



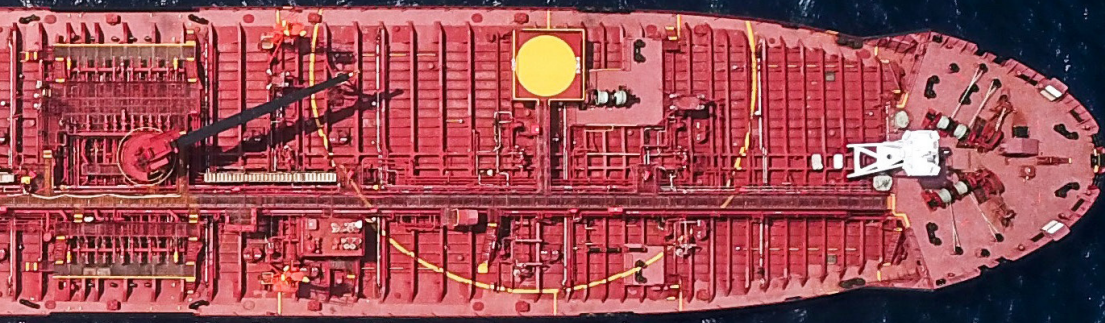
Reliability package

MAN PrimeServ





Don't get
caught
adrift



Dear Customer,

Now more than ever, it is critical for vessel owners and operators to keep their assets working at peak efficiency. All day. Every day. That is why we have developed the MAN PrimeServ Reliability Package, to help our customers ensure their profitability at sea – with minimized service interruptions.

The Reliability Package is an important part of the MAN PrimeServ commitment to you and your operations. The package you receive brings you the latest high-quality parts straight from the designers of your exact engine – which also keeps your newbuild engine covered by the MAN Energy Solutions warranty.

This brochure explains how the Reliability Package adds even more value to your good investment.

Michael Petersen
MAN Energy Solutions
Head of MAN PrimeServ Copenhagen

Full steam ahead

Keep your operations running

The high cost of engine trouble

Engine reliability is critical to service continuity and profitable operations. When a ship is taken off-hire – or even forced to operate below peak efficiency – the direct financial consequences can be enormous: up to USD 50,000 per day for MR tankers, USD 160,000 per day for LNG carriers, and USD 250,000 per week for VLCCs.

That is not to mention the costs associated with other major risks such as crew safety, possible spills, disruption to logistics plans and supply chains, and the knock-on impacts on your company's punctuality statistics, commercial reputation and finances.

Introducing the Reliability Package

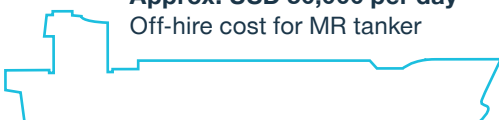
The MAN PrimeServ Reliability Package is a customized parts package configured to minimize costly service interruptions for your newbuild vessel, and limit the revenue-draining impact of off-hire periods.

Your Reliability Package makes sure you have exactly the right parts for your particular engine on board and ready to use – without delay. You always have the latest versions of key components, featuring design improvements and updates implemented since the original engine specification was decided on.

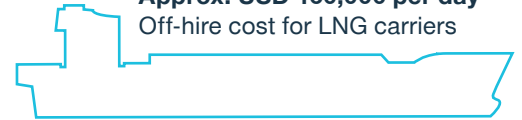
Plus, if you use any parts from the package, you can replenish them from strategically located warehouses in Europe and Singapore. You are entitled to advantageous bulk purchasing terms, and the package keeps your engine warranty intact.

Your onboard Reliability Package helps you avoid long, costly waits for spares to be flown in, and potential problems with gray-market parts sourced from third parties. It is your way of making sure of safe, sustainable, uninterrupted service – and all the financial and other business benefits that go with it.

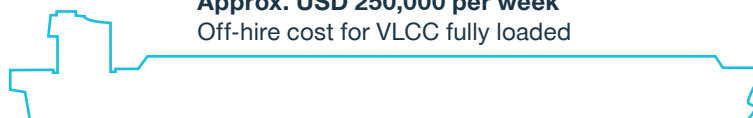
Approx. USD 50,000 per day
Off-hire cost for MR tanker



Approx. USD 160,000 per day
Off-hire cost for LNG carriers



Approx. USD 250,000 per week
Off-hire cost for VLCC fully loaded







An investment in advantage



The MAN PrimeServ Reliability Package is an investment in helping you ensure a profitable future.

It saves you from wasting precious time and unnecessary resources on getting hold of parts that you need to deal with sudden, unexpected situations – with all the costs and delays this almost inevitably involves.

It's a small price to pay for maintaining a competitive advantage and keeping your operations profitable.

Your benefits

- Greater operational certainty and financial security
- Less risk of service interruptions and off-hire costs
- Less risk of disruption to delivery schedules and supply chains
- Greater safety for crews and environment
- Full warranty with worldwide telephone support

What's in your reliability package

Your Reliability Package consists of an individually configured selection of around 200 crucial parts that your newbuild vessel simply shouldn't sail without if you need to be sure of maximum service reliability.

These parts are selected and prioritized on the basis of comprehensive MAN Energy Solutions data from thousands of engines in worldwide service, and are constantly updated and supplemented by extensive know-how and newest technical breakthroughs.

They are the operations-critical parts you need to have immediately available if an unforeseen mechanical, hydraulic or electrical event occurs.

Easy replenishment

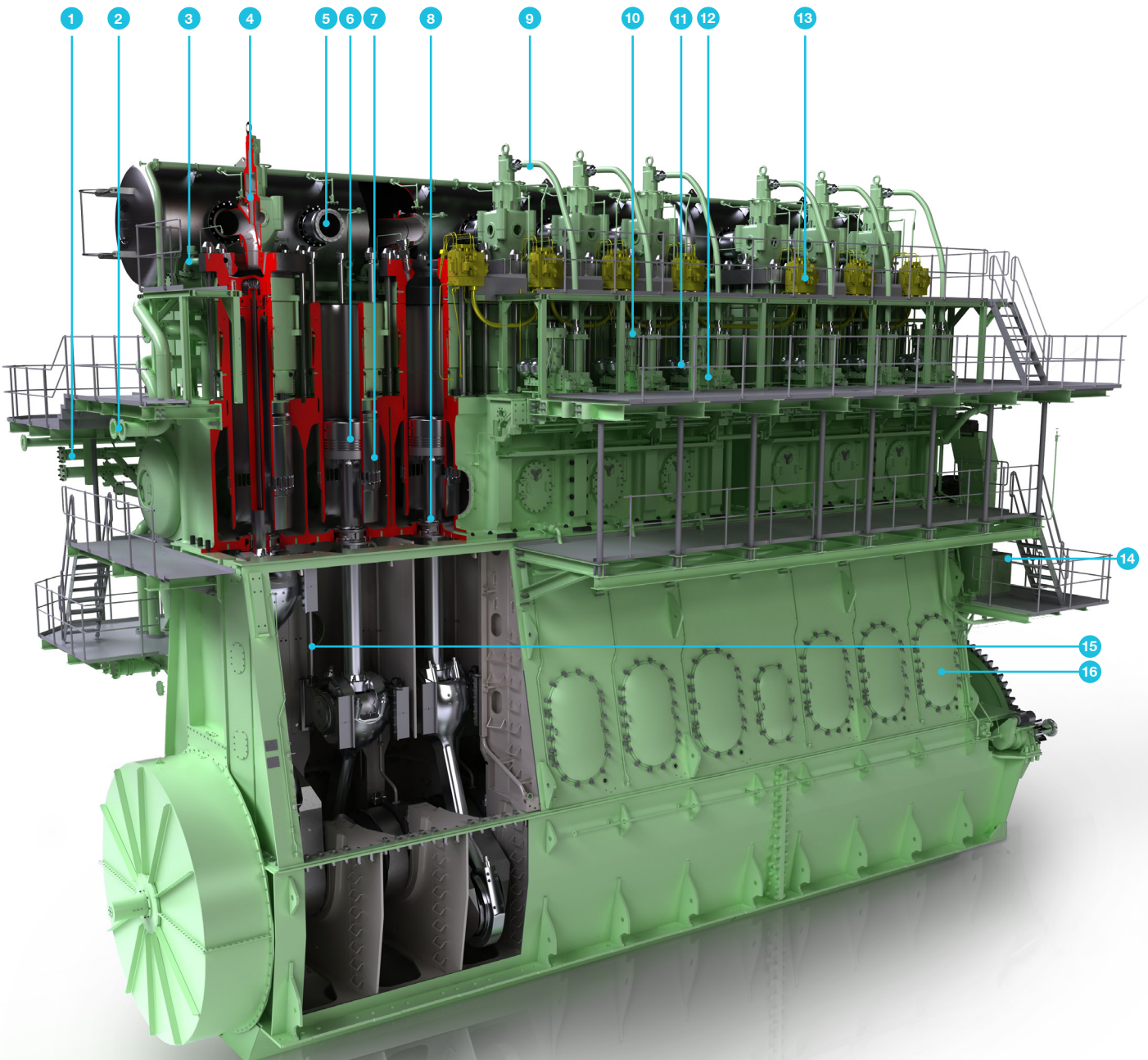
As soon as you've used a part, you can replace it with a new, latest-spec item to maintain the "validity" and preparedness of your Reliability Package.

Compliance vs. preparedness

The maritime classification societies require or recommend every vessel to carry a spare parts package for each engine, in order to ensure crew and environmental safety.

The MAN PrimeServ Reliability Package goes further, and is designed to protect your bottom line by minimizing service interruptions.

- | | | | |
|---|---------------------------------|----|--|
| 1 | Cooling water system components | 10 | Fuel oil booster |
| 2 | Piping sealings | 11 | HCU overhaul components |
| 3 | Starting air system components | 12 | Exhaust valve actuator |
| 4 | Exhaust valve components | 13 | Gas injection components |
| 5 | Compensators | 14 | Hydraulic oil pumps & power components |
| 6 | Piston rings | 15 | Telescopic pipe |
| 7 | Cylinder liner components | 16 | Guide bars |
| 8 | Stuffing box components | ● | Various packing & sealing |
| 9 | Hydraulic pipe & sealings | ● | Engine control unit components |





Hassle-free ordering and replenishment

Making sure your vessel – and your business – isn't left stranded due to a lack of important engine parts is easy and straightforward.

These three steps will make sure your engine is always operating at peak efficiency.



1. Send your IMO number, hull number, engine maker and type to reliabilitypackage@man-es.com



2. Receive our special newbuilding offer featuring your customized Reliability Package and order



3. Keep your Reliability Package up to date and replenished at all times via PrimeServ-cph@man-es.com, Shipserv or your local MAN PrimeServ sales representative

Contact your local MAN PrimeServ sales representative or mail us directly at:
reliabilitypackage@man-es.com



Reliability package

Why MAN PrimeServ?



MAN Energy Solutions is acknowledged worldwide as the engine designer of choice for bulk carriers, tankers and container vessels of all capacities and sizes. Our customers value the longevity, reliability and high quality of our low-speed engine designs.

You've already entrusted MAN and our 250 years of specialist experience to design your vessel's engine. Why not ensure its uninterrupted service and sustained profitability with a Reliability Package recommended by the engine's designer – and updated with the latest technologies and optimizations?

You'll also have the full capabilities of MAN PrimeServ at your disposal via telephone support and our extranet. And you'll receive regular service letters to keep you informed about part improvements, regulatory changes – including environmental regulations – and other information to keep you sailing reliably and profitably.

MAN PrimeServ solutions ensure high efficiency, increased reliability and low-cost maintenance of your engine – for its entire service life.

Worldwide service

Represented in all key markets and major ports, with a network of more than 100 service centers, and with skilled field service managers at the ready to provide first-class technical support, MAN PrimeServ is fully primed to provide 24/7 service, wherever you are.

In power plants, marine engines & systems and turbomachinery, offering reliable technical support when you need it most, our service solutions include OEM spare parts, engine and machinery maintenance and repairs, customized service agreements and individual consulting.

For existing equipment our holistic retrofit and modernization solutions keep your engines or turbochargers up-to-date and at optimal levels of reliability, availability and economic

efficiency. Through cutting edge digital technology we're able to hike performance and minimize downtimes, while our remote connections enable live data analysis, ensuring quick, effective solutions. MAN PrimeServ Academies provide expert training courses around the world, developing the operational and maintenance skills required.

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



100

Service centers
worldwide



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