

HARBOR MODELS 6 VOLT AND 12 VOLT SMALL SCALE SMOKERS (HAR-350-6 AND HAR350-12)

SCALE SMOKERS ARE PROUDLY DESIGNED, ENGINEERED, TESTED, AND ASSEMBLED IN THE USA!

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The 6V and 12V Small Scale Smoke Generators are a great way to add that extra touch of realism to your smaller scale Models. The unit features a brushless sleeve bearing fan for efficient and quiet operation, low power consumption, extended run time, and a compact size of 2 1/8" L (2 7/8" L with mounting tabs) 1 1/2" W and 1 1/2" H with a weight of just under 1.4 OZ when filled with fluid.

PREPARING FOR OPERATION:

- 1) The unit requires full air flow from the FRONT (direction of travel) of the model, or directly above the Smoke Unit Fan, equal to a minimum of 2 square inches through louvers, mesh, or vents. Do NOT use LI-PO or LI-ION Batteries. The 12V version is designed for a 12V NIMH, NiCad, or Sealed Lead Acid Battery with at least 2 AMPS, and Maximum of 8 AMPS. The 6V version is intended for a Maximum of 6V NIMH, NiCad, or Sealed Lead Acid Battery with at least 2 AMPS, and Maximum of 8 AMPS. Do not use a 7.2V or higher Battery on 6V units. The Harbor Models Power Distribution Box or a LED Voltage Regulator is recommended for dropping the voltage if needed.
- 2) The unit has a 13/32" O.D. brass fitting that is designed for clear 3/8" I.D. plastic tubing (soak in hot water first) slid over the fitting to connect up to the stack. **DO NOT FORCE THE TUBE ONTO THE FITTING.** A 3/8" "Y" Fitting can be used for dual stacks.
- 3) This unit only requires 15 minutes of priming prior to operation, filled through the brass fitting. After filling the reservoir with 1/2 OZ of fluid, let it sit for 15 minutes. Carefully top off as necessary before every operation. The unit should be checked and primed as necessary before every use.
- 4) The reservoir holds a Maximum of 1/2 oz of Smoke Fluid that is included with the unit. Do not use anything other than Small and Large Scale Smoker Fluid or JT's Mega Steam. Use the included dipstick to check your level, the top of the 1/2" black line indicates the Maximum capacity of 1/2 oz. An eye dropper can be used to remove excess fluid, or can be tilted so it pours out the brass fitting. **DO NOT LET THE FAN GET WET, OR LET THE UNIT RUN DRY.**
- 5) The 2 thinner wires operate the fan. Polarity must be correct. Red is Positive, Black is Negative **THESE LEADS ARE TO BE HOOKED DIRECTLY TO THE BATTERY, terminal strip, or Harbor Models Power Distribution Box or LED Voltage Regulator so that it receives a constant 6V or 12V, depending on the Unit, while the model is operating.**
- 6) The 2 larger diameter wires should be soldered to the motor tabs for best results. The amount of smoke will be proportional with the amount of power going from the ESC to the motor. The leads can also be hooked directly to the battery for the same amount of smoke regardless of engine speed. An inline toggle or relay switch should be installed, as well as a **LED Voltage Regulator if there is a chance that the 6V or 12V will be exceeded at any time.**
- 7) The unit should be mounted with Stainless Steel screws as low as practical to the keel to keep the center of gravity down, and to minimize rolling of the unit. A minimum of 2" of clearance must be maintained above the entire unit in order to allow proper air flow through the unit. Velcro or double sided can be used when screws are not possible.

OPERATION:

- 1) The unit consumes just over 1 AMP of power at full speed. The Harbor Models Small Scale Smoke Generator should provide approximately 4 hours of run time at full speed, depending on your model. This time will be extended under normal operation when maximum turns are not used. The fluid should be checked at regular intervals to ensure that it doesn't run dry.

NOTICE:

There is NO warranty on any version of our Smoke Generators. All Smoke Units are individually assembled by hand, and thoroughly tested for proper operation before they are shipped. If you do experience an issue, Please Contact scalesmokers@gmail.com before returning. Ensure units are completely drained and in a sealed plastic bag. Maximum shipping box size is 5" H x 5" W x 10" L. Once the request is approved, all units are sent directly to Scale Smokers at this address: Scale Smokers, PO Box 3206 Huntington Beach, CA 92605. Include a note with the issue you are having, email address, return address and phone number. You will be contacted with a quote for repairs (Parts and Labor) and return shipping.

With proper use, this Harbor Models Small Scale Smoke Generator should provide safe and reliable operation. The manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property of other loss whether direct, indirect, incidental, consequential, or otherwise based on a claim that the product failed to function. However, if the manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this Limited Warranty or otherwise, regardless of cause or origin, the manufacturer's maximum liability shall not in any case exceed the Purchase Price of the product, which shall be fixed as liquidated damages, and not as a penalty, and shall be the complete and exclusive remedy against the manufacturer.