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Press release

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MAHLE Aftermarket expands thermal management portfolio

- MAHLE Aftermarket is expanding its range to include indirect air conditioning condensers
- · Increasingly a standard component in modern vehicles
- Thanks to the wide range of thermal management components, workshops can more easily tap new potential business
- Maintenance of thermal management systems in hybrid and electric vehicles set to become "the new oil change"
- Workshops are being made fit for the future with training, digital information solutions, and accompanying service equipment from MAHLE

MAHLE Aftermarket is expanding its portfolio to include indirect air conditioning condensers, which are becoming standard components in the air conditioning systems of modern vehicles. By continuously extending its thermal management product range, MAHLE Aftermarket is making it easier for workshops to generate new business. For workshops, the maintenance of thermal management systems in hybrid and electric vehicles will become what used to be the regular oil change. That is why MAHLE Aftermarket is offering not only a growing range of components but also accompanying service equipment, training, and digital information solutions. The company is thus preparing workshops for the future and helping them with the switch to alternative drive systems.



Indirect air conditioning condensers are both powerful and compact and can be positioned where

"MAHLE is a strong partner for workshops for all aspects of thermal management. We recommend that our customers build up their skills in this area and support them accordingly," said Olaf Henning, Corporate Executive Vice President and General Manager MAHLE Aftermarket.

In an electric vehicle, the air conditioning system takes care of the cabin, and also cools the battery, electric motor, and power electronics. Accordingly, the system must be designed to meet high performance requirements and needs several circuits at different

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temperature levels. In the future, the maintenance and repair of such systems will constitute a major part of everyday business for workshops.

Indirect condensers, which cool down and thereby liquefy the refrigerant that has become heated during compression in the compressor, are already used in many modern vehicles with combustion engines and also represent the best technical option for hybrid and electric vehicles. They are more efficient, powerful, and compact than directly cooled condensers and can also be placed anywhere in the vehicle. Directly cooled models, on the other hand, must be installed at the front of the vehicle in order to make use of the ambient air.

MAHLE Aftermarket provides information on the design, function, repair, and maintenance of thermal management systems in TechTool, an online database. Aimed at both beginners and professionals, MAHLE's TechTool offers information at OEM level in 14 languages and gives detailed insights into automotive air conditioning and engine cooling in passenger cars and commercial vehicles. For workshops requiring specific training for their employees, MAHLE also offers in-depth courses that provide comprehensive expert knowledge on repair and maintenance.

One good way to enter the A/C service market is to purchase an air conditioning service unit from MAHLE. Workshops have the option of upgrading the air conditioning service units with the MAHLE vehicle diagnostics tool—the MAHLE TechPRO® or BRAIN BEE® Connex. The diagnostic system can detect and eliminate defects in the electronics or air conditioning system and check the status of the system and individual components. To better diagnose complex defects, the system can also activate compressors, valves, and fans.

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About MAHLE

MAHLE is a leading international development partner and supplier to the automotive industry. The technology group is now broadly positioned in the areas of powertrain technology and thermal management with a clear focus on future topics relating to mobility. As part of its dual strategy, MAHLE is working both on the intelligent combustion engine for the use of hydrogen and other nonfossil fuels and on technologies that will help the fuel cell and e-mobility achieve broad acceptance in the markets. The product portfolio of the company, which was founded in 1920, addresses all the crucial aspects of the powertrain and air conditioning technology. Half of all vehicles in the world now contain MAHLE components. #weshapefuturemobility

In 2020, MAHLE generated sales of approximately EUR 9.8 billion and is represented in over 30 countries with more than 72,000 employees in 160 production locations and 12 major research and development centers. (Last revised: 2020-12-31)

About MAHLE Aftermarket

MAHLE Aftermarket, the business unit specializing in spare parts, uses the expertise from the series production of original equipment in its product range and supplies trade, workshop, and engine repair partners. The portfolio also includes products developed by MAHLE Service Solutions for workshop equipment as well as comprehensive services and customized training programs.

MAHLE Aftermarket is represented at 25 locations and other sales offices worldwide, with around 1,700 employees. In 2020, the business unit achieved a global sales volume of about EUR 898 million.