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2017 SUBARU IMPREZA

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SUBARU TECHLINE HOLIDAY HOURS OF OPERATION

Holiday Break (CLOSED)

Friday, December 23, 2016
 Saturday December 24, 2016
 Monday, December 26, 2016

New Years (CLOSED)

Saturday December 31, 2016
 Monday, January 2, 2017

01 QMR OF THE MONTH

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

Adam Kosela from **Subaru of Hilton Head in Hardeeville, SC**

Adam submitted a very detailed QMR on his diagnosis and repair of a 2016 Outback with 14,589 miles. The customer reported the rearview/back-up camera was intermittently not working. It was noted the condition was difficult to duplicate. Adam requested more details on conditions when this was occurring and the customer indicated it was generally after the car had been parked for some time. Based upon the complaint, Adam started his diagnosis by attempting to confirm the condition. While initially the camera display functioned perfectly, he found that by opening and closing the door with the ignition off, the condition would later duplicate. Adam referenced the wiring diagrams for the rearview camera system and back-up light system to look for any connection points that could be influenced by the door movement. He found a connection at the body integrated unit (BIU) which on this car, is located in the left lower dash. Adam then duplicated the condition and determined tapping the BIU would cause the display to function again. Accessing the connector and reviewing the wiring diagram, he determined the back-up lighting and rearview camera shared a brown wire with yellow tracer at pin 15 of B158. An inspection of this wire and connection found the female pin was damaged and making poor contact. Using a suitable replacement pin from the Subaru Global Terminal Wiring Kit (J-47606), Adam replaced the damaged pin and confirmed the concern was corrected. Adam supplied many clear photos outlining the location of the concern and the conditions found during his inspection. These details made it very clear how he arrived at the final result and provided useful feedback for us.

In appreciation for going the extra mile and sharing his experience with us, Adam will be receiving the following from his Field Service Engineer (FSE):

A Snap On ATECH2FR100B Electronic Torque Wrench plus credits to be used for additional award items of his choice.

Any Subaru Service Technician can participate in QMR of the Month. See the February, 2013 and January 2016 TechTIPS for full details.

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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, L.L. Bean, Baja, Tribeca, BRZ, XV Crosstrek and "Quality Driven" are Registered Trademarks.

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.



QUALITY DRIVEN® SERVICE



01 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 October, was Adam Kosela, a newly-certified Subaru Senior Master Technician at Subaru of Hilton Head in Hardeeville, SC. Adam is shown above receiving his award and is joined by: (l to r), Alice Cliff, Service Manager, Subaru Senior Master Technician Adam Kosela and Jeff Sharkey, FSE, SOA.

Congratulations and **THANK YOU** to October’s QMR of the Month Award recipient!



01 SUBARU UNIVERSITY

Subaru-U is committed not only to the development of future Technicians, but also educating existing Service personnel on how Automotive Education works and how to give back to local programs. The Subaru-U Program is a true partnership and it cannot work unless all parties strive to make it work.



Over the next few months, a series of short articles will be released to help inform you, our retailers, about the education side of Subaru-U and what you can do to make the program a success and get the most out of it.

The Role of the Apprentice

The automotive industry has reached a tipping point. It is a known fact the number of Technicians entering the field is dramatically less than the number retiring or leaving for other reasons. Because of this, the way retailers approach the task of recruiting and training new Technicians entering the field needs to be different than how things were done in the past. The mindset of Millennials is markedly different than other generations before. If retailers attempt to train them in the old “Tried and True” method, many of the apprentices may give up before finding their true potential. There have been several times I have heard Service Managers say “I started at the shop by pushing a broom.”

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Most Technicians who have been in the business for any period of time can probably relate to that statement. However, in this day and age; 1. Pushing a broom is not really an efficient use of someone's time if they are there to learn maintenance and 2. With the shortage of Technicians in the force even their limited abilities can be put to effective use. Below are some tips on how to get the most out of any apprentices you have in your facility.

DON'T - Oil Change an Apprentice to Death When young Technicians get into the shop, they are excited to start experiencing the "fun" stuff. Engine swaps, suspension work and electrical troubleshooting is what they signed up for. But most entry level Technicians usually wind up in the express service lanes for the majority of the time. This is not to say an apprentice shouldn't do their time here. Operating in the minor service area helps them learn procedure and attention to detail that will help them perfect their quality of work throughout their career. Rotate them around on a regular basis in order to prevent complacency and allow them to be challenged in more technical areas. This will keep them engaged while Management gets a better feel for the strengths and weaknesses of the apprentice.

DO - Play to Your Regular Technicians Strengths In a previous article, it was put forth that effective mentoring can come from more than one person in the shop. By using several regulars to train your apprentices, you can be sure the most qualified mentor is helping the apprentice understand that particular system. Take an inventory of your current Technicians and determine who is the best of each of the 6 major vehicle areas (1-Engine 2-Manual Transmission 3-Automatic Transmission 4-Fuel and Emission 5-Underbody 6-Electrical) then train, those Technicians to be effective mentors for your apprentices.

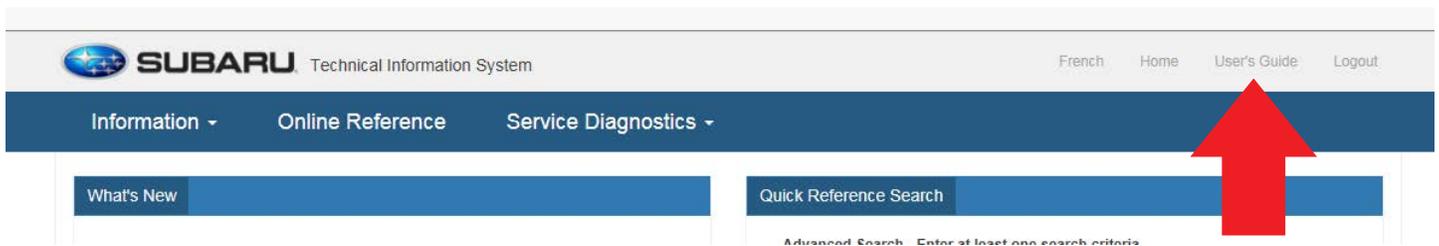
DON'T - Let an Apprentice Perform Major Work Themselves Just as giving them simple tasks for too long could lead to complacency and potential errors, cutting them loose on major work and expecting them to perform to the same standards as your regulars could be catastrophic for everyone concerned. No apprentice should be working their own bay on major repairs without direct supervision. Once an apprentice has sufficient time and experience in the shop, allow them to advance through progressively more challenging tasks BUT, make sure the work is thoroughly inspected before it is shipped. I've also heard Service Managers say they can't hire someone who doesn't have a driver's license. Why not? An apprentice should not be driving a customer's vehicle anyway. They should be riding along with their mentor learning what to listen and feel for in order to hone their diagnostic skills.

DO - Be Patient! Every shop would like ready-made, fully trained Technicians walking through their door but as we all know, that is not going to happen. It takes time to develop the Technician(s) you are going to need to keep your operation successful. Everyone makes mistakes, especially when they are first learning a skill. That is why proper mentoring is so critical at this point in their career. Don't be discouraged and don't let them be either, especially if you see true potential in them. And don't give up on working with apprentices just because one didn't work out. That is why you are encouraged to work with several at a time in case you do have to let one go.

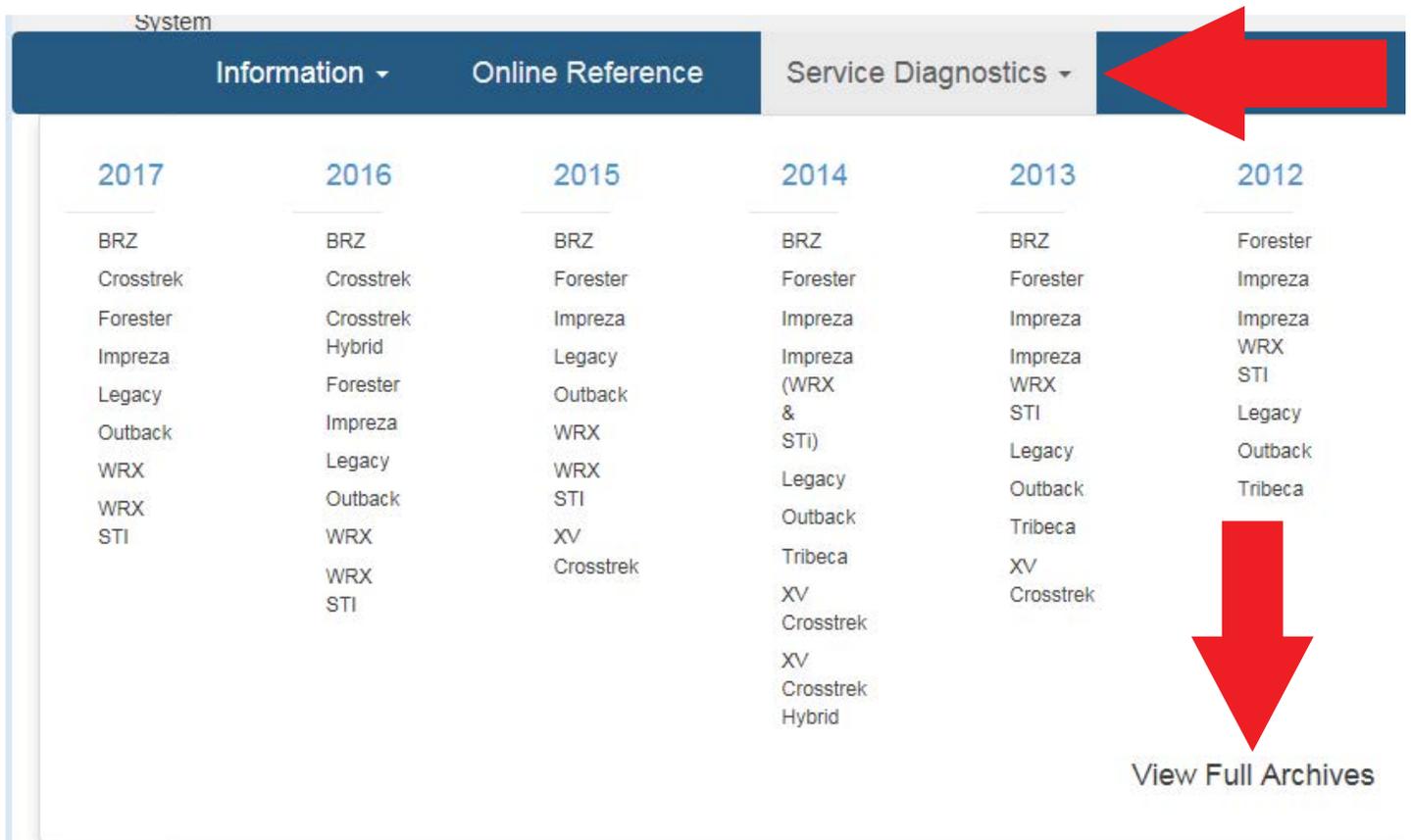
Knowing the limitations of apprentice Technicians and how to use them to their greatest efficiency can help your service operations grow. Nothing is instantaneous. It takes time, patience and understanding to build a Technician from scratch. But, if the organization works together, the benefits can drastically outweigh the risks of working with an apprentice. Work with your local programs, stay engaged and let the next generation of automotive Technicians know you believe that they can make a difference in the industry.

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The new STIS User's Guide is located at the top of the page.



Service Manuals can be accessed by clicking the Service Diagnostics tab.



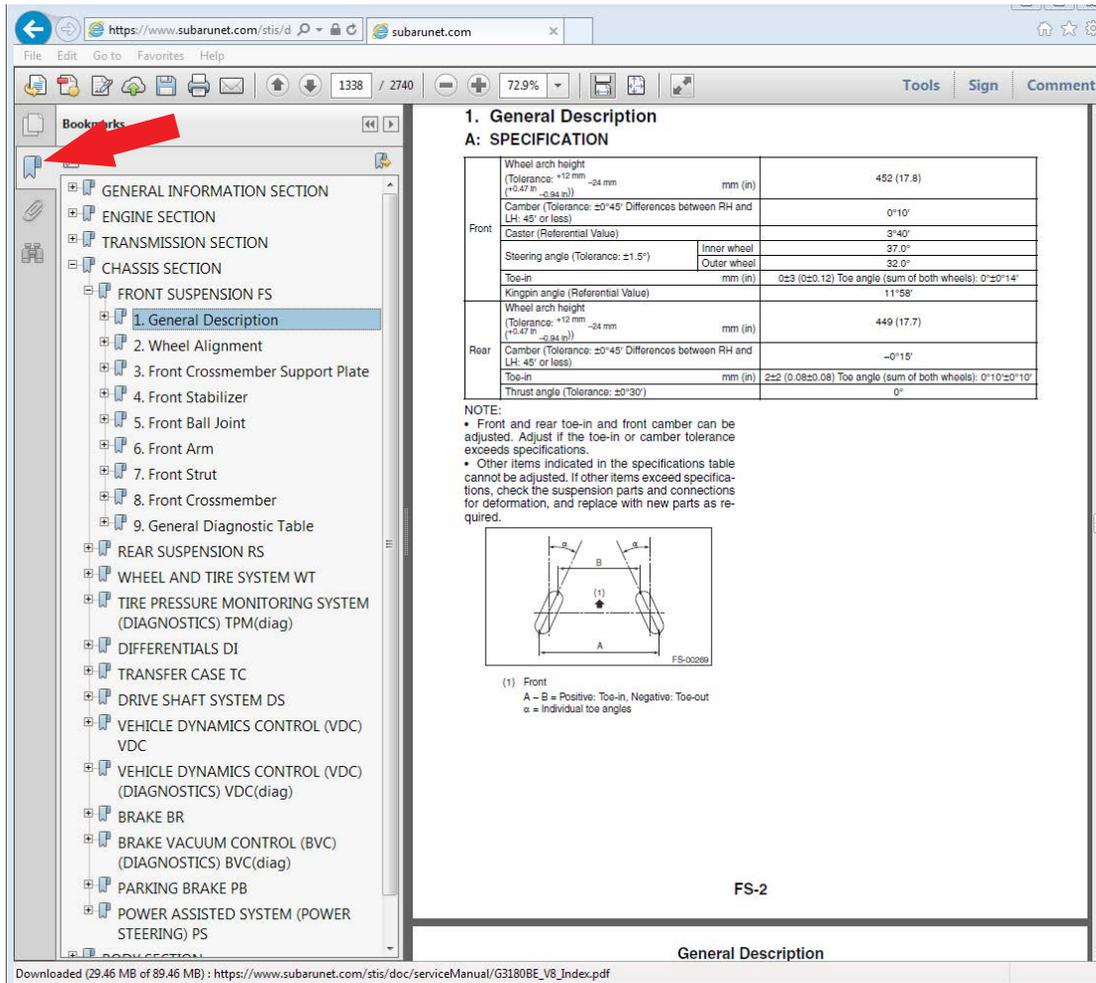
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Previous model year Service Manuals can be accessed by clicking the “View Full Archives” link. This will display diagnostics through MY 2005.

Information ▾	Online Reference	Service Diagnostics ▾		
Service Diagnostics				
<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
BRZ	BRZ	BRZ	BRZ	BRZ
Crosstrek	Crosstrek	Forester	Forester	Forester
Forester	Crosstrek	Impreza	Impreza	Impreza
Impreza	Hybrid	Legacy	Impreza	Impreza
Legacy	Forester	Outback	(WRX & STi)	WRX STI
Outback	Impreza	WRX	Legacy	Legacy
WRX	Legacy	WRX STI	Outback	Outback
WRX STI	Outback	XV	Tribeca	Tribeca
	WRX	Crosstrek	XV	XV
	WRX STI		Crosstrek	Crosstrek
			XV	
			Crosstrek	
			Hybrid	
<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>
Forester	Forester	Forester	Forester	Forester
Impreza	Impreza	Impreza	Impreza	Impreza
Impreza	Impreza	(WRX)	(WRX)	(WRX)
WRX STI	WRX STI	Impreza	Impreza	Impreza
Legacy	Legacy	WRX STI	WRX STI	WRX STI
Outback	Outback	Legacy	Legacy	Legacy
Tribeca	Tribeca	Outback	Outback	Outback
		Tribeca	Tribeca	Tribeca
<u>2007</u>	<u>2006</u>	<u>2005</u>		
B9 Tribeca	B9 Tribeca	Baja		
Forester	Forester	Forester		
Impreza	Impreza	Impreza		
(WRX & STi)	(WRX & STi)	(WRX & STi)		

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Vehicles not listed under Service Diagnostics have PDF Service Manuals that can be accessed by clicking Online Reference. It is recommended that you use Internet Explorer with the Adobe Acrobat Reader plugin to view PDF Service Manuals. This will allow use of the bookmark function to access pages of the Service Manual. This function will work while the Service Manual is still loading.



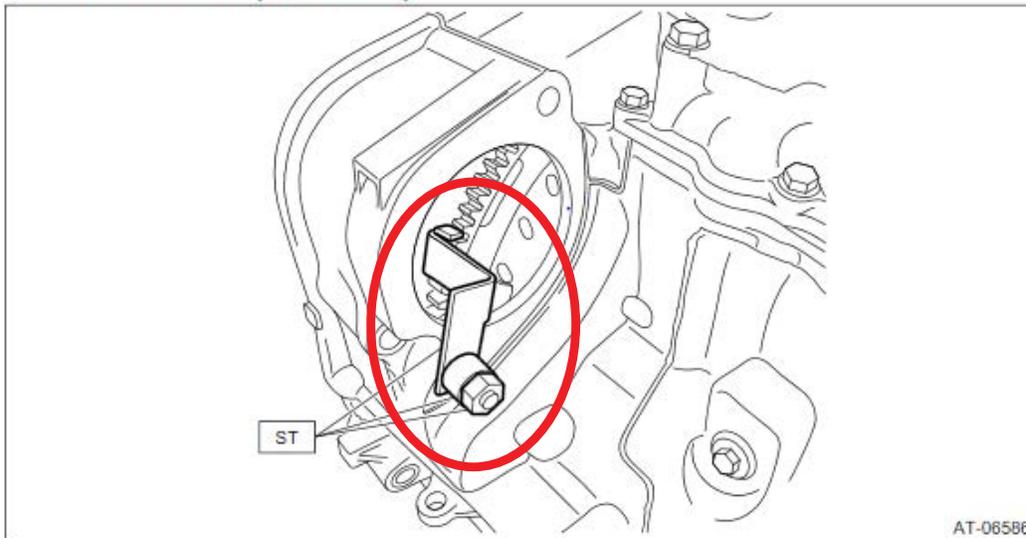
During ANY engine or transmission removal, it is required you follow the Service Manual removal procedures. Recently, it has been brought to SOA's attention several CVT replacements have been needed after engine installation. Further investigation led to the conclusion that the CVT hydraulic oil pump was damaged due to the torque converter being dislodged from the pump drive gear. When installing the engine assembly, the torque converter was not properly reseated into the pump drive gear causing a binding condition, which ultimately led to pump failure. CVT hydraulic oil pumps are not a serviceable component, so CVT replacement is necessary to resolve the concern. When removing the transmission from the vehicle for any reason, the Service Manual states as follows in **Figure 1**:

Figure 1 – From 2017 Impreza Service Manual Transmission Removal

14. Make sure the torque converter moves freely by rotating with finger through the starter installation hole.
15. Attach the ST to the converter case.

Preparation tool:

ST: STOPPER SET (498277200)



As seen above, the Service Manual shows the STOPPER SET (498277200) is required to be installed after removing the torque converter bolts and confirm the torque converter spins freely. Failure to install this tool could result in damage to the CVT unit as seen in **Figure 2**. Damage in this manner is not a matter for warranty.

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Figure 2 – Resulting Damage



Torque Converter



Oil Pump Chain Cover

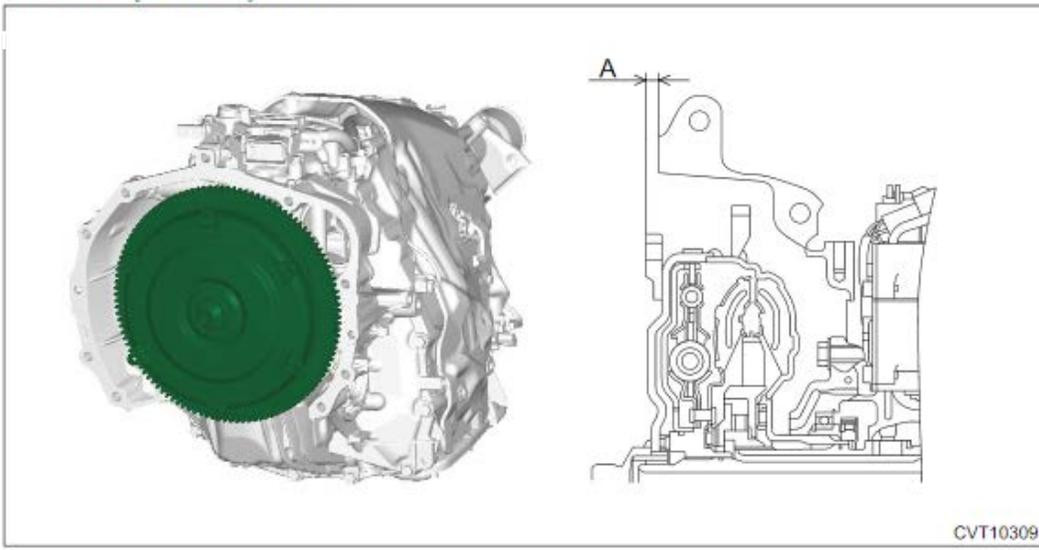
If questioning whether or not the torque converter is fully seated into the CVT unit, the Service Manual provides an inspection procedure to confirm depth. **Figure 3** is directly from the 2017 Impreza Service Manual showing the procedure.

Figure 3 – From 2017 Impreza Service Manual Torque Converter Depth

4. Measure depth "A", from converter case end surface to drive plate contacting surface.

Standard (reference):

6.8 mm (0.268 in) or less



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2017 SUBARU IMPREZA



15 2017MY IMPREZA, DISPLAY AUDIO (NON-NAVIGATION), CLOCK NOT SYNCHRONIZED

NOTE: This information is applicable to iPhone (IOS) users only. If a customer states the time displayed on their iPhone is not synchronized with the instrument panel clock display, the information below is an easy solution.



First, select the setting mode for the clock by following these steps:

- Press the “Home” button on the audio unit display.
- Press “Settings”
- Press “Vehicle”
- Select “Clock Adjustment”
- Select “Auto”

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Once “Clock Adjustment” is set to “Auto”, the iPhone “Show Notifications” setting must also be confirmed as set to ON following the steps below.

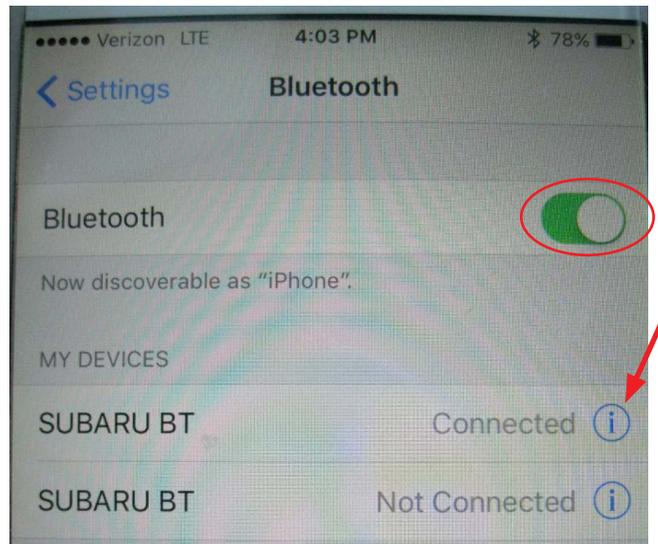


- From the iPhone Home screen, tap “Settings.”
- From the Settings menu, tap “Bluetooth” and make sure it is set to “On.”

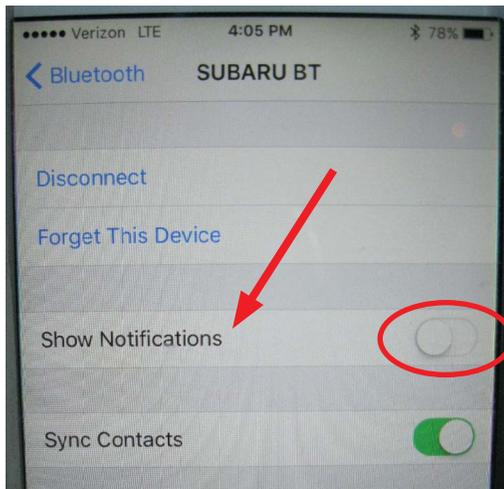


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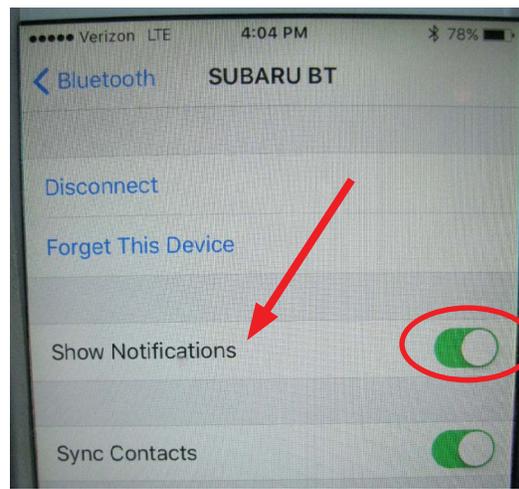
- Select the device being used then tap on the blue **(i)** icon to display the device options list.



- The "Show Notifications" must be set to ON for the time displays to synchronize.



OFF



ON

- Once "Show Notifications" is switched on, the device and vehicle clocks will synchronize automatically.

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15 2017 IMPREZA, NO BACKUP CAMERA AFTER RADIO REMOVAL?

If you encounter an issue where the radio needs to be removed on a 2017 Impreza, it is important the Service Manual procedure be followed. The Service Manual advises to disconnect the battery before servicing the audio unit. If you fail to follow the instructions, you could have a customer concern of the backup camera is inoperative since the service. The reason for this is, when you connect power to the unit, a self-check is performed. If the backup camera has not been connected yet, the unit assumes there is no back up camera and renders it inoperative. If you run into this, a quick fix is to install the transit (PDI) fuse or remove and reinstall the negative battery terminal. The situation can be avoided completely by following the Service Manual and disconnecting the battery before the service.

CAUTION: If swapping an audio system for diagnostic purposes, be sure the DCM remains with the original vehicle or network communications will be severed.

CAUTION: The SXM ESN is assigned by VIN. Moving audio units between vehicles will disrupt SXM services. Below is an image of what you will likely see if a line check is performed before the issue is corrected:



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Below are the Service Manual instructions:

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1/1 ページ

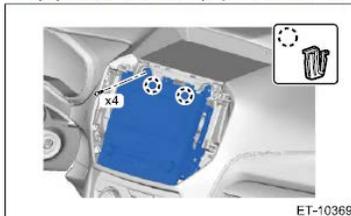
ENTERTAINMENT & MONITORING > Audio

REMOVAL

1. Disconnect the ground cable from battery.  [Ref. to REPAIR CONTENTS>NOTE > BATTERY.](#)
2. Remove the grille assembly - CTR ventilation.  [Ref. to AIR CONDITIONER>Air Vent Grille>REMOVAL > CENTER GRILLE ASSEMBLY.](#)
3. Remove the panel - center UPR.
(1) Release the clips and claws, then detach the panel - center UPR.



4. Remove the audio assembly.
(1) Remove the screws.
(2) Release the clips, and then remove the audio assembly.



5. Remove the audio bracket.
(1) Remove the screws, and then remove the audio bracket.



Note:

- Remove the screws on RH side in the same procedure as on the LH side.
- For models with telematics, the data communication module is attached on the upper side of the audio assembly.

ENTERTAINMENT & MONITORING > Audio

INSTALLATION

Caution:

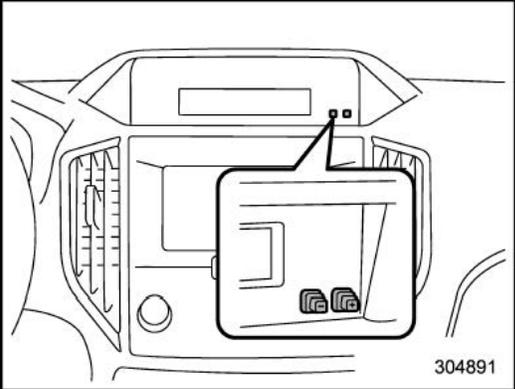
Do not allow harness and cables to interfere with or get caught by other parts.

1. Install the audio bracket.
2. Install the audio assembly.
3. Install the panel - center UPR.
4. Install the grille assembly - CTR ventilation.
5. Connect the battery ground terminal.  [Ref. to REPAIR CONTENTS>NOTE > BATTERY.](#)

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With the release of the 2017 Impreza SUBARU STARLINK™ 6.5" Multimedia System and SUBARU STARLINK™ 8.0" Multimedia Navigation systems, there have been inquiries about the clock adjustment. There are two different modes of adjustment available: Automatic and Manual. Below in **Figure 1** is an excerpt from the 2017 Impreza Owner's Manual describing both modes.

Figure 1 – 2017 Impreza Owner's Manual

<p>■ Clock setting with automatically</p> <p>To set the clock automatically, the "Auto" mode must be selected in the clock adjustment setting preparation procedure.</p> <p>▼ Models with navigation system</p> <p>The clock will be set automatically where a GPS signal is available.</p> <p>▼ Models without navigation system</p> <p>The clock will be set and adjusted automatically when a smartphone is connected via Bluetooth® for transferring phonebook data.</p> <ol style="list-style-type: none">1. Register the smartphone to the audio system. For details, refer to "Bluetooth SETTINGS" in the supplemental Owner's Manual for the audio/navigation system.2. Transfer phonebook data to the system. For details, refer to "Bluetooth SETTINGS" in the supplemental Owner's Manual for the audio/navigation system. The clock will be adjusted automatically.	<p>■ Clock setting with manually</p> <p>To set the clock in manual mode, "Manual" must be selected in the clock adjustment setting preparation procedure.</p> <p>▼ Type A multi-function display (black and white)</p>  <p>▼ Adjusting the clock</p> <p>To adjust the clock, press the "+" button or the "-" button beside the clock.</p>
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Automatic setting of the clock is accomplished differently between the navigation and non-navigation systems. As shown above, the navigation system will automatically set the time according to GPS location. Non-navigation systems utilize a paired smartphone connected via Bluetooth to accomplish the automatic setting. During the PDI process, it is recommended to manually set the clock on non-navigation models. This will ensure the correct time is displayed and allows the opportunity to show the customer the automatic feature should they choose to use it. Please review the Owner's Manual for the applicable manual clock setting procedure.

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ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
EXP-1000S	Other / Miscellaneous	EXP-1000S Battery Charging and Electrical System Analyzer User Manual	21-Dec-16
GR8-1100	Other / Miscellaneous	Battery Diagnostic Station with Alternator/Starter Test Module 167-000458EN-C (July 2016)	21-Dec-16
E751SVA010	Accessory Installation Guide	WRX and WRX STI Vortex Generator	21-Dec-16
F551SSG021	Accessory Installation Guide	Forester Rear of Seat Net	21-Dec-16
F551SSG011	Accessory Installation Guide	Forester Side Net	21-Dec-16
F551SSG001	Accessory Installation Guide	Forester Rear Net	21-Dec-16
F551SAL011	Accessory Installation Guide	Cargo Net Installation Instructions (Rear of Seat)	21-Dec-16
F551SAL000	Accessory Installation Guide	Cargo Net Installation Instructions (Rear Net)	21-Dec-16
16-95-15R	Technical Service Bulletin	Diagnosis Procedure for CVT Chain Slip	20-Dec-16
WTM-73R	Subaru Product / Campaign Bulletin	Secondary Air Injection Pump Relay Replacement	16-Dec-16
09-64-16	Technical Service Bulletin	Sub-Level Sensor Flange Nut Cap Shape Change	16-Dec-16
16-103-16	Technical Service Bulletin	Transmission Fluid Seepage	14-Dec-16
MSA5B1711A	Owner Manual	2017MY Impreza Starlink Quick Guide	8-Dec-16
H6710AL010	Accessory Installation Guide	Cigarette Lighter Kit	6-Dec-16
E201SSG000	Accessory Installation Guide	Wheel Arch Trim Set - Forester	6-Dec-16
MSA5M1717A	Owner Manual	2017MY SUBARU STARLINK Safety and Security Owner's Manual	5-Dec-16
TKC-16R	Subaru Product / Campaign Bulletin	Takata Front Passenger Airbag Inflator Replacement	5-Dec-16

All revised publications are highlighted in yellow.

CONTINUED ON THE NEXT PAGE

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
TKB-16R	Subaru Product / Campaign Bulletin	Takata Front Passenger Airbag Inflator Replacement	5-Dec-16
TKA-16R	Subaru Product / Campaign Bulletin	Takata Front Passenger Airbag Inflator Replacement	5-Dec-16
MSA5B1713A	Owner Manual	2017 Impreza EyeSight Quick Guide	2-Dec-16
E5610VA120	Accessory Installation Guide	WRX/STI Rear Under spoiler	1-Dec-16
07-116-16	Technical Service Bulletin	Optional Service Procedure Information to be Used in Conjunction with Campaigns WQP-51, WQR-53R and TKA, B, C-16R	1-Dec-16
U1300BE	Service Manual Full	2017 Impreza New Car Information	1-Dec-16
L1300BE	Service Manual Full	2017 Impreza Body Repair Manual	1-Dec-16
15-207-16	Technical Service Bulletin	USB Cable Cannot Be Removed from USB-AUX Unit	30-Nov-16
WTK-71R	Subaru Product / Campaign Bulletin	Windshield Wiper Motor	30-Nov-16
15-206-16	Technical Service Bulletin	USB Device Not Recognized on Fujitsu-Ten (F10) 7inch Display Navigation and Display Audio Units	29-Nov-16
15-193-16R	Technical Service Bulletin	All 2012 to 2015 Models Equipped with Fujitsu Ten (F10) Generation 1 (Gen1) Audio / Navigation Systems	29-Nov-16
MSA5M1718A	Owner Manual	2017MY Crosstrek EyeSight Owner's Manual	28-Nov-16
MSA5M1714A	Owner Manual	2017MY Legacy and Outback EyeSight Owner's Manual	28-Nov-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.: _____

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: _____