

## Dorman 911-153

# Dorman 911-153 Secondary Air Injection Check Valve Instruction Manual

## INTRODUCTION

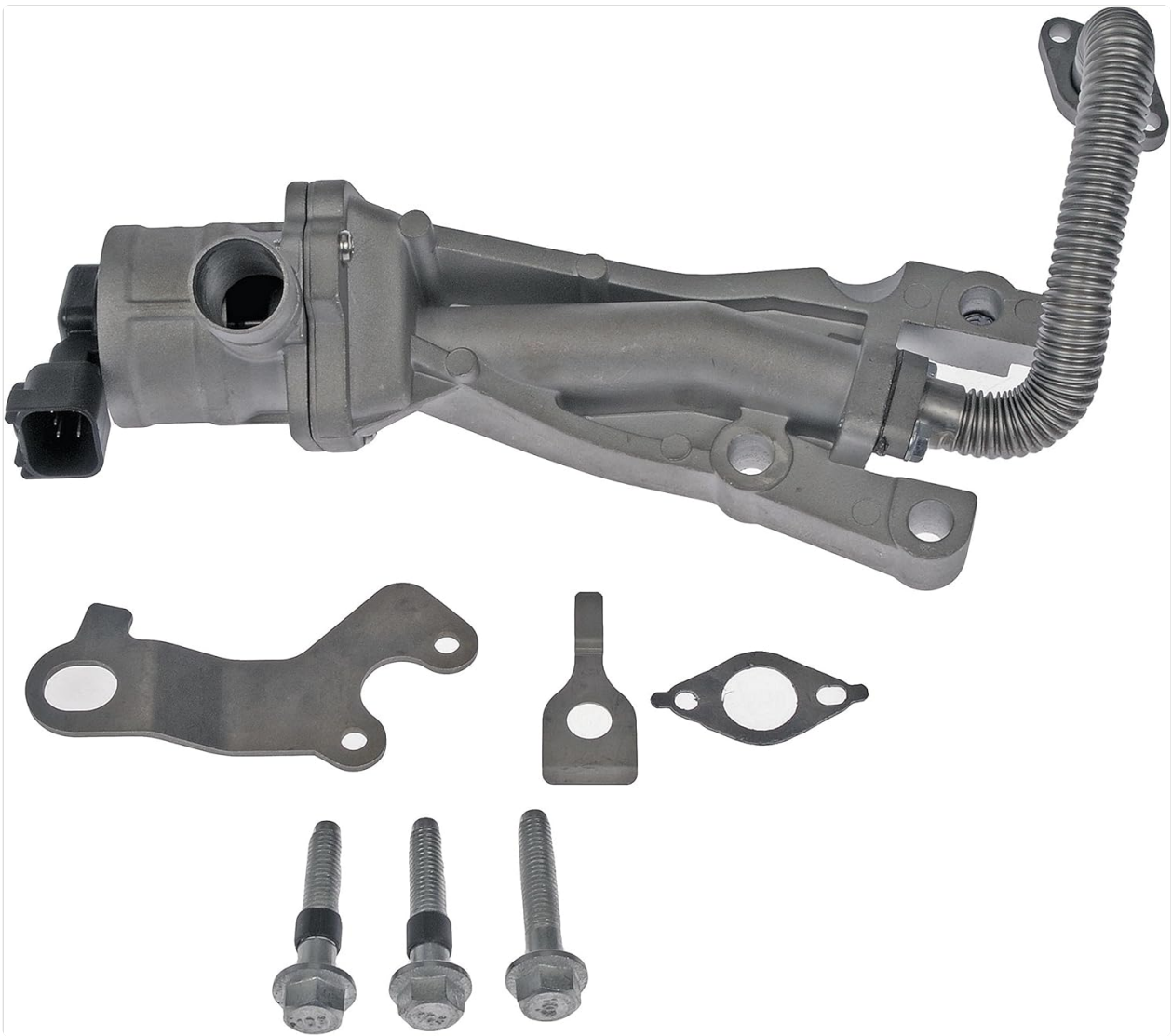
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This manual provides essential information for the Dorman 911-153 Secondary Air Injection Check Valve. It covers product overview, installation guidelines, operational principles, maintenance, troubleshooting, and technical specifications. This valve is designed as a direct replacement to match the fit and function of the original equipment on specified vehicles, ensuring reliable performance and restoring proper system functionality.

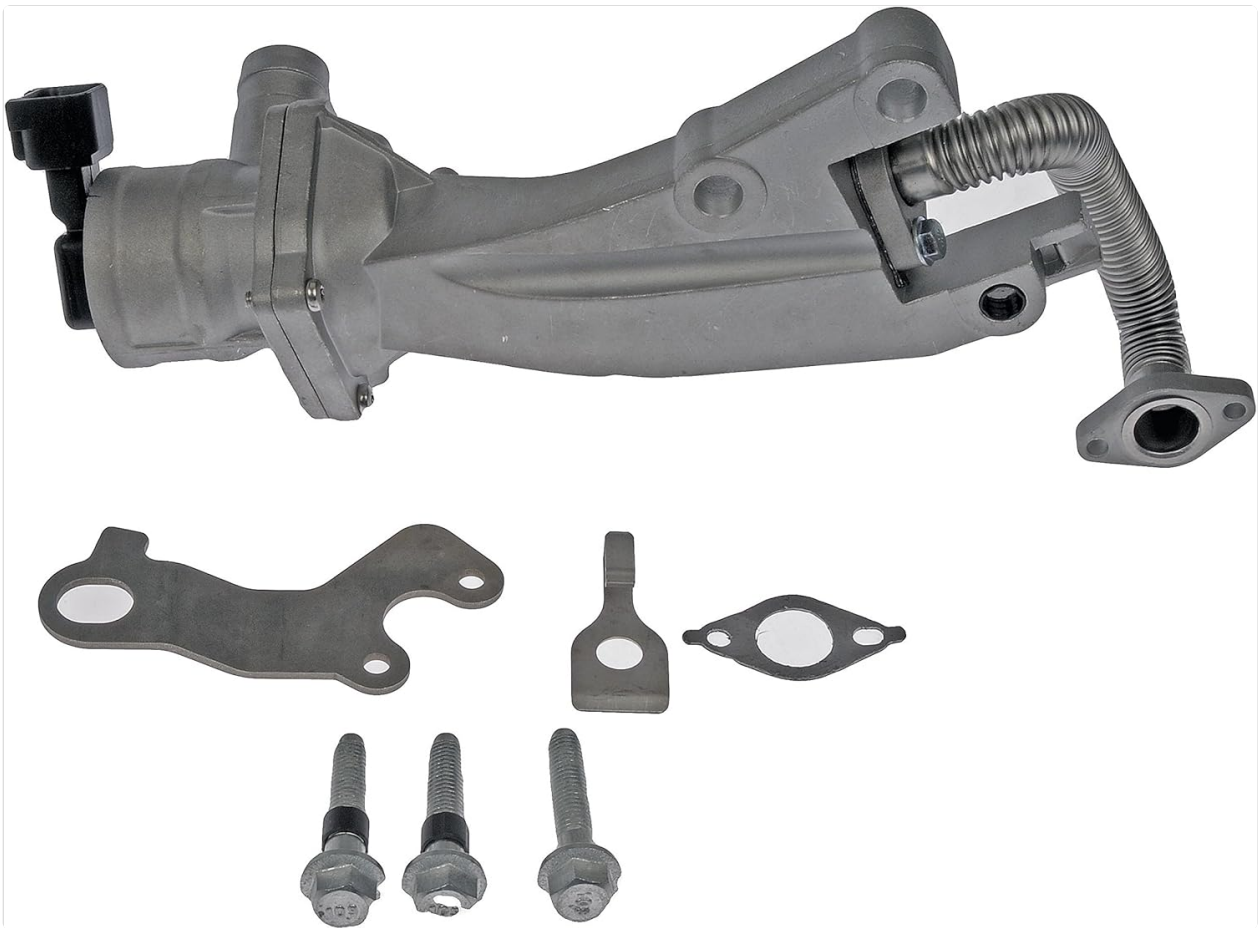
## PRODUCT OVERVIEW

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The Dorman 911-153 is a secondary air injection check valve, a critical component in your vehicle's emissions control system. Its primary function is to prevent exhaust gases from flowing back into the air pump, which could damage the pump and impair the system's ability to reduce emissions. This part is constructed from durable materials to ensure a long service life and consistent performance.



**Figure 1:** Front view of the Dorman 911-153 Secondary Air Injection Check Valve, showing the main valve body, corrugated hose, and included mounting hardware (gaskets and hex screws).



**Figure 2:** Side view of the Dorman 911-153 Secondary Air Injection Check Valve, illustrating the overall assembly and included components.

## PRODUCT CONTENTS

The Dorman 911-153 package typically includes the following components:

- 1 x Secondary Air Injection Check Valve
- 3 x Gaskets
- 3 x Hex Screws

## VEHICLE COMPATIBILITY

This Dorman 911-153 Secondary Air Injection Check Valve is compatible with select Buick and Chevrolet models. To ensure precise fitment for your vehicle, it is recommended to verify compatibility using your vehicle's make, model, and trim level.

### Compatible Vehicle Models

Make	Model	Years
Buick	Lucerne	2009, 2010
Chevrolet	Impala	2007, 2008, 2009, 2010
Chevrolet	Monte Carlo	2007

## SETUP AND INSTALLATION

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Installation of automotive emission control components can be complex and may require specialized tools and knowledge. For optimal performance and safety, professional installation by a certified mechanic is highly recommended.

### General Installation Guidelines:

1. **Safety First:** Ensure the vehicle is turned off, cooled down, and properly supported on a level surface. Disconnect the battery to prevent electrical hazards.
2. **Locate the Component:** Identify the existing secondary air injection check valve on your vehicle. Refer to your vehicle's service manual for exact location and removal procedures.
3. **Remove Old Part:** Carefully disconnect any hoses, electrical connectors, and mounting hardware from the old check valve. Note the orientation for correct installation of the new part.
4. **Prepare for Installation:** Clean the mounting surface to ensure a proper seal. Use the new gaskets provided with the Dorman 911-153 valve.
5. **Install New Part:** Position the new Dorman 911-153 check valve, ensuring correct orientation. Secure it with the new hex screws provided, tightening them to the manufacturer's specified torque values.
6. **Reconnect:** Reattach all hoses and electrical connectors securely.
7. **Final Checks:** Reconnect the battery. Start the vehicle and check for proper operation and any diagnostic trouble codes.

**Warning: Improper installation can lead to vehicle damage, system malfunction, or personal injury. If you are unsure about any step, consult a qualified automotive technician.**

## OPERATION

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The secondary air injection system introduces fresh air into the exhaust stream during specific engine operating conditions, typically during cold starts. This additional air helps to burn off uncombusted fuel in the exhaust, reducing harmful emissions. The check valve, such as the Dorman 911-153, is a one-way valve that allows air from the air pump to enter the exhaust system but prevents hot exhaust gases from flowing back into the air pump. This protection is crucial for the longevity and proper function of the air pump and the entire emissions system.

## MAINTENANCE

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The Dorman 911-153 Secondary Air Injection Check Valve is designed for durability and typically requires minimal maintenance. However, periodic inspection is recommended as part of your vehicle's routine service schedule.

### Inspection Points:

- **Visual Check:** Inspect the valve and surrounding hoses for any signs of cracks, leaks, corrosion, or damage.
- **Connection Integrity:** Ensure all connections to the valve are secure and free from looseness.
- **System Performance:** If your vehicle exhibits symptoms such as a check engine light related to the secondary air injection system, or unusual noises from the air pump, the check valve may need further diagnosis.

If any issues are detected, it is advisable to consult a qualified technician for diagnosis and repair.

## TROUBLESHOOTING

A malfunctioning secondary air injection check valve can lead to various issues, often triggering a check engine light. Here are some common symptoms and potential causes:

### Troubleshooting Guide

Symptom	Possible Cause	Recommended Action
Check Engine Light (DTCs related to Secondary Air Injection)	Valve stuck open or closed, vacuum leak, electrical issue.	Scan for diagnostic trouble codes (DTCs). Inspect valve and hoses for damage. Test vacuum lines and electrical connections.
Engine Idling Rough or Stalling (especially on cold start)	Valve stuck open, allowing exhaust gases into air pump or intake.	Inspect valve for proper sealing. Check for vacuum leaks.
Unusual Noises from Air Pump	Exhaust gases entering the air pump due to a faulty check valve.	Replace the check valve if it is confirmed to be faulty.
Failed Emissions Test	Secondary air injection system not functioning correctly.	Perform a comprehensive diagnosis of the entire secondary air injection system, including the check valve, pump, and relays.

For persistent issues or complex diagnostics, it is always best to consult a professional automotive technician.

## SPECIFICATIONS

Key technical specifications for the Dorman 911-153 Secondary Air Injection Check Valve:

### Technical Specifications

Attribute	Value
Brand	Dorman
Model Number	911-153
Material	Metal
Exterior Finish	Machined
Item Weight	3.9 pounds
Product Dimensions (L x W x H)	15.3 x 9 x 5.1 inches
Number of Ports	1
Inlet Connection Type	Flare
Outlet Connection Type	Flare
OEM Part Number Equivalents	911153; AV60; CV84; 12619123; 12659290

## WARRANTY INFORMATION

Dorman products are manufactured to high-quality standards. For specific warranty terms and conditions

applicable to the Dorman 911-153 Secondary Air Injection Check Valve, please refer to the official Dorman website or contact your point of purchase. Warranty coverage typically addresses defects in materials and workmanship under normal use.

## CUSTOMER SUPPORT

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For further assistance, technical inquiries, or to report any issues with your Dorman 911-153 Secondary Air Injection Check Valve, please contact Dorman customer support directly or visit their official website.

- **Dorman Official Website:** [www.dormanproducts.com](http://www.dormanproducts.com)
- **Contact Information:** Refer to the 'Contact Us' section on the Dorman website for phone numbers or email support.

When contacting support, please have your product model number (911-153) and vehicle information readily available.