

Newmar Corporation Warranty Department

Technical Service Bulletin

Date Issued	Model Year(s) Affected	Model(s) Affected	TSB #
02/04/2011	2010-2011	Diesel Pushers	382
Brand			Type
All <input type="checkbox"/>	American Star <input type="checkbox"/>	Mountain Aire <input checked="" type="checkbox"/>	All <input type="checkbox"/> T T <input type="checkbox"/>
Cypress <input type="checkbox"/>	Dutch Star <input checked="" type="checkbox"/>	Kountry Aire <input type="checkbox"/>	F W <input type="checkbox"/> C A <input type="checkbox"/>
Northern Star <input type="checkbox"/>	Kountry Star <input type="checkbox"/>	Essex <input checked="" type="checkbox"/>	D P <input checked="" type="checkbox"/> D B <input type="checkbox"/>
Scottsdale <input type="checkbox"/>	King Aire <input checked="" type="checkbox"/>	London Aire <input type="checkbox"/>	
All Star ME <input type="checkbox"/>	Ventana <input checked="" type="checkbox"/>	Bay Star <input type="checkbox"/>	
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Air Conditioning & Heating <input type="checkbox"/> Appliances & Accessories <input type="checkbox"/> Cabinets & Furniture <input checked="" type="checkbox"/> Chassis Components <input type="checkbox"/> Construction Components </div> <div> <input type="checkbox"/> Electrical Components <input type="checkbox"/> Exterior Components <input type="checkbox"/> Interior Components <input type="checkbox"/> Plumbing & Bath Components <input type="checkbox"/> Windows, Awnings, Vents, & Doors </div> </div>			
Description of Problem			
<p>Certain Spartan Motor recreational vehicle chassis' equipped with Cummins 2010 ISB, ISC, or ISL CM2250 Engine having a VDM (Vehicle Date of Manufacture) of January 28, 2010 through July 29, 2010, may contain inaccurate DEF (Diesel Exhaust Fluid) Gauge readings in the Lightbar Message Center.</p>			
Recommended Solution			
<p>Spartan Motors Chassis Inc recommends that this bulletin be performed in conjunction with Cummins C1033 Campaign <u>Only at a Cummins Distributor.</u></p> <ul style="list-style-type: none"> Please instruct all qualified Customers to call Spartan Motors Customer Service at 800-543-4277 for information to their nearest Cummins repair facility. 			

SPARTAN MOTORS CHASSIS, INC.



CSB10-560-001

September, 2010

Page 1 of 4

CAMPAIGN SERVICE BULLETIN

<u>SUBJECT:</u>	Instrumentation – Light Bar/LMC (Lightbar Message Center)
<u>APPLIES TO:</u>	Certain Spartan Motors Chassis Inc, recreational vehicle chassis equipped with Cummins 2010 ISB, ISC, or ISL CM2250 Engine having a VDM (Vehicle Date of Manufacture) January 28, 2010 through July 29, 2010.
<u>CONDITION:</u>	DEF (Diesel Exhaust Fluid) Gauge Inaccurate
<u>CORRECTION:</u>	Replace light bar message center

PLEASE READ THE ENTIRE BULLETIN BEFORE PROCEEDING WITH ANY WORK. CONTACT SPARTAN CHASSIS IF THERE ARE ANY CONCERNS WITH THE PROCEDURES CONTAINED IN THIS DOCUMENT.

PART / SERVICE INFORMATION:

Labor Time: 1.0 Hr.

Special Instructions:

This bulletin should be performed in conjunction with Cummins C1033 Campaign at a Cummins Distributor.

When ordering a service kit, the current mileage of the coach must be provided.

<u>QTY.</u>	<u>Part Number</u>	<u>Description</u>
1	S-2256-001	KIT- GAUGE LMC LIGHTBAR 1655-NN1E-011
1	S-2256-002	KIT- GAUGE LMC LIGHTBAR 1654-NN1E-009
1	S-2256-003	KIT- GAUGE LMC LIGHTBAR 1654-NN1E-005
1	S-2256-004	KIT- GAUGE LMC LIGHTBAR 1654-NN1E-003
1	S-2256-005	KIT- GAUGE LMC LIGHTBAR 1654-NN1E-001
1	S-2256-006	KIT- GAUGE LMC LIGHTBAR 1653-NN1E-003

Kit # S-2256-001 Contains:

<u>QTY.</u>	<u>Part Number</u>	<u>Description</u>
1	00080308-200	GAUGE LMC LIGHTBAR 1655-NN1E-011
1	CSB10-560-001	DOCUMENT INSTRUCTIONS

Technical Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of product specific nature in conjunction with industry standards. Professional Technicians are appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

SPARTAN MOTORS CHASSIS, INC.



CSB10-560-001

September, 2010

Page 2 of 4

CAMPAIGN SERVICE BULLETIN

Kit # S-2256-002 Contains:

<u>QTY.</u>	<u>Part Number</u>	<u>Description</u>
1	00080308-150	GAUGE LMC LIGHTBAR 1654-NN1E-009
1	CSB10-560-001	DOCUMENT INSTRUCTIONS

Kit # S-2256-003 Contains:

<u>QTY.</u>	<u>Part Number</u>	<u>Description</u>
1	00080308-100	GAUGE LMC LIGHTBAR 1654-NN1E-005
1	CSB10-560-001	DOCUMENT INSTRUCTIONS

Kit # S-2256-004 Contains:

<u>QTY.</u>	<u>Part Number</u>	<u>Description</u>
1	00080308-150	GAUGE LMC LIGHTBAR 1654-NN1E-003
1	CSB10-560-001	DOCUMENT INSTRUCTIONS

Kit # S-2256-005 Contains:

<u>QTY.</u>	<u>Part Number</u>	<u>Description</u>
1	00080308-100	GAUGE LMC LIGHTBAR 1654-NN1E-001
1	CSB10-560-001	DOCUMENT INSTRUCTIONS

Kit # S-2256-006 Contains:

<u>QTY.</u>	<u>Part Number</u>	<u>Description</u>
1	00080307-150	GAUGE LMC LIGHTBAR 1653-NN1E-003
1	CSB10-560-001	DOCUMENT INSTRUCTIONS

STEP-BY-STEP INSTRUCTIONS:

1. Observe all industry safety standards, disconnect any necessary power source and secure vehicle for replacing light bar.

NOTE: Mileage must be recorded and supplied to Spartan Motors Chassis Inc. before light bar is removed.

2. Refer to FIG. 2-1. Remove battery power by removing the fuse (Labeled "F8 Gauges") located in front PDC (power distribution box).

Technical Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of product specific nature in conjunction with industry standards. Professional Technicians are appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

SPARTAN MOTORS CHASSIS, INC.



CSB10-560-001

September, 2010

Page 3 of 4

CAMPAIGN SERVICE BULLETIN

3. Refer to FIG. 3-1. Loosen and remove instrument panel screws, retain screws for reuse.
4. Refer to FIG. 3-1. Tilt instrument panel outward to gain access to backside of light bar.



FRONT PDC
FIG. 2-1

5. Refer to FIG. 3-2. Unplug green, 30-pin connector from light bar.
6. Refer to FIG. 3-2. Unplug black, 6-pin connector from light bar.
7. Refer to FIG. 3-2. Remove (4) screws holding the light bar U-clamps, retain screws for reuse.
8. Remove light bar from instrument panel. For replacement components, you will need to contact Spartan Chassis, Inc.
9. Install new light bar from kit. Attach (4) screws to new light bar with the U-clamps thus attaching light bar to instrument panel.
10. Refer to FIG. 3-2. Connect black, 6-pin connector into light bar.
11. Refer to FIG. 3-2. Connect green, 30-pin connector into light bar.

Technical Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of product specific nature in conjunction with industry standards. Professional Technicians are appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

SPARTAN MOTORS CHASSIS, INC.



CSB10-560-001

September, 2010

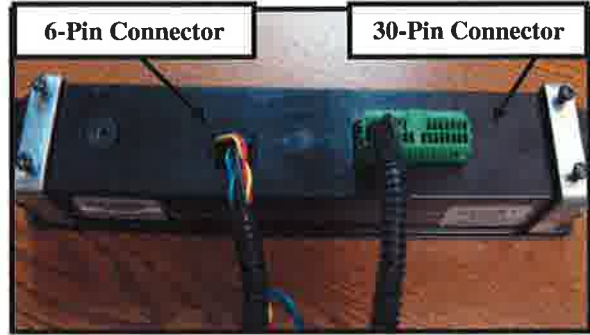
Page 4 of 4

CAMPAIGN SERVICE BULLETIN



LIGHT BAR

FIG. 3-1



LIGHT BAR CONNECTIONS

FIG. 3-2

12. Reinstall instrument panel using screws retained from step 3.
13. If any power source was disconnected reconnect power source and replace fuse.

Technical Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of product specific nature in conjunction with industry standards. Professional Technicians are appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.



SPARTAN CHASSIS, INC.

1000 REYNOLDS RD • CHARLOTTE, MI 48813 • 517.543.6400

October 13, 2010

Re: Notice of Campaign Service Bulletin: **CSB10-560-001**

Dear Service Manager,

Attached is a copy of campaign service bulletin **CSB10-560-001** regarding the Light Bar/LMC (Lightbar Message Center).

This condition applies to certain Spartan Motors Chassis Inc, recreational vehicle chassis equipped with Cummins 2010 ISB, ISC, or ISL CM2250 Engine having a VDM (Vehicle Date of Manufacture) of January 28, 2010 through July 29, 2010.

The correction is to replace the light bar message center.

1 hour labor will be allowed for this repair.

Special Instructions: This bulletin should be performed in conjunction with Cummins C1033 campaign at a Cummins Distributor.

If you have any questions or need technical assistance, call Spartan's Customer Service Dept. @ 800-393-8861 (option 2). To order parts call 800-393-8861 (Option 4)

Although **this is not a recall**, Spartan Motors Chassis Inc., is committed to serving you with your best interests in mind.

Sincerely,

Rosemary Swanson
Central Services Supervisor
Spartan Chassis, Inc.

Should the servicing facility have any questions, please direct them to call 1-800-393-8861 option 4

s p a r t a n c h a s s i s . c o m

A CUMMINS FIELD CAMPAIGN

Please Deliver To: Service Managers and Warranty Decision Makers

FROM: Cummins Global Warranty Administration Communications

Subject: ISB CM2250 and ISC/L CM2250 ECM Calibration and SCR Upfit Campaign

Number: C1033

Date: 17-Sep-2010

Expires: 22-Jun-2012 (U.S./Canada)
22-Jun-2012 (International)

Attention: U.S / Canadian Distr./Branches and Div. Offices
U.S / Canadian Dealers

This is to revise and replace Campaign 1033-C, dated 20-Aug-2010. This revision is to:

- 1 Add SRT 19-611, and
- 2 Update Attachment B, and
- 3 Update Attachment C, and
- 4 Update the ESN list, and
- 5 Update Action point #2.

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

DESCRIPTION:

This Campaign authorizes certified repair locations to recalibrate the engine ECM, recalibrate the Aftertreatment Diesel Exhaust Fluid (DEF) Controller, replace the Aftertreatment Decomposition Tube, replace the Aftertreatment DEF Dosing Valve, replace the Aftertreatment DEF Dosing Unit Backflow Connector and Filter, and replace the Accessory Drive Belt on some ISB/ISC/ISL CM2250 engines (refer to Attachment A for list of eligible ESNs and for the authorized repair actions by ESN)

ACTION:

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

- 1 will be covered regardless of coverage status, and
- 2 **must** be on the attached ESN list, and
- 3 **must** be an ISB/ISC/ISL CM2250 engine, and
- 4 **must** be recalibrated using INSITE™ 7.03.2.196 or higher, and
- 5 **must not** have been repaired per this Campaign previously.

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

All engines listed in Attachment A will require recalibration of the ECM and DEF controller. **Not** all engines are eligible for the component upgrades included in this Campaign. Refer to Attachment A for the component upgrades authorized for each eligible ESN.

- 1 Verify, at minimum, INSITE™ 7.3 Feature Pack 2 (7.03.2.196) is installed PRIOR to attempting the recalibration. **NOTE:** INSITE™ 7.3 Feature Pack 1 (7.03.1.149) **must** be installed before installing INSITE™ Feature Pack 2 (7.03.2.196). Download and install INSITE™ Feature Pack 2 (7.03.2.196) using the Cummins® INSITE™ Update Manager (START Menu on your computer -> All Programs -> Intellect folder -> Cummins INSITE™ Update Manager) by either the Internet or CD Option. The INSITE™ 7.3 Feature Pack 2 is a free download through the Internet. CD's will be available for purchase from your local Distributor. Refer to your local Distributor with any questions or INSITE™ download issues. Include the INSITE™ version number in the claim narrative.
- 2 INSITE™ provides the capability to download a calibration to the Aftertreatment Diesel Exhaust Fluid Controller using any RP1210A adapter. This capability is found in the Calibration section. New INLINE™ 5 driver (v5.6.3.1) and firmware (v5.45) are required to support this capability. The updates can be obtained from the internet as a free download at the following website <http://inline.cummins.com/downloads/index.html>.
- 3 Recalibrate the ECM as described in Procedure 019-032 in the ISB CM2250 Service Manual (Service Bulletin 4022254) or ISC/L CM2250 Service Manual (Service Bulletin 4022257) on QuickServe. ECM Calibrations can be obtained from QuickServe or by using a JUNE 2010 OR LATER INCAL™, DVD.
- 4 Recalibrate the Aftertreatment Diesel Exhaust Fluid Controller; reference Appendix C for detailed calibration procedures. Obtain the calibration (2888242) by using the July 2010 OR LATER INCAL™ DVD. **NOTE:** Dealers

will have to contact thier local Cummins distributor to obtain the calibration until the INCAL™ DVD is available. Contact the INSITE™ help desk (1-800-433-9341) if you encounter any downloading troubles.

- 5 Provide documentation of ECM revision codes from before and after the recalibration in the claims section.
- 6 Verify the decomposition tube requires replacement by referring to Appendix B. If replacement is required remove the aftertreatment decomposition tube refer 011-062 in the ISB CM2250 Service Manual (Service bulletin 4022254) or ISC/L CM2250 Service Manual (Service Bulletin 4022257) on QuickServe. **NOTE:** All units that require a decomposition tube will also require a stainless steel aftertreatment DEF dosing valve, refer to 011-059 in the ISB CM2250 Service Manual (Service bulletin 4022254) or ISC/L CM2250 Service Manual (Service Bulletin 4022257) on QuickServe. Install the updated aftertreatment decomposition tube and aftertreatment DEF dosing valve mounting hardware refer to the procedures above.
- 7 If the ESN list indicates replacement of the aftertreatment DEF dosing unit filter, replace the filter with the updated part. Refer to the service manual procedure 011- 060 in the ISB CM2250 service manual (Service Bulletin 4022254) or ISC/L CM2250 Service Manual (Service Bulletin 4022257) on Quickserve.
- 8 If the ESN list indicates replacement of the aftertreatment DEF dosing unit backflow connector, middle connector, replace it with the updated part. Refer to procedure 011-058 in the ISB CM2250 service manual (Service Bulletin 4022254) or ISC/L CM2250 Service Manual (Service Bulletin 4022257) on Quickserve.
- 9 If the ESN list indicates replacement of the front accessory drive belt, replace the belt. Refer to procedure 008-002 in the ISB 6.7 CM2250 Service Manual (Service Bulletin 4022254) on Quickserve.
- 10 File one claim for all labor and travel costs associated with this repair.

MATERIAL DISPOSITION:

The DEF dosing valve is to be shipped to the address listed below. All other parts are to be scrapped.

Cummins INC Non-Wrap SVC Warranty

Dock 82 Receiving Location 35

500 Central Ave.

Columbus, IN 47201

ATTN: Quazi Fawad-Decomp Campaign

NOTE: Ground shipping expenses are to be charged to one of the following shipping accounts:

FedEx Account Number: 153430055

UPS Account Number: X283X8

NOTE: The above Cummins Account numbers are to be used in strict confidence. The use of these Cummins account number is strictly prohibited for shipment not related the address above.

REIMBURSEMENTS:

Parts:

The following parts are covered under this field action:

Part Number	Quantity	Description
286633700	3	GSK,AFM
286663600	3	GSK,AFM
288021400	3	GSK,CNN
288021500	3	GSK,AFM
288589200	1	DEV,AFT
288589300	1	DEV,AFT
288589400	1	DEV,AFT
288589500	1	DEV,AFT
288590700	1	REA,DC
288811400	1	KIT,MTG
288817300NX	1	INJ,DOS
288818000	1	CNR,MAL
288818200	1	SCN,FIL
396702600	1	BLT,RIB

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.

Labor using applicable Access Code and Time:

SRT Code	Description	Time
00-90X	Administrative time	
08-002	Belt, Cooling Fan Drive - Replace	
11-056	Aftertreatment Decomposition Pipe - Remove and Install	
11-073	Aftertreatment Diesel Exhaust Fluid Dosing Unit Connector- Remove and Install	
11-233	Aftertreatment Diesel Exhaust Fluid Dosing Unit Filter - Replace (with SCR)	
11-802	Aftertreatment Diesel Exhaust Fluid Dosing Valve - Remove and Install (with SCR)	
19-042	Aftertreatment Diesel Exhaust Fluid Dosing Controller Calibration - Transfer	
19-611	Electronic Control Module (ECM) Calibration - Transfer	

Travel:

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

NOTE: *Travel is covered under this Campaign to recalibrate multiple vehicles. **Only** multiple ESN claims will have travel covered.

Other Claimables:

Consumables are **not** covered under this field action.

Claim Instructions:

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

Account Code: 65
 Pay Code: Distributor = X
 Pay Code: Dealer = D
 Pay Code: International = I
 Failure Code: WEQPEU

Attachments

c1033-b_esn-list.xls c1033-a_2010_midrange_cm2250_calibration_belt_scr_upfit_campaign_attach-b.pdf c1033-d_2010_midrange_cm2250_calibration_belt_scr_upfit_campaign_attach-c.pdf

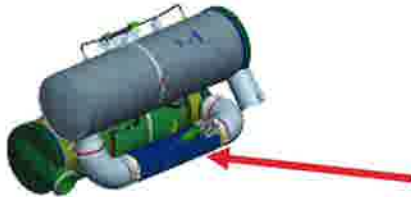
Appendix B

Locate the aftertreatment decomposition tube on the vehicle, every OEM has a unique mounting configuration. The decomposition tube is located between the aftertreatment DPF and aftertreatment SCR canister as seen in Figure (1) and Figure (2).

Figure 1.



Figure 2.



In some aftertreatment configurations, for example Figure (2), the elbow(s) attached to the aftertreatment decomposition tube will require to be removed to acquire the ability to remove the aftertreatment decomposition tube. Additional exhaust gaskets will then be needed required to complete the replacement. Refer to the descriptions below to determine if the aftertreatment decomposition tube is of the new conical design.

Figure (3) depicts a non-conical aftertreatment decomposition tube design and needs to be replaced. Focus on the aftertreatment DEF dosing valve mounting area base and notice there is no heat shield covering it. The aftertreatment DEF dosing valve capscrews do not have washers or spacers. Also notice that aftertreatment DEF dosing valve mounting area does not have additional screw holes aside from the 3 securing the aftertreatment DEF dosing valve.

3.

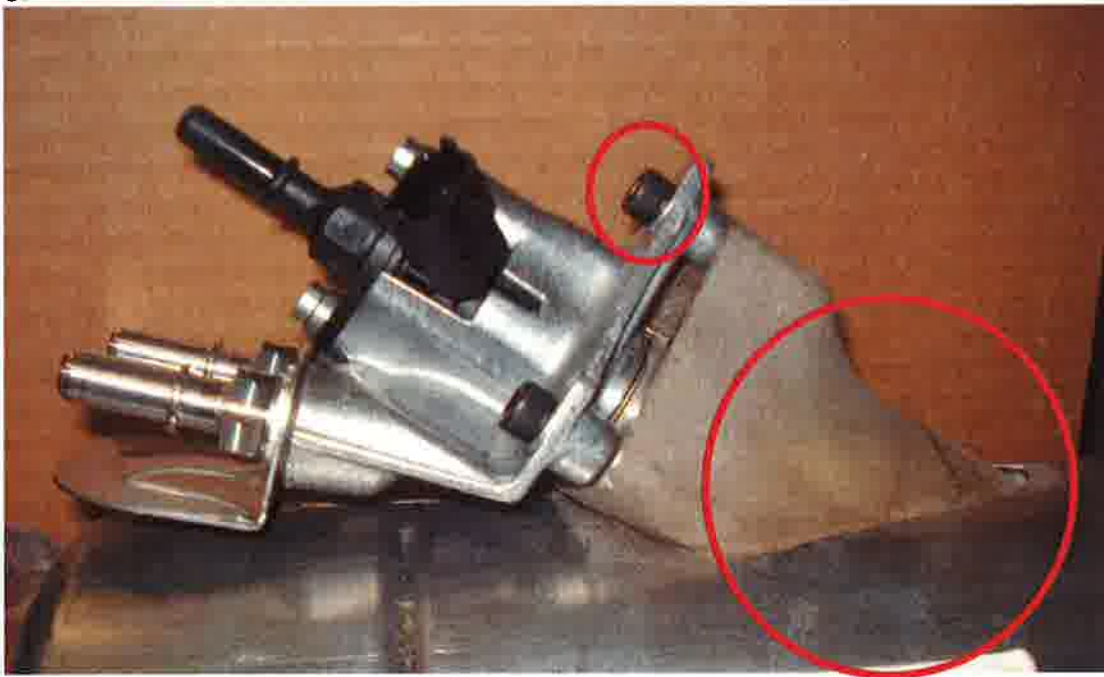
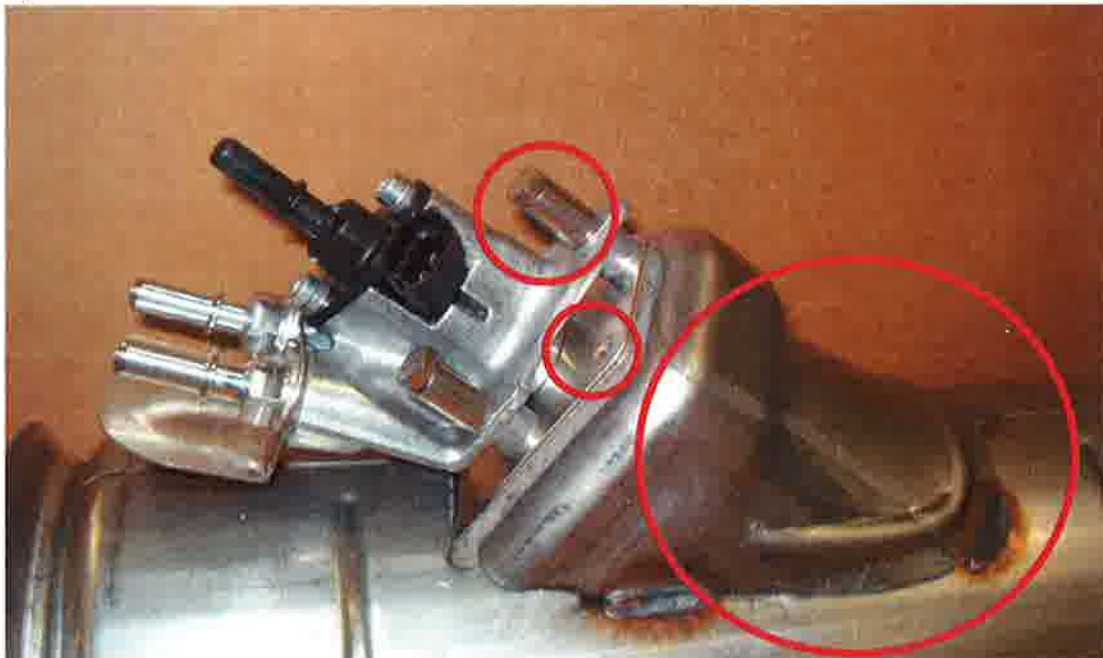


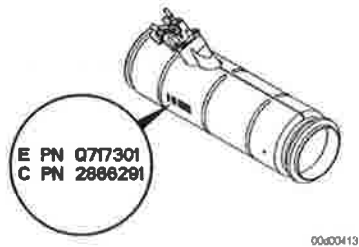
Figure (4) is the new conical design aftertreatment decomposition tube and does NOT require replacement. Notice that the aftertreatment DEF dosing valve mounting area base has a heat shield. The capscrews securing the aftertreatment DEF dosing valve are longer and require spacers. The new conical aftertreatment decomposition tube will have 2 extra screw holes in the aftertreatment DEF dosing valve mounting area where an aftertreatment DEF dosing valve guard may be secured.

4.



If there is any doubt of what aftertreatment decomposition tube is on the vehicle you can refer to the part number list below. The part number is located on side of the aftertreatment decomposition tube as depicted in Figure (5).

5.



Old Part Number	New Part Number (Conical Design)	Part Description
2886291	2885892	Standard Decomposition Tube
2880294	2885893	Standard Decomposition Tube, Spherical Inlet and Outlet
2880345	2885894	Standard Decomposition Tube, Spherical Inlet
2880295	2885895	Standard Decomposition Tube, Spherical Outlet
2880191	2885907	MidRange Integrated Elbow Decomposition Tube

For more details on the aftertreatment decomposition tube reference TSB100933

Appendix C

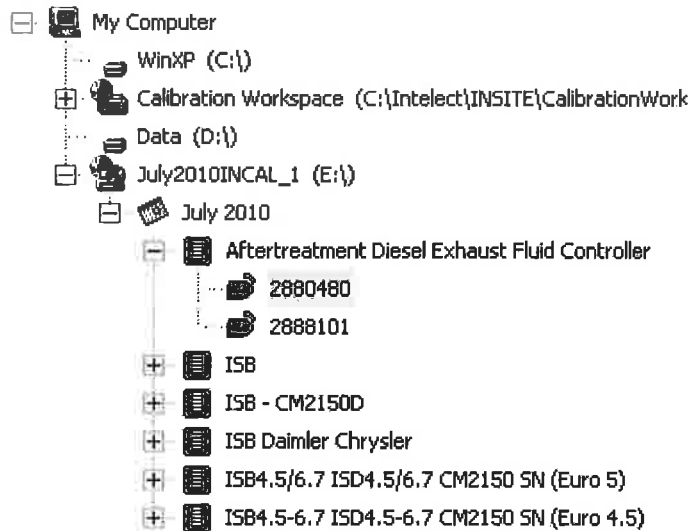
The DEF controller calibration can be downloaded just like a ECM calibration using a July 2010 or later INCAL DVD. To avoid troubles with the DEF controller calibration it is necessary to use a USB connection from the computer to INLINE adaptor. It is also important to utilize the 3 pin SAE J1939 data link connector at the front corner of the engine rather than the 9 pin connector in the cab. Ensure that when the cap is pulled off, the 3 pin connector face is green.



The adaptor needed to connect from the Inline to the 3 pin connector is Cummins part number 3165141.

For more detail about connecting to the DEF controller refer to TSB101039.

Click on Aftertreatment Diesel Exhaust Fluid Controller to obtain the calibration.



Click on file 2880480. All of the calibrations may be displayed.

Locate the correct aftertreatment DEF calibration- 2888242. Transfer it to the ECM.

Note: Three calibrations may be shown but any one of them can be selected.

