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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:

Diego Rubio-Rodriguez from
Subaru of Las Vegas in Las Vegas, NV

The winning Quality Monitoring Report selected from December's submissions involved the diagnosis and repair of a 2020 Ascent with a customer concern of multiple warning lights in the combination meter and the EyeSight indicator coming on intermittently. Diego's initial inspection for DTCs revealed a U1235 for Lost Communication with EyeSight. He began by connecting his scope to check both the low and high-speed CAN wiring at the EyeSight camera harness connector, R137. From there, he removed the driver's A-pillar trim to access the i157 / R50 connector. With his scope still connected, he found the low speed CAN readings would fluctuate wildly when wiggling the harness connector but, the R96 / i19 connection is right next to i157 / R50. After a closer inspection of both connectors, pin 6 of i19 had backed out of the connector body due to a broken lock tab. A temporary repair was made to confirm the cause of the condition had been isolated before Diego proceeded to order the affected instrument panel harness. After installation of the replacement instrument panel harness, normal operation of all systems was restored. Diego provided a short video showing his scope patterns along with numerous photos of the failed pin terminal in support of his test results.

In appreciation for going the extra mile and sharing his experience with us, Diego 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.

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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 June 2020 were:

- **Christopher Beckfield** from **Chilson Subaru** in Eau Claire, WI
- **Leo Gilmore** from **Ruge's Subaru** in Rhinebeck, NY
- **James Robertson** from **Parkway Subaru** in Wilmington, NC
- **Daniel Evans** from **North Reading Subaru** in North Reading, MA

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 December, 2020 was Diego Rubio-Rodriguez, a Technician from Subaru of Las Vegas in Las Vegas, NV.



Diego (center) is shown above after being presented with his \$500.00 Snap-On Gift Card. Left to right are: Rob Wilkes, Subaru of America Field Service Engineer and Subaru of Las Vegas Service Manager Daniel Jongbloed. To Diego's left are Subaru of Las Vegas' General Manager Burton Hughes and Service Manager Steve Maffioli. Congratulations and THANK YOU to our December 2020 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 2015.

01 Combination Meter and BIU shipments to SOA

If it becomes necessary to send in a BIU, combination meter, or any other component during the course of a Techline correspondence please ensure that you or the person packaging the box takes the time to review the following.

- Did you use enough bubble wrap to properly protect the Combination Meter from damage during shipping?
- Is the box large enough to ensure the bubble wrap will keep the Combination Meter protected during shipping?
- Is the BIU wrapped and away from the Combination Meter to avoid damage or scratches?
- Did you include a copy of the fax form in the box with your return address?

Packing materials we suggest you avoid using:

- Styrofoam packing peanuts
- Inflated bags

06 C1921 - Electronic Parking Brake Inoperative

DTC detecting condition:

- A fault is detected if the switch was positioned at lock or release continuously for 90 seconds while the vehicle is stopped.
- A fault is detected if an irregular switch condition continues for a predetermined period of time immediately after the switch position is changed. A fault is also detected if the switch condition is not confirmed afterwards.
- A fault is detected if the switch harness is open or shorted.



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06 C1921 – Electronic Parking Brake Inoperative (CONTINUED)

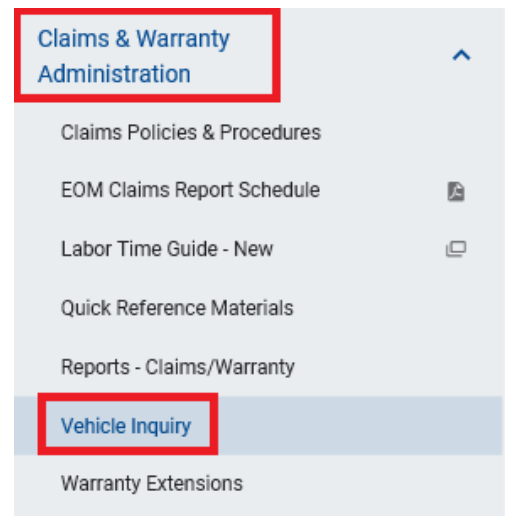
When diagnosing a C1921 trouble code, be sure to thoroughly inspect the EPB switch. Since the switch is in close proximity to the center console cup holders, there is higher chance for debris and liquids to contaminate the switch assembly. When this happens, the result can be a DTC set or an inoperative EBP/switch. Sticky contaminants, such as spilled soda, can cause the switch to be 'held' also resulting in a DTC. If this is the case, do not attempt to clean the switch, it should be replaced.

15 Homelink Mirror, No Operation with Key Off

Techline recently received an inquiry about a customer's Homelink Mirror not operating when the key is in the off position. This was compared to like vehicles, where the operation was found with the key off.

After investigating and discussing further with the supplier, the additional battery power to operate with the key off is not supplied to certain mirror assemblies. This depends on how the mirror was installed.

- **Accessory** installed Homelink mirrors- **Will Not** operate with key in the off position.
- **Factory** installed Homelink mirrors- **Will** operate with key in the off position.



This is considered normal operation. Therefore, if faced with this concern, the Technician should check the vehicle inquiry to see which method the mirror was installed.

The screenshot shows a VIN lookup interface. At the top, there is a 'Selection Category' dropdown and a 'VIN*' input field with a red box around it. A red arrow points to the 'View Results' button. Below the input field, there are several checkboxes for selection categories: Vehicle, Customer, Summaries, Port Accessories (checked), and Claims History. The 'Port Accessories' section is expanded, showing a table of installed accessories.

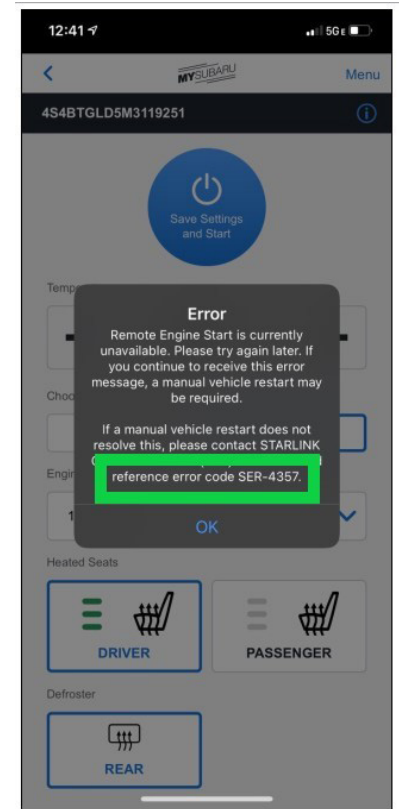
Package Code	Accy Code	Accessory Description	Date Installed
	XZK	Accy Promo Sticker	11/23/2020
	XYX	Brand Awards Cling	11/23/2020
	XAA	PDI	11/23/2020
	X43	Roadside Assistance Label	11/23/2020
	0HK	Splash Guards	11/23/2020
	0HF	Rear Seat Back Protector	11/23/2020
FF4	0H2	Mirror Compass w/ homelink	11/23/2020
FF4	0H6	Cargo Net	11/23/2020
FF4	0HB	All Weather Floor Liners	11/23/2020
FF4	0HH	Rear Bumper Cover	11/23/2020
FF4	0KO	Ext Auto Dim Mirror	11/23/2020
XIP	XA0	2021 Forester OIK	11/23/2020
XIP	XDN	Handling	11/23/2020
XIP	XL2	Cargo Tray	11/23/2020
XIP	XL3	Touring Brown Mat	11/23/2020
XIP	XL6	LED Dome Light	11/23/2020

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Telematics Remote Engine Start (RES) is a very popular feature seeing high volume use especially during the cold winter and hot summer months. For example, during January 2021, customers made over five million RES requests! Because customers rely heavily on this feature, a clear understanding of the details is vital whenever diagnosing a failed RES concern.

Diagnosing Telematics RES concerns can be challenging due to the lack of diagnostic trouble codes to indicate where diagnosis should begin. However, there are error messages which can appear on the MySubaru APP that may contain valuable information to help with diagnosis. If the customer arrives with a concern of RES requests are failing, one of the first questions should be is, what message appeared on the MySubaru APP following the failure? A screen capture of any messages that appear is valuable for reference and may be necessary when contacting Techline.

An example of a message displayed following a failed RES request referencing an error code is shown here. **Reference Error code SER-4357** indicates “negative acknowledgment” meaning although the vehicle has successfully received the RES request, there is a vehicle side system preventing engine start. Once the SER-4357 error message has been confirmed the on the customer’s phone, perform the preliminary diagnostic steps below:



1. Confirm the Telematics LED is GREEN.
2. Confirm proper operation of the power door locks.
3. Using the SSM4, verify the BIU indicates all the doors are locked.
4. Confirm proper operation of all door latch switches.
5. Using the SSM4, verify the BIU indicates all the door latches change from closed to open and vice-versa.
6. Verify the vehicle indicates it is in Park when the selector is in the Park position.
7. Using the SSM4, verify Park is indicated across all control modules consistently TCM, ECM, BIU, and KACM.
8. Verify the Push-button Start indicator functions as expected by illuminating GREEN when depressing the brake pedal with the engine OFF.
9. If Steps 1 - 8 are confirmed to be operating properly as indicated, contact Techline for assistance with additional diagnostic steps.

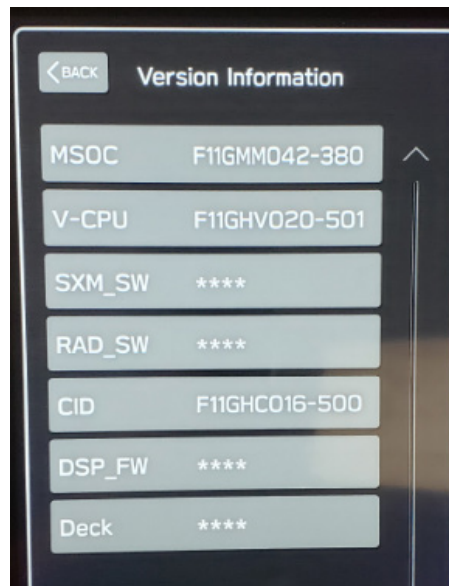
Technicians need to ensure all the systems outlined above work properly as preconditions to a successful RES. If all the vehicle’s side systems are functioning as expected, there are conditions on the back end infrastructure which may be the root cause of the failure but present no indication. These back end causes can only be addressed by opening a Techline case. Technicians faced with a RES concern and a vehicle that is otherwise operating as expected should contact Techline BEFORE any additional diagnosis, parts replacement or unnecessary repairs which may result in extended downtime.

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15 Software Version Verification

Reminder: For infotainment related concerns please always remember to review as applicable: **Technical Support Guide, TSB 15-177-14R** “Gen 2 and Gen 2.1 Operating Tips”, **TSB 15-221-18R** “Harman Audio/Infotainment: Harman Generation 3.0 and 3.1 Operating Tips”, **TSB 15-259-20R** “Denso Gen 4 Cockpit One (CP1) Infotainment System Operating TIPS Technical Support Guide.”

When confirming CP1 system software version information, it is critical to allow the unit to finish the boot-up process before accessing the version information screen. Failure to allow the process to complete could result in missing version information or asterisk symbols (****) as shown below. A good practice would be to wait a minimum of 3 minutes after the boot-up process begins at key on for this information to load properly.



However, this should not be confused with no “RAD_SW” version and “DSP_FW” version displayed or showing asterisk symbols (****) **AFTER** waiting for the system to completely boot-up. That would be a sign of a failed software update. For more details see Subarunet announcement “**Recall WRH-20 / WRI-20 Denso Gen 4 CP1 software update. Critical points to avoiding unnecessary hardware replacement**” posted January 5, 2021.

Note: Deck version as asterisk symbols (****) is normal when a CD Player is not installed.

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ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
E771SCC000	Accessory Installation Guide	2022MY BRZ Rear Bumper Appliqu...	10-Mar-21
WRB-21R	Subaru Product/Campaign Bulletin	Corrosion of the Air Condition...	10-Mar-21
12-315-21	Technical Service Bulletin	Steering Column Cover Rubbing ...	10-Mar-21
07-185-20R	Technical Service Bulletin	Seat Memory Control Module Dia...	10-Mar-21
F411SFL040	Accessory Installation Guide	Crosstrek/Impreza 5DR Pet-frie...	8-Mar-21
07-191-21	Technical Service Bulletin	DTC P257E / Hood Lock Assembly...	4-Mar-21
MSA5M2203A	Owner Manual	2022MY Legacy Owner's Manual	3-Mar-21
16-110-18R	Technical Service Bulletin	Reprogramming for "Shock" Felt...	3-Mar-21
H461SFL200	Accessory Installation Guide	PORT INSTALLATION: 2019-2022MY...	2-Mar-21
12-314-21	Technical Service Bulletin	Front Door Weatherstripping- D...	26-Feb-21
12-313-21	Technical Service Bulletin	Rear Door Weatherstrip - Desig...	26-Feb-21
05-84-21	Technical Service Bulletin	Front Wheel Hub Assembly- Desi...	26-Feb-21
12-311-21	Technical Service Bulletin	Side Cowl Panel Trim- Design C...	25-Feb-21
12-309-21	Technical Service Bulletin	Front Console Box Cover- Desig...	25-Feb-21
15-277-21	Technical Service Bulletin	Exchange Cockpit Control Unit ...	25-Feb-21
15-278-21	Technical Service Bulletin	Telematics DTC B2A01- Diagnost...	25-Feb-21
16-132-20R	Technical Service Bulletin	Diagnostic Information for All...	23-Feb-21
15-234-18R	Technical Service Bulletin	2019 Audio/Navigation & Power ...	22-Feb-21
15-272-20R	Technical Service Bulletin	2021 Audio/Navigation & Power ...	22-Feb-21
15-214-17R	Technical Service Bulletin	2018 Audio/Navigation Exchange...	22-Feb-21
15-249-19R	Technical Service Bulletin	2020 Audio/Navigation & Power ...	22-Feb-21
05-76-20R	Technical Service Bulletin	Front Wheel Hub Assembly- Desi...	22-Feb-21
05-83-21	Technical Service Bulletin	Rear Sub Frame Bolts- Design C...	22-Feb-21
15-204-16R	Technical Service Bulletin	2017 Audio/Navigation Exchange...	22-Feb-21
12-312-21	Technical Service Bulletin	Center Console Armrest Cover - ...	19-Feb-21
02-157-14R	Technical Service Bulletin	Engine Oil Consumption	19-Feb-21
01-167-08R	Technical Service Bulletin	Recommended Materials (All Veh...	18-Feb-21
F411SSJ000	Accessory Installation Guide	2020-2021 Forester Pet-friendl...	18-Feb-21
F411SAN020	Accessory Installation Guide	2020-2021 Outback Pet-friendly...	18-Feb-21
07-190-21	Technical Service Bulletin	Part Change Information for th...	17-Feb-21
WRB-21	Subaru Product/Campaign Bulletin	Corrosion of the Air Condition...	17-Feb-21
14-27-21	Technical Service Bulletin	New Engine Support Assembly Re...	17-Feb-21
WRH-20R	Subaru Product/Campaign Bulletin	Rear Visibility FMVSS 111 Non-...	15-Feb-21
WRI-20R	Subaru Product/Campaign Bulletin	Reprogramming of Denso CP1 Inf...	15-Feb-21
05-82-21	Technical Service Bulletin	Front Strut Dust Cover- Design...	15-Feb-21
07-189-21	Technical Service Bulletin	Front Door Window Regulator- E...	15-Feb-21
07-184-20R	Technical Service Bulletin	Power Window Main Switch- Desi...	15-Feb-21

All revised publications are highlighted in yellow.

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00 STIS New Releases (CONTINUED)

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
15-221-18R	Technical Service Bulletin	Harman Audio / Infotainment: H...	12-Feb-21
12-310-21	Technical Service Bulletin	Refinishing and Collision Repa...	11-Feb-21
15-236-18R	Technical Service Bulletin	Reprogramming File Availabilit...	10-Feb-21
SOA567S011	Accessory Installation Guide	Thule Ski Carrier (All years, ...	9-Feb-21
SOA567K011	Accessory Installation Guide	Thule Hull-a-Port XT (All year...	9-Feb-21
11-202-21R	Technical Service Bulletin	DTC P1160 / Extended Cranking ...	8-Feb-21
15-240-19R	Technical Service Bulletin	New Harman Audio Amplifiers	5-Feb-21
11-199-20R	Technical Service Bulletin	Reprogramming File Availabilit...	4-Feb-21
11-201-21	Technical Service Bulletin	DTC P0116 and / or Hard Starti...	4-Feb-21
07-155-19R	Technical Service Bulletin	Power Rear Gate (PRG) Control ...	3-Feb-21
11-200-20R	Technical Service Bulletin	Reprogramming File Availabilit...	3-Feb-21
WRA-21	Subaru Product/Campaign Bulletin	CVT Select Lever Cable Nut- Lo...	1-Feb-21
12-192-15R	Technical Service Bulletin	Windshield Cracking Concerns	1-Feb-21
17-17-13R	Technical Service Bulletin	Event Data Recorder (EDR) Func...	29-Jan-21
10-100-21	Technical Service Bulletin	A/C Compressor- Manufacturing ...	28-Jan-21
18-205-21	Service Manual Correction	Service Manual Corrections	28-Jan-21

All revised publications are highlighted in yellow.

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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: _____