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01 TechShare QMR of the Month

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

Garrett Coe from
Carlsen Subaru in Redwood City, CA

Garrett created a high quality QMR using TechShare reporting on P0600 found in memory. His report included diagnostic steps, high-quality photos, and SSM Data.

Please refer to the following link to review the TechShare QMR in detail.
<https://subarutechshare.com/qmrs/TS-192260>

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

\$500.00 Snap-On gift card

SUBARU TECHLINE HOLIDAYS & HOURS OF OPERATION

Memorial Day: (Closed)
Monday, May 30, 2022

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.

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.



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We Support
Education Foundation

01 QMR of the Month (CONTINUED)

The other Regional winners selected from QMRs submitted during February 2022 were:

- **Gregory Beach** from **Ramsey Subaru** in Ramsey, NJ
- **Jason Figueroa** from **Johnson Subaru of Cary** in Cary, NC
- **Jonathan Rodriguez** from **Napleton's Palatine Subaru** in Palatine, IL
- **Cory Scothon** from **Patriot Subaru of N. Attleboro** in North Attleboro, 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 February 2022 was Technician Garrett Coe from Carlsen Subaru in Redwood , CA.



Garret is shown above (right/center) after being presented with his \$500.00 Snap-On Gift Card. Also pictured (left to right) SOA District Parts Service Manager Michael Anderson and Carlsen Subaru Service Director Maher Nijem. To Garrett's left is SOA Field Service Engineer Alan Wolfe.

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

Continued on the next page

TECH TIPS GREATEST TIPS

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

01 Calling the Techline Revisited

In the interest of streamlining the process of contacting Techline, Technicians should follow proper phone etiquette. The Technician should always start by introducing themselves and express the reason for the call. The Technician is either opening a new case for diagnostic assistance or working on an existing case. It is important that the Technician understand the information provided is being documented by the Representative. Once the reason for the call has been established, allow the Techline Representative to ask relative questions in order to gather important information. The Techline Representative will require the following information at the beginning of the call:

- Case number (if applicable)
- Last 8 of the vin
- The dealership code number
- Your first and last name
- The Repair Order number
- The date the Repair Order was created
- The milage of the vehicle
- The customers concern as stated on the Repair Order

In order for Subaru Techline to best serve our retailers, it is necessary that the Technician meet the additional criteria before dialing in for assistance. Following the above and below guidelines will help reduce call wait times, decrease comebacks, and increase customer satisfaction.

- The vehicle should be available to the Technician for testing while on the phone with the Techline representative, if appropriate.
- All associated pre-call work sheets should be completed. These are located on Subarunet under Service Operations & Technical.
- If there are DTCs, the Technician should have a documented diagnostic path with exact answers. Stating "good" or "within specification" is not acceptable when a numerical value is requested.
- Always save Freeze Frame Data (FFD) electronically before clearing any DTCs. Printing is not recommended as it can omit important information. SSM4 use is recommended.
- Always try to capture a data stream (SSM4 File) every time you are attempting to duplicate a condition. This is especially important when diagnosing intermittent issues.
- Do not send data without opening a Techline case first. All unsolicited data will be deleted. Any data submitted should have the case number referenced in the subject line of the email, along with any other identifying characteristics requested by the Techline representative. Data files should include all PIDs and must be marked at time when the concern occurs. Technicians should review the data before submitting and have specific questions. When following up with Techline, techs should have a copy of the data file available to review when they call.

Continued on the next page

01 Calling the Techline Revisited (CONTINUED)

- Always search STIS for diagnostic and repair information via TechTips, Service Bulletins, and Campaign Bulletins. Techshare should not be used as a publication for diagnosis, as the postings only reflect the repair that has been made and not whether the repair was a confirmed fix of the concern.
- When a case number is given to a Technician, it serves only to document vehicle concerns and repairs. It does NOT give authorization to replace anything. A case number is not necessary for warranty purposes. If your diagnosis leads you to replacement of a component and your testing results have been reviewed with the Techline Representative, it is still recommended you discuss this with your Service Manager. When in doubt about the need for an authorization, consult the Policy and Procedures manual.
- Oil consumption issues that fall within the guidelines of Technical Service Bulletin 02-157-14R, do not need to be called into the Techline unless you require assistance as stated at the bottom of the Consolidated Oil Consumption Form found on Subarunet.
- A Techline case number is not needed for CVT unit replacement. Technicians should perform any related bulletin or the appropriate test plan in STIS for all CVT concerns.
- When you encounter a customer concern of a normal condition that you can verify on a comparable model, there is no need to call in for a case number to document this. If you have completed a repair successfully, there is no need to call and get a case number. It is recommended you complete and submit a TechShare QMR in these cases.

The Technical Support Line (Techline) is here to assist our retailers ONLY.

The Techline phone number should never be given to the Customer! We can assist Authorized Subaru Retailer personnel ONLY. Customers must be directed to Customer Retailer Services (CRS) by contacting them online or by phone at: <http://www.subaru.com/customer-support.html> or by calling 1-800-782-2783.

01 When Diagnostics Don't Diagnose, Checking ALL Power Supplies

When diagnosing a vehicle with a DTC or electrical concern, it is important to follow any diagnostics provided in STIS in addition to performing any basic checks that may not be mentioned. This includes verifying power and ground for the entire circuit in question, as well as fuses. This will likely require going to the wiring schematic for the system being diagnosed, and not just referencing the diagram included with the DTC. Don't forget, there are also separate diagrams for the vehicle Power Supply Circuit that show the electrical system from the battery to the fuse, and Ground Circuit diagrams. If you have followed all steps and the vehicle's problem is still unresolved, we recommend checking the most recent model year service manual for updates that may have been made to the diagnostics.

Case Example: We recently encountered a vehicle with B1016 SHIFT LOCK CIRCUIT, and trouble tree diagnostics led to BIU replacement. It was later found that one of the fuses providing power to the BIU was missing. The trouble tree for this specific model year did not call out checking any fuses for the BIU. For this example, it is recommended to reference the Shift Lock Control System diagram to identify all fuses that effect the Shift Lock Circuit. It may also be necessary to reference the Power Supply Circuit diagram. (NOTE: diagnostics for B1016 were updated to include inspecting the power supply with 2020MY)

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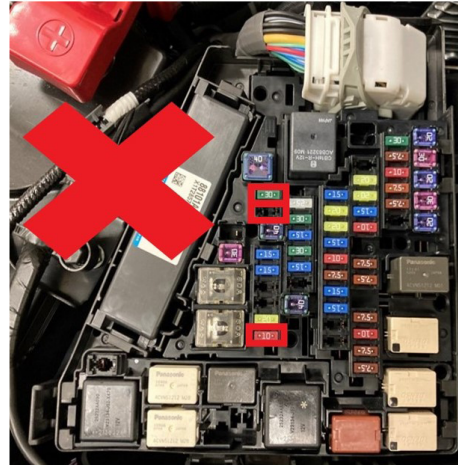
01 22MY Pre-Delivery Inspection (PDI) Fuse Location Reminder

During the Pre-Delivery Inspection process for any model year, it is important to keep in mind the PDI fuse movement. It has been brought to Techlines attention that if the incorrect fuses are moved it may result in features not operating properly. Recently, a 22MY WRX had a concern that the windshield wipers would not turn off unless the vehicle was completely powered off. The Technician diagnosing the concern found DTC B1A01 stored as current. The Technician followed the Diagnostic Trouble Tree and found three fuses installed in the wrong place. These fuses dealt directly with the front relay control module. Taking power away from MB fuse No. 40, resulted in the wipers defaulting to 'on'. This was traced back to the possibility of incorrect fuses being moved during the PDI process.

22MY WRX **Correct** PDI fuse movement



22MY WRX **Incorrect** PDI fuse movement



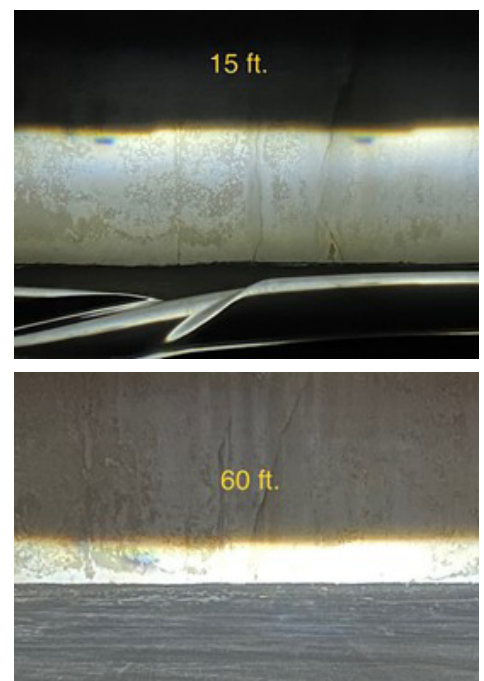
Technicians should refer to the appropriate manual on STIS for the proper PDI process.

This can be found under: [General Description](#) -> [Pre-Delivery Inspection](#) -> [Procedure](#)

07 Headlight appearance “Dark spot in headlight patterns.”

Subaru has received recent reports of concerns with headlight beam and pattern appearances. To satisfy the markets' desire to illuminate far distances, a more concentrated headlight illumination pattern has been adopted. As headlight patterns and beam clarity improve year after year with the evolution of headlight elements from halogen, HID and LED, drivers have noticed a dark area or “dark spot” in the beam. This black spot is to satisfy both Federal Motor Vehicle Safety Standards (FMVSS), and Insurance Institute for Highway Safety (IIHS) rules that certain points of the beam should not be illuminated. The “dark spot” is incorporated into the beam so as not to “dazzle” corresponding vehicles or pedestrians.

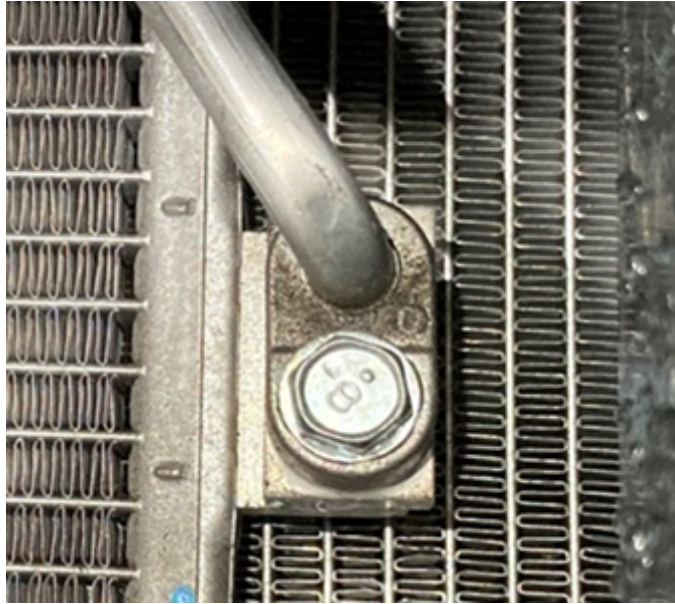
The example shown here is from the new 2022 Forester, notice the patterns' “dark spot” is less defined as the distance increases. When presented with a customer concern of a “dark spot” or “black spot” in the headlight pattern, it is best practice to confirm the condition and compare with a like year and model vehicle that is equipped with like headlights.



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10 2022 WRX AC Condenser, Oil Residue

When diagnosing an A/C concern, take note that you may notice oil residue where the A/C line connects to the condenser. During production, oil is applied to the pipe and O-ring to ease installation. If you notice this, it does not indicate a leak or defect. Simply clean the oil off the connection, operate the AC system and then reinspect this location. If there are no signs of a leak no further action is necessary.



14 Midtronics DSS-5000 Helpful Hints

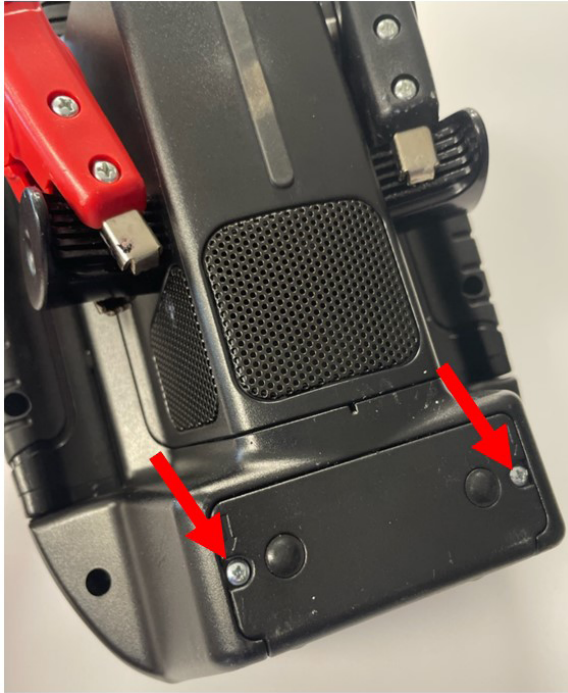
This message appeared while attempting to install the latest software version (currently “O” for the DSS-5000 and “I” for the DCA-8000 Dynamic Diagnostic Charging System).



Although the DSS was in the dock, the dock properly connected to AC via the AC adapter and a strong WiFi signal confirmed on the display, the update still could not be installed successfully. On the Main Menu screen, there was a small red indicator in upper corner of the Messages icon. The message referred to checking (replacing) the six (6) “AA” batteries of the Internal Battery pack located inside the base of the Tester Pod. To access the Internal Battery, remove the two small Phillips screws and slide the cover downward.

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14 Midtronics DSS-5000 Helpful Hints (CONTINUED)



Once the “AA” batteries were replaced, the DSS re-accessed the WiFi and automatically completed the software update. It is important to know, these batteries must be in good condition for the automatic update feature of the tool to function properly **regardless** of whether the dock is connected to AC power or not.

- Another question relating to the Internal Battery pack was, what to do if the batteries were found to have been leaking? If damage from the leakage is more than what a thorough cleaning of the contacts can address and a replacement pack is required, contact Midtronics Service Support at: (866) 592-8052.
- In some cases, a “Reserve Capacity Test Not Completed” message may also result from a low “AA” battery pack

15 The Telematics LED: When green does not mean GO

The 3G sunset program claims data and Techline case reporting have highlighted significant failed DCM replacement. Our customers are bearing the brunt of this Technician-induced failure which primarily stems from a failure to follow STIS, TSB, and TechTips regarding DCM replacement. Customers would have avoided the inconvenience of these failures if the Technician had referred to service documentation.

When a new DCM is installed, the Telematics green LED illuminates. This green LED indicates that the DCM is powered, trouble-free, and ready for initialization via the comm check. The DCM is non-operational at this point despite the illumination of the green LED. Thousands of DCM replacements have left the retailer in this state, causing inconvenience and service interruption to our customers.

Just like many of you have experienced with a new cell phone purchase, it is not instantly working out of the box without doing some things to activate the device on the network. Similarly, a new DCM must be initialized via the comm check followed by successful provisioning to ensure operation.

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Anytime there is a DCM replacement, Technicians should be:

1. Referring to documentation to ensure they are following the latest repair and claims requirements to complete the repair.
 - a. This includes recording the DCM serial number referenced in TSB 15-195-16R, page 4.
2. Pushing the iButton to perform the comm check and noting that both telematics LEDs flashed, indicating success.
3. After the comm check completes, the green LED stays illuminated.
4. Pushing the iButton and completing a test call connecting to an operator confirming operation.

The failure to comm check a replacement DCM and ensure the operation is a significant safety concern as Advanced Automatic Collision Notification (AACN) will not be functional. Technicians can avoid creating this safety concern by following all available service information in STIS, TSBs, and TechTips. Telematics repairs should follow the CONCERN, CAUSE, CORRECTION, and CONFIRMATION steps of repairs on other safety systems like SRS, ABS, and ELR.

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ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
TSG 900MHz PS	Troubleshooting Guide	Remote Engine Start Systems Tr...	8-Jun-22
MSA5M2301W	Warranty Booklet	2023 Warranty and Maintenance ...	8-Jun-22
E7710VC501	Accessory Installation Guide	2022MY WRX Exhaust Finisher	8-Jun-22
E5610VC010	Accessory Installation Guide	2022MY WRX Rear Side Under Spo...	2-Jun-22
L101SSJ005	Accessory Installation Guide	PORT INSTALLATION: 2019-2022MY...	25-May-22
07-162-19R	Technical Service Bulletin	Automatic Door Lock / Unlock F...	23-May-22
12-288-20R	Technical Service Bulletin	Power Front Seat Cushion Frame...	23-May-22
J101SVC100	Accessory Installation Guide	2022MY WRX - Mud Flaps	19-May-22
16-112-18R	Technical Service Bulletin	Ignition Key Sticking / Design...	19-May-22
MSA5M2312A	Owner Manual	2023MY Impreza Eyesight Owner'...	18-May-22
MSA5B2301A	Owner Manual	2023MY Impreza Getting Started...	18-May-22
MSA5M2309A	Owner Manual	2023MY Impreza Subaru STARLINK...	18-May-22
MSA5M2301A	Owner Manual	2023MY Impreza Owner's Manual	18-May-22
12-203-16R	Technical Service Bulletin	Squeaking Sound from Front Sea...	18-May-22
J131SVC001	Accessory Installation Guide	2017-22MY Impreza (all trims) ...	18-May-22
MSA5M2318A	Owner Manual	2022MY Crosstrek Eyesight Owne...	17-May-22
MSA5B2307A	Owner Manual	2023MY Crosstrek Getting Start...	17-May-22
15-236-18R	Technical Service Bulletin	Reprogramming File Availabilit...	17-May-22
MSA5M2327A	Owner Manual	2023MY Crosstrek Hybrid Eyesig...	17-May-22
MSA5B2308A	Owner Manual	2023MY Crosstrek Hybrid Gettin...	17-May-22
MSA5M2325A	Owner Manual	2023MY Crosstrek Hybrid Subaru...	17-May-22
MSA5M2308A	Owner Manual	2023MY Crosstrek Hybrid Owner'...	17-May-22
WRG-21R	Subaru Product/Campaign Bulletin	Fuel Pump Impeller Failure	17-May-22
15-296-22	Technical Service Bulletin	Denso CP1 MID & HIGH (11.6" Di...	13-May-22
15-273-20R	Technical Service Bulletin	Denso CP1 BASE (Dual 7" Displa...	13-May-22
09-89-22	Technical Service Bulletin	P0890 TCM Power Relay Sense Ci...	12-May-22
15-295-22	Technical Service Bulletin	Denso CP1 BASE (Dual 7" Displa...	12-May-22
18-219-22	Technical Service Bulletin	Service Manual Correction / D...	12-May-22
01-167-08R	Technical Service Bulletin	Recommended Materials (All Veh...	11-May-22
MSA5M2319A	Owner Manual	2023MY Crosstrek Subaru STARLI...	10-May-22
MSA5M2307A	Owner Manual	2023MY Crosstrek Owner's Manua...	10-May-22
MSA5M2301M	Warranty Booklet	2023 Solterra Warranty and Mai...	9-May-22
18-218-22	Technical Service Bulletin	Service Manual Correction / DT...	9-May-22
4/28/2022	Technical Service Bulletin	Squeaking Sound Occurs When Tu...	3-May-22

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: _____