DT90383	CPL4784
DT90014	DT90354	CPL4782
DT90081	DT90356	CPL4782
DT90078	DT90444	CPL4784
DT90079	DT90448	CPL4786

<b>Table 3, ISB (All Displacements) CM2350 (B101, B103, and B104) ECM Base Calibrations and CPLs</b>		
<b>Existing ECM Base Code</b>	<b>New ECM Base Code</b>	<b>New CPL</b>
DT90080	DT90446	CPL4784

<b>Table 4, ISL9 CM2350 L101 ECM Base Calibrations and CPLs</b>		
<b>Existing ECM Base Code</b>	<b>New ECM Base Code</b>	<b>New CPL</b>
EB90001	EB90192	CPL4779
EB90002	EB90193	CPL4779
EB90031	EB90194	CPL4779
EB90042	EB90195	CPL4779
EB90023	EB90196	CPL4779
EB90024	EB90197	CPL4779
EB90032	EB90198	CPL4779
EB90043	EB90199	CPL4779
EB90051	EB90207	CPL4779
EB90005	EB90203	CPL4779
EB90006	EB90204	CPL4779
EB90033	EB90205	CPL4779
EB90044	EB90206	CPL4779
EB90007	EB90213	CPL4780
EB90008	EB90214	CPL4780
EB90034	EB90215	CPL4780
EB90045	EB90216	CPL4780
EB90010	EB90221	CPL4781
EB90009	EB90220	CPL4781
EB90052	EB90218	CPL4781
EB90014	EB90232	CPL4781
EB90013	EB90231	CPL4781
EB90025	EB90200	CPL4779
EB90026	EB90201	CPL4779
EB90035	EB90239	CPL4779

<b>Table 4, ISL9 CM2350 L101 ECM Base Calibrations and CPLs</b>		
<b>Existing ECM Base Code</b>	<b>New ECM Base Code</b>	<b>New CPL</b>
EB90046	EB90240	CPL4779
EB90015	EB90209	CPL4780
EB90016	EB90210	CPL4780
EB90036	EB90211	CPL4780
EB90047	EB90212	CPL4780
EB90027	EB90222	CPL4780
EB90028	EB90223	CPL4780
EB90037	EB90224	CPL4780
EB90050	EB90225	CPL4780
EB90017	EB90227	CPL4780
EB90018	EB90228	CPL4780
EB90038	EB90229	CPL4780
EB90048	EB90230	CPL4780
EB90019	EB90233	CPL4780
EB90020	EB90234	CPL4780
EB90039	EB90235	CPL4780
EB90021	EB90237	CPL4780
EB90022	EB90238	CPL4780
EB90029	EB90241	CPL4779
EB90030	EB90242	CPL4779
EB90041	EB90243	CPL4779
EB90049	EB90202	CPL4779
EB90149	EB90217	CPL4780
EB90150	EB90226	CPL4780
EB90003	EB90208	CPL4779
EB90012	EB90219	CPL4781

### **Service Instructions**

In the event of an aftertreatment SCR catalyst failure:

- Replace aftertreatment SCR catalyst with appropriate part number. Reference “Aftertreatment SCR Catalyst” section above.
  - Reference the Service Manual for the product affected. See Procedure 011-036 Aftertreatment Selective Catalytic Reduction (SCR) Catalyst in Section 11.
  - Select two-bung aftertreatment SCR catalyst weldment part numbers have new ReCon® options available.
- Remove and discard NH3 sensor.
  - Reference the Service Manual for the product affected. See Procedure 019-479 Aftertreatment Selective Catalytic Reduction (SCR) Intermediate NH3 Sensor in Section 19.
- Replace 3-bung aftertreatment SCR catalyst wiring harness with a compatible 2-bung aftertreatment SCR catalyst wiring harness. Reference “Aftertreatment SCR Catalyst Wiring Harness” section above.
- Update ECM calibration to the latest ECM calibration revision. Reference “Engine Control Module (ECM) Calibration” section above.
  - Reference the Service Manual for the product affected. See Procedure 019-032 Engine Control Module Calibration Code in Section 19.
- Order new authorized change label, Part Number 5297400. Fill out authorized change labor sticker with new CPL, new ECM base code, distributor or dealer code, and the date. Campaign number section is to be left blank. Place completed new authorized change label near the engine dataplate. The ISB engine dataplate is located on the valve cover. The ISL engine dataplate is located on the front gear housing. Reference the section “Engine Control Module (ECM) Calibration” above for new ECM base code and new CPL.

**Note :** Note : When performing this action, there are instances where fault codes will become active.

Fault Code 3911: If this fault code occurs, the ECM calibration has **not** been updated, but the aftertreatment SCR catalyst has been changed. Please verify the ECM calibration is updated, as per Table 3 (ISB) and Table 4 (ISL).

**Note :** This TSB **only** provides instructions on how to upgrade a 3-bung aftertreatment SCR catalyst to a 2-bung SCR catalyst. Reference the Service Manual for the product affected, see Procedure 011-036 Aftertreatment Selective Catalytic Reduction (SCR) Catalyst in Section 11, for all other SCR catalyst repairs.

## Document History

Date	Details
2015-6-26	Module Created

Date	Details
2015-7-9	Non-Product Problem Solving (PPS)
2015-10-7	Removed statement, "The proper two-sensor wiring harness, see Table 2 below, must also be installed to prevent Fault Code 3911 from setting." as it does not apply. Also inserted EB90232 and EB90231 in the correct rows.
2016-3-8	Added Aftertreatment SCR Catalyst Obsolete Part Number 5308711 and New Part Number 4393714 to Table 1. Switched EB90220 and EB90221 in Table 4.
2016-5-9	Added Figures 3 and 4.
2016-6-13	Added part numbers starting with 4377* in Table 2 column labeled "Previous 3-Sensor Wiring Harness".
2016-7-5	Added note. Updated existing ECM base codes in Table 4.
2016-8-15	Added Aftertreatment SCR Catalyst Part Number Identification section.
2016-10-3	Updated Reason for Change and added note.
2017-7-25	Added note about aftertreatment SCR assembly number breakdown.
2017-11-13	Added statement about ReCon® components. Added ReCon® parts column to Table 1.
2018-4-24	Updated document to "Three-Bung Aftertreatment Selective Catalytic Reduction (SCR) Catalyst to a Two-Bung Aftertreatment SCR Catalyst Replacement".
2019-1-17	Added TRP statement
2019-1-21	added "Campaign documents with take precedence over repairs, parts and labor outlined in this TSB"
2019-1-23	Quick Fix application:
2019-2-15	Updated parts list
2019-3-12	Corrected typo.

Date	Details
2019-4-11	Added and corrected additional part numbers
2019-4-29	Added and corrected part numbers. Added SCR sensor section
2019-6-20	Added ECM cal instructions

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**Last Modified: 20-Jun-2019**

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