

INTRODUCTION:

This bulletin provides a revised diagnostic procedure for DTC P1C14 (Generator Performance).

SERVICE PROCEDURE / INFORMATION:

The previous diagnostic procedure stated to replace the Integrated Starter Generator (ISG) if P1C14 was found stored in memory. The corrected procedure provides additional diagnostic steps to help prevent unnecessary ISG replacements. Screen shots of the revised diagnostic steps are provided below.

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

HYBRID ELECTRIC VEHICLE (DIAGNOSTICS)

AF:DTC P1C14 GENERATOR PERFORMANCE

DIAGNOSIS:

- · Detects functional errors of the integrated starter generator.
- Immediately at fault recognition

TROUBLE SYMPTOM:

- EV traveling/Auto Start Stop does not operate.
- (Engine does not restart under EV traveling/Auto Start Stop condition.)
- Charge warning light illuminates.

CAUTION:

Before performing diagnosis, refer to "CAUTION" in "General Description". <Ref. to HEV(diag)-8, CAUTION, General Description.> WIRING DIAGRAM:

Hybrid system <Ref. to WI(HEV)-140, WIRING DIAGRAM, Hybrid Electric Vehicle System.>

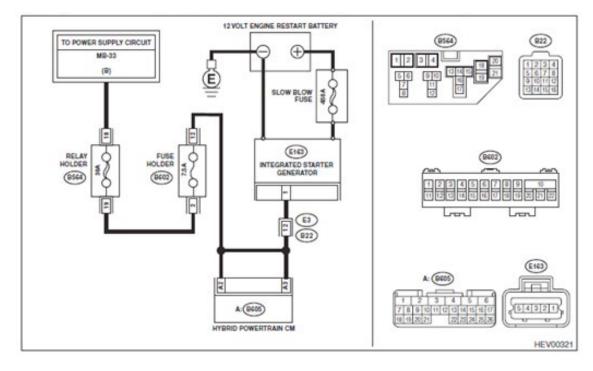
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CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

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	Step	Check	Yes	No
1	CHECK HPCM. Read the DTC.	Are any other Current DTCs (relating to ISG) detected? (Not including Past or History DTCs)	other DTCs.	Go to step 2.
2	CHECK FREEZE FRAME DATA. Using the Subaru Select Monitor, check the freeze frame data for the hybrid powertrain control module.	Record the «Detailed Code 25».	Go to step 3.	Go to step 3.
3	CHECK RESTART BATTERY. Check the 12 volt engine restart battery. <ref. charging<br="" starting="" to="">SYSTEMS(H4DO)(H4DO(HEV))>Battery>INSPE CTION.></ref.>	Is there any fault?	Replace the 12 volt engine restart battery. Caution: Never charge a defective battery.	Go to step 4.
4	CHECK SLOW BLOW FUSE. Check the 12 volt engine restart battery slow blow fuse.	Is there any fault?	Replace the fuse. If the fuse blows out easily, repair the short circuit of harness.	Go to step 5.
5	CHECK INTEGRATED STARTER GENERATOR TERMINALS. Check the integrated starter generator terminals. <ref. charging<br="" starting="" to="">SYSTEMS(H4DO)(H4DO(HEV))>Integrated Starter Generator (ISG).></ref.>	Are the integrated starter generator terminals connected securely?	Go to step 6.	Securely connect the integrated starter generator terminals. Or replace them.

	Step	Check	Yes	No
6	 CHECK HARNESS. Disconnect the terminals of 12 volt engine restart battery in the order of ground terminal → positive terminal. Disconnect the integrated starter generator terminals C and D. Using a tester, check the continuity between the integrated starter generator terminals and the 12 volt engine restart battery terminals. Connector & terminal Integrated starter generator (C) — 12 volt engine restart battery ground terminal: Integrated starter generator (D) — 12 volt engine restart battery positive terminal: 	Is there continuity?	Go to step 7.	Repair or replace the open circuit of harness.
	(1) Integrated starter generator (D) (2) Integrated starter generator (C)			
7	CHECK BATTERY CABLE ASSEMBLY. Check the battery cable assembly. < Ref. to STARTING/CHARGING SYSTEMS(H4DO)(H4DO(HEV))>Battery Cable Assembly.>	Is there any fault?	Repair the battery cable assembly.	Go to step 8.
8	CHECK HPCM. Read the DTC. 1) Turn the ignition switch to OFF. 2) Start the engine. 3) Read the DTC.	Is Current DTC P1C14 detected? (Not including Past or History DTCs)	Replace the integrated starter generator.	The circuit has returned to a normal condition a this time. Reproduce the failure, and then perform the diagnosis again. Before returning the vehicle, be sure to add battery fluid up to MAX level. Note: In this case, temporary poor contact of connector, temporary open or short circuit of harness may be the cause.

WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period or covered by an active Subaru Added Security Classic or Gold plan, this repair may be submitted using the following claim information:

Labor Description	Labor Operation #	Labor Time	Fail Code
INTEGRATED STARTER GENERATOR TESTING AND / OR R&R	A812-021	0.7	FBE-43

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.