

Eaton Performance Products

We make more horsepower work.*



EATON

Powering Business Worldwide

EATON

PERFORMANCE PRODUCTS

From the road to the rocks and the track to the trail, designing products to satisfy the demanding needs of enthusiasts takes world-class expertise.

At Eaton, we engineer solutions to handle the highest horsepower and the toughest terrain. Our legendary performance products are trusted by enthusiasts around the globe, because every product we offer is tested and validated in our state-of-the-art labs and proving grounds. So you know they'll go strong mile after mile.



*We help you make horsepower and get it to the ground. Because that's what matters.

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Ring and Pinion Gears

Choose Eaton to maximize the performance of your drivetrain.



Eaton's new ring and pinion sets are ideal for the performance enthusiast. Whether used for street or off-road applications, or for competing on the track, they are an ideal addition to pair with Eaton's broad portfolio of performance differentials. These ring and pinion sets build on Eaton's long history of building quality performance differentials for automotive enthusiasts; providing quality, reliability and enhanced vehicle performance.

All Eaton Performance gear sets are made in the U.S.A. and feature:

- Computer Numerical Controlled (CNC) cut teeth which improves gear meshing, reduces stress, and ensures smooth engagement;
- Rolled splines for additional tooth strength and longer life;
- Domestically sourced, heat-treated steel for exceptional durability



Street

Street series gear sets are made from high quality 8620 or 4320 steel which provides long life under daily use conditions.



Competition

Competition series gear sets are made from high quality 9310 steel which provides the higher impact resistance needed at the track.

Super Finish (Optional)

An optional Super Finish is available on all gear sets, which is highly polished and:

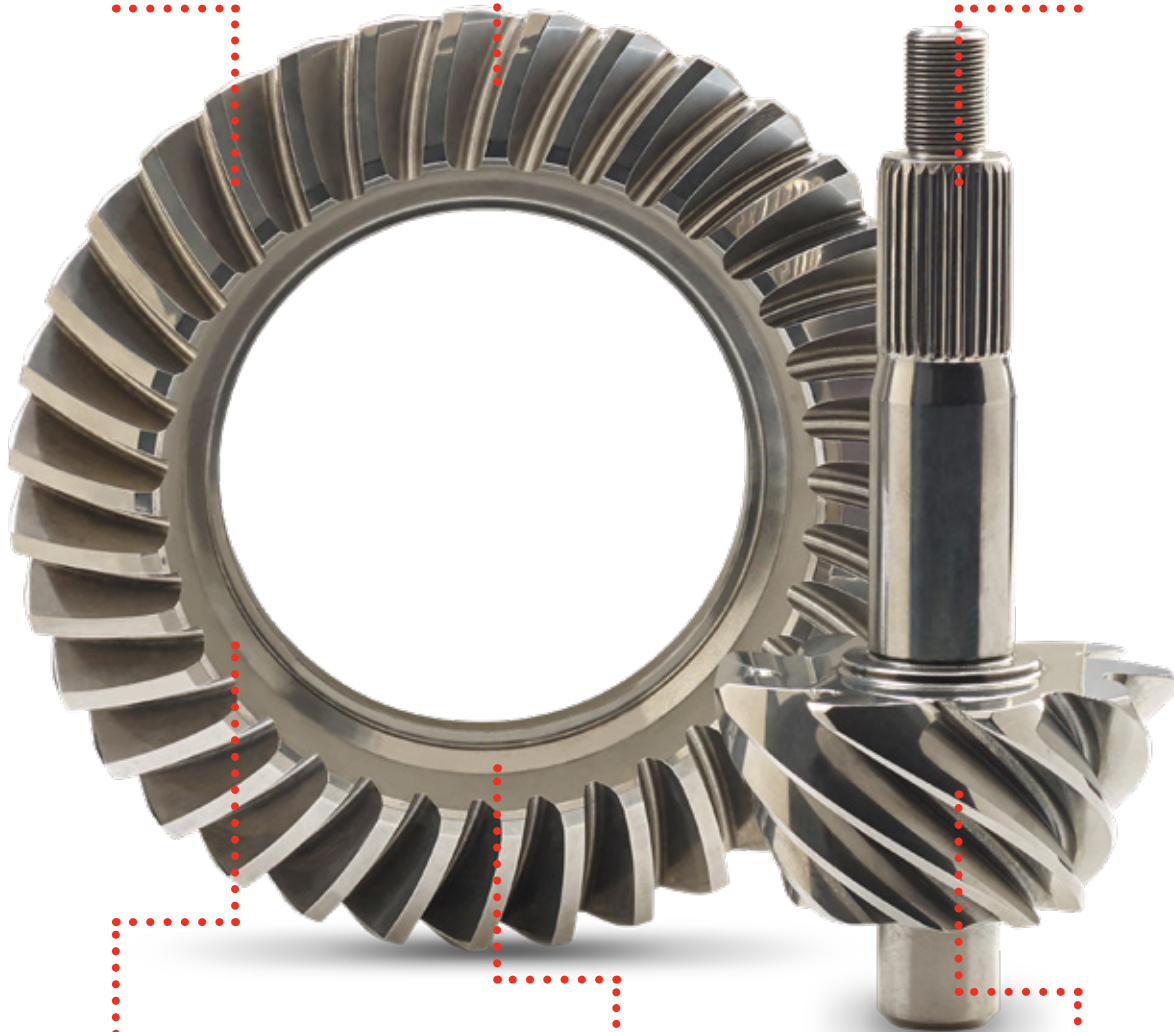
- Adds 3-5% more horsepower to the rear wheels
- Eliminates the break-in requirement
- Reduces friction and wear
- Improves oil retention and overall durability
- Reduces noise, vibration and harshness
- Improves resistance to pitting and corrosion
- Reduces heat build-up



Computer numerically controlled (CNC) machined gear teeth for precise, smooth, quiet performance

Duplex cutting process provides increased tooth strength

Roll-formed pinion splines for superior strength and durability



Optional super finish reduces friction, heat buildup and wear, providing increased horsepower

Proudly made in the USA from high quality steel

A perfect match to your Eaton Performance Differential

Ring and Pinion gear applications

Eaton Ring and Pinion gears are available in a wide range of axle ratios for many applications, including:

Axle Type	Ratio
Chrysler 8.7" IRS - Challenger / Charger / Magnum - Getrag H226 - 2010 & Newer -SRT8	3.23, 3.55, 4.10, 4.29
Chrysler 8.75" (489)	3.23, 3.55, 3.73, 3.91, 4.10, 4.30, 4.56, 4.86, 5.13
Dana 36 Corvette	3.54, 3.73
Dana 44 Corvette	4.11, 4.33, 4.56, 4.88
Dana 60	3.54, 4.88, 5.13, 5.38
Dana 60 PRO	4.10, 4.30, 4.56, 4.88, 5.38, 5.57, 5.86, 6.17
Ford 8"	2.80, 3.00, 3.25, 3.55, 3.80, 4.11, 4.62
Ford 8.8"	3.08, 3.55, 3.73, 3.90, 4.10, 4.30, 4.56, 4.71, 4.88, 5.13
Ford Super 8.8" IRS - 2015 Mustang	3.73, 3.91, 4.11
Ford 9" PRO	3.40, 3.50, 3.60, 3.70, 3.89, 4.11, 4.29, 4.57, 4.71, 4.86, 5.00, 5.14, 5.29, 5.43, 5.67, 5.83, 6.00, 6.20, 6.33, 6.50
Ford 9.5" PRO - 35 spline large stem pinion	3.25, 3.40, 3.50, 3.60, 3.70, 3.89, 4.11, 4.29, 4.57, 4.86, 5.00, 5.14
Ford 10" PRO - Dual bolt pattern	3.89, 4.11, 4.29, 4.57, 4.71, 5.00, 5.14, 5.43, 5.67, 5.83, 6.20
GM 8.4" Corvette	3.08, 3.36, 3.55, 3.73, 4.11, 4.33, 4.56
GM 12 Bolt Car	3.08, 3.31, 3.42, 3.55, 3.73, 3.73-4, 3.91, 4.11, 4.11 THICK, 4.30, 4.56, 4.56 THICK, 4.88, 5.14, 5.38
GM 12 Bolt Car PRO	4.11, 4.30, 4.56, 4.88, 5.00, 5.14, 5.38, 5.57, 5.86, 6.00, 6.14



Eaton Performance Differentials

Engineered for the most challenging terrain.

Whether you are transforming your daily driver to a street/strip machine or want to improve your off-roader, Eaton has a differential that is right for your application.

Limited slip differentials are torque sensing differentials that allow the wheel with traction to receive more torque.

Locking differentials ensure each wheel receives equal torque, to keep your vehicle moving on all types of terrain.

Eaton Performance Differentials		Applications					
		CircleTrack	Drag Racing	Off- Road	Rock Crawling	Street to Strip	Towing
Locking	Eaton Detroit Locker®	●	●	●	●	●	
	Eaton ELocker®			●	●		●
Limited Slip	Eaton Detroit Truetrac®	●	●	●		●	●
	Eaton Posi®	●	●	●		●	●



"I would never question the reliability of my Eaton lockers, they are always ready to lock up when I need them to get out of any situation, whether we are racing or just playing."

Jordan Pellegrino
GenRight Motorsports



Detroit Locker®

The Detroit Locker is a locking differential that provides ultimate traction for mild to extreme vehicle applications. Its unique, bullet-proof design is engineered to keep both wheels in drive mode - even if one wheel is lifted off the ground.

Operation

Normally locked, during straight-line driving, the Detroit Locker sends 100% of available torque to both wheels equally. During turns and maneuvers, the internal components unlock to allow one wheel to spin faster or slower as necessary (free wheel). When the vehicle returns to straight-line driving, the components re-engage and provide power to both wheels.

Performance

The Detroit Locker is highly engineered, tested and validated for a variety of uses including racing, towing, off-road, rock crawling and street/strip. No other performance differential can match its reputation for delivering traction in mud, snow, rocks and on the track.

Fast Fact:

The Detroit Locker is the only differential inducted into the Hot Rod Speed Parts Hall of Fame.

Features

- Normally locked, with automatic, speed sensitive unlocking as needed
- Provides maximum amount of traction to both wheel ends
- Maintenance free
- Special weight-reduced units are available for racing applications

Lubrication

A quality petroleum GL5 rated (mineral) based oil is recommended. Synthetic oils may also be used if desired per axle manufacturer's recommendations.

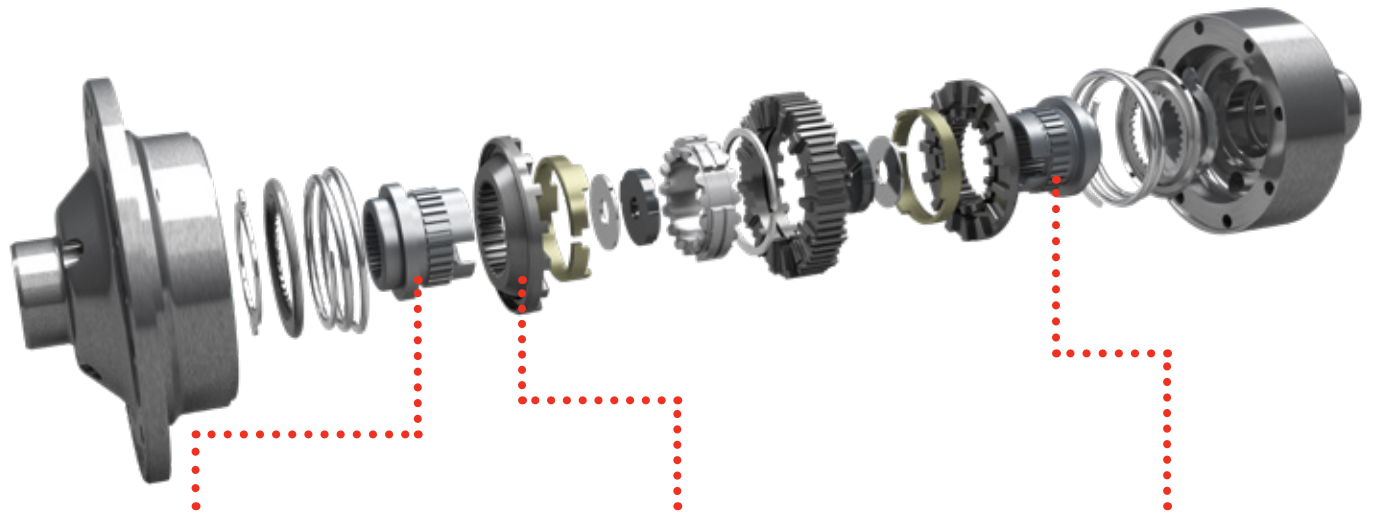
Applications

CircleTrack	Drag Racing	Off - Road	Rock Crawling	Street to Strip	Towing
●	●	●	●	●	

Dramatically enhances racing,
off-road and towing performance

Maintenance free design: no special
lubrication or additives required

Legendary strength and durability
for all driving conditions



No driver input required: operates
as a fully locked differential until
unlock is required

Normal, locked operation provides
traction even with one wheel off the
ground (no individual wheel spin-out)

Speed sensitive, automatic unlocking
when needed for cornering



"For over 45 years, we've depended on Detroit Lockers, Eaton ELockers, and Detroit Truetracs in our project vehicles. When reliable traction is needed, Eaton diffs do the job every time."

Phil Howell
Automotive Photojournalist

Eaton ELocker® / ELocker4®

The ELocker is an electronic, selectable differential for drivers that want full control and traction on demand.

Operation

Under normal conditions, the ELocker performs as an open differential. When an obstacle is encountered – a rocky trail, muddy ditch or other challenge – the driver presses a dashboard switch. The electromagnetic mechanism then locks, sending 100% of the available torque to both wheels equally. A second press of the switch deactivates the unit to resume normal driving.

Performance

ELocker internal gears are net-forged, providing the strength and durability necessary for off-road and recreational driving. Its electronic control also provides added reliability over similar air-controlled products.

Eaton ELocker4®

- 4 pinion gear design provides increased capability for today's higher driveline torques
- Fastest engagement time (.14 seconds) on Direct Acting ELocker4 for Dana 60/70 axles

Fast Fact:

The ELocker was originally developed for the Hummer H1, the civilian version of the AM General HMMWV (Humvee®).

Features

- Driver controlled push-button operation
- Positive-electronic locking mechanism
- Net-forged gears for maximum strength and durability
- Sends all available torque to both wheels equally upon driver command, providing maximum traction to overcome challenging terrain

Lubrication

A quality petroleum GL5 rated (mineral) based oil is recommended. Synthetic oils may also be used if desired per axle manufacturer's recommendations.

Applications

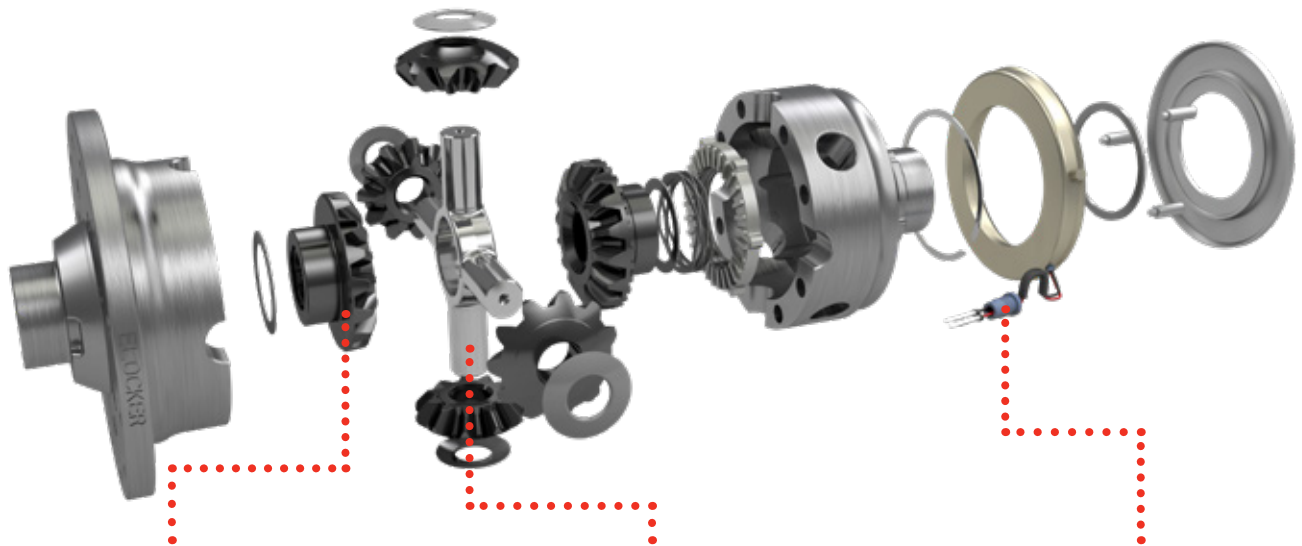
Applications					
Circle Track	Drag Racing	Off- Road	Rock Crawling	Street to Strip	Towing
		●	●		●

Use in front or rear axles, two-wheel or four-wheel drive vehicles

Maintenance free: no lubricant additives required



ELocker[®]



Operates as an open differential until activated by the driver, for maximum maneuverability

Four pinion, net-forged gear design for today's higher torque vehicles (ELocker4)

Increased driver control: a dashboard switch controls full axle lock/unlock



"Whether your application ranges from a tow vehicle to a 9 second, quarter mile beast, Eaton has a differential that will withstand the abuse. Their Truetrac and Lockers provide optimum traction for your performance street machine without sacrificing driveability."

Andy Warren

7-Time NMCA Champion

Detroit Truetrac®

The Detroit Truetrac is a helical-gear style limited-slip differential that maximizes wheel traction and enhances driving and handling characteristics.

Operation

The Truetrac operates as a standard (open) differential under normal driving conditions, allowing for unobtrusive operation. When a wheel encounters a loss of traction or the terrain changes, the helical-shaped gears mesh with increasing force, transferring torque to the high traction wheel until wheel spin is slowed or completely stopped. When the vehicle exits the low traction situation, the differential seamlessly resumes normal operation.

Performance

Operation of the Truetrac is smooth, quiet and automatic. The unit will engage without any driver action required. It also has no wearable parts and requires no maintenance, meaning less time in the garage and more time on the road.

Fast Fact:

Detroit Truetrac was the original, helical-gear style limited-slip differential.

Features

- Smooth and automatic engagement - no driver action needed
- Maintenance free, more time on the road
- Helical-style side and pinion gears
- Limited-slip operation

Lubrication

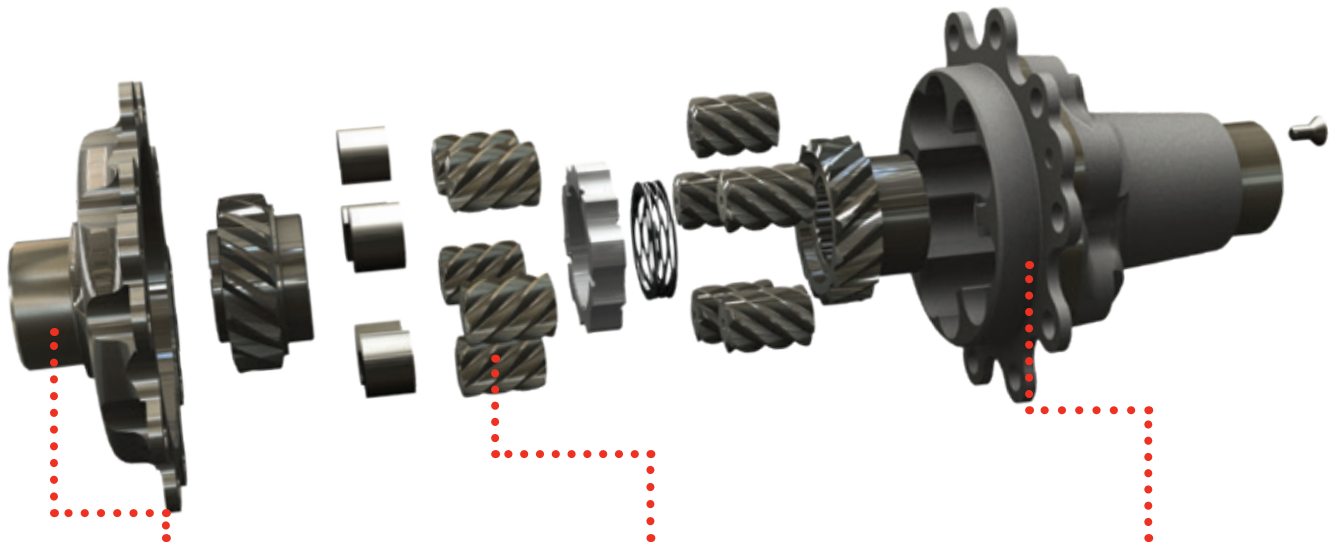
A quality petroleum GL5 rated (mineral) based oil is recommended. Synthetic oils may also be used if desired per axle manufacturer's recommendations. Friction modifiers should not be used as they will decrease overall performance.

Applications

Circle Track	Drag Racing	Off - Road	Rock Crawling	Street to Strip	Towing
●	●	●		●	●

Torque sensing, limited-slip differential that performs as open until wheel slip occurs

May be used in front or rear axles, two-wheel or four-wheel drive vehicles



Fully automatic: smooth and quiet engagement

High strength helical gear set for extreme durability and lifetime performance

No wearable parts, no maintenance required

"Anytime we build a car, we only use Eaton differentials. Whether it is a rock crawler with an ELocker, a strip beast with a Detroit Locker, or a high-horsepower cruiser and a Truetrac, Eaton gets the call."

Jefferson Bryant
Street Tech Magazine



Eaton Posi®

The Eaton Posi limited-slip differential is the perfect way to control traction in muscle cars, street rods, light duty pickups and all types of tarmac running race cars.

Operation

The Posi prevents wheel slip before it can get started. Race-bred carbon disc clutch packs, preloaded by a central spring assembly, are located behind each differential side gear. When torque input changes (one wheel slips), the clamping load on the clutch packs increases, causing them to smoothly transfer power to the other wheel as needed.

Performance

The Eaton Posi is smooth and automatic, requiring no driver input. Featuring pyrolytic carbon clutches and a rebuildable design, the Posi can be custom tuned for your desired performance.

Fast Fact:

Posi is short for "Positraction". The choice of American OEMs for over 50 years.

Features

- Superior rebuildable design
- Race-bred carbon friction discs
- Limited-slip operation
- Smooth and automatic engagement - no driver action needed
- Tunable via various spring packs (a.k.a. pre-loads)

Lubrication

A quality GL5 petroleum (mineral) based or synthetic oil with sufficient friction modifier must be used.

Applications

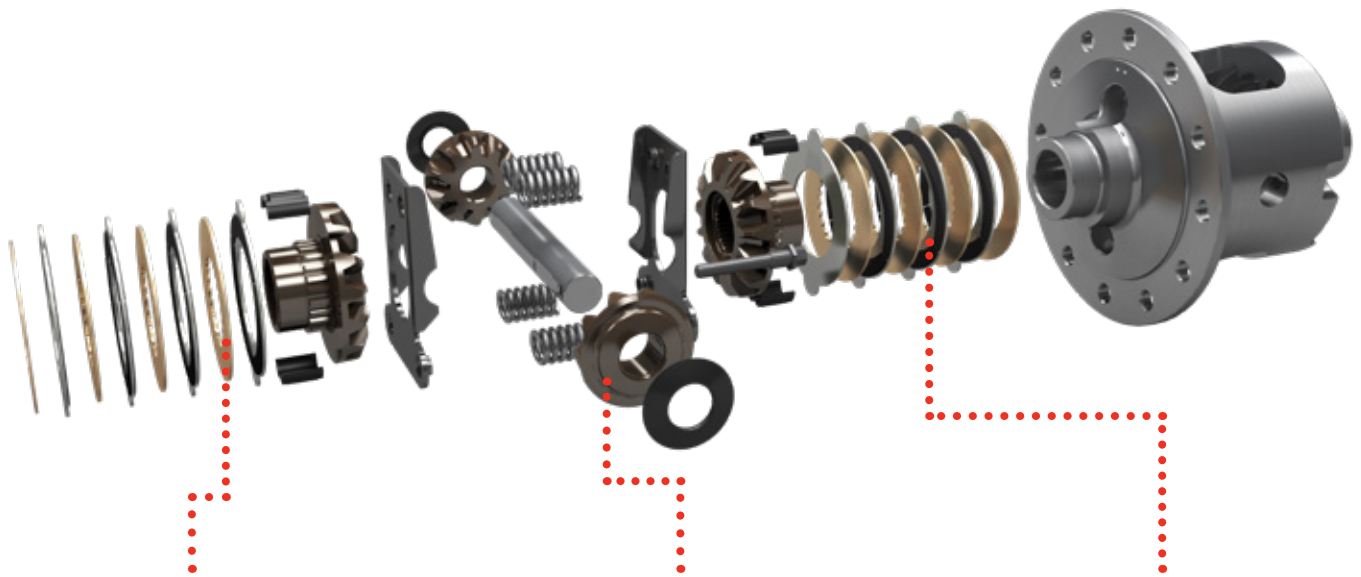
Applications					
CircleTrack	Drag Racing	Off - Road	Rock Crawling	Street to Strip	Towing
●	●	●		●	●

Clutch-style limited slip differential senses torque transfer and engages automatically

Dramatically enhances racing, street to strip, off-road and towing performance



Posi®



Patented, race-bred pyrolytic clutches provide smooth and consistent performance and high temperature tolerance

Precision net-forged gear sets for extra strength and durability

Fully rebuildable and tuneable design with 200 lb., 400 lb., and 800 lb. preload systems available to meet your specific performance needs

Superchargers

Power up with TVS® technology

With over 30 years of experience, Eaton is the world's largest producer of Roots-type superchargers. Our Twin Vortices Series (TVS®) design powers many of the world's highest performance production vehicles, so you know it's up to the task in an aftermarket application.

Aftermarket supercharger systems are a major investment, that's why you want a system that not only increases horsepower and torque, but is reliable. All Eaton TVS rotating groups are validated to OEM specifications, so we are confident that no other aftermarket supercharger can match its durability.

You can find TVS technology in supercharger systems from these well-known companies.

Roush Performance

Roush Performance was founded in 1995 by motorsports legend Jack Roush, the winningest name in racing. Combining performance engineering with entrepreneurship, Roush began selling designs he had created for his own team to the wider world of motorsports. Based out of Plymouth Township, Michigan, Roush Performance, a division of Roush Enterprises, designs, engineers and manufactures completely assembled pre-titled vehicles, aftermarket performance parts, and superchargers for the global performance enthusiast market.





Edelbrock E-Force Systems

Edelbrock E-Force Supercharger systems deliver excellent horsepower and torque in a complete kit. Its unique design features minimal components, making it possible to fit under the stock hood. Edelbrock's unique and efficient inlet configuration results in a shorter, less restrictive intake path for improved air flow, without the need for a jack-shaft. Edelbrock supercharger systems are available in three performance levels for most applications.

Everything fits right out of the box, no welding, cutting or grinding.



- Unique design allows maximum low-end torque and instant throttle response
- Electronic PCM programming module, with Stage 1 or Stage 2 application specific tuning
- Little to no decrease in fuel economy
- Available with a FREE limited powertrain warranty
- 50-state emissions street legal (Stage 1 and select Stage 2 systems)

Magnuson Superchargers

Located in Ventura, CA, Magnuson Superchargers have more than 40 years' experience serving the niche OEM, performance aftermarket and R&D industries. Magnuson is a market leader in late model car and truck supercharger systems with a broad range of vehicle applications. All Magnuson superchargers utilize Eaton's proven TVS Technology for efficient, reliable performance and proven durability. Magnuson has a world-class team of technical specialists with 100+ years of combined experience in the OEM supercharger industry.



Magnuson's capabilities include:

- Turn-key aftermarket supercharger systems with 3 yr/36k powertrain warranty
- Full range of generic supercharger assemblies
- New product design and development to OEM standards
- Engine and chassis dyno testing
- OEM quality engine tuning and calibration services
- Supercharger performance mapping and durability testing
- Low volume OEM production capability
- ISO 9001 and IAF 16949 certification
- 50 state CARB legal products
- Global distribution network

Harrop Engineering

Harrop Engineering designs and manufactures Superchargers for a variety of engine applications, utilizing Eaton TVS Technology to deliver more power and torque for uncompromising, high-performance driving. Harrop has a rich history as a key supply partner to OEM Supercharger programs including Ford Australia, Lotus UK and Toyota, as well as manufacturing supercharger systems for the automotive aftermarket.



- Positive displacement superchargers ranging in capacity from 410cc to 2650cc per revolution
- OE quality and packaging integration for the automotive aftermarket and specialty powertrain applications
- Leaders in supercharger intercooler technology
- Supercharger systems available for popular GM, Ford, Toyota and Nissan engine and vehicle variants

Superchargers Online

Superchargers Online (SCOL) is the only North American authorized Eaton supercharger parts distributor and rebuilder. They rebuild, repair, and remanufacture Eaton superchargers to factory specifications, with genuine Eaton parts, whether it's a factory (OEM) supercharger, or an aftermarket supercharger from TRD, Magnuson, Edelbrock, SLP or Roush.



With SCOL, you can trust that their rebuilt and remanufactured superchargers will enjoy many miles of quiet, trouble-free power. Their rebuilt superchargers are:

- Built with genuine Eaton parts
- Assembled to factory tolerances
- Rigorously tested

"We always try to stay a step ahead of everybody else - it takes a company like Eaton to keep us there."

-Troy Trepanier
Rad Rides



Learn more about performance driveline and axles we have.