

RYOBI P320

RYOBI 18-Volt ONE+ AirStrike 18-Gauge Cordless Brad Nailer Instruction Manual

Model: P320

INTRODUCTION

The RYOBI 18-Volt ONE+ AirStrike 18-Gauge Cordless Brad Nailer (Model P320) is designed for efficient and convenient fastening without the need for air compressors, bulky hoses, or expensive gas cartridges. This tool is part of the versatile RYOBI ONE+ system, offering superior performance for various projects. It is capable of driving 18-gauge nails ranging from 5/8 inches (15.9 mm) to 2 inches (50.8 mm) in length.

Key features include:

- Cordless design for enhanced convenience and mobility.
- AirStrike Technology eliminates the need for compressors, hoses, or gas cartridges.
- Capable of driving up to 60 nails per minute.



Image: The RYOBI 18-Volt ONE+ AirStrike 18-Gauge Cordless Brad Nailer, showcasing its lime green and black design with the nail magazine and battery port visible.

SETUP

Before operating the brad nailer, ensure proper setup for safe and effective use.

1. Loading Nails

1. To open the nail magazine, pinch the release mechanism located at the front of the magazine.
2. Slide the magazine cover down.
3. Insert the strip of 18-gauge brad nails into the magazine. Ensure the nails are oriented correctly.
4. Drive the magazine cover back until it clicks securely into place.

2. Battery Installation

The RYOBI P320 is a tool-only unit and does not include a battery with purchase. You will need a compatible RYOBI ONE+ 18-Volt Lithium-Ion battery (sold separately).

1. Align the battery with the battery port at the base of the tool handle.
2. Slide the battery firmly into the port until it clicks into place.

3. Adjusting Nail Depth

The depth of the nail can be adjusted to ensure proper fastening for different materials.

- Locate the depth adjustment dial on the side of the nailer, near the nose.
- Spin the dial to adjust the nail head's protrusion. Spinning it inward will drive the nail further into the material, while spinning it outward will leave the nail head more exposed.

4. Adjusting Pressure

The pressure dial on the back of the tool controls the force with which the nail is driven.

- Twist the pressure dial clockwise to increase the driving pressure.
- Twist the pressure dial counter-clockwise to decrease the driving pressure.

OPERATING THE BRAD NAILER

Follow these steps for safe and effective operation of your RYOBI P320 brad nailer.

1. Safety Features

The tool is equipped with a safety mechanism to prevent accidental firing. The nailer will not fire unless the safety contact tip at the nose of the tool is fully depressed against the workpiece.

- Ensure the battery is inserted.
- Press the safety contact tip firmly against the material until it is fully depressed.
- Once the safety is engaged, pull the trigger to fire a nail.

2. Firing Mode Selection

A switch located near the battery port allows you to toggle between single nail firing and multiple nail firing modes. For most precision work, the single nail mode is recommended.

3. Testing Adjustments

Before beginning your main project, it is crucial to perform test fires on scrap material identical to your actual workpiece. This allows you to fine-tune the nail depth and pressure settings.

- Use two pieces of scrap material that match your project materials.
- Mate them together and drive several test nails.
- Adjust the depth and pressure dials as needed until the nails are driven to your desired depth without damaging the material surface.

MAINTENANCE

Regular maintenance is essential for the longevity and consistent performance of your brad nailer.

1. O-Ring Lubrication

A common issue with this model is the drying out of O-rings within the striker tube, which can lead to the tool failing to fire. To prevent or fix this, regular lubrication is necessary.

1. Open the magazine by pinching the release and sliding the cover down.
2. Locate the striker tube inside the nailer's mechanism. It is a silver, circular tube.
3. Apply a few drops of **silicone-based oil** directly into the striker tube. Avoid petroleum-based oils as they

can degrade O-rings over time.

4. Swirl the oil around to ensure it coats the O-rings thoroughly.
5. Close the magazine and perform several test fires into scrap wood. This helps distribute the oil and expels any excess that could transfer to your workpiece.

It is recommended to incorporate this lubrication into your regular maintenance routine, depending on usage frequency. For occasional users, every 6-12 months may suffice. For frequent users, consider lubricating a couple of times a month.

2. Clearing Jams

In the event of a nail jam, follow these steps to safely clear the obstruction:

- Always remove the battery before attempting to clear a jam.
- Empty the nail magazine completely. Failure to do so may result in nails shooting out when the clasp is opened.
- Open the front clasp of the nailer to access the jammed nail.
- Carefully remove the jammed nail using pliers or a similar tool.
- Close the clasp, reload the magazine, and reinsert the battery.

TROUBLESHOOTING

Nailer Will Not Fire

- **Check Battery:** Ensure the battery is fully charged and properly inserted.
- **Engage Safety:** Confirm that the safety contact tip is fully depressed against the workpiece. The tool will not fire otherwise.
- **Lubrication:** If the tool has been in use for some time or stored, the internal O-rings may be dry. Refer to the 'O-Ring Lubrication' section under Maintenance for detailed steps on how to lubricate the striker mechanism. This is a common fix for firing issues.
- **Clear Jams:** Check for any jammed nails in the magazine or firing mechanism. Refer to the 'Clearing Jams' section under Maintenance.

SPECIFICATIONS

Attribute	Value
Manufacturer	Ryobi
Part Number	P320
Item Weight	6 pounds
Product Dimensions	10 x 3 x 7 inches
Item Model Number	P320
Material	Plastic/Metal
Power Source	Battery-Powered
Voltage	18 Volts

Attribute	Value
Item Package Quantity	1 (Tool-Only)
Batteries Included?	No
Batteries Required?	No
Date First Available	October 13, 2014

WARRANTY AND SUPPORT

For detailed warranty information, product registration, and additional support resources, please refer to the documentation included with your RYOBI 18-Volt ONE+ AirStrike 18-Gauge Cordless Brad Nailer (Model P320) at the time of purchase. You may also visit the official RYOBI website or contact their customer service for further assistance.