



DETROIT DIESEL

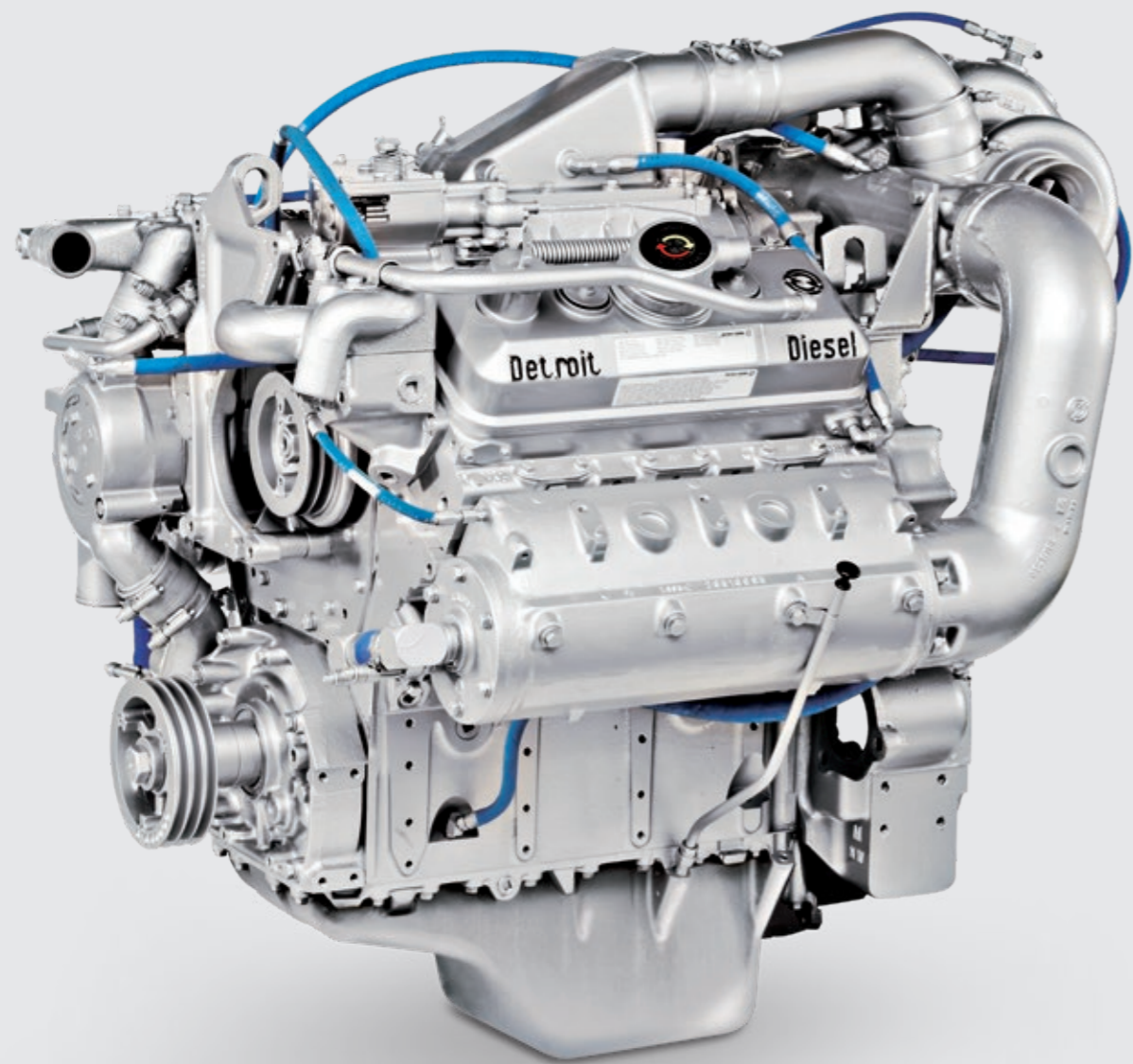
Detroit Diesel 2-Cycle

KEEP A GOOD THING GOING.

IMPORTANT ENGINE INFORMATION
THIS ENGINE HAS BEEN REMANUFACTURED BY DETROIT DIESEL IN A CENTRAL
FACILITY. ALL COMPONENTS MEETING OR EXCEEDING THE SAME
CENTRAL TOLERANCES AND CALIBRATION TOLERANCES AS THE ORIGINAL
EQUIPMENT. THE ENGINE IS A RE-ENGINEERED 2-CYCLE DIESEL ENGINE.
FOR MORE INFORMATION, CONTACT DETROIT DIESEL.
DETROIT DIESEL
DETROIT DIESEL



A Rolls-Royce solution



CONTENTS

01 A customer-oriented technological leader.

02 Keep a good thing going.
Genuine Detroit Diesel 2-Cycle
Maintenance Products
Spare Parts
Long Block Assemblies
Long Block Engine Kits

7
8
11
12
14

03 Local support. Worldwide.

Global Service Network

17



A CUSTOMER-ORIENTED TECHNOLOGICAL LEADER.

01

We are proud to supply our customers with technologically-advanced products that are proven in the field. Our range of products and services for off-highway applications is extensive and includes both standard and customized solutions.



MTU is the core brand of Rolls-Royce Power Systems AG, which is a world-leading provider of high- and medium-speed diesel and gas engines, complete drive systems and distributed energy systems for the most demanding requirements.

The product range of MTU is one of the widest and most modern in the sector. We offer comprehensive, powerful and reliable engine solutions for yachts, commercial ships and naval vessels, construction and industrial vehicles, agricultural machinery, mining, rail and military vehicles as well as for the oil and gas industry. We also provide a full line of service products to help you maximize uptime and performance.

For over 100 years, MTU has been known for cutting-edge innovation and technological leadership. That same spirit of innovation inspires our sustainability efforts. Today and in the future, our focus is on developing and implementing system solutions to maximize efficiency and meet emissions standards.

Powerful commitment.

MTU's success today is due in large part to its strong heritage in the diesel engine business. Its ancestry includes not only Germany's MTU, but also North America's Detroit Diesel—two brands which dominated off-highway diesel engine innovation and manufacturing on their respective continents for most of the 20th century. Today MTU continues this legacy of excellence. As owners of the Detroit Diesel 2-Cycle product line, we continue to provide expert support around the world.

An expert in technology.

MTU has always set standards in technological expertise for customized product and system solutions. To deliver you maximum power density, we concentrate our innovation on the continuous advancement of our core competencies: turbo charging and electronics.

A passionate engine specialist.

We spend every day working together with you, our customers, to deliver engines and systems that best fit your needs. Whether a standard system or a customized solution—we are passionate about the art of engine creation.

A reliable partner.

We understand the specific demands for diverse applications. In collaboration with you, we look for the solutions which are best suited to your individual requirements. Every step of the way—from the start of project planning, during the design of your integrated system solution, at the point of delivery and commissioning and continuing through the care of your product—we are there with you for the entire lifecycle.

1 Technological leader

As a supplier of high-quality performance drive solutions, you can count on us for the highest level of technological expertise.

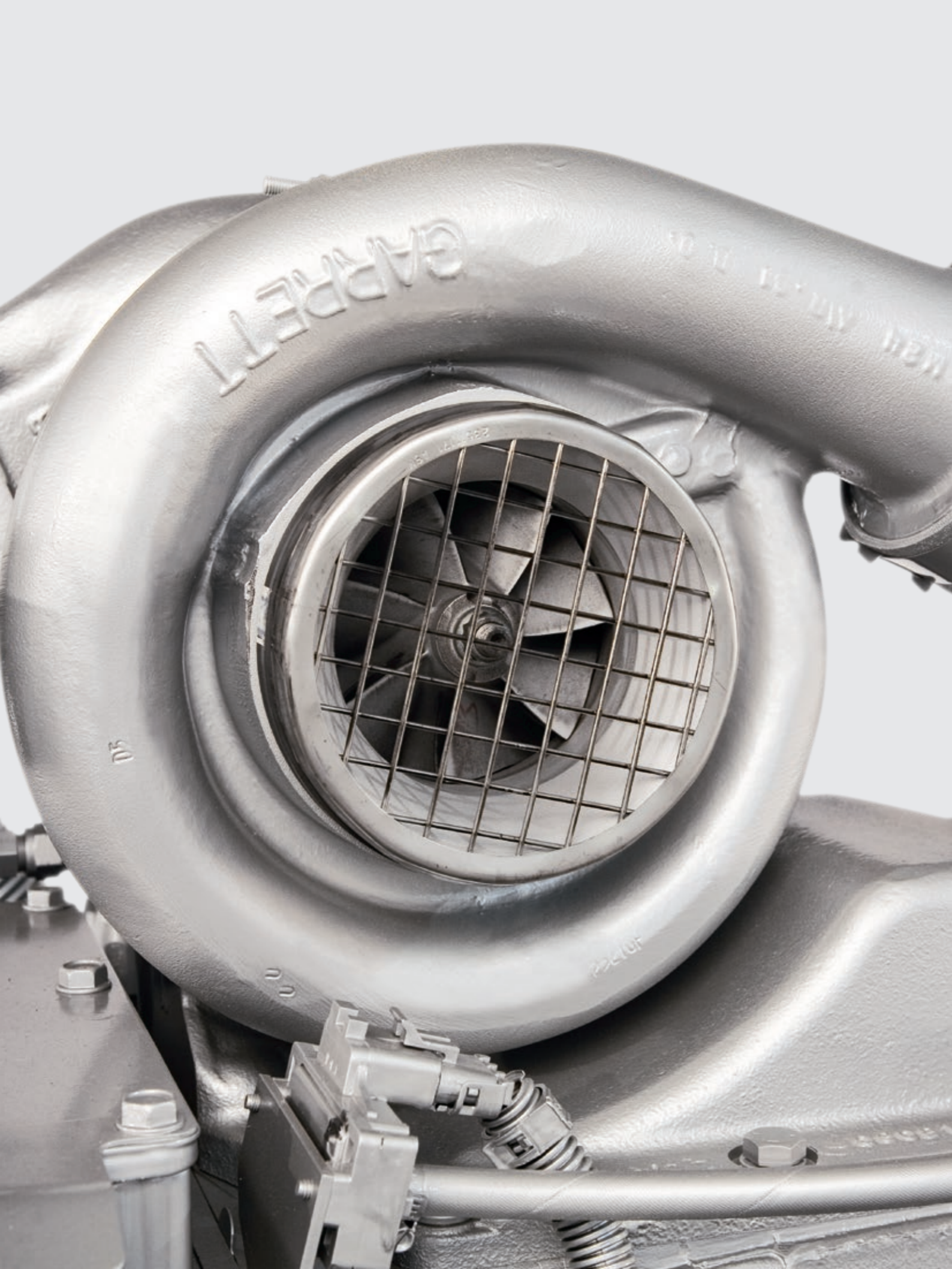
2 Passion

We're passionate about fulfilling the needs of our customers with the utmost professionalism and precision.

3 Partnership

We're a reliable and trend-setting partner who acts with foresight in a results-oriented manner.





KEEP A GOOD THING GOING.

02

Genuine Detroit Diesel 2-Cycle products are built to the latest engineering specifications from the original manufacturer, resulting in uncompromised quality and service life. You can count on us for the entire engine lifecycle—from preventive maintenance to repairs to repowering. Our worldwide sales and service network is ready to help with parts, service and support. Get in touch with your local distributor to keep your engines going strong.

MTU's 2-Cycle diesel engine business owns a legendary past and a bright future. Detroit Diesel 2-Cycle engines started rolling off the production line in 1937. The first engines were compact, lightweight, 2-Cycle products. Later, the company began developing heavy-duty engines and by 1965 it had produced its one-millionth engine. That same year, GM Diesel was renamed Detroit Diesel, producing Series 53, Series 71, Series 92 and Series 149 2-Cycle engines that powered most of the 20th century's diesel-driven industrial history. During the 1980s, the advent of tougher exhaust emissions laws relegated 2-Cycles to the sidelines in favor of more environmentally friendly four-cycle engines.

While many predicted the 2-Cycle engines would quietly fade away, they have proven remarkably resilient. Today, many are still going strong. And the future looks bright. When MTU acquired the product line from Detroit Diesel Corporation in 2006, a significant capital investment sharpened market focus and renewed the commitment to provide parts, service and support for the long term.

- 3.5 million Detroit Diesel 2-Cycle engines built since 1940
- Approximately 250,000 still in operation around the world
- More than 1,000 MTU service locations worldwide to keep your equipment up and running
- Nearly 2,000 trained 2-Cycle technicians
- Replacement parts stocked and ready to cover all your needs

Maintenance Products

TAKE YOUR LIFECYCLE TO
GREAT LENGTHS.

Our Detroit Diesel 2-Cycle maintenance products are designed to maximize engine performance, prolong engine life and protect your investment. We offer a full range of consumables for use in preventive maintenance programs: filters (air, oil and fuel), lubricants (including engine oils and greases) and coolants (both concentrates and pre-mixed).

All of these products must pass rigorous testing to qualify for use in Detroit Diesel 2-Cycle engines and other systems. Our Detroit Diesel 2-Cycle consumables help you achieve maximum engine performance in terms of power, torque, longevity and low total cost of operation. Our extensive testing, superior design and top-quality materials produce premium products. For added convenience, MTU also offers a fluid testing program. Onsite fluid samples are sent to our laboratory and results are returned quickly to give you peace of mind knowing that all fluids are protecting your investment as intended. All maintenance products can be purchased from your MTU distributor or dealer.

- 1 **Power Guard SAE 40 2-Cycle Engine Oil**
Features a low ash formula that adheres to the API CF-2 level of approval for on- and off-highway uses.
- 2 **Power Cool Heavy Duty Off-highway Coolant**
Pre-charged with supplemental additives that help prevent inhibitor dropout, scale deposits and gel problems.
- 3 **Power Guard Genuine 2-Cycle Oil and Fuel Filters**
Engineered to fit Detroit Diesel 2-Cycle engines precisely, thereby ensuring maximum protection and operational life.



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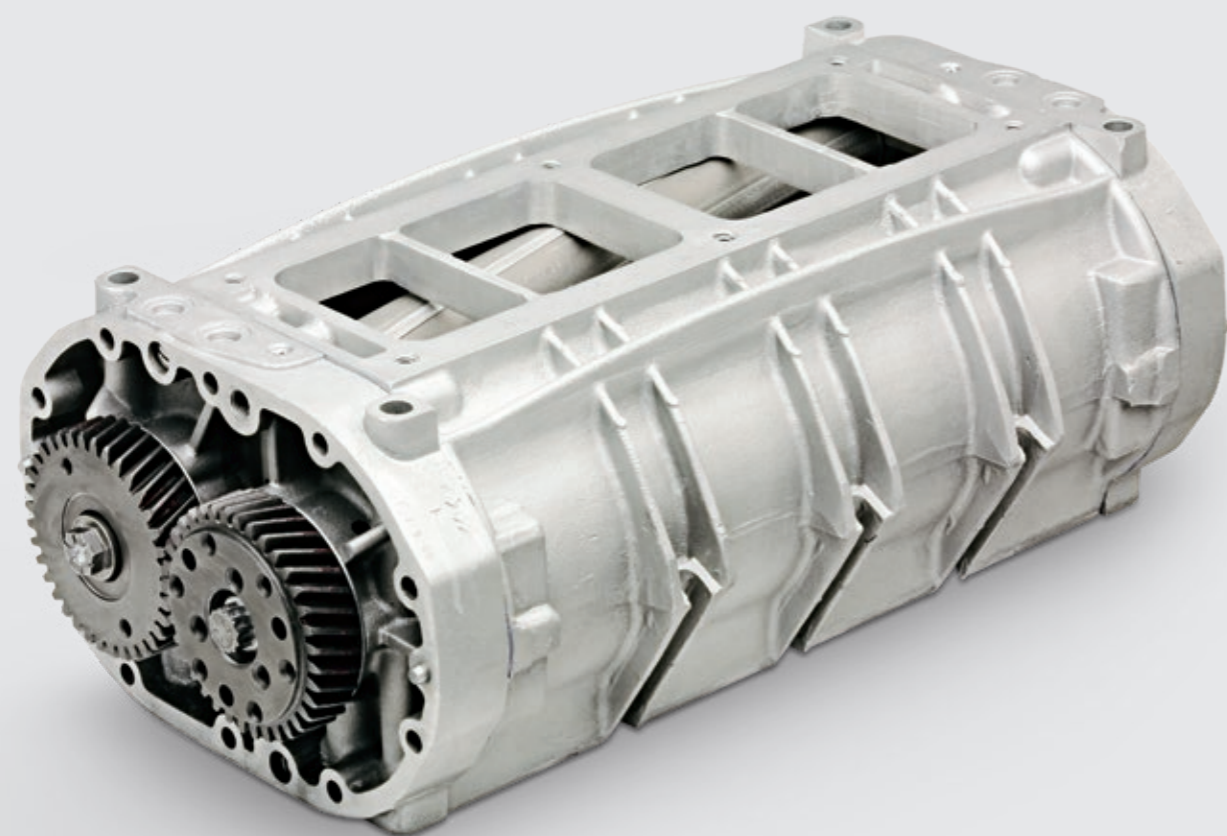
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3

Spare Parts

KEEP GOING WITH GENUINE PARTS AND COMPONENTS.



Our genuine Detroit Diesel 2-Cycle new and reliabilt[®] remanufactured components are built to original equipment specifications to ensure factory quality and optimum performance. No other manufacturer has access to current Detroit Diesel 2-Cycle engine specifications, quality audits or insight on progressive modifications. These updates are incorporated into the assembly, making our components the best possible match for Detroit Diesel 2-Cycle engines.

When you purchase a new or reliabilt[®] component, you are assured of a predictable service life. Parts are readily available, which reduces downtime and indirect service costs such as storage. We provide original manufacturer quality at a great value. Pricing for reliabilt[®] remanufactured parts is typically 20 to 40 percent lower than genuine new parts. And all genuine Detroit Diesel 2-Cycle parts carry a one-year, unlimited miles/hours warranty.



Long Block Assemblies

REBUILD FROM A
SOLID FOUNDATION.

If you need more than just replacement parts, you may want to consider a **reliabilt®** Detroit Diesel 2-Cycle Long Block Assembly.

Genuine Detroit Diesel 2-Cycle Long Block Assemblies deliver outstanding value. They streamline the overhaul process while ensuring the same high standards for quality and performance that you've come to expect from Detroit Diesel 2-Cycle products.

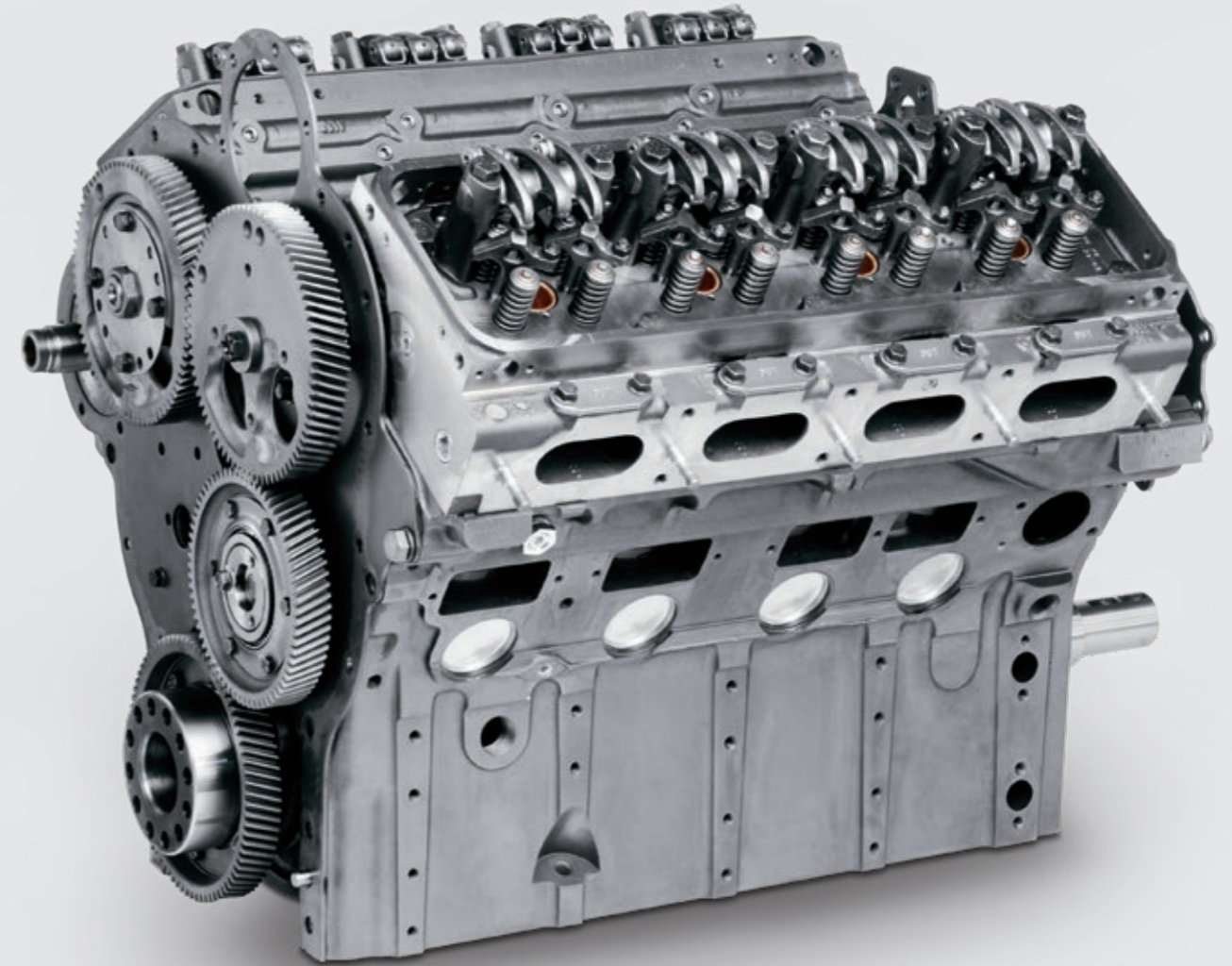
Components include:

- Cylinder block
- Gear train
- Cylinder kits
- Connecting rods
- Rear end plate
- Crankshaft
- Camshaft
- Front cam weights
- Cylinder heads with valve operating mechanism

All assembly components are designed, tested and approved by OEM engineers to ensure compliance with Detroit Diesel 2-Cycle blueprint specifications and compatibility of genuine parts.

Only a quick visual inspection is required to determine if your previous long block assembly will be acceptable for full core credit. If there is major casting damage that is hidden from view, you will not be charged back regardless of what is found during core disassembly. If your returned core has visible major casting damage, a predetermined unacceptable core charge is applied. This gives you an accurate calculation of your cost to overhaul, even when an engine has suffered visible damage.

Our Long Block Assemblies are backed by a full one-year warranty, which provides added peace of mind. Warranty service is available at nearly 1,200 authorized locations worldwide.



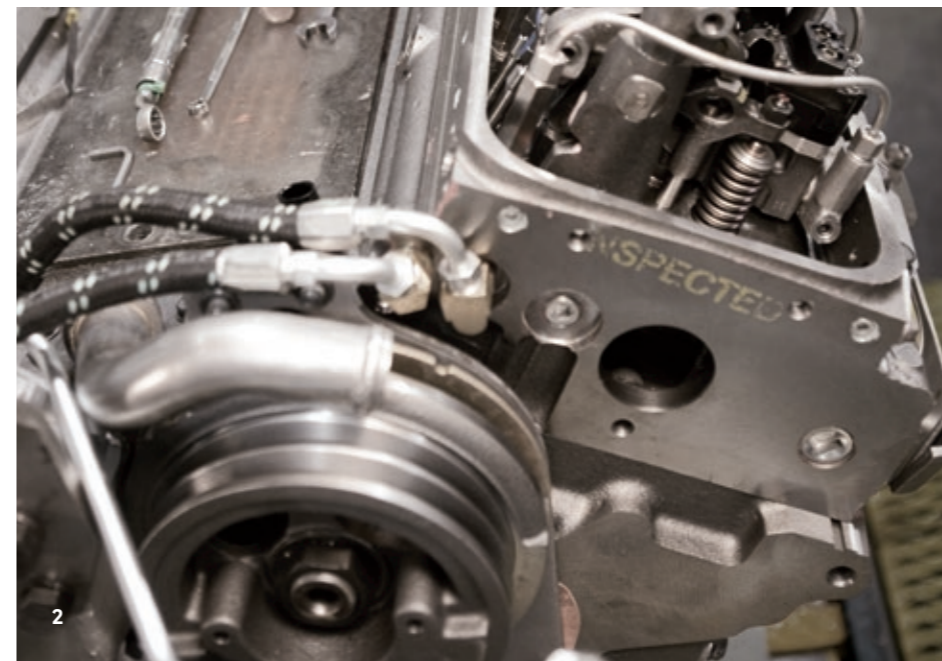
1

1 8V Series 71 Long Block

Detroit Diesel 2-Cycle long blocks are backed with a full one-year warranty, which provides added peace of mind.

2 reliabilt® Detroit Diesel 2-Cycle Long Block assembly

All assembly components are designed, tested and approved by OEM engineers to ensure compliance with Detroit Diesel 2-Cycle blueprint specifications and compatibility of genuine parts.



2



Long Block Engine Kits

GET EVERYTHING YOU NEED
IN ONE POWERFUL PACKAGE.

To achieve like-new Detroit Diesel 2-Cycle quality, there's simply no better option than a Detroit Diesel 2-Cycle Long Block Engine kit. This complete solution includes a Long Block Assembly plus a full set of **reliabilt®** components for your specified engine.

reliabilt® Long Block Assembly:

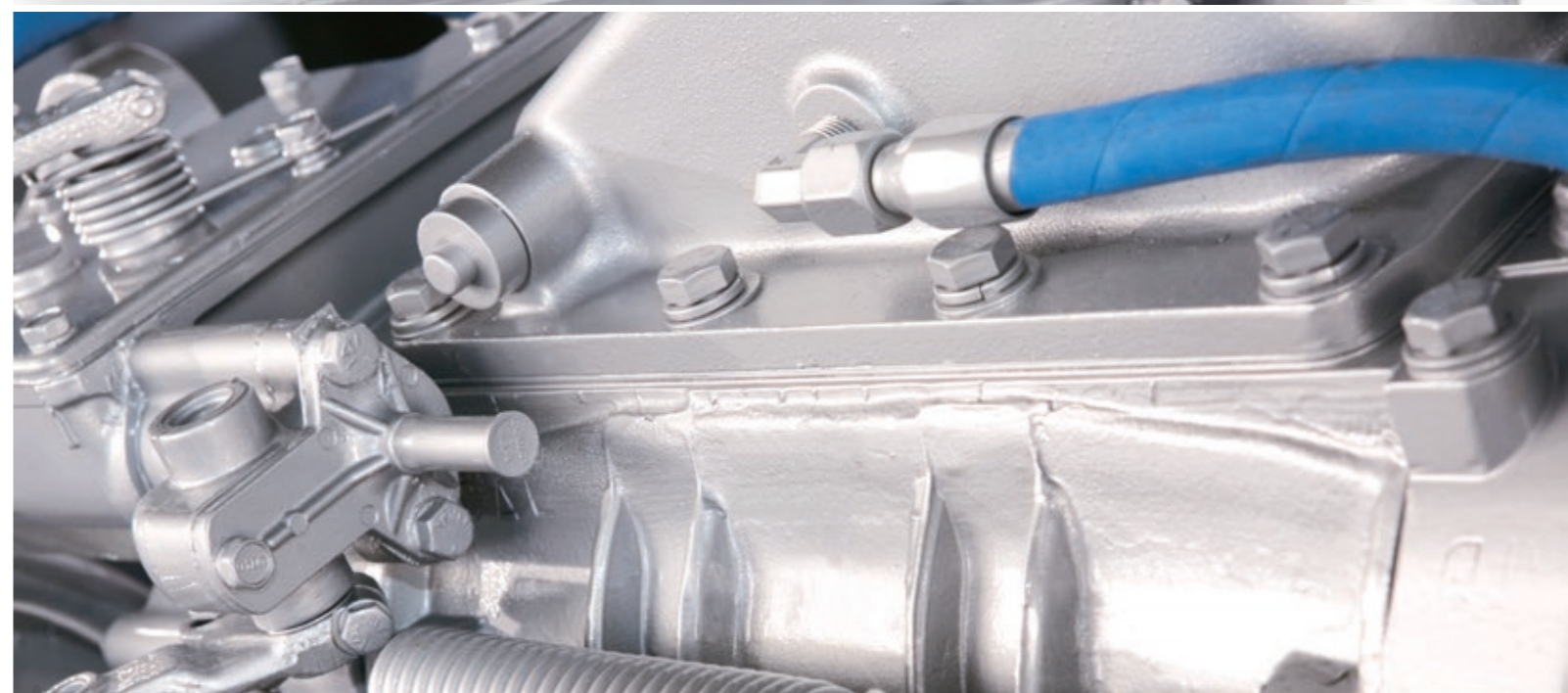
- Cylinder block
- Gear train
- Cylinder kits
- Connecting rods
- Rear end plate
- Crankshaft
- Camshaft
- Front cam weights
- Cylinder heads with valve operating mechanism

Complete set of reliabilt® components for the specified engine serial number:

- Turbo (if applicable)
- Blower
- Water pump
- Fuel pump
- Governor
- Injectors
- Overhaul gasket kit

All parts, components and assemblies are designed, tested and approved by OEM engineers to ensure compliance with Detroit Diesel 2-Cycle blueprint specifications and compatibility of genuine parts.

Detroit Diesel 2-Cycle Long Block Engine Kits are covered by a one-year, unlimited miles/hours warranty serviced at any authorized MTU location around the world. Contact your local MTU distributor to learn more.





Global Service Network

LOCAL SUPPORT. WORLDWIDE.

03

The most important part of your power system isn't a part at all—it's your local service team. With more than 1,200 service locations worldwide—backed by regional Parts Logistics Centers in Europe, Asia and America—you can count on responsive support by expert technicians, wherever work takes you. To find your local service partner, visit www.mtu-solutions.com.

Always on call, 24/7

Whether it's connecting you with a local service partner or assigning an urgent problem to a dedicated team of MTU experts, we're ready to assist you—wherever you are, whatever you need.

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Asia/Pacific +65 6860 9669

North and Latin America +1 248 560 8888

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LET'S GET TO WORK.

As your partner, it is our responsibility to see you through the entire lifecycle of your Detroit Diesel 2-Cycle engine. With dependable maintenance products, parts, Long Block Assemblies or complete Long Block Engine Kits, we're there every step of the way. The systematic long-term care by our team is an integral part of the standard specification of our engines. Our experienced and knowledgeable staff will help you—anywhere and anytime you need us.

Quality for us is not just a concept: it is the degree of your satisfaction and your continued trust in us.

We are your preferred partner for all service solutions:

- Installation support
- Commissioning
- Technical documentation
- Training
- Maintenance
- Diagnosis
- Repairs, Overhauls and Long Block Engine Kits
- Components, parts and tools
- Global service and parts support

