

QPKING 602A

QPKING CNC 602A 6-Cylinder Fuel Injector Cleaner Tester Instruction Manual

Model: 602A | Brand: QPKING

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation of your QPKING CNC 602A 6-Cylinder Fuel Injector Cleaner Tester. This machine is designed for comprehensive cleaning and testing of automotive fuel injectors, ensuring optimal engine performance and fuel efficiency. Please read this manual thoroughly before operating the device.

2. SAFETY INSTRUCTIONS

- Always operate the machine in a well-ventilated area to prevent inhalation of fumes from cleaning fluids.
- Wear appropriate personal protective equipment (PPE), including safety glasses and chemical-resistant gloves, when handling cleaning and testing fluids.
- Ensure the machine is properly grounded before connecting to a power source.
- Do not place anything on the control panel to prevent damage or accidental operation.
- Never allow the fuel level to exceed the guard line (MAX LEVEL indicator).
- Use only recommended cleaning and testing fluids. Refer to the "Fluid Selection" section for details.
- Keep the pulse signal cable away from liquids to prevent electrical hazards.
- In case of emergency, immediately disconnect the power supply.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact customer support.



Image: Main unit and various accessories including adapters, cables, and O-rings.

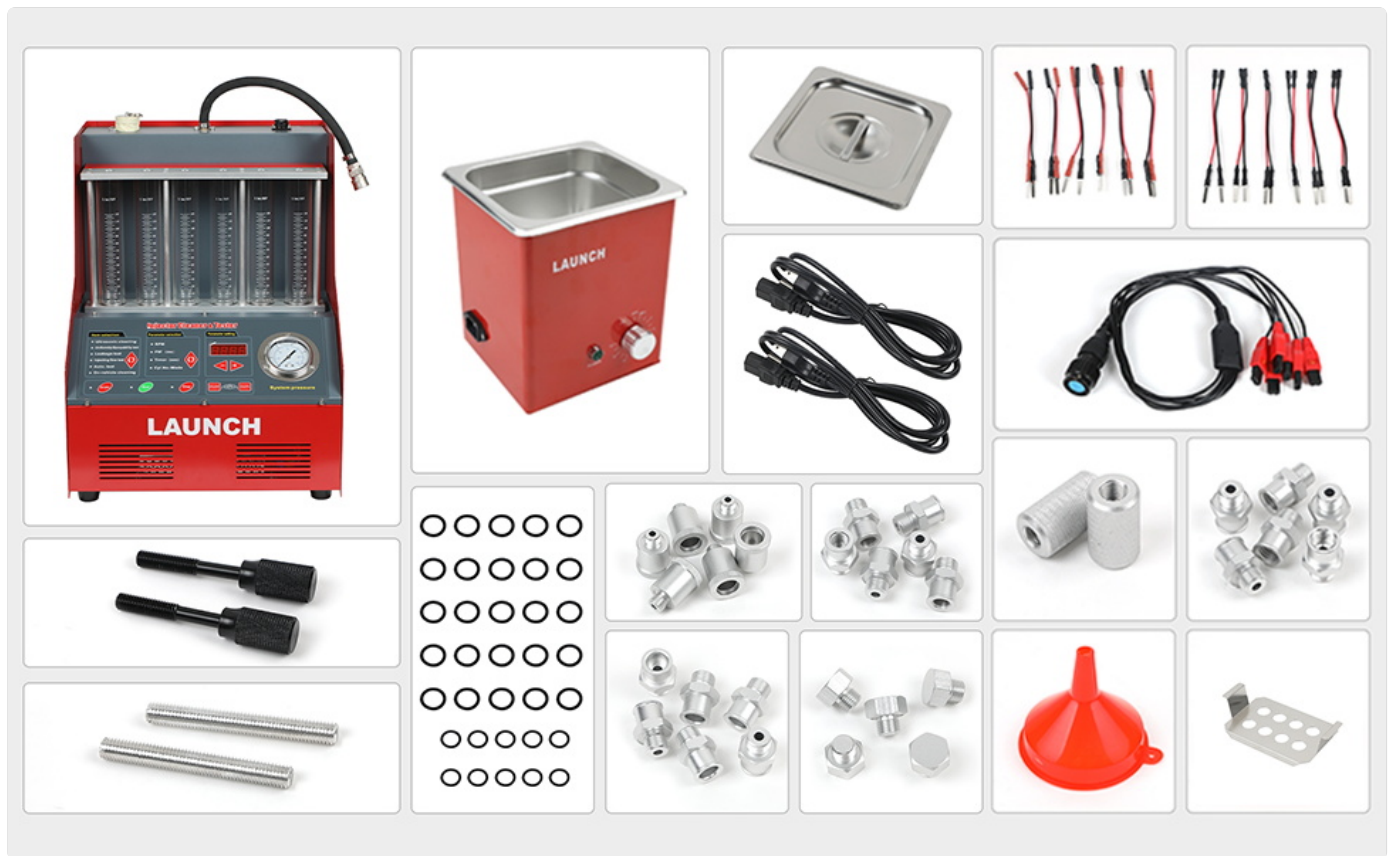


Image: Detailed packing list showing quantities of each component.

- QPKING CNC 602A Main Unit
- Ultrasonic Cleaner Unit
- 6-Cylinder Fuel Distributor Package
- Reverse Flush Adaptors (6 PCS)
- Adaptors for Fuel Top-Supply Injectors (various types, 6 PCS each)
- BUICK Injector Adaptor (6 PCS)
- Hexangular Stopper (5 PCS)
- Pulse Signal Connection Cables (various types, 10 PCS each)
- 6-Cylinder Injector Pulse Signal Cables (1 PC)
- O-rings (various sizes, 6 PCS each)
- Power Cables (2 PCS)
- Funnel
- Tool Box
- Instruction Manual (this document)
- Certificate

4. PRODUCT OVERVIEW

The QPKING CNC 602A is a versatile machine designed for diagnosing and maintaining fuel injection systems. It features a robust design with clear controls and indicators for precise operation.



Image: Front view of the main unit, showing the control panel, test tubes, and pressure gauge.

Key Features:

- **Ultrasonic Cleaning:** Performs simultaneous cleaning on multiple injectors to remove carbon deposits.
- **Uniformity/Sprayability Test:** Checks the consistency of injection amount and spray pattern.
- **Leakage Test:** Verifies injector sealing and dribbling conditions under system pressure.
- **Injecting Flow Test:** Measures the injection amount over a constant period.
- **Auto Test:** Simulates various working conditions for comprehensive injector testing.

- **On-Vehicle Cleaning:** Equipped with adaptors for cleaning injectors directly on the vehicle.
- **6-Cylinder Capacity:** Can test and clean up to 6 injectors simultaneously, or 8 cylinders with two test cycles.

5. SETUP

1. **Unpacking and Placement:** Carefully remove all components from the packaging. Place the main unit on a stable, level surface in a well-ventilated area.
2. **Power Connection:** Connect the provided power cable to the machine's power inlet and then to a suitable 110V/220V AC power outlet. Ensure the power switch is in the "OFF" position before connecting.



Image: Side view showing the power switch and AC power inlet.

3. **Ultrasonic Cleaner Setup:** Place the ultrasonic cleaner unit next to the main unit. Connect its power cable.



Image: The separate ultrasonic cleaning unit.

4. **Fluid Drain Valves:** Ensure the drain valves for both cleaning and testing fluids are securely installed and closed before adding any liquids.
5. **Install Cleaning Bracket:** Insert the stainless steel cleaning bracket into the ultrasonic cleaner tank.
6. **Connect Pulse Signal Cable:** Connect the main pulse signal cable to the designated port on the machine.
7. **Install Fuel Distributor:** Secure the 6-cylinder fuel distributor package onto the main unit.

6. OPERATING INSTRUCTIONS

6.1. Ultrasonic Cleaning

1. **Prepare Injectors:** Clean the exterior of the injectors with gasoline or a suitable cleaning liquid to remove loose dirt.
2. **Place in Ultrasonic Cleaner:** Place the fuel injectors into the ultrasonic cleaner tank, ensuring they are properly seated in the cleaning bracket.
3. **Connect Pulse Signal:** Connect the pulse signal wires from the main unit to each injector.
4. **Add Cleaning Fluid:** Pour professional injector ultrasonic cleaning fluid into the tank, ensuring the injectors are submerged. (Refer to "Fluid Selection" below).
5. **Start Cleaning:** Select the ultrasonic cleaning function on the control panel and press "Run" to start the cleaning process. The ultrasonic vibrations will dislodge carbon deposits.
6. **Drain Fluid:** After cleaning, drain the used cleaning fluid into a suitable container.

Your browser does not support the video tag.

Video: Demonstration of the QPKING CNC 602A injector cleaner and tester, including ultrasonic cleaning steps.

6.2. Fuel Injector Testing

1. **Install Injectors:** Securely install the cleaned fuel injectors onto the fuel distributor rail. Use appropriate adaptors and fix them with bolts.
2. **Add Test Fluid:** Pour professional injector test fluid into the main unit's reservoir. Ensure the fluid level is between MIN and MAX indicators. (Refer to "Fluid Selection" below).
3. **Connect Pulse Signal:** Connect the pulse signal wires from the main unit to each injector.
4. **Select Test Function:** Use the control panel to select the desired test function (e.g., Uniformity/Sprayability, Leakage, Injecting Flow, Auto Test).
5. **Adjust Parameters:** Set parameters such as RPM, PW (pulse width), and Timer (sec) as required for the specific test.
6. **Monitor Pressure:** Observe the system pressure gauge and adjust using the "Increase Pressure" or "Decrease Pressure" buttons if necessary.
7. **Start Test:** Press "Run" to begin the test. Observe the spray pattern, leakage, and flow rate in the graduated cylinders.
8. **Evaluate Results:** Compare the results against manufacturer specifications or expected performance.
9. **Drain Fluid:** After testing, drain the test fluid into a suitable container for recycling or disposal.

Your browser does not support the video tag.

Video: Detailed operation of the QPKING CNC 602A fuel injector cleaner and tester, demonstrating various test functions.

6.3. On-Vehicle Cleaning

The unit supports on-vehicle cleaning. This process involves connecting the machine to the vehicle's fuel system using specialized adaptors and couplers to clean injectors without removal. Consult your vehicle's service manual for specific on-vehicle cleaning procedures and compatible adaptors.

6.4. Fluid Selection

- **Test Fluid:** Used to evaluate injector performance. It should be a colorless, transparent liquid with no irritating odor, non-corrosive, and not easily evaporative. Professional automotive injector test fluids are recommended. As an alternative, medical alcohol with over 75% alcohol content can be used if professional fluid is unavailable locally.
- **Cleaning Fluid:** Used to remove deposits like carbon from injectors. It is typically highly corrosive and flammable. Professional injector ultrasonic cleaning fluid is recommended. Medical alcohol (over 75%) can be used as an alternative, but its effectiveness may be reduced compared to specialized cleaning fluids.
- **Note:** Cleaning and testing fluids are NOT included in the package and must be purchased separately from your

local market.

7. MAINTENANCE

- **Regular Cleaning:** After each use, clean the control panel and exterior of the machine with a soft, damp cloth.
- **Fluid Management:** Always drain and properly dispose of or store used cleaning and testing fluids. Do not mix different types of fluids unless specified.
- **Storage:** Store the machine in a dry, clean environment away from direct sunlight and extreme temperatures.
- **Component Inspection:** Periodically inspect all cables, hoses, and adaptors for wear or damage. Replace any damaged parts immediately.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Machine does not power on.	Power cable not connected, power switch off, no power from outlet.	Check power cable connection, ensure switch is ON, test power outlet.
Injectors not spraying or spraying unevenly.	Clogged injectors, incorrect pulse signal connection, low fluid level, insufficient pressure.	Perform ultrasonic cleaning, check pulse signal cables, ensure adequate fluid, adjust system pressure.
Fluid leakage during testing.	Loose connections, damaged O-rings, faulty injectors.	Tighten all connections, replace damaged O-rings, inspect injectors for damage.
Ultrasonic cleaner not working.	Power not connected, timer not set, unit malfunction.	Check power connection, set timer, ensure cleaning switch is on. If problem persists, contact support.

9. SPECIFICATIONS

- **Brand:** QPKING
- **Model Number:** 602A
- **Item Weight:** 45.5 pounds
- **Package Dimensions:** 22.5 x 18.2 x 18 inches
- **Manufacturer:** QPKING
- **Power Input:** 110V/220V (50Hz/60Hz)
- **Cylinder Support:** 6-Cylinder (can be used for 8 cylinders with multiple tests)

10. WARRANTY AND SUPPORT

1-Year Warranty: For damage caused by non-human factors, QPKING promises to resend parts for free within 1 year from the date of purchase.

Customer Support: For any needs, questions, or technical assistance, please contact QPKING customer service. We aim to respond within 24 hours.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question