



# **Bosch Long Haul Starter Motors and Alternators** – Built to go the distance



**BOSCH**  
Invented for life

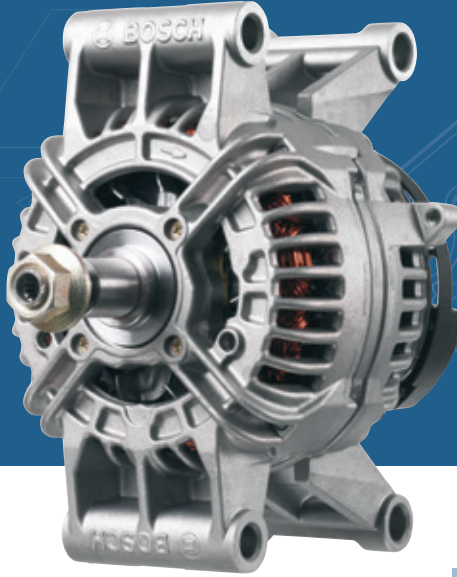
# 12 Volt Long Haul Alternators

## 160 A and 200 A



### J180 Mount

- **BX525085** - 160 A
- **BX625044** - 200 A



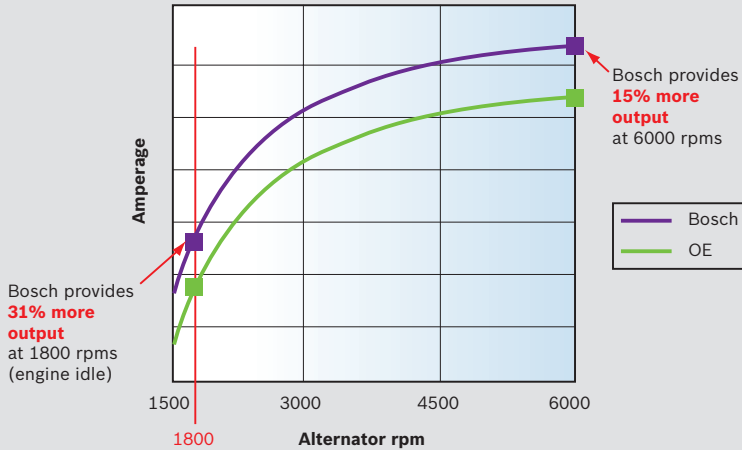
### Pad Mount

- **BX525109** - 160 A
- **BX625043** - 200 A

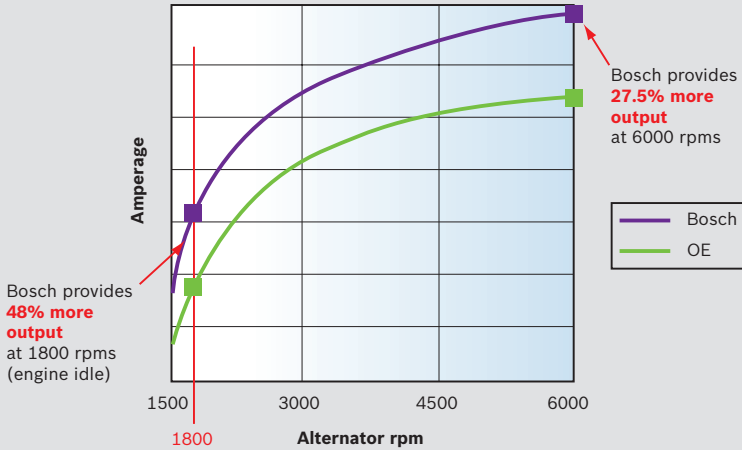
| 160 A                            |                        |
|----------------------------------|------------------------|
| Conventional OE Replacement Unit | Bosch 160 Amp Unit     |
| 145 Amps                         | <b>160 Amps</b>        |
| 62 Amps at idle                  | <b>80 Amps at idle</b> |
| 55% efficiency                   | <b>71% efficiency</b>  |

| 200 A                            |                         |
|----------------------------------|-------------------------|
| Conventional OE Replacement Unit | Bosch 200 Amp Unit      |
| 145 Amps                         | <b>200 Amps</b>         |
| 62 Amps at idle                  | <b>120 Amps at idle</b> |
| 55% efficiency                   | <b>71% efficiency</b>   |

Performance Curve at 80°C  
(engine operating temperature)



Performance Curve at 80°C  
(engine operating temperature)



The Bosch Long Haul alternator series can **replace** the following OE fitments: **Delco Series** 21SI, 22SI, 24SI, 33SI and 35SI.

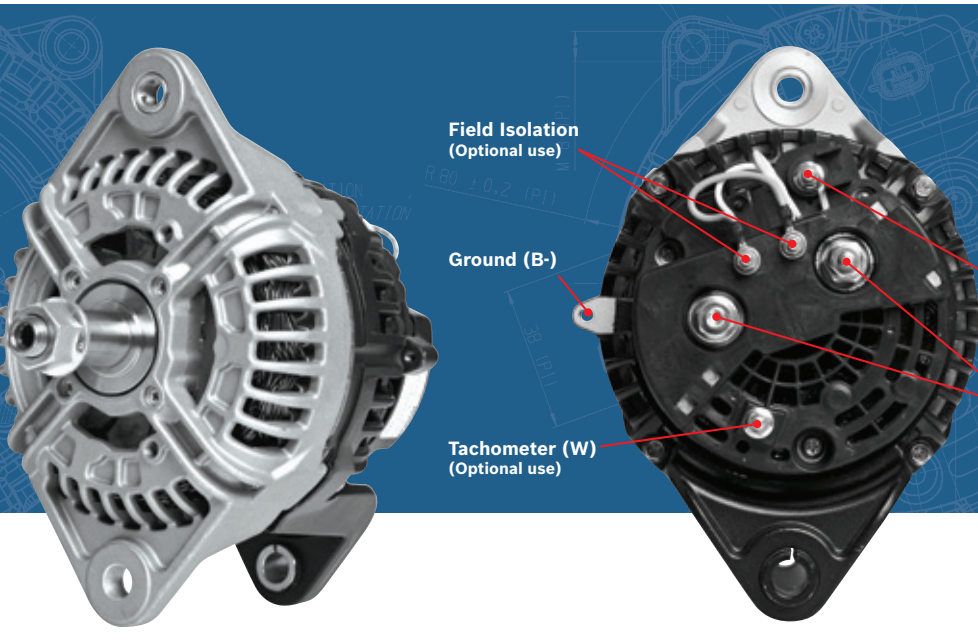
### Bosch Heavy Duty Output Alternators

Bosch Long Haul Alternators feature high efficiency alternator technology which delivers maximum charging power over the long-haul. With 160/200 Amps on-the-road output and 80/120 Amps at idle, these alternators provide superior output under all operating conditions.

- Longer Battery Life
- High Temperature Resistance
- Self Regulation Regulator
- Greater Efficiency and Lower Fuel Consumption
- Fewer Part Numbers for Reduced Inventory

# 24 Volt Long Haul Alternators

## 125 A - Field Isolated



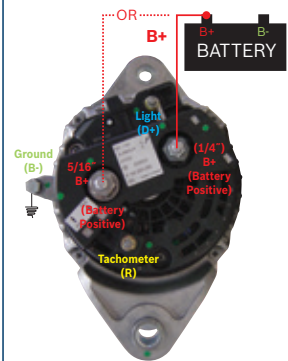
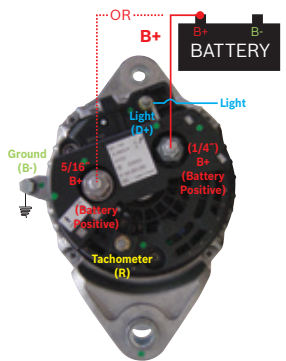
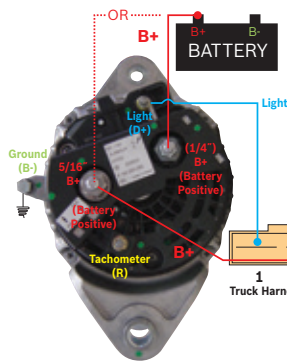
### 125 A - Field Isolated

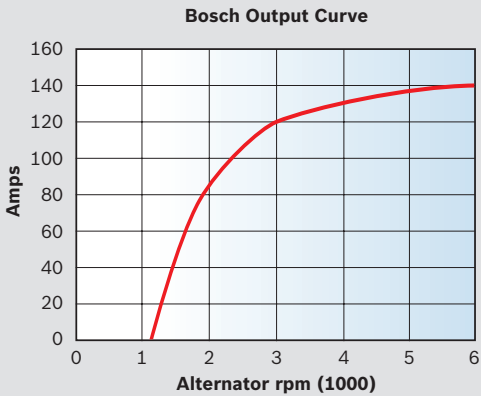
- ▶ **0 986 AN0 551** (J180 mount)
- ▶ **0 986 AN0 554** (J180 mount with corrosion protection)

|                 |
|-----------------|
| 125 A           |
| 125 Amps        |
| 51 Amps at idle |
| 64% efficiency  |

Note: There is no comparable conventional OE replacement unit available.

### Fitment Details

| One Wire Connection with No Tach  | Two Wire Connection with No Tach   | Three Wire Connection with No Tach   |
|---|--|--|
| Two Wire Connection with Tach   | Three Wire Connection with Tach  | Four Wire Connection with Tach   |
|  <p>B+ cable may attach to either the 1/4" or 5/16" B+ stud, depending upon size of eyelet on end of battery cable.</p> |  <p>B+ cable may attach to either the 1/4" or 5/16" B+ stud, depending upon size of eyelet on end of battery cable.</p> |  <p>B+ cable may attach to either the 1/4" or 5/16" B+ stud, depending upon size of eyelet on end of battery cable.</p> |
| One Wire Connection consists of B+  | Two Wire Connection consists of B+ and Light (D+)  | Three Wire Connection consists of B+, #1 to Light (D+) and #2 to B+  |
| One Wire Connection consists of B+ and Tach   | Three Wire Connection consists of B+, Light (D+) and Tach  | Four Wire Connection consists of B+, #1 to Light (D+), #2 to B+ and Tach   |



| Features  | Benefits   |
|---|--|
| ▶ 125 Amp operating output  | ▶ Increased battery life for maximum power         |
| ▶ Temperature and vibration-resistant materials and components              | ▶ Extended reliability over longer service life    |
| ▶ Dual internal cooling fans and externally-mounted rectifier and regulator | ▶ Helps eliminate heat damage, promoting long life |
| ▶ Exclusive Bosch long-life bearing technology                              | ▶ Reliable performance and increased service life  |
| ▶ Advanced, high-efficiency design and operation                            | ▶ Approximately 30% higher output @ idle           |
| ▶ 1 part number   | ▶ Replaces over 20 OE part numbers                 |

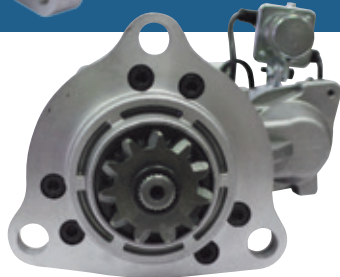


# 12V and 24V Long Haul Starter Motors

Reliable and Durable

## 12V

- **F042 003 066 – 12V** - 11 Tooth\*
- **F042 003 071 – 12V** - 12 Tooth



## Specifications - 12V

| Features  | Standard |
|---|----------|
| ► Output 7.2kW  | ✓        |
| ► Rotatable flange  | ✓        |
| ► IMS switch integrated                                   | ✓        |
| ► Overcrank protection                                    | ✓        |
| ► Torque, Power and Speed meets or exceeds OE equivalent* | ✓        |

## 24V

- **0 001 33F 102 – 24V**  
- 11 Tooth
- **0 001 33E 101 – 24V**  
- 12 Tooth



### OE Applications:

- 8200330
- 8200435

Due to the success of the Long Haul Alternator range, Bosch have developed a 24V starter, loaded with high quality features synonymous with Bosch quality standards worldwide.

## Specifications - 24V

| Features  | Standard |
|---|----------|
| ► 11 and 12 tooth models                          | ✓        |
| ► Output 8.4kW (@ -20°C)                          | ✓        |
| ► Rotatable flange                                | ✓        |
| ► IMS switch integrated                           | ✓        |
| ► Long-life carbon brushes                        | ✓        |
| ► Water resistant                                 | ✓        |
| ► Soft engagement                                 | ✓        |
| ► Insulated ground                                | ✓        |
| ► Protected against Blind Starts (Click-No-Crank) | ✓        |

| Bosch         | Cross Reference   | Engines   |
|---------------|---|---|
| 0 001 33F 102 | 10461024, 10461030, 10461043, 10461054, 10461068, 10461128, 10461184, 10461259, 10479290, 1990367, 1990368, 1990378, 1990382, 1990384, 1990409, 1990410, 1990456, 1990485, 1990493, 1993802, 1993810, 1993978 | <b>Cummins</b> ISX, ISM<br><b>CAT</b> C9, C10, C11, C12, C13, C15 |

Bosch Long Haul starter series can **replace** many **Delco Series** 39MT, 49MT and 50MT.

## Bosch Heavy Duty Output Starters

In response to the market demands for a reliable and durable starter motor fitting On and Off-Highway applications, Bosch Long Haul starter motors feature high powered output, providing maximum power and superior performance.

- Gear Reduction
- Rotatable Flange
- Reduces Breakdown Rates



# HEP Series Off-Highway Starter Motors

## For Komatsu Applications



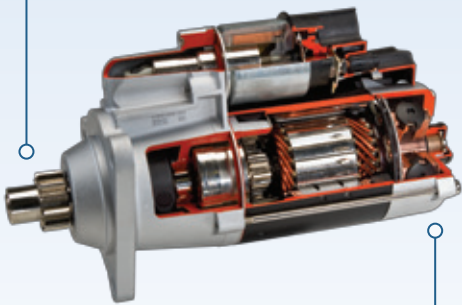
24V 7.5 kW

- ▶ **0 001 340 510** Fixed Flange
- ▶ **0 001 34F 508** Rotatable Flange
- ▶ **2 004 463 016** Connection Cable



### Robust and Powerful

- ▶ Achieves high initial torque output
- ▶ Superb cranking capability and endurance for heavy duty vehicles



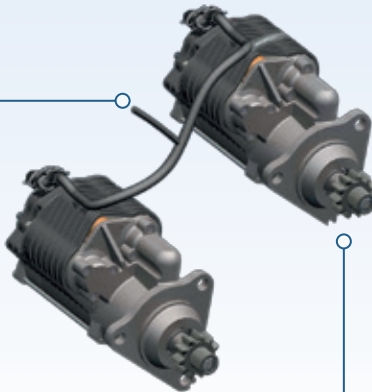
### Compact and Maintenance-Free

- ▶ Bosch HEP starters are more compact than OE and easy to install
- ▶ Maintenance not required during service life
- ▶ Longer life span than OE



### Parallel Operation Design

- ▶ Synchronised starting via an electronic control module
- ▶ Optimal distribution of mechanical and electrical loads prevents overloading
- ▶ Whole system includes 2 starters and 1 system connection cable



### Electrical Soft-Start

- ▶ Two-stage engagement increases lifetime of starter pinion and engine ring gear

### OE Part Cross Reference:

- ▶ Komatsu 600-813-7542 (Nikko 0-23000-7752)

### Application:

- ▶ Komatsu HD465-7R and HD785-7 Off-Highway Trucks

# HEP Series Off-Highway – Popular

## For Mining Trucks and Excavators



Fixed Flange

Retrofitting the new HEP series starters requires:

- ▶ 2 x **0 001 340 505**
- ▶ 1 x **2 004 463 013**



These starters are designed to **replace** the common 11 tooth **Delco 50MT series** starters found in:

| Engine Make   | Engine Model                                |
|---------------|---|
| ▶ Cummins     | ▶ QSK45, QSK50, QSK60, KTA38, KTTA38, QSK50 |
| ▶ MTU         | ▶ 16V4000, 12V4000, 20V4000                 |
| ▶ Caterpillar | ▶ C175-16, C175-20                          |

### OE Application:

- ▶ 471103467

# Bosch Long Haul Series

Built to go the distance

## Bosch Long Haul Part Numbers



### Alternators:

#### J180

- ▶ **BX525085** - 12V 160 A
- ▶ **BX625044** - 12V 200 A
- ▶ **0986AN0551** - 24V 125 A
- ▶ **0986AN0554** - 24V 125 A (Corrosion protected)



### Pad Mount

- ▶ **BX525109** - 12V 160 A
- ▶ **BX625043** - 12V 200 A



### Starter Motors:

- ▶ **F042 003 066** - 12V - 11 Tooth
- ▶ **F042 003 071** - 12V - 12 Tooth
- ▶ **0 001 33F 102** - 24V - 11 Tooth
- ▶ **0 001 33E 101** - 24V - 12 Tooth



### HEP Series

- ▶ **0 001 340 505** - Fixed Flange
- ▶ **0 001 340 510** - Fixed Flange
- ▶ **0 001 34F 508** - Rotatable Flange



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Bosch eCat (Online Catalogue)

[boschecat.com.au](http://boschecat.com.au)  
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