

Spec Sheet

Model: PPG86S17-PPT-4045HFC06-185

Patriot Prime - Vacuum Assist, Priming System.
Diesel-driven, DOT Trailer Mounted Pump Package

Package Overview

Suction Size	8" Flange, Class 150
Discharge Size	6" Flange, Class 150
Solids Handling	3.00"
Max Flow	4,011 gpm
Shutoff Head	265 ft
Max Speed	2000 rpm
Impeller Diameter	14.88"

Pump Specification

Make / Model	Pioneer / SC86S17L71-EO311
Impeller Type	Enclosed, Multi Vane, Solids Handling
Volute Type	Tangential
BEP	65%
Run-Dry Mechanical Seal	Tungsten Carbide vs. Silicon Carbide Seal Faces. Viton Elastomers with Stainless-Steel Spring & Hardware.
Seal Lubrication	ISO 32 (10W) Hydraulic Oil

Materials of Construction

Impeller	CA6NM Stainless Steel
Shaft	17-4 PH Stainless Steel
Brac-plate	Ductile Iron
Wear Ring	Class 40 Gray Iron
Volute	Ductile Iron
Suction Cover	Ductile Iron
Bearing Frame	ASTM A48 Class 30/35 Gray Iron

Priming System

Vacuum Pump	Diaphragm Style, 50cfm air removal capability.
Oil Lubricated Bearings	30W, non-Detergent
Air Removal Capability	Up to 50 CFM
Priming Chamber Suction Spool	ASTM A36 Carbon Steel Const. 304 Stainless Steel Float Ball & Linkage. (3) Quick Clamps for fast access to: Strainer, Linkage Assembly & Air Valve
Check Valve	8" Val-Matic Swing-Flex® Ductile Iron/Buna-N Disc
Drive	Guarded, Timing Belt & Pulleys



Engine Specification

Make & Model	John Deere / 4045HFC06
Continuous HP Rating	142 hp @ 1800rpm
Water Cooled	50/50 Water/Coolant
Lube Oil	15W-40 250-500hr change intervals
Emissions Rating	US EPA Final Tier 4
Engine Aftertreatment	DOC, SCR
Fuel Consumption	7.03 gph @ 1800rpm/Full Load
Industrial Battery	12 V - 925 CCA Wet/Flooded

Engine Control Panel

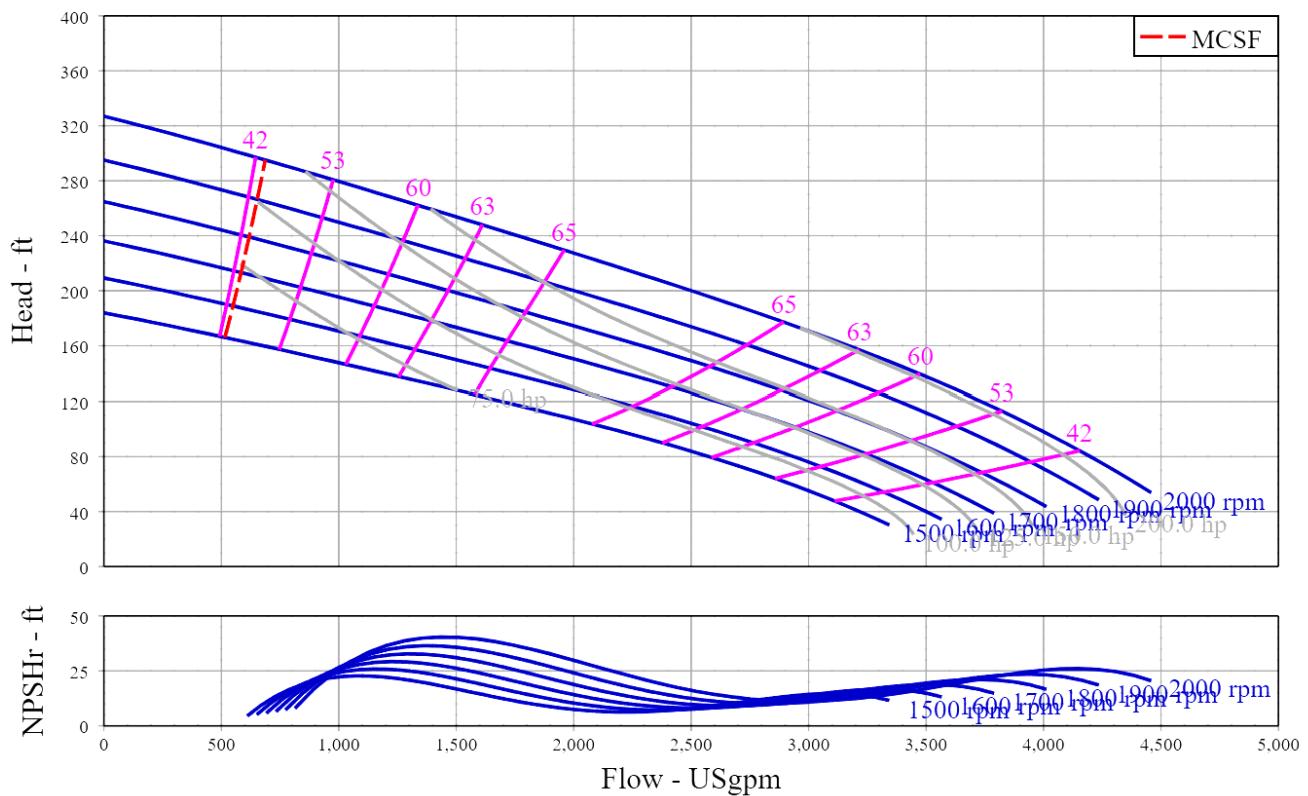
Make & Model	Controls Inc / CX-83501-AS
Display	3.12" OLED Graphical Screen. Up to 24 parameters displayed
Operating Voltage	6-32 VDC
Speed Control	Toggle Switch (up/down)
Auxiliary Operation	Automatic Start/Stop with Float Controls & Level Transducers

Open Platform - DOT Trailer Mounted

Fuel capacity	185 US Gal
Platform Material & Coatings	ASTM A36 Carbon Steel Material. Coated with metal primer and gloss enamel.
Leveling Jacks	(1) 2500lb, Sidewind, Tongue Jack. (2) 2000lb, Sidewind, Swivel Mount, Rear Stabilizing Jacks
Wheels & Tires	Radial Type - ST235-80R16 Single Tire Rating: 3.2k @ 80PSI. Mounted to 16" Steel Wheel
Trailer Brakes	Electric Brake Hubs
Trailer Suspension	7,000 lb Strait Torsion Dual Axle
Trailer Connection	7 Pole Connector Plug Pintle Hitch Set-up



Performance Curve



Package Dimensions

