

PCM Module Network Input Messages

Broadcast Message	Originating Module	Message Purpose
Ignition status	BCM	This message informs the PCM of the current ignition status; off, on, start, unknown or invalid.

DESCRIPTION AND OPERATION > STEERING WHEEL AND COLUMN ELECTRICAL COMPONENTS - SYSTEM OPERATION AND COMPONENT DESCRIPTION > IGNITION SWITCH SYSTEM

The BCM controls the ignition modes, including OFF, ACC, ON and START. This allows some systems to be activated without starting the vehicle.

The BCM provides voltage at all times to the ignition switch. Depending on the ignition switch position, voltage may be routed to one or two of the ignition switch input circuits back to the BCM.

OFF

The BCM supplies voltage to the ignition switch at all times. When the ignition switch is in the OFF position, the switch is open, preventing any voltage signals from reaching the BCM. When the BCM does not detect voltage from any of the ignition mode-designated circuits, the BCM interprets this as the ignition off mode.

The BCM communicates the ignition mode to the other modules by sending an ignition status message over the CAN and does not energize any relays to prevent voltage from being distributed to the various electrical systems.

ACC

When the ignition switch is in the ACC position, the switch routes voltage through the ACC-designated circuit to the BCM. The BCM interprets this as the ignition accessory mode.

The BCM communicates the ignition mode to the other modules by sending an ignition status message over the CAN and energizes the accessory designated relays and provides power to some electrical system.

ON

When the ignition switch is in the ON position, the switch routes voltage through the ACC-designated and ON-designated circuits to the BCM. The BCM interprets this as the ignition on mode.

The BCM communicates the ignition mode to the other modules by sending an ignition status message over the CAN and activates the internal run/start relay, providing ignition power to the various vehicle systems and modules.

START

When the ignition switch is placed in the START position, the switch routes voltage through the ON-designated and START-designated circuits to the BCM.

The BCM interprets this as the ignition start mode and communicates the ignition mode to the other modules by sending an ignition status message over the CAN. Additionally, the ignition switch routes voltage to the PCM indicating a request to start the vehicle.

The START-designated circuit is only used for vehicle starting.