# TECH **TIPS**

Subaru Service and Technical Support Line Newsletter



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#### SUBARU TECHLINE HOLIDAYS & HOURS OF OPERATION

Memorial Day: (Clo Monday, May 25, 20	<b>sed)</b> 20						
Independence Day: (Closed) Friday, July 3, 2020							
Labor Day: (Closed Monday, September	) 7, 2020						
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 Winner of QMR of the Month:

## Patrick Abramovitch from Subaru of Port Richey in Port Richey, FL

Patrick's winning QMR outlined his successful diagnosis and repair of a 2018 Outback 2.5i Limited which presented with an unusual customer concern of the door locks locking and unlocking on their own while driving. Although unable to confirm the condition as described by the customer, he did verify being able to lock the doors with the door switches but not unlock them. Patrick started his diagnosis by confirming the remote keyless entry feature operated normally, both lock and unlock. Next, he connected the SSM and brought up the BIU PID data. While monitoring the Manual Unlock Switch Input PID, Patrick noticed it was not switching and always showed as ON. His next step was to remove both front door panels and disconnect the lock switches one at a time while monitoring the PID in hopes of seeing it switch from ON to OFF. The PID data remained ON so, he began to inspect the instrument panel harness above the BIU by wiggling it in different areas while continuing to look for the PID to change. Eventually, Patrick was successful and after a thorough inspection, isolated a point where the harness had been contacting the steel frame of the passenger airbag module. He noticed the harness tape was chafed and upon closer inspection, found the insulation of the brown unlock request wire had been punctured, shorting the signal to ground. After repairing the damaged wire and adding some additional protection to the harness, normal door lock system operation was restored. Patrick's QMR contained a thorough description of his diagnostic procedure accompanied by guality photos and multiple videos.

In appreciation for going the extra mile and sharing his experience with us, Patrick 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 OTH-

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.



#### January 2020 TechTIPS

# **01** QMR OF THE MONTH (CONTINUED)

The other Regional winners selected from QMRs submitted during December 2019 were:

- Anthony Quintana from Ramsey Subaru in Ramsey, NJ
- David Callender from Roy Robinson Subaru in Tulalip, WA
- Matthew Brady from Subaru of Wichita in Wichita, KS
- Raymond Anderson from Premier Subaru Watertown in Watertown, CT

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 PRESENTATION**

As part of our "enhanced" QMR of the Month recognition program, we 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 2019 was Patrick Abramovitch, a Technician from Subaru of Port Richey in Port Richey, FL.



Patrick is shown after being presented with his \$500.00 Snap-On Gift Card by SOA Field Service Engineer, Jeff Sharkey. Subaru of Port Richey's Service Manager, Brian Skelton is shown to Patrick's left. Congratulations and THANK YOU to our November 2019 QMR of the Month Award recipient!

# **01** HINTS FOR SEARCHING SEPARATE PUBLICATIONS WITH ONLINE REFERENCE

Many Technicians call Tech Line because they are having difficulty locating certain publications required for effective diagnosis. Most of these problems occur from Technicians having trouble searching the Online Reference section of STIS. Here are some useful hints to improve the efficacy of the Online Reference search.

Finding the correct Accessory Installation Guide may consume too much time for some as they are only published in the first model year of the body style for the vehicle. Instead of searching every year or trying to remember which model year the vehicle was introduced, the fastest way to find the required installation guide is to check the Accessory Installation Guide box and enter the part number from the accessory package in the keyword search field.

ormation - Online Reference	Se	ervice Diagnostics -			
arch Criteria					
Ivanced Search - Enter at least one search (	criteria.				
Publication Type		🖨 VIN or Model Type (E	nter VIN or Model Year/C	arline/Trim):	
Accessory Installation Guide	^	VIN - Last 8 or Full 17		Lookup VIN	
Dn-Board Diag II Information		Model Year:	Model / Carline:	Trim:	
Control Manual		- Choose Model Year - 🗸	Choose Model Year	Choose Model Year	
Source Manual Correction     Standard Spection/Maintenance Advisory Bulletin	ł	Keywords/Tool #			
Subaru Product/Campaign Bulletin		H630SFL001			×
☐ TechTIPS NewsLetter ☐ Technical Service Bulletin	~			Search	Clear
		<b>T</b>			
he easiest way to get t	the i	nstallation guide	is to enter		
he part number from t	ho h	ov into the keyw	ord field		

When diagnosing immobilizer system concerns and steps to perform after immobilizer system components are replaced, the Service Manual states to use the Registration Manual for Immobilizer. This manual is available for all models equipped with Immobilizer systems. To access this manual, check the box labeled Other/Miscellaneous then click the search button.

SUBARU Technical Information Sys	tem		Franc	cais Home U	Jser's Guide
Information - Online Reference	Se	ervice Diagnostics -			
Search Criteria					•
Advanced Search - Enter at least one search	criteria.				
Publication Type		SVIN or Model Type (Enter VIN or Mo	del Year/Carline/Trim):		
Accessory Installation Guide     On-Board Diag II Information	^	VIN - Last 8 or Full 17	L	ookup VIN	
Conter/Miscellaneous		Model Year: Model / Carlin	ie: Trim:		
Dwner Manual		- Choose Model Year - V Choose Model	Year Choose M	/lodel Year	
Ce Manual Correction					
St. nspection/Maintenance Advisory		<sub>Image</sub> Then click the search	n button.		
Bulleti					
	h tvr	o first			
	Typ	e filst.		Search Clear	r
Quick Search - Enter a Document Code, Li	erature #	, or Bulletin # to search for a specific document.			
Document Code Literature # or	Bulleti	1 #·			
	Danoti	• • •			
Document Code / Literature # / Bulletin #				Search Cl	ear

**NOTE:** In this search, the fields for Model Year, Model / Carline and Trim are left blank and there is no Keyword entered. Leaving these fields empty allows the search to return the most possible hits. This can be done with any Publication Type.

Once this search is complete, the displayed results will look like the image below. Under Other/ Miscellaneous, there are several useful documents including the Registration Manuals for Immobilizer, TechTIPS Article Locator index and Instruction Manuals for various pieces of diagnostic equipment.

🌏 SUBARL	J Technical Information System				Fra	ncais	Home	User's G
Information -	Online Reference	Service Diagnostics -						
Click on ( + ) sign to	expand the search criteria se	- tion.						
Search Criteria								G
Search Results	Use the Filte	r field to narrow your results.						
Click a column title t	o sort results in table. Iries		Fi	Iter: [				
Document Code	Publication Ty	pe Title				Creat	ed Date	e Action
GLSRY_001	Other/Miscellar	Glossary of Automotive Terms (October 2019)				Mar 2	9, 2013	±*
SUTTIPSLOC	Other/Miscella	eous TechTIPS Article Locator Index (Updated December 201	19)			Dec 2	0, 2019	±*
SNLG_01	Other/Miscella	eous Engine, Transmission & Turbocharger Serial Number Lo	ocation G			Nov 8	, 2019	±*
R_J2534	Other/Miscella	eous Reprogramming J-2534 Files Chart				Jul 25	, 2016	±*
S1108BE	Other/Miscella	eous 2020MY Registration Manual For Immobilizer				Sep 1	2, 2019	±*
S1205BE	Other/Miscella	eous 2016MY Registration Manual For Immobilizer				Aug 2	6, 2015	±*
S1053BE	Other/Miscella	eous 2017MY Registration Manual For Immobilizer				Jan 1	0, 2017	±*
DCA-8000	Other/Miscella	eous DCA-8000 Diagnostic Battery Charger Instruction Manua	al			Mar 2	6, 2019	±*
DSS-5000-WTG	Other/Miscella	eous DSS-5000 WiFi Troubleshooting Guide				Dec 7	, 2017	±*
S1086BE	Other/Miscella	eous 2019 Registration Manual for Immobilizer Other Than BF	RZ			Aug 1	, 2018	±*
Showing 1 to 10 of 48	entries		Previous	1	2	3	4	5 Nex

The results can be narrowed by using the Filter field. Typing "imm" into the filter removes all search hits irrelevant to the immobilizer system.

🌛 SUBARU	Technical Information System			Francais	Home	User's Guide
Information -	Online Reference	Service Diagnostics -				
Click on ( + ) sign to ex	pand the search criteria sectio	ı.				
Search Criteria	Sort throug	ո the search results quickly by ւ	using the	Filte	r fielc	<mark>€</mark>
Search Results						
Click a column title to s	ort results in table.					
Show 10 V entrie	S		Filter: ir	nm		×
Document Code	Publication Type	Title		Crea	ted Date	Actions
S1108BE	Other/Miscellaneou	s 2020MY Registration Manual For Immobilizer		Sep ?	12, 2019	±*
S1205BE	Other/Miscellaneou	s 2016MY Registration Manual For Immobilizer		Aug 2	26, 2015	±*
S1053BE	Other/Miscellaneou	s 2017MY Registration Manual For Immobilizer		Jan 1	10, 2017	±*
S1086BE	Other/Miscellaneou	2019 Registration Manual for Immobilizer Other Than BRZ	7	Aug	1, 2018	±*
05LEGACY_NA_IM_EN	Other/Miscellaneou	Immobilizer Operation Manual		Apr 6	5, 2010	±*
S0985BE	Other/Miscellaneou	BRZ Registration Manual For Immobilizer		Oct 1	0, 2012	±*
S1001BE	Other/Miscellaneou	s 2005-2015MY Registration Manual For Immobilizer		Aug 2	26, 2015	±*
S1046BE	Other/Miscellaneou	s 2017MY Registration Manual For Immobilizer		Aug 8	5, 2016	±*
Showing 1 to 8 of 8 entrie	es (filtered from 48 total entries)			Pre	vious	1 Next

Owner Manuals for vehicles dating back to 2000MY are available in .pdf format. Service Manuals are also available as .pdf files for many models dating back to 1991MY.

Publication Type		SVIN or Model Ty	pe (Enter VIN or Model Yea	r/Canine/Thin).	
Accessory Installation Gui	de	VIN - Last 8 or Full 17		Lookup VIN	
On-Board Diag II Informati	ion				
Other/Miscellaneous		Model Year:	Model / Carline:	Trim:	
Owner Manual     Sorvice Manual		2018	<ul> <li>Choose Carline -</li> </ul>	<ul> <li>Choose Trim -</li> </ul>	~
Service Manual Correction	1				
State Inspection/Maintena	nce Advisory	Keywords/Tool	#		
Subaru Product/Campaign	Bulletin				
TechTIPS NewsLetter	Balloun				
Technical Service Bulletin	~			Search Clea	ar
Document Code, Li	iterature #, or Bullet	tin #:		Search C	lear
SUBARU. Technical	Information System	Service Diagnostics -		Francais Home	User
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SUBARU Technical prmation - Online rch Criteria vanced Search - Enter at le Publication Type Accessory Instantion Guid On-Becken and Informatio On-Becken and Informatio On-Becken and Informatio Subra to the second secon	Information System Reference S aast one search criteria de on More than one publication ype may be relected for inclo coarch	Service Diagnostics -	rpe (Enter VIN or Model Yea Model / Cartine: ✓ Legacy #	Francais Home ar/Carline/Trim): Lookup VIN Trim: ✓ 2.5 Liter, MT5, AWD Cle	∪ser ✓

These files may take some time to download but, will open faster if they are saved to the computer. To save the Owner or Service Manual, simply click the save icon 🖺 to store the file locally. When the manual is needed again, it will load much faster if you open the file from the computer rather than downloading from an internet browser.

## 01 HINTS FOR SEARCHING SEPARATE PUBLICATIONS WITH ONLINE REFERENCE (CONTINUED)

🌏 SUBARU	Technical Information System	m	Francais Home	User's Guide
Information -	Online Reference	Service Diagnostics -		
Click on ( + ) sign to e	expand the search criteria se	ection.		
Search Criteria				•
			Mechanism and	
The publica	ation type is lis	ted	Function, and New	
in the searc	ch result.		Car Info. manuals are	
Document Code	Publication Type	Title	listed as Service	tions
MSA5TCD00L	Service Manual	2000 Legacy & Outback Service Manual	Manuals under the	*
MSA5T0002A	Service Manual	2000MY Legacy Mechanism and Function Section	first model year of the	*
MSA5M0001A	Owner Manual	2000 Legacy and Outback Owners Manual	vehicle only. They are	*
550_0577AAB	Owner Manual	Homelink Programming and Information Guide	available for many,	*
Showing 1 to 4 of 4 ent	ries		but not all models.	Next

The TechTIPS Locator Index is an extremely useful tool. It is updated every three months with the article titles and the month/year in which the article was published. The index is located under the Other/ Miscellaneous Publication Type.

SUBARU Technical Information System	1	Francais	Home	User's Guide
Information - Online Reference	Service Diagnostics +			
Search Criteria				•
Advanced Search - Enter at least one search or Publication Type Accessory Installation Guide On-Board Diag II Information Other/Miscellaneous Owner Manual Service Mar	teria. Published Year: - Select Year Published - Published Month: - Select Month Published -			
Service V util Correction Service V util Correction State usection/Maintenance Advisory Bullett Subaru Product/Campaign Bulletin TechTIPS NewsLetter Technical Service Bulletin Quick Search - Enter a Document Code, Liter Bocument Code, Literature #, or B Document Code / Literature # / Bulletin #	When searching for ap P0171  When searching for ap TechTIPS articles, it is b TIPS Locator Index und Other/Miscellaneous. may also enter a keyw Year and Month fields	oplicab best to der Howev ord wi blank.	le use ver, ye th th	the ou e

Technical Service Bulletins can also be searched with the Model Year/Carline/Trim fields left blank. Simply check the publication type box for Technical Service Bulletins and enter a Keyword.

SUBARU Technical Information System

Francais Home User's Guide

This search was performed with the Technical Service Bulletin Publication Type box checked. The keyword used was "Harman." There are many TSBs regarding Harman audio units. Filtering these TSBs with useful keywords such as "USB" or "CarPlay" will help to find the specific TSB needed.

Search Results					
Click a column title to	o sort results in table.				
Show 10 🗸 ent	ries		Filter:		
Document Code	Publication Type	Title		Created Date	Actions
15-211-17R	Technical Service Bulletin	Reprogramming File Availability Offering Additional Optimiza		Jan 3, 2020	±*
15-236-18R	Technical Service Bulletin	Reprogramming File Availability for Optimization of Harman		Dec 30, 2019	±*
15-234-18R	Technical Service Bulletin	2019 Audio/Navigation & Power Amplifier Exchange Component I		Dec 20, 2019	±*
15-214-17R	Technical Service Bulletin	2018 Audio/Navigation Exchange Component Identification and		Dec 20, 2019	±*
15-249-19R	Technical Service Bulletin	2020 Audio/Navigation & Power Amplifier Exchange Component I		Dec 20, 2019	±*
15-204-16R	Technical Service Bulletin	2017 Audio/Navigation Exchange Component Identification and		Dec 20, 2019	±*
15-168-13R	Technical Service Bulletin	2014 Exchange Component Identification and Procedures		Aug 16, 2017	±*
15-172-14R	Technical Service Bulletin	2015 Exchange Component Identification and Procedures		Aug 23, 2019	±*
15-157-12R	Technical Service Bulletin	2013 Exchange Component Identification and Procedures		Aug 16, 2017	±*
15-190-15R	Technical Service Bulletin	2016 Audio/Navigation Exchange Component Identification and		Dec 20, 2019	±*
Showing 1 to 10 of 38	entries		Previous	1 2 3	4 Next

Sometimes, there will be no results even if the search fields are left blank and only the Publication Type is selected. This is likely because the user has been logged out of Subarunet for inactivity. Close the STIS tab, return to the Subarunet home page and click the refresh icon on the internet browser. Then, log in and repeat the search.

Important information can be found in several different Publication Types. Using Online Reference to search effectively will help to ensure Technicians have all the information they need to make a quick and efficient repair. The images and examples outlined here only cover some of the Publication Types but may be applied to all.

Other important Publication Types to note, and use:

- Owner Manuals for all models Owner Manuals Keeping copies of the Owner Manual for each vehicle type that is serviced often saved to the hard drive of the computer can clear up many questions regarding user error or system limitations/functions.
- Registration Manuals for Immobilizer Other/Miscellaneous Used to program immobilizer components, reference this guide when replacing DCMs, ECMs, etc. to check for additional required steps following replacement of modules.
- TechTIPS Article Locator Index Other Miscellaneous The best way to search for previous articles.
- Intermediate Fuel Injection Technician Reference Booklet Evaporative Emissions Systems diagnostic information. All TRBs are available via .pdf with color photos.
- Harman Technical Support Guide Troubleshooting Guides Harman 3.0 Audio Unit features, update information, troubleshooting. Also available for Fujitsu / Denso Ten, Kenwood, Panasonic, and Clarion audio units.

 Remote Engine Start Systems Troubleshooting Guide (many years/models available) – Troubleshooting Guide – Used to repair and diagnose RES systems, RES fob programming, runtime selection.

US M	odel	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Legacy /	Key Start						4							В			G
Outback	Push Button												D				н
Tribeca	Key Start						Α										
	Key Start						4						В				
Impreza	Push Button								-					[	<b>)</b>		
Creatively	Key Start												I	3			
Crosstrek	Push Button													[	)		
Crosstrek Hybrid	d Push Button											D				F	
	Key Start							Α						E	3		
WKX/SU	Push Button													[	)		
Forester	Key Start							Α						В			
Forester	Push Button													D			
007	Key Start												3	(			
BKZ	Push Button												,	1			
Accort	Key Start															E	3
Ascent	Push Button																>

# **01** APPLICATION CHART FOR IMMOBILIZER SYSTEM

# 07 2019-20 FORESTER & 2020 LEGACY/ OUTBACK DRIVER MONITORING SYSTEM (DMS), SEAT MEMORY, AND/OR MIRROR TILT INOPERATIVE

A small number of field reports have been received with a concern involving the DMS system being inoperative. In addition, the seat memory feature and mirror glass tilting was also found to be inoperative. After performing extensive electrical diagnostics, the root cause was traced to a loose harness connector located behind the lower exterior trim cover of the door mirror assembly. This condition has been found in both RH and LH mirror assemblies. After re-seating the connector and making sure it was fully locked in place, all systems returned to normal operation.

The photo sequence below is an example of the loose connector which resulted in a B2632- Mirror D Sensor Circuit Anomalous State in the LH Mirror control unit. This type of condition may create a B2632 (LH) or B2642 (RH) in the related outer mirror control module in either Forester, Legacy or Outback depending on which side mirror has the poor connection. In the case of Forester, you may find DTC U0156 for Lost Communication stored in multiple modules. In Legacy or Outback, a DTC U122E(LH) or U122F(RH) for lost communication with the related driver or passenger mirror module may also be stored.



#### 07 REVISED ASCENT SUNROOF GLASS (LID) AND SUN SHADE INITIALIZATION PROCEDURES

There are 3 Lid and Glass initialization procedures to use depending on the repair performed:

- Lid and Sun Shade Initialization: To be used whenever either the lid or sun shade motor / module is replaced with a NEW part. This procedure restores operation of the "Auto Open / Close" and "Pinch Prevention" features.
- Lid Re-Initialization: To be used whenever the lid is removed for repair or replacement and the lid is not fully opened or closed after reassembly.
- Sun Shade Re-Initialization: To be used whenever sun shade is removed for repair or replacement and the sun shade is not fully opened or closed at reassembly.

Lid and Sun Shade Initialization:

Whenever either the lid or sun shade motor is replaced and before the Auto Open / Close and Pinch Prevention functions of the sunroof system can operate properly, the Lid and Sun Shade initialization procedure must be completed successfully.

- 1. Turn the ignition ON.
- 2. Push and <u>HOLD</u> the sunroof switch to open the open position until the lid is fully opened. The lid and shade will open simultaneously. IMPORTANT: Both the lid and shade will open beyond the fully open position until they reach the mechanical lock position (positive stop) then immediately reverse (move forward) back to the fully open position and stop automatically. NOTE: The travel distance between the fully open and mechanical lock positions is very short, approximately one inch.
- 3. Release the sunroof switch to complete the procedure.

CAUTION: If when performing this procedure, the Lid and shade stop at any point before reaching the fully open position, the motor has already been initialized.

Use the illustration below as reference for Lid and Shade Positions.



## 07 REVISED ASCENT SUNROOF GLASS (LID) AND SUN SHADE INITIALIZATION PROCEDURES (CONTINUED)

Lid Re-Initialization Procedure:

- 1. Turn the ignition ON.
- 2. Push and release the sunroof switch to the open position repeatedly until the lid is in the fully open position.
- Push and HOLD the sunroof switch to the open position again. After about 10 seconds, the lid will open beyond the fully open position until it reaches the mechanical lock position (positive stop) then immediately reverse (move forward) back to the fully open position and stop automatically.

**NOTE:** The travel distance between the fully open and mechanical lock positions is very short, approximately one inch.

4. Release the sunroof switch to complete the procedure.

Sun Shade Re-Initialization Procedure:

- 1. Turn the ignition ON.
- 2. Push and release the sun shade switch to the open position repeatedly until it is in the fully open position.
- 3. Push and HOLD the sun shade switch to the open position again. After about 10 seconds, the lid will open beyond the fully open position until it reaches the mechanical lock position (positive stop) then immediately reverse (move forward) back to the fully open position. NOTE: The travel distance between the fully open and mechanical lock positions is very short, approximately one inch.
- 4. Release the sun shade switch to complete the procedure.

IMPORTANT: When these procedures are complete, always confirm proper lid and sunshade operations.

#### January 2020 TechTIPS

Some Technicians have noticed while performing ECM reprogramming recently, the length of the CID number is now longer than what it has been in the past. This is <u>not</u> a typo. CID numbers are required by California emission code regulations. The SAE standard allows for the CID number to be up to 16-digits to prevent duplication (which is illegal). Due to the ever-rising number of ECMs applicable to OBD regulation, SBR has decided to increase the CID number from 8-digits to 11 beginning with some new 2020MY vehicles. The phase-in of the new, 11-digit CID numbers will occur over time. Be advised, there will still be some new 8-digit numbers used during this transition period.

Old / New CID examples:

- OLD CID: LT8D601A
- NEW CID: LT8F102C00G

# **00** STIS NEW RELEASES

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
12-279-20	Technical Service Bulletin	Outer Door Handles- Chrome Fin	17-Jan-20
17-17-13R	Technical Service Bulletin	Event Data Recorder (EDR) Func	17-Jan-20
12-278-20	Technical Service Bulletin	Combination Meter Visor- Light	15-Jan-20
07-151-19R	Technical Service Bulletin	DTC B112C or B112E -Driver Mon	15-Jan-20
TKC-20R	Subaru Product/Campaign Bulletin	Takata Front Passenger Airbag	15-Jan-20
TKB-20R	Subaru Product/Campaign Bulletin	Takata Front Passenger Airbag	15-Jan-20
TKA-20R	Subaru Product/Campaign Bulletin	Takata Front Passenger Airbag	15-Jan-20
11-194-20	Technical Service Bulletin	Intake Manifold- Replacement P	15-Jan-20
S0A367035	Accessory Installation Guide	2020 Legacy Crossbars	14-Jan-20
WUR-03R	Subaru Product/Campaign Bulletin	Brake Hose Swelling Service Pr	10-Jan-20
01-168-09R	Technical Service Bulletin	Replacement Key and Immobilize	10-Jan-20
07-165-20	Technical Service Bulletin	EyeSight / Lane Departure Deac	10-Jan-20
05-71-19R	Technical Service Bulletin	Front Coil Spring Inspection P	8-Jan-20
07-164-20	Technical Service Bulletin	FlashWrite Control Module Repr	7-Jan-20
15-211-17R	Technical Service Bulletin	Reprogramming File Availabilit	3-Jan-20
H671SAN200	Accessory Installation Guide	2020MY Legacy/Outback Wireless	2-Jan-20
WUX-09	Subaru Product/Campaign Bulletin	2016-2017 Outback Replacement	2-Jan-20
H461SXC101	Accessory Installation Guide	PORT INSTALLATION: 2019-20MY I	2-Jan-20

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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.
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January 2020 TechTIPS