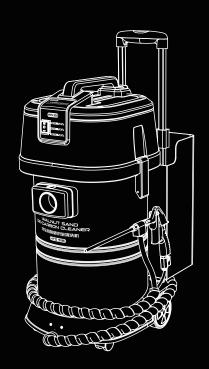


AUTOOL HTS518

Walnut Sand De-Carbon Cleaner

User Manual 用户手册



www.autooltech.com



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执行标准/Execution standard: SB/T 10741-2012









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CAUTIONS

Warning

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

- Keep the power cord away from heat, oil and sharp corners, and avoid the power cord from being damaged by stretching, squeezing or twisting.
- Please don't use it in areas where flammable, explosive or toxic objects are stored.
- ▶ Please don't vacuum up flammable, explosive, hot ashes, burning cigarette butts, etc.
- Please don't vacuum up corrosive liquids,e.g. bleach, ammonia water, drain cleaner,etc.
- ▶ Please don't vacuum up hard or sharp objects, e.g. broken glass, nails, screws, etc., to avoid damaging the hose.
- Please avoid malfunctions such as filter blockage and motor burnout caused by inhaling tiny particles such as gypsum powder, wall powder, and cement.
- ▶ If the machine vacuums up the above particles, please clean the filter in time.
- Please do not use this product without any filter screen, which will damage the motor and shorten the service life of the product.
- Please do not excessively twist, step on or pull the hose and do not continue to use after the hose of the carbon deposition cleaner is broken.
- ▶ The use of accessories and spare parts must meet the requirements of the manufacturer, and the product maintenance shall be replaced and repaired by the manufacturer or professionals in the maintenance department.
- ► The products and cables shall be placed out of the reach of children. People (including children) who are physically or mentally unsound or have no relevant experience and knowledge must use them under the supervision and guidance of their quardians.
- If the power cord, plug or other parts are damaged, the use of



this product must be stopped to avoid danger. Please contact the manufacturer immediately for replacement and maintenance.

Special instructions

This manual details the structural principle, functional characteristics, operating methods and relevant accessories of HTS 518 automotive walnut sand de-carbon cleaner, and briefly describes the precautions, maintenance and abnormal phenomenon treatment in use. AUTOOL reserves the right to change the product design and specifications, and the physical configuration is subject to the content of the product packing list.

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PRODUCT INTRODUCTION

Overview

Thank you for choosing AUTOOL HTS 518 Automotive walnut sand de-carbon cleaner produced by AUTOOL TECH CO., LTD. The working principle of this product is that the high-pressure air flow is sprayed into the engine intake pipe, and the sand particles at high-pressure and high-speed will roll and collide in the closed intake pipe, so as to impact the carbon deposits on the intake valve and cylinder wall, and then the walnut sand and the carbon deposit mixture are recovered into the sand storage bucket through a special joint.

Main functions

- Intake manifold cleaning: Clean the intake manifold of the engine by sandblasting in sequence.
- Intake/Exhaust valve cleaning: The valves can be cleaned by sandblasting in sequence without dismantling.

Main features

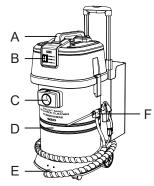
- 1400W high-power motor is adopted, with strong suction.
- Walnut sand is used for physically harmless cleaning.
- Filter screen is used to separate carbon and sand particles for reuse.
- External air compressor gas-supply, powerful sandblasting, better cleaning effect.

Specifications

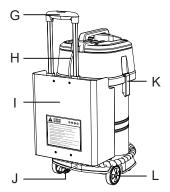
Power Supply	AC 220V±10% 50Hz AC 110V±10% 60Hz
Main Power	1400W
Sand Volume	30L
Machine Weight	23.5kg
Environment Temperature	-10°C~+40°C
Relative Moisture	<85%
Package Size	520*520*890mm

PRODUCT STRUCTURE

Structure diagram



Α	Handle	В	High-speed/Low-speed switch
С	Hose connection for particle recovery	D	Stainless sand storage bucket
Е	Sand blasting hose	F	Sand blasting gun



G	G Trolley rod		Power cord
-1	Accessory storage compartment	J	Air connector
K	Machine head latch	L	Pulleys

3

About control panel (Control the recovery motor)



Α	High-speed gear	В	Close and stop
С	Low-speed gear		

OPERATIONS INSTRUCTION

Installation and connection

- After unpacking, move the machine to the work area, then take out the particle recovery hose from the accessory storage compartment and install it on the suction pipe interface.
- Take out the hose bend of the recovery particle from the accessory storage compartment and install it on the recovery particle hose.
- Take out the long pipe or short pipe of the sandblasting gun from the accessory storage compartment and install it on the sandblasting gun.
- Insert the sand blasting gun into the round hole on the hose bend of the recovery particle hose.
- Connect the quick coupler of external air source to the air source connector of the product.
- Plug the power cord into the external power socket.

Preparatory work

- Open the latches at both ends of the machine, remove the machine head cover, take out the filter cartridge, take out the walnut sand from the accessory storage compartment and add it into the stainless bucket (it is recommended to add 3-5kg walnut sand.), and then install the filter cartridge and the machine head cover in turn.
- Take out the goggles from the accessory storage compartment and wear them.
- Disassemble the automotive engine intake manifold and observe the carbon deposition in the cylinder and the valves and whether the intake and exhaust valves are closed.
- Confirm that the sand blasting gun, the hose bend of the recovery particle and the model adapter have been completed according to the corresponding matching.

Operation process

- Turn on the power switch, and the machine starts to work.
- Select the working mode (low- speed, high- speed).

- Connect the sandblasting gun and hose connector together to the engine manifold port, and confirm that they are well sealed.
- Pull the sandblasting switch and start to enter the de-carbon procedure (generally, one manifold port can be cleaned up for about 2 minutes and then stop to check the cleaning effect).
- After cleaning the carbon deposits, use a dust blowing gun to blow out the remaining sand particles.

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 resumes 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.

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

↑ 在使用核桃砂积碳清洗机前,请注意以下操作:

- ▶ 避免电源线靠近热、油类及尖锐的边角部位,避免用力拉长、挤压或扭曲等方式而造成电源线破损。
- ▶ 请勿在存放易燃易爆或者有毒物体的区域内使用。
- ▶ 请勿抽吸易燃易爆、热的灰烬、燃烧的烟头等。
- ▶ 请勿抽吸腐蚀性液体,如漂白剂、氨水、管道疏通液等。
- ▶ 请勿抽吸坚硬或者锋利的物件,如碎玻璃、钉子、螺丝等,以免 损坏软管。
- ▶ 请避免吸入石膏粉、墻粉、水泥等微小颗粒而引起的滤芯堵塞、 电机烧坏等故障。如吸入上述颗粒,请及时清理滤芯。
- ▶ 请勿在没有任何滤网的情况下使用本产品,这会损坏马达并缩短 产品的使用寿命。
- ▶ 请勿过度扭曲、踩踏、拉拽软管,积碳清洗机软管破裂后,请勿继续使用。
- ▶ 附件及零配件的使用必须符合厂家要求,产品维修由制造厂家或 维修部门专业人员进行更换与维修。
- ▶ 将产品及线缆放在儿童接触不到的地方,肢体不健全、精神有障碍、缺乏相关经验和知识的人(包括儿童)不建议使用。
- ► 若电源线、插头或其他部件损坏时,为避免危险,必须停止使用本产品,请立即联系厂家进行更换和维修。

特别说明

本说明书详细介绍HTS518汽车核桃砂积碳清洗机的结构原理、功能特点、操作方法及相关配件,并对使用中的注意事项、维护保养及异常现象处理作了简要说明。本公司保留更改产品设计与规格的权利,实物配置以产品装箱单内容为准。

产品简介

概述

欢迎使用深圳市偶然科技有限公司生产的HTS518汽车核桃砂积碳清洗机,该产品是通过高压气流喷进发动机进气管道内,高压高速的砂粒会在封闭的进气管道内翻滚和撞击,从而把进气门及缸壁上的积碳冲击下来,然后通过专门的接头把核桃砂及积碳混合物回收到储砂桶中。

主要功能

- 进气歧管清洗: 分别对发动机进气歧管依次喷砂清洗。
 - 进/排气门清洗: 可在免拆情况下, 依次对气门喷砂清洗。

主要特点

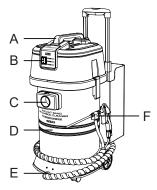
- 采用1400W大功率电机,吸力强劲。
- 采用核桃砂粒,物理无害清洗。
- 采用滤网分离积碳与砂粒, 重复使用。
- 外接空压机气源, 喷砂强劲有力, 清洗效果更好。

工作环境及 技术指标

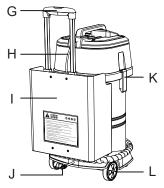
供电电源	AC 220V±10% 50Hz AC 110V±10% 60Hz
主要功率	1400W
砂粒容积	30L
整机重量	23.5kg
环境温度	-10°C~+40°C
相对湿度	<85%
产品尺寸	360*488*735mm
包装尺寸	520*520*890mm

产品结构

结构图



Α	提手	В	高速/低速开关
С	回收颗粒软管接口	D	不锈钢储砂桶
Е	喷砂管	F	喷砂枪



G	伸缩拉杆	Н	电源线
- 1	配件储存箱	J	气源接头
K	机头锁扣	L	滑轮

控制面板说明 (控制回收电机)



Α	高速档位	В	关闭停止
С	低速档位		

操作说明

安装与连接

- 拆箱后将机器滑至工作区,从配件储存箱中取出回收颗粒软管装在产品的吸管接口上。
- 从配件储存箱中取出回收颗粒软管转接弯头,装在回收颗粒软管上。
- 从配件储存箱中取出喷砂枪长管或着短管,装在喷砂枪上。
- 将喷砂枪插入回收颗粒软管转接弯头上的圆孔中。
- 将外接气源的快速接头连接到产品的气源接头上。
- 将电源线插入外接电源插座上。

准备工作

- 打开机器两端的锁扣,取下机头盖,取出滤芯,从配件储存箱中 拿出核桃砂粒倒入不锈钢桶中(建议倒入3~5kg核桃砂),再依次 装好滤芯和机头盖。
- 从配件储存箱中取出护目镜并戴好。
- 将汽车发动机进气歧管拆卸下来,观察气缸内以及气门的积碳 情况以及进、排气门是否处于关闭状态。
- 确认喷砂枪、回收颗粒软管转接弯头、车型适配接头已按相应的配合组合完成。

操作过程

- 打开电源开关,此时机器处于工作状态。
- 选择工作模式(低速、高速)。
- 将喷砂枪和软管接头组合一起对接到发动机歧管口,确认密封 好。
- 扣动喷砂枪开关,开始进入除碳程序。
 - 一般是一个歧管口清除2分钟左右停机确认清洗效果。
- 清洗完积碳后,用吹尘枪将残余的砂粒吹出即可。

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;

以下情况不在免费保修范围:

- 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;

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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。