

Newmar Corporation

Warranty Department

Technical Service Bulletin							
Date Issued		Model Year(s) Affected		Model(s) Affected		TSB #	
10/20/2006		All ISC Engines prior to eng. ser. #46447925		Spartan Chassis Cummins ISL Engines		279	
Brand						Type	
All	<input checked="" type="checkbox"/>	American Star	<input type="checkbox"/>	Mountain Aire	<input type="checkbox"/>	All	<input type="checkbox"/>
		Dutch Star	<input type="checkbox"/>	Kountry Aire	<input type="checkbox"/>	F W	<input type="checkbox"/>
		Kountry Star	<input type="checkbox"/>	Essex	<input type="checkbox"/>	D P	<input checked="" type="checkbox"/>
Scottsdale	<input type="checkbox"/>	Northern Star	<input type="checkbox"/>	London Aire	<input type="checkbox"/>	D B	<input checked="" 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							
Excessive Vibration when using Cummins Compression Brake							
Recommended Solution							
<p>Cummins has developed an enhancement for this condition which incorporates an ECU recalibration with re-wiring of the compression brake See Manufacturers attached repair directions. Contact manufacturer directly for additional information or instructions.</p>							

If you have any questions regarding this T.S.B., please contact a Warranty Service Representative at Newmar Corporation.



Tech Tips

Customer Care

Tech Tip No: MH 051605A

Date: May 16, 2005

REV: Release

Subject: Excessive Vibration when using Cummins Compression Brake

Applies To: Cummins ISL engines **Range:** All ISL engines prior to engine serial # 46447925

For Internal use only: No

Vocation: Motor Home

Please Read the Entire Tech Tip Before Proceeding With Any Work.

Verify The Complaint:

A complaint of excessive vibration when using the Cummins ISL compression brake in the LO selection at relative low speeds between 28 and 25 mph. **This is not a defect.**

Problem Identification:

This vibration is “as designed” and is caused by harmonics produced when utilizing the compression brake at low engine RPM’s (instead of utilizing the service brakes) and associated with the driveline speed and transmission shift points. The vibration occurs as the transmission downshifts just as the LO compression brake cuts out.

Special Note:

Cummins has developed an enhancement for this condition which incorporates an ECU recalibration with re-wiring of the compression brake. It should be pointed out that this enhancement will disengage the LO compression brake at engine RPM’s at or below 1600 RPM. The updated calibrations automatically engage 100 % (HI or six cylinders) braking at engines speeds close to 1600 RPM and will occur even if the compression brake switch is set to the 50% (LO or three cylinders) level. The following procedure will work on the 2413-GG5 and 2479-GG5 harness. Engines with an ESN starting 46447925 or higher should already have the latest software.

<p>Tech Tip 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.</p>
--



Tech Tips

Customer Care

Problem Correction:

IT IS CRITICAL TO VERIFY ALL CIRCUITS BEFORE CUT AND SPLICE

- Using the 2413-GG5 harness as a reference, locate the following:

Item 74 - Compression Brake Low/High Relay
Item 72 - Aux Brake On/Off
Item 24 - Engine ECM Connector

- **Current drawing:**

- 1) Remove SP038X and SP038Y from item 74 cavities 30 and 87 and splice together.
- 2) Move EN014A from item 24 cavity 18 to item 24 cavity 8.

- **New Drawing:**

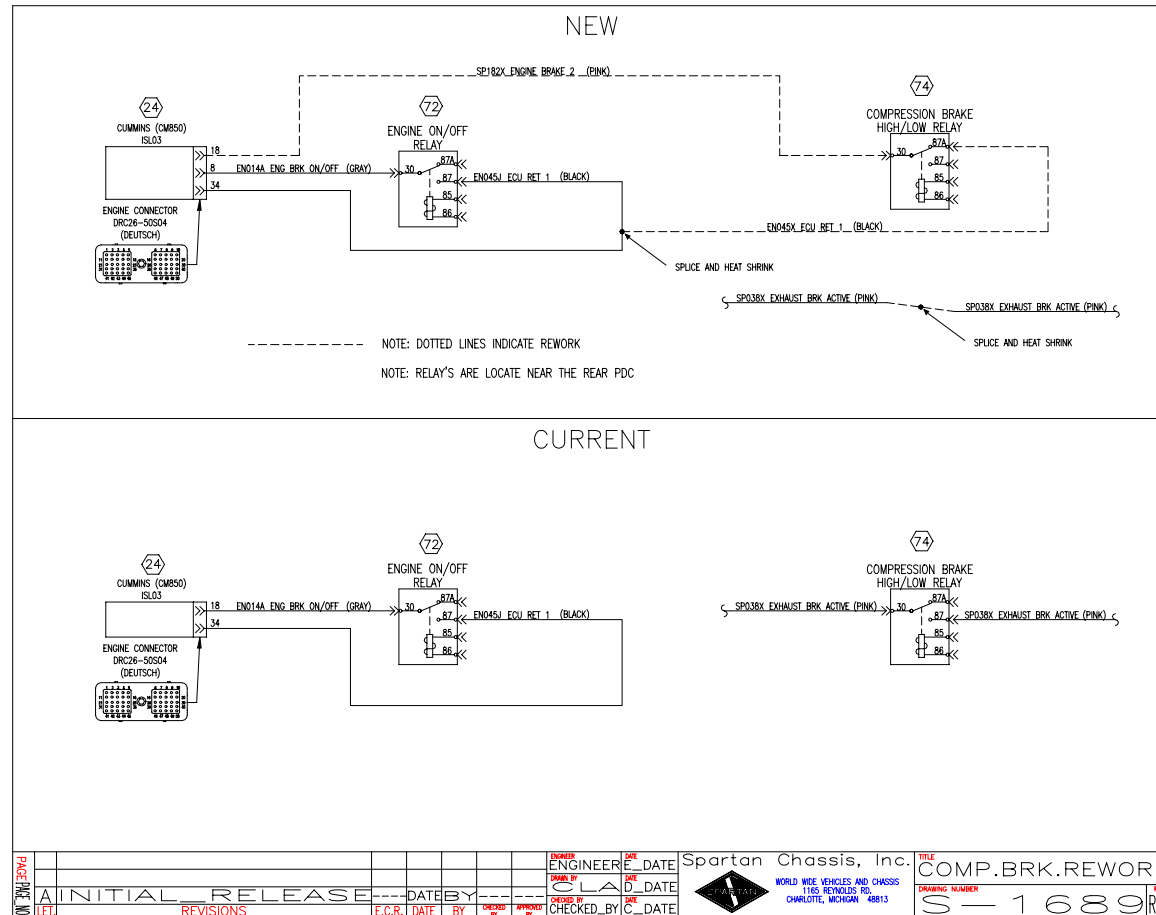
- 3) Locate EN045J coming from item 72 cavity 87. Splice into EN045J and run the new wire to item 74 cavity 18. Use heat shrink to cover the splice.
- 4) Add a new wire (SP182X) from item 74 cavity 30 to item 24 cavity 18.
- 5) Reprogram the engine ECM with the revised software to allow the HI/LO compression brake to function. Verify the ESN before reprogramming.

Tech Tip 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.



Tech Tips

Customer Care



Tech Tip 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.