

[Manuals.plus](#) /

› [Dorman](#) /

› Dorman 902-315 Engine Coolant Thermostat Housing Compatible with Select Chrysler/Dodge/Ram Models

Dorman 902-315

Dorman 902-315 Engine Coolant Thermostat Housing User Manual

Model: 902-315 | Brand: Dorman

PRODUCT OVERVIEW

The Dorman 902-315 Engine Coolant Thermostat Housing is a direct replacement component designed to match the fit and durability of the original equipment on specified Chrysler, Dodge, and Ram vehicles. This housing is engineered to withstand extreme temperature changes, ensuring extended service life and preventing common issues like cracking and leaking. It offers a cost-effective and reliable solution for maintaining your vehicle's cooling system integrity.

Key Features:

- **Ideal Replacement:** Directly replaces the original housing on specified vehicle years, makes, and models.
- **Durable Construction:** Specifically designed to withstand extreme temperature changes and resist cracking and leaking.
- **Cost-effective and Reliable:** Offers original manufacturer quality at a lower cost compared to dealership replacements.
- **Industry-leading Design:** Professionally engineered by Dorman, a leader in replacement thermostat housings.
- **Vehicle Compatibility:** Compatible with various Chrysler, Dodge, and Ram models from 2006 to 2021. Refer to the product description for specific vehicle fitment.



Figure 1: Front view of the Dorman 902-315 Engine Coolant Thermostat Housing.



Figure 2: Bottom view of the Dorman 902-315 Engine Coolant Thermostat Housing, showing mounting points.

SPECIFICATIONS

Attribute	Value
Brand	Dorman
Model Name	Dorman 902-315: Engine Coolant Thermostat Housing
Color	Black
Included Components	Thermostat Housing
Item Weight	8.4 ounces
Product Dimensions	3.94 x 3.94 x 3.74 inches
Item Model Number	902-315
Manufacturer Part Number	902-315
OEM Part Number Equivalents	86117; CH2315; 53022168AA; 53022168AB; 53022168AC; 53022168AD

INSTALLATION AND SETUP

Installation of the Dorman 902-315 Engine Coolant Thermostat Housing typically involves replacing the existing, faulty housing. Due to the critical nature of the cooling system, it is recommended that installation be performed by a qualified mechanic or an individual with appropriate automotive repair experience. Always refer to your vehicle's specific service manual for detailed, model-specific instructions and safety precautions.

General Installation Steps:

1. **Safety First:** Ensure the engine is cool and the vehicle is safely supported on jack stands or a lift. Disconnect the negative battery terminal.
2. **Drain Coolant:** Place a drain pan under the radiator and open the drain cock to drain the engine coolant.
3. **Locate and Remove Old Housing:** Identify the thermostat housing on your engine. It is typically located at the end of the upper radiator hose where it connects to the engine. Loosen hose clamps and disconnect hoses. Remove mounting bolts securing the old housing.
4. **Clean Mounting Surface:** Thoroughly clean the engine's mounting surface to remove any old gasket material or debris. A clean surface is crucial for a proper seal.
5. **Install New Housing:** Place the new Dorman 902-315 thermostat housing, ensuring any new gaskets or O-rings are correctly seated. Tighten mounting bolts to the manufacturer's specified torque.
6. **Reconnect Hoses:** Reattach all hoses to the new housing and secure them with clamps.
7. **Refill Coolant:** Refill the cooling system with the appropriate type and amount of coolant as specified by your vehicle manufacturer.
8. **Bleed Air:** Start the engine and allow it to reach operating temperature. Monitor the coolant level and bleed any trapped air from the system according to your vehicle's manual. Check for leaks.

Important: Always use appropriate personal protective equipment (PPE) such as gloves and eye protection when working with automotive fluids and components.

OPERATION

The Dorman 902-315 Engine Coolant Thermostat Housing is a passive component that houses the engine's thermostat. Its primary function is to provide a sealed pathway for engine coolant to circulate between the engine and the radiator. The thermostat, located within this housing, regulates the engine's operating temperature by controlling the flow of coolant. When the engine is cold, the thermostat remains closed, allowing the engine to warm up quickly. Once the engine reaches its optimal operating temperature, the thermostat opens, allowing coolant to flow to the radiator for cooling. The housing ensures a leak-free connection for this vital process.

MAINTENANCE

Proper maintenance of your vehicle's cooling system is essential for the longevity and performance of the Dorman 902-315 Thermostat Housing and the entire engine. While the housing itself requires minimal direct maintenance, regular checks of the cooling system are crucial.

Recommended Maintenance Practices:

- **Regular Coolant Level Checks:** Periodically check the coolant level in the reservoir when the engine is cool. Top up with the correct type of coolant if necessary.

- **Coolant Flush and Replacement:** Follow your vehicle manufacturer's recommendations for coolant flush and replacement intervals. Old or contaminated coolant can lead to corrosion and damage to cooling system components, including the thermostat housing.
- **Inspect Hoses and Clamps:** Regularly inspect all radiator and heater hoses connected to the thermostat housing for cracks, bulges, or signs of wear. Ensure hose clamps are tight and secure.
- **Check for Leaks:** Visually inspect the thermostat housing and surrounding areas for any signs of coolant leaks (e.g., drips, stains, or a sweet smell). Address any leaks promptly.
- **Thermostat Functionality:** While the housing is a static part, the thermostat inside it is mechanical. If you notice consistent engine overheating or underheating, the thermostat itself may need inspection or replacement.

TROUBLESHOOTING

Issues related to the thermostat housing often manifest as cooling system problems. Here are common symptoms and potential solutions:

Symptom	Possible Cause	Solution
Coolant Leak from Housing	Cracked housing, degraded gasket/O-ring, loose bolts.	Inspect housing for cracks. Replace housing if cracked. Replace gasket/O-ring. Tighten bolts to spec.
Engine Overheating	Stuck closed thermostat (inside housing), low coolant, air in system.	Check coolant level. Bleed air from system. Test/replace thermostat.
Engine Not Reaching Operating Temperature (Underheating)	Stuck open thermostat (inside housing).	Test/replace thermostat.
Visible Corrosion or Buildup on Housing	Old or incorrect coolant, internal system corrosion.	Flush and refill cooling system with correct coolant. Inspect other cooling components.

If you are unable to diagnose or resolve an issue, it is recommended to consult a certified automotive technician.

DORMAN QUALITY AND TESTING

Dorman is committed to providing high-quality aftermarket parts. Their products, including this thermostat housing, undergo rigorous testing to ensure reliability and performance that meets or exceeds original equipment specifications. This commitment is supported by dedicated engineering and testing personnel.

Video: Dorman Water Outlet Overview. This video highlights Dorman's engineering and testing processes for water outlets, demonstrating their commitment to quality and durability through various tests including lifecycle, leak, and temperature tests. It shows how Dorman products are designed to outperform competitors and OEM parts in certain aspects.

Dorman's internal product testing includes:

- **Exaggerated Lifecycle Tests:** Demonstrating superior longevity compared to some original equipment designs.
- **FAI Leak Tests:** Ensuring leak-free performance, with Dorman products consistently passing where competitors may fail.

- **Compression Set Tests:** Proving the durability of O-rings and gaskets to outlast the competition.
- **Temperature Tests:** Confirming integrated thermostats match OEM performance, unlike some competitors that fail prematurely.

WARRANTY AND SUPPORT

For specific warranty information regarding your Dorman 902-315 Engine Coolant Thermostat Housing, please refer to the documentation included with your purchase or visit the official Dorman website. Dorman stands behind the quality of its products.

For further assistance, technical support, or to explore other Dorman products, you can visit the [Dorman Store on Amazon](#) or their official company website.

Dorman's mission is to provide innovative solutions that give repair professionals and vehicle owners greater freedom to fix cars and trucks, offering a wide range of replacement products engineered for convenience, reliability, and cost-effectiveness.