

DESCRIPTION AND OPERATION > ANTI-LOCK BRAKE SYSTEM (ABS) AND STABILITY CONTROL - OVERVIEW > OVERVIEW

The ABS and stability control systems are comprised of the following subsystems which assist the driver in maintaining control of the vehicle:

- ABS
- Brake fluid support
- EBD
- ESC
- Hill descent control(TM)
- Hill start assist
- Hydraulic fade compensation
- RSC
- Supplemental braking assist
- Supports adaptive cruise control
- Supports collision avoidance
- Traction control
- Trailer sway control
- Torque vectoring control

The ABS helps maintain steering control during hard braking by preventing wheel lock up. The ABS also includes a brake assist function which provides maximum brake system pressure during a severe braking situation.

Brake fluid support increases brake fluid flow to the wheel ends to help compensate for brake fade conditions.

The EBD system helps maintain vehicle control by keeping a balanced braking condition between the front and rear wheels.

The ESC system helps prevent skids or lateral slides by modulating brake fluid pressure to individual brake calipers and reducing engine torque.

The hill descent control(TM) feature helps to maintain a low vehicle speed while descending steep inclines on various surface conditions.

The hill start assist feature is designed to assist the driver during hill-starts. Using the ABS, the hill start assist system holds the vehicle on an incline for a short time, allowing the driver to release the brake pedal and press the accelerator pedal without needing to use the parking brake.