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› Pro Chaser Carburetor Instruction Manual for Cub Cadet LTX1042KH, RZT-42, RZT-50KH

Pro Chaser PC310312

Pro Chaser Carburetor Instruction Manual

For Cub Cadet LTX1042KH, RZT-42, RZT-50KH Tractors

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Pro Chaser Carburetor. This carburetor is designed as a replacement part for various Cub Cadet tractor models, including LTX1042KH, RZT-42, and RZT-50KH, as well as specific part numbers 13AP91AS010, 13AP91AS056, 17AF2ACS010, 17WF2ACS009, and 17YF2ACP009.

Before proceeding with installation, carefully review the images provided in this manual and compare them with your existing carburetor to ensure compatibility. Minor design differences can exist between models. If you are uncertain about compatibility, consult a qualified technician or contact customer support with clear images of your current carburetor.



Figure 1.1: Overall view of the Pro Chaser Carburetor. This image displays the general appearance and primary components of the carburetor.

2. SAFETY INFORMATION

Always prioritize safety when working with fuel systems and internal combustion engines. Failure to follow these safety guidelines may result in personal injury or damage to equipment.

- **Eye Protection:** Always wear safety glasses or goggles to protect your eyes from fuel, debris, and other hazards.
- **Ventilation:** Work in a well-ventilated area to avoid inhaling fuel fumes.
- **Fire Hazard:** Fuel is highly flammable. Keep open flames, sparks, and other ignition sources away from the work area. Do not smoke.
- **Battery Disconnection:** Disconnect the spark plug wire or battery ground cable before beginning any work to prevent accidental engine starting.
- **Hot Surfaces:** Engine components can remain hot for an extended period after operation. Allow the engine to cool completely before servicing.
- **Fuel Handling:** Handle fuel with care. Wipe up any spills immediately. Store fuel in approved containers.

- **Proper Tools:** Use appropriate tools for the job to prevent damage to components or injury.

3. SETUP AND INSTALLATION

This section outlines the steps for replacing your old carburetor with the new Pro Chaser unit. If you are unfamiliar with engine repair, it is recommended to seek professional assistance.

3.1. Included Components

Verify that all components are present in your package:

- 1 x Carburetor
- 1 x Fuel Hose
- 1 x Fuel Filter
- 3 x Gaskets (various types for different mounting configurations)
- 1 x Shut Off Valve
- 2 x Spark Plugs



Figure 3.1: The Pro Chaser Carburetor kit, showing the carburetor, fuel hose, fuel filter, gaskets, shut-off valve, and spark plugs.

3.2. Tools Required

- Socket wrench set
- Screwdriver set (flathead and Phillips)

- Pliers
- Fuel line clamp or pinch-off tool
- Clean rags
- Container for draining fuel

3.3. Preparation

1. Ensure the engine is cool.
2. Disconnect the spark plug wire(s) to prevent accidental starting.
3. Locate the fuel shut-off valve (if present) and turn it to the OFF position.
4. Place a suitable container under the carburetor to catch any spilled fuel.

3.4. Removal of Old Carburetor

1. Carefully disconnect the fuel line from the carburetor. Use a fuel line clamp if no shut-off valve is present to minimize fuel spillage.
2. Disconnect any throttle linkage, choke linkage, and electrical connections (if applicable) from the old carburetor. Note their positions for reassembly.
3. Remove the mounting nuts or bolts that secure the carburetor to the engine intake manifold.
4. Gently remove the old carburetor and any old gaskets. Dispose of old gaskets properly.

3.5. Installation of New Carburetor

1. Clean the mounting surface on the engine intake manifold to ensure a proper seal.
2. Select the correct gaskets from the included set that match your engine's configuration. Install the new gaskets onto the mounting studs or manifold.
3. Carefully position the new Pro Chaser Carburetor onto the mounting studs, ensuring the gaskets are properly seated.
4. Secure the carburetor with the mounting nuts or bolts. Tighten them evenly to prevent warping, but do not overtighten.
5. Reconnect the throttle linkage, choke linkage, and any electrical connections. Ensure they operate smoothly without binding.
6. Install the new fuel filter in the fuel line, ensuring the flow direction is correct (if indicated).
7. Connect the new fuel hose to the carburetor and secure it with a clamp. If using the included shut-off valve, install it in an accessible location in the fuel line.
8. Replace the old spark plug(s) with the new ones provided in the kit. Gap the new spark plugs according to your engine manufacturer's specifications if necessary.



Figure 3.2: Side view of the carburetor, highlighting the fuel inlet and linkage connection points.

4. OPERATING INSTRUCTIONS

After installation, follow these steps for initial start-up and basic operation.

4.1. Initial Start-up

1. Ensure all connections are secure and there are no fuel leaks.
2. Refill the fuel tank with the appropriate fuel type for your engine.
3. Open the fuel shut-off valve (if installed).
4. Reconnect the spark plug wire(s).
5. Set the choke to the appropriate starting position (usually full choke for a cold engine).
6. Start the engine according to your tractor's manufacturer instructions.
7. Once the engine starts, gradually move the choke to the OFF position as the engine warms up.
8. Allow the engine to run for a few minutes to reach operating temperature and check for smooth operation.

4.2. Basic Adjustments

Most modern carburetors are pre-set and do not require extensive adjustments. However, if your engine runs rough or idles poorly after installation, minor adjustments may be needed. Refer to your engine's service manual for specific adjustment procedures.

- **Idle Speed:** If the engine idles too fast or too slow, locate the idle speed screw (if present) and adjust it gradually until the engine idles smoothly at the recommended RPM.
- **Mixture Screws:** Some carburetors may have idle mixture screws. Adjust these only if necessary and with caution, as improper adjustment can affect engine performance and emissions. Typically, turn the screw in until it lightly seats, then back it out 1.5 to 2 turns as a starting point. Fine-tune for the smoothest idle.

5. MAINTENANCE

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

- **Fuel Filter:** Inspect the fuel filter regularly (e.g., annually or every 50 operating hours) and replace it if it appears dirty or clogged. A clogged fuel filter can restrict fuel flow to the carburetor.
- **Air Filter:** Ensure the engine's air filter is clean and free of debris. A dirty air filter can cause the engine to run rich and affect carburetor performance.
- **Spark Plugs:** Inspect the spark plugs periodically. Clean or replace them if they are fouled, worn, or damaged. The included spark plugs should be gapped correctly for your engine.
- **Fuel System Cleaning:** If the equipment is stored for an extended period, drain the fuel system or use a fuel stabilizer to prevent fuel degradation and carburetor clogging.
- **External Cleaning:** Keep the exterior of the carburetor clean from dirt, dust, and oil buildup.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter. For more complex problems, consult a qualified technician.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Engine won't start	No fuel, clogged fuel filter, incorrect choke setting, fouled spark plug, no spark.	Check fuel level and shut-off valve. Replace fuel filter. Adjust choke. Inspect/replace spark plug. Check ignition system.
Engine runs rough or stalls	Dirty air filter, clogged fuel filter, improper carburetor adjustment, old/stale fuel.	Clean/replace air filter. Replace fuel filter. Adjust idle speed/mixture (if applicable). Drain and refill with fresh fuel.
Fuel leaks from carburetor	Loose connections, damaged gaskets, stuck float, worn O-rings.	Tighten fuel line connections. Replace gaskets. Inspect float and needle valve.
Loss of power	Clogged fuel filter, dirty air filter, incorrect carburetor adjustment, worn spark plug.	Replace fuel filter. Clean/replace air filter. Adjust carburetor. Replace spark plug.

7. SPECIFICATIONS

Brand:	Pro Chaser
Model Number:	PC310312
Compatible with Cub Cadet Models:	LTX1042KH, RZT-42, RZT-50KH
Compatible with Part Numbers:	13AP91AS010, 13AP91AS056, 17AF2ACS010, 17WF2ACS009, 17YF2ACP009
Included Components:	1 x Carburetor, 1 x Fuel Hose, 1 x Fuel Filter, 3 x Gaskets, 1 x Shut Off Valve, 2 x Spark Plugs
UPC/GTIN:	679070670958
Exterior Finish:	Machined



Figure 7.1: Bottom view of the Pro Chaser Carburetor, showing the float bowl and drain screw.

8. WARRANTY INFORMATION

The Pro Chaser Carburetor comes with a manufacturer's warranty. Please refer to the following details:

- **Warranty Period:** 90 days from the date of purchase.
- **Coverage:** This warranty covers defects in materials and workmanship under normal use.
- **Exclusions:** The warranty does not cover damage resulting from improper installation, misuse, neglect, accident, unauthorized repairs, or normal wear and tear.

For warranty claims or further details, please retain your proof of purchase and contact customer support.

9. CUSTOMER SUPPORT

If you have any questions regarding the installation, operation, or maintenance of your Pro Chaser Carburetor, or if you encounter any issues not covered in this manual, please contact our customer support team.

When contacting support, please have the following information ready:

- Product Model Number: **PC310312**
- Date of Purchase
- Description of the issue

Contact information for Pro Chaser can typically be found on the product packaging or the retailer's website where the item was purchased.

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This manual is for informational purposes only. Pro Chaser is not responsible for any damages or injuries resulting from improper installation or use of this product.