

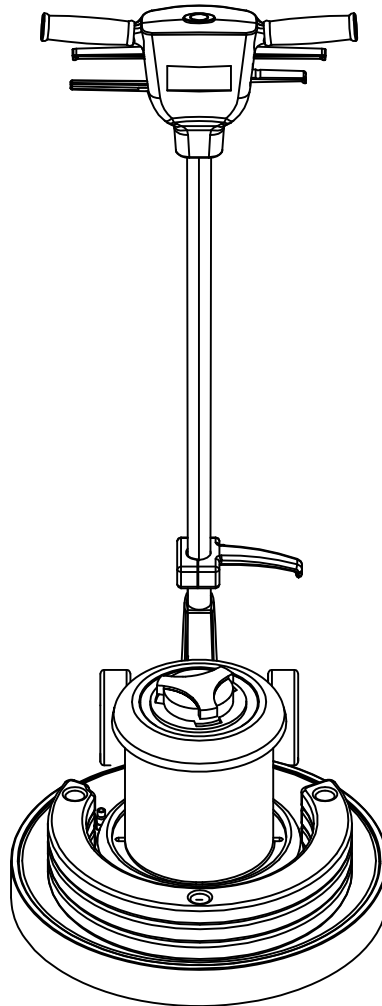


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STONE CARE MACHINES

OWNERS MANUAL

IMPORTANT: READ OWNERS MANUAL CAREFULLY
Please fill out & return your warranty card !



MODEL #

VF18HD

SERIAL #

VIPER INDUSTRIAL ESTATE
LIANG BIAN, LIAO BU
DONG GUAN, GUANG DONG
CHINA

TEL: [0769] 83283988
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VIPER...exceptional
value

REV.01(10-08)



CONGRATULATIONS on your purchase of a Viper product and welcome to the V.I.P. family. We appreciate your business and will do everything in our power to keep you happy with your purchase for many years to come.

As part of the V.I.P. family, you are entitled to the best protection by one of the most comprehensive warranties in the industry.

Thank-you for purchasing Viper products!

Tom Vander Bie, CEO

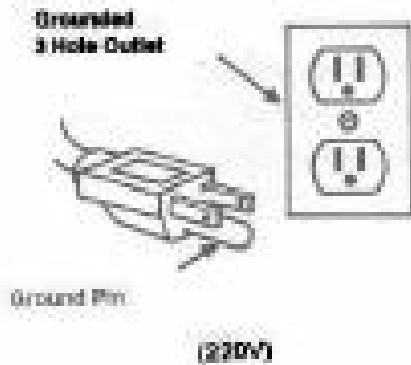
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SAFETY PRECAUTIONS

!!! This machine must be grounded!

Grounding provides a path of least resistance for electrical current. To reduce the risk of electrical shock should the machine malfunction, the machine has a special grounding plug. Don't remove the ground pin



This machine is intended for commercial use. It is constructed for use in an indoor environment and is not intended for any other use. Use only recommended accessories.

All operators shall read, understand and exercise the following safety precautions:

1] Do not operate machine:

- Unless trained and authorized.
- Unless you have read and understand operators manual.
- In flammable or explosive areas.
- With a damaged cord or plug.
- If not in proper operating condition.
- In outdoor areas.

- In standing water
- With the use of extension cords.

2] Before operating machine:

- Make sure all safety devices are in place and operate properly.

3] When using machine:

- Do not run machine over cord.
- Do not pull machine by cord or plug
- Do not pull cord around sharp edges or corners.
- Do not unplug by pulling on the cord.
- Do not stretch cord.
- Do not handle plug with wet hands.
- Keep cord away from heated surfaces.
- Do not pick up burning or smoking debris such as cigarettes, matches or hot ashes.
- Report machine damage of faulty operation immediately.

4] Before leaving or servicing machine:

- Turn off machine.
- Unplug cord from outlet.

5] When servicing machine:

- Unplug cord from outlet.
- Use manufacturer supplied or approved replacements parts.

Operation of Floor Machine

- * Read operators manual thoroughly prior to operating or servicing this machine.

GENERAL USE

- 1] Remove any obstructions or other obstacles in the area which is to be cleaned.
- 2] Place the handle in the upright position and tilt machine back until handle rests on the floor.
- 1] **Be sure the machine is not plugged into an outlet.**
- 3] Attach the pad driver or brush to the machine by placing the clutch plate over the gearbox hub and turning the driver / brush 1/4 turn.
- 4] Place machine back into its upright position.
- 5] Plug power cord into grounded outlet.

* Never use an extension cord in conjunction with the standard power cord.

- 6] The handle height may be adjusted by lifting up on the handle release lever, located on the right side of the switch housing. Pull trigger and lower handle to desired operating position. Release trigger to lock the handle into position.
- 7] To start the machine, press the red safety button on the top of the upper switch housing, and then squeeze either of the operating triggers. [the safety button must be depressed prior to squeezing the operating triggers].
- 8] When the machine is in operation, both hands should be placed on the switch housing [upper handle].
- 9] During operation, to make the machine go right, gently raise the handle. To make the machine to left, gently lower the handle.
- 10] To stop the machine at any time, simply release the operating trigger [s] and the machine will stop automatically.

MAINTENANCE

To keep the machine performing well for many years, please follow the following maintenance procedures.

*** Always confirm that the machine is unplugged prior to performing any maintenance or repairs.**

- 1] Unplug machine as soon as you are done using it.
- 2] Tilt machine back and remove pad driver or brush.

***Never store a low speed machine with the pad driver or brush mounted to the machine**

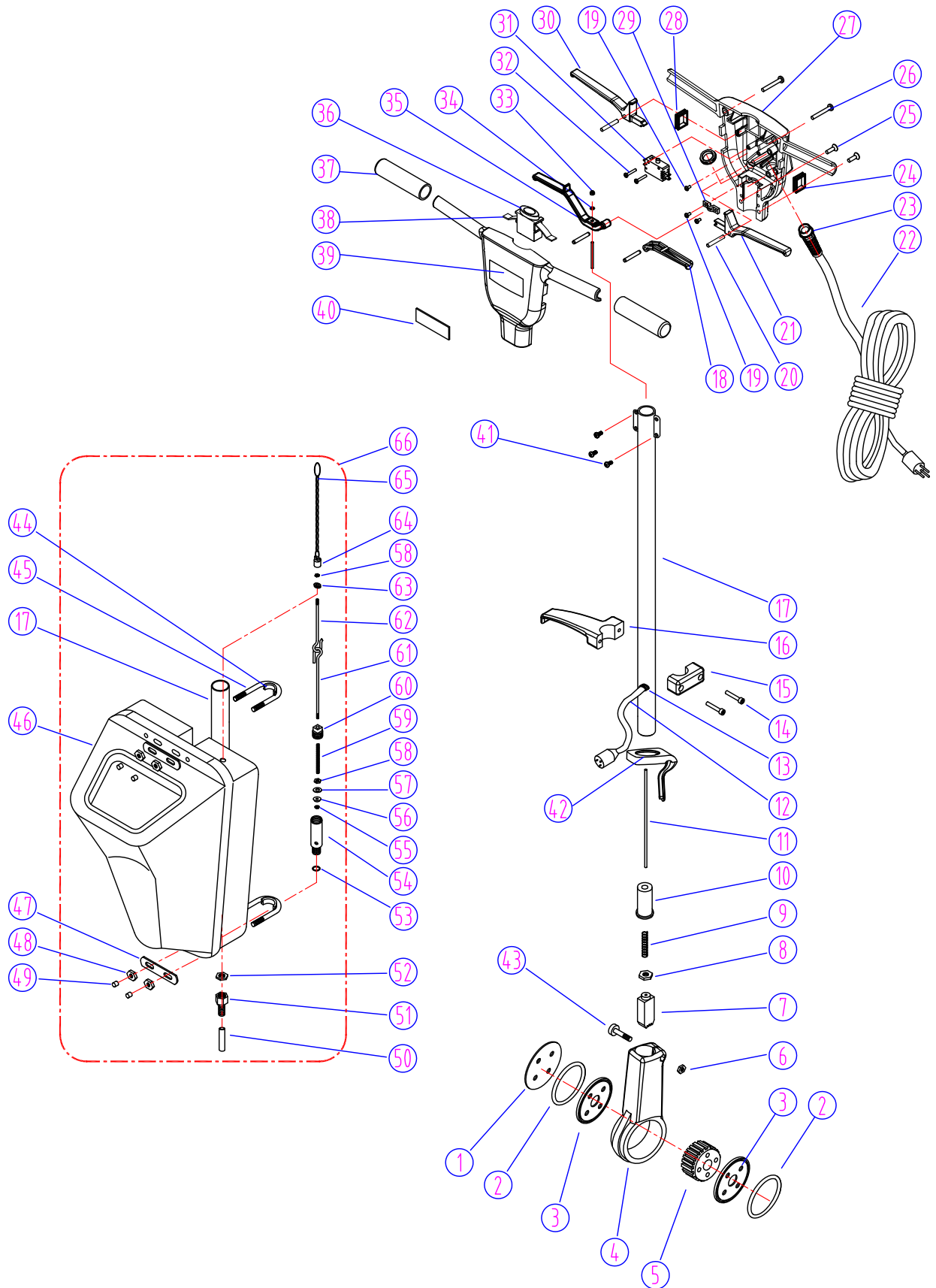
- 3] Clean the outside of the machine with a mild cleaner.
- 4] Check power cord for any damage. If damage is detected, replace the cord immediately.
- 5] Lubricate wheels with a water resistant lubricant once a month.
- 6] Check machine for loose or missing nuts and bolts, and replace as necessary.
- 7] If the machine is used in a dusty environment, you may remove the motor cover and blow the motor clean with compressed air. This will ensure proper ventilation, and allow the motor to run cooler.

STORAGE

- 1] Unplug machine from power source and wrap cord on handle.
- 2] Tilt machine back and remove pad driver or brush.
- 3] Store machine in upright position and in a dry area.

PARTS LIST

HANDLE GROUP FOR VF18HD



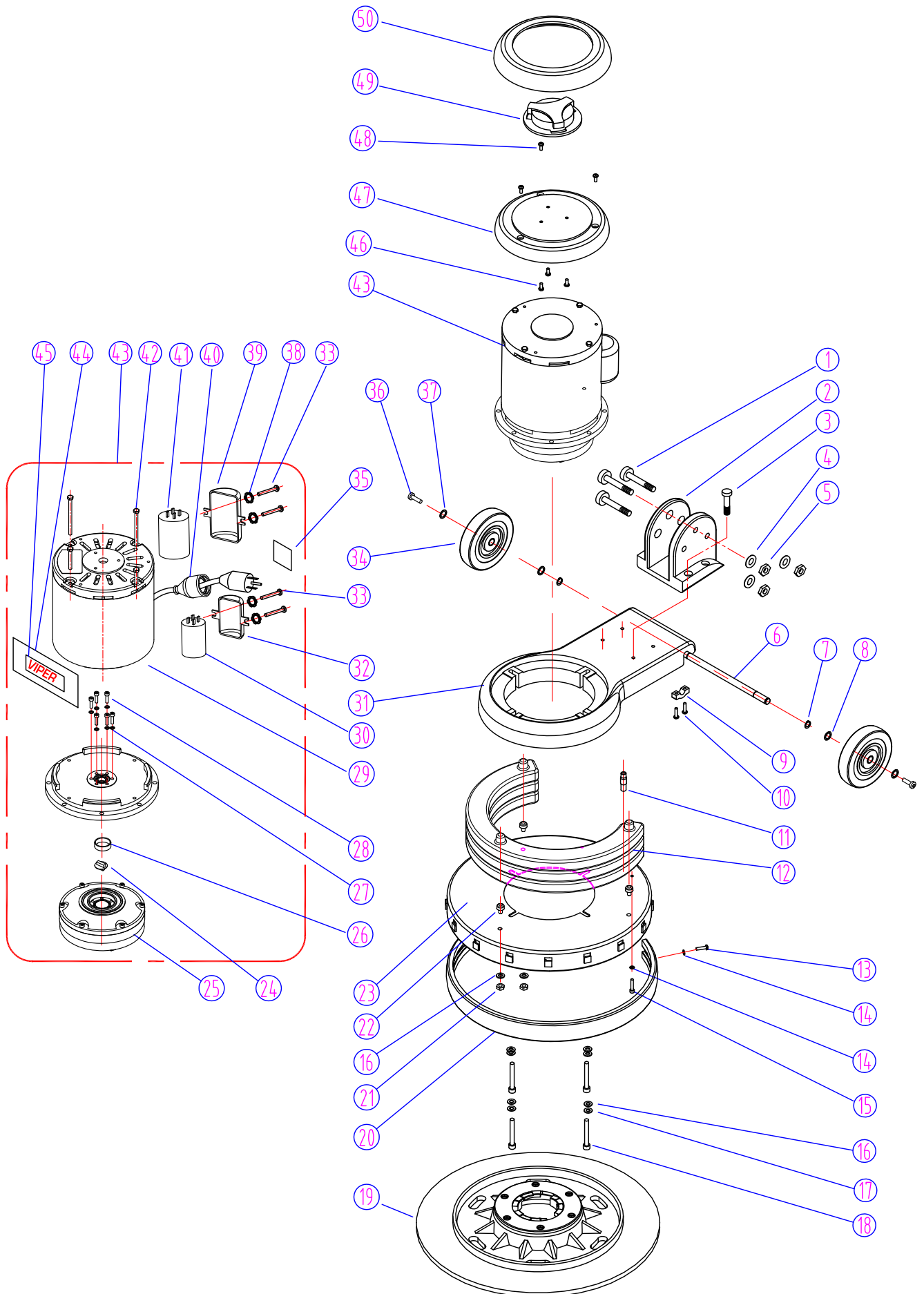
HANDLE GROUP FOR VF18HD

DIA NO	PART NO	DESCRIPTION	NO REQ'D
1	GV40229	COVER 密封端盖	1
2	GV40228	"O"RING,GEAR SEAT "O"密封圈	2
3	GV40227	WASHER,NYLON 尼龙垫片	2
4	VF40104F	SEAT,GEAR 铝套座	1
5	VF40125B	GEAR 调位齿轮	1
6	VF13502	NUT,LOCK,M6 防松螺母 M6	1
7	VF47052	INSERT 调位齿杆	1
8	GT13013	NUT M4 六角螺母 M4	1
9	VF40121	SPRING LEVELING 拉杆弹簧	1
10	VF40105	RETAINER 拉杆套	1
11	VF44004	ROD LEVELING 长拉杆	1
12	VF45117	CORD,HANDLE 手柄内电线	1
	AS41901	PLUG PROTECTOR,LARGE FEMALE 防水内套	1
13	VF50120	GROMMET 电源线保护胶圈	1
14	GT13031	SCREW M6X35 内六角螺钉 M6X35	2
15	VF44002-2	COVER,HOOK 绕线架盖板	1
16	VF44002-1	HOOK,CABLE 绕线架	1
17	VF40117	TUBE 主管	1
18	VF44018	LEVEL,SOLUTION 放水拉把	1
19	VV13650	SCREW,M4X10 十字盘头螺钉 M4X10	3
20	VF48306	PIN 定位销	4
21	VF44016	LEVEL,LEFT,SWITCH 左开关拉把	1
22	VF45118	CORD,POWER SUPPLY 电源线	1
23	VF44005	STRAIN RELIEF,CORD 电源线保护套	1
24	VF30108	GASKET,HANDLE SOLUTION 放水拉把垫	1
25	VF14223	SCREW M6X25 十字沉头螺钉 M6X25	2
26	VF14218	SCREW M6X45 十字盘头螺钉 M6X45	2
27	VF44015	REAR COVER 手柄后盖	1
28	VF30107	GASKET,HANDLE LEVELING 调位拉把垫	1
29	VF48309	CLAMP BLOCK 压线块	1
30	VF44017	LEVEL,RIGHT,SWITCH 右开关拉把	1
31	VF99023	SWITCH ASSY 电源开关	1
32	VF14212	SCREW M3X25 十字盘头螺钉 M3X25	2
33	GT13014	NUT,LOCK,M4 防松螺母 M4	1
34	GT13017	WASHER,PLAIN Φ4 平垫圈Φ4	1
35	VF44019	LEVELING ROD 调位拉把	1
36	VF46705	SAFETY BOTTOM 保险键	1
37	VF48310	HAND GRIP 扶手护套	2
38	GV40218	SPRING,SAFETY BLOCK 开关弹簧片	1
39	VF44014	FRONT COVER 手柄前盖	1
40	VF47035A	LOGO "VIPER"标牌	1
41	VF14222	SCREW M5X12 十字盘头螺钉 M5X12	4
42	GV40241	SEAL SEAT 防水胶套	1
43	VF14053	SCREW M6X25 内六角螺钉 M6X25	1
44	VF40140	GASKET 双头螺栓垫	2
45	VF40136	BOLT 双头螺栓	2
46	VF40130	TANK 水箱	1
47	VF40141	CLAMP PLATE 水箱压板	2
48	VF13503	NUT,LOCK M8 防松螺母 M8	4
49	VF99015	RUBBER CAP 双头螺栓胶盖	4
50	VF40139	HOSE,SOLUTION 双头螺栓胶盖	1
51	VF40132	BARN HOSE 溶液管	1
52	VF40142	NUT,M14 螺母 M14	1
53	VF41020	"O"RING "O"密封圈	1
54	VF40131	VALVE BODY 阀体	1
55	VF40155	NUT,M5 六角元台螺母 M5	1

HANDLE GROUP FOR VF18HD

DIA NO	PART NO	DESCRIPTION	NO REQ'D
56	VF40134	SEAL,RUBBER 锥型密封堵	1
57	VF40138	WASHER,PLAIN Φ5 铜垫圈 Φ5	1
58	VF40144	SCREW,M5,BRASS 铜螺母 M5	2
59	VF40135	SPRING 弹簧	1
60	VF40133	SCREW 放水阀螺堵	1
61	VF40148	LOWER PULLING ROD 拉钩	1
62	VF40137	UPPER PULLING ROD BRASS 拉杆	1
63	VF40147	SEAL,TANK 水箱拉杆密封套	1
64	VF40156	SEAT CHAIN 链条座	1
65	VF41021	CHAIN 链条	1
66	MF-VF001	SOLUTION TANK ASST 水箱组件	1
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BASE GROUP FOR VF18HD



PARTS LIST

DIA NO	PART NUMBER	DESCRIPTION	NO REQ'D
1	GT13016	SCREW M8 X 60,HEX SOCKET 内六角螺钉 M8X60	3
2	GV40240H	MOUNTING BASE,GEAR 铝底座支架	1
3	GT13081	SCREW M6 X 35,HEX SOCKET 内六角螺钉 M6X35	4
4	VF13514	WASHER,PLAIN Ø8 平垫圈 Φ8	3
5	VF13503	NUT,LOCK,M8 防松螺母 M8	3
6	VF44013	AXLE 轮轴	1
7	VF13520	WASHER,LOCK 开口挡圈 Φ12	2
8	VF50119	WASHER,LOCK 鞍型垫圈	2
9	GV40235	CLAMP BLOCK,AXLE 轮轴固定块	2
10	VV13621	SELF-TAPPING SCREW ST5 X 20 十字平尾自攻丝	4
11	VF40152	BARB HOSE 机体水管接头	1
12	VF32103	IRON BAR 配重块	3
13	VF13613	SCREW M5 X 20,HEX SOCKET 内六角螺丝 M5 X 20	2
14	VF13474A	WASHER,PLAIN Ø5 不锈钢平介子	4
15	VA13474	SCREW M5 X 16,PH 十字盘头螺钉 M5 X 16	2
16	VF13524	WASHER,PLAIN Ø8 平介子	7
17	VF13519	WASHER,LOCK Ø8 不锈钢弹性垫片	4
18	VF14114	SCREW M8 X 55 外六角螺丝	4
19	VF32102	17"PAD HOLDER ASSY 17"针座	1
	VF32104	17"GROUNDING DISC,HOLDER ASSY 17"翻新针座	1
20	VF32105	BUMPER 18" 18"防撞边	1
21	VF13503	NUT,M8 X 5.7 防松螺母 M8	3
22	VF32106	PIN 定位轴	3
23	VF32101	FRAME 18" 18"底盘	1
24	VF99021	COULPING 电机轴连接器	1
25	VF999802B	GEAR BOX 齿轮箱总成	1
26	MT01102	SLEEVE 隔套	1
27	VV13601	WASHER,LOCK Ø5 弹性垫片	6
28	VV13636	SCREW M5 X 30 内六角螺丝 M5 X 30	6
29	VF999790	MOTOR,220V,1.75HP 电机	1
	YCQ10300-1A	CENTRIFUGAL SWITCH 起动圈	1
	YCQ10300B	STATIONARY SWITCH 底板组件	1
30	VF32109	RUNNING CAPACITOR,20uf/500v,105 ° C 电容器 20UF/500V 105 ° C	1
31	VF32201	ALUMINIUM BASE,MOTOR 铝电机座	1
32	YLQ14601	MOUNTING FRAME(SMALL),CAPACITOR 小电容罩	1
33	VV20509	SCREW M5 X 10 十字盘头螺丝 M5 X 10	4
34	VF48202	WHELL 5" 5"轮子	2
35	VF40994	READ MANUAL LABEL 贴纸	1
36	VF44012	SCREW,M6 X 12.7 防松螺钉 M6 X 12.7	2
37	VF13666	WASHER,Ø6 平垫片	2
38	VF13604	WASHER,LOCK,OUTER TOOTH 齿型垫片	4
39	YCQ10615	MOUTING FRAME(BIG),CAPACITOR 大电容罩	1
40	AS41902	PLUG PROTECTOR SAMLL MALE 电机防水外套	1
41	VF999849	START-UP CAPACITOR(BIG),100UF/300V 起动电容	1
42	YLQ17507	BOLT WITH WASHER KIT 垫圈套装	4
43	VF999791	MOTOR WITH GEAR BOX ASSY 电机连牙箱	1
44	VF44003	LABEL,MOTOR 银丝龙贴纸	1
45	VF41079	LABEL,VIPER "VIPER"冲字标牌	1
46	VF14222	SCREW M5 X 12 十字盘头螺丝 M5 X 12	3
47	VF30001	TOP COVER,MOTOR 电机盖组合件	1
48	VV20150	SCREW,M5 X 12 开关盒固定螺丝 M5 X 12	3
49	VF30002	CLUTCH PLATE 刷盘固定座	1
50	VF47023	BUMPER 电机上盖密封圈	1

Directions for the grinding and crystallization processes.

1) Grinding process

Prepare the following tools and items: grinding disc holder, grinding disc (usually the granularity is 300#, 500#, 2000#), window squeegee, wet vacuum cleaner, "caution wet floor" caution signage.

Attach the base grinding disc to the grinding disc holder (first use the grinding disc with smallest granularity (the smaller the granularity number, the coarser the disc)) and then fit it onto the machine. Fill the tank with water.

Turn on the machine, put clean water on the floor. Grind slowly and evenly. Remove the water on the stone surface using a window squeegee. Repeat the procedure as required until there are no marks on the floor.

Pick up the powder thoroughly using wet/dry vacuum cleaner, and replace the grinding disc with the next larger granularity. Use the above directions, and continue grinding until the result is acceptable.

The floor **MUST** be cleaned thoroughly before beginning the crystallization process.

Caution, Make sure there is no sand on the floor. The grinding disc should be installed uniformly. Be sure to grind slowly and evenly with enough water. You must completely remove the powder from the last process before beginning next process. Immediately clean the floor with the vacuum cleaner, replace the grinding disc from coarsely

granular to finely granular. You can't skip steps. There is coarse grind, half-finishing grind and finishing grind. During finishing grind, if you feel resistance, you can reduce the quantity of grinding.

2) Crystallization process.

Prepare the following tools and items: pad driver, fiber pad (steel pad), dust mop, K2 stone treatment, or K3 stone shining plasm, or crystallization powder. Fit the pad driver onto the machine, then attach the fiber pad (steel pad). Turn on the machine, grind and spray K2 chemical simultaneously. Apply the chemical on the floor uniformly, and then spray K3 chemical. Rub to a high gloss and enter the next area. If using the crystallization powder, you can mix the powder with water and then spray this directly to the floor.

Caution: It's best if there is no wax application on the floor. The floor **MUST** be free of water and dirt. The color of the pad is white (or colorless). Replace pad if dirty.

云石翻新与晶硬处理操作指引

<1> 翻新处理:

首先需准备下列工具与材料：翻新针座、金钢石碟片（一般可准备粒度 300#、500#、2000#）、玻璃刮、吸水机、“小心地滑”告示牌。

将金钢石粘在翻新针座上（6片粒度要一样，先用牌号数小的金钢石碟），然后装在机器上，水箱中要装水。

开启机器，在地面上放入大量清水，慢而均匀的研磨，反复几次后，然后用玻璃刮清除石面的水份，观看效果，直至无痕迹为止。

用吸水机将粉末彻底吸净，并更换牌号数稍大一点的金钢石碟，方法如上，直至满意为止。将地面清洗干净后，方可做晶硬处理。

⚠ 注意：地面不能有沙粒，金钢石碟安装要均匀，研磨时要有足够的水份，并且慢而均匀，同时每一道工序前都必须彻底清除上一道工序留下的粉末，及时用吸水机吸净地面，更换金钢石碟须由粗到细，不能跳号，要分粗磨、半精磨、精磨，精磨时，若发现阻力较大，可对称的减少金钢石碟的数量，或者减少加重块的数量。

<2> 晶硬处理:

首先需准备下列工具与材料：针座、天然纤维垫（或钢丝垫）、尘堆、K2 晶面处理剂及 K3 晶光亮剂或者晶硬粉。然后将随机附件针座安装在机器上，放上纤维垫或钢丝垫，开动机器，边磨边喷药水 K2，将药水均匀地涂抹在地面上，接着喷药水 K3，将地面磨亮即可。随后进入下一区域。若使用晶硬粉，将晶硬粉加水调匀后，直接喷洒在地面上即可。

⚠ 注意：地面最好不要有腊层，地面的水及尘埃应先清理掉，纤维垫要用白色（或无色），粘有污物后要及时更换。

安全预防

⚠️ 本机必须接地!

为减少机器因故障而引起的触电危险,本机电源线插头带有一接地插脚,任何情况下不得去除该插脚。

本机仅作商业用途,并限于户内使用。务必使用推荐的附件,操作者应阅读,理解并掌握以下安全预防措施:

- 1、以下情况不得操作本机:
 - 未经培训取得相应资格;
 - 未仔细阅读和理解操作手册;
 - 在易燃易爆场所;
 - 电源线或插头损坏;
 - 机器存在问题不适合操作;
 - 在户外时;
 - 在水中;
 - 使用延长线;
- 2、操作机器前:
 - 务必确保所有安全装置动作正常;
- 3、使用机器时:
 - 不得碾压电线;
 - 不得靠牵拉电线的方式移动机器;
 - 不得将电线置于物件锋利的边、角;
 - 不得用拉电线的方式拔取插头;
 - 切勿用湿手拔取插头;
 - 始终使电源线远离发热的物件表面;
 - 应立刻报告机器任何之异常及损坏情况;
- 4、离开机器或进行维护前:
 - 务必关机并拔下电源插头;
- 5、进行维护时:
 - 应拔下电源插头;
 - 使用产商推荐的或认可的配件;

储存时

- 1、拔下电源插头;
- 2、取下针座或刷子;
- 3、直立存放于干燥的场所;

维护与保养

为使本机始终保持良好的性能,请遵循以下程序保养本机

⚠️ 进行任何维护、保养工作前,必须确保机器已断开电源

- 1、机器一经使用完毕,立即拔下电源插头;
 - 2、取下针座或刷子;
- ### ⚠️ 存放机器时,切勿忘记取下针座或刷子
- 3、用中性清洁剂清洁机器;
 - 4、检查机器电源线有无破损,如有应立即进行更换;
- ### ⚠️ 为避免危险,若电源线破损,必须联系当地售后服务部进行更换;
- 5、每月用防水润滑剂润滑轮子、轴;
 - 6、检查机器有否遗失螺母、螺栓并进行更换;
 - 7、机器在粉尘的场所使用后,应取下电机顶盖,用压缩空气吹净附着在电机上的灰尘以保证良好的通风。

操作说明

⚠️ 使用或维护本机前务必仔细阅读说明书

- 1、使用前应清理工作区域内的杂物、纸屑等;
 - 2、将手柄置于垂直位置后,将机器倾斜使手柄靠在地面;
- ### ⚠️ 确认机器此时未接通电源;
- 3、松开螺母,取下中心定位器;
 - 4、取合适的抛光垫粘在针座上,并用中心定位器压紧;
 - 5、将机器置于垂直位置;
 - 6、将电源线插头插入带接地的插座中;
- ### ⚠️ 切勿使用与电源线不一致的延长电缆;
- 7、拉住调节拉把将机器手柄调节至合适操作位置;
 - 8、按下位于手柄上方的红色按钮同时拉住左、右拉把即可启动机器;
 - 9、操作时、双手必须牢牢握住操作手柄;
 - 10、操作时,只要轻轻地抬起手柄,机器便会向右移动,轻轻按下手柄,机器便会向左移动;
 - 11、停机时,只需松开左、右拉把即可;

Wiring Diagram

