



Diversified Metal Fabricators Technical Reference Bulletin TRB0012

Title	Speedometer & TPMS Changes via FORScan
Document No.	TRB0012 Rev #
Issue Date	05/17/18 (TAM)
Release	General
Units Affected	2017+ Ford Superduty Pickup Models with DMF Wheel Modification Kits
Purpose	Provide guidance on modifying speedometer and TPMS setting via FORScan

This TRB outlines the basic steps necessary to change TPMS cold inflation pressures and tire size to correlate with aftermarket wheel and tire combinations specified by DMF for use on hyrail pickup trucks. It is not intended to be an exhaustive guide to using FORScan software or to provide troubleshooting advice.

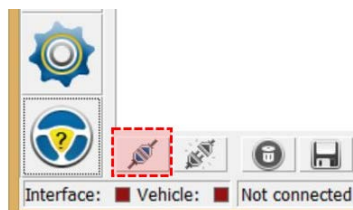
While DMF has confidence in the changes outlined below, installers making changes via FORScan accept the risks and liabilities associated with modifying factory settings. Users should take time to familiarize themselves with the FORScan software before attempting to make any changes to the vehicle, and are encouraged to create backup files of all modules before beginning. Independent On-road testing is recommended to verify the effectiveness of changes.

Required Hardware/Software:

- FORScan Software (free download): [FORScan Homepage](#)
 - These changes require the full version of FORScan, which is only supported for Windows. "Lite" and "Viewer" options do not have the required functionality.
 - These changes require an "extended license" of FORScan, which expires periodically. Getting an extended license requires installing the software and creating an account on the FORscan forum, then following the steps [outlined here](#).
- Supported OBD Interface Adapter (see list on FORScan website)

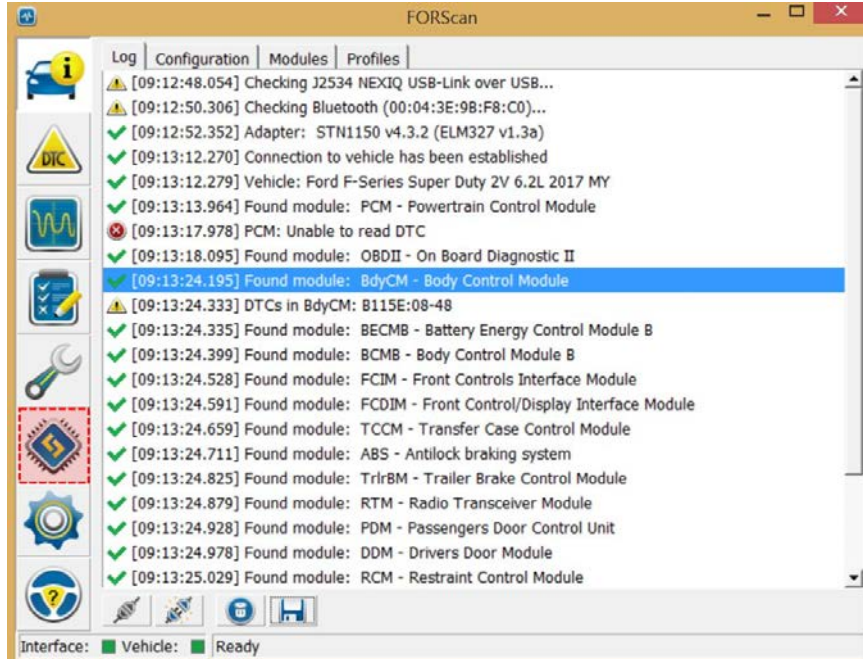
1. Connect laptop to vehicle

- a. Install OBD adapter in OBD port, turn ignition ON but do not start vehicle.
- b. Start FORScan software on laptop.
- c. Click the "connect" button at bottom to establish connection to the vehicle.
- d. Wait until FORScan stops reading modules/

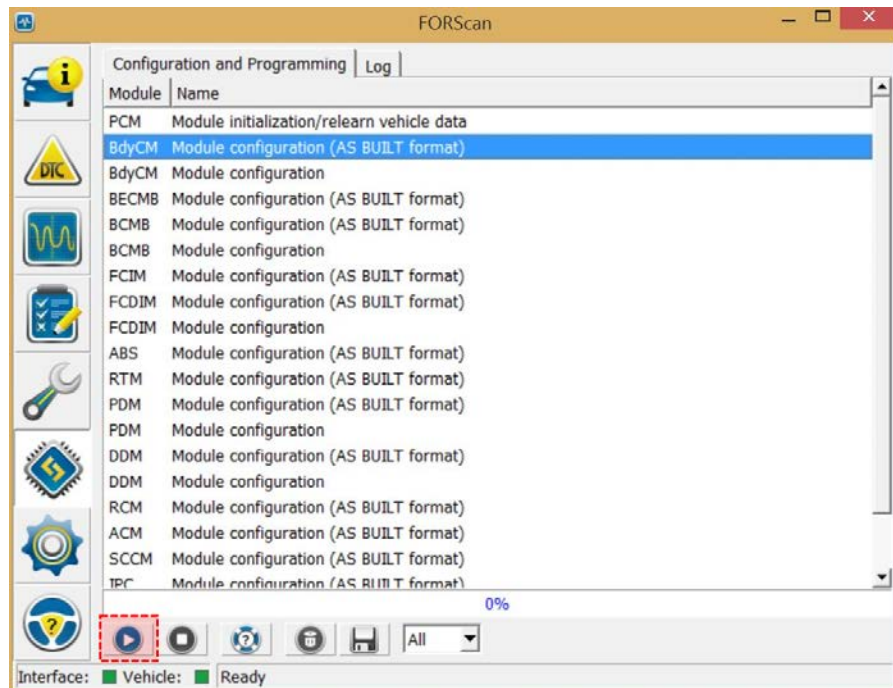


2. Read and Save Data from the Body Control Module

- a. Click the “Configuration and Programming” Button at left.



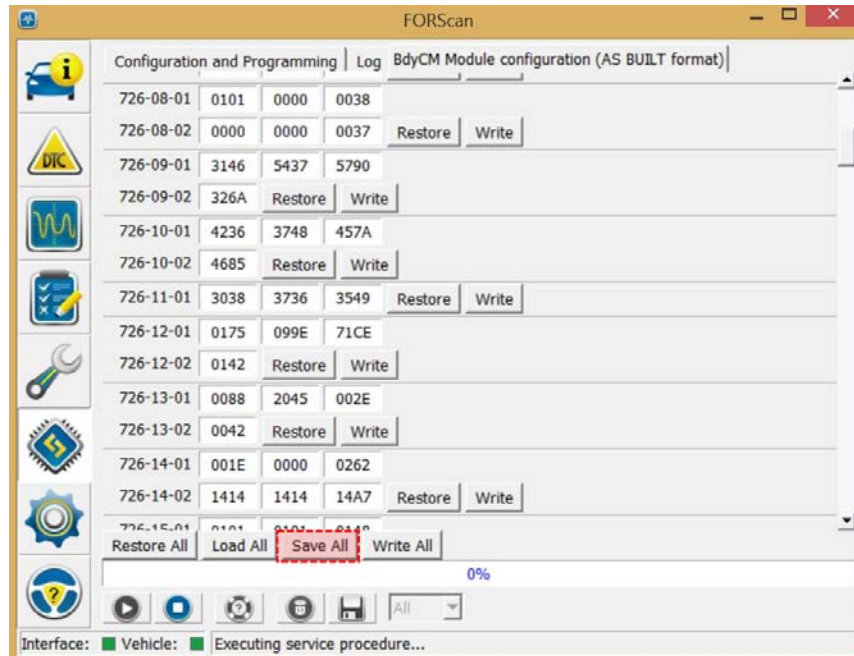
- b. Select “BdyCM Module Configuration” (AS BUILT format)” from the list of available modules, then click “Run Service Procedure” button at bottom to load data from the Body Control Module.





Diversified Metal Fabricators Technical Reference Bulletin TRB0012

- c. USE THE "SAVE ALL" OPTION TO SAVE A COPY (*.ABT) OF THE FACTORY CONFIGURATION BEFORE MODIFYING ANY DATA BLOCKS!



3. Modify Tire Size for Odometer/Speedometer Accuracy

- a. Locate 726-12-01 in the list of data blocks from the Body Control Module.
- b. Set the MIDDLE 4 digits in data block 726-12-01 according to Table 1 below.
- c. Do not modify remaining digits in data block 726-12-01.
- d. For tires not listed in Table 1, it may be necessary to try new values starting with the calculator spreadsheet located [HERE](#).

Set BCM line 726-12-01 To Values Below (x's unchanged)		
Tire	BCM value used	Result
Michelin XDS2 225/70R19.5	xxxx 099E xxxx	GPS speedo and dash display within 1 mph @ 60 MPH
Goodyear G647 225/70R19.5	xxxx 099E xxxx	GPS speedo and dash display within 1 mph @ 60 MPH

Table 1. Known "Good" Tire Calibration Values



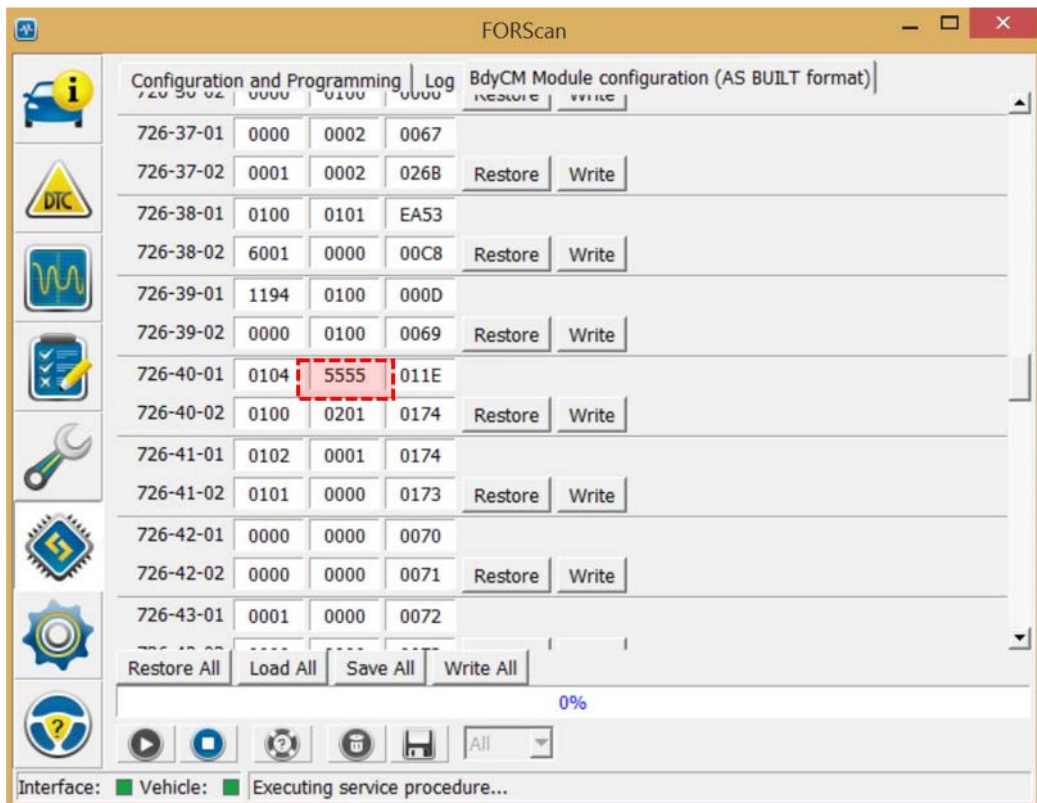
Diversified Metal Fabricators Technical Reference Bulletin TRB0012

4. Modify TPMS Cold Inflation Value

- a. Locate 726-40-01 in the list of data blocks from the Body Control Module.
- b. Set the MIDDLE 4 digits in data block 726-40-01 according to Table 2 below.
 - i. first two digits = FRONT cold inflation pressure (Hexadecimal value)
 - ii. Second two digits = REAR cold inflation pressure (Hexadecimal value)
 - iii. Examples: "4B50" = 75F/80R (typ. Stock); "5555" = 85F/85R
- c. Do not modify remaining digits in data block 726-40-01.

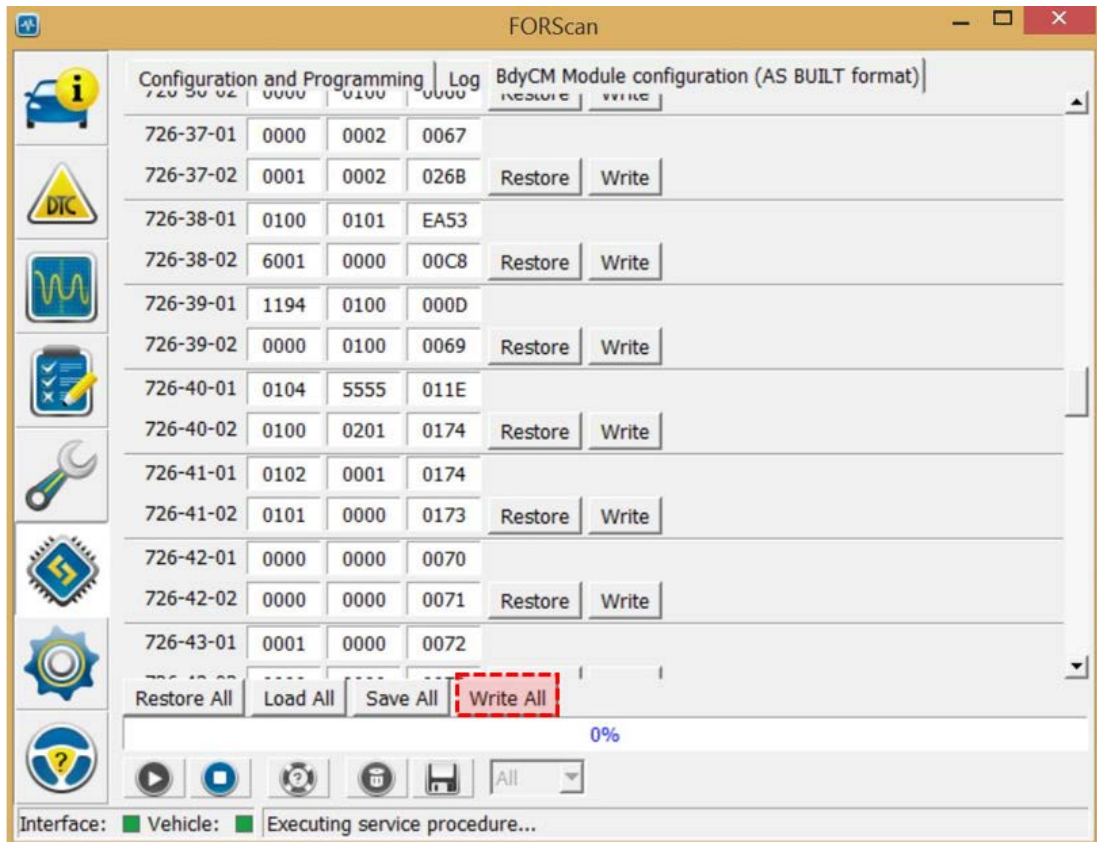
Cold Inflation Pressure to Hexadecimal		
Cold Inflation Pressure (psi)	Hexadecimal Value	Minimum TPMS Fault Pressure (psi)
50	32	37.5
55	37	41.25
60	3C	45
65	41	48.75
70	46	52.5
75	4B	56.25
80	50	60
85	55	63.75
90	5A	67.5
95	5F	71.25
100	64	75

Table 2. Cold Inflation Pressures to Hexadecimal Values



5. Save Changes

- a. After making and confirming the necessary changes, use the “Write All” button at bottom to save changes in the Body Control Module.
- b. Accept and ignore warnings related to check sums.
- c. When prompted by FORScan, cycle the ignition power on the vehicle.
- d. Exit FORScan and remove OBD Interface Adapter



6. Test Changes

- a. Test TPMS per FMVSS 138 Requirements.
- b. Test speedometer accuracy at highway speeds.