

Articles Contained in this Issue

Click on a title below to jump to the article.
Click the date located in the footer to return to page 1.

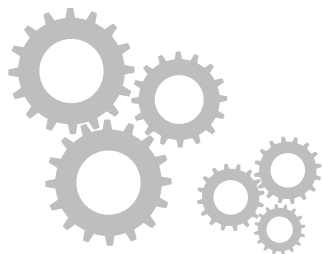
CODE	ARTICLE.....	PAGE
(00)	STIS New Releases	6-7
(01)	QMR of the Month.....	1-2
(01)	QMR of the Month Award Presentations.....	2
Tech Tips Greatest Tips		
(01)	Cell Phones, Air Tools and the Techline	3
(10)	Recovery of Contaminated R-1234yf	3-4
(12)	Water leaking into cabin from door trim all models and model years	4-5
(15)	Remote Engine Start/ Power Rear Gate Inoperative on Push to Start Vehicles	5

SUBARU TECHLINE HOLIDAYS & HOURS OF OPERATION

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 QMR of the Month Winner:

Jeremy DeGroot from
Capitol Subaru in San Jose, CA

Our June QMR of the Month report outlined the diagnosis and repair of a 2020MY Impreza which presented with a customer concern of all the combination meter warning light coming on. After confirming the condition as reported, Jeremy began his diagnosis by checking for DTCs which revealed a U1235 in each of the networked control units for a loss of communication with the EyeSight system. He proceeded to remove the EyeSight stereo camera cover and found connector R137 securely locked into the camera assembly. Jeremy then used his DVOM to inspect for proper ignition and battery power supply voltages along with the ground wiring to the camera and confirmed normal values for each. Since proper power and ground values were present and there was still a communication failure, Jeremy accessed the EyeSight wiring diagram and turned his attention to the CAN system. After disconnecting the battery to check resistance of the CAN network at pins 9 and 10 of the EyeSight camera connection (R137), he found open resistance (OL) when it should have been approximately 60 ohms. Further review of the wiring diagram showed only one harness connection between the stereo camera and the BIU: R96 to i19 located behind the right-side A-pillar trim. With the intention of using the split-half technique to isolate the apparent open CAN circuit, he removed the A-pillar trim to access the suspect harness connector but immediately noticed pin 5 of R96 (blue CAN wire) had backed out. Jeremy removed the affected pin terminal and after a close inspection with no damage found, reinstalled the pin back into the connector and heard it click into place. A confirmation test of the CAN resistance showed a normal 60 ohms. He then reconnected the battery, started the vehicle and verified all the warning lights previously illuminated cycled off normally. Jeremy's post-repair road test revealed no further concerns confirming a sound repair.

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

\$500.00 Snap-On gift card

Continued on the next page

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, Ascent, Crosstrek Hybrid 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

We Support



Education Foundation

01 QMR of the Month (CONTINUED)

The other Regional winners selected from QMRs submitted during July 2020 were:

- **Dan Gengel** from **Beardmore Subaru** in Bellevue, NE
- **Sean Ernest** from **Annapolis Subaru** in Annapolis, MD
- **David Rizzo** from **West Herr Subaru** in Orchard Park, NY
- **Daniel Evans** from **North Reading Subaru** in North Reading, MA

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!

01 QMR of the Month Award Presentations

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 June 2020 was Jeremy DeGroodt, a Senior Master Technician from Capitol Subaru in San Jose, CA.



Jeremy is shown after being presented with his \$500.00 Snap-On Gift Card by his Service Manager at Capitol, Miguel Villa. Congratulations and THANK YOU to our June 2020 QMR of the Month Award recipient!

TECH TIPS GREATEST TIPS

This series features TechTIPS articles frequently referred to by Techline. This month's feature is from September 2009.

01 Cell Phones, Air Tools and the Techline

In previous issues of TechTIPS, we published an article called **“Calling the Techline... Can You Hear Me Now?”** This month, we would like to pass along some reminders and reiterate a few very simple requests. We all know how the use of cell phones has become second-nature to most of us and an essential “tool” for getting things done. Unfortunately, reception issues are still prevalent which makes it hard for us to hear you (or for you to hear us). If you are going to call the Techline on your cell phone, please make sure you are in an area where signal strength and/or background noise are not issues, as it is frustrating on both ends when information has to be repeated. Additionally, calling us while standing near a co-worker who is using an air tool makes things particularly “challenging” on our end.

NOTE: For obvious safety reasons and certain state laws, Techline reps will NOT talk to Technicians using cell phones while driving a customer's car.

10 Recovery of Contaminated R-1234yf

The Robinair® Models AC1234-6 and AC1234-9 are designed and certified to SAE J2843 HFO-1234yf Recovery/Recycling/Recharging Equipment for Flammable Refrigerants for Mobile Air Conditioning Systems. The machine is designed to recover and recycle R1234yf refrigerant, evacuate air after the system has been open, and recharge refrigerant. The new regulations require that a refrigerant identifier be part of the equipment which prevents recycling or evacuation of contaminated refrigerant.

Either Robinair® machine will identify the refrigerant of the vehicle being serviced during all procedures. This includes; diagnostic pressure checks, evacuation, and re-charging. The identification procedure cannot be circumvented. If contaminated refrigerant is detected, a separate evacuation machine and storage tank must be used to clear the machine and the subject vehicle.

HFO 1234yf must be at least 98% pure before the machine will recycle the refrigerant in a vehicle.

Continued on the next page

10 Recovery of Contaminated R-1234yf (CONTINUED)



Contaminated Refrigerant Recovery Machine



Contaminated Refrigerant Recovery Machine Connection Port



Contaminated Refrigerant Recovery Tank

NOTE: Recovery tanks for contaminated refrigerant are gray with a black top.

When the system identifies the refrigerant is contaminated, a special procedure is required for recovery. Please use the Instruction Manual for the Robinair® AC1234-6 or the Robinair® AC1234-9 for specific instructions on how to recover the contaminated refrigerant.

12 Water Leaking Into Cabin From Door Trim- All Models and Model Years

When a customer is concerned with water dripping from the door panel to side-sill or into the vehicle, do not overlook the sealing cover installation. Gaps in the cover's sealant can create a route for water to escape. This condition has been identified on all four doors and in some cases multiple doors on the same vehicle. When encountering this condition, first verify the door drain is free and clear by water testing. Water test with the window glass fully closed and the door open. Pour water down the glass from the outside of the vehicle. There is a small drain hole at the bottom of the door that water should drain from. If it does not, clear the drain and test again to confirm if debris blocking the drain was the only concern or not. After water testing the door and verifying the drain operates as designed, CAREFULLY remove the door trim panel and visually inspect the sealing cover. If inspection finds any gaps in the sealant, do not replace the sealing cover. Instead repair the condition by carefully removing and reinstalling the sealing cover (making sure to apply even pressure around the parameter of the cover) then visually verify there are no remaining sealant gaps. A final water test will confirm the is repair.



Continued on the next page

12 Water Leaking Into Cabin From Door Trim- All Models and Model Years (CONTINUED)



15 Remote Engine Start/ Power Rear Gate Inoperative on Push to Start Vehicles

When presented with a customer concern of the Remote Engine Start (RES) not working, or the Power Rear Gate (PRG) is inoperative with the engine running, be sure to inspect the Park Position Switch and signal to the BIU. This concern may not always be easy to spot as a Push Start vehicle will still be able to be started, even if the BIU is not reading the correct input. When the RES is activated, the control module checks the BIU input of the Park Switch before it will operate. If it does not see this, the RES will fail to start the vehicle. Check the BIU P SW reading in the live data.

P SW	P range switch ON/OFF status. Body integrated unit input value. Set to ON in the P range.	ON/OFF
------	---	--------

- P SW is the park range switch, located in the AT shifter assembly. If the shifter is in the Park position and this PID remains OFF, suspect an issue with either the park range switch or the related wiring. Check for drink spills, previous interior repairs, modifications and the shift lever position itself.

Confirm operation of shift lever and Inhibiter Switch. Check Combination Meter, TCM and KACM (Keyless Access with Push Button Start control module) and also the pid in the BIU for the Park Switch signal (P SW).	The RES will only start the engine when the vehicle is in Park. An improperly adjusted or malfunctioning Inhibiter Switch could possibly be the root cause of a RES concern.
--	--

Likewise, the PRG looks for this P SW signal from the BIU to activate while the engine is running.

Continued on the next page

ITEM CODE	ITEM TYPE	TITLE	CREATED DATE
03-82-18R	Technical Service Bulletin	Clutch Release (Throw-Out) Bea...	26-Aug-20
H671SAN200	Accessory Installation Guide	PORT INSTALLATION: 2020MY Outb...	25-Aug-20
15-258-19R	Technical Service Bulletin	2020MY Legacy and Outback	25-Aug-20
B321SFL020	Accessory Installation Guide	PORT INSTALLATION: 2021MY Asce...	25-Aug-20
07-155-19R	Technical Service Bulletin	Power Rear Gate (PRG) Control ...	25-Aug-20
07-143-18R	Technical Service Bulletin	Power Rear Gate (PRG) Control ...	25-Aug-20
H671SXC200	Accessory Installation Guide	2021MY Ascent Wireless Charger...	24-Aug-20
MSA5B2102A	Owner Manual	2021 Forester Getting Started ...	24-Aug-20
MSA5M2123A	Owner Manual	2021MY Forester Subaru STARLIN...	24-Aug-20
MSA5M2113A	Owner Manual	2021MY Forester Eyesight Owner...	24-Aug-20
MSA5M2102A	Owner Manual	2021MY Forester Owner's Manual	24-Aug-20
U8290BE	Service Manual	2021MY Forester New Car Inform...	24-Aug-20
15-270-20	Technical Service Bulletin	2020 Outback & Legacy FOTA (Fi...	19-Aug-20
06-78-20	Technical Service Bulletin	2019-20 MY Ascent Brake Pad D...	18-Aug-20
E551SFL200	Accessory Installation Guide	2021 Crosstrek (all models) Fr...	18-Aug-20
15-269-20	Technical Service Bulletin	2017-18MY Forester A/C Condens...	17-Aug-20
07-124-17R	Technical Service Bulletin	Reprogramming File Availabilit...	17-Aug-20
H4510FL100	Accessory Installation Guide	2021MY Crosstrek Fog Light Kit...	13-Aug-20
L101SSJ001	Accessory Installation Guide	2019-21MY FORESTER TRAILER HI...	13-Aug-20
L101SSJ001	Accessory Installation Guide	2019-21MY FORESTER TRAILER HI...	13-Aug-20
L101SSJ001	Accessory Installation Guide	2019-21MY FORESTER TRAILER HI...	13-Aug-20
15-261-20R	Technical Service Bulletin	Reprogramming File Availabilit...	13-Aug-20
06-77-20R	Technical Service Bulletin	DTCs C1531 and C1741- VDC Cont...	12-Aug-20
WTB-63R	Subaru Product/Campaign	Service Campaign - Electronic ...	12-Aug-20
	Service Diagnostics	2021MY Forester Service Manual...	11-Aug-20
H501SSG203	Accessory Installation Guide	PORT INSTALLATION: 2019-2021MY...	11-Aug-20
13-103-20	Technical Service Bulletin	2021 MY Paint Coding Informati...	10-Aug-20
J101SFL600	Accessory Installation Guide	PORT INSTALLATION: 2021MY Cros...	10-Aug-20
MSA5M2118A	Owner Manual	2021MY Crosstrek Eyesight Owne...	10-Aug-20
MSA5M2119A	Owner Manual	2021MY Crosstrek Subaru STARLI...	10-Aug-20
MSA5B2107A	Owner Manual	2021 Crosstrek Getting Started...	10-Aug-20
MSA5M2107A	Owner Manual	2021MY Crosstrek Owner's Manua...	10-Aug-20
	Service Diagnostics	2021 Legacy/Outback Service Ma...	10-Aug-20
U2600BE	Service Manual	2021MY Legacy/Outback New Car ...	10-Aug-20
07-176-20R	Technical Service Bulletin	DTCs B118B, B11E5, B11E6 in Dr...	5-Aug-20
16-130-20	Technical Service Bulletin	DTC P0730, Erratic Upshifting ...	5-Aug-20
02-161-15R	Technical Service Bulletin	New Installation Procedure for...	4-Aug-20
J501SXC150	Accessory Installation Guide	PORT INSTALLTION: 2021MY Ascen...	4-Aug-20

All revised publications are highlighted in yellow.

Continued on the next page

ITEM CODE	ITEM TYPE	TITLE	CRE-ATED DATE
J501SXC130	Accessory Installation Guide	PORT INSTALLTION: 2021MY Ascen...	4-Aug-20
B321SFL020	Accessory Installation Guide	PORT INSTALLATION: 2021MY Impr...	4-Aug-20
14-22-16R	Technical Service Bulletin	Special Service Tool Cross Ref...	4-Aug-20
09-72-20	Technical Service Bulletin	Intake Manifold / Tumble Gener...	31-Jul-20
167-000961EN-A	Other/Miscellaneous	Battery Management Information...	29-Jul-20
MSA5M2128A	Owner Manual	2021MY SUBARU STARLINK Safety ...	29-Jul-20
MSA5B2100A	Owner Manual	2021MY Ascent Getting Started ...	28-Jul-20
MSA5M2126A	Owner Manual	2021MY Ascent EyeSight Owner's...	28-Jul-20
MSA5M2124A	Owner Manual	2021MY Ascent SUBARU STARLINK...	28-Jul-20
MSA5M2100A	Owner Manual	2021MY Ascent Owner's Manual	28-Jul-20
15-236-18R	Technical Service Bulletin	Reprogramming File Availabilit...	28-Jul-20
15-211-17R	Technical Service Bulletin	Reprogramming File Availabilit...	28-Jul-20
L101SAN000	Accessory Installation Guide	PORT INSTALLATION: 2020MY Outb...	27-Jul-20
15-268-20	Technical Service Bulletin	USB Map Data Update Procedure ...	27-Jul-20

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: _____