TECH TIPS

Subaru Service and Technical Support Line Newsletter

January 2022



© 2022 Subaru of America, Inc. All rights reserved.

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 ARTICLEPAGE
(00) STIS New Releases6-7
(01) QMR of the Month1-2
(01) QMR of the Month Award
Presentations2
Tech Tips Greatest Tips
(03) Squeak/Chirp Sound from High-Torque CVT
When Shifting from P/N to D3
(03) Hub Bearing and Backing Plate
Replacement4
(07) Wiring Harness Ground Bolt Torque
Spec4-5
(15) 2022MY Forester, HVAC Gesture Control 4

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:

Jeremy De Groodt from Capitol Subaru in San Jose, CA

The winning QMR of the Month selected from November's submissions provided a detailed diagnosis of a 2021Outback with no audio output from the infotainment system regardless of the selected source. While confirming the condition, Jeremy noticed the Telematics LED was illuminated red, indicating a fault. A check for DTCs with the SSM revealed DTC B2A06 in memory for the R/F speaker circuit. He attempted to perform an active test of the R/F speaker through the Telematics system but was unable to complete it as the PID shown indicated the output for the speaker was shorted. Jeremy proceeded to dig into the wiring between the DCM and the speaker, checking resistances and for any shorts to ground or to power with no problem found leading him to replace the DCM. After replacing the DCM, the LED returned to green and audio output was restored initially but during road testing, audio output was lost, the Telematics LED went back to being red and DTC B2A06 DTC returned. Techline was contacted and after reviewing the prior diagnostic steps taken, a recommendation was made to locate and inspect the connection where the R/F door harness joins the instrument panel harness at i29. Upon close inspection, a small puncture was found in the insulation of the violet wire. Jeremy ordered and installed a new R/F door wiring harness which restored normal audio and Telematics function. The TechShare report submitted included detailed results of each diagnostic test he performed. High quality photos were also included to document his findings.

In appreciation for going the extra mile and sharing his experience and TechShare feedback with us, Jeremy 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.



We Support



O1 QMR of the Month (CONTINUED)

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

- David Rizzo from West Herr Subaru in Orchard Park, NY
- Luke Wasson from CMA's Colonial Subaru in South Chesterfield, VA
- Chris Grad from Ganley Subaru of Wickliffe in Wickliffe, OH
- Craig Demeo 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!



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 2021 was 3-Time QMR of the Month Winner Jeremy DeGroodt, a Master Technician at Capitol Subaru in San Jose, CA.



Jeremy is shown above (right/center) after being presented with his \$500.00 Snap-On Gift Card. To his right are Capitol Subaru's Service Manager Tony Tran and Subaru of America, Inc. District Parts and Service Manager Michael Anderson. To his left is Subaru of America, Inc. Field Service Engineer Alan Wolfe.

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

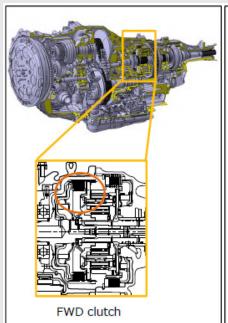
TECH TIPS GREATEST TIPS

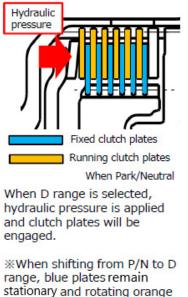
This series features TechTIPS articles frequently referred to by Techline. This month's feature is from April 2020.

03

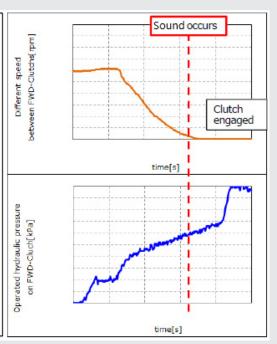
Squeak/Chirp Sound from High-Torque CVT When Shifting from P/N to D

The High-Torque CVT equipped in the 2019+MY Ascent, 2015+MY Legacy/Outback 3.6R and XT, 2014-2018MY Forester XT, and 2015MY+ WRX (CVT equipped), may emit a brief squeak or chirp sound when shifting the transmission from park or neutral to drive. This sound is caused by the operation of the forward clutch, just before the clutch fully engages. The sound is caused by the clutch plate friction materials sliding against each other. These plates are designed to accept this type of contact. The sound does not affect the performance or reliability of the transmission and is characteristic of its operation so, no attempt should be made to try to repair it. It is important to ensure there are no DTCs stored as current or in history, there are no drivability concerns present and, the sound only occurs while the vehicle is stopped and under the conditions described above.





plates will come to a stop.





Hub Bearing and Backing Plate Replacement

It has come to SOAs attention that Technicians are not replacing the backing plate when faced with hub bearing replacement. It is important to replace the backing plate along with the hub bearing assembly to avoid repeat bearing failures. TSB 05-70-19R is available to review this information.

A portion of the TSB is shown here as a reference. Always consult the appropriate service manual on STIS and the most up to date Technical Service Bulletins when replacing parts.

APPLICABILITY: 2014-18MY Forester

2012-19MY Impreza 2013-19MY Crosstrek

SUBJECT: Rear Wheel Backing Plate- Design Change

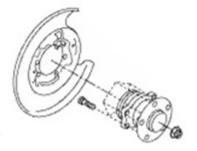
INTRODUCTION:

This bulletin announces a design change made to the rear wheel / brake backing plates. Under certain circumstances, some customers may have a concern regarding a howling-type sound from the rear of the vehicle later diagnosed as a faulty hub / bearing assembly. Unevenness of the backing plate surfaces may affect the concentricity (roundness) of the hub / bearing after torqued during assembly and over time, cause the howling -type sound to develop. Production changes for the backing plates have been implemented to optimize their mounting surface quality.

PART INFORMATION:

Description	Part Number
HUB / BEARING ASSY	28473FL040
BACKING PLATE RH	26704FJ002
BACKING PLATE LH	26704FJ012

REMINDER: Always order the most up-to-date replacement parts based on the specific VIN being repaired.





Wiring Harness Ground Bolt Torque Spec

When performing diagnostics or replacing vehicle wiring harnesses, verify all vehicle body ground bolts are torqued to spec. Vehicle body ground bolts are M6 and have an "E" (earth/ground) stamped on the bolt head. Be aware, these bolts may be used in other locations on the vehicle. Proper torque specification is 13 Nm (9.6 ft-lb). This does NOT include grounds that bolt to the engine, transmission, or other components that are not part of the vehicle body. Please see applicable section (ex: Transmission Assembly > Installation) in STIS for bolt torque specs on these components.



NUMBER: 05-70-19R

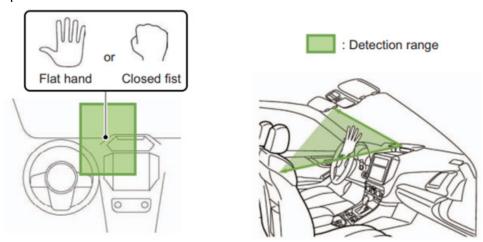
REVISED: 12/02/20

DATE: 09/30/19

15

2022MY Forester, HVAC Gesture Control

A new feature that will be integrated into Subaru vehicles is Gesture Control. The driver will be able to make hand gestures to control HVAC features through the Driver Monitor System (DMS). The Gesture feature is designed so that the customer can change their temperature settings without taking their eyes of the road. To accomplish this the driver will place their hand in front of the occupant recognition sensor. The gesture of an open palm with the fingers spread will raise the temperature of the air conditioning while a gesture of a closed fist will lower the temperature. The customer should be aware that if they are wearing gloves it may interfere with the recognition of the gesture being made. If a customer has a concern that involves the intermittent changing of climate control features the Gesture Control may be the cause. The Technician should confirm that the feature is active and interview the customer to ensure that they are aware of its function and confirm that they know proper operation.



Be sure to interview the customer about objects that are on the dash or rearview mirror area that they may remove when they drop off the vehicle as they may contribute to a false command being recognized. There has been confirmation that some objects hanging from the rearview mirror have triggered the Gesture Control to change settings. Technicians should confirm the concern by test driving the vehicle with all the customers items present in the vehicle. Once the concern has been duplicated a second test drive should be performed with objects such as parking passes, handicap placards, graduate tassels, or beads removed from the rearview mirror to confirm if they are associated with the customer concern. The Gesture Control can be temporarily turned off by the customer, but it requires them to turn off the Driver Monitor System. The system will turn back on if the ignition is cycled, or the driver's door has been opened and closed. The Gesture Control can be disabled with SSM through Driver Monitor customization functions. Additional information regarding activation conditions.

Non-activation conditions

The gesture control function does not work under the following conditions.

- DMS is OFF, paused, or faulty.
- Ignition switch is OFF or the select lever is in "P" or "R".
- When driving and the turn signals are operating, when the steering wheel is turned greatly (about 180° or more), when a looking aside / doze alarm is given, or when personal recognition is in progress.
- Driving at low speed.
- The heater control switch is not turned on.
- DMS cannot recognize the driver's face.

2022MY Forester, HVAC Gesture Control (CONTINUED)

■ Conditions under which the system may not work properly

Gesture recognition may not work properly in the following cases:

- Sunlight enters the vehicle interior.
 - Sunlight (including light with strong near-infrared components) is causing a shadow on the hand.
 - The intensity of sunlight (including light with strong near-infrared components) illuminating the hand fluctuates greatly and quickly.
- The driver is wearing gloves or hand accessories.
 - Wearing thick gloves
 - Wearing gloves that absorb near-infrared light
 - Wearing hand accessories
- There is a blocking object between the hand and the system.
- There are multiple hands within the recognition range (such as when the hand of the person in the passenger seat is within the recognition range).
- The hand is turned a lot or tilted too much.

In the following cases, the temperature setting of the air conditioner may change due to unintended gesture recognition.

- A hand is placed within the recognition range, when such as sending a signal to a person outside the vehicle.
- The driver operates the inner mirror or room light.
- Something is put on or off the MFD.
- Someone in the back seat, etc. reaches out to near the navigation system.

00 STIS New Releases

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
15-192-22R	Technical Service Bulletin	Infotainment Concern Data Coll	18-Mar-22
C1010VA001	Accessory Installation Guide	PORT INSTALLATION: 2022MY WRX	16-Mar-22
S0A567R200	Accessory Installation Guide	2019-22MY Ascent Pet Rear Door	16-Mar-22
S0A567R100	Accessory Installation Guide	2019-22MY Forester Pet Rear Do	16-Mar-22
F411SSJ020	Accessory Installation Guide	2019-22MY Forester Seat Cover	16-Mar-22
07-205-22	Technical Service Bulletin	Subaru Rear Vehicle Detection	15-Mar-22
13-104-21	Technical Service Bulletin	2022 MY Paint Coding Informati	10-Mar-22
16-136-22R	Technical Service Bulletin	Vibration & Possible Judder Co	9-Mar-22
18-217-22R	Technical Service Bulletin	Service Manual Correction / DT	9-Mar-22
06-84-22	Technical Service Bulletin	DTC B2809- VDC Abnormal & B2C2	7-Mar-22
L9020BE	Service Manual	2022MY WRX Body Repair Manual	7-Mar-22
09-83-21R	Technical Service Bulletin	3.6L Water Pump-Design Change	7-Mar-22
15-293-22	Technical Service Bulletin	Remote Climate Control Operati	4-Mar-22
15-240-19R	Technical Service Bulletin	New Harman Audio Amplifiers	2-Mar-22
09-80-21	Technical Service Bulletin	DTC # P2682 & P26Ax** / Thermo	28-Feb-22
12-234-22	Technical Service Bulletin	Body Repair Manual Correction	28-Feb-22
J121SAN500	Accessory Installation Guide	2022MY Outback Exterior Graphi	28-Feb-22
J121SAN200	Accessory Installation Guide	2022MY Outback Exterior Graphi	28-Feb-22
J121SAN100	Accessory Installation Guide	2022MY Outback Exterior Graphi	28-Feb-22
01-175-16	Technical Service Bulletin	E-Mailing Files to Techline an	28-Feb-22
06-85-22	Technical Service Bulletin	Rear Stabilizer Bar / Design C	23-Feb-22
WRL-21	Subaru Product/Campaign Bulletin	Front Axle Housings	23-Feb-22
15-255-19R	Technical Service Bulletin	Map Data Update Procedure for	22-Feb-22
C1010VA001	Accessory Installation Guide	PORT INSTALLATION: 2022MY WRX	22-Feb-22
15-234-18R	Technical Service Bulletin	2019 Audio/Navigation & Power	21-Feb-22
WRE-21R	Subaru Product/Campaign Bulletin	Ignition Coil Replacement	21-Feb-22
MSA5B2205A	Owner Manual	2022MY WRX Getting Started Gui	18-Feb-22
15-291-22	Technical Service Bulletin	Gen1 Telematics DCM Replacemen	18-Feb-22
MSA5M2210A	Owner Manual	2022MY WRX Subaru STARLINK® Ow	18-Feb-22
MSA5M2215A	Owner Manual	2022MY WRX Eyesight Owner's Ma	18-Feb-22
MSA5M2205A	Owner Manual	2022MY WRX Owner's Manual	18-Feb-22
07-204-22	Technical Service Bulletin	Tentative Select Monitor Proce	18-Feb-22
H505SSJ000	Accessory Installation Guide	PORT INSTALLATION: 2022MY Fore	18-Feb-22
E7210VC200	Accessory Installation Guide	PORT INSTALLATION: 2022MY WRX	18-Feb-22
J121SVC000	Accessory Installation Guide	2022MY WRX - Carbon Fiber Trun	18-Feb-22
H101SSJ000	Accessory Installation Guide	2022MY Forester Long Range Pus	18-Feb-22

OO STIS New Releases (CONTINUED)

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
15-192-22	Technical Service Bulletin	Infotainment Concern Data Coll	16-Feb-22
12-233-22	Technical Service Bulletin	Squeak Sound During Front Wind	11-Feb-22
05-75-20R	Technical Service Bulletin	Front Coil Spring- Design Chan	10-Feb-22
16-132-20R	Technical Service Bulletin	Diagnostic Information for All	8-Feb-22
06-83-22	Technical Service Bulletin	VDC Reprogramming File Availab	8-Feb-22
16-125-19R	Technical Service Bulletin	CVT Oil Pan- Design Change	3-Feb-22
16-138-22R	Technical Service Bulletin	DTC P0613 – TCM Processor	3-Feb-22
E721SAN031XX	Accessory Installation Guide	2020-2022MY Legacy - Trunk Spo	2-Feb-22
TSG 900MHz KS	Troubleshooting Guide	Remote Engine Start Systems Tr	2-Feb-22
	Service Diagnostics	2022 WRX Service Manual VH	2-Feb-22
09-85-22	Technical Service Bulletin	Front Exhaust Pipe Cover Repla	1-Feb-22
15-261-20R	Technical Service Bulletin	Reprogramming File Availabilit	28-Jan-22
SUTTIPSLOC	Other/Miscellaneous	TechTIPS Article Locator Index	25-Jan-22

All revised publications are highlighted in yellow.

*** Now you can e-mail your TechTIPS input and suggestions to: tech@subaru.com ***
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:

SUBARU TECHLINE Hours of Operation

Monday – Thursday 8:30 am to 7:30 pm Friday 10:30 am to 5 pm and Saturday 9 am to 3 pm