

## EBTOOLS GC135, GC160, GCV135, GCV160, EN2000

# EBTOOLS Recoil Starter Kit User Manual

**Brand:** EBTOOLS | **Model:** GC135, GC160, GCV135, GCV160, EN2000



## 1. INTRODUCTION

This EBTOOLS Recoil Starter Kit is designed as a high-quality replacement pull starter for various generators and engines. It features a durable construction and is engineered for stable performance with low operating noise, ensuring a reliable start for your equipment. This manual provides essential information for proper installation, operation, and maintenance.

## 2. SAFETY INFORMATION

**Always prioritize safety when working with machinery.**

- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves, when handling or installing the recoil starter.
- Ensure the engine is completely off, cooled down, and spark plug wire disconnected before attempting any installation, inspection, or maintenance.
- Keep hands and clothing clear of moving parts.
- Refer to your engine's specific manual for additional safety guidelines and procedures.
- Professional installation is recommended to ensure proper function and safety.

## 3. PARTS IDENTIFICATION

Familiarize yourself with the components of your recoil starter.



**Figure 3.1:** Internal view of the recoil starter, highlighting the spring and rope spool.



**Figure 3.2:** Recoil starter with key dimensions for reference.



**Figure 3.3:** Detail of the pull handle and cord assembly.





Figure 3.4: Top view of the recoil starter casing.

## 4. SPECIFICATIONS

Feature	Specification
Dimensions (L x W x H)	168 x 132 x 58 mm (6.6" x 5.2" x 2.3")
Weight	280 g
Material	High-quality Metal and Plastic
OEM Part Numbers	28400-ZL8-023ZA, 28400-ZL8-013ZA, 284400-ZM0-003
Power Rating	4.8E+2
UPC	798382987704

## 5. COMPATIBILITY

This recoil starter is compatible with a range of generators and engines, specifically designed to replace original equipment.

- Replacement for GC135, GC160, GCV135, GCV160, and EN2000 generators.
- Suitable for horizontal and vertical shaft engines ranging from 4 to 5.5 HP.



Recoil Starter for Honda GC135, GC160, GCV135, GCV160 and EN2000 generators for 4 thru 5.5 HP horizontal and vertical shaft engines.

Figure 5.1: Recoil starter shown with a compatible lawnmower engine.





**Figure 5.2:** The recoil starter's fit with a typical lawnmower engine.



**Figure 5.3:** Example of a generator utilizing a similar recoil starter.

## 6. INSTALLATION

The EBTOOLS Recoil Starter is designed for easy installation. However, for optimal performance and safety, professional installation is recommended.

1. **Prepare the Engine:** Ensure the engine is completely off, cool, and the spark plug wire is disconnected to prevent accidental starting.
2. **Locate Old Starter:** Identify the existing recoil starter on your engine.
3. **Remove Old Starter:** Carefully unbolt and detach the old recoil starter. Note the orientation and any specific mounting hardware.
4. **Align New Starter:** Position the new EBTOOLS recoil starter, ensuring the mounting holes align correctly with the engine's attachment points.
5. **Secure New Starter:** Fasten the new starter using the appropriate bolts. Ensure it is securely mounted but do

not overtighten.

6. **Test Pull Cord:** Gently pull the cord a few times to ensure it extends and retracts smoothly without binding.



Figure 6.1: Preparing to install the recoil starter on an engine.

## 7. OPERATION

Once installed, operating the recoil starter is straightforward:

1. **Prepare Engine:** Ensure your engine is primed and ready to start according to its specific operating instructions (e.g., fuel on, choke set).
2. **Pull Cord:** Grasp the recoil starter handle firmly. Slowly pull the cord until you feel resistance (this indicates the engine's compression stroke).
3. **Start Engine:** With a quick, smooth, and continuous pull, extend the cord fully. Do not yank or snap the cord.
4. **Retract Cord:** Allow the cord to retract fully and smoothly back into the starter housing. Do not let the handle snap back against the housing.
5. **Repeat if Necessary:** If the engine does not start on the first pull, repeat the process.





Figure 7.1: Proper technique for pulling the recoil starter cord.

## 8. MAINTENANCE

Regular maintenance helps prolong the life of your recoil starter:

- **Keep Clean:** Periodically clean the recoil starter housing to prevent dirt and debris from entering the mechanism.
- **Inspect Cord:** Regularly check the pull cord for signs of fraying, cuts, or excessive wear. Replace the cord if any damage is observed.
- **Check Mounting:** Ensure all mounting bolts are secure. Loose bolts can cause vibration and damage.
- **Lubrication:** If the cord does not retract smoothly, a small amount of dry lubricant (e.g., silicone spray) can be applied to the spring mechanism, if accessible, following manufacturer guidelines. Avoid oil-based lubricants which can attract dirt.

## 9. TROUBLESHOOTING

Here are some common issues and their potential solutions:

Problem	Possible Cause	Solution
Pull cord does not retract fully.	Internal spring issue, debris, or cord binding.	Inspect for visible obstructions. If internal, professional repair or replacement may be needed.



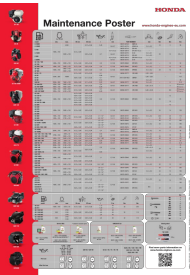

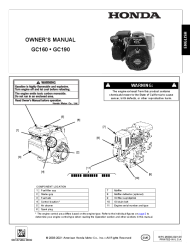
Pull cord is frayed or broken.	Normal wear and tear, improper pulling technique.	Replace the pull cord. Ensure smooth, consistent pulls during operation.
Engine does not start after pulling.	Not a recoil starter issue; engine-related problem.	Check engine fuel level, spark plug, carburetor, and other engine components. Consult your engine's manual.
Recoil starter feels loose after installation.	Mounting bolts are not tightened sufficiently.	Ensure all mounting bolts are securely tightened.


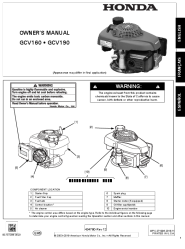

## 10. WARRANTY AND SUPPORT

For specific warranty information regarding your EBTOOLS Recoil Starter Kit, please refer to the product packaging or the official EBTOOLS website. For technical support or further assistance, please contact EBTOOLS customer service through their official channels.

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### Related Documents - GC135, GC160, GCV135, GCV160, EN2000

	<p><a href="#">Honda Engine Maintenance Specifications Poster</a></p> <p>Comprehensive maintenance specifications for Honda engines, including spark plug gaps, tightening torques, oil capacities, and recommended service parts. Covers GX, GCV, GXV, GP, GS, GV, iGX, and GD engine series.</p>
	<p><a href="#">California Trimmer Air Cushion Hover Mower Operator's Manual</a></p> <p>Operator's manual for the California Trimmer Air Cushion Hover Mower, model RC190-GCV160. Includes assembly, operation, safety, and maintenance instructions.</p>
	<p><a href="#">Honda GC160 GC190 Owner's Manual - Operation, Maintenance, and Specifications</a></p> <p>Comprehensive owner's manual for Honda GC160 and GC190 engines, covering operation, safety precautions, maintenance schedules, troubleshooting, specifications, and warranty information.</p>

 <p>Owner's Manual <b>CRAFTSMAN</b> PROFESSIONAL ROTARY LAWN MOWER 160cc Honda Engine Power-Propeled 22" Multi-Cut Model No. 944.361361</p> <p>CAUTION: Read the Manual at all times before use. Failure to follow these instructions may result in serious injury or death. ©2005 Craftsman, Inc. Toronto, Ontario M2B 2S5</p>	<p><a href="#">Craftsman Professional Rotary Lawn Mower Owner's Manual</a></p> <p>Owner's manual for the Craftsman Professional Rotary Lawn Mower, Model No. 944.361361, featuring a 160cc Honda Engine and 22" Multi-Cut deck. Includes safety instructions, operation, maintenance, troubleshooting, warranty, and parts information.</p>
 <p>HONDA OWNER'S MANUAL GCV160 • GCV190</p> <p>INTRODUCTION SAFETY PRECAUTIONS OPERATION MAINTENANCE TROUBLESHOOTING SPECIFICATIONS INDEX</p>	<p><a href="#">Honda GCV160 &amp; GCV190 Owner's Manual: Operation, Maintenance, and Safety Guide</a></p> <p>Comprehensive owner's manual for Honda GCV160 and GCV190 engines. Covers operation, maintenance schedules, safety precautions, troubleshooting, and technical specifications for reliable performance.</p>
 <p>HONDA OWNER'S MANUAL GCV160 • GCV190</p> <p>INTRODUCTION SAFETY PRECAUTIONS OPERATION MAINTENANCE TROUBLESHOOTING SPECIFICATIONS INDEX</p>	<p><a href="#">Honda GCV160/GCV190 Owner's Manual: Operation and Maintenance Guide</a></p> <p>Official owner's manual for Honda GCV160 and GCV190 engines. Provides comprehensive guidance on safe operation, routine maintenance, troubleshooting common issues, and technical specifications for optimal engine performance and longevity.</p>