

# Chelsea® Wetspline

## Eliminates Spline Fretting

### Overview:

Solving spline fretting on today's high torque, low RPM engines is what Parker Chelsea has accomplished. Premature spline fretting or wear is often caused by the torsional vibrations found in the latest engine designs that operate at low speeds and high torque. As your engine speed goes down the amount of vibration or hammering of the P.T.O. and pump splines increases. This condition is exaggerated when your P.T.O. is disengaged and there is no load on the mating shafts.

In the past keeping the pump shaft lubricated was a manual process that had to be part of your preventive maintenance schedule. Every two to three months the pump must be removed from the P.T.O. and the mating shafts must be cleaned thoroughly with a new fresh coating of grease applied and then the pump reinstalled and fasteners torqued to specifications. This process can take even longer of your pump required an additional support bracket.

The Chelsea Wet Spline option eliminates this down time by providing a constant flow of clean fresh oil to the mating P.T.O. and Pump shafts. This is done during all phases of operation but more importantly when the P.T.O. is disengaged and the mating shafts are impacted at their worst case by the hammering effect from the engine torsional vibrations.

The Chelsea design has been field proven in military applications and commercial vehicles for many years. Chelsea is the first manufacturer to provide you with a rotatable pump flange and wet spline combination in one option.

Extending your P.T.O. and Pump shaft life, providing you with options for maximum pump clearance and reducing your downtime is why the only and best choice for you is Chelsea.

- Refuse
- Aerial
- Material Handling
- Yard Spotters

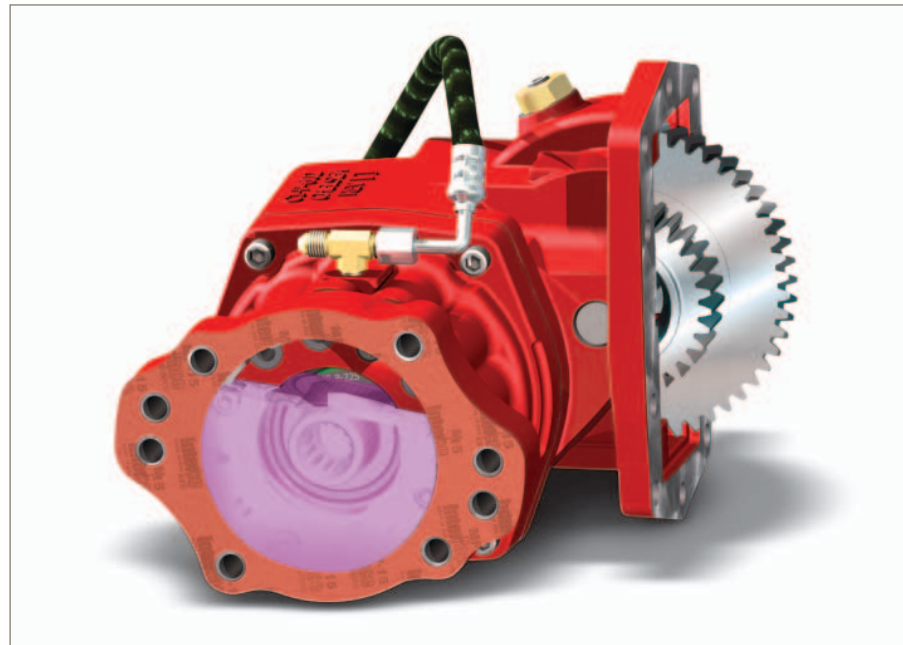
### Contact Information:

Parker Hannifin Corporation  
**Chelsea Products Division**  
8225 Hacks Cross Road  
Olive Branch, MS 38654 USA

**Phone: 1-888-PH4-TRUK**  
**(1-888-744-8785)**

**Fax: 1-662-890-5379**  
**chelseacustserv@parker.com**

[www.parker.com/chelsea](http://www.parker.com/chelsea)



### Product Features and Benefits:

- **Reduces Maintenance Time –**  
The Wetspline System does not require special inspections or greasing of the mating shafts
- **Increased Uptime –**  
Eliminating of the fretting corrosion between mating shafts keeps your trucks on the road and working
- **Field Proven –**  
Excellent Option for trucks such as Refuse, Yard Spotters, Material Handling, RV Motor Coaches, Aerial and Military Vehicles
- **Available on the following Chelsea P.T.O.'s –**  
267, 269, 277, 278, 280, 511/523, 590, 859, 867, 870, 877, 890, 892, 897 and 899 Series
- **Simplified Installation –**  
One Hose to connect for installation reduces installation time
- **Available Output Options –**  
Popular S.A.E., DIN and Rotatable pump Flanges

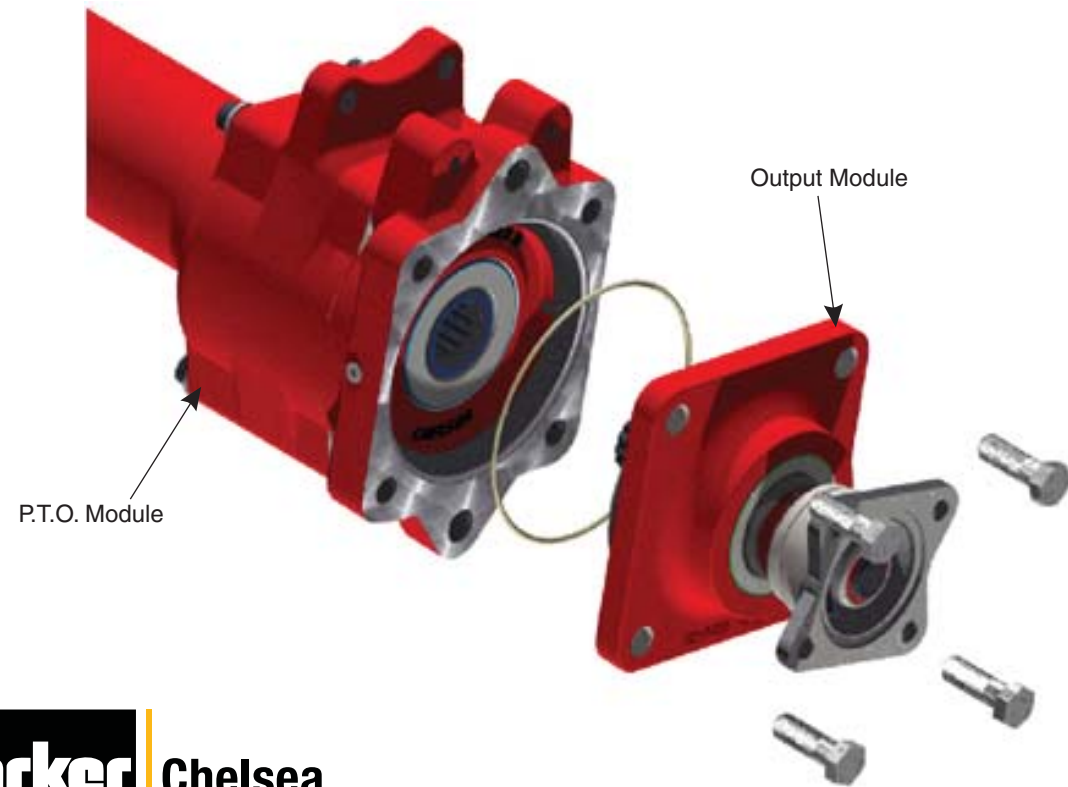


ENGINEERING YOUR SUCCESS.

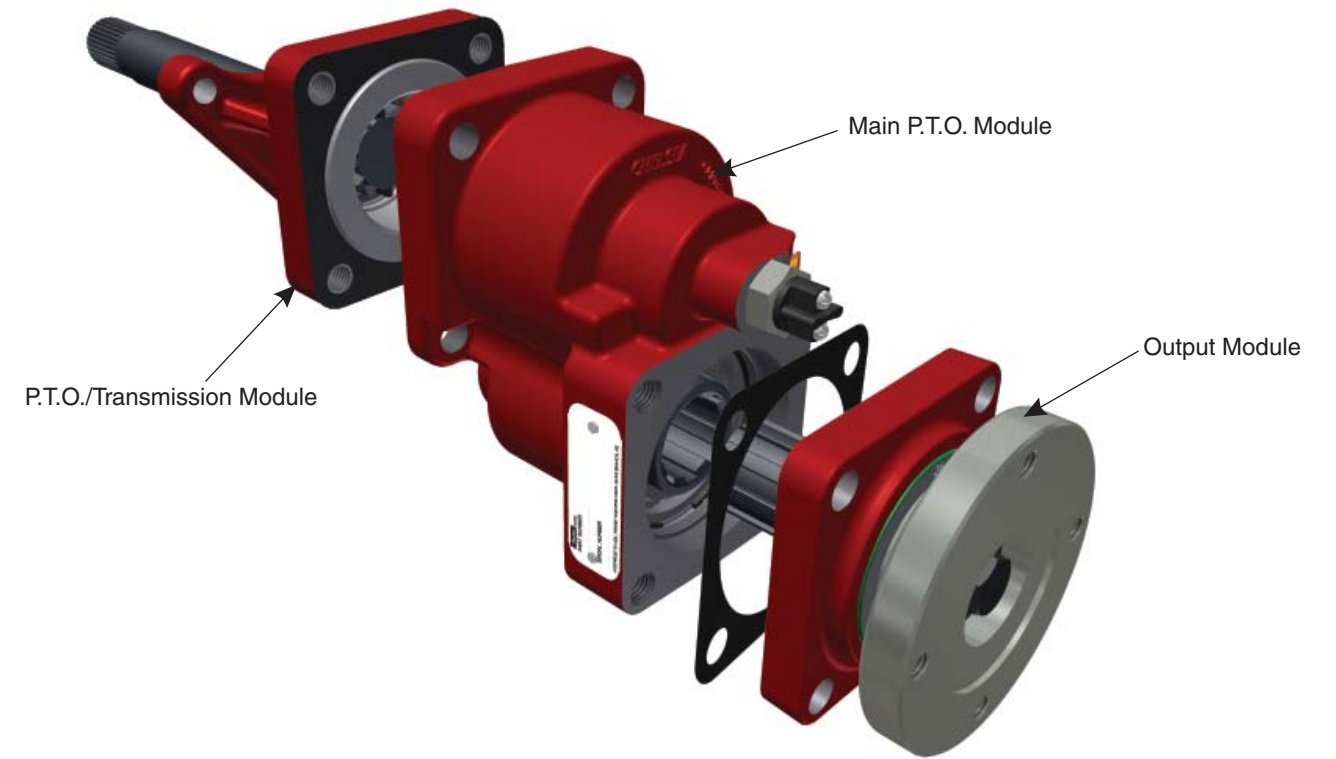
OUTPUT P.T.O. SERIES	DESCRIPTION	267	277/278	280	859	867	870/877	890/892	897/899	CAT-H	511/523	590
Wet Spline Options - Direct Mounted Pump Options												
AF	S.A.E. "B" 2 or 4 Bolt Flange, (1.000" 15 - Tooth)	w	w			w		w	w			
AK	S.A.E. "B" 2 Bolt Flange, (7/8" 13 - Tooth)	w										
AZ	S.A.E. "B" 2 or 4 Bolt Flange, (1.250" 14 - Tooth)							w	w			
AS	S.A.E. "C" 2 or 4 Bolt Flange, (ISO 3019 1.375" 21 - Tooth)							w	w			
CF	S.A.E. "B" 2 or 4 Bolt Flange, (1.000" 15 - Tooth)							w	w			w
CK	S.A.E. "B" 2 or 4 Bolt Flange, (7/8" 13 - Tooth)							w	w			w
CS	S.A.E. "C" 4 Bolt Flange, (1.250" 14 - Tooth)							w	w			w
CZ	S.A.E. "B" 2 or 4 Bolt Flange, (1.250" 14 - Tooth)							w	w			w
DA	S.A.E. "D" 4 Bolt Flange, (1.750" 13 - Tooth)							w	w			
RF	Rotatable S.A.E. "B" 2 or 4 Bolt Flange (1.000" 15 - Tooth)			w			w					
RK	Rotatable S.A.E. "B" 2 or 4 Bolt Flange, (7/8" 13 - Tooth)		w	w								
RS	Rotatable S.A.E. "C" 2 or 4 Bolt Flange, (1.250" 14 - Tooth)			w			w					
RY	DIN 5462	w										
RY	Rotatable DIN 5462			w			w					
RZ	Rotatable S.A.E. "B" 2 or 4 Bolt Flange (1.250" 14 - Tooth)			w			w					
XK	S.A.E. "B" 2 or 4 Bolt Flange, (7/8" 13 - Tooth)		w					w	w	w	w	
XQ	S.A.E. "B" 2 or 4 Bolt Flange, (7/8" 13 - Tooth) (Flange rotated 90 Degrees to the XK)	w	w					w	w	w	w	
XS	S.A.E. "C" 2 or 4 Bolt Flange, (1.250" 14 - Tooth)				w	w		w	w			
XY	DIN 5462							w	w		w	w
ZS	S.A.E. "C" 4 Bolt Flange, (1.250" 14 - Tooth)							w	w			w
ZY	DIN 5462		w									

**NOTE:** The 890/897 family, 511/523 and the 590 Series use a modular output flange concept. Any Driveline related output modules will be wetsplined between the main P.T.O. housing and output module

For customers that would like an extra level of protection from pump seal leaks, Chelsea recommends the use of a double sealed pump shaft. Please verify your requirements with your Chelsea P.T.O. and Parker Pump experts.



890 Series Family



523 Series

