

# Hill Decent Control

# What is Hill Decent Control

## **What:**

A system that controls vehicle speed without drivers intervention on steep downhill grades at slow speeds

## **Why:**

To improve passenger safety by providing regulated control of engine, transmission, and brakes to maintain a safe speed on slow downhill grades.

## **Benefits:**

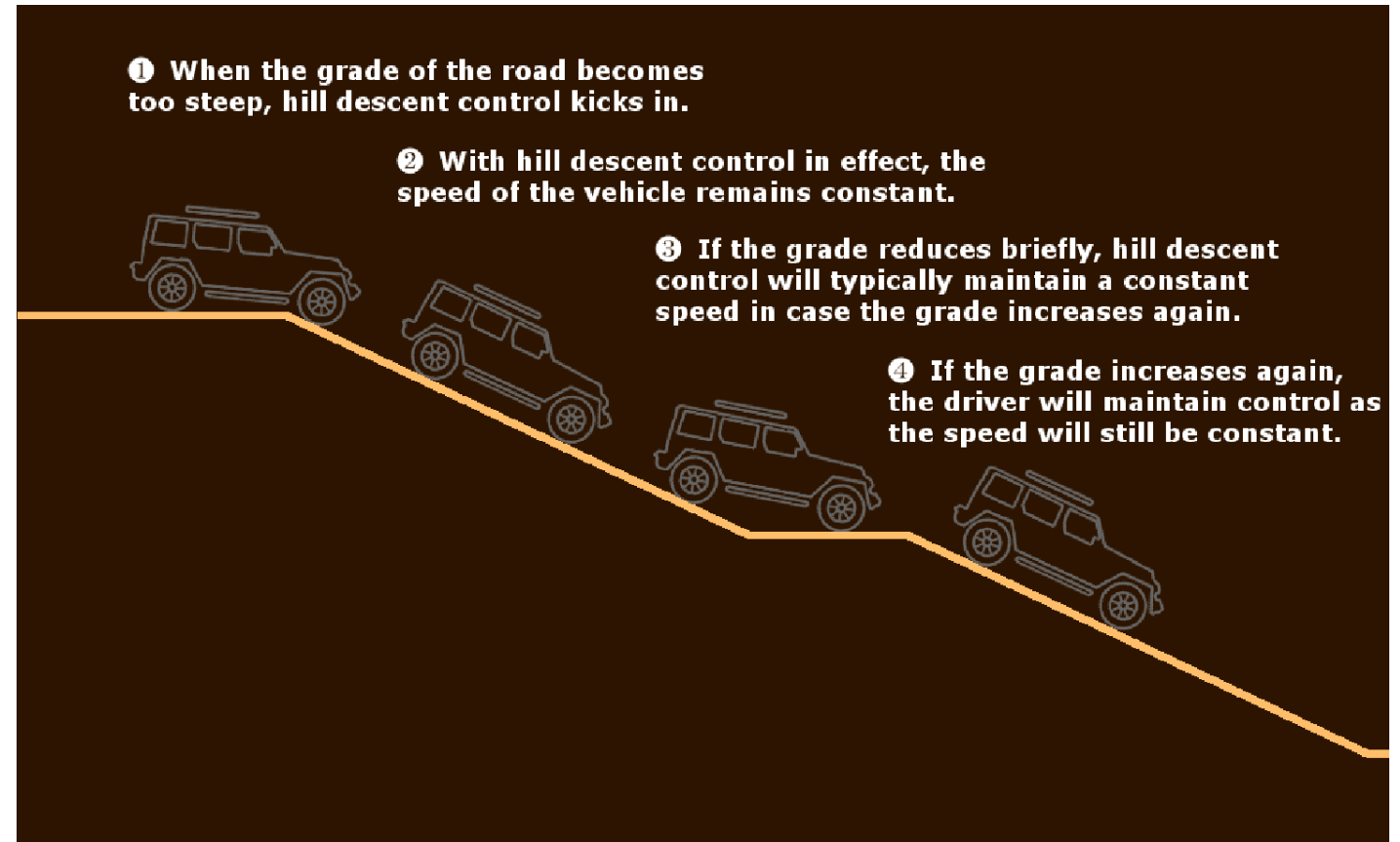
Decrease in accidents / injuries / deaths

## **How:**

Utilization of sensors and electronically controlled systems can interpret and react to changing conditions faster than a human driver in many situations reacts. System is “Active” (Provide engine speed, transmission range, and brake application) to maintain a consistent speed on slow downhill grades without driver assistace.

# Hill Decent Control Operation

When activated by the driver, the system will maintain a consistent speed, typically below 25 mph, by controlling engine speed, transmission range, and brakes. The driver continues to control the steering.



# Hill Decent Control Components

## Module

Engine Management

Throttle Control

Brake System

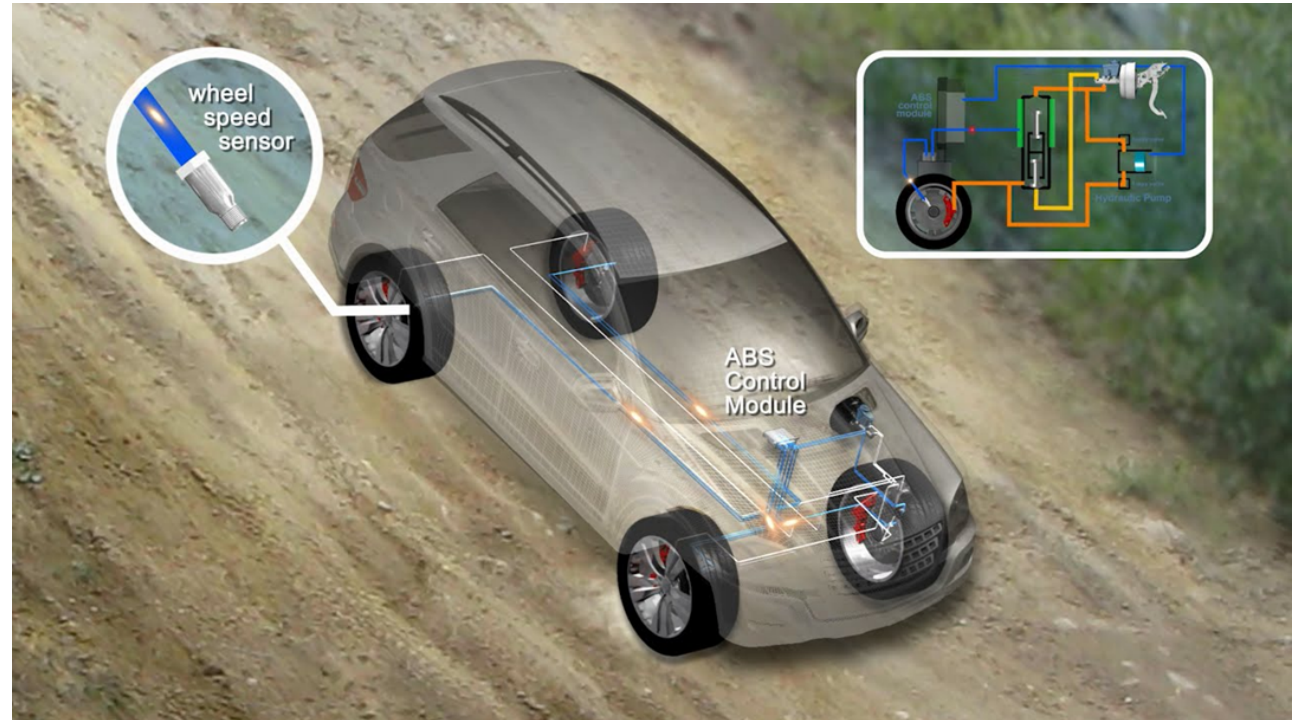
ABS

Transmission

## Sensors

Control Switch

Visual Indicators



# Hill Decent Control Diagnosis

## Visual inspection

- Brake System Components

## Fault codes

- OEM

- SAE

## Electrical testing

- Power

- Ground

- Signals

- BUS Communications

# Hill Decent Control Service / Calibration

Mechanical

Brake systems