

## Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [RATION](#) /

› [RATION Carburetor Instruction Manual for Craftsman P2100 CMXGJAMDPS25 41ADPS25793 25cc 2-Cycle Pole Saws](#)

## RATION P2100 CMXGJAMDPS25 41ADPS25793

# RATION Carburetor Instruction Manual

Model: P2100 CMXGJAMDPS25 41ADPS25793

Brand: RATION

### 1. INTRODUCTION

---

This manual provides essential instructions for the installation, operation, and maintenance of your RATION replacement carburetor. This carburetor is designed for specific 25cc 2-cycle pole saw models, including Craftsman P2100, CMXGJAMDPS25, and 41ADPS25793. Proper installation and care will ensure consistent fuel delivery, reliable engine starting, stable combustion, and efficient power output for your pole saw.

### 2. 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.

- **Read the Pole Saw Manual:** Always refer to your pole saw's original instruction manual for specific safety guidelines and procedures related to your equipment.
- **Disconnect Spark Plug:** Before performing any maintenance or installation, always disconnect the spark plug wire to prevent accidental engine starting.
- **Work in a Well-Ventilated Area:** Fuel fumes are flammable and hazardous. Ensure adequate ventilation when handling fuel or working on the carburetor.
- **Wear Safety Gear:** Use appropriate personal protective equipment, including safety glasses, gloves, and hearing protection.
- **Handle Fuel Safely:** Store fuel in approved containers, away from ignition sources. Avoid spilling fuel. Clean up any spills immediately.
- **Allow Engine to Cool:** Never work on a hot engine. Allow the engine to cool completely before attempting any service.
- **Use Correct Tools:** Ensure you have the proper tools for the job to prevent damage to parts or injury.

### 3. PACKAGE CONTENTS

---

Verify that all components are present and undamaged before beginning installation.

- 1x Carburetor (Model 41ADPS25793)
- 2x Primer Bulbs
- 2x Fuel Lines
- 1x Fuel Filter
- 2x Gaskets



Image 3.1: Contents of the RATION Carburetor replacement kit, including the carburetor, fuel lines, primer bulbs, fuel filter, and gaskets.

## 4. SETUP (INSTALLATION)

---

This section outlines the general steps for replacing the carburetor. Specific disassembly and assembly procedures may vary slightly depending on your pole saw model. Always consult your pole saw's service manual for detailed instructions.

### Tools Required (Common):

- Screwdrivers (Phillips and Flathead)
- Socket/Nut Drivers
- Pliers
- Clean Rags
- Fuel Container for Draining

## Installation Steps:

1. **Prepare the Pole Saw:** Ensure the engine is cool. Disconnect the spark plug wire. Place the pole saw on a stable, flat surface.
2. **Drain Fuel:** Carefully drain any remaining fuel from the fuel tank into an approved container.
3. **Remove Air Filter Assembly:** Locate and remove the air filter cover and air filter. This will expose the carburetor.
4. **Disconnect Linkages and Fuel Lines:** Carefully disconnect the throttle linkage and choke linkage from the old carburetor. Note their positions for reassembly. Disconnect the fuel lines from the carburetor and fuel tank. Be prepared for residual fuel.
5. **Remove Old Carburetor:** Unbolt the old carburetor from the engine intake manifold. Remove any old gaskets.
6. **Install New Gaskets:** Place the new gaskets provided in the kit in their correct positions between the engine, insulator (if present), and the new carburetor. Ensure they are seated properly to prevent air leaks.
7. **Install New Carburetor:** Mount the new RATION carburetor onto the engine intake manifold, securing it with the original bolts. Do not overtighten.
8. **Connect Fuel Lines and Filter:** Install the new fuel filter into the fuel tank. Connect the new fuel lines to the fuel tank and the new carburetor, ensuring the correct routing for the supply and return lines (often indicated by different line diameters or ports). Install the new primer bulbs if replacing.
9. **Connect Linkages:** Reconnect the throttle and choke linkages to the new carburetor. Verify smooth operation of both.
10. **Reassemble Air Filter:** Reinstall the air filter and air filter cover.
11. **Refill Fuel:** Fill the fuel tank with the correct 2-cycle fuel mixture as specified by your pole saw manufacturer.



Image 4.1: A detailed view of the RATION carburetor, highlighting key connection points for fuel lines and linkages.

## 5. OPERATING INSTRUCTIONS

---

After installation, follow these general steps to start and operate your pole saw. Always refer to your pole saw's specific operating instructions.

1. **Prime the Carburetor:** Press the primer bulb several times until fuel is visible in the clear return line or the bulb is full. This ensures fuel is drawn into the carburetor.
2. **Set Choke:** Move the choke lever to the FULL CHOKE position (usually for cold starts).
3. **Start Engine:** Pull the starter rope firmly and steadily until the engine attempts to start or "pops."
4. **Adjust Choke:** Once the engine pops, move the choke lever to the HALF CHOKE or RUN position. Pull the starter rope again until the engine starts.
5. **Warm-up:** Allow the engine to warm up for a few moments before engaging the throttle fully.
6. **Throttle Operation:** The throttle controls engine speed. Ensure smooth and responsive acceleration.

## 6. MAINTENANCE

---

Regular maintenance helps prolong the life of your carburetor and pole saw.

- **Fuel Mixture:** Always use the correct 2-cycle fuel mixture (gasoline and 2-cycle oil) as specified by your pole saw manufacturer. Using incorrect fuel or old fuel can damage the carburetor and engine.
- **Fuel Filter:** Inspect and replace the fuel filter periodically (e.g., annually or every 50 hours of use) to prevent debris from entering the carburetor.
- **Air Filter:** Clean or replace the air filter regularly to ensure proper air-fuel mixture and prevent dirt from entering the engine.
- **Fuel Lines:** Inspect fuel lines for cracks, hardening, or leaks. Replace them if any damage is observed.
- **Carburetor Cleaning:** If the engine experiences fuel-related issues, the carburetor may need cleaning. This typically involves disassembling the carburetor, cleaning jets and passages with carburetor cleaner, and replacing gaskets. This procedure should only be performed by individuals with mechanical experience.
- **Storage:** For long-term storage, drain all fuel from the tank and carburetor, or use a fuel stabilizer to prevent fuel degradation and gumming.

## 7. TROUBLESHOOTING

Refer to this section for common issues and potential solutions. For complex problems, consult a qualified service technician.

Problem	Possible Cause	Solution
Engine won't start	No fuel in tank Incorrect choke setting Clogged fuel filter Old/stale fuel Spark plug issue	Fill with fresh fuel Adjust choke correctly Replace fuel filter Drain and refill with fresh fuel Check/replace spark plug
Engine runs rough/stalls	Clogged fuel filter Dirty carburetor Air leak at gaskets Incorrect fuel mixture	Replace fuel filter Clean carburetor (professional service recommended) Inspect and replace gaskets Ensure correct fuel/oil ratio
Fuel leaks	Loose fuel line connections Cracked fuel lines Damaged primer bulb	Tighten connections Replace fuel lines Replace primer bulb

## 8. SPECIFICATIONS

- **Brand:** RATION
- **Model:** P2100 CMXGJAMDPS25 41ADPS25793
- **Compatibility:** 25cc 2-cycle pole saws (e.g., Craftsman P2100, CMXGJAMDPS25, 41ADPS25793)
- **Item Weight:** Approximately 5 pounds
- **Product Dimensions:** Approximately 2 x 2 x 2 inches
- **UPC:** 670021636146

## 9. WARRANTY AND SUPPORT

Specific warranty terms for this RATION carburetor are not provided in this manual. Please retain your

proof of purchase and contact the seller or manufacturer directly for warranty information and support inquiries.

For technical assistance or further questions regarding installation and operation, please reach out to the retailer from whom you purchased this product.