MAINTENANCE INFORMATION

MI16-15

DATE :	MARCH 2016	SECTION: 13 – Wheels, Hubs and Tires
SUBJECT :	New TPMS Sensor and Valves	

APPLICATION

All Prevost vehicles equipped with a Tire Pressure Monitoring System (TPMS).

NOTICE TO SERVICE CENTERS

*Verify vehicle eligibility by checking warranty bulletin status with **SAP** or via **ONLINE WARRANTY SYSTEM** available on Service / Warranty tab of Prevost website.*

Model	VIN 
X Series vehicles Model Year : Up to 2016	Built before 2PCG33499**G**C73**6065**
H Series Vehicles Model Year : Up to 2016	Built before 2PCH33492**G**C71**3277**

DESCRIPTION

The Beru sensors used on Prevost vehicles to monitor tire pressure (TPMS system) are being replaced by new Huf sensors and their corresponding stainless valves stems.

Since the older and newer sensors are using different valve stems, replacement of a defective sensor on older vehicles will require the use of a new kit number (valve stem and sensor assembly).

The table below provides a quick overview between the older and newer part numbers depending on wheel application. Replacement and complementary part numbers are also provided.

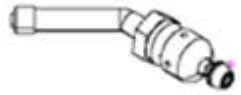
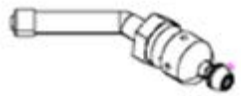
NOTE
Older valve stem numbers are still available when the old sensor is not defective.

It must be noted that for the new style sensor to work with the existing vehicle TPMS system, a *firmware update must be done to the vehicle TPMS ECU* and that the *sensors ID# must be modified manually* through the TPMS screen in the vehicle. The procedure below provides step by step instructions required to perform these modifications along with links to the downloadable ECU update file.

NOTE
-The ECU firmware update will only need to be loaded once on the vehicle.
-Old sensor ID# modification will only need to be done once on the vehicle.
-Every time a new sensor type will be installed, its ID# will have to be modified following the instructions below.
-New and old sensors can be installed on the same vehicle.
** See Part 2 of this procedure for complete instructions*

MATERIAL

Order one of the following kits (new assembly part #):

Wheel Application	Old Valve part #	New replacement valve #	Valve type	**New Valve & Sensor assembly part #**
Super Single Alu 14”	651126	650013		**150030**
365 Alu 10.5”	651128	650014		**150031**
315 Alu 9”	651122	650015		**150032**
Old 315 Alu 9” wheel	651082	650015		**150032**
315 Steel 8.25” wheel	651083	650017		**150033**
315 Steel 9” wheel		650018		**150034**

Other parts that may be required:

Sensor Only	Old part # 564078	**New part # 560032**	
Mounting bolt	Old part # 651084	**New part # 650019**	
Dielectric grease	Part # 685324		
Thread locker (Loctite 243)	Part # 680038		

NOTE
Material can be obtained through regular channels.

PROCEDURE

DANGER

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button.

PART 1 VALVE AND SENSOR INSTALLATION

1. Apply dielectric grease to the valve O-ring, threads and locking nut flange (this is particularly important on aluminum wheels to avoid galvanic corrosion).

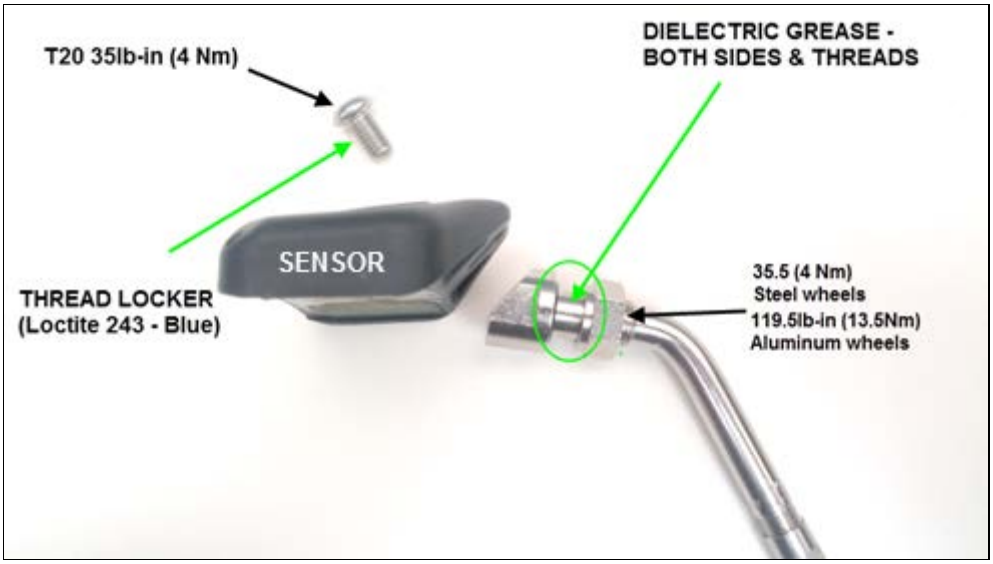
2. Install the valve on the wheel making sure that the tip is correctly positioned.

    - Torque locking nut to *119.5 +/- 13.5 in-lb* (13.5 +/- 1.5 Nm) for **aluminum wheels**

    - Torque locking nut to *35.5 +/- 9 in-lb* (4 +/- 1 Nm) for **steel wheels**

3. Install the sensor inside the wheel making sure it is seated properly.

4. Secure the sensor to the valve stem using the supplied T20 hollow Torx screw (use Loctite 243 on the threads) and torque the screw to *35in-lb* (4Nm)



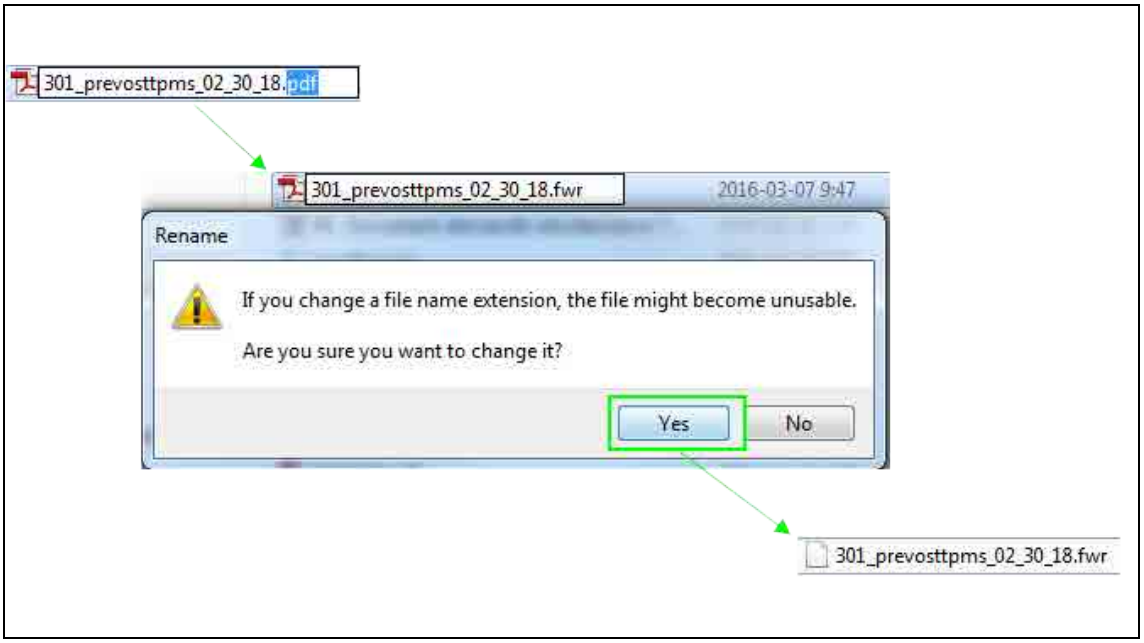
PART 2 FIRMWARE UPDATE AND SENSOR ID SETTING

NOTE
*To perform ECU firmware update, BERU F1 System **Truck Tyre V2.11** must be installed on a laptop connected to the vehicle TPMS ECU.* *You can download TRUCK TYRE 2.11 here: **Truck Tyre 2.11*** **** Download to desktop and rename pdf extension to exe**** 

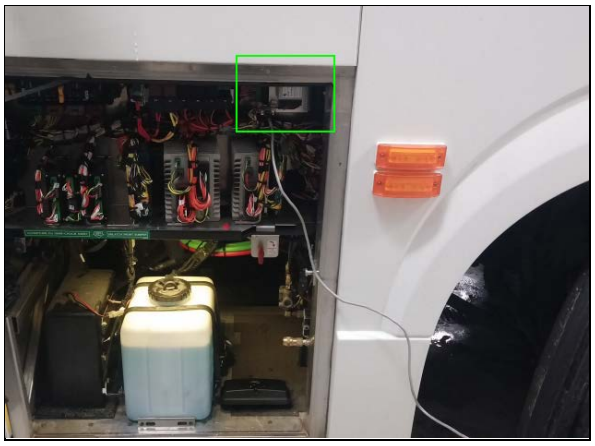
1. Download the firmware update file on the laptop that will be used to connect TRUCK TYRE 2.11 to the vehicle. Update file can be found here: **TruckTyre Firmware Update File**

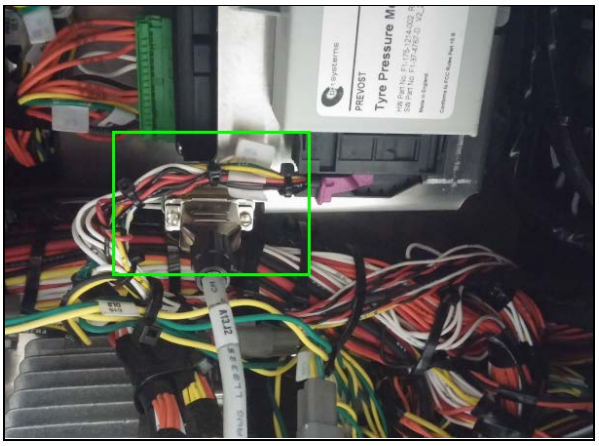
NOTE
Use the download function, not the open or view function

2. **IMPORTANT**; with the firmware update file downloaded on the laptop; rename the ".pdf" file extension to ".fwr".



3. With the ignition at the ON position, remove red cap protecting the ECU connector and connect the laptop to the vehicle TPMS ECU located at the top right corner of the front junction box.

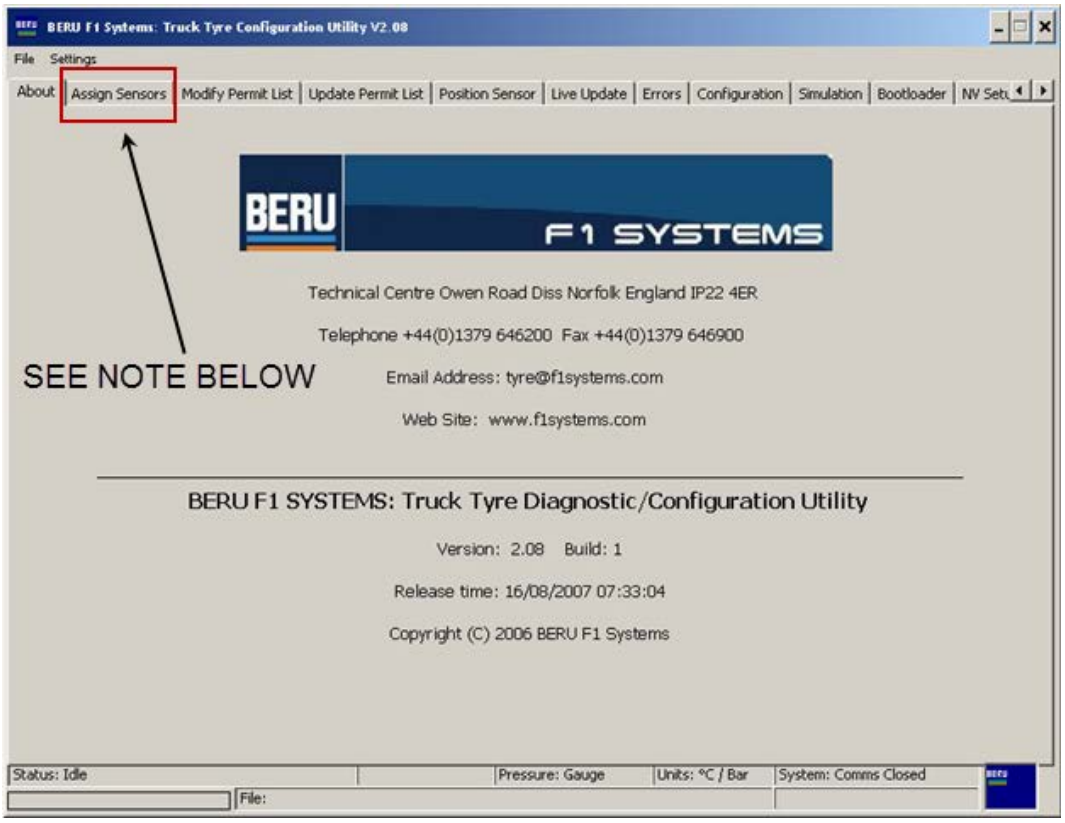




NOTE

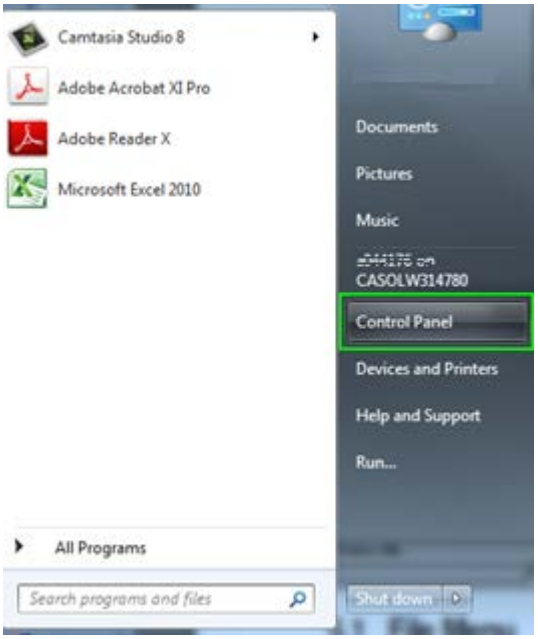
RS232 cable part # 066009 and a RS232 to USB adaptor are required to connect to the TPMS ECU

4. Open TRUCK TYRE 2.11 on the laptop.



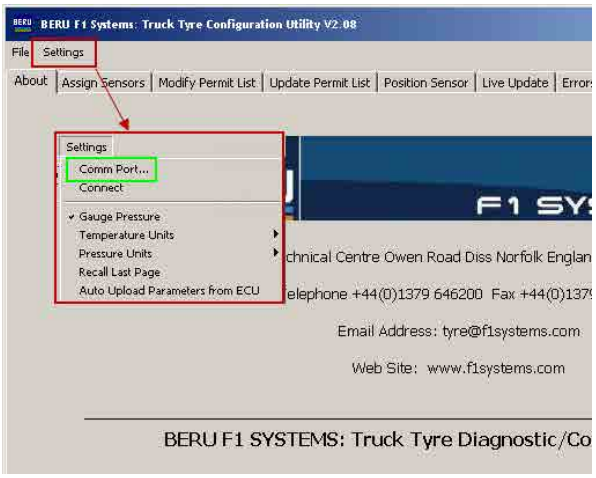
NOTE
Sensor assignment can only be done through the dash display, never from the TruckTyre software

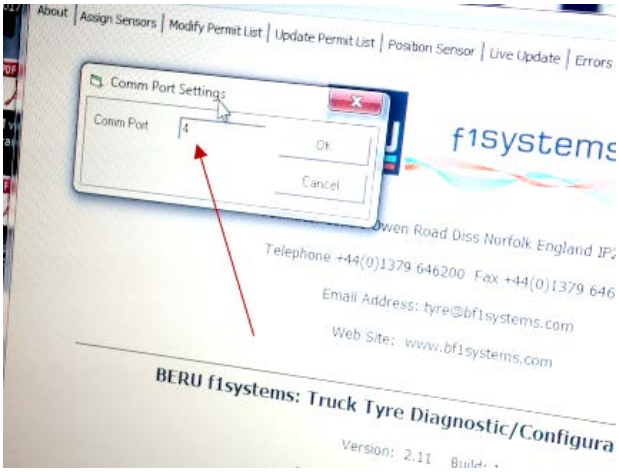
NOTE
Communication Port Error Message When opening Truck Tyre on a laptop, the system will check for compatibility between the program and the laptop communication port (Truck Tyre default port is set to 1). If the laptop used is not set to work with communication port 1, an error message will be displayed and the program com port will have to be manually changed to match the one used by the laptop. To do so, follow the steps below (*<u>required only if an error message is displayed</u>*). - First open the laptop control panel and open the device manager. - Locate the Port icon and expend it. - Take note of the computer port value (Com).



- Back to Truck Tyre main page, open the setting menu located at the top left corner of the screen (just above the “About” tab).

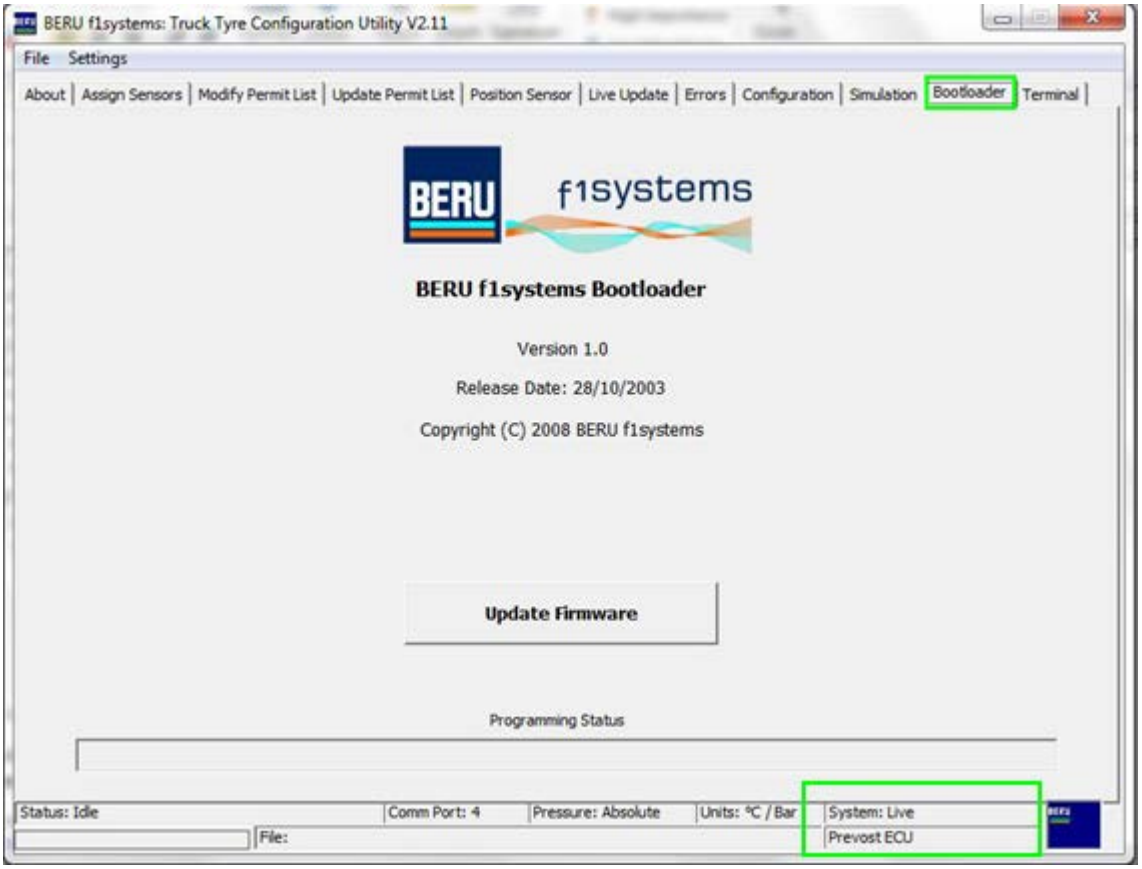
- Click on the “com port” option to open the port setting box and enter the value of the laptop com port previously noted. Click OK to confirm the action and close the box.



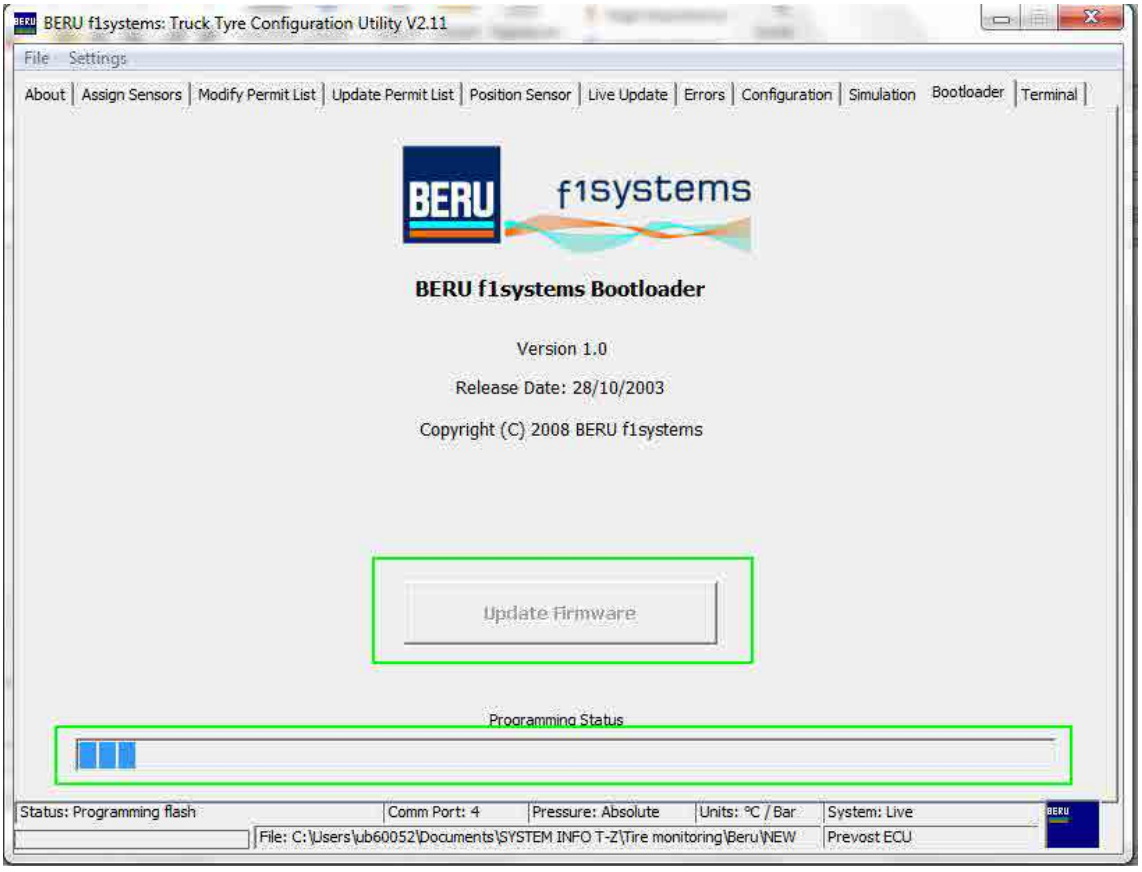


The laptop and Truck Tyre should now be able to communicate and connect to the vehicle TPMS ECU.

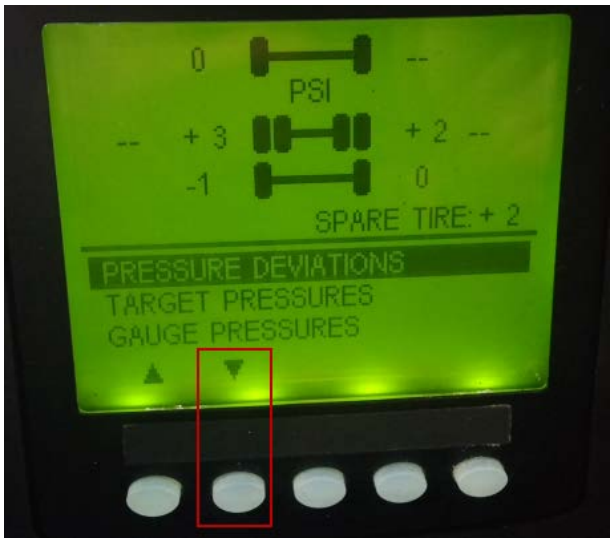
5. Open the Bootloader tab at the right corner of the menu.



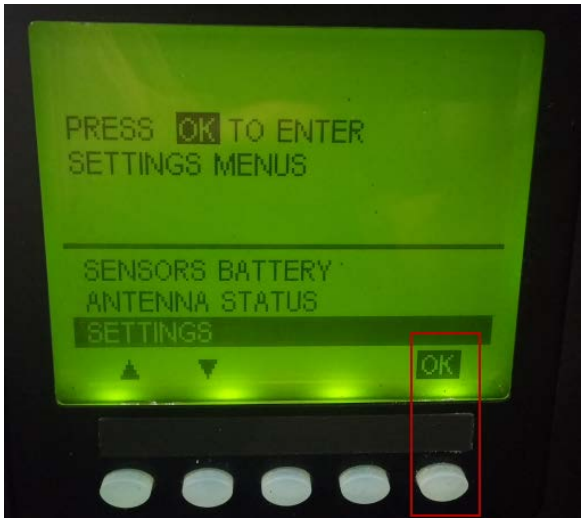
6. Click on the “Update Firmware” button to start the process. You will be prompted to select the file to be programmed into the ECU (choose file downloaded at step one of this procedure and converted to .fwr). From this point on the process is automatic and a “download completed” message will show-up at the end (you can watch the download progress through the programming status bar at the bottom of the screen).



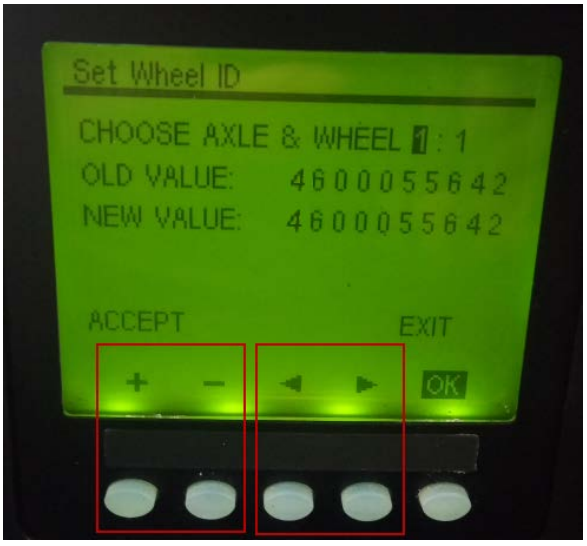
7. Inside the vehicle locate the TPMS screen at the lower left of the dashboard.

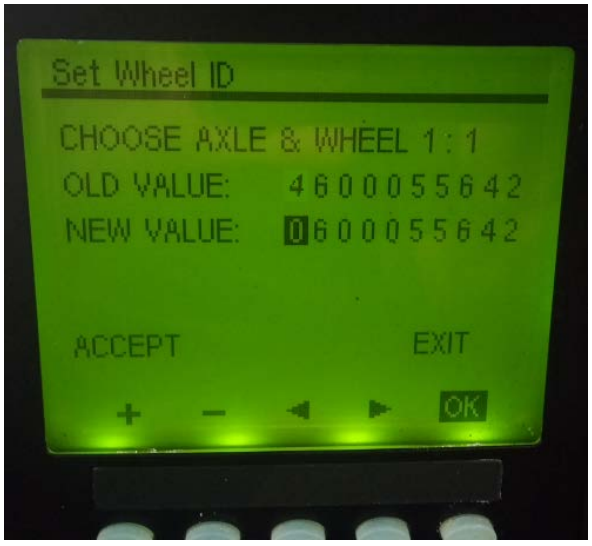


8. On the TPMS screen, scroll down to the SETTING/SET WHEEL ID menu.



9. In the WHEEL ID menu, choose the wheel with the *new sensor* (in this case 1 : 1 is Front Left Tire) and replace the new sensor first character (should be “4”) by “0”. Press Accept then OK.

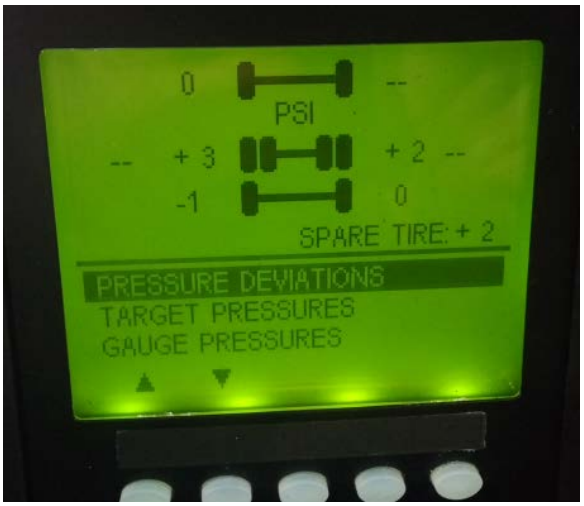




10. In the same menu, replace all other old sensor first digit by “0”. Press ACCEPT then OK.

NOTE
Every time a wheel ID is learned, the first digit has to be changed by a “0” again

11. Exit the Sensor ID menu to go back to the main menu, all sensors should now be displayed on the TPMS screen.



PARTS / WASTE DISPOSAL

Discard according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)

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