



Traction Control System (TCS) ('96-'99)

– How the Circuit Works

The traction control system is a variable system that monitors the amount of wheel spin under different driving conditions. During straight line acceleration, the TCS control unit may determine that some wheel spin is beneficial. During cornering, it may determine to reduce wheel spin by adjusting engine power and braking. The system is not designed to correct for gross errors of judgment on the part of the driver.

The TCS control unit communicates with the ABS control unit to obtain information from the wheel speed sensors about wheel speed and frequency of wheel rotational vibration. The wheel rotational vibration is used by the TCS control unit to signal the powertrain control module (PCM) to reduce engine power under certain rough road conditions. The TCS control unit also communicates with the PCM to monitor A/T gear position, throttle position, engine rpm, atmospheric pressure, and "TCS inhibit" information.

The TCS control unit also monitors input from the steering angle sensor. When you turn the steering wheel, the steering angle sensor sends a signal to the TCS control unit which reads it as a specific cornering radius. The TCS control unit also determines the straight ahead position by comparing the front wheel speed inputs from the ABS control unit. When the left front and right front wheels are rotating at the same speed, the car is moving in a straight line. The TCS control unit determines the yaw angle by comparing the actual cornering radius provided by the wheel speed sensor inputs to the steering angle. If required, the control unit will signal the TCS control valve actuator and the PCM to reduce engine power and slow the car down to maintain the cornering radius set by the steering angle sensor when you turned the wheel.

The TCS control unit is a self-diagnosing component and monitors the sensors for irregular signals.

Refer to the Service Manual (Section 19, Brakes) for testing and troubleshooting procedures.

