

Stihl MS 151 TC-E

Stihl MS 151 TC-E Chainsaw User Manual

Model: MS 151 TC-E

INTRODUCTION

This manual provides essential instructions for the safe and efficient operation, maintenance, and care of your Stihl MS 151 TC-E Chainsaw. The Stihl MS 151 TC-E is a lightweight, gasoline-powered chainsaw designed for tree-care applications. It features a manual fuel pump and STIHL ErgoStart (E) for smooth starting, and comes standard with a 1/4"-PM3 chain for refined cutting. This tool is intended for use by trained professionals.

Please read this manual thoroughly before operating the chainsaw to ensure your safety and to achieve optimal performance from the machine. Keep this manual in a safe place for future reference.

IMPORTANT SAFETY INFORMATION

WARNING: Chainsaws can be dangerous. Improper use can result in serious injury or death. Always follow all safety precautions and instructions provided in this manual.

- **Personal Protective Equipment (PPE):** Always wear appropriate PPE, including a helmet with face and hearing protection, safety glasses, heavy-duty gloves, chainsaw protective trousers, and safety boots.
- **Training:** This chainsaw is specifically designed for tree-care and must only be used by trained and qualified personnel.
- **Work Area:** Ensure the work area is clear of bystanders, children, and animals. Maintain a firm footing and balance.
- **Fuel Handling:** Handle fuel with extreme care. Fuel is highly flammable. Mix and refuel outdoors, away from ignition sources.
- **Kickback:** Be aware of kickback hazards. Avoid cutting with the tip of the guide bar.
- **Maintenance:** Regularly inspect and maintain the chainsaw according to the instructions to ensure safe operation.
- **First Aid:** Have a first aid kit readily available and know how to use it.

For detailed safety guidelines, refer to the comprehensive safety section in the full Stihl safety manual.

SETUP AND ASSEMBLY

1. Unpacking

Carefully remove all components from the packaging. Verify that all parts are present and undamaged. Refer to the packing list for a complete inventory.

2. Fuel and Oil Preparation

The MS 151 TC-E uses a 2-stroke engine that requires a mixture of gasoline and 2-stroke engine oil. Use high-quality unleaded gasoline and Stihl 2-stroke engine oil or an equivalent high-quality oil designed for air-cooled 2-stroke engines.

- **Mixing Ratio:** Follow the recommended mixing ratio specified by Stihl, typically 50:1 (50 parts gasoline to 1 part oil).
- **Fuel Tank Capacity:** 0.20 liters.
- **Chain Oil Tank Capacity:** 150 cm³. Use only high-quality chain lubricant.

Important: Always mix fuel in a separate, approved container. Never mix fuel directly in the chainsaw's fuel tank.

3. Bar and Chain Installation

1. Ensure the engine is off and the chain brake is engaged.
2. Remove the chain sprocket cover.
3. Place the guide bar onto the studs, ensuring the bar groove aligns with the drive link of the chain.
4. Fit the chain around the sprocket and into the guide bar groove. Ensure the cutting edges of the chain are facing forward on the top of the guide bar.
5. Replace the chain sprocket cover and hand-tighten the nuts.

4. Chain Tension Adjustment

Proper chain tension is critical for safe and efficient operation. The chain should be snug against the bottom of the guide bar, but still able to be pulled around by hand. Adjust tension using the tensioning screw, then fully tighten the chain sprocket cover nuts.



Image 1: The Stihl MS 151 TC-E Chainsaw, showcasing its compact design and included oil bottles. This image illustrates the overall appearance of the product.

OPERATING INSTRUCTIONS

1. Starting the Engine

The MS 151 TC-E features STIHL ErgoStart (E) for easier starting.

1. Place the chainsaw on a firm, level surface.
2. Engage the chain brake.
3. Set the master control lever to the cold start position (choke on).
4. Press the manual fuel pump (primer bulb) several times until fuel is visible.
5. Pull the starter cord firmly until the engine fires briefly.
6. Move the master control lever to the half-throttle position.
7. Pull the starter cord again until the engine starts and runs.
8. Blip the throttle to disengage the half-throttle and allow the engine to idle.
9. Disengage the chain brake before beginning to cut.

2. Cutting Techniques

Always maintain a secure grip with both hands. Ensure proper footing and balance. Plan your cuts to avoid kickback and falling hazards. For detailed cutting techniques, especially in tree-care, professional training is required and highly recommended.

3. Stopping the Engine

To stop the engine, move the master control lever to the STOP position. Engage the chain brake immediately after stopping the engine.

MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your Stihl MS 151 TC-E Chainsaw. Always ensure the engine is off and cool, and the spark plug cap is removed before performing any maintenance.

- **Daily Checks:**
 - Check chain tension.
 - Inspect chain for sharpness and damage.
 - Check guide bar for wear and burrs.
 - Verify chain brake function.
 - Check fuel and chain oil levels.
- **Chain Sharpening:** A sharp chain is crucial for efficient and safe cutting. Sharpen the chain regularly using a round file of the correct diameter (refer to chain specifications) and a filing gauge. If unsure, have it professionally sharpened.
- **Cleaning:**
 - Clean the air filter regularly.
 - Remove sawdust and debris from the cooling fins, chain sprocket area, and guide bar groove.
- **Spark Plug:** Inspect and clean the spark plug periodically. Replace if electrodes are worn or fouled.
- **Storage:** For long-term storage, drain the fuel tank and run the engine until it stops. Clean the chainsaw thoroughly and store it in a dry, secure location.

TROUBLESHOOTING

This section addresses common issues you might encounter with your chainsaw. For problems not listed here, or if you are unsure, contact an authorized Stihl service dealer.

Problem	Possible Cause	Solution
Engine does not start.	No fuel, incorrect starting procedure, fouled spark plug, clogged fuel filter.	Check fuel level, follow starting instructions carefully, clean/replace spark plug, clean/replace fuel filter.
Engine starts but stalls.	Incorrect carburetor adjustment, clogged air filter, old fuel.	Adjust carburetor (professional service recommended), clean air filter, use fresh fuel.
Chain does not cut efficiently.	Dull chain, incorrect chain tension, chain installed backward.	Sharpen or replace chain, adjust chain tension, ensure chain is installed correctly.
No chain oil flow.	Empty oil tank, clogged oil outlet, damaged oil pump.	Refill oil tank, clean oil outlet, contact service for oil pump issues.

TECHNICAL SPECIFICATIONS

Below are the key technical specifications for the Stihl MS 151 TC-E Chainsaw:

- **Model:** MS 151 TC-E
- **Engine Type:** 2-MIX Motor, Gasoline-powered
- **Displacement:** 23.6 cm³
- **Power Output:** 1.5 CV (1.0 kW)
- **Weight (without fuel, guide bar, and chain):** 2.6 kg (5.73 lbs)
- **Guide Bar Length:** 25 cm (1/4 Bar)
- **Chain Type:** 1/4"-PM3
- **Chain Step:** 1/4 inch P
- **Sound Pressure Level:** 96 dB(A)
- **Sound Power Level:** 109 dB(A)
- **Vibration Value Left Handle:** 4.9 m/s²
- **Vibration Value Right Handle:** 4.9 m/s²
- **Fuel Tank Capacity:** 0.20 liters
- **Chain Oil Tank Capacity:** 150 cm³
- **Maximum RPM with Pmax:** 10,000 revolutions/minute
- **UPC:** 886661851805



Image 2: Side view of the Stihl MS 151 TC-E Chainsaw, illustrating its compact dimensions (29 cm height, 49 cm length) and lightweight design (2.6 kg).

WARRANTY INFORMATION

Stihl products are manufactured to high-quality standards. For specific warranty terms and conditions applicable to your Stihl MS 151 TC-E Chainsaw, please refer to the warranty card included with your purchase or visit the official Stihl website for your region. Warranty coverage typically includes defects in materials and workmanship under normal use and service.

Note: Unauthorized modifications, improper maintenance, or use of non-genuine Stihl parts may void your warranty.

CUSTOMER SUPPORT

Should you require assistance, have questions, or need service for your Stihl MS 151 TC-E Chainsaw, please contact your authorized Stihl dealer. Stihl dealers are equipped with trained technicians and genuine Stihl parts to provide expert service and support.

You can find your nearest authorized Stihl dealer by visiting the official Stihl website: www.stihl.com