

# Logan Self-Adjusting™ Bell Housing PTO™ Clutches

## Bell Housing Series Description:

Logan Air / Fluid actuated Bell Housing PTO™ clutches are Self-Adjusting™ and designed to mount directly to a diesel or gasoline engine's flywheel.

The friction disc packs are designed for dry operation. Actuation is accomplished through either a stationary cylinder-piston arrangement, or through internal shaft and clutch passages.

The clutch is bored and keyseated for shaft mounting. Torque is transferred from the disc pack to a geared drive ring which is attached to the engine's flywheel.

## Logan Clutches – How They Work

Pressurizing the cylinder, forces the piston to clamp and lock the friction and steel separator discs. When pressure is removed, release springs separate the friction and steel discs, maintaining a running clearance when disengaged.

## Push Button Actuation - Eliminates Mechanical Linkages

Self-adjusting piston travel compensates for any disc wear, eliminating the need for mechanical adjustment (i.e. levers, linkages, and yokes). The amount of hydraulic or pneumatic pressure applied regulates the amount of torque transmitted through the clutch. Push-button, remote activation from a control panel, marine wheelhouse or cab is now possible.

## Standard Specifications:

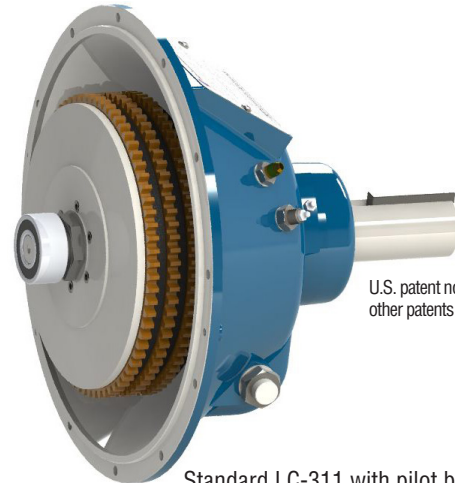
Standard Logan Bell Housing PTO's are available in No. 00 to No. 7 Size SAE Bells with input torque ratings from 159 lb. ft. (216Nm) to over 7,473 Lb. Ft. (10133 Nm). Logan uses a 1.4 factor of safety in our torque specifications.

Air / Fluid operating pressures range from 100 (6,9 bar) to 200 psi (13,8 bar) for Generation I and Generation III models; and 320 psi. (23 bar) for Generation II Models.

Operating speeds range from 1 to 3,000 RPM.

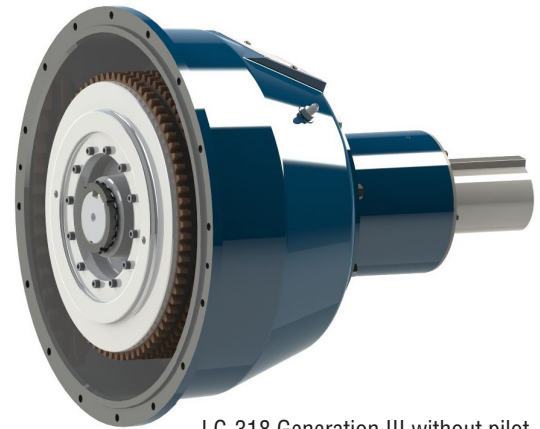
## Modified Standards:

Higher horsepower, torque ranges, speeds, actuation pressures, and design configurations are available to meet customer's specific design requirements.



U.S. patent no. 7,225,909  
other patents pending

Standard LC-311 with pilot bearing, and over shaft actuation for in-line or side load applications



LC-318 Generation III without pilot bearing, and over shaft actuation for in line or side load applications

## Where used:

- Hybrid Drive Systems
- Industrial Drives / Gensets
- Mobile Equipment
- Blowers, Vacuums, Fans
- Snow Removal Equipment
- Marine Propulsion / Auxiliary drives
- Tree and Brush Chippers

## Advantages:

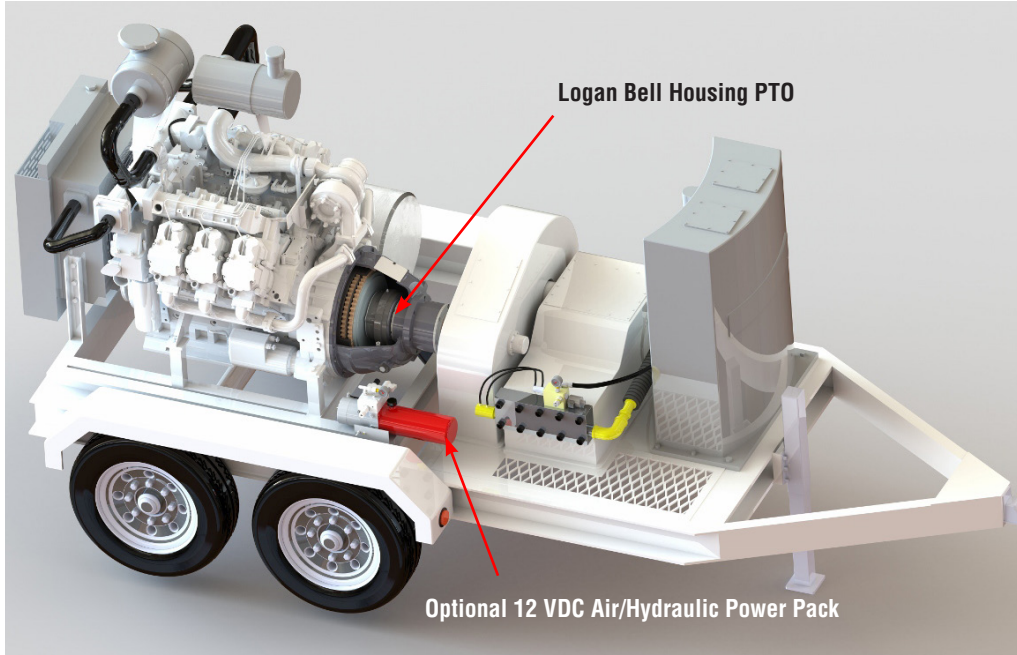
- Air or Fluid Actuated for Remote Activation
- Self Adjusting Disc Pack – Flow Control Engagement
- Eliminates Mechanical Linkages, Hand Levers, and Yokes
- Available with or without Pilot Bearing
- Heavy-Duty Side Load Models Available
- Modified Standards Available



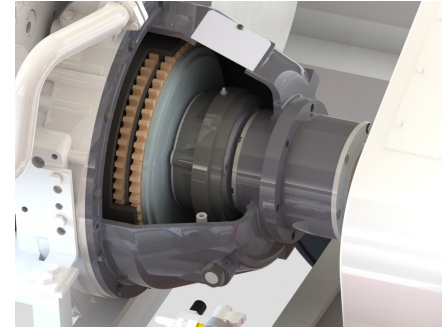
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# Bell Housing PTO's - Waterblasting Systems



Trailer mounted waterjet system outfitted with 200 HP engine and LC 311 PTO  
1446 lb. ft. (1960 Nm) @ 200 psi (13.8 bar)



Cut away view of Logan LC-311 disc pack

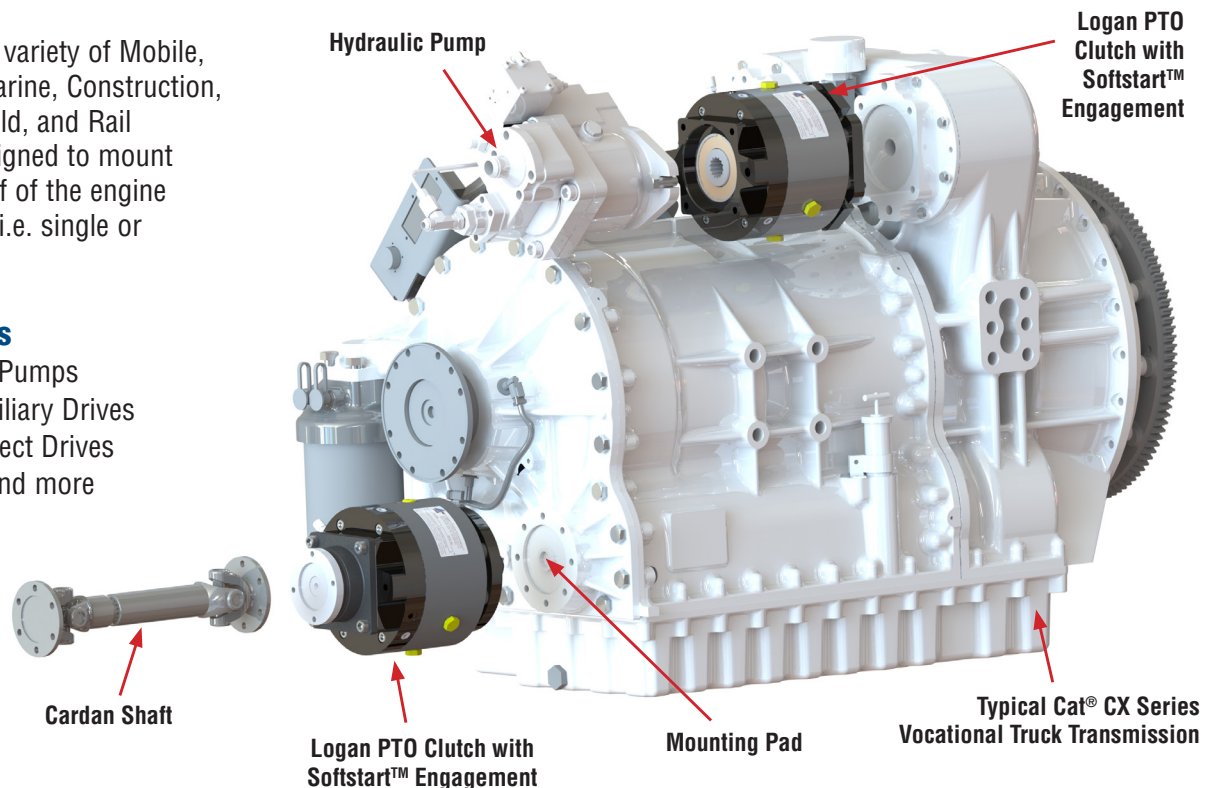
Trailer or skid mounted blasting systems can range in size from 50 to 500 HP, with required speeds up to 3,000 RPM on smaller units. With SAE size bells from No. 7 up to No. 0, and torque ranges from 159 lb. ft. (216 Nm) to over 6,000 lb. ft. (8236 Nm) Logan Bell Housing PTO's are properly sized to handle even the toughest demands in system torque and HP.

## Logan Power Take-Off (PTO) Clutches

Logan PTO's are used in a variety of Mobile, Industrial, On-Highway, Marine, Construction, Agriculture, Mining, Oil Field, and Rail applications – and are designed to mount between the power take-off of the engine and auxiliary attachment, i.e. single or multi-station pump drive.

### PTO Clutch Applications

- Single and Multi-Station Pumps
- Mobile or Stationary Auxiliary Drives
- Connect / Disconnect Direct Drives
- Winches, Reels, Hoists and more



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Logan Direct Drive Power Take-Off (PTO) Clutches for Main and Auxiliary Engines

