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

Holidays

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

01

QMR OF THE MONTH

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

Bethany Allis from Parkway Subaru in Wilmington, NC

Bethany submitted a very detailed QMR on her diagnosis and repair of a 2016 Outback with an intermittent no crank/ no start concern. The customer also reported that when this condition presented, the air conditioning and audio/ navigation system would operate normally. Bethany inspected the vehicle and was able to duplicate the concern. She noted the vehicle was equipped with keyless access and start and the start button led was green when the service brake was applied and the concern occurred. The LED would then turn orange and flash. Bethany then checked for any DTCs and found the following codes: U0100- Lost communication with ECM/PCM "A", U0101- Lost communication with TCM, U0122- Lost communication with VDCCM and U0162- Lost communication with Audio Visual Navigation Display Module. Following the service manual diagnostics, Bethany checked for a poor connection in the vehicle harness and found an open at the under hood fuse box. While inspecting the harness she found that the Red Wire with Blue Tracer (R/L) was not fully locked into the fuse box. Moving the wire would dislodge the 30 Amp fuse in the number 15 slot. This fuse powers the IG2 relay which in turn powers various control modules including the ECM, TCM and VDCCM as well as the combination meter. Bethany documented the harness location and condition in clear detailed photos before repairing the open by inserting and locking the wire into the fuse box. This allowed us to see the actual condition as she found it. In appreciation for going the extra mile and sharing her experience with us in hopes of improving product quality, Bethany will be receiving the following from her 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.



01

2015 AUGUST 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. The winner selected from QMR of the Month submissions received during September was Eric Quan, a Technician at Puente Hills Subaru in City of Industry, CA.

Shown below after receiving his new iPad mini from (I to r) are: Puente Hills Subaru General Manager, **Kevin Kim**, **Eric Quan**, Service Technician, **Joel Rimmer**, Service Manager from Puente Hills Subaru along with **Don Heck**, Subaru Field Service Engineer.



01

REMANUFACTURED TRANSMISSION REPLACEMENTS

A new failure code has been created to identify subsequent remanufactured transmission replacements. This new failure code, **TMB**, should be used when a second or subsequent remanufactured transmission unit is being replaced.

TMA failure code will now only be used when an original equipment or new transmission (previously installed) is being replaced with a remanufactured unit.

The labor operation number will remain the same for both failure codes.

Both following failure code descriptions have been adjusted to read:

TMA - Replace OE or NEW A/T with Reman A/T

TMB - Replace Reman A/T with Reman A/T

The Technical Service Bulletins for reman transmissions (16-63-99R and 03-67-12R) have been updated to reflect this new failure code. Please review these updates in STIS.

Contact the Subaru Claims Helpline at 1-866-SUBARU2 (1-866-782-2782) with any questions.

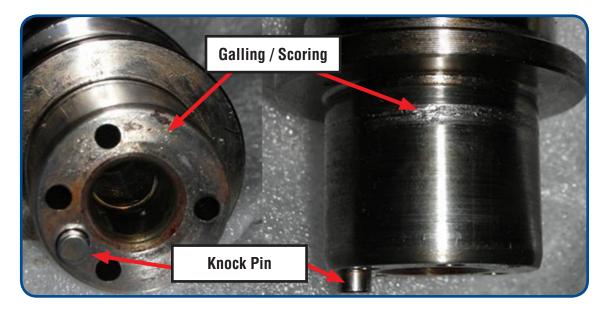
02 CAM SPROCKET REPLACEMENT FOR P000A - P000D: A REMINDER

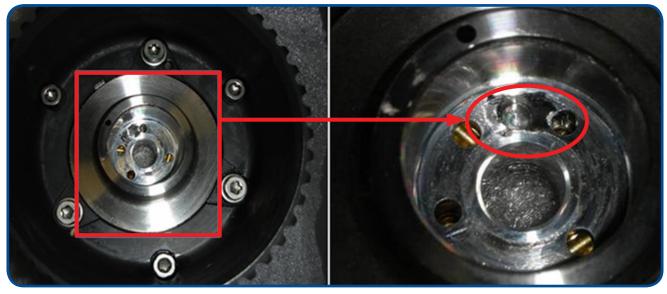
When diagnosis of DTCs P000A - P000D leads to cam sprocket replacement, it is **IMPERATIVE** the alignment dowel (a.k.a. knock pin) located in the front face of the camshaft gets properly aligned with the receiving (knock) hole on the back surface of the new sprocket. The photos show what kind of camshaft and sprocket damage can happen after the retaining bolts are torqued without the pin being installed into the hole of the sprocket properly. Not shown is metal contamination which can also result and cause other engine problems.

REMINDER: Always **TAKE YOUR TIME** and make 100% sure:

- · The camshaft knock pin and corresponding hole in the sprocket are properly aligned
- The camshaft sprocket is fully seated against the face of the camshaft

BEFORE torqueing the 3 retaining bolts to 18 Nm (13.3 ft. lbs.).





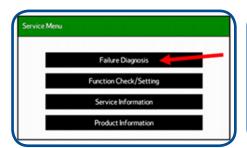


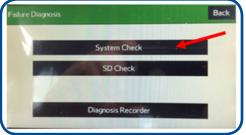
2015MY LEGACY & OUTBACK, GPS SIGNAL LOSS W/ FUJITSU TEN (F10) NAVIGATION SYSTEM

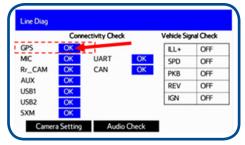
Fujitsu Ten has reported receiving a high percentage of units returned for exchange which are not failed as reported. When diagnosing a customer concern of the navigation system losing GPS signal, it is important to follow the diagnostic procedure below **BEFORE** ordering an exchange head unit and / or GPS antenna:

- 1. Does current position displayed match the vehicle position? If **YES**, go to Step 6. If **NO**, go to Step 2.
- 2. Are there any aftermarket devices installed? If YES, go to Step 7. If NO, go to Step 3.
- 3. Does GPS Connectivity show to be OK? If YES, go to Step 4. If NO, go to Step 8.

To check the GPS Connectivity, with the Ignition on, enter Diagnostic Mode by pressing and holding the HOME button then pressing the Tune / Track button 5 times. From the Service Menu screen, press Failure Diagnosis, then System Check. The Connectivity Check will be displayed on the following screen.







- 4. If "OK", replace GPS Antenna Assembly and perform Steps 1-3 again. If GPS Antenna Assembly has already been replaced proceed to Step 5.
- 5. If Steps 1-3 results are the same and condition can still be duplicated, interview the customer to complete the Questionnaire on the next page then scan and submit the completed form to the Techline for further instructions.
- 6. If Step 1 result is now **YES**, the repair is complete. **STOP.** If the condition can not be duplicated proceed to Step 5.
- 7. If Step 2 result is now **YES**, remove the aftermarket device and repeat Steps 1-3.
- 8. If Step 3 result is now **NO**, check for poor contact / connection between GPS antenna and the head unit then repeat Steps 1-3.



2015MY LEGACY & OUTBACK, GPS SIGNAL LOSS W/ F10 NAVIGATION SYSTEM

	Claim information (Dealer#, R.O #, Date):		
	VIN:		
	Claim Description:		
	Head Unit Part Number:		
	Question:	Answer:	
1	"Was there any error message displayed when the symptom happened? E.G. Looking for GPS signal, Autodetecting GPS receiver, etc."		
2	Is there a satellite icon on the top right of the map screen when the symptom is happening?	If Yes: Please touch the satellite icon and check GPS information. How many satellites are received? How is the reception level? Answer:	
3	"Where is the vehicle position in the map in comparison to the real location? E.G. Off by 200 feet, On the next street, Always at		
	the same location and never moves"		
4	How often does the symptom happen?		
5	How long was the vehicle parked (ACC off) before starting, driving and then the symptom happened? More than 4 hours?		
6	Did the symptom start happening from when engine was turned on? Or, did it start happening while driving?		
7	"Did the customer drive and turn and back very soon after engine started when the symptom happened?"		
8	Did the symptom happen when key was in the ACC position (engine is off)? Or, did it happen only when engine was running.		
9	How long did the symptom last? And how was the symptom fixed?		
10	"What was the audio mode? E.G. AM, FM, CD, etc"		

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2015MY LEGACY & OUTBACK, GPS SIGNAL LOSS W/ F10 NAVIGATION SYSTEM

11	Were there any external devices connected to the unit like a BT Hands-free phone, USB or iPod?	
12	Was the customer using voice recognition when the symptom happened?	
13	Was a destination set when the symptom happened?	If Yes: What is the destination address? Answer:
14	"Were any way points set when the symptom happened?"	If Yes: What are the way point addresses? Answer:
15	Where did you start driving from when the symptom happened (starting address)? Was anything blocking GPS signal like trees, garage, underground parking, etc?	
16	"What were the longitude, the latitude and the address where the symptom happened? (Touch the vehicle cursor on the map and push ""I"" on the top right to show Cursor Location.) Does the symptom always happen at the same location?"	
17	"What were the date and the time of the symptom occurrence?"	
18	Were there any obstacles blocking GPS signal, like tall building, trees, garage or underground parking around the start address or the area where the symptom happened?	
19	Were there any objects on the dash of the vehicle when the symptom happened?	
20	"Can you take a video or a photo of the symptom?"	
21	"Is GPS antenna connection in LINE DIAG OK?"	
22	"Was GPS antenna replaced?"	

October 2015 TechTIPS

2015 TECHNICIAN ASCENT PROGRAM - IMPORTANT ENHANCEMENTS

Feedback from retailers, JD Powers and OLP tell us Technicians have a huge impact on CSI in regard to repairing a Subaru correctly on the first visit. From a customer perspective, if that one element is not achieved, multiple areas in CSI and Service OLP performance freefall. As a result, SOA is excited to announce a huge enhancement, specifically, on the payout on FRFT, (Fixed Right First Time) to the Technician ASCENT program beginning October 1st, 2015. Currently, rewards on SOA and ASE certifications remain the same. The FRFT enhancement adds:

- Quarterly rewards based on Training Level
- Removal of the flat \$250 payout
- Removal of the minimum survey return qualifier
- Rewards earned for every "Yes" received on question, 6, "Were all service/repairs completed correctly the first time?" on the OLP Service Survey.
- Rewards will be earned by active retail employees with the job title as designated by DEM of: Technician, Specialist, Master and Senior Master Technician
- Rewards start at \$25 and pay up to \$100 per response
- See program Rules and Regulations on Subarunet in the "Training" section for more details and information

 $https://content.subarunet.com/snet/_content/service/ascent/subaru_technician_ascent_program_rules.pdf$

These enhancements will certainly pay off in terms of rewarding those Technicians that leave a positive impact on the Subaru customer experience by putting more ASCENT \$\$ in Technician's pockets.

SDC retailers are not included at this time.



SEPTEMBER STIS NEW RELEASES

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
12-191-15	Technical Service Bulletin	"Growling" Sound When Fully Closing the Door Glass	30-Sep-15
15-189-15	Technical Service Bulletin	Damaged MicroSD Memory Cards	30-Sep-15
16-63-99R	Technical Service Bulletin	Remanufactured Automatic Transaxle Program	28-Sep-15

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OO SEPTEMBER STIS NEW RELEASES

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
03-67-12R	Technical Service Bulletin	Remanufactured CVT Program	28-Sep-15
WQR-53R	Subaru Product / Campaign Bulletin	Takata Front Passenger Air Bag Inflator Replacement	24-Sep-15
WQL-48R	Subaru Product / Campaign Bulletin	Front Passenger Air Bag Inflator Replacement	24-Sep-15
15-188-15	Technical Service Bulletin	Reprogramming File Availability to Improve Audio Unit Performance	24-Sep-15
MSA5M1606A	Owner Manual	2016MY BRZ Owner's Manual	24-Sep-15
MSA5M1616A	Owner Manual	2016MY BRZ Audio System Owner's Manual	24-Sep-15
MSA5B1606A	Owner Manual	2016MY BRZ Quick Reference Guide	24-Sep-15
G4430BE	Service Manual Full	2016MY BRZ Service Manual	24-Sep-15
	HTML Diagnostics	2016MY BRZ Service Manual V1	24-Sep-15
12-189-15	Technical Service Bulletin	Rattling Sound from Rear Package Shelf Area	23-Sep-15
12-188-15	Technical Service Bulletin	Side Spoiler Removal Instructions and Precautions	23-Sep-15
06-52-15	Technical Service Bulletin	Service Procedure for DTC C0075	23-Sep-15
H7110VA100	Accessory Installation Guide	AC Power Outlet Kit (WRX and WRX STI)	22-Sep-15

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OO SEPTEMBER STIS NEW RELEASES

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
04-13-09R	Technical Service Bulletin	Power Steering Pump Relief Valve	18-Sep-15
WQH-44R	Subaru Product / Campaign Bulletin	Genuine Subaru Carpeted Floor Mats	16-Sep-15
WQU-56R	Subaru Product / Campaign Bulletin	Propeller Shaft Oil Seal Failure	15-Sep-15
16-96-15	Technical Service Bulletin	TCM Reprogramming File Availability for Engine Idle RPM Fluctuation on 6AT- Equipped Models	14-Sep-15
11-160-15	Technical Service Bulletin	Reprogramming File Availability for DTC P0137 and Improvement of Engine RPM (Idle) Drop Condition	14-Sep-15
15-168-13R	Technical Service Bulletin	2014 Exchange Component Identification and Procedures	11-Sep-15
02-162-15	Technical Service Bulletin	Change to Engine Oil Pressure Switch	11-Sep-15
11-150-14R	Technical Service Bulletin	Reprogramming File Availability for Oil Level	10-Sep-15
02-157-14R	Technical Service Bulletin	Surface Treatment Change To Oil Control Piston Rings	10-Sep-15
L101SAL012	Accessory Installation Guide	Trailer Hitch	9-Sep-15
03-75-15	Technical Service Bulletin	Change to Driver Controlled Center Differential (DCCD) Control Module	9-Sep-15

OO SEPTEMBER STIS NEW RELEASES

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
16-94-15	Technical Service Bulletin	Diagnosis and Repair of DTCs P172A and P0B0B	8-Sep-15
15-186-15	Technical Service Bulletin	Reprogramming File Availability to Improve Bluetooth Pairing	8-Sep-15
15-185-15R	Technical Service Bulletin	Cellular Phone Pairing to Clarion Audio Units	8-Sep-15
16-42-90R	Technical Service Bulletin	Transmission Cooler Flushing	3-Sep-15
TIPS0915	TechTIPS NewsLetter	2015 September TechTIPS Newsletter	1-Sep-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.

*** 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 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