



**DETROIT™**  
GENUINE PARTS



INTERNAL SERVICE  
OUTLET USE ONLY

# RESTORE ENGINE EFFICIENCY

## HELP YOUR CUSTOMERS RESTORE EFFICIENCY AND REDUCE THE TOTAL COST OF OWNERSHIP FOR THEIR DETROIT™ ENGINE THROUGH THE DETROIT™ GENUINE PARTS POWERPACKS™ SERVICE PROGRAM.

A set of six PowerPacks™ remanufactured fuel injectors delivers power, efficiency and value. PowerPacks gives you one more way to service your customers while increasing your service outlet's productivity and bottom line. PowerPacks is:

- A complete set of six Detroit™ Genuine Parts remanufactured fuel injectors installed for a single, all-inclusive price
- Backed by a 2-year/150,000-mile warranty, better than the 1-year/unlimited-mile warranty on a single injector

## DETROIT GENUINE PARTS: THE BEST CHOICE FOR REPLACEMENT FUEL INJECTORS

Detroit Genuine Parts fuel injectors are the only replacement injectors recommended for DD Series, Series 60® and MBE 4000 engines. Highlight these competitive advantages when consulting with customers about replacement fuel injectors:

- Every Detroit Genuine Parts fuel injector is completely remanufactured, not rebuilt like many non-genuine replacement fuel injectors
- 100% of components are inspected for quality, tolerance and function and must meet Detroit's stringent original specifications
- Includes the most up-to-date design and engineering upgrades, while non-genuine replacement injectors are rebuilt to older specifications
- Fuel atomization and spray pattern are optimized to produce complete combustion; providing improved power, better fuel efficiency and cleaner emissions
- All sealing surfaces are machined, lapped and thoroughly checked
- Fuel flow rate and injector response time are tested to ensure optimum efficiency
- Each injector is calibrated, ensuring balanced injector operation for a specific engine application, whereas non-genuine replacement injectors have a generic calibration
- Extensive lab and field testing assures efficient and reliable performance



## SHOW THEM THE ROI

Fuel is the single largest cost to any trucking operation. PowerPacks can help improve engine performance and fuel efficiency. Demonstrate the return on investment for your customers using the example below.

FUEL ECONOMY INCREASE EXAMPLE (AFTER 100,000 MILES)		
ANNUAL FIGURES PER UNIT	BEFORE POWERPACKS	AFTER POWERPACKS
Average MPG	6.2	6.4
Fuel Usage (gallons)	16,129	15,625
Total Fuel Cost (\$4.00/gal)	\$64,516	\$62,500
SAVINGS	-	\$2,016

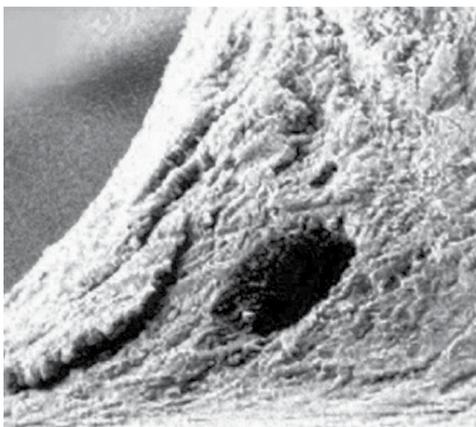
## FUEL INJECTORS ARE MAINTENANCE ITEMS

Although customers may not realize it, facts prove that fuel injectors wear slowly with normal use, just like brakes, tires, belts and other components. Since injectors have moving parts and metal-to-metal sealing surfaces, normal wear is caused by part-to-part contact, and poor sealing can be caused by erosion due to cavitation. Normal combustion events also cause carbon buildup on the injector tip, which hampers optimal fuel atomization and spray pattern, diminishing overall fuel injector efficiency.

### INJECTOR TIP FACTS

Considering that a single injector assembly actuates 15 times per second at 1,800 rpm, you can use some simple math to illustrate the normal fuel injector wear story with customers:

- 900 times per minute
- 54,000 times per hour
- 2.7 million times per 50-hour week
- 135 million times per 50-week year



Microscopic image of a typical high-mileage injector tip shows carbon build-up

### WHY SIX IS BETTER THAN ONE

Since fuel injectors wear at roughly the same rate with normal use, it only makes sense to replace them as a set in a single service visit for the best performance and value. Be sure to focus on these benefits:

- Increased power
- Improved fuel efficiency
- Better reliability and less downtime
- Discount on a complete set versus a single injector
- Labor and downtime savings
  - Replacing six injectors at one time while the rocker cover is removed reduces labor cost and downtime
- Parts are backed by a 2-year/150,000-mile warranty, which is better than the 1-year/unlimited-mile warranty on a single injector

### THE EFFECTS OF WEAR AND TEAR

- Poor fuel atomization
- Decreased combustion efficiency
- Sealing problems
- Wasted unburned fuel
- Rough idle
- Low power
- Misfire
- Increased exhaust emissions



## TEST THE CHARGE AIR COOLER FOR MAXIMUM PERFORMANCE

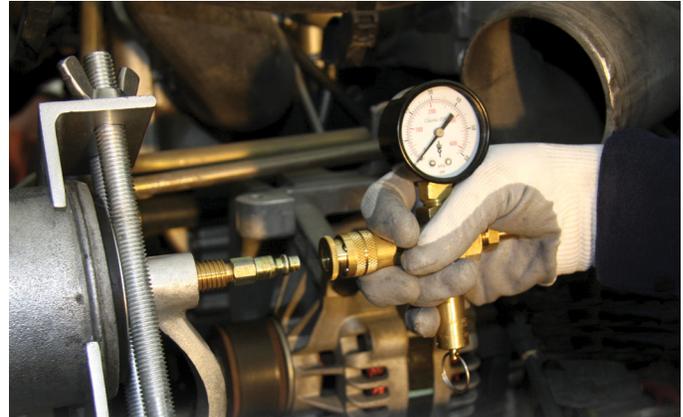
The charge air cooler (CAC) provides cool, dense air to the engine, which is essential for optimizing fuel atomization and combustion efficiency. A CAC leak can actually inhibit the performance benefits of installing PowerPacks, so testing the CAC during the same service visit is important to ensuring the best possible engine performance.

### A CAC LEAK:

- Degrades combustion efficiency and reduces engine power
- Decreases fuel economy by as much as .5 miles per gallon
- Elevates coolant temperature to dangerous levels
- Increases particulate emissions due to incomplete combustion
- Eventually causes damage to the exhaust manifold, turbocharger, pistons, rings and valves

### A CAC TEST:

- Ensures the performance benefits of a new set of fuel injectors
- Can help find the root cause of wasted fuel and increased particulate emissions
- Is quick and inexpensive insurance against poor engine performance and downtime
- Can lead to the sale of a new or remanufactured charge air cooler, adding incremental revenue and gross profit to the repair order



Charge air cooler testing

## ADDITIONAL SELLING OPPORTUNITIES WITH POWERPACKS

When a customer decides to have PowerPacks installed, don't overlook these related parts and service selling opportunities:

- Primary and secondary fuel filters
- Injector tip seals
- Injector wiring harness
- Rocker cover gasket(s)
- Replacement CAC
- Jake brake tune-up kit (Series 60 only)
- Installation labor for components listed above



## POWERPACKS PROGRAM RESOURCES

Daimler Trucks North America makes it easy for you to launch and maintain a PowerPacks program for maximum productivity and profit at your location. Look to the Detroit Genuine Parts marketing kit to aid you in promoting PowerPacks at your outlet. Included in the kit is a customer-focused PowerPacks brochure that will help you sell this program to your customers by explaining key concepts like how the program works, why getting all six injectors replaced is a better idea and why they should consider injectors maintenance items.

### ONLINE WARRANTY REGISTRATION

After making a PowerPacks sale, use the Online Warranty Registration for quick and easy warranty coverage.

PowerPacks MUST be installed at an authorized Detroit service outlet to be eligible for the 2-year/150,000-mile warranty.

- Log on to DDCSN.COM with your extranet ID and password
- Click on the PowerPacks warranty link
- Fill in each required field
- Submit the warranty registration

### PRICING CALCULATOR

- A quick and easy-to-use tool for determining your PowerPacks installed pricing
- Accessed through the PowerPacks webpage and Detroit™ eParts catalog on DDCSN.COM
- Add cost for shop supplies, adjust desired margin and customize the quote with your service outlet's contact information

### LITERATURE

- Customer-facing PowerPacks brochure that covers the top features, advantages and benefits of the program. Available on DDCSN.COM

The screenshot shows the 'PowerPacks' online warranty registration form. It includes fields for personal and dealer information, engine details, and a registration button. The form is titled 'PowerPacks' and 'DETROIT GENUINE PARTS'.

First/Last Name:	Joe	Smith
Distributor/Dealer Code:	0101900000	
Dealer Name:	JOE Trucking	
Address Line 1:	PO BOX 999	
Address Line 2:		
City/State, Province/Zip, PC:	Fort Mill	SC 29732
Phone:	999-999-9999	
Engine Serial Number:	06R0333555	
Part Number Installed:	R5235575S	
Repair Order Date:	6/30/2014	
Mileage at Repair/Replacement:	400,000	

Did the injector extended warranty influence you to choose to replace all 6 injectors?  Yes

Injector Extended Warranty Registration Application 6/30/2014

Warranty parchments are also available for download online

## LAUNCHING YOUR POWERPACKS PROGRAM

Follow these easy steps to give your PowerPacks program the best chance for success:

- Work with your RPM to develop the most effective and profitable PowerPacks program
- Using the pricing calculator, determine your installed pricing for a single electronic unit injector and complete set of PowerPacks for each engine
- Make your parts, service and sales team members aware of your PowerPacks program and installed pricing
- Educate your staff and promote to your customers the new Detroit Genuine Parts marketing kit