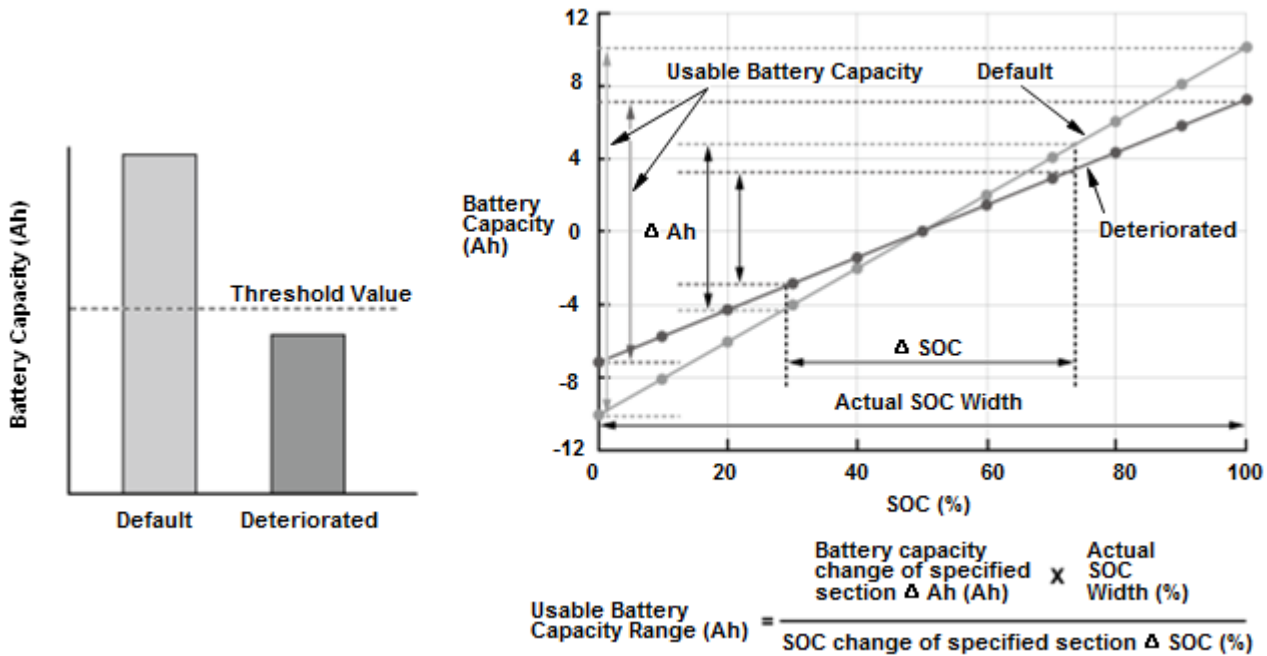


DTC P144A (78): HV Battery Pack Deterioration (High Severity)

General Description



The usable battery capacity range of the battery pack is calculated from the battery capacity (ΔAh) and SOC (state of charge) change width (ΔSOC) of a specified section. If the usable battery capacity lowers to a specified value, the battery condition monitor module A detects a malfunction and stores a DTC.

Monitor Execution, Sequence, Duration, DTC Type

Execution	Continuous
Sequence	None
Duration	—
DTC Type	Two drive cycles, MIL on, POWER SYSTEM indicator on, 12 volt battery charging system indicator off

Enable Conditions

Condition	Minimum	Maximum
Battery pack temperature	14 °F (-10 °C)	132 °F (56 °C)
Vehicle condition	Vehicle ON mode, or Plug-in charge on, or Plug-in quick charge on	

Malfunction Threshold

The battery pack capacity is 24.9 % or less.

Possible Cause

NOTE: The causes shown may not be a complete list of all potential problems, and it is possible that there may be other causes.

- Battery pack capacity decreased

Confirmation Procedure

Operating Condition

1. Turn the vehicle to the READY TO DRIVE mode.
2. Repeat accelerations and decelerations at the vehicle speed between 0 - 31 mph (0 - 50 km/h) for at least 20 minutes.

- Drive the vehicle in this manner only if the traffic regulations and ambient condition allow.

With the HDS

None.

Diagnosis Details**Conditions for setting the DTC**

When a malfunction is detected during the first drive cycle, a Pending DTC is stored in the battery condition monitor module A memory. If the malfunction returns in the next (second) drive cycle, the MIL and the POWER SYSTEM indicator comes on and a Confirmed DTC and the freeze data are stored.

Conditions for clearing the DTC

The MIL and the POWER SYSTEM indicator are cleared if the malfunction does not return in three consecutive trips in which the diagnostic runs. The MIL and the POWER SYSTEM indicator, the Pending DTC, the Confirmed DTC, and the freeze data can be cleared with the scan tool Clear command or by disconnecting the 12 volt battery.