

ATTENTION:

- GENERAL MANAGER
- PARTS MANAGER
- CLAIMS PERSONNEL
- SERVICE MANAGER

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

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QUALITY DRIVEN® SERVICE

SERVICE INFORMATION BULLETIN

APPLICABILITY: All 2019-22MY Vehicles Equipped with Gen2 Telematics **NUMBER:** 15-282-21R
DATE: 03/29/21
SUBJECT: STARLINK Remote Engine Start (RES) **REVISED:** 11/09/22
 Diagnostic Information

INTRODUCTION:

This Service Information Bulletin provides additional procedures and a detailed flow chart to use when diagnosing customer concerns regarding operation of the STARLINK RES feature.

RES is the STARLINK Telematics system’s most used remote service with requests averaging as many as two million requests per month. With the amount of use this feature is utilized by Subaru customers, it is also the number one reason they return to the retailer with Telematics concerns.

This document will aid Technicians in the diagnosis and repair of RES concerns. Due to the complexity of the system, Technicians may need to broaden their view to other systems in the vehicle to ensure a properly functioning RES feature. The information supplements diagnostic information found on STIS and TechTIPS. Techline and when necessary, District Service Quality Managers (DSQMs) are available to assist with RES functionality and / or clarification of testing procedures.

SERVICE PROCEDURE / INFORMATION:

REMINDER: Customer satisfaction and retention starts with performing quality repairs.

Using RES and RES with Automatic Climate Control on Gasoline Engine (non-Hybrid) Vehicles:

NOTES:

- When using RES on a vehicle with automatic climate control (a.k.a. Auto A/C), depending on environmental conditions or air conditioner performance, the interior temperature of the vehicle may not reach the desired setting.
- For remote management of the seat heaters, the vehicle must be equipped with a 3-Mode (low-med-high) seat heater switch.
- RES will only operate for a total runtime of 20 minutes before the vehicle will shut off and need a push button start from within the vehicle. (Example: 5 Minutes + 5 Minutes + 10 Minutes = 20 minutes total run time).

CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

Subaru Service Bulletins are intended for use by professional technicians ONLY. They 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 this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

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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.

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- Any interruption of a RES runtime using Remote Engine Stop will start a 5-minute timer requiring 5 minutes to elapse OR, a manual push button start to occur before another remote RES request can be made.
- RES will always change the vehicle's climate setting when equipped with Auto A/C.

Additional RES Climate Control Information:

- The default setting for HVAC control post-RES will always be AUTO. The Auto setting cannot be changed from the MySubaru App or the Customer Web Portal.
- The only purpose of the "Manual" button on the MySubaru App or Customer Web Portal is to provide the user more choices for climate customization during RES operation. It does not turn off the FULL AUTO or AUTO lamps on the HVAC control panel or put HVAC control into a manual mode.
- Even if the HVAC controls are in manual mode upon exiting the vehicle (FULL AUTO and AUTO are not illuminated), using RES with or without climate control modification will return the HVAC controls to the AUTO mode.
- In AUTO mode, the AC request signal is controlled automatically by the HVAC control system's operating parameters.
- Any modification to climate settings using the MySubaru App or Customer Web Portal will become the current HVAC control settings upon the next entry into the vehicle.

Best Practices:

1. Make every effort to verify the RES concern with the customer at vehicle write-up. Observe the vehicle behavior in question and document it with pictures or videos if necessary to ensure complete understanding.
 - a) Most repeat repairs result from failing to fully understand the customer's concern or a failure to verify the condition has been successfully addressed post-repair.
 - b) For any RES concern, at write-up, always make sure the customer's cell phone number is confirmed and listed as the primary contact number. Some Repair Order generation programs use the phone number provided at the time of the vehicle sale which in some cases, is a home or business phone and not the required cell number for contacting the customer.
2. Always confirm the person who will be answering the primary contact number has the MySubaru App loaded on their phone and is entirely familiar with the vehicle's concern.
 - a) There are circumstances where someone other than the owner may answer the phone. Explain the need to verify the repair at write-up in case arrangements are required to be made ensuring contact with an authorized user of the vehicle's Telematics system.
3. For customers with limited or unpredictable availability, obtain permission to have someone at the retailer added as an authorized user to their MySubaru account at write-up. The new Authorized User will now be able to support the repair efforts.

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- a) For example: Doctors, Lawyers, and other professionals may not always be able to accept personal calls during the workday. In these cases, the retailer could request having a trusted member of their staff added as an authorized user to the customer's MySubaru account to enable testing and diagnosis without interrupting the customer.
4. Perform a direct test of the customer's concern to confirm the condition as reported. For example, if the customer reported a RES problem, always confirm the concern while attempting the remote service request.
 - a) DCM replacements often occur as a result of failed remote services request concerns. Unfortunately, the only post-replacement repair verification performed in many cases is an i-Button push. A successful i-Button push DOES NOT guarantee the new DCM's ability to perform remote service requests. Pushing the i-Button and connecting with an Operator ONLY confirms the new DCM can access the voice network. Successful completion of the remote service being addressed by the DCM replacement MUST be performed to confirm the repair.
5. As previously stated, the most popular Telematics feature is RES. Always confirm the feature operates appropriately, especially after a DCM replacement. Not testing the operation of this service to confirm proper operation may compromise a successful repair. RES looks at many different vehicle system inputs to complete its function: door locks, door latches, hood latch, PRG, and the CVT inhibitor switch, to name a few. DCM replacement also requires registration with the immobilizer system. The only way to confirm a successful immobilizer registration is to perform a successful remote service request of the RES feature. **CRITICAL:** Always test and confirm proper RES operation before releasing the vehicle back to the customer.
6. The final verification of proper remote services function is confirmation of the i-Button operation. Press the blue i-button and simultaneously observe the Telematics LEDs. Confirm the **GREEN** LED is illuminated.
7. **IMPORTANT REMINDER:** Voice service (an Operator answering after pressing the i-button) is NOT an indicator of the Telematics system's ability to perform remote service requests. The purpose of the i-Button push test is to reach an Operator and confirm VIN and vehicle location information. Pushing the i-Button and canceling the call once the ring back tone is heard does NOT validate a fully functioning Telematics system.

Additional Information:

Also contained in this document is a table of Error Messages which may be experienced while using the MySubaru App or Customer Web Portal. The purpose of this table is to offer what can be done to move past the error. In some cases, due to an interruption in network connectivity or application support infrastructure, there is no way to move past those errors until full operational service has been restored. Other failures due to customer password or account issues instruct the Technician to contact one of the support centers most prepared to handle the customer concern. Due to corporate security policies, some circumstances require a certain amount of time to pass before an account can be unlocked or working through multiple verification steps may be an option. Although these processes can sometimes be confusing and frustrating, they intend to provide the highest level of security for the customer.

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The Importance of Park Switch to RES Operation

An often-overlooked essential input for the successful operation of RES is verifying the Park Switch output. The Park Switch must be confirmed in the “park position” by reviewing PIDs within the BIU and KACM. Both the “P SW” PID in the BIU and the “Shift P signal” PID in the KACM must indicate “ON” when the gear selector is in the park position.

Any time there is a customer complaint of no start after RES request, technicians must take the time to ensure that the park switch is operating as expected before investigating other possible root cause points of failure.

Keyless Access Control Module (KACM)

<input type="checkbox"/>	SMTP	Steering unlock SW	ON
<input type="checkbox"/>	SMTP	Shift P signal(AT only)	ON
<input type="checkbox"/>	SMTP	Shift N signal(AT only)	OFF
<input type="checkbox"/>	SMTP	Delivery mode signal	OFF

BIU

<input type="checkbox"/>	BIU	Manual unlock SW input	OFF
<input type="checkbox"/>	BIU	P SW	ON
<input type="checkbox"/>	BIU	MT Reverse Switch	OFF

Technician Support

Many systems provide inputs to the telematics system to enable successful Remote Engine Start. Due to the complexity of the repairs and lack of diagnostic tools, there is a high incidence of unnecessary parts replacement. Technicians that are unable to identify a root cause of failure should not replace any components until they review this TSB and their diagnostic findings with Techline or their DSQM.

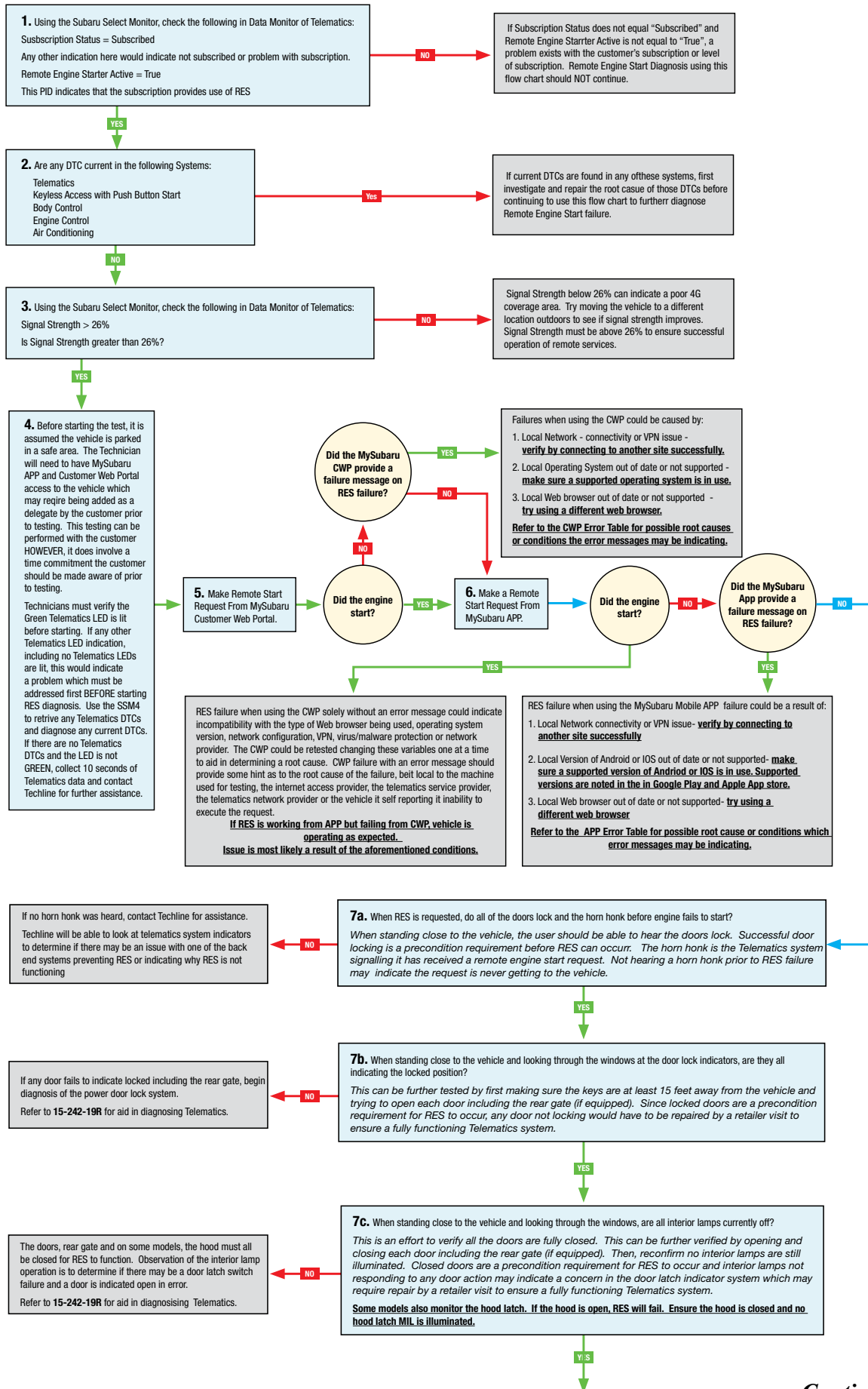
When contacting Techline, please have the detailed testing results from this TSB as well as any SSM4 data containing PIDs from the DCM, KACM, and the BIU.

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.

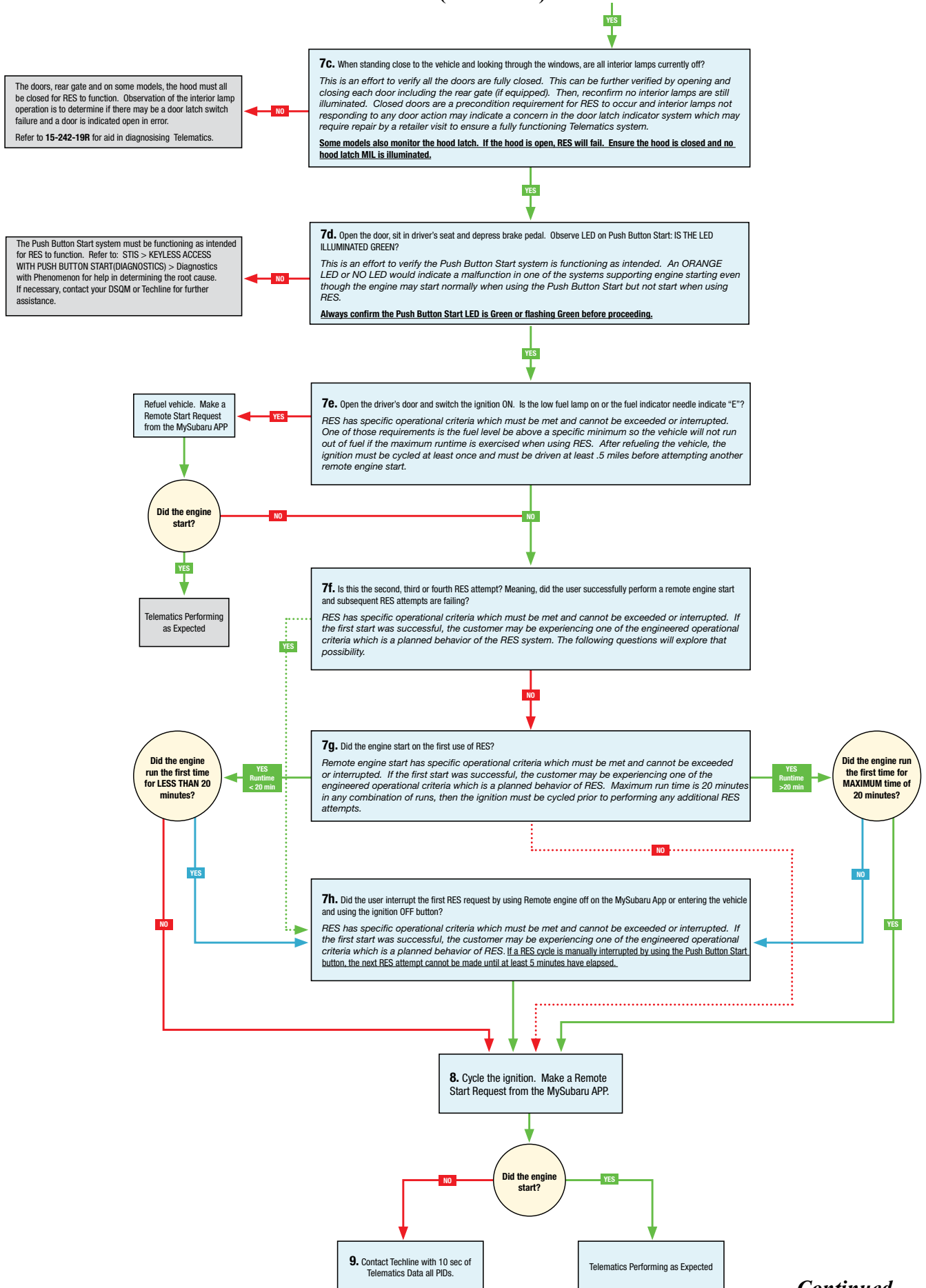
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Flow Chart



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Flow Chart (continued)



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