**Saved from manuals.plus.**
**Open the live page for links to other documents and user manuals.**



**HIRINTOL 5452687 5496045RX HE300VG HE351VE**

# HIRINTOL Turbocharger Actuator Kit Instruction Manual

Models: HE300VG, HE351VE, 5452687, 5496045RX

## 1. Introduction

This manual provides essential information for the installation, operation, and maintenance of the HIRINTOL Turbocharger Actuator Kit. This kit is designed as a direct replacement part for specific Cummins engine applications. Please read this manual thoroughly before attempting any installation or service.

## 2. Safety Information

**WARNING: Improper installation or handling of automotive components can lead to serious injury or damage to the vehicle. Always wear appropriate personal protective equipment (PPE) such as safety glasses and gloves.**

- Ensure the engine is completely cool and the vehicle's battery is disconnected before beginning any work.
- Refer to the vehicle manufacturer's service manual for specific procedures and torque specifications.
- If you are not confident in your ability to perform the installation, seek assistance from a qualified automotive technician.
- Keep all tools and parts away from moving engine components.

## 3. Product Overview

The HIRINTOL Turbocharger Actuator Kit is a critical component responsible for controlling the variable geometry of the turbocharger, optimizing engine performance and efficiency. It is constructed from high-strength aluminum alloy for durability and corrosion resistance.

### 3.1. Key Features

- Direct replacement for original equipment.
- Enhances engine intake pressure, contributing to increased power and torque.
- Manufactured to original factory specifications for reliable performance.

## 3.2. Package Contents

The kit typically includes:

- 1 x Turbocharger Actuator Unit
- Necessary gaskets and seals (if applicable)

## 3.3. Product Images



Figure 1: Top view of the actuator, showing the main housing and mounting points.



Figure 2: Side view of the actuator, highlighting the intake port and gasket area.



Figure 3: Angled view of the actuator, revealing internal channels and sealing

surfaces.



Figure 4: Bottom view of the actuator, showing the gear mechanism and fluid passages.



Figure 5: View of the actuator, focusing on the integrated electrical connector for control signals.



Figure 6: Close-up of the electrical connector and identification markings on the actuator housing.

## 4. Compatibility

This turbocharger actuator kit is compatible with various Cummins engine models and vehicle applications. Please verify your engine's part number and model before installation.

### 4.1. Compatible Part Numbers

- 5452687
- 5496045RX
- 05452687
- 4034176

### 4.2. Compatible Engine Models

- Cummins ISC
- Cummins ISL
- Cummins ISL9
- Cummins QSL9
- Cummins QSB6.7
- Cummins ISB6.7
- Cummins B6.7
- Cummins L9
- Cummins X15
- Cummins CM2350 B121B, B136C, B157C, B155B
- Cummins L101, L111, L116B
- Cummins CM2450 L126B, B105

### 4.3. Compatible Vehicle Applications

- International/Navistar Trucks
- Freightliner Trucks

## 5. Setup and Installation

**Professional installation is highly recommended for this component.**

1. **Preparation:** Ensure the engine is off and cool. Disconnect the vehicle's battery. Access the turbocharger assembly.
2. **Removal of Old Actuator:** Carefully disconnect any electrical connectors and vacuum/pressure lines attached to the old actuator. Unbolt and remove the old actuator from the turbocharger. Note the orientation and any specific mounting hardware.
3. **Inspection:** Inspect the turbocharger's variable geometry mechanism for any obstructions or damage. Ensure it moves freely. Clean any mating surfaces thoroughly.
4. **Installation of New Actuator:** Position the new HIRINTOL actuator onto the turbocharger. Ensure proper alignment with the variable geometry mechanism. Secure the actuator with the appropriate bolts, tightening to the manufacturer's specified torque values.
5. **Connections:** Reconnect all electrical connectors and vacuum/pressure lines. Ensure all connections are secure.
6. **Final Checks:** Reconnect the vehicle's battery. Start the engine and check for proper operation, leaks, or error codes.

## 6. Operating Principles

The turbocharger actuator is an electronically controlled device that adjusts the position of the variable geometry vanes within the turbocharger. This adjustment allows the turbocharger to optimize boost pressure across various engine speeds and loads, improving fuel efficiency and reducing emissions. Once installed, the actuator operates automatically under the control of the engine's Electronic Control Unit (ECU).

## 7. Maintenance

The HIRINTOL Turbocharger Actuator Kit is designed for long-term reliability with minimal maintenance. However, periodic checks can help ensure optimal performance:

- **Visual Inspection:** Periodically inspect the actuator and its connections for any signs of damage, corrosion, or loose wiring.
- **Cleanliness:** Keep the area around the turbocharger and actuator free from excessive dirt, oil, or debris.
- **System Checks:** Ensure the vehicle's engine management system is free of fault codes related to turbocharger or actuator operation. Address any diagnostic trouble codes (DTCs) promptly.
- **Professional Servicing:** During routine vehicle servicing, have a qualified technician inspect the turbocharger system, including the actuator, for proper function.

## 8. Troubleshooting

If you experience issues after installing the turbocharger actuator, consider the following common troubleshooting steps:

- **Check Connections:** Verify that all electrical connectors are securely attached and free from corrosion. Ensure any vacuum or pressure lines are properly connected and not kinked or damaged.
- **Review Installation:** Double-check that the actuator was installed correctly and that all mounting bolts are tightened to specification. Ensure the variable geometry mechanism moves freely without binding.
- **Diagnostic Scan:** Use an OBD-II scanner to check for any diagnostic trouble codes (DTCs). These codes can provide specific information about system malfunctions.
- **Consult a Professional:** If issues persist, it is recommended to consult a qualified automotive technician for further diagnosis and repair.

## 9. Specifications

| Attribute | Specification |
|---|---|
| Part Type | Turbocharger Actuator Kit |
| Material | High-strength Aluminum Alloy |
| Reference Part Numbers | 5452687, 5496045RX, 05452687, 4034176 |
| Compatible Turbo Models | HE300VG, HE351VE |
| Product Weight | 1.68 Kilograms |
| Package Dimensions | 20.29 x 13.59 x 12.19 cm |

| Attribute | Specification |
| --- | --- |
| Assembly Required | No |

## 10. Warranty and Support

For information regarding warranty coverage or technical support, please contact the seller or manufacturer directly through your purchase platform. Ensure you have your order details and product information available when contacting support.


### Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

**Name**

Anonymous

**Email**

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question



**Open the live page**

**https://manuals.plus/asin/B0CNTFFBSC**

More documents and user manuals: **https://manuals.plus/**