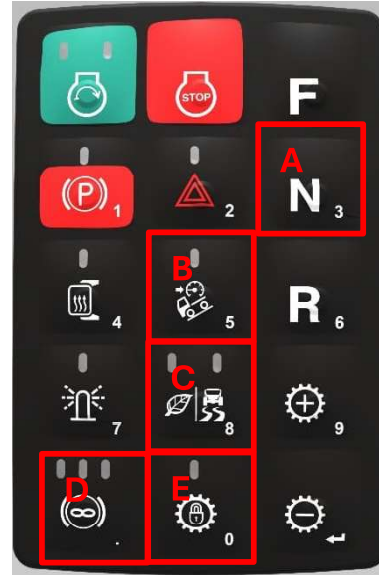




Key Feature Identification

- A: Neutral Selection Switch
- B: Descent Control Switch
- C: Drive Mode Switch
- D: Retarder Switch
- E: Gear Hold Switch (if equipped)



A: Neutral Selection (Standard)

***Always bring the machine to a complete stop before enabling the neutral selection switch. When the transmission drive is engaged, increased service brake pedal effort will be required to fully stop the machine. Always shift transmission to neutral when machine is stopped for an extended amount of time to reduce service brake pedal effort and to avoid an increased fuel consumption rate.**

Function State by Number of Lights

- i. No LED Lights – Press to Select Neutral when the machine is at a complete stop for loading/unloading operations, or periods of significant parked operation (monitor gear selector light displays “N”)

Recommendation

It is nearly always recommended to turn on Load Assist in the monitor (Operator Settings) so that when the operator presses the brake pedal, the brakes remain engaged while the transmission is in Neutral. This feature allows the operator to be most comfortable and reduce fatigue during loading operation since they do not need to hold the brake pedal down after pressing the Neutral Selection. If Load Assist is disabled in the monitor, when the Neutral Selection switch is enabled, the transmission will stay in neutral, with no brake assist, requiring the operator to press the brakes to keep the machine stationary.

**B: Descent Control (Standard)**

***Descent control can be set from (2-34 mph) and is used to maintain a set speed during downhill operation.**

Function State by Number of Lights

- i. No LED Lights – Descent Control Mode Off
- ii. 1 LED Light - Descent Control Mode On: When enabled, machine ground speed is limited by the automated retarder control when the accelerator or brake pedal is released. Pressing the accelerator or the brake pedal will momentarily deactivate the descent control feature. When the accelerator or brake pedal is released, the new speed will be set for descent control.

Recommendation

Descent Control Mode Off and the Retarder Switch (C) Off allows the machine to coast to a rolling stop with no transmission retardation. A customer may want the machine configured this way in very gentle slopes or flat conditions. This setting is also advantageous for icy conditions, to prevent aggressive braking conditions. Descent Control Mode On maintains the ground speed of the ADT at the point the operator releases the accelerator or brake pedal on a slope. This setting is recommended for any application that has change in elevation/ramp climbing/descending. This is generally a more comfortable and consistent ride, since the speed of the ADT is maintained without the need to feather the brake or accelerator pedals. This feature will reduce brake application/wear and likely improve fuel consumption as the throttle is consistent.

**C: Drive Mode (Standard – Only available on 410 and 460):**

***Multiple drive modes are available to balance fuel economy, traction control, and productivity. Each mode provides unique machine control parameters for engine power management, launch gear, acceleration, and differential lock engagement. Drive modes can be changed by the drive mode switch and can be limited or locked through owner settings.**

Function State by Number of Lights

- i. No LED Lights – Normal Mode (Intended for max production)
- ii. 1 LED Light – Economy Mode (Machine power and acceleration are limited to reduce engine load)
- iii. 2 LED Lights – Traction Mode (Reduces machine acceleration and increases traction)

Recommendation

Normal Mode is recommended for customers wanting to achieve maximum production, that have nearly no idle time while waiting to load. Economy Mode offers a customer noticeable fuel consumption savings, reduces wear and tear on the machine, however, is slightly less productive if there is no idle loading time. This mode is ideal for icy conditions. Traction Mode is best for sandy/loose/soft material, as this locks the Interaxle Differential Lock and the Cross Differential Lock preemptively to reduce tire spin. This is also beneficial for steep conditions, both climbing and descending. Do not use Traction Mode on firm, clean packed floor conditions, it would be recommended to turn off Auto-Diff Lock Mode in the monitor for these conditions. (Owner Setting in Monitor)

**D: Retarder Function (Standard):**

***When the brake pedal is depressed, the machine has 100% retardation. Always refer to the hill chart on the right-hand side of the cab window.**

Function State by Number of Lights

- i. No LED Lights – Auto Retardation (Allows the machine to coast uphill or on flat surfaces without retarder engagement)
- ii. 1 LED Light – Low Retardation When Accelerator Pedal is Released
- iii. 2 LED Lights – Medium Retardation When Accelerator Pedal is Released
- iv. 3 LED Lights – High Retardation When Accelerator Pedal is Released

Recommendation

See Descent Control (“B” on the SSM) for the applications that Auto Retardation should be utilized. Low Retardation Mode is best for small, short, easy slope applications. Medium Retardation Mode for slightly more aggressive/longer slope applications. High Retardation Mode for the most severe and longest slope applications. Proper retardation settings will increase brake life, may offer slight fuel efficiency gains, and increase operator comfort.

E: Gear Hold (Standard)

*** While operating in changing ground or slope conditions, gear hold may be used to avoid shift cycling and gear hunting.**

Function State by Number of Lights

- i. No LED Lights – Gear Hold OFF
- ii. 1 LED Light – Gear Hold ON (Prevents upshifting from the set gear while providing normal downshifting)

Recommendation

Gear Hold Off will operate as a normal automatic transmission, typically best served for flat conditions, good underfoot floor surfaces and longer hauls. Gear Hold On is typically recommended for all other applications. This will eliminate gear hunting on slopes, increasing productivity and improving overall powertrain component life. In soft/muddy conditions, this mode will also provide more consistent operating speeds which are best controlled by the manual gear up/down buttons on the SSM.