

# AE-SR 60-80-100-140-160

## 操作使用说明书 (Operating Instructions)

Pos. Nr. 分解图号	Description	中文名称	Pos. Nr. 分解图号	Description	中文名称
1	Pump/Body	泵浦主体	94	Hex. Nut	六角螺母
2	Rotor	转子	95	Washer	垫片
3	Carbon Vanes	碳精片	96	Silencer Tube	消音管
4a	Lid Left	后气缸面板	97	Washer	垫片
4b	Lid Right	后气缸面板	98	Socket Head Screw	内六角螺丝
17	Gasket	密封垫片	103	Dust separator Cover	粉尘分离器盖
18	Bearing Cover	培林盖	104	Gasket	密封垫片
19	Bearing Cover	培林盖	110	Handle	手柄
20	Gasket	密封垫片	121	Cooler	散热器
24	Seal	密封圈	122	Gasket	密封垫片
25	Compensating Disc	补偿垫片	123	Pressure Connection Box	压力连接盒
26	Shaft-Sealing Ring	轴封	125	Gasket	密封垫片
27	Ball Bearing	球轴承	126	Gasket	密封垫片
28	Ball Bearing	球轴承	131	Sealing Ring	密封圈
31	Set Distance Disc	衬垫盘	132	Socket Head Screw	内六角螺丝
32	Clamping Disc	夹紧盘	137	Socket Head Screw	内六角螺丝
38	Screw	螺丝	141	Connecting Piece	进排气调节隔垫
41	Hex-Head Screw	外六角螺丝	146	Gasket	密封垫片
42	Hex-Head Screw	外六角螺丝	148	Socket Head Screw	内六角螺丝
43	Hex-Head Screw	内六角螺丝	149	Rubber Buffer	橡胶缓冲器
44	Straight Pin	方键	161	Covering Hood	气缸外表保护盖
45	Key	方键	163	Air Guide Covering	前扇保护盖
50	Connection Flange	连接法兰	165	Ventilator Hood	风扇保护盖
52	Washer	垫片	166	Ventilator Hood	风扇保护盖
53	Socket head Screw	内六角螺丝	171	Socket Head Screw	内六角螺丝
56	Coupling With Fan	联轴器风扇	172	Socket Head Screw	内六角螺丝
57	Washer	垫片	173	Screw	螺丝
58	Shaft End Bolt	外六角螺丝	174	Spring Disc	弹性垫片
61	Filter Housing	过滤器外壳	176	Rubber Buffer	橡胶缓冲器
62	Gasket	垫片	177	Threaded Pin	直头螺栓
64	Stud	气缸螺栓	178	Ring Screw	异径螺母
65	Stud	气缸螺栓	182	Flange	法兰
67	Silencer Tube	消音管	184	Rubber Bushing	橡胶缓冲器
68	Filter Cartridge	滤芯	185	Pipe Rivet	固定管
71	Leaf Spring	过滤弹簧	186	Washer	垫片
72	Blind Rivet	铆钉	188	Socket Head Screw	内六角螺丝
73	Filter Cover	过滤器盖	190	Motor	马达
75	Gasket	密封垫片	191	Stud	直头螺栓
76	Gasket	密封垫片	192	Washer	垫片
77	Filter Holder	过滤器底座	193	Hex. Nut	六角螺母
79	Socket Head Screw	内六角螺丝	198	Coupling	联轴器
80	Stud	双头螺栓	199	Coupling Disc	联轴器垫片
81	Washer	垫片	241	Oil Pipe	油管
82	Hex. Nut	六角螺母	245	Oil Pipe	油管
83	Locating Peg	固定钉	250	Grease Nipple	滴油嘴
85	Gasket	密封垫片	341	Vacuum Regulation Valve	真空调节阀
86	Gasket	密封垫片	345	Pressure Regulation Valve	压力调节阀
88	Cooler	排气冷却器	356	Silencer	消音器
91	Filter Cartridge	滤芯			
93	Stud	双头螺栓			

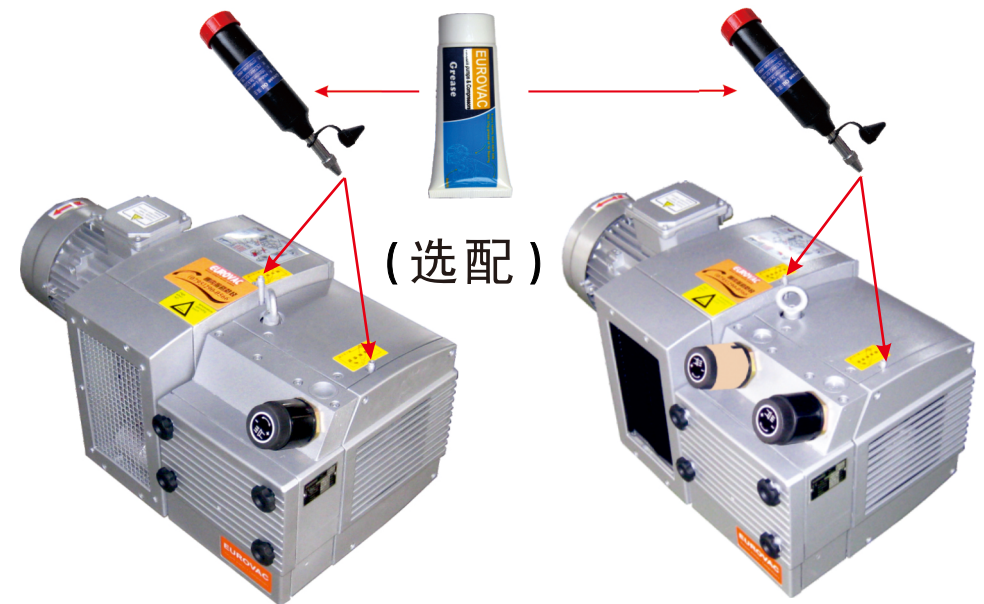
### 7.0 保证函

亚米拉自动化技术(苏州)有限公司保证所有提供的产品从出货之日起十二个月内,或者安装之日起一年以内不会有材料和工艺缺陷。在此期间必须做出声明,明是有限的更换或维修声明有缺陷的零部件。为防止由AMILA采购的组件(诸如:启动器、控制器、机械密封件、马达等等)制造商的保证将延伸到其采购商,我们的保养将取代所有制造商的保证。保养项目的更换,包括但不限于包装、油封、轴承、线圈等等。关于正常的保养服务不在此保证函以内。

此有限保证函,仅当产品正确安装,按照操作手册正常使用和维护时才有效。保证函不包括产品在保证期间未经工厂授权而错误使用、疏忽、更改或者维修而引起的质量问题。如果工作条件不符合我司要求,如不正确的电压或者水压、过高的环境温度或者其他将影响产品功能和寿命的环境条件,都将导致保证函无效。一定要获得退回零部件为保修的许可,并将所有退回零部件先寄到工厂。关于邮寄地址(请参照前封面)。检测后,如果发现产品或者零部件是有缺陷的,原则上将免费维修或更换。另外,如果被确定为不是我公司的责任,那么需要收取维修或更换配件的费用。废旧或按特殊订单制造的零部件或产品是不可退回的。本保证只适用于以上所述及之前约定的期限。在任何情况下,AMILA公司的最大责任将不超过被声明缺陷的产品、零部件或组件的合同价格:AMILA对于任何因有缺陷的设备引起的任何特殊、间接或相因而来的损害不负有责任。除包含在本有限保证函中的条款外,没有任何延伸的暗示或特殊保证。

### 特别申明:

- ① 客户须严格按照我司指定的黄油品牌和型号(德国克鲁勃GY193型)给真空泵定期(每30天一次)加注黄油以润滑轴承,确保轴承和真空泵的使用寿命;
- ② 真空泵里面的空气滤芯视情况最长不超过30天,用高压空气进行清洁,以确保真空泵吸气和排气顺畅;
- ③ 如客户未按保养或加注润滑黄油,那时时刻刻起,我司真空泵的保固期到此结束;
- ④ 质量保固期限:一年(每天8小时工作制,即以3000个小时为基准)。



## 亚米拉自动化技术(苏州)有限公司

电话: 0512-66365228

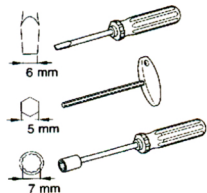
地址: 苏州市吴中区北官渡路7号

传真: 0512-66365628

网址: <http://www.amila-tech.cn>

# AMILA - 真空泵 AE-SR

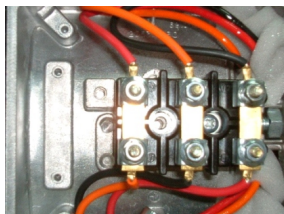
## 1. 使用工具 (Tools):



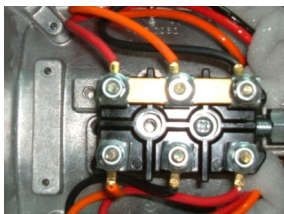
Grease gun (黄油枪)



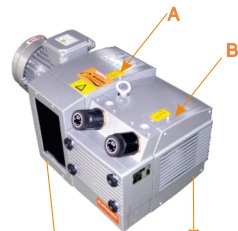
## 2. 安装及马达 (电机) 连接 (Installation & Motor Connection):



电压接法 (Low Voltage): 三相 3Φ 220V



电压接法 (High Voltage): 三相 3Φ 380V



周围环境温度不超过45°C  
Ambient temperatures must not exceed 45°C

在安装真空泵/压缩机时, 应考虑到易于保养维修。真空泵(压缩机)于周围隔壁之间, 空间至少不低于10公分, 以保证冷却所需的空气流动无阻。在消音罩内进行安装工作时, 请先向公司咨询联络。周围环境温度不超过摄氏45°C。

It is recommended to install the pumps with easy access for maintenance. Clearance between compressors and adjacent walls should be no less than 10cm of free space in order to ensure sufficient air flow for cooling. Contact **AMILA** Prior to installation under noise insulation canopies. Ambient temperatures must not exceed 45°C.

真空泵/压缩机的电源连接方式应符合规定, 注意遵守EN60204T1. 马达连接可按照接线盒内的电路图或备好插头进行, 此工作只能由专职电工完成, 注意检查连接电压及频率。配置电机安全开关, 按电机额定电流进行设置(数据见电机型号牌)。每小时内次数不超过十次。

让电机稍作回转, 检查其转向是否正确(参照电机壳上之箭头), 若转向不对时, 更改方向。

Connect the pump to the electricity supply observing all applicable safety regulations. Comply with EN 60204 T1. Connect motor based on connecting diagram(in terminal box) or ready made plugs. This work should be carried out by an experienced out by an experienced electrician only. Check for connecting voltage and frequency. Avoid more than 10 switches per hour. Install motor circuit-breaker and set to nominal motor current. (For data see motor rating plate). Briefly start motor and check rotation (arrow on casing). Exchange phases if rotation is incorrect.

操作时, 自动启动是可能的。

When in operation, an automatic start is possible.

注意确保配合尺寸之正确(见表格)和管路清理, 勿使接口沾染油液、油脂、水和其他污染物以保持连接物之顺畅。对于长度超过2公尺长之管路, 我们建议安装逆止。勿使接口沾染油液、油脂、水和其他污染物以保持连接物之顺畅。移开于DA和SA底盖, 不要接管路。

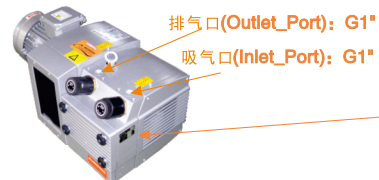
Ensure correct dimensions (see Table) and clean pipelines. Keep connections free from oil \ grease \ water and any other contamination. With pipelines exceeding 2m in length we recommend the installation of non-return valves. Keep connections free from oil \ grease \ water and other contaminants. Remove end caps at DA and SA. Do not connect to pipeline yet.

耐压管接DA端, 吸气管接SA端。安装真空控制调节阀VR和压力调节阀DR(参数值见表格)。若没有安全装置, 压缩机不可超压进行(最大压力表值见型号牌)。如果发生允许压缩机最后力超过1bar, 此外衔接压力测量仪表和标明最后之压力。

# AMILA - 真空泵 AE-SR

Connect pressure line at DA and inlet line at SA. Set vacuum control valve VR or pressure control valve DR to operating valve (for valve see table). Do not operate the compressor without safety equipment against excessive pressure (for maximum values see rating plate). In case of permitted compression end pressures of more than 1 bar additionally connect a pressure meter and mark end pressure.

## 3. 用途 (Application):



Design In Australia	
Year	XXXX
Serial No.	XXXX
Type	XXXXXXXXXXXX
Pumping Speed	XXXX R.M.
Motor Rating	XXXX KW
Inlet Capacity	XXXX m³/h
Vacuum	XXXX mbar
Pressure	XXXX mbar

製造番號 (Index)  
型號 (Option)

**Service:**  
Tel: 0512-66365228  
Fax: 0512-66365628  
E-mail: sales01@amila-tech.cn  
www.amila-tech.cn



泵浦可以使用产生真空(AE-SR)或超压力(AE-SR)入口空气必须为干燥大气空气: 泵浦为干式运转; 避免油雾吸入此项规格有效于800公尺以下之海平面高度。

The pump can be used to generate vacuum (AE-SR) or overpressure (AE-SR). Inlet air must be standard dry atmospheric air. The pumps are dry-running. Avoid intake or oil mist. The specification is valid up to a height of 800m above sea level.

## 4. 保养 (Maintenance):

经常性的维护保养可使真空泵/压缩机保持最佳工作状态, 维护保养的周期取决于使用情况和工作条件。

Maintain pump regularly to achieve the best operating results. Maintenance intervals will depend on the pump's use and ambient conditions.

在进行保养之前, 须切断电机的电源, 并确保不会出现无意中的重新启动。

Before commencing maintenance, remove main plug from socket to avoid unintentional restarting.

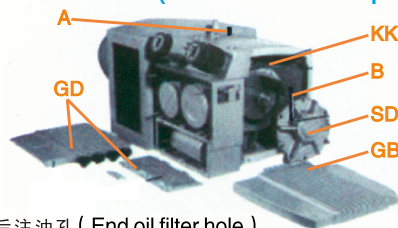
空压将产生高温在压缩机, 拆开前允泵浦冷却。

Air pressure will generate high temperature at the compressors, Allow the pump parts to cool before disassembly.

AE-SR 60~160: 当真空泵在运转时添加黄油(机型60-100为5g左右和机型140-160为7g左右) 润滑滚动培林于A和B二处之黄油嘴, 进行5000小时后, 更换原始滚动培林。

Grease Roller bearings at A and B both of the grease nipples while the vacuum pump is running within every 2 or 3 weeks please fill with oil grease (60-100: 5g and 140-160: 7g). after 5,000 hrs replace by original roller bearings only.

## 5. 零件代码及名称 (Code and name of parts):



A: 后注油孔 (End oil filter hole)

KK: 气缸 (Pump body)

B: 前注油孔 (Front oil filler hole)

SD: 面板盖 (Lid)

GB: 保护外壳 (Protect hood)

GD: 过滤器保护盖 (Protecting hood of filter)



VR: 真空调压阀 (Vacuum regulator valve)

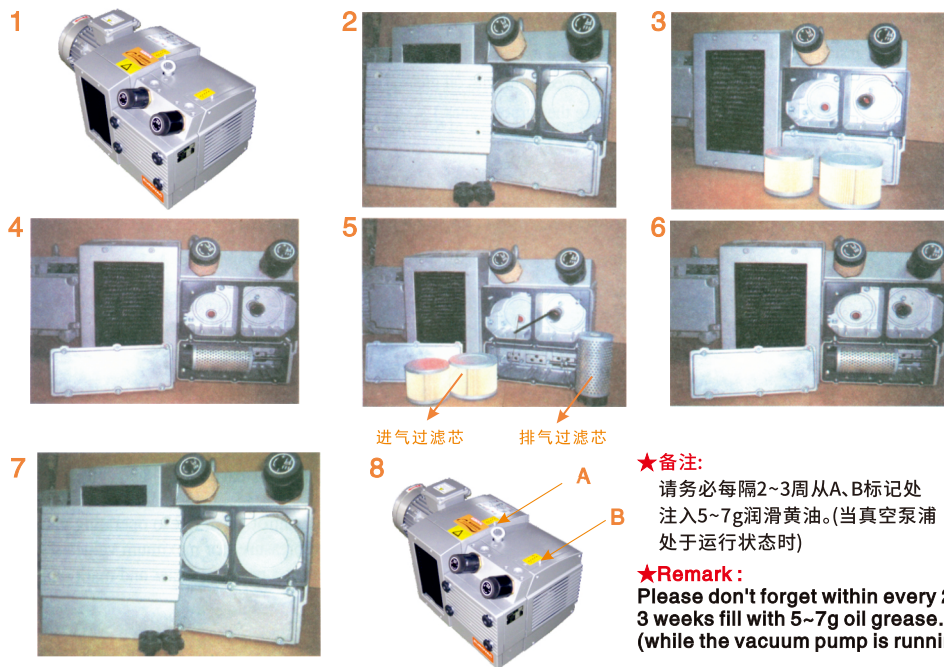
SA: 真空吸入口 (Intake of vacuum)

DA: 排气口 (Outlet port)

DR: 排气调压阀 (Pressure regulator valve)

# AMILA - 真空泵 AE-SR

## 5.更改过滤器和添加黄油步骤 (The procedure for how to replace the filter and fill with grease oil):



★备注:  
请务必每隔2~3周从A、B标记处  
注入5~7g润滑黄油。(当真空泵浦  
处于运行状态时)

★Remark:  
Please don't forget within every 2 or  
3 weeks fill with 5~7g oil grease.  
(while the vacuum pump is running)

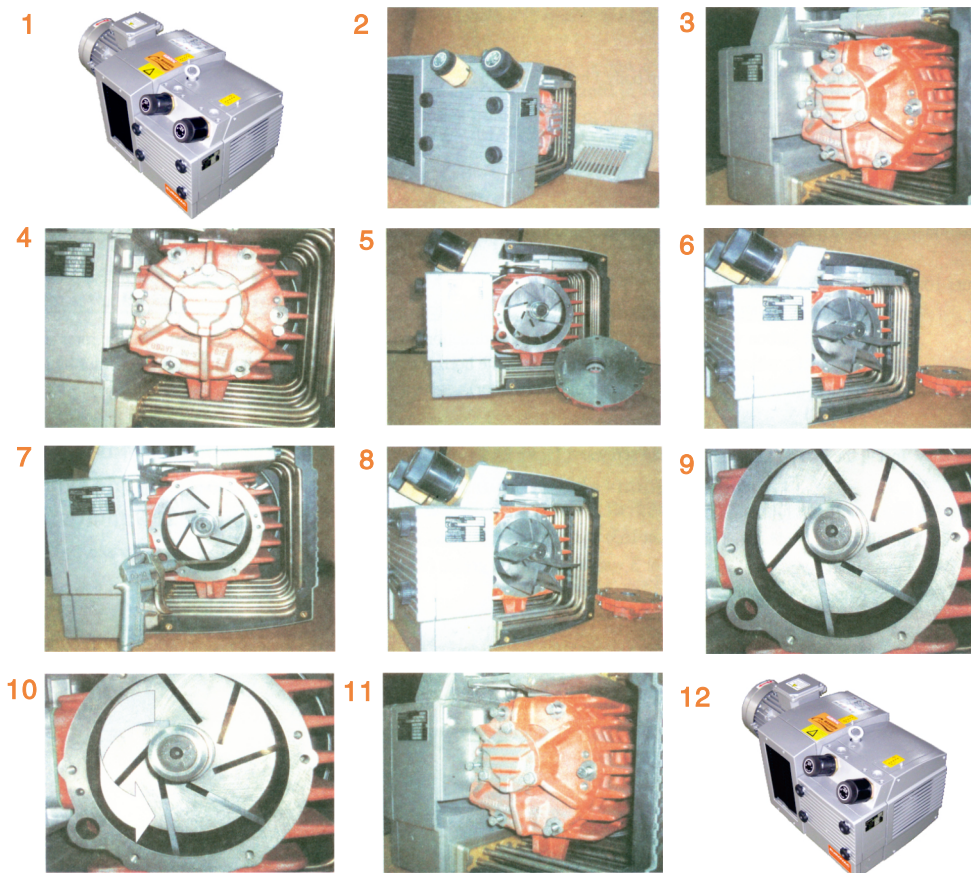
- Picture 1.** 逆时针放松4颗销头 (Pos.No.110);  
Loosen 4 handles(Pos.No.110) in the reverse direction;
- Picture 2.** 取下73号过滤器盖  
Remove the filter cover(Pos.No.73);
- Picture 3.** 取下进气过滤器  
Remove the air filter;
- Picture 4.** 使用5mm的六角扳手逆时针拆下粉尘分离盖螺丝 Pos.No.105与取下103号粉尘分离盖;  
Loosen the dust separator of socket head screw (Pos.No.105) by 5mm hexagon wrench key and remove socket head screws of the dust separator(Pos.No.103);
- Picture 5.** 取下Pos.91 排气过滤器及使用高压空气清洁;  
Remove the filter cartridge (Pos.No.91) and Blow out dirt in cooling air channel (pump body) A and B suction filter;
- Picture 6.** 更换排气过滤器新品与装上粉尘分离盖;  
Install new filter cartridges in pump body as well as the dust separator;
- Picture 7.** 装上粉尘分离盖与顺时针锁紧粉尘分离盖螺丝 Pos.no.105号;  
Install new filter cartridges in pump body as well as tighten socket head screw (Pos.No.105) of the dust separator in the clockwise direction;
- Picture 8.** 装上过滤器盖 (Pos.no.73)以及顺时针紧锁头 (Pos.no.110).  
Install the filter cover ( Pos.No.73 ) and the tighten handles ( Pos.No.110 ) in the clockwise direction.

★ 请务必每隔2~3周从标记处注入润滑黄油。(当真空泵浦处于运行状态时)

★ Please don't forget within every 2 or 3 weeks fill with oil grease (while the vacuum pump is running).

# AMILA - 真空泵 AE-SR

## 6. 更换碳精片步骤(The procedure for how to replace the carbon vanes):



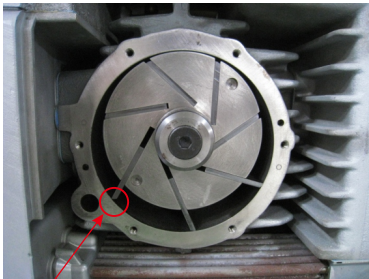
- Picture 1.** 使用5mm六角扳手, 逆时针放松Pos. 170号的4颗螺丝;  
Loosen 4 socket head screws (Pos.No.170) by 5 mm hexagon wrench key in the reverse direction;
- Picture 2.** 取下Pos. no. 163号前侧保护盖;  
Remove the air guide cover ring (Pos. No.163);
- Picture 3.** 使用10mm套筒, 将Pos. 14号面板的6颗螺丝逆时针取下;  
Loosen 6 hex head screws of lid(Pos.No.14)by sockets in the reverse direction;
- Picture 4.** 将2颗螺丝依顺时针锁入面板拔取孔, 两侧平行锁入。(面板高温请勿拆卸, 小心烫伤);  
Tighten 2 hex head screws into lockhole of lid and two sides shall be tightened horizontally in the clockwise direction; (Note: Do not disassemble the SD during high temperature phase);
- Picture 5.** 取下Pos. 14号前侧面板;  
Remove the lid(Pos.No.14);
- Picture 6.** 取下Pos. 11号碳精片, (AE-SR机型一组7片, AE-SR一组4片);  
Remove the carbon vanes(Pos.No.11);

# AMILA - 真空泵 AE-SR

- Picture 7.** 使用高压空气清洁气缸内部;  
Blow our dirt cooling air channel KK (pump body) by compressed air;
- Picture 8.** 再装上Pos. 11号碳精片;(AE-SR机型一组7片, AE-SR一组4片)  
Install the new carbon vanes in the rotors;(BVT type 7 pieces of 1 groups, KVE&KDE type 4 pieces of 1 groups)
- Picture 9.** 将碳精叶片新品装上. 注意碳精叶片方向.  
Install the new carbon vanes in the rotor.(Please notice the direction of carbon vanes)
- Picture 10.** 逆时针转动转子, 看叶片是否有水平掉下。(若无水平掉下, 请用砂纸研磨沟槽, 研磨完毕请使用高压空气清洁干净);  
After install the carbon vanes, turn the rotor in the reverse direction and look the carbon vanes to fall from the rotor smoothly in the horizontal position.(If it does not fall smoothly in the horizontal position, please grind the channel of rotor by abrasive paper and then blow out dirt in cooling air channels of rotor);
- Picture 11.** 装上面板, 顺时针锁紧6颗螺丝;  
Install the lid and tighten 6 hex head screws;
- Picture 12.** 装上Pos. 163号前侧保护盖与顺时针锁上保护盖螺丝, 请在运转中适量添加高温黄油。  
Install the air guide cover ring (Pos.No.163) and tighten socket head screws of ventilator hood. Please dont forget within evert 2 or 3 weeks fill with oil grease (while the vacuum pump is running).

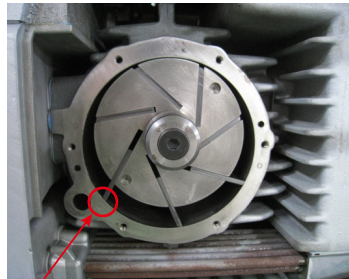
★注意: 1. 更换碳精叶片时应电源须切断, 以确保人员安全。  
warning: Before commencing replacement switch off electricity to ensure that the person whose safety.

2. 请勿高温拆卸, 检修泵浦, 以免高温烫伤。  
Do not disassemble or maintain the pump to avoid any hurt during high temperature phase.



叶片安装错误方向

The carbon vanes are installed by incorrect direction.



叶片安装正确方向

The carbon vanes are installed by correct direction.

**AMILA**  
Vacuum Pumps & compressors

□ AE-SR 140

H=48 mm(正常)  
少于32mm(建议更换)

L=240 mm  
H=48 mm  
B=4 mm

www.amila-tech.cn



在进行3000小时之后或至少每一年, 应检查叶片的宽度。(最小宽度见表格)

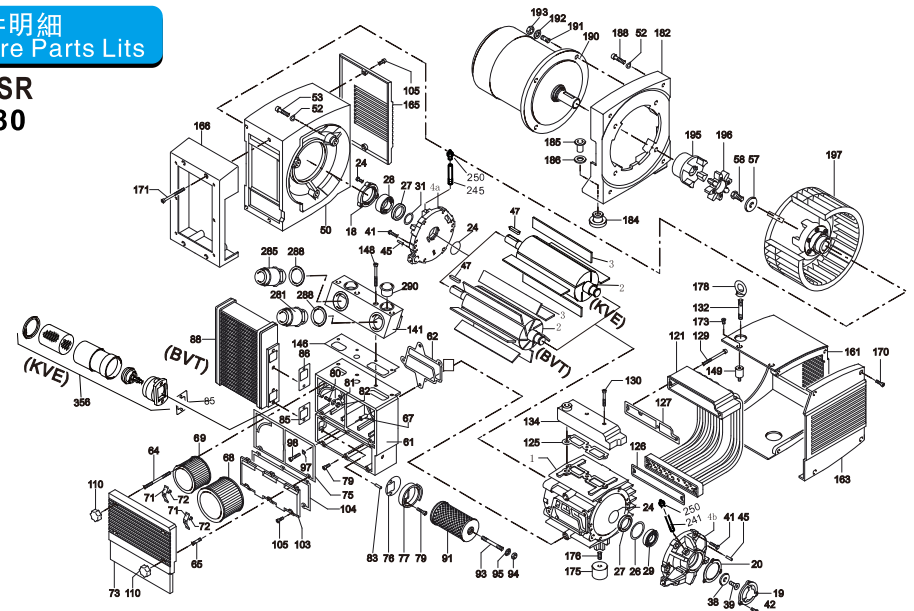
Check vane width every 3.000 operating hours or annually.(The minimum width see table)

型号	宽度正常尺寸	宽度少于建议更换尺寸
AE-SR 60	39 mm	26 mm
AE-SR 80	39 mm	26 mm
AE-SR 100	39 mm	26 mm
AE-SR 140	48 mm	32 mm

# AMILA - 真空泵 AE-SR

## 零件明細 Spare Parts Lists

### AE-SR 60-80



## 零件明細 Spare Parts Lists

### AE-SR 100-140-160

