

# Eaton Warranty Guide

## TCWY0900 EN-US

July 2019



*Powering Business Worldwide*

BACKED BY

**Roadranger**

SUPPORT



## General Information

Knowing and understanding Roadranger warranty is the responsibility of the vehicle owner. It is also the responsibility of the selling dealer to identify the Roadranger products in the vehicle and inform the purchaser of the warranty for those products, based on the vehicle vocation at the time of sale.

The combined use of the Eaton Warranty Manual TCWY0600 and the Eaton Warranty Guide TCWY0900 expresses Eaton component time and mileage warranty coverages for the Roadranger products. Roadranger warranty training is also available to assist dealers in understanding and identifying vocation coverage and warranty parameters. See your Roadranger Representative for details.

## TCWY0900, Eaton Warranty Guide

Roadranger component warranty is identified using the Eaton Warranty Guide TCWY0900. The Warranty Guide explains Roadranger vocation definitions, component time and mileage limits per vocation, aftermarket component / part warranties, and extended purchase warranty options.

How do I define my vocation coverage?

1. Review all the “Vocational Definitions” listed and select the one that most accurately describes the use and configuration of the vehicle.
2. Ensure your vehicle vocation is listed in the “Typical Vehicle Types” under the selected Vocational Definition.
3. Once the vocation is defined refer to the “Product Time and Mileage Coverage Per Vocation” section.
4. Identify the component in question using the product model number for the time and mileage coverage.
5. Refer to and understand any notes that pertain to a specific coverage (i.e. lube requirements).
6. Vocational requirements do not apply for most Aftermarket parts/components. Reference the Service/Aftermarket Parts Warranty Coverage section of this manual for warranty coverages specific to Service/Aftermarket Parts.
7. If you cannot determine coverage, contact your Roadranger Representative or call the Roadranger Call Center at the time of sale at 1-800-826-HELP (4357).

## TCWY0600, Eaton Warranty Manual

The Eaton Warranty Manual TCWY0600 documents the specifics of Roadranger product warranty. This manual includes:

- Product Warranty Statements for Eaton Truck Business Group
- Warranty terminology
- Warranty programs
- Claim procedures and claim information
- Important information regarding claim approval
- Component repair or replacement guidelines
- Labor hour guidelines (SRTs)
- Limits, exclusions, and requirements
- Other important resources

# General Information

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## Other Important Resources

**Printed copies of this document are not controlled.** Please refer to the electronic copy on Roadranger.com for up-to-date information.

For additional information on the below topics, see the below publications available on Roadranger.com:

## Lubrication

- TCMT0020 - Roadranger Approved Lubricants
- TCMT0021 - Roadranger Product Lubrication Manual
- TCSL0001 - Roadranger Transmission Synthetic Lubricant Data Sheet

## Warranty

- TCWY0750 - Extended Protection Plan Registration Form
- TCWY0900 - Eaton Warranty Guide (Time and Mileage, Vocational Definitions, Purchased Warranties)
- RRSL0001 - Roadranger Condensed Specifications (Product Offering Guide)
- [Frequently Asked Warranty Questions and Answers](http://www.roadranger.com/Roadranger/warranty/faq/index.htm) (<http://www.roadranger.com/Roadranger/warranty/faq/index.htm>)

## General Repair & Service

- TCSM0912 - Seal Maintenance Guide
- TRSM0913 - Understanding Spur Gear Life
- TRSM0915 - Transmission Synchronizer Repair Strategy
- TRSM0916 - Transmission Warranty Repair Strategy
- TRTS0910 - General Transmission Troubleshooting Guide

<b>General Information</b> .....	i	<b>Specialized Applications</b> .....	15
TCWY0900, Eaton Warranty Guide .....	i	School Bus .....	15
TCWY0600, Eaton Warranty Manual.....	i	Yard Tractor .....	15
Other Important Resources .....	ii	Rescue Vehicle .....	15
Lubrication.....	ii	Recreation Vehicle.....	15
Warranty .....	ii	Fire Service.....	16
General Repair & Service .....	ii	Transit Coach .....	16
<b>Introduction</b> .....	1	Heavy Haul Military.....	16
Effective Date .....	1	Off-Highway .....	16
Don't Be Confused - Help is Available .....	1	Industrial Equipment .....	16
<b>Pick Up and Delivery</b> .....	2	Intercity Bus .....	16
<b>Construction</b> .....	4	Agriculture.....	17
<b>Heavy Haul</b> .....	6	Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only) .....	18
<b>Linehaul</b> .....	7	<b>Eaton Service / Aftermarket Parts Warranty Coverage - U.S. and Canada Only</b> .....	20
<b>Logging</b> .....	10	Exceptions .....	21
<b>Mining</b> .....	11	Definitions .....	22
<b>Oil Field</b> .....	12	Notes .....	22
<b>Refuse</b> .....	13	Extended Protection Plan Requirements, Limitations, and Exclusions .....	23
		<b>Lubricant Specifications</b> .....	25
		Transmission Lubricants .....	25
		Clutch Lubricants .....	27
		<b>Change Control Log</b> .....	28

# Self Service Guide

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## Introduction

Our experience in extended warranty coverage dates back to the mid 80's. Since then, we have pioneered many new programs designed to deliver warranties, which meet the demands of an ever-changing trucking industry.

From our first versions of the on/off-highway coverages, to our more recent vocational warranties, released in January 1997, customization and customer satisfaction, have always been our goals. The recently released warranties, covered in this Warranty Guide, are no exception.

Moving to vocational warranties in 1997, was certainly a change from the way coverages were defined in the past. But, we considered the move as a means to significantly reduce incidents of misapplied products and customer disappointment. It has done exactly that.

When first released, the vocational warranties were a fairly complete package, which allowed for many variations in coverage. However, the introduction of new models and the resulting need to expand extended warranty coverages, have necessitated updates to this Warranty Guide.

## Effective Date

Warranties listed in this guide are effective for vehicles placed in service after the first day for the month / year of this publication month / year revision.

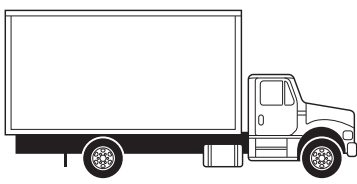
## Don't Be Confused - Help is Available

We realize, there are many different warranties available. Manufacturers and suppliers have established coverages to suit their specific products. Remembering all these guidelines, can be very difficult.

If, at any time, you have questions regarding Roadranger warranty coverages or model eligibility, contact the Roadranger Call Center at 1-800-826-HELP (4357). A customer service coordinator will be glad to assist you in getting the answers you need.

For warranty limits, exclusions, and requirements see the Eaton Warranty Manual TCWY0600. Additional limits, exclusions, and requirements for the Extended Protection Plan are available within this guide.

See the Change Log at the end of this guide for detailed updates to both the Eaton Warranty Manual and the Eaton Warranty Guide.



## Pick Up and Delivery

### Vocational Description:

- Pick up and delivery service consists of the movement of freight typically within a 100 mile radius in cities and/or suburban areas.
- Operation on road surfaces of concrete, asphalt and maintained gravel.
- Three (3) to thirty (30) miles between starts/stops (typical).
- Annual mileage less than 50,000 miles (80,000 Km).
- 100% load going / 40% load return (typical).
- 40% load going / 100% load return.

### Typical Vehicle Types

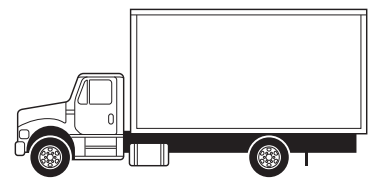
Beverage Truck	Municipal Truck	Stake Truck	Step Van
Flatbed Truck	City Delivery	Tanker	Grain Hauler
Moving Van	Refrigerated Truck	Wrecker	(grain hopper/bottom dump trailers)

Pick Up and Delivery

## Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only)

<b>Clutches</b>	All Models except UltraShift® PLUS and Advantage Series ( <b>Note 2</b> )	Per OEM Standard Chassis Warranty Coverage
	Ultrashift - HV Models	3 years/ 150,000 Mileage
	UltraShift PLUS LAS Clutch & Low Capacity Inertia Brake (LCIB) ( <b>Note 1</b> )	3 years / 350,000 Mileage
	UltraShift PLUS VCS, VMS, VXP, MXP, MHP, Clutch, and LCIB ( <b>Note 1</b> )	3 years / Unlimited Mileage
	Endurant - 430 MM Clutch (Note 1)	3 years / 350,000 Mileage
	PACCAR - 430 MM Clutch (Note 1)	3 years / 350,000 Mileage
	Fuller Advantage ECA	3 years/ 350,000 Mileage
	UltraShift PLUS LAS, VAS	3 years/ 350,000 Mileage
	Easy Pedal Advantage and Solo Advantage™ ( <b>Note 1, 6</b> )	2 years / 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	3 years / Unlimited Mileage
<b>Electronic Clutch Actuator</b>	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	Models: 7, 9, 10 Speeds ( <b>Note 1</b> ) [Excludes Fuller UltraShift LST (DM)] 8600 / 8700 Series (Model exceptions shown below)	3 years / Unlimited Mileage
	Multispeed: 13, 15, 18, 8LL ( <b>Note 1</b> ) (Excludes Fuller UltraShift LHP)	3 years / Unlimited Mileage

# Pick Up and Delivery



Transmissions, Continued	UltraShift <i>PLUS</i> VCS, VMS, VXP, MXP, MHP ( <b>Note 1</b> )	3 years / Unlimited Mileage
	UltraShift <i>PLUS</i> LAS, VAS. Excludes Clutch and LCIB ( <b>Note 1</b> )	5 years / 750,000 Mileage
	Fuller Advantage Automated EA3 ( <b>Note 1</b> )	5 years / 750,000 Mileage
	Fuller Advantage Mechanical ( <b>Note 1</b> )	3 years / Unlimited Mileage
	FS Series, RT-6609A, FO-6406-ASX, FO-8406-ASX ( <b>Notes 1, 3</b> ) (Excludes clutch module)	2 years / Unlimited Mileage
	FO-6406-ASW, FO-8406-ASW ( <b>Note 1</b> ) (Includes clutch module)	3 years / 150,000 miles (240,000 Km)
	UltraShift HV: F-5405B-DM3, FO-5406B-DM3, F-5505B-DM3, F-6505B-DM3, FO-5506B-DM3	3 years / Unlimited Mileage
	Procision ( <b>Note 8</b> )	3 years / Unlimited Mileage
	Hybrid: ( <b>Notes 1, 4, 5</b> ) EH-8E306A-CD EH-6E606B-CD EH-8E406A-CD EH-6E706B-CD EH-6FL0706B-CD EH-8FA0706A-CD EH-8E306A-T EH-8E406A-T EH-8FA0706A-T EH-8E306A-CDR EH-8E306A-CDG EH-8FA0806A-CDG EH-8E406A-CDR EH-8FA0706A-CDR EH-8E406A-CDG	3 years/ 150,000 Mileage (240,000 Km)
<b>Oil-to-Water Heat Exchangers</b>	All Models ( <b>Note 1</b> )	3 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift **PLUS** models and Hybrid Systems.

**Note 2:** Refer to “Extended Protection Plan Matrix” section on [www.roadranger.com](http://www.roadranger.com)

**Note 3:** FS Series synchronizer wear coverage (synchronizers with Eaton Friction Material) is only available for transmissions that use Eaton approved synthetic lubricant in conjunction with either a Solo Adjustment Free or a 365 MM Clutch (Transmission Robust Package). Without stated package requirements, synchronizer wear is not covered.

**Note 4:** EH-8E306A-T model restricted to “4x2 tractor only.”

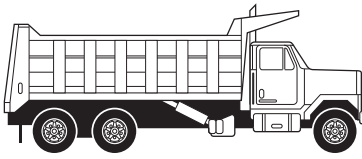
**Note 5:** EH-6E606B-CD model for Low Profile use restricted to Step Van and GVW. See engineering approval.

**Note 6:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 7:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.

**Note 8:** Procision transmissions require the use of PS-278 approved lubricants.





## Construction

- Movement of material to and from a job site.
- Or vehicles used in transfer / relocation on a maximum grade of 8%, typically greater than 10 miles per trip.
- 90% of loaded operation on road surfaces of concrete, asphalt, gravel, crushed rock or hard packed dirt and up to 10% of loaded operation into sandy or muddy job sites. Vehicles operating less than 90%, refer to Specialized Applications “Off-Highway” coverages.

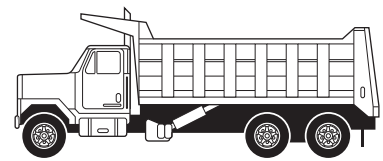
### Typical Vehicle Types

Asphalt Truck	Dump Truck	Roll-off	Tank Truck	Concrete Pumper	Mixer
Block Truck	Flatbed Truck	Snowplow	Utility Truck	Landscape Truck	

### Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only)

<b>Clutches</b>	All Models except UltraShift <i>PLUS</i> and Advantage Series. <b>(Note 2)</b>	Per OEM Standard Chassis Warranty Coverage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP & MXP, Clutch & Low Capacity Inertia Brake (LCIB) <b>(Note 1)</b>	3 years / Unlimited Mileage
	Easy Pedal Advantage and Solo Advantage™ <b>(Notes 1, 5)</b>	2 years / 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	3 years / Unlimited Mileage
<b>Electronic Clutch Actuator</b>	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	Models: 7, 9, 10-Speed <b>(Note 1)</b> 1100-1800 lb-ft. 8600/8700 Series [Excludes Fuller UltraShift LST (DM)]	3 years / Unlimited Mileage
	Multispeed: 13, 15, 18, 8LL, MLL, 9ALL <b>(Notes 1, 2)</b> (Excludes Fuller UltraShift LHP)	3 years / Unlimited Mileage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP & MXP <b>(Note 1)</b>	3 years / Unlimited Mileage
	Fuller Advantage, SmartAdvantage 10C	3 years / Unlimited Mileage
	FS Series, RT-6609A <b>(Notes 3, 4)</b>	2 years / Unlimited Mileage
	Hybrid: <b>(Note 1)</b> EH-8E306A-UP EH-8E406A-UP EH-8FA0806A-UP EH-8E306A-UPG EH-8E406A-UPG EH-6E606B-UPG EH-6E706B-UPG EH-8FA0806A-UPG EH-6FL0806B-UPG	3 years / 150,000 miles (240,000 Km)
<b>Oil-to-Water Heat Exchangers</b>	All Models <b>(Note 1)</b>	3 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage





**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.

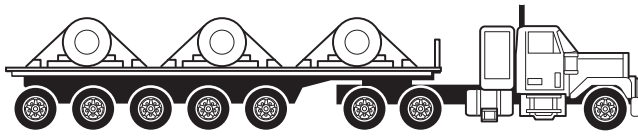
**Note 2:** Refer to "Extended Protection Plan Matrix" on [www.roadranger.com](http://www.roadranger.com)

**Note 3:** 1 year/Unlimited for Snow Plows in FS Series.

**Note 4:** FS Series synchronizer wear coverage (synchronizers with Eaton Friction Material) is only available for transmissions that use Eaton approved synthetic lubricant in conjunction with either a Solo Adjustment Free or a 365 MM Clutch (Transmission Robust Package). Without stated package requirements, synchronizer wear is not covered.

**Note 5:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 6:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.



## Heavy Haul

- Movement of heavy equipment or materials at legal maximums or special permit loadings, typically with GCW at or above 140,000 lbs.
- Operation on road surfaces of concrete, asphalt and maintained gravel.
- High horsepower engines and auxiliary gear boxes might be used.
- Vehicles may be equipped with two retarders.
- 100% load going and empty return.

### Typical Vehicle Types

Equipment Hauling

Lowboy

Steel Hauling

### Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines

(For U.S. and Canada Only)

<b>Clutches</b>	All Models except UltraShift <i>PLUS</i> , SmartAdvantage, and Fuller Advantage Automated ( <b>Note 2</b> )	Per OEM Standard Chassis Warranty Coverage
	UltraShift <i>PLUS</i> VXP, MXP, MHP Clutch & Low Capacity Inertia Brake (LCIB) ( <b>Note 1</b> )	2 years / Unlimited Mileage
	Easy Pedal Advantage and Solo Advantage™ ( <b>Note 1, 3</b> )	2 years / 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	3 years / Unlimited Mileage
<b>Electronic Clutch Actuator</b>	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	Models: 9, 10 Speeds ( <b>Note 1</b> ) (Excludes Fuller UltraShift LST (DM) & LHP) Multispeed: 13, 15, 18, 8LL, MLL, 9ALL ( <b>Note 1</b> )	2 years / Unlimited Mileage
	UltraShift <i>PLUS</i> VXP, MXP, MHP ( <b>Note 1</b> )	2 years / Unlimited Mileage
	Fuller Advantage, SmartAdvantage 10C	2 years / Unlimited Mileage
<b>Oil-to-Water Heat Exchangers</b>	All Models ( <b>Note 1</b> )	2 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.

**Note 2:** Refer to "Extended Protection Plan Matrix" on [www.roadranger.com](http://www.roadranger.com)

**Note 3:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 4:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.



## Linehaul

### Vocational Description:

- Linehaul is moving different types of freight in high mileage operation [over 50,000 miles (80,000 km) / year].
- Operation on road surfaces of good to excellent concrete or asphalt.
- 80% of distances are more than 30 miles between starting and stopping with remaining 20% being within 30 miles between starting and stopping.
- Typical vehicle configurations are 4X2, 6X2, and 6X4 tractor / trailer combinations and straight trucks.

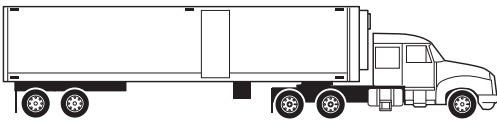
### Typical Vehicle Types

Auto Hauler	Flatbed Trailer	Livestock Hauler	Tanker
Bulk Hauler	General Freight	Moving Van	Triples
Doubles	Grain Hauler (grain hopper/bottom dump trailers)	Refrigerated Freight	Regional Hauler

### Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines

(For U.S. and Canada Only)

<b>Clutches</b>	All Models Except DM, UltraShift <b>PLUS</b> , and Advantage Series. ( <b>Note 2</b> )	Per OEM Standard Chassis Warranty Coverage
	Fuller Advantage ECA, UltraShift <b>PLUS</b> LAS, LSE, MXP, MHP Clutch & Low Capacity Inertia Brake (LCIB) ( <b>Note 1</b> )	3 years / 350,000 Mileage
	UltraShift <b>PLUS</b> VCS, VMS, VXP Clutch and LCIB ( <b>Note 1</b> )	3 years / Unlimited Mileage
	<b><u>Endurant - 430 MM</u></b>	<b><u>3 years / 350,000 Mileage</u></b>
	<b><u>PACCAR - 430 MM</u></b>	<b><u>3 years / 350,000 Mileage</u></b>
	Medium-Duty DM Models	3 years / Unlimited Mileage
	Heavy-Duty DM Models	3 years / 350,000 (560,000 km) parts and labor
	Solo Advantage ( <b>Notes 1, 6</b> )	3 years / 350,000 Mileage
	Easy Pedal Advantage ( <b>Notes 1, 6</b> )	2 years / 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	3 years / 300,000 miles (480,000 km)
<b>Electronic Clutch Actuator</b>	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	All Models: 7, 9, 10 Speeds (1750 lb-ft and below) Includes AutoShift (AS), Top 2 models, and Fuller UltraShift LST (DM). (Excludes DM clutch) for above models ( <b>Notes 1, 3, 4</b> ) (Model exceptions shown below)	5 years / 750,000 miles (1,200,000 km)
	8600/8700 Series	3 years / Unlimited Mileage



<b>Transmissions, Continued</b>	FS Series, RT-6609A ( <b>Note 5</b> ) FO-6406-ASX, FO-8406-ASX ( <b>Note 1</b> ) (excludes clutch module)	2 years/ Unlimited Mileage
	FO-6406-ASW, FO-8406-ASW. (Includes clutch module.) ( <b>Note 1</b> )	3 years / 150,000 miles (240,000 km)
	UltraShift HV Models: FO-6406B-DM3, FO-6506B-DM3, F-6405B-DM3, F-6505B-DM3	3 years / Unlimited Mileage
	FRO-18210C, RTLO-18610B, RTO-18910B-AS2 ( <b>Notes 1, 3</b> )	5 years / 500,000 miles (800,000 km)
	Multi-speeds: 13,15,18, 8LL Includes AutoShift (AS), Top 2 models for 13, 18 speed models. ( <b>Notes 1, 2</b> )	3 years / 300,000 miles (480,000 km)
	UltraShift <i>PLUS</i> LAS, LSE. (Excludes Clutch & LCIB) ( <b>Note 1</b> )	5 years / 750,000 Mileage
	Fuller Advantage Automated ( <b>Note 1</b> )	5 years / 750,000 Mileage
	Fuller Advantage Mechanical ( <b>Note 1</b> )	5 years / 750,000 Mileage
	UltraShift <i>PLUS</i> MXP, MHP. (Excludes Clutch & LCIB). ( <b>Note 1</b> )	5 years / 500,000 Mileage
	UltraShift <i>PLUS</i> VCS, VMS, VXP. (Excludes Clutch & LCIB.) ( <b>Note 1</b> )	3 years / 300,000 miles (480,000 km)
	RTLO/RTL0M-16913L-DM3 ( <b>Notes 1, 4</b> )	5 years / 500,000 miles (800,000 km)
	FO/FOM-16D313E-LEP	5 years / 500,000 miles (800,000 km)
	Convertible Models: RTOC/RTOFC-16909A/E RTLOC/RTLOFC-16909A-T2 RTLOC-16709A, RTOC-18909A RTLC-16609E, RTLOC-18909A-T2  <b>Scenario 1</b> [converted within first 3 years/ 300,000 miles (480,000 km) of service]  <b>Scenario 2</b> [converted after the expiration of 3 years/300,000 miles (480,000 km) but prior to the expiration of 5 years/500,000 miles (800,000 km) of service]	<b>Original 9 Speed Configuration</b> (prior to conversion) 5 years / 500,000 miles (800,000 km)  <b>Converted to 13 Speed Configuration</b> 1 year/100,000 miles(160,000 km) or to the expiration of 3 years/300,000 miles (480,000 km) whichever is greater  1 year/100,000 miles (160,000 km) <b>Note:</b> In any case, there is no warranty coverage beyond 6 years/600,000 miles (960,000 km) of service.
<b>External Oil-to-Water Heat Exchangers</b>	All Models ( <b>Note 1</b> )	3 years / 300,000 (480,000 km)
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.

**Note 2:** Refer to “Extended Protection Plan Matrix” on [www.roadranger.com](http://www.roadranger.com)

# Linehaul



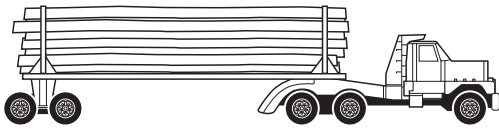
**Note 3:** For manual transmissions with Approved Synthetic Lube, Without Approved Synthetic Lube, Warranty = 3 years/300,000 miles (480,000 km).

**Note 4:** Fuller UltraShift LST (DM) transmission warranty less the DM clutch (see “Clutch” for DM clutch warranty).

**Note 5:** FS Series synchronizer wear coverage (synchronizers with Eaton Friction Material) is only available for transmissions that use Eaton approved synthetic lubricant in conjunction with either a Solo Adjustment Free or a 365 MM Clutch (Transmission Robust Package). Without stated package requirements, synchronizer wear is not covered.

**Note 6:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 7:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.



## Logging

- Movement of logs, chips, and pulp between logging sites and / or mills.
- High horsepower engines and multiple retarders are typically used in this vocation.
- 3 to 30 miles between starts and stops (typical).
- 90% of loaded operation on road surfaces of concrete, asphalt, maintained gravel, crushed rock or hard packed dirt and up to 10% of loaded operation into sandy or muddy job sites. Vehicles operating less than 90%, refer to Specialized Applications “Off-Highway” coverages.
- 100% load going and empty return.

### Typical Vehicle Types

Tractors with Pole Trailers    Tractor / Trailer                      Excluding Log Skidders  
 Log Hauler

### Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only)

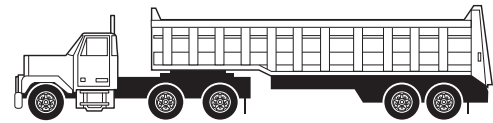
<b>Clutches</b>	All Models except UltraShift <i>PLUS</i> and Advantage Series. ( <b>Note 2</b> )	Per OEM Standard Chassis Warranty Coverage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP Clutch & Low Capacity Inertia Brake (LCIB) ( <b>Note 1</b> )	2 years / Unlimited Mileage
	Easy Pedal Advantage and Solo Advantage™ ( <b>Note 1, 3</b> )	2 years / 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	3 years / Unlimited Mileage
<b>Electronic Clutch Actuator</b>	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	Models: 9, 10 Speeds ( <b>Note 1</b> ) (Excludes Fuller UltraShift LST (DM) & LHP) Multispeed: 13, 15, 18, 8LL ( <b>Notes 1,2</b> )	2 years / Unlimited Mileage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP ( <b>Note 1</b> )	2 years / Unlimited Mileage
	Fuller Advantage, SmartAdvantage 10C	2 years / Unlimited Mileage
<b>Oil-to-Water Heat Exchangers</b>	All Models ( <b>Note 1</b> )	2 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.

**Note 2:** Refer to “Extended Protection Plan Matrix” on [www.roadranger.com](http://www.roadranger.com)

**Note 3:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 4:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.



## Mining

- Movement of rock, ore, gravel, and minerals between mine sites and delivery sites.
- High horsepower engines are typically used in this vocation.
- 3 to 30 miles between starts and stops (typical).
- 90% operation on-highway and up to 10% into sandy or muddy job site. Vehicles operating less than 90%, refer to Specialized Applications “Off-highway” coverages.
- 100% load going and empty return.

### Typical Vehicle Types

Bottom Dump Trailer                      Semi-End Dump  
 Hopper Trailer Combinations        Transfer Dump

### Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines

(For U.S. and Canada Only)

<b>Clutches</b>	All Models except UltraShift <i>PLUS</i> and Advantage Series. ( <b>Note 2</b> )	Per OEM Standard Chassis Warranty Coverage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP Clutch & Low Capacity Inertia Brake (LCIB) ( <b>Note 1</b> )	2 years / Unlimited Mileage
	Easy Pedal Advantage and Solo Advantage™ ( <b>Note 1, 3</b> )	2 years / 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	3 years / Unlimited Mileage
Electronic Clutch Actuator	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	Models: 9, 10 Speeds ( <b>Note 1</b> ) (Excludes Fuller UltraShift LST (DM) & LHP) 8600 / 8700 Series Multispeed: 13, 15, 18, 8LL ( <b>Note 1</b> )	2 years / Unlimited Mileage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP ( <b>Note 1</b> )	2 years / Unlimited Mileage
	Fuller Advantage, SmartAdvantage 10C	2 years / Unlimited Mileage
<b>Oil-to-Water Heat Exchangers</b>	All Models ( <b>Note 1</b> )	2 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

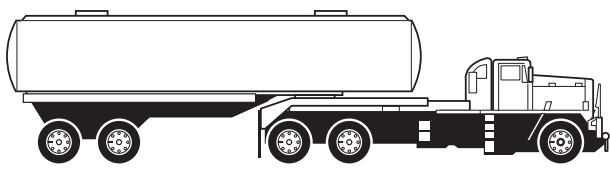
**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty.

**Note 2:** Contact your OEM for details. Refer to “Extended Protection Plan Matrix” on [www.roadranger.com](http://www.roadranger.com)

**Note 3:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 4:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.





## Oil Field

- Movement of production related products, supplies, and tools between job sites.
- Movement of processing equipment and laboratories on job sites.
- Low mileage operation on road surfaces made of concrete, asphalt, maintained gravel, crushed rock or hard packed dirt.

### Typical Vehicle Types

Cementing Vehicle      Drill Rig      Geophysical Exploration      Winch Truck  
 Demolition      Fracturing Truck      Tanker

## Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only)

<b>Clutches</b>	All Models except UltraShift <i>PLUS</i> and Advantage Series. <b>(Note 2)</b>	Per OEM Standard Chassis Warranty Coverage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP Clutch & Low Capacity Inertia Brake (LCIB) <b>(Note 1)</b>	2 years / Unlimited Mileage
	Easy Pedal Advantage and Solo Advantage™ <b>(Note 1, 4)</b>	2 years/ 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	2 years / Unlimited Mileage
Electronic Clutch Actuator	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	Models: 7, 9, 10 Speeds <b>(Note 1)</b> [Excludes Fuller UltraShift LST (DM) & LHP] 8600 / 8700 Series Multispeed: 13, 15, 18, 8LL <b>(Note 1)</b> (Model exceptions shown below)	2 years / Unlimited Mileage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP <b>(Note 1)</b>	2 years / Unlimited Mileage
	Fuller Advantage, SmartAdvantage 10C	2 years / Unlimited Mileage
	FS Series, RT-6609A <b>(Note 3)</b>	1 year/ Unlimited Mileage
<b>Oil-to-Water Heat Exchangers</b>	All Models <b>(Note 1)</b>	2 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.

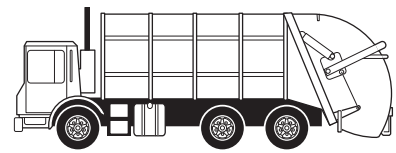
**Note 2:** Contact your OEM for details. See “Extended Protection Plan Matrix” on [www.roadranger.com](http://www.roadranger.com)

**Note 3:** FS Series synchronizer wear coverage (synchronizers with Eaton Friction Material) is only available for transmissions that use Eaton approved synthetic lubricant in conjunction with either a Solo Adjustment Free or a 365 MM Clutch (Transmission Robust Package). Without stated package requirements, synchronizer wear is not covered.

**Note 4:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 5:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.

# Refuse



## Refuse

- Vehicles used for residential refuse / recycle pickup, typically a high number of stops per mile.
- Or vehicles operated in commercial / industrial pickup, typically a low number of stops per mile.
- Or vehicles used in transfer / relocation, typically greater than 10 miles per trip.
- 90% of loaded operation on road surfaces of concrete, asphalt, or maintained gravel and up to 10% of loaded operation into landfill, transfer or recycling sites. Vehicles operating less than 90%, refer to Specialized Applications “Off-Highway” coverages.

### Typical Vehicle Types

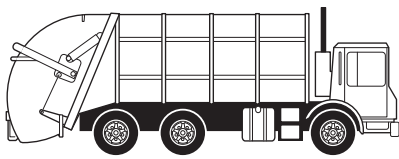
Front / Rear / Side Loader      Sewer / Septic / Waste      Transfer Vehicle  
 Residential / Commercial Pickup      Scrap Truck

## Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only)

<b>Clutches</b>	All Models except UltraShift <i>PLUS</i> and Advantage Series. ( <b>Note 2</b> )	Per OEM Standard Chassis Warranty Coverage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP Clutch & Low Capacity Inertia Brake (LCIB) ( <b>Note 1</b> )	2 years / Unlimited Mileage
	Easy Pedal Advantage and Solo Advantage™ ( <b>Note 1, 4</b> )	2 years / 200,000 Mileage
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	2 years / Unlimited Mileage
Hydraulic Launch Assist (HLA)	All Models	1 year / Unlimited Mileage
Electronic Clutch Actuator	Electronic Clutch Actuator	Same as Transmission Coverage
<b>Transmissions</b>	Models: 7, 9, 10 Speeds ( <b>Note 1</b> ) (Excludes Fuller UltraShift LST (DM) & LHP) (Model exceptions shown below) 8600 / 8700 Series Multispeed: 13, 15, 18, 8LL ( <b>Note 1</b> )	2 years / Unlimited Mileage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP, MXP ( <b>Note 1</b> ) (Excludes house-to-house residential pickup)	2 years / Unlimited Mileage
	Fuller Advantage, SmartAdvantage 10C	2 years / Unlimited Mileage
	FS Series, RT-6609A ( <b>Note 3</b> )	1 year / Unlimited Mileage
<b>Oil-to-Water Heat Exchangers</b>	All Models ( <b>Note 1</b> )	2 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.

**Note 2:** Contact your OEM for details. See “Extended Protection Plan Matrix” on [www.roadranger.com](http://www.roadranger.com)



## Refuse

**Note 3:** FS Series synchronizer wear coverage (synchronizers with Eaton Friction Material) is only available for transmissions that use Eaton approved synthetic lubricant in conjunction with either a Solo Adjustment Free or a 365 MM Clutch (Transmission Robust Package). Without stated package requirements, synchronizer wear is not covered.

**Note 4:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 5:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.

# Specialized Applications

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## Specialized Applications

### School Bus

- Transporting students to and from school and /or school related events.
- Operation on road surfaces made of concrete, asphalt, maintained gravel, crushed rock, hard packed dirt, or other similar surfaces.

#### Typical Vehicle Types

Front Engine Commercial Chassis	Rear Engine Integral Coach
Front Engine Integral Coach	Rear Engine Commercial Chassis

### Yard Tractor

- Moving and spotting trailers and containers around freight terminals, port facilities, and warehouses (short distances).
- Operation on well maintained concrete, asphalt, or gravel surfaces at yards, terminals, or docks.

#### Typical Vehicle Types

Load-On/ Load-Off	Roll-On/Roll-Off	Stevedoring Tractor	Yard Jockey
Port Tractor	Rail Yard Spotter	Trailer Spotter	

### Rescue Vehicle

- Specialized vehicles for rapid acceleration to crash sites away from hydrant hookups.
- Airport rescue is the most common.
- Low mileage operation.

#### Typical Vehicle Types

Airport Rescue Fire (ARF)	Emergency Service
Crash Fire (CFR)	Rapid Intervention Vehicle (RIV)

### Recreation Vehicle

- A privately owned recreational vehicle.
- Truck chassis based
- Bus chassis based

#### Typical Vehicle Types

Recreational Vehicles	Motor Homes Class A
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## Fire Service

- Pumpers, tankers, or aerial ladders used in fighting structural fires.
- Low mileage operation.

### Typical Vehicle Types

Ambulance	Aerial Platform	Tanker Truck
Aerial Ladder Truck	Pumper	

## Transit Coach

- Transporting people and sometimes light freight between cities and/or suburban areas.
- Transporting people in and around city or suburban areas.

## Heavy Haul Military

- Vehicles often operate under extreme conditions of load, weight, road conditions and grade

### Typical Vehicle Types

Equipment Hauling

## Off-Highway

- Operation exceeding 10% of the time on unimproved surfaces such as loose dirt, mud, and sand.

## Industrial Equipment

- Non-vehicle applications such as generator sets, winches, and cranes.

## Intercity Bus

- Transporting people and sometimes light freight between cities and/or suburban areas.
- Transporting people in and around city or suburban areas.

### Typical Vehicle Types

Airport Shuttle	Trolley
City Bus	Shuttle Bus

# Specialized Applications

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## **Agriculture**

### **Vocational Description:**

- Vehicles used in the agriculture industry. Use typically involves transportation of agricultural & dairy products to/from/on/around farm sites
- Includes operation off of improved surfaces while on the farm.

### **Typical Vehicle Types**

Milk Tankers for Farm Pickup

Feed Trucks

Grain Silage, and Hay Haulers  
(which load in the field)

## Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only)

Product	School Bus	Yard Tractor	Rescue Vehicle	Fire Service	Transit Coach	Off Highway	Other Industrial Equipment	Recreational Vehicle	Inter City Bus	Agriculture	Heavy Haul Military
Hydraulic Clutch Actuator Adapter Assembly and Release Fork Assembly	1 year / 100,000 Miles	1 year / 100,000 Miles	1 year / 100,000 Miles	1 year / 100,000 Miles	1 year / 100,000 Miles	1 year / 100,000 Miles	N/A	1 year / 100,000 Miles	1 year / 100,000 Miles	1 year / 100,000 Miles	N/A
Hydraulic Launch Assist (HLA)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Procision (Note 4)</b>	5 years / Unlimited Miles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Electronic Clutch Actuator	N/A	N/A	Same as Transmission	Same as Transmission	Same as Transmission	Same as Transmission	N/A	Same as Transmission	N/A	Same as Transmission	Same as Transmission
FS Series Transmissions Under 1099 lb-ft. (Note 2)	2 years/ Unlimited Miles	N/A	2 years/ Unlimited Miles	2 years/ Unlimited Miles	2 years/ Unlimited Miles	N/A	N/A	2 years/ Unlimited Miles	N/A	N/A	N/A
UltraShift LST, LHP AutoShift (Note 1)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5 years/ Unlimited Miles	N/A	N/A	N/A
Clutches - except UltraShift PLUS and Advantage Series	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)	(Note 2)
UltraShift PLUS Clutch & Low Capacity Inertia Brake (LCIB) (Note 1, 5)	N/A	N/A	Same as Transmission	Same as Transmission	Same as Transmission	Same as Transmission	N/A	Same as Transmission	N/A	Same as Transmission	Same as Transmission
Easy Pedal Advantage and Solo Advantage™ (Notes 1, 3)	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	2 years/ 200,000 Miles	N/A
Transmission UltraShift PLUS Models (Note 1)	N/A	N/A	VCS, VMS, VXP, LAS, MHP 3 years/ Unlimited Miles	VCS, VMS, VXP, LAS, MHP 3 years/ Unlimited Miles	LAS, LSE, MXP, MHP, LAS, MHP, VCS, VMS, VXP 3 years/ Unlimited Miles	VCS, VMS, VXP, LAS, MHP, MXP 2 years/ Unlimited Miles	N/A	MXP, LAS, LSE, LAS, MHP, VCS, VMS, VXP 3 years/ Unlimited Miles MHP 5 years/ Unlimited Miles	N/A	VCS, VMS, VXP, LAS, MHP, MXP 2 years/ Unlimited Miles	FO-22E318A-VXP 1 year Manufacturing Defects Only

Specialized Applications

# Specialized Applications

Product	School Bus	Yard Tractor	Rescue Vehicle	Fire Service	Transit Coach	Off Highway	Other Industrial Equipment	Recreational Vehicle	Inter City Bus	Agriculture	Heavy Haul Military
Hybrid (Note 1)	EH-6E606B-P EH-6E706B-P EH-6E706B-PSB EH-8FA0406A-PSB EH-8FA0706A-PSB EH-6FL0706B-PSB  5 years/ Unlimited Miles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EH-8E306A-P EH-8E406A-P EH-8FA0706A-P EH-8E306A-U  3 years / 150,000 Miles	N/A	N/A
Heavy-Duty Transmissions (Excludes Fuller UltraShift LST (DM) & LHP) (Note 1)	3 years / Unlimited Miles	2 years / Unlimited Miles	3 years / Unlimited Miles	3 years / Unlimited Miles	3 years / Unlimited Miles	2 years / Unlimited Miles	N/A	3 years / Unlimited Miles	2 years / Unlimited Miles	2 years / Unlimited Miles	N/A
Oil-to-Water Heat Exchangers	3 year / Unlimited Miles	1 year / Unlimited Miles	3 year / Unlimited Miles	3 year / Unlimited Miles	3 year / Unlimited Miles	1 year / Unlimited Miles	N/A	3 year / Unlimited Miles	2 year / Unlimited Miles	2 year / Unlimited Miles	N/A

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift PLUS models and Hybrid Systems.

**Note 2:** Per OEM Standard Chassis Warranty Coverage.

**Note 3:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 4:** Precision transmissions require the use of PS-278 approved lubricants.

**Note 5:** UltraShift PLUS, ECA Clutch and Low Capacity Inertia Brake (LCIB) warranty coverage only applies if transmission model approved for the specific application. Reference Note 1 for application approval requirements.



# Service / Aftermarket Parts Warranty Coverage

## Eaton Service / Aftermarket Parts Warranty Coverage - U.S. and Canada Only

The following warranty coverages apply for all genuine Eaton service/aftermarket parts, subcomponents, and complete components (subject to the exceptions, notes, and definitions stated therein):

Product Supplied	Warranty Term	Exceptions
Service / Aftermarket Parts	12 months / Unlimited Mileage (km)	Parts and Labor*
New, Exchange and Remanufactured Electronics		
Clutch Service / Remanufactured / ECA Clutch / DM Clutch / Diaphragm Spring Clutch		
Reman™ Power Electronics Carrier (PEC)		
Clutch Advantage Series™ see (Note 2)		
Clutch EverTough Brand™ (see Note 3)		
New Exchange Power Electronics Carrier (PEC)		
New or Reman™ Medium Duty Transmissions	12 months / Unlimited Mileage (km)	Parts and Labor*
Lightning Reman™	12 months / Unlimited Mileage (km)	Excludes Output Shaft Seals & Parts and Labor*
Reman™ Heavy Duty Transmissions (see Notes 1)	24 months / Unlimited Mileage (km)	
Reman™ Glider Kit Heavy Duty Transmissions (see Notes 1)		
FLEX Reman™ Heavy Duty Transmissions (see Notes 1)		
Reman™ Heavy Duty, Reman™, FLEX Reman™ and Glider Kit Heavy Duty Transmissions with: <b>Enhanced Warranty Upgrade -</b> Eaton Advantage Clutch or EverTough® with Roadranger approved lube (PS-386) specified (see Notes 2)	36 months / Unlimited Mileage (km)	
New Exchange Heavy Duty Transmissions		
Bendix Brake and VORAD Collision Warning System	See Bendix Warranty Web Site	

**Note: 1** - Warranty terms apply to all purchases effective January 1, 2012. All transmissions purchased prior to January 1, 2012 carry their warranty terms at time of sale.

**Note: 2** - The Enhanced Warranty Upgrade for 36 months / Unlimited Mileage (km) is available for all applications (must be registered within one year of transmission purchase on the Eaton warranty web site, Roadranger.com)(UltraShift, UltraShift *PLUS* and Lightning Reman, and Stationary Applications not included). If purchased with an EverTough Clutch, clutch coverage will be 24 months / Unlimited Mileage and if purchased with Advantage Clutch, clutch coverage will be 36 months / Unlimited Mileage.

**Note: 3** - Warranty terms apply to all purchases effective on or after August 1, 2015. When purchased and installed with a Genuine Eaton Clutch Installation kit, EverTough Clutch coverage will be 24 months / Unlimited Mileage and Advantage Clutch coverage will be 36 months / Unlimited Mileage.

\* Parts and Labor will be reimbursed for warranty repairs performed through OEM approved channel.

\* Parts reimbursement only for warranty repairs performed through non-OEM approved channel.

# Service / Aftermarket Parts Warranty Coverage

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## Exceptions

If a non-warrantable failure occurs within the **Standard** warranty coverage period, and the customer purchases a new Eaton Exchange Transmission to complete the repair; warranty coverage shall be the remainder of the *original* warranty period, or the coverage period of the new Exchange, whichever is greater. If an Eaton Remanufactured Transmission is purchased to complete a non-warrantable repair during the **Standard** warranty period, warranty coverage shall be the coverage period of the Eaton Remanufactured Transmission.

If a non-warrantable failure occurs within the **Extended** warranty coverage period, and the customer purchases a genuine New Exchange Transmission or an Eaton Remanufactured transmission to complete the repair; warranty coverage shall be the remainder of the original warranty period, or the defined coverage period of the purchased replacement transmission, whichever is greater.

If a non-warrantable failure occurs during the **Original** warranty period (*Standard or Extended*) and the customer purchases genuine Eaton service/aftermarket parts to complete the repair; the warranty coverage period of the service/aftermarket parts shall be one year from the date of installation. Remaining parts and subcomponents, which were not replaced at the time of the non-warrantable repair, shall maintain the coverage of the *original* warranty period.

See the Eaton Warranty Manual TCWY0600 for replacement matrix.

# Service / Aftermarket Parts Warranty Coverage

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## Definitions

**Standard Warranty** - The base warranty coverage, offered to all purchasers of a product. It is sometimes called, “the OEM warranty period.”

**Extended Warranty** - Additional coverage, which becomes effective when the Standard warranty period ends. Usually, there are other requirements for eligibility and, in some cases, a service charge must be paid to purchase the coverage.

**Original Warranty** - The total warranty coverage for which a product is eligible. A combination of the Standard and Extended warranty periods.

## Notes

- Warranty coverages for genuine Eaton service / aftermarket parts, subcomponents, and complete components commence on the date of retail sale.
- Warranty coverages, stated herein, **apply only** to genuine Eaton service / aftermarket parts, subcomponents, and complete components, which are purchased by the customer at normal retail prices.
  - Warranty coverages, stated herein, **do not apply** to genuine Eaton service / aftermarket parts, or subcomponents for which Eaton has contributed, to any extent, to the purchase and/or installation by full or partial reimbursement in the form of check, coupon, or no charge parts to the customer as a goodwill or policy transaction. Such service/aftermarket parts shall be covered for a period of ninety (90) days from the date of installation. REMAN™ and New Exchange transmissions provided as the result of a good will or policy transaction, are warranted for 12 months from the installation date.
- To continue warranty coverage, the purchased component model must be the same as the failed component model, unless substitution is authorized by Eaton.
- All other Eaton warranty exclusions and limitations apply to the coverages stated herein and in the Eaton Warranty Manual TCWY0600. Special aftermarket programs and products not listed in this manual have warranty parameters and requirements specified individually per released documentation.
- New / REMAN / Part Product warranty starts the date of RETAIL Sale when used in Glider Kits and vehicle refurbishing. IF a product is transferred to a Glider Kit or a vehicle / chassis other than the original vehicle / chassis, the warranty of the transferred product is VOID.

# Extended Protection Plan

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## Extended Protection Plan Requirements, Limitations, and Exclusions

- Application for purchased warranty must be made within one (1) year of the in-service date of the vehicle.
- Extended warranty is only available for the eligible models listed or referenced herein.
- Warranty applies only to clutches and transmissions installed in vehicles as original equipment.
- A Roadranger approved synthetic lubricant must be used. Lubricant must be changed per Roadranger prescribed maintenance schedules (Reference Roadranger publication TCMT0021). Lube change records might be requested for verification purposes.
- Transmission oil temperatures must be maintained per Roadranger publication TCMT0021.
- Warranty applies exclusively to vehicles licensed and operating in the United States of America or Canada.
- Warranty is transferable to only one subsequent vehicle owner. Warranty is only transferable within the same vehicle vocation. Changing vehicle vocations voids the warranty coverage.
- Re-rating engine torque above the approved torque capacity of the component, voids the warranty coverage. Dealer/ Purchaser shall be responsible for verifying the engine torque does not exceed the torque capacity of the drivetrain.
- Warranty covers parts and labor per Eaton established guidelines.
- Oil to water heat exchangers are not covered under the Roadranger Extended Protection Plans.
- See the Eaton Warranty Manual TCWY0600 for time and mileage examples and warranty information, requirements, limits, and exclusions.

For complete information on requirements, limitations or exclusions available warranty coverages, warranty claim filing procedures, and authorized repair times, reference the Warranty Manual (TCWY0600) and the Warranty Guide (TCWY0900) both available on Roadranger.com or contact the Roadranger Call Center at 1-800-826-HELP (4357).

Please refer to [www.roadranger.com](http://www.roadranger.com) for a complete list of Extended Protection Plan options.

**Note:** Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.



# Lubrication

## Lubricant Specifications

### Transmission Lubricants

Eaton Recommends the Use of Roadranger Lubricants for Extended Drain

Use the Heavy-Duty and Medium-Duty charts, starting with transmission type, to locate the correct lubricant and change interval.

**Note:** See line haul and vocational definitions for more information.



Automated and above 1,850 lb-ft. must use PS-386 approved fluid.

#### Transmission Oil Filters

Transmission filters should be changed during regular lube intervals.

Inspection of the transmission filter should be conducted during preventative maintenance checks for damage or corrosion.

Replace as necessary.

#### Heavy-Duty

Product	Synthetic or Mineral	Lubricant Specification	SAE Viscosity Grade	Change Interval for Linehaul	Change Interval for Vocational
Automated and above 1,850 lb-ft. Hybrid (HEV) FRW Transmissions All Transmissions with Extended Warranty	Synthetic	PS-386	N/A	500,000 miles [800,000 Km] or 5 years	180,000 miles [288,000 Km] or 3 years (mobile applications) 2,000 hours or 5 years (stationary applications)
Mechanical	Synthetic	PS-386	N/A	500,000 miles [800,000 Km] or 5 years	180,000 miles [288,000 Km] or 3 years (mobile applications) 2,000 hours or 5 years (stationary applications)
Mechanical	Mineral	Heavy Duty Engine Oil	SAE 50 (HD Engine Oil), Mil2104H, Cat TO-4 (SAE 40 - SAE 50)	60,000 miles [96,000 Km] or 1 year	60,000 miles [96,500 Km] or 1 year (mobile applications) 500 hours or 1 year (stationary applications)

## Medium-Duty

Product	Synthetic or Mineral	Lubricant Specification	SAE Viscosity Grade	Change Interval for Linehaul	Change Interval for Vocational
Automated Hybrid (HEV) All Transmissions with Extended Warranty	Synthetic	PS-386	N/A	500,000 miles [800,000 Km] or 10 years	180,000 miles [288,000 Km] or 3 years (mobile applications)  2,000 hours or 5 years (stationary applications)
ASW Clutch Module	Synthetic	Dextron VI	N/A	150,000 miles [250,000 Km] or 3 years	150,000 miles [250,000 Km] or 3 years
Mechanical All Transmissions with Extended Warranty	Synthetic	PS-386	N/A	500,000 miles [800,000 Km] or 10 years	180,000 miles [288,000 Km] or 3 years (mobile applications)  2,000 hours or 5 years (stationary applications)
Mechanical	Mineral	Heavy Duty Engine Oil	SAE 50 (HD Engine Oil), Mil 2104H, Cat TO-4 (SAE 40 - SAE 50)	60,000 miles [96,500 Km] or 1 year	500 hours or 1 year

# Lubrication

## Clutch Lubricants

Use the chart, starting with clutch type, to locate the correct lubricant and change interval.

**Note:** See the Linehaul and Vocational definitions for more information.

Product	Lubricant	Service Interval for Linehaul	Service Interval for Vocational
Stamped Angle Spring	<b>Required:</b> NLGI #2 or #3, LB/GC Lithium Complex Temperature operating range -40–325 °F <b>Recommended:</b> Roadranger Grease EP-2	10,000 miles [16,000 Km] or 1 month	250 hours or 1 month
Medium-Duty Solo™			
365 mm (see Note)	No Lubricant Needed	Not Applicable	Not Applicable
395 mm (see Note)	No Lubricant Needed	Not Applicable	Not Applicable
EverTough	<b>Required:</b> NLGI #2 or #3, LB/GC Lithium Complex Temperature operating range -40–325 °F <b>Recommended:</b> Roadranger Grease EP-2	25,000 miles [40,000 Km] or 3 months	250 hours or 1 month
Heavy-Duty ECA Clutch	<b>Required:</b> NLGI #2 or #3, LB/GC Lithium Complex Temperature operating range -40–325 °F <b>Recommended:</b> Roadranger Grease EP-2	50,000 miles [80,000 Km] or 3 months	250 hours or 1 month
Solo™ Advantage			
Easy Pedal™ Advantage			
Value Clutch	<b>Required:</b> NLGI #2 or #3, LB/GC Lithium Complex Temperature operating range -40–325 °F <b>Recommended:</b> Roadranger Grease EP-2	20,000 miles [32,000 Km] or 2 months	250 hours or 1 month
Reman Solo Clutch			
Reman Easy Pedal Clutch			
DM	No Lubricant Needed	Not Applicable	Not Applicable
Pedal Shaft / Bushings	<b>Required:</b> NLGI #2 or #3, LB/GC Lithium Complex Temperature operating range -40–325 °F <b>Recommended:</b> Roadranger Grease EP-2	At every chassis lubrication	At every chassis lubrication



## Change Control Log

Last Revised Date	Description of Clarifications and Updates
July 2019	<p><b>Added</b> Endurant and PACCAR 430 mm clutch coverages.</p> <p><b>Updated:</b></p> <ul style="list-style-type: none"> <li>-UltraShift <i>Plus</i> clutch models to correspond with UltraShift <i>Plus</i> transmission nomenclature.</li> <li>-Advantage Self-Adjust and Easy Pedal Advantage Manual Adjust coverage from 2 years to 3 years.</li> <li>-EverTough Self-Adjust and Manual Adjust coverage from 1 year to 2 years.</li> </ul>
February 2019	Created ECJV Warranty Document

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**For spec'ing or service assistance, call 1-800-826-HELP (4357) or visit [www.eaton.com/roadranger](http://www.eaton.com/roadranger). In Mexico, call 001-800-826-4357.**

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