



Technical Service Information Bulletin

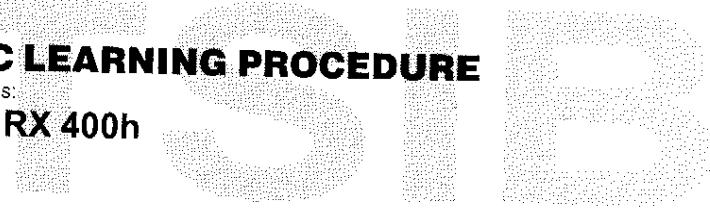
August 25, 2007

Title:

ISC LEARNING PROCEDURE

Models:

'08 RX 400h



ENGINE
EG021-07

Introduction When the 12-volt battery is disconnected or is depleted below 7 volts on 2008 model year RX 400h vehicles, it is necessary to perform the ISC Learning procedure to re-initialize the idle speed control. The information in this TSIB relates to this procedure.

- Applicable Vehicles**
- 2008 model year RX 400h vehicles.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* NOTE: Software version 2.11.004 or later is required.	ADE	TSPKG1	1



NOTE:
Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
N/A	Not Applicable to Warranty	-	-	-	-



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.

**ISC
Initialization
Procedure**

1. Connect TIS Techstream to the vehicle.
2. Select the following menu items:
Powertrain/Engine/Data List/Coolant Temp
3. Check that the engine coolant temperature is 181°F (83°C) or more.

HINT:

If the engine coolant temperature is below 181°F (83°C), start the engine by depressing the accelerator pedal with the shift lever in the “P” position to increase the coolant temperature.

4. Select the following menu items:
Powertrain/Hybrid Control/Data List/Calculate Load
5. Move the shift lever to the “D” position while depressing the brake pedal with the LEFT foot.
6. Depress the accelerator pedal with the right foot while firmly depressing the brake pedal with the left foot, and maintain an engine load value of 45% or more (60 – 70% of full acceleration) for approximately 30 seconds.

NOTE:

Do NOT perform this step for more than 40 seconds.

7. Shift the lever to the “P” position. Turn the ignition switch OFF and then wait for 5 seconds before putting the vehicle into the “READY ON” state again.
8. Select the following menu items:
Powertrain/Engine/Data List/ISC Learning
9. Check that the air conditioner is OFF. Lightly depress the accelerator pedal and release it when the engine starts.
10. Check that “COMPLETE” is displayed on the TIS Techstream screen.

HINT:

- If “ISC LEARNING” is NOT completed within 1 minute, repeat steps 4 – 8.
- The engine will usually stop when the “ISC LEARNING” is completed. However, the engine will NOT stop even when the “ISC LEARNING” is completed if the state-of-charge of the auxiliary battery is low.