4x4 Hydraulic Front Axle Drive System

Voted #1 One Product of the Year by OEM Off Highway Magazine!

For the Off-Road Customer
Todd Kaufman, Chassis Cab Marketing Manager, recently announced the new availability of a hydraulic, driving front axle system for F-650 and F-750 Ford medium duty trucks. This system provides alternative “off-road” capability in lieu of traditional four-wheel drive vehicles that are equipped with a transfer case and a 4x4 front axle.

The hydraulic system, known as EZ Trac and developed by Terra Drive Systems, Inc., is designed to provide front driving axle traction without sacrificing vehicle steering or mobility. While traditional 4x4 front driving axles can have a tendency to make steering more difficult, the EZ Trac hydraulic system maintains factory angles and minimizes the perception of a “pulling” effect on steering efforts. This is especially noticeable in typical off-road conditions like mud, deep ruts, wet/slippery surfaces and hilly terrain.

Benefits Overview
The EZ Trac system is based on simple hydraulic technology without the complexity of a transfer case and an additional drive shaft. There’s no change in ride quality, ground clearance, ride height, or turning radius. Installation is quick, the design allows for less fuel consumption and no windage loss in freewheel (disengaged) mode, plus it actually weighs 800 to 1,200 pounds less than a transfer case drive system. Lower vehicle weight can translate into more cargo capability or additional vocational equipment.

Installation and operation of an EZ Trac conversion does not put extra stress on existing engine components.

EZ Trac was named the 2011 #1 product of the year by OEM Off Highway magazine. The Product has been around for many years but the EZ Trac name is relatively new. Many off-road equipment owners may recognize the system by its old name, “Mud Hog”.

Front Axle Assembly
The system is comprised of a few major components:

- Hydrostatic Pump and Transmission-Mounted PTO
- Hydraulic Package
- EZ Trac Hydraulic Front Axle

A PTO is mounted to the transmission to power the heavy-duty hydrostatic pump at 6,000 psi. The pressurized hydraulic fluid is sent to the Hydraulic Package. The EZ Trac Hydraulic Package can be mounted anywhere on the chassis. The unit includes:

- Hydraulic oil cooler
- Hydraulic reservoir
- Oil filtration
- Electric fan
- Electronic controller
- Free-wheel valve

The existing Ford front axle is removed and totally replaced by the EZ Trac front axle. The Ford springs are retained. However, the new axle is equipped with its own anti-lock brake system and drum brake systems.
**Off-Road Capability**

A Ford F-750 medium duty truck equipped with an EZ Trac hydraulic axle system has been featured on the “Swamp Loggers” television show. It often appears in very demanding off-road work situations that are a testimony to the traction capabilities of the vehicle.

**50-Degree Wheel Cut Capability**

The EZ Trac is designed with a 50-degree wheel cut turning angle. Many traditional 4x4 front axles are designed with a 36-degree or 42-degree turning angle. As a result, vehicles equipped with the EZ Trac feature a smaller turning radius.

**Maintains Original Equipment Ride Height**

Traditional AWD with transfer case increases ride height by 7-15 inches

EZ Trac requires no transfer case and maintains OEM ride height

**Manual and Automatic Modes**

In manual mode, the driver using a cab mounted switch can switch the system “on” or “off” to immediately engage or disengage the system, even while on the go, at speeds of less than 20 miles per hour (first gear).

In automatic mode, system software engages on rear wheel slip then disengages when vehicle speed increases to 20 mph.

**Ordering**

At this time, installation requires an Allison 3000 Series transmission and a diesel engine. Some other chassis options may be required and the Startracks Engineer will review your specifications prior to placing the order. Standard warranty is 1-year/50,000 miles, with an extended warranty available through EZ Trac.

The ability to keep going is crucial to your productivity. That's why EZ TRAC is designed to handle steep inclines, mud, ruts, wet or slippery conditions and unstable roads. It also features improved clearance for load- or truck-mounted cranes and equipment, making on- and off-road driving surprisingly uneventful. With up to 110 HP output, EZ Trac gives you the confidence of knowing there are no roadblocks to what you can do.