

4L	90 km/h (56 mph) FOOTNOTE a	100 km/h (62 mph)	90 km/h (56 mph) FOOTNOTE a
----	---------------------------------------	-------------------	---------------------------------------

FOOTNOTE a The ELD system engages/re-engages at or below the speed noted.

ELD Engagement/Disengagement Speeds - 2WD Vehicles

Switch Position	Engage	Disengage	Re-engage
Off	N/A	N/A	N/A
On	31 km/h (19 mph) FOOTNOTE a	42 km/h (25 mph)	31 km/h (19 mph) FOOTNOTE a

FOOTNOTE a The ELD system engages/re-engages at or below the speed noted.

When the operator activates the ELD, the ELD icon displays in the IPC message center. If the vehicle is driven above the disengage speed, the IPC message center no longer displays the ELD icon, alerting the operator that the ELD is disengaged. Once the vehicle speed drops below the re-engage speed, the IPC message center displays the ELD icon again. If there is a malfunction with the ELD system, a CHECK LOCKING DIFFERENTIAL message is displayed in the IPC message center, letting the operator know the ELD is not engaged.

Under certain conditions the ELD system has the ability to modulate powertrain torque output as well as system engagement/disengagement to protect internal ELD hardware.

The ELD feature allows the ABS to override the engage state during special events. When this condition occurs the ELD icon flashes on and off rapidly.

The differential locks when a PWM controlled magnetic field coil located inside the differential energizes. This locks the differential side gears and creates the locked differential.

The ELD system also informs the customer when there is too much wheel slip to safely engage the ELD by displaying TO ENGAGE LOCKING DIFFERENTIAL RELEASE ACCELERATOR PEDAL message in IPC message center. When the ELD is engaged, the TCCM sends PWM voltage to the ELD field coil located in the differential. This voltage is initially 98% duty cycle, and then tapers off after 30 seconds. In order for the TCCM to activate the ELD, certain conditions must be met.

- ELD MSS set to On.
- Wheel speed information via HS-CAN communication from ABS module)
- Operating range (voltage 11.5-16 volts)
- DTC setting range (voltage 10-15 volts)
- Ignition in the ON position
- Throttle Position (TP)

DIAGNOSIS AND TESTING > ELECTRONIC LOCKING DIFFERENTIAL (ELD) > INSPECTION AND VERIFICATION