



PosiClutch 200 Series PTO

The PosiClutch 200 Series PTO is a hydraulically actuated microprocessor controlled Oil Shear PTO clutch. The wet clutch assembly is designed to mount on a Diesel engine with SAE 00 flywheel housing.

Several assemblies are available including output sheave with supporting bracket, plain shaft output, and 4 pump pads to drive additional hydraulic pumps up to a total of 400 HP. The pump pads can be located around the circumference of the PTO to satisfy many design requirements.

Advanced engineering design eliminates the need to install separate transmission fluid cooling equipment including a pump, reservoir, cooler, and filter assembly plus complex hoses and fittings. Not only does this use one pump drive pad (or externally mounted belt drive from the engine), but requires additional space below the PTO and mounting and assembly time.

The unique combination of friction material, disc and plate design, internal cooling, and Oil Shear Technology provide exceptionally long life with minimal maintenance. In addition, by eliminating the external cooling package plumbing leaks are eliminated.

Another major advantage of the 200 Series FCP (Force Control PTO) is the overall length. At only 33 $\frac{1}{4}$ inches including sheave support bracket, it is the shortest package available today. This can be very important on equipment with the drive mounted across the machine where maximum highway width allowance may require an oversize load condition.

The PosiClutch 200 Series PTO includes an internal brake that can be released. Allowing free movement of



the output for inspection, or freeing a jam.

Coupled with the proprietary FCP Controller complete control of the PTO is maintained preventing damage, increasing safety, and improving operator convenience.

The FCP Controller provides many functions, and communicates through the J-1939 communications protocol typically used on most engines. These include limiting engagement at proper engine speed, overload protection if the engine overloads and falls below a specified speed (preventing engine stall condition), detection preventing clutch damage, and a smart release brake.

PosiClutch 200 Series PTO Specifications			
•	1300 HP Design (900 HP transfer)	•	Internal Smart Release Brake—stops rotation, releases for inspection.
•	400 HP total pump capacity (100 HP per Pump). 4 B, C, or D size pumps.	•	Field Mountable Pump Drive Section can be rotated to fit most machines.
•	No External Cooling (eliminates additional reservoir, pump, filter, cooler).	•	FCP Smart Controller—Startup, stall detection, slip detection, stop control.
•	Shorter overall length—Only 33 1/4" inches with pulley support.	•	J-1939 Communications—works with standard engine protocol.
•	Oil Shear Technology—no disc replacement or adjustments.	•	Maintenance Free Design. Extra heavy duty pump chain drive.

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PosiClutch 200 Series PTO

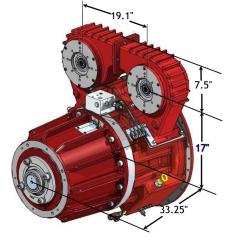
No Extras—No Leaks



No Pumps No Coolers No Reservoirs No Filters No Hose & Fittings







Extra strength pulley support bracket can be rotated

Four pump drive pads can be positioned to fit any machine design.

Normal Operation

smart Start

Controlled clutch engagement under proper conditions

- Eliminates operator error
- Engaging at high engine speed
- Engaging under jam conditions (above idle speed)

Shut Down

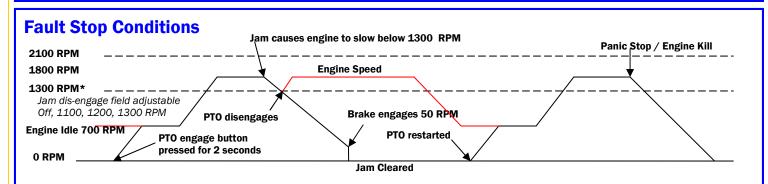
- Disconnect clutch at proper engine RPM
- Engages smart brake at approx. 50 RPM
- Disengages brake when engine is off

Fault Stop Condition

Safety Clutch Disengage

- To keep engine from stalling during hard jam (recommended by engine manufacturer)
- If slip detected
- · If engine RPM below set point
- If high oil temperature detected
- If low actuation pressure detected
- Provides error light for all fault conditions

Normal Operation Engine reduced to idle speed Speed reduced waiting for load 2100 RPM Clutch engaged **1800 RPM** PTO disengage button pressed 1300 RPM* Jam dis-engage field adjustable Brake engages Off, 1100, 1200, 1300 RPM **50 RPM** Engine Idle 700 RPM PTO engage button pressed for 2 seconds 0 RPM



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