

## ProForm 66511

# Proform 66511 Harmonic Balancer Instruction Manual

Model: 66511

[Overview](#) [Installation](#) [Operation](#) [Introduction](#) [Safety Information](#) [Product](#) [Maintenance](#) [Troubleshooting](#) [Specifications](#) [Warranty & Support](#)

## 1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Proform 66511 Harmonic Balancer. A harmonic balancer, also known as a crankshaft damper, is a crucial component in an internal combustion engine. Its primary function is to reduce torsional vibrations that occur in the crankshaft during engine operation. These vibrations, if left unchecked, can lead to premature wear of engine components and potential engine failure. The Proform 66511 is designed for Chevrolet Small Block (S/B) engines with an internal balance (Int 8).

## 2. SAFETY INFORMATION

Always prioritize safety when working on automotive systems. Failure to follow safety precautions can result in serious injury or damage to the vehicle.

- Ensure the vehicle is securely supported on jack stands or a lift before beginning any work.
- Disconnect the battery's negative terminal to prevent accidental engine cranking or electrical shorts.
- Wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and closed-toe shoes.
- Allow the engine to cool completely before working on it to avoid burns.
- Use the correct tools for each task. Improper tools can cause damage or injury.
- If you are unsure about any step, consult a qualified automotive technician or refer to a comprehensive service manual for your specific vehicle.
- Keep children and pets away from the work area.

## 3. PRODUCT OVERVIEW

The Proform 66511 Harmonic Balancer is a precision-engineered component designed to manage crankshaft torsional vibrations in Chevrolet Small Block engines. It features a robust construction suitable for demanding automotive applications. This balancer is specifically designed for engines requiring an internal balance configuration.



**Figure 1:** Front view of the Proform 66511 Harmonic Balancer. This image displays the circular metal component with multiple bolt holes and a central bore, characteristic of a crankshaft damper. The outer ring features several small, circular indentations.

## 4. INSTALLATION

Proper installation is critical for the performance and longevity of your harmonic balancer. Refer to your vehicle's specific service manual for detailed instructions and torque specifications relevant to your engine model.

### 4.1. Tools and Materials Required

- Harmonic balancer puller/installer tool kit
- Socket set and ratchet
- Torque wrench
- Crankshaft holding tool (if necessary)
- Gasket scraper or wire brush (for cleaning surfaces)
- Clean rags

- Thread locker (medium strength, if recommended by engine manufacturer)

## 4.2. Pre-Installation Checks

1. **Verify Compatibility:** Confirm that the Proform 66511 is the correct harmonic balancer for your specific Chevrolet Small Block engine and its balance requirements (internal balance).
2. **Inspect New Balancer:** Carefully inspect the new balancer for any signs of damage from shipping. Ensure the keyway is clean and free of burrs.
3. **Clean Crankshaft Snout:** Thoroughly clean the crankshaft snout and keyway. Remove any rust, old sealant, or debris that could impede proper installation or cause runout.

## 4.3. Installation Procedure

1. **Remove Old Balancer:** Using a suitable harmonic balancer puller, carefully remove the old balancer from the crankshaft. Avoid damaging the crankshaft snout or timing cover.
2. **Lubricate:** Apply a thin coat of engine oil or assembly lubricant to the crankshaft snout and the bore of the new harmonic balancer.
3. **Align Keyway:** Carefully align the keyway on the harmonic balancer with the key on the crankshaft.
4. **Install Balancer:** Use a harmonic balancer installer tool to press the new Proform 66511 onto the crankshaft. **Do not use a hammer or attempt to drive the balancer on without the proper tool, as this can damage the balancer or crankshaft.** The installer tool ensures even pressure and prevents damage.
5. **Install Crankshaft Bolt:** Once the balancer is fully seated, install the crankshaft bolt. Apply thread locker if recommended by the engine manufacturer.
6. **Torque Crankshaft Bolt:** Using a torque wrench, tighten the crankshaft bolt to the manufacturer's specified torque. This is a critical step; refer to your engine's service manual for the exact specification.
7. **Reassemble:** Reinstall any removed accessories, belts, and covers.
8. **Reconnect Battery:** Reconnect the negative battery terminal.

## 5. OPERATION

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The Proform 66511 Harmonic Balancer operates passively as an integral part of the engine's rotating assembly. Once correctly installed, it continuously dampens torsional vibrations in the crankshaft, contributing to smoother engine operation and protecting other engine components from excessive stress. No user intervention is required during its operation.

## 6. MAINTENANCE

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Harmonic balancers typically require minimal maintenance. Regular inspection is recommended during routine engine service.

- **Visual Inspection:** Periodically inspect the harmonic balancer for signs of wear, cracking in the rubber elastomer (if applicable), wobbling, or separation of the outer ring from the hub.
- **Noise Check:** Listen for unusual noises coming from the front of the engine, which could indicate a failing balancer.
- **Replacement:** If any signs of damage or failure are observed, the harmonic balancer should be replaced immediately to prevent further engine damage.

## 7. TROUBLESHOOTING

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If you experience issues after installing or during the use of your harmonic balancer, consider the following:

- **Engine Vibration:** Excessive engine vibration, especially at certain RPMs, can indicate a failing or improperly installed harmonic balancer.
  - *Check:* Inspect the balancer for wobble or separation. Ensure the crankshaft bolt is torqued correctly.
- **Squealing or Chirping Noise:** While often related to belts, a failing balancer can sometimes produce noise.
  - *Check:* Visually inspect the balancer for any contact with other components or signs of rubber degradation.
- **Accessory Drive Issues:** A wobbly balancer can affect belt tension and cause issues with power steering, alternator, or AC compressor.
  - *Check:* Observe the balancer's rotation for any runout or eccentricity.

If troubleshooting steps do not resolve the issue, it is recommended to consult a professional mechanic.

## 8. SPECIFICATIONS

Product Type	Auto Part
Brand	ProForm
Model Number	66511
Manufacturer Part Number	66511
OEM Part Number	66511
Item Weight	11 pounds
Product Dimensions	8.75 x 8.75 x 5.5 inches
Country of Origin	Mexico
Engine Compatibility	Chevrolet Small Block (S/B) - Internal Balance

## 9. WARRANTY & SUPPORT

### 9.1. Warranty Information







ProForm products are manufactured to high standards. For specific warranty details regarding your Proform 66511 Harmonic Balancer, please refer to the warranty documentation included with your purchase or visit the official ProForm website. Warranty coverage typically addresses defects in materials and workmanship under normal use.

### 9.2. Customer Support

If you have questions about the installation, operation, or troubleshooting of your Proform 66511 Harmonic Balancer, or require technical assistance, please contact ProForm customer support. You can usually find contact information on the product packaging or the official ProForm website ([ProForm Store](#)).



## Related Documents - 66511

 The cover of the ProForm 705 CST treadmill user manual. It features the ProForm logo at the top, followed by the model name '705 CST'. Below this is a small diagram of the treadmill and a section titled 'BEDIENUNGSANLEITUNG'. The cover also includes a 'CAUTION' warning and a 'QUESTIONS?' section with contact information.	<p><a href="#">ProForm 705 CST Treadmill User Manual</a></p> <p>User manual for the ProForm 705 CST treadmill, providing assembly instructions, operating procedures, safety precautions, and maintenance guidelines.</p>
 The cover of the ProForm 530 HeartRateControl treadmill user manual. It features the ProForm logo at the top, followed by the model name '530 HeartRateControl'. Below this is a small diagram of the treadmill and a section titled 'USER'S MANUAL'. The cover also includes a 'CAUTION' warning and a 'QUESTIONS?' section with contact information.	<p><a href="#">ProForm 530 HeartRateControl Treadmill User Manual</a></p> <p>Comprehensive user manual for the ProForm 530 HeartRateControl treadmill (Model PFTL51232), covering assembly, operation, maintenance, troubleshooting, and exercise guidelines. Visit <a href="http://www.proform.com">www.proform.com</a> for more information.</p>
 The cover of the ProForm 400 SPX exercise bike user manual. It features the ProForm logo at the top, followed by the model name '400 SPX'. Below this is a small diagram of the exercise bike and a section titled 'USER'S MANUAL'. The cover also includes a 'CAUTION' warning and a 'QUESTIONS?' section with contact information.	<p><a href="#">ProForm 400 SPX User's Manual</a></p> <p>This user manual provides instructions for the ProForm 400 SPX exercise bike, covering assembly, usage, maintenance, and troubleshooting. It includes safety precautions and exercise guidelines.</p>
 The cover of the ProForm PRO 2000 treadmill user manual. It features the ProForm logo at the top, followed by the model name 'PRO 2000'. Below this is a small diagram of the treadmill and a section titled 'USER'S MANUAL'. The cover also includes a 'CAUTION' warning and a 'QUESTIONS?' section with contact information.	<p><a href="#">PROFORM PRO 2000 Treadmill User's Manual - Assembly, Operation, and Maintenance</a></p> <p>Comprehensive user's manual for the PROFORM PRO 2000 treadmill (Model No. PFTL13011.0). Includes assembly instructions, operation guides, troubleshooting, exercise tips, and warranty information.</p>
 The cover of the ProForm 830QT treadmill user manual. It features the ProForm logo at the top, followed by the model name '830QT'. Below this is a small diagram of the treadmill and a section titled 'USER'S MANUAL'. The cover also includes a 'CAUTION' warning and a 'QUESTIONS?' section with contact information.	<p><a href="#">ProForm 830QT Treadmill User Manual: Assembly, Operation, and Maintenance Guide</a></p> <p>This comprehensive user manual provides detailed instructions for the ProForm 830QT treadmill. It covers essential safety precautions, step-by-step assembly, operation and adjustment procedures, troubleshooting tips, conditioning guidelines, and a complete parts list. Learn how to set up, use, and maintain your ProForm treadmill for optimal home fitness.</p>
 The cover of the ProForm 380 treadmill user manual. It features the ProForm logo at the top, followed by the model name '380'. Below this is a small diagram of the treadmill and a section titled 'USER'S MANUAL'. The cover also includes a 'CAUTION' warning and a 'QUESTIONS?' section with contact information.	<p><a href="#">PROFORM 380 Treadmill User Manual: Assembly, Operation, and Maintenance</a></p> <p>Comprehensive user manual for the PROFORM 380 treadmill (Model PFTL49020). Includes assembly instructions, operation guides, safety precautions, troubleshooting tips, and conditioning advice.</p>