# Body Control Module (BCM) Programming/RPO Configuration (IPM)

### General Information to Setup the Instrument Panel Module (IPM)

**Important:** The Air Bag indicator light may remain ON after the instrument panel module (IPM) is replaced and during the setup procedure for the IPM until the procedure is completed and the ignition key is cycled OFF and ON.

Before performing any of the setup procedures ensure the following:

- The scan tool has been updated with the latest software version.
- The battery is fully charged.
- All modules on the serial data line are connected.

The following procedures must be performed when a new IPM is installed:

- 1. Setup New IPM/RIM
- 2. Program vehicle identification number (VIN)
- 3. Brake Pedal Position (BPP) Sensor Calibration

## Setup New IPM/RIM

This procedure will allow the user to compare the IPM and rear integration module (RIM) vehicle configuration data. The IPM is the master for storing vehicle configuration and a backup copy is retained in the RIM. If a fault occurs in either module, this test will do a comparison of data and the user will then be able to update the data in the module that was replaced.

To set up a new IPM, perform 'Setup New IPM/RIM' procedure under Vehicle Control Systems > Computer/Integrating Systems > Module Setup > IPM menus on the scan tool.

Excepting the Export Country option, which is slightly different, the screen will display 4 columns. The user will be able to scroll up and down with the up and down arrow keys in all columns. The user will be able to scroll through options available to that name/function in the fourth column with the left and right arrow keys. The first column will display the function of the option. The second column will display RIM data and the third column will display IPM data. The forth and final column will display all options available for that name/function. The user will compare the RIM to the IPM data or the IPM to the RIM data depending on which module was replaced. If the user replaces the IPM, the user will scroll through the options with the left and right arrow keys in the fourth column and match that option with the options with the left and right arrow keys in the fourth column and match that option with the options with the IPM column. Likewise, if the user replaces the RIM, the user will scroll through the options with the left and right arrow keys in the fourth column and match that option with the option set in the RIM column. Likewise, if the user replaces the RIM, the user will scroll through the options with the left and right arrow keys in the fourth column and match that option with the option set in the IPM column.

The following options can be set up:

- Export Country
- Engine Type
- Aux. Heater/KA6

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- TVT/YQ6 or YQ7 -- TV Tuner
- DRR/U2K -- Digital Radio Receiver
- Remote Start
- Theft Export/CU9
- CTD Present -- Content Theft Deterrent (UK)
- Automatic Trans.
- AWD/MV3 -- ACC Wheel Drive
- Alarm Export/UA2
- ACC/K59 -- Adaptive Cruise Control
- Driver Position
- MSM Lumbar/AL2 -- Memory Seat Module
- MSM/A45 -- Memory Seat Module
- Intru Export/UA2 -- Intrusion Sensor
- Heated Seats/KA1
- Speed Biasing
- HUD/UV6 -- Head Up Display
- Incli Exp/UA2 -- Inclination Sensor
- VCIM/UE1 -- OnStar®
- SCLM/UA2 -- Steering Column Lock Module
- RWD/M22 or M82 -- Rear Wheel Drive
- SOD/UEB -- Side Object Detection
- ESC/F55 -- Electronic Suspension Control
- Overspeed /Warn.
- TCS -- Traction Control System
- TPM -- Tire Pressure Monitoring
- Smart Beam /TQ5
- Headlamp Level
- Air Quality /K14
- HV Seat /KB6 -- Heated/Vented Seat
- Metric FE Units -- Fuel Economy Units
- DRL/Z49 -- Daytime Running Lamps
- HID/TT6/TT7/TT8 -- High Intensity Discharge Lamps
- Fog Lmps not Us /Can
- SWC/K59 -- Steering Wheel Control Switches with Adaptive Cruise Control
- SWC/UE1 -- with OnStar®
- SWC Htd St WHL -- with Heated Steering Wheel

After all options were set, save them using Save Options. If the option setting was successfully, Procedure Complete message will be displayed. The power mode will toggle from Run to Accessory.

#### **Program VIN**

This procedure needs to be performed if IPM is replaced. Under Module Setup > IPM menu, perform the program VIN procedure following the Tech 2 instructions.

## **BPP Sensor Calibration**

This procedure needs to performed whenever IPM or BPP sensor was replaced. Refer to <u>Brake Pedal</u> <u>Position Sensor Calibration</u> in Lighting Systems.

Important: After setup, perform the following to avoid future misdiagnosis:

- 1. Turn the ignition OFF for 10 seconds.
- 2. Connect the scan tool to the data link connector (DLC).
- 3. Turn the ignition ON, with the engine OFF.
- 4. Use the scan tool in order to retrieve history DTCs from all modules.
- 5. Clear all history DTCs.