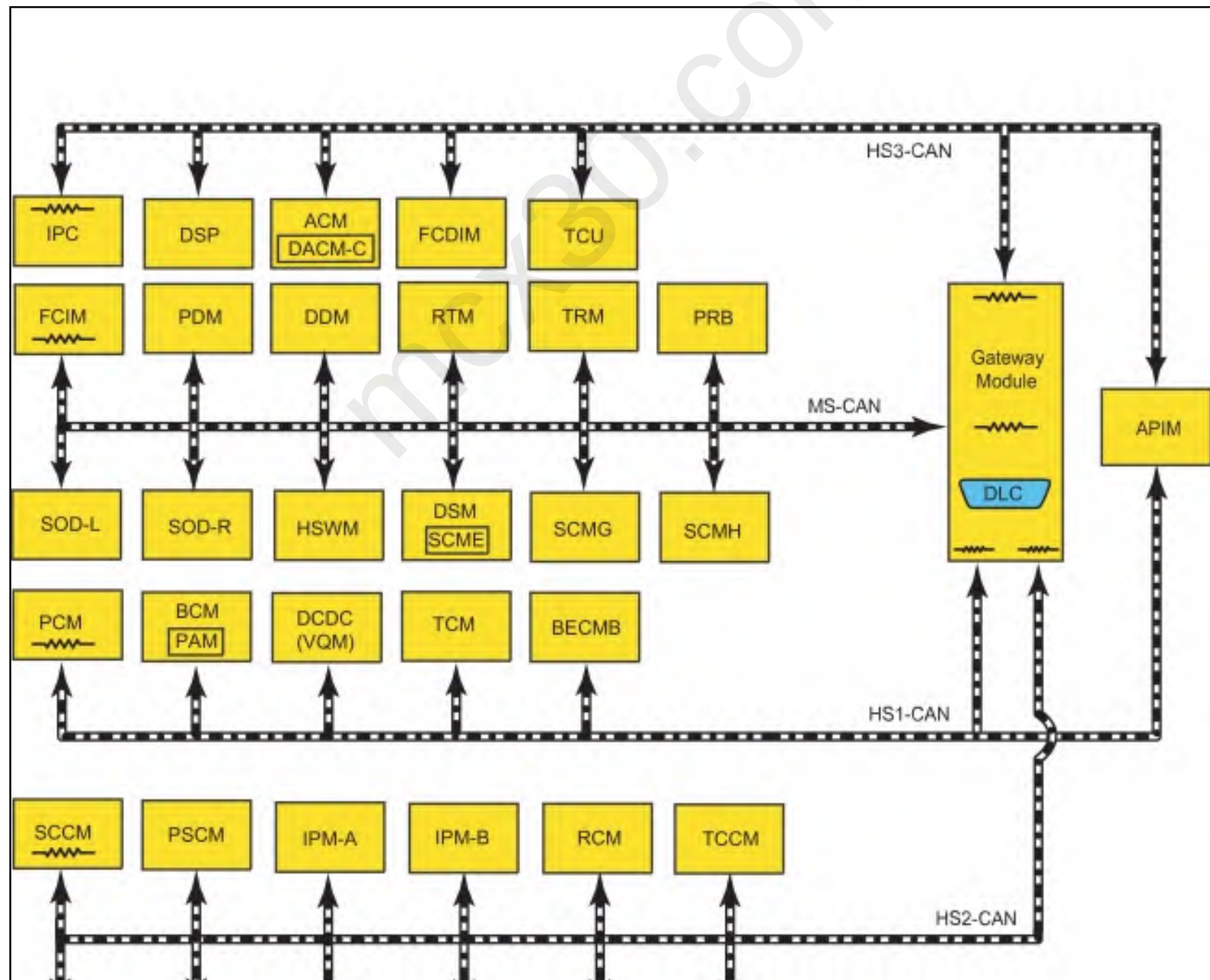


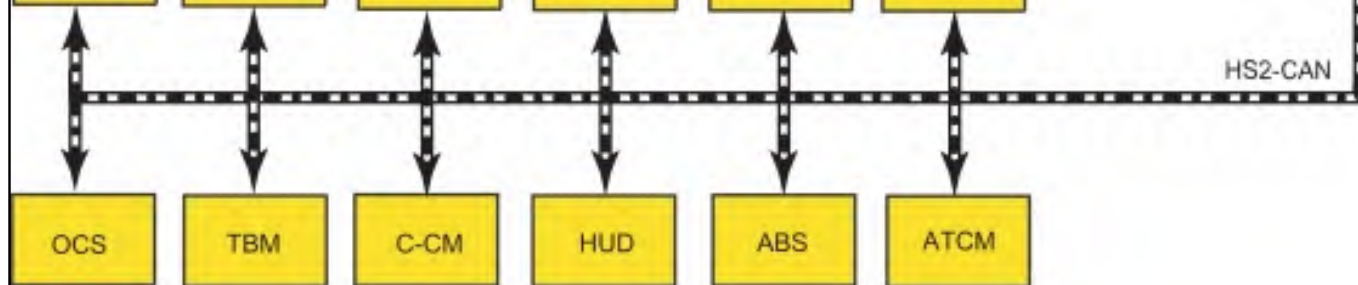
Communications Network - System Operation and Component Description

System Operation

System Diagram

NOTE: For vehicles equipped with pre-collision assist, the CCM does not communicate directly on the HS-CAN2. The CCM communicates with the IPMA on a private CAN, and the IPMA communicates on the HS-CAN2. For description and diagnostic information, refer to Section 419-03B.





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Module Network Chart

Module Name	Network Type	Terminating Module
APIM (if equipped)	HS-CAN1	No
	HS-CAN3	No
ATCM (Raptor)	HS-CAN2	No
ABS module	HS-CAN2	No
ACM	HS-CAN3	No
Audio DSP (if equipped)	HS-CAN3	No
BECMB (except Raptor)	HS-CAN1	No
BCM	HS-CAN1	No
CCM (without pre-collision assist only)	HS-CAN2	No
DACMC (if equipped) (integrated with ACM)	HS-CAN3	No
DC/ DC converter control module (VQM) (if equipped)	HS-CAN1	No
DDM	MS-CAN	No
DSM	MS-CAN	No
FCIM (if equipped)	MS-CAN	Yes
FCDIM (if equipped)	HS-CAN3	No
GWM	HS-CAN1	Yes
	HS-CAN2	Yes
	HS-CAN3	Yes
	MS-CAN	Yes
HUD module (if equipped)	HS-CAN2	No
HSWM (if equipped)	MS-CAN	No
IPC	HS-CAN3	Yes

IPMA (if equipped)	HS-CAN2	No
IPMB (if equipped)	HS-CAN2	No
OCSM	HS-CAN2	No
PAM (if equipped) (integrated with BCM)	HS-CAN1	No
PSCM	HS-CAN2	No
PCM	HS-CAN1	Yes
PDM	MS-CAN	No
PRB module (if equipped)	MS-CAN	No
RTM	MS-CAN	No
RCM	HS-CAN2	No
SODL (if equipped)	MS-CAN	No
SODR (if equipped)	MS-CAN	No
SCME (if equipped) (integrated with DSM)	MS-CAN	No
SCMG	MS-CAN	No
SCMH (if equipped)	MS-CAN	No
SCCM	HS-CAN2	Yes
TCU (if equipped)	HS-CAN3	No
TBM (if equipped)	HS-CAN2	No
TRM (if equipped)	MS-CAN	No
TCCM (if equipped)	HS-CAN2	No
TCM (if equipped)	HS-CAN1	No

Network Termination

The CAN uses network termination to improve communication reliability. Termination modules are located at both ends of the network. As network messages are broadcast in the form of voltage signals, the network voltage signals are stabilized by the termination resistors.

Each termination module has an internal 120 ohm resistor that bridges across the positive and negative bus connection. With two 120 ohm resistors located in a parallel circuit configuration, the total network impedance, or total resistance, is 60 ohms.

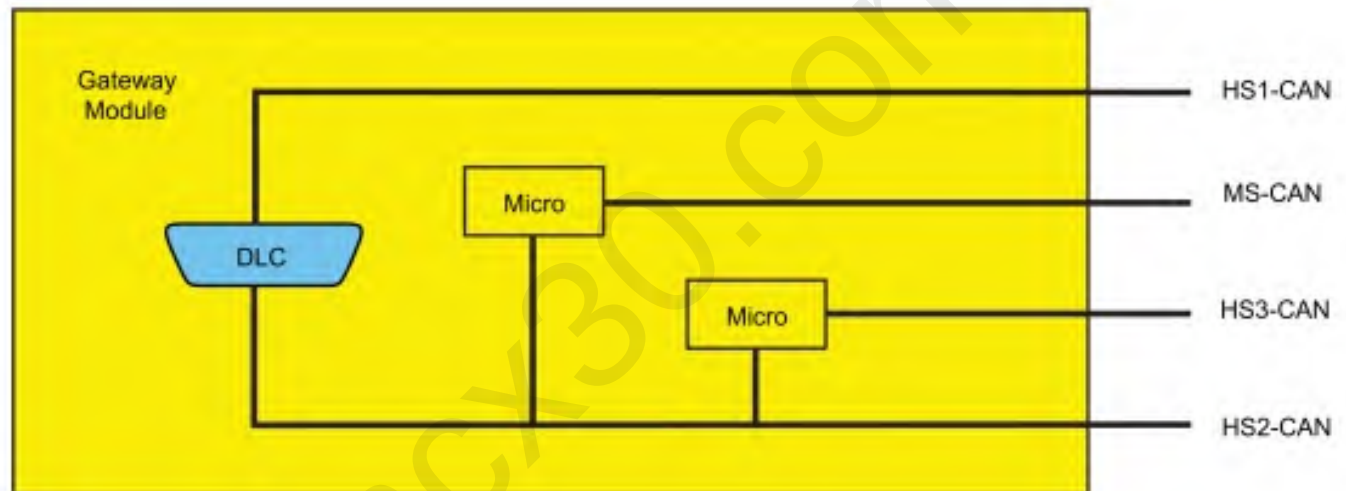
Network termination improves bus message reliability by stabilizing bus voltage and eliminating electrical interference.

Gateway Module

NOTE: The GWM, communicates with the 4 controller area networks (CAN). The OBD DLC is fitted to the GWM, and is the direct interface with the scan tool.

The GWM is mounted under the driver side instrument panel. The OBD connector is fitted to the GWM. The GWM acts as a central gateway to translate messages across all 4 vehicle controller area networks (CAN). The GWM is the only module on this vehicle with this ability. The GWM also serves as a termination module for each of the networks to which it is connected.

The 2 module communication networks connected to the DLC are HS-CAN1 and HS-CAN2. These 2 networks communicate directly with the diagnostic scan tool. The other 2 communication networks, HS-CAN3 and MS-CAN, communicate on the network, but do not communicate directly with the diagnostic scan tool. The GWM translates the messages from these 2 networks to the HS-CAN2, which transfers the signals to the diagnostic scan tool.



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High Speed Controller Area Network 1 and 2 (HS-CAN1, HS-CAN2)

The HS-CAN1 and HS-CAN2 operate at a maximum data transfer speed of 500 Kbps and are designed for real time powertrain and driver feature information transfer and control. Modules on the HS-CAN1 and HS-CAN2 communicate using bussed messages. The HS-CAN uses an unshielded twisted pair cable, data bus (+) and data bus (-) circuits. In addition to scan tool communication, the HS-CAN allows sharing of information between all modules on each HS-CAN.

With the addition of more modules, network traffic has increased. This has created the need for an additional HS-CAN to manage the increased bus data carried on each network.

The GWM is used as a gateway for the messages to transfer between the scan tool and the modules on the HS-CAN1 and the modules on the HS-CAN2.

The scan tool communicates with the vehicle communication networks directly through the HS-CAN1 and HS-CAN2.

High Speed Controller Area Network 3 (HS-CAN3)

The HS-CAN3, or the I-CAN, operates at a maximum data transfer speed of 500 Kbps and is designed for real time audio, multimedia and driver information transfer and control. Modules on the HS-CAN3 communicate using bussed messages. HS-CAN3 uses an unshielded twisted pair cable, data bus (+) and data bus (-) circuits, and allows sharing of information between all modules on the network.

The GWM is used as a gateway for the messages to transfer between the scan tool and the modules on the HS-CAN3.

The GWM translates the diagnostic messages from the HS-CAN2 to the HS-CAN3 and vice versa, allowing communication between the modules on the HS-CAN3 and the scan tool.

Medium Speed Controller Area Network (MS-CAN)

The MS-CAN operates at a maximum data transfer speed of 125 Kbps and is designed for general information transfer. Modules on the MS-CAN communicate using bussed messages. The MS-CAN uses an unshielded twisted pair cable, data bus (+) and data bus (-) circuits. In addition to scan tool communication, the MS-CAN allows sharing of information between all modules on the network.

The GWM is used as a gateway for the messages to transfer between the scan tool and the modules on the MS-CAN.

The GWM translates the diagnostic messages from the HS-CAN2 to the MS-CAN and vice versa, allowing communication between the modules on the MS-CAN and the scan tool.

Controller Area Network (CAN) Fault Tolerance

Fault Tolerance Normal Operation

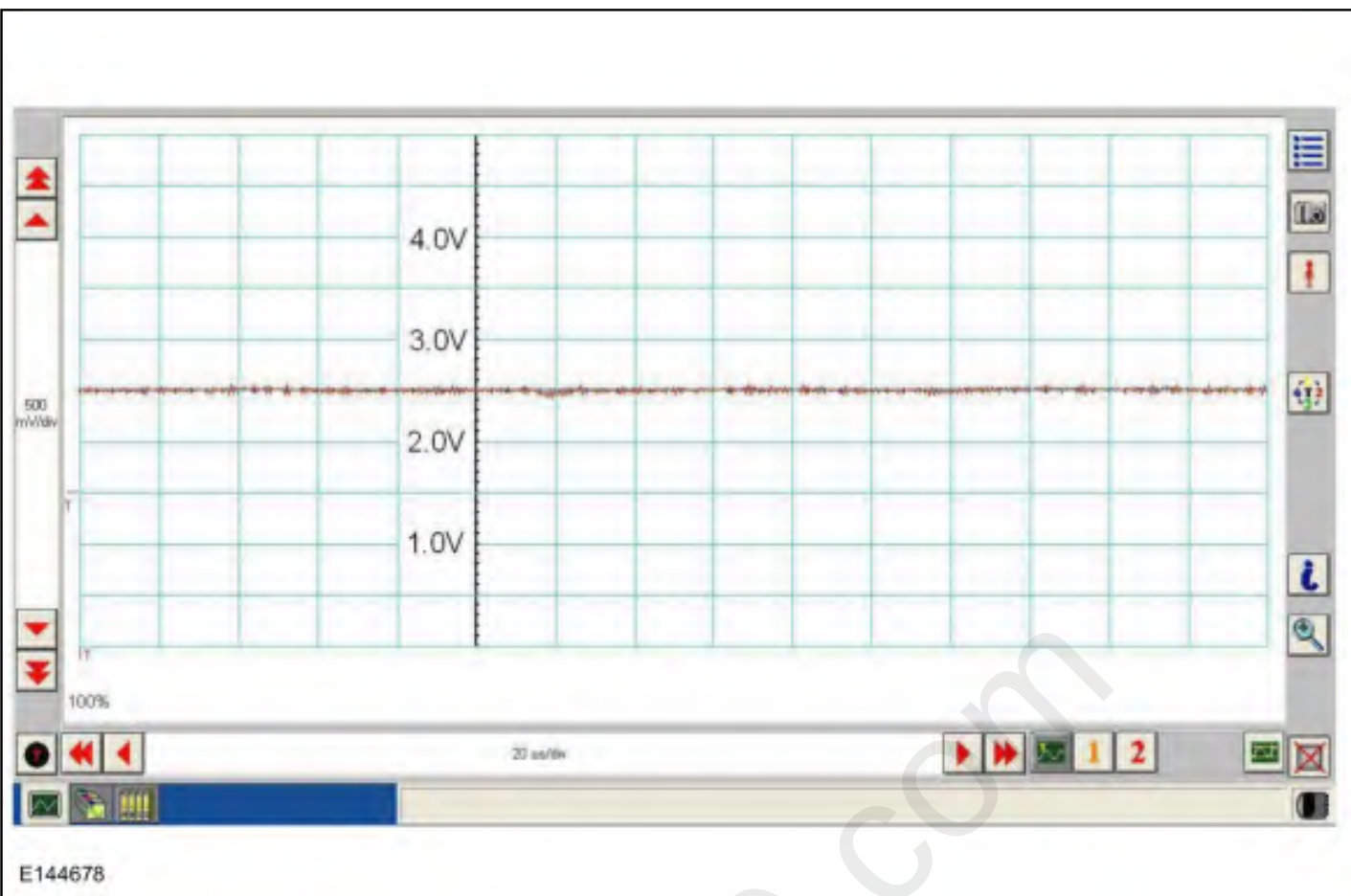


NOTE: The oscilloscope traces shown are from the IDS oscilloscope taken using the IDS pre-configured CAN settings. The traces are for both data (+) and data (-) taken simultaneously (2-channel) at a sample rate of 1 mega-sample per second (1MS/s) or greater.

The data (+) and data (-) circuits are each regulated to approximately 2.5 volts during neutral or rested network traffic. As messages are sent on the data (+) circuit, voltage is increased by approximately 1.0 volt. Inversely, the data (-) circuit is reduced by approximately 1.0 volt when a message is sent.

Successful communication of a message can usually be identified by the slight spike at the end of a message transmission. Any signals that are significantly different than the normal CAN waveform may cause network Diagnostic Trouble Codes (DTCs) (U-codes) to set or may cause a complete network outage.

CAN Circuits Shorted Together



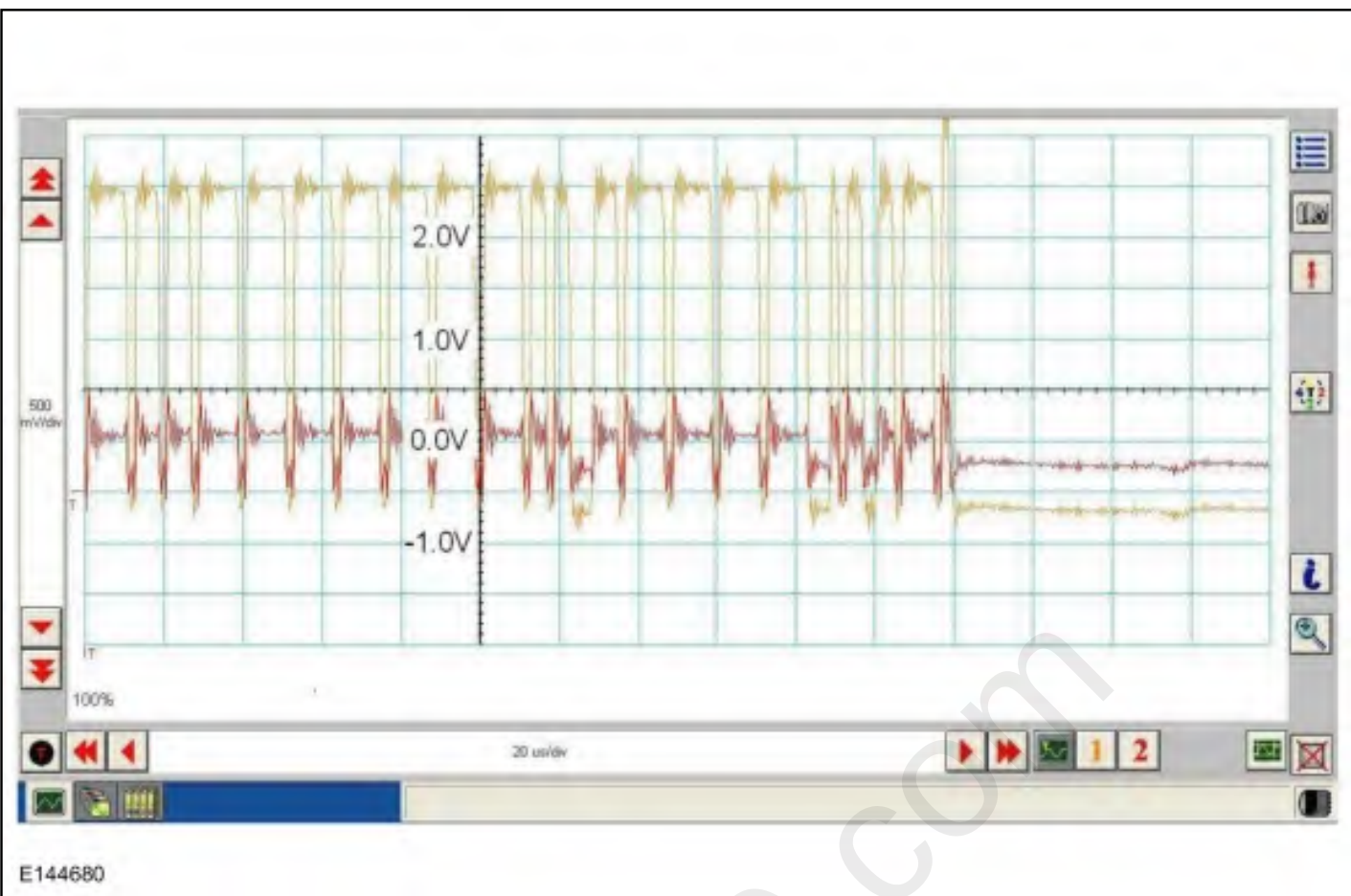
In the event the data (+) and data (-) circuits become shorted together, the signal stays at base voltage (2.5V) continuously and all communication capabilities are lost.

CAN (+) Circuit Shorted to Ground



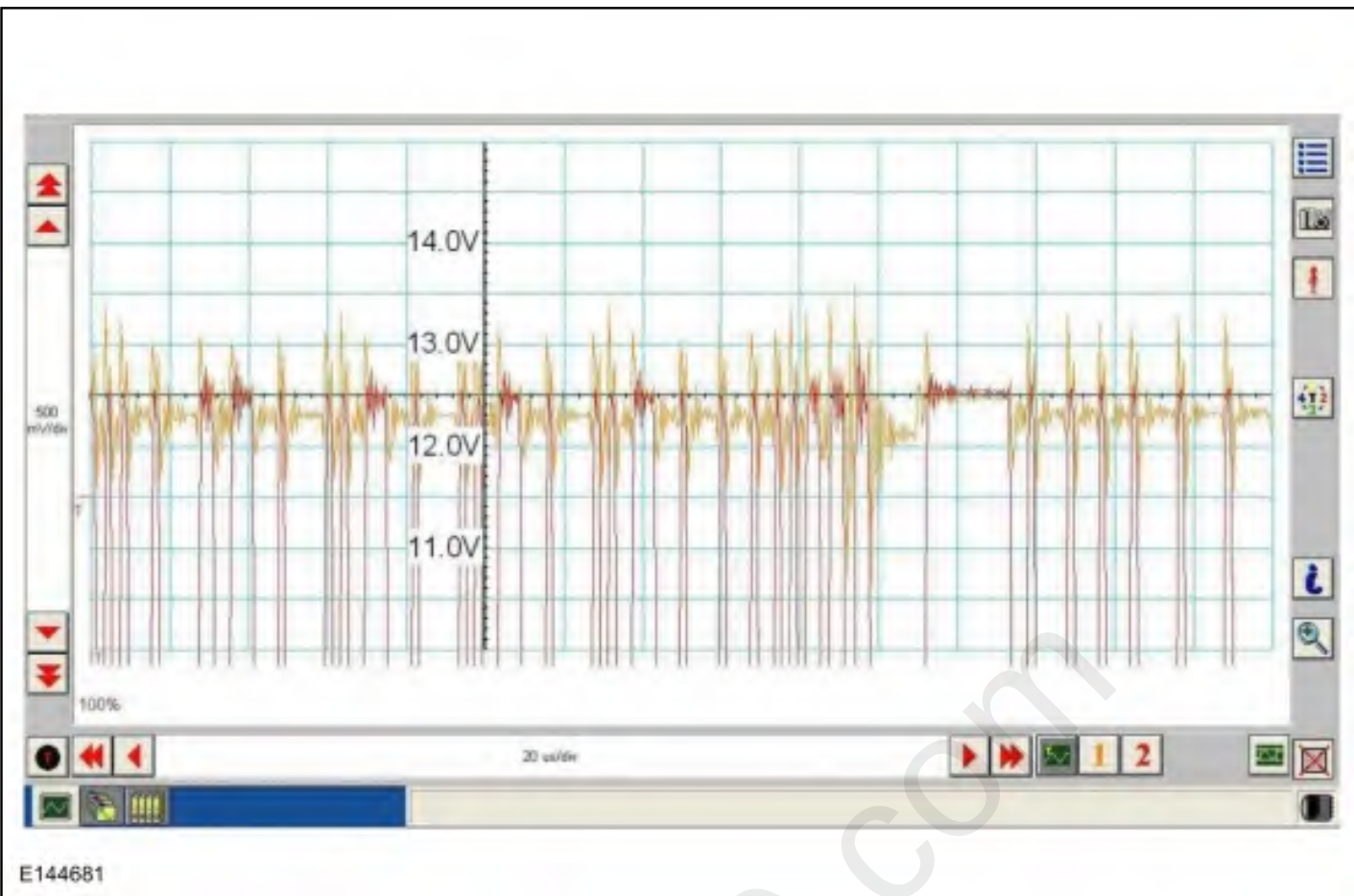
In the event the data (+) circuit becomes shorted to ground, both the data (+) and data (-) circuits are pulled low (0V) and all communication capabilities are lost.

CAN (-) Circuit Shorted to Ground



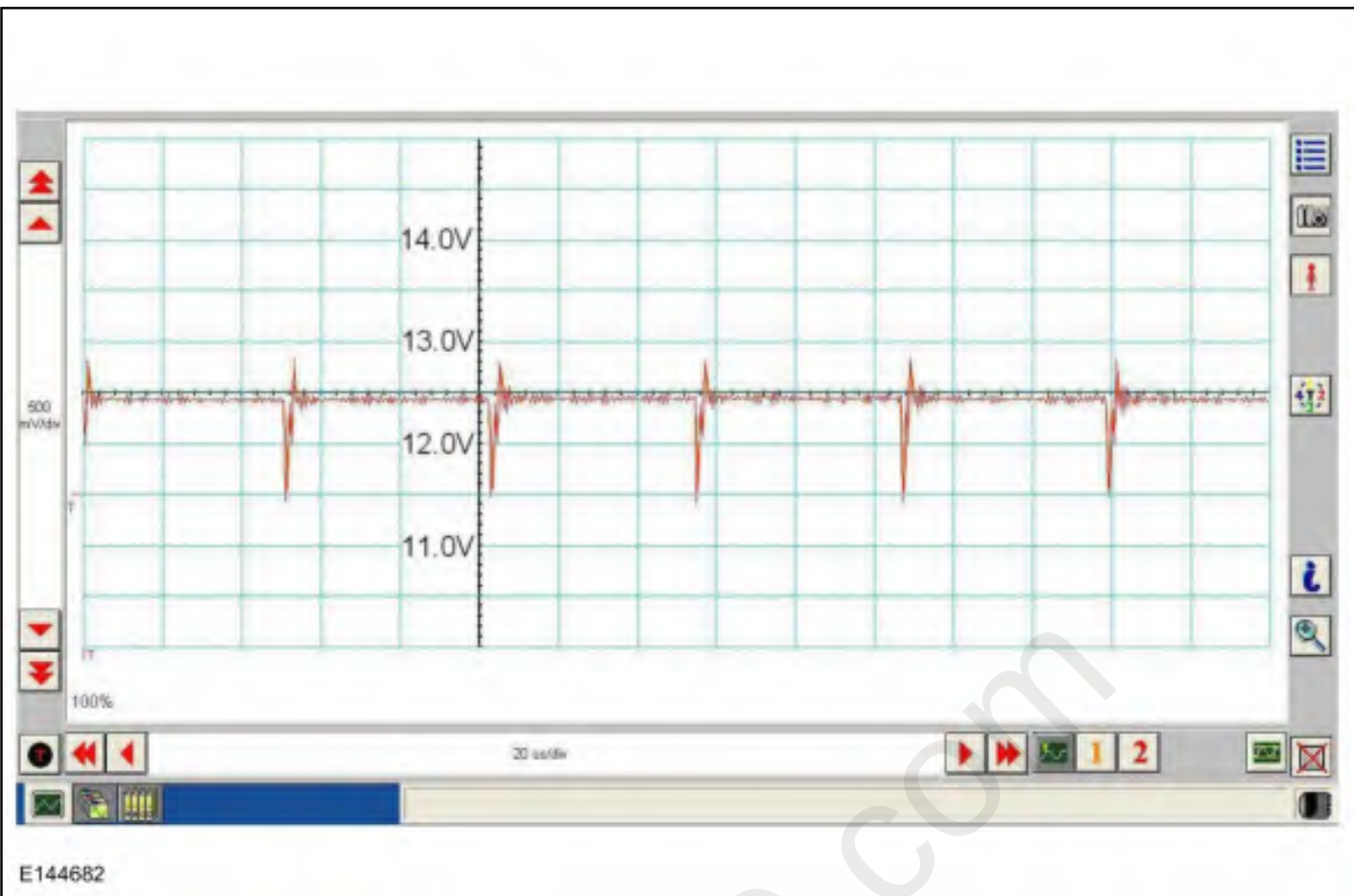
In the event the data (-) circuit becomes shorted to ground, the data (-) circuit is pulled low (0V) and the data (+) circuit reaches near-normal peak voltage (3.0V) during communication but falls to 0V instead of normal base voltage (2.5V). Communication may continue but at a degraded level.

CAN (+) Circuit Shorted to Battery Voltage



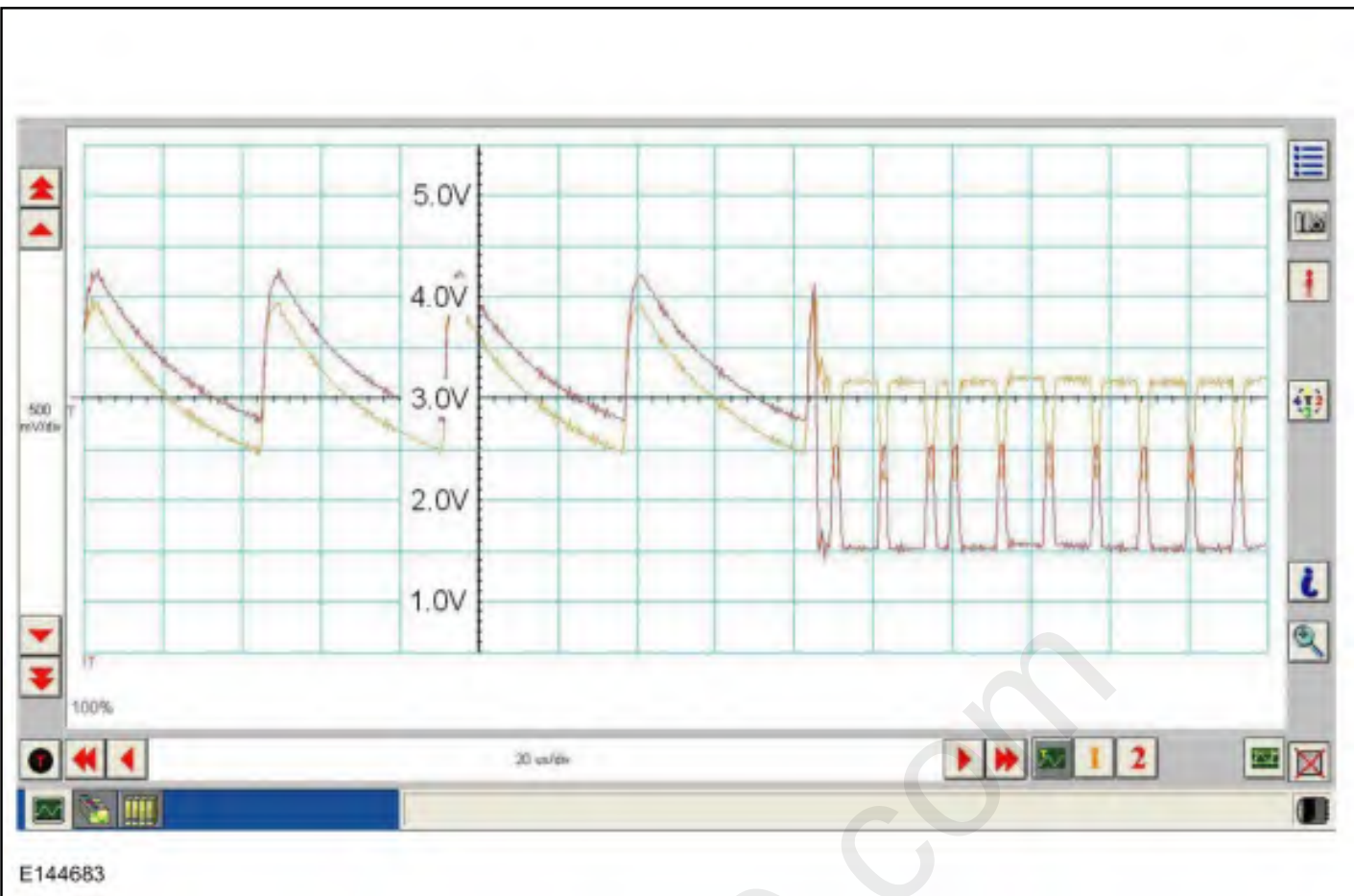
In the event the data (+) circuit becomes shorted to battery voltage, the data (+) circuit is pulled high (12V) and the data (-) circuit rises to abnormally high voltage (above 5V) during communication and reaches battery voltage (12V) for peak voltage. Communication may continue but at a degraded level.

CAN (-) Circuit Shorted to Battery Voltage



In the event the data (-) circuit becomes shorted to battery voltage, both the data (+) and data (-) circuits are pulled high (12V) and all communication capabilities are lost.

CAN Circuit Signal Corruption



Rhythmic oscillations, inductive spikes or random interference can corrupt the network communications. The corruption signal source may be outside electrical interference such as motors or solenoids or internal interference generated from a module on the network. In some cases, an open in either the data (+) or data (-) circuit to a network module may cause the module to emit interference on the one circuit which is still connected. The trace shown is an example of a "sawtooth" pattern transmitted from a module with one open network circuit.

Other corruptions may be present when a module is intermittently powered up and down. The module on power up may initiate communication out of sync with other modules on the network causing momentary communication outages.

Controller Area Network (CAN) Multiplex Messages

Communication Message Chart

Network Message	Originating Module	Network Type	Receiving Module(s)
4WD auto lamp display	TCCM	HS-CAN2	• ATCM • GWM
4WD auto lamp display	GWM	HS-CAN3	• IPC

4WD drive mode display	TCCM	HS-CAN2	• GWM
4WD drive mode display	GWM	HS-CAN3	• IPC
4WD high indicator request (Raptor)	TCCM	HS-CAN2	• ATCM • GWM
4WD high indicator request	GWM	HS-CAN3	• IPC
4WD low indicator request (Raptor)	TCCM	HS-CAN2	• ATCM • GWM
4WD low indicator request	GWM	HS-CAN3	• IPC
4WD mode display (Raptor)	ATCM	HS-CAN2	• TCCM • GWM
4WD mode display	GWM	HS-CAN3	• IPC
4WD off-road mode display (Raptor)	TCCM	HS-CAN2	• IPMB • GWM
4WD off-road mode display (Raptor)	GWM	HS-CAN3	• IPC
4WD range	TCCM	HS-CAN2	• GWM • ABS module • PSCM • IPMB
4WD range	GWM	HS-CAN1	• PCM • TCM
4WD range	GWM	HS-CAN3	• IPC • TCU
4WD service required	TCCM	HS-CAN2	• GWM • ABS module • PSCM

4WD service required	GWM	HS-CAN1	• PCM • TCM
4WD service required	GWM	HS-CAN3	• IPC
4WD status	TCCM	HS-CAN2	• GWM
4WD status	GWM	HS-CAN3	• IPC
4x2 status	TCCM	HS-CAN2	• GWM
4x2 status	GWM	HS-CAN3	• IPC
4x4 auto status	TCCM	HS-CAN2	• GWM
4x4 auto status	GWM	HS-CAN3	• IPC
4x4 high/low status	TCCM	HS-CAN2	• GWM
4x4 high/low status	GWM	HS-CAN1	• PCM
4x4 high/low status	GWM	HS-CAN3	• IPC
911 Assist override status	IPC	HS-CAN3	• APIM
A/C clutch status	PCM	HS-CAN1	• GWM
A/C clutch status	GWM	HS-CAN3	• IPC
A/C clutch status	GWM	MS-CAN	• FCIM
ABS active	ABS module	HS-CAN2	• CCM • IPMA • PSCM • RCM • TBM • GWM

ABS active	GWM	HS-CAN1	• PAM • PCM • TCM
ABS active	GWM	HS-CAN3	• TCU
ABS fault	ABS module	HS-CAN2	• GWM
ABS fault	GWM	HS-CAN1	• PCM
ABS fault	GWM	HS-CAN3	• IPC
ABS warning indicator request	ABS module	HS-CAN2	• RCM • GWM
ABS warning indicator request	GWM	HS-CAN3	• IPC
Accelerator pedal position	PCM	HS-CAN1	• BCM • TCM • GWM
Accelerator pedal position	GWM	HS-CAN3	• DACMC • ACM • APIM • TCU
Accelerator pedal position	GWM	HS-CAN2	• ABS module • CCM • IPMA • OCSM • PSCM • RCM • TCCM
Accelerator pedal position	GWM	MS-CAN	• FCIM
Accessory delay	BCM	HS-CAN1	• GWM

Accessory delay	GWM	MS-CAN	• DDM • PDM
Accessory delay	GWM	HS-CAN3	• APIM • DACMC • IPC
ACM configuration	ACM	HS-CAN3	• APIM • IPC
ACM track information	ACM	HS-CAN3	• APIM • IPC
Active noise audio status	DACMC	HS-CAN3	• DSP • ACM
Active park assist status	PAM	HS-CAN1	• BCM • PCM • GWM
Active park assist status	GWM	MS-CAN	• FCIM • SODL • SODR
Active park assist status	GWM	HS-CAN2	• PSCM • IPMB
Active park assist status	GWM	HS-CAN3	• IPC • FCDIM • APIM
Active park assist steering angle control status	PSCM	HS-CAN2	• GWM
Active park assist steering angle control status	GWM	HS-CAN1	• PAM
Active park assist steering angle request	PAM	HS-CAN1	• GWM
Active park assist steering angle request	GWM	HS-CAN2	• PSCM • ABS module

Active park assist switch request	FCIM	MS-CAN	GWM
Active park assist switch request	GWM	HS-CAN1	PAM
Active park assist chime request	PAM	HS-CAN1	GWM
Active park assist chime request	GWM	HS-CAN3	IPC
Active park assist mode available	PAM	HS-CAN1	GWM
Active park assist mode available	GWM	HS-CAN3	- FCDIM - IPC
Adaptive cruise control cancel request	SCCM	HS-CAN2	- CCM - GWM
Adaptive cruise control cancel request	CCM/ IPMA (pre-collision assist)	HS-CAN2	GWM
Adaptive cruise control cancel request	GWM	HS-CAN1	PCM
Adaptive cruise control commands	SCCM	HS-CAN2	- CCM - IPMA (pre-collision assist) - GWM
Adaptive cruise control commands	GWM	HS-CAN1	PCM
Adaptive cruise control deceleration request	CCM/ IPMA (pre-collision assist)	HS-CAN2	- ABS module - RCM - GWM
Adaptive cruise control deceleration request	GWM	HS-CAN3	TCU
Adaptive cruise control enable request	IPC	HS-CAN3	GWM
Adaptive cruise control enable request	GWM	HS-CAN2	- CCM - IPMA (pre-collision assist)

Adaptive cruise control engine status	PCM	HS-CAN1	• GWM
Adaptive cruise control engine status	GWM	HS-CAN2	• CCM • IPMA (pre-collision assist)
Adaptive cruise control follow mode display	CCM / IPMA (pre-collision assist)	HS-CAN2	• GWM
Adaptive cruise control follow mode display	GWM	HS-CAN3	• IPC
Adaptive cruise control forward distance alert	CCM / IPMA (pre-collision assist)	HS-CAN2	• GWM
Adaptive cruise control forward distance alert	GWM	HS-CAN3	• IPC
Adaptive cruise control gap distance display	CCM / IPMA (pre-collision assist)	HS-CAN2	• GWM
Adaptive cruise control gap distance display	GWM	HS-CAN3	• IPC
Adaptive cruise control gap select	SCCM	HS-CAN2	• CCM • IPMA (pre-collision assist) • GWM
Adaptive cruise control gap select	GWM	HS-CAN1	• PCM
Adaptive cruise control message display	CCM	HS-CAN2	• GWM
Adaptive cruise control message display	GWM	HS-CAN3	• IPC
Adaptive cruise control service required	CCM/ IPMA (pre-collision assist)	HS-CAN2	• GWM
Adaptive cruise control service required	GWM	HS-CAN3	• IPC
Adaptive cruise control set speed request	PCM	HS-CAN1	• GWM
Adaptive cruise control set speed request	GWM	HS-CAN2	• CCM
Adaptive cruise control stop mode request	PCM	HS-CAN1	• GWM

Adaptive cruise control stop mode request	GWM	HS-CAN2	• ABS module • IPMA (pre-collision assist)
Adaptive cruise control warning request	CCM	HS-CAN2	• GWM
Adaptive cruise control warning request	GWM	HS-CAN3	• IPC
Airbag deployment status	RCM	HS-CAN2	• GWM
Airbag deployment status	GWM	HS-CAN1	• APIM
Airbag deployment status	GWM	HS-CAN3	• TCU
Airbag warning indicator request	RCM	HS-CAN2	• GWM
Airbag warning indicator request	GWM	HS-CAN3	• IPC • TCU
Ambient air temperature	PCM	HS-CAN1	• BCM • PAM • GWM
Ambient air temperature	GWM	MS-CAN	• FCIM
Ambient air temperature	GWM	HS-CAN3	• IPC
Ambient air temperature	GWM	HS-CAN2	• ABS module • SCCM • TCCM
Ambient air temperature filtered	PCM	HS-CAN1	• BCM • PAM • GWM
Ambient air temperature filtered	GWM	MS-CAN	• FCIM
Ambient air temperature filtered	GWM	HS-CAN2	• IPMA

Ambient air temperature filtered	GWM	HS-CAN3	• IPC
Ambient light sensor	SCCM	HS-CAN2	• IPMA • GWM
Ambient light sensor	GWM	HS-CAN1	• BCM
Ambient lighting color/intensity	BCM	HS-CAN1	• APIM • GWM
Ambient lighting color/intensity	GWM	HS-CAN3	• APIM
Ambient lighting color/intensity request	APIM	HS-CAN3	• GWM
Ambient lighting color/intensity request	GWM	HS-CAN1	• BCM
Audio front control module alert	ACM	HS-CAN3	• IPC
Audio settings	IPC	HS-CAN3	• ACM • APIM
Audio source select	IPC	HS-CAN3	• APIM
Audio volume	ACM	HS-CAN3	• APIM • IPC
Audio system response status	ACM	HS-CAN3	• IPC • APIM • DSP • GWM
Audio system response status	GWM	MS-CAN	• FCIM
Auto high beam status display	IPMA	HS-CAN2	• GWM
Auto high beam status display	GWM	HS-CAN3	• IPC

AWD lock	ABS module	HS-CAN2	• GWM • TCCM
AWD lock	GWM	HS-CAN3	• IPC
Backlit LED status	BCM	HS-CAN1	• GWM
Backlit LED status	GWM	HS-CAN3	• FCDIM
Backlit LED status	GWM	HS-CAN2	• TBM
Backlit LED status	GWM	MS-CAN	• DDM • PDM • FCIM
Battery low state of charge	BCM	HS-CAN1	• GWM
Battery low state of charge	GWM	MS-CAN	• FCIM • TRM
Battery low state of charge	GWM	HS-CAN3	• IPC
Battery saver status	BCM	HS-CAN1	• GWM
Battery saver status	GWM	MS-CAN	• DDM • PDM
Battery saver status	GWM	HS-CAN3	• ACM • DSP
BLIS LED status driver side	DDM	MS-CAN	• SODL • SODR
BLIS LED status passenger side	PDM	MS-CAN	• SODL • SODR

BLIS trailer tow left status	SODL	MS-CAN	• DDM • PDM • GWM
BLIS trailer tow left status	GWM	HS-CAN3	• IPC
BLIS trailer tow right status	SODR	MS-CAN	• DDM • PDM • GWM
BLIS trailer tow right status	GWM	HS-CAN3	• IPC
Body service required	BCM	HS-CAN1	• GWM
Body service required	GWM	HS-CAN3	• IPC
Brake auto hold status	ABS module	HS-CAN2	• GWM
Brake auto hold status	GWM	HS-CAN1	• PCM
Brake (red) warning indicator request	ABS module	HS-CAN2	• RCM • GWM
Brake (red) warning indicator request	GWM	HS-CAN3	• IPC
Brake chime request	ABS module	HS-CAN2	• GWM
Brake chime request	GWM	HS-CAN3	• IPC
Brake drive mode status	ABS module	HS-CAN2	• CCM • GWM
Brake drive mode status	GWM	HS-CAN3	• IPC
Brake fluid level low message request	BCM	HS-CAN1	• GWM
Brake fluid level low message request	GWM	HS-CAN3	• IPC

Brake On/Off switch	PCM	HS-CAN1	• GWM
Brake On/Off switch	GWM	HS-CAN2	• OCSM
Brake On/Off switch	GWM	HS-CAN3	• APIM
Brake pedal applied	PCM	HS-CAN1	• GWM • TCM
Brake pedal applied	GWM	HS-CAN2	• ABS module • CCM • IPMA (pre-collision assist) • OCSM • RCM • TBM • TCCM
Brake pedal movement	ABS module	HS-CAN2	• GWM
Brake pedal movement	GWM	HS-CAN1	• PCM
Brake request	PSCM	HS-CAN2	• ABS module
Brake warning indicator request	BCM	HS-CAN1	• GWM
Brake warning indicator request	GWM	HS-CAN3	• IPC
Braking status	ABS module	HS-CAN2	• PSCM
Camera front display status	IPMB	HS-CAN2	• GWM
Camera front display status	GWM	HS-CAN3	• APIM
Camera settings	BCM	HS-CAN1	• GWM
Camera settings	GWM	HS-CAN3	• APIM • IPC

Camera settings request	APIM	HS-CAN3	• GWM
Camera settings request	GWM	HS-CAN1	• BCM
Camera status display	IPMA	HS-CAN2	• GWM
Camera status display	GWM	HS-CAN3	• IPC
Cancel request	APIM	HS-CAN3	• GWM
Cancel request	GWM	HS-CAN2	• PSCM
CD load/eject	ACM	HS-CAN3	• APIM
Cell phone chirp request	TCU	HS-CAN3	• GWM
Cell phone chirp request	GWM	HS-CAN1	• BCM
Cell phone lock request	TCU	HS-CAN3	• GWM
Cell phone lock request	GWM	HS-CAN1	• BCM
Center stack display configuration	APIM	HS-CAN1	• BCM • GWM
Center stack display configuration	FCDIM	HS-CAN3	• GWM
Center stack display configuration	GWM	HS-CAN2	• CCM • IPMA (pre-collision assist) • IPMB • SCCM
Center stack display configuration	GWM	MS-CAN	• DDM • DSM • FCIM
Child lock request	BCM	HS-CAN1	• GWM

Child lock request	GWM	MS-CAN	DDM
Chime active	ACM	HS-CAN3	DSP
Chime source	IPC	HS-CAN3	- ACM - APIM - DSP
Climate control button status	FCIM	MS-CAN	GWM
Climate control button status	GWM	HS-CAN3	- APIM - IPC
Climate control seat settings request	FCIM	MS-CAN	SCME
Climate control seat settings status	SCME	MS-CAN	FCIM
Climate control temperature display	FCIM	MS-CAN	GWM
Climate control temperature display	GWM	HS-CAN3	- APIM - IPC
Collision avoidance and driver support camera status (pre-collision assist)	IPMA	HS-CAN2	GWM
Collision avoidance and driver support camera status (pre-collision assist)	GWM	HS-CAN3	IPC
Collision avoidance and driver support chime request	CCM/ IPMA (pre-collision assist)	HS-CAN2	GWM
Collision avoidance and driver support chime request	GWM	HS-CAN3	IPC
Collision avoidance and driver support radar blocked warning	CCM/ IPMA (pre-collision assist)	HS-CAN2	GWM
Collision avoidance and driver support radar blocked warning	GWM	HS-CAN3	IPC

Collision mitigation brake precharge request	CCM/ IPMA (pre-collision assist)	HS-CAN2	• ABS module • RCM • GWM
Collision mitigation brake precharge request	GWM	HS-CAN3	• TCU
Collision mitigation by braking enable request	CCM/ IPMA (pre-collision assist)	HS-CAN2	• RCM • GWM
Collision mitigation by braking enable request	GWM	HS-CAN1	• PCM
Collision mitigation by braking event status display	CCM	HS-CAN2	• GWM
Collision mitigation by braking event status display	GWM	HS-CAN3	• IPC
Compass direction	APIM	HS-CAN3	• IPC
Crash event status	BCM	HS-CAN1	• GWM
Crash event status	GWM	MS-CAN	• FCIM
Cross traffic alert chime request	IPC	HS-CAN3	• GWM
Cross traffic alert chime request	GWM	MS-CAN	• SODL • SODR
Cross traffic alert left status	SODL	MS-CAN	• DDM • PDM • GWM
Cross traffic alert left status	GWM	HS-CAN3	• IPC
Cross traffic alert right status	SODR	MS-CAN	• DDM • PDM • GWM
Cross traffic alert right status	GWM	HS-CAN3	• IPC

Cross traffic left sensor status	SODL	MS-CAN	• DDM • PDM • GWM
Cross traffic left sensor status	GWM	HS-CAN3	• IPC
Cross traffic right sensor status	SODR	MS-CAN	• DDM • PDM • GWM
Cross traffic right sensor status	GWM	HS-CAN3	• IPC
Cruise control mode	PCM	HS-CAN1	• GWM • TCM
Cruise control mode	GWM	HS-CAN2	• ABS module
Cruise control override	PCM	HS-CAN1	• GWM • TCM
Cruise control override	GWM	HS-CAN2	• ABS module • CCM • IPMA (pre-collision assist) • RCM • TCCM
Cruise control override	GWM	HS-CAN3	• IPC
Cruise control set speed display	PCM	HS-CAN1	• GWM
Cruise control set speed display	GWM	HS-CAN3	• IPC
Cruise control set speed request	PCM	HS-CAN1	• TCM • GWM
Cruise control set speed request	GWM	HS-CAN2	• CCM • IPMA (pre-collision assist)

Cruise control set speed request	GWM	HS-CAN3	• IPC
Cruise control status	PCM	HS-CAN1	• GWM • TCM
Cruise control status	GWM	HS-CAN2	• ABS module • CCM • IPMA (pre-collision assist) • OCSM • RCM • TCCM
Cruise control status	GWM	HS-CAN3	• IPC
Cruise control switch commands	SCCM	HS-CAN2	• CCM • IPMA (pre-collision assist) • GWM
Cruise control switch commands	GWM	HS-CAN1	• PCM
Date/time display	APIM	HS-CAN3	• DSP • IPC
Date/time settings	APIM	HS-CAN3	• IPC
Day/night status	BCM	HS-CAN1	• PAM • PCM • GWM
Day/night status	GWM	HS-CAN3	• IPC • ACM • APIM
Day/night status	GWM	MS-CAN	• DDM • FCIM • PDM
Day/night status	GWM	HS-CAN2	• CCM • IPMA

Daytime running lamps on status	BCM	HS-CAN1	• GWM
Daytime running lamps on status	GWM	HS-CAN3	• IPC
Display language request	APIM	HS-CAN3	• IPC • TCU
Display speed offset data	IPC	HS-CAN3	• GWM
Display speed offset data	GWM	HS-CAN1	• PCM
Do not disturb override status	IPC	HS-CAN3	• APIM
Drive mode select message request (except Raptor)	ABS module	HS-CAN2	• GWM
Drive mode select message request (except Raptor)	GWM	HS-CAN3	• IPC
Drive mode select message reset (except Raptor)	IPC	HS-CAN3	• GWM
Drive mode select message reset (except Raptor)	GWM	HS-CAN2	• ABS module
Drive mode select position status (except Raptor)	ABS module	HS-CAN2	• GWM
Drive mode select position status (except Raptor)	GWM	HS-CAN3	• IPC
Drive mode select status (except Raptor)	PCM	HS-CAN1	• GWM
Drive mode select status (except Raptor)	GWM	HS-CAN2	• ABS module
Drive mode select status (except Raptor)	GWM	HS-CAN3	• IPC
Drive mode select switch status (except Raptor)	PCM	HS-CAN1	• GWM
Drive mode select switch status (except Raptor)	GWM	HS-CAN2	• ABS module
Drive mode switch status	SCCM	HS-CAN2	• GWM

Drive mode switch status	GWM	HS-CAN3	• IPC
Driver door ajar status	BCM	HS-CAN1	• PAM • PCM • GWM
Driver door ajar status	GWM	HS-CAN3	• APIM • DACMC • FCDIM • IPC • TCU
Driver door ajar status	GWM	HS-CAN2	• ABS module • CCM • IPMA • IPMB • TCCM
Driver door ajar status	GWM	MS-CAN	• PRB module
Driver door lock switch status	DDM	MS-CAN	• GWM
Driver door lock switch status	GWM	HS-CAN1	• BCM
Driver performance mode request	IPC	HS-CAN3	• GWM
Driver performance mode request	GWM	HS-CAN1	• PCM
Driver performance mode status	PCM	HS-CAN1	• GWM
Driver performance mode status	GWM	HS-CAN3	• IPC • DACMC
Driver seat belt buckle status	RCM	HS-CAN2	• ABS module • CCM • IPMA • GWM

Driver seat belt buckle status	GWM	HS-CAN3	• IPC • TCU
Driver seat belt buckle status	GWM	HS-CAN1	• APIM
Driver set temperature	APIM	HS-CAN3	• GWM
Driver set temperature	GWM	MS-CAN	• FCIM
Driver window position	DDM	MS-CAN	• FCIM • GWM
Driver window position	GWM	HS-CAN1	• BCM
Driver window status	DDM	MS-CAN	• GWM
Driver window status	GWM	HS-CAN1	• PCM
DSP chime request	DSP	HS-CAN3	• IPC • APIM
DSP volume status	DSP	HS-CAN3	• APIM
Easy entry/easy exit request	DSM	MS-CAN	• SCMG • SCMH
eCall confirmation	APIM	HS-CAN1	• BCM • GWM
eCall confirmation	GWM	HS-CAN2	• RCM
eCall confirmation	GWM	HS-CAN3	• TCU
eCall notification	RCM	HS-CAN2	• GWM
eCall notification	GWM	HS-CAN1	• APIM

eCall notification	GWM	HS-CAN3	TCU
Electronic park brake (red) indicator request	ABS module	HS-CAN2	GWM
Electronic park brake (red) indicator request	GWM	HS-CAN3	IPC
Electronic park brake (yellow) indicator request	ABS module	HS-CAN2	GWM
Electronic park brake (yellow) indicator request	GWM	HS-CAN3	IPC
Electronic park brake allowed dynamics	ABS module	HS-CAN2	GWM
Electronic park brake allowed dynamics	GWM	HS-CAN3	IPC
Electronic park brake message request	ABS module	HS-CAN2	GWM
Electronic park brake message request	GWM	HS-CAN3	IPC
Emergency brake lamp request	ABS module	HS-CAN2	GWM
Emergency brake lamp request	GWM	HS-CAN1	BCM
Emergency call mute status	TCU	HS-CAN3	- ACM - APIM - Audio DSP
Engine coolant temperature data	PCM	HS-CAN1	- BCM - TCM - GWM
Engine coolant temperature data	GWM	MS-CAN	FCIM
Engine coolant temperature data	GWM	HS-CAN3	- IPC - TCU
Engine idle shutdown message request	PCM	HS-CAN1	GWM

Engine idle shutdown message request	GWM	HS-CAN3	• IPC • TCU
Engine idle shutdown status	PCM	HS-CAN1	• BCM • GWM
Engine idle shutdown status	GWM	HS-CAN3	• IPC
Engine off status	PCM	HS-CAN1	• GWM
Engine off status	GWM	HS-CAN3	• IPC
Engine oil life	PCM	HS-CAN1	• GWM
Engine oil life	GWM	HS-CAN3	• IPC • TCU
Engine oil life data reset	IPC	HS-CAN3	• GWM
Engine oil life data reset	GWM	HS-CAN1	• PCM
Engine oil temperature data	PCM	HS-CAN1	• GWM
Engine oil temperature data	GWM	HS-CAN3	• IPC
Engine overheat indication request	PCM	HS-CAN1	• GWM
Engine overheat indication request	GWM	HS-CAN3	• IPC
Engine RPM data	PCM	HS-CAN1	• BCM • TCM • GWM
Engine RPM data	GWM	HS-CAN2	• ABS module • PSCM • RCM • TCCM

Engine RPM data	GWM	HS-CAN3	• IPC
Engine RPM data	GWM	MS-CAN	• FCIM
Engine service required request	PCM	HS-CAN1	• GWM
Engine service required request	GWM	HS-CAN3	• IPC
Engine service required request	GWM	HS-CAN2	• RCM
Engine status	PCM	HS-CAN1	• BCM • DC/ DC (VQM) • GWM
Engine status	GWM	HS-CAN3	• ACM • APIM • DACMC • DSP
Engine status	GWM	HS-CAN2	• ABS module
Engine status	GWM	MS-CAN	• FCIM
English/metric mode	IPC	HS-CAN3	• GWM
English/metric mode	GWM	MS-CAN	• FCIM
English/metric mode	GWM	HS-CAN1	• PCM
EPAS failure	PSCM	HS-CAN2	• GWM
EPAS failure	GWM	HS-CAN1	• PAM
EPAS failure	GWM	HS-CAN3	• IPC

Factory mode	BCM	HS-CAN1	• PAM • PCM • TCM • GWM
Factory mode	GWM	HS-CAN2	• ABS module • CCM
Factory mode	GWM	MS-CAN	• DDM • FCIM • HSWM • PDM • RTM • TRM
Factory mode	GWM	HS-CAN3	• IPC • TCU
FCIM button state	FCIM	MS-CAN	• GWM
FCIM button state	GWM	HS-CAN3	• APIM • DSP • ACM
Folder/track information request	APIM	HS-CAN3	• ACM
Forward collision chime request	CCM/ IPMA (pre-collision assist)	HS-CAN2	• GWM
Forward collision chime request	GWM	HS-CAN3	• IPC
Forward collision warning message request	CCM/ IPMA (pre-collision assist)	HS-CAN2	• GWM
Forward collision warning message request	GWM	HS-CAN3	• IPC • TCU
Front blower speed	APIM	HS-CAN3	• GWM
Front blower speed	GWM	MS-CAN	• FCIM

Front fog lamp indicator request	BCM	HS-CAN1	• GWM
Front fog lamp indicator request	GWM	HS-CAN3	• IPC
Front passenger detect status	RCM	HS-CAN2	• GWM
Front passenger detect status	GWM	HS-CAN3	• IPC • TCU
Front wiper status	SCCM	HS-CAN2	• CCM • IPMA • GWM
Front wiper status	GWM	MS-CAN	• FCIM • SODL • SODR
Front wiper status	GWM	HS-CAN1	• BCM • PCM
Frost warning indicator	IPC	HS-CAN3	• GWM
Frost warning indicator	GWM	HS-CAN1	• PCM
Fuel alcohol percent	PCM	HS-CAN1	• GWM
Fuel alcohol percent	GWM	HS-CAN3	• IPC
Fuel fill inlet message display	PCM	HS-CAN1	• GWM
Fuel fill inlet message display	GWM	HS-CAN3	• IPC
Fuel flow volume display	PCM	HS-CAN1	• GWM
Fuel flow volume display	GWM	HS-CAN3	• IPC • APIM • TCU

Gear lever position	PCM/ TCM (3.5L)	HS-CAN1	• BCM • PAM • GWM
Gear lever position	GWM	HS-CAN2	• ABS module • CCM • IPMA • IPMB • PSCM • RCM • SCCM • TCCM
Gear lever position	GWM	HS-CAN3	• ACM • APIM • DACMC • DSP • IPC • TCU
Gear lever position	GWM	MS-CAN	• DDM • PDM • DSM • FCIM • PRB module • SCMG • SCMH • SODL • SODR
Glove box release	FCIM	MS-CAN	• GWM
Glove box release	GWM	HS-CAN1	• BCM
GPS tracking request	TCU	HS-CAN3	• APIM
Head up display active	HUD module	HS-CAN2	• CCM • IPMA (pre-collision assist) • GWM
Head up display active	GWM	HS-CAN3	• IPC

Head up display fault	HUD module	HS-CAN2	• CCM
Head up display fault	GWM	HS-CAN3	• CCM • IPMA (pre-collision assist) • GWM
Head up display flash command	CCM/ IPMA (pre-collision assist)	HS-CAN2	• HUD module
Head up display flash rate	CCM/ IPMA (pre-collision assist)	HS-CAN2	• HUD module
Headlamp flash to pass status	SCCM	HS-CAN2	• IPMA • GWM
Headlamp flash to pass status	GWM	HS-CAN1	• BCM
Headlamp high/low status	BCM	HS-CAN1	• PCM • GWM
Headlamp high/low status	GWM	HS-CAN2	• IPMA
Headlamp high/low status	GWM	HS-CAN3	• IPC
Headlamp low beam out	BCM	HS-CAN1	• GWM
Headlamp low beam out	GWM	HS-CAN3	• IPC
Headlamp on warning chime	BCM	HS-CAN1	• GWM
Headlamp on warning chime	GWM	HS-CAN3	• IPC
Headlamp switch status	BCM	HS-CAN1	• GWM
Headlamp switch status	GWM	HS-CAN2	• IPMA
Headlamp switch status	GWM	HS-CAN3	• IPC

Heated steering wheel command status	HSWM	MS-CAN	FCIM
Hill descent message request	ABS module	HS-CAN2	GWM
Hill descent message request	GWM	HS-CAN3	IPC
Hill descent mode	ABS module	HS-CAN2	GWM
Hill descent mode	GWM	HS-CAN1	PCM
Hill descent mode	GWM	HS-CAN3	IPC
Hill start assist display	ABS module	HS-CAN2	GWM
Hill start assist display	GWM	HS-CAN3	IPC
Hill start assist mode request	IPC	HS-CAN3	GWM
Hill start assist mode request	GWM	HS-CAN2	ABS module
Hill start assist status	ABS module	HS-CAN2	GWM
Hill start assist status	GWM	HS-CAN1	PCM
Hill start assist status	GWM	HS-CAN3	IPC
Home safe lamp indicator request	BCM	HS-CAN1	GWM
Home safe lamp indicator request	GWM	HS-CAN3	IPC
Hood ajar status	BCM	HS-CAN1	GWM
Hood ajar status	GWM	HS-CAN3	- IPC - DACMC - TCU

HUD bulb check status	IPC	HS-CAN3	GWM
HUD bulb check status	GWM	HS-CAN2	HUD module
HVAC A/C request	FCIM	MS-CAN	GWM
HVAC A/C request	GWM	HS-CAN1	PCM
HVAC evaporator temperature request	FCIM	MS-CAN	GWM
HVAC evaporator temperature request	GWM	HS-CAN1	PCM
HVAC front blower indicator	FCIM	MS-CAN	GWM
HVAC front blower indicator	GWM	HS-CAN3	- APIM - IPC
HVAC front blower speed	APIM	HS-CAN3	GWM
HVAC front blower speed	GWM	MS-CAN	FCIM
HVAC front/rear blower status	FCIM	MS-CAN	GWM
HVAC front/rear blower status	GWM	HS-CAN1	BCM
Ignition key type	BCM	HS-CAN1	- PAM - PCM - GWM
Ignition key type	GWM	HS-CAN3	IPC
Ignition key type	GWM	MS-CAN	- SODL - SODR
Ignition key type	GWM	HS-CAN2	- CCM - IPMA

Ignition status	BCM	HS-CAN1	• BECMB (except Raptor) • PAM • PCM • TCM • GWM
Ignition status	GWM	MS-CAN	• DDM • DSM • FCIM • HSWM • PDM • PRB module • RTM • SCMG • SCMH • SODL • SODR • TRM
Ignition status	GWM	HS-CAN2	• ABS module • CCM • HUD module • IPMA • OCSM • PSCM • RCM • SCCM • TBM • TCCM • ATCM (Raptor)
Ignition status	GWM	HS-CAN3	• ACM • APIM • DACMC • DSP • FCDIM • IPC
Illumination dimming level	BCM	HS-CAN1	• GWM
Illumination dimming level	GWM	MS-CAN	• DDM • PDM • FCIM

Illumination dimming level	GWM	HS-CAN3	• IPC • ACM • APIM
Immobilizer message display	BCM	HS-CAN1	• GWM
Immobilizer message display	GWM	HS-CAN3	• IPC
Input controller interface button data	SCCM	HS-CAN2	• GWM
Input controller interface button data	FCIM	MS-CAN	• GWM
Input controller interface button data	GWM	HS-CAN3	• IPC • APIM
IPC chime request	IPC	HS-CAN3	• ACM • DSP
Key in ignition status	BCM	HS-CAN1	• GWM
Key in ignition status	GWM	MS-CAN	• DSM • RTM • SCMH • SCMG
Key in ignition status	GWM	HS-CAN3	• IPC
Key-in-ignition indicator status	BCM	HS-CAN1	• GWM
Key-in-ignition indicator status	GWM	HS-CAN3	• IPC
Keypad factory code status	BCM	HS-CAN1	• GWM
Keypad factory code status	GWM	HS-CAN3	• IPC
Lane keeping system available	PSCM	HS-CAN2	• IPMA • GWM

Lane keeping system available	GWM	HS-CAN3	• IPC • TCU
Lane keep assist hands off	PSCM	HS-CAN2	• IPMA • GWM
Lane keep assist hands off	GWM	HS-CAN3	• IPC
Lane keep assist reference angle request	IPMA	HS-CAN2	• PSCM
Lane keeping alert request	IPMA	HS-CAN2	• PSCM • GWM
Lane keeping alert request	GWM	HS-CAN3	• IPC
Lane keeping alert warning chime request	IPMA	HS-CAN2	• GWM
Lane keeping alert warning chime request	GWM	HS-CAN3	• IPC
Lane keeping system indicator request	IPMA	HS-CAN2	• GWM
Lane keeping system indicator request	GWM	HS-CAN3	• IPC
Lane keeping system message request	IPMA	HS-CAN2	• GWM
Lane keeping system message request	GWM	HS-CAN3	• IPC
Lane keeping system status	IPMA	HS-CAN2	• PSCM • GWM
Lane keeping system status	GWM	HS-CAN3	• IPC
Lane keeping system status display	IPMA	HS-CAN2	• GWM
Lane keeping system status display	GWM	HS-CAN3	• IPC • TCU

Lane keeping system switch status	IPMA	HS-CAN2	• GWM
Lane keeping system switch status	GWM	HS-CAN3	• IPC
Language selection	IPC	HS-CAN3	• APIM
Language update status	IPC	HS-CAN3	• APIM
Left rear door ajar status	BCM	HS-CAN1	• PAM • GWM
Left rear door ajar status	GWM	HS-CAN2	• ABS module • TCCM
Left rear door ajar status	GWM	MS-CAN	• PRB module
Left rear door ajar status	GWM	HS-CAN3	• APIM • DACMC • IPC • TCU
Left turn lamp on request	BCM	HS-CAN1	• GWM
Left turn lamp on request	GWM	HS-CAN3	• ACM • DSP • IPC
Left turn lamp request	BCM	HS-CAN1	• GWM
Left turn lamp request	GWM	MS-CAN	• DDM • PDM • TRM
Left turn lamp request	GWM	HS-CAN2	• IPMA • SCCM
Lock system message request	BCM	HS-CAN1	• GWM

Lock system message request	GWM	HS-CAN3	• IPC
Manual mirror override	DDM	MS-CAN	• DSM
Memory command	DSM	MS-CAN	• DDM • PDM • SCMG • SCMH • GWM
Memory command	GWM	HS-CAN3	• IPC
Memory feedback request	DSM	MS-CAN	• GWM
Memory feedback request	GWM	HS-CAN3	• IPC
Memory recall source	BCM	HS-CAN1	• GWM
Memory recall source	GWM	MS-CAN	• DSM
Memory seat switch request	DSM	MS-CAN	• GWM
Memory seat switch request	GWM	HS-CAN1	• BCM
Memory seat switch status	DDM	MS-CAN	• DSM
Message center display	IPC	HS-CAN3	• GWM
Message center display	GWM	HS-CAN2	• CCM • IPMA • IPMB • SCCM
Message center display	GWM	HS-CAN1	• BCM

Message center display	GWM	MS-CAN	• DDM • DSM • FCIM
Message center feature configuration	IPC	HS-CAN3	• GWM
Message center feature configuration	GWM	HS-CAN2	• CCM • IPMA • IPMB • SCCM
Message center feature configuration	GWM	HS-CAN1	• BCM
Message center feature configuration	GWM	MS-CAN	• DDM • DSM • FCIM
MIL request	PCM	HS-CAN1	• BCM • GWM
MIL request	GWM	HS-CAN3	• IPC
MIL request	GWM	HS-CAN2	• RCM
Mirror heat on request	FCIM	MS-CAN	• DDM • PDM
Mirror manual override	DDM	MS-CAN	• DSM
Multi-contour seat massage settings - driver	SCMG	MS-CAN	• GWM
Multi-contour seat massage settings - driver	GWM	HS-CAN3	• APIM
Multi-contour seat massage settings - passenger	SCMH	MS-CAN	• GWM
Multi-contour seat massage settings - passenger	GWM	HS-CAN3	• APIM

Multi-contour seat passenger status	SCMH	MS-CAN	GWM
Multi-contour seat passenger status	GWM	HS-CAN2	OCSM
Multi-contour seat setting requests	APIM	HS-CAN3	GWM
Multi-contour seat setting requests	GWM	MS-CAN	- SCMG - SCMH
MyKey Beltminder audio mute	IPC	HS-CAN3	- ACM - DSP - APIM
MyKey change key type request	IPC	HS-CAN3	GWM
MyKey change key type request	GWM	HS-CAN1	BCM
MyKey code status	BCM	HS-CAN1	GWM
MyKey code status	GWM	HS-CAN3	IPC
MyKey volume limit status	ACM	HS-CAN3	APIM
Navigation information	APIM	HS-CAN3	IPC
OCS fault status	OCSM	HS-CAN2	RCM
OCS sensor data	OCSM	HS-CAN2	- RCM - GWM
OCS sensor data	GWM	MS-CAN	- FCIM - SCMG - SCMH
OCS serial number	OCSM	HS-CAN2	RCM
OCS vehicle calibration data	OCSM	HS-CAN2	RCM

Odometer count	PCM	HS-CAN1	• GWM
Odometer count	GWM	HS-CAN3	• IPC
Odometer master value	IPC	HS-CAN3	• GWM • APIM • TCU
Odometer master value	GWM	HS-CAN2	• ABS module • IPMA • PSCM
Odometer master value	GWM	HS-CAN1	• BCM • PCM • TCM
Odometer trip programming data	IPC	HS-CAN3	• GWM
Odometer trip programming data	GWM	HS-CAN1	• PCM
Oil pressure warning indicator request	PCM	HS-CAN1	• GWM
Oil pressure warning indicator request	GWM	HS-CAN3	• IPC
Outside air temperature	FCIM	MS-CAN	• DDM • PDM • GWM
Outside air temperature	GWM	HS-CAN3	• IPC • APIM • DSP
Outside air temperature	GWM	HS-CAN1	• PAM • PCM
Outside air temperature	GWM	HS-CAN2	• CCM • IPMA

Park detect status	IPC	HS-CAN3	• GWM
Park detect status	GWM	HS-CAN1	• BCM
Park lamp status	BCM	HS-CAN1	• GWM
Park lamp status	GWM	HS-CAN2	• ATCM (Raptor)
Park lamp status	GWM	HS-CAN3	• ACM • APIM • IPC
Park lamp status	GWM	MS-CAN	• DDM • FCIM • PDM • SODL • SODR • TRM
Park light status	BCM	HS-CAN1	• GWM
Park light status	GWM	MS-CAN	• TRM
Parking aid audio mute request	PAM	HS-CAN1	• GWM
Parking aid audio mute request	GWM	HS-CAN3	• IPC
Parking aid chime request	PAM	HS-CAN1	• GWM
Parking aid chime request	GWM	HS-CAN3	• IPC
Parking aid chime status	PAM	HS-CAN1	• GWM
Parking aid chime status	GWM	HS-CAN3	• IPC
Parking aid fault status	PAM	HS-CAN1	• BCM • GWM

Parking aid fault status	GWM	HS-CAN3	• IPC • APIM • FCDIM
Parking aid fault status	GWM	HS-CAN2	• IPMB
Parking aid front status	PAM	HS-CAN1	• GWM
Parking aid front status	GWM	HS-CAN3	• IPC • APIM • FCDIM
Parking aid message center data	PAM	HS-CAN1	• GWM
Parking aid message center data	GWM	HS-CAN3	• IPC • APIM • FCDIM
Parking aid mode request	APIM	HS-CAN3	• GWM
Parking aid mode request	GWM	HS-CAN1	• PAM
Parking aid rear status	PAM	HS-CAN1	• GWM
Parking aid rear status	GWM	HS-CAN3	• IPC • APIM • FCDIM
Parking aid sensor data	PAM	HS-CAN1	• GWM
Parking aid sensor data	GWM	HS-CAN2	• IPMB
Parking aid sensor data	GWM	HS-CAN3	• APIM • FCDIM • IPC
Parking aid text message request	PAM	HS-CAN1	• GWM

Parking aid text message request	GWM	HS-CAN2	• IPMB
Parking brake active status	BCM	HS-CAN1	• PAM • PCM • TCM • GWM
Parking brake active status	GWM	HS-CAN2	• ABS module • IPMB • TCCM
Parking brake active status	GWM	HS-CAN3	• APIM • IPC
Parking brake chime request	BCM	HS-CAN1	• GWM
Parking brake chime request	GWM	HS-CAN3	• IPC
Parking brake message request	ABS module	HS-CAN2	• GWM
Parking brake message request	GWM	HS-CAN3	• IPC
Parking brake status	ABS module	HS-CAN2	• IPMA • IPMB • GWM
Parking brake status	GWM	HS-CAN1	• BCM • PCM • TCM
Parking brake status	GWM	MS-CAN	• FCIM • SODL • SODR
Parking brake status	GWM	HS-CAN3	• APIM • FCDIM • TCU
Parklamp status	BCM	HS-CAN1	• GWM

Parklamp status	GWM	MS-CAN	• DDM • FCIM • PDM • SODL • SODR • TRM
Parklamp status	GWM	HS-CAN3	• ACM • APIM • IPC
Passenger door ajar status	BCM	HS-CAN1	• PAM • GWM
Passenger door ajar status	GWM	HS-CAN3	• APIM • DACMC • FCDIM • IPC • TCU
Passenger door ajar status	GWM	HS-CAN2	• ABS module • IPMB
Passenger door ajar status	GWM	MS-CAN	• PRB module
Passenger door lock switch status	PDM	MS-CAN	• GWM
Passenger door lock switch status	GWM	HS-CAN1	• BCM
Passenger restraint indicator	FCIM	MS-CAN	• GWM
Passenger restraint indicator	GWM	HS-CAN2	• RCM
Passenger restraint indicator	GWM	HS-CAN3	• APIM
Passenger seat belt buckle status	RCM	HS-CAN2	• GWM • OCSM
Passenger seat belt buckle status	GWM	HS-CAN1	• APIM

Passenger seat belt buckle status	GWM	HS-CAN3	• IPC • TCU
Passenger window command	DDM	MS-CAN	• PDM
Passenger window position	PDM	MS-CAN	• FCIM • GWM
Passenger window position	GWM	HS-CAN1	• BCM
Passenger window status	PDM	MS-CAN	• GWM
Passenger window status	GWM	HS-CAN1	• PCM
PATS control command	BCM	HS-CAN1	• PCM
PATS target status	PCM	HS-CAN1	• BCM • TCM
Perimeter alarm chime request	BCM	HS-CAN1	• GWM
Perimeter alarm chime request	GWM	HS-CAN3	• IPC
Police idle mode status	BCM	HS-CAN1	• GWM
Police idle mode status	GWM	HS-CAN3	• IPC
Power pack torque status	PCM	HS-CAN1	• BCM • PAM • TCM • GWM

Power pack torque status	GWM	HS-CAN2	• ABS module • CCM • HUD module • IPMA • IPMB • OCS • PSCM • SCCM • TBM • TCCM
Power pack torque status	GWM	MS-CAN	• DDM • DSM • FCIM • HSWM • PDM • RBM • RTM • SCME • SCMG • SCMH • TRM
Power pack torque status	GWM	HS-CAN3	• ACM • APIM • DACMC • DSP • IPC • TCU
Power running board status	PRB module	MS-CAN	• GWM
Power running board status	GWM	HS-CAN3	• IPC
Power shed level request	BCM	HS-CAN1	• PCM • GWM
Power shed level request	GWM	HS-CAN2	• SCCM

Power shed level request	GWM	MS-CAN	• DDM • PDM • FCIM • TRM
Power shed level request	GWM	HS-CAN3	• IPC
Power up chime modules	IPC	HS-CAN3	• ACM • DSP • DACMC
Powertrain cooling message request	PCM	HS-CAN1	• GWM
Powertrain cooling message request	GWM	HS-CAN3	• IPC
Powertrain drive mode request	IPC	HS-CAN3	• GWM
Powertrain drive mode request	GWM	HS-CAN1	• PCM
Powertrain drive mode selection status (except Raptor)	PCM	HS-CAN1	• GWM
Powertrain drive mode selection status (except Raptor)	GWM	HS-CAN2	• ABS module
Powertrain drive mode status	PCM	HS-CAN1	• GWM
Powertrain drive mode status	GWM	HS-CAN2	• IPMA
Powertrain drive mode status	GWM	HS-CAN3	• IPC • DACMC
Powertrain speed limit request	PSCM	HS-CAN2	• GWM
Powertrain speed limit request	GWM	HS-CAN1	• PCM
Puddle lamp activation	BCM	HS-CAN1	• GWM

Puddle lamp activation	GWM	MS-CAN	• DDM • PDM
RCM serial number	RCM	HS-CAN2	• ABS module • OCSM
Rear differential indicator request	TCCM	HS-CAN2	• ATCM (Raptor) • GWM
Rear differential indicator request	GWM	HS-CAN3	• APIM • IPC
Rear differential lock display (Raptor)	ATCM	HS-CAN2	• TCCM • GWM
Rear differential lock display (Raptor)	GWM	HS-CAN3	• IPC
Rear differential lock status	TCCM	HS-CAN2	• ABS module • GWM
Rear differential lock status	GWM	HS-CAN3	• IPC
Rear differential lock status	GWM	HS-CAN1	• PCM
Rear differential lock message request	TCCM	HS-CAN2	• GWM
Rear differential lock message request	GWM	HS-CAN3	• IPC
Rear fog lamp indicator (China only)	BCM	HS-CAN1	• GWM
Rear fog lamp indicator (China only)	GWM	HS-CAN2	• IPMA
Rear fog lamp indicator (China only)	GWM	HS-CAN3	• IPC
Rear fog lamp indicator (China only)	GWM	MS-CAN	• TRM
Rear locking differential service required	TCCM	HS-CAN2	• GWM

Rear locking differential service required	GWM	HS-CAN3	• IPC
Red brake warning indicator request	BCM	HS-CAN1	• PCM • GWM
Red brake warning indicator request	GWM	HS-CAN3	• IPC
Reduced guard status	BCM	HS-CAN1	• GWM
Reduced guard status	GWM	HS-CAN3	• IPC
Remote start quiet mode	FCIM	MS-CAN	• GWM
Remote start quiet mode	GWM	HS-CAN1	• BCM
Remote start status	BCM	HS-CAN1	• GWM
Remote start status	GWM	HS-CAN2	• CCM • IPMA
Remote start status	GWM	MS-CAN	• FCIM
Remote start status	GWM	HS-CAN3	• APIM • IPC
Restraint impact event status	RCM	HS-CAN2	• CCM • IPMA • OCSM • GWM
Restraint impact event status	GWM	MS-CAN	• FCIM
Restraint impact event status	GWM	HS-CAN1	• BCM • PCM
Restraint impact event status	GWM	HS-CAN3	• TCU

Restraints module power fault (except Raptor)	BECMB	HS-CAN1	• GWM
Restraints module power fault (except Raptor)	GWM	HS-CAN2	• RCM
Restraints indicator status	IPC	HS-CAN3	• GWM
Restraints indicator status	GWM	HS-CAN2	• RCM
Reverse gear state	PCM	HS-CAN1	• BCM • PAM • GWM
Reverse gear state	GWM	HS-CAN2	• ABS module • CCM • IPMA • IPMB • OCSM • PSCM • RCM • SCCM
Reverse gear state	GWM	HS-CAN3	• IPC
Reverse gear state	GWM	MS-CAN	• SODL • SODR
Reverse mirror chime request	DDM	MS-CAN	• DSM • GWM
Reverse mirror chime request	GWM	HS-CAN3	• IPC
Right rear door ajar status	BCM	HS-CAN1	• PAM • GWM
Right rear door ajar status	GWM	HS-CAN2	• ABS module • TCCM
Right rear door ajar status	GWM	MS-CAN	• RBM

Right rear door ajar status	GWM	HS-CAN3	• IPC
Right turn lamp on request	BCM	HS-CAN1	• GWM
Right turn lamp on request	GWM	HS-CAN3	• ACM • DSP • IPC
Right turn lamp request	BCM	HS-CAN1	• GWM
Right turn lamp request	GWM	HS-CAN2	• IPMA • SCCM
Right turn lamp request	GWM	MS-CAN	• DDM • PDM • TRM
Road curvature	IPMA	HS-CAN2	• PSCM
Satellite radio alert status	APIM	HS-CAN3	• ACM
Satellite radio status	APIM	HS-CAN3	• ACM
Set point volume	FCIM	MS-CAN	• GWM
Set point volume	GWM	HS-CAN3	• DSP
Side obstacle display warning indicator	IPC	HS-CAN3	• GWM
Side obstacle display warning indicator	GWM	MS-CAN	• SODL • SODR
Side detect left illumination	SODL	MS-CAN	• DDM • PDM • GWM
Side detect left illumination	GWM	HS-CAN3	• IPC

Side detect right illumination	SODR	MS-CAN	• DDM • PDM • GWM
Side detect right illumination	GWM	HS-CAN3	• IPC
Side obstacle detect status-left	SODL	MS-CAN	• GWM
Side obstacle detect status-left	GWM	HS-CAN3	• IPC
Side obstacle detect status-right	SODR	MS-CAN	• GWM
Side obstacle detect status-right	GWM	HS-CAN3	• IPC
Side obstacle sensor status-left	SODL	MS-CAN	• DDM • PDM • SODR • GWM
Side obstacle sensor status-left	GWM	HS-CAN3	• IPC
Side obstacle sensor status-right	SODR	MS-CAN	• DDM • PDM • SODL • GWM
Side obstacle sensor status-right	GWM	HS-CAN3	• IPC
Snow plow mode	FCIM	MS-CAN	• SCMG • SCMH • GWM
Snow plow mode	GWM	HS-CAN1	• BCM
Snow plow mode	GWM	HS-CAN3	• IPC
Stability-traction control chime request	ABS module	HS-CAN2	• GWM

Stability-traction control chime request	GWM	HS-CAN3	• IPC
Stability-traction control event in progress	ABS module	HS-CAN2	• CCM • IPMA • PSCM • RCM • TCCM • GWM
Stability-traction control event in progress	GWM	HS-CAN1	• PAM • PCM • TCM
Stability-traction control event in progress	GWM	HS-CAN3	• TCU
Stability-traction control indicator off request	ABS module	HS-CAN2	• GWM
Stability-traction control indicator off request	GWM	HS-CAN3	• IPC
Stability-traction control indicator request	ABS module	HS-CAN2	• CCM • IPMA • RCM • GWM
Stability-traction control indicator request	GWM	HS-CAN1	• PCM • PAM
Stability-traction control indicator request	GWM	HS-CAN3	• IPC
Stability-traction control disabled indicator request	ABS module	HS-CAN2	• CCM • IPMA • RCM • GWM
Stability-traction control disabled indicator request	GWM	HS-CAN1	• PAM • PCM
Stability-traction control disabled indicator request	GWM	HS-CAN3	• IPC

Stability-traction control on/off message request	ABS module	HS-CAN2	• GWM
Stability-traction control on/off message request	GWM	HS-CAN3	• IPC
Starting system message request	PCM	HS-CAN1	• GWM
Starting system message request	GWM	HS-CAN3	• IPC
Steering column position switch status	SCCM	HS-CAN2	• GWM
Steering column position switch status	GWM	MS-CAN	• DSM
Steering effort status	PSCM	HS-CAN2	• GWM
Steering effort status	GWM	HS-CAN3	• IPC
Steering wheel angle	ABS module	HS-CAN2	• CCM • IPMA • IPMB • PSCM • RCM • TCCM • SCCM • GWM
Steering wheel angle	GWM	HS-CAN1	• BCM • PAM • PCM • TCM
Steering wheel angle	GWM	HS-CAN3	• APIM • IPC
Steering wheel heat request	FCIM	MS-CAN	• HSWM
Steering wheel message center switch data	SCCM	HS-CAN2	• GWM
Steering wheel message center switch data	GWM	HS-CAN3	• IPC

Stop lamp brake request	ABS module	HS-CAN2	• GWM
Stop lamp brake request	GWM	HS-CAN1	• BCM
Stop lamp request	BCM	HS-CAN1	• GWM
Stop lamp request	GWM	MS-CAN	• TRM
Stop/start drive mode indicator	PCM	HS-CAN1	• BCM • GWM
Stop/start drive mode indicator	GWM	MS-CAN	• FCIM
Stop/start drive mode indicator	GWM	HS-CAN3	• IPC
Stop/start mode request	IPC	HS-CAN3	• GWM
Stop/start mode request	GWM	HS-CAN1	• PCM
Stop/start standby mode indicator	PCM	HS-CAN1	• GWM
Stop/start standby mode indicator	GWM	MS-CAN	• FCIM
Stop/start standby mode indicator	GWM	HS-CAN3	• IPC
Stop/start text message display	PCM	HS-CAN1	• GWM
Stop/start text message display	GWM	HS-CAN3	• IPC
SYNC alerts	APIM	HS-CAN3	• ACM • DSP
Tailgate ajar	BCM	HS-CAN1	• PAM • GWM
Tailgate ajar	GWM	HS-CAN2	• IPMB

Tailgate ajar	GWM	HS-CAN3	• DACMC • IPC • TCU
TCU activation request	APIM	HS-CAN3	• TCU
TCU activation status	TCU	HS-CAN3	• APIM
Telematics factory reset	TCU	HS-CAN3	• APIM
Telematics service contract status	TCU	HS-CAN3	• APIM
Tire pressure data	BCM	HS-CAN1	• GWM
Tire pressure data	GWM	HS-CAN3	• IPC
Tire pressure information	BCM	HS-CAN1	• GWM
Tire pressure information	GWM	MS-CAN	• RTM
Tire pressure placard data	BCM	HS-CAN1	• GWM
Tire pressure placard data	GWM	HS-CAN3	• IPC
Tire pressure reset request	IPC	HS-CAN3	• GWM
Tire pressure reset request	GWM	HS-CAN1	• PCM
Tire pressure status	BCM	HS-CAN1	• GWM
Tire pressure status	GWM	MS-CAN	• RTM
Tire pressure system status	BCM	HS-CAN1	• GWM
Tire pressure system status	GWM	MS-CAN	• RTM

Tire pressure system status	GWM	HS-CAN3	• APIM • IPC • TCU
Tire pressure warning indicator	BCM	HS-CAN1	• GWM
Tire pressure warning indicator	GWM	MS-CAN	• RTM
Tire pressure warning indicator	GWM	HS-CAN3	• APIM • IPC
Tow haul status	PCM	HS-CAN1	• GWM
Tow haul status	GWM	HS-CAN2	• PSCM
Trailer angle offset direction status	IPC	HS-CAN3	• GWM
Trailer angle offset direction status	GWM	HS-CAN2	• IPMB • PSCM
Trailer backup assist cancel request	APIM	HS-CAN3	• GWM
Trailer backup assist cancel request	GWM	HS-CAN2	• PSCM • IPMB
Trailer backup assist enabled	PSCM	HS-CAN2	• IPMB • GWM
Trailer backup assist enabled	GWM	HS-CAN3	• APIM • IPC
Trailer backup assist enabled	GWM	HS-CAN1	• PCM
Trailer backup assist enabled request	IPC	HS-CAN3	• GWM
Trailer backup assist enabled request	GWM	HS-CAN2	• PSCM • IPMB

Trailer backup assist lamp request	PSCM	HS-CAN2	• GWM
Trailer backup assist lamp request	GWM	HS-CAN1	• BCM
Trailer backup assist setup request	IPC	HS-CAN3	• APIM • FCDIM • GWM
Trailer backup assist setup request	GWM	HS-CAN1	• PAM
Trailer backup assist setup request	GWM	HS-CAN2	• PSCM • IPMB
Trailer backup assist setup status	APIM	HS-CAN3	• IPC
Trailer backup assist status	IPMB	HS-CAN2	• PSCM
Trailer backup assist switch request	TRM	MS-CAN	• GWM
Trailer backup assist switch request	GWM	HS-CAN2	• PSCM
Trailer backup assist text message request	PSCM	HS-CAN2	• IPMB • GWM
Trailer backup assist text message request	GWM	HS-CAN3	• IPC • APIM • FCDIM
Trailer backup assist text message request	GWM	HS-CAN1	• PAM
Trailer backup assist text message request	GWM	MS-CAN	• TRM
Trailer ball to bumper distance	IPC	HS-CAN3	• GWM
Trailer ball to bumper distance	GWM	HS-CAN2	• IPMB • PSCM

Trailer battery charge	TRM	MS-CAN	• GWM
Trailer battery charge	GWM	HS-CAN3	• IPC
Trailer brake connect status	TBM	HS-CAN2	• ABS module • PSCM • TCCM • GWM
Trailer brake connect status	GWM	HS-CAN1	• PCM
Trailer brake mode request	IPC	HS-CAN3	• GWM
Trailer brake mode request	GWM	HS-CAN2	• TBM
Trailer brake request	ABS module	HS-CAN2	• TBM
Trailer hitch lamp request (trailer backup assist)	PSCM	HS-CAN2	• GWM • IPMB
Trailer hitch lamp request (trailer backup assist)	GWM	HS-CAN1	• BCM
Trailer lamp connected	TRM	MS-CAN	• SODL • SODR • GWM
Trailer lamp connected	GWM	HS-CAN3	• IPC
Trailer lamp connected	GWM	HS-CAN1	• BCM • PAM • PCM
Trailer lamp connected	GWM	HS-CAN2	• IPMA • IPMB • PSCM • SCCM
Trailer lamp out	TRM	MS-CAN	• GWM

Trailer lamp out	GWM	MS-CAN	• IPC
Trailer speed limiting status	PCM	HS-CAN1	• GWM
Trailer speed limiting status	GWM	HS-CAN2	• PSCM
Trailer sway event in progress	ABS module	HS-CAN2	• GWM
Trailer sway event in progress	GWM	HS-CAN3	• IPC • TCU
Trailer target acquire request	APIM	HS-CAN3	• GWM
Trailer target acquire request	GWM	HS-CAN2	• IPMB
Trailer target sticker data	IPMB	HS-CAN2	• PSCM • GWM
Trailer target sticker data	GWM	HS-CAN3	• IPC
Trailer target to bumper distance	IPC	HS-CAN3	• GWM
Trailer target to bumper distance	GWM	HS-CAN2	• IPMB • PSCM
Transmission fluid temperature data	PCM	HS-CAN1	• GWM
Transmission fluid temperature data	GWM	HS-CAN3	• IPC
Transmission gear display	PCM	HS-CAN1	• GWM
Transmission gear display	GWM	HS-CAN3	• IPC
Transmission gear display mode	PCM	HS-CAN1	• GWM
Transmission gear display mode	GWM	HS-CAN3	• IPC

Transmission message request	TCM	HS-CAN1	• GWM
Transmission message request	GWM	HS-CAN3	• IPC
Transmission not in park indicator request	BCM	HS-CAN1	• GWM
Transmission not in park indicator request	GWM	HS-CAN3	• IPC
Transmission service required	PCM/ TCM (if equipped)	HS-CAN1	• GWM
Transmission service required	GWM	HS-CAN2	• RCM
Transmission service required	GWM	HS-CAN3	• IPC
Transport mode	BCM	HS-CAN1	• PAM • PCM • TCM • GWM
Transport mode	GWM	HS-CAN2	• ABS module • CCM
Transport mode	GWM	MS-CAN	• DDM • FCIM • HSWM • PDM • RTM • TRM
Transport mode	GWM	HS-CAN3	• IPC • TCU
Trip odometer verify	PCM	HS-CAN1	• GWM
Trip odometer verify	GWM	HS-CAN3	• IPC

Turn signal switch status	SCCM	HS-CAN2	• CCM • IPMA • GWM
Turn signal switch status	GWM	HS-CAN1	• BCM • PAM
Turn signal switch status	GWM	MS-CAN	• SODL • SODR
Turn signal switch status	GWM	HS-CAN3	• IPC
Valet mode status	APIM	HS-CAN3	• GWM • TCU
Valet mode status	GWM	HS-CAN1	• BCM
Vehicle configuration data	BCM	HS-CAN1	• PAM • PCM • TCM • GWM
Vehicle configuration data	GWM	HS-CAN2	• ABS module • CCM • HUD module • OCSM • IPMA • PSCM • RCM • SCCM • TBM • TCCM
Vehicle configuration data	GWM	MS-CAN	• DDM • FCIM • PDM • PRB • RTM • SODL • SODR • TRM

Vehicle configuration data	GWM	HS-CAN3	• ACM • APIM • FCDIM • IPC • TCU
Vehicle dynamics SOS	ABS module	HS-CAN2	• GWM
Vehicle dynamics SOS	GWM	HS-CAN1	• BCM
Vehicle dynamics SOS	GWM	HS-CAN3	• IPC
Vehicle lateral acceleration	ABS module	HS-CAN2	• PSCM • TCCM • GWM
Vehicle lateral acceleration	GWM	HS-CAN1	• PCM • TCM
Vehicle lateral acceleration	RCM	HS-CAN2	• ABS module • CCM • IPMA • PSCM • GWM
Vehicle lateral acceleration	GWM	HS-CAN3	• IPC • TCU
Vehicle lock requestor	BCM	HS-CAN1	• GWM
Vehicle lock requestor	GWM	MS-CAN	• DDM • PDM
Vehicle lock status	BCM	HS-CAN1	• GWM
Vehicle lock status	GWM	HS-CAN3	• APIM
Vehicle lock status	GWM	MS-CAN	• DDM • PDM

Vehicle longitudinal acceleration	ABS	HS-CAN2	• PSCM • GWM
Vehicle longitudinal acceleration	GWM	HS-CAN1	• PCM • TCM
Vehicle longitudinal acceleration	RCM	HS-CAN2	• ABS module • CCM • IPMA • GWM
Vehicle longitudinal acceleration	GWM	HS-CAN3	• IPC • TCU
Vehicle pitch angle display	ABS module	HS-CAN2	• GWM
Vehicle pitch angle display	GWM	HS-CAN3	• IPC
Vehicle roll angle display	ABS module	HS-CAN2	• GWM
Vehicle roll angle display	GWM	HS-CAN3	• IPC
Vehicle speed	PCM	HS-CAN1	• BECMB (except Raptor) • BCM • PAM • TCM • GWM
Vehicle speed	GWM	HS-CAN3	• ACM • APIM • DACMC • DSP • IPC • TCU

Vehicle speed	GWM	MS-CAN	• DDM • DSM • FCIM • PDM • PRB • RTM • SCMG • SCMH • SODL • SODR
Vehicle speed	GWM	HS-CAN2	• ABS module • CCM • HUD module • IPMA • IPMB • OCSM • PSCM • RCM • SCCM • TBM
Vehicle temperature display units	APIM	HS-CAN3	• IPC
Vehicle temperature display units	GWM	MS-CAN	• FCIM
Vehicle trip display units	APIM	HS-CAN3	• IPC
Vehicle yaw rate	ABS module	HS-CAN2	• CCM • IPMA (pre-collision assist) • PSCM • GWM
Vehicle yaw rate	GWM	HS-CAN1	• PAM • PCM • TCM
Vehicle yaw rate	GWM	HS-CAN3	• IPC • TCU

Vehicle yaw rate	RCM	HS-CAN2	• ABS module • CCM • IPMA • IPMB • PSCM • GWM
Vehicle yaw rate	GWM	MS-CAN	• SODL • SODR
Voice recognition audio source request	APIM	HS-CAN3	• ACM
Voice recognition bluetooth response data	APIM	HS-CAN3	• IPC
Voice recognition status	APIM	HS-CAN3	• IPC • TCU
Voltage stability status	DC/ DC (VQM)	HS-CAN1	• PCM
Wheel rotation count	GWM	HS-CAN1	• BCM • PAM
Wheel rotation count	ABS module	HS-CAN2	• PSCM • GWM
Wheel rotation count	GWM	MS-CAN	• SODL • SODR
Wheel rotation count	GWM	HS-CAN1	• PAM
Wheel rotation direction	ABS module	HS-CAN2	• CCM • IPMA • PSCM • GWM
Wheel rotation direction	GWM	HS-CAN3	• APIM

Wheel speed data	ABS module	HS-CAN2	• CCM • IPMA • IPMB • PSCM • TCCM • GWM
Wheel speed data	GWM	HS-CAN1	• BCM • PAM • PCM • TCM
Wheel torque	PCM	HS-CAN1	• GWM
Wheel torque	GWM	HS-CAN3	• IPC
Window global open command	BCM	HS-CAN1	• GWM
Window global open command	GWM	MS-CAN	• DDM • PDM
Window lockout status	BCM	HS-CAN1	• GWM
Window lockout status	GWM	MS-CAN	• DDM
Wiper front status	SCCM	HS-CAN2	• CCM • IPMA • GWM
Wiper front status	GWM	MS-CAN	• FCIM • SODL • SODR
Wiper front status	GWM	HS-CAN1	• BCM • PCM
Wiper front status	GWM	HS-CAN3	• APIM

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