

IMA COMPONENT LOCATIONS



This view shows the contents of the "IPU" compartment, immediately behind the driver and passenger seats. This compartment contains the following components:

- **Motor Control Module (MCM):** This is the metal box located in the upper right corner, which controls when the motor operates in assist or regeneration mode, and controls the degree of assist/regeneration.
- **Battery Condition Module (BCM):** This is the metal box to the left of the MCM, just right of center. This tracks the battery state of charge and decides how much energy can be supplied to or delivered from the battery.
- **Battery Module:** Located below the MCM and BCM, this is the Insight's 144 volt primary battery pack.
- **Battery Module cooling fan,** located in the bottom right portion of the picture. This two speed fan draws air from the cabin, behind the right seat, and pulls it through the battery pack.
- **Motor Drive Module (MDM):** This is the component located in the upper left corner of the picture. The Motor Drive Module contains the switching electronics used to bidirectionally-send power between the Battery Module and the IMA Motor, based on instructions provided to it by the Motor Control Module (MCM).
- **Heat Sink:** This is the duller colored component located next to the MDM, which absorbs and dissipates heat produced by the MDM and DC-DC Converter.
- **DC-DC Converter:** This is the component located to the right of the Heat Sink. The DC-DC Converter converts the 144 volt power supplied by the IMA motor and/or Battery Module into 12 volts to supply the Insight's conventional 12 volt accessories.
- **Power Control Unit (PCU):** The MDM, Heat Sink and DC-DC Converter are collectively known as the Power Control Unit.
- **PCU Cooling Fan:** This is located in front of the heat sink, and draws air through the heat sink to aid in cooling of the PCU.