

## ECHO CS 400

# ECHO CS 400 Chainsaw 18" Bar with Chain Instruction Manual

Model: CS 400 | Brand: ECHO

## INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your new ECHO CS 400 Chainsaw 18" Bar with Chain. This is an Original Equipment Manufacturer (OEM) replacement part designed specifically for the ECHO CS 400 chainsaw. Please read this manual thoroughly before use to ensure safe and efficient operation and to prolong the life of your equipment.

## SAFETY INFORMATION

Always prioritize safety when working with chainsaws. Refer to your ECHO CS 400 chainsaw's main instruction manual for comprehensive safety guidelines. This replacement bar and chain must be installed and used in accordance with all safety precautions.

- Wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, gloves, and protective footwear.
- Ensure the chainsaw is turned off and the spark plug cap is disconnected before performing any installation or maintenance.
- Inspect the bar and chain for damage before each use.
- Keep bystanders and pets away from the work area.

## SETUP AND INSTALLATION

Proper installation of the guide bar and saw chain is crucial for safe and effective operation. Follow these steps carefully:

1. **Prepare the Chainsaw:** Ensure the chainsaw engine is off and cool. Disconnect the spark plug cap to prevent accidental starting. Engage the chain brake.
2. **Remove Old Bar and Chain (if applicable):** Loosen the two bar nuts on the side cover. Remove the side cover. Carefully remove the old guide bar and saw chain from the clutch drum.
3. **Clean Components:** Clean any sawdust or debris from the clutch area, guide bar mounting area, and the guide bar

groove.

4. **Install New Bar:** Place the new 18-inch guide bar onto the guide bar studs. Ensure the guide bar adjustment pin engages with the hole in the guide bar.
5. **Install New Chain:** Carefully place the new 18-inch semi-chisel saw chain around the clutch drum sprocket and into the guide bar groove. Ensure the cutting edges of the chain cutters are facing forward in the direction of rotation.
6. **Reinstall Side Cover:** Replace the side cover, ensuring the chain brake lever is in the disengaged position (pulled back towards the handle) to allow the cover to seat properly. Hand-tighten the bar nuts.
7. **Adjust Chain Tension:** While holding the tip of the guide bar up, turn the chain tensioning screw clockwise until the chain is snug against the bottom of the guide bar. The chain should be able to be pulled freely around the bar by hand, but there should be no sag on the underside of the bar. A properly tensioned chain will have the drive links fully seated in the bar groove, but you should be able to pull the chain up slightly to see the bottom of the drive links.
8. **Tighten Bar Nuts:** With the chain tension set, fully tighten the two bar nuts securely.
9. **Final Check:** Reconnect the spark plug cap. Before starting the chainsaw, manually rotate the chain to ensure it moves freely and smoothly around the guide bar.



**Figure 1:** The ECHO 18-inch replacement guide bar and semi-chisel chain. This image shows the complete assembly of the guide bar with the saw chain wrapped around it, ready for installation. The ECHO logo is visible on the bar.

## OPERATING GUIDELINES

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This replacement bar and chain are designed to work seamlessly with your ECHO CS 400 chainsaw. Always refer to your chainsaw's primary operating manual for detailed instructions on starting, cutting techniques, and general chainsaw operation.

- **Chain Lubrication:** Ensure the chainsaw's oil tank is filled with appropriate bar and chain oil. The guide bar and chain require constant lubrication during operation to prevent excessive wear and heat buildup.
- **Chain Tension Check:** Periodically check chain tension during operation, especially during the first hour of use with a new chain. A chain that is too loose can derail, while a chain that is too tight can cause premature wear to the bar, chain, and sprocket.
- **Sharpening:** Keep the saw chain sharp. A dull chain will not cut efficiently, can cause kickback, and puts undue strain on the chainsaw engine. Refer to your chainsaw manual for proper chain sharpening techniques or consult a professional.

## MAINTENANCE

Regular maintenance of the guide bar and chain will ensure optimal performance and extend their lifespan.

- **Bar Groove Cleaning:** Regularly clean the guide bar groove to remove sawdust and debris that can impede chain movement and oil flow. A small pick or a specialized bar groove cleaner can be used.
- **Sprocket Nose Lubrication:** If your guide bar has a sprocket nose, ensure it is regularly lubricated using a grease gun designed for chainsaw bar noses.
- **Bar Flipping:** To promote even wear, flip the guide bar periodically (e.g., every 8-10 hours of operation). This helps distribute wear on both sides of the bar rails.
- **Chain Inspection:** Inspect the chain for damaged or worn cutters, drive links, and tie straps. Replace the chain if significant damage is present.
- **Storage:** When storing the chainsaw for extended periods, remove the bar and chain, clean them thoroughly, and apply a light coat of oil to prevent rust.

## TROUBLESHOOTING

This section addresses common issues related to the guide bar and chain. For chainsaw engine-related issues, refer to your ECHO CS 400 chainsaw's main manual.

Problem	Possible Cause	Solution
Chain not cutting efficiently / dull cut	Dull chain, incorrect sharpening angle, chain installed backward.	Sharpen chain, verify sharpening angle, ensure chain is installed with cutters facing forward.
Chain derails from bar	Chain too loose, worn guide bar groove, damaged drive links.	Adjust chain tension, inspect and replace worn guide bar, replace damaged chain.
Bar and chain overheating / smoking	Insufficient chain oil, dull chain, chain too tight, clogged bar groove.	Check oil level and pump, sharpen chain, adjust chain tension, clean bar groove.
Chain binds in cut	Dull chain, improper cutting technique, chain too tight.	Sharpen chain, review cutting techniques, adjust chain tension.

## SPECIFICATIONS

- **Product Type:** Replacement Guide Bar and Saw Chain
- **Brand:** ECHO (OEM Part)
- **Compatible Chainsaw Model:** ECHO CS 400

- **Guide Bar Length:** 18 inches
- **Saw Chain Type:** Semi-Chisel
- **Drive Link Count:** 72
- **Part Number (UPC):** 710228780447

## WARRANTY AND SUPPORT




This ECHO OEM replacement part is manufactured to high standards. For specific warranty information regarding this replacement bar and chain, please refer to the warranty documentation provided with your original ECHO CS 400 chainsaw or contact ECHO customer support directly.




For technical support or inquiries about genuine ECHO parts, please visit the official ECHO website or contact their authorized service centers. Always use genuine ECHO replacement parts to ensure compatibility and maintain product performance.

**ECHO Official Website:** [www.echo-usa.com](http://www.echo-usa.com)

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### Related Documents - CS 400

	<p><a href="#">ECHO CS-4510 Chainsaw Parts Catalog and Accessories</a></p> <p>Comprehensive parts catalog for the ECHO CS-4510 Chainsaw. Includes detailed diagrams, part numbers, descriptions for engine, carburetor, fuel system, ignition, and more. Lists optional accessories and safety equipment.</p>
	<p><a href="#">ECHO CS-590 Chainsaw Parts Catalog</a></p> <p>Comprehensive parts catalog for the ECHO CS-590 Chainsaw, detailing all components, part numbers, and accessory options for model years C69015001001 through C69015999999. Includes diagrams and specifications.</p>
	<p><a href="#">ECHO CS-271T Chainsaw Parts Catalog</a></p> <p>Comprehensive parts catalog for the ECHO CS-271T Chainsaw, detailing all components, part numbers, and descriptions in both English and Spanish. Includes optional accessories and safety equipment.</p>

	<p><a href="#">ECHO CS-4510 Chainsaw Parts Catalog and Diagrams</a></p> <p>Comprehensive parts catalog for the ECHO CS-4510 chainsaw, featuring detailed exploded view diagrams, part numbers, and descriptions for all components. Includes optional accessories, safety equipment, and assembly breakdowns for engine, carburetor, fuel system, and more.</p>
	<p><a href="#">ECHO CS-361P Chainsaw Parts Catalog</a></p> <p>Comprehensive parts catalog for the ECHO CS-361P Chainsaw, detailing all components with part numbers, descriptions, and diagrams. Includes optional accessories, safety equipment, and technical specifications.</p>
	<p><a href="#">ECHO CS-352 Chainsaw Parts Catalog and Diagrams   ECHO USA</a></p> <p>Comprehensive parts catalog for the ECHO CS-352 Chainsaw, including detailed diagrams, part numbers, and descriptions in English and Spanish. Find all replacement parts for your ECHO chainsaw.</p>