

Continental Hybrid Coolant Pumps

Data Sheet

Industry wide the use of belt-driven coolant pumps is declining, with electrically driven pumps taking their place. Electric coolant pumps are also doing jobs that would be impossible for a conventional pump.

Hybrid and Electric Vehicles typically use coolant pumps driven by an electric motor, as the pump must operate without the engine running. Many Hybrid vehicles will have multiple cooling systems, one for the ICE (Internal Combistion Engine) and one for the electrical components, Inverter, one for electric traction motor.







As part of the Hybrid drive system, the inverter translates high-voltage direct current generated by hybrid batteries into alternating current for the motor. To keep the system at the proper operating temperature the coolant pump is used.

The coolant pump does not wear like a common tire or a ball joint, but eventually the bearing or impeller can fail inside the coolant pump. If the coolant pump is not maintaining good coolant circulation, the engine will overheat, causing leaks, possible head gasket damage and ultimately a failed motor.

Top Part Numbers and Applications

HY2000

Application: Ford Escape 2020





HY2002

Application: Lexus CT200h 17-13, RX450h 15-12; Scion iQ 2013; Toyota Highlander 16-13, Prius 15-12, Prius C 17-12, Prius V 18-12





HY2004

Application: Lexus ES300h 18-13; Toyota Avalon 18-13, Camry 17-12, Mirai 19-16





HY2001

Application: Lexus CT200h 17-11; Toyota Prius 17-10, Prius C 19-12, Prius Plug-In 15-12, Prius V 18-12





HY2003

Application: Lexus ES300h 18-13; Toyota Avalon 18-13, Camry 17-12





Did you know?

- > The second generation Toyota Prius have four coolant pumps, three electric and one mechanical.
- > A Hybrid Coolant Pump is also called an Inverter Coolant Pump.
- > That the Hybrid water pump doesn't need belt power, as it runs on electrical power.
- Maintaining your automobile's cooling system will prevent expensive repairs caused by overheating.

