



GROUP
Electrical

MODEL
2016MY >
Sorento (UMa)

NUMBER
PS423

DATE
September 2015

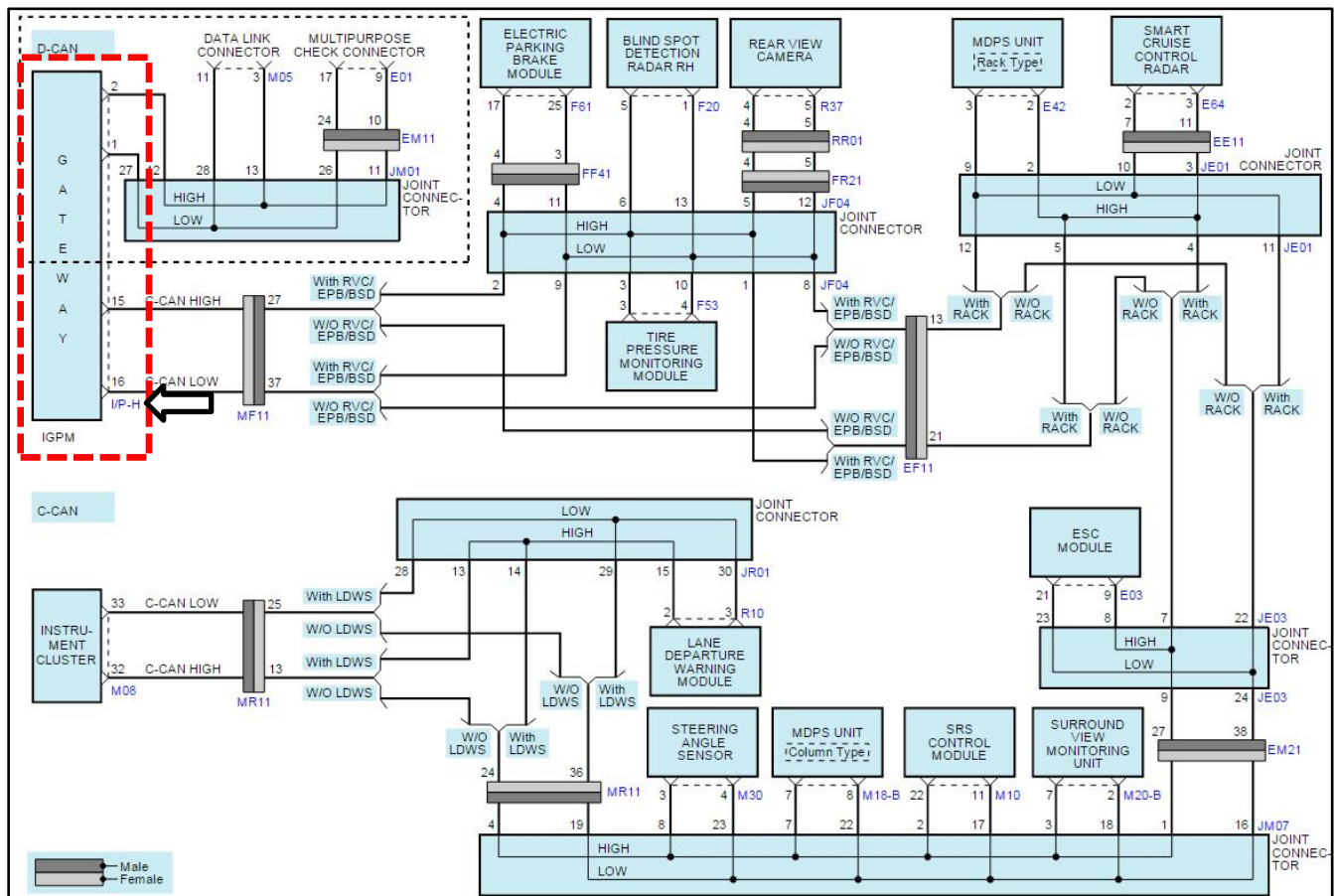


TECHNICAL OPERATIONS

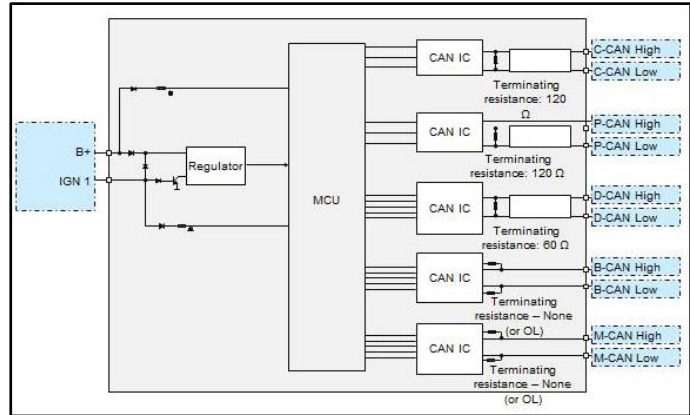
SUBJECT: 2016MY SORENTO (UMa) - CENTRAL GATEWAY OVERVIEW

The 2016MY Sorento (UMa) is equipped with a newly designed Controller Area Network (CAN) Communication System. This new system utilizes a “Central Gateway” which is integrated into the IPM. The redesigned IPM is now known as the Integrated Gateway Power Control Module (IGPM).

One of the benefits of this system is the ability to inspect the resistance of individual CAN systems, at a centralized connector. This connector can be found on the reverse side of the IGPM, specifically, connector I/P-H (see diagram below), and does not require major component removal to access.



Inspection of each system can be accomplished by utilizing a “T-Connector” (Part # TCLE-020 F 0.64mm Square) in-line between the male and female pins. Terminating resistance values of the IGPM alone can be tested by removing the male pins of the “T-Connector” from the female side of I/P-H.



Refer to the “Data Link Details” section of the wiring diagram on the vehicle you are servicing, for specific pin locations.

Diagnostic Tips:

The C-CAN and P-CAN system utilize two 120 Ω resistors per system, while the D-CAN system utilizes one 60Ω resistor per system. The B-CAN and M-CAN systems contain terminating resistors that are not interconnected between their respective high and low lines; as a result, they cannot be tested.

When diagnosing intermittent concerns, leave the “T-Connector” in-line with the IGPM and I/P-H connector, and observe the readings while conducting simulation testing.

Refer to the table below for known good values.

System	Ω @ IGPM (I/P-H Disconnected)	Ω @ I/P-H (I/P-H Disconnected)	Ω @ I/P-H (Connected to IGPM)
C-CAN	120 Ω	120 Ω	60 Ω
P-CAN	120 Ω	120 Ω	60 Ω
D-CAN	60Ω	OL	60 Ω
B-CAN	OL	OL	OL
M-CAN	OL	OL	OL