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01 TechShare QMR of the Month

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

Pete Silan from
Farrish Subaru in Fairfax, VA

Pete created a high quality QMR using TechShare reporting the driver side main switch will not operate the passenger side window. In addition, the passenger side window switch only lowers the window. Pete's report included detailed diagnostic steps, high-quality photos, and videos.

Please refer to the following link to review the TechShare QMR in detail.

<https://subarutechshare.com/qmrs/TS-196154>

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

\$500.00 Snap-On gift card

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 |

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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 TechShare QMRs submitted during April 2022 were:

- **Darren Beck** from **Ganley Subaru of Wickliffe**
- **Brian Hillock** from **Cascade Subaru - Wenatchee**
- **Russell Witt** from **Profile Subaru**
- **Marco Yanes-Pena** from **Bill Kolb Jr. Subaru**

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

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 April 2022 was Pete Silan, Shop Foreman and Senior Master Technician at Farrish Subaru, Fairfax, VA.



Pictured from left to right is Farrish Subaru’s Dealer Principal Kevin Farrish, Subaru of America Inc. Field Service Engineer Dan Rockholt, Farrish Subaru’s Service Manager Gary Mellett, Farrish Subaru’s Shop Foreman/Senior Master Technician Pete Silan after being presented with his \$500.00 Snap-On Gift Card, Farrish Subaru’s Operations Director Daniel Farley, Farrish Subaru’s General Manager Fawad Osmani, Subaru of America Inc. District Sales Manager Andrew Raszewski and District Parts/Service Manager Cory Hiken.

*Congratulations and **THANK YOU** to our April 2022 QMR of the Month Award recipient!*

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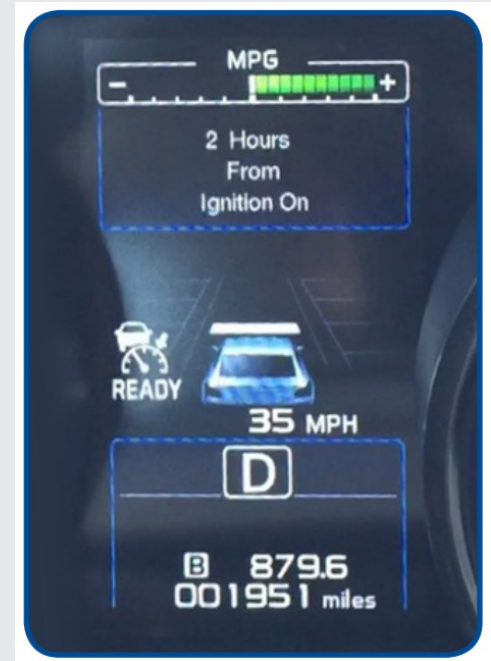
TECH TIPS GREATEST TIPS

This series features TechTIPS articles frequently referred to by Techline. This month's feature is from September 2015.

08

2015MY LEGACY AND OUTBACK: JOURNEY TIME ALERT ON COMBINATION METER TELLTALE DISPLAY

An added feature of the Combination Meter is an alert message (accompanied by a single “beep” sound) which will be displayed in the Telltale section above the odometer after 2 hours of driving have elapsed from ignition ON. The “beep” is the same sound heard when the low fuel lamp is first illuminated. This message is provided simply as a notification to make the driver aware they have been driving for 2 hours and it may be a good time to consider taking a break, checking fuel level, etc. Like other alerts shown on the Telltale display, it cannot be turned off or adjusted. This feature has been included on Subaru vehicles for several years, but unless the vehicle is driven for approximately 2 hours or more, many customers may have never experienced it. Until the Owner's Manual is revised, information will be limited regarding this message.



02

Diagnosing P0128 on Thermo Control Valve Equipped Vehicles

Forester 2019MY – current

Crosstrek Sport 2.5L – All

Legacy/Outback 2.5L 2020MY - current

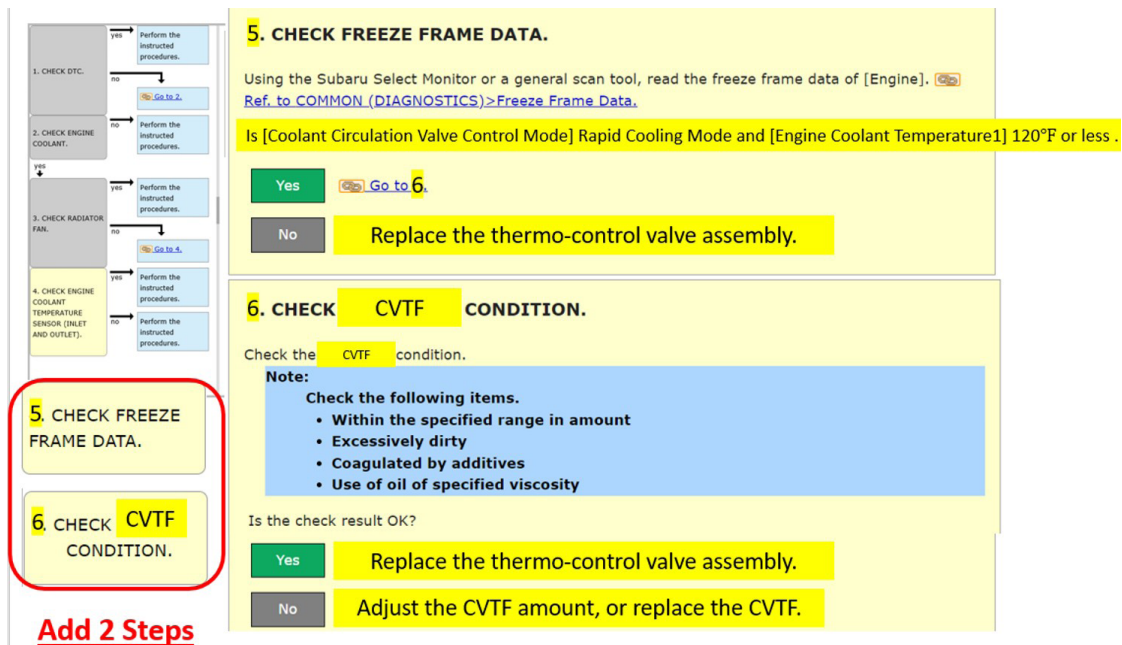
When diagnosing a DTC P0128 on a vehicle equipped with a Thermo Control Valve (TCV), Technicians may want to look somewhere unexpected: the CVT transmission fluid level. It was recently discovered that if the CVT fluid is mistakenly overfilled, it can cause the coolant temperature to rise abruptly. This will be outside of the normal logic seen by the ECM during engine warm up. This causes the TCV to switch to Rapid Cooling mode. In turn the ECM will interpret this as the engine not cooling/warming correctly, eventually leading to a P0128 DTC. The current Trouble Tree for P0128 does not mention a CVT fluid check. Be sure to refer to the applicable service manual to check that CVT fluid level!!

Continued on the next page

To check for this concern, inspect the FFD data for P0128. Check to see if the “Coolant Valve Circulation” PID is on RAPID. Also, look for the “Coolant Temperature 1” PID to be reading around 120° F. If you find both of those conditions in the FFD, check the CVT fluid to see if it is overfilled. If you do not find both in the FFD, continue with the normal P0128 Trouble Tree.

| P0128 The past : Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature) | | | | | | |
|---|--------|-----------|-----------|-----------|-----------|---|
| Item | Unit | 3 bloc... | 2 bloc... | 1 bloc... | Detect | |
| Engine Speed | rpm | 1681 | 1704 | 1730 | 1732 | - |
| Mass Air Flow | lb/min | 2.29 | 2.48 | 2.65 | 2.68 | - |
| Mass Air Flow Average | lb/min | 2.35 | 2.56 | 2.59 | 2.66 | - |
| Vehicle Speed | MPH | 59 | 59 | 59 | 59 | - |
| Throttle Opening Angle | % | 21 | 23 | 23 | 23 | - |
| Accel. Opening Angle | % | 0.0 | 0.0 | 0.0 | 0.0 | - |
| A/F Sensor #1 | | 1.01 | 0.99 | 0.99 | 1.00 | - |
| Ignition timing adv. #1 | ° | 23.0 | 20.5 | 20.0 | 20.0 | - |
| Engine Coolant Temperature 1 | °F | 120 | 120 | 120 | 120 | - |
| Engine Coolant Temperature 2 | °F | 113 | 113 | 113 | 113 | - |
| Coolant Circulation Valve Control Mode | | Rapid ... | Rapid ... | Rapid ... | Rapid ... | - |
| Coolant Circulation Valve Actual Angle | deg | 78.99 | 78.99 | 79.04 | 79.02 | - |
| Coolant Circulation Valve Angle Sensor Voltage | V | 4.150 | 4.150 | 4.151 | 4.151 | - |
| Coolant Circulation Valve Target Angle | deg | 78.61 | 78.61 | 78.61 | 78.61 | - |
| Coolant Circulation Valve Duty Ratio | % | 2 | 2 | 2 | 2 | - |
| Coolant Circulation Valve Request Status | | ON | ON | ON | ON | - |

A special note; when following the Trouble Tree for P0128 on a 19-21MY Thermo Control Valve equipped vehicle, it may lead to replacement of the thermostat. This is incorrect. Vehicles with a TCV should not be equipped with a traditional coolant thermostat. The TCV takes on the job of a thermostat. Please review the updated Trouble Tree below. The Service Manual has been updated for 2022MY and up and has the correct information.



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During inspection of a new vehicle equipped with a manual or CVT transmission, there may be oil residue found in the following areas.

- The CV shaft, bottom of the transmission or on the drain plug
- The propeller shaft and the thermal barrier.

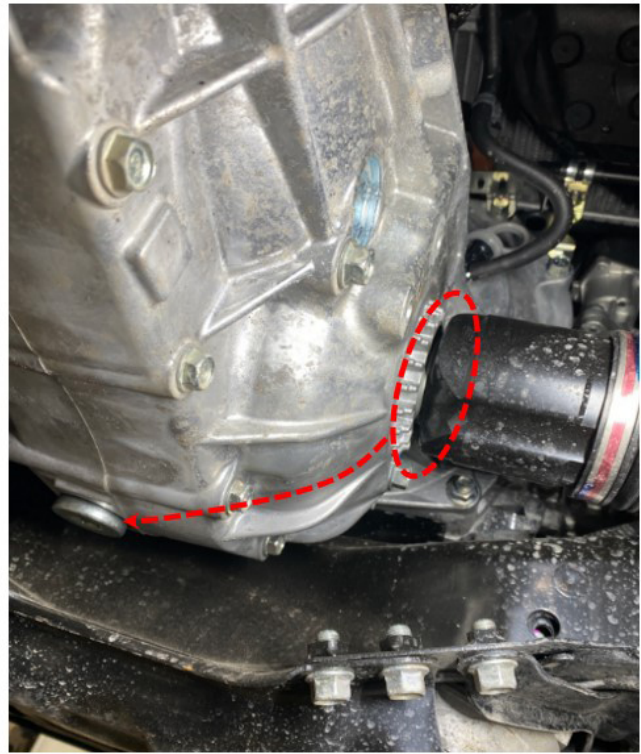
This is due to a small amount of oil spillage during the assembly process.

If this symptom is found it is recommended to:

- 1) Clean the area so it is free of any residue.
- 2) Drive the vehicle for several miles (recommendation: 10 miles).
- 3) Re-check whether oil residue is duplicated. If no new oil is found, no action is needed.

Note: If further action is needed, refer to Tech TIPS 3/21 for Leak Trace Powder Revisited.

Fig.1 Junction of Transmission and CV drive shaft



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Fig.2 Transmission oil drain plug

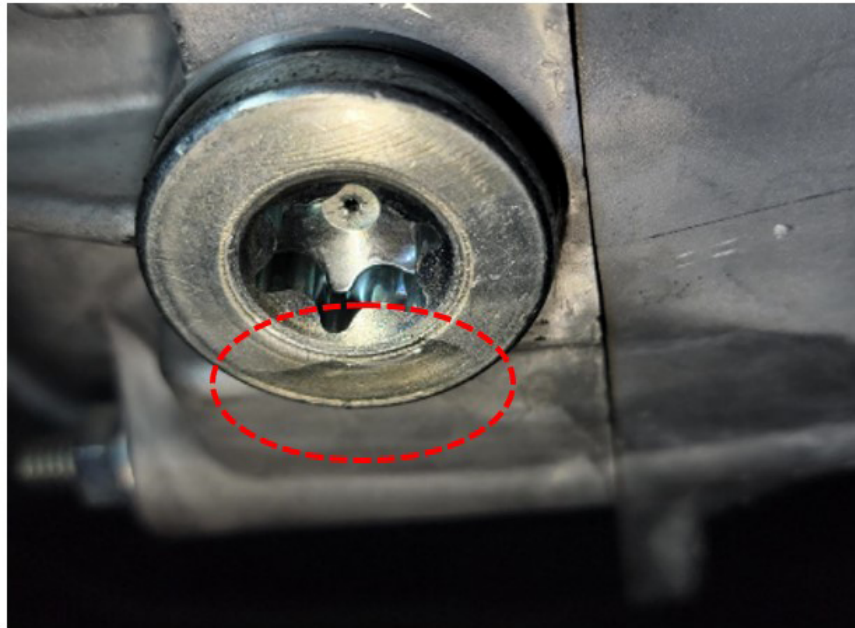
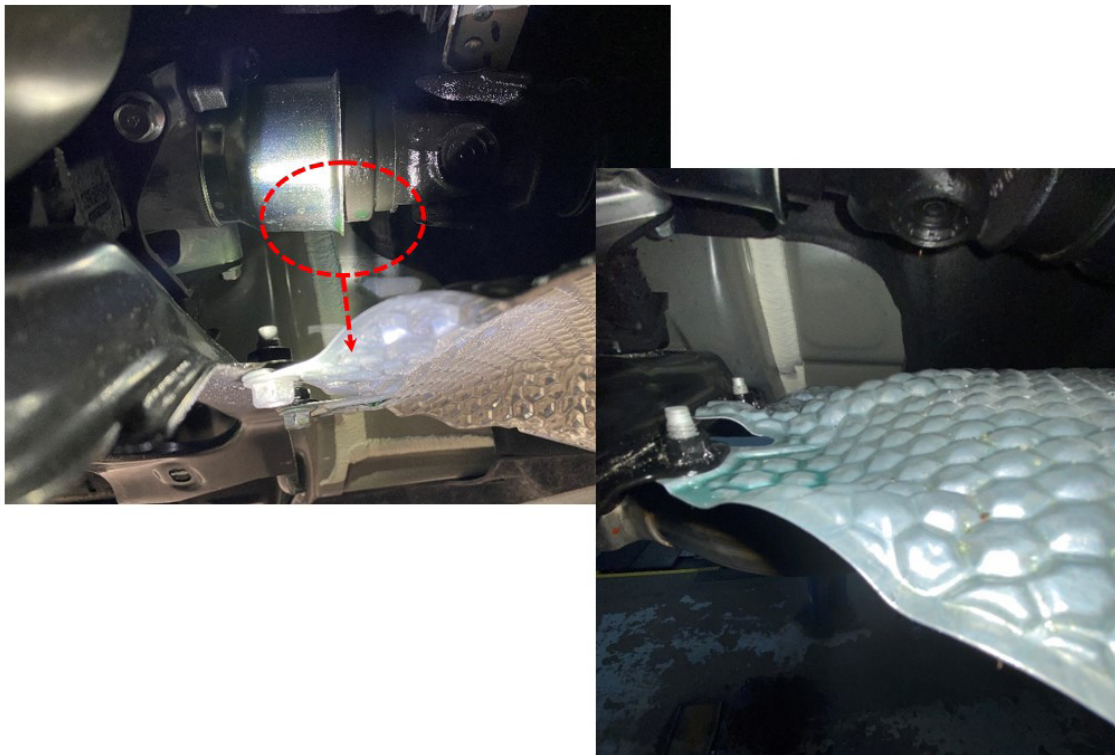


Fig.3 Junction of Transmission extension part and Propeller shaft. Thermal barrier cover under the extension section.



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15 Keyless Access Output Volume

Vehicles equipped with Keyless Access have two BIU settings that can be adjusted at customer request for Keyless Buzzer sound. These settings can be accessed through BIU customization in SSM4. The following example is from a MY20 Outback Touring with push button start.

The first setting will turn off the audible noise made when the lock and unlock buttons are pressed on the key fob. This setting is called **Buzzer sounding setting**. When switched to **OFF**, there will be no audible noise emitted when locking or unlocking the car. This setting can be changed at any time.

SUBARU Select Monitor 4 - Customize - Body Control

Current Setting Value
Changed value
Setting Reading Val.
Not modify value

| Item | Setting value | | |
|--|---------------|--------------|------------|
| High Beam Assist Current Setting | OFF | ON | |
| High Beam Assist Function Setting (mirror/Eye... | No HBA | EyeSight HBA | mirror HBA |
| Rr Defogger op. mode | Normal | Continuous | |
| Security Alarm Setup | OFF | ON | |
| Alarm delay setup | OFF | ON | |
| Lockout prevention | OFF | ON | |
| Buzzer sounding setting | OFF | ON | |
| Abnormal warning lamp flashing setting | OFF | ON | |
| Door open warning | No Support | Support | |
| Dome Light Alarm Setting | OFF | ON | |
| Auto A/C Setting | No Support | Support | |
| Wiper Deicer setting | No Support | Support | |

The next setting, **Keyless Buzzer Volume**, will adjust the volume of the Keyless entry chirp. The default setting is 5. Lowering the number value will make the vehicle quieter as the lock/unlock buttons are pushed. The volume can be made slightly louder by raising the volume to 7. It is recommended that this setting be changed only at customer request.

SUBARU Select Monitor 4 - Customize - Body Control

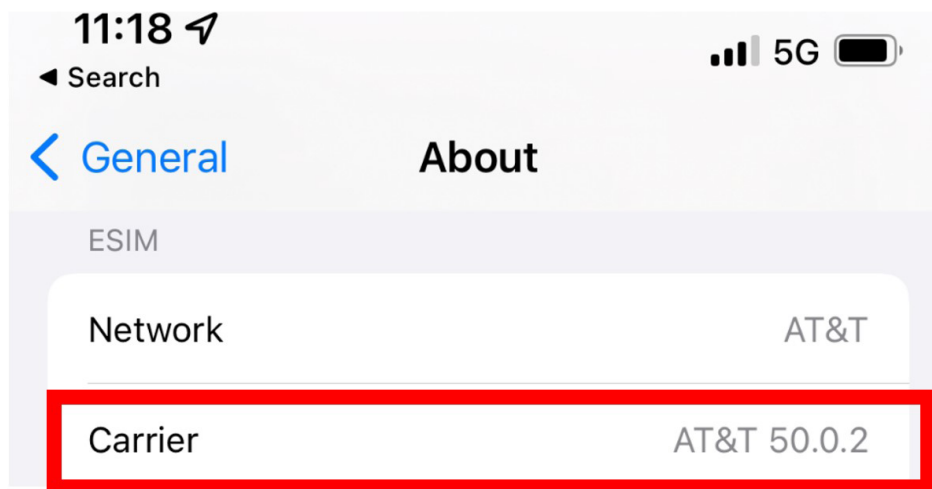
Current Setting Value
Changed value
Setting Reading Val.
Not modify value

| Item | Setting value | | | | |
|---|---------------|---------|--------|--------|------|
| Dome Light Alarm Setting | OFF | ON | | | |
| Auto A/C Setting | No Support | Support | | | |
| Wiper Deicer setting | No Support | Support | | | |
| Sedan/Wagon Setting | Sedan | Wagon | | | |
| MT/AT Setting | MT | AT | | | |
| Illumination Sensor Setting | No Support | Support | | | |
| Factory initial setting | Market | Factory | | | |
| EPB setting | No Support | Support | | | |
| Sunroof setting | No Support | Support | | | |
| Welcome Light (Exit) | OFF | 30 Sec | 60 Sec | 90 Sec | |
| Welcome Light Off Delay Time(Approaching) | OFF | 30 Sec | 60 Sec | 90 Sec | |
| Keyless Buzzer Volume | 1 | 2 | 3 | 4 | 5 |
| | 6 | 7 | | | |
| Auto Dimmer Cancel setting | OFF | Least | Less | Normal | More |
| | Most | | | | |

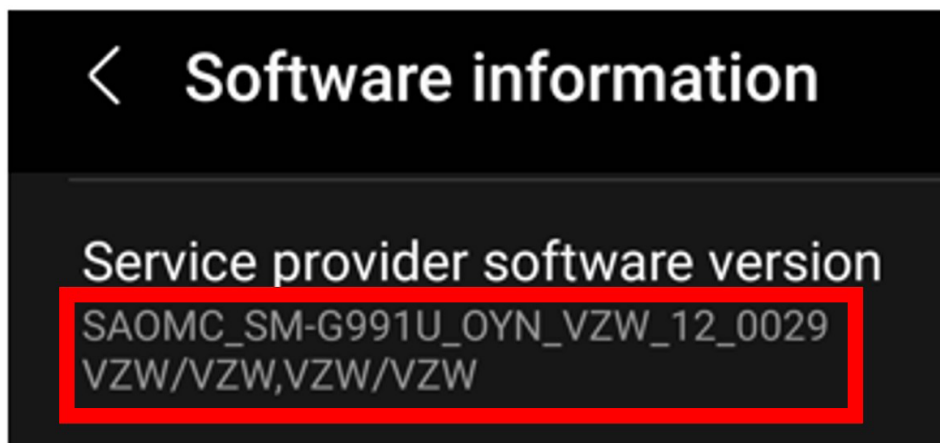
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With the anticipated release of the enhanced Infotainment Portal Questionnaire, pilot groups provided feedback on a question about the Carrier Version number; mainly what it is and what it is for. The Carrier Version number allows a phone carrier to control which versions of applications are allowed to 'run' on the phone. This is different from the Operating System Version number. This information can be beneficial in helping Technicians understand how two seemingly similar phones are different. Techline has been working with colleagues at Harman and United Radio to assist retailer Technicians in identifying when a customer concern is related to operating software, rather than hardware failure. Therefore, the Carrier Version number is a valuable piece of information to collect. This information can be found in both Apple and Android phones.

For Apple phones: Navigate to Settings > General > About. Locate "Carrier," this is the carrier version information.



For Android phones: Navigate to Settings > About phone > Software information. Locate "Service provider software version."



This information can be useful in making sure that the phone being tested is as identical a match as possible to the customers' phone. As always, being able to test with the customers' actual equipment is recommended.

[Continued on the next page](#)

| ITEM CODE | ITEM TYPE | TITLE | CREATED DATE |
|-----------------|----------------------------------|-----------------------------------|--------------|
| 15-283-21R | Technical Service Bulletin | 2022 Audio/Navigation & Power ... | 13-Jul-22 |
| 01-185-22 | Technical Service Bulletin | Lifting Requirements & Procedu... | 13-Jul-22 |
| WRK-21R | Subaru Product/Campaign Bulletin | CVT Chain Guide Breakage | 13-Jul-22 |
| 16-132-20R | Technical Service Bulletin | Diagnostic Information for All... | 12-Jul-22 |
| S1165BE | Other/Miscellaneous | 2023MY Solterra Registration M... | 11-Jul-22 |
| 15-298-22 | Technical Service Bulletin | Repair Process for Vehicles Wh... | 11-Jul-22 |
| TECH_SRVY_22 | Other/Miscellaneous | 2022 Subaru Technician Survey | 11-Jul-22 |
| 02-131-12R | Technical Service Bulletin | Oil Seepage Diagnosis and Repa... | 11-Jul-22 |
| 02-136-12R | Technical Service Bulletin | Oil Seepage Diagnosis and Repa... | 11-Jul-22 |
| PT97442231 | Accessory Installation Guide | PORT INSTALLATION: 2023MY Solt... | 8-Jul-22 |
| 16-139-22 | Technical Service Bulletin | CVT Assembly (WRK-21) Warranty... | 8-Jul-22 |
| 15-294-22 | Technical Service Bulletin | Original Equipment Key Fob Una... | 8-Jul-22 |
| 09-91-22 | Technical Service Bulletin | Engine Not Cranking/Starting | 8-Jul-22 |
| SOA3881320 | Accessory Installation Guide | OIL CAP 5W-30 | 8-Jul-22 |
| SOA3881310 | Accessory Installation Guide | OIL CAP 0W-20 | 8-Jul-22 |
| SOA3881300 | Accessory Installation Guide | SUBARU BATTERY TIE DOWN | 8-Jul-22 |
| SS_OTA_Navi_3.1 | Owner Manual | Over the Air Software Updates ... | 6-Jul-22 |
| SS_OTA_Mid_3.1 | Owner Manual | Over the Air Software Updates | 6-Jul-22 |
| SS_OTA_Navi_3.0 | Owner Manual | Over the Air Software Updates ... | 6-Jul-22 |
| WRC-22 | Subaru Product/Campaign Bulletin | Safety Recall - Engine Harness... | 6-Jul-22 |
| WRC-20R | Subaru Product/Campaign Bulletin | Rear Seat Belt Webbing Locking | 6-Jul-22 |
| WUV-07R | Subaru Product/Campaign Bulletin | CVT Chain Slip | 5-Jul-22 |
| 05-88-21R | Technical Service Bulletin | Front Stabilizer Bushing- Desi... | 5-Jul-22 |

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: _____