

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: 2020-2021MY Outback
2019-2021MY Forester
2019-2021MY Ascent

NUMBER: 07-199-21R

DATE: 07/30/21

REVISED: 10/03/22

SUBJECT: Measurement of Dark Current
(Standby Current Draw)

INTRODUCTION:

This Service Information Bulletin provides additional information for the diagnostic procedures concerning measurement of Dark Current (a.k.a. Standby Current). Customer concerns of batteries going dead over a period of time should be diagnosed using this procedure after any obvious contributing factors have been eliminated. The following information is provided to help avoid unnecessary parts replacement. The following is to be used as supplemental information and is not intended to replace the more detailed procedures supplied in the applicable Service Manual.

SERVICE PROCEDURE / INFORMATION:

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

When a dead battery condition is experienced due to excessive Dark Current (Standby Current) draw and the source is traced to the VDC and/ or Power Rear Gate Control Module, **it is IMPORTANT** to follow the procedures outlined in the applicable Service Manual: Engine > STARTING/CHARGING SYSTEM > Battery > INSPECTION, in conjunction with the additional diagnostic information provided below.

NOTE:

- These Flow Charts are to be used in addition to the applicable Service Manual procedures.
- Prepare the vehicle with the hood up, door(s) open, and the rear gate open. Confirm all associated latches are in the “latched” position. This will help reduce unwanted battery resets.
- **ALWAYS** set the power supply voltage to 13.5 Volts when using Power Supply Mode. **NEVER** turn the ignition switch on when charging at voltages 15 Volts or higher.
- **The Trouble trees below should only be used if excessive dark current is identified AFTER waiting the appropriate time outlined in the Service Manual.**

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.

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.

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Fuse and Relay Information:



Ascent & Forester

VDC Fuse

Fuse No.31

SBF No.10

Power Rear Gate Fuse

Fuse No.14



Outback

VDC Fuse

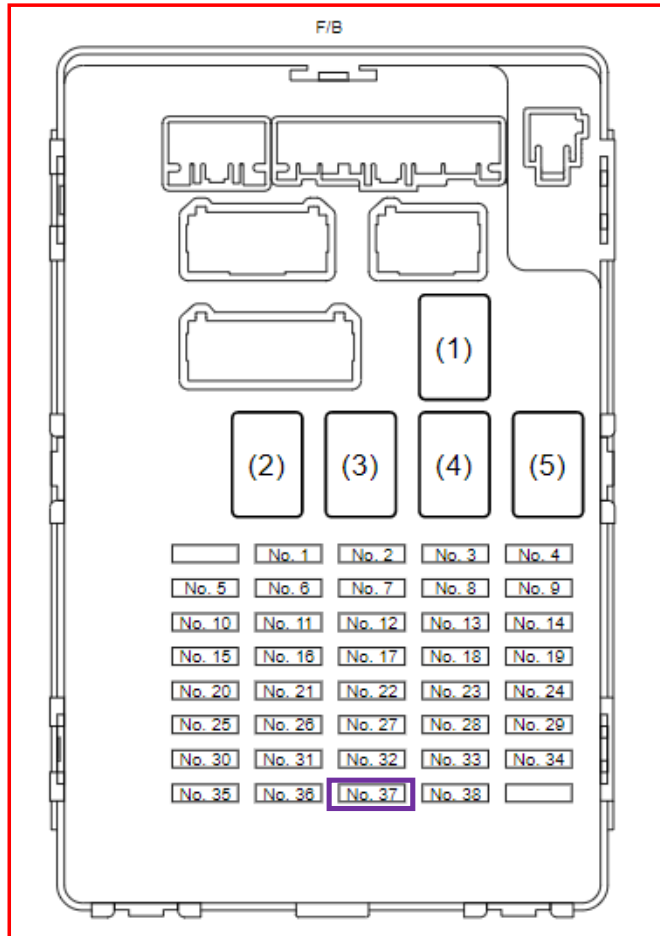
Fuse No.8

Power Rear Gate Fuse

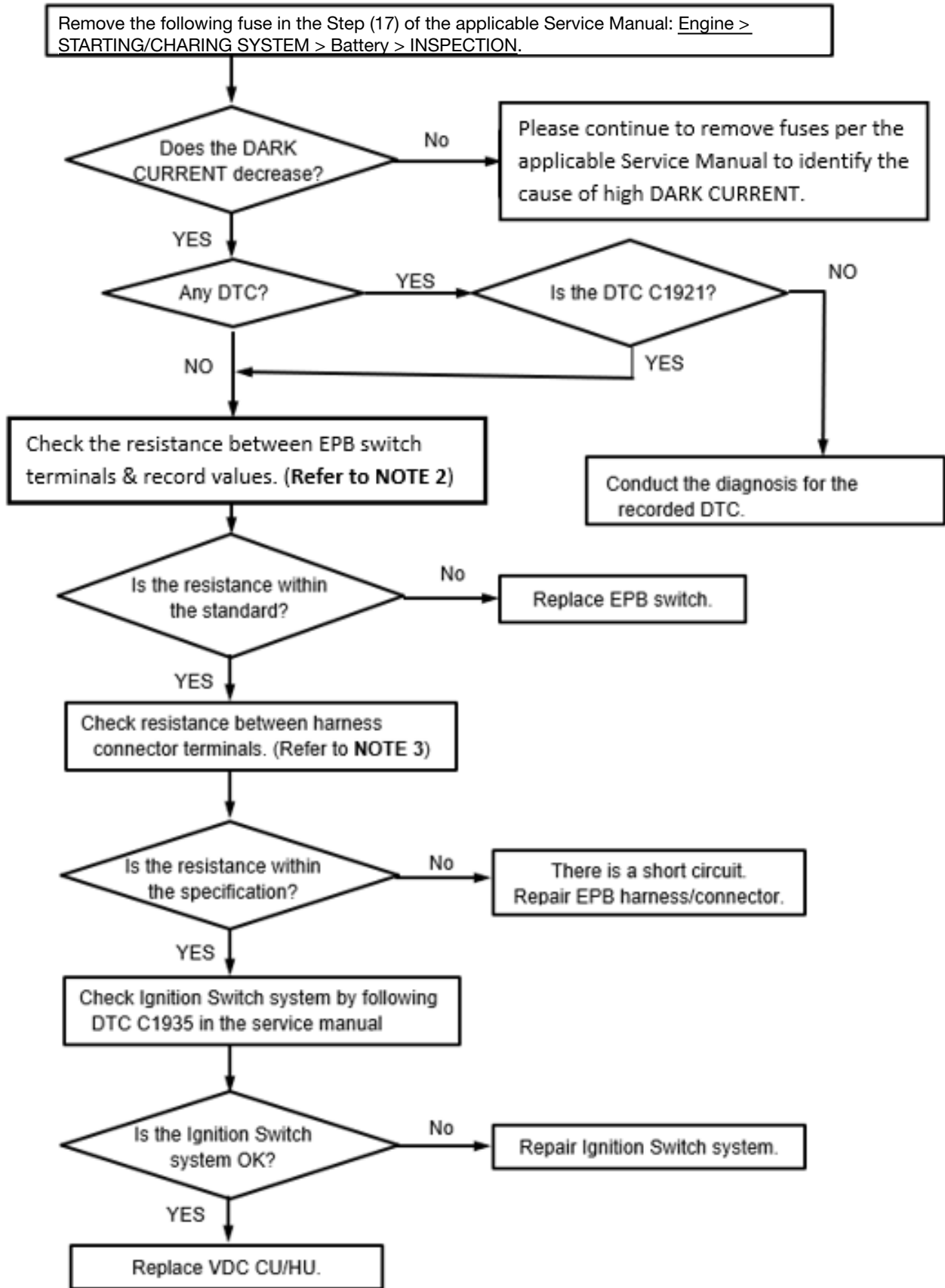
SBF No.2

Fuse No.37

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NOTE 1) Troubleshooting Tree for Dark Current (Standby Current) draw from VDC system.

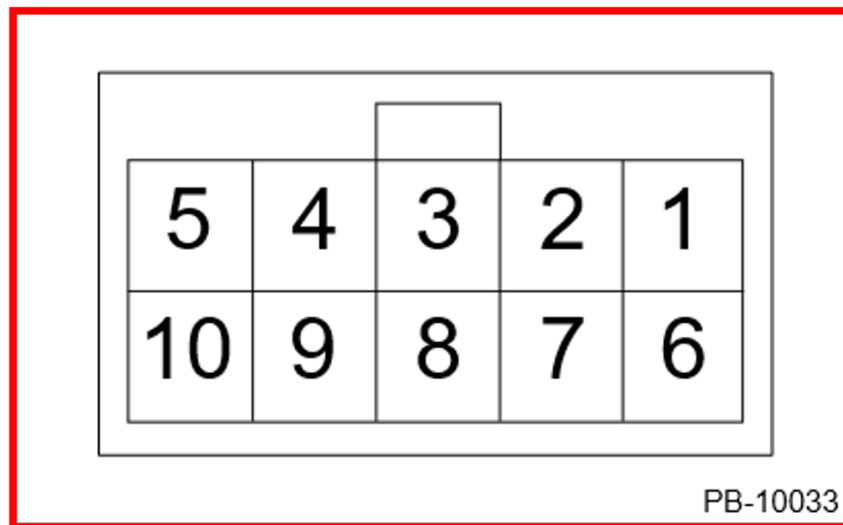


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NOTE 2) How to check resistance between EPB switch terminals.

- Confirm the ignition is switch OFF:
- Disconnect the EPB switch connector, and check if Dark Current decreases. If Dark Current decreases by disconnecting the EPB switch connector, replace EPB switch and continue diagnosis.
- Check resistance between terminals per the illustrations below.

Required Tool: DVOM



Switch Position	Terminal No.	Standard
Neutral	1-2 4-5	1MΩ and higher
	1-5 2-4	Less than 1Ω

NOTE 3) How to check resistance between harness connector terminals for EPB Switch:

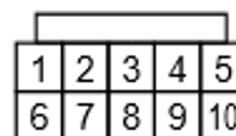
- Check the resistance between terminals per the illustrations below.

No. 1 - No. 2

No. 4 - No. 5

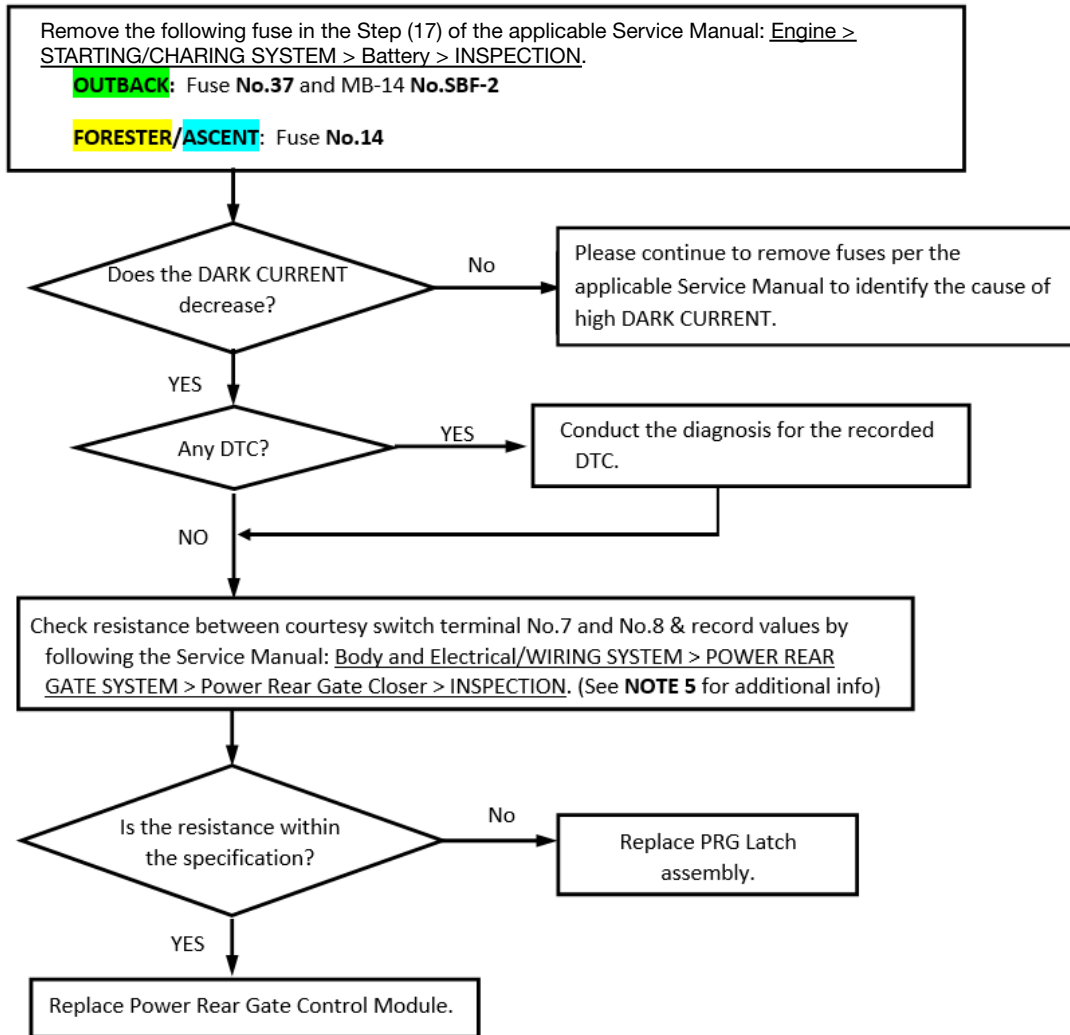
Forester- AD67 Ascent- i163 Outback- C31

Specification: 1MΩ or more



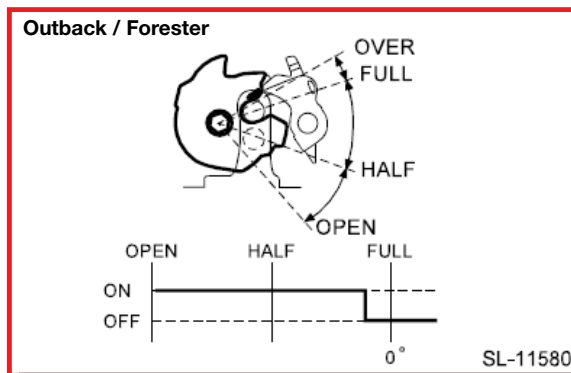
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NOTE 4) Troubleshooting Tree for excessive Dark Current draw from Power Rear Gate system:



NOTE 5) How to check resistance between terminals for Courtesy Switch.

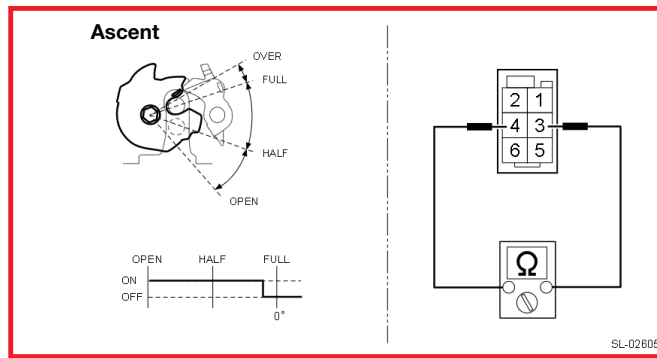
- Check the resistance between the terminals specified in the charts below.



3		2	1
8	7	6	5

Terminal No.	Inspection Conditions	Specification
7 to 8	Open	Less Than 1 Ω
7 to 8	Half	Less Than 1 Ω
7 to 8	Full	1MΩ or More

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Terminal No.	Inspection Conditions	Specification
5 to 4	Open	Less Than 1 Ω
	Half	Less Than 1 Ω
	Full	60 M Ω or More

IMPORTANT NOTE: Whenever reconnecting the ground cable terminal to the battery sensor, torque to 7.5Nm (5.5ft.-lbs. or 66inch.-lbs.) while supporting the sensor with the other hand as outlined in the applicable Service Manual under: STARTING/CHARGING SYSTEMS > Battery Sensor.

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.