

HAKKO 493

SMOKE ABSORBER

INSTRUCTION MANUAL

HAKKO 493 (SMOKE ABSORBER) IS...

Soldering work requires a flux.

This flux is mainly composed of rosin-resin, and is mixed with a slight activator (halogen organic agent), which is commonly called "pine resin."

Abietic acid ($C_{20}H_{30}O_2$), the main component of rosin is denatured to neo-abietic acid when the temperature is increased. In this process, noxious components such as salicylic acid (HOC_6H_4COOH) and pinene are generated in the evaporating smoke.

Flux containing large quantities of resin generate phenol (C_6H_5OH), and activators generate hydrogen chloride (HCL), etc.

The permissible concentrations for such noxious gases are regulated by the Japan Association for Industrial Sanitation Standards ACGIH standard, etc. Inhalation of such noxious components will result in headaches, nausea, eye irritations, etc.

HAKKO 493 is a newly developed product with a high performance fan and an activated carbon filter designed to absorb flux and lead fumes.

Specifications

Name	HAKKO 493 E.S.D.
No.	493-10
Power Supply	AC120V, 60Hz
Power Consumption	17W
Air Volume (with filter)	0.93/1.07m ³ /minute
Outer Dimensions	220 (W) x 270 (H) x 168 (D) mm (8.7 x 10.6 x 6.6 in)
Weight	1,500g (3.3lb)
Accessories	Filter (3 pieces)

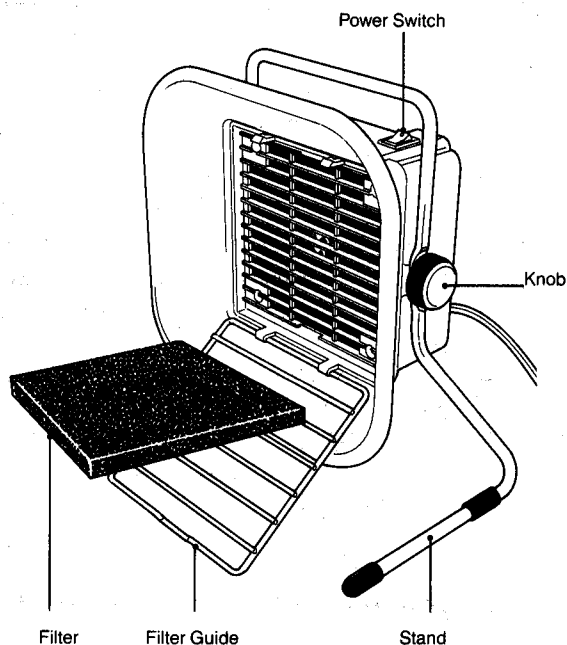
Activated-Carbon Filter

Size	130 x 130 x 10mm(5.1 x 5.1 x 0.4 in)
Amount of Activated-Carbon filter	7g (0.02 lb.)
Max. absorbing weight of noxious components per one filter	2g (0.004 lb.)

The specifications written here may be subject to change without notice.

Operating Instructions: Part Name

- Open the Filter Guide, and install the Activated Carbon Filter. Then close the Filter Guide.
- Loosen the Knob and adjust the angle.



Maintenance

Replacing the Filter

Under normal operating conditions, the filter should be replaced once a month since absorption capacity decline. The filter may also need replacement when the dust adhere. (Never allow the filter to become wet.)

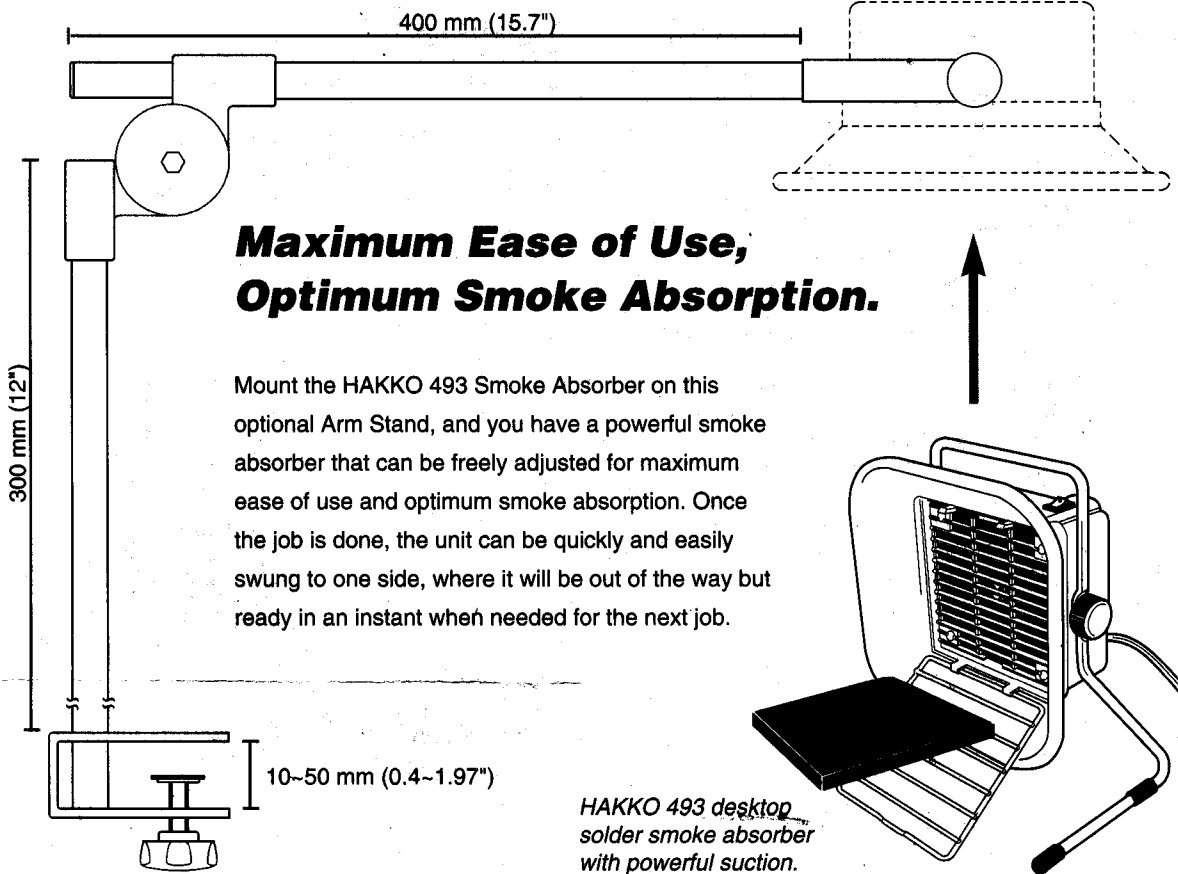
Replacement Parts

No.	A1001
Name	Filter Set
Specifications	Activated-carbon Filter, Set of 5
For	493, 491

Optional ARM STAND for the

HAKKO 493

Desktop Solder
Smoke Absorber



Maximum Ease of Use, Optimum Smoke Absorption.

Mount the HAKKO 493 Smoke Absorber on this optional Arm Stand, and you have a powerful smoke absorber that can be freely adjusted for maximum ease of use and optimum smoke absorption. Once the job is done, the unit can be quickly and easily swung to one side, where it will be out of the way but ready in an instant when needed for the next job.

*HAKKO 493 desktop
solder smoke absorber
with powerful suction.*

Specifications

Arm Stand

Name	Arm Stand
Model No.	C1023
Weight	1.8 kg. (3.97 lbs.)



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