Roadranger®

DANA | EATON

Hydraulic Launch Assist™ Refuse Truck

Eaton's HLA® system delivers 15-30% better fuel economy in many applications while reducing emissions.

Ideally suited for refuse and other applications that require repeated starts and stops.

System Benefits

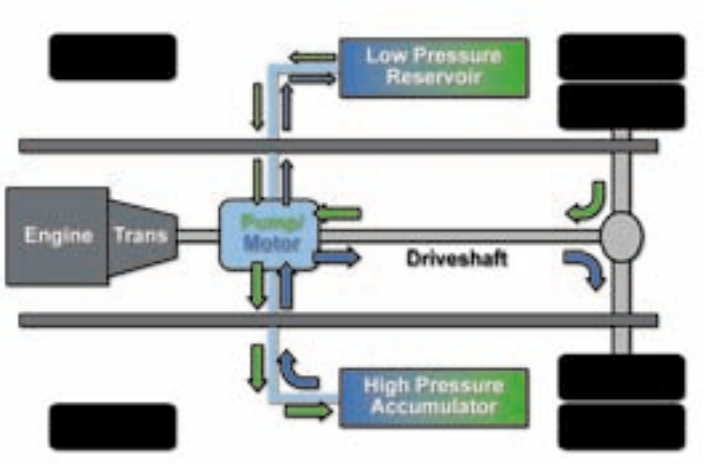
- HLA can be used in economy or productivity mode. One maximizes fuel savings. The other increases productivity.
- Delivers 15-30% better fuel economy.
- Reduces emissions of NOx, particulates, and CO2.
- Provides more torque for quicker acceleration and shorter cycle times.
- Greatly increases brake life (>x4).
- Extends service intervals for engine and transmission.

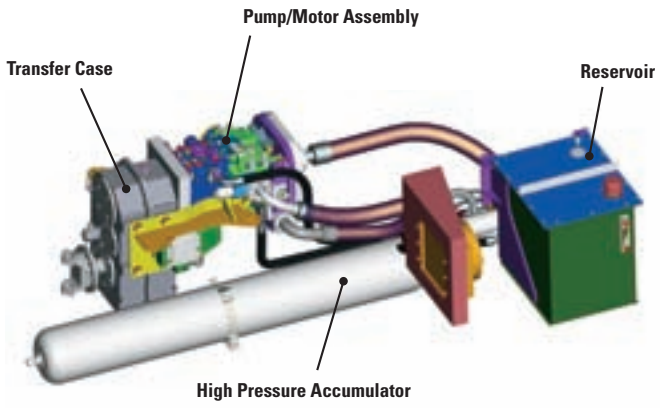
	ECONOMY MODE	PERFORMANCE MODE
Fuel Economy Improvement	28%	17%
Vehicle Acceleration	+2%	+26%
Productivity (Cycle Time Improvement)	N/A	11.5%
Brake Life	>4x	>4x

Vehicle Configuration: Peterbilt Model 320 Chassis @ 63,000lb GVW
Allison 4500 5-speed automatic transmission
100 feet between stops

An Eaton Green Solution

Hydraulic Launch Assist™: Refuse Truck





Eaton uses a parallel hydraulic system, where the conventional vehicle powertrain is supplemented by the addition of the hydraulic system. The system is best suited for vehicles that operate in stop and go duty cycles. Examples include refuse trucks and buses. Key elements of the value proposition include improved fuel economy through regeneration of braking energy, longer brake life, and increased productivity due to the extra power the HLA system provides. Fuel economy and emission reductions in the 20-30% range and paybacks in 2-3 years are possible with this technology.

Features

- Parallel hybrid hydraulic regenerative braking system.
- The HLA system recovers the majority of the energy normally wasted as heat during braking and uses it to supplement the engine's power during acceleration.
- The HLA system provides the greatest benefit when the vehicle's driving cycle involves stop and go driving.

Benefits

- Parallel system allows vehicle to function normally when HLA is offline.

Fuel Economy

- The HLA system delivers 15-30% better fuel economy.

Performance

- Provides more torque for quicker acceleration thus improving productivity.

Environment

- Reduces emissions of NOx, particulates, and CO2.

Maintenance

- Greatly increases brake life (>x4).
- Extends service intervals for engine and transmission.

Specifications

Mass of HLA System:	1250 lb
Max Pressure:	5000 psi
Total System Oil Volume:	21 gallons
Torque:	2550 ft-lbs
Active Speed Range:	Up to 25 mph
Minimum Wheelbase	191" (single) 215" (tandem)

High-Power, High-Value Hydraulic Hybrid™

For spec'ing or service assistance, call 1-800-826-HELP (4357) or visit our web site at www.roadranger.com. In Mexico, call 001-800-826-4357.

©2009 Eaton Corporation and Dana Corporation All rights reserved. Printed in USA · TRSL5500 409 · 2M/WP

Eaton Corporation • Truck Components Operations • P.O. Box 4013 • Kalamazoo, MI 49003 • U.S.A. • www.roadranger.com