

## Archer D-043-40DL

# Archer 10-inch Chainsaw Chain (Model D-043-40DL) Instruction Manual

High-Quality Replacement Chainsaw Chain

## 1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Archer 10-inch Chainsaw Chain, Model D-043-40DL. This high-quality replacement chain is designed for various pole saws, pruners, and chainsaws that utilize a 10-inch guide bar with specific pitch, gauge, and drive link specifications. It is manufactured from durable Japanese steel to ensure reliable performance.

This chain is compatible with numerous models, including Ryobi ONE 18V Cordless Chainsaws (P540, P542, P543, P546, P547, RY52504), Worx, Bauer, and AEG models. It also serves as a replacement for Oregon part numbers 90PX040G, 90VXL040G, and 90VG040G, and Stihl part number 61PMN-40.



**Image 1.1:** Archer 10-inch Chainsaw Chain in its packaging. The label clearly displays the part number D-043-40DL, 3/8LP pitch, .043 gauge, 40 drive links, semi-chisel cutter type, 10-inch bar length, and recommended 5/32" (4.0mm) file size for sharpening.

## 2. SETUP AND INSTALLATION

Proper installation of the chainsaw chain is critical for safe and efficient operation. Always ensure the chainsaw is turned off and the battery is removed (for cordless models) or spark plug wire disconnected (for gas models) before handling the chain.

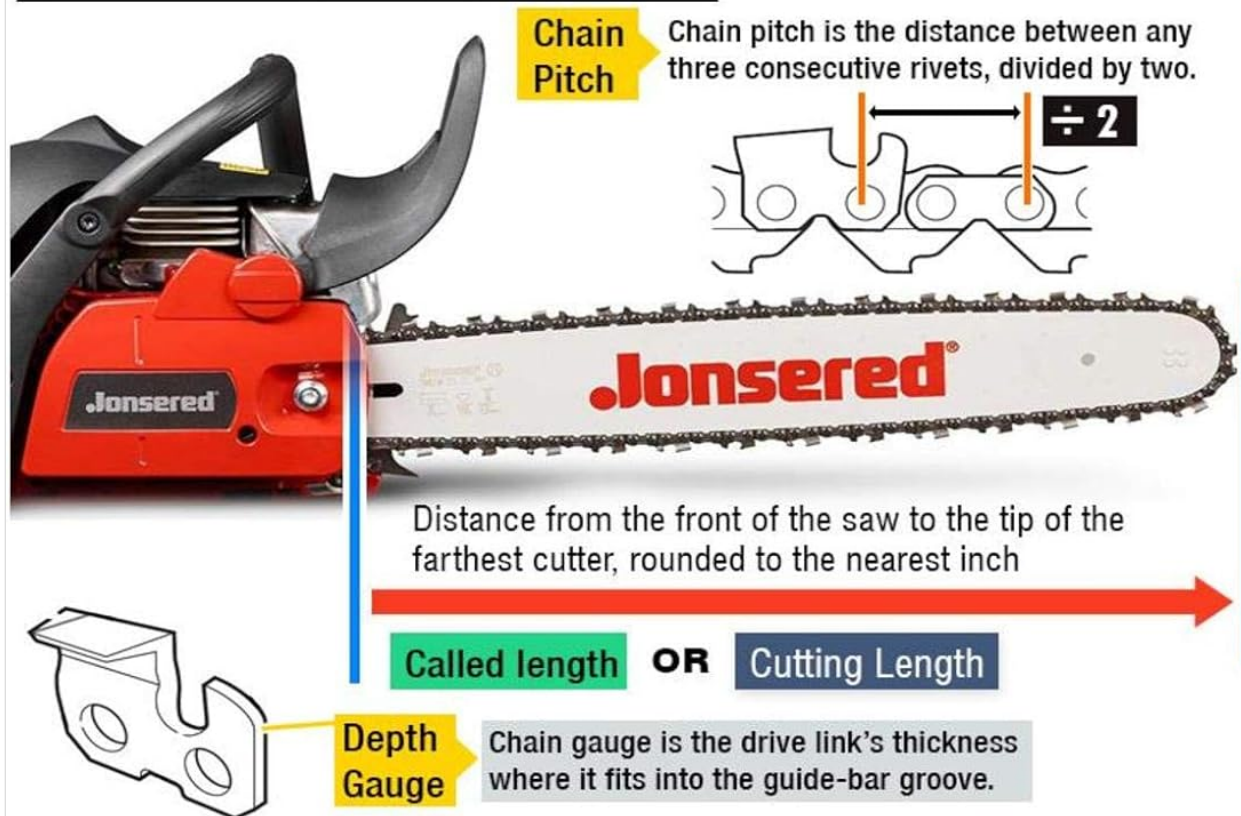
## 2.1. Verifying Chain Compatibility

Before installation, confirm that the replacement chain matches the specifications of your chainsaw's guide bar. Key parameters include:

- **Pitch:** The distance between any three consecutive rivets, divided by two.
- **Gauge:** The thickness of the drive link, which fits into the guide bar groove.
- **Drive Links:** The total count of drive links on the chain.
- **Bar Length:** The cutting length of the guide bar.

All chainsaw chains are called length, and sold by pitch, gauge, and drive link count and your replacement chain will always fit when you match the correct pitch, gauge, and drive link count.

## How to Measure A Chainsaw Bar



|             |  |
|-------------|--|
| PITCH       |  |
| GAUGE       |  |
| BAR LENGTH  |  |
| DRIVE LINKS |  |

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**Image 2.1:** A visual guide illustrating how to accurately measure the chain pitch, chain gauge, bar length (or cutting length), and count the drive links on a chainsaw chain. This ensures correct replacement chain selection.

### 2.2. Installation Steps (General)

1. **Safety First:** Disconnect power source (remove battery or spark plug wire).
2. **Remove Bar Cover:** Loosen the bar nuts and remove the side cover that holds the guide bar in place.
3. **Remove Old Chain:** Carefully remove the old chain from the guide bar and sprocket.

4. **Clean:** Clean any sawdust or debris from the guide bar groove, sprocket, and chain brake area.
5. **Install New Chain:** Place the new Archer chain onto the sprocket, ensuring the cutting edges of the chain cutters face forward (in the direction of rotation).
6. **Fit to Guide Bar:** Guide the chain into the groove of the guide bar.
7. **Reattach Bar Cover:** Position the guide bar and chain back onto the chainsaw studs. Reinstall the side cover and hand-tighten the bar nuts.
8. **Adjust Chain Tension:** Adjust the chain tension screw until the chain is snug but can still be pulled freely around the guide bar by hand. There should be no slack on the underside of the bar, and the drive links should not lift out of the bar groove.
9. **Final Tightening:** While holding the tip of the guide bar up, fully tighten the bar nuts.
10. **Check Tension:** Re-check chain tension after tightening. It may loosen slightly.

### 3. OPERATING INSTRUCTIONS

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This Archer chainsaw chain is a non-safety professional chainsaw chain. It is designed for efficient cutting. Always refer to your chainsaw's specific operating manual for detailed safety guidelines and operating procedures.

#### 3.1. Pre-Operation Check

- Ensure the chain is correctly tensioned. A properly tensioned chain should be snug against the guide bar but still allow you to pull it around the bar by hand without excessive force.
- Verify that the chain is adequately lubricated.
- Inspect the chain for any damage or dullness. A sharp chain is essential for safe and effective cutting.

#### 3.2. Safe Operation Practices

- Always wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, gloves, and sturdy footwear.
- Maintain a firm grip on the chainsaw with both hands.
- Be aware of kickback potential, especially with non-safety chains. Avoid cutting with the tip of the guide bar.
- Do not operate a chainsaw when fatigued or under the influence of substances.

### 4. MAINTENANCE

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Regular maintenance extends the life of your Archer chainsaw chain and ensures optimal cutting performance.

#### 4.1. Sharpening

The Archer D-043-40DL chain features a semi-chisel cutter type. For sharpening, use a **5/32" (4.0mm) round file**. Sharpen each cutter uniformly, maintaining the original angle. Consistent sharpening is crucial for balanced cutting and chain longevity.

#### 4.2. Cleaning and Lubrication

- After each use, clean the chain to remove sap, sawdust, and debris.
- Ensure your chainsaw's automatic oiler is functioning correctly and that the oil reservoir is filled with appropriate bar and chain oil.

- Proper lubrication reduces friction and heat, preventing premature wear.

### 4.3. Inspection

- Regularly inspect the chain for dullness, cracks, broken links, or stretched rivets.
- Replace the chain if it shows signs of significant wear or damage that cannot be corrected by sharpening.

## 5. TROUBLESHOOTING

Common issues with chainsaw chains can often be resolved with simple checks and adjustments.

- **Chain Not Cutting Effectively:**
  - **Cause:** Dull chain.
  - **Solution:** Sharpen the chain using a 5/32" (4.0mm) file or replace it if severely worn.
- **Chain Smoking or Overheating:**
  - **Cause:** Insufficient lubrication or improper chain tension (too tight).
  - **Solution:** Check bar oil level and ensure the oiler is working. Adjust chain tension to be snug but free-moving.
- **Chain Derailing from Guide Bar:**
  - **Cause:** Loose chain tension, worn guide bar groove, or damaged drive links.
  - **Solution:** Adjust chain tension. Inspect guide bar and chain for wear and replace components as necessary.

## 6. SPECIFICATIONS

| Specification            | Detail                      |
|--------------------------|-----------------------------|
| Model Number             | D-043-40DL                  |
| Brand                    | Archer                      |
| Pitch                    | 3/8" LP (Low Profile)       |
| Gauge                    | .043" (1.1mm)               |
| Drive Links              | 40                          |
| Bar Length Compatibility | 10 inches (25cm)            |
| Cutter Type              | Semi-Chisel                 |
| Recommended File Size    | 5/32" (4.0mm)               |
| Material                 | High-Quality Japanese Steel |
| Manufacturer             | PMD International           |

## 7. WARRANTY AND SUPPORT

Information regarding specific warranty terms for the Archer 10-inch Chainsaw Chain is not available in the provided product data. For warranty inquiries or technical support, please contact the seller, ArcherPlus, or the manufacturer, PMD International, directly.

When contacting support, please have your product model number (D-043-40DL) and purchase details readily available.

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This manual is for informational purposes only. Always prioritize safety when operating power tools.