



**PRODUCT DATA SHEET**

November, 2000

**THOMPSON 60HST HYDRAULIC  
SUBMERSIBLE & 32 HPU POWER UNIT**

**GENERAL INFORMATION**

The hydraulic power unit (HPU) is located high above the pump and connected via hydraulic hoses. The pump is submerged in the liquid being pumped and is powered by circulating hydraulic fluid. Suction lift and priming are not considerations. This pump can run dry without damage. **CAUTION: HYDRAULIC FLUID IS UNDER HIGH PRESSURE.**

**PERFORMANCE DATA**

➤ <b>Min/Max Hyd. Oil Press.:</b>	- 500 psi / 2000 psi
➤ <b>Minimum Shutoff Head:</b>	- 28 feet (12 psi) <sup>(1)</sup>
➤ <b>Maximum Shutoff Head:</b>	- 103 feet (45 psi) <sup>(1)</sup>
➤ <b>Min./Max. Flow</b>	- 75 gpm / 1,750 gpm
➤ <b>Maximum Temperature:</b>	- 150°F
➤ <b>Maximum Solids Size:</b>	- 3.00" spherical diameter

**PUMP SPECIFICATIONS**

➤ <b>Impeller:</b>	- 9.74" diameter, two-vane, semi-open with full shroud and rear equalizing vanes
➤ <b>Wearplate Clearance:</b>	- 0.010" – 0.020"
➤ <b>Bearing Lubrication:</b>	- Hydraulic oil
➤ <b>Mech. Seal Lubrication:</b>	- Hydraulic oil
➤ <b>Discharge Connection:</b>	- 6" male aluminum cam & groove
➤ <b>Pump Weight:</b>	- 420 lbs.
➤ <b>Overall Pump Height:</b>	- 3'-2" (suction screen to top of bail)
➤ <b>Overall Pump Diameter:</b>	- 2'-3¼"
➤ <b>Hydraulic Motor:</b>	- Rotary vane, 3.5 cu. in., SAE 2B splined output
➤ <b>Hydraulic Quick Disconnects:</b>	- Source couplings must be Aeroquip 5100 series female or equal:
➤ <b>Hydraulic Hoses:</b>	- High Pressure - 1" x 50' Low Pressure - 1¼" x 50' Bypass - ½" x 50'
➤ <b>Dead Head Pressure: @ 1500 psi (hyd. oil): @ 750 psi (hyd. oil):</b>	- 36 psi – 38 psi 15 psi – 17 psi

**HYDRAULIC POWER UNIT SPECIFICATIONS**

➤ <b>HPU/Trailer Weight:</b>	- 4,750 lbs.
➤ <b>HPU/Trailer Height:</b>	- 5'-8"
➤ <b>HPU/Trailer Width:</b>	- 5'-" (approx.)
➤ <b>HPU/Trailer Length:</b>	- 11'-4"

**HYDRAULIC POWER UNIT SPECIFICATIONS - cont**

➤ <b>Hydraulic Fluid:</b>	- Biodegradable vegetable oil ISO 46 HVI
➤ <b>Actuator Valve:</b>	- Pilot operated relief valve,
➤ <b>Relief Valve Setting:</b>	- 2800 psi
➤ <b>Max. Hyd Oil Flow</b>	- 36 gpm @ 2300 RPM
➤ <b>Max. Hyd Oil Press.:</b>	- 2800 psi @ 2300 RPM
➤ <b>Hyd. Oil Reservoir:</b>	- 60 gallons

**MATERIAL SPECIFICATIONS**

➤ <b>Pump Casing:</b>	- Cast iron
➤ <b>Shaft Sleeve:</b>	- SAE 51420 stainless steel
➤ <b>Wearplate:</b>	- A36 carbon steel
➤ <b>Mechanical Seal Faces:</b>	- Tungsten carb / tungsten carb
➤ <b>Pump Shaft:</b>	- 416 stainless steel
➤ <b>Elastomers:</b>	- Buna-N
➤ <b>Impeller:</b>	- Cast iron
➤ <b>Cutwater:</b>	- 316 stainless steel
➤ <b>Bearing Housing:</b>	- Class 30 cast iron

**ENGINE SPECIFICATIONS**

➤ <b>Engine Make/Model:</b>	- John Deere 4045D
➤ <b>Crankcase Oil:</b>	- 14 quarts SAE10W40 <sup>(2)</sup>
➤ <b>Safety Shutdowns:</b>	- High water temperature & low oil pressure
➤ <b>Noise Level @ BEP:</b>	- 90 – 95 dbA
➤ <b>Fuel Capacity:</b>	- 55 gallons
➤ <b>Fuel Consumption:</b>	- 3.1 gal/hr @ max load
➤ <b>Run Time:</b>	- ~18 hours <sup>(3)</sup>
➤ <b>Coolant Type:</b>	- 50/50 water/antifreeze
➤ <b>Number of Cylinders:</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> Midrange compromise. See John Deere manual.
- <sup>(3)</sup> Engine operating at 2000 RPM

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