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› [NEO-TEC](#) /

› NEO-TEC 52CC Gas-Powered 2-Cycle String Trimmer User Manual

NEO-TEC BC520

NEO-TEC 52CC Gas-Powered 2-Cycle String Trimmer User Manual

Model: BC520

INTRODUCTION

Thank you for choosing the NEO-TEC 52CC Gas-Weed-Wacker. This powerful 2-cycle gas string trimmer is designed for efficient trimming of weeds and grass, offering robust performance and ease of use. This manual provides essential information for the safe assembly, operation, maintenance, and troubleshooting of your new tool. Please read it thoroughly before first use and keep it for future reference.



IMPORTANT SAFETY INFORMATION

WARNING: Failure to follow these safety instructions could result in serious injury or death.

- Always wear appropriate safety gear, including eye protection (safety glasses or goggles), ear protection, heavy-duty gloves, long pants, and sturdy, non-slip footwear.
- Keep bystanders, children, and pets at least 50 feet (15 meters) away from the operating area.
- Inspect the work area for debris, rocks, wire, or other objects that could be thrown by the cutting attachment. Clear the area before starting.
- Do not operate the trimmer in wet conditions or rain.
- Ensure all guards and attachments are properly installed and secured before operation.
- Handle fuel with extreme care. Fuel is highly flammable. Store fuel in an approved container in a well-ventilated area away from ignition sources.
- Never refuel a hot engine. Allow the engine to cool down before adding fuel.
- Operate the trimmer only in well-ventilated areas to avoid inhaling exhaust fumes.
- If the cutting attachment strikes an object or the trimmer vibrates excessively, stop the engine immediately, inspect for damage, and repair before resuming operation.
- Avoid contact with skin and eyes when handling fuel or oil. Be cautious of flying debris during operation.

PACKAGE CONTENTS

Your NEO-TEC 52CC Gas-Weed-Wacker package should include the following components:

- 52CC Engine Unit
- Shaft Assembly (split shaft for easy transport)
- Handlebar Assembly
- Trimmer Head (with string line)
- Metal Blade (3T blade, 10-inch cutting range)
- Protection Plate/Guard
- Shoulder Strap/Harness
- Tool Kit (for assembly)
- Fuel Mixing Bottle
- User Manual (this document)

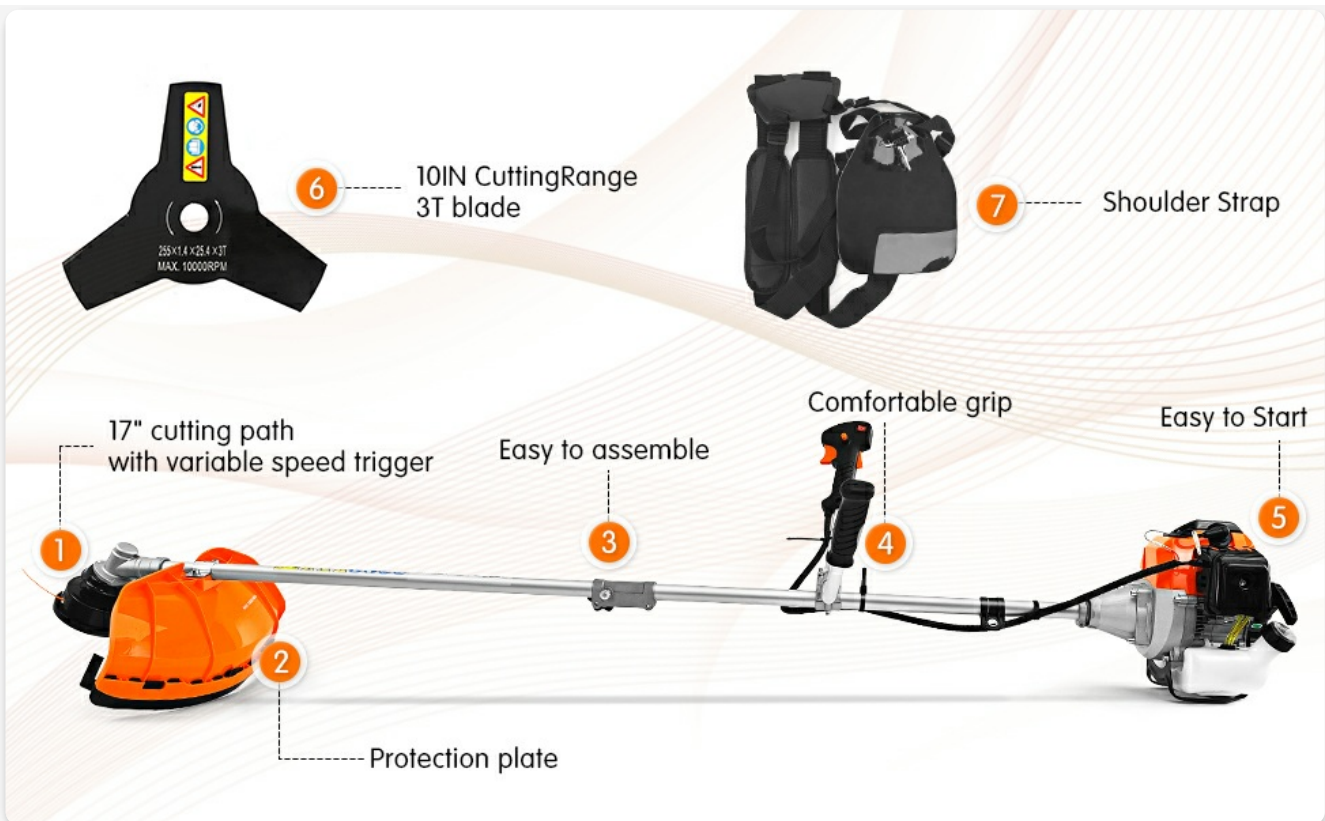


Image: An exploded diagram showing the main components of the NEO-TEC 52CC Gas-Weed-Wacker, including the engine, shaft, handlebar, protection plate, cutting head, blade, and shoulder strap.

ASSEMBLY INSTRUCTIONS

Follow these steps to assemble your NEO-TEC Gas-Weed-Wacker. Refer to the component diagram in the "Package Contents" section for visual guidance.

1. Attaching the Handlebar

1. Locate the handlebar assembly and the handlebar clamp on the main shaft.
2. Position the handlebar on the shaft at a comfortable operating height.
3. Secure the handlebar firmly using the provided bolts and nuts with the included tools. Ensure it is tight and does not rotate.

2. Installing the Guard and Trimmer Head/Blade

1. Slide the protection plate/guard onto the lower end of the shaft, ensuring it aligns with the mounting holes.
2. Secure the guard with the provided screws. This guard is crucial for safety and must always be installed.
3. Attach either the string trimmer head or the metal blade to the output shaft. Follow the specific instructions for each attachment to ensure correct and secure mounting. The metal blade is designed for tougher vegetation.



BLADE SHIELD

Prevent debris from splashing
and keep you safe

Image: A close-up view demonstrating the installation of the blade shield and the cutting head, emphasizing the importance of proper attachment for safety.

3. Connecting the Shaft

1. If your model has a split shaft, align the two halves of the shaft (engine side and trimmer head side).
2. Push them together until they click into place, ensuring the drive shaft engages properly.
3. Tighten the quick-release clamp to secure the connection.

SETUP

1. Fuel Mixture

This is a 2-cycle engine and requires a specific fuel mixture of gasoline and 2-cycle engine oil. The manufacturer recommends a **25:1 fuel-to-oil ratio**. Use fresh, unleaded gasoline with an octane rating of 89 or higher and high-quality 2-cycle engine oil (designed for air-cooled engines).

- Use the provided fuel mixing bottle for accurate measurement.

- Pour the correct amount of 2-cycle oil into the bottle first, then add gasoline up to the marked line for the desired ratio.
- Securely cap the bottle and shake it thoroughly to ensure the oil and gasoline are completely mixed.

CAUTION: Never use straight gasoline or automotive oil in a 2-cycle engine, as this will cause severe engine damage.

2. Filling the Fuel Tank

- Ensure the engine is off and cool. Move to a well-ventilated outdoor area away from open flames or sparks.
- Clean the area around the fuel cap to prevent dirt from entering the tank.
- Carefully open the fuel cap and pour the mixed fuel into the tank using a funnel to prevent spills.
- Do not overfill. Leave a small air gap to allow for fuel expansion.
- Securely replace the fuel cap. Wipe up any spilled fuel immediately.

3. Pre-Operation Checks

- Verify all nuts, bolts, and fasteners are tight.
- Check that the cutting attachment (string head or blade) is securely fastened and undamaged.
- Ensure the protection guard is correctly installed.
- Inspect the fuel lines for any leaks or cracks.
- Confirm the air filter is clean and properly seated.

OPERATING INSTRUCTIONS

1. Starting the Engine



■ EASY TO START

EASY TO START

Image: A detailed view of the engine's starting mechanism, highlighting the pull cord and choke lever for easy starting.

- Place the trimmer on a flat, stable surface.
- Set the ignition switch to the "ON" position.
- Move the choke lever to the "FULL CHOKE" position (cold start).
- Press the primer bulb 5-7 times until fuel is visible in the return line.
- Pull the starter cord firmly and smoothly until the engine "pops" or attempts to start (usually 1-3 pulls). Do not pull the cord to its full extension.
- Once the engine "pops," move the choke lever to the "HALF CHOKE" or "RUN" position.
- Pull the starter cord again until the engine starts.
- Allow the engine to warm up for 30-60 seconds before applying full throttle. If the engine stalls, return the choke to "FULL CHOKE" and repeat the process.

2. Operating the Trimmer

- Wear the shoulder strap/harness for comfortable and balanced operation. Adjust it so the trimmer head is close to the ground without straining your back.
- Maintain a firm grip on the handlebar with both hands.

- Keep the cutting attachment parallel to the ground for even trimming.
- Use a sweeping motion, moving from right to left, to cut grass and weeds.
- Avoid hitting hard objects, as this can damage the cutting attachment or engine.



Image: A person demonstrating the proper way to wear the shoulder harness while operating the NEO-TEC Gas-Weed-Wacker, illustrating balanced and comfortable use.

3. Stopping the Engine

- Release the throttle trigger to allow the engine to return to idle speed.
- Move the ignition switch to the "OFF" position.
- Wait for the cutting attachment to come to a complete stop before setting the trimmer down.

4. Blade and String Trimmer Use

Your NEO-TEC trimmer is versatile, supporting both string trimming and blade cutting.



Image: A visual comparison of the cutting ranges for the string trimmer (17 inches) and the metal blade (10 inches), illustrating their respective applications.

- **String Trimmer:** Ideal for cutting grass and light weeds. The 17-inch cutting range allows for efficient coverage. To advance the line, tap the trimmer head gently on the ground while the engine is running at full throttle.
- **Metal Blade:** The included 3T blade offers a 10-inch cutting range and is suitable for dense weeds, brush, and small saplings. Always ensure the blade is sharp and free from damage. Use extreme caution when operating with the blade.
- Always ensure the correct guard is installed for the attachment being used.

MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your trimmer.

1. Air Filter Cleaning

- Check the air filter before each use, or more frequently in dusty conditions.
- Remove the air filter cover (often tool-free).
- Remove the foam filter element. Wash it in warm, soapy water, rinse thoroughly, and allow it to air dry completely.
- Lightly oil the dry foam filter with a few drops of clean 2-cycle oil, then squeeze out any excess.
- Reinstall the filter and cover.

2. Spark Plug Inspection

- Inspect the spark plug every 25 hours of operation or annually.
- Remove the spark plug boot and use a spark plug wrench to remove the plug.
- Check for carbon buildup or electrode wear. Clean with a wire brush or replace if necessary.
- Ensure the electrode gap is correct (refer to specifications or a service manual if available).
- Reinstall the spark plug and boot.

3. Fuel System Care

- Always use fresh fuel mixture. Stale fuel can cause starting problems and engine damage.
- If storing the trimmer for more than 30 days, drain the fuel tank and run the engine until it stops from lack of fuel to clear the carburetor.

4. General Cleaning and Storage

- After each use, clean the exterior of the trimmer, especially the cutting head and guard, to remove grass clippings and debris.
- Store the trimmer in a clean, dry, well-ventilated area, out of reach of children.
- If storing for an extended period, ensure the fuel system is prepared as described above.

TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|--------------------------------|--|--|
| Engine won't start | No fuel, incorrect choke position, fouled spark plug, stale fuel, clogged fuel filter, air filter dirty. | Check fuel level and mixture. Adjust choke. Clean/replace spark plug. Use fresh fuel. Clean/replace fuel filter. Clean air filter. |
| Engine starts then stalls | Incorrect choke, carburetor adjustment needed, air filter dirty, fuel cap vent clogged. | Adjust choke. Consult service center for carburetor. Clean air filter. Check fuel cap vent. |
| Loss of power during operation | Dirty air filter, incorrect fuel mixture, dull cutting attachment, engine overheating. | Clean air filter. Verify fuel mixture. Sharpen/replace cutting attachment. Allow engine to cool. |
| Excessive vibration | Damaged cutting attachment, loose components, bent shaft. | Inspect and replace damaged cutting attachment. Tighten all fasteners. If shaft is bent, seek professional service. |
| String line not advancing | Line tangled in spool, insufficient line, incorrect tapping method. | Remove spool and untangle line. Reload with new line if necessary. Ensure engine is at full throttle when tapping. |

SPECIFICATIONS

- **Brand:** NEO-TEC
- **Model:** BC520
- **Engine Type:** 2-Cycle Gas Engine
- **Engine Displacement:** 52CC
- **Power Source:** Gas Powered
- **Fuel Mixture Ratio:** 25:1 (Gasoline to 2-Cycle Oil)
- **Max Speed:** 400 rps (rotations per second)
- **String Trimmer Cutting Width:** 17 inches
- **Blade Cutting Width:** 10 inches (for 3T blade)
- **Item Weight:** Approximately 16-23 pounds (Note: Product listing states 1 pound, but customer reviews indicate

closer to 23 pounds for the actual product weight. Please verify upon receipt.)

- **Assembly Required:** Yes
- **Cordless:** Yes (Gas-powered)

WARRANTY AND SUPPORT

For warranty information, technical support, or to inquire about replacement parts, please contact NEO-TEC customer service. Keep your purchase receipt as proof of purchase for any warranty claims. Specific warranty terms and conditions may vary and are typically provided with the product packaging or available on the manufacturer's official website.

For further assistance, you may visit the NEO-TEC Store on Amazon:[NEO-TEC Store](#)