

I was able to enable the line lock on my 2015 EB using Partizan's directions, below are screenshots and notes taken during the process:

Prerequisites


1. FORScan 2.4: e-mail contact@forscan.org requesting the 2.4 test version. They responded back to me with a link to the latest test build and instructions within a day.
2. OBD II to USB interface: FORScan won't allow wireless interfaces like OBDLink MX Bluetooth version (trust me, I tried) to flash the firmware. I purchased ELS27 style interface from Amazon (<https://www.amazon.com/Sojoy-FORScan...eywords=ELS27&qid=1561963167&s=gateway&sr=8-4>). You may be able to find other cheaper versions online.
3. Battery tender/charger hooked up to the car.
4. The laptop hooked up to an outlet and ensure that auto sleep, hibernate, shutdown, etc, isn't enabled.

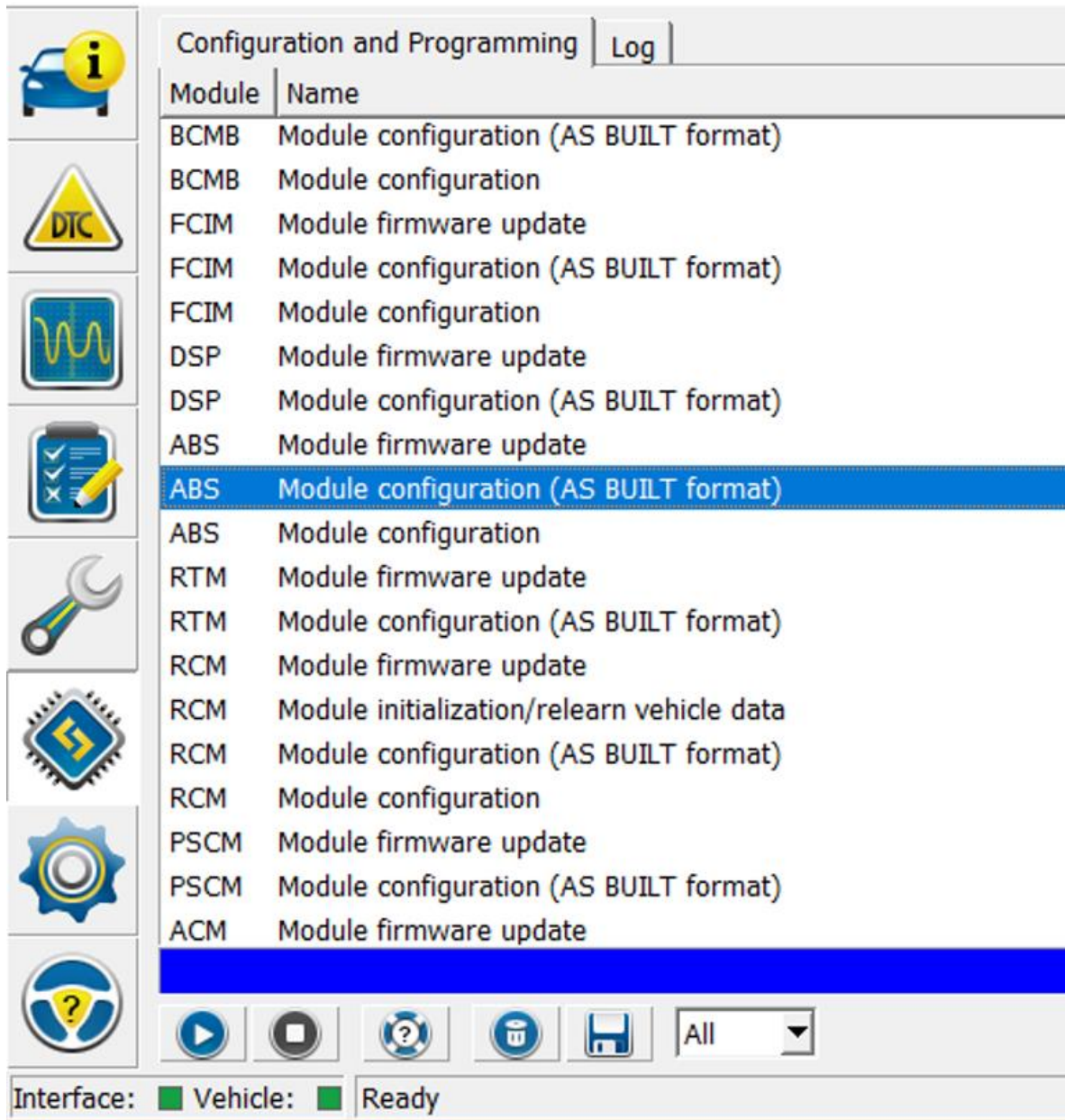
Directions

Under "Driver Assist", ensure that "Auto Engine Off" is turned off. You can also have it turned off by default using FORScan. I always turn this off before updating the tune to be on the safe side, but definitely turn it off for the ABS module firmware update since it'll take over 30 minutes.



Fire up FORScan 2.4, connect to the car, and access AS BUILT for the ABS module .

 FORScan v2.4.0 test20190618.EL2, Ford Mustang EcoBoost Gasoline Turbocharged Dire



The screenshot shows the FORScan software interface. On the left is a vertical toolbar with icons for information, DTC, waveform, clipboard, wrench, chip, gear, and steering wheel. The main area is titled 'Configuration and Programming' with a 'Log' button. Below this is a table with 'Module' and 'Name' columns. The 'ABS Module configuration (AS BUILT format)' row is highlighted in blue. At the bottom, there are playback controls, a trash icon, a save icon, a dropdown menu set to 'All', and a status bar showing 'Interface: [green] Vehicle: [green] Ready'.

Module	Name
BCMB	Module configuration (AS BUILT format)
BCMB	Module configuration
FCIM	Module firmware update
FCIM	Module configuration (AS BUILT format)
FCIM	Module configuration
DSP	Module firmware update
DSP	Module configuration (AS BUILT format)
ABS	Module firmware update
ABS	Module configuration (AS BUILT format)
ABS	Module configuration
RTM	Module firmware update
RTM	Module configuration (AS BUILT format)
RCM	Module firmware update
RCM	Module initialization/relearn vehicle data
RCM	Module configuration (AS BUILT format)
RCM	Module configuration
PSCM	Module firmware update
PSCM	Module configuration (AS BUILT format)
ACM	Module firmware update

Interface: ■ Vehicle: ■ Ready

The first four lines are hex values for your car's VIN, followed by two lines denoting options like adaptive cruise and collision avoidance system (my car doesn't have them). While the hex values for the VIN shouldn't change after the firmware update, back up the values by clicking on "Save All" just in case.

FORScan v2.4.0 test20190618.EL2, Ford Mustang EcoBoost Gasoline Turbocharged Direct Injection 2.3L 2015

Configuration and Programming | Log ABS Module configuration (AS BUILT format)


760-01-01	3146	4136	50A7		
760-01-02	3854	4834	46B8		
760-01-03	3534	3334	3873		
760-01-04	3033	CF		Restore	Write
760-02-01	1111	3111	00CE		
760-02-02	0200	127F		Restore	Write
760-03-01	55C0			Restore	Write

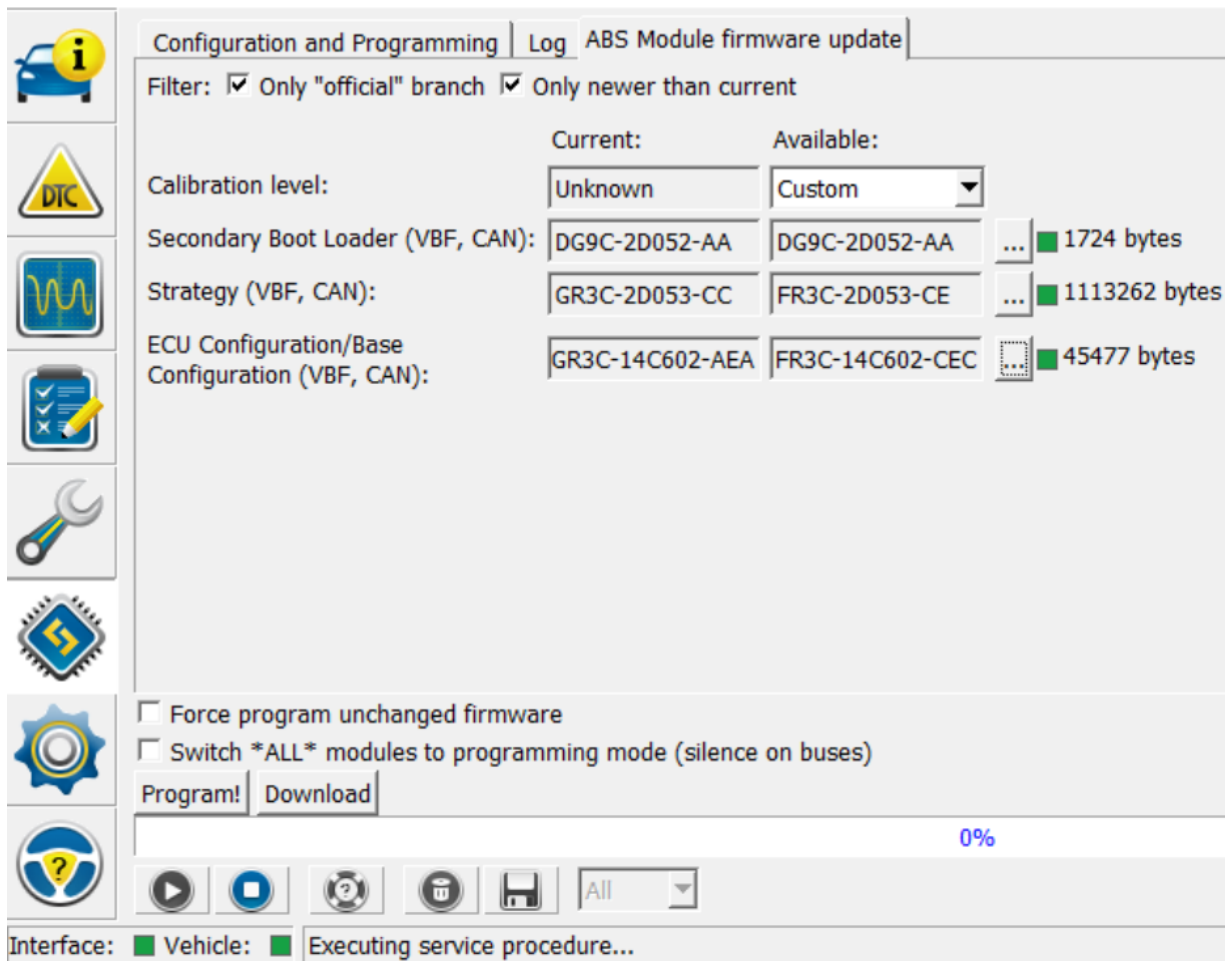
Restore All | Load All | Save All | Write All

0%

Interface: ■ Vehicle: ■ Executing service procedure...

Exit from the AS BUILT tab and go to "ABS Module firmware update". Click on "Download" to save a copy of the existing firmware in case you have to roll back.

 FORScan v2.4.0 test20190618.EL2, Ford Mustang EcoBoost Gasoline Turbocharged Direct Injection 2.3L 2015 (2015 MY



The screenshot shows the FORScan software interface for updating ABS module firmware. The window title is "Configuration and Programming | Log | ABS Module firmware update".



Filter: Only "official" branch Only newer than current

	Current:	Available:	
Calibration level:	Unknown	Custom	
Secondary Boot Loader (VBF, CAN):	DG9C-2D052-AA	DG9C-2D052-AA	... 1724 bytes
Strategy (VBF, CAN):	GR3C-2D053-CC	FR3C-2D053-CE	... 1113262 bytes
ECU Configuration/Base Configuration (VBF, CAN):	GR3C-14C602-AEA	FR3C-14C602-CEC	... 45477 bytes

Force program unchanged firmware
 Switch *ALL* modules to programming mode (silence on buses)

Program! Download

0%

Interface:  Vehicle:  Executing service procedure...

Old firmware will be saved to your user's Documents -> CalibrationFiles directory. Move them to a safe spot, download abs_module_firmware.zip, and uncompress the files in the same directory.

📁 > This PC > Documents > CalibrationFiles

Name	Date modified	Type	Size
📄 DG9C-2D052-AA.vbf	6/27/2019 9:55 PM	VBF File	3 KB
📄 FR3C-2D053-CE.vbf	6/27/2019 9:55 PM	VBF File	1,089 KB
📄 FR3C-14C602-CEC.vbf	6/27/2019 9:55 PM	VBF File	46 KB

Under the "Available" column, select the above three files in the order shown below.

🔌 FORScan v2.4.0 test20190618.EL2, Ford Mustang EcoBoost Gasoline Turbocharged Direct Injection 2.3L 2015 (2015 MY)

Configuration and Programming
Log ABS Module firmware update

Filter: Only "official" branch Only newer than current

	Current:	Available:	
Calibration level:	Unknown	Custom	
Secondary Boot Loader (VBF, CAN):	DG9C-2D052-AA	DG9C-2D052-AA	... 1724 bytes
Strategy (VBF, CAN):	GR3C-2D053-CC	FR3C-2D053-CE	... 1113262 bytes
ECU Configuration/Base Configuration (VBF, CAN):	GR3C-14C602-AEA	FR3C-14C602-CEC	... 45477 bytes

Force program unchanged firmware
 Switch *ALL* modules to programming mode (silence on buses)

Program!
Download

0%

▶
⏏
⌛
🗑
💾

All

Interface: ■ Vehicle: ■ Executing service procedure...

Click "Program!" and you'll see the warning below. Heed it and click "Ok". If you have a wireless interface, this is where FORScan tells you that you can't continue.

FORScan v2.4.0 test20190618.EL2, Ford Mustang EcoBoost Gasoline Turbocharged Direct Injection 2.3L 2015 (2015 MY), VIN: 1FA*****34803

The screenshot displays the FORScan software interface. At the top, the title bar reads "Configuration and Programming Log". The main window shows a log of events:

- ✓ [19:53:33.689] Module firmware update has been started
- ⚠ [19:53:33.873] Firmware p/n doesn't match to assembly p/n: GR3C-14C602-AEA instead of GR3V-14C602-DCB
- ⚠ [19:55:48.91] Warning

A warning dialog box is open in the foreground, titled "Warning". It contains the following text:

⚠ This procedure will update module firmware
Total size: 1.11 Mb. Estimated duration: 41m 26s - 1h 2m 10s

The operation is not safe. Please make sure the following initial conditions are met:

- Battery charger is connected to the vehicle
- The battery of the device that runs FORScan is charged enough to finish the operation
- Device that runs FORScan must have any sleep mode, hibernate etc disabled
- After start of the operation, wait until it is finished and don't try to stop or close the application

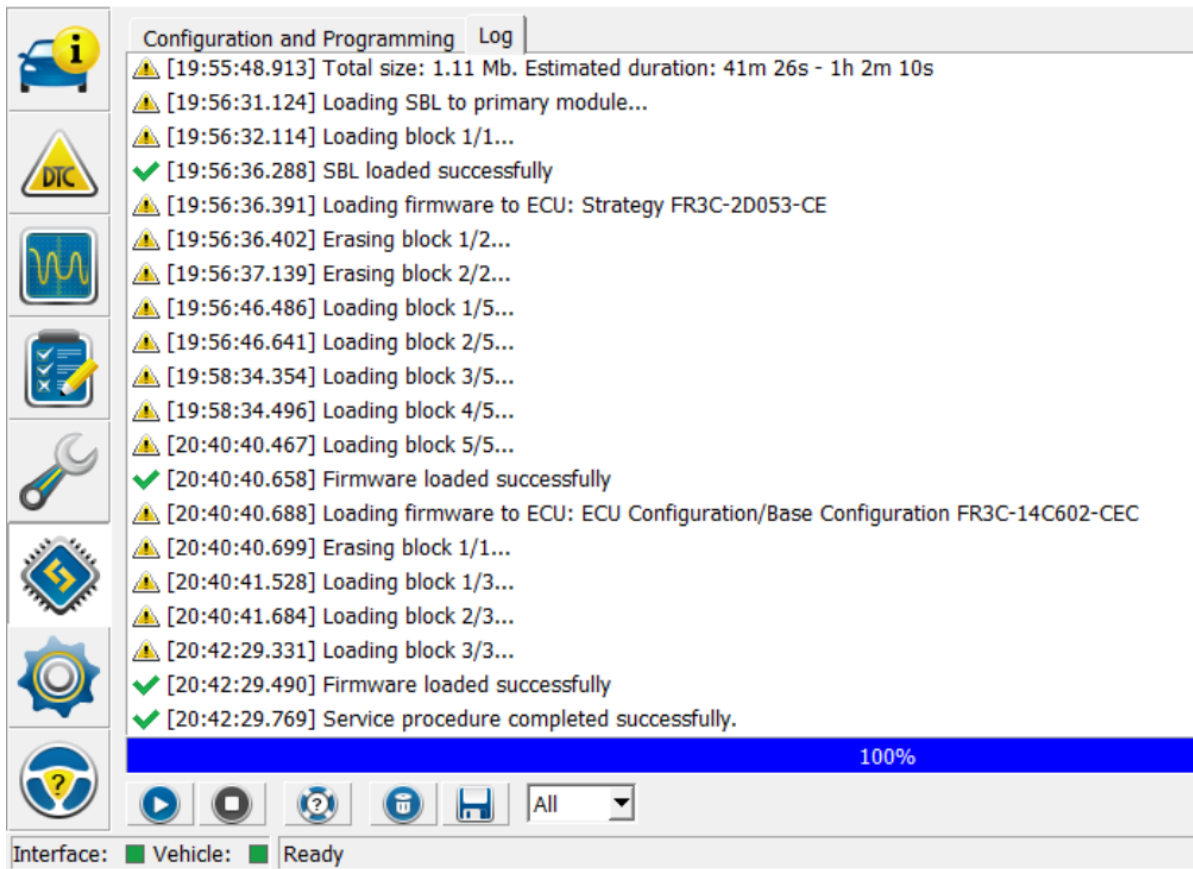
Are you ready to continue?

Buttons: Ok, Cancel

At the bottom of the interface, there is a progress bar showing "0%" and a status bar that reads "Interface: ■ Vehicle: ■ Executing service procedure...".

I don't know exactly how long it took as I stepped away to do other things and came back periodically to check on the progress. My estimate's about 45 minutes.





Configuration and Programming | Log

- [19:55:48.913] Total size: 1.11 Mb. Estimated duration: 41m 26s - 1h 2m 10s
- [19:56:31.124] Loading SBL to primary module...
- [19:56:32.114] Loading block 1/1...
- [19:56:36.288] SBL loaded successfully
- [19:56:36.391] Loading firmware to ECU: Strategy FR3C-2D053-CE
- [19:56:36.402] Erasing block 1/2...
- [19:56:37.139] Erasing block 2/2...
- [19:56:46.486] Loading block 1/5...
- [19:56:46.641] Loading block 2/5...
- [19:58:34.354] Loading block 3/5...
- [19:58:34.496] Loading block 4/5...
- [20:40:40.467] Loading block 5/5...
- [20:40:40.658] Firmware loaded successfully
- [20:40:40.688] Loading firmware to ECU: ECU Configuration/Base Configuration FR3C-14C602-CEC
- [20:40:40.699] Erasing block 1/1...
- [20:40:41.528] Loading block 1/3...
- [20:40:41.684] Loading block 2/3...
- [20:42:29.331] Loading block 3/3...
- [20:42:29.490] Firmware loaded successfully
- [20:42:29.769] Service procedure completed successfully.

100%

Interface: ■ Vehicle: ■ Ready

You'll see "AdvancedTrac Service" warning and the dreadful wrench icon during the flashing process, which you can ignore for now.



Once the firmware update's completed, return to the AS BUILT tab for the ABS module. Notice that the VIN entry didn't change but the options lines did. If your VIN was overwritten for some reason, click on "Load All" and load from the backup. Don't worry about overwriting the options lines as they aren't valid for our application anyways.

FORScan v2.4.0 test20190618.EL2, Ford Mustang EcoBoost Gasoline Turbocharged Direct Injection 2.3L

Configuration and Programming		Log	ABS Module configuration (AS BUILT format)	
760-01-01	3146	4136	50A7	
760-01-02	3854	4834	4688	
760-01-03	3534	3334	3873	
760-01-04	3033	CF	Restore	Write
760-02-01	0000	0000	006A	
760-02-02	0000	006B	Restore	Write
760-03-01	55C0	Restore	Write	

Restore All | Load All | Save All | Write All

0%

Interface: ■ Vehicle: ■ Executing service procedure...

Since my car doesn't have adaptive cruise and collision avoidance system, I used the following values for the options lines:

760 02-01: 2113 3111 00E0
760-02-02: 0200 79E6

If your car has adaptive cruise and collision avoidance system, use the following:

760-02-01: 2113 3111 A080
760 02-02: 0200 79E6

If you have some weird combination not covered by the values above, check <http://media.4rev4.com/s550-as-built-library/> and look at the AS BUILT values from a GT with similar options.

Once updated, click "Write All". I went over the IPC section without power cycling the ignition since writing reboots the module anyways.

FORScan v2.4.0 test20190618.EL2, Ford Mustang EcoBoost Gasoline Turbocharged Direct Injection 2.3L 2015 (2015 MY), VIN: 1FA*****3.

The screenshot shows the FORScan software interface for ABS Module configuration (AS BUILT format). The main window displays a table of configuration values for various modules. An information dialog box is overlaid on the table, indicating that the programming was successful and instructing the user to cycle the ignition.

Module ID	Option 1	Option 2	Option 3	Buttons
760-01-01	3146	4136	50A7	
760-01-02	3854	4834	4688	
760-01-03	3534	3334	3873	
760-01-04	3033	CF		Restore Write
760-02-01	2113	3111	00E0	
760-02-02	0200	79E6		Restore Write
760-03-01	55C0			Restore Write

Information dialog box content:

Information

✔ Block(s) programmed successfully

Please cycle the ignition OFF and then back ON

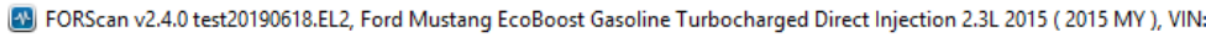
Ok

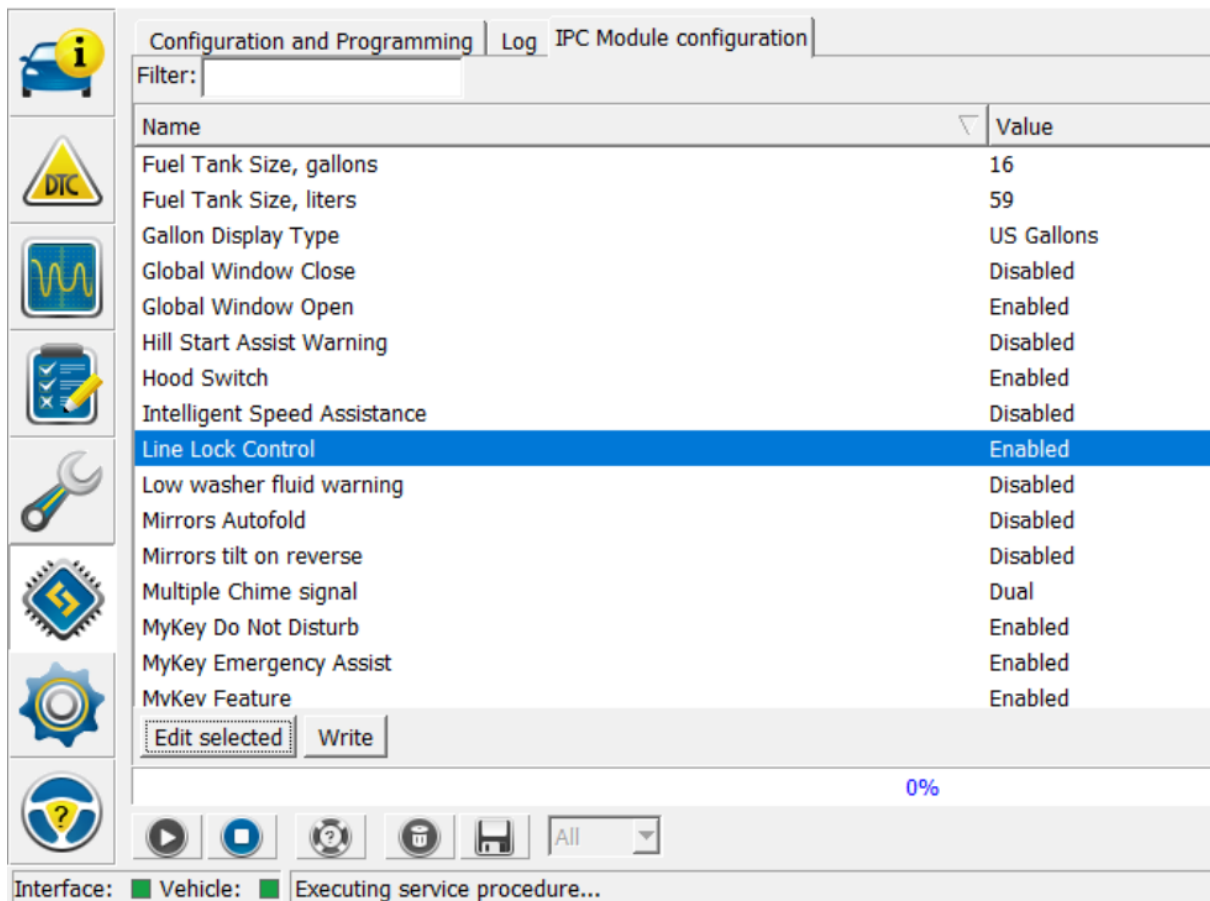
Buttons: Restore All, Load All, Save All, Write All

Progress: 0%

Interface: Vehicle: Executing service procedure...

Go to the "IPC Module configuration" (not the AS BUILT version), and enable "Line Lock Control" so you'll see it as an option.





Configuration and Programming | Log IPC Module configuration

Filter:

Name	Value
Fuel Tank Size, gallons	16
Fuel Tank Size, liters	59
Gallon Display Type	US Gallons
Global Window Close	Disabled
Global Window Open	Enabled
Hill Start Assist Warning	Disabled
Hood Switch	Enabled
Intelligent Speed Assistance	Disabled
Line Lock Control	Enabled
Low washer fluid warning	Disabled
Mirrors Autofold	Disabled
Mirrors tilt on reverse	Disabled
Multiple Chime signal	Dual
MyKey Do Not Disturb	Enabled
MyKey Emergency Assist	Enabled
MvKev Feature	Enabled

Edit selected Write

0%

Interface: Vehicle: Executing service procedure...

Power cycle the ignition and start the engine. You should not see any AdvancedTrac warnings. "Line Lock" now shows up under "Track Apps".



Line Lock

N

Track
Only

Engaged

Press OK to
Begin



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