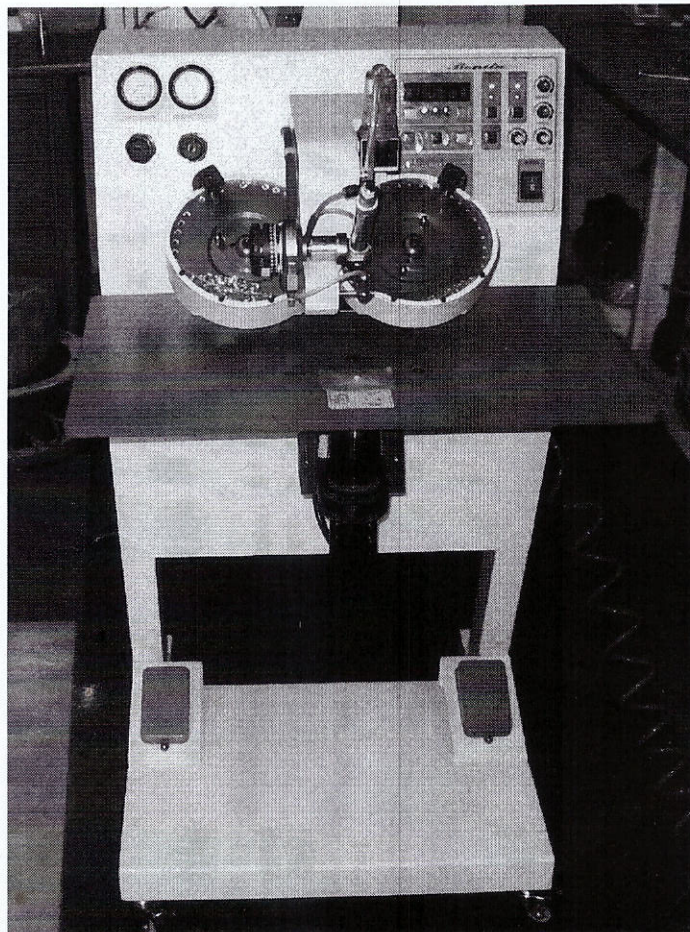


Instruction Manual

Automatic Hot-fix Setting Machine

Applicable Model : VHS-500N series



Product Description

Thank you for purchasing a Vision Tech product. The Automatic Hot-Fix Setting Machine is to fix any kind of rhinestones, metal studs & rhinestuds onto fabric regardless of thickness as this model equipped with not only 'ultrasonic' but also 'heater' function.

If you have any questions or problems about our product, please contact me as below.

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Representative in EU

This area is intentionally left as blank for our representative in EU.
The information of representative can be attached here by sticker.

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1. Safety

1.1 Safety Rule

Proper and intended use of this machine is the user's responsibility. VISION TECH provides information about its product and the associated hazards, but it assumes no responsibility for the user's operating and safety practices. It is imperative that all personnel who work with this equipment understand the hazards described in this manual and take precautions to protect against possible injury

This chapter discusses general warnings and cautions that apply during operating and servicing this machine.

High voltages(230Va.c) are employed for the operation. Do not perform maintenance in any parts without understanding the circuits and voltages present.

1.2 Mechanical Safety

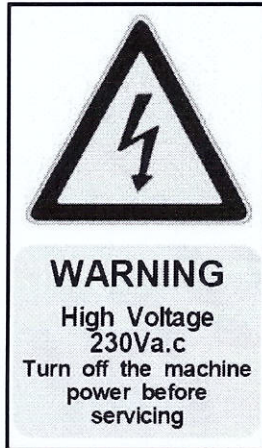
Straight cylinder can crush a hand when operating. It can causes a pain, so user must use with care.

Heating part which is under the table have a heating element.



1.3 Electrical Safety

Use only original fuses with the specified current rating. Switch off or plug-out the machine immediately if trouble occurs in the electrical system.



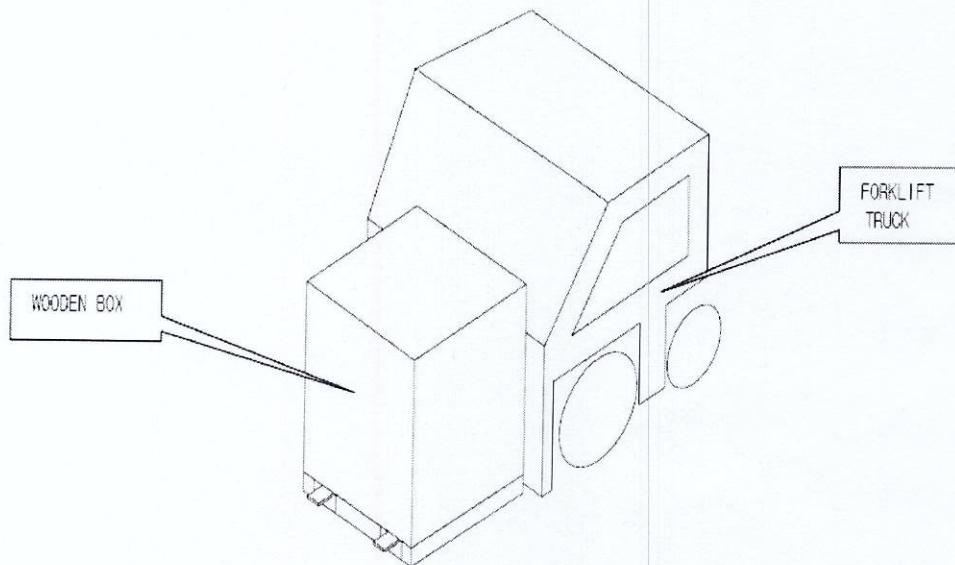
1.4 Pneumatic Safety

To prevent from unintended movement of cylinder, depressurize all lines when repairing and maintenance.

2. Transportation

Using an appropriate sized forklift truck, carry the machine slowly without jarring significantly.

- SHIPPING WEIGHT : 100kg
- MACHINE WEIGHT : 80kg



3. Specifications

Model	VHS-510N	VHS-530N	VHS-540N
Dimension	550X630X1030	550X650X1030	550X650X1100
Weight	75kg	80kg	80kg
Moving Height	50mm	50mm	50mm
Wheel Feeder	Mono	Mono	Dual
Melting Type	Ultrasonic	Ultrasonic and Heater	Ultrasonic and Heater
Capacity	0.1Kw	0.2Kw	0.2Kw
Rated Current	0.5A	1A	1A
Power supply	1phase, 110/230V, 50/60Hz	1phase, 110/230V, 50/60Hz	1phase, 110/230V, 50/60Hz
Air pressure	5.5Kg/cm ² /80PSI	5.5Kg/cm ² /80PSI	5.5Kg/cm ² /80PSI
Noise level	80dB	80dB	80dB

4. Installation

4-1. Environmental Requirements Insure that the installation location is stable with no slop that could effect machine operation.

* Environment Temperature Range

Operation : +10 °C ~ +30 °C

Idle : -20 °C ~ +50 °C

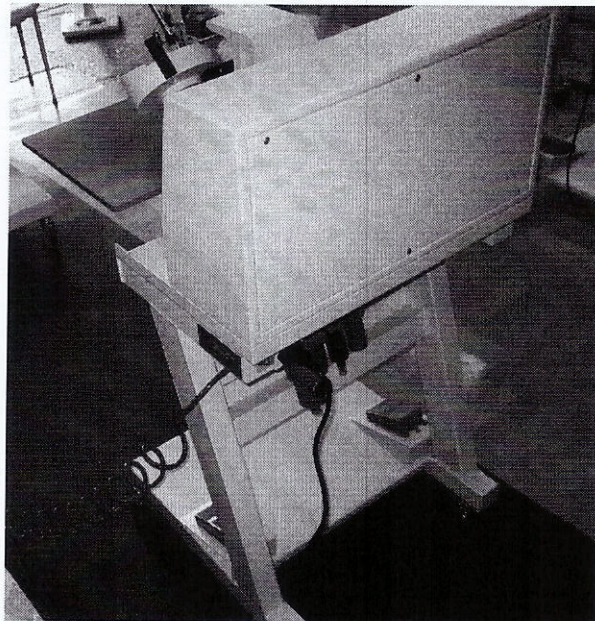
* Relative Humidity Range

Operation : 20% ~ 55%

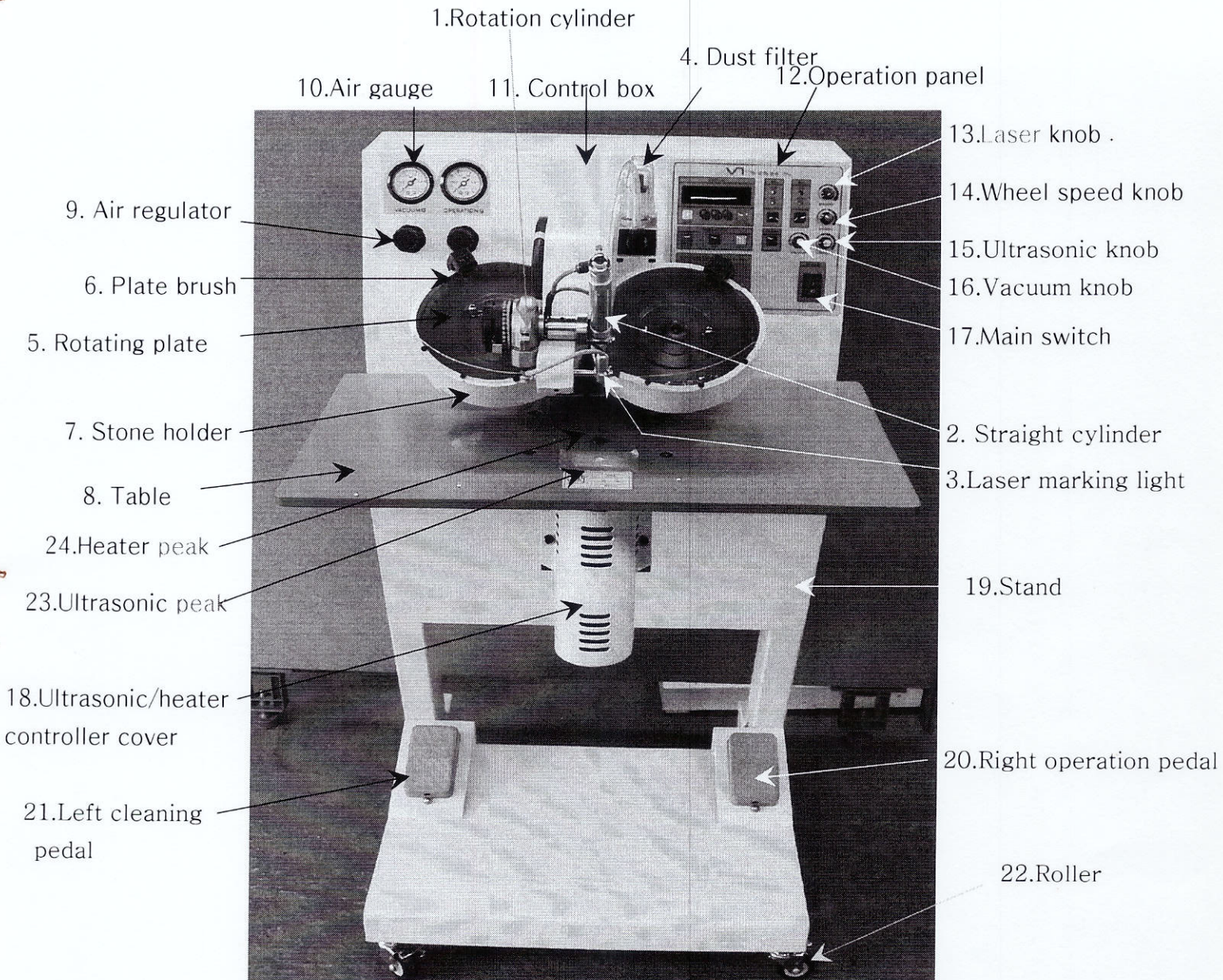
Idle : 20% ~ 90%

4-2. Electrical Power Requirements AC Power : 1Phase, 230V, 50/60Hz, 0.2Kw Electrical power supply connections using by plug and socket.

4-3. The Compressed Air supplied must provide 5.0~5.5kg/cm²(71~78PSI) of clean air using a Air Hose inserted into the pneumatic unit in the machine.



5. Parts Identification



Part Identification

NO	PART NO	DESCRIPTION
1	N-101	ROTATION CYLINDER
2	N-102	STRAIGHT CYLINDER
3	N-103	LASER MARKING LIGHT
4	N-104	DUST FILTER
5	N-105	ROTATING PLATE
6	N-106	PLATE BRUSH
7	N-107	STONE HOLDER
8	N-108	TABLE
9	N-109	AIR REGULATOR
10	N-110	AIR GAUGE(and Vacuum Gauge)
11	N-111	CONTROL BOX
12	N-112	OPERATION PANEL
13	N-113	LASER KNOB
14	N-114	WHEEL SPEED KNOB
15	N-115	ULTRASONIC KNOB
16	N-116	VACUUM KNOB
17	N-117	MAIN SWITCH
18	N-118	ULTRASONIC/HEATER CONTROLLER COVER
19	N-119	STAND
20	N-120	RIGHT OPERATION PEDAL
21	N-121	LEFT OPERATION PEDAL
22	N-122	ROLLER(Wheel)
23	N-123	ULTRASONIC PEAK
24	N-124	HEATER PEAK

6. Operation

6.1 BEFORE USE

6.1.1 Check the electric specification of the machine before connecting the machine to the electric power supply. (230V for European countries, 110V for the USA and Japan, etc)

6.1.2 Connect an air compressor that has the air discharge pressure 5.5 kg/cm² to the regulator(the air hose size should be 8 mm).

6.2 FUNCTION OF EACH PART

6.2.1 SELECT BUTTON(N1~CO)

Automatic Mode

- N1 : Motor control time(2~)
- N2 : Rotating cylinder working time(10~)
- **NL : Left Rotating cylinder working time(10~) : VHS-540N only**
- **NR : Right Rotating cylinder working time(10~) : VHS-540N only**
(if it is lower than 10, malfunction could happen. If user increases the number, rotating speed will be slower. Namely, straight cylinder moves vertically)
- N3 : Straight cylinder going down time(8~).
- N4 : Ultrasonic oscillating time(5~)
- N8 : Operation time(50~, only for heater)
- CO : Counter(0000) – showing numbers of operation

Manual Mode

- URM-XX : Vacuum setting value
- USN-XX : Vacuum automatic setting value
- REF-XX : Standard value when nozzle sucking rhinestones(automatically settled whenever changing nozzle)
- ULT-XX : Ultrasonic strength value
- MAC-XX : Laser strength value

Test mode

1. For Malfunction check of each function
 - S/W-UP = VAC-XX (Vacuum status check)
 - S/W-DOWN = ROTATE (Rotating cylinder working check)
 - S/W-AUTO/MAN = (Air exhausting check after rotating cylinder working)
 - S/W-CLEAN = DOWN(Straight cylinder going down check after rotating cylinder working)
 - S/W-SEL(RIGHT/LEFT) = MOTOR1(Right motor rotating check)
 - S/W-SEL(RIGHT/LEFT)+CLEAN = MOTOR2(Left motor rotating check)
 - S/W-SEL(ULTRA/HEATER)=ULT-ON(Ultrasonic oscillating check)
2. RESET BUTTON : push 3 seconds then return to initial setting value
3. LASER BUTTON : Adjust brightness of laser light
4. WHEEL SPEED VOLUME : Control motor speed
5. VACUUM VOLUME : Air sensor strength control(automatically controlling. but, it is better to make slight control by manual)
6. AUTO BUTTON-on : Automatically working(right operation pedal/panel lamp on)
AUTO BUTTON-off : One time working(right operation pedal/panel lamp off)
MAIN SWITCH-on : Lamp on the main switch
7. Right operation pedal : Use when operating the machine
Left operation pedal : Use when removing debris(cleaning work)
8. WHEEL Speed KNOB operation : Set the speed in order to suck rhinestone when cylinder moves to rhinestone.
9. ULTRASONIC KNOB : Adjusting ultrasonic oscillation strength(depends on the fabric).
10. When rhinestone is broken during the hotfix setting work, adjust speed control valve on the straight cylinder (when closing valve rhinestone does not break - fine tuning required)

6.3 Operating Procedure

6.3.1 Switch on the main switch.

6.3.2 Rotating plate rotates 320 degree automatically (fill up the rhinestones into the stone holder)

6.3.3 Press the right operation pedal. Then rotation cylinder moves and air sensor operates automatically (about 4 seconds)

6.3.4 When nozzle inside is blocked, press the left operation pedal. Then rotation cylinder moves and air is coming out and air sensor operates automatically (about 4 seconds)

6.3.5 When changing nozzle, press the left operation pedal slightly and then rotation cylinder moves and stop. (using 8 MM & 12 MM spanner to change the nozzle)

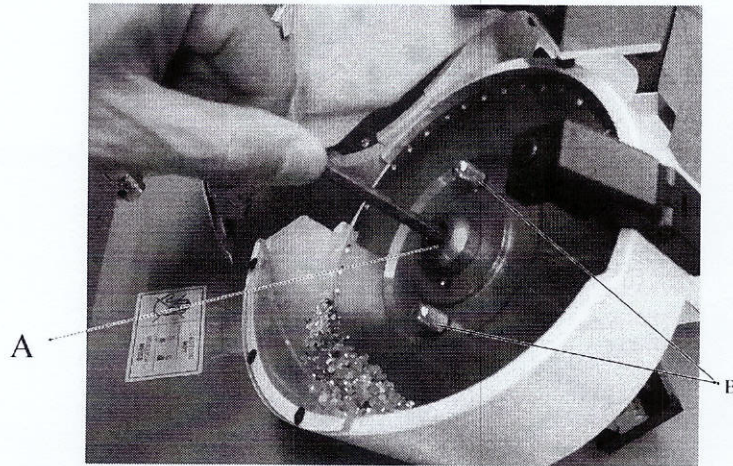
6.3.6 Press left operation pedal slightly then air sensor operates automatically (about 4 seconds).

7. Maintenance

7.1. Exchange of rotating plate(Fig.1)

A rotating plate consists of 4 parts.(SS6, SS10, SS16 & SS20~30/ rear side of plate is for rhinestud 2 mm, 3 mm, 4 mm & 5-6 mm)

When using different size of material unscrew "A" with hexagonal wrench and lift up the plate. Insert a proper size plate and screw.



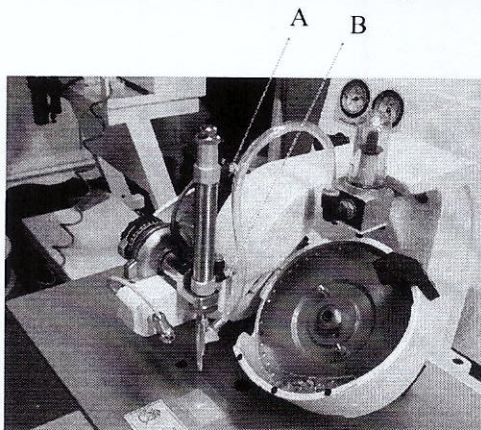
(Fig. 1)

7.2. Exchange of vacuum holder cup (Fig. 2 &3)

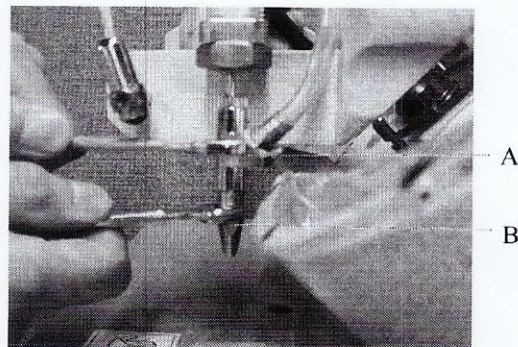
7 different size of nozzles (vacuum holder cup) are provided.

Push left cleaning pedal. Then the position of straight cylinder will be vertical(Fig.2), by using spanners(12 mm size-top, 8 mm size-bottom) changing vacuum holder cup.

When using iron on stud(nailhead), pearl stud and half pearl vacuum holder cup for iron on stud should be used. And change hotfix mode by heater type.



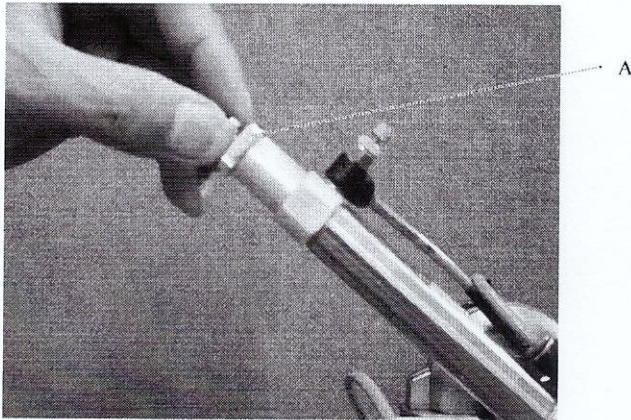
(Fig. 2)



(Fig. 3)

7.3. Adjust straight cylinder height (Fig.4)

When changing vacuum holder cup, the distance between vacuum holder cup and rhinestone/stud should be 1.5 mm. it can be adjusted by rotating "A" left/right on top of the straight cylinder.



(Fig. 4)

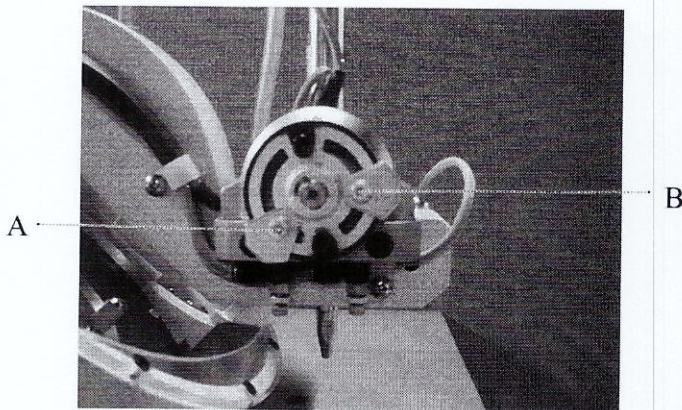
7.4. Adjustment of rotation cylinder (Fig.5)

By adjust "B", keep vertical(90 degree) between straight cylinder and rhinestone/stud.

By adjust "A", keep vertical(90 degree) between straight cylinder and ultrasonic peak.

Bolt "C" and " D" control the rotating cylinder moving speed. Normally, bolt "D" should be closed tightly and bolt "C" open 2 rounds from tight closed status.

If not, straight cylinder may hit the stone holder.



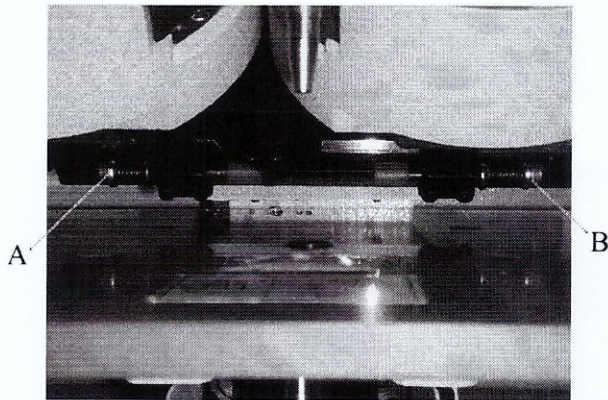
(Fig. 5)

7.5. Gap adjustment of right and left stone holder (drum)

Model: applied only to VHS-540N.

An adjustment bolt is located at lower side, and thus bolt "A" adjusts a right stone holder and bolt "B" adjusts a left stone holder like Fig.6.

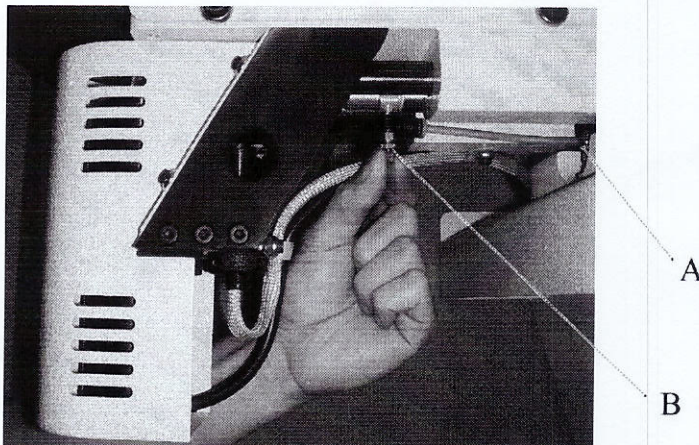
When misalignment(Y-axis) between a straight cylinder and rhinestone/stud happens adjust by rotating bolt "A" and " B".



(Fig. 6)

7.6. Pressure adjustment for front-to-back movement of table(Fig.7)

When changing hotfix method from/to ultrasonic/heater, working table moves front to back. The moving speed can be controlled by bolt "A" and "B". normally do not touch these bolts.



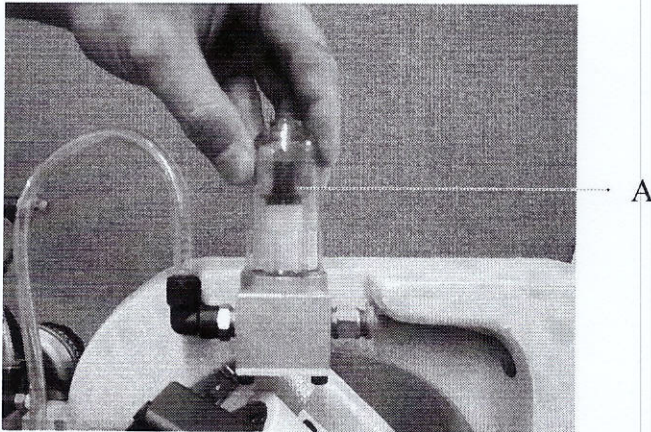
(Fig. 7)

7.7. Exchange of collecting filter (element filter)

Clean foreign substance inside of a glass pipe.

A collecting filter should be exchanged when pressure becomes high, because suction power is reduced in the event that water and oil are in contact with a collecting filter (white filter turns grey).

A collecting filter should be exchanged by loosening an A (glass pipe) in Fig. 8.

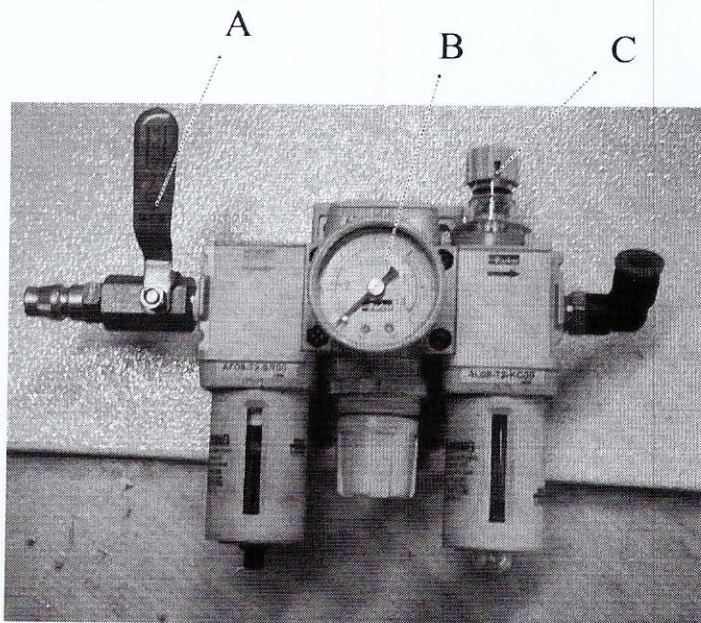


(Fig. 8)

7.8. Unit(Fig.9)

Valve "A" should be opened during work.

A valve should be fastened and an air hose should be separated after work so as to extend life of pneumatic parts.

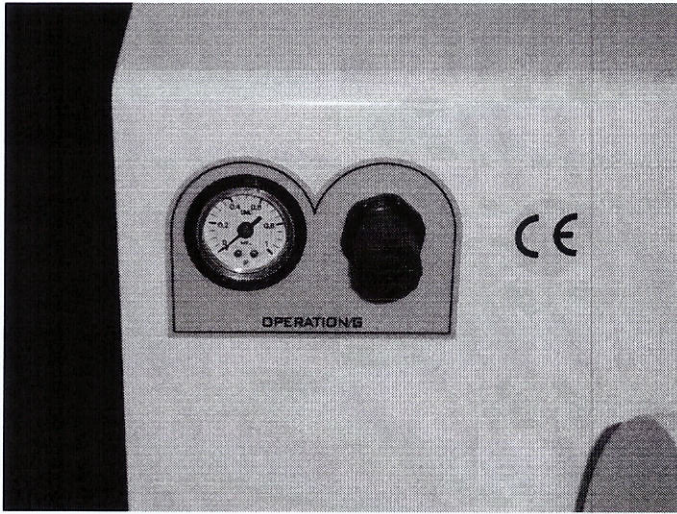


(Fig. 9)

Don't adjust B and C. it was set before shipment already.

7.9. Adjustment of air regulator(Fig. 10)

When turning clockwise, the pressure will be higher, turning count clockwise the pressure will be lower. Keep the needles at the green zone.

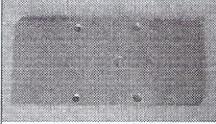

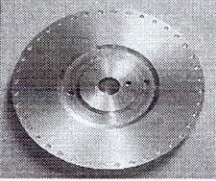
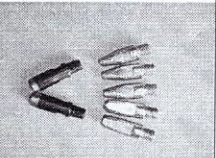



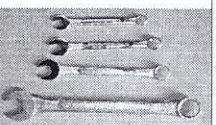
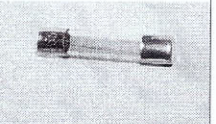





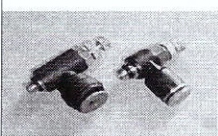
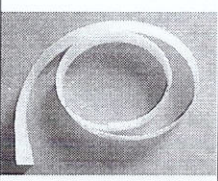
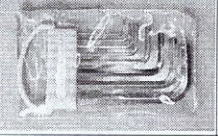

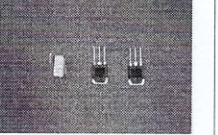
(Fig. 10)

8. Troubleshooting

Problems	Check Items	Action
1. Power	1. Power specification(230Va.c)	Supply 230 or 220Va.c
	2. Power code connection	Reconnection
	3. Fuse(2A)	Change, If broken
2. Cylinder moving	1. Is air pressure proper?	Supply proper pressure
	2. Is there any water in the air regulator?	Vent-out
	3. Is there any air leakage?	Reconnection
3. Heater	Temperature setting value	Adjust proper Temperature range or change board
4. Ultrasonic	Ultrasonic intensity	Adjust proper intensity or change board

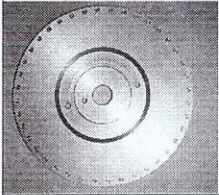



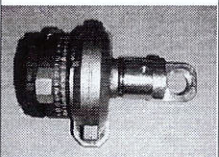
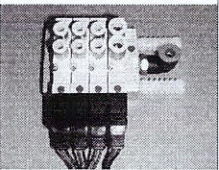
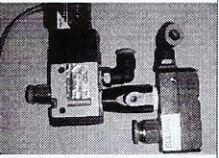
9. Standard Accessory List

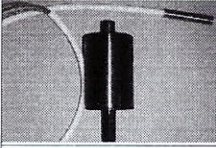
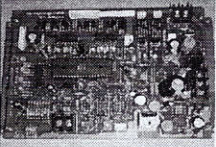
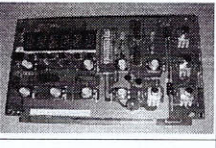
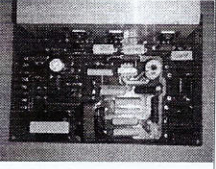
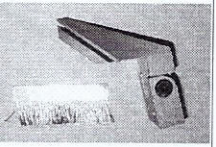
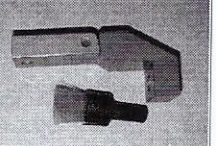


Figure	Name	VHS-510	VHS-530	VHS-540
	Working Table(large) (330X150)	X	O	O
	Working Table(small) (300X120)	O	X	X
	Rotating plate			
	SS6(2 mm)	1	1	1
	SS10~12(3 mm)	1*	1*	2*
	SS16(4 mm)	1	1	1
	SS20~30(5~6 mm)	1	1	1
	Vacuum holder cup			
	SS-6(1)	1	1	1
	SS-10~12(2)	1*	1*	1*
	SS-16(3)	1	1	1
	SS-20(4)	1	1	1
	SS-30(5)	1	1	1
	Iron on stud (3~4 mm)	1	1	1
	Iron on stud (5~6 mm)	1	1	1
	Tool box	O	O	O
	Spanner 8MM,10MM, 12MM	O	O	O
	Fuse 2A	O	O	O

	Straight cylinder Hose(8MM)	○	○	○
	Power cable	○	○	○
	Element filter	○	○	○
	Speed control(2 EA)	○ (04 X M5)	○ (04 X M5)	○ (04 X M5)
	Teflon tape	○	○	○
	Wrench set	○	○	○
	Air hose	○	○	○
	T/R & Resistance for Ultrasonic PCB	○	○	○

● : Installed on the machine

10. Optional Item List

Figure	Name	VHS-510	VHS-530	VHS-540
	Rotating plate	O	O	O
	Vacuum holder cup	O	O	O
	Vacuum holder cup (Iron on stud)	O	O	O
	Straight cylinder	O	O	O
	Rotary cylinder	O	O	O
	Solenoid valve(2 EA)	O	X	X
	(3 EA)	X	O	X
	(4 EA)	X	X	O
	Vacuum pump set	O	O	O

	Heater	O	O	O
	Main PCB	O	O	O
	Display PCB	O	O	O
	Ultrasonic PCB	O	O	O
	Brush(static electricity type) set	O	O	X
	(general type)	X	X	O
	Motor(type D) (type L)	O X	X O	X O
	Oscillator	O	O	O