

## ECHO CS-590-20AA

# ECHO CS-590-20AA 20-inch 59.8 cc Gas Chainsaw Instruction Manual

Model: CS-590-20AA | Brand: ECHO

## INTRODUCTION

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your ECHO CS-590-20AA 20-inch 59.8 cc Gas Chainsaw. Please read this manual thoroughly before operating the chainsaw to ensure proper use and to prevent injury or damage.

## SAFETY INFORMATION

Operating a chainsaw can be dangerous if proper safety precautions are not followed. Always wear appropriate personal protective equipment (PPE), including a helmet, eye protection, hearing protection, gloves, and chainsaw protective chaps. Ensure a clear work area and be aware of your surroundings. Never operate the chainsaw under the influence of alcohol or drugs. Refer to the full safety guidelines provided with your product for detailed instructions.

## SETUP

### 1. Fueling the Chainsaw

The ECHO CS-590-20AA requires a specific fuel mixture of gasoline and 2-stroke engine oil. Always use fresh, unleaded gasoline with a minimum octane rating of 89 or higher. Mix the gasoline with high-quality 2-stroke engine oil at the ratio specified in your product's detailed manual (typically 50:1 for ECHO products, but always verify). Fill the fuel tank carefully, avoiding spills.



Image: Top view of the ECHO CS-590 chainsaw, highlighting the fuel and oil caps for easy access during fueling.

## 2. Filling Chain Oil

The chainsaw requires bar and chain oil to lubricate the guide bar and saw chain during operation. Use a high-quality bar and chain oil. Fill the chain oil tank, ensuring it is not overfilled. Regularly check the chain oil level during operation.



*Image: Close-up of the ECHO CS-590 chainsaw, showing the oil cap and the model number label.*

## OPERATING INSTRUCTIONS

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### 1. Starting the Engine (Cold Start)

1. Place the chainsaw on a firm, flat surface.
2. Engage the chain brake by pushing the front hand guard forward.
3. Move the master control lever to the "COLD START" (choke) position.
4. Press the primer bulb several times until fuel is visible in the return line.
5. Pull the starter handle firmly and quickly until the engine "pops" or attempts to start.
6. Move the master control lever to the "RUN" position.
7. Pull the starter handle again until the engine starts.
8. Allow the engine to warm up for a few moments before disengaging the chain brake and beginning operation.





*Image: Close-up view of the starter handle on the ECHO CS-590 chainsaw, used for manual engine ignition.*

## **2. Starting the Engine (Warm Start)**

1. Engage the chain brake.
2. Move the master control lever to the "RUN" position.
3. Pull the starter handle firmly and quickly until the engine starts.

## **3. Stopping the Engine**

To stop the engine, move the master control lever to the "STOP" position. Ensure the chain has come to a complete stop before setting the chainsaw down.



Image: Close-up of the rear handle and the red stop switch on the ECHO CS-590 chainsaw.

## 4. Basic Cutting Techniques

- **Felling:** Plan your felling direction, clear the area, and make proper felling cuts (notch and back cut).
- **Limbing:** Remove branches from a fallen tree. Work from the base towards the top, cutting smaller branches first.
- **Bucking:** Cut a fallen log into shorter sections. Be aware of tension and compression in the wood to avoid pinching the bar or kickback.

## MAINTENANCE

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Regular maintenance ensures the longevity and safe operation of your chainsaw. Always disconnect the spark plug wire before performing any maintenance.

- **Chain Sharpening:** Keep the saw chain sharp for efficient and safe cutting. Use a round file of the correct diameter for your chain.

- **Guide Bar Maintenance:** Clean the guide bar groove and oil holes regularly. Flip the bar periodically to ensure even wear.
- **Air Filter Cleaning:** Clean the air filter frequently, especially in dusty conditions, to maintain engine performance.
- **Spark Plug Inspection:** Inspect and clean the spark plug periodically. Replace if electrodes are worn or fouled.
- **General Cleaning:** Keep the chainsaw clean from sawdust, debris, and oil residue.



Image: Side view of the ECHO CS-590 chainsaw, showing the engine housing and air intake area, important for maintenance access.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Engine will not start	No fuel, incorrect starting procedure, fouled spark plug, clogged fuel filter.	Check fuel level, follow cold/warm start procedure, clean/replace spark plug, replace fuel filter.



Problem	Possible Cause	Solution
Engine runs poorly	Dirty air filter, stale fuel, incorrect carburetor adjustment.	Clean air filter, use fresh fuel, consult service manual for carburetor adjustment.
Chain not cutting efficiently	Dull chain, incorrect chain tension, worn guide bar.	Sharpen chain, adjust chain tension, inspect/replace guide bar.

## SPECIFICATIONS

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- **Brand:** ECHO
- **Model:** CS-590-20AA
- **Power Source:** Gas Powered
- **Engine Displacement:** 59.8 cc
- **Horsepower:** 5.3 HP
- **Chain Length:** 20 Inches
- **UPC:** 743184009338

## WARRANTY AND SUPPORT

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For detailed warranty information, please refer to the warranty card included with your product or visit the official ECHO website. For technical support, replacement parts, or service, please contact an authorized ECHO service dealer. You can find a dealer near you by visiting the ECHO website or contacting their customer service line.

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

