



HAKKO 494 SMOKE ABSORBER

Smoke Absorber

Instruction Manual



Thank you for purchasing the HAKKO 494 Smoke Absorber.

This Manual describes the use and maintenance of the HAKKO 494. Please read it before using the unit.

After reading the manual, keep it in a safe place for future reference.



Table of Contents

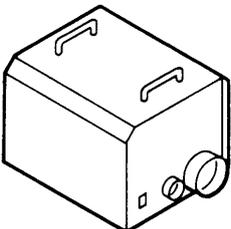
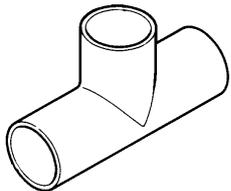
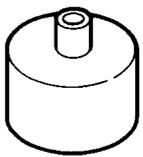
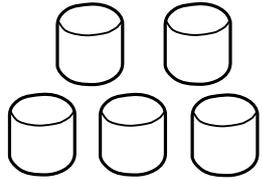
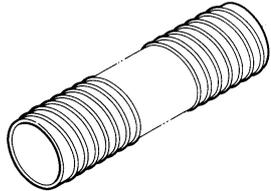
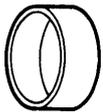
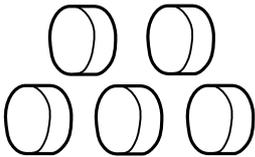
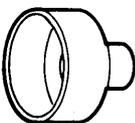
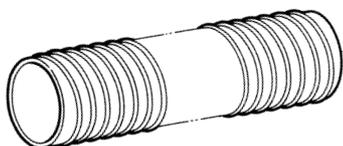
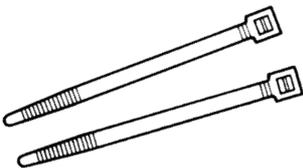
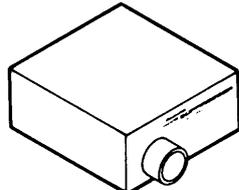
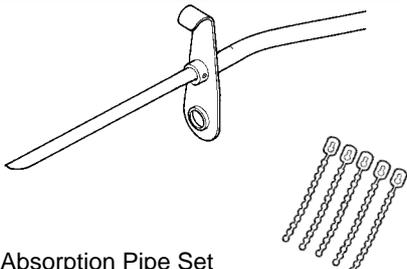
Packing List	1
Notes on Usage, Specifications	2
Names of parts, Assembly Procedure	3,4
Assembling the Absorption Pipe set	5
Maintenance, Parts Replacement	6,7
Parts List	8~10

Packing List

Before using the set, please check the contents to be sure that all items are included.

Station.....	1	Inlet Socket.....	1
Filter Case.....	1	Exhaust Duct/5m(16.4ft).....	1
Filter Cap.....	1	Nylon Strap.....	2
Pre-Filter.....	5	Suppressor.....	1
Duct/3m(9.84ft).....	1	Absorption Pipe Set....Any one set from A through H. (Please let us know the type of Sliding Iron you are using when you place you order)	1
End Cover.....	1	Instruction Manual.....	1
Main Filter.....	5		

*Soldering Iron not included in set.
*Iron Stand not included.HAKKO 607(No.607)Iron Stand available separately.

 <p>Station</p>		
 <p>Filter Case</p>	 <p>Filter Cap</p>	 <p>Pre-Filter</p>
 <p>Duct</p>	 <p>End Cover</p>	 <p>Main Filter</p>
 <p>Inlet Socket</p>	 <p>Exhaust Duct</p>	 <p>Nylon Strap</p>
	 <p>Suppressor</p>	 <p>Absorption Pipe Set</p>

Notes on Usage

⚠ CAUTION : For Safety reasons, be sure to ground the unit by connecting the ground wire to a grounded terminal.

Maintenance

Be sure to regularly replace all expendable parts and clean the required areas. (Refer to "Maintenance, Parts Replacement" on Page 6.)

Unless specifically requested to do otherwise, always turn off the power switch and unplug the power cord from the power source before beginning any maintenance procedure.

Tip Temperature

The tip temperature drops slightly when the smoke absorber is in use. In workplaces where strict temperature control is required, measure the tip temperature (using the HAKKO 191 thermometer) 10 minutes after operating the smoke absorber.

Soldering Iron

A single HAKKO 494 unit can handle up to 10 Soldering Irons.

Filter

Operating the smoke absorber without inserting filter may cause the turbo fan to malfunction. Always run the system with the filter in place.

Duct

The duct should be a maximum of 20m(65.6 ft) in length on the suction side and 5m(16.4 ft) in length on the exhaust side.

Specifications

Name	Hakko 494	
•Station		
Part Name	Station	
Frequency	50 Hz	60 Hz
Power Consumption	150 W	200 W
Static Pressure	240 mm Aq.	325 mm Aq.
Absorption Capacity	1.56 m ³ /min.	1.82 m ³ /min.
Outer Dimensions (W x H x D)	322 x 300 x 386 mm (12.68 x 11.81 x 15.2 in) w/o Handle, Cord	
Weight	Approx. 18 kg (39.9 lb)	

*Specification and exterior are subject to change without prior notification.

•Replacement Parts

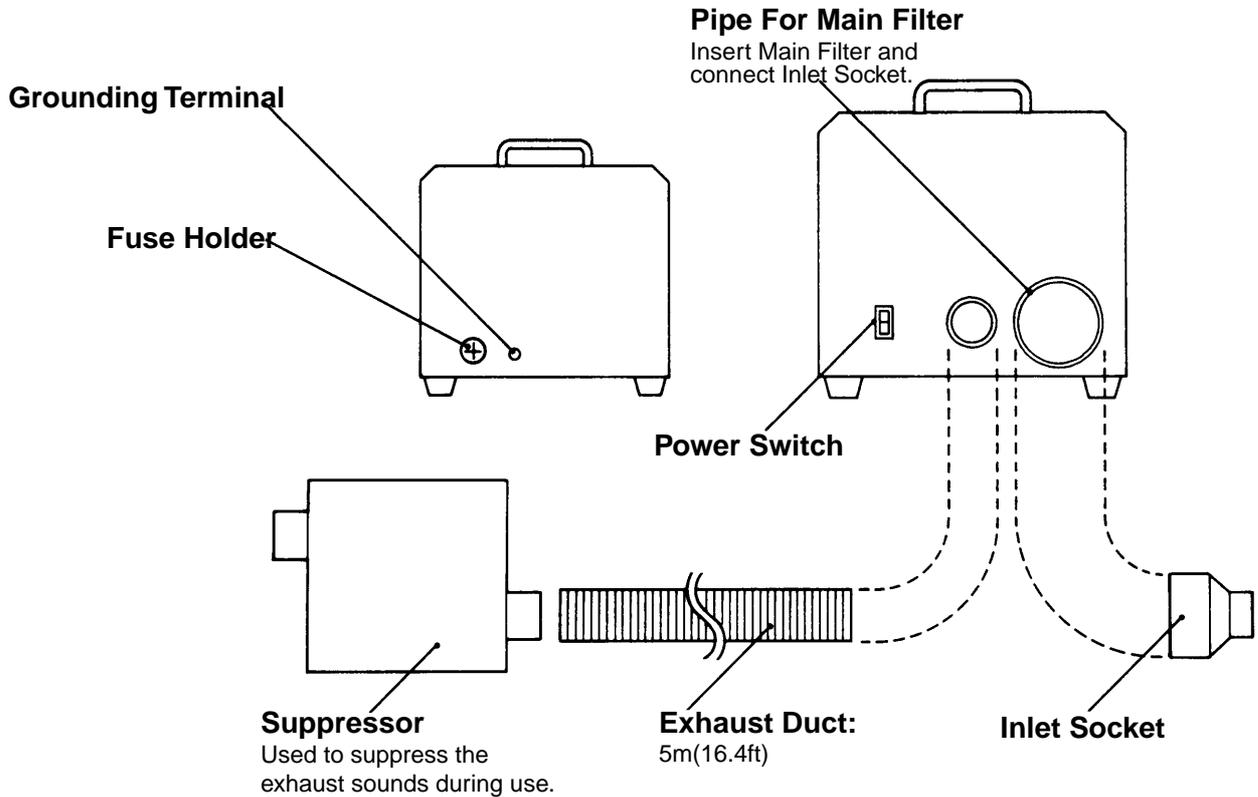
No.	Name	Contents
C1028	Duct Set	Filter Cap.....1 Pre-Filter5 Nylon Strap2 Filter Case1 Duct/1.5m(4.92 ft.).....1

No.	Name/Specification	Contents
C1029	Absorption Pipe Set A/ DASH,900M/L	Absorption Pipe1 Silicone Hose/1m(3.28 ft.)...1 Hose Coupling Band5 Metal Fitting For Absorption Pipe.....1
C1030	Absorption Pipe Set B/ MACH-I(920,921,922)	
C1031	Absorption Pipe Set C/ MACH-I(918)	
C1032	Absorption Pipe Set D/ 457,458	
C1033	Absorption Pipe Set E/ MG30W-100W	
C1034	Absorption Pipe Set F/ 455	
C1035	Absorption Pipe Set G/ 456	
C1086	Absorption Pipe Set H/ 901,902,904	

•Replacement Parts

Part No.	Part Name/Specification
B1276	Filter Cap
A1074	Pre-Filter/5 pcs.
B1278	Filter Case
B1292	Nylon Strap/2 pcs.
B1279	Duct/1.5 m (4.92 ft.)
B1293	Duct/3 m (9.84 ft.)
B1277	End Cover
B1280	Absorption Pipe A/6.5x1000,DASH,900M/L,MACH-I
B1281	Absorption Pipe B/6.5x1300,455,457,458
B1282	Absorption Pipe C/6.5 bent, MG30W-100W
B1283	Absorption Pipe D/6.5x1400, 456
B1596	Absorption Pipe E/6.5x800, 901,902,903,904
B1284	Metal Fitting For Absorption Pipe A/ DASH,900M/L,457,458,901,902,903,904
B1285	Metal Fitting For Absorption Pipe B/ MACH-I(920,921,922)
B1286	Metal Fitting For Absorption Pipe C/MACH-I(918)
B1287	Metal Fitting For Absorption Pipe D/MG30W-100W
B1288	Metal Fitting For Absorption Pipe E/455
B1289	Metal Fitting For Absorption Pipe F/456
B1291	Silicone Hose/1m(3.28 ft.)
B1314	Silicone Hose/E.S.D.,1m(3.28 ft.)
B1290	Hose Coupling Band/5 pcs.
B1294	Exhaust Duct/5 m (16.4 ft.)
A1069	Main Filter/5 pcs.
B1239	Timing Belt
B1245	Inlet Socket
B1246	Parallel Piping Joint
C1026	Suppressor

Names of Parts, Assembly Procedure



1. Connect the Exhaust Duct

- Connect the Exhaust Duct to the Outlet of the Station.

(Attach the Exhaust Duct to the root the Outlet).

2. Assemble the Duct Set

- Place the Pre-Filter in the Filter Case and attach the Filter Cap to the Filter Case.
- Connect the Duct to the Filter Case and attach the End Cover to the other end. (Put the End Cover on the Filter Case which is placed at the end).

3. Connect the Absorption

- Connect the Soldering Iron to the Absorption Pipe Set.

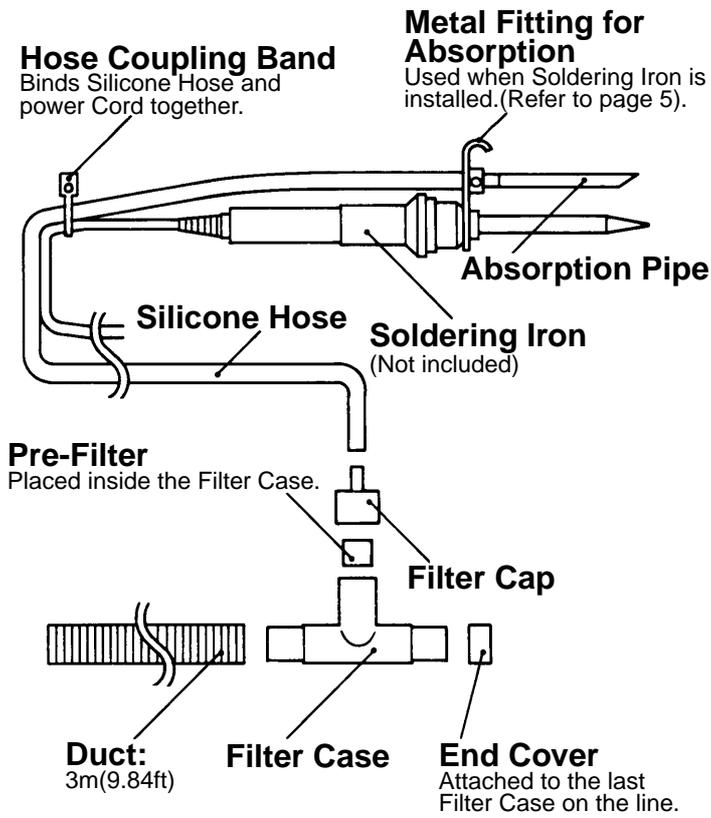
(Refer to "Assembling the Absorption Pipe Set" on Page 5).

- Bind the Silicone Hose and Soldering Iron Power Cord together with the Hose Coupling Band.

- Attach the Silicone Hose to the tip of the Filter Cap.

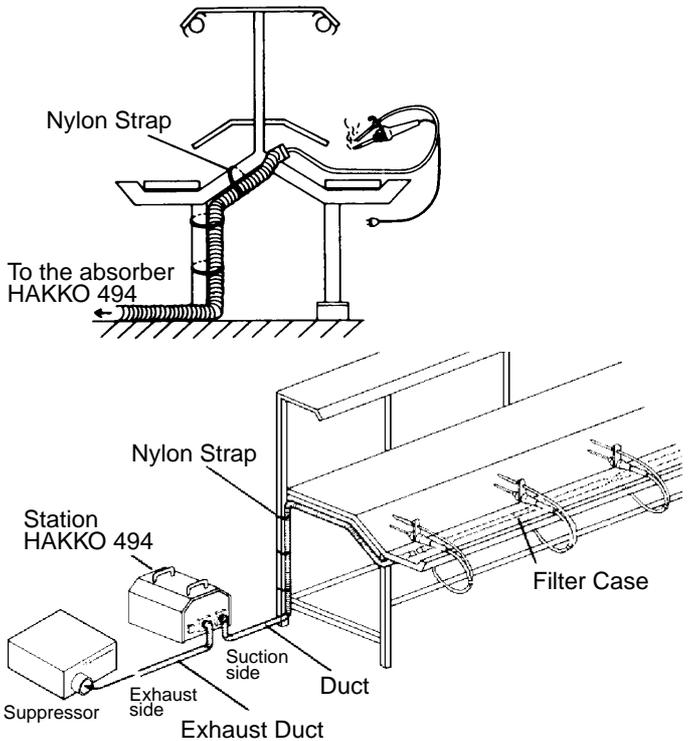
4. Connect the Duct Set

- Connect the Duct to the Inlet Spcket.
- Place the Main Filter in the Pipe For Main Filter on the Station and connect to the Inlet Socket.

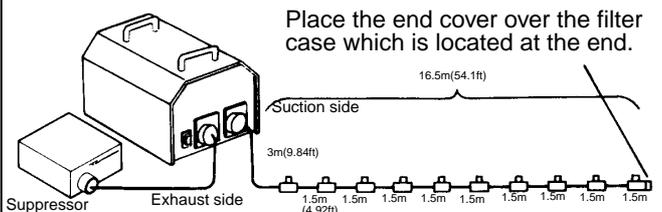


Connecting the Line

Install the line by referring to the chart below.



•Example: 10 workers

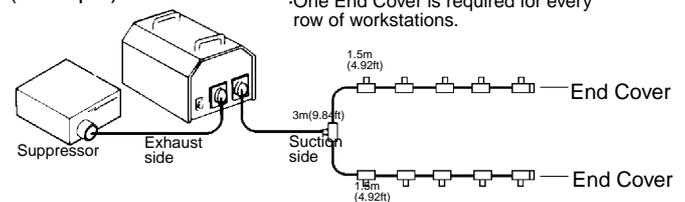


- Set includes one pipe set for one worker.
- Pipe sets for additional Soldering Iron are available separately.
- *Attach the end cover to the Filter Case located at the end.

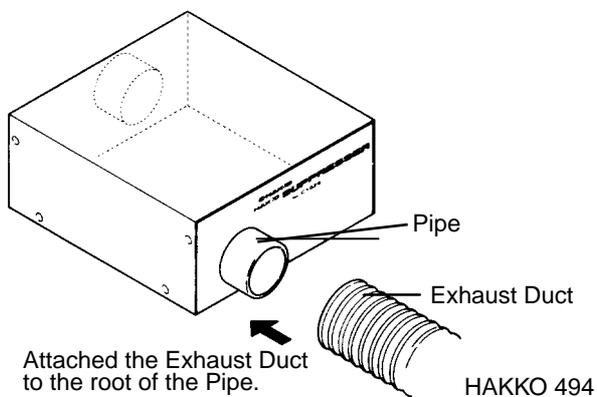
•Using the Options and the Parallel piping joint

Parallel piping joint(No.B1246) permit a variety of piping layouts to be used.

(Example).



•How to connect the Suppressor

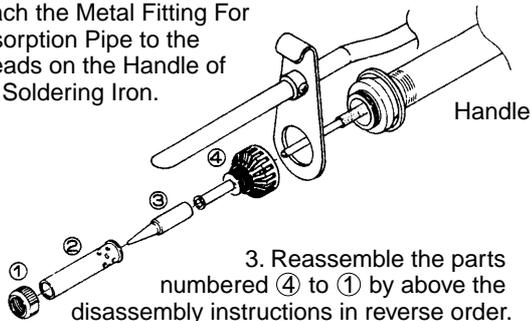


Note: Performance is unaffected whether the Exhaust Duct is connected to the front or back.

Assembling the Absorption Pipe Set

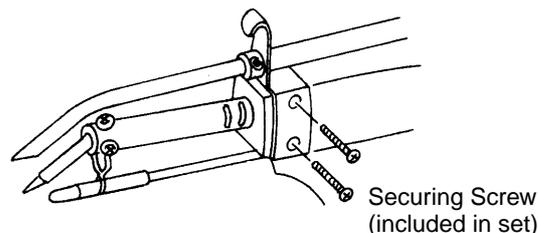
•Absorption Pipe Set A [No. C1029 for DASH, 900M/L]

1. Disassemble the parts numbered ① through ④.
2. Attach the Metal Fitting For Absorption Pipe to the threads on the Handle of the Soldering Iron.



•Absorption Pipe Set E [No. C1033 for MG30W-100W]

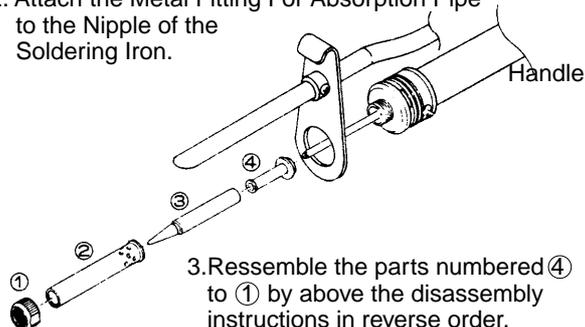
1. Remove the 2 screws indicated in the chart.
2. Attach the Metal Fitting For Absorption Pipe as shown in the chart and tighten the attaching screws.



•Absorption Pipe Set B [No. C1030 for MACH-I(920/921/922)]

•Absorption Pipe Set C [No. C1031 for MACH-I(918)]

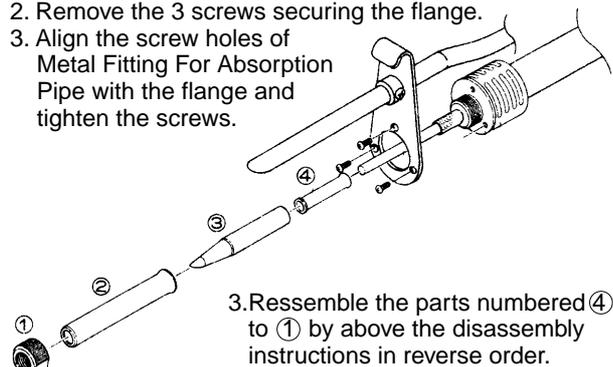
1. Disassemble the parts numbered ① through ④.
2. Attach the Metal Fitting For Absorption Pipe to the Nipple of the Soldering Iron.



•Absorption Pipe Set F [No. C1034 for 455]

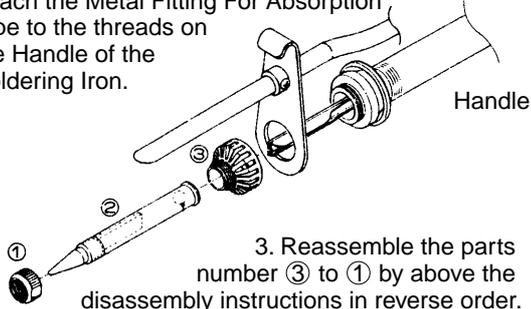
•Absorption Pipe Set G [No. C1035 for 456]

1. Disassemble the parts numbered ① through ④.
2. Remove the 3 screws securing the flange.
3. Align the screw holes of Metal Fitting For Absorption Pipe with the flange and tighten the screws.



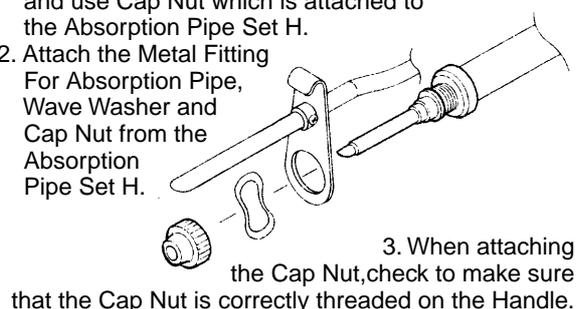
•Absorption Pipe Set D [No. C1032 for 457/458]

1. Disassemble the parts numbered ① through ③.
2. Attach the Metal Fitting For Absorption Pipe to the threads on the Handle of the Soldering Iron.



•Absorption Pipe Set H [No. C1086 for 901,902,904]

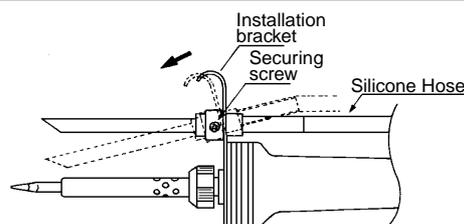
1. Remove the Cap Nut from the HAKKO 901/902/904, and use Cap Nut which is attached to the Absorption Pipe Set H.
2. Attach the Metal Fitting For Absorption Pipe, Wave Washer and Cap Nut from the Absorption Pipe Set H.



Adjustment

Adjust the length and angle of the pipe by monitoring the smoke emissions.

- Length—adjust by loosening the screw.
- Angle—bend the installation bracket of the Metal Fitting For Absorption Pipe as shown right.



Maintenance, Parts Replacement

Regular maintenance will maximize the operating life of the product.

Replace the Main Filter

Replace the Main Filter when it turns yellow from flux bleeding into it.

- Remove the Inlet Socket and pull out the Main Filter from the Pipe For Main Filter.

Note:The Main Filter can not be reused.
Be sure to replace it.

Clean the Absorption Pipe

Suction performance drops as flux builds up within the Absorption Pipe. Remove the flux regularly.

- Remove the Silicone Hose and loosen the screw to remove the Absorption.
- Since the Absorption Pipe is made of stainless steel,a flux cleaning solution may be used to clean the pipe.

Maintenance of the Duct Set

Suction performance drops as flux builds up in the Pre-Filter and Filter Cap. Perform maintenance following the instructions below.

-Replace the Pre-Filter

Replace the Pre-Filter when it turns yellow from flux bleeding into it.

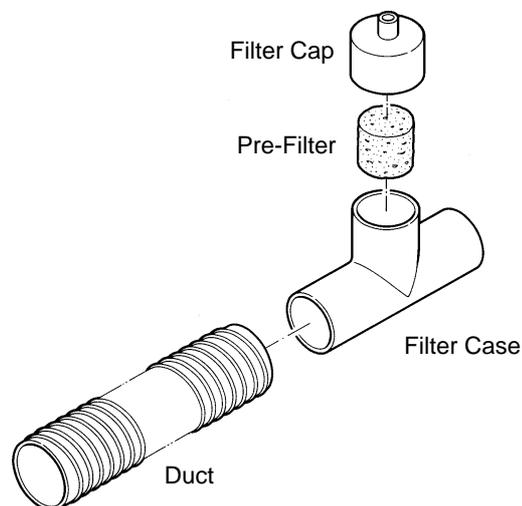
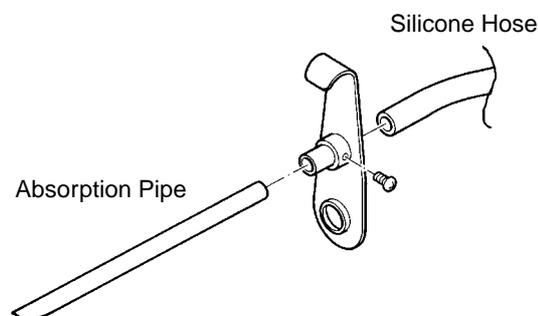
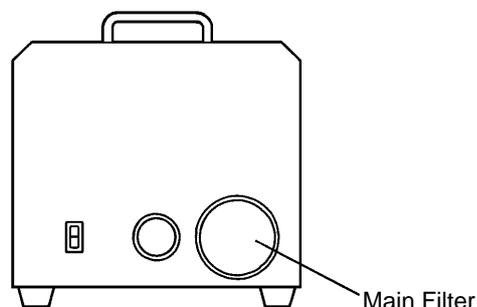
- Remove the Filter Cap and pull out the Pre-Filter.

Note:The Pre Filter can not be reused.
Be sure to replace it.

-Clean the Filter Cap

Remove the Silicone Hose and remove any built-up flux.

Note:Since the flux is dry,it can be removed with a brush,etc.If the flux is difficult to remove, alcohol may be used to dissolve it.Do not use thinner,etc.Since it is harmful to the pipe.



Replace the Timing Belt

Before replace the Timing Belt,turn off the Power Switch and detach the Power Cord from the power outlet.

1.Remove the old belt

- Remove the station cover.
- Loosen the four M6 hexagon bolts.
Note:Do not remove the bolts.
- Slide the mortar in direction "A"(indicated in drawing) until the belt is loose enough to remove.

2.Install the New Belt

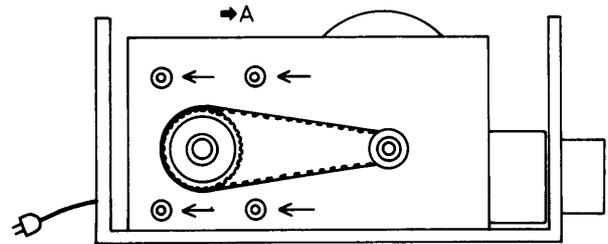
- Install the new belt onto the Pully.
- Slide the motor away from direction "A" (indicated in drawing) until the belt is tight.
- Tighten the four bolts while maintaining tension on the belt.

3.Confirmation

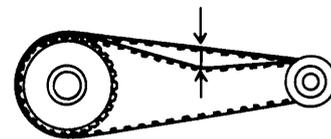
- Check to see if the belt is appropriately tight by pressing it with the hand.
- Check to make sure that all screws are tight,then reattach the main body cover.

Request from the manufacture:

If repair should ever become necessary,please keep the product intact (do not disassemble it) and take it as is to retailer or agent.

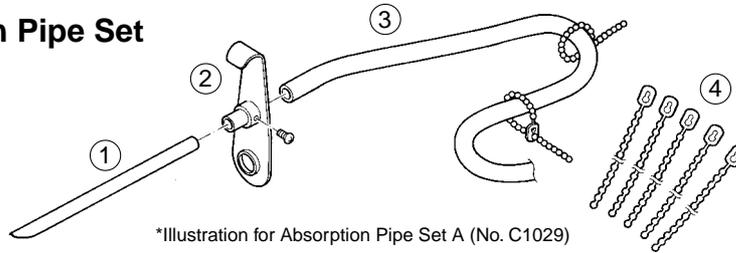


2mm(0.88in.) of play when pressed down.



Parts List

●Absorption Pipe Set



*Illustration for Absorption Pipe Set A (No. C1029)

Item No.	Part No.	Part Name	Description
3	B1291	Silicon Hose	1m (3.28 ft.)
4	B1290	Hose Coupling Band	5 pcs.

*All of Absorption Pipe Sets include 3 Silicone Hose and 4 Hose Coupling Band.
 *Absorption Pipe Set Q (No.C1125) has a different Silicone Hose from other ones (No.C1029-C1086).

●No. C1029 [Absorption Pipe Set A/DASH,900M/L]

Item No.	Part No.	Part Name	Description
1	B1280	Absorption Pipe A	
2	B1284	Metal Fitting For Absorption Pipe A	

●No. C1030 [Absorption Pipe Set B/MACH-I(920,921,922)]

Item No.	Part No.	Part Name	Description
1	B1280	Absorption Pipe A	
2	B1285	Metal Fitting For Absorption Pipe B	

●No. C1031 [Absorption Pipe Set C/MACH-I(918)]

Item No.	Part No.	Part Name	Description
1	B1280	Absorption Pipe A	
2	B1286	Metal Fitting For Absorption Pipe C	

●No. C1032 [Absorption Pipe Set D/457,458]

Item No.	Part No.	Part Name	Description
1	B1281	Absorption Pipe B	
2	B1284	Metal Fitting For Absorption Pipe A	

●No. C1033 [Absorption Pipe Set E/MG (30W~100W)]

Item No.	Part No.	Part Name	Description
1	B1282	Absorption Pipe C	
2	B1287	Metal Fitting For Absorption Pipe D	

●No. C1034 [Absorption Pipe Set F/455]

Item No.	Part No.	Part Name	Description
1	B1281	Absorption Pipe B	
2	B1288	Metal Fitting For Absorption Pipe E	

●No. C1035 [Absorption Pipe Set G/456]

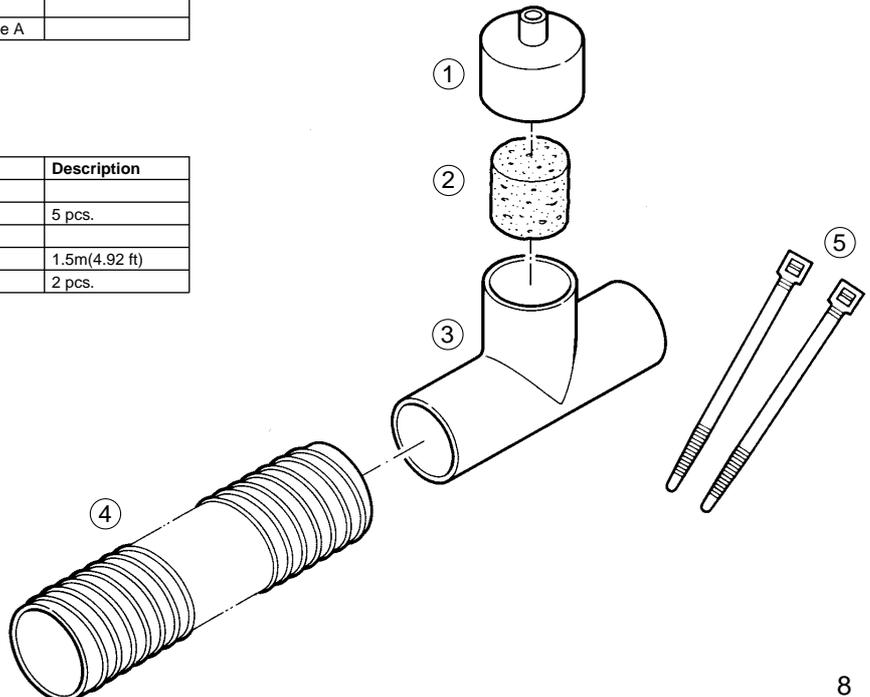
Item No.	Part No.	Part Name	Description
1	B1283	Absorption Pipe D	
2	B1289	Metal Fitting For Absorption Pipe F	

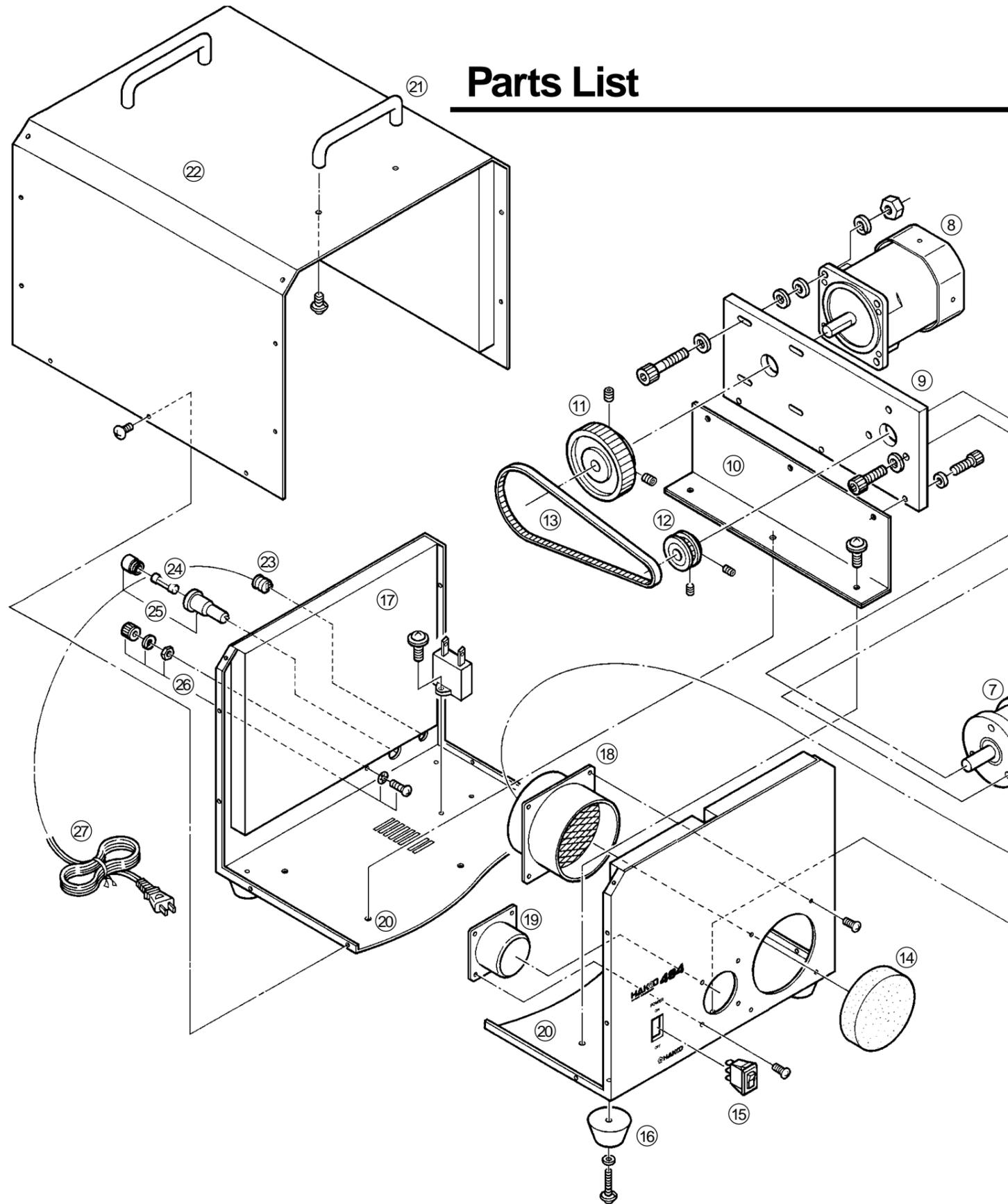
●No. C1086 [Absorption Pipe Set H/901,902,903,904]

Item No.	Part No.	Part Name	Description
1	B1596	Absorption Pipe E	
2	B1284	Metal Fitting For Absorption Pipe A	
	B1597	Cap Nut	
	B1999	Wave Washer	

●Duct Set

Item No.	Part No.	Part Name	Description
1	B1276	Filter Cap	
2	A1074	Pre-Filter	5 pcs.
3	B1278	Filter Case	
4	B1279	Duct	1.5m(4.92 ft)
5	B1292	Nylon Strap	2 pcs.





Parts List

Item No.	Part No.	Part Name	Description
1	B1224	Connecting Hose	
2	B1223	Casing Inlet	
3	B1225	Connecting Hose Joint	
4	B1228	Casing	With Outlet Gasket
5	B1230	Turbo Fan	
6	B1222	Casing Securing Plate	With Vibration-proof Rubber(B)
7	B1229	Follower Unit	Fan Shaft, Fan Shaft Fitting, Ball Bearing x 2
8	B1221	Motor	100V,with Capacitor
	B1315	Motor	110V,120V,with Capacitor
	B1316	Motor	220V,with Capacitor
	B1317	Motor	230V,240V,with Capacitor
9	B1234	Base Plate	
10	B1231	Base Plate Securing Stay	With Vibration-proof Rubber(A)
11	B1232	Pully/Prime Mover Side	
12	B1233	Pully/Follower Side	
13	B1239	Timing Belt	
14	A1069	Main Filter	5 pcs.
15	B1244	Power Switch	100V-120V
	B1259	Power Switch	220V-240V

Item No.	Part No.	Part Name	Description
16	B1240	Rubber Foot	Set of 4
17	B1243	Sound-proof Sponge	Set of 8
18	B1226	Pipe For Main Filter	
19	B1227	Outlet	
20	B1242	Chassis	
21	B1193	Handle	
22	B1241	Cover	
23	B1236	Fuse	125V-5A
	B1257	Fuse	250V-5A(U)
	B1132	Fuse	250-2A
24	B1041	Fuse Holder	
25	B1235	Grounding Terminal	

A d d i t i o n a l I n f o r m a t i o n

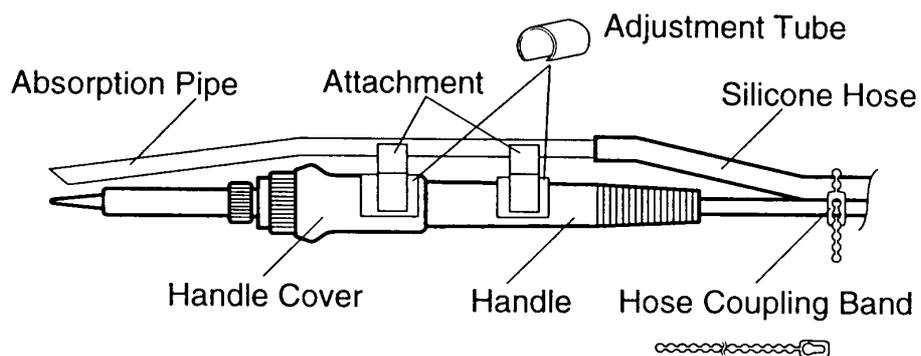
No.C1125 absorption pipe set Q (for HAKKO 907, 908) is newly added.

Packing List

Part No.	Part Name
B1953	Absorption Pipe
B1954	Attachment / 2 pcs.
B2184	Silicone Hose / 1.5m
B1955	Adjustment Tube / 3 pcs.
B1290	Hose Coupling Band / 5 pcs.

Setting Up

1. Attach the two(2) thinner of the adjustment tubes to the handle for HAKKO 907, 908, the other to the handle cover. Attach the attachment to the adjustment tubes and to absorption pipe.
2. Binds the power cord of iron and silicone hose together with the hose coupling band.





HAKKO CORPORATION

HEAD OFFICE

4-5, SHIOKUSA 2-CHOME, NANIWA-KU, OSAKA, 556-0024 JAPAN
TEL: (06) 561-3225 FAX: (06) 561-8466
TLX: HAKKOOSA J65274

OVERSEAS AFFILIATES

U.S.A.: AMERICAN HAKKO PRODUCTS, INC.
25072 ANZA DR. SANTA CLARITA, CA 91355, U.S.A.
TEL: (805) 294-0090 FAX: (805) 294-0096
Toll Free (800)88-HAKKO
4 2 5 5 6

S'PORE: HAKKO PRODUCTS PTE., LTD.

1, GENTING LINK #02-04, PERFECT INDUSTRIAL
BUILDING, SINGAPORE 349518
TEL: 7482277 FAX: 7440033

HONG KONG: HAKKO DEVELOPMENT CO., LTD.

ROOM 804 EASTERN HARBOUR CENTRE,
28 HOI CHAK STREET, QUARRY BAY, HONG KONG.
TEL: 2811-5588 FAX: 2590-0217

PHILIPPINES: HAKKO PHILS TRADING CO., INC.

NO. 415 WINDSOR TOWER CONDOMINIUM,
163 LEGASPI ST., LEGASPI VILLAGE MAKATI,
METRO MANILA, PHILIPPINES
TEL: 2-817-07-12 FAX: 2-810-76-49

MALAYSIA: HAKKO PRODUCTS SDN BHD

MALAYSIA HEAD OFFICE: PETALING JAYA
LOT 35/1 THE HIGHWAY CENTRE JALAN 51/205 46050
PETALING JAYA WEST MALAYSIA
TEL: 03-7941333 FAX: 03-7911232

PENANG BRANCH:

TEL: 04-644 6669 FAX: 04-644 8628

JOHORE BAHRU BRANCH: TEL: 07-236 7766 FAX: 07-237 4655