



Medium & Heavy Duty Starter Quick Reference Guide

Applications: Beverage Fleets, Chevy Kodiak, Construction & Crane Equipment, Ford & Freightliner FL Series Trucks, Generator Sets/Compressor Units, GMC Top Kick, Package Delivery Fleets, Recreation Vehicles School Bus Fleets, Terminal Tractors (Trailer/Yard Jockey Equipment)

| Engine OE | Model | New Part No. | Reman Part No. | Application | Size | Additional Information |
|-------------|----------------------------------|--------------|----------------|-----------------|-----------|--|
| CATERPILLAR | 6.6/7.2L Engine A/T 3126 | 228000-7121 | 280-8004 | SAE #3 | 12V 4.0kW | Wet Clutch, Ground Stud |
| CATERPILLAR | 6.6/7.2L Engines Pass. Side 3126 | 228000-9750 | 280-8012 | Kodiak, Topkick | 12V 4.0kW | Dry Clutch, Ground Stud, Jump Start Protection |
| CATERPILLAR | 6.6/7.2L Engines M/T 3116 & 3126 | 428000-1610 | | SAE #2 | 12V 4.0kW | Dry Clutch, Ground Stud |

Applications: Beverage Fleets, Construction Equipment (bulldozers, Excavators, Motorgraders, Wheel Loaders), Dodge Trucks, Ford Trucks (F550, F650, F750), Freightliner FL Series Medium Duty Trucks, Generator Sets/Compressor Units, Package Delivery Fleets, Pick-up & Delivery Fleets, Recreation Vehicles, School Bus Fleets, Terminal Tractor

| Engine OE | Model | New Part No. | Reman Part No. | Application | Size | Additional Information |
|-----------|------------------|--------------|----------------|----------------------------|-----------|--------------------------------------|
| CUMMINS | Cummins ISB 5.9L | 228000-2292 | 9722809-229 | Dodge Pick Up, 1994 - 2002 | 12V 2.7kW | Dry Clutch, Driver Side |
| CUMMINS | Cummins ISB 5.9L | 228000-3811 | | | 12V 2.7kW | Wet Clutch, Driver Side |
| CUMMINS | Cummins ISC 8.3L | 228000-5311 | 280-8002 | | 12V 4.0kW | Dry Clutch, Ground Stud, Driver Side |
| CUMMINS | Cummins ISC 8.3L | 228000-6511 | | | 12V 4.0kW | Wet Clutch, Ground Stud |
| CUMMINS | Cummins ISB 5.9L | 228000-7280 | | Thomas Built Bus | 12V 4.0kW | Dry Clutch, Ground Stud |
| CUMMINS | Cummins ISB 5.9L | 228000-7291 | | Thomas Built Bus | 12V 4.0kW | Dry Clutch, Ground Stud |
| CUMMINS | Cummins ISB 5.9L | 428000-1600 | 280-8018 | FL70, Package Delivery | 12V 2.7kW | Dry Clutch, Ground Stud, Pass. Side |
| CUMMINS | Cummins ISB 5.9L | 428000-5940 | | Dodge Pick Up, 2003 - 2006 | 12V 2.7kW | |
| CUMMINS | Cummins ISB 6.7L | 428000-6110 | | Dodge Pick Up, 2007 | 12V 3.0kW | PA90S |

Applications: Department of Transportation (DOT), Emergency Vehicles, Hotel Shuttle Buses, Landscape Vehicles, Mechanical Services Fleets (HVAC, Electrical, etc.), Rental Car Shuttle Buses, Road Construction Fleets, Support Trucks for Airport Services (Airlines), Support Trucks for Misc. Large Fleets (Garbage, Concrete, etc.) and Tow Vehicles

| Engine OE | Model | New Part No. | Reman Part No. | Application | Size | Additional Information |
|-----------------|----------------------------------|--------------|----------------|--------------|-----------|------------------------|
| FORD / NAVISTAR | 6.9/7.3L A/T & M/T | 228000-8410 | 280-8007 | | 12V 4.0kW | Wet Clutch |
| FORD / NAVISTAR | 7.3L A/T & M/T, Direct Injection | 228000-8420 | 280-8008 | Power Stroke | 12V 4.0kW | Wet Clutch |

Applications: City Delivery Fleets, Cargo Delivery, Furniture Delivery, Landscape, Rental Equipment

| Engine OE | Model | New Part No. | Reman Part No. | Application | Size | Additional Information |
|-----------|--------------|--------------|----------------|----------------|-----------|------------------------|
| HINO | J08C-T1 8.0L | 228000-6253 | 9722809-625 | YJ22 MT | 12V 4.8kW | |
| HINO | J08C-T1 | 228000-6261 | 9722809-626 | YJ22A | 12V 4.8kW | |
| HINO | J05C-T1 | 228000-6383 | 9722809-638 | YJ21 | 12V 2.5kW | |
| HINO | J05D | 428000-2503 | | NA, NB, NC | 12V 2.5kW | |
| HINO | J08, J08E | 428000-2511 | 9742809-251 | ND, NE, NF, NV | 12V 4.0kW | |

Applications: Armored Car, Beverage, Bottled Water Distributor, Cargo Delivery, Furniture Delivery, Ice Cream, Landscape, Newspaper Delivery, Rental Equipment, School Bus, Uniform Delivery and Waste Management Fleets

| Engine OE | Model | New Part No. | Reman Part No. | Application | Size | Additional Information |
|---------------|--------|--------------|----------------|--------------------|-----------|-------------------------|
| INTERNATIONAL | DT466E | 428000-2690 | | | 12V 4.0kW | Wet Clutch, Ground Stud |
| INTERNATIONAL | T444E | 228000-7371 | 280-8020 | 4700 | 12V 4.0kW | Dry Clutch |
| INTERNATIONAL | DT466 | 228000-8510* | 280-8011 | 4300 | 12V 4.0kW | Wet Clutch |
| INTERNATIONAL | VT365 | 428000-0071 | | 1652 Strip Chassis | 12V 4.0kW | Wet Clutch |

Applications: City Delivery Fleets, Cargo Delivery, Furniture Delivery, Landscape, Rental Equipment

| Engine OE | Model | New Part No. | Reman Part No. | Application | Size | Additional Information |
|-----------|-----------------|--------------|----------------|--------------------------------|-----------|------------------------|
| ISUZU | 6BD1 | 128000-0494 | 9712809-049 | | 12V 3.0kW | |
| ISUZU | 6SA1 | 128000-2451 | | FRR 13 | 24V 5.5kW | |
| ISUZU | 6SA1 | 128000-2742 | | FTR | 24V 5.5kW | |
| ISUZU | | 128000-4663 | | Elf NKR | 12V 2.0kW | |
| ISUZU | 6HE1-T 7.1/7.8L | 228000-2807 | 9722809-280 | EVR, FRR, FSR, FTR, GMC Trucks | 12V 3.0kW | |
| ISUZU | 4JG2 | 228000-5144 | | Elf NHR69 | 12V 2.0kW | |
| ISUZU | 4HE-1 3.9/4.8L | 228000-7004 | | Elf NPR, NQR, GMC Trucks | 12V 3.0kW | |
| ISUZU | 4HE1-T 3.9/4.8L | 228000-8182 | 9722809-818 | Elf NPR, NQR, GMC Trucks | 12V 3.0kW | |
| ISUZU | 6HK1-TC 7.8L I6 | 228000-9761 | | Topkick | 12V 4.0kW | |

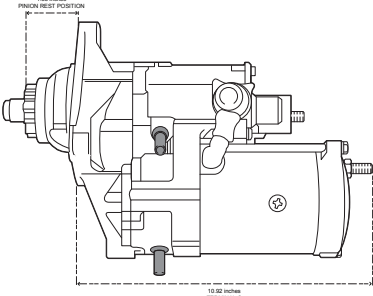
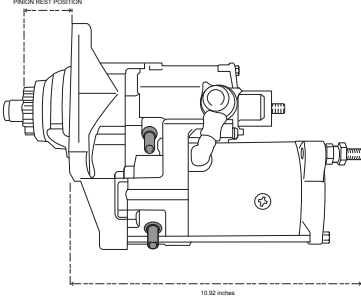
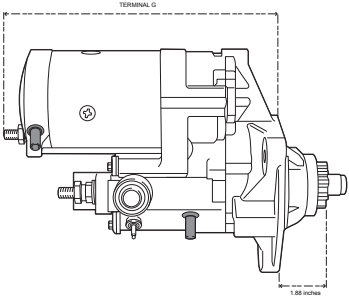
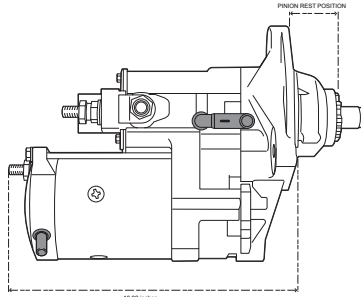
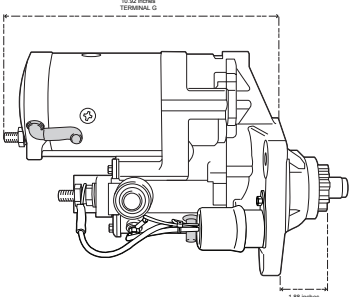
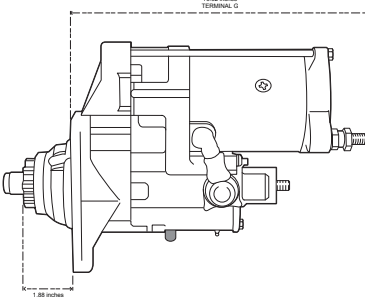
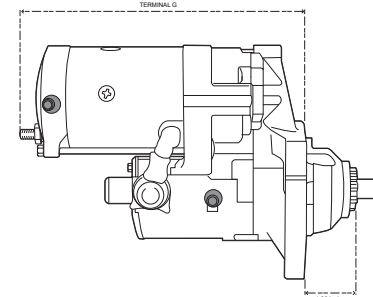
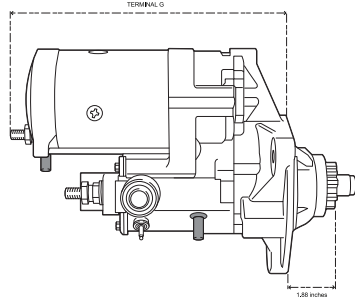
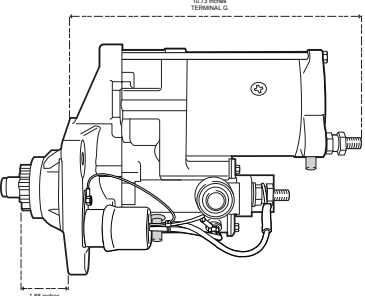
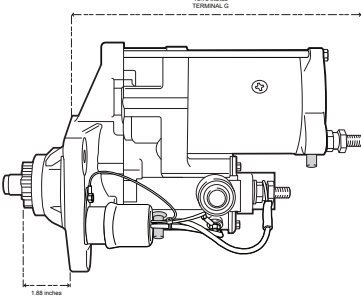
Applications: Airport Service, Beverage Fleets, Car Haulers, Dump Trucks, Food Distribution, Landscape Vehicles, Liquid Bulk, Mixers, Refuse, School Bus Fleets, Towing Utility

| Engine OE | Model | New Part No. | Reman Part No. | Application | Size | Additional Information |
|-----------|--------------------|--------------|----------------|--------------------------------------|-----------|-------------------------|
| MERCEDES | Mercedes 904 | 428000-0310 | | M2 Business Class & Package Delivery | 12V 2.7kW | Dry Clutch, Ground Stud |
| MERCEDES | Mercedes 906 & 926 | 428000-1881 | | M2 Business Class & Sterling Acterra | 12V 4.0kW | Dry Clutch, Ground Stud |

*228000-8510 has 5/8" mounting holes. In certain applications you may need to use bushing inserts. See your DENSO representative for details.

WARRANTY
18 Months Unlimited

R5.0 Starters for On-Road Applications

| | | |
|---|---|---|
|  | <p>428000-4420</p> <p>Freightliner w/CAT C12, C13 & C15 Freightliner w/Cummins ISM International w/CAT C11, C12, C13 & C15 International w/Cummins ISM Kenworth w/CAT C11, C13 & C15 Peterbilt w/CAT C12, C13 & C15 Peterbilt w/Cummins ISM Sterling w/CAT C13 & C15 Sterling w/Cummins ISM Volvo w/Cummins ISM Western Star w/Cat C12 & C15</p> |  <p>428000-4430</p> <p>Freightliner w/Cummins M11 Freightliner w/Detroit Series 60 International w/Cummins M11 International w/Detroit Series 60 Kenworth w/Cummins M11 Kenworth w/Detroit Series 60 Mack w/E-Tech Mack w/E-7 Peterbilt w/Cummins M11 Sterling w/Cummins M11 Sterling w/Detroit Series 60 Volvo w/Detroit Series 60 Western Star w/Detroit Series 60</p> |
|  | <p>428000-4440</p> <p>Freightliner w/Cummins ISX Freightliner w/Cummins N14 International w/Cummins ISX International w/Cummins N14 Kenworth w/Cummins N14 Peterbilt w/Cummins N14 Sterling w/Cummins N14 Volvo w/Cummins N14</p> |  <p>428000-4450</p> <p>Freightliner w/Mercedes 4000 Sterling w/Mercedes 4000</p> |
|  | <p>428000-5170</p> <p>2010- Freightliner w/Cummins ISX 2007- International w/Cummins ISX</p> |  <p>428000-5190</p> <p>Freightliner w/Cummins ISX International w/Cummins ISX Kenworth w/Cummins ISX Peterbilt w/Cummins ISX</p> |
|  | <p>428000-5430</p> <p>Volvo VE 12</p> |  <p>428000-5730</p> <p>Freightliner w/Detroit Series 60 International w/Detroit Series 60 Kenworth w/Detroit Series 60 Peterbilt w/Detroit Series 60 Sterling w/Detroit Series 60 Volvo w/Detroit Series 60 Western Star w/Detroit Series 60</p> |
|  | <p>428000-8370</p> <p>International w/MaxxForce 11 & 13</p> |  <p>428000-8690</p> <p>Freightliner w/DD13</p> |

WARRANTY
3 Years / 350,000 Miles (On-Road Applications)

Starter must be installed with the drain tube positioned downward.
 The physical appearance of this DENSO starter may differ from the original starter.



DENSO Sales California, Inc.
 3900 Via Oro Avenue
 Long Beach, CA 90810
 800.222.6352 • 310.834.6352
www.DensoHeavyDuty.com