

ARTICLES CONTAINED IN THIS ISSUE

CODE	ARTICLE.....	PAGE
(00)	September STIS New Releases	5
(01)	QMR of the Month.....	1
(01)	5th Annual Subaru Technician Competition	2
(04)	Electronic Power Steering	4
(07)	2015 Legacy and Outback Cold Weather Light Operation	4
(07)	2015MY Legacy & Outback Under-Hood Main Fuse Box (M/B) Information.	5
(07)	2015 Legacy and Outback-Keyhole Shadow from Projector Beam Headlamp	6

01 QMR OF THE MONTH

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

Toby Costa

Maita Subaru in Sacramento, CA

Toby submitted a very detailed QMR on his diagnosis and repair of an engine wire harness condition found on a 2014 Forester resulting in an AF sensor heater circuit code (P0037). Using good electrical diagnosis techniques, Toby found a wire from the AF sensor heater control circuit had shorted against the tumble generator housing causing the code and repaired it. In appreciation for going the extra mile and sharing his experience with us in hopes of improving product quality, Toby will be receiving the following from his FSE:

A Subaru
Confidence In Motion Jacket
and a
\$100 Gift Card

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

2014 CALENDAR OF SUBARU HOLIDAYS

Thanksgiving

Thursday, November 27, 2014
Friday, November 28, 2014*

*Techline Hours of operation will be from 9:00 am until 3:30 pm EST.

Happy Holidays

Thursday, December 25, 2014
Friday, December 26, 2014

2014 SUBARU



National Technician Competition

See page 2 for the results of the 2014 Subaru National Technician Competition

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.



QUALITY DRIVEN® SERVICE



2014 SUBARU
National Technician Competition
Champion Stephen Larson



Stephen Larson of Carter Subaru Ballard in Seattle, Washington is this year's **Subaru US National Technician Competition Champion.**

Mr. Stephen Larson won the national competition which tests the knowledge, skill and on-the-job excellence of Subaru technicians in a variety of diagnostic and hands-on challenges. This is the fifth year that Subaru of America, Inc. has presented the award.

Larson attended Ballard High school in Seattle and during High school worked part time at Arne's Auto service in old Ballard. Upon graduation, he completed an apprenticeship at Carter Motors and has been employed by Carter motors for nearly 15 years. Larson said; "I have always been interested in the engineering and skill it takes to service and repair automobiles including the technical challenges involved and love working on Subarus. I'm very excited about next year's competition."

In addition to receiving a plaque and a check from Subaru of America, Inc., Larson received a recognition gift from Fuji Heavy Industries (parent company of Subaru of America, Inc.).



Top left: Will Wright, Robert Frantz, Russell Geisler, Jeremy DeGroodt, Tomomi Nakamura, Robert Black, Stephen Larson, Greg Sampley, Dan Overfield, Tom Doll, Dan Vespertino
Bottom Left: John Maletich, John M. Hollingsworth, Jr., Hugo Lorenzo, Joseph Rahr, Brian Freeman



Stephen Larson's photo appeared on a billboard in Times Square

In second place was Joseph (JB) Rahr of Don Miller Subaru West, Madison, WI and third was Greg Sampley of Maple Hill Subaru, Kalamazoo, MI.

Runner-up Group (in no particular order):

Robert Black

Van Bortel Subaru, Victor, NY

Russell Geisler

Day Apollo Subaru, Moon Township, PA

Will Wright

Pence Subaru, Midlothian, VA

John M. Hollingsworth, Jr.

Subaru of Kennesaw, Kennesaw, GA

Hugo Lorenzo

Subaru of Hilton Head

Dan Overfield

Yark Subaru, Toledo, OH

Brian Freeman

Bob Moore Subaru, Oklahoma City, OK

John Maletich

Subaru of Loveland, Loveland, CO

Jeremy DeGroot

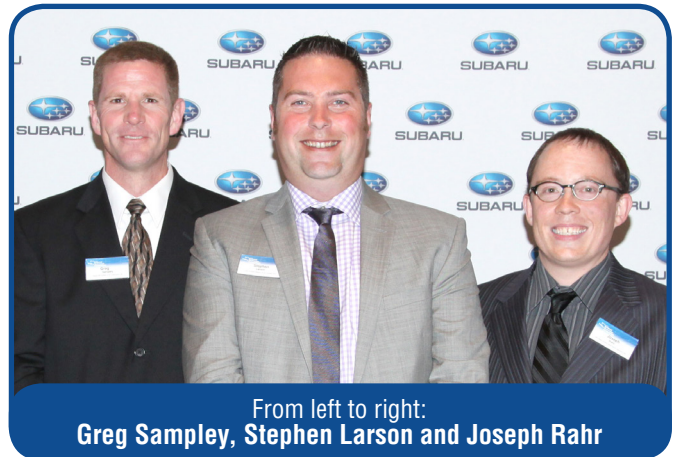
Capitol Subaru, San Jose, CA

Robert Frantz

Peoria Subaru, Peoria, AZ

Mr. Larson is a shop foreman who has been a Subaru technician for 14 years and holds the title of Subaru Specialist. In his free time Stephen enjoys billiards, fishing, motorcycles and snowboarding. Mr. Larson will now go on to represent the United States in the Subaru International Technician Competition to be held during the fall of 2015 in Takao, Japan.

Tom Doll, President, Subaru of America said: "As a company that takes great pride in delivering excellent customer service, it is vital that we train our technicians to the very best standards. Stephen was a worthy winner of a very competitive event and we wish him good luck in the international final in Japan."



From left to right:
Greg Sampley, Stephen Larson and Joseph Rahr



BRIAN FREEMAN
Bob Moore Subaru, Oklahoma City, OK



JOHN MALETICH
Subaru of Loveland, Loveland, CO



RUSSELL GEISLER
Day Apollo Subaru, Moon Township, PA

04 ELECTRONIC POWER STEERING

Have you come across a vehicle with the complaint of the electronic power steering assist not working? Does the EPS light come on without a DTC and there is a heavy steering feel? Check to see if the battery terminals are cleaned and properly torqued. If the 10mm nut on battery terminal becomes loose, it can result in a momentary loss in power to the EPS.



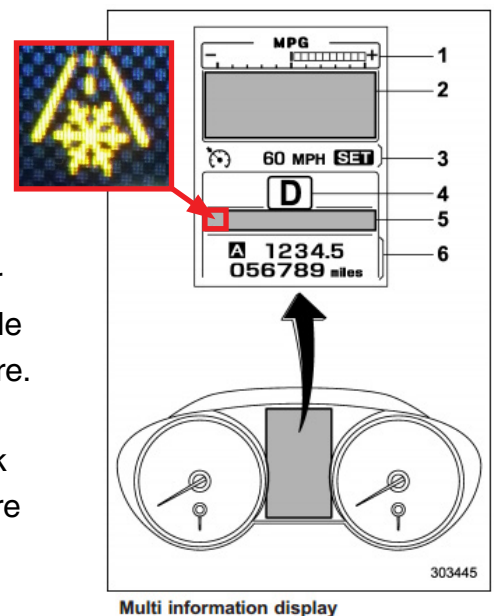
Electronic Power Steering Light



10mm Battery Terminal Nut

07 2015 LEGACY AND OUTBACK COLD WEATHER LIGHT OPERATION.

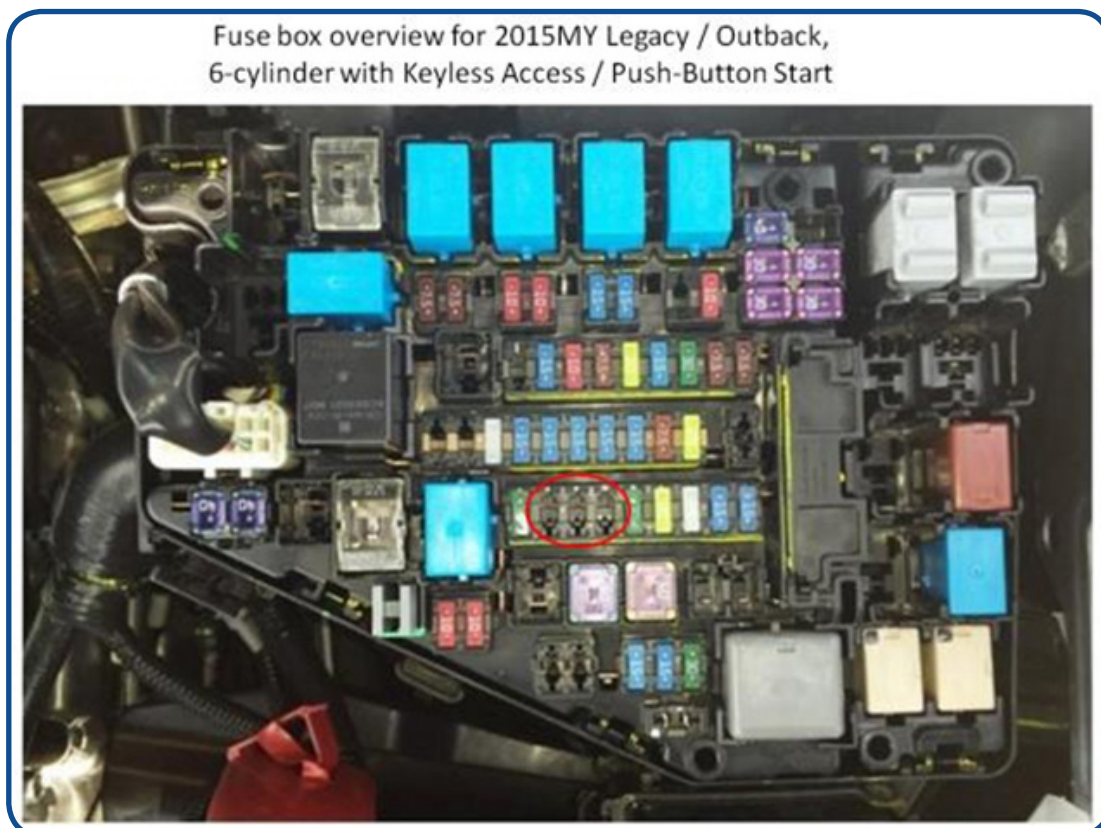
The 2015 Legacy and Outback now include a road surface freeze warning indicator displayed in the Multi Information Display. This should not to be confused with the Multi Function Display found in the middle of the dashboard on other models. The Multi Information Display in the center of the Combination Meter will present this warning when the vehicles ambient temperature sensor reaches approximately 37° F and colder. Please note that the outside temperature indication may differ from the actual outside temperature. Also, the road surface freeze warning indication should always be treated as a guide. Customers should always be reminded to check and monitor the actual condition of the road surface anytime they are behind the wheel.



Multi information display

Inquiries have been received regarding some confusion while performing the Pre-Delivery Inspection (PDI) involving the under-hood (M/B) fuse box and its cover being used on 2015MY Legacy and Outback models. Some had questions regarding what appeared to be missing fuses. Others mentioned discrepancies between the fuse location / circuit name diagram located inside the fuse box cover and the Service Manual. Before spending any diagnostic time unnecessarily, always keep the following points in mind:

- Refer to the June, 2014 issue of TIPS for Transit Fuse Information. Relocating this fuse is the ONLY item which should need to be addressed inside the M/B during the PDI procedure.
- There is no need to install any additional fuses in the M/B other than relocating the transit fuse. For example, on 6-cylinder models, there are 3 empty fuse slots as shown in the photo below. One of these empty slots is for the Active Grille Air Shutter System which is used only on 4-cylinder models therefore, the slot is left empty.



- If a required fuse is truly missing, the circuit it controls will be inoperative and will likely become apparent while performing the operational check portion of the PDI. In some cases, the Check Engine light may also illuminate.
- A very small number of discrepancies between the fuse diagram inside the M/B cover and the Service Manual have been identified. When diagnosing an electrical concern, always refer to the applicable Wiring Diagram section of the Service Manual.

The SOA Technical Helpline has received a few calls recently questioning the appearance of a keyhole like shadow appearing in the projector beam headlamps of 2015 Legacy and Outback models. It should be noted that the 3.6R Limited models utilize an HID headlamp and as a result do not exhibit this condition.

The main questions have been:

- **Is this condition characteristic or not?**
- **Why is it there?**

The answer to the first question is simply **YES**. This appearance is characteristic and there is no need to try and repair or correct it.

The second question requires a more detailed explanation. The 2015 Legacy and Outback with projector beam headlamps feature a longer and wider field of vision than the prior model year design. This design has a focal point for the projector beam that is roughly one foot in front of the headlamp lens (as shown in the drawing below). The area behind the focal point (shown in gray in the drawing below) is not illuminated. This area is what creates the keyhole like appearance. As seen in the photos below this non illuminated area only exists within the roughly 12 inch area immediately in front of the headlamp (photo 1) and that the actual usable illumination beyond that point provides full illumination with no gaps (photo 2) across the entire range of the lamp. So in a sense it could be said that the keyhole shadow is actually a key to better vision.

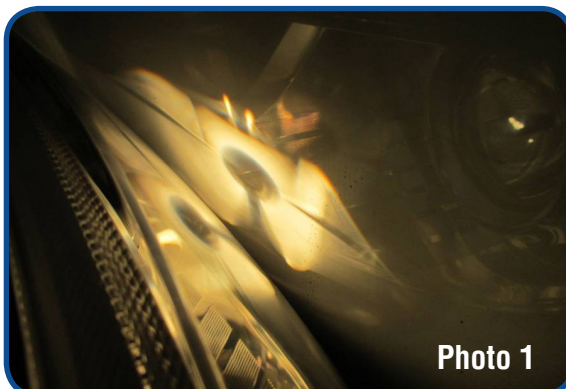
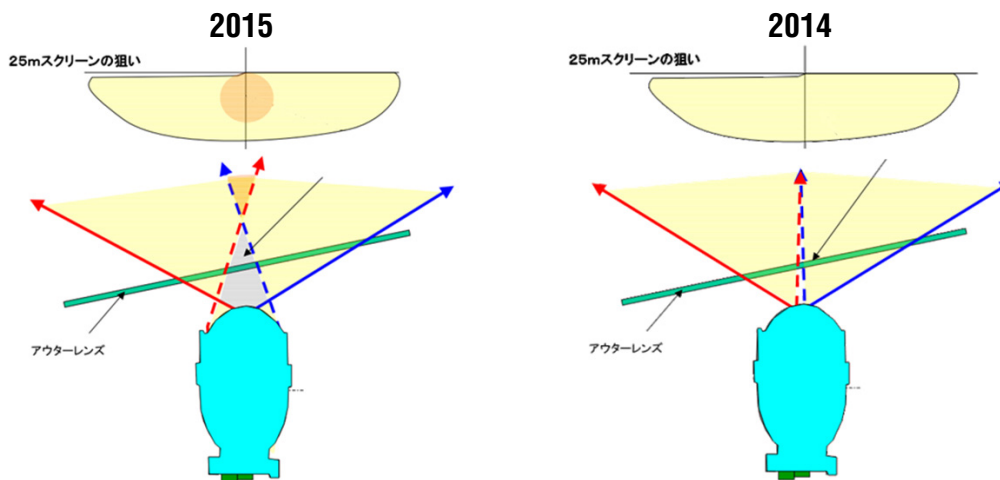


Photo 1

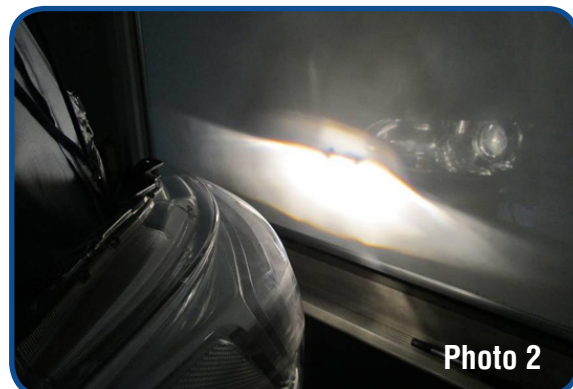


Photo 2

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
SOA7181002	Accessory Installation Guide	Bumper Corner Molding (2 piece)	30-Sep-14
F0010AL500	Accessory Installation Guide	2015MY Outback Side Window Deflectors	29-Sep-14
02-157-14R	Technical Service Bulletin	Surface Treatment Change To Oil Control Piston Rings	29-Sep-14
02-147-13R	Technical Service Bulletin	Surface Treatment Change To Oil Control Piston Rings	29-Sep-14
02-145-13R	Technical Service Bulletin	Surface Treatment Change To Oil Control Piston Rings (2012-2013MY Impreza and 2013MY XV Crosstrek)	29-Sep-14
02-144-13R	Technical Service Bulletin	Surface Treatment Change To Oil Control Piston Rings (2012-2014MY Forester)	29-Sep-14
02-143-13R	Technical Service Bulletin	Surface Treatment Change To Oil Control Piston Rings (2013MY Legacy and Outback)	29-Sep-14
09-58-14	Technical Service Bulletin	Procedure to Improve Fit and Operation of the Fuel Filler Door (Flap)	26-Sep-14
15-172-14	Technical Service Bulletin	2015 Exchange Component Identification and Procedures	26-Sep-14
WQM-49	Subaru Product / Campaign Bulletin	Regional Front Passenger Air Bag Inflator Replacement	26-Sep-14
SUTTIPSLOC	Other / Miscellaneous	TechTIPS Article Locator Index (Updated 09-2014)	25-Sep-14
11-146-14	Technical Service Bulletin	Reprogramming Files for DTC P0420	24-Sep-14
ASRE_UM_042511	Owner Manual	Rear Seat Entertainment System User Guide	24-Sep-14

CONTINUED ON THE NEXT PAGE

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
550-0566AA	Owner Manual	Auto-Dimming Compass Mirror User Guide (for Vehicles with Exterior Auto Dimming Mirrors)	24-Sep-14
550-0565AA	Owner Manual	HomeLink Mirror User Guide (for Vehicles With Exterior Auto Dimming Mirrors)	24-Sep-14
550_0521A	Owner Manual	Auto Dimming Compass Mirror User Guide	24-Sep-14
550_0610AA	Owner Manual	HomeLink Mirror User Guide (Interior Auto Dimming Mirror with HomeLink Drive Card)	24-Sep-14
550_0577AA	Owner Manual	Homelink Programming and Information Guide	24-Sep-14
02-151-14R	Technical Service Bulletin	Revised Valve Train Parts to Reduce a Warm Engine Tapping Sound from the Left Cylinder Head	23-Sep-14
H7150AL000	Accessory Installation Guide	Perimeter Alarm (Security Shock Sensor)	15-Sep-14
KS_RES_QRG	Owner Manual	Turn-Start Remote Start Quick Reference Guide	15-Sep-14
SMR_STRT_1	Owner Manual	Smart Engine Start / Remote Engine Start Key Ring Tag	15-Sep-14
SMR_STRT_0...	Owner Manual	Smart Engine Start Owner's Manual	15-Sep-14
H630SFJ260	Accessory Installation Guide	Subwoofer Removal Card	15-Sep-14
H630SFJ060	Accessory Installation Guide	Subwoofer Removal Card	15-Sep-14
H630SFG340	Accessory Installation Guide	Subwoofer Removal Card	15-Sep-14

CONTINUED ON THE NEXT PAGE

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
H630SFG150	Accessory Installation Guide	Subwoofer Removal Card	15-Sep-14
H630SCA050	Accessory Installation Guide	Subwoofer Removal Card	15-Sep-14
11-145-14	Technical Service Bulletin	Reprogramming File Availability for Oil Level Detection	15-Sep-14
WQL-48R	Subaru Product / Campaign Bulletin	Front Passenger Air Bag Inflator Replacement	11-Sep-14
TIPS0914	TechTIPS NewsLetter	2014 September TechTIPS Newsletter	11-Sep-14
S1001BE	Other / Miscellaneous	Registration Manual For Immobilizer	10-Sep-14
H771SSG000	Accessory Installation Guide	Forester Trailer Hitch Harness - Fuse Caution Warning Card	9-Sep-14
H771SSG000	Accessory Installation Guide	Forester Trailer Hitch Harness	9-Sep-14
H771SSG100	Accessory Installation Guide	Forester Trailer Hitch Harness (Turbo Models)	9-Sep-14
H771SFJ000	Accessory Installation Guide	XV Crosstrek Trailer Hitch Harness (H771SFJ000)	9-Sep-14
H771SFJ000	Accessory Installation Guide	XV Crosstrek Trailer Hitch Harness - Fuse Caution Warning Card	9-Sep-14
SOA3991310	Accessory Installation Guide	2015 Impreza Sunshade	4-Sep-14
10-80-14	Technical Service Bulletin	Whistling Sound from Side Dash Vents	2-Sep-14
16-92-14	Technical Service Bulletin	Replacement AT Oil Cooler Piping	2-Sep-14

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.

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: _____