



[Manuals.plus](#) /

> [Archer](#) /

> Archer 16-inch Chainsaw Chain (Model D-050-54DL) User Manual

Archer D-050-54DL

Archer 16-inch Chainsaw Chain User Manual

Model: D-050-54DL

1. PRODUCT OVERVIEW

This Archer chainsaw chain is a high-quality, professional-grade replacement chain designed for 16-inch guide bars. It features a 3/8LP pitch, .050 gauge, and 54 drive links. This chain is compatible with various chainsaw brands, including McCulloch, that utilize these specifications. All Archer chains are manufactured from high-quality Japanese steel, ensuring durability and performance.



A general view of the Archer 16-inch chainsaw chain, highlighting its design and construction.

Important Note: This is a non-safety professional chainsaw chain. Users should be aware of its characteristics and handle it with extreme caution, always following all chainsaw safety guidelines.

2. SETUP AND INSTALLATION

Understanding Chain Specifications

To ensure proper fit and safe operation, it is crucial to understand the key specifications of your chainsaw chain and guide bar:

- **Pitch:** The distance between any three consecutive rivets, divided by two. This must match your chainsaw's sprocket and guide bar nose.
- **Gauge:** The thickness of the drive link, which fits into the guide bar groove. This must match the groove width of your guide bar.
- **Drive Links:** The total number of links that engage with the sprocket. This count must be exact for your guide bar length.

- **Bar Length:** The cutting length of the guide bar, typically measured from the front of the saw to the tip of the farthest cutter, rounded to the nearest inch.



This diagram illustrates the critical measurements for a chainsaw chain: chain pitch (distance between three consecutive rivets divided by two), cutting length (distance from the front of the saw to the tip of the farthest cutter), depth gauge (drive link's thickness), and drive links count.

Matching Your Chain

Always ensure your replacement chain matches the correct pitch, gauge, and drive link count of your existing chain and guide bar. Incorrect specifications can lead to improper fit, poor performance, and significant safety hazards. If you are unsure, consult your chainsaw's owner's manual or contact a qualified technician.

Installation Steps (General Guidelines)

1. **Safety First:** Ensure the chainsaw is turned off. For gas saws, disconnect the spark plug cap. For electric saws, remove the battery or unplug from the power source.
2. **Remove Old Chain:** Loosen the clutch cover nuts and remove the clutch cover. Carefully remove the old chain and guide bar.
3. **Clean Components:** Clean any sawdust, debris, or old oil from the guide bar groove, sprocket area, and clutch cover.
4. **Install New Chain:** Place the new Archer chain around the drive sprocket and then guide it into the groove of the guide bar. Ensure the cutting edges of the chain cutters are facing the correct direction (typically indicated by an arrow on the chain or guide bar).
5. **Reinstall Cover:** Position the guide bar onto the studs and replace the clutch cover. Hand-tighten the nuts, but do not fully secure them yet.
6. **Adjust Chain Tension:** While holding the tip of the guide bar up, adjust the chain tensioning screw until the chain is snug against the guide bar. The chain should be able to be pulled freely by hand around the bar, but there should be no slack on the underside of the bar, and the drive links should sit fully in the bar groove.
7. **Secure Cover:** Once the tension is correct, fully tighten the clutch cover nuts.
8. **Final Check:** Re-check the chain tension after tightening the nuts, as it can sometimes change. The chain should not sag, but also not be overly tight, which can cause premature wear and overheating.

3. OPERATING INSTRUCTIONS

Proper operation of your chainsaw with the Archer chain ensures efficiency and safety.

- **Lubrication:** Always ensure the chainsaw's oil reservoir is filled with appropriate bar and chain oil before each use. Proper lubrication is crucial for chain longevity, efficient cutting, and preventing overheating.
- **Chain Sharpness:** Operate only with a sharp chain. A dull chain can cause the saw to work harder, leading to increased wear on the chain and saw, reduced cutting efficiency, and a higher risk of kickback.
- **Safe Operation:** Always follow the safety guidelines provided in your chainsaw's owner's manual. Wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, gloves, and sturdy footwear. Maintain a firm grip on the saw and a balanced stance.
- **Avoid Kickback:** Be aware of the kickback danger zone at the tip of the guide bar. Avoid cutting with

this area.

4. MAINTENANCE

Regular maintenance extends the life of your Archer chainsaw chain and ensures safe, efficient cutting.



A detailed view of the Archer chainsaw chain, highlighting the construction of the drive links and cutting teeth, which are made from high-quality Japanese steel.

- **Sharpening:** Regularly sharpen the chain cutters using a round file of the correct diameter for your chain's pitch (typically 5/32" for 3/8LP pitch). Maintain the correct filing angles as specified by your chainsaw or chain manufacturer. A sharp chain cuts efficiently and safely.
- **Cleaning:** After each use, clean the chain and guide bar thoroughly to remove sawdust, sap, and debris. This prevents buildup that can hinder performance and cause premature wear.
- **Inspection:** Periodically inspect the chain for damaged or worn cutters, cracked drive links, or stretched rivets. Replace the chain if any significant damage or wear is observed. Also, inspect the guide bar for burrs or uneven wear, which can affect chain performance.
- **Storage:** Store the chain in a clean, dry place when not in use. If storing for extended periods, apply a light coat of oil to the chain to prevent rust.

5. TROUBLESHOOTING

Here are some common issues and their potential solutions:

- **Chain Cuts Slowly or Produces Fine Dust:**
Solution: The chain is likely dull and needs sharpening. Ensure proper filing angles are maintained.
- **Chain Jumps Off Guide Bar:**
Solution: This can be caused by incorrect chain tension (too loose), a worn guide bar, or a stretched chain. Check and adjust tension. Inspect the guide bar for wear or damage. Consider replacing the chain if it is significantly stretched.
- **Chain Binds or Smokes During Operation:**
Solution: Insufficient lubrication, incorrect chain tension (too tight), or a dull chain can cause binding or smoking. Ensure the oil reservoir is full, the tension is correct, and the chain is sharp.

- **Uneven Cutting:**

Solution: This often indicates unevenly sharpened cutters. Ensure all cutters are sharpened to the same length and angle.

6. SPECIFICATIONS

Attribute	Specification
Brand	Archer
Model Number	D-050-54DL
Chain Type	Full Chisel
Item Length	16 Inches
Chain Length	16 Inches
Drive Link Count	54
Pitch	3/8LP
Gauge	.050

7. WARRANTY AND SUPPORT

For warranty information or technical support regarding your Archer chainsaw chain, please contact Archer customer service through their official website or the retailer where the product was purchased. It is recommended to keep your purchase receipt as proof of purchase for any warranty claims.