

VARIABLE GEAR RATIO STEERING

PRECAUTION

CAUTION:

1. After replacing VGRS ECU or VGRS actuator or repairing steering system parts, proceed with the following operations in the order listed.
 - (a) Perform VGRS system calibration
 - (b) Perform VGRS system initialization by driving vehicle
 - (c) Confirm steering angle flag is VALID
 - (d) Test drive vehicle to confirm steering is centered
2. When the steering wheel is still off-center after completing the steering angle sensor initialization, perform the VGRS system calibration (See page [DI-810](#)).
3. When each of the following procedures is completed, be sure to perform the steering angle initialization.
 - Reconnect the battery terminal
 - Replace the battery
 - Reconnect the connectors (steering angle sensor, VGRS ECU, VGRS actuator, skid control ECU)
4. The inspection of the VGRS system may detect the DTC in the VSC and AHC system. After the inspection of the VGRS system, check the DTC in the VSC and AHC system and clear the DTC.
5. Conditions for the VGRS system suspension
 - (a) When the power supply voltage is too low or too high.
 - (b) When protecting the VGRS system from heat. (The system is suspended to prevent the VGRS actuator motor or ECU from heating up. The system returns to a normal condition when the temperature of the VGRS actuator motor returns to the operating range.)
 - (c) When the temperature is extremely low. (When the temperature is approx. -30°C , the system control will be suspended.)