



**PRODUCT DATA SHEET**

November, 2000

**4" GODWIN CD100 PUMP**

**GENERAL INFORMATION**

The compressor/ejector priming system uses a compressor to blow compressed air through a jet into a tapered tube to create a vacuum. The compressor is powered by a timing belt driven off the engine and receives lubrication from the engine's oiling system. A valve installed at the injector inlet slows down fluid entering the ejector. A screen installed at the inlet filters out debris from entering. Flexible tubing connected to the ejector exhaust directs blowby on the ground or collection source.

**PERFORMANCE DATA**

➤ <b>Minimum Speed:</b>	- 1200 rpm
➤ <b>Maximum Speed:</b>	- 2200 rpm
➤ <b>Minimum Shutoff Head:</b>	- 35 feet (15 psi) <sup>(1)</sup> @ 1200 rpm
➤ <b>Maximum Shutoff Head:</b>	- 116 feet (50 psi) <sup>(1)</sup> @ 2200 rpm
➤ <b>Maximum Suction Lift:</b>	- 25 feet <sup>(6)</sup>
➤ <b>Minimum Flow:</b>	- 50 - 100 gpm
➤ <b>Maximum Flow:</b>	- 700 - 800 gpm
➤ <b>Maximum Suction Press:</b>	- 29 psi
➤ <b>Maximum Casing Press:</b>	- 75 psi
➤ <b>Maximum Temperature:</b>	- 212°F
➤ <b>Maximum Solids Size:</b>	- 1-7/8" spherical diameter

**PUMP SPECIFICATIONS**

➤ <b>Impeller:</b>	- 8-5/8", three vanes
➤ <b>Wearplate Clearance:</b>	- 0.015" – 0.020" (rear) 0.015" – 0.020" (front)
➤ <b>Bearing Lubrication:</b>	- No. 2 Grease
➤ <b>Vacuum System:</b>	- Piston compressor, 10 cfm, with venturi eductor
➤ <b>Mech. Seal Lubrication:</b>	- SAE 20/20 oil lubricated
➤ <b>Dead Head Pressure:</b>	-
@ 1600 RPM:	23 psi – 27 psi
@ 1800 RPM:	29 psi – 34 psi
@ 2000 RPM:	36 psi – 42 psi

**PHYSICAL SPECIFICATIONS**

➤ <b>Suction Size:</b>	- Four-inch 150# flange
➤ <b>Discharge Size:</b>	- Four-inch 150# flange
➤ <b>Total Weight:</b>	- 2050 lbs. <sup>(2)</sup>
➤ <b>Overall Height:</b>	- 5'-11"
➤ <b>Overall Width:</b>	- 4'-6"
➤ <b>Overall Length:</b>	- 7'-7"

**MATERIAL SPECIFICATIONS**

➤ <b>Pump Casing:</b>	- Cast iron
➤ <b>Shaft Sleeve:</b>	- Nickel/Chromium
➤ <b>Wearplates:</b>	- Cast iron
➤ <b>Mechanical Seal Faces:</b>	- Silicon carbide
➤ <b>Separator Tank:</b>	- Cast Iron
➤ <b>NRV Ball and Seat:</b>	- Nitrile rubber (Buna-N)
➤ <b>Pump Shaft:</b>	- Nickel/Chromium
➤ <b>Elastomers:</b>	- Nitrile (Buna-N)
➤ <b>Impeller:</b>	- Chromium steel
➤ <b>NRV Body:</b>	- Silicon aluminum

**ENGINE SPECIFICATIONS**

➤ <b>Engine Make/Model:</b>	- John Deere 3014D
➤ <b>Crankcase Oil:</b>	- 5.4 quarts of SAE 30 <sup>(3)</sup>
➤ <b>Oil Press @ 1300 RPM:</b>	- 21 psi min.
➤ <b>Safety Shutdowns:</b>	- High water temperature & low oil pressure
➤ <b>Grease Lubrication:</b>	- No. 2 <sup>(3)</sup>
➤ <b>Fuel Capacity/Type:</b>	- 30 gallons of No. 2 diesel
➤ <b>Fuel Consumption:</b>	- 1.03 gal/hr @ 2000 rpm
➤ <b>Run Time:</b>	- 24 hours + <sup>(4)</sup>
➤ <b>Coolant Type:</b>	- 50/50 water/antifreeze
➤ <b>Idle / Rated Speed:</b>	- 1300 RPM / 3000 RPM <sup>(5)</sup>
➤ <b>Number of Cyinders:</b>	- Three
➤ <b>Bore x Stroke:</b>	- 3.31"x3.39"
➤ <b>Fuel Filter:</b>	- Baldwin PF717
➤ <b>Oil Filter:</b>	- Baldwin B488
➤ <b>Engine Air Filter:</b>	- Baldwin PS1690FN
➤ <b>Compressor Air Filter:</b>	- Baldwin PA2072

**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.

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