TECH NOTES

Depending on the conditions, a starter can pull up to 500 amps. These levels of amperage stress ALL components in the circuit including cables, terminals, batteries, and more. Problems with these components can be difficult to diagnose as they appear fine at rest and under a light load, but generate high resistance under heavy amperage draws. This results in low voltage to the starter while cranking, causing heavier amperage draw, and increased heat leading to starter failure. It is recommended that you load test each battery and check you charging system operation before installation. Batteries, cables and additional components should be checked and serviced regularly.



INSTALLATION

These instructions are provided as supplementary information to the factory service manual instructions for starter replacement.

- **DISCONNECT BOTH BATTERIES**
- MOUNT STARTER Make sure the mounting surface of the engine block is smooth, flat and free of paint buildup. Torque the starter mounting bolts to engine manufacturer specifications, typically 32 ft. lbs.
 - *Wire brush mounting surfaces thoroughly.
- ATTACH BATTERY CABLE AND SWITCH (IGNITION) WIRE The switch wire should be capable of handling 75A intermittent and 15A continuous, typically a 10AWG wire. The battery cable must be the proper size for the length of the cable. All connections should be clean and tight. The ground cable is important, and the best ground path is direct to the engine block. With steel frame vehicles the ground path can be to the frame. This ground cable should be the same size as the starter positive cable. Also, a ground strap should be installed from the frame to the engine.
- OPERATE THE STARTER It should operate quietly. The cables and connectors themselves should be checked for voltage drop with a voltmeter. OPERATE THE CIRCUIT and simultaneously measure input voltage by connecting the positive probe of a voltmeter to the "MOTOR" terminal of the solenoid and connecting the negative to the starter housing. This should be 11V DC minimum while cranking.
 - *Never operate a starter more than 3-5 seconds at a time without allowing time to cool for at least one minute. Over-cranking will damage the starter.



WARRANTY

Products manufactured by XDP carry a 2-Year Unlimited Mileage warranty against defects in materials and craftsmanship. The Warranty is Limited to two (2) years from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to XDP and must be accompanied by a dated proof of purchase receipt. Warranty is limited to the original purchaser.









FOR MOST DIESEL APPLICATIONS

FORD

XD253 - 1994-2003 7.3L Powerstroke

XD255 - 2003-2007 6.0L Powerstroke/ 2003-2010 6.0L Powerstroke Vans

XD256 - 2008-2010 6.4L Powerstroke **XD254** - 2011-2024 6.7L Powerstroke

DODGE/RAM XD257 - 1994-2002 5.9L Cummins XD258 - 2003-2006 5.9L Cummins

XD259 - 2007-2024 5.9L/6.7L Cummins

CHEVY/GMC

XD250 - 1982-2000 GM 6.2L/6.5L Duramax XD251 - 2001-2019 GM 6.6L Duramax

STARTER BOLT KITS

XD532 - 2003-2010 6.0L/6.4L Powerstroke

XD533 - 2001-2022 GM 6.6L Duramax

LB7/LLY/LBZ/LMM/LML/L5P

XD534 - 2007.5-2024 6.7L Cummins Engine

XD535- 1994-2007 5.9L Cummins Engine