

AVIATOR 440 SDT OPERATING INSTRUCTIONS

Please Read These Instructions Fully Before Operating Your Smoke Machine

GENERAL SPECIFICATION (approx)

Weight.....	42 lbs (19kg)
Usable oil capacity in reservoir.....	2.15 pts (1017ml)
Max working pressure	75 psi (normal range 0-75 psi)
Smoke production time at max. o/p.....	40 min
Electrical supply	110v,10 amp / 220v, 5 amp max60/450hz

GENERAL INFORMATION

1. Use CO₂ as propellant gas. Do not use siphon CO₂ cylinders. If desired, a Nitrogen adapter may be fitted. **NEVER USE COMPRESSED AIR.**
2. Use only CORONA SMOKE OIL 135.
3. Ensure that the gas hose is kept kink free and that the cylinder is properly restrained. Keep flames and sparks away from cylinder and hoses. **Do not smoke near the equipment.**
4. Before transport, drain all oil from the generator using the plug underneath the generator.
5. The unit can be subjected to pitch and roll angles of 20 degrees (maximum angle is 45 degrees with the reservoir filled to a maximum of 500 ml)

PREPARATION

1. Ensure that the reservoir contains oil by checking sightglass. **DO NOT OVERFILL beyond the maximum level shown on the sightglass.** Replace the filler cap.
2. Fit the regulator to the gas cylinder (If preferred, use a Nitrogen gas adapter); set the pressure adjusting knob to zero, and open up the stop valve on the cylinder. The cylinder gas pressure will now be displayed. A minimum of 400 psi is recommended.
3. Connect gas line to regulator.
4. Make sure all switches are in the OFF (0) position.

OPERATION

1. Connect the remote control lead to the rear of the unit.
2. Connect the generator to a suitable power supply. Put the power switch (on far right-hand side of panel) to ON (1). The Digital Display and the RED Power On indicator on the remote control handset (if attached) will light up, indicating that the generator is powering up.
3. Use the set of four switches to turn on any combination of chimney heaters as required.
4. Connect the gas line to the generator and set the output pressure on the regulator to 45 psi.
5. Put the pressurizing valve switch to ON (1). The yellow LED will light to indicate pressure in the tank.
6. The machine has reached its operating temperature when the GREEN Ready light on the remote control lights up and the 'OUT 2' LED on the generator is flashing.
7. To produce smoke, push the red smoke switch on the remote control (or the red switch on the operator panel) to ON.

8. The YELLOW light on the remote control will indicate that smoke is being produced. (If the red switch on the operator panel is ON, this light will always be on).
9. Smoke volume can be varied by adjusting the gas pressure using the regulator valve.
10. When smoke is no longer required, turn the smoke switch OFF(0).
11. Purge the heat exchanger by flicking the pressurizing valve toggle switch in the OFF (0) direction for 2 to 5 seconds. Leave the switch in the ON (1) position if another test is imminent.
12. When smoke production has ceased for the day, put the pressurizing valve to OFF (0) to purge the remaining gas in the pressure tank through the heat exchanger chamber. This will take between 30 and 50 seconds depending on the volume of gas in the reservoir.
13. Turn all other switches to the OFF (0) position.

DIGITAL CONTROL SETTINGS

The Digital Control settings are factory pre-set in degrees Celsius.

THERMAL CUT OUT

If the generator overheats for any reason the Thermal Cut Out will trip, cutting off all power to the unit. If this happens, consult CORONA.

ROUTINE MAINTENANCE

1. Clean the heat exchanger nozzle regularly, using the .08" hand held twist drill to a depth of 1". Do this weekly under heavy use. Make certain the generator and chimney heaters are cold.
2. Every 6 months, remove the side panels from the generator, check all compression joints for tightness, and wipe away any excess oil.
3. Every 12 months the oil reservoir should be drained, using the plug on the unit's under side.
4. Only use CORONA SMOKE OIL 135. Use of other chemicals will void any warranties and may be hazardous.

HEALTH AND SAFETY

The smoke produced by all CORONA Smoke Generators has been rigorously tested to ensure that it is non-toxic under normal circumstances. However, it is recommended that persons who are asthmatic or suffering from a respiratory complaint should not be subjected to dense smoke concentrations. We recommend that breathing apparatus be worn upon prolonged exposure to the smoke.

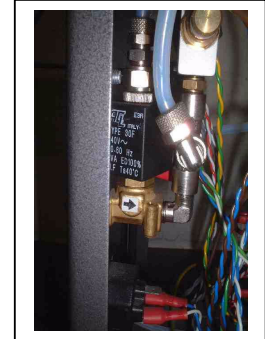
WARNING

CORONA does not accept responsibility for any damage or malfunction to or by CORONA Smoke Machines, or for any consequential damage where these instructions are not observed, inappropriate fluids are used or ducting of smoke or electrical switching is carried out other than upon explicitly documented acknowledgement of CORONA INTEGRATED TECHNOLOGIES INC.

TROUBLE SHOOTING

Apply solutions in sequence and only proceed with the next step if necessary

Problem	Solution
Smoke volume poor	<ul style="list-style-type: none"> a Check gas pressure supply b Check oil level c Clean heat exchanger nozzle d Clean the fluid supply lines (Consult Corona)
Fog thin and blue	<ul style="list-style-type: none"> a Check oil level and top up as necessary b Clean nozzle of heat exchanger c Turn metering valve screw* clockwise
Fog dense but wet	<ul style="list-style-type: none"> a Generator overfilled. Drain away excess oil b Turn metering valve screw* anticlockwise
No power at generator	<ul style="list-style-type: none"> a Remove cover. Press Thermal Cut Out (TCO) on top of heat exchanger. If TCO is tripped again contact CORONA. b Check fuse and replace if necessary. If fuse blows again, consult CORONA.



- * The metering valve screw is the brass-colored screw shown in the top right-hand corner of the picture (above). This screw is accessible by removing the right side panel (as viewed from the rear). Always tighten the locknut after adjustments have been made. **DO NOT FULLY CLOSE THE VALVE.**

Please contact Corona (1-888-878-9433 or admin@smokemachines.com) prior to shipping any equipment for servicing or repair.



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