

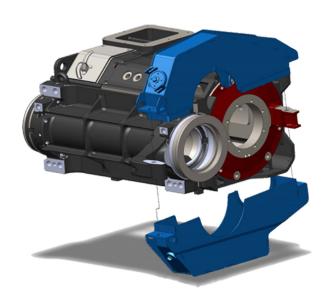


# PowerRail

# Let's Talk Traction Motors







Powered by electricity and tasked with generating the power to rotate the wheels, traction motors play a vital role in keeping locomotives moving.

When a traction motor goes down, repairs and/or replacement parts are needed, and time is of the essence to get the locomotive running back on track.

PowerRail proudly offers a complete line of new and remanufactured traction motors, with standard and premium rebuilds in stock for immediate delivery. They are approved by Class Is, regional lines, short lines, and passenger transits across the USA, as well as internationally approved. With an experienced staff and quality workmanship, PowerRail is an AAR M-1003 quality certified company. Utilising an OEM verification process and the SolidWorks CAD system, PowerRail's engineering staff complete full product development, enhanced designs and failure analysis.

In addition, if you're looking for improved reliability, lower maintenance costs, and extended service intervals for your traction motor, PowerRail offers state-ofthe-art, enhanced design, BTR/ axle bearing housing traction motor conversions. Conversions are available for most EMD and GE Models.

Benefits include eliminating brass support bearings and the wick assembly, allowing less maintenance and longer life. Tapered roller support bearings are sealed, eliminating wick lubricators, and the addition of oil. Tapered roller support bearings also only require a visual inspection of the seals every 90 days, versus sleeve-type bearings which require inspection and oil addition every 45 days. With the BTR traction motor, wheelset removal from the traction motor is more simplified. And axle wheel



gear assembly can be removed from the motor, complete with suspension bearings, and be applied to other motors, as required.

In addition to all the benefits that come from upgrading your fleet with BTR traction motors, PowerRail's conversion to axle housing bearings, also known as 'U-Tubes', offers an improved design with heavier wall thickness at the commutator end, sensor holes drilled (ready for sensor installation), and cable cleat supports pre-installed.

With over 18 years of experience in supplying the rail industry, PowerRail utilises its expertise in development, manufacturing, and operation to create custom solutions for railroads across the world. When an Australian-based railroad was faced with a need for replacement BTRL traction motors, PowerRail configured the optimal solution to meet their requirements.

To purchase new BTRL traction motors for the GT46C locomotive would have come with an increased price tag and a lead-time of almost six months. That just wasn't an option for this railroad. Instead, PowerRail developed a way to convert the existing BTR cores that they had in stock to BTRL traction motors.

The BTRL traction motor is a mechanical hybrid between the latest DC traction motor models, like the D90 and D100, and the standard D87BTR. The mounting is similar to these more recent models and therefore will not mount into a BTR model truck assembly. Thanks to the innovation of PowerRail, they were able to rebuild the connection on the rear of the motor to complete the conversion.



PowerRail U-Tubes offer an improved design with heavier wall thickness at the commutator end.

PowerRail is the leading expert for innovation and quality of traction motors and other related electrical rotating components. Made in the USA for railways around the world, PowerRail utilises a proven design that meets OEM specifications. In addition, they offer costcompetitive options including all new or a combination of new and requalified components. With a full line of support products and offering technical support, PowerRail can be your one-stopshop for all electrical rotating parts and components.

PowerRail is a United States-based company, with several locations in various parts of the world. Originally formed in 2003 in Wilke-Barre, Pa., the PowerRail Corporate Offices and Main Distribution Center are now located on a 7+ acre site in Duryea, Pa. PowerRail proudly offers a wide range of new and rebuilt rail-related parts and components including bearings and journal boxes, electrical rotating parts, engine components, compressors, pumps, and motors, from their various manufacturing facilities across the US. In addition, PowerRail offers locomotive rebuilds, overhauls, and mobile maintenance at their locomotive shop. PowerRail is also a global supplier with locations in Europe and Australia.

#### www.epowerrail.com





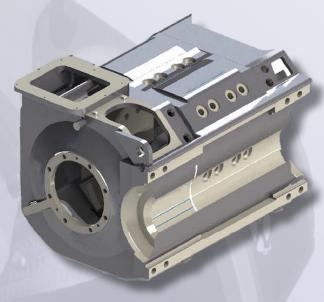


## **TRACTION MOTORS**

PowerRail proudly offers a complete line of new and remanufactured Traction Motors.

- Approved by Class I's, Short Lines, Regionals, Passenger Transits, and Internationally
- Quality M-1003 Approved Parts
- Full Line of Support Products
- Experienced Staff
- Quality Workmanship
- Technical Support
- Competitive Price

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D27/D37/D47	D57/D67	752E6	752E8
D77/D77B	D78	752 AF	752AG
D87/D87B	D90	752AH	GEB
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### TRACTION MOTOR CONVERSIONS

Looking for improved reliability, lower maintenance costs, and extended service intervals?

Upgrade your fleet with PowerRail's state of the art, enhanced design, BTR/Axle Bearing Housing Traction Motor Conversion. Conversions available on most EMD and GE Models.

#### **BENEFITS INCLUDE:**

- ✓ Eliminates brass support bearings and wick assembly, allowing less maintenance and longer life
- ✓ Tapered roller support bearings require visual inspection every 90 days, vs. sleeve-type bearings which require inspection and oil addition every 45 days
- √ Wheelset removal from the traction motor is simplified
- ✓ Axle wheel gear assembly can be removed from the motor, complete with suspension bearing, and be applied to other motors, as required



PowerRail is the leading expert for innovation and quality of Traction Motors and other related Electrical Rotating Components. Our Traction Motors are made in the USA for Railways around the world, utilizing a proven design that meets OEM specifications.

Cost competitive options include all new or a combination of new and requalified components.

www.ePowerRail.com™