

## CTS EH41

# Carburetor for Robin Subaru EH41 - Instruction Manual

Model: EH41

Brand: C-T-S

## INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your new C-T-S replacement carburetor for Robin Subaru EH41 engines. This high-quality replacement part is designed to restore optimal fuel delivery and engine performance. Please read this manual thoroughly before proceeding with any installation or maintenance.

Always ensure the engine is cool and disconnected from its power source before performing any work on the carburetor.

## PRODUCT OVERVIEW

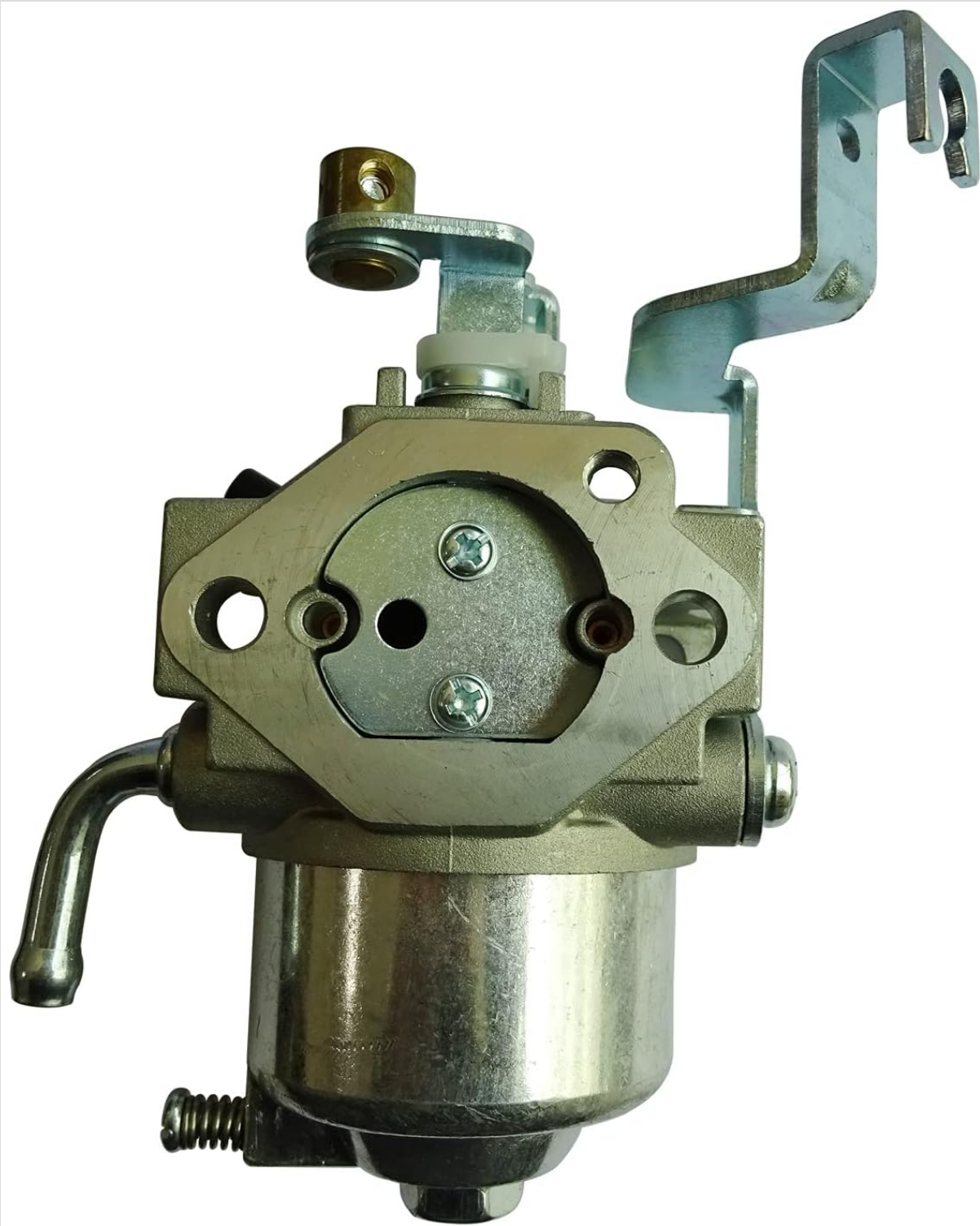
The C-T-S Carburetor for Robin Subaru EH41 is a direct replacement component. It includes the main carburetor assembly and necessary gaskets for installation. Below are various views of the carburetor to aid in identification and understanding its components.



**Figure 1:** The complete C-T-S replacement carburetor for Robin Subaru EH41 engines, shown with the accompanying set of gaskets required for installation. This image provides a comprehensive view of the product as it arrives.



**Figure 2:** A side profile of the carburetor, highlighting the fuel inlet and various adjustment screws. This view is useful for understanding the external connections.



**Figure 3:** The front view of the carburetor, showing the air intake and mounting points. This perspective helps in identifying the orientation for installation.



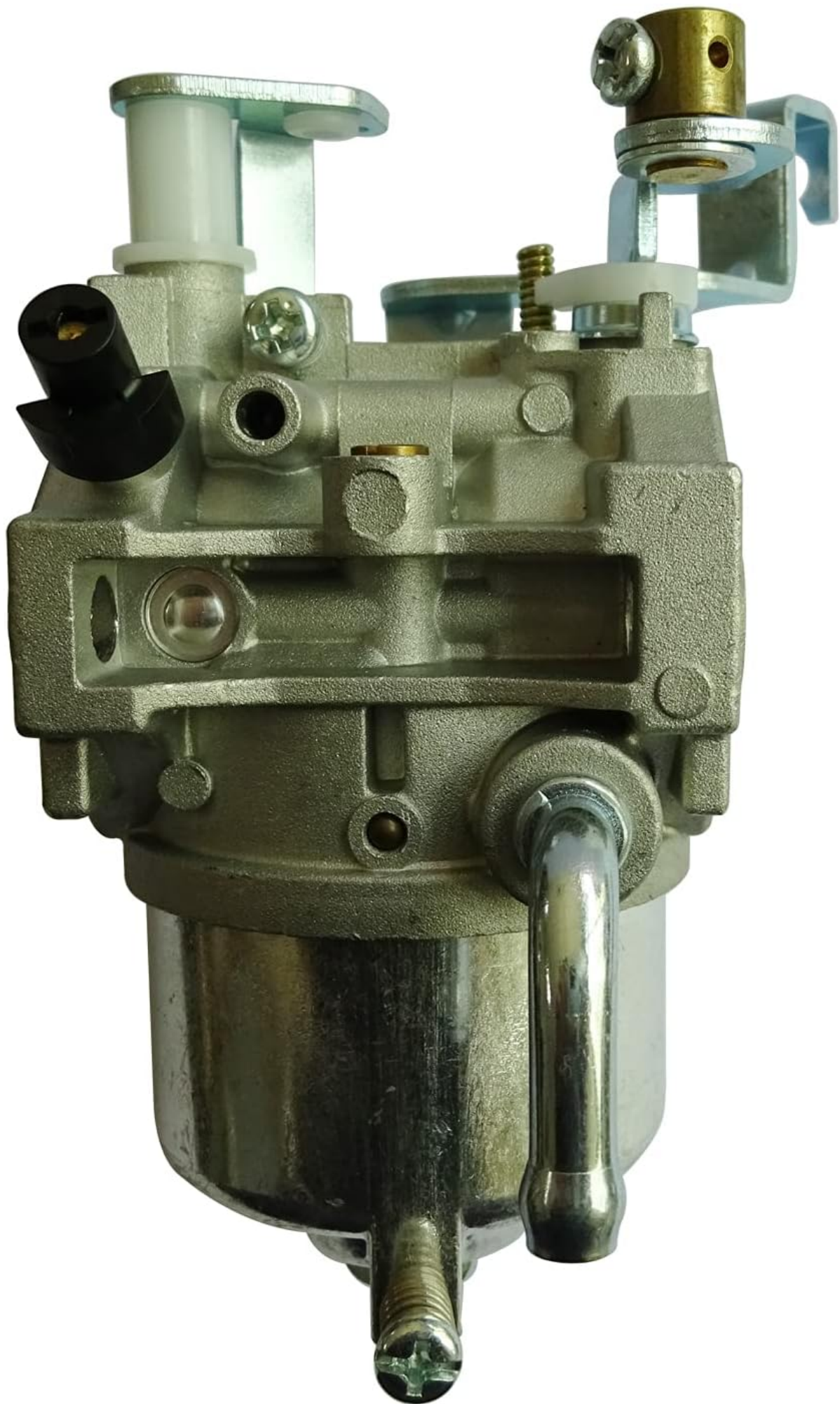


**Figure 4:** A detailed close-up of the carburetor's intake opening, revealing the throttle plate and internal components. This view is important for checking the throttle mechanism.



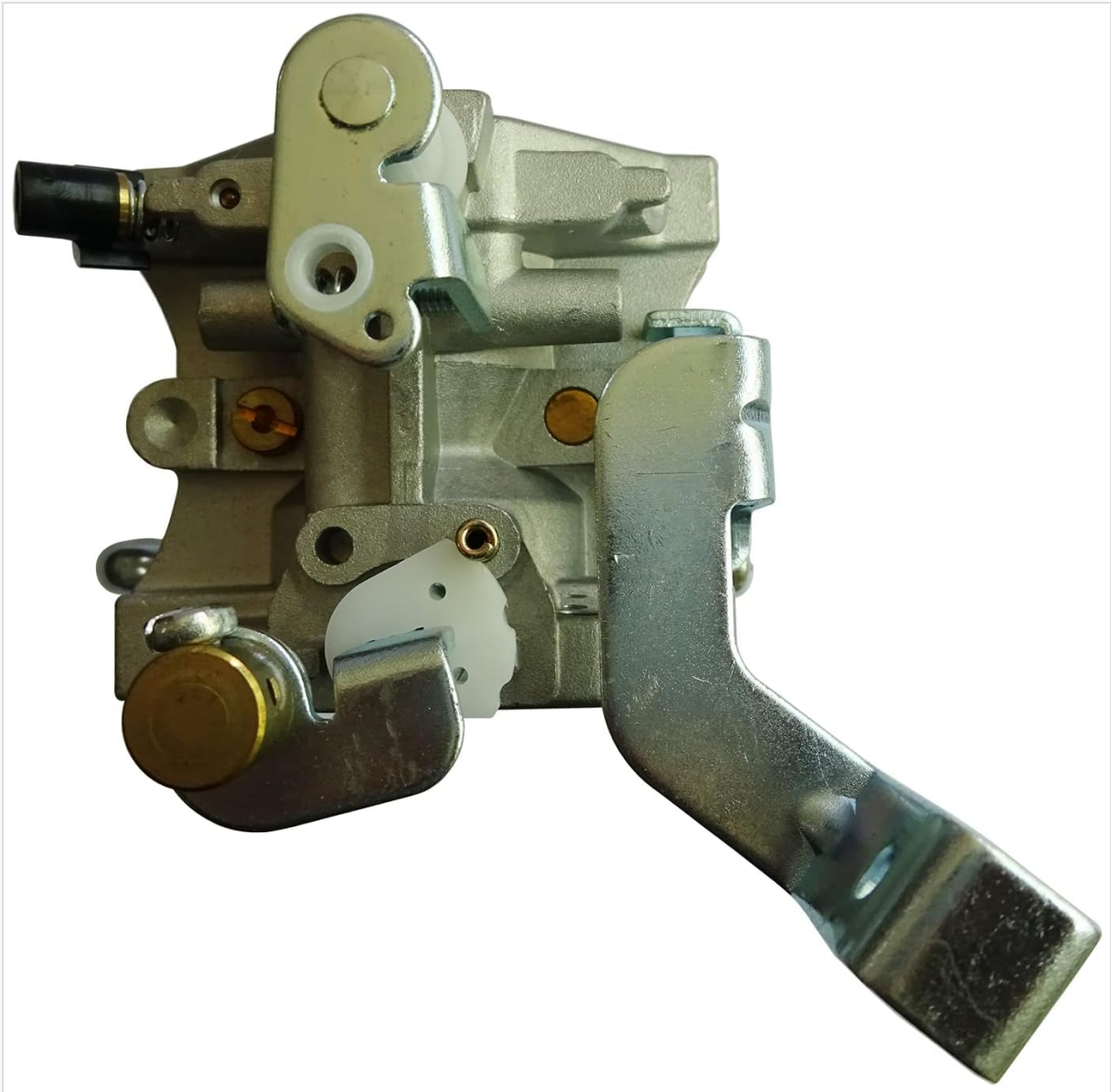
**Figure 5:** Another side view, emphasizing the integrated mounting bracket and linkage points. This shows how the carburetor attaches to the engine and connects to the throttle control.





**Figure 6:** The rear view of the carburetor, displaying the various ports and connections that interface with the engine's

manifold and fuel lines.



**Figure 7:** A detailed side view focusing on the throttle linkage and choke mechanism. This image helps in understanding the moving parts for air and fuel mixture control.





**Figure 8:** The bottom view of the carburetor, showing the float bowl and drain screw. This is the area where fuel collects before being drawn into the engine.

## SETUP AND INSTALLATION

Proper installation is crucial for the carburetor's performance. If you are unsure about any step, consult a qualified technician.

1. **Safety First:** Ensure the engine is completely cool and the spark plug wire is disconnected to prevent accidental starting.
2. **Drain Fuel:** Drain any fuel from the fuel tank and fuel lines to prevent spills.
3. **Remove Air Filter Assembly:** Carefully remove the air filter housing and any associated ducting to gain access to the old carburetor.
4. **Disconnect Linkages and Fuel Line:** Disconnect the throttle and choke linkages from the old carburetor. Use a clamp to pinch the fuel line before disconnecting it to minimize fuel leakage.
5. **Remove Old Carburetor:** Unbolt the old carburetor from the engine manifold. Note the position of any spacers or gaskets.
6. **Clean Mounting Surface:** Thoroughly clean the engine's mounting surface to ensure a proper seal with the new gaskets.
7. **Install New Gaskets:** Place the new gaskets provided with your C·T·S carburetor in the correct order and orientation. Refer to your engine's service manual for specific gasket placement if needed.
8. **Mount New Carburetor:** Carefully position the new C·T·S carburetor onto the mounting studs and secure it with the original bolts. Do not overtighten.
9. **Reconnect Linkages and Fuel Line:** Reconnect the throttle and choke linkages, ensuring they operate smoothly without binding. Reconnect the fuel line and remove the clamp.
10. **Reinstall Air Filter Assembly:** Reattach the air filter housing and any other components removed

during disassembly.

11. **Refill Fuel:** Add fresh, appropriate fuel to the tank.

## OPERATING INSTRUCTIONS

After installation, follow these steps to start and operate your engine with the new carburetor:

1. **Prime the Carburetor:** If your engine has a primer bulb, press it several times until fuel is visible in the fuel line or bulb.
2. **Set Choke:** For cold starts, set the choke lever to the "FULL CHOKE" position. For warm starts, the choke may not be necessary or only partially needed.
3. **Set Throttle:** Set the throttle lever to the "FAST" or "START" position.
4. **Start Engine:** Pull the recoil starter cord firmly or engage the electric starter until the engine fires.
5. **Adjust Choke:** As the engine warms up (usually within 10-30 seconds), gradually move the choke lever to the "OFF" or "RUN" position. If the engine sputters, move the choke back slightly until it runs smoothly, then continue to move it off.
6. **Idle Adjustment:** Once warm, the engine should idle smoothly. If the idle is too high or too low, a minor adjustment to the idle speed screw on the carburetor may be necessary.

***Note:** This carburetor is pre-tuned for standard operation. Significant adjustments should only be made by experienced individuals.*

## MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your carburetor.

- **Fuel Quality:** Always use fresh, clean fuel. Stale or contaminated fuel is a primary cause of carburetor issues. Consider using a fuel stabilizer if the engine will be stored for extended periods.
- **Fuel Filter:** Regularly inspect and replace the fuel filter according to your engine manufacturer's recommendations. A clogged fuel filter can restrict fuel flow to the carburetor.
- **Air Filter:** Keep the air filter clean and replace it as needed. A dirty air filter restricts airflow, leading to a rich fuel mixture and poor engine performance.
- **Carburetor Cleaning:** If the carburetor becomes clogged due to old fuel or debris, it may require cleaning. This typically involves disassembling the float bowl, cleaning jets, and passages with carburetor cleaner. This procedure should only be performed by individuals familiar with carburetor mechanics.
- **Storage:** Before long-term storage, run the engine until it runs out of fuel, or drain the fuel system completely to prevent fuel from gumming up inside the carburetor.

## TROUBLESHOOTING

If you encounter issues after installing the new carburetor, consider the following common problems and solutions:

| Problem | Possible Cause | Solution |
|---------|----------------|----------|
|---------|----------------|----------|

| Problem                     | Possible Cause                                                                                          | Solution                                                                                                                                                                |
|-----------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Engine won't start          | No fuel, clogged fuel filter, incorrect choke setting, spark plug issue, air leak at carburetor gasket. | Check fuel level and quality. Inspect/replace fuel filter. Ensure choke is set correctly for starting. Check spark plug. Verify carburetor gaskets are sealed properly. |
| Engine runs rough or stalls | Dirty air filter, stale fuel, clogged carburetor jet, incorrect idle adjustment.                        | Clean/replace air filter. Drain old fuel and refill with fresh. Clean carburetor jets (professional service recommended). Adjust idle speed screw.                      |
| Engine lacks power          | Restricted fuel flow, dirty air filter, partially clogged carburetor.                                   | Check fuel filter and fuel lines for obstructions. Clean/replace air filter. Consider a thorough carburetor cleaning.                                                   |
| Fuel leaks from carburetor  | Damaged float, stuck float needle, loose float bowl, damaged gasket.                                    | Inspect float and needle valve for damage or debris. Tighten float bowl screws. Replace float bowl gasket if damaged.                                                   |

For persistent issues, it is recommended to consult a qualified small engine mechanic.

## SPECIFICATIONS

| Attribute          | Detail                                             |
|--------------------|----------------------------------------------------|
| Product Type       | Replacement Carburetor                             |
| Compatibility      | Robin / Subaru EH41 Engines                        |
| Brand              | C·T·S                                              |
| Item Weight        | 10.9 ounces (approx. 309 grams)                    |
| Package Dimensions | 4.72 x 4.72 x 1.97 inches (approx. 12 x 12 x 5 cm) |
| UPC                | 755419045738                                       |

## WARRANTY AND SUPPORT

Specific warranty details for this C·T·S replacement carburetor are not provided in this manual. For information regarding warranty coverage, returns, or technical support, please refer to the product listing where you purchased the item or contact the seller directly.

Always retain your proof of purchase for any warranty claims.