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SUBARU TECHLINE HOLIDAYS & HOURS OF OPERATION

Thanksgiving: (Closed)

Thursday, November 28, 2019

Day After Thanksgiving (10:30am-3:30pm)

Friday, November 29, 2019

Mon. - Thurs.	8:30AM - 7:30PM EST
Friday	10:30AM - 5:00PM EST
Saturday	9:00AM - 3:00PM EST

01 QMR OF THE MONTH

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

Steven Zielinski from
Faulkner Subaru in Harrisburg, PA.

Steven's winning QMR involved a 2019 Outback 3.6R with a recurring, intermittent no start and low (or dead) battery concern. After a review of the vehicle's prior repair history, he began his diagnosis by connecting the Midtronics battery charger / tester to rule out a faulty battery. Both the battery and charging system were inspected and determined to be fine. Steven then began investigating for an excessive voltage (dark current) draw. His initial results showed a low .03mA current draw, well within specifications supplied in TSB 07-85-14. The vehicle then sat for 4 days and during that period, he continued to monitor the draw at various times with no significant change. Another inspection the following morning revealed the battery was dead. Steven re-charged the battery and checked the current draw again which still measured an acceptable .03 mA. Next, he removed the audio fuse and allowed the vehicle to sit overnight. The battery was fine the next morning so, he reinstalled audio fuse and performed additional circuit testing with no problem found. The following morning, the battery was not completely dead but, only had approximately 4 volts, nowhere near enough to start the car. Steven charged battery yet again, let the vehicle run for about 2 hours then shut vehicle off and re-connected his test equipment. This time, a significant 3 amp current draw was identified. He then began performing voltage drop tests across the fuses in the under-hood Main fuse box (M/B). After performing extensive testing, Steven was able to determine the BIU was intermittently "waking up" and powering a handful of circuits which combined to create the 3.0A draw he had verified earlier. He replaced Body Integrated Unit (BIU) and test drove the vehicle multiple times. His confirmation testing over the following week never produced a current draw of more than the original .03mA identified previously. Steven's report outlined all the tests performed and contained detailed results for each.

In appreciation for going the extra mile and sharing his experience with us, Steven will receive the following from his Field Service Engineer:

A \$500.00 Snap-On gift card.

CONTINUED ON THE NEXT PAGE

CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

The Subaru TechTIPS newsletter is intended for use by professional Technicians ONLY. Articles are written to inform those Technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained Technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that your vehicle has or will have that condition. Impreza, Legacy, Justy, Loyale, Outback, Forester, Subaru SVX, WRX, WRX STI, Baja, Tribeca, BRZ, XV Crosstrek, Ascent, Crosstrek Hybrid and "Quality Driven" are Registered Trademarks.

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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.



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01 QMR OF THE MONTH (CONTINUED)

The other Regional winners selected from QMRs submitted during April 2019 were:

- **David Derks** from **Groove Subaru** in Englewood, CO
- **Craig DeMeo** from **Granite Subaru** in Hudson, NH
- **David Nichols** from **Morrie's Minnetonka Subaru** in Minnetonka, MN
- **Tom Mazgaj** from **West Herr Subaru** in Orchard Park, NY

Any Subaru Technician can participate in the QMR of the Month program. See the February 2013 and January 2016 issues of Tech TIPS for full details. You just might see your name and photo in a future issue of Tech TIPS!

01 QMR OF THE MONTH AWARD PRESENTATIONS

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 July 2019 was Steven Zielinski, a Technician from Faulkner Subaru in Harrisburg, PA.

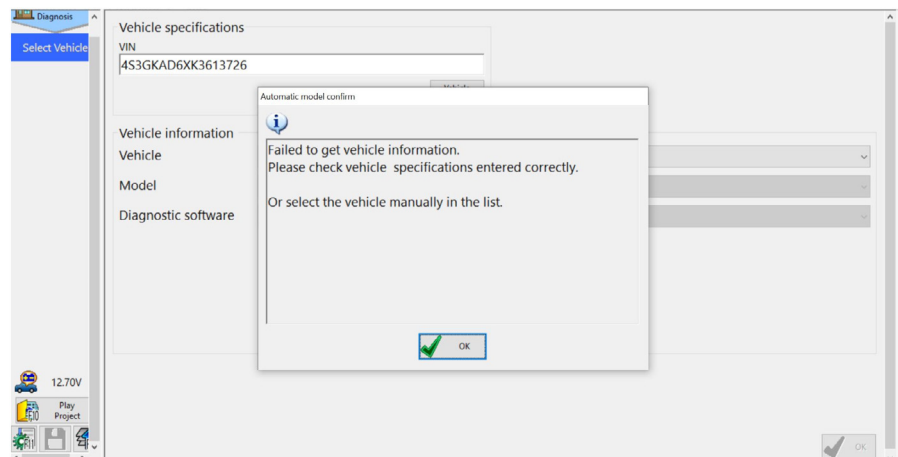
Shown, left to right: Subaru of America District Parts and Sales Manager Dan Cassidy, Faulkner Subaru Service Manager Joie Bollman, Technician Steven Zielinski, Faulkner Subaru General Sales Manager Chris Carvell and Subaru of America Field Service Engineer, Glenn Skjoldal.



Congratulations and **THANK YOU** to our July 2019 QMR of the Month Award recipient!

01 SUBARU SELECT MONITOR (SM4) UNRESPONSIVE WHEN CONNECTING TO SOME 2020MY VEHICLES

When connecting the SSM to some 2020MY vehicles, the system appears unresponsive (does not automatically “identify” the vehicle / VIN) and displays the screen as shown below. The Vehicle information must be selected manually to initialize SSM communication. This condition will be addressed in the January 2020 SSM Software Update release.



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TECH TIPS GREATEST TIPS

This series features TechTIPS articles frequently referred to by Techline. This month's feature is for HomeLink Mirror Programming Information from January 2014

15 HOMELINK MIRROR PROGRAMMING INFORMATION

Should you receive a customer concern of not being able to program their HomeLink mirror, the cause may be software incompatibility between the mirror and the garage door opener. If the customer has recently added or replaced their opener, it may not be receiving a "usable" activation signal from the HomeLink mirror. When the opener utilizes HomeLink Version 4 software (common in openers produced after 2011) and the HomeLink mirror utilizes HomeLink Version 3, a "signal repeater" device is often required to complete the programming process. The HomeLink mirror part numbers listed below all operate with HomeLink Version 4 and do not require a repeater.

- H501SFJ101 (applicable to 2012-14 Impreza, 2013-14 XV Crosstrek, 2013-14 Outback & Legacy)
- H501SAJ100 (2010-12 Outback & Legacy)
- H501SSG100 (applicable to 2014-15 Forester)
- H501SCA101 (applicable to 2013-14 BRZ*)

**BRZ HomeLink mirrors requires an adaptor.*

If your customer has one of the openers listed in the HomeLink website information provided below, they may need to purchase a repeater. They are available directly from HomeLink through their website: <https://secure.homelink.com/homelink-repeater-kit-detail> and have a price of \$27.95 each plus shipping. For more information and Tech Support on HomeLink products, go to: www.homelink.com or call: 1-800-355-3515.



Homelink Repeater

HomeLink Repeater Kit

The HomeLink Repeater Kit is designed to allow compatibility between a new Chamberlain, Sears Craftsman, or LiftMaster garage door opener fitted with a yellow antenna wire and the HomeLink system in your vehicle.

The HomeLink Repeater Kit is designed to allow compatibility between a new Chamberlain, Sears Craftsman, or LiftMaster garage door opener fitted with a yellow antenna wire and the HomeLink system in your vehicle. These garage door openers were manufactured in 2011 or later. If your opener does not have a yellow antenna wire or is not one of the brands listed above, please consider purchasing a Universal Receiver to ensure compatibility.

Sales price: \$27.95

As some Retailers continue to find out, swapping electronic components between vehicles is never a good idea.

For example: **NEVER** swap audio head units between vehicles because there is adequate supply of replacement and exchange units available to repair them. Breaking the head unit serial number – VIN association will exclude that particular vehicle from future head unit FOTA updates.



For years, the instruction has been to **NOT** swap DCMs between vehicles. Unfortunately, this continues to happen during audio head unit swaps with hasty disregard for the Telematics control module bolted to the same mounting bracket. Swapping the DCM often leads to DCM replacement in order to repair the Telematics concerns created by the swap. When customer subscriptions are involved, repairs may even require DCM replacement in **both** the donor and recipient vehicles.

The ECM should **NEVER** be swapped because it carries the VIN with it. Swapping an ECM into another vehicle will cause the DCM to pull the VIN from the donor ECM. Even though this is the ECM moving, the DCM thinks it has been swapped. Just as in a real DCM swap, the DCM in a vehicle with a swapped ECM may also require replacement as a result.

To summarize, there are no shortcuts in today's world of Automotive Technology. Electrical systems become more dependent upon each other every year and any interruption or change in their operation can ripple through the entire vehicle affecting multiple systems. When there is a question about a trouble tree, diagnostic procedure or replacement procedure, don't guess. Use all your available resources for additional information and guidance. Consult STIS first and foremost, your FSE and the SOA Techline as they are all here to help you.

During ongoing review of Techline cases, there have been several inquiries regarding the PDI comm check, Error Code 202, and Error Code 204.

- Error Code 202 essentially means the comm check signal failed to send from the DCM. It could be a network issue or hardware problem but, the most common root cause is the comm check has never been completed.
- Error Code 204 occurs when the provisioning message which is returned to the DCM and writes the VIN has not been returned. This could be a network issue or hardware problem but most often, it is a technical issue with one of the databases which can only be resolved by opening a TechLine case.

Error 202 and 204 are the subject of **TSB 15-219-18R**. This bulletin is an excellent resource for Technicians to use when addressing these concerns. Taking the time to review this document thoroughly and having the answers to the questions the bulletin asks **before** contacting Techline about either error code is paramount to finding a quick resolution of the concern. These cases are often involve time-sensitive situations which can impact both the sales delivery experience and customer satisfaction.

An easy way to verify the comm check has been completed on any vehicle is to push the SOS button. There can only be one of the following two results.

1. Pushing the SOS button and hearing the recorded message: “Not currently subscribed to STARLINK. Please visit mySubaru.com to upgrade your service”. This indicates the comm check was completed successfully.
2. Pushing the SOS button and nothing happens: this indicates there has not been a comm check performed on the vehicle. Perform the comm check following the procedure below.

Comm Check Procedure:

Press and hold the blue i-Call (i-button) switch for 2 seconds or more.

This will identify both the VIN (via the ECM) and the DCM ID then transmit them to the SOA network via the AT&T 4G LTE network. When received, subscription information will be associated with the VIN and verified on the Subaru of America, Inc. (SOA) servers.



REMEMBER:

- Error Code 202 is often fixed with a comm check. The vast majority of these cases can easily be resolved locally without any Techline or external support.

TIP: Get in the habit of using the SOS button to verify every new vehicle is comm checked before delivery.

- Error Code 204 requires a Techline case to get the help required to resolve the concern. None of these cases have been solved without external support.

The Techline has received some reports recently about DTC B2A16 on STARLINK Gen2 Telematics equipped vehicles (2019-20 Ascent, 2019-20 Impreza, 2019-20 Crosstrek / Crosstrek Hybrid, 2019-20 Forester, and 2020 Legacy/ Outback).

Almost all cases describe the following situation:

- When attempting to use the Remote Engine Start (RES) feature via Telematics (STARLINK / My Subaru), the request is unsuccessful and the red Telematics lamp illuminates. All other Telematics remote functions work normally.
- Customer brings their car to the Retailer and the Technician finds DTC B2A16 to be the only code stored in the DCM.
- When the Technician attempts to repair the DTC according to the Service Manual Trouble Tree for B2A16, the DCM ends up being replaced.

Actually, nearly all of these cases can be fixed without DCM replacement. SBR is working now to revise the troubleshooting tree information to reflect this.

If DTC B2A16 code is found in the DCM, start by registering the DCM with the vehicle Immobilizer to avoid unnecessary DCM replacement. Follow the instructions found in the applicable Immobilizer manual. See basic SSM screenshots for reference.

Once registered, confirm the RES function of the Telematics system operates. The customer will need to help with this as it requires them to enter their PIN through either the MySubaru web page or the mobile MySubaru App.

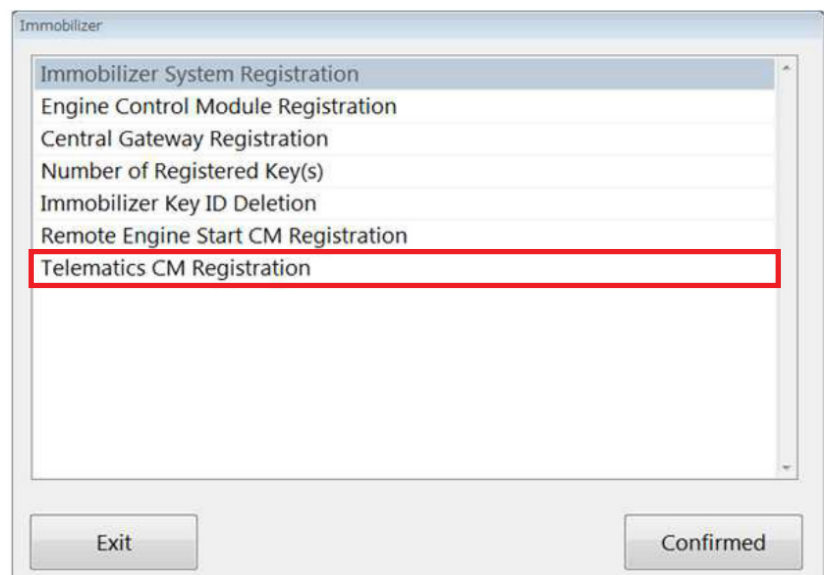
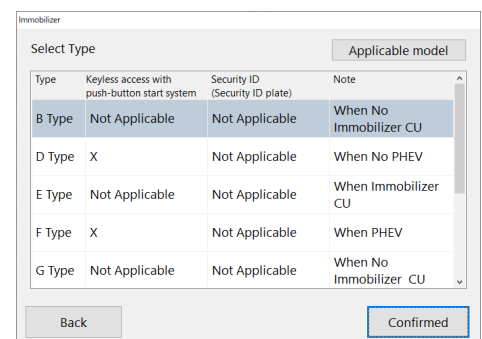
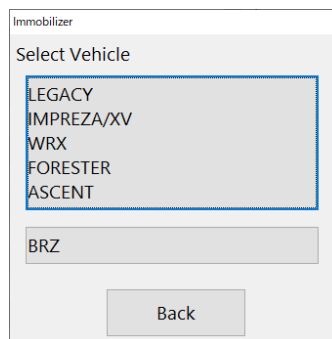
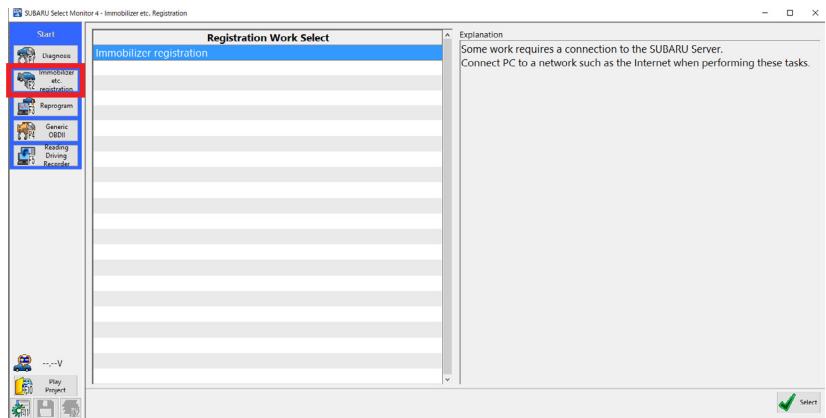
If this resolves the condition and the STARLINK Telematics RES feature now works, clear the DTC and release the vehicle.

NOTE: When selecting G, H, or I type, the latest SSM4 software (July 2019 version or later) is required along with a secure network connection. Please refer to **TSB:15-246-19** for details.

Finally, keep in mind following point.

Any time the KACM (keyless access module) or DCM is replaced on a STARLINK Gen2 Telematics - equipped vehicle, the DCM must be registered with the vehicle Immobilizer system.

Please refer to the applicable Immobilizer Manual for the Model Year vehicle being repaired. These can be found on STIS by searching Online Publications, selecting Publication Type: Other/Miscellaneous, and searching for keyword "Immobilizer"



16 2020MY LEGACY AND OUTBACK NEW CVT FLUID

With the launch of the 2020MY Legacy and Outback just around the corner, we want to make sure every Technician is ready to service the new vehicles. The 2.5L naturally aspirated Outback and Legacy are equipped with a new CVT that uses a new transmission fluid. This new fluid (CVTF-III) comes in a white five-gallon pail with an orange lid to help distinguish it from all other CVT fluid packaging. The color of the new fluid is blue/opaque. This fluid is only applicable to the 2020 Outback and Legacy naturally aspirated (non-turbo) vehicles. No other CVT fluids or other transmission fluids can be used in its place.



18 ASCENT SUNSHADE REINITIALIZATION PROCEDURE CLARIFICATION

Confusion has arisen regarding the reinitialization procedure for the shade control module. **Step 2** states “Push and hold the sunroof switch (shade) ON until the shade assembly stops moving.” When referring to the “ON” position, this means “OPEN.” The sunshade should be moved to the FULLY OPEN position, rather than only until it stops. The Service Manual is pending clarification.

18 C1532 TROUBLE TREE CORRECTION

When diagnosing C1532, **Step 3** may instruct per the image below:

3. CHECK STOP LIGHT SWITCH HARNESS.

1. Disconnect the connector from the VDCCM&H/U.
2. Measure the resistance between VDCCM&H/U connector and chassis ground.

Connector & terminal
(B310) No. 30 — Chassis ground:

Is the resistance less than 1 MΩ?

[Go to 4.](#)

Repair the stop light switch circuit.

(The stop light switch connector was already disconnected in **Step 2**.)

The two answers to the question “**Is the reistance less than 1 M Ω?**” are backwards. The Service Manual should read, “**Yes – Repair the stop light switch circuit.**” and “**No – Go to 4**”. The incorrect step results have been confirmed on STIS for 2017 Crosstrek, 2017 Impreza, and 2017 Forester. At this stage, it is unclear how many model years are affected.

NOTE: If the vehicle has had the WUE-90 campaign for the Brake Lamp Switch Replacement completed, it is necessary to unplug the brake light switch adapter harness to complete this step of the trouble tree.

CONTINUED ON THE NEXT PAGE

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
H630SAN000	Accessory Installation Guide	2020 Legacy/Outback Rockford Fr..	24-Sep-19
H630SAN000	Accessory Installation Guide	2020 Legacy/Outback Rockford En..	24-Sep-19
WUL-97R	Subaru Product/Campaign Bulletin	Brake Pedal Bracket Mounting B...	Sep 23, 2019
MSA5B2002A	Owner Manual	2020MY Forester Quick Guide	Sep 20, 2019
MSA5M2023A	Owner Manual	2020MY Forester SUBARU STARL...	Sep 20, 2019
MSA5M2013A	Owner Manual	2020MY Forester Eyesight Owner...	Sep 20, 2019
MSA5M2002A	Owner Manual	2020MY Forester Owner's Manual	Sep 20, 2019
U8270BE	Service Manual	2020MY Forester New Car Inform...	Sep 20, 2019
	2020 Forester Service Manual V...	Sep 20, 2019	
02-131-12R	Technical Service Bulletin	Oil Seepage Diagnosis and Repa...	Sep 20, 2019
02-136-12R	Technical Service Bulletin	Oil Seepage Diagnosis and Repa...	Sep 20, 2019
15-248-19	Technical Service Bulletin	Required Supplemental Procedur...	Sep 18, 2019
15-249-19	Technical Service Bulletin	2020 Audio/Navigation & Power ...	Sep 18, 2019
H461SXC101	Accessory Installation Guide	IMPREZA/CROSSTREK INTERI...	Sep 17, 2019
H461SXC101	Accessory Installation Guide	FORESTER INTERIOR FOOTWE...	Sep 17, 2019
15-246-19R	Technical Service Bulletin	New Immobilizer Registration P...	Sep 17, 2019
06-71-19	Technical Service Bulletin	Electric Parking Brake Assembl...	Sep 16, 2019
H001SAN100	Accessory Installation Guide	2020 Legacy / Outback Remote E...	Sep 16, 2019
H001SAN000	Accessory Installation Guide	2020 Legacy / Outback Remote E...	Sep 16, 2019
H621SAN000	Accessory Installation Guide	2020MY Legacy/Outback CD Play...	Sep 12, 2019
S1108BE	Other/Miscellaneous	2020MY Registration Manual For...	12-Sep-19
15-240-19R	Technical Service Bulletin	New Harman Audio Amplifiers	11-Sep-19
MSA5M1928A	Owner Manual	2019MY S209 Owner's Manual...	10-Sep-19
01-168-09R	Technical Service Bulletin	Replacement Key and Immobilize...	9-Sep-19
01-179-19	Technical Service Bulletin	Headlight Leveler System Infor...	9-Sep-19
E721SAN000	Accessory Installation Guide	2020 Legacy Trunk Spoiler	6-Sep-19
MSA5M2017A	Owner Manual	2020MY SUBARU STARLINK...	6-Sep-19
MSA5M2022A	Owner Manual	2020MY SUBARU STARLINK...	6-Sep-19
	Service Diagnostics	2020 WRX/STI Service Manual V0	5-Sep-19
G1740BE	Service Manual	2020 WRX/STI Service Manual	5-Sep-19
U1740BE	Service Manual	2020 WRX/STI New Car Informati...	5-Sep-19
MSA5B2005A	Owner Manual	2020 WRX/STI Quick Guide	5-Sep-19
MSA5M2015A	Owner Manual	2020 WRX EyeSight Owner's...	5-Sep-19
MSA5M2010A	Owner Manual	2020 WRX/STI SUBARU STARL...	5-Sep-19
MSA5M2005A	Owner Manual	2020 WRX/STI Owner's Manual	5-Sep-19
01-167-08R	Technical Service Bulletin	Recommended Materials (All Veh...	4-Sep-19

All revised publications are highlighted in yellow.

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
TIPS0919-SE	TechTIPS NewsLetter	2020MY Legacy/Outback QMT...	4-Sep-19
16-103-16R	Technical Service Bulletin	Transmission Fluid Seepage	3-Sep-19
15-245-19R	Technical Service Bulletin	FOTA (Firmware Over-The-Air) R...	3-Sep-19
12-271-19	Technical Service Bulletin	Rear Bumper Face Side Mounting...	29-Aug-19
10-94-19	Technical Service Bulletin	Front Seat Ventilation Blower ...	29-Aug-19
4-25-19	Technical Service Bulletin	Torque Steer Diagnostics and R...	28-Aug-19
WTV-81R	Subaru Product/Campaign Bulletin	Electronic Parking Brake (EPB)...	26-Aug-19
07-157-19	Technical Service Bulletin	ECM Reprogramming for Inaccura...	26-Aug-19
16-124-19	Technical Service Bulletin	Torque Converter Assembly- Des...	26-Aug-19
15-234-18R	Technical Service Bulletin	2019 Audio/Navigation & Power ...	23-Aug-19
15-214-17R	Technical Service Bulletin	2018 Audio/Navigation Exchange...	23-Aug-19
15-190-15R	Technical Service Bulletin	2016 Audio/Navigation Exchange...	23-Aug-19
15-172-14R	Technical Service Bulletin	2015 Exchange Component Identi...	23-Aug-19
15-204-16R	Technical Service Bulletin	2017 Audio/Navigation Exchange...	23-Aug-19

All revised publications are highlighted in yellow.

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.: _____

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 9103; Camden, NJ 08101-9877.

Your Name: _____

Signature: _____

Dealer's Name: _____

City: _____

Date: _____

Dealer Code: _____