



Technical Service Bulletin

SUBJECT:		No: TSB-19-52B-005
UPDATED DIAGNOSTICS FOR ETACS-ECU DTC U0141 - SERVICE MANUAL REVISION		DATE: March 2019
		MODEL: See below
CIRCULATE TO:	<input type="checkbox"/> GENERAL MANAGER	<input checked="" type="checkbox"/> PARTS MANAGER
<input checked="" type="checkbox"/> SERVICE ADVISOR	<input checked="" type="checkbox"/> SERVICE MANAGER	<input type="checkbox"/> WARRANTY PROCESSOR
		<input checked="" type="checkbox"/> TECHNICIAN
		<input type="checkbox"/> SALES MANAGER

PURPOSE

This TSB updates the Supplemental Restraint System (SRS) section of the affected Service Manuals to update diagnostics for ETACS-ECU CAN timeout diagnostics with DTC U0141.

The change detailed on pages 2 and 3 may also apply to the following groups of the affected Service Manuals listed below, all groups containing diagnostics for DTC U0141.

- Group 13-Fuel (Multiport Fuel Injection [MFI])
- Group 17-Engine and Emission Control
- Group 23-Automatic Transmission
- Group 27-Rear Axle
- Group 35-Service Brakes
- Group 36-Parking Brake
- Group 37-Steering
- Group 42-Body (42B-Keyless Operation System [KOS] and 42C-Wireless Control Module [WCM])
- Group 54A-Chassis Electrical
- Group 55-Heater, Air Conditioning and Ventilation

AFFECTED VEHICLES

- 2008 - 2017 Lancer
- 2008 - 2015 Lancer Evolution
- 2009 - 2017 Lancer Sportback
- 2007 - 2019 Outlander
- 2018 - 2019 Outlander PHEV
- 2011 - 2019 Outlander Sport

AFFECTED SERVICE MANUALS

- 2008 - 2017 Lancer Service Manual, Group 52B-Supplemental Restraint System (SRS)
- 2008 - 2015 Lancer Evolution Service Manual, Group 52B-Supplemental Restraint System (SRS)
- 2009 - 2017 Lancer Sportback Service Manual, Group 52B-Supplemental Restraint System (SRS)
- 2007 - 2019 Outlander Service Manual, Group 52B-Supplemental Restraint System (SRS)
- 2018 - 2019 Outlander PHEV Service Manual, Group 52B-Supplemental Restraint System (SRS)
- 2011 - 2019 Outlander Sport Service Manual, Group 52B-Supplemental Restraint System (SRS)



Please make the indicated changes below to Group 52B-Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures -> DTC U0141: ETACS CAN timeout, in the following Service Manuals:

- 2008 - 2017 Lancer
- 2008 - 2015 Lancer Evolution
- 2009 - 2017 Lancer Sportback
- 2007 - 2019 Outlander
- 2011 - 2019 Outlander Sport

DTC U0141: ETACS CAN timeout

CAUTION

- If the DTC No. U0141 stored, be sure to diagnose the CAN bus line.
- Before replacing the ECU or combination meter, ensure that the power supply circuit, the ground circuit and the communication circuit are normal.
- When the ETACS-ECU of vehicles without KOS is replaced, the encrypted code of the ignition key needs to be registered to the ETACS-ECU. (If the encrypted code is not registered, the engine cannot be started. Register the encrypted code as described in Immobilizer System – How to Register Key ID .)

DIAGNOSTIC FUNCTION

If the signal from ETACS-ECU cannot be received, the combination meter sets DTC No. U0141.

JUDGMENT CRITERIA

With the ignition switch is at ON position, DTC No. U1190 is not stored and DTC No. U1195 is not stored, if the communication with ETACS-ECU cannot be established for 2500 ms or more, the combination meter determines that a problem has occurred.

TROUBLESHOOTING HINTS

- The CAN bus line may be defective.
- The combination meter may be defective.
- The ETACS-ECU may be defective.

DIAGNOSIS

STEP 1. Using scan tool (M.U.T.-III), diagnose the CAN bus line

CAUTION

To prevent damage to scan tool (M.U.T.-III), always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool (M.U.T.-III).

- (1) Connect scan tool (M.U.T.-III). Refer to "How to connect the Scan Tool (M.U.T.-III) ."
- (2) Turn the ignition switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the ignition switch to the "LOCK" (OFF) position.

Q: Is the CAN bus line found to be normal?

YES : Go to Step 2.

NO : Repair the CAN bus line (Refer to GROUP 54C, Diagnosis).

STEP 2. Using scan tool (M.U.T.-III), read the ETACS diagnostic trouble code

Check if DTC is stored in the ETACS-ECU.

Q: Is the DTC stored?

YES : Diagnose the ETACS-ECU (Refer to).

NO : Go to Step 3

STEP 3. Using scan tool (M.U.T.-III), read the KOS diagnostic trouble code.

Check if the DTC No. U0141 stored in KOS-ECU.

Q: Is the DTC stored?

YES : Go to Step 4.

NO : Go to Step 5.

<Correct>

Check whether an ETACS "time-out" related DTC is set in other ECUs (Refer to GROUP 54C – CAN-Related DTC Table).

<Incorrect>

Please make the indicated changes below to the 2018 - 2019 Outlander PHEV Service Manual, Group 52B-Supplemental Restraint System (SRS) -> SRS Air Bag Diagnosis -> Diagnostic Trouble Code Procedures -> DTC U0141: ETACS CAN timeout.

DTC U0141: ETACS CAN timeout

CAUTION

- If DTC No. U0141 is set, be sure to diagnose the CAN bus line.
- Before replacing the ECU or combination meter, ensure that the power supply circuit, the ground circuit and the communication circuit are normal.

DIAGNOSTIC FUNCTION

If the signal from ETACS-ECU cannot be received, the combination meter sets DTC No. U0141.

DTC SET CONDITIONS

With the electric motor switch is at ON position, DTC No. U1190 is not set and DTC No. U1195 is not set, if the communication with ETACS-ECU cannot be established for 2500 ms or more, the combination meter determines that a problem has occurred.

TROUBLESHOOTING HINTS

- The CAN bus line may be defective
- The combination meter may be defective
- The the ETACS-ECU may be defective

DIAGNOSIS

STEP 1. Using scan tool (M.U.T.-III SE), diagnose the CAN bus line.

CAUTION

To prevent damage to scan tool (M.U.T.-III SE), always turn off the power supply mode of the electric motor switch before connecting or disconnecting scan tool (M.U.T.-III SE).

- (1) Connect scan tool (M.U.T.-III SE). Refer to "How to connect the Scan Tool (M.U.T.-III SE) P.54A-6."
- (2) Press the electric motor switch to turn on the power supply mode.
- (3) Diagnose the CAN bus line.
- (4) Press the electric motor switch to turn off the power supply mode.

Q: Is the CAN bus line found to be normal?

- YES :** Go to Step 2.
- NO :** Repair the CAN bus line (Refer to GROUP 54C, Diagnosis P.54C-12).

STEP 2. Using scan tool (M.U.T.-III SE), read the other system DTC.

Check if DTC is set in the ETACS-ECU.

Q: Is the DTC set?

- YES :** Diagnose the ETACS-ECU (Refer to P.54A-433).
- NO :** Go to Step 3

STEP 3. Using scan tool (M.U.T.-III SE), read the other system DTC.

<Incorrect>

Check if a DTC, which relates to CAN communication-linked systems below, is set.

Engine control module

- DTC No.U0141: ETACS CAN timeout

Q: Is the DTC set?

- YES :** Go to Step 4.
- NO :** Go to Step 5.

<Correct>

Check whether an ETACS "time-out" related DTC is set in other ECUs (Refer to GROUP 54C - CAN-Related DTC Table).