

Service Information

Mazda Motor Corporation

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Category G	Repair Guidance	Ref. No. R078/17A	Page 1 of 4
Coverage <input type="checkbox"/> Distributor only <input checked="" type="checkbox"/> Please inform your dealers		Date Issued November 27, 2017	
Please convey this information to your <input type="checkbox"/> Director <input checked="" type="checkbox"/> General Manager <input checked="" type="checkbox"/> Warranty Dept. <input checked="" type="checkbox"/> Parts Dept. <input checked="" type="checkbox"/> Training Dept. <input checked="" type="checkbox"/> Field Rep.		Date Revised January 19, 2018	
Applicable Model Mazda2 (DJ), CX-3 (DK) and MX-5 (ND) with i-ELOOP	Applicable Countries and/or Vehicle Specifications Europe		

REVISED

Revision Note: "Parts Information" and "Warranty Information" have been changed.

Subject: i-ELOOP and Charging System Warning Light illumination, i-STOP Warning Light (Amber) flashing and DTC P1794:00 stored

DESCRIPTION

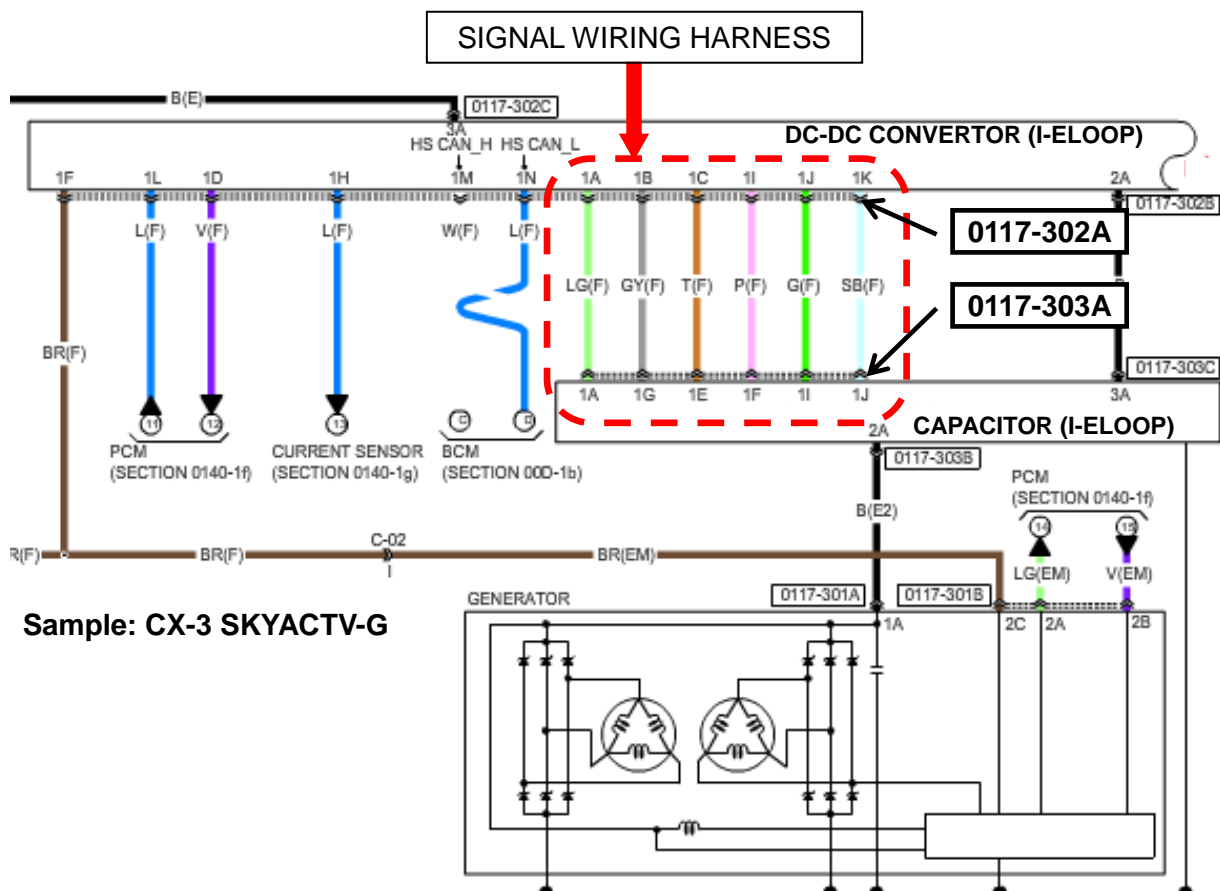
Some vehicles may exhibit the i-ELOOP and Charging System warning light illumination, i-STOP warning light flashing and DTC P1794:00 stored.

- P1794:00: Capacitor (i-ELOOP) malfunction

NOTE: DTC P1794:16 is not subject for this Service Information.

CAUSE

An oxide film may be formed on terminals in the connectors (0117-302A and 303A) for the signal wiring harness between the DC-DC converter and the capacitor. Due to this, terminal resistance is increased and the DTC P1794:00 is set.



MASS PRODUCTION CHANGE

The software of DC-DC convertor has been/will be changed to increase the electrical current for signal wiring, preventing occurrence of oxide film.

SUBJECT VIN & PRODUCTION DATE RANGE

Mazda2 (DJ)

Mexico Built

Spec.	VIN Range	Production Date Range
Europe (L.H.D. Spec.)	3MD DJ**** **	100001 - TBD

CX-3 (DK)

Japan Built

Europe (L.H.D. Spec.)	JMZ DK**** **	100001 - 342939	Feb. 10, 2015 - Oct. 4, 2017
Europe (UK Spec.)	JMZ DK**** **	100001 - 152439	Feb. 10, 2015 - Feb. 29, 2016

Thailand Built

Europe (UK Spec.)	MMZ DK**** **	109070 - TBD	Mar. 14, 2016 - Nov. 2, 2017
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MX-5 (ND)

Europe (L.H.D. Spec.)	JMZ ND**** **	100001 - 139399	May 14, 2015 - Oct. 4, 2017
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REPAIR PROCEDURE

When you receive a customer complaint on this concern, use the following repair procedure.

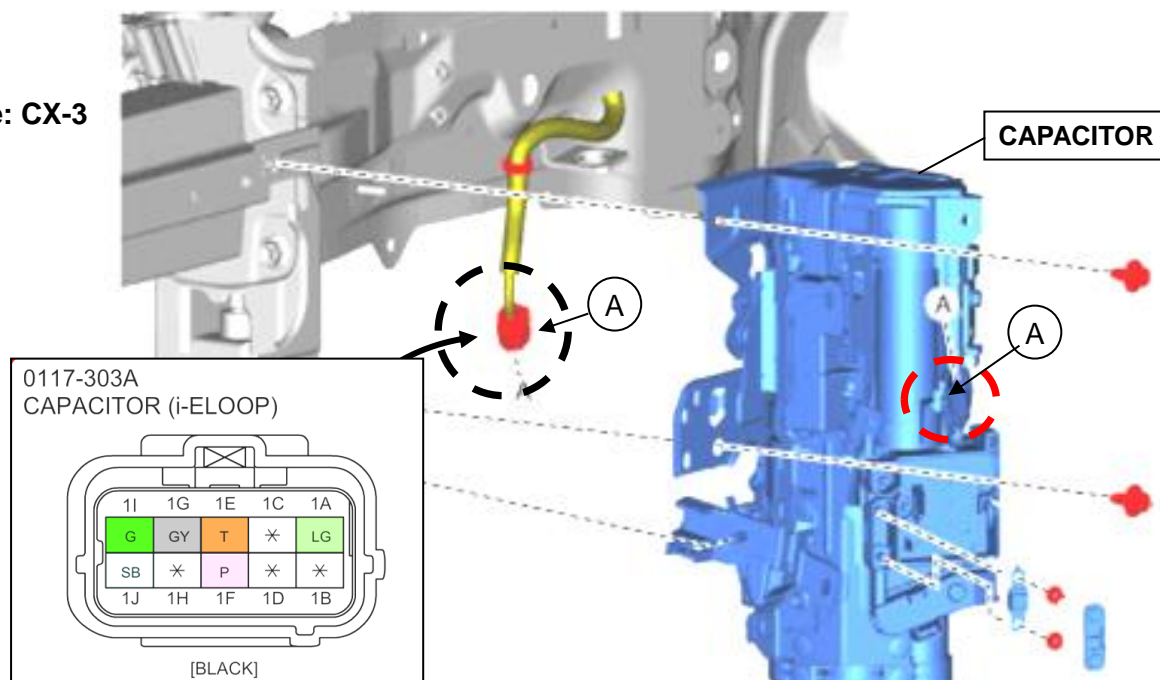
Verify Problem

1. Using the M-MDS, perform Self-Test and verify that the DTC 1794:00 is stored.

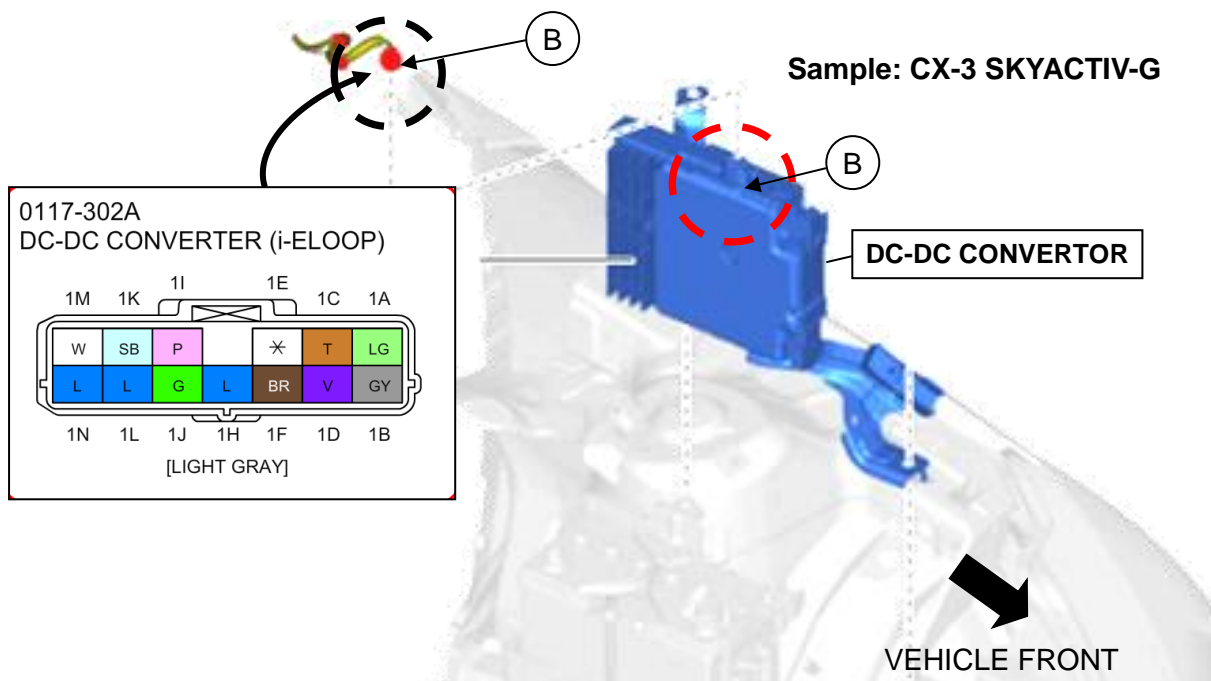
Remove oxide film from terminals and spray electrical contact cleaner

2. Switch the ignition off.
3. Disconnect the service plug. (See SERVICE PLUG DISCONNECTION/CONNECTION [i-ELOOP].)
4. Remove the air cleaner, air hose, and the fresh air duct component. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.)
5. Disconnect and connect the connector (A) to the capacitor for five times to remove oxide film from terminals.

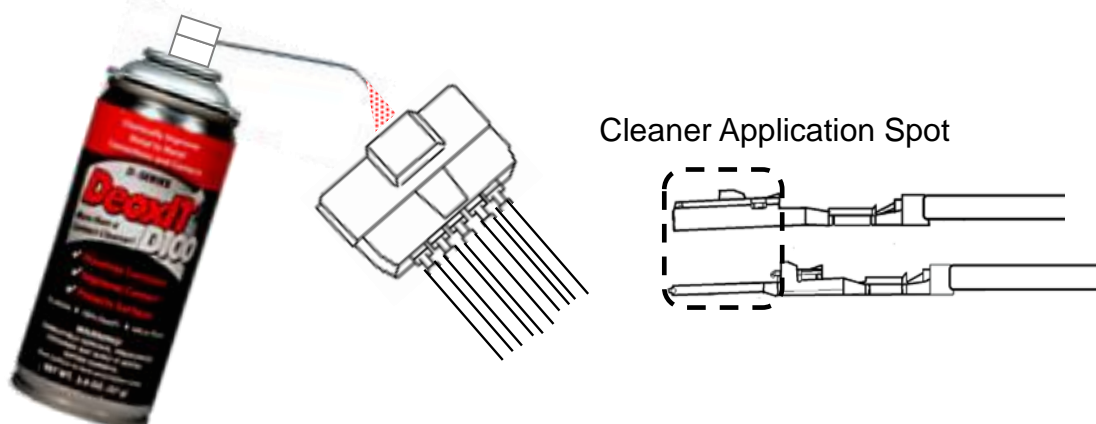
Sample: CX-3



Perform the same procedure for the connector (B) to the DC-DC converter



- With the connectors being disconnected spray both male and female terminals of the connector A and B with the electrical contact cleaner designated below.
DeoxIT Model number: D100S (Undiluted solution spray-type, volume 57g)



NOTE: Spraying the cleaner removes oxide film from terminals as well as suppresses occurrence of oxide film.

NOTE: Never use a cleaner other than the designated one. If the designated cleaner cannot be obtained by all means, please contact your NSC/ID.

- Reconnect the connectors.
- Install the air cleaner, air hose, and the fresh air duct component. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION.)
- Connect the service plug. (See SERVICE PLUG DISCONNECTION/CONNECTION [i-ELOOP].)

Verify repair by checking if DTC P1794:00 is set when duplicating P1794:00 detection conditions

10. Perform the battery condition initial setting (i-stop setting) to complete the i-stop initial setting. (See BATTERY CONDITION INITIALIZATION SETTING (i-stop SETTING).)
11. Start the engine.
12. Turn off all the electrical loads such as Heater, Headlight etc.
13. Depress the accelerator pedal to increase the engine speed to 3,000 rpm.
14. Release the accelerator pedal to idle the engine.
15. Stop the engine.
16. Switch the ignition on and wait for 1 min.
17. Switch the ignition off and wait for 20 min.
18. Start the engine.(no electrical load)
19. Using the M-MDS data monitor function, verify that "Power Output (Normal)" is displayed for the DC-DC converter (i-ELOOP) voltage reduction circuit operation status (PID: CONV_STAT). (See PID/DATA MONITOR INSPECTION [i-ELOOP].)
NOTE: If "Power Output" is "Normal", it indicates that the high resistance due to oxide film has been corrected.
20. Check (PID: CAP_SIS_17). If "ON" is displayed as follows, the DTC P1794:00 has not been fixed yet

(CAP_SYS_17=ON: Short circuit to ground in capacitor (i-ELOOP))

In this case, causes other than this Service Information are possible. Use the diagnosis procedure in the workshop manual.

PART INFORMATION

Part Number	Description	Qty
D100-S2-000A	DeoxIT D100	1

WARRANTY INFORMATION

REPAIR CASE - Remove Oxide Film from terminals and Spray Electrical Contact Cleaner

Assembly group	G – Engine Electrical System
Subassembly group	05 - BATTERY
Symptom Code	6X (Warning Light ON/Flashing)
Damage Code	9W (Internal Failure)
Causal Part No.	DA7A-67-Y6YE
Quantity	0
Operation No. and Labor Hours	XXN9HXRX / 0.6 Hrs. (Mazda2) / 0.6 Hrs. (CX-3) / 0.7 Hrs. (MX-5) Operation includes: Connectors to DC-DC Convertor & Capacitor, Remove oxide film from terminals and spray electrical contact cleaner
Period Covered	Normal Warranty Period
Prior approval necessary	NO

NOTE: Claim the contact cleaner **DeoxIT D100 (D100-S2-000A, Q'ty=1)** only when it has been newly purchased for this time repair.

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1G60235002 (MC Internal Use)