



Articles Contained in this Issue

Click on a title below to jump to the article.
Click the date located in the footer to return to page 1.

CODE	ARTICLE.....	PAGE
(00)	STIS New Releases	6
(01)	QMR of the Month	1-2
(01)	QMR of the Month Award Presentations.....	2
Tech Tips Greatest Tips		
(05)	Abnormal Noise Diagnosis	3-4
(01)	Techline Staffing Changes.....	3-4
(06)	VDC Control Module Replacement Followed by SRH Warning Light Information.....	4
(15)	Remote Engine Start (RES)- No Start After Registration, MY20+ Legacy/Outback or MY19 + Impreza/Crosstrek (Key Start)	5

SUBARU TECHLINE HOLIDAYS & HOURS OF OPERATION

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

This month's winning Quality Monitoring Report selected from November's submissions was a departure from the way we normally receive them. Leo's report was submitted with all the details contained in an extremely well-done PowerPoint® presentation. His report detailed the diagnosis and repair of a 2013 Impreza 2.0i with recurring P0366 and P0391 camshaft position sensor DTCs which set after camshaft carrier reseal repairs were performed by another Technician. Both codes would reset immediately after being cleared and re-starting the engine. The Service Manual diagnostic procedures begin with numerous circuit integrity tests. Leo decided to start his diagnosis by confirming the integrity of his camshaft position sensor waveforms instead. If any abnormality is identified, the offending sensor would normally be replaced but, as it turned out in this case, replacing the sensor would not have repaired the condition. Leo provided the waveforms in his presentation which showed the engine was timed properly and, identified extra pulses on both Bank 1 (before a reluctor notch) and on Bank 2, just after a reluctor notch. He compared these waveforms to a known good vehicle with the same 2.0L engine to confirm his suspicions. Leo then removed both sensors and examined both reluctor discs where damage was identified on each. Although the damage was relatively minor, it was enough to cause the extra pulses identified on the waveforms. After replacing both camshaft sprocket assemblies, the DTCs did not reset confirming a sound repair. Leo's presentation included details of his testing procedures, his test results and high-quality photos documenting the damaged components.

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

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.

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



Education Foundation

01 QMR of the Month (CONTINUED)

The other Regional winners selected from QMRs submitted during November 2020 were:

- **Tau Jeppesen** from **Larry H. Miller Subaru** in Boise in Boise, ID
- **Thomas Slaughter** from **Motor Mile Subaru** in Christiansburg, VA
- **Michael Iangois** from **Subaru By-the-Bay** in Bay Shore, MI
- **Derick Smith** from **Granite Subaru** in Hudson, NH

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 November, 2020 was Leo Gilmore, a Technician from Ruge’s Subaru in Rhinebeck, NY. Leo’s name may sound familiar as a QMR he submitted was selected as our winner back in February of 2020.



Leo is shown above after being presented with his \$500.00 Snap-On Gift Card. To Leo’s right is Dealer Principal Lewis Ruge, and to his left is Service Manager Jack Cleary.

*Congratulations and **THANK YOU** (AGAIN!) to our November 2020 QMR of the Month Award recipient!*

TECH TIPS GREATEST TIPS

This series features TechTIPS articles frequently referred to by Techline. This month's feature is from December 2018.

05 Abnormal Noise Diagnosis

The Techline continues to receive calls from Technicians needing assistance with noise concerns. One thing to keep in mind when calling is to have very specific details on the noise and its location. If possible, it is recommended a video of the noise be submitted for the Techline to better assist you. If unable to duplicate the noise, arrange for a test drive with the customer. One of the things you will need to diagnose a noise which is hard to find is a set of chassis ears. This will be one of the first recommendations by the Techline in order to get the noise localized. Once localized, Techline may have a better idea of a possible cause and be able to give better advice on how to approach the noise. One of the main issues the Techline sees is lack of detail. Here are some questions Advisors can ask customers or, you should have the answer to when calling:

When does the noise occur? (hot, cold, rough surface only, etc.)

Where is the noise coming from? (L/F, R/R, center of vehicle, etc.)

- Steering/suspension related
- Engine/trans/driveline related
- Brake application related
- Body noise related

Is the noise normal? (Not sure? Compare it to a like vehicle.)

Check for any related TSBs or TIPS on the issue.

REMINDER: An Electronic Listening Device is required as per Subaru Minimum Required Equipment List found on SubaruNet.



01 Techline Staffing Changes

As part of our on-going initiative to improve our position in the Service Satisfaction Index rankings and to provide even greater levels of service, the Subaru Techline is in the process of adding more representatives to help better assist with your needs. Along with these new Technical Representative positions, there have been other changes among our current staff:

- **William Humphries** began his automotive career in 2006. He started as a tech at Bryan Subaru in July 2015. He quickly reached Master level and joined Techline in the fall of 2018. He achieved Senior Master level in 2020 and was Promoted to Field Auditor - Warranty Compliance in January 2020.

Continued on the next page

01 Techline Staffing Changes (CONTINUED)

- **Dan Selle** has moved from his position on the Techline after 8 years to the Field Quality Assurance group as a Quality Data Specialist.
- **Andrew Weisenberger** has moved from the Techline after 2.5 years of service. Andrew has joined the Technical Training Department at the San Francisco, CA Area Training Center as a Field Service Training Manager. Andrew had worked at the retailer level as a Subaru Master Technician for 4 years prior to joining the Techline. We wish him the best in his new role.
- **Tony Saban** began his career at SOA in 1990 coming into the SEC as a technician. He continued there as both technician and SOA Parts Warehouse manager until 1995. Tony then moved to SAS as a claims processor until being incorporated into CDS in 1997. In his time in CDS he handled all aspects of claim type processing as well as Audit and Vendor Recovery functions. Tony then moved to the Techline in 1999 where he became the supervisor. Nearing the end of 2020 Tony has now been promoted to Warranty Claims Operations Manager.
- **Micah McCurdy** started his Subaru carrier at Austin Subaru in 2010, moving to Techline in the fall of 2019. In late February 2021 he will be moving on from his position on the Techline to the Field Quality Assurance group as a Field Quality Data Specialist.
- **Jonathan Matyasovski** will be taking over the Senior Techline Representative role. He has been with the Techline team for 4 years after a decade in the field.

06 VDC Control Module Replacement Followed by SRH Warning Light Information

When completing replacement of the VDC Control Module (CM) vehicle applied model information must be written into the new VDC CM. Techline line has received inquiries from technicians that have properly completed this VDC CM applied model setting, finding the Steering Responsive Headlight (SRH) warning lamp flashing on the Combination Meter. The SRH warning light flashing is accompanied with no movement of the headlights when driving. In all reported cases the headlights will complete the initialization sweep at key on but will not function from that point on.

When the new VDC CM is installed it does not have an applied model setting written, it is “blank.” The SRH CM attempts communication via LAN with the blank VDC CM. Since the VDC CM is blank it has no vehicle height information to share resulting in the SRH CM to go idle and not fully function. This phenomenon does not present any trouble codes when the systems are scanned.

Techline and SBR have confirmed this phenomenon and have this work around to prevent unnecessary replacement of the SRH CM.

Disconnect the vehicle battery> Disconnect the SRH CM> Connect the vehicle battery> Rewrite the VDC CM applied model setting with the SRH CM disconnected> Cycle the key to the off position> plug in the SRH CM> Cycle the key on.

Note: Until applied model setting is finished, vehicle height information is lost and will result in SRH warning lamp illumination.

When completing installation of Remote Engine Start (RES) on MY20+ Legacy/Outback or MY19+ Impreza/Crosstrek (Key Start) a no start condition may occur. In this scenario the vehicle will not remote start immediately after successfully registering the RES to the Immobilizer system. The vehicles Combination Meter will illuminate, and the gauges will sweep followed by ignition off. (Some vehicles the horn will sound, and park lights will flash three times.) This condition can be corrected by waiting for the vehicles CAN bus to “go to sleep” before making the RES attempt after registration.

This condition has been found to occur in the following vehicles and kits:

- MY20+ Legacy/Outback with Key Start Ignition – RES Kit #H001SAN100 / H001SAN101
- MY19+ Impreza/Crosstrek with Key Start Ignition – RES Kit #H001SFL400 / H001SFL401

To reduce unnecessary replacement of the RES control module or other vehicle components follow the steps outlined below:

1. Ensure the RES Registration process was successful.
2. Turn the ignition OFF and remove the ignition key.
3. Disconnect the SSM4 (DST-i) and remove from the vehicle.
4. Ensure all doors, hood and trunk/hatch are closed and lock doors/arm security system with the Factory Remote Keyless Entry (RKE) transmitter.
5. Observe the security indicator light on the instrument cluster. It should be “flashing rapidly”.
6. Once the security system has armed, the security indicator light changes status from “flashing rapidly” to a “double flash”, **wait an additional thirty (30) seconds.**
7. Attempt to Remote start the vehicle using the Remote Engine Start transmitter. Press button two (2) times within three (3) seconds.
 - a. Remote Engine Start success = complete.
 - b. Remote Engine Start failure (same issue/scenario) = repeat steps 4-7 again. If the same issue occurs, proceed to the RES Troubleshooting Guide for component testing.

Note: The RES Troubleshooting Guide can be found on STIS> Online Reference> Publication Type “Troubleshooting Guide”> select Model Year, Car Line and Trim.

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
18-204-21	Service Manual Correction	Service Manual Corrections	19-Jan-21
WRK-20	Subaru Product/Campaign Bulletin	Air Conditioning Refrigerant P...	18-Jan-21
WRF-20	Subaru Product/Campaign Bulletin	Air Conditioning Refrigerant P...	18-Jan-21
12-299-20R	Technical Service Bulletin	6/8-way and Driver's Seat Hing...	18-Jan-21
07-182-20	Technical Service Bulletin	Door Latch / Lock Actuator Mot...	15-Jan-21
12-300-20R	Technical Service Bulletin	Power Rear Gate (PRG) Switch T...	15-Jan-21
15-265-20R	Technical Service Bulletin	"Destination to Vehicle" Gen 2...	14-Jan-21
15-266-20R	Technical Service Bulletin	Telematics Function and Operat...	14-Jan-21
15-267-20R	Technical Service Bulletin	Telematics System Automatic Co...	14-Jan-21
15-242-19R	Technical Service Bulletin	Telematics System Diagnostic Q...	14-Jan-21
U1760BE	Service Manual	2021MY WRX/STI New Car Informa...	14-Jan-21
15-219-18R	Technical Service Bulletin	Error Code 202 and / or 204 Ge...	14-Jan-21
15-257-19R	Technical Service Bulletin	STARLINK Service Leads, DTC B2...	14-Jan-21
15-195-16R	Technical Service Bulletin	Servicing and Claim Submission...	14-Jan-21
15-251-19R	Technical Service Bulletin	DTC B2A16	14-Jan-21
	Service Diagnostics	2021MY WRX/STI Service Manual ...	13-Jan-21
SOA567X070	Accessory Installation Guide	Subaru Extended Crossbar (THUL...	13-Jan-21
J501SAN260	Accessory Installation Guide	OUTBACK CARGO SIDEWALL PROTECT...	13-Jan-21
12-307-21	Technical Service Bulletin	Windshield Washer Nozzle and H...	12-Jan-21
MSA5M2117A	Owner Manual	2021MY SUBARU STARLINK Safety ...	12-Jan-21
03-78-17R	Technical Service Bulletin	Clutch Release Bearing- Design...	12-Jan-21
03-82-18R	Technical Service Bulletin	Clutch Release (Throw-Out) Bea...	12-Jan-21
12-203-16R	Technical Service Bulletin	Squeaking Sound from Front Sea...	12-Jan-21
MSA5M2127A	Owner Manual	2021MY Crosstrek Hybrid Eyesig...	11-Jan-21
MSA5M2125A	Owner Manual	2021MY Crosstrek Hybrid Subaru...	10-Jan-21
MSA5M2108A	Owner Manual	2021MY Crosstrek Hybrid Owner'...	10-Jan-21
15-236-18R	Technical Service Bulletin	Reprogramming File Availabilit...	7-Jan-21
WRJ-20R	Subaru Product/Campaign Bulletin	Power Rear Gate (PRG) Control ...	6-Jan-21
SUTTIPSLOC	Other/Miscellaneous	TechTIPS Article Locator Index...	5-Jan-21
WRH-20R	Subaru Product/Campaign Bulletin	Rear Visibility FMVSS 111 Non-...	4-Jan-21
01-168-09R	Technical Service Bulletin	Replacement Key and Immobilize...	4-Jan-21
02-131-12R	Technical Service Bulletin	Oil Seepage Diagnosis and Repa...	4-Jan-21
02-136-12R	Technical Service Bulletin	Oil Seepage Diagnosis and Repa...	4-Jan-21
02-130-12R	Technical Service Bulletin	Oil Seepage Diagnosis and Repa...	4-Jan-21
TIPS1220	TechTIPS NewsLetter	2020 December TechTIPS Newsett...	31-Dec-20

All revised publications are highlighted in yellow.

Continued on the next page

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: _____