

■ ADDIDRIVE Assist

Poclain Hydraulics, Inc.

Sturtevant, Wisconsin, USA

262-321-0676, www.poclain-hydraulics.com

The Poclain ADDIDRIVE Assist system is designed for on-highway, vocational-model trucks and offers better mobility and traction in difficult driving conditions: mud, snow, sand, steep inclines and declines. This hybrid (hydraulic used in combination with existing mechanical) all-wheel-drive system provides advantages over mechanic all-wheel-drive axle configurations: significant weight savings of 400 kg (881 lb), no increased cab height requirement resulting in lower center of gravity, a 5 to 10 percent savings in fuel consumption, greater vehicle stability, and engagement-on-demand while moving. The system's heart is the Poclain MFE08 Hydraulic Motor, which provides greater off-road capabilities due to high torque. In difficult road conditions, the driver shifts the transmission from mechanical to mechanical-plus hydraulic transmissions at speeds up to 32 kph (20 mph). Once speed is reached, the hydraulic motors can be free-wheeled at up to 600 rpm with nearly 100 percent efficiency. The motor is highly compact and designed to be integrated into the hub of an existing on-highway truck axle without modification to the truck chassis.

