

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

1. General

A VSC (Vehicle Stability Control) system has been made available as optional equipment on the models for Europe and Australia.

The brake control system of the models equipped with VSC has the following functions:

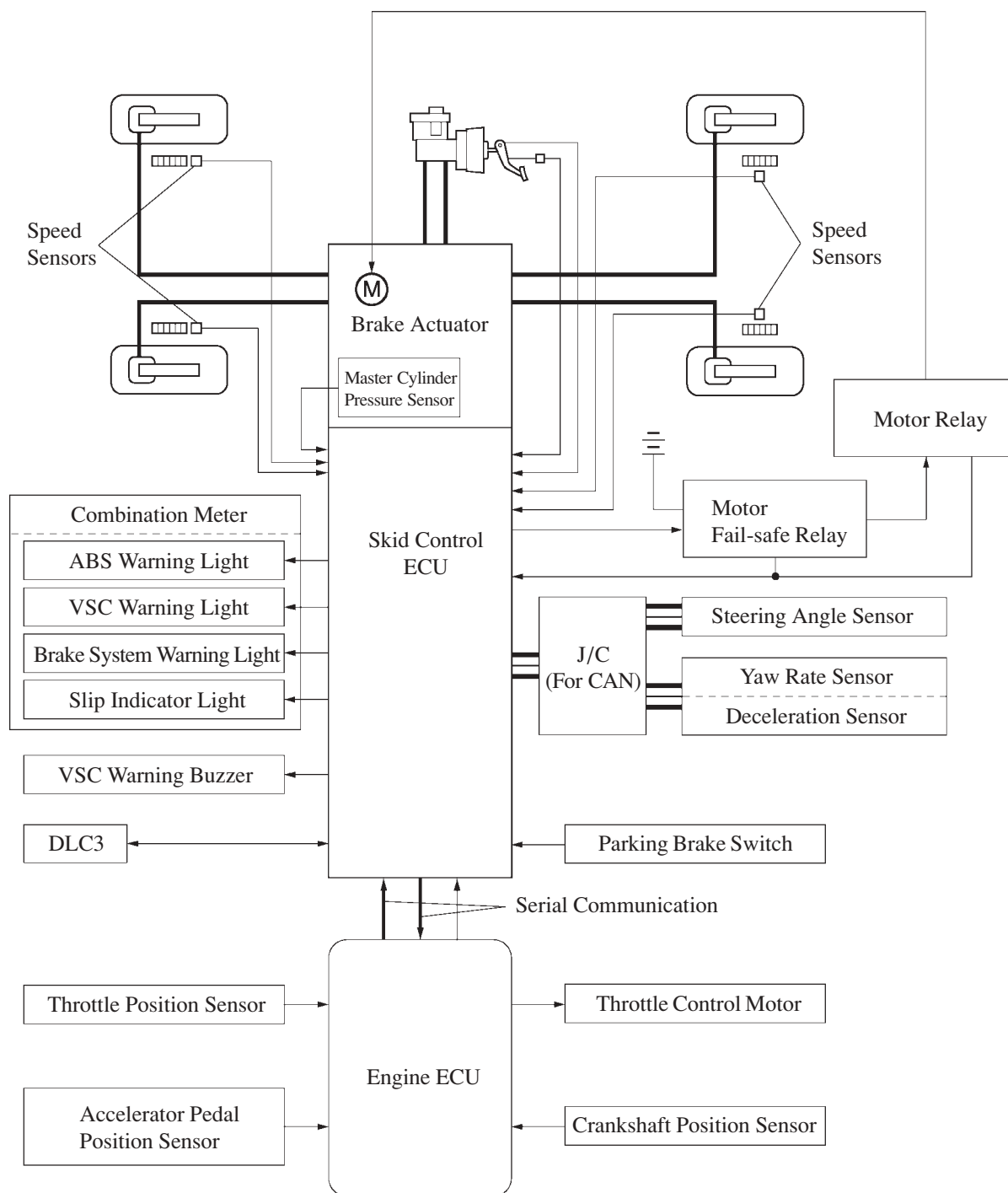
Function	Outline
ABS (Anti-lock Brake System)	The ABS helps prevent the wheels from locking when the brakes are applied firmly or when braking on a slippery surface.
EBD (Electronic Brake force Distribution)	The EBD control utilizes ABS, realizing the proper brake force distribution between front and rear wheels in accordance with the driving conditions. In addition, during cornering braking, it also controls the brake forces of right and left wheels, helping to maintain the vehicle behavior.
Brake Assist	Brake assist applies the sufficient pressure on the brake pedal if the brake pedal operation is not sufficient when urgent braking is needed.
TRC (Traction Control)	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.
VSC (Vehicle Stability Control)	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.

- This model uses the CAN (Controller Area Network) communication system for communication between the skid control ECU, steering angle sensor and yaw rate & deceleration sensor.
- The “skid control ECU and brake actuator”, and the “yaw rate sensor and deceleration sensor”, are integrated units, respectively.
- A trochoid gear type pump has been adopted for the pump in the brake actuator.
- A pressure regulator valve has been adopted to regulate the pressure of the fluid that is supplied to the pump.

Service Tip

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

► System Diagram ◀



≡ : CAN (Controller Area Network)