

FUEL GAUGE READING IS NOT CORRECT [INSTRUMENT CLUSTER]

id0903d5012800

Possible cause

2WD

- Instrument cluster malfunction
- Rear body control module (RBCM) malfunction
- Fuel gauge sender unit malfunction
- Open or short circuit in wiring harness between fuel gauge sensor unit and rear body control module (RBCM)

4WD

- Instrument cluster malfunction
- Rear body control module (RBCM) malfunction
- Fuel gauge sender unit (main/sub) malfunction
- Open or short circuit in wiring harness between fuel gauge sender unit (main/sub) and rear body control module (RBCM)

Diagnostic Procedure

Step	Inspection	Action	
1	PERFORM CAN MALFUNCTION DIAGNOSIS AND DTC INSPECTION <ul style="list-style-type: none">• Perform the CAN malfunction diagnosis according to the recommendation of FOREWORD [INSTRUMENT CLUSTER] malfunction diagnosis, and if there is no CAN malfunction, perform inspection for DTCs. (See DTC INSPECTION [INSTRUMENT CLUSTER].)• Is the DTC displayed?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [INSTRUMENT CLUSTER].)
		No	Go to the next step.
2	Inspection of instrument cluster <ul style="list-style-type: none">• Perform inspection of the fuel gauge/LCD display referring to the instrument cluster inspection. (See INSTRUMENT CLUSTER INSPECTION.)• Is the display normal?	Yes	Go to the next step.
		No	Replace the instrument cluster. (See INSTRUMENT CLUSTER REMOVAL/ INSTALLATION.)
3	DETERMINE IF MALFUNCTION CAUSE IS FUEL GAUGE SENDER <ul style="list-style-type: none">• Display the following rear body control module (RBCM) PIDs using the M-MDS.<ul style="list-style-type: none">— FUEL_SEN_M— FUEL_SEN_S (4WD)• Verify the voltage in the display monitor while shaking the vehicle.• Does the voltage change?	Yes	Go to the next step.
		No	Go to Step 5.
4	DETERMINE IF MALFUNCTION CAUSE IS REAR BODY CONTROL MODULE (RBCM) <ul style="list-style-type: none">• Display the following instrument cluster PIDs using the M-MDS.<ul style="list-style-type: none">— FUEL_SEN_M— FUEL_SEN_S (4WD)• Verify the resistance in the display monitor while shaking the vehicle.• Does the resistance change?	Yes	Replace the instrument cluster. (See INSTRUMENT CLUSTER REMOVAL/ INSTALLATION.)
		No	Replace the rear body control module (RBCM). (See REAR BODY CONTROL MODULE (RBCM) REMOVAL/INSTALLATION.)
5	INSPECT FUEL GAUGE SENDER UNIT <ul style="list-style-type: none">• Switch the ignition off (LOCK).• Inspect the fuel gauge sender unit (2WD) or the fuel gauge sender unit (main/sub) (4WD). (See FUEL GAUGE SENDER UNIT INSPECTION [2WD].) (See FUEL GAUGE SENDER UNIT INSPECTION [4WD].)• Is the fuel gauge sender unit (2WD) or the fuel gauge sender unit (main/sub) (4WD) normal?	Yes	Inspect the wiring harness between the fuel gauge sender unit (2WD) or the fuel gauge sender unit (main/sub) (4WD) and the rear body control module (RBCM), and repair or replace the malfunctioning part.
		No	Replace the fuel gauge sender unit (2WD) or the fuel gauge sender unit (main/sub) (4WD). (See FUEL GAUGE SENDER UNIT REMOVAL/ INSTALLATION [2WD].) (See FUEL GAUGE SENDER UNIT REMOVAL/ INSTALLATION [4WD].)