



Did YOU know?

Locking Differentials Inter-axle Differential Lock Automatic Traction Control



Locking Differential

A locking differential is beneficial as it allows torque to be developed in all wheels sharing an axle, regardless of their traction. The drive wheels will act like they are rotating on a common shaft. This way if one wheel has good traction it offers the ability to keep the truck moving. Without a locking differential, the wheels without traction may continue to spin with little torque being sent to the wheels with traction.

- 🔒 **Never engage the differential lock above 25mph or while the wheels are spinning**
- 🔒 When engaged, steering radius will increase
- 🔒 Disengage once the vehicle is freely moving—do not drive on dry pavement with the lock engaged
- 🔒 When tire chains are installed, do not attempt to turn the vehicle with the lock engaged.

Inter-axle Differential Lock (Tandem Axle Trucks)

The inter-axle differential provides for necessary differential action between the axles of a tandem drive unit. This allows the wheels of either axle to revolve faster or slower than the wheels of the other axle in order to compensate for cornering, uneven road surfaces, and slightly different tire sizes. When encountering soft or slippery road conditions, the IAD can be locked out, eliminating any differential action between the axles.

- 🔒 **Engage the IAD lock only when stopped or moving at slow speed. NEVER lock the IAD lock with the rear wheels spinning.**
- 🔒 Disengage once the vehicle is freely moving—do not drive on dry pavement with the lock engaged.

Automatic Traction Control

The ATC function automatically applies braking to a drive wheel that is spinning. Engine speed may also be decreased until traction is achieved. If it is desirable to rock the vehicle when stuck and the ATC is cutting the throttle, depress the mud and snow switch.