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DEMAND GENUINE. **DEMAND** **DETROIT.**

Why StepUP® Overhaul?




In the ultra competitive trucking industry, better productivity means greater profits. Your engine plays a vital role in ensuring the success of your business. You need an engine that pulls with strength, uses fuel efficiently and guarantees reliability. StepUP Overhaul gives you four easy-to-understand options for improving the performance of your DD Series, Series 60® or MBE 4000 engine. Each option includes Detroit™ genuine parts, pricing with installation, solid warranty coverage and expert installation by an unrivaled network of authorized Detroit service outlets.

BENEFITS

PUT AN END TO:

-  Low Power
-  Poor Fuel Efficiency
-  Hard Starts
-  Rough Idle
-  Blue or White Smoke
-  Low Compression
-  High Oil Consumption
-  Wear Metals in Oil

BE MORE PRODUCTIVE WITH:

-  Increased Power
-  Improved Fuel Economy
-  Smooth Operation
-  Less Downtime
-  Longer Engine Life
-  Lower Labor Expenses
-  Warranty Protection
-  Best-Performing Service Network

WARRANTY:

With Detroit genuine parts and factory-backed technicians, each StepUP Overhaul step comes with a nationwide warranty and optional extended coverage.¹

ITEM	WARRANTY	OPTIONAL EXTENDED COVERAGE
Step 1: Basic Overhaul	Standard parts and labor warranty: 1-year/unlimited-miles on replaced components	N/A
Step 2: Super Overhaul	Standard parts and labor warranty: 1-year/unlimited-miles on replaced components	2-year/200,000-mile Power Protection Plan on replaced and inspected components
Step 3: Complete Overhaul	1-year/100,000-mile Power Protection Plan on required inspected components	
Step 4: Reman 3/4 Engine	2-year/200,000-mile Power Protection Plan on replaced and inspected components	3-year/300,000-mile Power Protection Plan on replaced and inspected components
Step 4: Reman Complete Engine		
Step 4: Reman PowerChoice Engine		

COVERAGE REQUIREMENTS:

- As of January 1, 2019 there are no age or mileage restrictions for StepUP qualification
- The overhauled engine must be installed in the original chassis
- EGR valve and EGR cooler must be replaced on EGR factory equipped engines
- All work must be performed by an authorized Detroit service outlet

¹ StepUP Overhaul is available on most DD13®, DD15® and DD16®; Series 60 and MBE 4000 engines in on-highway applications. Check with your authorized Detroit service outlet for specific applications.

STEP 1: BASIC OVERHAUL

Restore Power Efficiency and Reliability

- Complete set of six cylinder kits
 - Pistons, rings, pins and bushings
 - Cylinder liners and seals
- Connecting rods
- EGR actuator linkage and nut
- Oil pump³
- Oil suction module
- Oil filter
- Oil pan gasket
- Coolant filter¹
- Fuel line kit
- Fuel filter kit
- Lower-end bearing kit
 - Upper and lower main bearings
 - Connecting rod bearings
 - Thrust washers
- Cylinder head bolt set
- Cylinder head gasket kit
- Block gasket kit
- EGR valve^{1,3}
- EGR cooler^{1,3}
- Pipe from cooler to valve

Order separately

- DPF^{1,3}



Steps 1-3 shown

¹ If applicable based on engine model, must be replaced at time of overhaul.

² PowerPacks fuel injectors are covered by a 2-year/150,000-mile warranty when installed by an authorized Detroit service outlet. Warranty registration separate from StepUP Overhaul registration for Steps 1 and 2.

³ New or remanufactured based on availability.

⁴ Remanufactured to the original engine content and performance specifications based on VIN.

STEP 2: SUPER OVERHAUL

Reinvigorate Performance and Productivity

Everything in a Step 1: Basic Overhaul PLUS

- Rocker arms³
 - Exhaust and intake
- High-pressure fuel pump³
- Cylinder head assembly³
- Coolant thermostat

STEP 3: COMPLETE OVERHAUL

Make Your High-Mileage Engine Run Strong and Long

Everything in a Step 2: Super Overhaul PLUS

- Turbocharger³
- Axial power turbine (DD15 only)
- Axial power turbine gear box (DD15 only)
- Water pump³
- PowerPacks™ — a set of six fuel injectors^{2,3}

STEP 4: DETROIT REMAN ENGINE

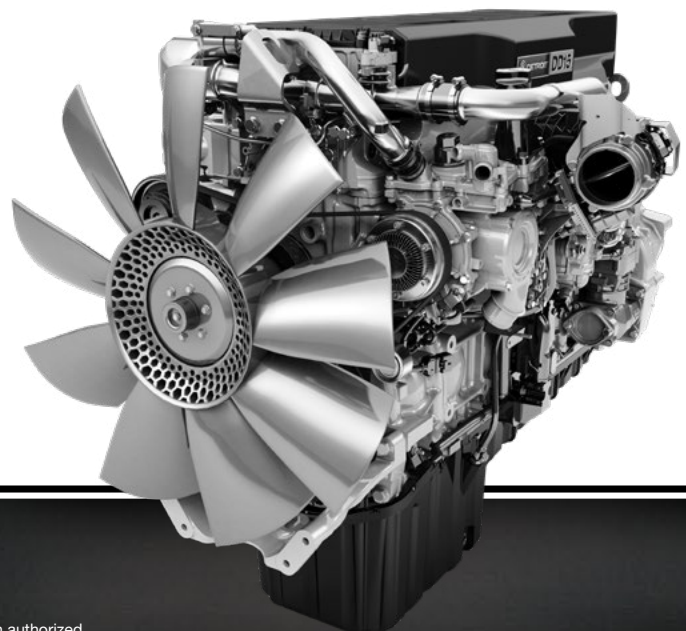
Guaranteed to Run Like New

Detroit Genuine Parts Remanufactured Engine

- Remanufactured, not rebuilt, to the latest engineering and design enhancements
- Factory-tested to OEM specifications

Options

- Reman 3/4 Engine
- Reman Complete Engine
- Reman PowerChoice Engine⁴



¹ If applicable based on engine model, must be replaced at time of overhaul.

² PowerPacks fuel injectors are covered by a 2-year/150,000-mile warranty when installed by an authorized Detroit service outlet. Warranty registration separate from StepUP Overhaul registration for Steps 1 and 2.

³ New or remanufactured based on availability.

⁴ Remanufactured to the original engine content and performance specifications based on VIN.

SERIES 60[®]

STEP 1: BASIC OVERHAUL

Restore Power Efficiency and Reliability

- Complete set of six cylinder kits
 - Piston domes, rings, skirts³, pins and bushings
 - Cylinder liners and seals
- Cam-bearing shell set
- Cylinder head bolt set
- Thermostats
- Overhaul gasket kit
- Oil pan and rocker cover gaskets
- Order Separately**
 - Oil pressure regulator
 - Oil pressure relief valve
 - EGR valve^{1,3}
 - EGR cooler^{1,3}
 - Lower-end bearing kit
 - Upper and lower main bearings
 - Connecting rod bearings
 - Thrust washers



Steps 1-3 shown

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SERIES 60[®]

STEP 2: SUPER OVERHAUL

Reinvigorate Performance and Productivity

Everything in a Step 1: Basic Overhaul PLUS

- Cylinder head assembly³
- Rocker arms³
 - Exhaust and intake

Optional Components

- PowerPacks™ — a set of six fuel injectors^{2,3}
- Turbocharger³
- Fuel pump³
- Water pump³

STEP 3: COMPLETE OVERHAUL

Make Your High-Mileage Engine Run Strong and Long

Everything in a Step 2: Super Overhaul PLUS

- PowerPacks — a set of six fuel injectors^{2,3}
- Turbocharger³
- Water pump³

Optional Components

- Fuel pump³

STEP 4: DETROIT REMAN ENGINE

Guaranteed to Run Like New

Detroit Genuine Parts Remanufactured Engine

- Remanufactured, not rebuilt, to the latest engineering and design enhancements
- Factory-tested to OEM specifications

Options

- Reman 3/4 Engine
- Reman Complete Engine
- Reman PowerChoice Engine⁴



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⁴ Remanufactured to the original engine content and performance specifications based on VIN.

MBE 4000

STEP 1: BASIC OVERHAUL

Restore Power Efficiency and Reliability

- Complete set of six cylinder kits
 - Piston domes, rings, skirts³, pins and bushings
 - Cylinder liners and seals
- Overhaul gasket kit
- Thermostat kit
- Lower-end bearing kit
 - Upper and lower main bearings
 - Connecting rod bearings
 - Thrust washers
- Cylinder head bolt set
- Fuel line hardware kit
 - Banjo bolts
 - Fuel line washer
- High-pressure fuel lines
- Transfer tubes
- EGR valve^{1,3}
- EGR cooler^{1,3}



Steps 1-3 shown

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MBE 4000

STEP 2: SUPER OVERHAUL

Reinvigorate Performance and Productivity

Everything in a Step 1: Basic Overhaul PLUS

- Cylinder head assemblies³
- Rocker arms³
 - Exhaust and intake

Optional Components

- PowerPacks™ — a set of six fuel injectors^{2,3}
- Turbocharger³
- Fuel pump³
- Water pump³

STEP 3: COMPLETE OVERHAUL

Make Your High-Mileage Engine Run Strong and Long

Everything in a Step 2: Super Overhaul PLUS

- PowerPacks — a set of six fuel injectors^{2,3}
- Turbocharger³
- Water pump³

Optional Components

- Fuel pump³

STEP 4: DETROIT REMAN ENGINE

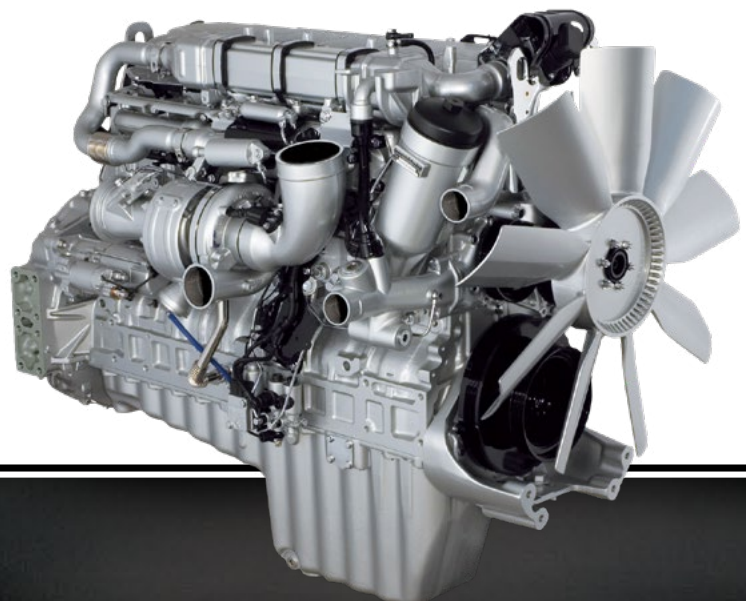
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DETROIT SUPPORT. ANYWHERE.

- **OVER 700 AUTHORIZED DETROIT SERVICE OUTLETS**
- **REPAIRS PERFORMED BY DETROIT CERTIFIED TECHNICIANS**
- **UNMATCHED AVAILABILITY OF DETROIT GENUINE PARTS**
- **COVERAGE THROUGHOUT U.S. AND CANADA**

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