

Leak Repair

Water Outlet and Thermostat Gaskets

Different Situations, Different Solutions.

PermaDryPlus® Gaskets

Late-model vehicles, particularly those with lightweight castings and bi-metal engines, can be problematic coolant leakers. This is because typical paper gaskets cannot conform adequately to the warpage and corrosion of the thermostat housing flange. Coolant leaks can lead to low coolant levels, potentially resulting in engine overheating and catastrophic engine failure.

For these situations NAPA AUTO PARTS Stores offer a molded rubber, rigid carrier design PermaDryPlus water outlet gasket.

PermaDryPlus water outlet gaskets feature rigid carrier construction and silicone sealing beads. The carrier prevents overtightening and allows precise compression, while the molded rubber assures a secure seal. These gaskets are the perfect solution for warped or corroded thermostat housing flanges.

Molded Rubber Seals

Increasingly, molded rubber seals are the OEM design choice. Molded rubber O-ring seals (featuring either a round or square cross-section) fit into a groove or counter bore. Grooved seals are slotted to fit around the edge of the thermostat. Press-in-place designs (spaghetti style to fit in a groove) and edge-molded designs (featuring a precise edge-sealing bead on a metal carrier) are other types of molded rubber seals.

When developing a molded rubber seal for an application, Fel-Pro engineers choose from a variety of rubber materials. NAPA gaskets incorporate all four materials into their selection of water outlet gaskets. Each is highly effective for its intended applications.

EPDM & Nitrile – Excellent all-around performance.

HNBR – Offers enhanced coolant and chemical resistance.

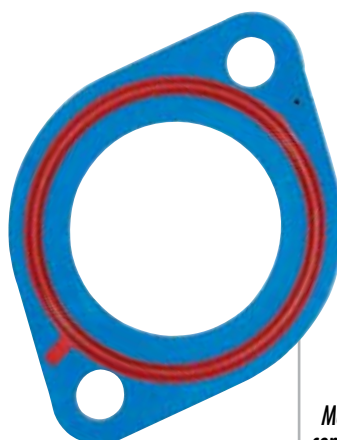
Silicone – For increased temperature resistance.

FKM – For optimum chemical and temperature resistance.

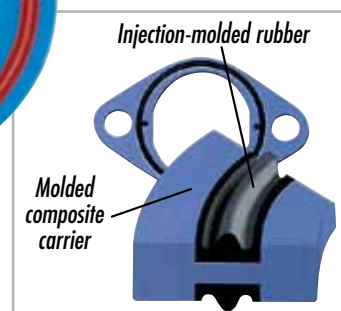
Paper Gaskets

Typical NAPA water outlet and thermostat housing gaskets are made of high-density paper material. This material is excellent for sealing most water outlet applications and is included in many NAPA Head Sets (HS) and Head Installation Sets (HIS).

Fel-Pro Blue Stripe® paper is a high-density, high-quality paper material. Its density balances good internal sealability, wick resistance, and conformability. Choosing from over a dozen material variations (thickness and paper type), Fel-Pro engineers match the material to the needs of each specific application. The paper material can also feature Printoseal® sealing beads, for increased fluid sealability, and special coatings (silicone or PTFE) to reduce sticking and improve conformability to aftermarket conditions.



PermaDryPlus® Gasket



Rubber O-Ring



Blue Stripe® Paper Gasket