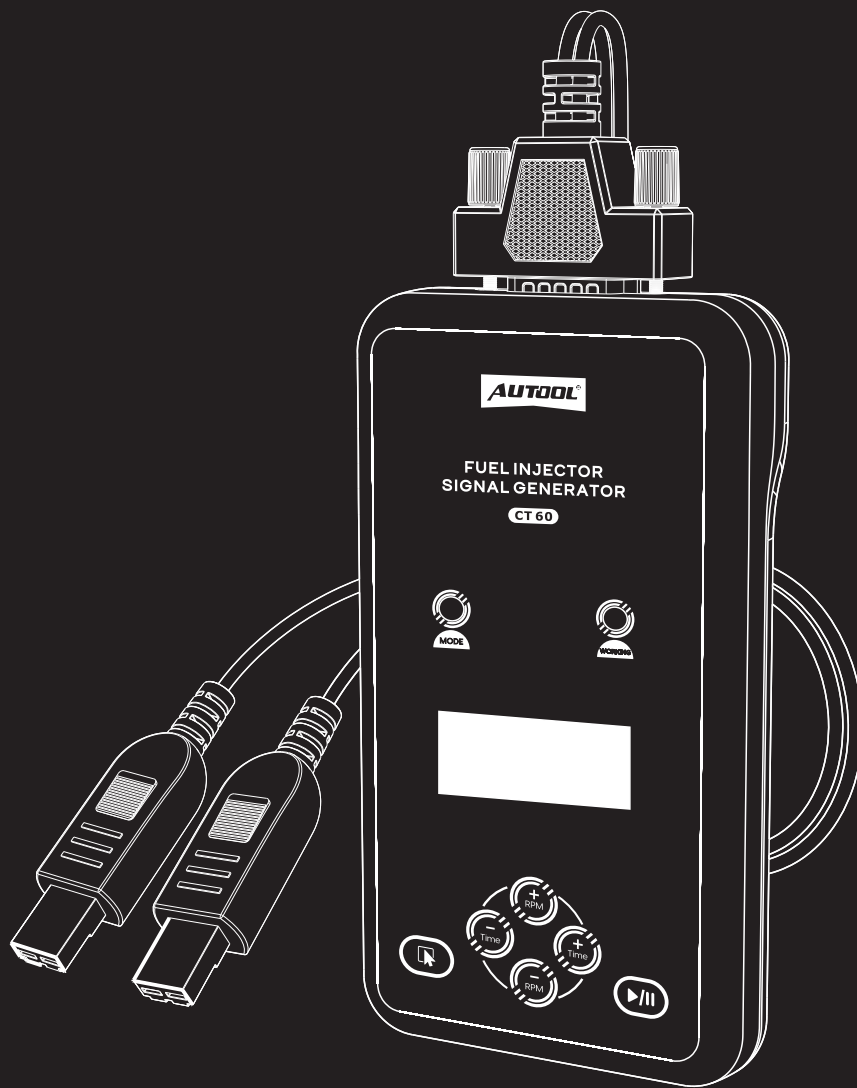


AUTOOL CT60

Fuel Injector Signal Generator

User Manual



Copyright Information

All rights reserved by AUTOOL TECH. CO., LTD. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of AUTOOL. The information contained herein is designed only for the use of this unit. AUTOOL is not responsible for any use of this information as applied to other units.

Neither AUTOOL nor its affiliates shall be liable to the purchaser of this unit or third parties for damages, losses, costs, or expenses incurred by purchaser or third parties as a result of: accident, misuse, or abuse of this unit, or unauthorized modifications, repairs, or alterations to this unit, or failure to strictly comply with AUTOOL operating and maintenance instructions.

AUTOOL shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original AUTOOL Products or AUTOOL Approved Products by AUTOOL.

Other product names used herein are for identification purposes only and may be trademarks of their respective owners. AUTOOL disclaims any and all rights in those marks.

This unit is made for the purpose of persons who have special techniques and certifications.

Manual are either trademarks, registered trademarks, service marks, domain names, logos, company names of or are otherwise the property of AUTOOL or its affiliates. In countries where any of the AUTOOL trademarks, service marks, domain names, logos and company names are not registered, AUTOOL claims other rights associated with unregistered trademarks, service marks, domain names, logos, and company names. Other products or company names referred to in this manual may be trademarks of their respective owners. You may not use any trademark, service mark, domain name, logo, or company name of AUTOOL or any third party without permission from the owner of the applicable trademark, service mark, domain name, logo, or company name. You may contact AUTOOL by visiting AUTOOL at <https://www.autooltech.com>, or writing to aftersale@autooltech.com, to request written permission to use Materials on this manual for purposes or for all other questions relating to this manual.

Product description

The is used to test automobile injectors to determine whether the fuel injectors are stuck, leaking, or burning. It is possible to set multiple pulse outputs and adjust speed, pulse width, operating time and other parameters as required. It is also possible to connect two nozzles for the simultaneous operation to compare the sprayability status and the spray angle of the fuel injector.

Features

- Easily solve common faults such as stuck, blocked, leaked, or insufficient combustion of the fuel injector.
 - Three-year warranty and lifetime maintenance.
 - The pulse width and RPM can be continuously adjusted and different programs can be applied to drive the injectors.
 - During the cleaning process, pulse cleaning can be achieved by adjusting the RPM and width to optimize the cleaning effect.
 - Can be used with any fuel pressure tester.
 - This device can also be used with ultrasonic cleaners and older fuel injector testers.
- The drive mode of the GDI engine injector added to this machine can be used as an upgrade kit for the old version of the machine (machine without GDI drive).

Parameters

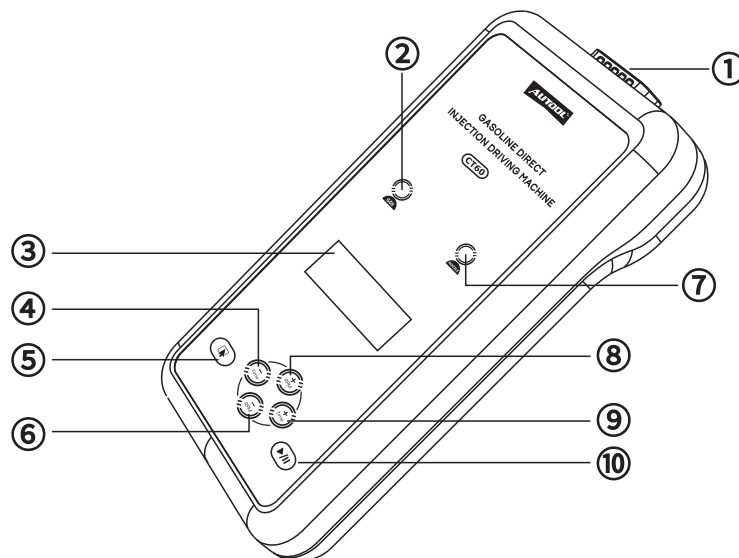
Power input: AC 110~220V 50Hz/60Hz;

Operating environment: 0°C-60°C, Relative humidity<80%;

Storage environment: -10°C-60°C, Relative humidity<85%;

Weight: 200g; Size: 150mm×90mm×50mm

Schematic diagram



- 1-DP15 Connector ; 2-Fuel Injector Type Indicator; 3- Display area; 4-RPM“+” ;
5-TIME“-” ;6-Select button; 7-RPM“-”; 8-Working status indicator; 9-TIME“+” ; 10-Pause

Instructions

- Turn off the vehicle's engine and remove the fuel injectors from the engine.
- Connect the pulse output to the power input port on the fuel injector.
- Connect the positive and negative electrodes clamps to the 12V battery.
- Press RPM“+”,“-”key to select the required analog speed. Press “Start” button, then the device starts working.
- Select the required injector.
- Put the device into the connection equipment, and then press the carburetor cleaner.
- Press RPM“+” and “-”keys, the tester will output pulse to the injector, and then the pulse signal indicator will light up, The device will start working.
- Use self-pressure detergent, you need to select the corresponding connector and connect it well. Press the start button to start spraying, and observe the sprayability status and spray angle with your naked eye.

Warranty

There are 3 years warranty of the main unit from the date of the customer received the AUTOOL product and 1 year warranty for accessories.

Warranty Access

- Repair or replace the equipment will be done according to the specific fault conditions;
- We guarantee that all replacement parts, accessories or equipment are brand new;
- Within 90 days after the customer receives the product, if the product has faulty, the buyer can provide videos and pictures, we will bear the shipping costs and provide free replacement parts for the customer.

Warranty is not Covered on the Condition Listed Below

- Product is bought through non-official AUTOOL purchase channel.
- Product failure is caused by incorrect use of the product, use for other wrong purpose or human factors.

Disclaimer: All information, illustrations, and specifications contained in this manual, AUTOOL reserves the right of modify this manual and the machine itself with no prior notice. The physical appearance and color may differ from what is shown in the manual, please refer to the actual product. Every effort has been made to make all descriptions in the book accurate, but inevitably there are still inaccuracies, if in doubt, please contact your dealer or AUTOOL after-service centre, we are not responsible for any consequences arising from misunderstandings.

版权所有！未征得深圳市偶然科技有限公司的书面同意,任何公司或个人不得以任何形式（电子、机械、影印、录制或其他形式）对本说明书进行复制和备份。本手册专为偶然公司产品的使用而计,对于将之用于指导其他设备操作而导致的各种后果,本公司不承担任何责任。

因使用者个人或第三方的意外事故,滥用、误用该设备,擅自更改,或修理该设备,或未按偶然公司的操作与保养要求而导致设备损坏、遗失所产生的费用及开支等,偶然公司及其分支机构不承担任何责任。

正式声明:本说明书所提及之其他产品名称,目的在于说明该设备如何使用,其注册商标所有权仍属原公司。

本设备供专业技术人员或维修人员使用。

注册商标

偶然公司已在中国及海外若干国家进行了商标注册,其标志为**AUTOOL**。本手册所提及之偶然公司其它商标、服务标志、域名、图标、公司名称均属偶然及其下属公司之产权。在偶然公司之商标、服务标志、域名、图标、公司名称还未注册之国家,偶然公司声明其对未注册商标、服务标志、域名、图标、公司名称之所有权。本手册所提及之其它产品及公司名称的商标仍属于原注册公司所有。在未得到拥有人的书面同意之前,任何人不得使用偶然公司或所提及的其它公司之商标,服务标志,域名,图标,公司名称。您可以访问偶然网址: www.autooltech.com, 或发送邮箱至: aftersale@autooltech.com, 与偶然公司进行联系, 征得其手册使用权之书面同意。

注意事项

- 使用本仪器前，必须将汽车的发动机关闭；
- 不要在靠近汽车的地方抽烟或点火。
- 不要将汽车的燃油溅到热的发动机部件上。
- 仅在通风的场所使用本仪器。
- 不要靠近任何汽车的转动部件，不要接触任何汽车的发热部件。
- 不要触碰任何带有危险电压的汽车部件。
- 佩戴合格的护目镜。
- 测试完成后，应将所有被断开的汽车连接正确恢复。

产品介绍

本产品用于测试汽车喷油器，以判断喷油器是否卡滞，泄漏或燃烧等故障状况。它可设置多个脉冲信号输出，并可以根据需要调整转速，脉冲宽度，工作时间等参数。也可连接两个喷嘴同时工作，对比喷油的雾化状态和喷油角度。

功能特点

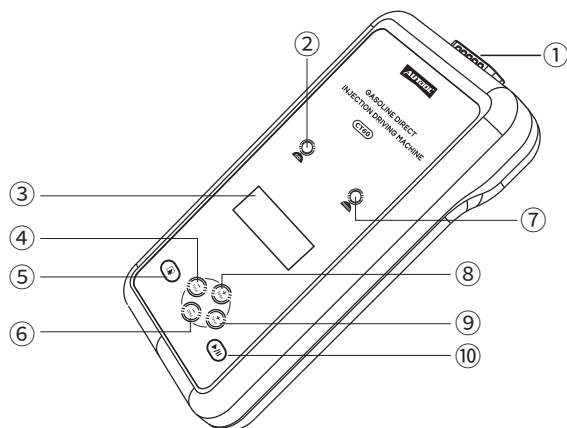
- 轻松解决喷油嘴卡滞、阻塞、泄露、燃烧不充分等常见故障。
- 质保三年，终身维护。
- 可以连续调节脉冲宽度和速度，并应用不同的程序来驱动喷油器。
- 在清洁过程中，可以通过调节转速和脉冲宽度来实现脉冲清洁，以提高清洁效果。
- 可以与任何燃油压力测试仪一起使用
- 本设备也可以与超声波清洗机和旧款的喷油嘴测试仪一起使用，本机增加的GDI发动机喷油器的驱动模式，可以作为旧版机器（不带GDI驱动机器）的升级配套。

产品参数

- 输入电源: AC110~220V 50Hz/60Hz;
- 运行环境: 0°C-60°C，相对湿度<80%；
- 储存环境: -10°C-60°C，相对湿度<85%；

整机结构解析

- 1-DP15连接器; 2-喷油嘴类型指示灯;
3-屏幕显示区; 4-时间“-”; 5-选择键;
6-转速“-”; 7-工作状态指示灯; 8-转速“+”;
9-时间“+”; 10-启动/停止;



操作说明

- 关闭车辆的引擎,拆出发动机上的喷油器;
- 将脉冲输出端子连接到喷油器上的电源输入端口;
- 连接交流电源适配器;
- 按下转速“+”“-”键,选择所需的模拟转速,按启动键喷油器开始工作;
- 选择所需的喷油器连接设备;
- 将喷油器装入连接设备里面,再按压化油器清洗剂;
- 按下转速“+”“-”键,测试仪将向喷油器输出脉冲,然后脉冲信号指示灯将亮起;喷油器开始有开关动作;
- 用有自带压力的清洗液,需选出对应的连接接头连接好,按启动键,就会开始喷油出来,用眼睛观察喷油的雾化状态和喷油角度有没有问题;

售后保修

AUTOOL 整机自客户签收日起享有3年保修期,附件1年保修期。

保修方式:

- 根据具体的故障情况对设备进行修理或更换;
- 我方保证所有更换的部件、附件或设备都是全新;
- 在客户收到产品90天内出现故障同时提供视频和图片,我方承担运费并免费提供相应配件给客户更换。收到产品超过90天,客户承担相应的费用,我方免费提供配件给客户更换。

以下情况不再免费保修范围:

- 非正规渠道购买**AUTOOL**的产品;
- 未按产品说明书要求使用和维护造成的损坏。

声明:偶然公司保留更改产品设计与规格的权利,届时恕不另行通知。实物外观与颜色可能与说明书中显示的有差别,请以实物为准。我们已尽最大努力力求使书中所有描述准确,但仍难免有不妥之处,如有疑问,请联系经销商或偶然售后服务中心,本公司不承担任何因误解而产生的后果。

AUTOOL[®]

深圳市偶然科技有限公司

深圳市光明新区长春南路中鹏程工业园

 Shenhua Innovation Park, Baoan, Shenzhen, China

 www.autooltech.com

 aftersale@autooltech.com

 +86-400 032 0988 / +86-755-27807580

   **RoHS**
Made in China

