

Features

Hill Start Aid

- Hill Start Aid (HSA) requests the vehicle foundation brake system to temporarily hold (3 seconds) the vehicle in place when stopped on a grade of 3% or greater to allow the driver to transition from the vehicle service brake pedal to the vehicle accelerator pedal to achieve a controlled launch.
- When HSA is configured on, or Enabled, in the Transmission Control Module (TCM) and the vehicle is stopped on a grade of 3% or greater the transmission system requests the vehicle electronic brake system keep the vehicle foundation brakes applied for 3 seconds after the driver releases the vehicle service brake.
- The feature may be disabled for one launch by selecting the vehicle's HSA switch. When the HSA switch is selected, the lamp on the switch flashes indicating the feature is disabled. The feature automatically enables after a successful launch. Refer to OEM for information on operation of the HSA switch.


Note: The default configuration for this feature in the TCM is Enabled and can be configured to activate on a 1%, 2% or 3% grade using ServiceRanger.

NOTICE: If the vehicle electronic brake system is faulted and not working, this feature will not function. Refer to OEM for more information on the vehicle electronic brake system.

Operation


Vehicle Facing Uphill – Forward Mode (HSA)

1. The transmission system must be in Drive (D) mode and on an incline greater than the Hill Start Aid Threshold configuration setting (1%, 2% or 3%) in the Transmission Control Module (TCM).
2. Bring the vehicle to a stop, depress the vehicle service brake then release the vehicle service brake to launch the vehicle.

 **WARNING:** The transmission system HSA feature requests the vehicle electronic brake system to apply the vehicle foundation brakes for approximately 3 seconds. After 3 seconds, once the vehicle foundation brakes release, the vehicle may begin to move backward if the vehicle accelerator pedal is not depressed or the vehicle service brake pedal is not re-applied by the driver. Failure to depress the vehicle accelerator pedal or re-apply the vehicle service brake after the vehicle foundation brakes are released may cause unintended vehicle movement and may result in major vehicle component damage, property damage, severe injury or death.

Vehicle Facing Downhill - Reverse Mode (HSA)

1. The transmission system must be in Reverse (R) mode and on an incline greater than the Hill Start Aid Threshold configuration setting (1%, 2% or 3%) in the Transmission Control Module (TCM).
2. Bring the vehicle to a stop, depress the vehicle service brake, then release the service brake to launch the vehicle.

 **WARNING:** The transmission system HSA feature requests the vehicle electronic brake system to apply the vehicle foundation brakes for approximately 3 seconds. After 3 seconds, once the vehicle foundation brakes release, the vehicle may begin to move forward if the vehicle accelerator pedal is not depressed or the vehicle service brake pedal is not re-applied by the driver. Failure to depress the vehicle accelerator pedal or re-apply the vehicle service brake after the vehicle foundation brakes are released may cause unintended vehicle movement and may result in major vehicle component damage, property damage, severe injury or death.