



IMA System Indicator On With IMA DTC 77 (P1447) or DTC 78 (P1449)

PROBLEM

The IMA system indicator comes on and IMA DTC 77 (P1447) (battery module deterioration) or DTC 78 (P1449) (battery module deterioration) is set.

CORRECTIVE ACTION

Replace the battery module. If needed, replace the motor control module (MCM), the battery condition monitor (BCM), or both.

PARTS INFORMATION

Battery Module:

P/N 1D010-PHM-999RM, H/C 6366165
(To order, call CALHAC at 877-785-9175. CALHAC will ship the battery module with a battery lifting tool to ease battery module removal.)

Battery Control Module (Battery Condition Monitor):

P/N 1K100-PHM-A01, H/C 7687452

Control Unit (Motor Control Module) (M/T models):

P/N 1K000-PHM-060, H/C 7071525
[Order this part only if the existing MCM is not P/N 1K000-PHM-060 (H/C 7071525), 1K000-PHM-070 (H/C 7595390), or 1K000-PHM-305 (H/C 6912901).]

Control Unit (Motor Control Module) (CVT models):

P/N 1K000-PHM-905, H/C 7094709
[Order this part only if the existing MCM is not P/N 1K000-PHM-905 (H/C 7094709) or 1K000-PHM-906 (H/C 7595408).]

WARRANTY CLAIM INFORMATION

In warranty: The normal warranty applies.

NOTE: IMA components (battery module, battery condition monitor, and motor control module) are covered under warranty for **8 years** or **80,000 miles**, whichever comes first.

OP#	Description	FRT
118014	Replace battery module	1.2
118116	Replace battery condition monitor	0.5
118115	Replace motor control module	0.5

Failed Part: P/N 1K000-PHM-000
 H/C 6340608

Defect Code: 03214

Symptom Code: 03205

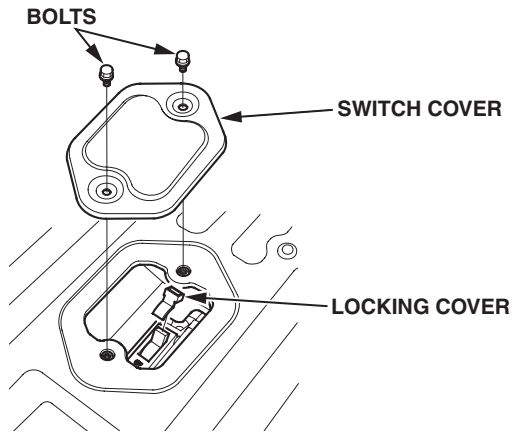
Skill Level: Repair Technician

Out of warranty: Any repair performed after warranty expiration may be eligible for goodwill consideration by the District Parts and Service Manager or your Zone Office. You must request consideration, and get a decision, before starting work.

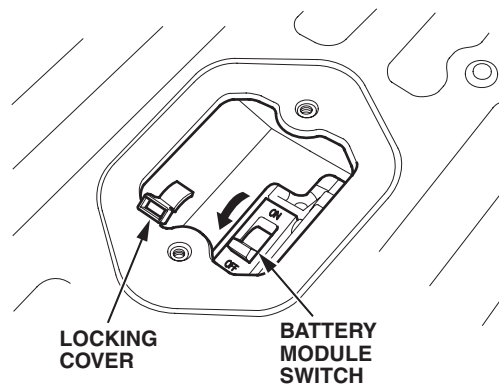
INSPECTION PROCEDURE

1. Turn the ignition switch to LOCK (0).
2. Remove the cargo floor mat (see page 20-44 of the 2000-04 Insight Service Manual). (In ISIS, use the keyword **FLOOR MAT**, and select **Interior Trim Removal/Installation - Cargo Area** from the list.)

- Remove the battery module switch cover (two bolts), then remove the locking cover from the switch.

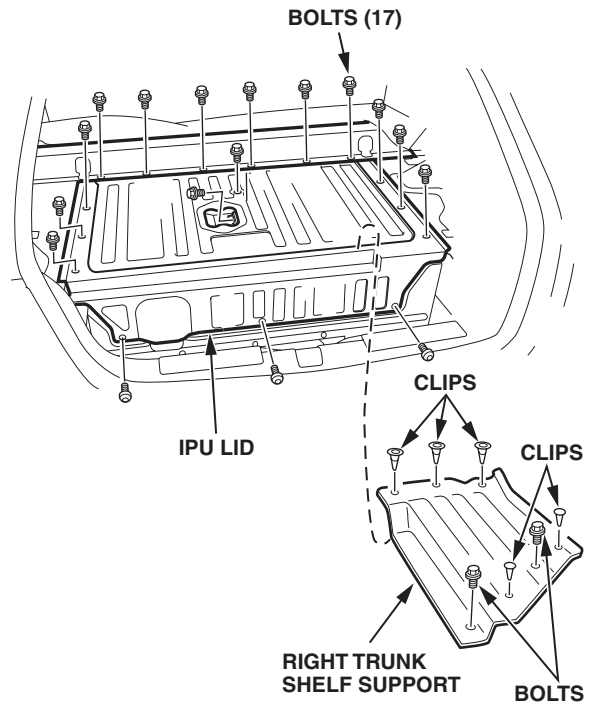


- Flip the battery module switch to **OFF**. Reinstall the locking cover.



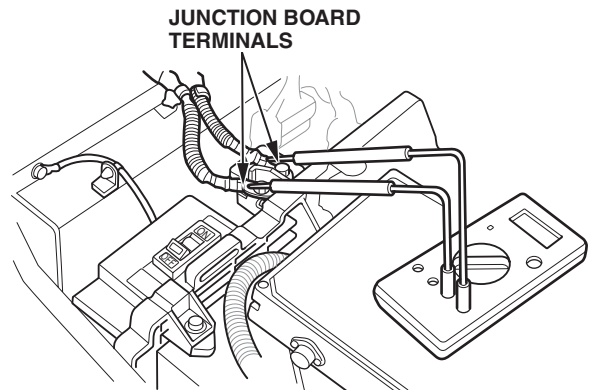
- Wait at least **5 minutes** to let the capacitors in the system discharge.

- Remove the right trunk shelf support (five clips and two bolts).



- Remove the six mid-frame cover bolts. Remove the intelligent power unit (IPU) lid (17 bolts).

- Measure the voltage at the junction board terminals. There should be **30 V or less**. If you read **more than 30 V**, there is a problem in the circuit; do the DTC troubleshooting first.



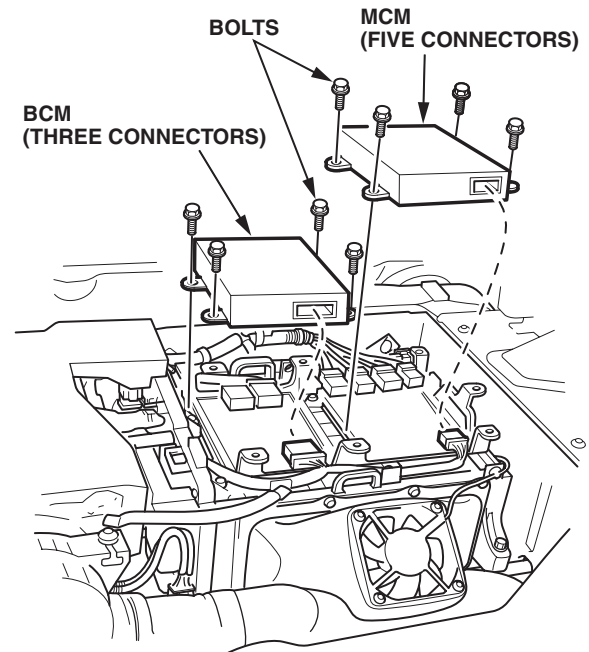
- Look at the part number on the motor control module (MCM), and refer to this chart. If there is a replacement part number listed for it, you need to order a replacement MCM.

Model Year	MCM Part Number	Replacement Part Number
M/T Models		
2000-01	1K000-PHM-000 thru 1K000-PHM-050	1K000-PHM-060 (H/C 7071525)
2000-01 with ECU Module Kit	06060-PHM-305	None
2002-03	1K000-PHM-060	None
2004	1K000-PHM-070	None
CVT Models		
2001	1K000-PHM-900 thru 1K000-PHM-904	1K000-PHM-905 (H/C 7094709)
2002-03	1K000-PHM-905	None
2004	1K000-PHM-906	None

- Look at the part number on the battery condition monitor (BCM). If the part number is not 1K100-PHM-A01 (H/C 7687452), you need to order a replacement BCM.
- Use the Honda Diagnostic System (HDS) with version 1.011.014 or later software to clear any set DTCs.
- Reinstall the IPU lid and the mid-frame cover bolts. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
- Reinstall the right trunk shelf support. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
- Remove the battery module switch locking cover, and flip the switch to **ON**. Reinstall the locking cover.
- Reinstall the battery module switch cover.
- Reinstall the cargo floor mat.
- Return the vehicle to your customer. Advise your customer that it is OK to drive the vehicle as is until the replacement parts arrive, but the vehicle will have reduced power (no IMA assist).
- Order a battery module and, if needed, a BCM, an MCM, or both.

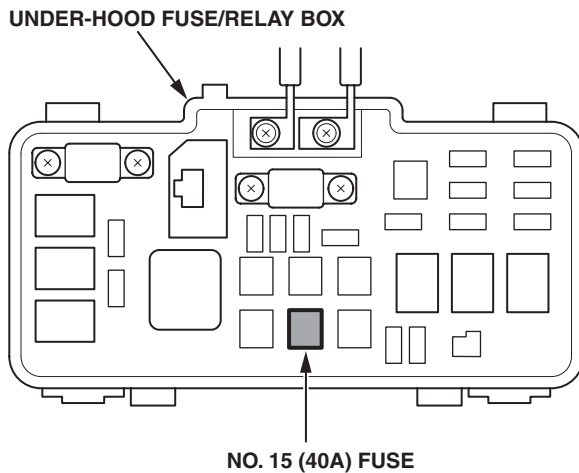
REPAIR PROCEDURE

- Remove the battery module from the vehicle (see page 12-113 of the service manual). (In ISIS, use the keyword **BAT MOD**, and select **Battery Module Removal/Installation** from the list.)
- Remove the lifting tool from the battery module.
- Remove the mounting bolts for the MCM and the BCM (eight total). Unplug the electrical connectors (five for the MCM and three for the BCM), then remove the modules.



- Install the MCM and the BCM in the new battery module. Use the original MCM and BCM if no replacement was needed; otherwise, use the appropriate replacement parts. Torque the mounting bolts to **9.8 N·m (7.2 lb-ft)**.
- Install the lifting tool on the battery module.
- With someone to help you, carefully lift the battery module into the vehicle, and set it down into position. Remove the lifting tool.
- Plug in the connectors, and install the Y condenser harness. Then install the mounting bolts. Torque the bolts to **24 N·m (17 lb-ft)**.
- Install the battery module air duct. Torque the bolt to **9.8 N·m (7.2 lb-ft)**.
- Connect the high voltage cables to the junction board. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
- Install the front and rear IPU braces and the mid-frame. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.

11. Install the foam inserts.
12. Install the IPU lid. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
13. Reinstall the right side trunk shelf support. Torque the bolts to **9.8 N·m (7.2 lb-ft)**.
14. Remove the battery module switch locking cover, and flip the switch to **ON**. Reinstall the locking cover.
15. Reinstall the battery module switch cover.
16. Reinstall the cargo floor mat.
17. Remove the No. 15 (40A) fuse (EPS control unit) from the under-hood fuse/relay box.



18. With the transmission in Neutral, and the clutch released on M/T models, start the engine. Hold it at **3,500 rpm** until the IMA battery level indicator shows at least **50 percent** charge.
19. Turn off the engine, and reinstall the No. 15 fuse.