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› AUTOOL CT400 GDI Fuel Injector Cleaner & Tester User Manual

AUTOOL CT 400

AUTOOL CT400 GDI Fuel Injector Cleaner & Tester User Manual

Model: CT 400

INTRODUCTION

The AUTOOL CT400 GDI Fuel Injector Cleaner & Tester is an advanced automotive tool designed for comprehensive cleaning and testing of various fuel injectors, including GDI, EFI, and FSI types. This machine utilizes ultrasonic cleaning technology and microcomputer oil pressure closed-loop control to simulate diverse engine working conditions, ensuring thorough cleaning and accurate testing of fuel injectors for automobiles and motorcycles. Regular cleaning and testing of injectors are crucial to prevent carbon buildup, maintain engine performance, optimize fuel consumption, and reduce emissions.

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your AUTOOL CT400 unit to ensure safe and efficient use.

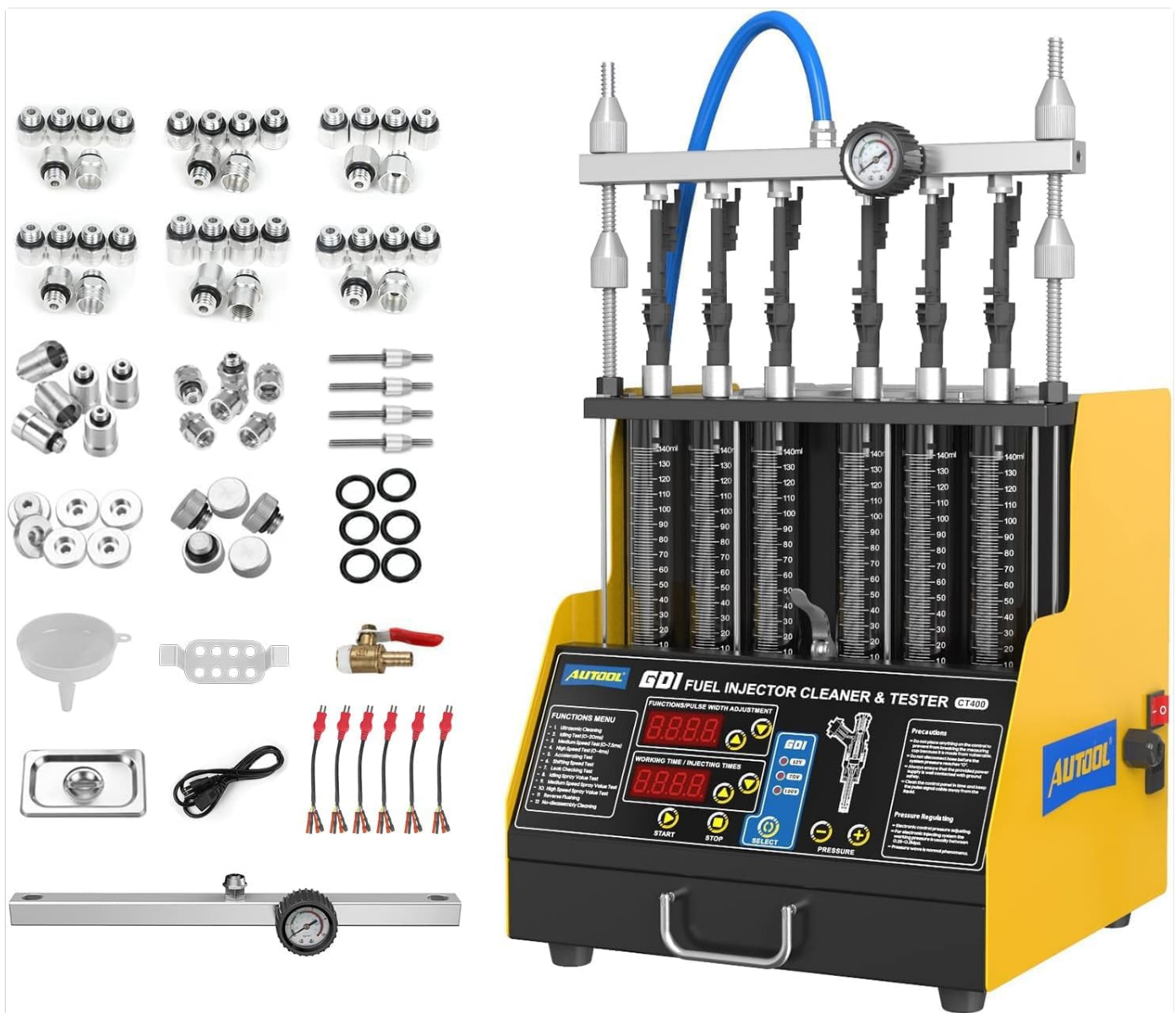


Image: AUTOOL CT400 GDI Fuel Injector Cleaner & Tester with its complete set of accessories.

SETUP

Before operating the AUTOOL CT400, ensure all components are present and the unit is placed on a stable, level surface. Familiarize yourself with the machine's layout and connections.

1. Unpacking and Component Identification

Carefully unpack the main unit and all accessories. Refer to the packing list provided with your machine to ensure all items are accounted for. The unit features a portable drawer for convenient storage of various adapters and small parts.



Image: Overview of the AUTOOL CT400 main unit and its comprehensive accessory kit.

2. Filling Test and Cleaning Fluids

The machine requires specific fluids for testing and cleaning. Use professional automotive injector test fluids for optimal results. As an alternative, medical alcohol with an alcohol content of more than 75% can be used, though the effect may vary for cleaning. Fill the respective tanks as indicated on the unit.

Video: Demonstrates the process of filling test liquid and cleaning solution, along with connecting injectors for cleaning and testing.

3. Connecting Injectors

The AUTOOL CT400 supports simultaneous cleaning and testing of up to six injectors. Securely connect the injectors to the appropriate ports using the provided adapters and cables. Ensure proper sealing to prevent leaks during operation.

SMART CONTROL PANEL

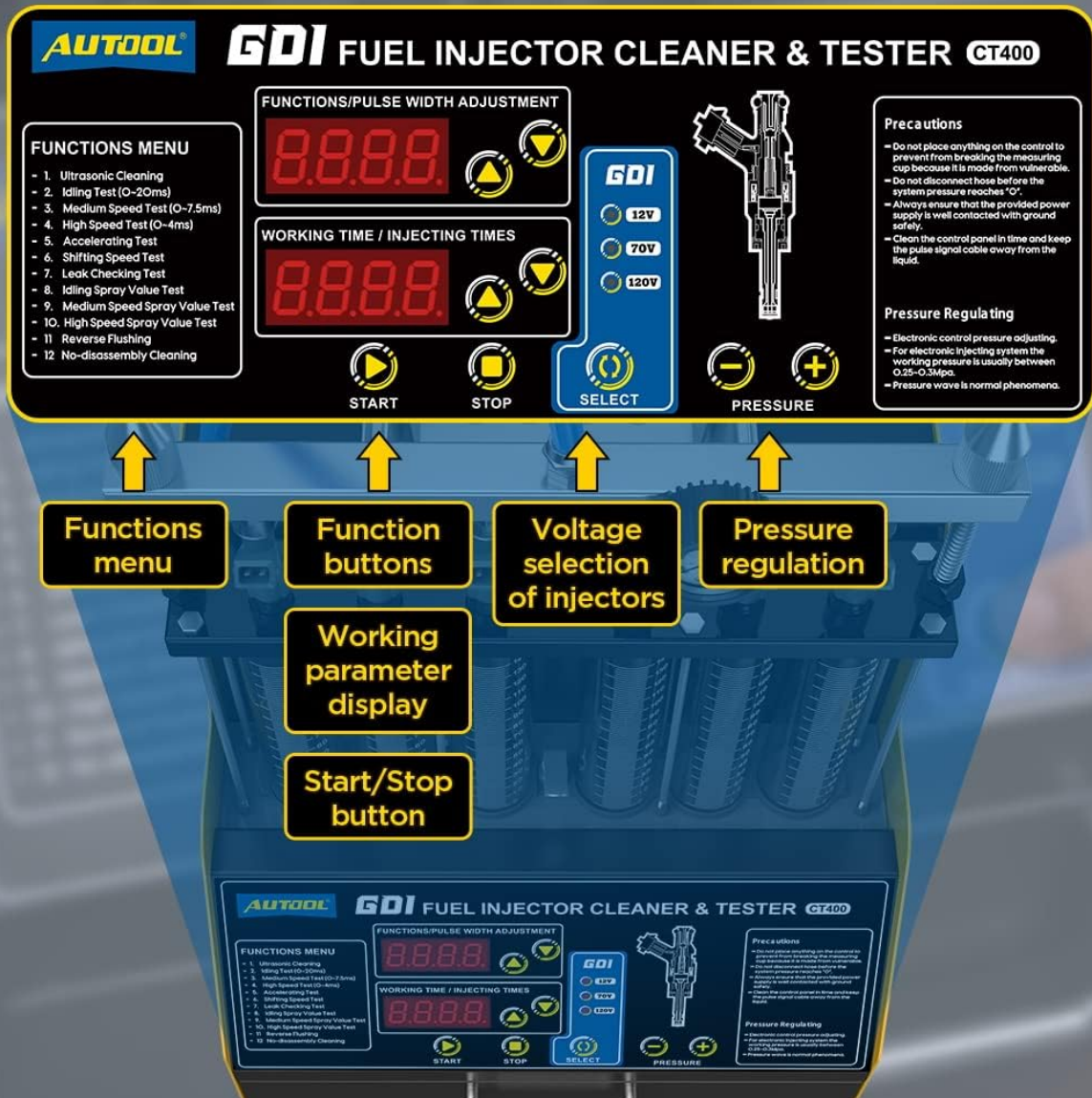


Image: The 6-cylinder design allows for efficient simultaneous cleaning and testing of multiple injectors.

OPERATING

The CT400 features a smart control panel with a high-definition digital display for easy operation and monitoring. The bright LED background light enhances visibility during testing.

6-CYLINDER DESIGN

Six injectors can be cleaned or tested at the same time, which greatly improves work efficiency.



**Simultaneous
6-cylinder cleaning**



**Simultaneous
6-cylinder testing**



Image: The intuitive smart control panel of the AUTOOL CT400.

1. Ultrasonic Cleaning

This function uses ultrasonic vibration with cleaning fluid to thoroughly remove carbon deposits and impurities from inside the injectors. Place the injectors in the ultrasonic cleaning bath and set the desired working time on the control panel.

ULTRASONIC CLEANING FUNCTION

It works by sending an ultrasonic vibration signal to the injector through the pulse signal cable, which causes a strong vibration of the carbon inside and thus enables more thorough cleaning.

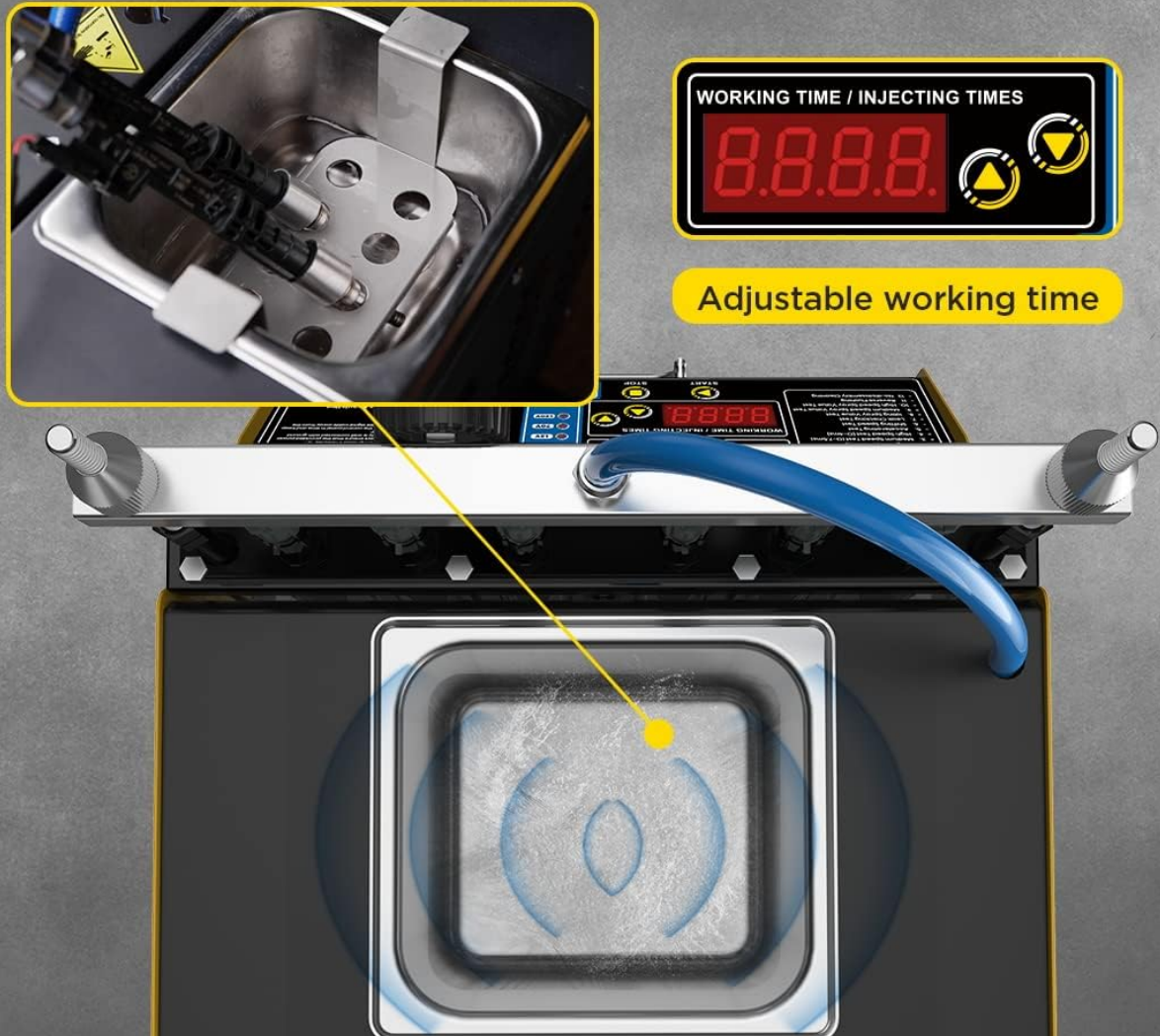


Image: The ultrasonic cleaning bath in action, showing injectors submerged for cleaning.

2. Fuel Injector Testing

The CT400 offers 12 injector-specific functions to simulate various engine conditions and test injector performance. It supports GDI, EFI, and FSI injectors and can drive 12V, 70V, and 120V high-pressure injectors.

COMPATIBLE FOR VARIOUS TYPES OF INJECTORS

It can clean and test standard injectors, EFI, FSI injectors, as well as GDI injectors such as for Mercedes-Benz, BMW, Audi, Porsche, Ford, and other direct injection engines.

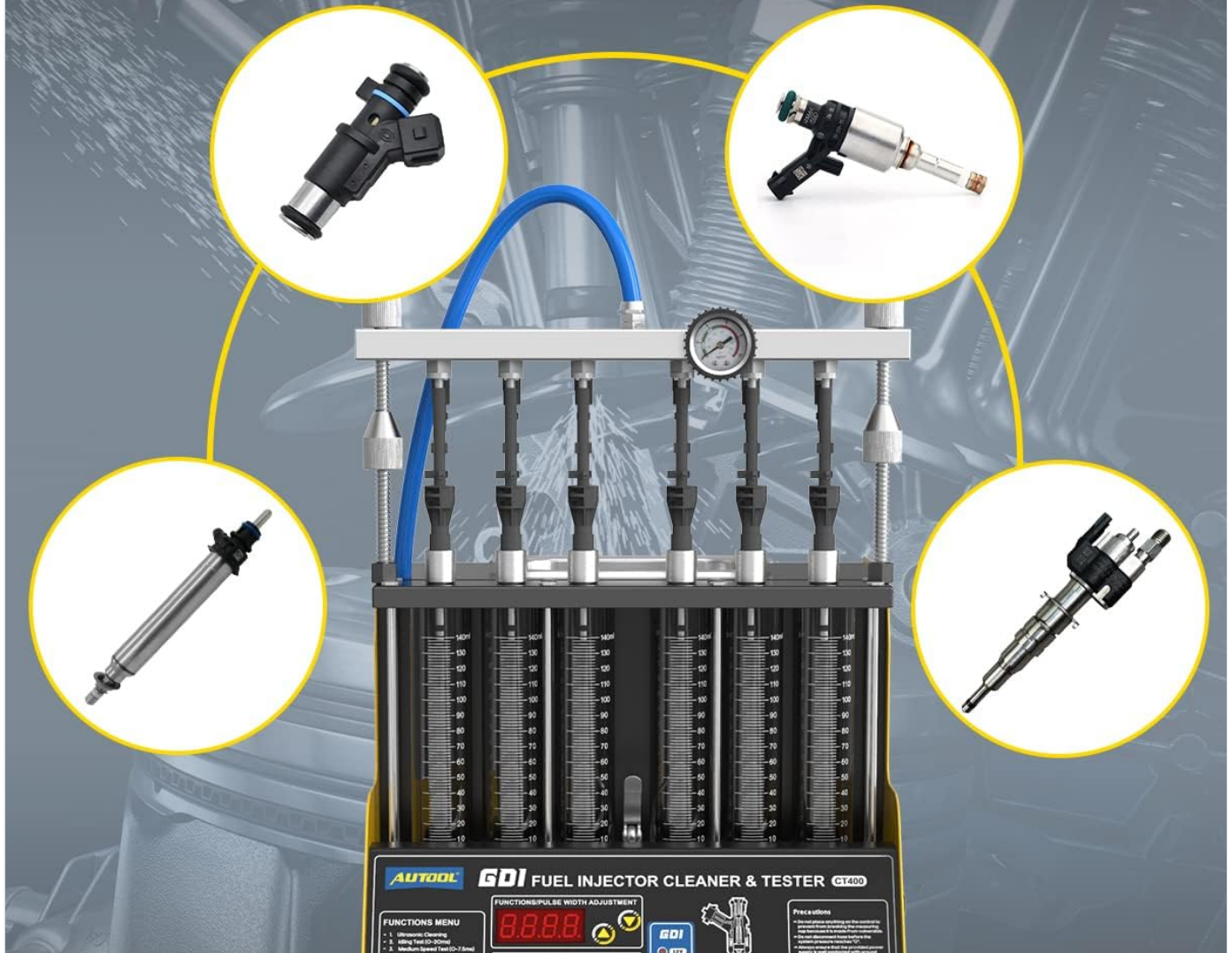


Image: The CT400's compatibility with different types of fuel injectors.

Key testing functions include:

- **Idle Speed Test (0-20ms):** Simulates engine idling speed to test injector state.
- **Medium Speed Test (0-7.5ms):** Simulates engine running at medium speed.
- **High-Speed Test (0-4ms):** Simulates high-speed engine performance.
- **Acceleration Test:** Simulates car acceleration state.
- **Shift Speed Test:** Simulates car shifting state.
- **Leakage Test:** Checks the sealing condition of the fuel injector.
- **Idle Speed Sprayability Test:** Tests spraying performance at idle.
- **Medium Speed Sprayability Test:** Tests spraying performance at medium speed.
- **High-Speed Sprayability Test:** Tests spraying performance at high speed.
- **Reverse Flush:** Cleans injectors by flowing test liquid from outlet to inlet.
- **No-Disassembly Cleaning:** Direct cleaning without disassembling injectors (requires special adapters).

FUEL INJECTOR TEST

- 1** Idling test (0~20 ms)
- 2** Medium speed test (0~7.5 ms)
- 3** High speed test (0~4 ms)
- 4** Accelerating test
- 5** Shifting speed test
- 6** Leak checking test
- 7** Idling spray value test
- 8** Medium speed spray value test
- 9** High speed spray value test



Image: Display of various fuel injector test functions available on the CT400.

3. Injector Voltage Selection

Select the appropriate injector voltage (12V, 70V, or 120V) on the control panel according to the injector type being tested. This ensures proper operation and accurate results for different vehicle brands.

INJECTOR VOLTAGE SELECTION

Select the right injector voltage for cleaning or testing according to the injector type.



Image: Control panel showing options for selecting injector voltage.

MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your AUTOOL CT400.

1. Fluid Management

Always use professional automotive injector test and cleaning fluids. If not available, medical alcohol with an alcohol content of more than 75% can be used as an alternative, but note that cleaning effectiveness may vary. The CT400 is designed to allow for recycling of cleaning fluid, which can be drained via the discharge valve.

2. Cleaning the Unit

Regularly clean the control panel and exterior of the machine to prevent dust and debris buildup. Ensure the ultrasonic cleaning bath is kept clean.

3. Cooling System

The CT400 is equipped with a cooling fan to prevent overheating during prolonged use. Ensure the fan vents are not obstructed to allow for proper airflow.

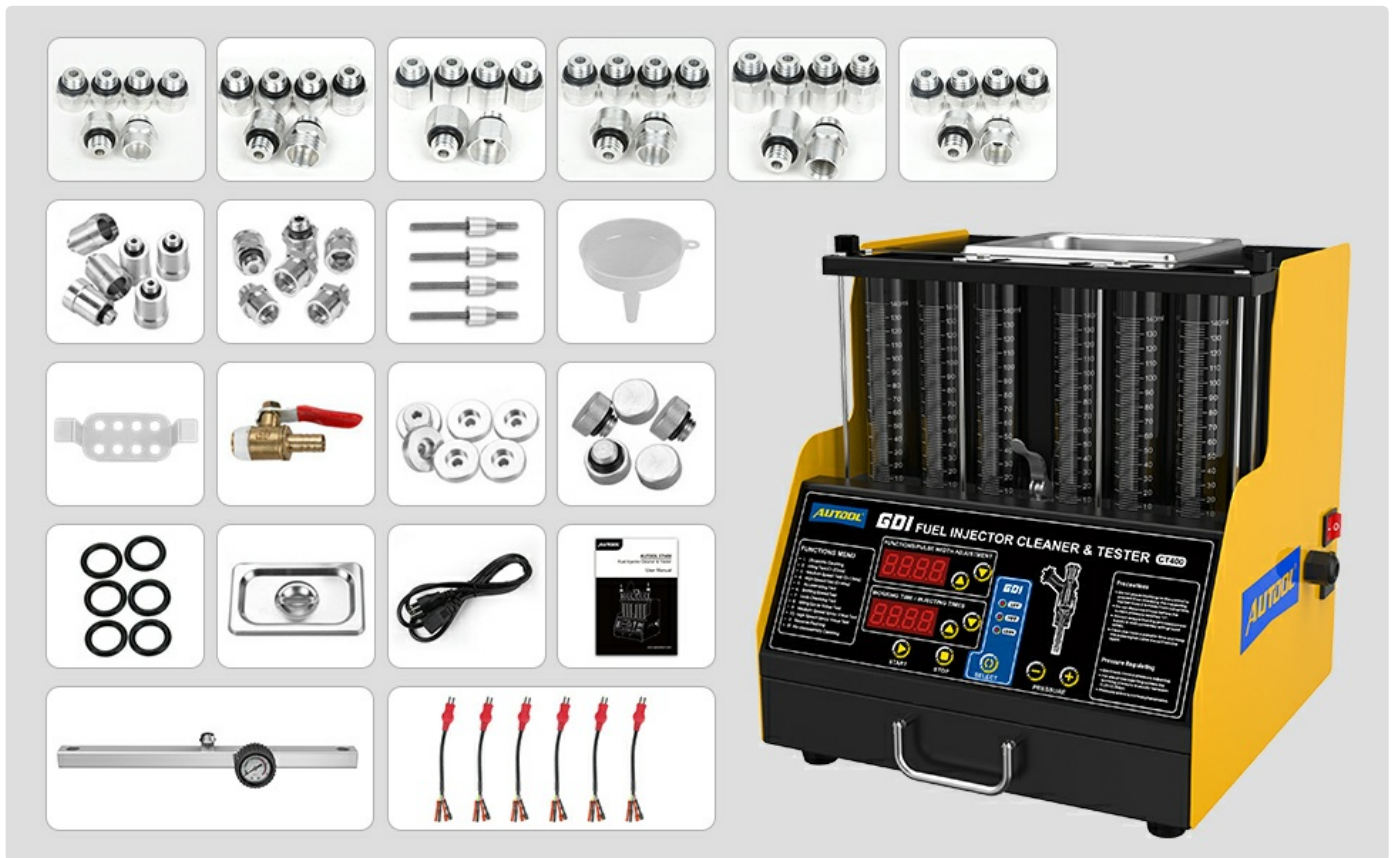


Image: The intelligent cooling system of the AUTOOL CT400, designed for continuous operation.

TROUBLESHOOTING

Refer to the following guidelines for common issues:

- **General Safety:** Always ensure the provided power supply is well connected with ground safety.
- **Control Panel Operation:** Do not place anything on the control panel to avoid interference. Clean the control panel regularly.
- **Hose Disconnection:** Do not disconnect hoses before the system pressure reaches 0.
- **Pressure Fluctuation:** Electronic control pressure adjusting range is 0-0.65Mpa. Minor pressure fluctuation is a normal phenomenon during operation.

Video: Provides a visual guide to the machine's functions, including setup and operational aspects that may help in troubleshooting.

SPECIFICATIONS

Feature	Detail
Brand	AUTOOL
Model	CT 400 (Fuel Injector Cleaner)
Item Weight	35.7 pounds
Package Dimensions	18.2 x 18.2 x 17.2 inches
Injector Compatibility	GDI, EFI, FSI (12V, 70V, 120V)
Cylinder Capacity	6-Cylinder Simultaneous Cleaning/Testing
Cooling System Power	60W
Pressure Regulating Range	0-0.65Mpa

WARRANTY AND SUPPORT

AUTOOL stands behind the quality of its products. The CT400 GDI Fuel Injector Cleaner & Tester comes with **Three Years Warranty and Lifelong Maintenance**. For any damage caused by non-human factors, AUTOOL promises to resend parts for free within 3 years.

For technical assistance, inquiries, or support, AUTOOL offers **24/7 Customer Support**. Please contact us, and we will reply as soon as possible within 24 hours.



Image: AUTOOL's commitment to customer support, warranty, and product certifications.

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