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SUBARU TECHLINE HOLIDAYS & HOURS OF OPERATION

Memorial Day: (Closed)	
Monday, May 31, 2021	
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 QMR of the Month Winner:

Leo Gilmore from
Ruge's Subaru in Rhinebeck, NY

Another Subaru "first" occurred this month when Leo Gilmore's QMR was selected from February's submissions making him our first back-to-back winner! This is quite an accomplishment. The reports selected to be finalists each month are proof more and more Technicians are stepping up their game as evidenced by the quality of QMRs being submitted. THANK YOU! Quality reports like these are invaluable in helping with our initiatives directed at enhancing vehicle quality.

Leo's report outlined the diagnosis and repair of an electrical issue on a brand-new 2021 Outback with just 8 miles on it and multiple warning lamps illuminated in the combination meter. An initial All Systems scan revealed several DTCs for communication failures between EyeSight and various vehicle systems. He began checking into the CAN system by performing various resistance checks between sections of the instrument panel harness. Once Leo's testing revealed an open circuit, he proceeded to use the split-half technique to help isolate the trouble source. Reviewing the wiring diagram again showed 2 splices in the harness between connector i88 at the Central Gateway module and instrument panel harness connector i52. This section of the harness is located behind the BIU. With his DVOM connected, Leo was able to manipulate the suspected location of the splices and induce changes to the resistance values. Replacing the faulty instrument panel harness restored normal operation. As he has done previously, his QMR contained a PowerPoint® presentation which included a short video along with numerous pictures, a detailed progression of the diagnosis and the related testing results.

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

\$500.00 Snap-On gift card

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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, Baja, Tribeca, BRZ, XV Crosstrek, Ascent, Crosstrek Hybrid 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

We Support



01 QMR of the Month (CONTINUED)

The other Regional winners selected from QMRs submitted during February 2021 were:

- **Jaime Rios** from **Modesto Subaru** in Modesto, CA
- **Raymond Anderson** from **Premier Subaru Watertown** in Watertown, CT
- **Jacob Groover** from **Suburban Subaru of Troy** in Troy, MI
- **Timothy Whalen** from **Cannon Subaru** in Lakeland, FL

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 include a photo (whenever available) of the recipient’s award presentation in TIPS. The winner selected from QMR of the Month submissions received during February 2021 was (once again) Leo Gilmore, a Technician from Ruge’s Subaru in Rhinebeck, NY.



Leo is shown above after being presented with his latest \$500.00 Snap-On Gift Card. To Leo’s right are Dealer Principals Lewis Ruge and Kristin Hutchins. To his left are Service Manager Jack Cleary and Subaru Distributors Corporation Field Service Engineer, Jim Colamarino.

*Congratulations and **THANK YOU** to our February 2021 QMR of the Month Award recipient!*

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TECH TIPS GREATEST TIPS

This series features TechTIPS articles frequently referred to by Techline. This month's feature is from June 2019.

01 Vibration After Transmission or Engine Removal

Techline has received increasing concerns of vibration after transmission or engine removal. Multiple cases have been identified where the vibration has been traced back to the snout of the torque converter being broken. This can happen if the torque converter holder tool is not used. When removing an engine or transmission the component needs to be released as straight as possible without any rocking or pitching.



The photo above shows the nose of the torque converter is broken off and remaining in the crankshaft. Also note, there is no torque converter holder tool installed to the transmission.



Torque converter with broken nose.

During component removal it is imperative to follow all steps of the procedure as outlined in the Service Manual. In addition, always confirm both dowel pins are installed in the engine block before engine reinstallation to insure proper engine to transmission alignment.

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01 Dash Camera Etiquette - Behave like you're being watched

With insurance companies offering discounts for safe driving, customers interest in recording their track sessions, enthusiasts recording meetups, and various other reasons, the use of in car video and audio recording devices is becoming more commonplace.

Many of these recording devices are designed to start audio and video recording automatically when the vehicle ignition is turned to the on position and can record for several minutes after the ignition is turned off. While this offers a level of convenience for the end user, it can, and has, caught unwitting technicians less than professional behavior on film for the customer to see.

It's also worth noting that the customer may get to see your workspace, which can leave a lasting impression about the quality of your service department.

As a representative of your retailer, and Subaru of America, it's vital that a level of professionalism and cleanliness when interacting with customers and their vehicles is maintained, because you never know when someone may be watching.

03 Ascent or Legacy/Outback 2.4L Binding When Turning Basic Diagnosis Overview

If you encounter an Ascent or Legacy/Outback 2.4L Turbo equipped with TR690HRC CVT where the customer is reporting a binding or judder condition when turning, this article will provide some guidance on how to address the condition quickly and efficiently.

Start by duplicating the condition via road test or in empty parking lot

NOTE: Always be sure X-Mode is switched OFF

If the vehicle has very low mileage see if the condition is resolved by performing transfer clutch break-in procedure. Drive the vehicle at very low speed (3 mph) in an open and empty parking lot through a series of tight circles to the left and to the right with the steering wheel at full lock in that direction while lightly accelerating and decelerating. Complete at least 10 turns in each direction. Then road test and see if the condition continues after allowing the CVT to return to normal operating temperature. Repeat an additional time if some improvement is felt but more is needed. If this does not resolve the condition, continue the inspection process.

Once duplicated, inspect the vehicle's tires. The tire circumference must be confirmed. As little as a quarter inch (1/4") difference in rolling circumference can result in binding. Be sure all tires match in terms of brand and type as even tires from the same brand listed as the same size can have some variation in circumference. As example an Ascent with factory Falken Ziex tires and one or two Falken WildPeak replacement tires of the same size could experience a binding condition. Always check each tire carefully as you may also encounter a case where all four tires are the same brand and type but one or more may be of a slightly different size.

Next connect the SDS Notebook and DSTi and check for any DTCs. Diagnose any DTCs found to eliminate them as a factor.

Then put the CVT into Front Wheel Drive mode. In this mode the duty solenoid for the All Wheel Drive is turned off. This is achieved using the Transmission Control Module Settings in Work Support. Once activated drive the vehicle and look for any change in the condition. If the condition is no longer present this would indicate a possible concern with the AWD system transfer clutches which are repairable and do not require a CVT replacement.

[Continued on the next page](#)

The next step would be to try changing the CVT fluid. It is possible that during break-in some burnishing of the transfer clutch plates may have occurred in which case a CVT fluid change may be all that is required to alleviate the condition.

If that does not resolve the condition, the next step would be to remove the extension housing and inspect the end play and clearance as well as the condition of the drive and driven plates and overall condition of the seals, hub and housing. Refer to the applicable Service Manual for full details of the inspection and proper setup of the transfer clutch assembly.

Note that following this repair some parking lot break-in may be required but should not be extensive.

Techline has received an increase of concerns from technicians not being able to perform basic tasks when using the SSM4. This condition has been identified and is directly related to the use of aftermarket USB cables connected from the DST-i box to the SSM/Toughbook.



Nuspire Systems Integration
DENSO USB CABLE
5135

Techline would like to remind everyone to always use OE Denso USB Cable equipment when diagnosing or updating Flashwrite2 PAK files with the SSM/Toughbook. Reports of no communication with control modules, software updates crashing, and error messages being displayed has resulted in unrecoverable data leading to unnecessary control module replacement. There is no way to determine if an aftermarket cable will be able to perform all the tasks that the SSM4 or Flashwrite2 requires.

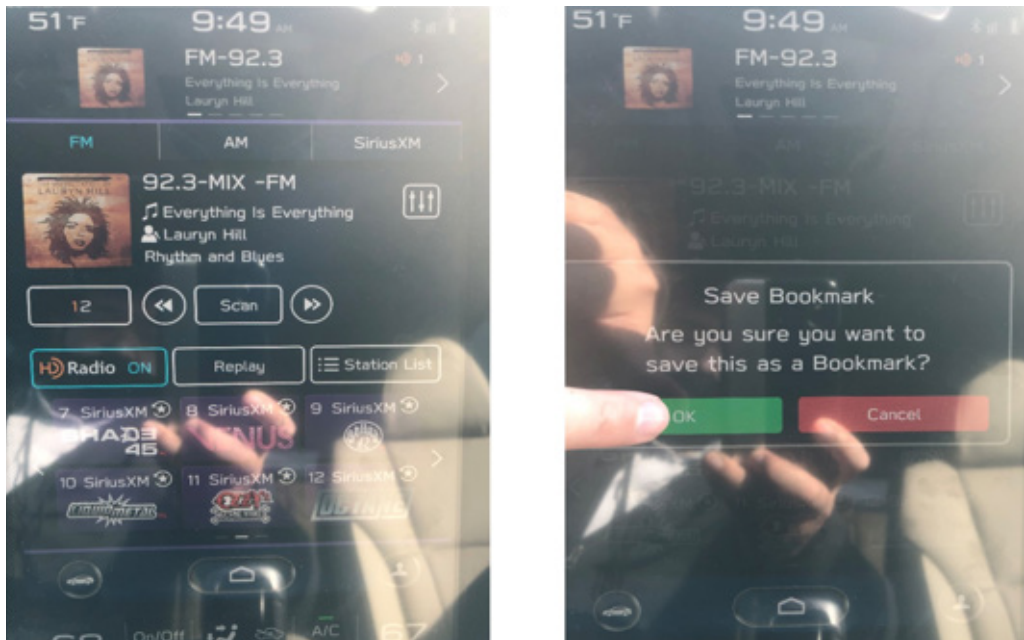
Please be sure that replacements for damaged USB cables are ordered directly through SubaruDT.com. Contact Subaru Dealer Technologies to order genuine Denso parts. Pricing is available in the RISE hyperlink under Service Operations & Technical in Subarunet.com.

As a final note, be sure to inspect the physical port on the DST-i and Toughbook for damage before use.

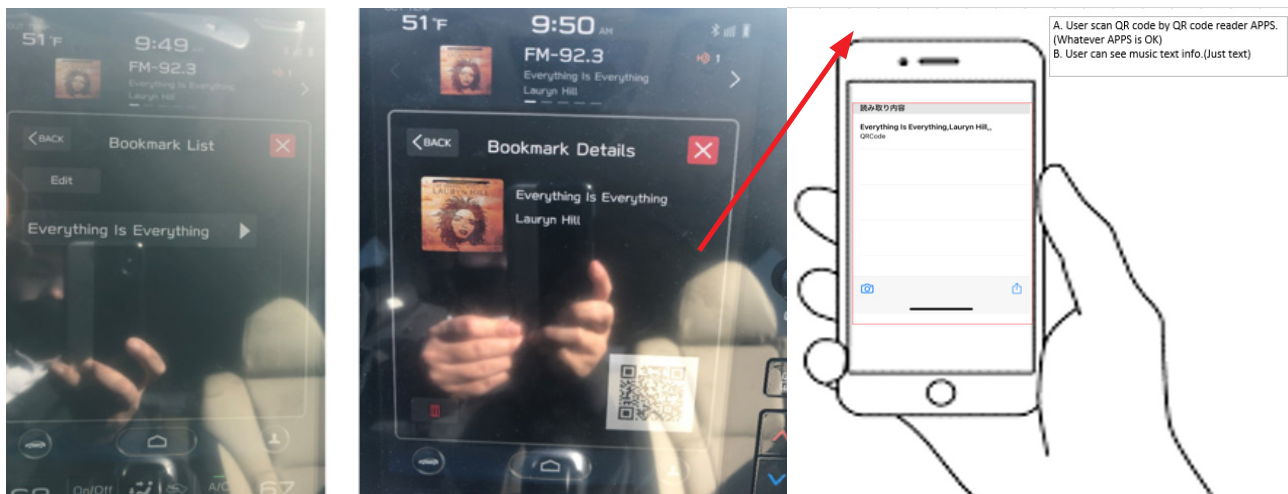
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15 Gen 4 CP1 Denso - Bookmark Feature

Inquiries have come in from the field regarding the Bookmark Feature for the CP1 Denso Audio System. This feature is designed to help the user save Music Information that they may be interested in, without having to memorize, while driving. This feature is applicable to AM and FM radio. When the user presses and holds the album art, displayed on the screen, the audio system will take record of the music information. The user can then access their saved Music, by going into the Bookmark screen.



Once the User is in the Bookmark Screen they can select the Music Album/Song Title, which will then provide a QR Code, that the customer can scan using a QR Code reader from their phone. This will provide the User additional details on the Artist Name, Song Title, and Album (Just Text).



The Technician and User can find supporting details in the following owner's manual;
[-2020MY/2021MY Legacy/Outback Subaru STARLINK® Owner's Manual – PG 91-92 / PG 143-144](#)
This outlines the use of Bookmarks and how to add/delete bookmark files.

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
05-85-21R	Technical Service Bulletin	TPMS Valve Stem Assembly- Desi...	27-Apr-21
F411SXC030	Accessory Installation Guide	2020MY Ascent Pet-Friendly Pad...	26-Apr-21
MSA5M2214A	Owner Manual	2022MY Legacy/Outback Eyesight...	26-Apr-21
MSA5M2211A	Owner Manual	2022MY Legacy/Outback Subaru S...	26-Apr-21
MSA5B2203A	Owner Manual	2022MY Legacy Getting Started ...	26-Apr-21
MSA5B2204A	Owner Manual	2022MY Outback Getting Started...	26-Apr-21
MSA5M2204A	Owner Manual	2022MY Outback Owner's Manual	26-Apr-21
WRE-21	Subaru Product/Campaign Bulletin	Ignition Coil Replacement	23-Apr-21
WUQ-02R	Subaru Product/Campaign Bulletin	Ignition Coil Short Circuit	23-Apr-21
WRD-21R	Subaru Product/Campaign Bulletin	Rear Stabilizer Bracket Bolts	23-Apr-21
WRC-21R	Subaru Product/Campaign Bulletin	Continental Tire Safety Recall	23-Apr-21
15-282-21R	Technical Service Bulletin	STARLINK Remote Engine Start (...)	21-Apr-21
SOA567X010	Accessory Installation Guide	Extended Crossbar	20-Apr-21
SOA567X070	Accessory Installation Guide	Subaru Extended Crossbar (THUL...	20-Apr-21
J101SAN900	Accessory Installation Guide	2022MY Outback Wilderness Door...	19-Apr-21
J101SAN900	Accessory Installation Guide	2022MY Outback Wilderness Door...	19-Apr-21
SUTTIPSLOC	Other/Miscellaneous	TechTIPS Article Locator Index...	19-Apr-21
15-272-20R	Technical Service Bulletin	2021 Audio/Navigation & Power ...	16-Apr-21
15-280-21R	Technical Service Bulletin	Gen1 Telematics Reprogramming ...	13-Apr-21
U2610BE	Service Manual	2022MY Legacy/Outback New Car ...	13-Apr-21
	Service Diagnostics	2022 Legacy/Outback Service Ma...	13-Apr-21
02-157-14R	Technical Service Bulletin	Engine Oil Consumption	13-Apr-21

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: _____