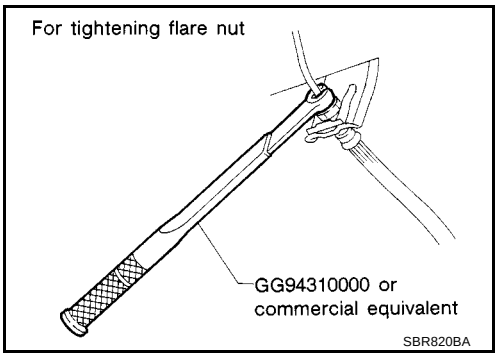
PRECAUTIONS

Precautions for Brake System

To ESM

- Recommended fluid is brake fluid “DOT 3” or “DOT 4”.
- Do not reuse drained brake fluid.
- Be careful not to splash brake fluid on painted areas such as body. If brake fluid is splashed, wipe it off and flush area with water immediately.
- Do not use mineral oils such as gasoline or kerosene to clean. They will ruin rubber parts and cause improper operation.
- Using a flare nut torque wrench, securely tighten brake tube flare nuts.
- Brake system is an important safety part. If a brake fluid leak is detected, always disassemble the affected part. If a malfunction is detected, replace part with a new one.
- Before working, turn ignition switch OFF and disconnect electrical connectors of ABS actuator and electric unit (control unit) or battery negative terminals.
- When installing brake piping, be sure to check torque.
- After removing/installing any hydraulic parts of the brake or ESP system (such as actuator and piping parts, etc.), bleed air from the system.



ON-VEHICLE SERVICE

Adjustment of Steering Angle Sensor Neutral Position

To ESM

In case of doing work that applies to the list below, make sure to adjust neutral position of steering angle sensor before running vehicle.

Situation	Adjustment of Steering Angle Sensor Neutral Position
Disconnecting/connecting the battery	×
Removing/Installing ABS actuator and electric unit (control unit)	×
Replacing ABS actuator and electric unit (control unit)	×
Removing/Installing steering angle sensor	×
Removing/Installing steering components	×
Removing/Installing suspension components	×
Removing/Installing the same tire to the same position	–
Change 4 tires to new ones	–
Change some of 4 tires to new ones (not 4 tires)	–
Tire rotation	–
Adjusting wheel alignment	×

×: Required

–: Not required

CAUTION:

To adjust neutral position of steering angle sensor, make sure to use CONSULT-II.
(Adjustment cannot be done without CONSULT-II.)

OPERATION PROCEDURE

- For operation procedure, refer to STC-4, “Steering Angle Adjustment (WORK SUPPORT)” on ESM.

TROUBLE DIAGNOSIS

To ESM

Basic Inspection

BASIC INSPECTION 1: BRAKE FLUID AMOUNT, LEAKS, AND BRAKE PADS INSPECTION

1. Check fluid level in the brake reservoir tank. If fluid level is low, refill brake fluid.
2. Check brake piping and around ABS actuator and electric unit (control unit) for leaks. If there is leaking or oozing fluid, check the following items.
   - If ABS actuator and electric unit (control unit) connection is loose, tighten piping to the specified torque and re-perform the leak inspection to make sure there are no leaks.
   - If there is damage to the connection flare nut or ABS actuator and electric unit (control unit) screw, replace the damaged part and re-perform the leak inspection to make sure there are no leaks.
   - When there is fluid leaking or oozing from a part other than ABS actuator and electric unit (control unit) connection, if fluid is just oozing out, use a clean cloth to wipe off the oozing fluid and re-check for leaks. If fluid is still oozing out, replace the damaged part.
   - When there is fluid leaking or oozing at ABS actuator and electric unit (control unit), if fluid is just oozing out, use a clean cloth to wipe off oozing fluid and re-check for leaks. If fluid is still oozing out, replace ABS actuator and electric unit (control unit) body.

     CAUTION:
     ABS actuator and electric unit (control unit) body cannot be disassembled.
3. Check brake pad degree of wear. Refer to BR-21, “FRONT DISC BRAKE” on ESM and BR-27, “REAR DRUM BRAKE” on ESM.

BASIC INSPECTION 2: POWER SYSTEM TERMINAL LOOSENESS AND BATTERY INSPECTION

Make sure battery positive cable, negative cable and ground connection are not loose. If looseness is detected, tighten the cables. In addition, check the battery voltage to make sure it has not dropped and alternator is normal.

BASIC INSPECTION 3: ABS WARNING LAMP, ESP OFF INDICATOR LAMP and SLIP INDICATOR LAMP INSPECTION

1. Make sure ABS warning lamp and ESP OFF indicator lamp (when ESP OFF switch is OFF) turn ON approximately 1.5 second when ignition switch is turned ON. Make sure SLIP indicator lamp (when ESP OFF switch is OFF) turns ON approximately 3 seconds when ignition switch is turned ON. If they do not, check ESP OFF indicator lamp and then ESP OFF switch. Refer to BRC-97, “ESP OFF SWITCH” on ESM. Check CAN communications. Refer to “CAN Communication Inspection”. If there are no errors with ESP OFF switch and CAN communication system, check combination meter. Refer to DI-5, “COMBINATION METERS” on ESM.
2. Make sure ABS warning lamp, ESP OFF indicator lamp, SLIP indicator lamp turn off approximately 1.5 second after turn ignition switch ON. If lamps do not turn off, perform self-diagnosis.
3. With engine running, make sure ESP OFF indicator lamp turns on and off when ESP OFF switch is turned ON and OFF. If indicator lamp status does not correspond to switch operation, check the ESP OFF switch system. Refer to BRC-97, “ESP OFF SWITCH” on ESM.
4. Make sure ABS warning lamp, ESP OFF indicator lamp, and SLIP indicator lamp turn off 1.5 seconds after engine is started. If ABS warning lamp, ESP OFF indicator lamp, and SLIP indicator lamp have not turned off 10 seconds after engine has been started, perform self-diagnosis of ABS actuator and electric unit (control unit).
5. After performing the self-diagnosis, be sure to erase the error memory. Refer to BRC-75, “SELF-DIAGNOSIS” on ESM.