Stihl 1216111-055

Stihl Chainsaw Chain Instruction Manual

Model: 1216111-055

1. Product Overview

This manual provides essential information for the safe and effective use of your Stihl Picco Micro Mini Comfort 3 (PMMC3) chainsaw chain. This low-profile saw chain is designed for occasional users in work and leisure activities, offering good cutting performance, low vibration, reduced kickback tendency, and high comfort. It is equipped with the Stihl Oilomatic 3 lubrication system.

The low-profile saw chain is particularly recommended for professional tree care, limbing work, and felling small timber. It is suitable for professional use in industries such as gardening and landscaping, forestry, carpentry, sawmills, agriculture, as well as for demanding private users.



Figure 1: Stihl Picco Micro Mini Comfort 3 (PMMC3) chainsaw chain in its packaging. The packaging displays the Stihl logo and "Oilomatic" branding, along with the model number 1216111-055.

2. Safety Information

Always prioritize safety when working with chainsaws and chainsaw chains. Failure to follow safety instructions can result in serious injury or death.

- **Read the Chainsaw Manual:** Always refer to your chainsaw's instruction manual for specific safety guidelines, installation, and operation procedures.
- **Wear Personal Protective Equipment (PPE):** Always wear appropriate PPE, including a helmet with face shield, hearing protection, safety glasses, heavy-duty gloves, chainsaw protective trousers, and safety boots.
- **Inspect Before Use:** Before each use, inspect the chain, guide bar, and chainsaw for damage, wear, or loose parts. Replace damaged components immediately.
- **Proper Tension:** Ensure the chain is correctly tensioned according to your chainsaw manufacturer's instructions. An improperly tensioned chain can derail or cause kickback.

- **Sharp Chain:** A sharp chain cuts efficiently and reduces the risk of kickback. A dull chain requires more force, increasing fatigue and the risk of accidents.
- **Lubrication:** Ensure the chainsaw's automatic oiler is functioning correctly and the chain is adequately lubricated during operation.
- **Kickback Awareness:** Be aware of the risk of kickback. Avoid cutting with the tip of the guide bar and maintain a firm grip on the chainsaw.

3. Setup and Installation

Installing the chainsaw chain correctly is crucial for safe and efficient operation. Always consult your chainsaw's specific manual for detailed instructions.

1. **Ensure Safety:** Turn off the chainsaw engine, engage the chain brake, and disconnect the spark plug wire (for gasoline models) or remove the battery (for electric models) to prevent accidental starting.
2. **Remove Old Chain (if applicable):** Loosen the bar nuts and remove the clutch cover. Carefully remove the old chain and guide bar.
3. **Clean Components:** Clean the guide bar groove, sprocket, and clutch area thoroughly to remove sawdust and debris.
4. **Install New Chain:** Place the new Stihl chain around the drive sprocket, ensuring the cutting edges face the correct direction (usually forward on the top of the guide bar).
5. **Mount Guide Bar:** Fit the guide bar over the bar studs and slide the chain into the guide bar groove.
6. **Replace Clutch Cover:** Reinstall the clutch cover and hand-tighten the bar nuts.
7. **Adjust Chain Tension:** While holding the tip of the guide bar up, adjust the chain tensioning screw until the chain fits snugly against the guide bar, but can still be pulled around by hand without binding. The drive links should not come out of the guide bar groove on the underside.
8. **Tighten Bar Nuts:** Fully tighten the bar nuts while still holding the guide bar tip up.
9. **Final Check:** Ensure the chain moves freely and the tension is correct. Reconnect the spark plug wire or battery.



Figure 2: A Stihl chainsaw chain correctly installed on a guide bar, ready for operation. The chain's drive links are seated within the guide bar groove.

4. Operating Instructions

This Stihl PMMC3 chain is designed for efficient cutting. Always operate your chainsaw according to the manufacturer's guidelines.

- **Lubrication:** Ensure the chainsaw's oil tank is filled with appropriate chain lubricant. The Stihl Oilomatic 3 system requires proper lubrication for optimal performance and chain longevity.
- **Starting the Chainsaw:** Follow your chainsaw's specific starting procedure.
- **Cutting Technique:** Use a steady, controlled motion. Let the chain do the work. Avoid forcing the chain into the wood, as this can lead to premature wear and increased kickback risk.
- **Monitor Chain Performance:** If the chain starts to cut slowly, produce fine sawdust instead of chips, or pull to one

side, it likely needs sharpening or inspection.

- **Check Tension During Operation:** Chain tension can change as the chain heats up. Periodically check and adjust tension during extended use, always with the engine off and chain brake engaged.

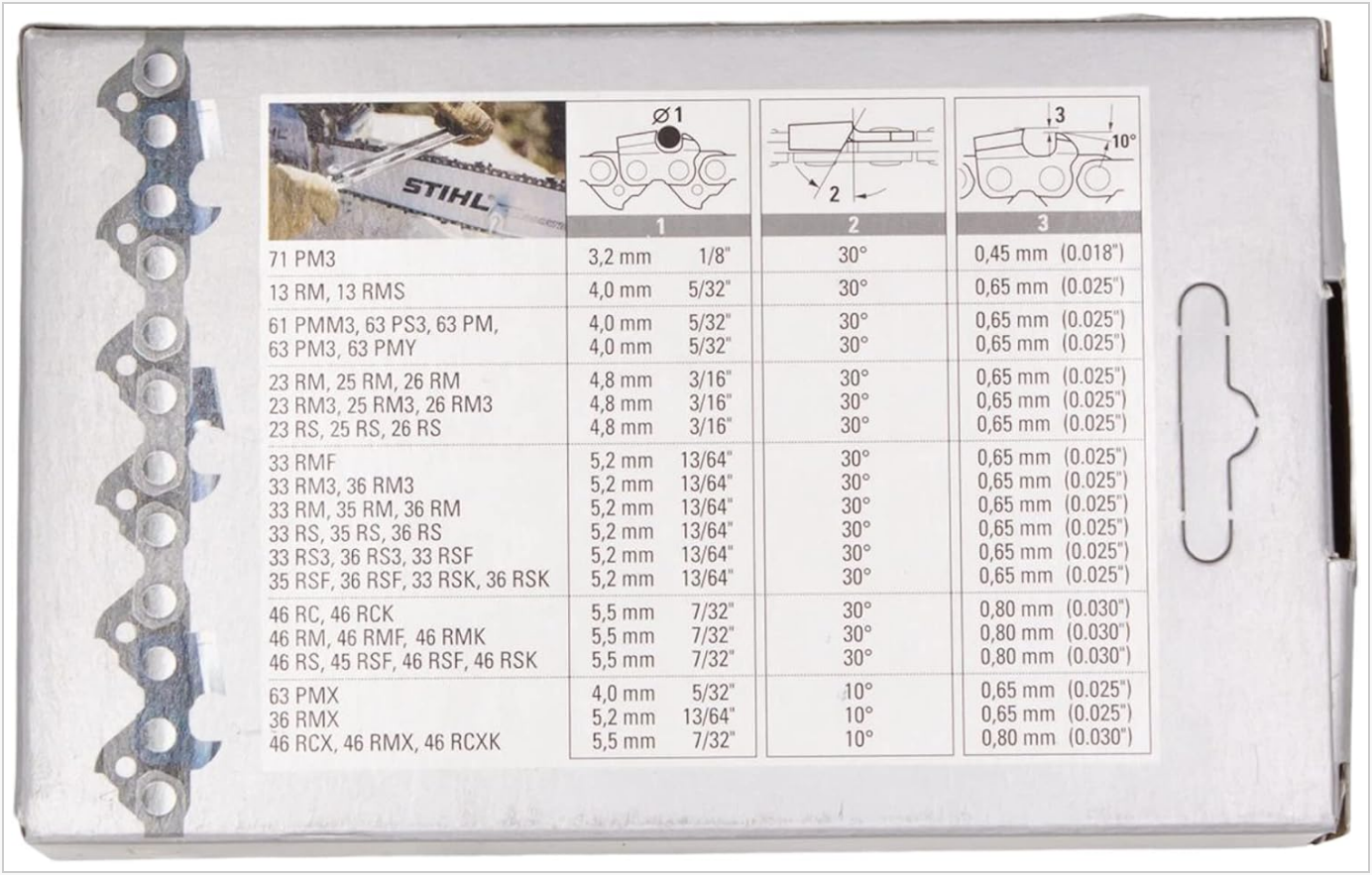
5. Maintenance

Regular maintenance extends the life of your Stihl chainsaw chain and ensures safe operation.

5.1. Sharpening

A sharp chain is essential for safe and efficient cutting. The Stihl PMMC3 chain requires specific sharpening angles and file sizes.

- **File Size:** Use the correct round file size for 3/8LP Picco chains. Refer to your chainsaw manual or a Stihl dealer for the exact diameter.
- **Sharpening Angle:** Maintain the correct sharpening angle (typically 30 degrees for the top plate and 10 degrees for the side plate angle, but always verify with Stihl guidelines or the diagram below).
- **Depth Gauge Setting:** Check and adjust the depth gauge setting after sharpening. The depth gauge determines the amount of wood the cutter takes.
- **Even Sharpening:** Sharpen all cutters evenly to maintain balance and straight cutting.



	1		2	3
71 PM3	3,2 mm	1/8"	30°	0,45 mm (0.018")
13 RM, 13 RMS	4,0 mm	5/32"	30°	0,65 mm (0.025")
61 PMM3, 63 PS3, 63 PM,	4,0 mm	5/32"	30°	0,65 mm (0.025")
63 PM3, 63 PMY	4,0 mm	5/32"	30°	0,65 mm (0.025")
23 RM, 25 RM, 26 RM	4,8 mm	3/16"	30°	0,65 mm (0.025")
23 RM3, 25 RM3, 26 RM3	4,8 mm	3/16"	30°	0,65 mm (0.025")
23 RS, 25 RS, 26 RS	4,8 mm	3/16"	30°	0,65 mm (0.025")
33 RMF	5,2 mm	13/64"	30°	0,65 mm (0.025")
33 RM3, 36 RM3	5,2 mm	13/64"	30°	0,65 mm (0.025")
33 RM, 35 RM, 36 RM	5,2 mm	13/64"	30°	0,65 mm (0.025")
33 RS, 35 RS, 36 RS	5,2 mm	13/64"	30°	0,65 mm (0.025")
33 RS3, 36 RS3, 33 RSF	5,2 mm	13/64"	30°	0,65 mm (0.025")
35 RSF, 36 RSF, 33 RSK, 36 RSK	5,2 mm	13/64"	30°	0,65 mm (0.025")
46 RC, 46 RCK	5,5 mm	7/32"	30°	0,80 mm (0.030")
46 RM, 46 RMF, 46 RMK	5,5 mm	7/32"	30°	0,80 mm (0.030")
46 RS, 45 RSF, 46 RSF, 46 RSK	5,5 mm	7/32"	30°	0,80 mm (0.030")
63 PMX	4,0 mm	5/32"	10°	0,65 mm (0.025")
36 RMX	5,2 mm	13/64"	10°	0,65 mm (0.025")
46 RCX, 46 RMX, 46 RCXK	5,5 mm	7/32"	10°	0,80 mm (0.030")

Figure 3: Diagram illustrating various Stihl chain types and their recommended sharpening parameters, including file diameter, top plate angle, and depth gauge setting. Consult this chart or your chainsaw manual for precise sharpening instructions for your PMMC3 chain.

5.2. Cleaning and Inspection

- **After Each Use:** Clean the chain, guide bar groove, and sprocket area to remove sap, sawdust, and debris.
- **Inspect for Damage:** Regularly inspect the chain for bent or cracked links, stretched rivets, or excessive wear. Replace the chain if any significant damage is found.
- **Lubrication System:** Ensure the oil holes on the guide bar are clear and the automatic oiler is functioning correctly.



Figure 4: A close-up view of Stihl chainsaw chain links, showing the cutters, drive links, and rivets. Regular inspection of these components is vital for safety and performance.

6. Troubleshooting

This section addresses common issues you might encounter with your chainsaw chain.

- **Chain Cuts Poorly or Slowly:**
  - **Cause:** Dull chain, incorrect sharpening angle, incorrect depth gauge setting.
  - **Solution:** Sharpen the chain correctly, ensuring proper angles and depth gauge settings.
- **Chain Pulls to One Side:**
  - **Cause:** Cutters on one side are duller or shorter than the other side.

- **Solution:** Resharpen the chain, ensuring all cutters are of equal length and sharpness.

- **Chain Jumps Off Guide Bar:**
  - **Cause:** Incorrect chain tension (too loose), worn guide bar groove, worn drive sprocket.
  - **Solution:** Adjust chain tension, inspect and replace worn guide bar or sprocket if necessary.
- **Chain Overheats or Smokes:**
  - **Cause:** Insufficient lubrication, incorrect chain tension (too tight), dull chain.
  - **Solution:** Check oiler function and oil level, adjust chain tension, sharpen chain.

7. Specifications

Feature	Specification
Brand	Stihl
Model Number	1216111-055
Chain Type	Picco Micro Mini Comfort 3 (PMMC3), Low Profile
Pitch	3/8LP (Low Profile)
Gauge (Drive Link Thickness)	1.1 mm
Number of Drive Links	55
Lubrication System	Stihl Oilomatic 3

Note: Always verify compatibility with your specific chainsaw model before purchase and installation.

8. Warranty and Support

For warranty information and technical support regarding your Stihl chainsaw chain, please refer to the official Stihl website or contact an authorized Stihl dealer.

- **Official Stihl Website:** www.stihl.com
- **Authorized Dealer Locator:** Visit the Stihl website to find a dealer near you for service, parts, and expert advice.

Keep your purchase receipt as proof of purchase for any warranty claims.

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Details

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