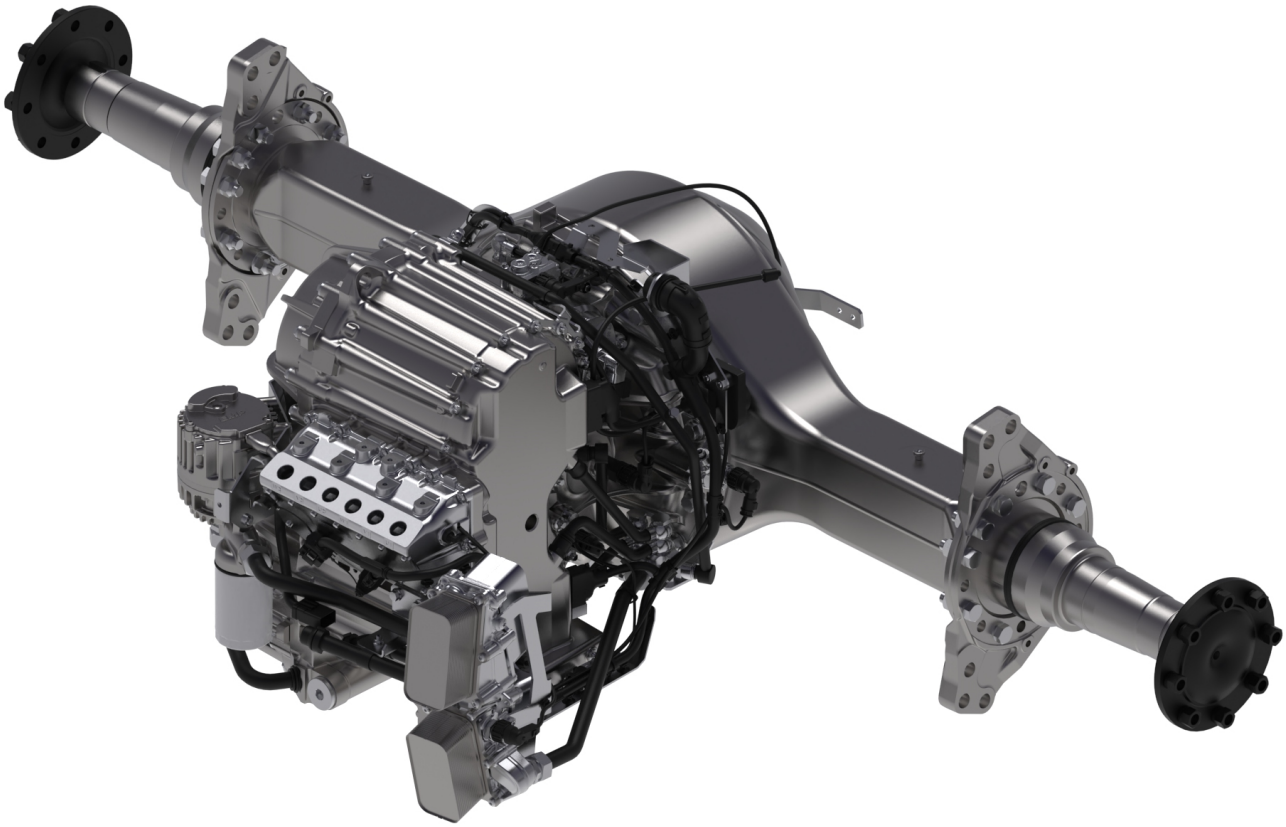
DTNAParts™

Log In

DETROIT®

ePowertrain™



Detroit eAxle & eCarrier

The Detroit eAxle integrates the function of the engine brake, drive axle and transmission into a drive unit with a reduced package size to optimize chassis space. Designed specifically for the eCascadia and eM2 products.

The Detroit Reman eCarrier provides a replacement option for the electric motor and transmission, without requiring a full eAxle replacement. The Reman product is assembled to match OEM specifications.

Demand Detroit Webpage (https://www.demanddetroit.com/emobility/epowertrain/)

Product Highlights

Re440 eAxle

Tandem drive axle configurations of the Re440 eAxle include a dual motor, 2-speed transmission on the 4x2 eCascadia and a dual motor, 2-speed transmission forward axle paired with a single motor, fixed gear rear axle on the 6x4 eCascadia

4x2 Re440 eAxle

- Max power - 395 hp

6x4 Re440 eAxle

- Max power - 470 hp

Re440L eAxle

Single drive axle configurations of the Re440L eAxle include a single motor, 2-speed transmission on the Class 6 eM2 and a dual motor, 2-speed transmission on the Class 7 eM2 and the 4x2 eCascadia.

Class 6 Re440L eAxle

- Max power - 195 hp

Class 7 Re440L eAxle

- Max power - 255 hp

Part Numbers and Compatibility

Paragon Part Number	eAxle Series	Description	Vehicle	Model Rating	Axle Position	eMotor	DCDL
MBA 7753508814	Re440	EAXLE, REAR 2ND AXLE, 6X4 NON-DCDL	eCascadia	20K (tandem is 40K)	REAR	SINGLE	NO
MBA 7753509114		EAXLE, REAR AXLE, 4x2 DCDL		22K	SINGLE	DUAL	YES
MBA 7753508914		EAXLE, REAR 1ST AXLE, 6X4 NON-DCDL		20K (tandem is 40K)	FORWARD	DUAL	NO
MBA 7753509214		EAXLE, REAR AXLE, 4X2 NON-DCDL		22K	SINGLE	DUAL	NO
MBA 7753509014		EAXLE, REAR 1ST AXLE, 6X4 DCDL		20K (tandem is 40K)	FORWARD	DUAL	YES
MBA 7753509414	Re440L	EAXLE, REAR AXLE, 4X2 NON-DCDL	eM2	22K	SINGLE	SINGLE	NO
MBA 7753509314		EAXLE, REAR AXLE, 4X2 DCDL		22K	SINGLE	SINGLE	YES

Part Number	Compatible eAxle	Description
MBA EDR2 CT1WA 01R	MBA 7753508814	REMAN ECARRIER, HD, SINGLE 6X4 NON-DCDL
MBA EDR2 CM1WA 01R	MBA 7753509414	REMAN ECARRIER, MD, SINGLE, NON-DCDL
MBA EDR2 CH2DA 01R	MBA 7753509014 MBA 7753509114	REMAN ECARRIER, HD, DUAL, DCDL
MBA EDR2 CH2WA 01R	MBA 7753508914 MBA 7753509214	REMAN ECARRIER, HD, DUAL, NON-DCDL
MBA EDR2 CM1DA 01R	MBA 7753509314	REMAN ECARRIER, MD, SINGLE, DCDL

General Product Information

The eAxle is an electric drivetrain component that's key to making an electric powered truck less complex and more productive. By integrating an electric motor, transmission and specialized electronics within a compact unit, the eAxle can directly and efficiently power a truck's wheels. The Detroit ePowertrain provides two Detroit eAxle designs that can be combined to meet the demands of any job by the eCascadia or eM2 vehicles.

eCARRIER PACKAGING

With the Detroit eAxle's "eCarrier" design, the elimination of the driveshaft allows more space to package HV battery packs without increasing the truck's wheel base. Placing the motors at the center of each axle enables the truck to be spec'd with standard wheel ends and all tire options currently available for Freightliner's diesel platforms. The eAxle's small footprint on the chassis also enables weight savings for Freightliner's electric trucks, translating to higher payload capacity.

REGENERATIVE BRAKING

While the HV battery provides power to the eAxle to propel the truck, the eAxles are also designed to recharge the HV battery when the vehicle is decelerating. When regenerative braking is activated, simply removing pressure from the accelerator initiates a process called recuperation, which converts mechanical motion into electrical charge that can be stored in the batteries. With Detroit's proprietary eAxle design, regenerative braking has been integrated with Freightliner's MD/HD truck platforms specifically in mind, enabling the powertrain to best leverage this energy-saving feature for the eCascadia and eM2 trucks. Data from the field indicates that once familiarized with the use of regenerative braking, drivers recuperate a significant portion of the battery's energy throughout the day.

DRIVER CONTROLLED DIFFERENTIAL LOCK (DCDL)

As a carryover feature from Freightliner's diesel product, the Detroit eAxle will offer a driver-controlled diff-lock, allowing the driver to lock out the drive-axle differential when necessary to regain traction if the truck becomes stuck on wet or icy roads.

Warranty Information

Dealer Availability

Standard Warranty Terms

eAxles and eCarriers outside of the vehicle's ePowertrain warranty period fall under the DTNA Parts Standard Warranty (1 year/unlimited miles).

Availability information

- Available in the PDC - from Canton and Phoenix

Last updated: Monday, 08 January 2024 08:42 PM

Back to Top

Copyright © Daimler Truck North America LLC. Privacy Statement, Legal Notices and Terms (https://northamerica.daimlertruck.com/privacy-policy) . Privacy Settings
All rights reserved. Daimler Truck North America LLC is a Daimler company.