

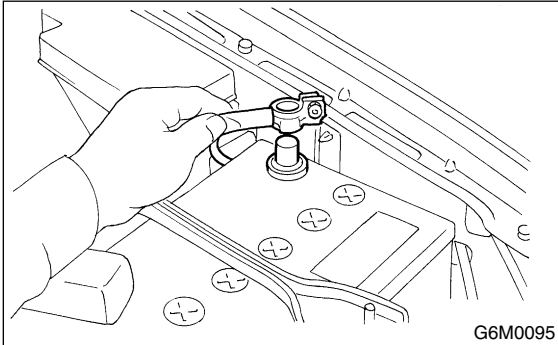
6. Yaw Rate and Lateral G Sensor

S402634

A: REMOVAL

S402634A18

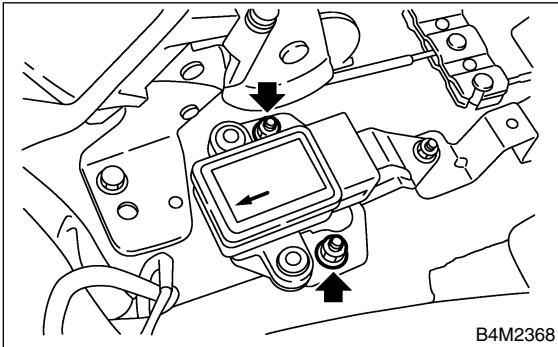
- 1) Disconnect battery ground cable.



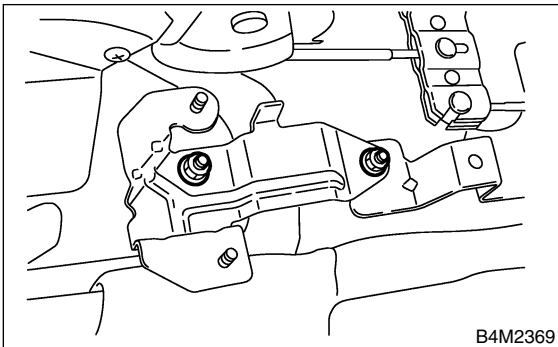
- 2) Remove console cover.
<Ref. to EI-36, Console Box.>
- 3) Disconnect connector from yaw rate and lateral G sensor.
- 4) Remove yaw rate and lateral G sensor.

CAUTION:

Do not drop or bump yaw rate and lateral G sensor.



- 5) Remove bracket from body.



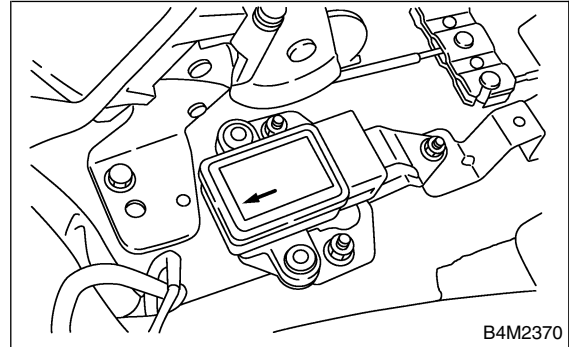
B: INSTALLATION

S402634A11

Install in the reverse order of removal.

NOTE:

Do not install yaw rate and lateral G sensor in the wrong direction. There is an arrow on the sensor showing direction which side faces the front of the vehicle.



CAUTION:

After completion of installation procedure, the following two position settings must be made.

- Steering angle sensor center positioning
 - Yaw rate and lateral G sensor 0 positioning
- These procedures are necessary for VDCCM to later recognize what position the vehicle is in. For procedures for the above two settings, <Ref. to VDC-10, ADJUSTMENT, VDC Control Module (VDCCM)>.

C: INSPECTION

S402634A10

1. LATERAL G SENSOR SIGNAL

S402634A1001

No.	Step	Check	Yes	No
1	CHECK SUBARU SELECT MONITOR.	Do you have SUBARU select Monitor?	Go to step 5.	Go to step 2.
2	CHECK YAW RATE AND LATERAL G SENSOR. 1) Move the vehicle to a flat location. 2) Turn ignition switch to OFF. 3) Connect connector to yaw rate and lateral G sensor. 4) Turn ignition switch to ON. 5) Measure voltage between yaw rate and lateral G sensor connector terminals. Connector & terminal (R100) No. 5 (+) — No. 6 (-)	Is the voltage 2.5 ± 0.2 V when yaw rate and lateral G sensor is horizontal?	Go to step 3.	Replace yaw rate and lateral G sensor.
3	CHECK YAW RATE AND LATERAL G SENSOR. 1) Remove yaw rate and lateral G sensor from vehicle. 2) Measure voltage between yaw rate and lateral G sensor connector terminals. Connector & terminal (R100) No. 5 (+) — No. 6 (-) NOTE: If the yaw rate and lateral G sensor is moved, the VDC (Yaw rate sensor) may be entered into the memory.	Is the voltage 3.5 ± 0.2 V when yaw rate and lateral G sensor is inclined left to 90° ?	Go to step 4.	Replace yaw rate and lateral G sensor.
4	CHECK YAW RATE AND LATERAL G SENSOR. Measure voltage between yaw rate and lateral G sensor connector terminals. Connector & terminal (R100) No. 5 (+) — No. 6 (-) NOTE: If the yaw rate and lateral G sensor is moved, the VDC (Yaw rate sensor) may be entered into the memory.	Is the voltage 1.5 ± 0.2 V when yaw rate and lateral G sensor is inclined right to 90° ?	Go to step 5.	Replace yaw rate and lateral G sensor.
5	CHECK YAW RATE AND LATERAL G SENSOR. 1) Turn ignition switch to OFF. 2) Connect select monitor connector to data link connector. 3) Turn ignition switch to ON. 4) Turn select monitor into {BRAKE CONTROL} mode. 5) Set the display in the {Current Data Display & Save} mode. 6) Read the yaw rate and lateral G sensor output voltage. NOTE: If the yaw rate and lateral G sensor is moved, the VDC (Yaw rate sensor) may be entered into the memory.	Is the indicated reading 2.5 ± 0.2 V when the vehicle is in horizontal position?	Go to step 6.	Replace yaw rate and lateral G sensor.

YAW RATE AND LATERAL G SENSOR

VDC

No.	Step	Check	Yes	No
6	CHECK YAW RATE AND LATERAL G SENSOR. 1) Remove console box. 2) Remove yaw rate and lateral G sensor from vehicle. (Do not disconnect connector.) 3) Read the select monitor display. NOTE: If the yaw rate and lateral G sensor is moved, the VDC (Yaw rate sensor) may be entered into the memory.	Is the indicated reading 3.5 ± 0.2 V when yaw rate and lateral G sensor is inclined left to 90° ?	Go to step 7.	Replace yaw rate and lateral G sensor.
7	CHECK YAW RATE AND LATERAL G SENSOR. Read the select monitor display. NOTE: If the yaw rate and lateral G sensor is moved, the VDC (Yaw rate sensor) may be entered into the memory.	Is the indicated reading 1.5 ± 0.2 V when yaw rate and lateral G sensor is inclined right to 90° ?	Yaw rate and lateral G sensor is normal.	Replace yaw rate and lateral G sensor.

2. YAW RATE SENSOR SIGNAL S402634A1002

No.	Step	Check	Yes	No
1	CHECK YAW RATE AND LATERAL G SENSOR USING OSCILLOSCOPE. 1) Connect all connectors. 2) Set oscilloscope to TCM connector terminals. Positive probe; (R100) No. 4 Earth lead; (R100) No. 6 3) Start the engine. 4) Measure signal voltage indicated on oscilloscope. <Ref. to VDC-15, WAVE FORM, MEASUREMENT, Control Module I/O Signal.>	Is the voltage between 2.1 V and 2.9 V?	Go to step 2.	Replace yaw rate and lateral G sensor is normal.
2	CHECK YAW USING OSCILLOSCOPE. 1) Turn ignition switch to OFF. 2) Set oscilloscope to TCM connector terminals. Positive probe; (R100) No. 2 Earth lead; (R100) No. 6 3) Start the engine. 4) Measure signal voltage indicated on oscilloscope. <Ref. to VDC-15, WAVE FORM, MEASUREMENT, Control Module I/O Signal.>	Is the voltage 5 V?	Yaw rate and lateral G sensor is normal.	Replace yaw rate and lateral G sensor.