



Essential spare parts

MAN PrimeServ



A complete portfolio of
high-quality components
for maximum engine
performance



Service with passion

Straddling the globe with a network of more than 100 service centers, MAN PrimeServ is fully primed to provide local expertise, solving your problems wherever you are and whenever you need assistance. Ensuring the operational availability of your equipment, while offering reliable support when you need it most, MAN PrimeServ service solutions include OEM spare parts, engine and machinery maintenance and repairs, customized service agreements and individual consulting. For existing equipment, holistic retrofit and upgrade solutions keep your machinery up-to-date and at optimal levels of reliability, availability and economic efficiency.

This makes energy transition, as part of your environment-conscious decarbonization plans, an exciting possibility. Other solutions include Omnicare, a one-stop service to take care of equipment from other OEMs too, securing expert service coverage right across your machinery portfolio and streamlining your operations management. Cutting-edge digital solutions hike performance and minimize downtimes, while remote connections enable live data analysis, ensuring quick and effective response. To further ensure the efficient performance and safety of your machinery, MAN PrimeServ Academies provide expert training, developing the operational and maintenance skills required.

Keep downtime to a minimum

To maximize the value of your engine investment, it is vital that all parts and components are well maintained and replaced when necessary. With MAN PrimeServ, you have access to the industry's largest portfolio of genuine-quality spare parts, each designed to optimize your engine's performance over its entire lifetime.

OEM quality

OEM spare parts from MAN PrimeServ are the best way to prevent engine damage and costly interruptions to your operation schedule. All OEM spare parts incorporate the latest technology solutions to provide maximum quality and reliability, while ensuring downtime is kept to a minimum.

Continuous development

Our R&D teams are constantly developing new ways to improve the quality of your engine's components, covering everything from O-rings to crankshafts, and for new or old engine models. Every part we produce is precision-engineered for its specific purpose, using the latest design updates and the highest-grade materials, resulting in cost-, reliability- and efficiency gains.

Dependable support

We understand the challenges you face in maintaining profitable fleet operations, which is why we focus on providing high-quality solutions as well as high-quality parts. This gives you the best and most flexible options to protect your investments and minimize your repair costs. We have also optimized our global network of sales offices, including a more streamlined online portal, to make it easier for you to find the part or quotation you need, and to ensure reliable delivery and installation.

With MAN PrimeServ you can be sure of:

- One-stop shop for all your needs
- Comprehensive portfolio of spare parts with warranties
- Class-approved spare parts for all MAN two-stroke engines
- Round-the-clock stock availability in Denmark and Singapore
- Emergency assistance availability to minimize downtime
- Fully updated designs for the highest quality and efficiency
- Global network of more than 100 sales and service offices
- IMO parts for any engine
- One contact point regardless of engine builder
- Technical support 24/7



Spare parts for gas engines

Powering sustainable
shipping



The global shipping industry is working towards a sustainable future. This means that you will face important choices about the technologies and investments you need in order to stay competitive and at the forefront of compliance for decades to come.

At MAN Energy Solutions, we are helping to shape the sustainability agenda and provide a clear path for you to achieve your goals. As the industry's trusted partner for class-leading marine systems, we have the expertise and solutions ready now to support whatever decisions you make. Our green engines powered by future fuels such as green hydrogen, ammonia, methanol, and biofuels, are essential for long-term decarbonization. Our green engines introduce new technologies into the maintenance and service of your fleet and here you need a partner you can trust. At MAN Energy Solutions we can supply the spare parts for all green engine types and ensure that you always get the latest design, directly from the engine designer.

With the promotion of the MAN B&W LGIM engine we stake our claim as the designer of the world's first and only dual-fuel

two-stroke engine running on methanol. This dual-fuel engine type offers great benefits and supports MAN ES' contribution to the Maritime Energy Transition.

The MAN B&W LGIM engine also complements successful the existing ME-GA, ME-GI and ME-LGI engine program. Our two-stroke dual-fuel engine portfolio provides a dual-fuel solution for any vessel type and operating pattern.

MAN Energy Solutions offers:

- Simplified spare-parts management with access to the industry's most extensive portfolio of genuine OEM-quality parts, covered by warranty
- Global emergency assistance availability to minimize downtime
- Benefit from high-quality, standard components
- Fully updated designs for the highest quality and efficiency
- All of this to ensure longer-lasting spare parts and lower emissions today.
- OEM-standard parts with the latest design upgrades to optimize performance and efficiency.

Fuel and exhaust equipment (two-stroke)



Multi-way
FIVA valves



Spindle guides



Pump Barrel



DSA Spindle

Fuel and exhaust equipment (four-stroke)



Fuel pump



Fuel valve



Fresh water
pump



Lube oil pump

OEM spare parts for reliable engine performance

Essential wear parts (two- and four-stroke)



Cylinder liners



Piston crowns



Piston rings
(Alu and Cermet)



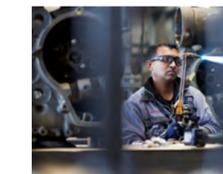
Bearing shells



Stuffing box
(two-stroke)



Rotocap
(four-stroke)



Package solutions



Maintenance kits



Package solutions



Maintenance kits



Fuel and exhaust equipment

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Spare parts for fuel and exhaust equipment

MAN PrimeServ fuel and exhaust equipment is designed to optimize the performance of your two- and four-stroke engine. Inevitable wear and tear on key components can result in lower fuel efficiency, inconsistent emissions, and further engine damage, which is why it is important you replace any parts that are not in optimal working conditions.

Full availability

We offer a complete range of genuine spare parts for fuel and exhaust systems. As with all our equipment, each component is built using the latest modifications and the correct material composition. We also use state-of-the-art 'lapping' technology to ensure corresponding or 'paired' parts are fully compatible and operate together with maximum efficiency.

Genuine quality

It is essential you only use genuine MAN spare parts. We conduct rigorous in-house testing and validation to ensure each part meets our uncompromising standards for durability and performance, and to ensure thousands of hours of flawless operation.

Multi-way **two-stroke** FIVA valves

The FIVA (Fuel Injection, Valve Actuation) valve is a high-precision unit that controls the fuel injection and exhaust valve opening of the main engine, thereby serving the same function as the camshaft on conventional engines. It is an important part of your engine and essential to its operation and efficiency.

A highly durable coating on the inside of the valve ensures thousands of hours of maintenance-free operation. All FIVA designs are constantly upgraded to enhance performance and reliability, and each component is manufactured to the highest possible quality.

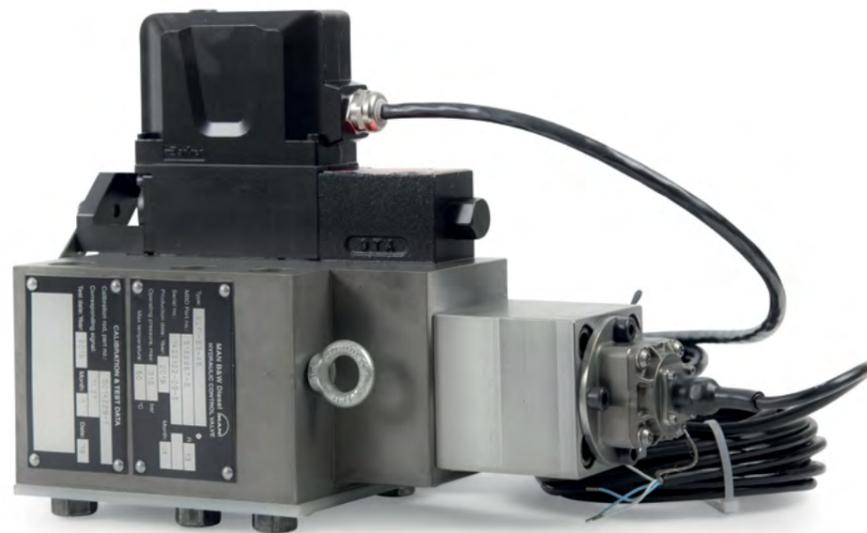
Depending on your engine design, the multi-way valve can be provided as two separate units (ELFI and ELVA).

Key features

- Optimal engine performance
- Long lifetime
- Incorporates the latest design updates
- Built to the highest quality standards

Services for multi-way FIVA valves

- MAN FIVA valve retrofitting
- FIVA overhauling
- Cost-effective factory overhaul options at certified MAN ES workshops in Copenhagen, Istanbul, Shanghai, Qatar and Houston
- Service kit for multi-way valves



MAN FIVA valve

Pump **two-stroke** barrel

The pump barrel, consisting of the plunger and barrel, is the main component of your engine's fuel pump, ensuring the right amount of fuel oil reaches the combustion chamber. pump barrels are included in the IMO technical file because they are essential to the running of the engine and are a part of the fuel system that can affect emissions.

To optimize the combustion process and regulate emissions correctly, it is important to monitor the engine performance during different engine loads. If the index has increased more than 10% before testbed performance, the pump barrel should be replaced.

The pump barrel are continuously developed to improve reliability and manufactured in-house in Copenhagen to ensure the highest possible quality. Even if your engine is of an older design, you will receive exactly the right parts for your engine's specifications in order to comply with the technical file.

Key features

- Incorporates the latest design updates
- Built to highest quality standards
- Tracking codes ensure you receive the right part for your engine type
- Precision-engineered by MAN Energy Solutions in Denmark
- Amendments to the IMO technical file free of charge (if required)

Services for pump barrel

- Maintenance Kits for fuel pumps



MAN pump barrel

Spindle guides two-stroke

The spindle guide and nozzle are important fuel valve components and play a crucial role regarding fuel injection accuracy. OEM spindle guides and OEM nozzles are designed to withstand extreme temperatures to maintain precise operation with no fuel leakage. This eliminates risks of contamination of other key components and helps to ensure efficient fuel combustion.

The spindle guide and nozzle are the main wear parts of the fuel valve, and as such they need to be replaced at certain intervals. As they are designed to work as a pair, they should both be changed at the same time.

Combining the spindle guide with a HIP (Hot Isostatic Pressing) compound nozzle helps to minimize maintenance costs by providing an average Time Between Overhaul of 16,000 running hours (8,000 hours on gas).

Spindle guides, as with other fuel system components that can affect emissions, are manufactured in-house in Denmark using precision machinery to maintain strict quality standards. To help reduce your fuel consumption and emissions, a high priority is placed on the development of our spindle guides and nozzles for optimal performance.

Dummy nozzles for dual Fuel engines

For prolonged operation in Fuel-mode, we offer dummy Nozzles. The purpose of these nozzles is to protect the dual-fuel injection valves against the influence from fuel oil combustion.



MAN spindle guides with nozzle

Key features

- Manufactured using the latest design specification updates
- No dripping from the nozzle eliminates contamination of other key components and helps to minimize exhaust gas emissions
- Cleaner exhaust gas ways for more efficient combustion
- Manufactured to the highest quality standards
- Precision-engineered by MAN Energy Solutions in Denmark

Services for Spindle guides

- Fuel valve nozzle - cleaning tools
- Maintenance Kits for fuel valve



MAN Fuel nozzles

DSA spindle

two-stroke

The exhaust valve spindle is a crucial high-stress component that needs to operate reliably under the extreme pressures and temperatures experienced after combustion. Similar to its predecessors, the Dura and Nimonic spindle, the DSA spindle incorporates a vane wheel designed for the rotation of the exhaust spindle during operation.

This rotational movement ensures symmetrical heating of the valve spindle and also uniform seal with the valve seat. This also means that heat from minor blow-throughs are distributed across a broader area of the bottom piece. This design feature significantly reduces the likelihood of burn-away occurrences on the valve seat, contributing to the overall durability of the component. In essence, the DSA Spindle builds on the capabilities of its predecessors by delivering a robust and technologically advanced solution.

The patented aerospace-derived DSA alloy taking TBO to new levels. The meticulous engineering, focus on durability, and innovative welding techniques make the DSA Spindle a reliable choice for optimizing the performance and longevity of exhaust valve under varied operational conditions.



MAN exhaust valve spindle

Key features

- Longer time between overhaul
- Incorporates the latest design updates
- Improved reliability
- Reduced maintenance

Services for DSA Spindle

- Maintenance Kits for exhaust valves

Fuel pump

four-stroke

The fuel pump is a critical component of your four-stroke engine, responsible for delivering fuel to the combustion chamber with precision.

Crafted with high-quality materials, our fuel pumps ensure reliable and efficient fuel delivery, contributing to optimal engine performance. The plunger and barrel feature a durable coating for extended operational life, and our continuous upgrades enhance both reliability and efficiency.

Major overhaul pack

Included in the Major Overhaul Pack are spare parts to enable the overhaul of the fuel pumps. This includes complete pump element, O-rings, packing ring and seal rings. Individual kits for overhaul of fuel pumps are also available. We can undertake the overhaul of the fuel pumps at a state-of-the-art MAN workshop facility.



MAN fuel pump

Key features

- Incorporates the latest design updates
- Manufactured to the highest quality for maximum performance
- Option for reconditioning to maintain peak performance
- In-house performance testing (recon parts)

Services for fuel pump

- Kits for fuel pump
- Major overhaul pack for fuel pump

Fuel valve

four-stroke

The fuel valve is a key element in four-stroke engines, regulating fuel injection and exhaust valve opening. Engineered with precision and durability, our OEM fuel valves are designed to withstand extreme temperatures, ensuring accurate fuel injection without any leakage. The nozzle, integrated into the fuel valve features MAN ES low-sack design, ensuring efficient combustion and reduced after drip. Regular replacement of these wear parts is recommended for upholding optimal performance.

Major overhaul pack

Included in the Major Overhaul Pack are spare parts to enable the overhaul of the fuel pumps. This includes injection nozzle, cylindrical pin and O-rings. Individual kits for overhaul of fuel valves are also available. We can undertake the overhaul of the fuel valves at a state-of-the-art MAN workshop facility.



MAN fuel valve

Key features

- Incorporates the latest design updates
- Manufactured to the highest quality for maximum performance
- Option for reconditioning to maintain peak performance
- In-house performance testing (recon parts)

Services for Fuel valve

- Kits for fuel valve
- Major overhaul pack for fuel valve

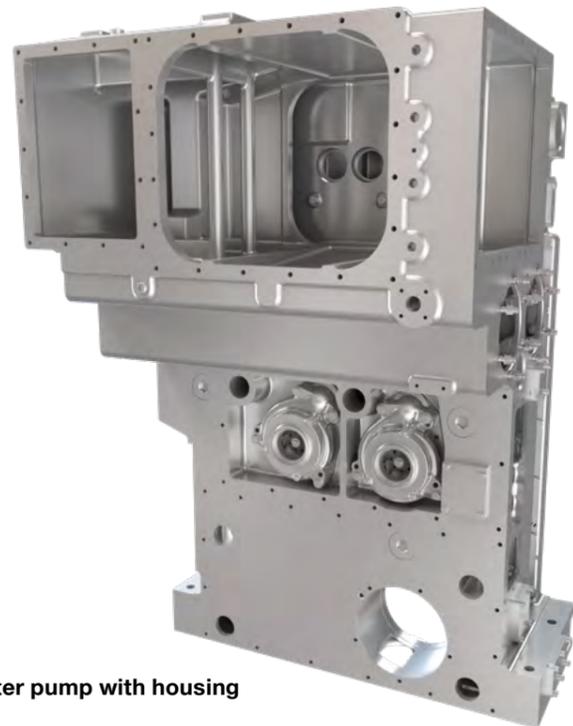
Freshwater pump

four-stroke

The freshwater pump is a vital component that circulates coolant to regulate the engine's temperature and prevent overheating. Engineered for durability and efficiency, our freshwater pumps meet the highest quality standards. Regular upgrades to the design enhance performance and reliability, ensuring effective cooling for the engine.

Major overhaul pack

Included in the Major overhaul pack are spare parts to enable overhaul of the fuels pumps. This includes seals, rotating seal, bearings, axle, and where necessary impeller. Individual kits for overhaul of fresh water pumps are also available. Additionally, an upgrade kit for the freshwater pump is available. We can undertake the overhaul of the freshwater pump at a state-of-the-art MAN workshop facility.



MAN freshwater pump with housing

Key features

- Incorporates the latest design updates
- Manufactured to the highest quality for maximum performance
- Option for reconditioning to maintain peak performance
- In-house performance testing (recon parts)
- Long time between overhaul

Services for freshwater pump

- Kit for cooling water pump
- Major overhaul pack for freshwater pump

Lube oil pump

four-stroke

The lube oil pump is crucial for lubricating engine components, minimizing friction, and ensuring smooth operation. Crafted with precision and durability in mind, our lube oil pumps undergo continuous improvements to meet the highest quality standards. The internal components are designed for thousands of hours of maintenance-free operation, providing assurance for the longevity and optimal performance of your four-stroke engine.

Major overhaul pack

Included in the Major overhaul pack are spare parts to enable overhaul of the lube oil pump. This includes seals/gaskets, bushes and where necessary pressure relief piston. Individual kits for overhaul of lube oil pumps are also available. We can undertake the overhaul of the lube oil pump at a state-of-the-art MAN workshop facility.



MAN lube oil pump

Key features

- Incorporates the latest design updates
- Manufactured to the highest quality for maximum performance
- Option for reconditioning to maintain peak performance
- In-house performance testing (recon parts)
- Long Time Between Overhaul

Services for Lube oil pump

- Kits for lube oil pump
- Major overhaul pack for lube oil pump



Essential wear parts

Certain spare parts for the two- and four-stroke engine are considered to be essential wear parts, as they are key components that have a critical effect on the performance of your engine. When worn, they must be replaced with parts engineered to precise design specifications to avoid further damage to your engine and downtime for your vessel.

Engineered for quality

Essential wear parts are subject to harsh operating conditions and other factors such as inconsistent fuel quality, which can affect their operational lifetime. It is critical that these parts are manufactured to the highest possible quality standards to ensure continuous and dependable performance over many thousands of hours in use.

Tested to the extreme

Every product we launch undergoes a stringent testing and validation process at our research centers. We verify key factors such as efficiency, longevity and reliability against a broad scope of variables, including different engine models, running speeds and fuel types, to ensure you always get the best solution for your specific engine requirements.

Cylinder liners

two- and four-stroke

Cylinder liners are a key component of your main engine and should be kept in optimal condition to ensure efficient and reliable operation.

OEM cylinder liners have a wave-cut and honed profile on the surface for optimal oil retention and to provide a hydrodynamic oil film. The cast iron running surface of our cylinder liners helps to optimize tribology configuration. For specific engines, a tailored cooling layout of the liners contributes to improved lifetime and performance.

OEM cylinder liners are engineered in Denmark to the highest standards and produced under strict quality control. Rigorous in-house performance testing of the interaction between the running surface and the piston ring ensures minimal maintenance and a long time between overhaul.



MAN two-stroke cylinder liner



MAN four-stroke cylinder liner

Key features

- Incorporates the latest design updates
- High strength, cast iron build with optimized tribology configuration
- Cooling layout tailored to specific engine types
- In-house performance testing between running surface and piston ring
- Limited maintenance
- Long time between overhaul
- 1/8 or 1/3 lubrication points.
- Derated liners for various load schemes to reduce CO₂.
- Special honin pattern ensuring correct oil film (four-stroke)

Services for cylinder liners

- Maintenance Kits for cylinder liners
- Kit for cylinder unit
- Included in the Major overhaul packages (four-stroke)

Piston (crown)

two- and four-stroke

For piston and piston crown

The OEM piston crown and piston head is located at the top of the piston rod and is a crucial component to transform combustion energy to the crankshaft as mechanical energy. During this process, the piston crown/head is subjected to very high pressures, temperatures, and corrosive substances.

To ensure they can withstand these harsh conditions and give you many thousands of hours of maintenance-free operation, OEM piston crowns/heads are manufactured using high-grade steel and tested at certified workshops under strict quality control agreements.

By incorporating the latest designs updates, the warranty on OEM piston crowns/heads has been extended to 36 months.



MAN two-stroke piston crown

For two-stroke piston crowns

Acknowledging the diverse needs of our clientele, we offer a range of ring packages - including 1H/3L, 1H/2L, and 3H - as the new industry standard. These packages complement the piston pack, offering customers enhanced flexibility and optimized engine performance.

Furthermore, we provide the option to upgrade from a 4-ring to a 3-ring crown, delivering tangible improvements in performance and efficiency. This upgrade reflects our commitment to providing tailored solutions to meet the evolving demands of engine optimization.

In alignment with this upgrade, the engine's technical documentation ensures ongoing compliance with regulatory standards, thereby fortifying the reliability of our products.



MAN four-stroke piston

For four-stroke pistons

Monobloc piston 23/30 and 28/32 feature high grade nodular cast iron with excellent wear properties ensuring longest TBO

Key features

- Incorporates the latest design updates
- Manufactured to the highest quality for maximum performance
- Extended warranty to 36 months for complete reliability assurance (two-stroke)
- Option for reconditioning to maintain peak performance

Services for Piston crown/Piston

- Maintenance Kits for piston
- Kit for pistons
- Kit for piston rings / flame ring
- Included in the Major overhaul packages (four-stroke)

Piston rings

two- and four-stroke

For two- and four-stroke engines

Piston rings form a seal between the piston crown and the cylinder liner to retain combustion pressure and improve fuel efficiency, while also influencing the friction and retention of lube oil. As such, piston rings are a critical part of your engine and play an important role in maintaining the performance of surrounding components, including emissions and consumptions. It is important to keep your piston rings in optimal condition.

For two-stroke engines

Depending on your engine needs, you can choose from two types of piston rings: Cermet-coated and Alu-coated.

Cermet-coated piston rings reduce the risk of scuffing and seizures, which can occur when operating on 2020-complaint fuel oils (VLSFO & ULSFO). As cermet is a composite, part-ceramic, part-metal material, it combines the best properties from each, including wear resistance and toughness. This helps to reduce wear when using low-sulphur fuel oils and minimizes potential cylinder lubrication issues. For certain engine types, the addition of chrome layers on the underside of the rings also helps to protect the piston crown.

Alu-coated piston rings have a light aluminum-based coating on the base ring to give a faster running-in time. The aluminum coating is also applied to Cermet-coated piston rings.



MAN two-stroke piston rings

By combining specific layers of coating and complying with new environmental regulations, OEM piston rings are designed to maximize your cylinder liners' and pistons' operational lifetime and increase Time Between Overhaul.

CPR three-ring configuration pack
Based on the latest service experience and engine development, we now offer a three-ring configuration pack for low-speed engine types with bore sizes designed for one high and three low piston rings.

By introducing a controlled pressure relief (CPR) piston ring design with gas tight finger locks, gas leakage through the piston ring pack is controlled by controlled leakage (CL) grooves.

Fitting a gastight piston ring in the third ring position makes the complete piston ring pack gastight.

This helps to lower specific fuel oil consumption and reduces any deposit buildup between the ring lands, behind the piston rings in the grooves, and to some extent on the top land.



MAN four-stroke piston rings

Key features

- Low friction
- Low lube oil consumption
- Resistant to 2020-compliant fuel oils
- Incorporates the latest design updates
- Increases cylinder liner operational lifetime
- Safe and reliable running-in time
- Maximizes piston operational time
- Improved time between overhaul
- CK 36 coating introduced to cope with LSFO (23/30) (four-stroke)

Services for Piston rings

- Cermet-coated piston rings are part for the MAN PrimeServ product portfolio for compliance with IMO 2020 regulations
- Maintenance Kits for pistons
- Kit for pistons
- Kit for piston rings / flame ring
- Included in the major overhaul packages (four-stroke)

Bearing shells

two- and four-stroke

OEM bearing shells are essential to keep your engine's crankshaft and crosshead pin in place during operation. These components are subjected to high forces and pressures and, if maintained correctly, should last for your engine's entire lifetime.

OEM bearing shells are engineered for different engine types and feature unique coatings for maximum protection. An optimized design ensures better oil film thickness and pressure on the bearing shells.

As with all our spare parts, our constant focus on improvement ensures you always get the best product quality and performance.



MAN blended edge main bearing shell

Blended edge main bearing shells – key features

- Reduced oil film pressures
- Increased oil film thickness
- Relieves edge loading

Crosshead bearing shells – key features

- Undivided loaded area
- Ensures higher oil film thickness
- Maintains lower oil film pressure

Services for bearing shells

- Included in the Major overhaul packages (four-stroke)



MAN crosshead bearing shell

Stuffing box

two-stroke

The stuffing box is a mechanical seal between the cylinder and the crosshead that protects both sides from contamination. It features a lamella-type top ring that scrapes off unwanted substances (soot, coke, etc.) from the piston rod and leads them into a scavenge sludge drain.

The stuffing boxes feature a new lap joint and lamellas, which optimizes the overall performance and is standard on all two-stroke MAN ES diesel engines. An optimized design also helps to reduce oil consumption, which lowers your operational costs, as well

as improved draining and sealing to help the system oil remain clean.

You can also get special Maintenance Kits to maintain your stuffing box, which include all the spare parts you need for optimal performance and a longer operational lifetime.

All stuffing boxes are designed in Denmark and produced in approved facilities to ensure they adhere to our uncompromising quality control standards.



MAN stuffing box

Key features

- Reduced cost in system oil consumption
- Reduced stuffing box maintenance costs
- Improved cleanliness of system oil
- Innovative design optimizes stuffing box performance

Services for stuffing box

- Maintenance Kits for stuffing box
- Retrofit kit for stuffing box

Rotocap

four-stroke

The Rotocap is a critical component that adds efficiency and precision to the operation of your four-stroke engine. Serving as a crucial part of the engine's valvetrain system, the Rotocap plays a pivotal role in controlling valve movement and timing. Crafted with precision engineering and durable materials, our Rotocaps are designed to withstand the rigors of engine operation, contributing to the overall reliability and longevity of your engine.

Our Rotocaps feature advanced designs and undergo continuous upgrades to enhance their performance and durability. The high-quality construction ensures smooth and precise valve actuation, optimizing combustion efficiency and overall engine performance.

Regular maintenance and replacement of the Rotocap are essential to uphold the peak functionality of your engine. Trust in our Rotocaps to deliver consistent and reliable valve control, ensuring that your four-stroke engine operates at its best for extended periods. Invest in the quality and precision of our Rotocaps for a smoother and more efficient engine performance.



MAN Rotocap

Key features

- Controlling valve movement and timing
- Optimizing combustion efficiency and overall engine performance
- Consistent and reliable valve control
- Long time between overhaul

Services for Rotocap

- Included in the major overhaul packages



Package solutions

Make your life easier with MxPSS, overhaul packages, PMC and maintenance kits

At MAN we offer multiple package solutions that provide tailor-made options to meet your specific needs.

With overhaul packages and MxPSS, you can maximize the service life of your two- and four-stroke engine during docking. PMC offers class-recommended service for your propeller that you will need for your dry-docking, and maintenance kits is a all-in-one solution for easy and effective maintenance of components in your engine.

Trust MAN to provide flexible package solutions, ensuring optimal performance for your engine.



Overhaul packages

Achieve lasting peace of mind with overhaul packages

At MAN PrimeServ, we believe in maximizing the service life of your four-stroke spare parts. Just like maintaining existing equipment, opting for our major overhaul packages proves to be more cost-effective and environmentally justifiable than continuously purchasing new components.

Our major overhaul packages ensure that every component is thoroughly inspected, repaired, and refurbished to restore them to optimal condition. This not only enhances performance but also extends their service life, ensuring reliability and safety at sea.

Moreover, we emphasize the importance of overhauling valves and other parts that have been replaced and stored onboard for any reason. By proactively overhauling these components, we ensure service continuity and safety, as they are ready for deployment whenever needed.

Choose MAN PrimeServ for cost-effective maintenance, environmental stewardship, and enhanced reliability of your equipment.

Benefits

- Meet the requirements of the MAN Schedules maintenance programme
- Reliability of engines in service
- Preventative maintenance
- Original MAN OEM parts
- Manages costs
- Saves time (as we take the burden of specifying the content of the packages)
- Manufacturer supported programme



MxPSS

Achieve lasting peace of mind with MxPSS

A package solution suitable for your M(X) engines (ME, MC, MC-C, ME-GI, ME-LGIM, ME-GA, ME-LGIP), consists of all hydraulic, gas and fuel components and services you will need for your 5-year docking based on MAN's recommended TBO.

This solution gives you peace of mind during docking. We provide all your needed spares with service prices from different service locations delivered on time at the location of your choice and the possibility to include the unique solution of a retrofit product provided by MAN.

M(X)-PSS not only streamlines your engine maintenance but also elevates its performance to new heights. Trust in our expertise to ensure your engine operates at peak efficiency, delivering reliability and cost-effectiveness.

Benefits of planning early

- Fixed prices
- Parts ready for docking
- Price is fixed and price change will not be affected
- Peace of mind
- Order early and pay after shipping (cash flow will not be affected)

Spare part benefits

- OEM parts for two- or four-stroke
- All hydraulic, Gas and Liquid fuel components for your overhaul
- All parts identified by MAN technical team with the help of MAN's guiding overhaul interval and experience
- Delivery just in time for your docking
- 24/7 worldwide support
- Latest design spare parts from MAN only

Service benefits

- Flexible to take place worldwide
- Led by highly skilled MAN superintendents
- Flexibility regarding docking schedule - to be coordinated with MAN (can be rearranged 3 months prior to docking)

Retrofit benefits

- Carried out by our team of experts
- Higher efficiency and smooth running of your engine
- To be carried out during your docking
- Exceptional ROI
- Customized for your individual engine
- Only at MAN

Turbocharger benefits

- Predefined packages for two- and four-stroke
- Lumpsum service cost



PMC

Plan ahead and be prepared for the next docking

Propeller Maintenance Concept (PMC) service packages for your propeller system include our class-recommended five- or ten-year inspections and service overhauls in accordance with the docking periods.

Even though they are sturdy and robust, your CP propeller systems contain critical parts that need periodic maintenance in order to keep your vessel performing at a reliable level.

A lack of maintenance will cause equipment to fail. Failures can lead to breakdowns, loss of income due to costly emergency dockings, and unplanned downtime with unnecessary expenses.

The principle and aim of the PMC is to avoid failures through planned maintenance.

Pre-docking preparation really pays off in today's supply situation with longer lead times.

Careful focus on your propeller equipment is essential.

Knowing the status of the installed equipment is knowing the expected scope of work, thereby enabling thorough planning. The preparation ensures that the right parts are available on time.

We recommend contacting us five to six months ahead of dry-docking. Contact us, and we will help you with an overview of the propeller maintenance status of your vessels.

Benefits

- Avoid unscheduled dockings and downtime
- Vessel-specific spare parts package, ready when docking
- Class-recommended scope of inspections and services
- Transparency regarding the cost of ownership
- Docking intervals in line with class docking recommendation
- Worldwide PrimeServ network ready to support you locally
- Maker's certificate and checklists of propeller service performed

Maintenance Kits

Make your life easier with MAN Maintenance Kits for two- and four-stroke

We provide the solution for you

MAN PrimeServ Maintenance Kits provide an all-in-one solution for the easy and effective maintenance of components in your engine.

Each Maintenance Kit contains all necessary genuine MAN PrimeServ spare parts for the specific component, with an easy-to-follow kit plate that highlights their purpose and fitting instructions. Engineers are enabled to carry out any maintenance task quickly and correctly, whenever and wherever needed, helping you to minimize risks of downtime.

Using Maintenance Kits aids in reaching the time between overhaul intervals and assists in keeping your engine operating with even greater reliability and lower operating costs.

Worldwide service

Represented in all key markets and major ports, with a network of more than 100 service centers MAN PrimeServ is fully primed to provide 24/7 service, wherever you are.

Tailored to your needs

Each Maintenance Kit is tailored for your MAN energy and propulsion system, providing the required spare parts for effective engine maintenance. Maintenance Kits are your insurance that you always have the right spare parts at hand for servicing key components of your MAN two- or four-stroke engines.

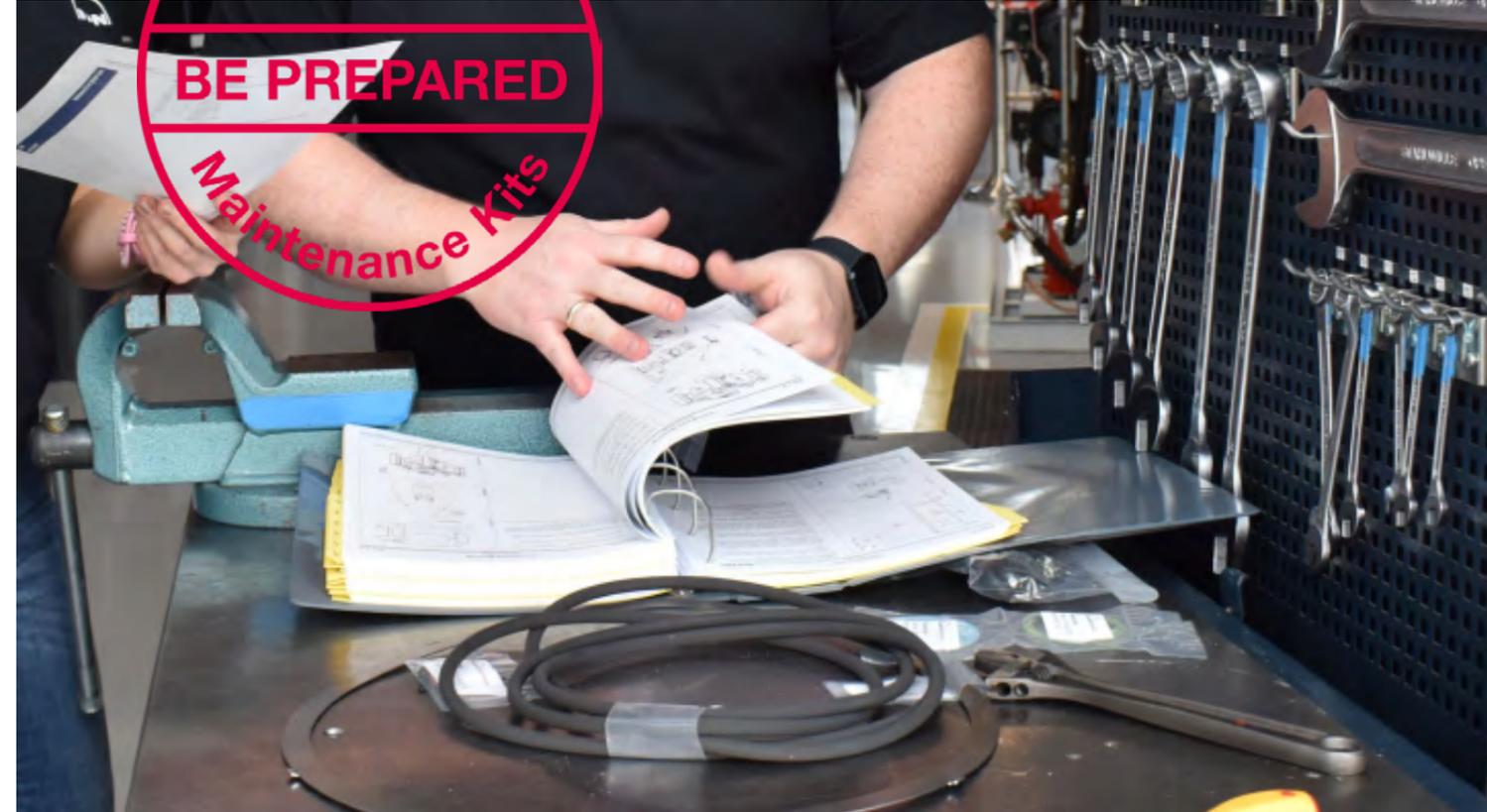
Reduce hassle and costs to a minimum

By using MAN PrimeServ Maintenance Kits, you can rely on genuine, high-quality spare parts to perform both scheduled maintenance and unscheduled repairs promptly. Reduce the risk of downtime and penalties, while keeping costs at a minimum. Enhance your fleet reliability and lower operating expenses.

Be prepared with Maintenance Kits.

Best quality with OEM spare parts

MAN PrimeServ Maintenance Kits contain original spare parts of the highest quality at the right price. We developed and designed your MAN engines and know exactly what each of your engines needs.



Efficiency

Easy budgeting, easy reordering, easy installation. Ensure compliance with recommended service intervals and have your engine running smoothly until the next interval



Optimization

Replacement of all O-rings and gaskets at guidance maintenance intervals ensures that energy stays in the engine and emission levels are controlled. This will aid in maintaining CII score, as well as class grade.



Prevention

Use Maintenance Kits to change all O-rings and gaskets. Prevent premature component failure and minimize costly downtime effectively.

Savings

Exercise efficient budget control, by ensuring engine component running from interval to interval. Buying a kit is even more economical than buying the individual spare parts the kit consists of. A small investment, for a huge impact.



Ease

All-in-one solutions with easy-to-read kit plates for swift maintenance task execution. Kits are prepacked for immediate availability with any class approval. All MAN products offer access to 24-hour worldwide emergency support.



Latest & greatest

Genuine class-certified spare parts tailor-made especially for your engine by the engine designer.



Worldwide service

100
service centers
worldwide

We offer retrofitting and upgrade services to bring engines and turbochargers already in service up to the very latest standards of performance and efficiency.

Using the latest digital technology, we enable you to maximize the performance and availability of your MAN equipment by accessing real-time data analysis, remote support and rapid solutions. We also offer an extensive range of training courses at MAN PrimeServ Academies around the world.

Our service does not vary according to location. We know that a vessel may be built in Asia, operated in Europe for ten years and then move to Africa for the next ten years. That does not alter our focus on dedicated training, fast delivery of strategic spare parts, a comprehensive approach, or our tailored maintenance contracts.

For more information please visit
www.man-es.com/primeserv

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