

Long Haul Alternators 160 A and 200 A - Range Extension Upgrade and Save!



The Bosch Long Haul Alternator Road Tests

The Field Trial

The BX525085, a genuine Bosch alternator, was installed in a Kenworth "T" series prime mover, one of a fleet of trucks operated by a large transport company, carrying general freight. All trucks average between 250,000 - 300,000 km per year. Each truck is serviced fortnightly, and subjected to a CAT extra engine analysis each month.

The independent analysis made in January 2007, with the Bosch alternator fitted, showed an overall fuel economy of 1.53 km per litre of fuel. Six months earlier, the same engine in the same truck, with the previous alternator, recorded a fuel economy of 1.43 km per litre. In both instances, the truck exceeded 300 driving hours during the test period.

A spokesman for the company commented:

"Since the installation of the Bosch alternator there has been a reduction in fuel consumption which equates to substantial dollar savings over the year".

The driver made the observation:

"The voltage gauge did not waiver at all when the lights went on, or when I hooked up..."

The bottom line:

*Fuel savings on this vehicle will reach up to
A\$16,000 per year.*

| | Distance km | km per Litre | Diesel per Litre | Total cost of Fuel |
|-----------------------|-------------|--------------|------------------|----------------------|
| OE Fitment | 250,000 ÷ | 1.43 | x \$1.40 | = \$244,755.24 |
| Long Haul | 250,000 ÷ | 1.53 | x \$1.40 | = \$228,758.17 |
| Annual Savings | | | | = \$15,997.07 |

Trusted Bosch Quality

As the world's largest alternator manufacturer, Bosch has been a major supplier of new alternators and starters to OE vehicle manufacturers since 1913, and is also a highly regarded supplier of new units for the aftermarket. Recognised worldwide as a leader in innovative automotive and heavy duty technology, Bosch takes pride in its quality reputation and works continuously to advance its standards of excellence. All Bosch alternators are built to stringent precision and performance criteria, and are 100% factory tested to ensure superior reliability and performance over the long haul.

Features

- 160/200 Amp operating output and higher output at engine idle
- Temperature and vibration-resistant materials and components
- Exclusive Bosch self protection voltage regulator
- Dual internal cooling fans, and externally-mounted rectifier and regulator
- Exclusive Bosch long-life bearing technology
- Advanced, high-efficiency design and operation
- 4 part numbers with unique terminal configuration
- 24 month/200,000 km warranty

Benefits

- Increased battery life for maximum power
- Unmatched reliability over longer service life
- Protects internal components from excessive heat
- Virtually eliminate heat damage, promoting long life
- Reliable performance and increased service life
- Increased fuel economy
- Replaces over 200 OE part numbers
- Best-in-class warranty

Upgrade and Save!

The Bosch Long Haul series can **upgrade** the following OE fitments:

Delco Series

21SI, 22SI, 24SI, 25SI and 30SI.

Prestolite/Leece-Neville Series

Load Handler - 555 and 555 High Temperature series.

For further information please contact your
leading automotive distributor or call
Australia 1300 30 70 40 New Zealand 0800 452 896
www.bosch.com.au





BX525085 (J180) and BX525109 (Pad Mount)

160 A

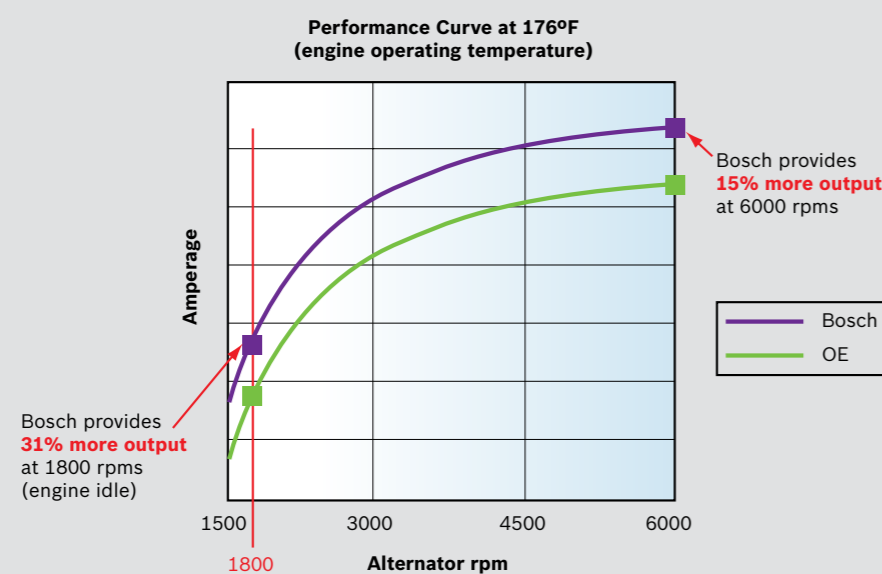
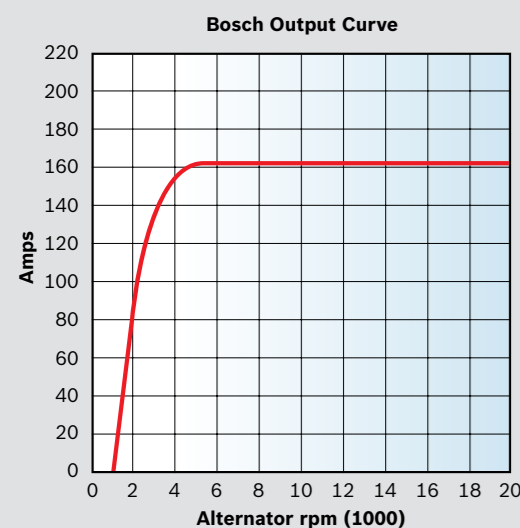


J180 Mount



Pad Mount

| Conventional OE Replacement Unit | Bosch 160 Amp Unit |
|----------------------------------|--------------------|
| 145 Amps | 160 Amps |
| 62 Amps at idle | 80 Amps at idle |
| 55% efficiency | 71% efficiency |



Bosch Long Haul Series - Reducing the breakdown rates.

Bosch Heavy Duty Output Alternators

Bosch long haul alternators are revolutionising the industry with high efficiency alternator technology that has delivered maximum charging power through millions of tough stop-and-go km's worldwide. With 160/200 Amps on-the-road output and 80/120 Amps at idle, these alternators stand up under all operating conditions. In addition, they're engineered with several innovative features to prevent heat damage and component wear.

Advanced Performance Technology

The Bosch long haul alternators represent the next generation of heavy vehicle charging technology, delivering more power and greater efficiency than competitive alternators. Bosch's higher charge rate at idle helps maximise battery life by reducing battery cycling.

High Temperature Resistance

The long haul alternators can really take the heat! At an operating temperature of 80°C, the Bosch long haul sustain operating amperage better than competitive units to supply more power for critical electrical systems. They're specifically designed to withstand operating temperatures up to 13% higher than competitive units. Dual internal cooling fans optimise the amount of cooling air being pulled through the unit. Air is drawn in from both the front and the rear of the alternator forcing heat out through the vents circling the housing. Exclusive Bosch long life bearing technology couples special heat treated, long life steel bearings with heat resistant lubricant to withstand heat and wear for km's of reliable service.



Self Protection Regulator

Bosch regulators equipped with exclusive Bosch self protection technology automatically begin to reduce amperage output when under hood temperatures exceed 125°C, allowing output to return to normal levels when the temperature drops below 125°C. Competitive units typically fail at temperatures above 110°C. This feature allows the alternator to continue to provide needed power while protecting internal components from heat damage. External heat dissipating rectifier, utilising Bosch's best-in-class press fit diodes, is also mounted in the cool-air intake stream providing the same cooling features as the regulator. Advanced temperature-resistant electronics, like the integrated circuit regulator and high amperage rectifier, are designed and manufactured by Bosch to meet the needs of the most demanding long haul applications.

Built for the Long Haul

Bosch 160/200 Amp alternators are designed specifically for the high electrical loads of today's heavy vehicle transport industry. Their unique ability to replace hundreds of original equipment part numbers makes them ideal for service replacement and upgrades to existing equipment. With only 4 part numbers replacing over 200 original equipment part numbers, inventory commitment can be greatly reduced, saving both time and money. In addition, patented Bosch high efficiency winding technology uses 30% more copper than competitive units for increased efficiency resulting in fuel savings and heavy duty slip ring technology significantly diminishes wear on the brushes. Bosch technology delivers increased service life and reliability, prolonged battery life and improved fuel economy.

2-Year Warranty

All Bosch long haul alternators are backed by 24 month/200,000 km warranty.



BX625044 (J180) and BX625043 (Pad Mount)

200 A



Pad Mount



J180 Mount

| Conventional OE Replacement Unit | Bosch 200 Amp Unit |
|----------------------------------|--------------------|
| 145 Amps | 200 Amps |
| 62 Amps at idle | 120 Amps at idle |
| 55% efficiency | 71% efficiency |

Only use the 160 Amp version for Detroit Diesel 60 series engines, due to excessive vibration

