MOTORAD®

OEM SUPPLIER

Thermal management and powertrain controls solutions for automotive OEM and IAM passenger cars and industrial applications.

MotoRad develops, manufactures and supplies a range of products, including thermostats, caps and sensors, compatible with existing and emerging technologies for Internal Combustion Engines, Hybrid, Plug-In Hybrid, and Battery Electric Vehicles.



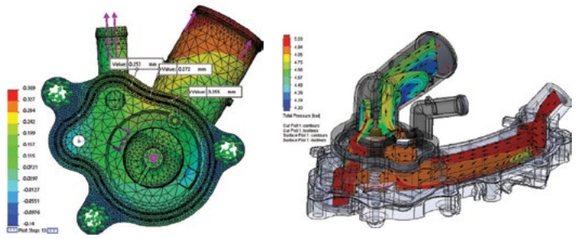
www.motorad.com

Scan the QR code to explore the full MotoRad product range and find the right solution for your needs.

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OEM SUPPLIER

ENGINEERING KNOW-HOW AND EXPERTISE



- Comprehensive in-house CAD design and testing.
- In-house capabilities for thermostat testing, problem analysis, and CFD.
- Black box design and build-to-print services for OEM requirements.

VALIDATION LAB



- Durability performance testing (Temperature cycling).
- Stress Corrosion Cracking (SCC) Testing.
- Pressure-drop and flow-rate testing.
- Performance tests: STO, Stroke, Hysteresis.
- Valve leakage testing.
- Outlet housing sealing testing.

GLOBAL OPERATIONAL EXCELLENCE



- High-end process automation.
- Online testing and error-proofing.
- Efficient and repeatable manufacturing.
- Statistical process control (SPC).

ESG PROGRESS AND RECOGNITION

Building on years of sustainability initiatives, MotoRad is formalizing its strategy and driving measurable progress.

Bronze Badge Awarded

The badge recognises MotoRad's active engagement and commitment to sustainability, supported by ongoing progress in key environmental areas:

- Greenhouse gas reporting.
- Sustainable energy use.
- Renewable electricity.





*EcoVadis is a globally recognized platform for assessing corporate sustainability performance

THERMOSTATS

MotoRad® is an OEM and aftermarket supplier of automotive thermostats, offering extensive coverage for passenger cars and light commercial vehicles.

Key features

- MotoRad thermostats provide consistent and precise response to specific cooling system needs, ensuring optimal engine operating temperature.
- Maintaining the engine at the correct operating temperature improves fuel efficiency.
- Maintaining the correct engine temperature is essential for emissions control.



BEV THERMOSTATIC VALVES

Key features

- Part of battery module thermal management system.
- Designed to respond at temperatures as low as 15°C to support efficient battery charging and discharging.
- Based on thermal expansion – no temperature sensor, control circuits or wiring necessary.
- Highly reliable and durable.
- Compact envelope, low weight.
- Affordable, field-proven technology by MotoRad.



THERMOSTAT INSERT

The thermostat insert is a temperature-sensitive valve or element. When the engine is cold, the thermostat insert remains closed to restrict the flow of coolant from the engine to the radiator.

MotoRad high-quality inserts deliver reliability and long-lasting durability.

Key features

- **Thermostatic Control** – Regulates coolant flow between engine and radiator to bring the engine to its optimal operating temperature and hold it there.
- **Calibrated Opening Temperature** – Factory-set to the OE specified opening temperature, protecting fuel efficiency and emissions performance.
- **Compatibility** – Available in the diameters, heights and valve configurations needed to fit the original housing.



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ELECTRONIC THERMOSTATIC VALVES

MotoRad Electronic Thermostatic Valves are electronic thermostats offering advanced features and capabilities compared to traditional mechanical thermostats. Electronic thermostats use electrical sensors and actuators to regulate coolant flow. These thermostats can be controlled and adjusted by the vehicle's Engine Control Unit (ECU).



#1 in COVERAGE

Key features

- **Faster response time –** The thermostat reacts to changes in engine temperature much quicker than traditional thermostats.
- **More precise temperature control –** The thermostat can be programmed to maintain an extremely specific engine temperature, crucial for achieving optimal performance and fuel efficiency.
- **Reduced emissions –** By consistently maintaining engine temperature, the thermostat can assist in reducing emissions.
- **Improved fuel economy –** Through the optimization of engine temperature, the thermostat can enhance fuel economy.

INTEGRATED HOUSING THERMOSTATS



#1 in COVERAGE

MotoRad integrated housing thermostats differ from traditional thermostats. They offer an all-in-one, bolt-on solution with the thermostat and housing integrated into one unit.

This is a growing segment of thermostats, with a large number of vehicles entering the replacement window.

Key features

- Built-in gasket or seal that ensures an airtight and watertight connection when installed in the cooling system.
- Where applicable, includes a temperature sensing element or sensor that monitors the engine's temperature. It triggers the thermostat to open or close based on temperature changes.

THERMOSTAT KITS



A coolant flange and thermostat kit bundles two essential components for optimal engine cooling in a single convenient package.

Replacing both components together can help streamline the repair process and reduce potential leak points. A new thermostat ensures proper engine temperature regulation, while the upgraded coolant flange eliminates potential leak points and comebacks, promoting long-lasting cooling system reliability.

COOLANT FLANGE

The coolant flange serves as a connection point in the cooling system, usually connecting hoses, pipes, or other components to allow the circulation of coolant between the engine, radiator, and heater core.

- Made from durable materials like composite, aluminum, or cast iron.
- Many coolant flanges have multiple ports or outlets to accommodate various coolant hoses, temperature sensors, and other connections in the cooling system.
- Some coolant flanges have provisions for mounting temperature sensors. These sensors monitor the coolant temperature and send data to the engine control unit (ECU) to help regulate engine performance and control the cooling system.

Key features



#1 in COVERAGE

RADIATOR PRESSURE CAPS

MotoRad radiator pressure caps are designed and manufactured to provide precise pressure control for the vehicle's cooling system.

- Designed with specific pressure ratings to help regulate cooling system pressure and prevent overheating.
- The pressure relief valve is designed to open at a specific pressure to release excess pressure from the cooling system.
- Some radiator caps also include a vacuum relief valve that allows air to enter the cooling system as it cools down. This prevents the creation of a vacuum inside the radiator, which can lead to coolant loss and overheating.

Key features



#1 in COVERAGE

FUEL CAPS

Fuel caps serve an important function in sealing off a vehicle's fuel tank to prevent fuel from evaporating, contaminants from entering, and to maintain pressure in the fuel system.

- Fuel caps have a **sealing mechanism** which prevents fuel vapor from escaping and keeps out dirt, dust, and water.
- Some fuel caps have a **locking mechanism**, to prevent unauthorized access to the fuel tank.
- Many modern fuel caps come with a **tether or retaining strap** that keeps the cap attached to the vehicle when it's removed.
- Fuel caps may have a **venting system** to equalize pressure inside the fuel tank. This helps prevent a vacuum from forming as fuel is consumed and allows for the release of pressure to avoid damage to the fuel tank.

Key features



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OIL FILTER CAPS



MotoRad's oil filter caps are designed to meet the exacting standards of automotive enthusiasts and professionals alike.

Our OEM-compatible designs guarantee a seamless fit, eliminating the hassle of compatibility issues.

Key features

- Maintains system pressure – prevents leaks
- Resistant to heat, pressure, oils and fuels
- Durable for repeated removal – no cracking, warping, or thread damage

OIL CAPS



The oil cap, also known as the oil filler cap, is a relatively simple yet important component in a vehicle's engine system.

Key features

- Oil caps are typically designed with threads to provide a secure and tight fit.
- Maintains a sealed crankcase – Keeps oil in, contaminants out, and the crankcase ventilation system working as designed, so blow-by gases stay within the closed circuit
- Made with high-quality materials to withstand high temperatures and exposure to engine oil and chemicals.

CAMSHAFT & CRANKSHAFT POSITION SENSORS



MotoRad camshaft and crankshaft position sensors guarantee OE accuracy and improved engine operation. All MotoRad Cam/Crank Position Sensors are manufactured to meet or exceed OEM specifications at our IATF 16949:2016 manufacturing facilities.

Key features

- Start your engine! – Provides accurate position data necessary for your engine to properly start. Allows the ECU to identify the correct stroke cycle and spark timing.
- Fuel consumption optimization – Ensures correct valve timing and optimal fuel-air mixture for efficient combustion.
- Long-life Durability – Designed to perform under the most severe operating conditions, using only the highest quality materials.

NEW!

IGNITION COILS

MotoRad ignition coils are designed to support consistent ignition performance under demanding operating conditions, including exposure to extreme heat. All MotoRad Ignition Coils are designed to meet or exceed OEM specifications at our ISO IATF 16949:2016 manufacturing facilities.



Key features

- Primary and secondary windings made with ETP grade copper to provide superior temperature protection and voltage conductivity.
- Heat-resistant components designed to support reliable high-voltage performance.
- Graphite-infused platinum connections resist corrosion and offer superior conductivity and durability.
- Pre-applied dielectric grease for easy installation.
- Extensive product testing includes thermal cycling, thermal shock, salt-spray, vibration, and voltage drop tests, among other tests, to ensure all coils meet or exceed OEM specifications.

COMING SOON

EVAP SOLUTIONS

CRITICAL COMPONENTS FOR VEHICLE PERFORMANCE AND EMISSION COMPLIANCE

EVAP



Vapor Canister Vent Valves

Vapor Canister Purge Solenoids

Leak Detection Pumps

Vapor Canisters

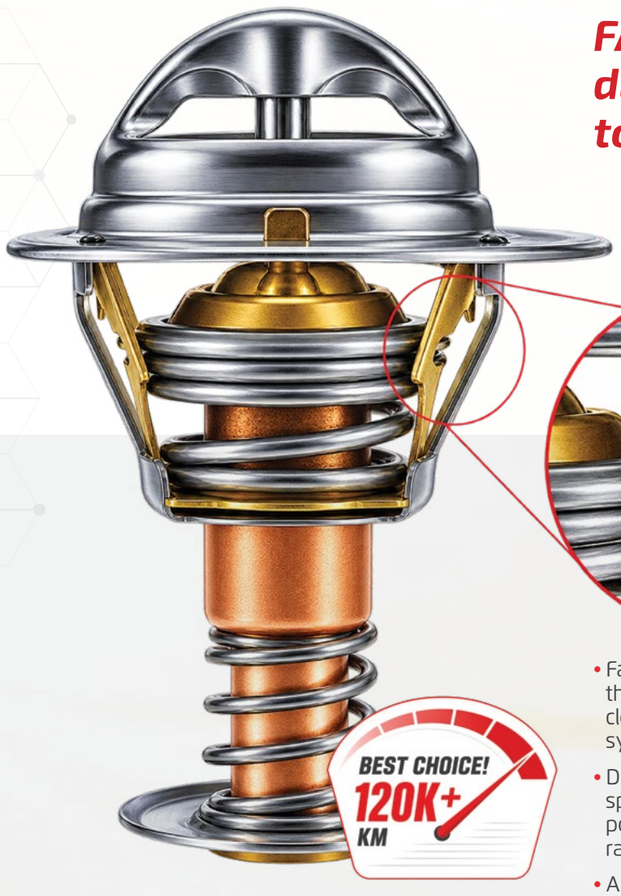
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FAIL-SAFE® THERMOSTAT



MotoRad Fail-Safe® thermostats are designed to help protect your engine when overheating occurs. Based on premium, patented technology. Fail-Safe® thermostats are designed to provide additional protection during overheating conditions.



FAIL-SAFE® locks open during overheating to protect your engine

- Fail-safe® technology – developed to prevent the thermostat from becoming stuck in its closed position during prolonged cooling system overheating.
- During an overheating situation the Fail-Safe® spring locks the valve into a wide-open position, allowing a maximum flow rate of radiator-cooled coolant.
- A Fail-Safe® thermostat can help reduce the risk of costly engine damage.

ULTRASTAT



MotoRad UltraStat® Thermostats are an innovative line offering many features and benefits over original equipment (OE).

THE WORLD'S TOUGHEST THERMOSTAT

- Heavy-gauge stainless-steel construction designed for excellent corrosion resistance.
- Proprietary BLVT™ valve design technology prevents thermal shock.
- AccuSpring™ design provides accurate spring load, stabilizing temperature, resulting in increased cabin comfort.



NEW!

MOTORAD SPEC R
RACING DEVELOPMENT

THERMOSTATS



The perfect thermostat for high performance and racing applications, designed to withstand high pressure/ horsepower demands

HIGH PERFORMANCE

- Black oxide coating for high temperature tolerance, corrosion resistance and life-long durability
- Lower than OE opening temperature for cooler engine operation, resulting in more power
- Specially formulated Spec R™ heat element mixture for faster response time
- Proprietary gasket composition to withstand high pressure/high performance cooling systems



RADIATOR CAPS

Designed for high heat, high pressure conditions found in racing and high performance cooling systems



- Constructed from premium, OE quality materials
- Distinct high performance design and labeling
- EasyGrip™ design for simple installation and removal (various styles based on application)
- Designed and tested to meet or exceed the highest quality standards

OEM SUPPLIER

HEAVY-DUTY VEHICLE APPLICATIONS



Our HD solutions are engineered for durability, thermal stability, and long-lasting performance – even under the toughest working conditions.

BUILT TO LAST

- High-flow thermostats for enhanced coolant regulation
- Pressure caps ensuring stable operating pressure
- Engine management sensors that support efficiency and diagnostic accuracy





MotoRad products help reduce engine wear, prevent overheating, and minimize unplanned downtime – helping your vehicles stay productive, day after day.

When the job is tough, trust MotoRad to keep you moving.

Scan the QR code, complete the form, and our team will contact you with a tailored proposal.

IATF 16949 | ISO 9001 | ISO 14001 | ISO 45001

TecDoc Premier Data Supplier | ACES | PIES

GLOBAL FOOTPRINT

MotoRad Facilities:

- Misgav, Israel
- Mt. Carmel, IL, USA
- Atlanta, GA, USA
- Apodaca, Mexico
- Erftstadt, Germany



COVERAGE

97.45% coverage across our core product lines.

SERVICE

97.6% global fill rate to help keep the right parts available.

INNOVATION

OEM+ solutions for traditional and EV powertrain technologies.

QUALITY

OEM-quality solutions trusted by leading manufacturers.



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