



Subaru Service and Technical Support Line Newsletter

ARTICLES CONTAINED

CODE	ARTICLE PAGE
(00)	STIS New Releases8-9
(01)	QMR of the Month1-2
(01)	QMR of the Month Award Presentations
(01)	2019MY Forester Quality Monitoring Team New Model Launch
(01)	2019MY Forester: Auto Start- Stop and Driver Monitor System Diagnostic Information
(07)	Ascent Automatic Wiper Rain Sensor Initialization
(11)	2019MY Ascent: DTC P0606, Control Module Processor: Diagnostic Hints. 5
(15)	Fujitsu/Denso 10 iPhone Contact Picture Display- Update
(15)	Sirius XM List and Voice Tuning Concerns on Gen. 2 & 2.1 Denso
	(D10) Audio Units 6
(15)	2019MY Impreza/Crosstrek Remote Engine Start (Key Start) - Control Module Installation
(16)	Service Manual Correction: Rear Transmission Crossmember / Transmission Mount Removal- Impreza and Crosstrek CVT Models 7

SUBARU TECHLINE HOLIDAYS & HOURS OF OPERATION

Thanksgiving: (Closed) Thursday, November 22, 2018

Day After Thanksgiving: 10:30-3:30 Friday, November 23, 2018

Holiday Break: (Closed) Monday, December 24, 2018 Tuesday, December 25, 2018

Mon Thurs.	8:30AM - 7:30PM EST
Friday	10:30AM - 5:00PM EST
Saturday	9:00AM - 3:00PM EST

QMR OF THE MONTH

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

Daniel Anderson from Stohlman Subaru in Vienna, VA

Daniel submitted an excellent QMR detailing his diagnosis and repair of a second-row captain's chair in a new 2019MY Ascent. The seat would not slide forward or backward and, the lever to lift the seat forward to gain easier 3rd row access was also inoperative. After checking for any obstructions under the seat that could be causing the condition, Daniel noticed the left side release arm for the slide was stuck in the down position, appeared to be bent and looked like it was missing a small plastic insert which keeps in place. After straightening the arm enough to release the mechanism, he was able to remove the seat from the vehicle for closer inspection. Daniel determined there was 2 separate issues. The first was the missing plastic insert from the release arm which caused the sliding mechanism to jam. Fortunately, the missing insert is available separately from the mechanism. After installation of a replacement insert and careful straightening of the release lever, normal operation of the slide mechanism was restored. The second issue was the cable attached to the release lever that operates the mechanism allowing the seat to be lifted for 3rd row access was not attached. Daniel secured the cable to the lever with another cable tie which corrected the condition. He reinstalled the seat in the vehicle and confirmed all the functions of the seat were now operating as designed.

Daniel submitted a highly detailed report outlining his repairs and accompanied it with quality before and after photographs of the affected components.

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

A \$500.00 Snap-On gift card.

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 and "Quality Driven" are Registered Trademarks. Ascent is a trademark.

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.



The other Regional winners selected from QMRs submitted during August 2018 were:

- David Jodat from Subaru City of Milwaukee in Milwaukee, WI
- Zachary Sklarew from Michael's Subaru of Bellevue in Bellevue, WA
- Edwin Mcgrath from DELLA Subaru of Plattsburgh in Plattsburgh, NY
- Francis Pelletier from Suburban Subaru in Vernon, CT

Any Subaru Technician can participate in the 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 Tech TIPS!



QMR OF THE MONTH AWARD PRESENTATIONS

As part of our "enhanced" QMR of the Month recognition program, we will be including a photo (whenever available) of the recipient's award presentation in TIPS. The winner selected from QMR of the Month submissions received during August 2018, was Dan Anderson a Technician at Stohlman Subaru in Vienna, VA.



Len Conway, FSE, SOA and Stohlman Subaru's Service Manager Arvin Nano are shown here after presenting Dan with his \$500.00 Snap-On Gift Card. In addition, Dan was joined by his family who stopped by to join in the celebration, his son Dustin, wife Jennifer and daughter Brittany. Congratulations and **THANK YOU** to our August QMR of the Month Award recipient!

01 2019MY FORESTER QUALITY MONITORING TEAM NEW MODEL LAUNCH

A Special SBR Quality Monitoring Team is currently in the USA monitoring the launch of this muchanticipated new model. The Team is very interested in **EVERYTHING** related to this new vehicle. They are looking for specific and detailed information on **EVERY** condition identified. Naturally, this includes any repairs performed. It also includes cases when a customer comments on a function or condition considered to be a normal operational characteristic. This includes any improvement opportunities where some feature or function could be made even better. We are asking you to be our eyes and ears with this new model.

For high priority, unusual, or serious concerns, we ask that you call SOA's Techline and open a new case. When calling, be sure to have Freeze Frame Data (saved electronically, not a printout) or SSM data streams where applicable. It is crucial to also include troubleshooting tree results from the Service Manual found during diagnosis.

QMRs are the best and preferred reporting method for communicating any new model feedback. When submitting a QMR, please remember to include any Freeze Frame Data (electronically, not a printout) or SSM data streams where applicable. It is crucial to also include troubleshooting tree results from the Service Manual found during diagnosis. Photos and videos, where practical, of the condition prior to repair are also extremely helpful for the team to fully understand the condition. Provide as much detail as possible on the customer complaint, the actual condition found, and all findings. Your detailed feedback is strongly requested and greatly appreciated. These items are crucial so the team can accurately understand the condition and how to address it.

While there is no guarantee a change will occur based upon any individual report, we can guarantee nothing will happen if we don't know about it. Our request is to report **EVERYTHING**, even if it seems to be just a small or straightforward repair.

QMRs, Techline Cases, CRS Cases and Warranty Claims are being reviewed daily. Team Members may contact Retailer personnel for additional details, photos, videos, part collections, or to arrange an on-site inspection. We ask for your cooperation in quickly responding to these requests for additional information. Please save all removed parts no matter how small, including gaskets, clips, fasteners, any filtered sediments, or other small bits and pieces. The rule of thumb is, if you report it or claim it, save it (including any drained fluids).

Please note, questions may come to you regardless if an QMR is submitted or not so, please keep detailed notes on all repairs.

As a reminder, QMRs must never be used to request escalation of a repair, request information, or for any other purpose than to notify SOA of a new or trending condition. Authorization or Repair Escalation Requests must always go through normal channels for the fastest, most efficient handling. Paint or Glass Authorization requests must go through the Techline Authorization System on Subarunet. All other authorizations must be reviewed in advance with your DPSM.

We **THANK YOU** all in advance for your great support and assistance in making this launch successful.

01 2019MY FORESTER: AUTO START-STOP AND DRIVER MONITOR SYSTEM DIAGNOSTIC INFORMATION

The new 2019MY Forester is equipped with the Auto Start-Stop system which under the right conditions, shuts the engine off when the vehicle is stopped then restarts it when pulling away from the stop. Another new feature is the Driver Monitor System (DMS) which actually monitors the driver's eyes for signs of fatigue and when determined necessary, activates audible and visual warnings to help keep the driver alert.

The TCM supports the Data Monitor function for the Auto Start-Stop system. Currently, the Service Manual text for the related prohibition Reference values are listed as "Permit" or "Not Permit" but the SSM displays them as "ON" or "OFF". Until corrections are made, "ON" means "Permit" and "OFF" means "Not Permit". See the reference images below:

\square				Item	1		V	alue	Unit	Maxim	um	Minimur	n Aver	rage
-	TM	Low water temperature stop prohibition judgment						ON		-		-	-	
V	TM	Battery high temperature prohibition judgment						ON		-		-	-	
v	TM	Battery low temperature prohibition judgment						ON		-		-	-	
v	TM	External air temper						ON		-			-	
	TM	Inclination prohibit	ion iud	ament	, ,			ON		-		-	-	
V	TM	Steering angle prol			nt			ON		-		-	-	
	TM	Engine rotation pro						ON			_		-	
-	TM	Battery current pro						ON		SSM	Sc	reens	hot .	
-	TM	Voltage drop prohi				e time o		ON		-		-	-	
7	TM	Air-conditioning pr						ON		-			-	
7	TM	DC/DC Converter 1				n Evalua		ON		-		-	-	
	TM	Prohibition judgme						ON		-			-	
A.		· · · · · · · · · · · · · · · · · · ·					·····							_
				Start Stop operation condition (Idling → Auto Start Stop)	Start Stop restart condition s (Auto Start Stop → Restart)	for cancel (During Auto Start Stop → Engine stall)	evaluation a time of start Air-condition prohibition DC/DC Conv Temperature Prohibition Evaluation	ning	engine start Judgment of air cor prohibition DC/DC converter pi judgment		rmit		lot Permit —	
Low wa temper prohibit judgme	ature stop tion	Judgment of stop prohibition with low water temperature	Permit	Permit	Not Permit	-	Prohibition judgment by atmospheric pressure cor		Judgment of prohib atmospheric pressu		rmit	Permit M	iot Permit —	
Battery temper prohibit judgme	/ high ature tion	Judgment of prohibition with high battery temperature	Permit	Permit	Not Permit	-								
Battery temper prohibit judgme	r low ature tion	Judgment of prohibition with low battery temperature	Permit	Permit	Not Permit	-								
Inclinat prohibit judgme	tion tion	Judgment of inclination prohibition ^{*1}	Permit	Permit	Not Permit					Serv	ice	Man	lal	
prohibit judgme	ent	Judgment of steering angle prohibition ¹	Permit	Permit	Not Permit									
prohibit	ent	Judgment of engine rotation prohibition ^{*1}	Permit	Permit	Not Permit									
Battery	current	Judgment of battery current prohibition ¹	Permit	Permit	Not Permit	-								

The DMS system is supported by the Data Communication Module (DCM). The error involves incorrect cancel code time stamp data. The repair will be to reprogram the DCM with a file included in a future SSM update release.

			Т			Unit Tem	perature.
Code▲	Number of Occurrences	Explanation / Reason	Trip Count [count] A	Time Count [msec]	Group	Main	Came
			00537	1349400	Current		
	145	Eyelid Detection Failure	06402	519040000	Originally	79°C	79°C
03	146	Eyelid Detection Failure	06402	564915200	Originally	79°C	79°C
03	147	Eyelid Detection Failure	06402	591129600	Originally	79°C	79°C
03	148	Eyelid Detection Failure	06402	604236800	Originally	79°C	79°C
03	149	Eyelid Detection Failure	06402	735308800	Originally	79°C	79°C
03	150	Eyelid Detection Failure	06402	807398400	Originally	79°C	79°C
03	151	Eyelid Detection Failure	06402	1010560000	Originally	79°C	79°C
03	152	Eyelid Detection Failure	06402	1023667200	Originally	79°C	79°C
03	153	Eyelid Detection Failure	06402	1036774400	Originally	79°C	79°C
03	154	Eyelid Detection Failure	06402	1056435200	Originally	79°C	79°C
03	155	Eyelid Detection Failure	06402	1069542400	Common	79°C	79°C
03	156	Eyelid Detection Failure	06402	1089203200	Originally	79°C	79°C
03	157	Eyelid Detection Failure	06402	1390668800	Originally	79°C	79°C
03	158	Eyelid Detection Failure	06402	138956800	Originally	79°C	79°C
03	159	Eyelid Detection Failure	06402	165171200	Originally	79°C	79°C
03	160	Eyelid Detection Failure	06402	224153600	Originally	79°C	79°C
03	161	Eyelid Detection Failure	06402	578048000	Originally	79°C	78°C
03	162	Eyelid Detection Failure	06402	800870400	Originally	79°C	78°C
03	163	Eyelid Detection Failure	06402	886067200	Originally	79°C	78°C
05	15	Face Angle Detection Failure	06402	394547200	Originally	79°C	78°C
			· · · · · · · · · · · · · · · · · · ·				
				7			
						_	
			a www.e.e.t.Time.e	Champin V	-		
		ind ind	correct Time	Stamp v	alues	5	

07 ASCENT AUTOMATIC WIPER RAIN SENSOR INITIALIZATION

Whenever the Rain Sensor is removed or replaced, initialization of the sensor must be performed. Currently, for 2019MY Ascent, the Automatic Light and Wiper (ALW) control module does not display as an available system on SSM4 (ver. July 2018). Setting the SSM4 software as a 17MY Legacy/ Outback will allow access to the Ascent ALW CM and calibration can be performed. As a workaround until SSM4 is updated, please follow the steps below:

- 1. Open SSM4 and select Diagnosis
- 2. Enter the Vehicle Information as 17MY Legacy / Outback
- 3. Connect DST-I to the ODB connector
- 4. From Each System select Automatic Light and Wiper
- 5. From Work Support select Sensor initial setting

If you encounter any trouble with the procedure above, please contact Techline for assistance.

11 2019MY ASCENT: DTC P0606, CONTROL MODULE PROCESSOR: DIAGNOSTIC HINTS

The Techline has received a small number of reports regarding DTC P0606 where following the Service Manual diagnostic steps has not isolated the root cause of the DTC. To properly diagnose this DTC, it is important to understand the cause is a discrepancy between the actual engine torque value and the engine torque value as calculated by the ECM. Related field reports also outline where P0606 was stored and the root cause was determined to be loose or missing hardware for the intercooler piping which resulted in a boost pressure leak. In a case where the actual engine torque is reduced, as it would be when a boost leak is present, a stored DTC P0606 may result. While the Service Manual currently directs the Technician to perform various electrical tests first, the diagnostics will be revised to include instruction to inspect for any boost pressure leak between the turbocharger and the throttle body.

To summarize, if a vehicle presents with a stored DTC P0606, always be sure to start by inspecting and confirming all turbocharger pressure side and intercooler piping hardware is in place, properly secured and fully tightened before proceeding further with any electrical testing.

15 FUJITSU/DENSO 10 IPHONE CONTACT PICTURE DISPLAY- UPDATE

In the June 2018 TechTIPS, we provided the contact photo specifications for Gen 2 & 2.1 D10 (formerly F10) head units. The Techline continues to receive calls about picture contact concerns. According to investigation by D10, this is a compatibility issue due to a specification change of iPhone. The image data format was changed starting from OS 11.3 and the new format is no longer compatible with Gen 2 & 2.1 head units for images larger than 800 bytes. D10 has implemented an enhancement to be available in the next software update. This is tentatively planned for released in December 2018. Installation of an exchange or new head unit will not correct this condition currently.

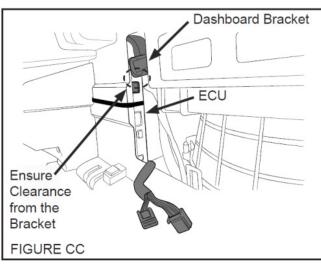
When using the list function to display available channels, only two channels (Ch000 and Ch001) are displayed. After an SXM programming update in August 2018, it was found that the D10 Gen 2 and 2.1 head units were not capable of handling the new line-up due to a software limitation of the head units. Please note the number of received channels varies upon the SXM subscription package. The actual number of receivable channels may also change depending on the current SXM channel line-up. At this moment, only customers with the full subscription package are affected by the condition as that lineup contains more than 256 channels. Impacted customers may still use either the direct tune functionality, the radio tune knob, or save their favorites to their presets. D10 has implemented an enhancement to be available in the next software update. This is tentatively planned for released in December 2018. Installation of an exchange or new head unit will not correct this condition currently.

15 2019MY IMPREZA/CROSSTREK REMOTE ENGINE START (KEY START) - CONTROL MODULE INSTALLATION

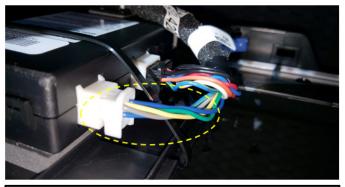
Vehicles & Remote Engine Start Kits (RES) Affected:

- 2019MY Impreza/Crosstrek with Key Start Ignition H001SFL400
- 2019MY Impreza/Crosstrek with Key Start Ignition (Permanent Fix Coming soon)

<u>Current Condition</u>: If proper care is not used when mounting the RES Control Module, the RES connector/ harness could come in contact with a factory metal bracket following reassembly. SOA recommends a quick visual inspection of this area once the glove box inner cover is replaced. See below, Figure CC.



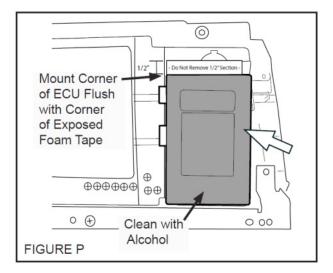
Also note:



In the event of a "no-start" condition using the vehicle key, and vehicle fuse #33 (7.5A) in the main fuse box is blown, check the RES harness insulation (gray wire, pin 5 of 8-pin connector) for damage or potential short to a metal bracket. Remove and replace damaged harness if necessary.

15 2019MY IMPREZA/CROSSTREK REMOTE ENGINE START (KEY START) - CONTROL MODULE INSTALLATION

Long Term Solution: Refer to the updated H001SFL400 Installation Instructions, Issue 01 (Dated: July 25, 2018) to ensure the revised ECU mounting procedures are followed. The installation instructions illustrate how to mount the ECU ½" lower to avoid any contact with the factory metal bracket after reassembly. See below, Figure P.



16 SERVICE MANUAL CORRECTION: REAR TRANSMISSION CROSSMEMBER / TRANSMISSION MOUNT REMOVAL- IMPREZA AND CROSSTREK CVT MODELS

When removing the rear transmission crossmember to replace the cushion mounts on a 2017-18MY Impreza or 2018MY Crosstrek, removal of the <u>rear</u> exhaust pipe (pipe between the spring bolt connection and front muffler) is required, NOT the front pipe as currently directed by the Service Manual. The applicable Service Manuals will be updated with this change soon.

IMPORTANT REMINDERS:

- Whenever removing the rear crossmember, always support the transmission with a transmission jack.
- NEVER support the transmission by the oil pan.
- Always use new gaskets and the specified one-time use nuts whenever re-installing exhaust components.
- Torque all hardware to proper specification.

00 STIS NEW RELEASES

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
15-211-17R	Technical Service Bulletin	Reprogramming File Availabilit	16-Oct-18
07-141-18	Technical Service Bulletin	Engine Harness Retaining Clip	15-Oct-18
15-199-16R	Technical Service Bulletin	Reprogramming File Availabili	12-Oct-18
06-66-18	Technical Service Bulletin	Front Brake Rotor- Design Chan	12-Oct-18
02-179-18	Technical Service Bulletin	Cylinder Head Bolt Torqueing S	12-Oct-18
A091SFL100	Accessory Installa- tion Guide	2019 Crosstrek PHEV Engine Blo	12-Oct-18
F551SFL030	Accessory Installa- tion Guide	2019 Crosstrek PHEV Cargo Net	12-Oct-18
01-168-09R	Technical Service Bulletin	Replacement Key and Immobilize	
07-140-18	Technical Service Bulletin	DTC U0284, Additional Diagnost	9-Oct-18
12-251-18	Technical Service Bulletin	Gap Between Top of Glove Box a	9-Oct-18
16-117-18	Technical Service Bulletin	CVT Warranty Extension	9-Oct-18
J201SFL301	Accessory Installation Guide	PORT INSTALLATION: 2019MY Fore	2-Oct-18
15-208-17R	Technical Service Bulletin	Availability of "Gracenote® Me	2-Oct-18
04-23-18	Technical Service Bulletin	Power Steering System Diagnost	27-Sep-18
10-86-17R	Technical Service Bulletin	Blower Motor- Design Change to	27-Sep-18
11-183-18R	Technical Service Bulletin	DTC P0045 ECM Reprogramming Fi	27-Sep-18
F5410SJ001	Accessory Installation Guide	2019 Forester Moonroof Air Def	26-Sep-18
F551SSJ200	Accessory Installation Guide	2019 Forester Cargo Separator	26-Sep-18

00 STIS NEW RELEASES

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
SOA567B050	Accessory Installation Guide	Ascent THULE 4 BIKE HITCH RACK	26-Sep-18
H001SSJ100	Accessory Installation Guide	FORESTER LONG RANGE KEY START	26-Sep-18
H001SSJ000	Accessory Installation Guide	FORESTER LONG RANGE PUSH START	26-Sep-18
06-65-18	Technical Service Bulletin	"Clicking" or "Ticking" Sound	24-Sep-18
15-211-17R	Technical Service Bulletin	Reprogramming File Availabilit	21-Sep-18
H671SSJ000	Accessory Installation Guide	PORT INSTALLATION: 2019MY Fore	21-Sep-18
H001SFL100	Accessory Installation Guide	PORT INSTALLATION: 2019MY Fore	21-Sep-18
L101SXC002	Accessory Installation Guide	2019 ASCENT TRAILER HITCH (FRE	21-Sep-18
J501SSJ310	Accessory Installation Guide	PORT INSTALLATION: - 2019MY Fo	21-Sep-18
16-116-18	Technical Service Bulletin	New Select Lever Component Par	21-Sep-18
WTT-79R	Subaru Product/ Campaign Bulletin	ECM Reprogramming for DTC P160	20-Sep-18
06-64-18	Technical Service Bulletin	Brembo Caliper Brake Hose Banj	19-Sep-18
E2610SJ040	Accessory Installation Guide	2019 Forester STI Side Door Ga	19-Sep-18
07-128-18R	Technical Service Bulletin	Stop Lamp Switch / Pedal Strok	18-Sep-18
04-22-18	Technical Service Bulletin	Rattle Sound from Steering Rac	17-Sep-18

*** 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:



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