TECH TIPS

Subaru Service and Technical Support Line Newsletter

April 2016

SUBARU

ARTICLES CONTAINED IN THIS ISSUE

2016 CALENDAR OF SUBARU HOLIDAYS

Memorial Day
Monday, May 30, 2016

Independence Day
Monday, July 4, 2016

Labor Day
Monday, September 5, 2016

01 QMR OF THE MONTH

We are pleased to announce this month's winner of QMR of the Month:

Leo Gilmore from
Ruge's Subaru in Rhinebeck, NY

Leo submitted a very detailed QMR on his diagnosis and repair of a 2015 Outback with 24K miles where the customer reported multiple warning lamps on and reduced power steering response. Based upon the complaint, Leo started his diagnosis with a check for codes and confirmation of the physical symptom. Inspection confirmed the condition the customer described and Leo found DTCs C2514- Vehicle speed sensor failure as well as C2548- VDC module abnormal in the Power Steering Control Module (PSCM). The VDC module contained a C1231- RR wheel speed sensor wire break/ excessive input. Leo then proceeded to graph the wheel speed sensors using SSMIII and found the RR wheel speed would spike up in some cases even when the wheel was not moving. Leo also noted the PSCM indicated the power steering status was "assist limitation" as a result of this erratic speed signal. As a final test, Leo swapped the sensors side to side and confirmed that the condition moved with the sensor. Replacing the wheel speed sensor corrected the condition. Leo's report included extensive SSMIII data files from all related systems as well as his detailed explanation of his step by step diagnosis. This detail made it very clear how he arrived at the final result.

In appreciation for going the extra mile and sharing his experience with us, Leo will be receiving the following from his FSE:

An **Apple iPad® Mini tablet** with a custom
Subaru Confidence in Motion case

Any Subaru Service Technician can participate in QMR of the Month. See the February 2013 and January 2016 Tech Tips for full details. You may see your name here in a future Tech Tips.

SUBARU OF AMERICA, INC. IS ISO 14001 COMPLIANT

ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

SUBARU
QUALITY DRIVEN® SERVICE

AUTOMOTIVE Youth Educational Systems
PROUD PARTNER

01 2016 MARCH QMR OF THE MONTH AWARD PRESENTATION

As part of our "enhanced" QMR of the Month recognition program, we will be including a photo (whenever available) of the recipient's award presentation in TIPS. The winner selected from QMR of the Month submissions received during February, was Leo Gilmore, a Technician at Ruge's Subaru in Rhinebeck, NY. Leo is shown below receiving his award and is flanked by: (l to r) Jack Cleary, Service Manager, Rob Pazos, FSE, Subaru Distributors Corp. along with Dealer Principals,

Kristin and Scott Hutchins. Congratulations and THANK YOU to our QMR of the Month Award recipient!

01 SUBARU-U ANNOUNCEMENT

Subaru is proud to announce the official release of Subaru University or Subaru-U, our new partnership program designed to combine the talent and resources of Subaru of America, our 600+ retailers nationwide, and select NATEF/AYES accredited Secondary and Post-Secondary schools. By offering Subaru's Web Based Training (WBT) and other benefits into the existing curriculum of high performing automotive programs, students have the ability to take most of the entry level training that is required of all Subaru technicians. Students can even opt to take a Subaru Level 2 Instructor Led Training Test-out and advance their training even further.

Students at participating Subaru-U partner schools can gain valuable knowledge of Subaru vehicle systems that can better prepare them for possible employment at Subaru retailers nationwide throughout the Country. Students that are apprenticed at a Subaru retailer and school instructors are also eligible for additional training through Subaru. Our retailers have the ability to take an active role with their local partner schools in shaping the technicians of tomorrow. Other advantages of this program are in development and will be released as they are made available.

Subaru-U@Subaru.com

01 SUBARU-U ANNOUNCEMENT

Stay tuned more information to come out each month: School locations, school contacts, value propositions, how and why to be a mentor and more……….

01 SAVING AND PRINTING FREEZE FRAME DATA

We would like to take a few moments to address a concern which has been discussed in every Service department, and with every Technician over the past approximately 2 years. FSEs have most likely had the conversations with you about this, as well as Techline reps and the Tech Trainers have been providing reinforcement of it as part of their instructor led training classes.

What we're referring to is the electronic saving of data collected using the SDS Notebook. Some say, "We never had to do this before". As a technician performing a repair, we have ALWAYS had to keep, and be able to provide on request, all notes and data required as part of making a repair, especially those covered by Warranty. Refer to section 13.2 of the Claims Policy and Procedures Manual on Subarunet. "It is the responsibility of the retailer to maintain documentation supporting all claims submitted by the retailer to SOA for reimbursement. All documents should be retained and readily available for review and verification by an SOA representative. SOA requires that documentation be retained for the time period required by Federal, State and Local statutes or for a minimum of 2 years."

Using the SDS Notebook to save this data is faster and more efficient than the old way of printing, walking to the printer, and stapling it to the RO. With printed data, if the data was requested (or worse the car returned), someone had to go to the customer file, retrieve the document, remove the staple, copy the document, fax the document, then reattach all the paperwork and return it to the file. It's easy to see why saving the data electronically is a better use of everyone's valuable time.

When printing Freeze Frame data as an example, the printed copy cuts off at least one, sometimes more than one column of data and prevents access to the actual event data which FHI engineers absolutely need to have. In fact, this information is so important, FHI will no longer accept a printed copy of any collected data from SOA. So now, not only is printing environmentally wasteful and time consuming, from a practical standpoint it's a complete waste of everyone's time.

If you print out your Freeze Frame data and your print out shows a file location such as shown below, you can still navigate to it by searching that file location. This, way the electronic version can still be retrieved and shared with anyone who requests it.
With all of this in mind, make sure you immediately start saving EVERYTHING ELECTRONICALLY!!

> **Freeze Frame Data Display**
> **Date**   **Wednesday, December 09, 2015**
> **Time**   **15:12 C:\Users\Subaru\Documents\JF2SJGPCXEH523163 P0171.ffd**
> **System   Engine Control System**

DTC and Freeze Frame Data should be saved EVERY time the SDS Notebook is connected to the vehicle for diagnostic purposes.

Start by creating a new folder in "My Documents" on the notebook. (Folder name example—G3233396 <Trouble symptom or DTC>-RO 12345-<Retailer code>)

Then, collect Current & History codes module by module not just with an all system check. Each time data is collected, it must be identified as to what they are. (File name example—G3233396-ECM Freeze Frame <DTC>-<Retailer code>) saving those files to the folder you just created.

It is always recommended Technicians print the diagnostic trouble tree, fill in the results to each step as they go through the diagnostic process, then attach their results to the RO, or if possible, scan and save it in the same folder.

None of us had to do this before. However, technology has evolved, and whether we like it or not, we must evolve in how we approach diagnosing and repairing utilizing this new technology. It only appears difficult because we're not used to doing it. Initially, it may take just a little longer because it's new and unfamiliar but, it will become second nature and quick after doing it a few times.

Remember, by supporting the process, you will limit any claim concerns that may come up later as a result of incomplete documentation. Perhaps even more importantly, whenever a vehicle comes in, you and the other Technicians in your retailer will have access to all the vehicle's past data including prior codes, FFD, and known good driving files for reference which could be valuable time savers.

Don't forget to regularly back up the data you save in My Documents following your company's data retention policies and procedures. Remember, the SDS Notebooks are leased and will go away after a time, plus any device can crash unexpectedly and data may be lost as a result. So, regular backups are STRONGLY recommended. See your retailer internal IT liaison for details.

An excerpt from the February 2015 Tech Tips:

IMPORTANT REMINDER: It is imperative all collected Freeze Frame Data (FFD) be saved electronically. Faxing or e-mailing scanned print-outs or screen captures of FFD is no benefit to anyone requesting the data. A recent TSB, 01-172-14, was released on this and other Select Monitor III-related usage topics during August, 2014 which included screen shots with step-by-step instructions outlining the necessary procedures to follow for saving and e-mailing FFD and SSMIII data files. For those unfamiliar with TSB 01-172-14, please locate it on STIS at your earliest opportunity and become familiar with this very important, time-saving information."

01   CHANGES TO SUBARUNET LINKS

On Sunday April 24th, there were some changes made to the left side menu for Parts, Service and Claims links. All the familiar links will still be available on the left menu, but there will be new main-section names and those links will be reorganized. The goal is to streamline content and reduce redundant links to provide more intuitive paths to content. Below is a list of the current menu names and the new menu names. At the end of May, you can look forward to an all-new, redesigned Subarunet. The homepage will have better organized information that is readily available, it will be customizable and, have better management of new and old announcements.

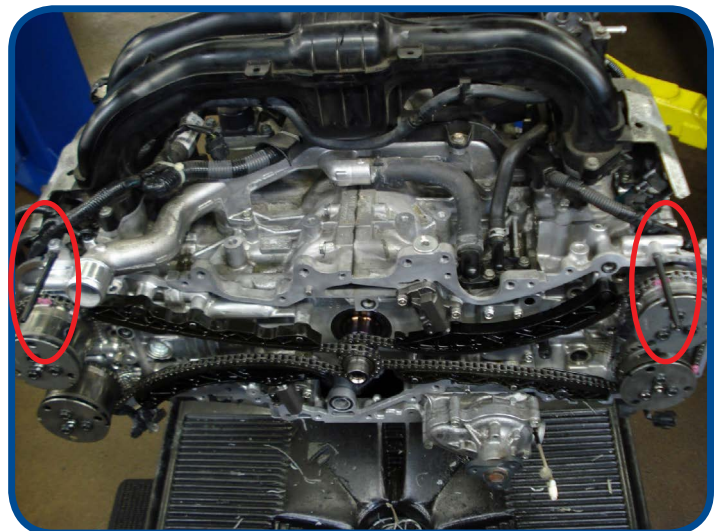| Current Menu Section Name	New Menu Section Name
Fixed Ops – Inventory/Ops	Parts Operations
Fixed Ops – Marketing	Parts/Service Programs & Accessories
Service	Service Operations & Technical
Service – Claim Entry/Info	Claims & Warranty Administration

02   TIMING CHAIN COVER INSTALLATION

When working on a 2011 to 2016 FA or FB engine, keep in mind you have been supplied guide pins to help ease timing cover installation for both in car and out of car servicing. The tools were shipped under essential kit number SOA321107 but the part number for ordering is J-51972. Refer to the instructions below.

Follow the procedure supplied in the applicable Service Manual for accessing and removing the timing cover.

REMINDER: USE CORRECT THREE BOND LIQUID GASKET AND APPLY PER SERVICE MANUAL.

CAREFULLY screw the guide pins into the block in the positions shown. After applying Three Bond liquid gasket position the timing cover onto the guide pin tips and slide timing cover into place. Loosely install timing cover bolts then remove guide pins and install remaining timing cover bolts. Refer to Service Manual for proper torque procedure.

TIP: You can use a flat blade screwdriver to help install and remove guide pins.

Please be advised that there is a new web based training video located on SKILS.

To Access video:

1. Make sure you are logged into SKILS
2. **CLICK HERE**

NOTE: Link will not work if you are not logged in

14 APRIL 2016 SSM4 CHANGES

With the release of the April 2016 SSM4 software, you may notice some changes to the application and the functions that it provides. In the following, you will find some of the key features added and how to utilize them to your advantage as a Subaru Technician.
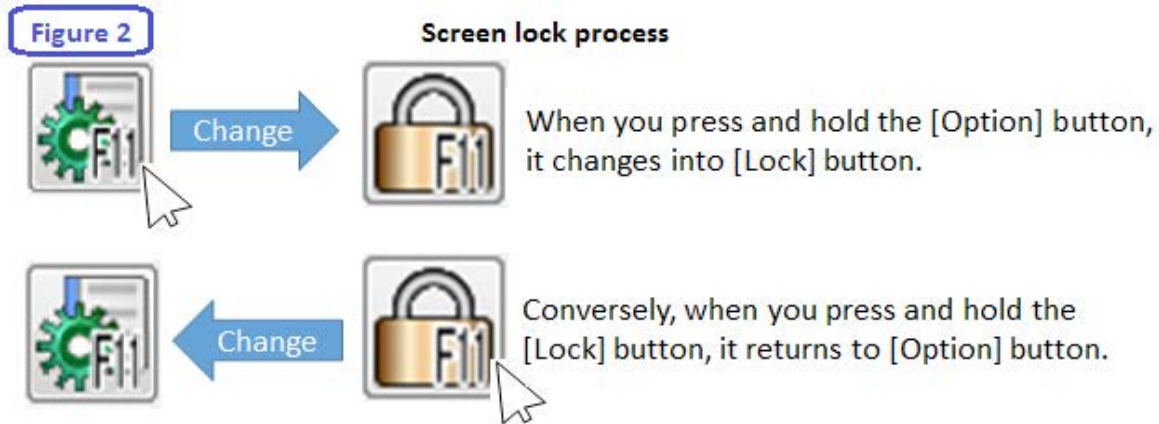
1. Screen lock Icon

Locking the screen on the SSM4 is now available with the release of the April 2016 software. This feature will prevent inadvertently selecting an option on the screen which could interfere with the process you are following. Below in figure 1, you can see the lock button in place of the option button.

To enable the screen lock function, press and hold the option button. Once the option button switches to the lock symbol, the SSM4 screen is in the lock state. In order to unlock the screen, the same process will need to be followed. This process can be seen below in figure 2.

Figure 2

Screen lock process

Change → When you press and hold the [Option] button, it changes into [Lock] button.

Change ← Conversely, when you press and hold the [Lock] button, it returns to [Option] button.

2. Freeze Frame Data

When viewing the All System Scan on the SSM4, you will now be able to view the freeze frame data on the same screen. Another feature will be that the freeze frame data is automatically saved in the project file along with the All Systems Scan. Figure 3 shows how the April 2016 SSM4 All Systems Scan will be viewed with this new feature. Note that now you can select to view the freeze frame data by clicking on the icons in the FFD column when viewing the All Systems Scan.

Figure 3   **April 2016 Version**
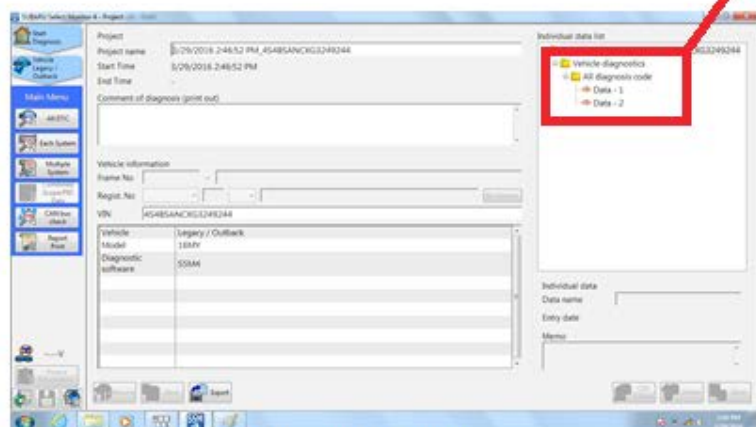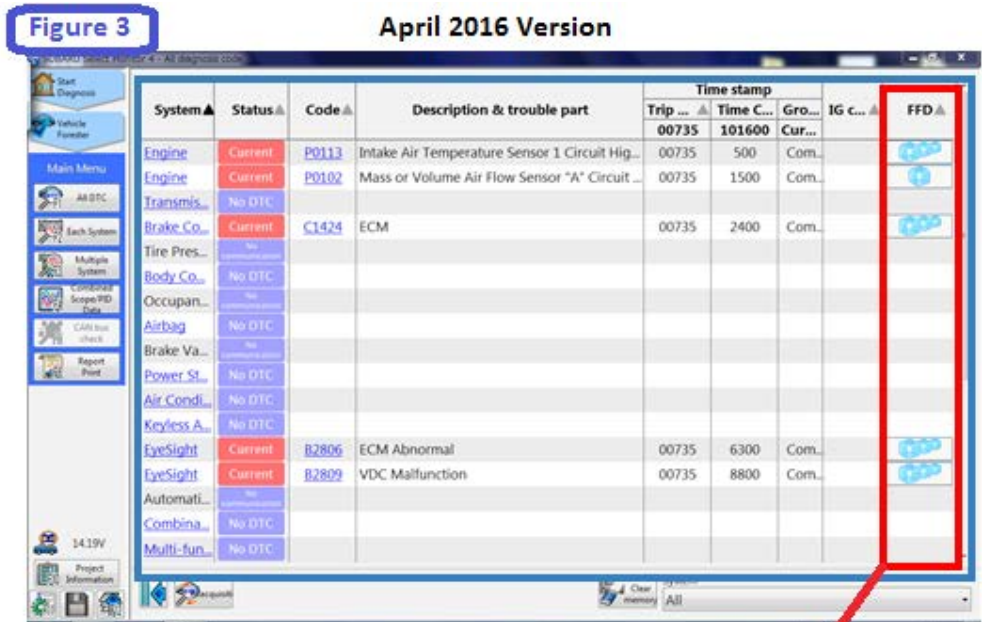
[Project] menu

3. Oscilloscope Changes

Oscilloscope data viewed in the current data display of the control module for which you are monitoring can now be viewed at an asynchronous interval. Prior to the release of the April 2016 SSM4 version, the oscilloscope data could only be viewed at the same interval (synchronous) of the control module current data. Another change you will see under the Select Signal menu is the name of the measurement category which has changed from "ANA" to "OSC". Figure 4 shows a screenshot of the analog settings menu in which you can now select a sampling interval of Synchronous, 2ms, 3ms, 6ms, and 15ms. Figure 5 shows a screen shot from the Select Signal menu with the new name of the measurement category.

Figure 4 — Analog Setting Menu

Figure 5 — Select Signal Menu
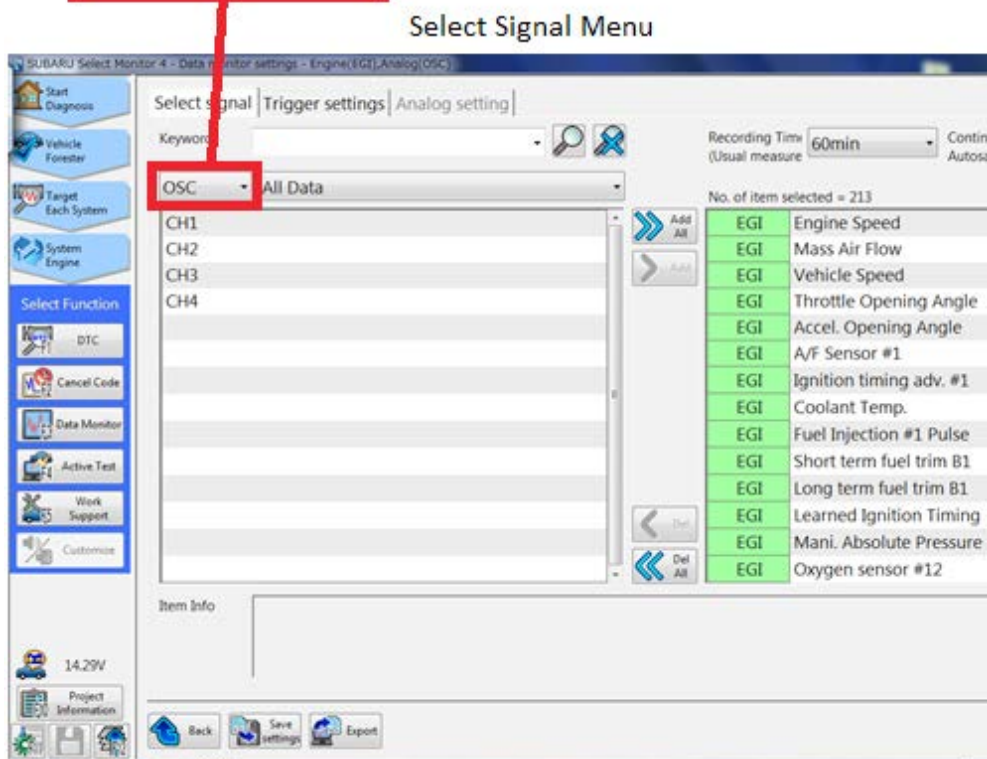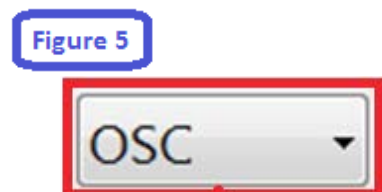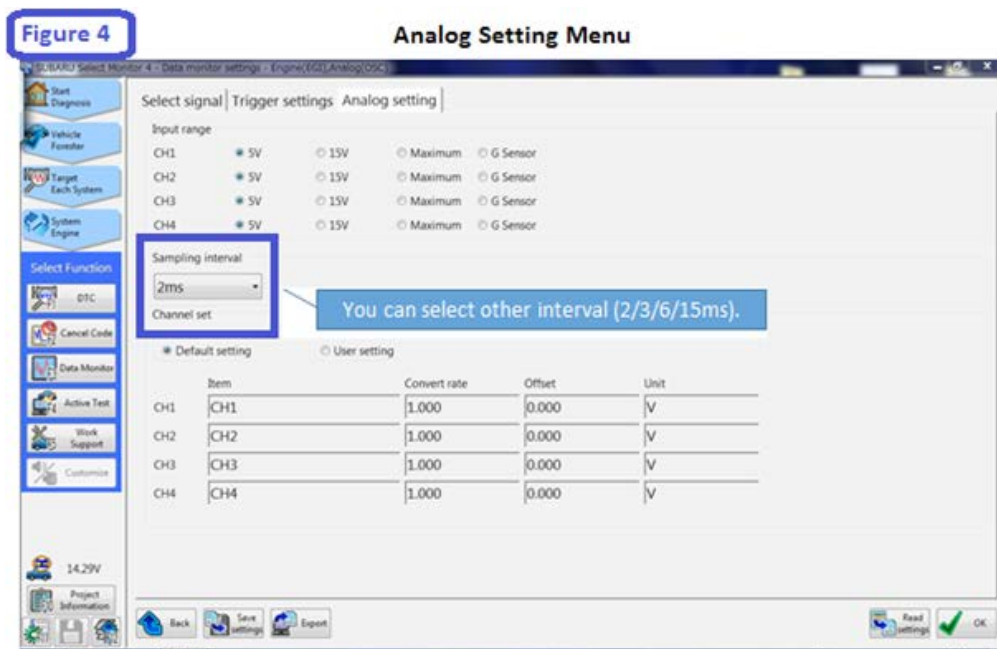
4. Customized Setting Changes

You can now save the customized settings of the Body Integrated Unit as a setting file in the vehicle project information. Accessing this file will allow you to change the current settings of the Body Integrated Unit to match those in the setting file if, for example, the Body Integrated Unit has been replaced or the customer has purchased a new Subaru and would like the settings adjusted to their previous vehicle. Figure 6 shows the new function icons available with the new SSM4 software.
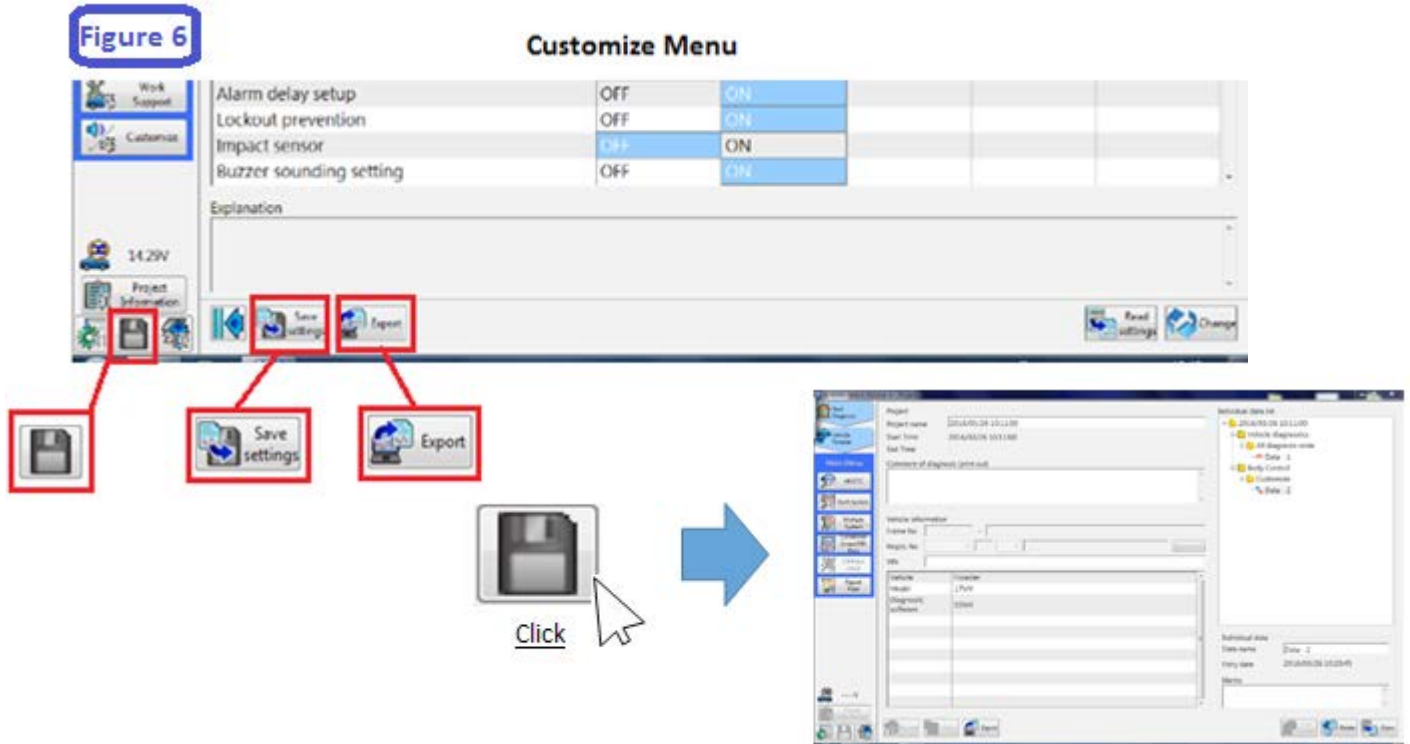
Click the save button to open the project information screen.
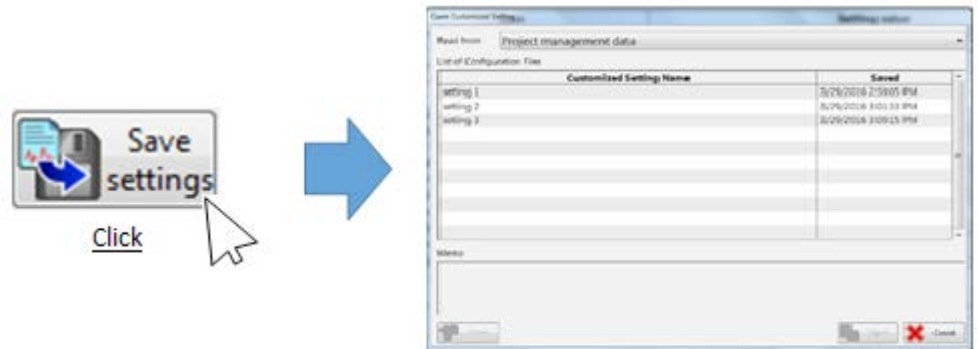
Click the Save Settings button to save the vehicle's customized settings.

The Export function will enable you to export the saved settings file.

2016033008490 8761.SECF

When viewing the customized settings function of the SSM4, you will now see three colors depicting the status of each setting. Figure 7 shows this new feature, and shows how the color corresponds to the status of each setting selection. The orange cell depicted below represents a selection from a saved setting file, which was explained in figure 5.
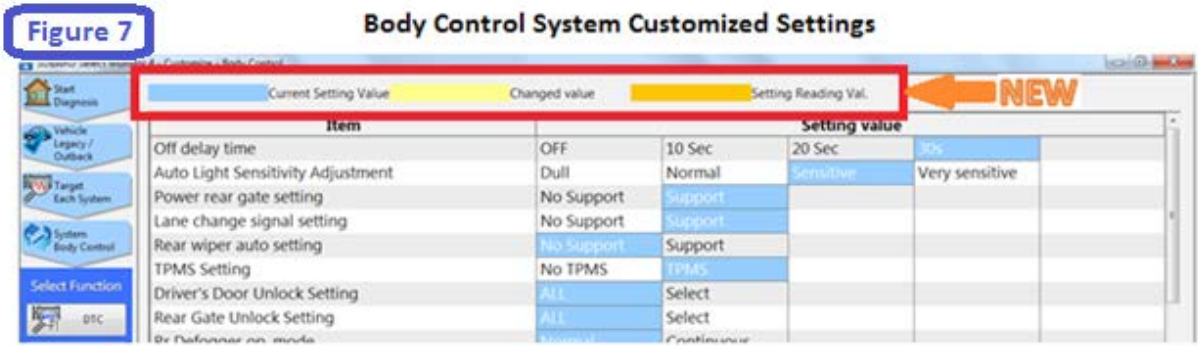

Figure 7

Body Control System Customized Settings

Changed value

If you select a new setting value which is different from the "Current Setting Value", the cell of this new value become highlighted in yellow.

Setting Reading Val.

"Setting Reading Val." is defined by a saved setting file which you open. If a "Setting Reading Val." value is different from the "Current Setting Value", the cell of this value is highlighted in orange.

5.   Open Project Menu

You will now notice when viewing the Open Project menu, the "Brand" column will no longer be seen with the project management data. Figure 8 shows you the difference between the April 2016 SSM4 version versus the previous version.
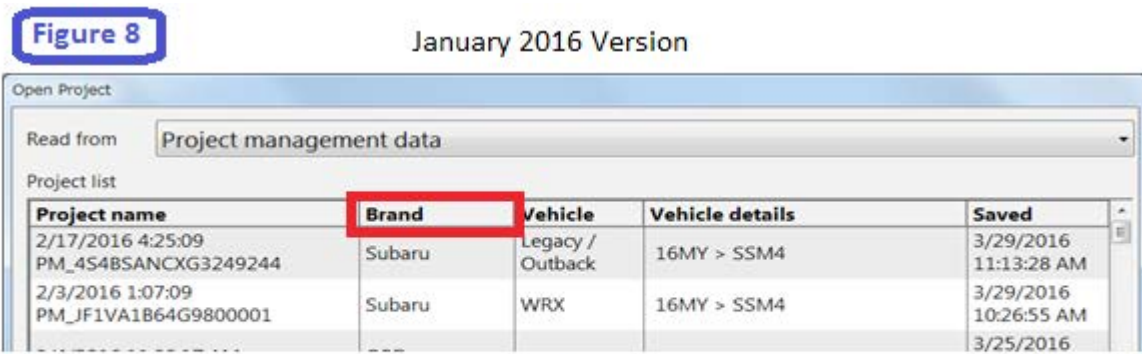
Figure 8   January 2016 Version

Project name	Brand	Vehicle	Vehicle details	Saved
2/17/2016 4:25:09 PM_4S4BSANCXG3249244	Subaru	Legacy / Outback	16MY > SSM4	3/29/2016 11:13:28 AM
2/3/2016 1:07:09 PM_JF1VA1B64G9800001	Subaru	WRX	16MY > SSM4	3/29/2016 10:26:55 AM
				3/25/2016

April 2016 Version

6. Search History

Previous search keywords in the Monitor Settings menu will now have the option to be deleted if they are no longer needed. Figure 9 highlights the process to delete keywords from the search history log.

Figure 9

Data Monitor Settings Menu

Place the cursor on the '"X" and click to delete

Click

"elcm" is no longer in search history

7. Target models for SSM4

Additional models will now be supported by the SSM4 with the release of the April 2016 version. Targeting more vehicles with the SSM4, along with these new features, will help to enhance the diagnostic process necessary in the field. Below is a list of additional models and the model years applicable.
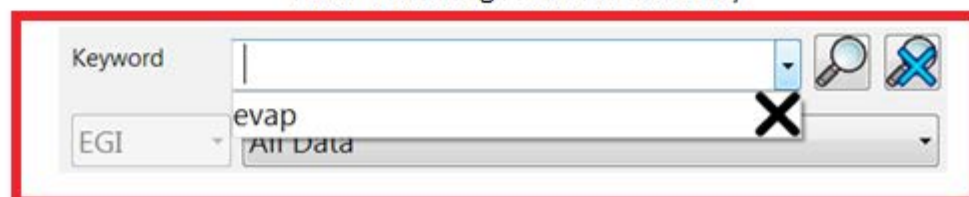
> ### Additional Models
>
> **Legacy/Outback 15MY**
> **WRX/STI 15MY**
> **Impreza 12MY - 15MY**
> **Crosstrek 13MY - 15MY**
> **Forester 14MY - 15MY**
> **BRZ 13MY - 15MY**

15 BLUETOOTH OPERATION AND DIAGNOSIS

The Techline has been experiencing high call volume on Bluetooth concerns. Some of the concerns can be handled by following a basic diagnostic approach. If additional diagnostics are needed after following this approach, the Bluetooth pre-call worksheet should always be filled out and available at the time of the call to the Techline. This form is found on Subarunet in the Service/Forms area.

In the event you receive a Bluetooth concern from a customer, always ask them (whenever reasonably possible) to demonstrate the condition using their phone. If it is a phone-related concern, you may have difficulty duplicating it with another phone. Phone-related concerns should be addressed by referring the customer to their cellular provider for assistance.

The basic diagnostic approach should be:

1. **Verify the customers concern.**
2. **Check the phone for compatibility. (Subaru.com- For owners- Bluetooth compatibility)**
   If not compatible, advise the customer of this and verify operation with a compatible phone and display if necessary.
3. **Pair another compatible phone.**
   Is the concern still present? (If not, this is likely a phone-related concern)

In the event the concern is still present, here is some information you should be aware of:

Bluetooth is a wireless technology built for exchanging data over short distances, in this case between the phone and the audio unit. In the event you have a pairing concern, pairing another phone to diagnose which side the Bluetooth failure is on is the recommended approach. If you have a cellular concern (dropped calls), always remember the audio unit has no cellular connection and the phone is responsible for holding the call. While verifying the concern, when the call drops, see if the call is

still live on the phone. If so, this could be an concern with the connection between the phone and the audio unit. Pair another phone and see if it has the same concern. If so, the concern is more likely with the audio unit however, other factors may apply. If the call has been dropped from the phone, this is a phone/cellular concern. For this case, advise the customer to contact their cellular provider for assistance. Please note, the displayed bars of cellular connection only indicate the available network strength and not reflective of the actual voice or data volume that network is carrying. Just because you have 5 bars doesn't mean you can't have a call drop occasionally or a slow data connection. Another point to keep in mind is if the phone has experienced a recent operating system update (os or ios), the phone may need to be restarted to correct for the pairing condition. Most users leave their phones on 24/7. While not required in every case, many times just turning the phone OFF and then ON again may resolve a spotty Bluetooth pairing concern. In some cases after system update, the customer may also need to delete the phone from the head unit and pair the phone to it again in addition to restarting the phone to resolve the intermittent or dropping pairing condition.

If you have a voice command concern, remember if the customer has chosen the option to download their phonebook, this will happen every key cycle. While this is happening, the voice commands may not be available until the download process completes. The time needed to download contacts will be much longer. Thousands of contacts can require several minutes (not seconds) to download.

There have been a limited number of reports received from Technicians about customers experiencing fluctuations in volume level while listening to some audiobook CDs in Gen 2 Clarion audio unit equipped vehicles. After investigation, and confirmation from Clarion, it appears this condition may be corrected by disabling the Volume Smoother function in the audio unit settings. Figure 1 is from the Owner's Manual of a 2015 Impreza equipped with the SUBARU STARLINK Multimedia Gen 2 Clarion audio unit and shows each available audio setting for the unit.

[Figure 1]

Setting ranges

Item	Step	Default
Audio volume	0-40	15
Balance	L9-R9	0 (Center)
Fader	F9-R9	0 (Center)
Vocal Image Control	Left/Right: R9-L9 Front/Rear: R9-F9	Left/Right: R3 Front/Rear: 0 (Center)
Speed Volume Control	OFF, Low, High	Low
Graphic Equalizer, SET1-3	−6-+6	0 (Flat)
Sound Restorer	ON, OFF	ON
Volume Smoother	OFF, Low, Mid, High	Mid
Virtual Bass	OFF, Low, Mid, High	Mid

Figure 2 gives a description of the Volume Smoother function, which can also be located in the Owner's Manual. This function will automatically adjust the volume between different audio sources, and can cause the volume fluctuation while listening to some audiobooks in these particular Gen 2 Clarion units.

[Figure 2]

Sound Restorer	Select to add high-pitched tone to the compressed audio file.
Volume Smoother	Select to adjust volume difference between audio sources.
Virtual Bass	Select to add harmonic tone so that low-pitched tone is strengthened.

Start by confirming the condition on the vehicle. Once confirmed, identify if it is equipped with the Gen 2 Clarion audio unit (see audio exchange bulletin 15-172-14R). If the customer authorizes the procedure, following the steps outlined below will disable the Volume Smoother feature. After completing this process, confirm the customer's complaint is resolved. It's highly recommended that others at the retailer review how to change this setting with the customer as part of delivery so this feature may be activated again should the customer want to select this option in the future.

Disabling the Volume Smoother

Step 1: Press the Settings button

① Press "Setting"

② Press "Sound"
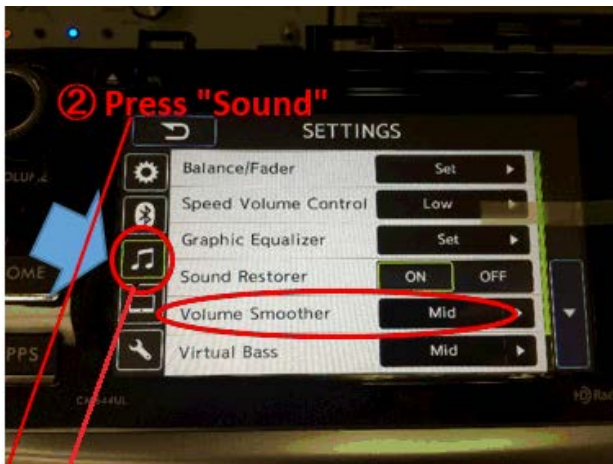
Step 2 of this process requires you to press the sound icon once you've accessed the settings menu.

Step 3: Press "Volume Smoother" to open the available settings
Step 4: Press "OFF" to disable the Volume Smoother
Step 5: Once selected, confirm the Volume Smoother is turned to "OFF"

④ Press "OFF"

⑤ Confirm "Volume Smoother OFF"

③ Press "Volume Smoother"
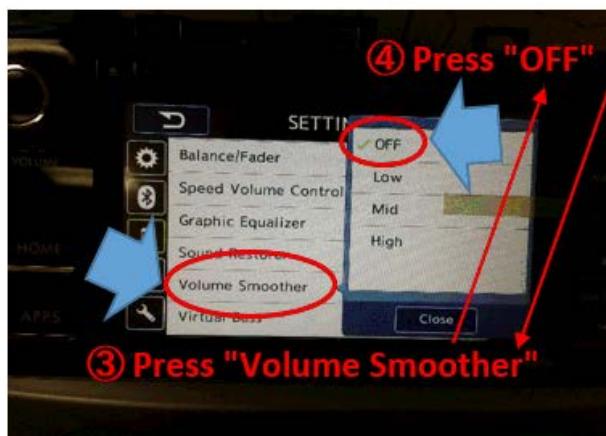
The chart below will come in handy for determining vehicle applicability of the Navigation / Display Audio head unit types used on 2012 to 2016MY vehicles.

Model/MY	2012	2013	2014	2015	2016
Crosstrek	-	Gen 1	Gen 1	Gen 2	Gen 2.1
Impreza	Gen 1	Gen 1	Gen 1	Gen 2	Gen 2.1
Legacy	Gen 1	Gen 1	Gen 1	Gen 2	Gen 2.1
Outback	Gen 1	Gen 1	Gen 1	Gen 2	Gen 2.1
Forester	Gen 1	Gen 1	Gen 1	Gen 1	Gen 2
WRX/STI	Gen 1	Gen 1	Gen 1	Gen 1	Gen 2
BRZ	Gen 1	Gen 1	Gen 1	Gen 1	Gen 2 (Clarion, non-navigation)

This chart shows (after pairing the phone), how the various downloadable services and applications must be accessed (connected) for use through the applicable Navigation / Display Audio head unit.

|	SERVICE	Clarion (Base)		FTEN (Mid/High)	
		iOS	*Android*	*iOS*	*Android*
Gen 2/2.1	**STARLINK Infotainment Apps**	USB Only	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)
	Aha	USB Only	BT (can keep USB connected to charge phone)	USB Only	BT (can keep USB connected to charge phone)
	Pandora	USB Only	BT (can keep USB connected to charge phone)	USB Only	BT (can keep USB connected to charge phone)
	Hands-Free Phone	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)
	Music Streaming	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)	BT (can keep USB connected to charge phone)
	MirrorLink	N/A	N/A	N/A	USB Only

NOTES:

- "Base" trim level vehicles are equipped with Clarion display audio head units.
- "Mid" and "High" trim level vehicles are equipped with Fujitsu TEN (F10) display audio and Navigation system head units.
- "BT" is an acronym for Bluetooth® connectivity.

Use this handy chart when determining proper automatic transmission fluid applicability.

	Engine	2010MY	2011MY	2012MY	2013MY	2014MY	2015MY	2016MY
Legacy / Outback	2.5 NA	TR690			TR580			
		CVTF II						
	3.6 NA	5AT					TR690HT	
		ATF HP					High Torque CVTF	
Tribeca	3.6 NA	5AT						
		ATF HP						
IMPREZA XV Crosstrek	2.0 / 2.5 NA	4AT		TR580				
		ATF HP		CVTF II				
XV Crosstrek Hybrid (HEV)	2.0 NA					TH58A		
						CVTF II		
WRX	2.5 Turbo / 2.0 DI Turbo	4AT					TR690HT	
		ATF HP					High Torque CVTF	
Forester	2.5 NA	4AT				TR580		
		ATF HP				CVTF II		
	2.5 Turbo / 2.0 DI Turbo	4AT				TR690HT		
		ATF HP				High Torque CVTF		
BRZ	2.0 DI				6AT			
					Type WS			

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
15-195-16	Technical Service Bulletin	Servicing and Claim Submission Requirements for STARLINK Diagnosis and Repair Involving the Data Communication Module	29-Apr-16
02-157-14R	Technical Service Bulletin	Engine Oil Consumption	29-Apr-16
TSMSFJ2	Troubleshooting Guide	Remote Engine Start Systems Troubleshooting Guide (2014-16MY Impreza / Crosstrek Vehicles)	28-Apr-16
WTB-63	Subaru Product / Campaign Bulletin	Service Campaign Electronic Parking Brake Reprogramming	27-Apr-16
LEG_OBK_RES_TSG	Troubleshooting Guide	2015-16MY Legacy and Outback Remote Engine Start Systems Troubleshooting Guide	26-Apr-16
02-157-14R	Technical Service Bulletin	Engine Oil Consumption	25-Apr-16
15-196-16	Technical Service Bulletin	Data Communication Module (DCM) Procedures for Provisioning Failure, Inspection / Repair	25-Apr-16
15-197-16	Technical Service Bulletin	"Check SD Memory Card Message" on Clarion "Gen 2" Display Audio (Without Navigation) Head Units	25-Apr-16
11-162-16R	Technical Service Bulletin	Reprogramming File Availability for Extended Engine Cranking and Engine Oil Level Detection Improvement	21-Apr-16
11-145-14R	Technical Service Bulletin	Reprogramming File Availability for Oil Level Detection	21-Apr-16
10-84-16	Technical Service Bulletin	New A/C Compressor / Clutch Assembly	21-Apr-16
07-108-16	Technical Service Bulletin	Diagnostic TIPS for ODS DTC B1760	21-Apr-16
16-100-16	Technical Service Bulletin	Transmission Control Module (TCM) Reprogramming File Availability for Inconsistent Engine Braking Feel	15-Apr-16
11-163-16	Technical Service Bulletin	Reduced Engine Performance at High Ambient Temperatures	15-Apr-16
WQW-58R	Subaru Product / Campaign Bulletin	Engine Control Module (ECM) Reprogramming	15-Apr-16
12-182-15R	Technical Service Bulletin	New Front Door Checker Mechanism	15-Apr-16

All revised publications are highlighted in yellow.

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
MSA5P2205C	Technician Reference Booklet	Transmission Theory and Diagnosis (March 2016)	14-Apr-16
MSA5P2607C	Technician Reference Booklet	Subaru Select Monitor Diagnostic Systems (March 2016)	14-Apr-16
05-61-16	Technical Service Bulletin	"Popping" Sound from Front Strut Mounts on Low Speed Turns	14-Apr-16
R_J2534	Other / Miscellaneous	Reprogramming J-2534 Files Chart	13-Apr-16
02-157-14R	Technical Service Bulletin	Engine Oil Consumption	13-Apr-16
WQR-53R	Subaru Product / Campaign Bulletin	Takata Front Passenger Air Bag Inflator Replacement	12-Apr-16
01-168-09R	Technical Service Bulletin	Replacement Key and Immobilizer Information for Authorized Subaru Dealers	12-Apr-16
EXP-1000S	Other / Miscellaneous	EXP-1000S Battery Charging and Electrical System Analyzer User Manual	7-Apr-16
11-162-16	Technical Service Bulletin	Reprogramming File Availability for Extended Engine Cranking and Engine Oil Level Detection Improvement	5-Apr-16
11-155-15R	Technical Service Bulletin	Reprogramming File Availability for Extended Engine Cranking and Engine Oil Level Detection Improvement	5-Apr-16
15-194-16R	Technical Service Bulletin	Fujitsu 10/ FTEN/ F10 Navigation Voice Guidance Instructions Getting Cut Off	4-Apr-16
WTA-62	Subaru Product / Campaign Bulletin	Turbocharger Air Intake Duct	4-Apr-16
J121SVA100	Accessory Installation Guide	Carbon Fiber Trunk Trim	1-Apr-16
15-177-14R	Technical Service Bulletin	Gen 2 & Gen 2.1 Operating Tips	1-Apr-16
L101SAL013	Accessory Installation Guide	Trailer Hitch	1-Apr-16
TIPS0316	TechTIPS NewsLetter	2016 March TechTIPS Newsletter	31-Mar-16

This is your chance to offer suggestions for use in future issues of TechTIPS! Make sure that if you e-mail us, you place in the subject line of your e-mail "For TechTIPS Newsletter". Thank you!

MODEL: _____

YEAR: _____

VIN: _____

Description of situation encountered: _____

_____

_____

_____

Your suggestion for repair procedure, product improvements, etc.: _____

_____

_____

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Please attach separate sheets, if necessary. You may also want to include Service Manual diagrams or references, or your own drawings to assist in describing your suggestion. All information submitted becomes the property of Subaru of America, Inc. Permission is granted to Subaru of America, Inc. to print your name and suggestions in TechTIPS and other Subaru of America, Inc. publications. Mail items to: PO Box 6000, Cherry Hill, NJ 08034-6000.

Your Name: _____

Signature: _____

Dealer's Name: _____

City: _____

Date: _____

Dealer Code: _____

SUBARU TECHLINE
Hours of Operation

Monday – Thursday 8:30 am to 7:30 pm
Friday 10:30 am to 5 pm and Saturday 9 am to 3 pm