



# News Release

For Release: Immediately  
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## **Parker BLA Boost Unit Simplifies Building of Closed or Semi-Closed Hydrostatic Transmissions; Replaces Charge Pump and Valves to Help Reduce Design Cost**

MARYSVILLE, OH – July 22, 2010 – The BLA Boost Unit from Parker Hannifin Corporation, the global leader in motion and control technologies, simplifies the building of closed or semi-closed hydrostatic transmissions by replacing the conventional charge pump and corresponding valves in many applications including fan (Figure 1), propeller, generator and pump drives. This can simplify the design and reduce the total cost of a hydrostatic transmission.

In a closed circuit hydrostatic transmission, a charge pump is typically included with the main pump to provide make-up fluid to replace pump and motor volumetric losses. The charge pump also maintains pump inlet pressure to avoid cavitation.

Parker's BLA Boost Unit replaces the charge pump in many applications where the following conditions are met:

- The maximum-to-minimum pump flow ratio does not exceed 2:1
- System pressure changes gradually (no frequent or pronounced pressure peaks)
- The line length between the pump and BLA Boost Unit is relatively short

When fluid flows from the motor outlet through the BLA Boost Unit to the pump inlet (Figure 2), the increased fluid velocity between the boost unit nozzle and injector creates a low-pressure zone, causing additional fluid to be drawn from the tank into the main circuit. Also, because pressure increases after the injector, the pump can be operated at speeds higher than the self-priming speed. Thus, "boost pressure" increases with flow.

An additional bleed-off nozzle, meanwhile, diverts approximately 10% of the main flow through a cartridge filter before being directed to the tank.

Parker offers two BLA Boost Unit models: the BLA 4 is available in four sizes with a maximum recommended flow of 10, 16, 26 and 42 gal/min while the BLA 6 is available in 66, 92 and 105 gal/min sizes. Both are constructed without moving/wearing parts and can be installed either directly to the oil reservoir or connected separately with piping or hoses (in both instances, to function properly, the boost unit must be installed well below the lowest oil level in the reservoir).

To learn more about Parker BLA Boost Units for simplifying the design and reducing the cost of hydrostatic transmissions, visit [www.PHpump.com](http://www.PHpump.com), email [pumptechsupport@parker.com](mailto:pumptechsupport@parker.com) or call the Hydraulic Pump Division at 937.644.3915.

### **About Parker Hannifin's Hydraulic Pump Division**

The Hydraulic Pump Division of Parker Hannifin is a leading manufacturer of piston pumps, vane pumps and hydrostatic transmissions that set new industry standards for performance, precision control, responsiveness, service life, adaptability and low noise. Worldwide, Parker's advanced open- and closed-circuit pump technology helps mobile and industrial equipment users achieve greater efficiency from their hydraulic systems with the potential of reducing energy consumption. Visit [www.phpump.com](http://www.phpump.com) to learn more.

With annual sales exceeding \$10 billion in fiscal year 2009, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. The company employs approximately 52,000 people in 48 countries around the world. Parker has increased its annual dividends paid to shareholders for 53 consecutive years, among the top five longest-running dividend-increase records in the S&P 500 index. For more information, visit the company's web site at <http://www.parker.com>, or its investor information site at <http://www.phstock.com>.

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