■BRAKE CONTROL SYSTEM (ABS, BRAKE ASSIST, TRC and VSC)

1. General

- The ABS helps prevent the wheels from locking when the brakes are applied firmly or when braking on a slippery surface.
- The primary purpose of the Brake Assist system is to provide an auxiliary brake force to assist the driver who cannot generate a large brake force during emergency braking, thus helping draw the vehicle's brake performance.
- The TRC system helps prevent the drive wheels from slipping if the driver presses the accelerator pedal excessively when starting off or accelerating on a slippery surface.
- The VSC system helps prevent the vehicle from slipping sideways as a result of strong front wheel skid or strong rear wheel skid during cornering.
- Brake control system is operated by a skid control ECU with the signal from each sensor and the engine ECU. Skid control ECU and engine ECU does serial communication to regulate the engine output during TRC or VSC operation. Also, the engine ECU outputs TRC/ VSC operation signal to the transmission control ECU via CAN (Controller Area Network) communication. By receiving this signal, the transmission control ECU performs TRC/ VSC cooperative control.

Service Tip

When brake control system is activated, the brake pedal could shudder, which is a normal occurrence of the system in operation and should not be considered a malfunction.

2. System Diagram

