

DYNAMIC STABILITY CONTROL (DSC) CONSTRUCTION

B3E041543000T03

- The DSC system consists of the following parts. While each part has a regular function in other systems, only the function during DSC control is listed.

Part name	Function
DSC HU/CM	<ul style="list-style-type: none"> • Makes calculations using input signals from each sensor, controls brake fluid pressure to each wheel, and actuates each function (ABS, EBD, TCS and DSC) of the DSC system. • Outputs the torque reduction request signal, wheel speed signal and DSC system warning control data via CAN lines. • Controls the on-board diagnostic system and fail-safe function when there is a malfunction in the DSC system.
PCM	<ul style="list-style-type: none"> • Controls engine output based on signals from the DSC HU/CM. • Transmits engine speed, tire and shift position data via CAN communication to the DSC HU/CM. • Transmits gear/selector lever position data via CAN communication to the DSC HU/CM.
DSC indicator light	<ul style="list-style-type: none"> • Informs the driver that the DSC is operating (vehicle sideslip occurring). • Informs the driver that the TCS is operating (drive wheel is spinning). • Informs the driver of DSC/TCS malfunction.
DSC OFF switch	<ul style="list-style-type: none"> • Transmits driver intention to release DSC control to the DSC HU/CM.
DSC OFF light	<ul style="list-style-type: none"> • Informs driver that DSC control has been released due to DSC OFF switch operation.
ABS wheel-speed sensor	<ul style="list-style-type: none"> • Detects the rotation condition of each wheel and transmits it to the DSC HU/CM.
Combined sensor	<ul style="list-style-type: none"> • Detects the lateral-G (vehicle speed increase) and the yaw rate (vehicle turning angle) of the vehicle and transmits them to the DSC HU/CM.
Brake fluid pressure sensor (Built into DSC HU/CM)	<ul style="list-style-type: none"> • Detects the fluid pressure from the master cylinder.
Steering angle sensor	<ul style="list-style-type: none"> • Detects the steering angle and transmits it to the DSC HU/CM.