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> SS 284 eB2 (Jouley) Excessive Parasitic Draw & Roa...

SS 284 eB2 (Jouley) Excessive Parasitic Draw & Road Speed Limit Adjustment Feature (576181)

Applicable Vehicles

FCCC eB2 (Jouley)

Symptoms

Units can exhibit higher than normal parasitic draw on **low** voltage batteries.

Road speed limit is currently not adjustable.

Issue

Inverter currently supplies constant battery power.

Current PCM software will not allow RSL adjustment.

Solution

Battery draw = Re-wire battery constant source to ignition source. (See attachment)

RSL = Update PCM software version to 4.3.1 to allow RSL adjustment with Proterra Service Tool.

Calibration file can be found in DTNA Portal/Download Center/FCCC/eB2 (Jouley) Proterra PCM calibration version 4.3.1.

Please ensure wiring is installed correctly at the high current relay as seen on the last page.

Normal warranty applies using PFP# **PRR 0051509 with SRT of 1.0 hr labor.**

Labels :

Busses

Add tags

Attachments



 0 Kudos

Comment



DAIMLER TRUCK

PCM 4.3.1 Update for eB2

8/17/2023

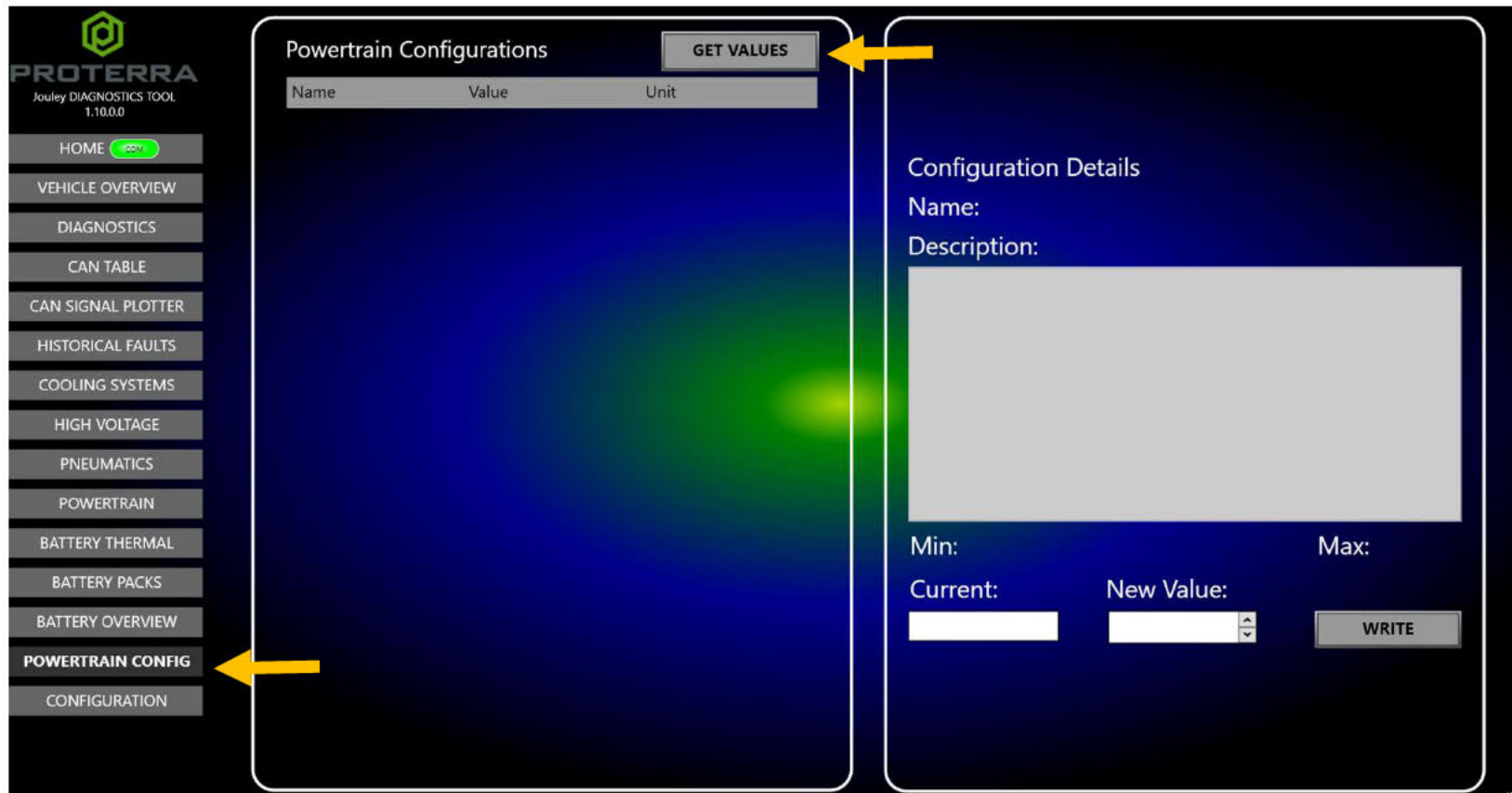
- Programmable Speed Limits and Tire Sizes
- Resolves current draw from Powertrain Inverter when vehicle is off



Open the Proterra Diagnostic Tool and update the PCM to version 4.3.1 by opening the CONFIGURATION tab, selecting START FLASH, and choosing the PCM SW .hex file.

The screenshot displays the Proterra Diagnostic Tool interface. On the left, a vertical menu lists various system categories, with 'CONFIGURATION' highlighted and a yellow arrow pointing to it. The main display area shows software versions for several controllers: Powertrain Controller SW Version: 3.1.0, Vehicle Controller SW Version: 2.3.2, Charge Controller SW Version: Unknown Version, and ESM Controller SW Version: Unknown Version. To the right, a list of components includes 'Powertrain Controller', 'Vehicle Controller', 'Charge Controller', 'ESM Controller', 'Battery Mgmt System', and 'Contactor Configuration'. Each component has a 'START FLASH' button, with a yellow arrow pointing to the 'START FLASH' button for the Powertrain Controller. The 'Battery Mgmt System' also includes a 'SET STRING' button. At the bottom right, a warning message states: '*WARNING: Do not run other applications on this computer during flashing process as it may cause the controller to fail. Make sure the vehicle's batteries have enough charge, or connected to a charger, and your laptop has battery, or plugged in to a charger.'

After updating the PCM to version 4.3.1 you will see a new **POWERTRAIN CONFIG** tab. Click on it, then click **GET VALUES**.



After clicking on GET VALUES everything will show up as 0. You will need to manually put in all values under New Value do one at a time then click Write Value after each value change.

The screenshot displays the PROTERRA diagnostic tool interface. On the left is a navigation menu with options: HOME, VEHICLE OVERVIEW, DIAGNOSTICS, CAN TABLE, CAN SIGNAL PLOTTER, HISTORICAL FAULTS, COOLING SYSTEMS, HIGH VOLTAGE, PNEUMATICS, POWERTRAIN, BATTERY THERMAL, BATTERY PACKS, BATTERY OVERVIEW, POWERTRAIN CONFIG, and CONFIGURATION. The main area is split into two panels. The left panel, titled 'Powertrain Configurations', contains a table with the following data:

Name	Value	Unit
Forward Speed Limit	0	mph
Tire Size	0	rev/mi
Rear Axle Ratio	0	

A 'GET VALUES' button is located at the top right of this panel. The right panel, titled 'Configuration Details', shows details for the 'Forward Speed Limit' configuration. It includes a description: 'Maximum vehicle speed in the forward direction.' Below this, it shows 'Min: 40' and 'Max: 75'. There are two input fields: 'Current:' with a value of '0' and 'New Value:' with an empty field. A 'WRITE' button is positioned to the right of the 'New Value' field. Two yellow arrows point to the 'New Value' field and the 'WRITE' button.

Value information

Enter Road Speed Limit (45, 50, 55, 60, 65, 70, or 75 mph).

Enter tire size... this will be REVS per mile based on make and model of equipped tire.

Enter axle ratio. This information is on the rear axle, but all eB2s are currently equipped with 6.14.

After programming all Value's click GET VALUES to verify everything is entered correctly.

The screenshot displays the PROTERRA diagnostic tool interface. On the left is a vertical navigation menu with the following items: HOME (highlighted in green), VEHICLE OVERVIEW, DIAGNOSTICS, CAN TABLE, CAN SIGNAL PLOTTER, HISTORICAL FAULTS, COOLING SYSTEMS, HIGH VOLTAGE, PNEUMATICS, POWERTRAIN, BATTERY THERMAL, BATTERY PACKS, BATTERY OVERVIEW, POWERTRAIN CONFIG (highlighted in bold), and CONFIGURATION. The main area is split into two panels. The left panel, titled 'Powertrain Configurations', contains a table with the following data:

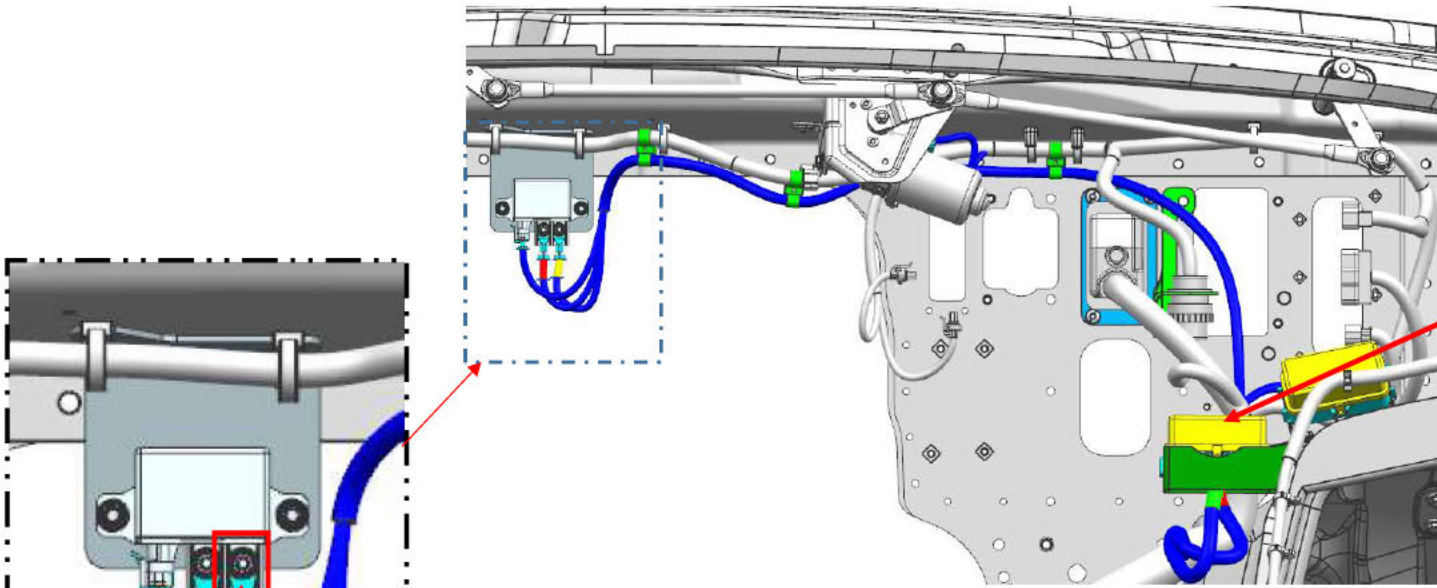
Name	Value	Unit
Forward Speed Limit	70	mph
Tire Size	514	rev/mi
Rear Axle Ratio	6.14	

A 'GET VALUES' button is located at the top right of this panel. The right panel, titled 'Configuration Details', shows the details for the 'Forward Speed Limit' configuration. It includes the name, a description ('Maximum vehicle speed in the forward direction.'), and a range from 'Min: 40' to 'Max: 75'. Below this, there are input fields for 'Current:' (displaying '0') and 'New Value:', followed by a 'WRITE' button.

Final Step

- Key off the bus for 1 minute to let everything go to sleep.
- Perform Inverter Pin 1 wiring rework instruction
- Power on vehicle and check for fault codes.

Inverter Pin 1 (BATT) rework to Ignition switched power



1. Create the wire below with terminals on both end.
2. Locate the powertrain PDM fuse holder.
3. Remove the circuit on E5. Tape the terminal so it does not short.
4. Insert the new wire to pin 5 and double stack the ring terminal to the high current relay terminal 3.
5. Zip the wire to the main bundle on the front wall.



16 GA (1650 mm)

To pin E5

Terminal for 60way PDM fuse holder

Double stack ring terminal to high current relay terminal 3

Ensure terminal 2 has 12V with ignition off and terminal 3 does not

