



Countries: CANADA, UNITED STATES, PUERTO RICO **Document ID:** IK1200248
Availability: ISIS, FleetSIS **Revision:** 5
Major System: ENGINES **Created:** 4/2/2008
Current Language: English **Last Modified:** 2/12/2014
Other Languages: [Français](#), [Español](#), **Author:** Robert Beckett
Viewed: 2471

[Less Info](#)
☒ Hide Details

Coding Information

Copy Link 	Copy Relative Link 	Bookmark View My Bookmarks	Add to Favorites 	Print 	Provide Feedback 	Helpful 339	Not Helpful 504
----------------------	-------------------------------	--	-----------------------------	------------------	-----------------------------	---------------------------	-------------------------------

Title: Water in Fuel (WIF) Light Troubleshooting and Diagrams for MaxxForce Engines

Applies To: All MaxxForce Engines

DESCRIPTION

The water in fuel light on trucks with MaxxForce engines and body controllers works by using a sensor that is hardwired to the engine ECM and when the engine ECM senses water in the fuel, it sends a j1939 datalink signal to the body controller and guage cluster telling them to turn on the water in fuel light. See diagrams below.

SIGNALS TO WATCH

PID	SA	Value	Units
Battery Volts	ECM...	NA	V
Water In Fuel	ECM...	NA	

Signal	Pins	Signal Type	Unit	Watch
Text_Message_1		J1939 Output	On/Off	
WIF I313		J1939 Input	List	
Water_In_Fuel_Warning_Light			On/Off	
Accessory_Signal_Input	1600-A1	Digital Input	On/Off	
Ignition_Signal_Input	1600-A16	Digital Input	On/Off	

TROUBLESHOOTING

Connector Voltage Check
(Disconnect WIF sensor connector. Turn the ignition switch to ON. Use DMM to measure voltage.)

Test Points	Specification	Comments
1 to B+	B+	If < B+, check SIG GND circuit for OPEN.
2 to GND	5 V	If > 5.5 V, check WIF circuit for short to PWR. If < 4.5 V, check WIF circuit for short to GND.

Connector Resistance Checks to GND
(Turn ignition switch to OFF. Connect harness from WIF sensor. Use DMM to measure resistance.)

Test Points	Specification	Comments
1 to GND	< 5 ohm	If > 5 ohm, check SIG GND for OPEN circuit.
2 to GND	> 1k ohm	If < 1k ohm, check WIF circuit for short to GND.

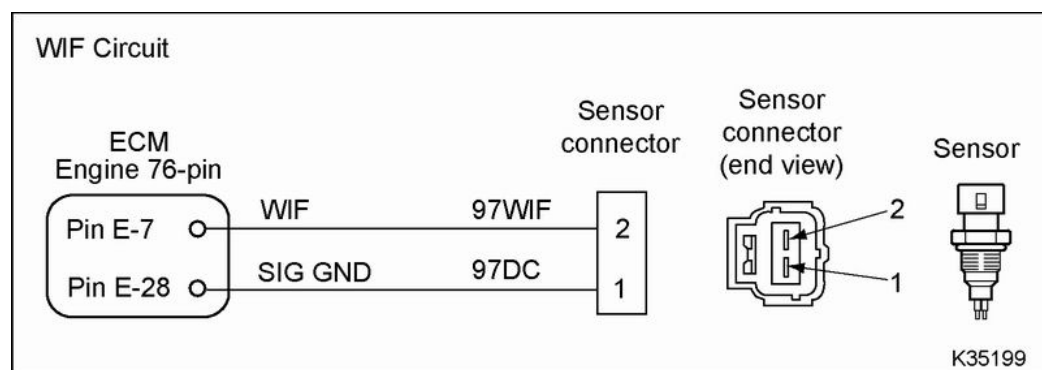
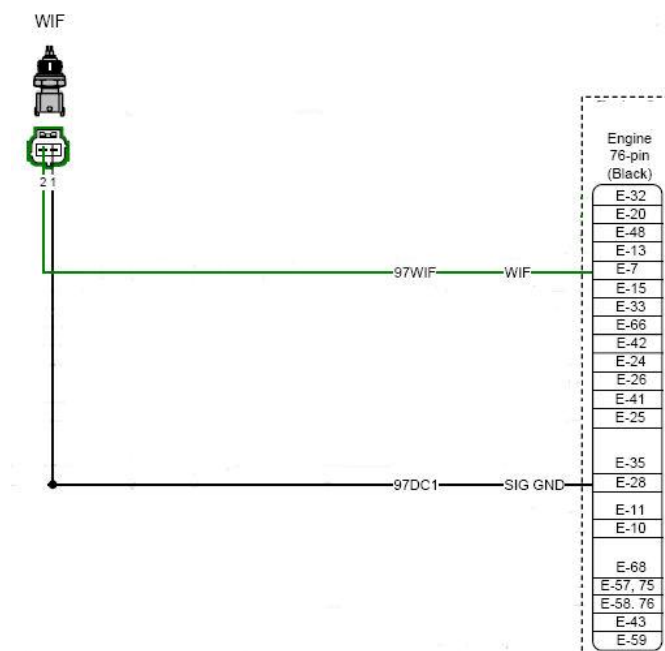
WARNING:

To avoid serious personal injury, possible death, or damage to the engine or vehicle, always disconnect main negative battery cable first. Always connect the main negative battery cable last.

Harness Resistance Checks
(Turn ignition switch to OFF. Connect breakout box and leave ECM and WIF sensor disconnected. Use DMM to measure resistance.)

Test Points	Specification	Comments
1 to E-28	< 5 ohm	If > 5 ohm, check for OPEN circuit.
2 to E-7	< 5 ohm	If > 5 ohm, check for OPEN circuit.

CIRCUIT DIAGRAMS



[Hide Details](#)

Feedback Information

Viewed: 2470
Helpful: 339
Not Helpful: 504

No Feedback Found