# Hybrid Power Systems Medium-Duty Hybrid Electric System



#### The Eaton Hybrid Electric Power System

Eaton's medium-duty Hybrid Electric Power System uses a Fuller automated transmission with a parallel hybrid system. It incorporates an electric motor/generator located between the output of an automated clutch and input of the transmission. Using Eaton's patented hybrid solutions, the system recovers and stores energy normally lost during braking into batteries. When electric torque is blended with engine torque, the stored energy is used to improve fuel economy and vehicle performance for a given speed, or operate with electric power only...and provides energy for use during engine-off worksite operations. Eaton's Medium-Duty Hybrid Electric System base system is designed to support typical city delivery applications and includes:

- · Hybrid drive unit
- · Power electronics carrier (battery system)
- · Push button shift console
- Automated clutch control

For applications that require engine off, ePTO capability (such as utility applications), the additional content includes:

- DC/DC converter
- PTO vocational software
- Push button shift console (to support engine off requirements)

Note: Availability of the optional Auxiliary Power Generator (APG) feature is planned for 2008.

Content may vary by application. For specific details on content and applications, consult your Roadranger representative.

# Hybrid Power Systems Medium-Duty Hybrid Electric System

## Nomenclature

### **Medium Duty**



## Specs, Options & Provisions

Model Hybrid Electric System	Sales Sht. TRSLXXXX	Extended C/S PTO Provision	Oil Cap. Pints [ltr]	Length Inches [mm]	System Weight* Lbs. [kg]	PTO Speed (% of Engine)	
EH-8E306A-CD	5002	OTD	10 5 [0]	00.4 [0.40]	040 [400]	67	
EH-8E306A-UP	5001	STD	19.5 [9]	33.4 [848]	940 [426]		

\* Includes the hybrid drive unit, clutch, batteries, high voltage cables and associated hardware. Does not include the auxiliary power unit. Also, the weight savings achieved by the elimination of an automatic transmission is not included here, but it should be included in the final weight estimation.

Transmission: Proven, Fuller Medium-Duty Automated Manual Transmission Clutch Housing: SAE #2 aluminum Electric Motor: 44 kW Peak / 26 kW Continuous Battery System: Nominal 340 VDC / Lithium Ion

### **Ratios & Steps**

Model Hybrid Electric System	lb-ft Max TQ [Nm]	Overall	Reverse	1	%	2	%	3	%	4	%	5	%	6
EH-8E306A-CD	860 [1166]	9.04	6.75	7.05	71	4.13	64	2.52	58	1.59	59	1.00	28	.78
EH-8E306A-UP														

Availability of Auxiliary Power Generator (APG) feature is planned for 2008. Content may vary by application. For specific details on content and applications, consult your Roadranger representative.

### SHADED AREA INDICATES AVAILABILITY