TECH TIPS

Subaru Service and Technical Support Line Newsletter



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2015 CALENDAR OF SUBARU HOLIDAYS

Thanksgiving

Thursday, November 26, 2015 Friday, November 27, 2015* *Techline Hours of operation will be from 9:00 am until 3:30 pm EST.

Happy Holidays

Thursday, December 24, 2015 Friday, December 25, 2015

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QMR OF THE MONTH

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

Michael Sneigle from Wheeling Subaru of Wheeling, WV

Michael submitted a very detailed QMR on his diagnosis and repair of a 2015 Forester with an electronic power steering concern. The customer reported while making a sharp turn, the power steering lamp illuminated and the steering became tight. Michael checked the power steering control module for any codes and found none at which point he performed a basic visual inspection of the system. Finding no visible concerns, he road tested the vehicle and could not duplicate the concern. Upon his return to the shop, Michael had another technician turn the steering sharply while he performed a more detailed inspection. At that point he found that center white pin of connector PS2 was moving when the steering was turned sharply. Within a few more turns the pin backed out enough for the connection to be lost, the power steering lamp to illuminate, and a C2532 code to set. The connector was found to have a missing locking tab for this pin. As a result, the power steering rack assembly had to be replaced. Additionally Michael pointed out in his QMR, in this very rare case, the intermittent connection the customer experienced was brief enough as to not set a code. He requested we share these comments as a reminder to Subaru technicians everywhere of the value of performing a very thorough inspection even in a case where no codes were found.

In appreciation for going the extra mile and sharing his experience with us in hopes of improving product quality, Michael will be receiving the following from his FSE:

An Apple iPad® Mini tablet with a custom Subaru Confidence in Motion case

Any Subaru Service Technician can participate in QMR of the Month. See the February 2013 TechTIPS for full details. You may see your name here in a future TechTIPS.

If you have never entered a QMR before, have an idea for one, or are not sure what should be reported, please discuss with your Field Service Engineer (FSE) or District Parts and Service Manager (DPSM) as they visit your store.

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, L.L. Bean, Baja, Tribeca, BRZ, XV Crosstrek 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.



2015 OCTOBER QMR OF THE MONTH AWARD PRESENTATION

As part of our QMR of the Month recognition program, we will include a photo (when available) of the recipient's award presentation in TIPS. Our winner selected from QMR of the Month submissions received during October was Bethany Allis, a Service Technician from Parkway Subaru in Wilmington, North Carolina.



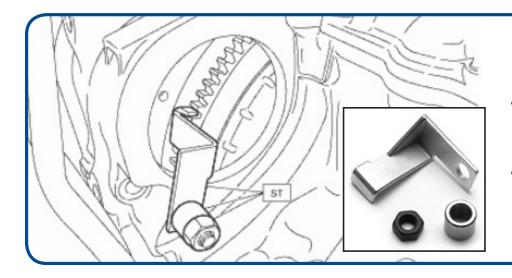
Shown above are (front row, left to right): **Mary Margaret Latham**, Dealer Principal, **Bethany Allis**, **Phillina Jacobs**, Service Manager along with Subaru of America Field Service Engineer, **Dan Page**. Also shown are (back row, left to right): fellow Service Technicians, **Weston Jones**, **Maurice Wright** and **Samantha Ward**.



STOPPER TOOL FOR CVT AND AUTOMATIC TRANSMISSIONS

Please be advised it is necessary to leave the supplied stopper bracket in place while installing a remanufactured or new transmission assembly to the engine. The stopper is to be removed after the engine mounting bolts have been properly tightened. Always refer to the suitable Service Manual for proper procedure.

For repairs when the stopper is not already attached, special tool **498277200** must be used for the removal and installation of transmission assemblies. Failure to follow instructions may result in permanent damage to the torque converter or transmission assembly. Damages resulting from improper installation are not a matter for warranty.



498277200 STOPPER SET

- Used for removing and installing transmission assembly to engine.
- Used for preventing the torque converter from coming dislodged from the transmission.

ACCESSORY FLOOR MAT REMINDERS AND PRECAUTIONS

As we approach the winter months in most areas of the country, some Subaru owners will be installing all-weather floor mats in their vehicles to give their carpets some extra protection against water and salt damage and the elements. As a reminder, although there are plenty of purportedly quality aftermarket mats available to choose from, Subaru of America, Inc. strongly recommends using only Genuine Subaru Accessory floor mats as they are specifically designed and engineered for each individual vehicle application. When purchasing a vehicle which is award-winning in terms of safety, why sacrifice peace of mind by using anything other than products engineered specifically to ensure the safe operation of that vehicle?

When installing Genuine Subaru Accessory floor mats, they **MUST** be installed directly on top of the vehicle's carpet and **NEVER** "stacked" on top of an existing floor mat. Stacking floor mats can be dangerous. If not properly secured, a "loose" floor mat can work its way forward enough to interfere with proper operation of the brake and accelerator pedals. Genuine Subaru accessory floor mats have grommets or reinforced holes designed to attach to a retention device which keeps them secured in the proper position, away from the vehicle's pedals. Examples of the consumer warning statements used on Genuine Subaru floor mats are shown in the photos below.



IMPORTANT REMINDERS TO RETAILERS:

- Subaru of America, Inc. (SOA) does not endorse the use of any floor mats other than those developed and supplied by SOA's Parts and Accessories Group.
- NEVER double-stack floor mats in any new, used or SSLP loaner vehicle.
- Whenever a vehicle is in for service, all Retailer personnel entering a customer vehicle should inspect the condition of the floor mats and retention hooks and notify customers in writing of any concerns identified.

ACCESSORY BUMPER COVER / INSTALLATION TIPS AND BEST PRACTICES

As a result of a warranty claim investigation, it was noted that the accessory Bumper Cover may not have been installed correctly. Proper alignment, pressure, procedure or even cleaning may not have been followed. As a result, we have listed key points when installing a Subaru Genuine Bumper Protector. A detailed installation video is linked below.

KEY POINTS:

- 1. Clean vehicle surface and part
- 2. Vehicle surface and part temperature should be between 60-110F
- 3. Part aligned properly
- 4. Tape liners pulled in correct order and correct pressure applied



Bumper Cover Installation Tips & Best Practices

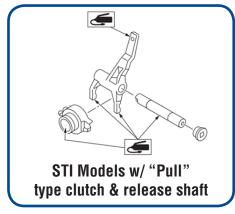
NOTE: To view the linked video a Gmail account is required. An account may be set up by going to... https://mail.google.com

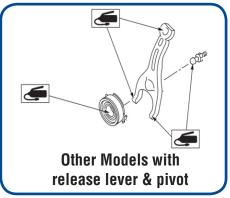


REMINDER- CLEANING AND LUBRICATION OF CLUTCH RELEASE COMPONENTS

To avoid customer concerns of a creaking, squeaking or clicking sound possibly accompanied by increased pedal effort (stiffness) when operating the clutch pedal after performing a clutch-related repair, it is important to remember to always thoroughly clean and re-lubricate the clutch release components. Where applicable, the release lever, shaft, pivot, release bearing contact points on both the release lever and pressure plate along with the input shaft splines should all be properly lubricated and checked for smooth operation before re-installing the transmission assembly. It is also important to apply the grease sparingly, especially on the input shaft splines to avoid any grease contamination of the clutch disc friction material.

In addition, if you receive a customer concern of a squeaking or creaking sound when operating the clutch pedal, review TSB 12-190-15 to make sure the source of the sound is properly identified and addressed on the first repair visit. As always, when attempting to identify the location of an unusual sound, chassis ears or a similar tool can be helpful in isolating the source.





GLASS AUTHORIZATION REQUEST - ADDITIONAL PHOTO REQUIRED

When completing a Glass Authorization Request going forward, you will notice there is an additional required photo that must be submitted with the Authorization Request. The new Required File Type is named, "Glass Identification Marking", see Illustration 1.

The Glass Identification Marking is located in the lower left corner of the windshield. See Illustration 2 for examples of what is required.

Illustration 1

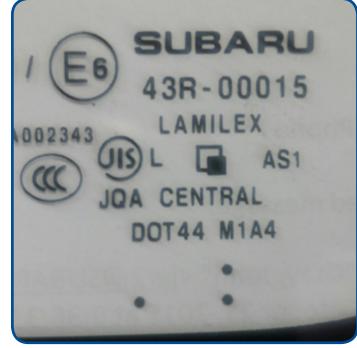
Required File Types

| Туре | Title | Filename | Status |
|---------------------------------|-------|----------|--------|
| License Plate | | | |
| VIN Plate | | | |
| Odometer | | | |
| Condition | | | |
| Glass Identification Marking | | | |

NEW REQUIRED PHOTO

Illustration 2





HILL HOLDER OR ELECTRONIC PARKING BRAKE (EPB) WON'T RELEASE

If a customer presents with either complaint, the first step should be a thorough interview by the Service Advisor to find out the when and how either condition is occurring. Both concerns may have the same root cause. Recently, our Engineers performed an inspection on a vehicle with a reported concern of the EPB setting by itself and upon acceleration, the EPB would not release until the button was pressed. The customer also reported the green Hill Holder indicator was illuminated. The investigation found the customer would back out of their driveway and proceed a short distance up an incline to a stop sign. When they came to a stop, (still on an incline) the EPB (actually the Hill Holder) engaged but would not release without an input from the driver. After ruling out any mechanical or electronic fault, a review of the Owner's Manual provided some insight and, after an interview with the customer confirmed what had occurred. The cause for automatic engagement of the EPB was the customer did not have their seat belt fastened by the time they arrived at the stop sign. The Hill Holder function operated as expected because of stopping on the incline but, the EPB (as part of the Hill Holder function), did not release automatically as expected because the driver's seat belt was not fastened. The driver, not recognizing this, kept pushing the EPB release and driving away (after buckling their seatbelt). See the 2016MY Legacy / Outback Owner's Manual information on the right as an example.

Automatic release function by accelerator pedal

The electronic parking brake system has an automatic release function. The parking brake will be automatically released by depressing the accelerator pedal. However, the automatic release function does not operate under the following conditions.

- Any door (other than the trunk lid or rear gate) is open.
- The driver's seatbelt is not fastened.
- The clutch pedal is released from the fully depressed position to partially engaged position (MT models).

▼ Hill Holder function

The electronic parking brake system has a Hill Holder function. If the Hill Holder function is activated, the parking brake will be automatically applied when stopping on an uphill slope with the brake pedal depressed. In this case, the electronic parking brake indicator light and the indicator light on the parking brake switch illuminate.

The Hill Holder function also operates while driving uphill in reverse.



IDENTIFYING FUJITSU-TEN NAVIGATION UNITS.

New for select 2016 Model Year vehicles is the release of the Fujitsu-Ten 2.1 Audio / Navigation System. Fujitsu-Ten 2.1 offers several new features including the ability to use Siri with your compatible Apple Inc. device. To the right is an applicability chart to help identify which generation is being utilized on each moel / model year.

For more detailed information refer to Technical Service Bulletin **15-172-14R** on STIS.

| | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------------|-------|-------|-------|------------|------------|
| Legacy & Outback | | Gen 1 | Gen 1 | Gen 2.0 | Gen 2.1 |
| Impreza & Crosstrek | Gen 1 | Gen 1 | Gen 1 | Gen 2.0 | Gen 2.1 |
| WRX & STI | | Gen 1 | Gen 1 | Gen 1 | Gen 2.0 |
| Forester | Gen 1 | Gen 1 | Gen 1 | Gen 1 | Gen 2.0 |
| XV Crosstrek Hybrid | | | Gen 1 | Gen 2.0 | Gen 2.1 |
| BRZ | | Gen 1 | Gen 1 | Gen 1 | Gen 2.0 |

NEW F-10 GEN. 2.1 AUDIO /NAVIGATION SYSTEM AND SIRI

For 2016 model year, the Fujitsu Ten (F-10) Audio and Audio/ Navigation systems used in Legacy & Outback models have been enhanced with the addition of some new user-friendly features. This version of the Audio and Audio/ Navigation systems are referred to as Gen 2.1 systems. One of these new features is the integration with Siri, the "Intelligent Personal Assistant" feature included with most Apple iPhone models currently in use along with some iPod Touch devices. It is important for all Retailer personnel to understand that although Siri will interface with the new F-10 Gen 2.1 systems, the feature will only operate when an iOS-based (Apple) device equipped with Siri is paired to the Head Unit (H/U). Siri features will not operate with any Android-based devices or when an Apple device is not paired.

HERE ARE SOME OPERATIONAL KEY POINTS TO BE AWARE OF:

A "long press" (press and hold) of the talk switch on the steering wheel will initiate Siri
when an iOS (Apple) device equipped with Siri is paired. Once Siri responds, all of her
voice recognition capabilities will operate normally, just as if the device was being used
outside the car.

NOTE: At no time will any Apple smart phone or iPod displays appear on the vehicle's H/U display. Also, Siri cannot be used to control any vehicle functions such as climate control or any of the Navigation system's built-in features.

- The same long press of the talk switch with an Android device paired to the system will cause a message to display on the H/U screen which reads "feature only works with an IOS device".
- A long press with no phone paired will cause a message to display on the H/U screen which reads "no phones are paired, would you like to add one now?".
- A "short press" (brief press and release) of the talk switch will activate the built-in voice recognition function of the H/U. Siri will not be activated.

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OCTOBER STIS NEW RELEASES

| ITEM CODE | ITEM TYPE | TITLE | CREATED DATE |
|------------|-------------------------------|---|-----------------|
| 12-190-15R | Technical Service Bulletin | Elimination of Creaking Sound from Clutch Pedal Assembly | 30-Oct-15 |
| 12-185-15R | Technical Service Bulletin | Wind "Rushing" or "Fluttering" Sound from "B" Pillar Area | 28-Oct-15 |

OO OCTOBER STIS NEW RELEASES

| ITEM CODE | ITEM TYPE | TITLE | CREATED DATE |
|------------|---------------------------------|---|-----------------|
| 12-177-14R | Technical Service Bulletin | Service Procedure to Address a Wind Rushing Sound from the Rear Door Sash Area | 28-Oct-15 |
| 12-176-14R | Technical Service Bulletin | Service Procedure to Address a Wind Rushing Sound from the Front Door Sash Area | 28-Oct-15 |
| 06-51-15 | Technical Service Bulletin | New Front Disc Brake Pad Kit Availability To Reduce Brake Squeal | 27-Oct-15 |
| 07-99-15 | Technical Service Bulletin | Reprogramming File Availability for Keyless Buzzer Volume | 26-Oct-15 |
| 12-192-15 | Technical Service Bulletin | Windshield Cracking Concerns | 26-Oct-15 |
| 09-60-15R | Technical Service Bulletin | Fuel Filler Door Difficult to Close | 26-Oct-15 |
| J1010FJ050 | Accessory Installation Guide | Sport Mesh Grille | 23-Oct-15 |
| H001SAL001 | Accessory Installation Guide | Remote Engine Starter-Turn (Key Start) | 23-Oct-15 |
| 16-94-15R | Technical Service Bulletin | Diagnosis and Repair of DTCs P172A and P0B0B | 22-Oct-15 |
| 02-161-15R | Technical Service Bulletin | New Installation Procedure for Front Crankshaft Oil Seal | 21-Oct-15 |
| 09-51-08R | Technical Service Bulletin | Catalytic Converter Revised Shipping Procedure | 16-Oct-15 |
| 12-193-15 | Technical Service Bulletin | Design Change to Rear Seat Backrest Striker | 16-Oct-15 |

OO OCTOBER STIS NEW RELEASES

| ITEM CODE | ITEM TYPE | TITLE | CREATED DATE |
|------------|---------------------------------|---|-----------------|
| MSA5M1603A | Owner Manual | 2016MY Legacy and Outback Owner's Manual | 15-Oct-15 |
| 06-48-15R | Technical Service Bulletin | Design Change to Stop Light Switch | 12-Oct-15 |
| 06-46-14R | Technical Service Bulletin | Revised Brake Light Switch Adjustment Procedure for DTCs C1531 and C0054 | 12-Oct-15 |
| J1010SG300 | Accessory Installation Guide | Splash Guard Set (Front and Rear) | 9-Oct-15 |
| 15-177-14R | Technical Service Bulletin | New "Gen 2" Fujitsu Ten (F10) SD Card Audio / Navigation (AVN) System Operating Tips | 7-Oct-15 |
| TIPS1015 | TechTIPS NewsLetter | 2015 October TechTIPS Newsletter | 6-Oct-15 |
| 08-39-15 | Technical Service Bulletin | Resetting the Lifetime Fuel Consumption Function of the Multi- Function Display (MFD) | 2-Oct-15 |

Be sure to always check the "What's New" section on STIS for any updated or recently released information that may not be listed here.

| *** NUW YOU CAN E-MAIL YOUR TECHTIPS INPUT AND SUGGESTIONS TO: TECH@SUBARU.COM *** |
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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 6000, Cherry Hill, NJ 08034-6000. |
| 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