

AUTOOL SC301

Cooling System Tester & Filler

User Manual

用户手册





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CAUTIONS



Before using the instrument, please read this manual carefully for proper operation.

- ▶ Before installation, conduct a meticulous examination of the equipment list. In case of any uncertainties, promptly contact the dealer or AUTOOL company for clarification.
-

Environmental requirements

- ▶ The operation of the equipment does not necessitate starting the vehicle.
 - ▶ Avoid placing wiping cloths used for motor oil, fuel, or solvents on the equipment.
 - ▶ Perform a visual inspection of the equipment for any signs of damage before usage. If any damage is detected, refrain from using the equipment and seek assistance from a qualified professional for repairs.
 - ▶ This equipment is designed for testing automotive cooling systems and adding coolant. Using it for any other purposes is strictly prohibited, as it may result in equipment damage.
 - ▶ This equipment is exclusively intended for use with a 12V DC voltage. Usage with voltages of 24V/110V/220V/380V is strictly prohibited, as it may lead to equipment damage.
 - ▶ It is advisable to utilize an air compressor with a pressure rating of 0.7Mpa or higher.
 - ▶ Before opening the radiator cap, ensure that the radiator has cooled down.
 - ▶ Operate the leak detection unit and the vehicle in well-ventilated conditions to prevent inhalation of gas.
-

Routine maintenance

- ▶ Avoid using low-quality coolant.
- ▶ Do not mix coolant with different performance specifications, as it can lead to chemical reactions that may affect the normal effectiveness of the coolant.
- ▶ Avoid directly adding undiluted coolant to prevent coolant degradation and thickening in low temperatures.

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PRODUCT INTRODUCTION

Overview

The SC301 is designed for the automotive maintenance and repair field. Mainly through the function of vacuuming and pressure holding detection, the coolant replacement and the leakage detection of the automobile cooling system are realized. It boasts a high level of automation, making it suitable for one-person use, offering convenience, time-saving, and labor-saving benefits.

Product features

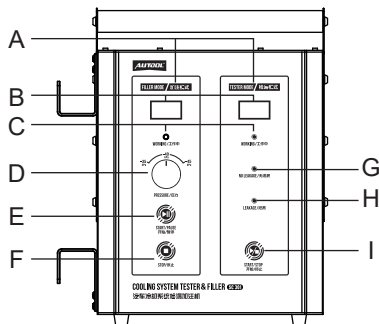
- Automatic coolant filling, significantly reducing coolant replacement time for added convenience and speed.

Technical parameters

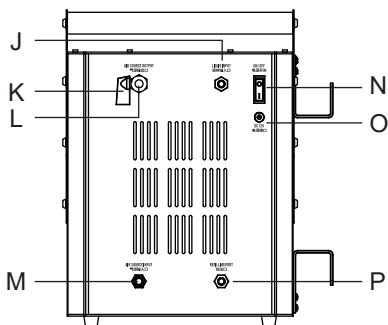
Power Supply	DC 12V / 5A
Pressure Range	-1~2bar
Storage Temperature	-10~+60°C
Operating Temperature	-20~+65°C

PRODUCT STRUCTURE

Structure diagram



A	Mode Selection	B	Digital display
C	Working Indicator	D	Gear Adjustment Knob
E	Start/Pause Button	F	Stop Button
G	No Leakage Indicator (Green Light On)	H	Leakage Indicator (Red Light On)
I	Start/Stop Button		



J	Coolant Input Port	K	Drain Valve
L	Air Outlet Port	M	Air Inlet Port
N	Power Switch	O	Power Interface
P	Filling Port		

OPERATIONS INSTRUCTION

Basic operation

- Upon startup, both modes (Testing Mode and Filling Mode) will display their respective gear selections. When you select one mode, the gear display for the other mode will disappear. For example, if you select Testing Mode, the gear display for Filling Mode will not be visible.
 - There are three pressure settings based on vacuum pressure levels: -35KPa, -40KPa, and -45KPa.
 - In Filling Mode, you can choose the appropriate gear for vacuum pumping. After the vacuum pumping is complete, the system will automatically proceed to coolant filling. If it doesn't fill completely, you can perform multiple filling cycles.
 - In the event that no coolant enters the system within two minutes during Filling Mode, a fault reminder will be displayed.
 - In Testing Mode, if the selected vacuum level cannot be achieved and maintained, the system will switch to pressure holding mode within two minutes, a fault reminder will be displayed.
-

Testing mode

NOTE

- ▶ Vehicle ignition is not required.
 - ▶ Begin by opening the drain valve before starting the operation. (The vent valve is considered open when it aligns parallel to the air hose.)
-
- Connect to a car battery or a 12V DC power supply and plug it into the machine's rear power interface.
 - Toggle the switch to power on the machine. There will be a buzzer sound to indicate that the machine is starting.
 - Connect the air inlet hose to the air compressor
 - Select the desired gear level, which is categorized by vacuum pressure: -35KPa, -40KPa, or -45KPa.
 - Press the [Start/Stop] button to initiate machine operation. The machine will begin the vacuuming process. Wait for the vacuuming to complete, and the machine will automatically

enter pressure holding mode for 60 seconds. Afterward, it will provide an automatic leak detection indication.

- The leak testing function utilizes LED lights to inform the user about the coolant tank's condition. When there is a leak, the red LED light remains continuously lit, while in the absence of a leak, the green LED light remains continuously lit.

Filling mode

NOTE

- Begin by opening the drain valve before starting the operation. (The vent valve is considered open when it aligns parallel to the air hose.)

After completing the Testing Mode, select the Filling Mode to add coolant into the vehicle's cooling system.

- Connect the filling hose to the vehicle and place the coolant inlet hose into the coolant container.
- Choose the appropriate gear level (for older vehicles, it's advisable not to use the higher gear levels).
- Press the [Start/Pause] button to initiate the vacuuming process. Once vacuuming is complete, the machine will automatically start adding coolant to the system.
- After the filling is completed, press the [Stop] button.
- After refilling, disconnect the connector from the vehicle.

Drain operation

NOTE

- When draining the residual coolant, it is recommended to drain in an open area or use a container to collect the liquid.
- After disconnecting the connector from the vehicle, close the drain valve by turning it downward. Press and hold the Tester Mode Start button until you hear the buzzer, then release. Press the Tester Mode Start button to clean the internal pipes; liquid will discharge from the filling port. When no liquid is coming out, press the Tester Mode stop button to finish draining. Turn off the power and remove the compressed air hose.

MAINTENANCE SERVICE

Our products are made of long-lasting and durable materials, and we insist on perfect production process. Each product leaves the factory after 35 procedures and 12 times of testing and inspection work, which ensures that each product has excellent quality and performance.

Maintenance To maintain the performance and appearance of the product, it is recommended that the following product care guidelines be read carefully:

- Be careful not to rub the product against rough surfaces or wear the product, especially the sheet metal housing.
- Please regularly check the product parts that need to be tightened and connected. If found loose, please tighten it in time to ensure the safe operation of the equipment. The external and internal parts of the equipment in contact with various chemical media should be frequently treated with anti-corrosion treatment such as rust removal and painting to improve the corrosion resistance of the equipment and extend its service life.
- Comply with the safe operating procedures and do not overload the equipment. The safety guards of the products are complete and reliable.
- Unsafe factors are to be eliminated in time. The circuit part should be checked thoroughly and the aging wires should be replaced in time.
- Adjust the clearance of various parts and replace worn (broken) parts. Avoid contact with corrosive liquids.
- When not in use, please store the product in a dry place. Do not store the product in hot, humid, or non-ventilated places.

WARRANTY

From the date of receipt, we provide a three-year warranty for the main unit and all the accessories included are covered by a one-year warranty.

Warranty access

- The repair or replacement of products is determined by the actual breakdown situation of product.
- It is guaranteed that AUTOOL will use brand new component, accessory or device in terms of repair or replacement.
- If the product fails within 90 days after the customer receives it, the buyer should provide both video and picture, and we will bear the shipping cost and provide the accessories for the customer to replace it free of charge. While the product is received for more than 90 days, the customer will bear the appropriate cost and we will provide the parts to the customer for replacement free of charge.

These conditions below shall not be in warranty range

- The product is not purchased through official or authorized channels.
- The product breakdown because the user does not follow product instructions to use or maintain the product.

We AUTOOL pride ourselves on superb design and excellent service. It would be our pleasure to provide you with any further support or services.

Disclaimer

All information, illustrations, and specifications contained in this manual, AUTOOL reserves the right to 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.

RETURN & EXCHANGE SERVICE

Return & Exchange

- If you are an AUTOOL user and are not satisfied with the AUTOOL products purchased from the online authorized shopping platform and offline authorized dealers, you can return the products within seven days from the date of receipt; or you may exchange it for another product of the same value within 30 days from the date of delivery.
- Returned and exchanged products must be in fully saleable condition with documentation of the relevant bill of sale, all relevant accessories and original packaging.
- AUTOOL will inspect the returned items to ensure that they are in good condition and eligible. Any item that does not pass inspection will be returned to you and you will not receive a refund for the item.
- You can exchange the product through the customer service center or AUTOOL authorized distributors; the policy of return and exchange is to return the product from where it was purchased. If there are difficulties or problems with your return or exchange, please contact AUTOOL Customer Service.

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注意事项

警告

 在使用本产品前，请注意以下操作：

- ▶ 安装前应仔细检查设备清单。如有疑问，请立即与经销商或偶然公司联系。
-

使用环境要求

- ▶ 设备操作过程中无需启动车辆。
 - ▶ 严禁将用于机油、燃料、溶剂的擦拭布放置于设备上。
 - ▶ 使用前通过目测检查本设备是否有损坏，若有损坏请勿使用并联系专业人员进行维修。
 - ▶ 此设备适用于汽车冷却系统测试及冷却液加注。严禁用作其它用途，否则将会造成设备损坏。
 - ▶ 此设备仅用于12V直流电压。严禁使用24V/110V/220V/380V电压，否则将会造成设备损坏。
 - ▶ 建议使用空气压缩机压力0.7Mpa以上。
 - ▶ 在开启水箱盖前，请确保水箱是冷却状态。
 - ▶ 在通风良好的情况下操作测漏组及车辆，以避免吸入瓦斯气体。
-

日常维护

- ▶ 避免选用劣质的冷却液。
- ▶ 不能将不同性能的防冻液混合使用，很容易会出现化学反应，影响防冻液的正常使用效果。
- ▶ 不要直接加注冷却液母液，防止出现冷却液变质、低温粘稠情况。

产品简介

概述 SC301用于汽车维修保养领域，主要通过抽真空和保压检测功能，实现冷却液更换和汽车冷却系统检漏。自动化程度高，单人操作即可，使用便捷、省时、省工。

产品功能 汽车冷却系统检漏测试，加注冷却液。

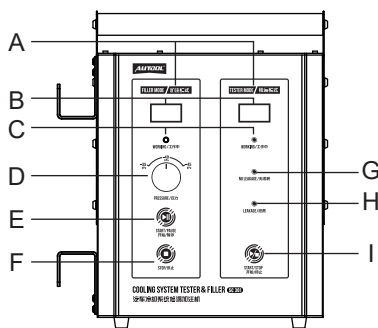
产品特点 自动加注，大大缩短了冷却液的更换时间，更方便、更快捷。

技术参数

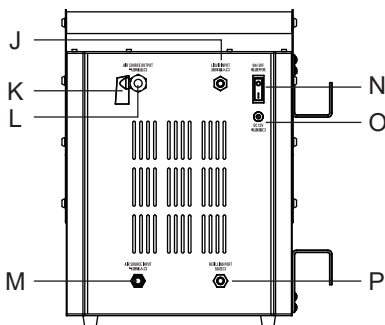
电源	DC 12V / 5A
压力范围	-1~2bar
工作温度	-10~+60°C
存放温度	-20~+65°C

产品结构

结构图



A	模式选择	B	档位显示窗
C	工作指示灯	D	档位调节旋钮
E	开始/暂停按键	F	停止按键
G	无泄漏提示 (绿灯亮)	H	泄漏提示 (红灯亮)
I	开始/停止按键		



J	液体输入口	K	排空阀
L	气源输出口	M	气源输入口
N	电源开关	O	电源接口
P	加注口		

操作说明

基本操作

- 开机时两种模式(检漏模式, 加注模式) 均显示档位, 选择相应模式时另一模式不显示档位, 如当选择检漏模式时加注模式数码管不显示档位。
 - 三种档位选择, 按真空压力分为-35KPa、-40KPa、-45KPa三种档位。
 - 在加注模式中, 可以选择相应的档位进行抽真空, 抽真空结束后无需进行检漏测试直接自动加注, 如没有加注满可进行多次加注。
 - 仪器在加注模式时, 两分钟内没有冷却液进入, 将会出现报错提示。
 - 仪器在检漏模式时, 一直抽不到所选真空度在两分钟内进入保压模式, 将会出现报错提示。
-

检漏模式

注意

- ▶ 不需要启动车辆。
 - ▶ 开始工作前, 必须打开排空阀 (排空阀与气管平行打开状态)。
-
- 使用汽车蓄电池或者12V直流电源插入机器背面电源接口;
 - 拨动开关进行开机, 开机时有蜂鸣器发声提醒;
 - 将空压机气管与机器气源输入口相连接;
 - 选择档位, 按真空压力分为-35KPa、-40KPa、-45KPa三种档位;
 - 点按[开始/停止]键机器工作, 机器开始抽真空后静等抽真空结束, 结束后机器自动进入保压模式, 保压时间60S, 结束后自动提示是否泄漏;
 - 泄漏提示功能, 使用 LED 灯长亮来提示用户水箱是否泄漏, 其中泄漏时红色 LED 灯长亮, 无泄漏时绿色 LED 灯长亮。
-

加注模式

⚠ 注意

- ▶ 开始工作前，必须打开排空阀（排空阀与气管平行打开状态）。

检漏模式通过后选择加注模式往冷却系统内部加注冷却液。

- 加注口管道连接汽车，将液体输入管道放入冷却液瓶中；
- 选择档位（年限较久的车辆，不建议使用高档位）；
- 点按[开始/暂停]键，开始进行抽真空，抽真空结束后自动进行加注冷却液；
- 完成加注后点按[停止]键即可；
- 加注结束后，将接头从车上取下。

排空操作

⚠ 注意

- ▶ 排空时为了防止加注口管道的液体飞溅，建议在空地排空，或者使用胶壶收集液体。
- 将接头从车上取下后，关闭排空阀（排空阀往下为关闭状态），先长按检漏模式开始键，直到听见蜂鸣器提示声响起后松开，然后点按检漏模式开始键，开始对内部管道进行清洗，液体将从加注口排出，待管道无液体排出后点按检漏模式停止键，即代表完成排空工作，关闭电源，取下空压机气管。

维修保养服务

您所拥有的AUTOOL产品选用持久耐用的材料，AUTOOL坚持精益求精的生产工艺，每一件产品出厂都经过35道工序及12次质检工作，从而确保每一件产品都拥有卓越的品质及性能。所以您的AUTOOL产品值得您定期维护保养，使其产品将能够长期稳定地工作。

维修保养

维护保养是为了保持产品性能和外观，我们建议您仔细阅读以下产品保养指南：

- 注意不要将产品与粗糙表面摩擦或揉搓产品，特别是钣金外壳。
- 对产品中需要紧固和连接的部位经常进行检查，如发现松动应及时紧固，以保证产品的安全运行。对与各种化学介质接触的产品外部和内部零件要经常进行除锈、喷漆等防腐处理，以提高产品的抗腐蚀能力，延长产品的使用寿命。
- 遵守安全操作规程，不超负荷使用产品。产品的安全防护装置齐全可靠，及时消除不安全因素。电路部分彻底检查，老化电线要及时更换。
- 定期清洗和更换易耗部件；调整各部位配合间隙和更换磨损（已坏）部件清洁时，避免产品接触带腐蚀性的液态物品。
- 不使用时，请将产品存放于干燥的位置。不要将产品存放在高温、潮湿或不通风的地方。

保修服务

AUTOOL主机自客户签收日起享有3年保修期。其所含附件自客户签收日起享有1年保修期。

保修方式

- 根据具体的故障情况对产品进行免费修理或更换；
- 我方保证所有更换的部件、附件或产品都是全新；
- 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；

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退换货服务

退换货

- 如果您对从线上授权购物平台和线下授权经销商所购买的 AUTOOL 产品不满意, 根据《AUTOOL 全球销售条款》, 您可以自收到产品之日起七日内退货; 或者在产品交付之日起的30日内调换等值的其他产品。
- 退回及调换的产品必须处于完全可销售状态, 并附上相关销售单单据, 所有相关配件、纸质发票 (如有)。
- AUTOOL 将会对寄回退货的商品进行检查, 以确保其处于完好无损的状态并且符合条件, 相关条件详情请参阅《AUTOOL 全球销售条款》。任何未通过检查的商品将退还给您, 您将不会获得商品退款。
- 您可以通过客户服务中心或 AUTOOL 授权经销商调换产品; 退换货原则为从哪里购买, 就从哪里退换货。如果您退换货遇见困难或者阻碍, 请联系 AUTOOL 客户服务中心。通过客户服务中心退换货时, 我们建议您通过下面的方式进行:

中国区域致电	400-032-0988 / 18929303778
售后微信号	18929303778
海外区域致电	+86 0755 23304822
E-mail	aftersale@autooltech.com
Facebook	https://www.facebook.com/autool.vip
YouTube	https://www.youtube.com/c/autooltech

- 如您的退换货得到确认, 您将收到确认信息和邮件。