

**ISC Learning Procedure**

It is important to perform the ISC Learning procedure anytime the 12-volt battery is disconnected or the voltage falls below 7 volts. This procedure allows the internal combustion engine to relearn its optimal idle speed during the initial engine warm-up cycle or charging the HV battery. If this procedure is NOT performed, the following customer complaints may occur:

- Engine runs too long or more frequently than normal
- Reduced fuel economy
- Transmission gear “clatter” noise at idle is more pronounced

In TIS Techstream, the current state of ISC Learning status can be accessed through the following path:

**Powertrain/Engine/Data List/ISC Learning**

**ISC Learning** value identifies the current status of ISC Learning and is expressed as either “COMPL” (complete) or “INCOMP” (incomplete).

Each time the ignition is cycled to the “OFF” position, the ISC Learning value will show “INCOMP” until the engine completes its initial startup/shutdown. Use the following procedure to verify the current status of the ISC Learning:

1. Drive the vehicle until the engine reaches operating temperature 158°F (70°C) (can be accessed through TIS Techstream: Powertrain/Engine/Data List/ Coolant Temp).
2. Park the vehicle and turn the ignition OFF.
3. Access the ISC LEARNING data parameter (Powertrain/Engine/Data List/ ISC Learning).
4. Turn the ignition key back to “READY ON”.
5. Wait for the engine to start and run through its initial startup cycle and shut OFF.
6. Observe the ISC Learning status.

If the vehicle shows “INCOMP” after initial engine shutdown in step 5, then the ISC Initialization Procedure should be performed.