


# Code No.83: Steering Wheel Sensor Calibration Incomplete

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<b>caution</b>	If there is any problem in the CAN bus lines, an incorrect diagnosis code may be set. Diagnose the CAN bus lines before the diagnosis codes (Refer to GROUP 54D, CAN bus-line diagnostic flow  ).
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## DIAGNOSIS CODE SET CONDITIONS

Diagnosis code No. 83 is set when the battery is removed, and the learned neutral point of the steering wheel sensor is thereby erased. The steering wheel sensor on Pajero stores the neutral point of the steering wheel angle by the battery power supply. The steering wheel sensor judges whether the calibration of the steering wheel sensor is completed or not, and it sends the state to the ASTC-ECU via the CAN communication.

## PROBABLE CAUSES

The most likely causes for these diagnosis codes to set are:

- Damaged wiring harness or connector
- Steering wheel sensor calibration not performed
- Malfunction of the steering wheel sensor
- Malfunction of the ASTC-ECU

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## DIAGNOSIS


## STEP 1. M.U.T.-III CAN bus diagnostics

<b>caution</b>	Before connecting or disconnecting the M.U.T.-III, turn the ignition switch to the "LOCK" (OFF) position.
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- (1) Connect M.U.T.-III to the 16-pin diagnosis connector.
- (2) Turn the ignition switch to the "ON" position.
- (3) Diagnose the CAN bus line.
- (4) Turn the ignition switch to the "LOCK" (OFF) position.

### Q. Is the check result normal?

**Yes** Go to Step 3.

**No** Repair the CAN bus line (Refer to GROUP 54D, CAN bus line Diagnostic flow ). Then go to Step 2.

## STEP 2. Check whether the diagnosis code is reset.

<b>caution</b>	Before connecting or disconnecting the M.U.T.-III, turn the ignition switch to the "LOCK" (OFF) position.
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- (1) Turn the ignition switch to the "ON" position.
- (2) Erase the diagnosis code.
- (3) Turn the ignition switch to the "LOCK" (OFF) position.
- (4) Turn the ignition switch to the "ON" position.
- (5) Check if the diagnosis code is set.
- (6) Turn the ignition switch to the "LOCK" (OFF) position.

### Q. Is code No.83 set?


**Yes** Go to Step 3.



The procedure is complete.

### **STEP 3. Check the diagnosis code again after the steering wheel sensor calibration.**

<b>caution</b>	Before connecting or disconnecting the M.U.T.-III, turn the ignition switch to the "LOCK" (OFF) position.
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- (1) Turn the ignition switch to the "ON" position.
- (2) Erase the diagnosis code.
- (3) Perform the steering wheel sensor calibration. (Refer to .)
- (4) Turn the ignition switch to the "LOCK" (OFF) position.
- (5) Turn the ignition switch to the "ON" position.
- (6) Check if the diagnosis code is set.
- (7) Turn the ignition switch to the "LOCK" (OFF) position.

#### **Q. Is code No.83 set?**



Replace the steering wheel sensor. Then

go to Step 4.




The procedure is complete.

### **STEP 4. Check the diagnosis code again after the steering wheel sensor calibration.**

<b>caution</b>	Before connecting or disconnecting the M.U.T.-III, turn the ignition switch to the "LOCK" (OFF) position.
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- (1) Turn the ignition switch to the "ON" position.

- (2)Erase the diagnosis code.
- (3)Perform the steering wheel sensor calibration.(Refer to .)
- (4)Turn the ignition switch to the "LOCK" (OFF) position.
- (5)Turn the ignition switch to the "ON" position.
- (6)Check if the diagnosis code is set.
- (7)Turn the ignition switch to the "LOCK" (OFF) position.

**Q. Is code No.83 set?**

**Yes**

Replace the ASTC-ECU.

**No**

The procedure is complete.