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Homelite 870170001

Homelite 870170001 Chainsaw Spark Plug Installation and Maintenance Manual

Model: 870170001 | Brand: Homelite

INTRODUCTION

This manual provides essential instructions for the proper installation, maintenance, and troubleshooting of the Homelite 870170001 Chainsaw Replacement Champion RCJ4 Spark Plug. Adhering to these guidelines will help ensure optimal performance and longevity of your chainsaw engine. Always consult your chainsaw's original owner's manual for specific model requirements and safety procedures.

SAFETY INFORMATION

Always prioritize safety when working with power tools and engine components. Failure to follow safety instructions can result in serious injury or damage to equipment.

- **Disconnect Power:** Before performing any maintenance or installation, ensure the chainsaw engine is turned off and the spark plug wire is disconnected to prevent accidental starting.
- **Engine Cool Down:** Allow the engine to cool completely before handling the spark plug. Hot engine components can cause severe burns.
- **Eye Protection:** Always wear appropriate eye protection to shield against debris.
- **Gloves:** Wear work gloves to protect hands from sharp edges and hot surfaces.
- **Ventilation:** Work in a well-ventilated area.

SETUP AND INSTALLATION

Proper installation is crucial for the spark plug's function and engine performance.

Tools Required:

- Spark plug wrench (typically 13/16 inch or 19mm, consult chainsaw manual)
- Feeler gauge (for checking gap, if necessary)
- Clean cloth or brush

Installation Steps:

1. **Preparation:** Ensure the chainsaw is off, cool, and the spark plug wire is disconnected. Clean the area around the existing spark plug to prevent debris from entering the combustion chamber when the plug is removed.
2. **Remove Old Spark Plug:** Carefully pull the spark plug boot off the existing spark plug. Use the spark plug wrench to loosen and remove the old spark plug by turning it counter-clockwise.
3. **Inspect New Spark Plug:** Before installation, visually inspect the new Homelite 870170001 (Champion RCJ4) spark plug for any damage. The spark plug gap is typically pre-set by the manufacturer, but it is advisable to verify it against your chainsaw's specifications using a feeler gauge. Adjust if necessary by carefully bending the ground electrode.
4. **Install New Spark Plug:** Thread the new spark plug into the cylinder head by hand, turning clockwise. Ensure it threads smoothly to avoid cross-threading. Once finger-tight, use the spark plug wrench to tighten it. For new spark plugs, tighten approximately 1/2 to 2/3 of a turn after finger-tight. For used spark plugs (if reinstalling), tighten 1/12 of a turn. *Do not overtighten*, as this can damage the cylinder head threads.
5. **Reconnect Spark Plug Wire:** Firmly push the spark plug boot back onto the new spark plug until it clicks into place, ensuring a secure connection.



A close-up view of the Homelite 870170001 Chainsaw Replacement Champion RCJ4 Spark Plug, showing its metal casing, ceramic insulator, and electrode tip. This image illustrates the component to be installed.

OPERATING CONSIDERATIONS

While the spark plug itself does not have "operating" instructions, its proper function is integral to the chainsaw's operation. Ensure your chainsaw is operated according to its manufacturer's guidelines, including using the correct fuel-to-oil mixture. An incorrect fuel mixture can lead to spark plug fouling or premature wear.

MAINTENANCE

Regular inspection and timely replacement of the spark plug are essential for maintaining engine efficiency and preventing starting issues.

- **Inspection:** Periodically remove the spark plug and inspect its condition. Look for signs of wear, carbon buildup (fouling), or electrode damage. A healthy spark plug typically has a light tan or grayish-brown color on the insulator tip.
- **Cleaning:** If the spark plug shows minor carbon buildup, it can sometimes be cleaned with a wire brush and spark plug cleaner. However, excessive fouling often indicates other engine issues that need addressing.
- **Replacement Schedule:** Consult your chainsaw's owner's manual for the recommended spark plug replacement interval. Generally, spark plugs should be replaced annually or every 50 operating hours, whichever comes first, to ensure reliable starting and optimal engine performance.

TROUBLESHOOTING

If your chainsaw experiences starting difficulties or poor performance, the spark plug is often a primary component to check.

- **Engine Not Starting:**
 - Check if the spark plug wire is securely connected.
 - Remove the spark plug and inspect for fouling or damage. A wet plug might indicate a flooded engine. A dry plug might indicate a fuel delivery issue.
 - Test for spark: With the spark plug connected to the wire and grounded against the engine block (*use insulated pliers and exercise extreme caution*), pull the starter cord. A strong blue spark should be visible. If no spark, the plug may be faulty, or there could be an ignition system problem.
- **Poor Engine Performance (Misfires, Loss of Power):**
 - Inspect the spark plug for signs of wear, incorrect gap, or fouling.
 - Ensure the correct spark plug type (Champion RCJ4 or equivalent) is installed.

If troubleshooting steps do not resolve the issue, consult a qualified service technician or refer to your chainsaw's comprehensive service manual.

SPECIFICATIONS

Model Number	870170001
Equivalent Spark Plug	Champion RCJ4
Brand	Homelite (Genuine Replacement Part)

Product Dimensions	1 x 1 x 3.75 inches
Item Weight	0.96 ounces
Core Material	Copper
Vehicle Service Type	Chainsaw
UPC	704660072048

WARRANTY AND SUPPORT

This Homelite replacement part is covered by the manufacturer's standard warranty. For specific warranty details, claims, or technical support, please refer to the documentation provided with your original Homelite chainsaw or contact Homelite customer service directly. Always ensure you are using genuine replacement parts to maintain warranty validity and optimal performance.

