Mechanical Locking Differential



Availability

 Optional Equipment (G80 Order Code) on all GM two-wheel and four-wheel drive trucks, sport utilities, and vans

Benefits

- Provides best in class traction. Improved traction differentiates the vehicle relative to other rear wheel and four wheel drive vehicles on the market
- Functions as a light bias limited slip differential during normal driving conditions; automatically provides full axle lock when needed
- Maintenance free; requires no lube additives
- Enhanced towing and off-road performance
- Patented carbon friction disc technology enhances performance and durability

Principle of Operation

- Wheel speed difference (left to right) in excess of 100 RPM will cause a flyweight mechanism to open and engage a latching bracket
- The stopped flyweight will trigger a selfenergizing clutch system, which results in the cam plate ramping against a side gear

- Ramping increases until both axles turn at the same speed (full lock), which prevents further wheel slip
- At speeds above 20 MPH, the latching bracket swings away from the flyweight mechanism and prevents lockup from occurring

Features

- Automatic locking takes place within a fraction of a second, so smoothly that it is unnoticed by the average driver
- Once the need for improved traction is gone, unlocking occurs automatically
- Compatible with anti-lock brake systems and vehicle stability systems

