

# Heavy-Duty Aftermarket Catalog

We make more time on the road work.\*



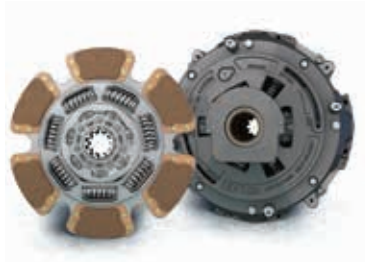
BACKED BY  
**Roadranger**  
SUPPORT



Your truck's driveline is only as strong as its weakest link. Insist on genuine Eaton parts and get back on the road with confidence. Because that's what matters.

Fleets rely on you to perform the maintenance and repairs that keep their trucks on the road. And you take pride in your workmanship, knowing that there is no substitute for quality. So instead of cutting corners with less expensive, lower quality products, you should invest in genuine Eaton aftermarket parts and services. We've got you covered – from parts designed and tested to exacting standards for optimal durability to easy-to-use diagnostic tools that reduce downtime. And a family of lubricants that provide superior protection. Every day, you're thinking about what's best for your customer, because that's what really matters. And we're here to make sure it works.

# Heavy-Duty Aftermarket Catalog



## Clutch

Concentric Pneumatic Clutch Actuator (CPCA).....	5
Advantage Automated Series .....	6-8
Eaton Genuine Manual Clutch Portfolio.....	9-11
Advantage Series Clutch.....	12
EverTough Clutch.....	13
Remanufactured Clutch.....	14
Choosing a Replacement Clutch.....	15
Clutch Selectors.....	16-17
Medium-Duty Clutch Application Guide.....	18-21
Clutch Installation Kits.....	22-23

## Transmission Units

Reman Bundle Program.....	24
Nomenclature.....	25
Reman Transmission .....	26
FLEX Reman Transmission.....	27
Standard Reman Transmission.....	28-29

## Transmission Parts

All-Makes Transmission Parts.....	30
Rebuilder Bulk Packs .....	31-34
Transmission Rebuild and Overhaul Kits .....	35

## Mobile Hydraulic Power

Complete Solutions.....	36-37
PTO Quick Guide .....	38
Bezares Wet Kits .....	39
Nomenclature.....	40
Dump Pump Cross Reference.....	41

## Service & Support

IntelliConnect Remote Diagnostics .....	42
ServiceRanger .....	43
Lubricants.....	44
Extended Protection Plans.....	45

## Technical

Roadranger Academy Online Training .....	46
Warranty Registration .....	47

## Service & Support Roadranger Support

### Roadranger Support 24 Hours a Day at [www.roadranger.com](http://www.roadranger.com)

Whether you are a truck maker, dealer, distributor, owner or driver, you can find instant answers when you need them most.

[www.EatonPartsOnline.com](http://www.EatonPartsOnline.com) is your resource for Eaton aftermarket parts. Quickly and conveniently find:

- Guided product selectors
- Product information and resources
- Approved lubricants
- The Roadranger literature library
- Warranty information and Extended Protection Plans
- ServiceRanger
- All aftermarket information in one location

**You can contact the Roadranger Call Center at 800-826-4357 (HELP) from anywhere in North America. In Mexico call 001-800-826-4357.**

UNITEC SYSTEMS | Roadranger Support

EATON  
Power Quality Solutions

Products | Digital | Services | Market | Support | Company

VEHICLES  
Roadranger Support

Our comprehensive online products are backed by the support, solutions and expertise of the Roadranger network. We're here to get your vehicle back on the road faster.

Looking for product information? Click on an image below to be taken to that product category.

Manual and automated transmissions >

Clutches >

Eaton lubricants >

SR  
ServiceRanger 4 >

IntelliConnect remote diagnostics >

Brazers PTOs >

Support quick links

Warranty  
Warranty claim process and procedures.

Extended protection plans  
Protect your investment.

Electronic parts catalog  
Find transmissions and clutch part numbers.

Roadranger Academy training  
Search and enroll in computer-based and hands-on training from Eaton experts.

Locate a channel partner  
Looking to purchase parts? Contact one of our channel partners.

Eaton part price list  
Search for Eaton transmissions and clutch prices.

Getting you back on the road faster

Eaton Parts Online is your source for Eaton aftermarket components - from automotive to commercial vehicles.

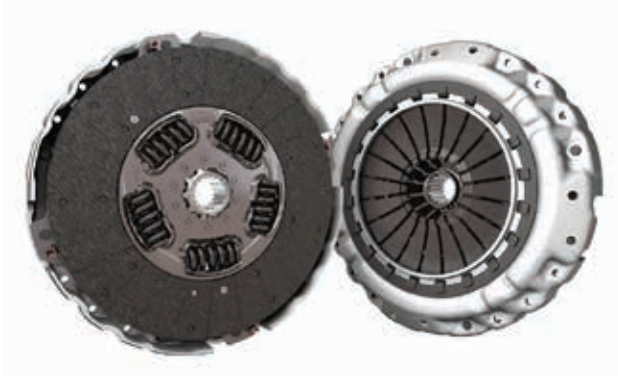
Visit Eaton Parts Online

Not finding what you're looking for? We're here to help.

Roadranger call center  
1-800-826-4357  
Available 24/7 to assist you with technical or warranty claim support.

Email us  
You can also email us.

Find your rep  
Locate your local Roadranger representative.



## Clutch Concentric Pneumatic Clutch Actuator (CPCA)

### Part of Eaton's complete aftermarket solution

The Concentric Pneumatic Clutch Actuator (CPCA) is designed to optimize the performance of the clutch and manage the power transmission from the engine to the drivetrain. The vehicle's automated manual transmission (AMT) system continuously determines the ideal release position and electronically controls clutch actuation via the CPCA.



The CPCA is part of Eaton's aftermarket solution for servicing AMTs. Our complete portfolio includes Eaton Advantage Automated clutches, CPCAs, and ServiceRanger 4 Pro Plus software for clutch system calibration.

#### Benefits

- Direct replacement for Detroit® DT12® and Volvo® I-Shift / Mack® mDRIVE™ automated manual transmissions
- Pneumatic system – no need to drain fluids or deal with hazardous waste
- Easy installation – quickly calibrate with ServiceRanger 4 Pro Plus
- Provides quick, smooth shifting
- Maximizes clutch life

Part No.	Description	O. E. Reference
K-4515CL	Clutch actuator for Detroit DT12	A 003 250 21 15, 6482 000 218
K-4516CL	Clutch actuator for Volvo I-Shift/Mack mDRIVE	20806451, 21320923, 21465235, 21580956, 22429963, 22809232, 6482 000 155



## Clutch Advantage Automated Series

Eaton is a leading worldwide supplier of medium- and heavy-duty clutches to the commercial truck industry. Eaton clutches are renowned for their reliability, durability, and performance.

Eaton Advantage Automated Series clutches feature the proven technology of a high strength stamped steel bracket, robust diaphragm design, and premium organic driven disc facings. Maintenance-free and adjustment-free: they eliminate periodic adjustments and extend clutch service life.

The Advantage Automated Series portfolio includes aftermarket clutches for the most popular transmissions currently in operation in North America, including:

- Eaton Cummins Endurant™
- Detroit® DT12®
- Volvo® I-Shift
- Mack® mDRIVE™

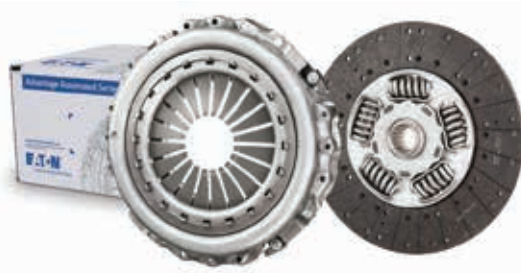
Transmission	OEM	Engine	OEM Clutch Part No.	Eaton Clutch Part No.	CPCA Part No.
DT12	DTNA	All	A02-82500-001 A02-14027-008	K-4489CL	K-4515CL
I-Shift / mDRIVE	Volvo / Mack	11L and 13L Engine	85003114 85000907 85003972 85003973 85002560	104461-1	K-4516CL

### Features

- 100% new components. No remanufactured or reused components.
- Cushioned organic facings allow for smoother engagement, while the clutch bracket features a hardened steel pivot ring to better sustain loads throughout the life of clutch.
- Larger spring fingers for better wear and superior performance.
- Built to leading industry quality and durability standards to ensure outstanding performance and maximum clutch life.
- The standard pre-damper eliminates idling rattle.
- 3 year/unlimited mile warranty



Fits DT12



Fits I-Shift / mDRIVE

Endurant is a registered trademark of Eaton Cummins Automated Transmission Technologies. Detroit, DT12 and DD are registered trademarks of Detroit Diesel Corporation. Volvo is a registered trademark of Volvo Trademark Holding AB Corporation. Mack mDRIVE is a registered trademark of Volvo Truck Corporation.



## Clutch Advantage Automated Series

### Diaphragm Spring Clutches

1

Choose  
transmission

2

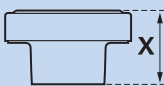
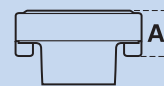
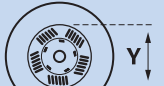

Select OEM

3

Choose engine

4

Find Part No.

Transmission	OEM	Engine	Eaton Kit Part No.	Verify fit with dimensions if needed.				
				 Release Bearing Style prior to 2023 (X)	 Release Bearing Style 2023 and later (A)	 Damper Size (Y)	 Flywheel Bore Opening (Z)	
Endurant HD	DTNA	Detroit DD13 (thru 2020)	K-4496CL *	87.7mm / 3.4in (SAE)	46.7mm / 1.83in (SAE)	254mm	290mm	
		Detroit DD13 (2021 +)				285mm		
		Detroit DD15				254mm		
		Cummins X15	K-4494CL*			260mm		
		Cummins X12						
	Cummins ISX12N (CNG)	K-4512CL*						
	NAVISTAR	Cummins X15	K-4488CL*	94.6mm / 3.7in (ISO)	53.5mm / 2.10in (ISO)	254mm	260mm	
		International A26						
		PACCAR	PACCAR MX (thru 2020)	K-4488CL*	94.6mm / 3.7in (ISO)	53.5mm / 2.10in (ISO)	254mm	260mm
		Cummins X15						
Cummins ISX12N (CNG)		K-4512CL*	87.7mm / 3.4in (SAE)	46.7mm / 1.83in (SAE)	285mm	290mm		
PACCAR MX (2021 +)	K-4514CL*	94.6mm / 3.7in (ISO)	53.5mm / 2.10in (ISO)	254mm	260mm			
VOLVO	Cummins X15	K-4494CL*	87.7mm / 3.4in (SAE)	46.7mm / 1.83in (SAE)	254mm	260mm		
	Cummins ISX12N (CNG)	K-4512CL*						
Endurant XD	DTNA	Cummins X15	K-4544CL**		46.7mm / 1.83 in (SAE)	254mm	260mm	
	NAVISTAR	Cummins X15	K-4545CL**		53.5mm / 2.10in (ISO)	254mm	260mm	
		International A26						
	PACCAR	Cummins X15	K-4545CL**		53.5mm / 2.10in (ISO)	254mm	260mm	
		PACCAR MX11 / MX13	K-4561CL**		285mm	290mm		
VOLVO	Cummins X15	K-4544CL**	46.7mm / 1.83 in (SAE)	254mm	260mm			
Endurant XD Pro	DTNA	Cummins X15	K-4559CL**		46.7mm / 1.83 in (SAE)	254mm	260mm	
		Cummins X15 (2050 lb-ft.)	K-4557CL**					
	NAVISTAR	Cummins X15	K-4560CL**		53.5mm / 2.10in (ISO)	254mm	260mm	
		International A26						
		Cummins X15 (2050 lb-ft.)						
	PACCAR	Cummins X15	K-4560CL**		53.5mm / 2.10in (ISO)	254mm	260mm	
		Cummins X15 (2050 lb-ft.)	K-4558CL**					
		PACCAR MX11 / MX13	K-4638CL**					285mm
	VOLVO	Cummins X15 (2050 lb-ft.)	K-4557CL**		46.7mm / 1.83 in (SAE)	254mm	260mm	

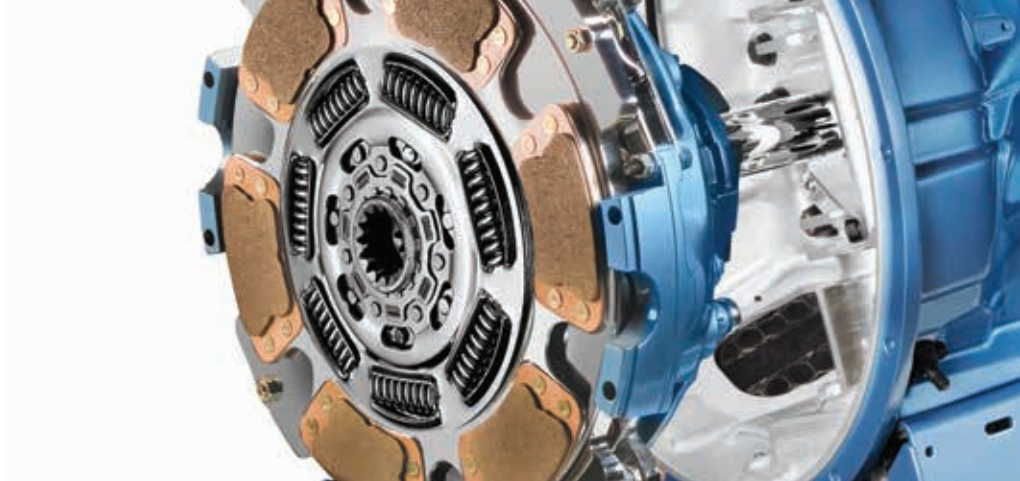
\* Endurant HD kits include the release bearing and an input shaft journal kit.  
\*\* Endurant XD kits include the release bearing.

#### Applications

- Automated manual transmissions
- Linehaul, vocational, bus and coach

#### Benefits of Organic Facings

- Customized for automated transmissions
- Advanced engagement performance
- Good wear characteristics
- Does not wear the mating friction surface



## Clutch Advantage Automated Series

### DM and ECA clutches

Eaton clutch systems for Eaton Cummins automated transmissions offer the durability and performance necessary to withstand the high actuation conditions associated with automated transmission systems. They are backed by a 12 month / unlimited mileage warranty.



The first-generation UltraShift transmission used a centrifugal clutch to “float shift” by RPM.



The Electronic Clutch Actuator (ECA) in the UltraShift PLUS—“actively shifts” based on load, grade and throttle power. Complete shifts are smooth and quick.

#### Automated Clutch Systems

The clutch systems of the UltraShift®, UltraShift® PLUS and Fuller® Advantage Series transmissions are a fundamental piece of these transmission upgrades.

DM Clutches:

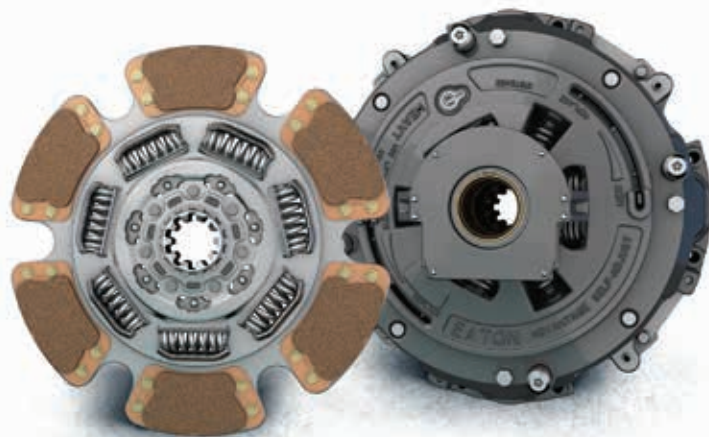
- Centrifugal design relies on engine RPM for engagement.
- Provides smooth engagement.

ECA Clutches:

- Ensure performance and efficiency with new Electric Clutch Actuation and intelligent shift selection software.
- Enables better launch and shift decisions through grade sensing, weight computation and driver throttle commands.
- Provides smooth engagement and high fidelity of vehicle control, even in the most challenging applications.
- Designed for fast actuation to enable quick, open clutch shifting.
- 50,000 mile release bearing lubrication interval for linehaul.

Clutch Torque lb-ft (must equal or exceed engine torque)	Eaton Clutch for Automated Transmission
	Heavy-Duty ECA Clutch
1850	122002-35A (w/ Low Capacity Inertia Brake)
	122002-35EX (w/o Low Capacity Inertia Brake)
2250	122003-42A (w/ Low Capacity Inertia Brake)
	Heavy-Duty DM Clutch
1750	121000-1





## Eaton Manual Clutch

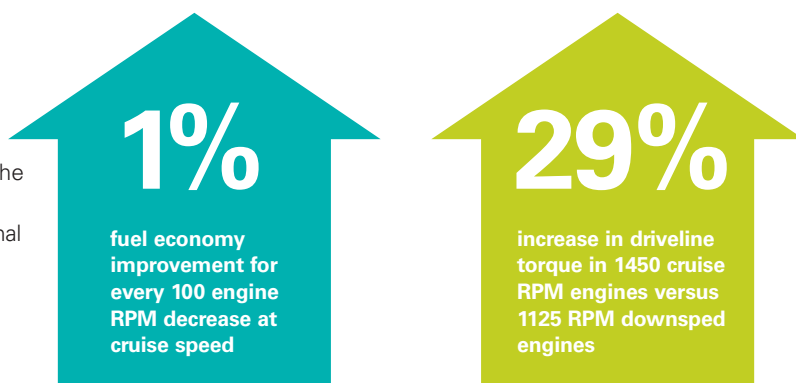
### Proven Superior Performance

We tested the Eaton Advantage Series and EverTough clutches against the top four manufacturers who sell and distribute clutches as: ACE • Alliance Truck Parts • Fleetpride OTR • IATCO • Meritor AllFit • Road Choice • Sachs

Test	Advantage Series	EverTough	OEM #1	OEM #2	OEM #3	OEM #4	What It Measures	Why It Matters To You
Torque Transfer	Pass	Pass	Pass	Pass	Fail	Fail	Clutch plate load	Does it effectively transfer engine torque to the transmission? Or does it slip and wear prematurely?
Damper Performance	Pass	Pass	Fail	Fail	Pass	Fail	Ability to absorb engine vibrations	Will it absorb harmful vibrations, even in downsped truck configurations? Or does it simply pass them through to the transmission, causing damage?
Drag	Pass	Pass	Pass	Pass	Fail	Fail	Torque with clutch disengaged	Does it release cleanly? Or will excess drag cause wear and poor shifting?
Damper Durability	Pass	Pass	Fail	Fail	Fail	Fail	Life of the damper under load	Will it last with today's difficult engine vibrations? Or will the damper springs, stampings, and rivets crack or break?
Intermediate Plate Durability	Pass	Pass	Fail	Fail	Fail	Fail	Life of intermediate plate under load	Is it tough? Or will the intermediate plate break, leading to an expensive repair bill?

#### The Lowdown on **Downspeeding**

- A common strategy for achieving **increased fuel economy**
- But downspeeding **increases drivetrain torque** and causes the clutch damper to do more work **absorbing vibrations**
- An **optimal clutch** delivers superior torque transfer, exceptional damper performance and tested durability allowing for ideal downspeeding strategies
- **Eaton's new Advantage Series Clutches are designed to manage today's downsped engines**



Source: Trucking Efficiency Confidence Report on Downspeeding, 10/2015

## Eaton Genuine Manual Clutch Portfolio Choose Genuine Performance

Whether you're maintaining a new truck or extending the service life of an older truck, Eaton's clutch portfolio ensures you get the right clutch for every stage of your truck's life cycle. Eaton clutches have navigated millions of miles, for thousands of customers, in a variety of applications. Each clutch is manufactured with Genuine Eaton parts, is thoroughly tested by Eaton, and is backed by our nationwide Roadranger support team. Choose quality. Choose genuine.

### Why a Strap Drive Intermediate Plate Connection?

The strap drive connection found on the Advantage series clutch improves the connection to the intermediate plate, eliminating lug failures and open clutch rattle. The alternative to the strap drive is a lug drive, which is the most common design in the market. However, since the lug is not fastened to the housing, it floats and vibrates when the clutch is open. This vibration of the intermediate plate lug can result in fatigue, and over time this fatigue can lead to failure. The straps in the Advantage clutch design affix the intermediate plate to the housing so it does not vibrate, eliminating lug rattle and improving longevity.



#### Best: Advantage Series

Original equipment spec

New, **industry-leading technology** designed and tested to outperform the highest OE specifications.

- Leading strap drive technology improves intermediate plate connection, for more reliable performance
- Designed to eliminate lug rattle and fatigue
- Dual seal release bearing for best-in-class 50,000 mile lubrication intervals
- Tuned, dual damper system absorbs engine vibrations and prevents idle rattle
- Soft rate springs protect driveline components
- Two wear indicators for improved serviceability
- **3 year/unlimited mile warranty\***



#### Better: EverTough® Series

Genuine Eaton: extends the life of your truck

**Industry standard**, proven technology for the aftermarket.

- Industry-standard lug drive intermediate plate connection
- Release bearing seal features a 360° design for 25,000 mile lubrication intervals
- Three lubrication ports provide easy access for maintenance
- Premium single damper system for superior driveline vibration control
- **2 year/unlimited mile warranty\***



#### Good: Reman Series

Prolong the life of an older truck

**Proven technology** for price-conscious buyers.

- Industry-standard lug drive intermediate plate connection
- Release bearing seal features a 360° design
- Two lubrication ports provide easy access for maintenance
- Genuine Eaton parts
- 1 year/unlimited mile warranty


\*USA and Canada only. Please refer to the Roadranger Warranty Guide TCWY0900 for the latest warranty time and miles offering.

Clutch Cross Reference Chart


Product	Part	ACE	Illinois Auto	Meritor	Haldex	Mid-America
Advantage® Self-Adjust	309701-20	—	—	—	—	—
	309701-23	—	—	—	—	—
	309701-24	—	—	—	—	—
	309701-25	—	—	—	—	—
	309701-30	—	—	—	—	—
	309701-34	—	—	—	—	—
	309701-35	—	—	—	—	—
	309701-51	—	—	—	—	—
	309701-68	—	—	—	—	—
	309701-82	—	—	—	—	—
	309701-91	—	—	—	—	—
	309701-98	—	—	—	—	—
309708-32	—	—	—	—	—	
309708-42	—	—	—	—	—	
Easy-Pedal Advantage® Manual-Adjust	308925-20	—	—	—	—	—
	308925-23	—	—	—	—	—
	308925-24	—	—	—	—	—
	308925-25	—	—	—	—	—
	308925-30	—	—	—	—	—
	308925-34	—	—	—	—	—
	308925-35	—	—	—	—	—
	308925-51	—	—	—	—	—
	308925-68	—	—	—	—	—
	308925-82	—	—	—	—	—
	308925-91	—	—	—	—	—
	308925-98	—	—	—	—	—
308937-32	—	—	—	—	—	
308937-42	—	—	—	—	—	
EverTough® Self-Adjust	109701-20AM	—	NMU701-207-6	—	N10970120TM	SO-155698-VHD
	109701-25AM	EZ209925-82H	NMU701-147-6	MAF209925-25	N10970125TM	SO-155698-VHD
	109701-51AM	EZ209935-51	NMU701-054-M	MAF209935-51	—	SO-155698-SB9
	109701-82AM	EZ209925-82B	NMU701-044-4	MAF209925-82	N10970182	—
	109701-92AM	—	—	MAF209935-51H	—	SO-155698-12SB9
EverTough® Manual Adjust	108391-74AM	EZ208391-74B	NMU898-064-4	MAF-108931-74	HN10893174	MU-155698-SB-10
	108391-81AM	EZ208391-81B	NMU898-094-4	MAF-108391-81	N108391-81	MU-155697-DSCB
	108925-20AM	—	NMU898-207-6	MAF-108925-25	—	MU-155698-VHD
	108925-25AM	EZ208925-82H	NMU898-147-6	MAF-108925-25	HN10892552HT	MU-155698-VHD
	108925-82AM	EZ208925-82B	NMU898-044-4	MAF-108925-82	HN10892582	MU-155698-SB-7
	108935-51AM	EZ208935-51H	NMU898-054-M	MAF-108935-51	HN10893551	MU-155698-SB9
	108935-61AM	—	—	MAF-108935-91	—	MU-155698-SB9
108935-91AM	—	—	MAF-108935-51	HN10893551	MU-155698-12SB9	
Heavy-Duty DM Clutch	121000-1	—	—	—	C121-0001	MU-121000
Medium-Duty DM Clutch	121500-EX	—	—	—	—	—
Heavy-Duty ECA Clutch and LCIB	122002-35A	—	—	—	—	MU-122002
Heavy-Duty ECA Clutch and LCIB	122003-42A	—	—	—	—	MU-122002

Advantage Series is the **#1** Commercial Vehicle Clutch in North America

It's the only clutch sold in new trucks, and it's the most popular in Aftermarket



**Improved Downspeeding Capabilities**  
Superior torque transfer, exceptional damper performance, and tested durability allow for maximum fuel economy savings



Proven Eaton durability combined with these new or updated features:

- Strap drive (new)
- Spring separator (new)
- Release bearing design

produce the **Longest life ever**


**50k mile** release bearing lube interval: Industry leading interval helps to reduce truck maintenance

**New 1850 lbs-ft**  
4-paddle clutch for over the road applications


**1st** in industry Strap Drive  
Intermediate plate to improve life and reduce vibration and noise

**New 1850 lbs-ft 9-spring**  
Upgraded design for Volvo and Mack engines.


**New 2 Wear Tab Indicators**  
Improved maintenance visibility for easy viewing of remaining clutch life



**Patent Pending Spring Separator**  
Ensures optimal clutch release, quick disengagement, and ultra-low drag for easier shifting



**Protect your Drive Line**  
Softer rate damper absorbs engine vibrations to protect drivetrain components and enables engine downspeeding at torque ratings up to 1850 lbs-ft



## Eaton Manual Clutch Advantage Series

### Advantage Self-Adjust® and Easy Pedal Advantage®

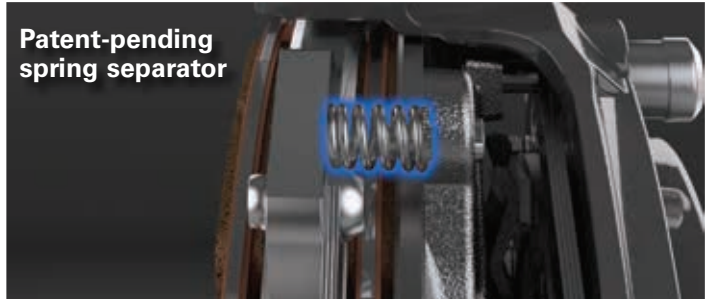
Building on over a hundred years of driveline design experience and millions of miles of proven durability, Advantage clutches are the smoothest and most durable clutches Eaton has developed. These clutches are the best on the market, with a combination of features that can't be found anywhere else in the aftermarket.

#### Industry-leading strap drive technology



Eliminates lug rattle and fatigue for **quieter operation and extended clutch life**

#### Patent-pending spring separator



Quick clutch disengagement for **fast shifting** and ultra-low drag for **clean release**

#### Easy-to-see wear indicators



Two locations for improved visibility for **better serviceability**

#### Soft-rate damper



Absorbs engine vibrations **to protect drivetrain components** and enables engine **downspeeding** at torque ratings up to 1850 lb.ft.

- 50,000 mile release bearing lube interval
- Long life OEM-grade clutch facing material
- Two wear tab indicators
- Industry leading durability and quality
- 1850 lbs-ft clutch for over-the-road applications

- **Advantage Self-Adjust warranty:**  
3-year/ 350,000 miles- production  
3-year/unlimited miles- aftermarket
- **Easy Pedal Advantage (manual adjust) warranty:**  
2-year/ 200,000 miles- production  
3-year/unlimited miles- aftermarket

*Eaton recommends always using a self-adjusting clutch on systems with hydraulic linkage to reduce the risk of drivetrain damage*





## Eaton Manual Clutch EverTough® Series

### EverTough Clutch: Now even tougher

An EverTough Clutch by Eaton is 100% new and uses Genuine Eaton components, with a design based on our millions of miles of clutch experience. And every clutch undergoes Eaton's rigorous standard of testing – so you can be confident of the quality. Backed by Roadranger support, you'll see high performance on the job and a difference on the bottom line. That's something no other brand can match.

Eaton is a leading worldwide supplier of medium- and heavy-duty clutches to the commercial truck industry. Eaton clutches are known for their reliability, durability, and performance. Manufactured and marketed globally, Eaton clutches are the number one commercial vehicle clutch in North America, serving the medium- and heavy-duty markets.

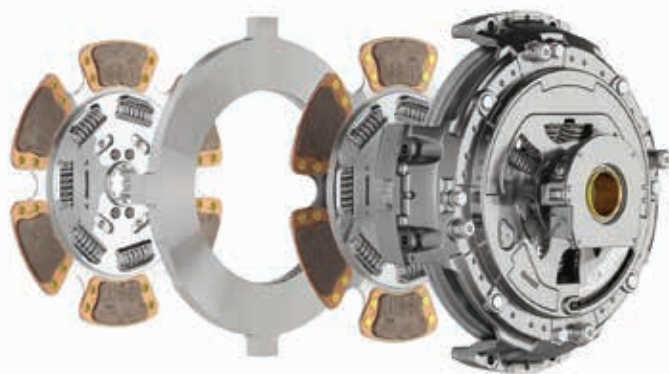
#### All EverTough clutches now feature:

Three grease zerks

- Easier access for maintenance

Wider thrust pads

- Provides increased contact area: this allows the clutch to be used with wider fingers of hydraulic release systems
- Helps reduce failures due to improper adjustment



All EverTough clutches are engineered specifically for the aftermarket by optimizing key areas of the clutch to achieve the price and performance balance:

- Ceramic facings
- Available in 7, 8, 9, and 10-spring designs
- Torque Ratings from 1400 up to 2050 lb.ft.
- Three zerks on release bearing
- 25,000-mile lube interval
- Premium damper from Eaton reduces the drivetrain torsional vibrations and meets the long life expectations of vehicle OEMs.
- A full-round contamination baffle protects against debris.
- Stainless steel cam spring delivers increased durability and long life.
- No additional technician training is required. Similar installation process between manual and self-adjust models.
- All EverTough clutches come with a two-year, unlimited mileage warranty and are backed by Roadranger® support.

#### EverTough Self-Adjust:

- Eaton's proprietary self-adjusting technology keeps the clutch in constant adjustment and maintains bearing release position.
- Features an easy-to-see wear indicator.
- Self-adjust mechanism eliminates the need for periodic clutch adjustment (13 on average over the life of the clutch).

#### EverTough Manual-Adjust:

- EverTough Manual Adjust clutches feature proven Kwik-Adjust technology to make clutch adjustments faster and simpler.
- Eaton PowerThread adjusting ring eliminates seizing and makes adjustments easier
- Adjusting requires approximately half the movement of standard adjusting rings.





## Eaton Manual Clutch Reman Series

### Reman clutches now available in higher torque models

Now available in 1850 and 2050 lb-ft ratings, Eaton remanufactured clutches are the right choice for price conscious buyers. Remanufactured to exacting standards using 100 percent genuine Eaton components, these clutches are designed for long life and trouble-free operation.

#### Eaton Reman Clutches

- Now available in 1850 and 2050 lb-ft.
- Remanufactured with Genuine Eaton parts
- 50 percent less pedal effort
- National warranty

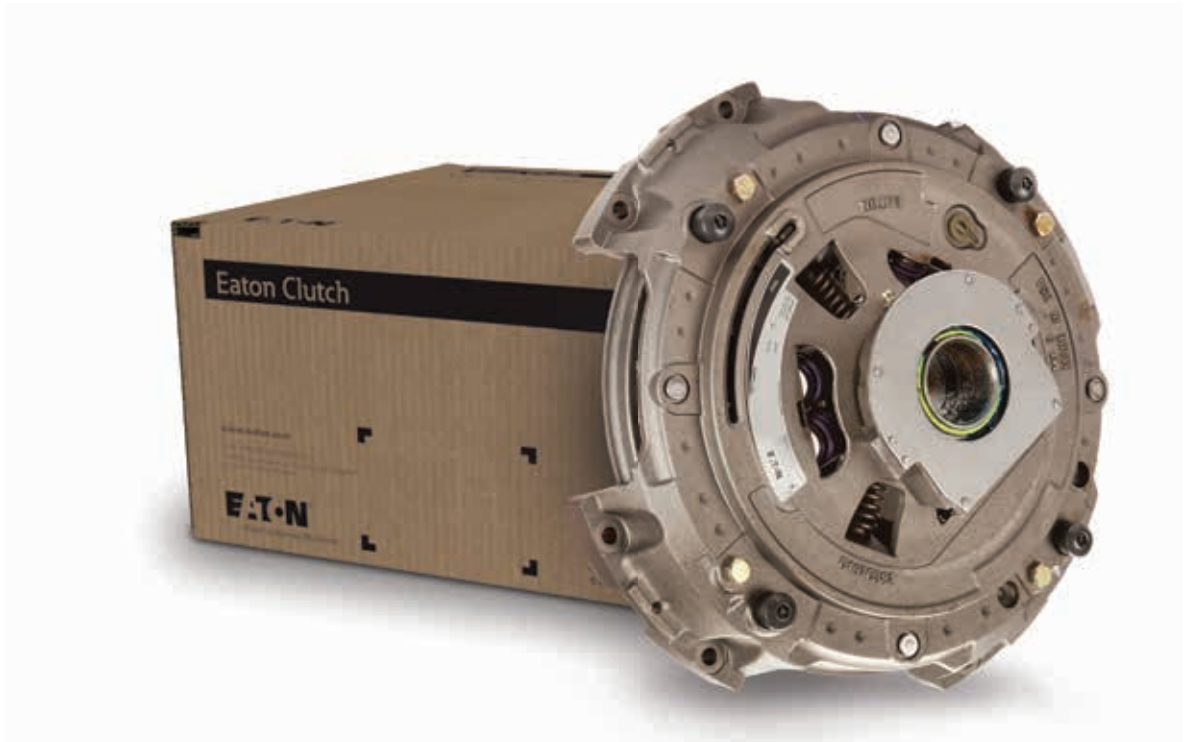
#### Solo Reman benefits

- Keeps the clutch in constant adjustment by maintaining bearing release position
- Features an easy-to-see wear indicator
- A full-round contamination baffle protects against debris
- Dual zerck release bearing

#### Easy Pedal Reman benefits

- Kwik-Adjust provides quick access and adjustment
- Positive Pin separator

**Now available in 1850 and 2050 ft-lbs.**



# Questions to ask when choosing a replacement clutch

## Q: What are torsional vibrations?

**A: Torsional vibrations occur because of the firing of the engine cylinders and the sudden high pressure forcing the piston down.** All engines produce torsional vibrations, and all drivelines have natural frequencies at which they will vibrate. The problem occurs when the vibration the engine produces at the normal cruise RPM consists of the same frequency as the driveline's natural vibration frequency so the driveline will develop vibration at normal cruise. The clutch damper is the key vibration tuning element for the whole drivetrain. It shifts the frequency produced by the engine to below the natural frequency of the drivetrain.

## Q: What variables are considered when tuning the clutch?

**A: The engine's RPM as well as the torque rating need to be considered when tuning the clutch to the drivetrain.** For example, a damper that will work with 1,850 lbs.-ft. of torque would not be effective with a lower torque rating because the springs would not compress enough. The engine rated at 1,650 lbs.-ft. of torque would need softer springs. The length of the springs must also be tailored to the operating RPM; today's downsped engines often need longer springs. The design process is very much like tuning a musical instrument.

## Q: What's wrong with a one-size fits all clutch option?

**A: Choosing the right replacement clutch is critical** because as RPMs have dropped in today's engines, the torque spikes that result are much more likely to cause torsional vibration in the drivetrain.

Some aftermarket clutches are ineffective in absorbing these torsional vibrations. The result will be resonance that can show up as damage in many different places, from gears or synchronizer parts in the transmission, to U-joints, even the clutch itself, or the flywheel or engine thrust bearings.

There are aftermarket clutch brands that sell a standard design claiming to fit a variety of torque ratings, operating ranges and cruise RPMs. They often sell their line of replacement clutches to the fleet or distributor by claiming the customer can save inventory dollars because they won't need to stock as many replacement clutches.

## Q: How do Eaton's aftermarket clutches differ from other manufacturers' designs?

**A: It's combination of things really.** Eaton clutches are available in a variety of configurations: each is uniquely tuned to the engine RPM to eliminate vibrations. Proprietary facings provide longer life, smoother engagement and less flywheel wear. With Eaton's broad portfolio of clutches, you can rest assured that you're getting excellent value for your money. And every Eaton clutch is backed by the support, solutions and expertise of the Roadranger network to get you back on the road faster.

**Hydraulic linkage = self-adjusting clutch**

**Mechanical linkage = manual adjusting clutch**

**Not sure? Use a self-adjusting clutch.**

# Eaton EverTough Clutch + Eaton Clutch Installation Kit = Additional 1-Year Clutch Warranty

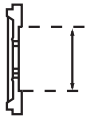
See page 22 for details.

## Eaton Manual Clutch Heavy-Duty Clutch Selector

**1** Self-adjusting clutches are recommended for trucks with hydraulic linkage to reduce the risk of drivetrain damage.

					Best		Better		Good			
					Original Equipment Specifications (Pre-damper suffix in parentheses)		Aftermarket Specifications		Remanufactured			
Spline Dia. – No. of Splines	Flywheel Bore Opening	No. of Springs / Damper Type	Clutch Torque lb-ft (must equal or exceed engine torque)	Facing	Advantage* Self-Adjust	Easy Pedal Advantage* Manual Adjust	EverTough* Self-Adjust	EverTough Manual Adjust	Solo* Self-Adjust	Easy Pedal* Manual Adjust		
15.5 inch	2" – 10	8	1400	4				108391-81AM		108391-81MO		
				Organic						108391-82MO		
	10"	9 (Mack and Volvo 11L & 13L)	7	1650	4	309701-51	308925-51	109701-51AM	108935-51AM	109700-74MO	108391-74MO	
				1760	4				108935-61AM	109700-61MO	108935-61MO	
				1850	4	309701-68	308925-68					
				1650	6	309701-91	308925-91		108935-91AM		108935-91MO	
				1760	6			109701-92AM				
				1850	6	309701-98	308925-98					
				1700	4	309701-82	308925-82	109701-82AM	108925-82AM	109700-82MO	108935-82MO	
				7 / VCT Plus*	1750	4	309701-24 (-34)	308925-24 (-34)				
					1860	4	309701-23	308925-23				
					1860	6	309701-20 (-30)	308925-20 (-30)				
				7	1860	6			109701-20AM	108925-20AM	109700-20MO	108935-20MO
					2050	6			109701-25AM	108925-25AM	109700-25MO	108935-25MO
				7 / VCT Plus	2050	6	309701-25 (-35)	308925-25 (-35)				
2" – 14	10"	7 / VCT Plus	2250	6	309708-32 (-42)	308937-32 (-42)						
14 inch	1.75" – 10	7	8	1400	4							
				950	6							
	2" – 10	7	8	1000	3	N/A	108063-59	N/A		N/A		
				1150	Organic		108334-6					
				1400	4		108034-61B				108034-61MO	
							108034-82B				108034-82MO	
				108050-59B		108050-59AM		108050-59MO				

- 2** Choose size of your cast two-plate heavy-duty clutch.
- 3** Determine flywheel bore opening and select number of springs.
- 4** Choose clutch torque. Rating in chart must be equal to or exceed engine torque rating.
- 5** Narrow clutch choice based on options. All part numbers in row meet your specs.
- 6** Choose from new or remanufactured.



**Advantage Series**

- Strap drive intermediate plate
- Spring separator system
- Original equipment specification
- 3 year/unlimited mileage warranty
- 50,000 mile lube interval

**EverTough**

- Aftermarket specification
- 2 year/unlimited mileage warranty
- 25,000 mile lube interval

**Remanufactured**

- Economy
- 1 year/unlimited mileage warranty
- Longer service life compared to rebuilt
- Dual zerk

Please refer to the Roadranger Warranty Guide TCWY0900 for the latest warranty time and miles offering.

**Advantage Series 7-spring VCT Plus**  
Eaton's premium damper, high torque capability with best-in-class vibration control

**Advantage Series Pre-Dampers**  
effective at quieting neutral gear idle rattle (Pre-damper suffix in parentheses in the table above)

Estimated shipping weights: 15.5" = 150 lbs, 14" = 110 lbs



# Eaton Manual Clutch Medium-Duty Clutch Selector

Standard Stroke .500" to .560" Bearing Travel	Splines Dia. - No. of Splines	No. of Discs	Damper Type	Clutch Torque lb-ft (must equal or exceed engine torque)	Facing	New		Remanufactured	
						Solo*	Manual Adjustment	Solo	Manual Adjustment
	1.75" - 10	1	8 / Free Travel	620	3SB	109400-5	107683-5	109400-5MO	107683-5MO
			7 + 1	800	Organic				107237-16MO
			7 + 1	860	3 Trap	109500-10	107237-10	109500-10MO	107237-10MO
	2.0" - 10	2**	7 + 1	860	3SB	109500-22*	107237-22*	109500-22MO*	
			7 + 1	860	3SB	109504-12	107342-12		
			7 + 1	1000	4SB	109504-24	107342-24	109504-24MO	
			7 + 1	1000	6SB	109504-3	107342-5		
			8	1050	4SB	109504-20	107342-20		
			8	1150	4SB	109504-26	107342-26		
Short Stroke .410" to .470" Bearing Travel	Splines Dia. - No. of Splines	No. of Discs	Damper Type	Clutch Torque lb-ft (must equal or exceed engine torque)	Facing	Solo		Solo	
	1.75" - 10	1	8 / Free Travel	620	3SB	109404-5	N/A	109404-5MO	N/A
		2**	7 + 1	860	3 Trap	109503-10		109503-10MO	
Diaphragm Spring	Splines Dia. - No. of Splines	No. of Discs	Damper Type	Clutch Torque lb-ft (must equal or exceed engine torque)	Facing	Adjustment Free			
	1.75" - 10	1	8	660	Organic	104104-2	N/A	N/A	N/A
		1	8	660	3SB	104100-2			
		2**	7+1	860	3SB	104200-1			

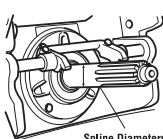
Please refer to the Roadranger Warranty Guide TCWY0900 for the latest warranty time and miles offering.

**\* Severe Service:**  
A combination of higher plate load, super buttons, or an additional number of facings. United States and Canada only.

**\*\*Two Plate Clutches:** Fits in place of single plate (pull type), however, this increases inertia to the transmission and may affect shiftability and longevity.

**1** Choose linkage stroke and clutch type.

**2** Choose spline diameter size and number of discs.




Spline Diameters: 1.75" or 2.00"

**3** Choose damper type.


**7+1 Damper** - designed to quiet idle rattle

**4** Choose clutch torque. Rating in chart must be equal to or exceed engine torque rating.


**5** Narrow clutch choice based on options. All part numbers in row meet your specs.




3 Super Button (3 SB)



4 Super Button (4 SB)



3 Trap



6 Super Button (6SB)

**6** Choose from new or remanufactured.

**New**

- Longer service life
- Less downtime

**Remanufactured**

- Economy
- Longer service life compared to rebuilt

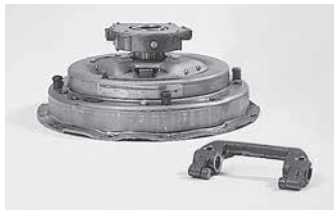
Clutch Torque lb-ft (must equal or exceed engine torque)	Eaton Medium-Duty DM Clutch for Automated Transmission Kit Part No.
700	121500-EX

Solo® Adjustment-Free  
Single and Two Plate Clutches



## Eaton Manual Clutch Medium-Duty Clutch Application Guide

Reliability and long life are certainly two reasons why Fuller clutches are the number one selling clutches in North America. Eaton offers a complete line of push and pull type medium-duty clutches with application coverage from 100 to 330 horsepower engines and up to 1150 ft. lb. of torque. This bulletin provides application and adjustment guidelines to assure you the reliability and long life you've come to expect from Fuller Clutches.



### Solo® Maintenance-Free (Pull Type)

Fuller Solo Maintenance-Free Clutches are lubed for life to eliminate periodic lubrication and extend clutch service life.

The Solo Maintenance-Free Clutch contains all the benefits of the Standard Solo Adjustment-Free Clutch and its product enhancements maximize service life.

- Roller yoke provides smoother operation and reduced bushing and bearing wear.
- Sealed premium lubed-for-life release bearing eliminates lubrication requirements.
- Improved steel-backed bushings resist wear for increased service life.

### Solo® Adjustment-Free (Pull Type)

Fuller Solo Adjustment-Free Clutches have been designed to work with either standard or short stroke linkages.

**Standard Stroke** is normally used with mechanical linkages capable of pulling the release bearing .560" min. (after the yoke is touching the bearing). Additional travel is required for clutch brake squeeze on non-synchronized transmissions.

**Short Stroke** is used with linkages that have limited stroke (usually hydraulic or cable). Some hydraulic linkages run with the yoke touching the bearing (no free play), and the system must pull the bearing 0.500" minimum. With cable linkage the bearing must be pulled .470" min. after the free play is removed. Additional travel is required for clutch brake squeeze on non-synchronized transmissions.



### Adjustment: Pull Type – SAS only (Synchronized Transmissions)

1. Set the distance between the release bearing and clutch cover at 3/4" (two plate) or 1 3/4" (single plate) (the engine side, not the transmission side).

Use the internal adjustment to change the gap. Push pedal down and push in and turn the Kwik-Adjust® or remove lock strap to move adjusting ring. Adjuster type depends on clutch model.

2. Adjust the truck linkage to set the distance from the tips of the yoke to the release bearing wear pads at 1/8". The result of setting the 1/8" will vary between truck models and could be from 1" to 3" of "in cab" free pedal.
3. Measure the amount of bearing movement during the pedal stroke—it must be a minimum of 1/2" and not greater than 9/16" to achieve proper release travel.



### Adjustment: Push Type – AR only

1. After the truck linkage is hooked up, adjust the linkage to get 1/8" clearance between the bearing and levers. This is the proper linkage setting. Then measure the free pedal in the cab of the truck—this will be the normal "in cab" free pedal for this truck. Adjust the linkage when this dimension reaches one half of normal.
2. Push the pedal to the end of the stroke in the cab. The release bearing should push the levers a minimum of 1/2" to achieve proper release stroke. If less than 1/2" is stroked, the clutch may not release—check truck linkage system if additional stroke is required.

### Release bearing / Sleeve length dimensions

**310mm** clutches have a mounted dimension of 2.062" from the flywheel surface to the lever tips.

**350mm** clutches have a mounted dimension of 2.438" from the flywheel surface to the lever tips. If the bearing is too far away after the truck linkage is installed and adjusted, investigate and determine if a longer bearing and sleeve assembly is required.

With both the 310mm and 350mm, the release levers will move toward the transmission as the clutch wears by a maximum of 0.75".

SAS = Stamped Angle Spring (Adjustable)	1401 = 14" 1-plate model
AR = Angle Ring	1402 = 14" 2-plate model

## International (Formerly Navistar)

Engine/Truck Model	Spline	Eaton PN	Description	Release Bearing	Max. Torque (lbs.ft.)
(R200, 372, 401, 450, 501)	1-1/4"-10	107605-1	AR 310MM Push Type		400
(BG 241) (C160, 180, 190, 301, 354) (MV-401, 446) (V-401, 406, 461, 478, 549) (BD100, 308)	1-1/2"-10	107606-1	AR 310MM Push Type		400
V8 – 266, 304, 345, 392	1-1/4"-10	107605-1	AR 310MM Push Type	3-3/8" (NAV)180155R22 I-2005-C	400 400
Diesels – 6.9, 354, 462, 550	1-1/4"-10	107605-1	AR 310MM Push Type		400
	1-1/2"-10	107606-1	AR 310MM Push Type		400
7.3 Diesel (Heavy-Duty)	1-1/2"-10	107606-1	AR 310MM Push Type	3-7/8" NAV-487731C91	400
	1-1/2"-10	107621-1	AR 350MM Push Type	1-1/2" NAV-572107C91	500
9 Litre, DT360, T444	1-1/2"-10	107621-1	AR 350MM Push Type	1-1/2" NAV-572107C91	500
DT360, DT408, DT466	1-3/4"-10	109400-5	Solo 1401 Pull Type, "Adjustment-Free", Standard Stroke		620*
VT 365	1-3/4"-10	109410-5Y	Solo 1401 Pull Type, "Maintenance-Free", Standard Stroke		6
DT408, DT466, DT530	1-3/4"-10	107237-10	SAS 1402 Pull Type		860
	1-3/4"-10	109500-10	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke		860
	1-3/4"-10	109507-10Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke		860
	2"-10	109504-20	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke		1050
	2"-10	109508-11Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke		1150

Do Not Use 107683-5, 109400-5, 109410-5Y, 107237-8, 109500-8 or 109507-8Y in gasoline engines!

## Chevrolet/GMC

Engine/Truck Model	Spline	Eaton PN	Description	Release Bearing	Max. Torque (lbs.ft.)
V8-350, 366	1-1/2"-10	107616-4	AR 310MM Push Type	2-13/16" (FM)CA02135-C	400
3208 CAT / 3116 CAT	1-3/4"-10	109400-5	Solo 1401 Pull Type, "Adjustment-Free", Standard Stroke		620*
CAT 3126, CAT C7		109410-5Y	Solo 1401 Pull Type, "Maintenance-Free", Standard Stroke		620
	1-3/4"-10	107237-10	SAS 1402 Pull Type		860
		109500-10	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke		860
		109507-10Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke		860

♦Contact GM Tech Service/Dealer for Linkage Replacement Kit for Standard Stroke Solo.

## Ford (F, B, & L Series)<sup>†</sup>

Engine/Truck Model	Spline	Eaton PN	Description	Release Bearing	Max. Torque (lbs.ft.)
GAS V8-330, 361, 370, 391, 429	1-3/8"-10	107943-3	AR 330MM Push Type	E1HZ7548D/(FM)F-D1757-C	450
	1-1/2"-10	107943-1	AR 330MM Push Type	E1HZ7548D/(FM)F-D1757-C	450
V8-522(1160 CAT)	1-1/2"-10	107606-1	AR 310MM Push Type 4-3/16"	E1HZ7548A/(FM)FA-02256-C	400
6.6 Ford Diesel	1-1/2"-10	107688-7	SAS 1401 Pull Type	(FS4005 Trans.)	560
8.2 Detroit Diesel, 3208NAT	1-1/2"-10	107621-1	AR 350MM Push Type 3-3/32"	E2HS7548AA/(FM)FE-02256-CA	500
CAT 3208, 6.6 Ford Diesel, Cummins 1060 (5.9L)	1-3/4"-10	109400-5	Solo 1401 Pull Type, "Adjustment-Free", Standard Stroke		620
		109410-5Y	Solo 1401 Pull Type, "Maintenance-Free", Standard Stroke		620
Cummins 1460 (8.3L),	1-3/4"-10	107237-10	SAS 1402 Pull Type		860
7.8 Ford Diesel	1-3/4"-10	109500-10	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke		860
		109507-10Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke		860

<sup>†</sup> Ford models F-650 and F-750 (began in 1999) have hydraulic clutch linkages, but use Solo Standard-Stroke.

## Ford (Cargo) Synchronized Transmissions<sup>†</sup>

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
6.6 Ford Diesel, 1060(5.9) Cummins	1-3/4"-10	109404-5	Solo 1401 Pull Type, "Adjustment-Free", Short Stroke	620*
7.8 Ford Diesel, 1460(8.3) Cummins Diesel	1-3/4"-10	109503-10	Solo 1402 Pull Type, "Adjustment-Free", Short Stroke	860

NOTE: 1986 Engines do not have dual bolt patterns on the flywheel. Order flywheel #E6HZ6375B (for 6 bolt crankshaft) with EATON FULLER pattern.

<sup>†</sup> Cargo manufactured by Sterling Trucks after 1997.

## Ford (Cargo) Non-Synchronized Transmissions

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
7.8 Ford Diesel,	1-3/4"	109500-10	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	860
1460(8.3) Cummins	1-3/4"	109507-22Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke	860

\* Previously rated to 680 lb.ft. on trucks built before January 1998.

## Eaton Manual Clutch Medium-Duty Clutch Application Guide

### Freightliner

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
Cummins, C-8.3, B-5.9	1-1/2"-10	107342-12	AR 350MM Push Type (107621-1 w/ bearing 187140)	500
	2"-10	107342-12	SAS 1402 Pull Type, 2 Plate	860
Mechanical Linkage Only (Trucks manufactured after 5/16/94)	1-3/4"-10	107683-5	SAS 1401 Pull Type	620*
	1-3/4"-10	109400-5	Solo 1401 Pull Type, "Adjustment-Free", Standard Stroke	620*
	1-3/4"-10	109410-5Y	Solo 1401 Pull Type, "Maintenance-Free", Standard Stroke	620
	1-3/4"-10	107237-10	SAS 1402 Pull Type	860
	1-3/4"-10	109500-10	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	860
	1-3/4"-10	109504-12	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke	860
	2"-10	109504-12	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	860
	2"-10	109508-11Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke	1150
Hydraulic Linkage Only (Trucks manufactured before 5/16/94)	1-3/4"-10	109404-5	Solo 1401 Pull Type, "Adjustment-Free", Short Stroke	620*
	1-3/4"-10	109503-10	Solo 1402 Pull Type, "Adjustment-Free", Short Stroke	860
Business Class M2 (with synchronized trans. & hydraulic linkage)	1-3/4"-10	104100-1§	365mm 1-plate Pull Type	520§
	1-3/4"-10	104100-2	365mm 1-plate Pull Type	660
	1-3/4"-10	104200-1	365mm 2-plate Pull Type	860
Business Class M2 (with non-synchronized trans. & hydraulic linkage)	1-3/4"-10	109500-22	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	860
	1-3/4"-10	109507-22Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke	860
	2"-10	109504-20	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	1050
	2"-10	109508-11Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke	1150

§ For MBE 904 engine.

### Kenworth/Peterbilt

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
Mechanical Linkage Only	1-3/4"-10	107237-10	SAS 1402 Pull Type	860
	2"-10	109504-12	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	860
	2"-10	109504-20	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	1050
	1-3/4"-10	109400-5	Solo 1401 Pull Type, "Adjustment-Free", Standard Stroke	620*
	1-3/4"-10	109410-5 Y	Solo 1401 Pull Type, "Maintenance-Free", Standard Stroke	620
	1-3/4"-10	109500-10	Solo 1402 Pull Type, "Adjustment-Free", Standard Stroke	860
	1-3/4"-10	109507-10Y	Solo 1402 Pull Type, "Maintenance-Free", Standard Stroke	860
Hydraulic Linkage Only	1-3/4"-10	109404-5	Solo 1401 Pull Type, "Adjustment-Free", Short Stroke	620*
	1-3/4"-10	109503-10	Solo 1402 Pull Type, "Adjustment-Free", Short Stroke	860

### Isuzu

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
NPR	1-1/2"-10	107606-7	AR 310MM Push Type	300
FSR, FTR, FVR, FPR	1-1/2"-10	107350-2	AR 350MM Push Type	500
FVR, EVR	1-3/4"-10	107350-7	AR 350MM Push Type	500
	1-3/4"-10	107401-1	SAS 1401 Pull Type (uses 2 plate cover w/1 disc.)	560

\* Previously rated to 680 lb.ft. on trucks built before January 1998.

# Eaton Manual Clutch Medium-Duty Clutch Application Guide

## Hino

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
FA, FB	1-1/2"-10	107310-1	AR 310MM Push Type	400
FE, FF, SF, FD, GC	1-3/4"-10	107350-1	AR 350MM Push Type	500
145, 165, 185	1-3/4"-10	107350-1	AR 350MM Push Type	500
238, 268, 338	1-3/4"-10	107683-21	SAS 1401 Pull Type	585

## Mack (RVI)

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
MS200, MS 250	1-1/2"-10	107350-4	AR 350MM Push Type (Includes Bearing) <i>Spicer Transmission Only</i>	500

## Mitsubishi

Engine/Truck Model	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
FK617, FM617, FM657	1-1/2"-10	107351-1	AR 350MM Push Type (14.76 Bolt Circle)	500

1997 & 1998 models only

## Volvo "FE"

(Hydraulic Linkages)	Spline	Eaton PN	Description	Max. Torque (lbs.ft.)
	1-3/4"10	109404-5	Solo 1401 Pull Type, "Adjustment-Free", Short Stroke	620*
	1-3/4"10	109503-10	Solo 1402 Pull Type, "Adjustment-Free", Short Stroke	860

\* Previously rated to 680 lb.ft. on trucks built before January 1998.

	Part Number	Description
<b>Clutch Installation Kits</b>	K-2468CL	Clutch Installation Kit
	K-3600CL	Clutch Installation Kit
<b>Lube Tubes</b>	CLT006P	Lube Tube Assembly, Packaged
	CLT007P	Lube Tube Assembly, Packaged
	CLT008P	Lube Tube Assembly, Packaged
	CLT008P-30	Lube Tube Assembly, Packaged (30)
	CLT009P	Lube Tube Assembly, Packaged
	CLT012P	Lube Tube Assembly, Packaged
	K-4050	Kit, Hydraulic Release Clutch Lube Tube
<b>Clutch Brakes</b>	127200	Clutch Brake
	127200-20	Clutch Brake (20)
	127740	Torque Limiting Clutch Brake 1.750-10 Spline HD
	127760	Torque Limiting Clutch Brake 2.000-10 Spline HD
	127760-50	Torque Limiting Clutch Brake (50)
<b>Additional Components</b>	125398	Retainer Sub-Assembly 2.000
	125437	Release Bearing And Housing Assembly
	125489	Adjusting Pinion
	125598	Master Cylinder And Adapter Assembly
	274C6	Angle Spring Drive Pin
	97-509-10-3X	HD Roller Yoke Assembly
<b>Additional Medium-Duty Clutches</b>	107237-22	Stamped Angle Spring Installation 1.75
	107238-22	Stamped Angle Spring Installation 1.75
	107621-7	Angle Ring Installation
	107684-5	Stamped Angle Spring Installation 1.75

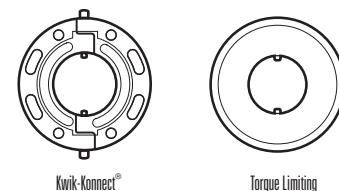


**WARNING:** The major cause of clutch failure is excessive heat. Excessive heat generated between the flywheel, driven discs, intermediate plate and pressure plate can cause the metal to flow and the friction material to be destroyed. If this occurs the clutch can burst which can cause property damage, serious bodily injury or death. In order to prevent clutch failure resulting from excessive heat:

- Recommended vehicle loads should not be exceeded.
- The clutch should only be used for the recommended applications.
- Drivers should be properly trained in the starting, shifting and operation of the vehicle.
- Drivers should report erratic clutch operation as soon as possible to permit maintenance personnel to inspect, adjust or lubricate as required.
- Mechanics must be familiar with proper clutch adjustment, linkage adjustment, lubrication and other maintenance and troubleshooting procedures outlined in the Failure Analysis Guide and the Eaton Fuller Clutch Service Manual.

New	REMAN
REMAN Interchange – 107683-5 = 107213-5MO	
107237-8 = 107137-8MO	
(Remaining Numbers – No REMAN Available)	

## Heavy-Duty Clutch Brakes



SPLINE	DESCRIPTION	PART#
1.75" - 10	Torque Limiting	127740
2" - 10	Kwik-Konnect	127200
	Torque Limiting	127760



## Clutch Clutch Installation Kits

Extend replacement clutch life and receive an additional year of clutch warranty coverage.\*

Receive an additional year of warranty coverage on an EverTough® clutch with the use of a Genuine Eaton Clutch Installation Kit. Replace all the right parts with genuine parts at the same time.

When the transmission is pulled to replace the clutch, replacing the clutch-related wear components at the same time can save you the cost of having to pull the transmission again.

An Eaton Clutch Installation Kit has all the parts and instructions you need for longer clutch life, smoother shifts and less wear on your transmission.

### Features

- Input shaft design engineered to eliminate idle gear rattle.
- Shift tower & clutch housing gaskets – includes beaded surface to eliminate leak paths. The clutch housing gasket is compatible with both Fuller's patented "Forced Lube" system and standard configuration transmissions.
- Includes front bearing cover engineered for smoother clutch brake surface with oil return grooves on the input shaft for maximum lube retention.
- Many kits contain long life flywheel pilot bearing with high temperature grease and Viton™ seals to resist the temperatures of today's hotter running engines.
- Some kits include the cross shaft bushings for improved throw-out bearing life, smoother shifting, easier operation and protection against costly clutch housing repairs or replacements.
- More parts for the money priced well below the sum of the components.
- Each kit contains genuine Eaton components to make your clutch replacement a complete job.

Most kits include the clutch release fork for standard or hydraulic clutch release.

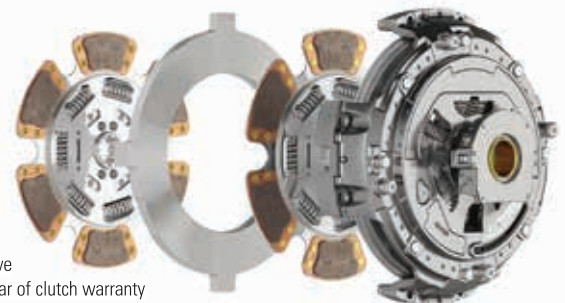


### Replace with only genuine Eaton parts for performance, durability and warranty assurance.

- Eliminate cross-reference mistakes and get the right part the first time, every time.
- Maintain your warranty with genuine components.
- Choose Eaton, and get legendary Roadranger support for More Time On The Road.

**Eaton EverTough® Clutch  
+ Eaton Clutch Installation Kit  
= Additional 1-Year Clutch Warranty**

See page 47 for Factory Reman Bundle Warranty/  
Clutch Installation Kit Bundle Warranty  
Roadranger Warranty Registration Form TCWY0760.



\* Registration is required to receive the additional year of clutch warranty coverage. Refer to document TCWY0760 on Roadranger.com for registration instructions.



## Clutch Clutch Installation Kits

### RT, Mack RT & FR Series:

APPLICATION	KIT #	INCLUDES INPUT SHAFT #	KIT CONTENTS	QTY.
RT Series	K-2468CL	23566	Clutch Release Shaft Bushings	4 (if required)
RT Series - 1.75"	K-4264CL	4304041	Front Bearing Cover Gasket	1
RT Series – Severe Duty (designed for PTO applications)	K-3762CL	23566	Input Shaft Snap Ring (Outer)	1
RT Series with 14 Spline Input Shaft	K-3768CL	4304841	Input Shaft Snap Ring (Inner)	1
RT Series with Hydraulic Clutch Release	K-4125CL	23566	Shift Lever Tower Gasket	1
RT Series - Severe Duty with Hydraulic Clutch Release	K-4339CL	23566	Front Bearing Cover	1
RT Series with Mack® style Pilot Bearing	K-3599CL	23566	Clutch Housing Gasket	1
FR Series	K-3600CL	4304633	Input Shaft Bearing	1
FR Series - 1.75"	K-4263CL	4304357	Pilot Bearing	1
FR Series with Mack® style Pilot Bearing	K-3601CL	4304633	Input Shaft Assembly	1
FR Series with Original Design (4302315) Input Shaft	K-3602CL	4302315	Clutch Brake	1
FR Series with Hydraulic Clutch Release	K-4124CL	4304633	Clutch Release Fork	1
			Fasteners (Hydraulic CLT Release)	2 (if required)

### UltraShift PLUS Series:

APPLICATION	KIT #	INCLUDES INPUT SHAFT #	KIT CONTENTS	QTY.
All UltraShift PLUS	K-4145CL	4308011	Input Shaft Snap Ring (Outer)	1
			Input Shaft Snap Ring (Inner)	1
			Front Bearing Cover	1
			Clutch Housing Gasket	1
			Input Shaft Bearing	1
			Pilot Bearing	1
			Input Shaft Assembly	1
			Cross-Shaft Assembly	1
			Seal Kit	1

### Lightning Series:

APPLICATION	KIT #	INCLUDES INPUT SHAFT #	KIT CONTENTS	QTY.
FRLO (Lightning) Series	K-3764CL	4305624	Piston Pump	1
			Eccentric Pump	1
			Input Shaft	1
			Input Shaft Bearing	1
			Shim Kit	1
			Front Bearing Cover Assembly	1
			Set Screw for Pump	1



## Transmission Reman Bundle Program

Eaton Reman Transmission  
 + Eaton Advantage Series **OR** EverTough Clutch  
 + Eaton-Approved Lubricant

---

= 3-Year/Unlimited-Mile Transmission  
**AND** Clutch Warranty\*

Receive an enhanced 3-year total warranty on your transmission and clutch when you bundle a Standard or FLEX Reman transmission with an Advantage Series or EverTough clutch and Eaton-approved lubricant. Standard warranties apply on individual purchases of the transmission and clutch.

### Build your Reman Bundle in Three Easy Steps

#### Step 1: Select a Reman Transmission

An Eaton Reman transmission, whether Standard or FLEX, is made with Genuine Eaton parts and more new parts than an ordinary rebuild. Every unit is performance tested to ensure Eaton quality specifications.



#### Step 2: Select an Advantage Series or EverTough Clutch

Eaton's Advantage Series clutches are made for the long haul. They feature a 50K mile standard lubrication interval for linehaul applications and come with a standard 3-year unlimited warranty. EverTough clutches offer a unique combination of durability and support in an aftermarket clutch. All EverTough clutches are 100% new and offer a standard two-year unlimited mile warranty, which is upgraded to three years when bundled.



#### Step 3: Fill with Eaton-Approved Lubricant

Eaton's PS-386 Synthetic Transmission Fluid is designed specifically to optimize performance in Eaton transmissions. PS-386 improves fuel economy, reduces friction and gear wear, and prolongs the life of your transmission. Eaton-approved PS-386 is a necessary component in the Reman Bundle Program.

\*Applies to applications in the U.S. & Canada only. Please refer to the Roadranger Warranty Guide (TCWY0900) for the latest warranty time and mileage offerings.

### Replace with only genuine Eaton parts for performance, durability and warranty assurance.

- Eliminate cross-reference mistakes and get the right part the first time, every time.
- Maintain your warranty with genuine components.
- Choose Eaton, and get legendary Roadranger support for More Time On The Road.

### You must register to receive the Reman Bundle warranty.

Complete form TCWY0760 on page 47 and follow the submission instructions, or complete form online at [www.roadranger.com](http://www.roadranger.com)

#### Notes:

- Electronics are not included in the 3-year warranty.
- Excludes Lightning transmissions (FRLO models).



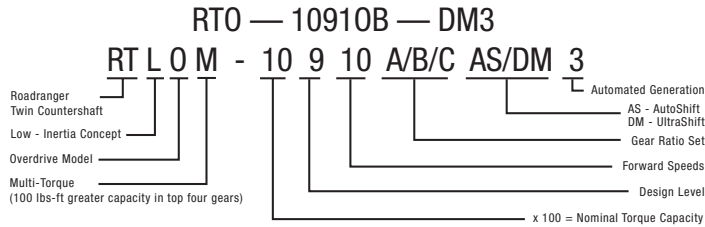


# Transmission Automated Nomenclature

## New Nomenclature System Components

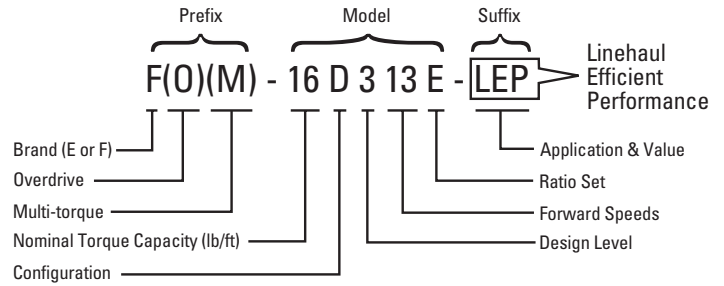
- Prefix
  - F for Fuller: All medium-duty and heavy-duty UltraShift products in North America and Australia
  - E for Eaton
  - Parenthetical letters such as (O) and (M) indicate provisions for Overdrive, Multi-Torque and other configurations
- Model Designator
  - Nominal Torque Capacity (lb/ft for North America and Australia)
  - Configuration: alpha designator A,B,C,D...for launch device and other system components
  - Design Level: numeric designator describes mechanical and electronic design levels
  - Gear Ratio Set: alpha designator (unchanged)
  - 3-Letter Suffix: denotes application and value

## Heavy-Duty Automated Example



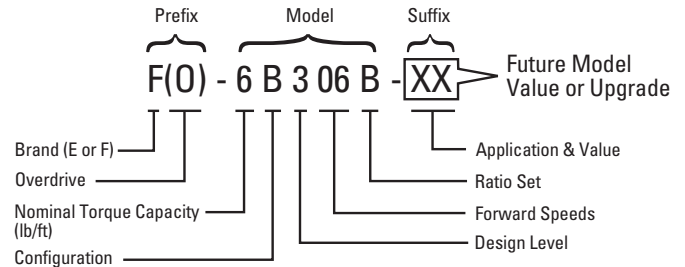
## Heavy-Duty UltraShift Example

Example: Fuller UltraShift Linehaul Efficient Performance (LEP)



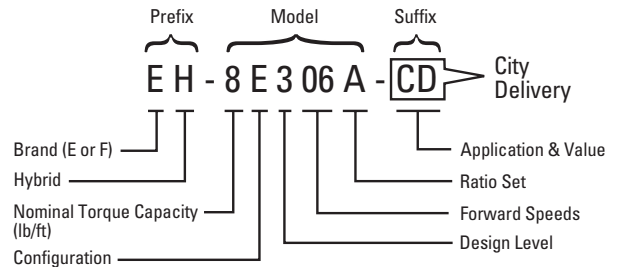
## Medium-Duty UltraShift Example

Example: Fuller UltraShift XX (for future use as new products and significant upgrades are introduced)



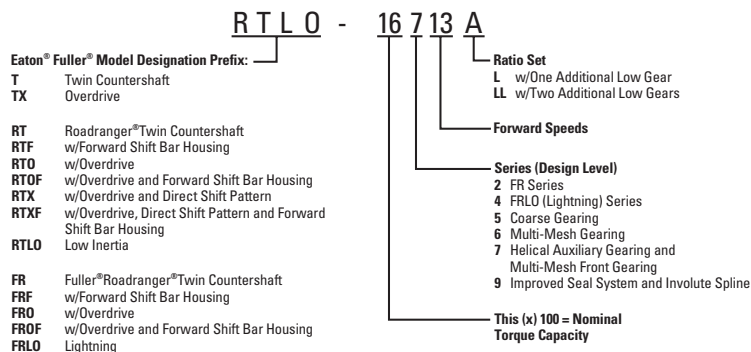
## Hybrid Power System Example

Example: Eaton Hybrid City Delivery (CD)

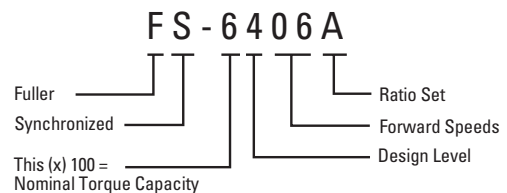


## Manual Nomenclature

### Heavy-Duty Example



### Medium-Duty Example





FLEX Reman Transmission



Standard Reman Transmission

## Transmission Remanufactured

Eaton's Reman transmissions are second only to a new transmission.

You have many options for rebuilt transmissions, but only Eaton's Reman Transmission gives you the quality and content of a genuine, new Eaton transmission. Other advantages include:

- Industry's best warranty in the U.S. and Canada – 2 years for linehaul and vocational applications.
- Receive an enhanced 3-year total warranty on your transmission and clutch when you bundle a standard or FLEX Reman transmission, Advantage/EverTough clutch and Eaton-approved lubricant. Registration required. Form TCWY0760 available at [www.roadranger.com](http://www.roadranger.com)
- 100% genuine Eaton content.
- Backed by the Roadranger Network – the nation's leading support system for drivetrain components – providing unequalled protection, support, and training from experienced professionals.
- Expertly remanufactured using Eaton technology.
- Dyno performance tested to meet Eaton standards.

### Benefits of FLEX Reman

When faced with a truck down situation, you need immediate access to quality Reman units. But you also need to keep inventory low and focus on turns to keep your dealership profitable. The FLEX transmission increase your *flexibility* to do both.

- The FLEX portfolio covers over 85% of the reman market demand.
- Truck-down orders will ship same day or next day with no additional fee.

**Units will ship the same day when an order is received by 2:00 PM local time of the delivering Eaton Logistics Center.**

### Increase sales with FLEX Reman Transmissions

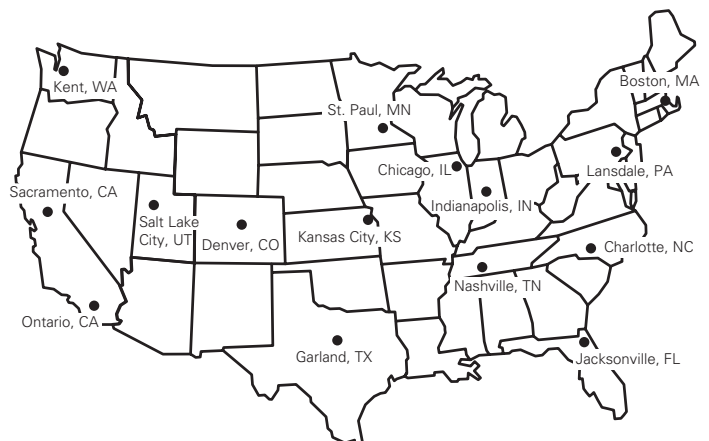
Components	FLEX Reman Transmissions	Standard Reman Transmissions
<b>100% Genuine Eaton Content</b>	Yes	Yes
<b>Warranty: 2 yrs. Linehaul and Vocational*</b>	Yes	Yes
<b>Clutch Housing</b>	Shipped with new gasket only – recycle housing from existing unit or replace with new	Shipped with complete clutch housing
<b>Torque Coverage</b>	Range of torque covers multiple models, increasing availability and decreasing dealer stock	Model-specific torque limits unit to single model coverage

9 Series 13- and 18-speed FLEX transmissions are shipped with the HALO tube installed. Older clutch housings without HALO tube provisions will need to be replaced.

\* Can be upgraded to a three-year warranty. See form TCWY0760.

### Roadranger® Logistic Centers

These facilities offer customer pick-up options which save you time and money. The Logistic Centers are set up to meet same or next day criteria to almost anywhere in the United States. Look for one near you. Or contact your Roadranger Parts Representative. **To order, please call 1-800-826-4357.**





## Transmission Remanufactured

### Eaton Fuller FLEX Reman

For immediate assistance on truck down orders in the U.S. call:

**1-800-826-HELP (4357)**

For immediate assistance on truck down orders in Canada call:

**1-888-507-1500**

- Same day/next day shipment available from our 15 logistics centers.
- No truck-down premium.
- 24-month standard warranty, upgradable to 3 years.\*
- The proven confidence of 100% Genuine Eaton components.

*\*For complete information refer to document TCWY0900.*

**P** = pump model   **C** = cooler model

**Units will ship the same day when an order is received by 2PM local time of the delivering Eaton Logistics Center.**

Standard Shift Bar Housing	
Trans. Model	FLEX Part #
FR-9210B	FR15210B-P
FR-11210B	
FR-12210B	
FR-13210B	
FR-14210B	
FR-15210B	
FRO-11210C	FRO16210C-P FRO16210C-C
FRO-12210C	
FRO-13210C	
FRO-14210C	
FRO-15210C	
FRO-16210C	
FRO-17210C	FRO18210C-P
FRO-18210C	
RTLO-14713A	RTLO16713A-P
RTLO-16713A	
RTLO-12913A	RTLO16913A-P
RTLO-14913A	
RTLO-16913A	
RTLO-18913A	RTLO18913A-P
RTLO-14718B	
RTLO-16718B	RTLO18718B-P
RTLO-18718B	
RTLO-14918B	RTLO18918B-P
RTLO-16918B	
RTLO-18918B	
RTLO-20918B	RTLO20918B-P
RTO-14908LL	
RTO-16908LL	

Forward Shift Bar Housing	
Trans. Model	FLEX Part #
FRF-9210B	FRF15210B-P
FRF-11210B	
FRF-12210B	
FRF-13210B	
FRF-14210B	
FRF-15210B	
FROF-11210C	FROF16210C-P FROF16210C-C
FROF-12210C	
FROF-13210C	
FROF-14210C	
FROF-15210C	
FROF-16210C	
FROF-17210C	FROF18210C-P
FROF-18210C	
RTLOF-14713A	RTLOF16713A-P
RTLOF-16713A	
RTLOF-12913A	RTLOF16913A-P
RTLOF-14913A	
RTLOF-16913A	
RTLOF-18913A	RTLOF18913A-P
RTLOF-14718B	
RTLOF-16718B	RTLOF18718B-P
RTLOF-18718B	
RTLOF-14918B	RTLOF18918B-P
RTLOF-16918B	
RTLOF-18918B	
RTLOF-20918B	RTLOF20918B-P
RTOF-14908LL	
RTOF-16908LL	



# Transmission Standard Reman



Manual Models	Standard Shift Bar Housing		Forward Shift Bar Housing	
	Without Internal Oil Pump	With Internal Oil Pump (-12) Cooler (-10) Forced Lube (-50)	Without Internal Oil Pump	With Internal Oil Pump (-12) Cooler (-10) Forced Lube (-50)
<b>CONVERTIBLE 9-SPEEDS</b>				
RTOC/F-16709A		TA-E97-12R		TA-E98-12R
RTOC/F-16909A		TA-F83-12R		TA-F84-12R
RTOCM-16909A		TA-D96-12R		
RTL0C-16909A-T2		TA-F81-12R		
RTOC/F-18909A		TA-E59-50R		TA-E60-50R
<b>10-SPEEDS</b>				
FR/F-9210B				
FR/F-11210B				
FR/F-12210B		TA-D64-12R		TA-D65-12R
FR/F-13210B		TA-D64-10R		TA-D65-10R
FR/F-14210B				
FR/F-15210B				
FRO/F-11210B				
FRO/F-12210B				
FRO/F-13210B		TA-D58-12R		TA-D59-12R
FRO/F-14210B		TA-D58-10R		
FRO/F-15210B				
FRO/F-16210B				
FRW-15210B	TA-D98-11R			
FRO/F-11210C				
FRO/F-12210C	TA-D44-11R	TA-D50-12R	TA-D45-12R	TA-D51-12R
FRO/F-13210C				
FRO/F-14210C		TA-D50-12R		TA-D51-12R
FRO/F-15210C		TA-D56-12R		TA-D57-12R
FRO/F-16210C		TA-D60-12R		TA-D61-12R
		TA-D60-10R		TA-D61-10R
FRO/F-17210C		TA-D69-12R		TA-D70-12R
FRO/F-18210C		TA-D69-10R		TA-D70-10R
RTX/F-14710B				
RTX/F-15710B		TA-B50-12R		TA-B54-12R
RTX/F-16710B				
RTX/F-11710C				
RTX/F-12710C	TA-B12-11R			
RTX/F-13710C				
RTX/F-14710C				
RTX/F-15710C		TA-B51-12R		TA-B55-12R
RTX/F-16710C				
RTO/F-11908LL				
RTO/F-14908LL		TA-E39-12R		TA-E40-12R
RTO/F-16908LL		TA-E41-12R		TA-E42-12R
<b>11-SPEEDS</b>				
RTO/F-11909ALL				
RTO/F-11909MLL				
RTO/F-14909ALL		TA-F68-12R		TA-F69-12R
RTO/F-14909MLL				
RTO/F-16909ALL		TA-F28-12R		TA-F29-12R

Manual Models	Standard Shift Bar Housing		Forward Shift Bar Housing	
	Without Internal Oil Pump	With Internal Oil Pump (-12) Cooler (-10) Forced Lube (-50)	Without Internal Oil Pump	With Internal Oil Pump (-12) Cooler (-10) Forced Lube (-50)
<b>13-SPEEDS</b>				
RTLO/F-14713A				
RTLO/F-16713A		TA-B56-12R		TA-B57-12R
RTLO/F-14913A				
RTLO/F-16913A		TA-F04-50R		TA-F05-50R
RTLO/F-18913A		TA-E59-50R		TA-E60-50R
RTLO/F-20913A		TA-F43-50R		TA-F44-50R
<b>15-SPEEDS</b>				
RTLO/F-14915				
RTLO/F-16915		TA-E51-12R		TA-E52-12R
<b>18-SPEEDS</b>				
RTLO/F-14718B				
RTLO/F-16718B		TA-B29-12R		TA-B30-12R
RTLO/F-18718B		TA-B77-12R		TA-B78-12R
RTLO/F-14918B				
RTLO/F-16918B		TA-F08-50R		TA-F09-50R
RTLO/F-18918B		TA-F10-50R		TA-F11-50R
RTLO/F-20918B		TA-E63-50R		TA-E64-50R
RTLO/F-22918B		TA-F48-50R		TA-F49-50R

Manual Models	Standard Shift Tower Opening	Forward Shift Tower Opening
<b>FULLER ADVANTAGE 10-SPEEDS</b>		
FA/F-15810B	TA-J65-12RH	TA-J66-12RH
FAO/F-16810C	TA-J67-12RH	TA-J68-12RH
FAM/F-15810B	TA-J91-12RH	TA-J92-12RH
FAOM/F-16810C	TA-J97-12RH	TA-J98-12RH



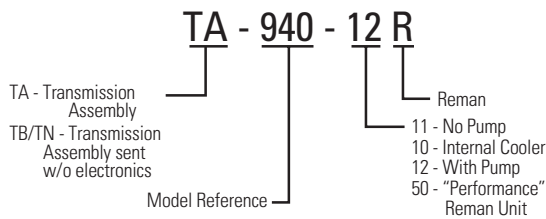
# Transmission Standard Reman

Gen 2 Automated Models	Without Internal Oil Pump (-11) With Internal Oil Pump (-12)
<b>10-SPEED AUTOSHIFT</b>	
RTO-16710B-AS2	TB-F55-12R
RTO-14910C-AS2	TB-F80-12R
RTO-16910C-AS2	
<b>10-SPEED ULTRASHIFT</b>	
RTO-14910B-DM2	TN-F89-12R
RTO-16910B-DM2	

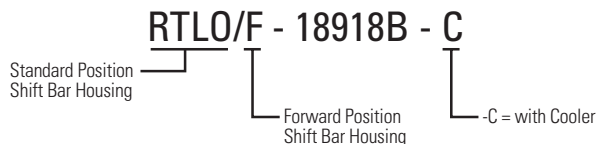
Gen 3 Automated Models	With Internal Oil Pump
<b>10-SPEED AUTOSHIFT</b>	
RTO-16910C-AS3	TN-F97-12R
<b>18-SPEED AUTOSHIFT</b>	
RTLO-18918A-AS3	TN-G18-12R
<b>10-SPEED ULTRASHIFT</b>	
FM-14D310B-LST	TN-G25-12R
FM-15D310B-LST	
RTO-16910B-DM3	TN-G03-12R
RTOM-16910B-DM3	TN-D86-12R
<b>13-SPEED ULTRASHIFT</b>	
RTLO-16913L-DM3	TN-G14-12R

UltraShift PLUS Automated Models	With Internal Oil Pump
<b>10-SPEED</b>	
FM-14E310B-LAS	TN-J01-12R
FM-15E310B-LAS	
FO-10E310C-VAS	TN-J06-12R
FO-14E310C-LAS	
FO-16E310C-LAS	
FO-16E310C-VAS	
FO-14E308LL-VCS	TN-G26-12R
FO-16E308LL-VCS	
FO-17E308LL-VCS	TN-G44-12R
FOM-14E310C-LAS	TN-J04-12R
FOM-15E310C-LAS	
FOM-16E310C-LAS	
FOM-16E310C-VAS	
<b>11-SPEED</b>	
FO-12E309ALL-VMS	TN-J58-12R
FO-14E309ALL-VMS	TN-G27-12R
FO-16E309ALL-VMS	
FO-17E309ALL-VMS	TN-G45-12R
<b>13-SPEED</b>	
FO-14E313A-MHP	TN-G43-12R
FO-16E313A-MHP	
FO-16E313A-VHP	TN-G47-12R
FO-18E313A-MHP	TN-G30-12R
FO-18E313A-VHP	
FO-20E313A-MHP	TN-G31-12R
FO-20E313A-VHP	
<b>18-SPEED</b>	
FO-14E318B-MXP	TN-G40-12R
FO-14E318B-VXP	
FO-16E318B-MXP	
FO-16E318B-VXP	
FO-18E318B-MXP	TN-G32-12R
FO-18E318B-VXP	
FO-20E318B-MXP	TN-G29-12R
FO-20E318B-VXP	
FO-22E318B-MXP	TN-G41-12R
FO-22E318B-VXP	

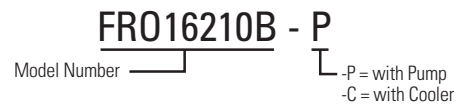
## Part Number Nomenclature:



## Transmission Model Nomenclature:



## FLEX Part Number Nomenclature:





## Parts All-Makes Transmission Parts

### Keep your customers on the road.

Eaton's complete portfolio of all-makes transmission parts are available for popular automated manual transmissions (AMTs), including Detroit™ DT12®, Volvo® I-Shift and Mack® mDRIVE™. Premium components ensure quality and fit, and are backed by Eaton quality and support.

This comprehensive line of service parts includes everything needed for a complete remanufactured transmission unit including gears, bearings, gaskets, shafts, synchronizers and fasteners, so you can get your customer's trucks back on the road quickly. Eaton recommends replacing all wearable parts when performing service to maximize uptime and reliability.

#### Core Features:

- Premium components ensure quality and fit: fully interchangeable with original parts
- Complete range of components: over 400 parts for DT12, I-Shift and mDRIVE AMTs
- Simple ordering: convenient kits include all recommended service replacement parts in one part number
- Fully backed by Eaton quality and support
- Quick delivery: all inventory stocked in Eaton US warehouse





## Parts Rebuilder Bulk Packs

Streamline ordering with Rebuilder Bulk Packs.



Part ordering and stocking have never been easier than with Eaton Fuller Rebuilder Bulk Packs. These Bulk Packs allow high-volume rebuilders to order parts less often and keep a consistent level of parts always available.

- Maintain the optimal quantity of parts always on hand.
- Reduce forecasting and the need for spot buys.
- Decrease your time spent ordering parts.
- Simplify ordering by purchasing all transmission rebuild parts from a single supplier.
- Maintain genuine Fuller parts...with all the quality and dependability your customers associate with the Eaton Fuller name.

### Nomenclature Example:

**S-1659 - BULK144**

Base Part Number

Bulk Quantity

**Contact your Roadranger Parts Solutions Manager to get started today.**



PART NUMBER	DESCRIPTION	QTY
14897-BULK420	SPRING, BULK	420
15953-BULK24	GEAR, COUNTERSHAFT PTO, BULK	24
16136-BULK28	YOKE (3RD & DIRECT), BULK	28
16756-BULK24	REVERSE GEAR, BULK	24
16757-BULK18	GEAR, REV IDLER, BULK	18
18922-BULK56	YOKE, BULK	56
19063-BULK18	BLOCK, BULK	18
19239-BULK42	GEAR, MAIN DRIVE, BULK	42
19549-BULK30	COUNTERSHAFT, BULK	30
20323-BULK100	CLUTCH, SLIDING (RANGE), BULK	100
20380-BULK12	GEAR, COUNTERSHAFT (3RD), BULK	12
20381-BULK12	GEAR, MAINSHAFT (2ND), BULK	12
20382-BULK18	GEAR, COUNTERSHAFT (2ND), BULK	18
20458-BULK36	GEAR, MAIN DRIVE, BULK	36
20482-BULK12	GEAR, COUNTERSHAFT 2ND, BULK	12
20550-BULK50	COVER, FRONT, BEARING, BULK	50
20840-BULK28	GEAR, COUNTERSHAFT PTO, BULK	28
20895-BULK100	COVER, OUTPUT SHAFT, BULK	100
21025-BULK18	GEAR, CTRSHAFT, BULK	18
21264-BULK30	GEAR, CTRSHAFT 2ND, BULK	30
21319-BULK24	GEAR, MAINSHAFT, AUX (REDUCTION), BULK	24
21325-BULK15	MAINSHAFT, AUX, BULK	15
21355-BULK36	BEARING, ROLLER, TAPERED, BULK	36
21356-BULK24	BEARING, ROLLER, TAPERED, BULK	24
21360-BULK48	CLUTCH, SLG, BULK	48
21588-BULK42	GEAR, COUNTERSHAFT, BULK	42
21654-BULK100	COVER, OUTPUT SHAFT, BULK	100
21898-BULK20	SHAFT, INPUT, BULK	20
21930-BULK36	CLUTCH, SLG, BULK	36
22254-BULK168	NUT, FLANGE, HEX (NYLON INSERT) (2.00), BULK	168
227675-BULK300	INSERT - YOKE PAD, BULK	300
22823-BULK24	YOKE, BULK	24
230292-BULK750	KEY, WOODRUFF, NO 1210, BULK	750
23159-BULK24	GEAR, AUX DRIVE, BULK	24
23653-BULK32	GEAR, M/S REVERSE, BULK	32
239807-BULK20	SHAFT, INPUT, BULK	20
241012-BULK20	GEAR, C/S DRIVE, BULK	20
241013-BULK24	GEAR, C/S DRIVE, BULK	24
3315743-BULK16	GEAR, C/S DRIVE, BULK	16
3315745-BULK16	GEAR, C/S 5TH, BULK	16
3316196-BULK16	GEAR, C/S DRIVE, BULK	16
4300035-BULK10	GEAR, BULK	10

Continued on page 32

## Parts Rebuilder Bulk Packs

PART NUMBER	DESCRIPTION	QTY	PART NUMBER	DESCRIPTION	QTY
4300191-BULK28	GEAR, COUNTERSHAFT (OVERDRIVE), BULK	28	4302090-BULK10	GEAR, BULK	10
4300241-BULK36	GEAR, CTRSHAFT 1ST, BULK	36	4302092-BULK10	GEAR, BULK	10
4300243-BULK15	COUNTERSHAFT, BULK	15	4302159-BULK100	KEY, INTERLOCK, BULK	100
4300244-BULK15	COUNTERSHAFT, BULK	15	4302276-BULK20	MAINSHAFT, AUX, BULK	20
4300247-BULK30	GEAR, CTRSHAFT 2ND, BULK	30	4302381-BULK36	GEAR, MAINSHAFT (OVERDRIVE), BULK	36
4300312-BULK15	MAINSHAFT, AUX, BULK	15	4302384-BULK20	GEAR, NO BURN, BULK	20
4300677-BULK8	GEAR, BULK	8	4302393-BULK48	GEAR, MAINSHAFT (OVERDRIVE), BULK	48
4300828-BULK84	BEARING, ROLLER, BULK	84	4302394-BULK50	GEAR, MAINSHAFT (2ND), BULK	50
4300830-BULK100	WASHER, BULK	100	4302411-BULK24	GEAR, M-SHAFT, BULK	24
4300858-BULK24	GEAR, BULK	24	4302413-BULK16	GEAR, M-SHAFT, AUX RDCN, BULK	16
4300902-BULK63	BEARING, TAPERED ROLLER, BULK	63	4302420-BULK36	GEAR, CTRSHAFT 2ND, BULK	36
4300904-BULK15	MAINSHAFT, AUX, BULK	15	4302421-BULK28	GEAR, M-SHAFT 2ND, BULK	28
4300907-BULK144	CLUTCH, SLIDING (SPLITTER), BULK	144	4302422-BULK42	GEAR, COUNTERSHAFT (3RD), BULK	42
4300912-BULK80	SPACER, AUX M-SHAFT, BULK	80	4302427-BULK16	GEAR, MAIN SHAFT, AUX RDCN, BULK	16
4300924-BULK27	CLUTCH, SLG, BULK	27	4302435-BULK30	GEAR, AUX DRIVE, BULK	30
4300938-BULK30	GEAR, AUX DRIVE, BULK	30	4302506-BULK30	GEAR, M-SHAFT, BULK	30
4300940-BULK16	GEAR, M-SHAFT, AUX RDCN, BULK	16	4302529-BULK40	GEAR, M-SHAFT, BULK	40
4301403-BULK20	SHAFT, INPUT, BULK	20	4302652-BULK15	COUNTERSHAFT, BULK	15
4301465-BULK24	CUP, SYNC, BULK	24	4302662-BULK42	GEAR, MAIN DRIVE, BULK	42
4301466-BULK25	CUP, SYNC, BULK	25	4302666-BULK40	GEAR, COUNTERSHAFT (DRIVE), BULK	40
4301467-BULK24	CUP, SYNC, BULK	24	4302670-BULK50	GEAR, MAINSHAFT (2ND), BULK	50
4301477-BULK18	GEAR, M/S 5TH, BULK	18	4302792-BULK20	GEAR, PUMP DRIVE, BULK	20
4301478-BULK24	GEAR, C/S 5TH, BULK	24	4303033-BULK20	GEAR, M-SHAFT, BULK	20
4301485-BULK20	SHAFT, INPUT, BULK	20	4303119-BULK15	COUNTERSHAFT, BULK	15
4301515-BULK100	COVER, OUTPUT SHAFT, BULK	100	4303120-BULK40	GEAR, COUNTERSHAFT, BULK	40
4301528-BULK24	GEAR, M/S 3RD, BULK	24	4303121-BULK40	GEAR, COUNTERSHAFT DRIVE, BULK	40
4301529-BULK40	GEAR, M/S 2ND, BULK	40	4303233-BULK30	GEAR, M/S 4TH, BULK	30
4301530-BULK12	GEAR, M/S 1ST, BULK	12	4303359-BULK24	MAINSHAFT, AUX, BULK	24
4301531-BULK35	GEAR, M/S REV, BULK	35	4303409-BULK24	GEAR, MAINSHAFT (LOW), BULK	24
4301532-BULK15	MAINSHAFT, BULK	15	4303412-BULK24	GEAR, M-SHAFT, BULK	24
4301628-BULK20	SHAFT, INPUT, BULK	20	4303420-BULK28	GEAR, M-SHAFT 1ST, BULK	28
4301686-BULK24	GEAR, M/S 3RD, BULK	24	4303422-BULK30	SPLITTER GEAR, BULK	30
4301687-BULK24	GEAR, M/S 2ND, BULK	24	4303428-BULK35	GEAR, BULK	35
4301689-BULK28	GEAR, M/S REV, BULK	28	4303477-BULK28	GEAR, BULK	28
4301750-BULK20	SHAFT, INPUT, BULK	20	4303497-BULK24	GEAR, BULK	24
4301762-BULK24	GEAR, M/S 2ND, BULK	24	4303620-BULK12	GEAR, BULK	12
4301764-BULK8	GEAR, M/S REV, BULK	8	4303649-BULK15	MAINSHAFT, AUX, BULK	15
4301795-BULK16	GEAR, AUX M-SHAFT REDN, BULK	16	4303666-BULK28	GEAR, COUNTERSHAFT (OVERDRIVE), BULK	28
4301840-BULK100	CLUTCH, SLIDING, BULK	100	4303701-BULK28	GEAR, MAINSHAFT (1st), BULK	28
4301851-BULK72	BEARING, ROLLER, BULK	72	4303705-BULK15	MAINSHAFT, AUX, BULK	15
4302041-BULK30	GEAR, MAINSHAFT, AUX (SPLITTER), BULK	30	4303737-BULK40	GEAR, CTRSHAFT, BULK	40
4302047-BULK100	SPACER, GEAR SPLINED, BULK	100	4303774-BULK64	GEAR, PUMP DRIVE, BULK	64
4302059-BULK15	MAINSHAFT, AUX, BULK	15	4303796-BULK48	GEAR, M/S 4TH, BULK	48
4302074-BULK72	BEARING, ROLLER C/S, BULK	72	4303878-BULK15	COUNTERSHAFT, BULK	15

Continued on page 33



# Parts Rebuilder Bulk Packs

PART NUMBER	DESCRIPTION	QTY
4303880-BULK12	GEAR, M-SHAFT, BULK	12
4304001-BULK42	GEAR, M-SHAFT, BULK	42
4304023-BULK100	PLUG, MAGD, 1-1/16 SPL, BULK	100
4304056-BULK36	GEAR, C/S 3RD, BULK	36
4304060-BULK40	GEAR, COUNTERSHAFT (DRIVE), BULK	40
4304073-BULK15	COUNTERSHAFT, BULK	15
4304084-BULK42	GEAR, AUX DRIVE, BULK	42
4304086-BULK30	GEAR, AUX M-SHAFT SPLIT, BULK	30
4304097-BULK48	GEAR, C/S 4TH, BULK	48
4304098-BULK55	GEAR, M/S 4TH, BULK	55
4304317-BULK168	CLUTCH, SLIDING, BULK	168
4304438-BULK28	YOKE, BULK	28
4304491-BULK30	GEAR, CTRSHAFT, BULK	30
4304510-BULK42	GEAR, MAIN DRIVE, BULK	42
4304514-BULK144	GEAR, MAINSHAFT (OVERDRIVE), BULK	144
4304539-BULK20	SHAFT, INPUT, BULK	20
4304541-BULK20	GEAR, C/S DRIVE, BULK	20
4304542-BULK16	GEAR, C/S 5TH, BULK	16
4304544-BULK24	GEAR, M/S 2ND, BULK	24
4304545-BULK24	GEAR, M/S 1ST, BULK	24
4304604-BULK40	KEY, SELECTOR, BULK	40
4304617-BULK15	MAINSHAFT, BULK	15
4304618-BULK28	GEAR, COUNTERSHAFT O/D, BULK	28
4304621-BULK24	GEAR, M-SHAFT, BULK	24
4304635-BULK40	GEAR, MAIN DRIVE, BULK	40
4304641-BULK42	GEAR, MAIN DRIVE, BULK	42
4304642-BULK42	GEAR, MAIN DRIVE, BULK	42
4304750-BULK48	GEAR, MAINSHAFT O/D, BULK	48
4304765-BULK36	GEAR, COUNTERSHAFT 1ST, BULK	36
4304790-BULK20	GEAR, COUNTERSHAFT, BULK	20
4305128-BULK100	COVER, SHIPPING, LUBE SYSTEM, BULK	100
4305566-BULK20	SHAFT, INPUT, BULK	20
4305575-BULK28	YOKE (3RD & OVERDRIVE), BULK	28
4305663-BULK42	GEAR, MAINSHAFT, BULK	42
4305657-BULK20	GEAR, COUNTERSHAFT, BULK	20
4305659-BULK42	GEAR, MAIN DRIVE, BULK	42
4305661-BULK40	GEAR, COUNTERSHAFT (DRIVE), BULK	40
4305665-BULK40	GEAR, COUNTERSHAFT (DRIVE), BULK	40
4305879-BULK15	GEAR, C/S, BULK	15
4305880-BULK30	GEAR, MAIN DRIVE, BULK	30
4306033-BULK28	GEAR, C/S, BULK	28
4306076-BULK48	GEAR, COUNTERSHAFT, BULK	48
4306520-BULK200	NUT, HEX, FLANGE, CRIMPED, BULK	200

PART NUMBER	DESCRIPTION	QTY
4306647-BULK 144	CLUTCH, SLG (M/S), BULK	144
4306648-BULK 144	CLUTCH, SLG (M/S), BULK	144
4306649-BULK48	CLUTCH, SLG (M/S), BULK	48
4306650-BULK112	CLUTCH, SLG (M/S), BULK	112
4307114-BULK40	GEAR, C/S, BULK	40
4307126-BULK42	GEAR, MAIN DRIVE, BULK	42
4308397-BULK48	BEARING, ROLLER, BULK	48
4308398-BULK72	BEARING, ROLLER, BULK	72
4308400-BULK72	BEARING ROLLER, BULK	72
4308403-BULK72	BEARING, NEEDLE ROLLER, BULK	72
4308451-BULK36	BEARING, ROLLER, BULK	36
4308452-BULK1 12	BEARING, ROLLER, BULK	112
55508-BULK100	HOSE ASSY, AIR, BULK	100
55509-BULK100	HOSE ASSY, AIR, BULK	100
55527-BULK100	HOSE ASSY, AIR, BULK	100
55528-BULK100	HOSE ASSY, AIR, BULK	100
5556503-BULK24	BEARING, ROLLER, TAPERED, BULK	24
5556507-BULK36	BEARING, ROLLER, TAPERED, BULK	36
5566505-BULK160	BEARING, BALL, BULK	160
5566507-BULK18	BEARING, BALL, BULK	18
5566508-BULK18	BEARING, BALL, BULK	18
5566510-BULK50	BEARING, BALL, BULK	50
691445-BULK30	GEAR, AUX M/S SPLIT, BULK	30
81052-BULK72	BEARING, BALL, BULK	72
81057-BULK42	BEARING, BALL, BULK	42
81504-BULK48	BEARING BALL, BULK	48
A-4740-BULK44	FILTER/REGULATOR ASSEMBLY, AIR, BULK	44
A-5000-BULK112	VALVE ASSEMBLY, RANGE SLAVE, BULK	112
A-5156-BULK24	MAINSHAFT ASSY, RANGE, BULK	24
A-5159-BULK12	YOKE ASSY, RANGE, BULK	12
A-5160-BULK14	YOKE ASSY, DEEP REDN, BULK	14
A-5401-BULK48	SYNC ASSY (450/550), BULK	48
A-5454-BULK44	FILTER/REGULATOR ASSEMBLY, AIR, BULK	44
A-5474-BULK12	YOKE ASSY, RANGE, BULK	12
A-5692-BULK42	SYNCHRONIZER ASSY, BULK	42
A-5693-BULK24	SYNCHRONIZER ASSY, BULK	24
A-5721-BULK24	SYNCHRONIZER ASSY, BULK	24
A-6135-BULK24	SYNCHRONIZER ASSY, BULK	24
A-6136-BULK48	SYNCHRONIZER ASSY, BULK	48
A-6154-BULK42	SYNCHRONIZER ASSY, BULK	42
A-6156-BULK42	SYNCHRONIZER ASSY, BULK	42
A-6188-BULK12	YOKE ASSY, RANGE, BULK	12
A-6224-BULK12	YOKE ASSY, RANGE, BULK	12
A-6299-BULK44	SPACER ASSY, BULK	44

Continued on page 34

## Parts Rebuilder Bulk Packs

PART NUMBER	DESCRIPTION	QTY	PART NUMBER	DESCRIPTION	QTY
A-6340-BULK48	RETAINER ASSY, BULK	48	K-7051-BULK35	SYNCHRONIZER KIT, BULK	35
A-6436-BULK24	COUNTERSHAFT ASSY, BULK	24	S-1659-BULK72	SHAFT ASSEMBLY, INPUT, BULK	72
A-6473-BULK60	PUMP ASSY, INTEGRAL, BULK	60	S-1794-BULK126	ISOLATOR ASST, BULK	126
A-6608-BULK48	SYNCHRONIZER ASSY, BULK	48	S-2129-BULK42	SHIFT LEVER HSG ASSY, BULK	42
A-6756-BULK12	CTRSHAFT ASSY, AUX WELD, BULK	12	S-2130-BULK42	SHIFT LEVER HSG ASSY, BULK	42
A-6843-BULK30	COUNTERSHAFT ASSY, AUX, BULK	30	S-2501-BULK36	SPEEDO-ROTOR ASSY, BULK	36
A-6909-BULK28	VALVE ASSY, RANGE MASTER, BULK	28	S-2519-BULK42	SHIFT LEVER HSG ASSY, BULK	42
A-6910-BULK28	VALVE ASSY, RANGE MASTER, BULK	28	S-2688-BULK16	MAINSHAFT ASSY, BULK	16
A-7011-BULK16	YOKE ASSY, SPLIT, BULK	16	S-2737-BULK15	MAINSHAFT ASSY, BULK	15
A-7012-BULK14	YOKE ASSY, SPLT, BULK	14	S-2809-BULK30	REAR BEARING COVER ASSY , BULK	30
A-7254-BULK140	SYNCHRONIZER ASSY, LOW SIDE, BULK	140	S-2822-BULK72	SHAFT ASSEMBLY, INPUT, BULK	72
A-7331-BULK140	SYNC ASSY, AUX DIRECT, BULK	140	S-2842-BULK18	SHIFT BAR HSG ASSY, BULK	18
A-7471-BULK40	LUBE TUBE ASSY, EXTENDED, BULK	40	S-2928-BULK20	INPUT SHAFT ASSY, BULK	20
A-7934-BULK54	SYNCHRONIZER ASSY, BULK	54	S-3108-BULK16	MAINSHAFT ASSY, BULK	16
K-1644-BULK20	REPLT KIT, QUILL, BULK	20	X-1-1008-BULK500	NUT, 5/8 - 18 ELS STOP, BULK	500
K-1935-BULK66	REPAIR KIT, SLAVE VALVE, BULK	66	X12-1207-BULK350	PLUG, PIPE, 3/4 MAGD, BULK	350
K-2054-BULK100	O-RING KIT, BULK	100	X12-208-BULK1000	PLUG, PIPE, 1/8, BULK	1000
K-2262-BULK46	OIL SEAL KIT, BULK	46	X12-802-BULK500	PLUG, PIPE, 1/2, BULK	500
K-2272-BULK10	MAINSHAFT KIT, BULK	10	X14-1200-BULK500	BALL, STEEL, 3/4, BULK	500
K-2424-BULK30	VALVE REPLACEMENT KIT, BULK	30	X14-800-BULK850	BALL, STEEL, 1/2, BULK	850
K-2804-BULK100	O-RING KIT-COMPLETE, BULK	100	X-7-1005-BULK500	SCREW, 5/8 - 18 X 1.75, BULK	500
K-2808-BULK16	REPLT. KIT-DRIVE GEAR, BULK	16	X-7-1008-BULK500	SCREW, 5/8-18 X 1.00, BULK	500
K-3104-BULK50	ACTUATOR PIN KIT, BULK	50	X-7-809-BULK500	SCREW, 1/2 - 20 X 1-3/4, BULK	500
K-3122-BULK27	SPLITTER GEAR UPDATE KIT, BULK	27	X-8-0801M-BULK500	SCREW, M8X1.25 X 12MM, BULK	500
K-3128-BULK100	PISTON KIT, BULK	100	X-8-423-BULK800	SCREW, 1/4 - 20 X 1/2, BULK	800
K-3130-BULK90	SHIFT YOKE KIT, BULK	90	X-8-645-BULK800	SCREW, 3/8 - 16 X 1, BULK	800
K-3209-BULK40	IDLER SHAFT REPL KIT, BULK	40	X-8-680-BULK600	SCREW, 3/8 - 16 X 1-1/2, BULK	600
K-3215-BULK100	S.B. HSG COVER ASSY, BULK	100	X-8-686-BULK800	SCREW, 3/8 - 16 X 3/4, BULK	800
K-3245-BULK36	AIR MODULE ASSY, BULK	36	X-8-725-BULK450	SCREW, 7/16 - 14 X 7/8, BULK	450
K-3301-BULK27	GEAR REPLACEMENT KIT, BULK	27	X-8C-411-BULK500	SCREW, HEX HD/WASHER ASSY (1/4-20 X 1-3/4), BULK	500
K-3331-BULK90	SPLITTER VLV REPL KIT, BULK	90	X-8C-412-BULK500	SCREW, HEX HD/WASHER ASSY (1/4-20 X 2-1/4), BULK	500
K-3367-BULK30	OIL PUMP KIT, BULK	30	X-8C-830-BULK400	SCREW, HEX HEAD/WASHER ASSY (.500-13 X 1.490), BULK	400
K-3399-BULK100	ISOLATOR BUSHING KIT, BULK	100	X-8L-540-BULK725	SCREW, 5/16 - 18 X 1-7/8, BULK	725
K-3420-BULK16	GEAR UPDATE KIT, BULK	16	X-8L-602-BULK600	SCREW, 3/8 - 16 X 1-1/2, BULK	600
K-3480-BULK16	REPLT. KIT, DRIVE GEAR, BULK	16	X-8L-604-BULK700	SCREW, 3/8 - 16 X 1-1/4, BULK	700
K-3682-BULK34	RANGE VALVE KIT, BULK	34	X-8L-607-BULK450	SCREW, 3/8 - 16 X 2-1/4, BULK	450
K-4001-BULK20	SYNCHRONIZER KIT, BULK 20	20	X-8L-631-BULK300	SCREW, 3/8 - 16 X 3-1/2, BULK	300
K-4122-BULK48	KIT, HEX FLANGE CRIMPED NUT, BULK	48			
K-4126-BULK50	KIT, FASTENER, BULK	50			
K-4152-BULK56	KIT, BEARING (INPUT SHAFT), BULK	56			



## Parts Transmission Rebuild and Overhaul Kits

### Stay genuine to save money and time.

Save big when compared to buying the components separately. Plus, you'll get everything you need with one part number instead of spending time and effort identifying individual parts required.

All kits come with one-year warranty.\*\*

Backed by the Roadranger Network – the nation's leading support system for drivetrain components – providing unequalled protection, support, and training from experienced professionals.

For a complete, up-to-date kit content list by model, visit [www.roadranger.com/epc](http://www.roadranger.com/epc)

#### Master Rebuild Kits

Comprehensive kit includes components to completely overhaul a transmission.

#### Basic Overhaul Kits

When a new input shaft and sliding clutch are needed for a long lasting, trouble free, overhaul.

#### Basic Rebuild Kits

Designed for transmissions with little wear and tear and have reusable components.

KIT CONTENTS*	MASTER REBUILD	BASIC OVERHAUL	BASIC REBUILD
O-Rings	X	X	X
Bearings	X	X	X
Snap Ring	X	X	X
Springs	X	X	X
Shim Kit	X	X	X
Oil Seal Kit	X	X	X
Gasket Kit	X	X	X
Sliding Clutch	X	X	
Input Shaft	X	X	
Drive/Overdrive Gears	X		
Breather	X		
Hose Assemblies	X		
Clutch Brake	X		
Air/Filter Regulator	X		
Splitter and Range Valve (where applicable)	X		
Front Bearing Cover	X		
Synchronizer Assembly	X		
Shift Fork	X		
Miscellaneous Washers	X		

\* Kit contents may vary based on transmission model and kit.

\*\* Please refer to the Roadranger Warranty Guide TCWY0900 for the latest

warranty time and mile offerings.

### Replace with only genuine Eaton parts for performance, durability and warranty assurance.

- Eliminate cross-reference mistakes and get the right part the first time, every time.
- Maintain your warranty with genuine components.
- Pick Eaton, and get legendary Roadranger support for More Time On The Road.



## Mobile Hydraulic Power Complete Mobile Power Solutions



Eaton is the North American master distributor for Bezares USA, a global manufacturer of Power Takeoffs (PTOs), hydraulic pumps, fittings, tanks, valves, and other related mobile power hydraulic components. In addition to distribution services, Eaton provides post-sale service and support through its extensive Roadranger field team.



**PTOs**



**Tanks**



**Valves**



**Pumps**

### ✓ **Expertise**

Decades of experience in heavy duty power management

### ✓ **Complete solutions**

Configurations for vocational and specialty applications

### ✓ **Peace of mind**

Backed by the Roadranger field team

**Eaton's decades of experience and leadership in the development of commercial vehicle transmissions allows us to help customers develop highly customized systems and configurations for vocational needs and specialty applications.**



*Powering Business Worldwide*

BACKED BY  
**Roadranger**  
SUPPORT





## Mobile Hydraulic Power Eaton and Bezares: the best value and support

### Flexible solutions

Widest range (9) of Volvo I-Shift and Mack mDrive® PTOs on the market.

### Complete kits

Hot shift PTOs- ship complete as a kit. All hoses, hardware, and wiring are included.

### Smooth engagement

Robust, integrated air shifter in the housing features a smooth engagement design to reduce clash shifting.\*

### Idler shaft

Industry exclusive idler shaft with locking nut and snap ring.\*

### Deep heat-treated gears

33% deeper gear tooth carburization creates stronger gear surfaces for long life.

### Lighter weight

Industry leading weight-to-torque ratio provides outstanding performance for the price and size.

### High quality bearings

Large, oversize bearings provide long life on higher torque applications such as blowers.

### Premium gaskets and seals

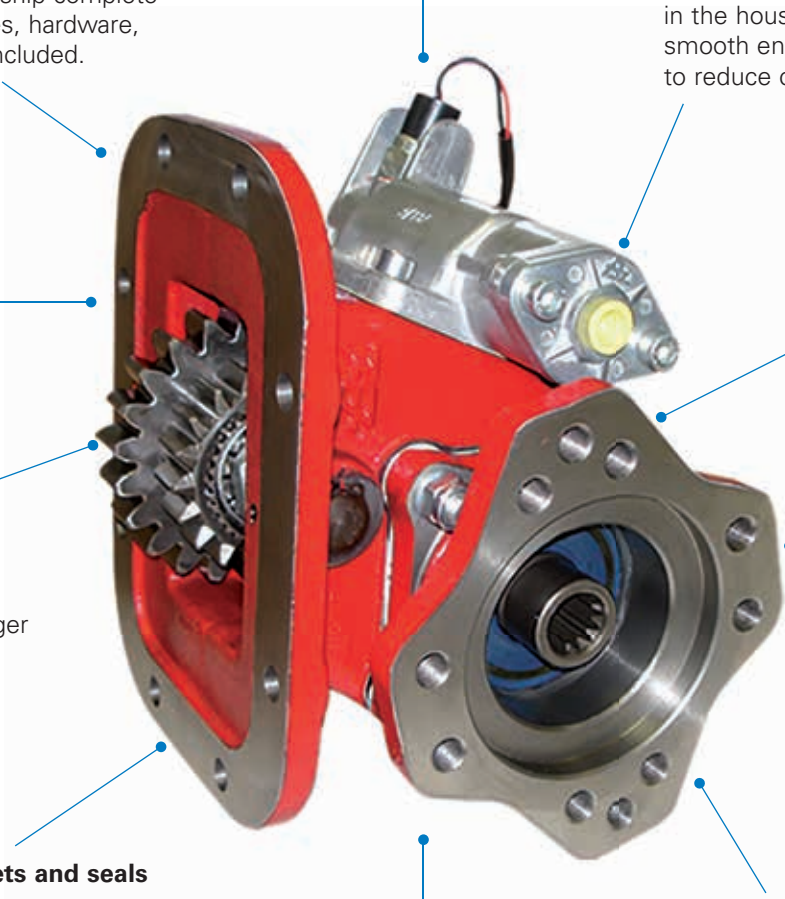
Industry leading Garlock™ gasket material provides better tear resistance and easier installation, with Viton™ o-ring material & shaft seals to prevent leaks.

### Larger flange bolts

Best in class larger flange mounting hardware provides additional support and reduces failures caused by heavy pumps.

### Cast iron housings

Robust housings for durability and clearances when used with large bodied pumps.



\*Some models

## Mobile Hydraulic Power PTO Quick Guide

### Manual PTOs: Eaton-Fuller/ Rockwell-Meritor/Spicer/Mack

- Six bolt models: 1000/1010
- Six bolt model reversible: 6000
- Eight bolt models: 2000 Standard/Heavy Duty 4100/8500
- Eight bolt model reversible: 6800/8000
- Eight bolt model dual output: 4200/4250

### "Hot shift" PTO for Manuals: Eaton-Fuller/Rockwell- Meritor/Spicer/Mack

- Six bolt model: 3200
- Eight bolt model: 3200 with AD68248 adapter
- Eight bolt model: 3800/3810

### Aisin Transmission (Dodge):

- Hot shift 3300

### Allison Automatic: AT/MT/HT/ CLT (SAE 6 bolt)

- Manual PTO: 1000

### Allison Automatic: 1000-2000 Series (SAE 6 Bolt)

- Manual PTO: 1000
- Hot shift PTO: 3300

### Allison World Transmission: MD/HD/3000/4000 series (SAE 10 Bolt)

- 3131 Heavy Duty
- 3151 Constant mesh: HD
- 3252 Low Profile-High Torque
- 3131 with rear pump mounting (3131RP) + bracket and 3190

### Ford Automatic:

- 5R110 (5 Speed) use 3900
- 6R140 (6 Speed) use 3920
- 10R140 (10 Speed) use 3940

### PTOs for Automated Manual Transmissions

#### Endurant™ HD & XD

- Bottom (8 bolt) models: 2000, 4100, 8500 series
- Rear (4 bolt) models: 95X Series

#### Detroit® DT12®

- C and D Box adapter: SAE 8 bolt
  - Fits DT12-OC, -OHD, -OV, -OD, -OVX
- 120X Series
  - DT12-DA / 14.93-1.0
  - DT12-OA / 14.96-1.0

#### PACCAR Automated Transmission

- Bottom (8 bolt) models: 2000, 4100, 8500 series
- Rear (4 bolt) models: 95X Series

#### Volvo® I-Shift/ Mack® mDRIVE™:

- 1198K03 Single output
- 11106K03 Single output heavy-duty – high speed
- 11107K\*\*\* Dual output heavy-duty – low / high speed
- 1196K03 Driveline only – slow speed
- 11109K52 Dual 1310 – low speed shafts

(\*\*\* = output choices)

▶ **Easier ordering**  
One part number for a complete installation

▶ **Save time**  
No need to waste time specking a system

▶ **Avoid mistakes**  
All components sized for a seamless installation

▶ **Manage inventory**  
Drop ship direct to install site

### Bezares Wet Kits: The simple solution to a complex problem.

Bezares wet kits provide you with everything for a complete end dump installation, in one part number. Designed for the most popular Eaton Fuller and Eaton Cummins Endurant HD™ applications, our wet kits feature a PTO with Viton™ seals and Garlock™ gaskets for easier installation and fewer leaks, a high-quality roller bearing dump pump for reliability, and an aluminum tank for lighter weight.



# Mobile Hydraulic Power Turnkey Solutions for End Dump Applications

## Eaton Fuller part numbers and contents:

Part Number	Description
<b>K-PTFWKC2U</b>	<b>Standard Fuller End Dump Wet Kit 2-Line Upright Tank</b>
PT2000XCNO11RA	(1) Bottom mount Fuller, air shift, direct mount 110-130% of engine
PTTA-50-UA	(1) 50 Gal upright (behind cab) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK2L-16-8	(1) Complete 2 line hose kit (pressure & suction hose plus all fittings)
PTTO126C-10	(1) 10" Console for the in cab control
PTBV125	(1) 1.25" NPT ball valve
PTAK126C	(1) PTO/pump combo control with kick out option
PTM2	(1) Metric stud kit (see note)
<b>K-PTFWKC3U</b>	<b>Standard Fuller End Dump Wet Kit 3-Line Upright Tank</b>
PT2000XCNO11RA	(1) Bottom mount Fuller, air shift, direct mount 110-130% of engine
PTTA-50-UA	(1) 50 Gal upright (behind cab) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK3L-12-12	(1) Complete 3 line hose kit (pressure & suction hose plus all fittings)
PTTO126C-10	(1) 10" Console for the in cab control
PTAK126C	(1) PTO/pump combo control with kick out option
PTF6FE	(2) 25 Micron spin-on filter element
PTF415	(1) Dual filter head
PTBV125	(1) 1.25" NPT ball valve
PTM2	(1) Metric stud kit (see note)
<b>K-PTFWKC2S</b>	<b>Standard Fuller End Dump Wet Kit 2-Line Saddle Tank</b>
PT2000XCNO11RA	(1) Bottom mount Fuller, air shift, direct mount 110-130% of engine
PTTA-50-SA	(1) 50 Gal saddle (round frame mount) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK2L-16-8	(1) Complete 2 line hose kit (pressure & suction hose plus all fittings)
PTTO126C-10	(1) 10" Console for the in cab control
PTBV125	(1) 1.25" NPT ball valve
PTAK126C	(1) PTO/pump combo control with kick out option
PTM2	(1) Metric stud kit (see note)
<b>K-PTFWKC3S</b>	<b>Standard Fuller End Dump Wet Kit 3-Line Saddle Tank</b>
PT2000XCNO11RA	(1) Bottom mount Fuller, air shift, direct mount 110-130% of engine
PTTA-50-SA	(1) 50 Gal saddle (round frame mount) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK3L-12-12	(1) Complete 3 line hose kit (pressure & suction hose plus all fittings)
PTTO126C-10	(1) 10" Console for the in cab control
PTAK126C	(1) PTO/pump combo control with kick out option
PTF6FE	(2) 25 Micron spin-on filter element
PTF415	(1) Dual filter head
PTBV125	(1) 1.25" NPT ball valve
PTM2	(1) Metric stud kit (see note)

Note: All wet kits will include an SAE stud kit in the PTO box as well as a metric stud kit for FR/FRO/FRF/FRF Series Fuller transmissions.

## Endurant part numbers and contents:

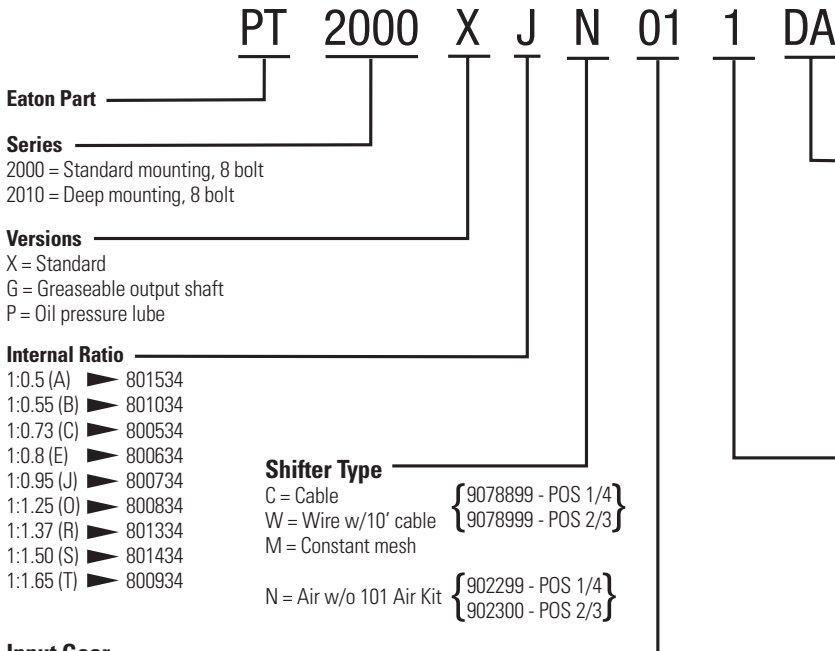
Part Number	Description
<b>K-PTEWKB2U</b>	<b>Endurant HD End Dump Wet Kit 2 Line Upright Tank</b>
PT2010XBN751RA	(1) Bottom mount, air shift, direct mount 110-130% of engine
PTTA-50-UA	(1) 50 Gal upright (behind cab) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK2L-16-8	(1) Complete 2 line hose kit (pressure & suction hose plus all fittings)
PTTO126C-10	(1) 10" Console for the in cab control
PTBV125	(1) 1.25" NPT ball valve
PTAK126C	(1) PTO/pump combo control with kick out option
<b>K-PTEWKB3U</b>	<b>Endurant HD End Dump Wet Kit 3 Line Upright Tank</b>
PT2010XBN751RA	(1) Bottom mount, air shift, direct mount 110-130% of engine
PTTA-50-UA	(1) 50 Gal upright (behind cab) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK3L-12-12	(1) Complete 3 line hose kit (pressure & suction hose plus all fittings)
PTTO126C-10	(1) 10" Console for the in cab control
PTAK126C	(1) PTO/pump combo control with kick out option
PTF6FE	(2) 25 Micron spin-on filter element
PTF415	(1) Dual filter head
PTBV125	(1) 1.25" NPT ball valve
<b>K-PTEWKB2S</b>	<b>Endurant HD End Dump Wet Kit 2 Line Saddle Tank</b>
PT2010XBN751RA	(1) Bottom mount, air shift, direct mount 110-130% of engine
PTTA-50-SA	(1) 50 Gal saddle (round frame mount) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK2L-16-8	(1) Complete 2 line hose kit (pressure & suction hose plus all fittings)
PTBV125	(1) 1.25" NPT ball valve
PTTO126C-10	(1) 10" Console for the in cab control
PTAK126C	(1) PTO/pump combo control with kick out option
<b>K-PTEWKB3S</b>	<b>Endurant HD End Dump Wet Kit 3 Line Saddle Tank</b>
PT2010XBN751RA	(1) Bottom mount, air shift, direct mount 110-130% of engine
PTTA-50-SA	(1) 50 Gal saddle (round frame mount) aluminum tank
PTPBK1000	(1) Dump pump support bracket kit
PTBZ102LAS25	(1) Direct mount air shift dump pump (equal to a C102 or E3X127)
PTHSK3L-12-12	(1) Complete 3 line hose kit (pressure & suction hose plus all fittings)
PTTO126C-10	(1) 10" Console for the in cab control
PTAK126C	(1) PTO/pump combo control with kick out option
PTF6FE	(2) 25 Micron spin-on filter element
PTF415	(1) Dual filter head
PTBV125	(1) 1.25" NPT ball valve

Note: All wet kits will include a metric stud kit for Endurant HD PTOs



# Mobile Hydraulic Power Nomenclature

## Nomenclature Example (2000 Series):



### Input Gear

01 = Fuller Series (R/675)	14 = Fuller (R/737)	27 = Eaton/Fuller (R/692)	52 = ZED/F (R/700)
02 = Universal (R/683)	15 = Eaton/Fuller FS-4005C/4205C (R/717)	28 = Fuller (R/771)	55 = Mack/Renault (R/748)
03 = Spicer (R/736)	16 = ZF (R/716)	30 = Eaton/Fuller (R/698)	56 = Tremec (R/744)
05 = Spicer (R/677)	17 = Eaton 6305 A (R/680)	33 = Spicer (R/697)	57 = ZF (R/740)
06 = Fuller (Tremec) (R/679)	18 = Eaton FS 3005/4005 AB (R/681)	34 = Spicer (R/696)	61 = Ford (R/754)
07 = Navistar (R/693)	20 = Dodge (R/701)	36 = New Process (R/739)	64 = Allison (R/752)
08 = Spicer (R/682)	21 = ZF S5-42/5.72 (R/676)	39 = Warner (R/741)	66 = Fuller (R/862)
09 = Spicer (R/684)	22 = Eaton/Fuller (R/738)	41 = Warner (R/743)	67 = Aisin (R/870)
10 = Chevy (R/678)	23 = Eaton/Fuller FS-3005 B (R/714)	42 = Fuller (R/770)	68 = Tremec (R/897)
11 = Chevy/Spicer (R/699)	24 = Mack (R/695)	50 = ZF (R/694)	70 = Mercedes G60 (R/956)
13 = New Process (R/718)	25 = Eaton/Fuller FS-7206 A (R/715)	51 = Dodge (R/702)	75 = Endurant (G/210)







## Mobile Hydraulic Power Dump Pump Cross Reference

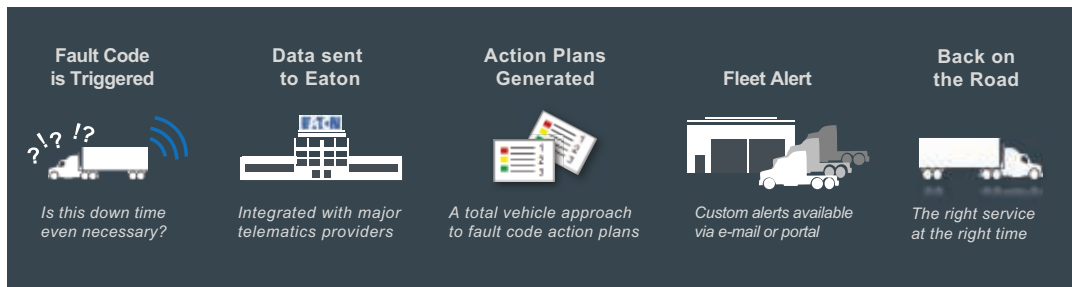
EATON PART NO.	MUNCIE PART NO.	PARKER PART NO.	PERMCO PART NO.	METARIS PART NO.	DESCRIPTION
PTBZ102LAS25	E3XA1270BPRL or EZX	C102-D-25-1-AS	DMD-25-7-L-AS-25	MH102-C-25-L-AS	SAE 4-Bolt 7/8" 13 Spline Shaft, Direct Mount, Air Shift, Rear Pipe Ports, CCW Rotation, 2 or 3 line (for most Eaton/Fuller manual transmissions)
PTBZ102RAS25	E3XA12702BPRR or EZX	C102-D-25-AS	DMD-25-7-R-AS-25	MH102-C-25-R-AS	SAE 4-Bolt 7/8" 13 Spline Shaft, Direct Mount, Air Shift, Rear Pipe Ports, CW Rotation, 2 or 3 line (for most Allison and some Mack transmissions)
PTBZ101AS25	E3A12701RPRB or EZX	C101-D-25-AS	DM-640-25-ZR-M-AS	MH101-C-25-AS	1" Dual Shaft w-1/4" Key, Remote Mount, Air Shift, Rear Pipe Ports, 2 or 3 line (must have driveline from PTO to operate pump)
<b>Note: To order the Eaton/Bezars Dump Pump in a Manual Shift, replace "A" with "M" in part number. Above pumps are 27 GPM @ 1000 Pump RPMs</b>					
PTBZG102RMS20	S2LD11502BPRR	G102-1-2.0-R-4S	DMD-400-20-XR-200	MH102-G-2-R	SAE 4 Bolt 7/8" 13 Spline shaft, Direct Mount, Lever Shift, Rear Pipe Ports, CW Rotation, 2 or 3 line (for Allison transmissions with single axle dump body)
PTBZG102LMS20	S3LD11502BPRL	G102-1-2.0-L-4S	DMD-400-20-XL-200	MH102-G-2-L	SAE 4 Bolt 7/8" 13 Spline shaft, Direct Mount, Lever Shift, Rear Pipe Ports, CCW Rotation, 2 or 3 line (for manual transmissions with single axle dump body)
PTBZG10120	S3LD11501RPRB	G101-1-2.0	DMD-400-20-ZR-200	M101-G-2	1" Dual Shaft 1/4" key, Remote Mount, Lever Shift, Rear Pipe Ports, 2 or 3 line (must have drive line from PTO to operate pump)
<b>Note: Above pumps are 15 GPM @ 1000 Pump RPMs. Change "M" to "A" in part number to order with air shift.</b>					

# Service & Support INTELLICONNECT™

IntelliConnect remote diagnostics provides near real-time monitoring of vehicle fault codes using your existing telematics provider

- Increase your uptime
- Reducing unplanned downtime
- Quicker repair diagnosis
- Provide comprehensive fault code action plans
- Over 100 years of transmission expertise

### No unnecessary downtime



### Easy-to-use portal

- Live data using your telematics system
- Fault severity and fault code action plans
- Service Activity Reports
- Customized information delivery
- Customized vehicle watchlist
- Set up a watchlist of vehicles to view quickly
- Transmission profile: view configuration, calibration and software changes on your vehicle transmission
- Weekly fleet health report delivered to your inbox



**STOP**



**Service Now**



**Service Soon**



**Informational**

Sign up today at [www.eaton.com/intelliconnect](http://www.eaton.com/intelliconnect) and view available Telematics Providers online.



## Service & Support SERVICE RANGER 4



**ServiceRanger™ 4** is a PC-based diagnostic and service software application for commercial vehicle products. Available in three service levels, it allows for quick and easy diagnosis of complex problems, enabling faster service and reduced downtime.

**ServiceRanger 4 Pro Plus** includes the Advantage Automated Clutch calibration software which enables dealers, fleets and independent repair facilities to calibrate the clutch on non-Eaton and non-Eaton Cummins transmissions, including popular models such as Detroit™ DT12®, Volvo® I-Shift and Mack® mDrive™ automated transmissions, when installing a new Advantage Automated clutch from Eaton.

FEATURES	Pro+	Pro	Basic
<b>Clutch Calibration: Detroit DT12</b>	✓		
<b>Clutch Calibration: Volvo I-Shift V2 &amp; V3</b>	✓		
<b>Clutch Calibration: Mack mDRIVE &amp; mDrive HD</b>	✓		
<b>App Center</b>	✓	✓	
<b>Programming and Configurations</b>	✓	✓	
<b>Calibrations</b>	✓	✓	
<b>Diagnostic Functions</b>	✓	✓	✓
<b>Data Monitoring</b>	✓	✓	✓
<b>Fault Codes and Troubleshooting</b>	✓	✓	✓
<b>Service Activity Report</b>	✓	✓	✓
<b>Online Account Management</b>	✓	✓	✓
<b>Free Technical Support</b>	✓	✓	✓
<b>Service Routines</b>	✓	✓	✓

**Subscribe Today. For your convenience, visit [www.EatonPartsOnline.com](http://www.EatonPartsOnline.com) and click on the ServiceRanger4 button or call 1.800.826.HELP**



## Service & Support PS-386 Synthetic Transmission Lubricant



Eaton Approved Lubricant

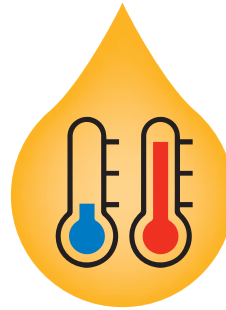
PS-386 Synthetic Transmission Fluid

### Why PS-386 Synthetic Transmission Lubricant?

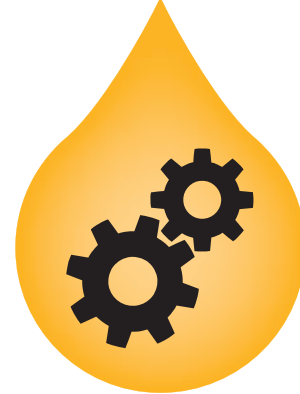
- Extended oil drain intervals (12.5 times longer than mineral oil drain intervals)
- Less downtime due to proven component durability
- Oil drain intervals extended out to 750,000 miles in some applications
- Improved shear stability results in longer gear and bearing life
- Improved oxidation resistance results in less staining and no sludging
- Eaton PS-386 approved lubricants demonstrated up to 1.5% improved fuel economy over previous approved lubricant

*"We tested the PS-386 fluid with BASF & Eaton and found it offered us the outstanding durability we've come to expect from Eaton & BASF."*

*Allen Caldwell, manager, maintenance technology, First Fleet*



- Reduces sump temperature
- Enhanced cold start properties



- Reduced gear wear
- Longer bearing life



- Less downtime due to increased component durability



- Tested in:
- 100 trucks
  - 18 months
  - 10,000,000 miles



- OEM factory fill
- Longer life



## Service & Support Roadranger Extended Protection Plans

### Coverage for Peace of Mind

Keeping your truck on the road is critical to your livelihood. Roadranger® Extended Protection Plans give you peace of mind knowing that, despite increasing parts and labor costs, or how severe the work conditions are, you can repair your truck to its original standard of quality.

### Comprehensive Coverage

Roadranger Extended Protection Plans cover the transmission, clutch, and 100% of parts and labor on all warrantable failures. For a relatively modest investment, you can rest easy, knowing that Roadranger is there to support you throughout the life of your truck. You choose the protection that meets your needs.

### You're Covered Everywhere

With our Extended Protection Plans, you are never far from parts and service, with over 3,500 authorized dealers in the U.S. and Canada.

### How to Order...The Process Is Simple

- Simply visit [www.roadranger.com](http://www.roadranger.com), and click the link for Extended Protection Plans. You can review options and pricing online.
- Use the interactive Roadranger Warranty Assistant. It will assist you in selecting the right coverage.
- You will receive an invoice for the coverage. Once payment is received, a confirmation of your coverage will be sent, and you are covered.
- Alternatively, you can use the mail-in order form available on the website and send via email, fax or regular mail.

### Benefits

1. Full Warranty Protection  
Full parts and labor on warrantable failures.
2. Service Available at All OEM Dealer Facilities
3. Genuine Parts  
All replacement parts will be genuine Eaton parts, so you know your repaired vehicle will have the same outstanding quality it had when it was first purchased.
4. Simple Payment Options  
You can purchase a Roadranger Extended Protection Plan by rolling it into the financing of your new vehicle, or simply order online. Peace of mind has never been easier to obtain.
5. Protection from Cost Inflation  
Your Extended Protection Plan covers all repairs to your vehicle's drivetrain, regardless of increases in parts or labor that are certain to occur over time. One simple payment now can save you substantial repair charges in the future.
6. Enhanced Resale Value  
Repairing your vehicle with genuine Eaton parts increases its resale value. Plus, your coverage is transferable, further enhancing your resale value.

### Expanded Lineup of Extended Protection Plan Offerings

*Heavy- and Medium-Duty Transmissions (Manual and Automated)*

Full coverage is provided for all Eaton heavy- and medium-duty manual and automated transmissions.

*All Vocations*

Extended Protection Plans cover all drivetrain components, regardless of the severity of use in your industry, including logging and mining vehicles.

*Single Year Coverage Available*

Roadranger Extended Protection Plans may be purchased for as little as a single year, so you do not have to purchase coverage for longer than you expect to own your vehicle.

Refer to the warranty guide (TCWY0900) for complete details.





## Technical Roadranger Academy Product Training



### Keep Ahead of the Curve with Training from the Experts

The Roadranger Academy offers hands-on and computer-based instruction your technicians need to move more trucks through the bays and reduce "comebacks":

Roadranger Academy teaches:

- Techniques and shortcuts used by the experts.
- How to more accurately diagnose problems through hands-on training.
- How to use valuable class materials referencing what they learned, including service bulletins, service manuals and troubleshooting guides.

To register for classes in your area or see what computer and web-based training is available, visit [www.roadranger.com](http://www.roadranger.com) and click on the Roadranger Academy training link.



# Factory Reman Bundle Warranty/Clutch Installation Kit Bundle Warranty Roadranger Warranty Registration Form TCWY0760

Use this form to activate additional one year warranty on:

- Heavy-duty Standard Reman/FLEX Reman, Reman Glider Kit and EverTough clutch (Factory Reman Bundle Warranty)
- EverTough clutch (Clutch Installation Kit Bundle Warranty)

**Registration for additional warranty must be completed/submitted within one year of retail sale of bundled products.**

## Factory Reman Bundle Warranty Instructions:

1. Purchase of heavy-duty Reman transmission, Advantage/ EverTough clutch and Eaton-approved synthetic lubricant is required to activate additional 1-year warranty on above items.
2. Please enclose proof of purchase or repair order listing transmission, clutch and lubricant along with this form to activate the warranty.
3. Coverage confirmation will be sent by USPS mail.
4. Advantage clutch, UltraShift, UltraShift *PLUS* and Lightning transmissions (FRLO models) are not included in this program.

## Clutch Installation Kit Bundle Warranty Instructions:

1. Purchase of EverTough clutch and clutch installation kit is required to activate additional 1-year warranty.
2. Please enclose proof of purchase or repair order listing clutch and installation kit along with this form to activate the warranty.
3. Coverage confirmation will be sent by USPS mail.
4. All genuine clutch installation kits qualify.
5. Advantage and UltraShift clutches are not included.

## Step 1: Enter owner/dealer information

Owner: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State/Prov: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

Dealer Code: \_\_\_\_\_

Dealer: \_\_\_\_\_

Dealer Contact: \_\_\_\_\_

Dealer Contact Email: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State/Prov: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_

## Step 2: Enter vehicle/component information

OEM \_\_\_\_\_ Date-In-Service \_\_\_\_\_ Current Odometer \_\_\_\_\_  MI  KM

Chassis VIN (17 characters): \_\_\_\_\_

Transmission Model: \_\_\_\_\_ Transmission Serial: \_\_\_\_\_

Clutch Part No.: \_\_\_\_\_ Clutch Installation Kit Part No.: \_\_\_\_\_

Clutch Serial Number/Build Date \_\_\_\_\_

Lube Brand and picture of Eaton logo on container (or invoice): \_\_\_\_\_

Vehicle vocation (choose one only)

**Linehaul**

### Standard Duty

- Construction   
  Pickup and Delivery   
  Fire Services   
  Rescue Vehicle   
  Recreation Vehicle  
 Transit Coach   
  School Bus

### Severe Duty

- Off Highway   
  Agriculture   
  Heavy Haul   
  Logging   
  Mining  
 Oil Field   
  Refuse   
  Yard Tractor   
  InterCity Bus

## Step 3: Mail, fax or email this completed form with proof of purchase to:

**Mail:** Eaton  
c/o 360 Services, Inc.  
275 E. 12 Mile Rd.  
Madison Heights, MI 48071



**Fax:**  
1-734-591-7899




**Email:**  
roadrangerprotection@eaton.com

Check here for email confirmation of warranty submission (please ensure you enter your email address above).

# Learn More

Learn about Eaton's entire portfolio of truck and automotive parts and services for the aftermarket at [EatonPartsOnline.com](http://EatonPartsOnline.com)


INDUSTRY BEST expertise  
easy to do business solutions  
ROADRANGER ACADEMY  
TRAINING solutions  
**SUPPORT** 

reliability  
**REMAN TRANSMISSIONS**   
Genuine Eaton FLEX REMAN  
AUTHORIZED REBUILT TRANSMISSION confidence


**MOBILE POWER** Tanks Pumps Valves  
 PTOs   
*bezaresusa*

**DIFFERENTIALS** DETROIT LOCKER® POSI®  
high performance  
DETROIT TRUETRAC®  
strength  traction  
ELocker®  
ELocker4®

**TOOLS** ECOMMERCE  
ServiceRanger™ 4  
DEALER LOCATOR  
IntelliConnect™  
PRODUCT SELECTORS

**LUBRICANTS**  
 PS-386 peace of mind  
protects your investment PS-278

**CLUTCHES** Genuine  
ADVANTAGE SELF-ADJUST®  
 EVERTOUGH® CLUTCH  
ECA CLUTCH  
REMANUFACTURED  
ADVANTAGE AUTOMATED  
430mm ANGLE RING  
INSTALL KITS

TVS® Technology  
R2650  
**SUPERCHARGERS** R2300  
R1740 R1900  
V-series 

**PARTS** TRUE SINE WAVE INVERTER  
 OVERHAUL KITS  
BULK KITS  
genuine value for the money  
**REBUILD KITS**

 competition STREET performance  
**RING & PINIONS**

BACKED BY  
**Roadranger**  
SUPPORT

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

Roadranger: Eaton and trusted partners  
providing the best products and services in the  
industry, ensuring more time on the road.

**Eaton**  
Vehicle Group  
13100 E. Michigan Ave.  
Galesburg, MI 49053 USA  
800-826-HELP (4357)  
[www.eatonpartsonline.com](http://www.eatonpartsonline.com)

© 2023 Eaton  
All Rights Reserved. Printed in USA.  
APSL0220 0623

**Note:** Features and specifications listed in this document are subject to change without notice and represent the maximum capabilities of the software and products with all options installed. Although every attempt has been made to ensure the accuracy of information contained within, Eaton makes no representation about the completeness, correctness or accuracy and assumes no responsibility for any errors or omissions. Features and functionality may vary depending on selected options.

Eaton, Roadranger, Fuller, UltraShift, Fuller Advantage, Solo, Advantage Self-Adjust and Easy Pedal Advantage are registered trademarks of Eaton. All trademarks, logos and copyrights are those of their respective owners.