



**PRODUCT DATA SHEET**

January, 2001

**THOMPSON 6TS PUMP**

(PW16001 – PW16012 only)

**GENERAL INFORMATION**

This is a self-priming heavy-duty open trash pump. It must be filled with water (liquid) prior to starting. The vacuum produced as the impeller rotates draws air into the pump from the suction line and mixes with the liquid in the pump. The air is expelled but the liquid recirculates in the pump until all air is evacuated from the suction line. The pump is now primed and operates like a regular centrifugal pump.

**PERFORMANCE DATA**

➤ <b>Minimum Speed:</b>	- 1200 rpm
➤ <b>Maximum Speed:</b>	- 2200 rpm
➤ <b>Minimum Shutoff Head:</b>	- 54 feet (23 psi) <sup>(1)</sup> @ 1200 rpm
➤ <b>Maximum Shutoff Head:</b>	- 174 feet (75 psi) <sup>(1)</sup> @ 2200 rpm
➤ <b>Maximum Suction Lift:</b>	- 25 feet <sup>(6)</sup>
➤ <b>Minimum Flow:</b>	- 100 - 190 gpm
➤ <b>Maximum Flow:</b>	- 1,900 gpm
➤ <b>Maximum Suction Press:</b>	- 100 psi
➤ <b>Maximum Casing Press:</b>	- 125 psi
➤ <b>Maximum Temperature:</b>	- 150°F
➤ <b>Maximum Solids Size:</b>	- 3" spherical diameter

**PUMP SPECIFICATIONS**

➤ <b>Impeller:</b>	- 11.25" , two vanes
➤ <b>Wearplate Clearance:</b>	- 0.010" – 0.020" (rear) 0.010" – 0.020" (front)
➤ <b>Bearing Lubrication:</b>	- No. 2 Grease
➤ <b>Vacuum System:</b>	- None
➤ <b>Mech. Seal Lubrication:</b>	- Grease lubricated
➤ <b>Dead Head Pressure:</b>	-
@ 1600 RPM:	37 psi – 41 psi
@ 1800 RPM:	48 psi – 53 psi
@ 2000 RPM:	58 psi – 64 psi

**PHYSICAL SPECIFICATIONS**

➤ <b>Suction Size:</b>	- Six-inch 125# Male NPT
➤ <b>Discharge Size:</b>	- Six-inch 125# Male NPT
➤ <b>Total Weight:</b>	- 3,000 lbs. <sup>(2)</sup>
➤ <b>Overall Height:</b>	- 7'-2"
➤ <b>Overall Width:</b>	- 5'-4"
➤ <b>Overall Length:</b>	- 11'-0"

**MATERIAL SPECIFICATIONS**

➤ <b>Casing/Volute:</b>	- Cast iron class 30
➤ <b>Shaft Sleeve:</b>	- 304 stainless steel
➤ <b>Wearplates:</b>	- Carbon Iron, rubber lined
➤ <b>Mechanical Seal Faces:</b>	- Tungsten carb / tungsten carb
➤ <b>Suction Valve:</b>	- Flapper type, two-ply Nitrile rubber canvas reinforced & weighted
➤ <b>Pump Shaft:</b>	- 17-4 PH stainless
➤ <b>Elastomers:</b>	- Nitrile (Buna-N)
➤ <b>Impeller:</b>	- Ductile Iron with 304 SS shaft sleeve

**ENGINE SPECIFICATIONS**

➤ <b>Engine Make/Model:</b>	- John Deere 4045D
➤ <b>Crankcase Oil:</b>	- 14 quarts of SAE10W40 <sup>(3)</sup>
➤ <b>Max. Continuous BHP:</b>	- 76 @ 2500 RPM
➤ <b>Oil Press @ 800 RPM:</b>	- 15 psi min.
➤ <b>Safety Shutdowns:</b>	- High water temperature & low oil pressure
➤ <b>Fuel Capacity/Type:</b>	- 59 gallons of No. 2 diesel
➤ <b>Fuel Consumption:</b>	- 2.5 gal/hr @ 2000 rpm
➤ <b>Noise Level @ BEP:</b>	- 90-95 dbA
➤ <b>Run Time:</b>	- 24 hours <sup>(4)</sup>
➤ <b>Coolant Type:</b>	- 50/50 water/antifreeze
➤ <b>Idle / Rated Speed:</b>	- 850 RPM / 3000 RPM <sup>(5)</sup>
➤ <b>Number of Cyinders:</b>	- Four
➤ <b>Bore x Stroke:</b>	- 4.19"x5.00" (279 cu. in. total)
➤ <b>Fuel Filter:</b>	- John Deere RE60021
➤ <b>Oil Filter:</b>	- John Deere RE59754
➤ <b>Engine Air Filter:</b>	- John Deere C085004

**Notes:**

- <sup>(1)</sup> Based on 1.0 specific gravity
- <sup>(2)</sup> Includes weight of trailer, pump and engine
- <sup>(3)</sup> Midrange compromise. See John Deere manual.
- <sup>(4)</sup> At 2000 RPM. Run time increases with reduced speed and decreases with higher speed.
- <sup>(5)</sup> **WARNING** – this is the rated speed for the ENGINE ONLY. The rated speed of the pump is only 2000 RPM.
- <sup>(6)</sup> Depends on flowrate and pump speed.