PTO WORKSHEET FOR FIRE PUMPS

F-2028-2
5/15

Waterous Order No._____   Customer Order No._____

Truck Model_____   Engine_____   HP@_____

Truck Transmission Make & Model_____ Chelsea Application No._____

Power Take-Off Model_____   Rotation_____   PTO Location_____   PTO Rating_____HP/1000 RPM

Pump Model_____   Ratio_____   Impeller(s)_____

NOTE: Some PTO/Pump ratio combinations may exceed the rated maximum RPM of the pump and should be avoided (see Form F-1052 Power and Speed Data for Transmissions). The PTO listed on this work sheet is only a suggestion of one PTO that may be suitable for this appreciation and is not an endorsement by Waterous Company. Final approval of the application should be granted by the PTO manufacturer chosen.

PTO Selection Formula

1) A, B, C and L can be read from Pump Curve and H from PTO catalog.

2) To obtain E, divide by C and D.

3) To obtain F, multiply E by PTO rating and divide by 1,000.

4) To obtain G, divide L by F, multiply by 100 and subtract 100.

5) To obtain J, divide E by H, multiply by 100.

6) To obtain K, multiply F by .70.

7) PTO Intermittent Torque Rating _____, multiply by .7 for continuous torque rating _____.

8) To obtain M, $\frac{5252 \; x \; HP}{Input \; Speed}$ = ft-lbs required of pump.

A	B	C	D	E	F	G	H	J	K	L	M
GPM	PSI	Pump Impeller RPM	Pump Ratio	PTO Output Shaft Speed	PTO HP Available	% of PTO Overload	PTO % of Engine RPM	Engine RPM	Continuous PTO HP Available	Pump HP Required	Torque Required by Pump