

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.



SMOKE MACHINE

FOR CUSTOMER SERVICE

Technical Question?

CALL 1-866-458-2472

customerservice@oem-tools.com

UNPACKING

After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. If any damage is observed, a shipping damage claim must be filed with carrier. Do not use Smoke Machine if broken, bent, cracked or damaged parts (including labels) are noted. Any Smoke Machine that appears damaged in any way, operates abnormally or is missing parts should be removed from service immediately. If you suspect that the Smoke Machine was subjected to a shock load (a load that was dropped suddenly, unexpectedly, etc.) immediately discontinue use until it has been checked by a factory authorized service center.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

▲WARNING: This product can expose you to chemicals, including DEHP, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.



SMOKE MACHINE

Thank you very much for choosing an OEMTOOLS Product!

For future reference, please complete the owner's record below:

Model: _____ **Purchase Date:** _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it. This machine is designed for certain applications only. OEMTOOLS cannot be responsible for issues arising from modification. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted OEMTOOLS to determine if it can or should be performed on the product.

For technical questions please call 1-866-458-2472.



IMPORTANT INSTRUCTIONS AND SAFETY RULES

1. Know your tool. Read this manual carefully. Learn the tool's applications and limitations, as well as, potential hazards specific to it.
2. Keep work area clean and well lit. Cluttered or dark work areas invite accidents.
3. Keep children away. All children should be kept away from the work area. Never let a child handle a tool without strict adult supervision.
4. Do not operate this tool if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to operate.
5. Use safety equipment. Eye protection should be worn at all times when operating this tool. Use ANSI approved safety glasses. Everyday eyeglasses are NOT safety glasses. Dust mask, non-skid safety shoes, hard hat or hearing protection should be used in appropriate conditions.
6. Wear proper apparel. Loose clothing, gloves, neckties, rings, bracelets or other jewelry may present a potential hazard when operating this tool. Keep all apparel clear of the tool.
7. Don't overreach. Keep proper footing and balance at all times when operating this tool.
8. Check for damage. Check your tool regularly. If part of the tool is damaged it should be carefully inspected to make sure that it can perform its intended function correctly. If in doubt, the part should be repaired. Refer all servicing to a qualified technician. Consult your dealer for advice.
9. Keep away from flammables. Do not attempt to operate this tool near flammable materials or combustibles. Failure to comply may cause serious injury or death.
10. Store idle tools out of the reach of children and untrained persons. Tools may be dangerous in the hands of untrained users.
 - Maintain tools with care.
 - Keep tools dry and clean.
 - Properly maintained tools are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
 - Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation.
 - If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
 - Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.
 - Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
 - When servicing a tool, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
 - Maintain a safe working environment. Keep the work area well lit. Make sure there is adequate surrounding workspace. Keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use this product in a damp or wet location.
 - Maintain labels and nameplates on this product. These carry important information. If unreadable or missing, contact OEM for a replacement.
 - Keep the handle dry, clean, and free from brake fluid, oil, and grease.



SMOKE MACHINE

- Before use, read and understand all warnings, safety precautions, and instructions as outlined in the vehicle manufacturer's service manual. It is beyond the scope of this manual to properly describe the correct procedure and test data for each vehicle.
- Always perform vehicle service in a properly ventilated area. Never run an engine without proper ventilation for its exhaust. Stop work and take necessary steps to improve ventilation in the work area if you develop momentary eye, nose, or throat irritation as this indicates inadequate ventilation.
- Engine parts that are in motion and unexpected movement of a vehicle can injure or kill. When working near moving engine parts, wear snug fit clothing and keep hands and fingers away from moving parts. Keep hoses and tools clear of moving parts. Always stay clear of moving engine parts. Hoses and tools can be thrown through the air if not kept clear of moving engine parts. The unexpected movement of a vehicle can injure or kill. When working on vehicles always set the parking brake or block the wheels.
- Do not leave vehicle unattended while equipment is connected or operating.
- Avoid accidental fire and/or explosion. Do not smoke near engine fuel and battery components.
- The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
- For safety purposes and the prevention of damage to expensive components it is advised that the user have an understanding of basic automotive repair and a working knowledge of automotive systems.
- We believe the information contained herein to be reliable. However, general technical information is given by us without charge and the user shall employ such information at his own discretion and risk. We assume no responsibility for results or damages incurred from the use of such information in whole or in part. Always refer to specific instructions and technical information supplied by vehicle manufacturer.
- The manufacturer declines any and all responsibility for damage to vehicles or components if said damage is the result of unskillful handling by the operator or of failure to observe the basic safety rules set forth in the instruction manual.

DISPOSAL

At the end of the useful life of the Smoke Machine, dispose of the components according to all state, federal, and local regulations

PURPOSE

- Allows the technician to pinpoint all manner of system leaks including air intake, cooling, evaporation, fuel, exhaust and vacuum systems.
- Fast and simple to use, maximizing earning potential.
- Features single button operation, flow control and auto power-off.
- Uses mineral (baby) oil and workshop air supply to generate smoke at low pressure
- System is clean and easy to use and connects to a 12V vehicle battery.
- Four rubber cones included.

PRODUCT SPECIFICATIONS

Power Supply	12V dc
Operating input pressure	70-115psi
Use mineral oil (baby oil) ONLY	Not Included
Rubber Cone Diameters	10-45mm, 30- 65mm, 50-85mm, 70-100mm
Oil Type	Mineral (baby) oil
Oil Reservoir Capacity	140ml
Heating Duration	4¾ minutes
Hose Length	2.6 Meters
Power Lead Length	4 Meters
Machine Weight	72kg
Smoke Output Pressure	Approximately 1psi

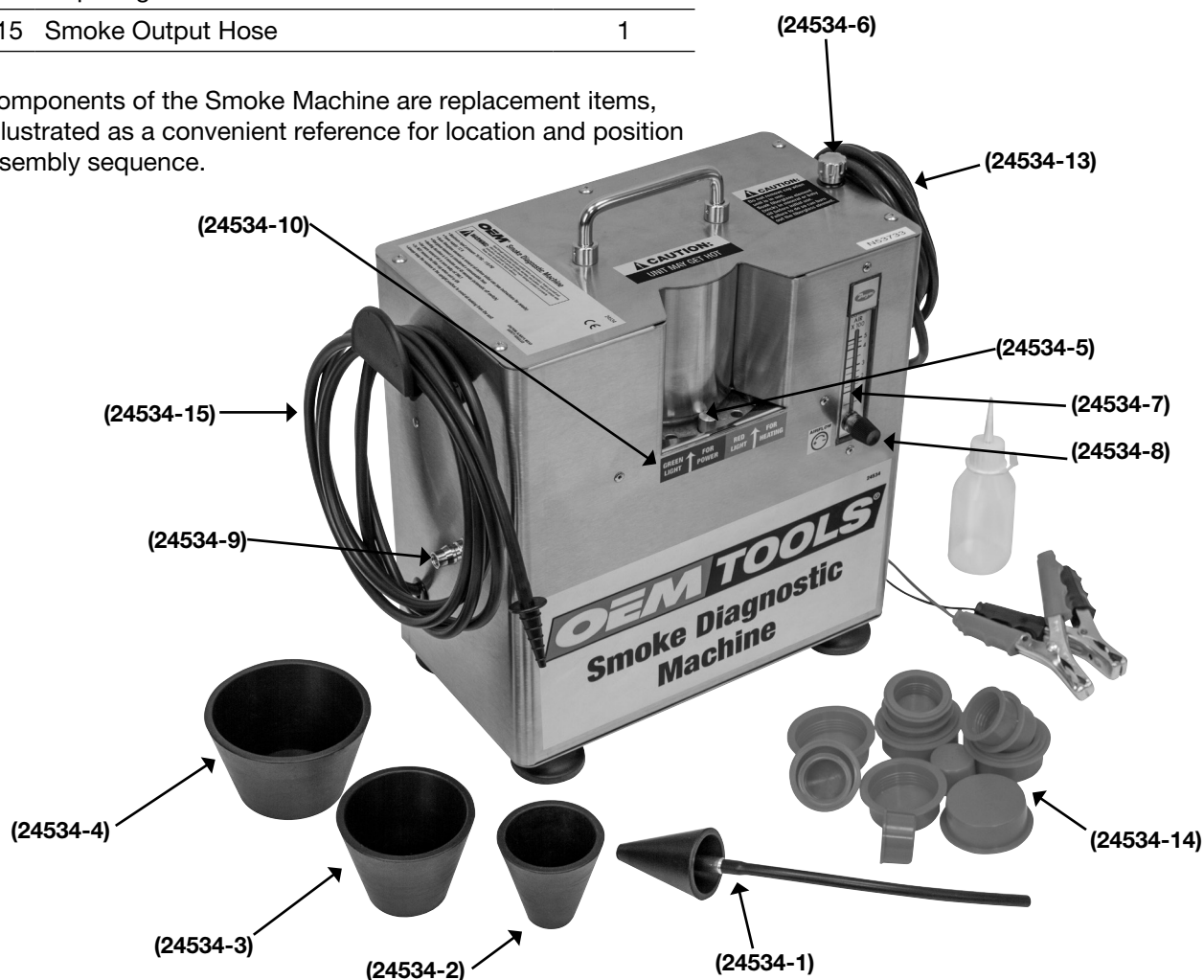


SMOKE MACHINE

Figure	Description	Quantity
24534-1	Rubber Cone 10-46mm	1
24534-2	Rubber Cone 30-65mm	1
24534-3	Rubber Cone 50-85mm	1
24534-4	Rubber Cone 70-100mm	1
24534-5	Heater Button	1
24534-6	Oil Filler	1
24534-7	Air Flow Gauge	1
24534-8	Air Flow Control	1
24534-9	Air Connector	1
24534-10	Indicator Lights	1
24534-11	Heater Element (Not Shown)	1
24534-12	Housing Cover Rubber Gasket (Not Shown)	1
24534-13	Power Cord	1
24534-14	Cap Plug Kit	1
24534-15	Smoke Output Hose	1

Note:

Not all components of the Smoke Machine are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence.





SMOKE MACHINE

OPERATION

This equipment is intended only for professional use by personnel trained in performing the service functions for which it has been designed.

This equipment is designed for servicing a variety of vehicles in a safe, convenient manner. However, differences in vehicle makes and models may make it impossible to use this equipment as it is intended. Do not attempt to force the use of this equipment on an application for which it is not designed to perform. The procedures documented in this manual are to serve as guidelines for the use of this equipment. In addition to these guidelines, always follow the manufacturer's recommended procedures when servicing each unique vehicle.

The use of this equipment is simple and straightforward if you follow the instructions. When operating this equipment, use common sense, and always stop to think before connecting the Smoke Machine or performing any tests.

PERSONAL PRECAUTIONS



- Position cords to reduce risk of damage by hood, door or moving engine parts.
- Stay clear of fan blades, belts, pulleys, and other moving parts that can cause injury to persons.
- Check polarity of battery posts.
- Working Near A Lead Acid Battery Is Dangerous. Batteries Can Generate Explosive Gases During Normal Operation. Battery Explosion Can Kill, Injure, and Cause Property Damage!
- Risk of Contact with Battery Acid. Battery Acid Is A Highly Corrosive Sulfuric Acid.
- Wear safety eye protection and protective clothing. Avoid touching eyes while working near battery.
- Wash immediately with soap and water if battery acid contacts skin or clothing. If acid enters eye, flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.
- Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current which is high enough to weld such items to the vehicle and cause severe burns.

- To prevent the risk of sparking, short circuit and possible explosion, DO NOT drop metal tools in the battery area, or allow them to touch the battery terminals.
- DO NOT cross-connect unit to battery.
- Do not connect to battery charger.
- Ensure positive (RED) clamp is to positive terminal and negative (BLACK) clamp is to negative terminal.
- Do not leave the Smoke Machine hose or power cord connected to the vehicle for extended time periods when tests are not being performed
- Do NOT remove filler cap when unit is ON.
- Keep unit upright at all times to avoid oil leaking out.
- When not in use, clean unit and store in a safe, dry, childproof location.
- All tests should be performed with the engine off
- For best results, test in a draft-free area
- Check Fluid level before each test.
- The vehicle battery must be in good condition and fully charged.

WARNING! Unit may get HOT!

Before initial use, soak the Fiberglass Element/Wick in mineral (baby) oil for 3 hours. Failure to do this will lead to the fiberglass element burning out immediately.

The fiberglass element is considered to be a consumable item and is not covered by warranty.

INITIAL STARTUP INSTRUCTIONS

1. Take top off Oil Filler and fill with mineral based baby oil (maximum: 140ml). The sight glass on the right-hand side of the unit shows the oil level.
2. Let unit sit for a minimum of 3 hours to allow internal wick to become completely soaked in oil. Looking at the Sight Glass, you will notice a significant drop in the oil level during this time. If necessary top off oil tank making sure oil level is visible in Sight Glass



SMOKE MACHINE

OPERATING INSTRUCTIONS

1. Check Sight Glass to Insure Smoke Machine has sufficient oil.
2. Connect to workshop air supply using the quick connector on the left-hand side of the unit
3. The inlet air pressure needs to be regulated to 70-110psi
4. Connect to 12V battery; green indicator light will show.
5. Press Heater Button on front of unit; red light will show indicating that the heater element is active. The heater element is timed to operate for 4¼ minutes, after which time it will switch off automatically.
6. DO NOT remove the oil filler cap while the unit is operating or is connected to an air supply as this will cause oil (which could be hot) to be forced from the filler neck.
7. If the Smoke Machine has been stored in a cold environment, the heater may need to be activated more than once to achieve the required temperature necessary for vaporization.
8. Once smoke is starting to flow from the hose it may be necessary to temporarily increase the air flow using the air flow control This will clear any excess oil.
9. The volume of smoke can be increased or decreased by adjusting the air flow rate, using the air flow control and gauge for reference.
10. The smoke produced can be used in many ways to indicate the presence of leaks in either pressure or vacuum systems. When smoke is introduced into the area of the suspected leak, it will be carried by the flow of air either to or from the aperture, depending on the system. Observing the behavior of the smoke will pinpoint the problem.
11. Alternatively, smoke can be introduced into ducting by unfastening one end of the duct and plugging with a suitable rubber cone from those included in the kit. The hose from the machine can then be connected to the cone and the duct filled with smoke. Any leak will be displayed by a jet of smoke coming from it.
12. The amount of smoke needed will vary with the capacity of the system being tested.
13. If the smoke starts to dwindle, the heater element will need to be switched on to run for another cycle.

Repeatedly cycling the heating element can cause the surface of the Smoke Machine to get Hot

MAINTENANCE

If the amount of smoke generated reduces over time, it may indicate that the fiberglass element/wick needs replacement. The fiberglass element is considered to be a consumable item.

FIBERGLASS ELEMENT/WICK REPLACEMENT

1. Soak replacement fiberglass element/wick in mineral (baby) oil before starting procedure.
2. Remove oil filler plug (take care not to tilt machine and spill oil).
3. Remove the 5 screws securing the top cover, and remove cover.
4. Remove the vaporizer housing cover by taking out the 3 screws around its base and laying it to one side.

Note: the Top Cover Screws and Vaporizer Housing Cover Screws are similar in size, but different lengths. Do not mix them up.

5. This will expose the element which can be removed by unscrewing the securing screws.
6. Fitting the replacement element is the reverse of steps 3 - 5 above.

Care should be taken not to damage the Rubber Gasket in the Cover of the Vaporizer Housing.

1. Always store the Smoke Machine in a well-protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements.
2. Keep the Smoke Machine clean for better and safer performance.



SMOKE MACHINE

OEMTOOLS™ YEAR LIMITED WARRANTY

From one year from the original purchase date of this product, OEMTOOLS will warranty this product. If you find any defect in material or workmanship, through normal usage, return it to the place of purchase or to OEMTOOLS for repair or replacement at our discretion. In order to obtain this service send your tool and proof of purchase, transportation pre-paid, to OEMTOOLS Q.A. Dept., 3580 E. Raines Road #3, Memphis, TN 38118. We will not be responsible for lost or damaged goods during transportation, please insure your package. If our inspection verifies the defect, we will either repair or replace the product at our election, or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

OEMTOOLS does not provide warranty for products labeled other than OEM or OEMTOOLS. OEMTOOLS will not provide any warranty for products subjected to abnormal use. Abnormal use includes, but is not limited to, abuse, accident, alteration, neglect, and unauthorized or unreasonable use or repairs. This warranty does not cover bits, blades, files, batteries, or calibration. We recommend that you maintain your tools and sharpen or replace blades, bits, files, and batteries as necessary. OEMTOOLS reserves the right to make any changes in construction or design at any time without any obligation in incorporating such changes to tools or equipment previously sold.

OEMTOOLS makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase. This warranty does not apply to damage due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear or to lack of maintenance.

We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

CONTACT US



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NOTES:

