

Electronic Locking Differential (ELD) - Raptor

Principles of Operation

The ELD system allows the operator to lock the rear differential side gears. When the ELD is engaged both rear wheels turn at the same speed, providing added traction on slippery and/or off road surfaces. The operator can engage the ELD per the charts below:

ELD Engagement/Disengagement Speeds — 4WD Vehicles

Switch Position	Engage	Disengage	Re-engage
4A/4H	31 km/h (19 mph) ^a	42 km/h (25 mph)	31 km/h (19 mph) ^a
4L	90 km/h (56 mph) ^a	100 km/h (62 mph)	90 km/h (56 mph) ^a

^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.