

1.使用之前

- 在使用本产品之前, 请一定仔细阅读本说明书, 在理解了正确的使用方法以后再使用。如果不明白正确的使用方法的话, 请不要使用。
- 在阅读之后, 请妥善保管本说明书。必要的时候请再次阅读。
- 对由于没有正确使用所引起的产品的损坏或事故, 弊社不承担任何责任。
- 请一定不要空转水泵。请确认所有部件都连接好, 而且水已经完全进入到金属桶以及水泵中后再接通电源。
- 连接金属桶和水泵的黑色橡胶管会随着时间的推移而老化。如果表面有裂缝或者有水渗出, 请立即更换新的橡胶管。情况紧急时, 可以临时将附带的透明软管截短使用。
- 请不要把海绵或前置过滤器等连接到吸水部位。否则会导致水泵发生故障。
- 仅限用于过滤一般的淡水。一定不要用于海水。
- 身体弱小或体弱生病的鱼或虾有可能被吸入, 请注意。
- 关于生物的疾病、死亡及水草的枯萎等问题, 弊社概不负责。

2.安全注意事项

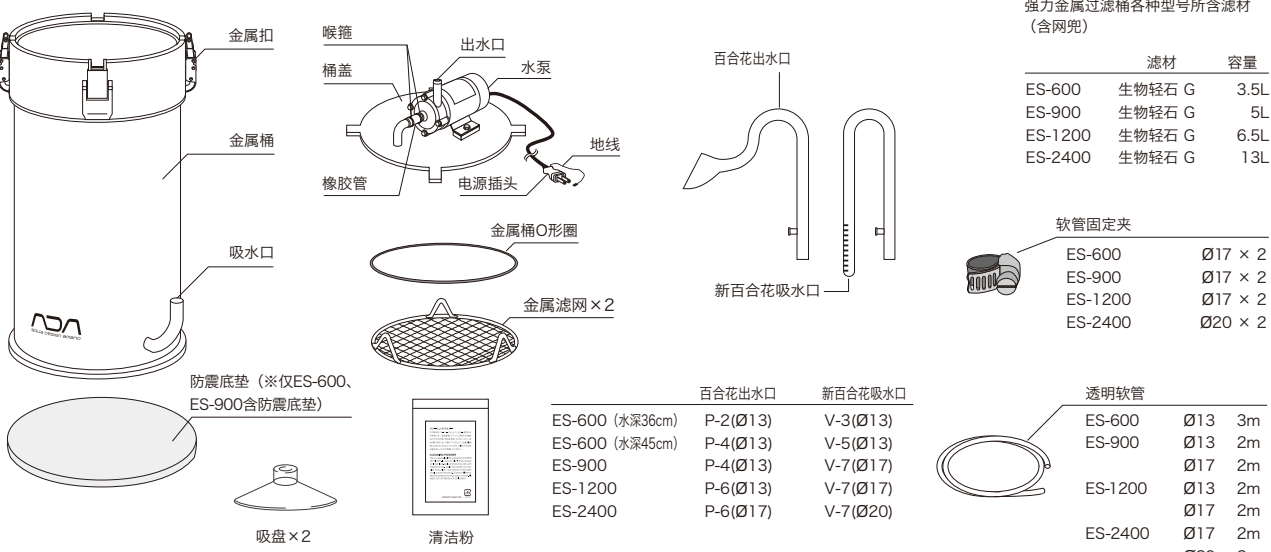
- △注意: 这里的内容是在设想如果使用错误等情况, 则有发生人员受伤或物品损害的危险而标注的。
- 请务必保证电源插头确实插入电源插座。请注意不要让插孔位置溅到水。请定期检查, 除去灰尘。请一定要连接地线。为了更加安全, 推荐使用漏电保护器。
 - 当手需要伸进鱼缸时候, 请先切断电源, 否则有触电的危险。
 - 水泵不防尘不防水。如果在高温高湿的场所使用, 有发生触电或短路危险。手湿时, 请不要碰触水泵。
 - 虽然本品50Hz/60Hz通用, 但是请确保在100V电压的情况下使用本品。如果使用错误, 则会引起火灾、触电、故障等事故的发生。
 - 请不要粗暴的使用电线, 以致电线损伤。否则会引起火灾、漏电、触电等事故的发生。
 - 请一定不要在电源线中增加开关、一定不要改造水泵。否则会引起故障或重大事故的发生。
 - 本品仅限于室内。
 - 触摸金属锋利的部位有可能引起划伤、玻璃出水口和吸水口也有破裂危险。所以请不要让孩子碰触本品。
 - 使用时, 水泵表面温度升高, 请注意不要烫伤。也不要孩子的手可以够得到的地方使用。
 - 手湿或电源插头沾水时, 请不要插入插线板或也不要拔下电源插头, 否则有发生火灾, 触电或事故的危险。

3.强力金属过滤桶的特点

- 是享受自然水族风格水草造景乐趣最适宜的外置型过滤器。适用于饲养鱼类, 也适用于培育水草(※淡水专用)。
- ES-600 可对应规格W60×D30×H36cm ~ W60×D45×H36cm的鱼缸
- ES-900 可对应规格W90×D45×H45cm的鱼缸
- ES-1200 可对应规格W120×D50×H50cm的鱼缸
- ES-2400 可对应规格W150×D60×H60cm~W180×D60×H60cm的鱼缸(※更大的鱼缸可以通过设置若干强力金属过滤桶达到过滤效果)
- 采用了不易堵塞的特殊规格电磁泵(易威奇水泵)。水泵外置于金属桶, 可以减轻水泵运转时产生的热量和电磁波对金属桶内的微生物的影响。
- 最高级别的SUS304不锈钢制成的圆筒状金属桶没有一丝多余的构造, 可以最大限度的利用桶内空间。简约的外形, 兼顾牢固性和设计性两方面的需求。

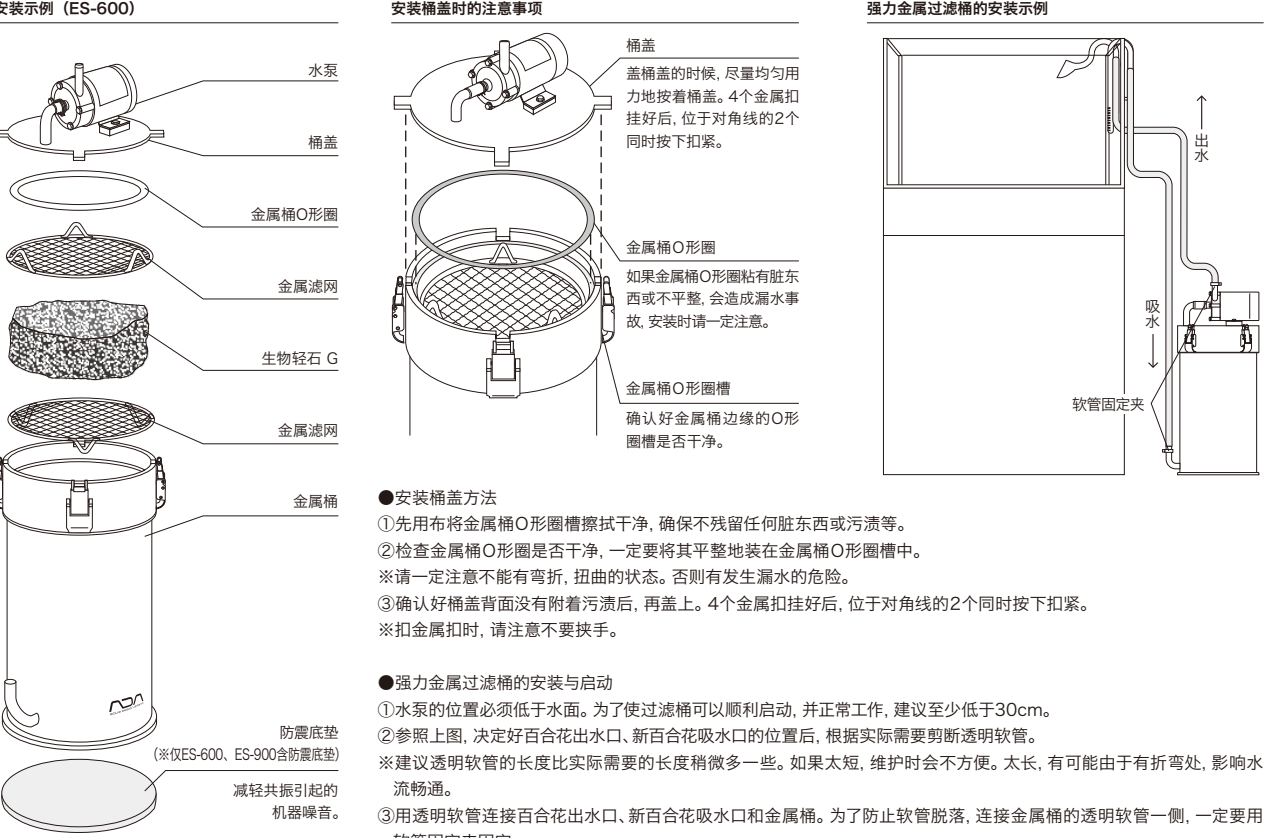
4.各个部件名称

※请在安装前, 仔细检查配件是否齐全。



5.使用方法

- 放置滤材方法
- ①扳开金属扣后打开桶盖, 先从金属桶中取出金属滤网和生物轻石 G (带网兜)。※扳动金属扣时请注意不要伤到手或指甲等。
- ②把带网兜的生物轻石 G从塑料袋中取出。连同网兜一起, 用清水或温水冲洗掉细小粉状物。
- ③依次放入金属滤网、带网兜的生物轻石 G、金属滤网。※放入带网兜的生物轻石 G时请注意不要让金属桶边缘刚环网兜。



- 好水流入水泵中后, 再重新装上百合花出水口。
- ※严禁空转水泵, 否则会引起故障。
- ⑤水泵接通电源前, 请检查桶盖的周围, 透明软管连接部等是否有水渗出。如果有漏水现象, 请先把桶内的水放空, 然后检查金属桶O形圈是否安装正确, 是否弯折, 是否附着灰尘等。即使是桶盖上的渗水问题也有可能是金属桶O形圈没有正确安装。
- ⑥插上电源, 启动水泵。如果有漏水或不正常的声响, 请把电源插头拔出, 再次检查各个连接部位。水泵启动初时, 如果金属桶中有残留的空气, 水泵会有“沙”的声音, 出水中有可能含很细小的水泡。通常声音在几分钟内消失。
- ※新的过滤材料在刚开始使用时, 空气完全排出需要一定的时间。如果金属桶中残留空气, 出水中会有断断续续的水泡排出。这是正常现象。
- ⑦水泵启动30 ~ 60分钟后, 请再次检查金属桶、水管等是否有漏水现象, 以及水泵是否正常工作。

- 关于固定橡胶管用的喉箍的使用方法
- 连接金属桶和水泵的橡胶管用特殊的喉箍固定。在维护清洁水泵时, 请根据右图所示进行拆卸和安装。
- 请使用一字螺丝刀拆卸喉箍(如图一)。
- 使用喉式管束钳等卡紧喉箍, 并确认扣紧。(如图二)
- ※请注意不要被喉箍尖锐的边缘划伤。在使用工具装卸时也注意不要受伤。
- ※为防止孩子不慎吞咽, 请妥善保管在孩子的手触摸不到的地方。

6.关于百合花系列 出水口和吸水口

- [安全注意事项] ※请一定仔细阅读。
- 因为是为玻璃制品, 碰撞、掉落时受到冲击或施加过度的压力时, 有破碎的危险。特别是在安装或卸下时, 要特别小心。
 - 清洗时也要注意轻拿轻放; 不要使用热水等, 使其温度急剧变化, 否则有破损的危险。
 - 万一破损时, 请注意不要用手触摸到破损边缘, 脚也不要踩玻璃碎片, 否则有受伤的危险。
 - 关于生物的疾病、死亡及水草的枯萎等问题, 弊社概不负责。
 - 请妥善保管及使用在孩子的手碰不到的地方。

- [使用注意事项]
- 请一定使用新的透明软管连接出水口和吸水口。过于陈旧的透明软管会因为老化而失去弹性, 在使用过程中容易脱落。
 - 透明软管如果不容易和出水口、吸水口相连时, 请用水浸湿, 会变得容易连接。在分开透明软管和出水口、吸水口时, 先往透明软管里插入一下, 再向外拉, 更易分开。



- 强力金属过滤桶的安装与启动
- ①水泵的位置必须低于水面。为了使过滤桶可以顺利启动, 并正常工作, 建议至少低于30cm。
- ②参照上图, 决定好百合花出水口、新百合花吸水口的位置后, 根据实际需要剪断透明软管。
- ※建议透明软管的长度比实际需要的长度稍微多一些。如果太短, 维护时会不方便。太长, 有可能由于有折弯处, 影响水流畅通。
- ③用透明软管连接百合花出水口、新百合花吸水口和金属桶。为了防止软管脱落, 连接金属桶的透明软管一侧, 一定要用软管固定夹固定。
- ※请使用螺丝刀装卸软管固定夹。※请不要固定得过紧, 否则零部件有破损的危险。
- ④启动水泵前, 先确认鱼缸是否装满水后, 向水泵中引水。(折下百合花出水口, 吮吸透明软管, 就可以轻松引水。)等确认

- 关于固定橡胶管用的喉箍的使用方法
- 连接金属桶和水泵的橡胶管用特殊的喉箍固定。在维护清洁水泵时, 请根据右图所示进行拆卸和安装。
- 请使用一字螺丝刀拆卸喉箍(如图一)。
- 使用喉式管束钳等卡紧喉箍, 并确认扣紧。(如图二)
- ※请注意不要被喉箍尖锐的边缘划伤。在使用工具装卸时也注意不要受伤。
- ※为防止孩子不慎吞咽, 请妥善保管在孩子的手触摸不到的地方。

6.关于百合花系列 出水口和吸水口

- [安全注意事项] ※请一定仔细阅读。
- 因为是为玻璃制品, 碰撞、掉落时受到冲击或施加过度的压力时, 有破碎的危险。特别是在安装或卸下时, 要特别小心。
 - 清洗时也要注意轻拿轻放; 不要使用热水等, 使其温度急剧变化, 否则有破损的危险。
 - 万一破损时, 请注意不要用手触摸到破损边缘, 脚也不要踩玻璃碎片, 否则有受伤的危险。
 - 关于生物的疾病、死亡及水草的枯萎等问题, 弊社概不负责。
 - 请妥善保管及使用在孩子的手碰不到的地方。

- [使用注意事项]
- 请一定使用新的透明软管连接出水口和吸水口。过于陈旧的透明软管会因为老化而失去弹性, 在使用过程中容易脱落。
 - 透明软管如果不容易和出水口、吸水口相连时, 请用水浸湿, 会变得容易连接。在分开透明软管和出水口、吸水口时, 先往透明软管里插入一下, 再向外拉, 更易分开。

スーパージェットフィルター 使用説明書

ADA NATURE AQUARIUM SUPER JET FILTER

强力金属过滤桶

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0256-72-1994 (平日10:30~17:30)
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発売元: **株式会社 アкваデザインアマン**
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aqua design amano CO.,LTD.
8554-1 Urushiyama, Nishikan-ku, Niigata 953-0054, Japan
MADE IN JAPAN
405101S14JE22E12

- 在连接与分开透明软管或吸盘时, 请手持出水口, 吸水口的吸盘连接部附近进行操作。如果手持过远, 用力过大, 玻璃有破损的危险。而且分开吸盘时, 请一定纵向移动。横向移动分开, 有导致玻璃破碎的危险。
- 当吸水部位堆积了水草叶片等杂物时, 请立即除去。不要使用海绵等挡住吸水部位。吸水部位被挡住, 会增加水泵压力, 导致故障的发生。
- 请使用另售的玻璃专用清洗剂或弹簧刷清洁出水口, 吸水口。玻璃器具专用清洁剂具体使用方法请参考使用说明书。

7.维护方法

- 日常检查及注意事项
- 定期检查百合花出水口的水流量是否减少。如果桶中积聚了垃圾或污泥, 流量会逐渐减少。请先切断电源, 把过滤材料从桶中拿出, 并使用鱼缸水清洗 (每2 ~ 3个月清洗一次)。如果新百合花吸水口的吸水部位聚集了很多水草叶; 或是水管弯折; 或是水泵中进了污物, 水的流量会急剧减少。这时请切断电源, 正确排除水流量减少的原因后再使用。
- 由于水分蒸发或换水, 使水位低于吸水部位时, 空气会随之进入, 从而损坏水泵。这时请立刻切断水泵的电源, 并往鱼缸中加水。再次启动水泵前, 先引水, 确认好水泵中充满水后再通电源。
- 换水时请注意不要让水溅到水泵和电源插头上。

●强力金属过滤桶的维护

- 清洗或交换金属桶中的滤材时, 先拔出电源插头: 拆下出水口和吸水口, 放在其他水桶中, 放空金属桶中的水。充满滤材和水的金属过滤桶非常重, 移动时请当心。
- 为了避免水环境变化太大, 清洗滤材和换水不要同时进行。滤材清洗也仅限于在水桶中的鱼缸水中轻轻刷洗。
- 每次打开桶盖, 都需要检查金属桶O形圈是否安装好, 确认没有开裂, 沾附垃圾等现象。如果金属桶O形圈劣化, 请尽早更换。
- 如果透明软管的内壁有藻类, 请使用另售的弹簧刷清洁。
- 没有特别的事情, 请不要轻易打开水泵前盖。

如果滤材或异物不慎进入到水泵内部或者水泵内部有堆积的污物, 不得不开水泵时, 请拔出电源插头, 并按照下列的顺序清洁。

- ①使用开口扳手等工具, 把水泵从桶盖上拆卸下来。喉箍和黑色橡胶管也拆卸下来。
- ②拧开固定水泵前盖的四个螺丝。
- ③打开水泵前盖, 谨慎去除异物。非必要, 请不要拆分叶轮、垫片、陶瓷轴。如果一定要拆开清洁, 安装时请注意不要丢失。附着在叶轮等的污物用刷子清洗掉。

※ES-1200和ES-2400的叶轮、垫片、陶瓷轴是一体的, 不能分解, 请注意。

④清洁后, 各个部件复原。拧紧螺丝, 固定好水泵前盖。安装ES-600和ES-900的陶瓷轴时, 请参照右图, 注意方向。

※安装密封圈时, 请一定要注意平整, 并确认没有开裂, 沾附垃圾等现象。如果密封圈劣化, 请尽早更换。

⑤使用橡胶管连接水泵和桶盖的金属突出部位。橡胶管内侧用水润湿后, 更加容易连接。水有可能从橡胶管的连接处渗出, 所以请一定使用喉箍固定橡胶管。由于温度、湿度和紫外线等因素的影响, 橡胶管会随着时间的推移而劣化。为了防止漏水, 如果发现有劣化的迹象, 请更换另售的橡胶管。

⑥把水泵固定在桶盖上。

※非必要, 请不要拆下, 分解水泵。除了水泵前盖可以打开, 其他都不能打开。特别是马达部位和电容部位都绝对不能打开。

●保管注意事项

- 如果长时间不使用时, 请先放空桶中的水, 并拿出滤材。洗干净桶内后, 用干布擦净后, 再保管。
- 如果在潮湿状态下长时间保存, 金属桶各个焊接部位会轻微生锈。可以使用市面上销售的除锈剂擦拭。使用除锈剂后请清洗干净, 并确保除锈剂不进入鱼缸。

8.使用注意事项

- 本产品的水泵不是自吸式水泵。水泵的位置低于水面至少30cm, 否则空气有可能进入水泵内部。
- 请不要用海绵等物品遮挡吸水部位。本款产品也不能连接前置过滤器。如果在吸水侧给予水泵的负荷过大, 会增加内部的叶轮磨损, 可能引起空转或水泵停止工作等故障。
- 请不要在本产品上放纸或布, 否则容易导致机器过热。
- 正常工作时, 水泵表面会发热。特别是ES-1200和ES-2400的水泵表面非常烫手。水泵工作时请不要碰触。为防止烫伤, 请放在孩子的手够不到的地方使用。维护水泵时, 请拔掉电源, 当水泵表面温度下降后再维护。
- 水泵工作时会一直有声音, 这是正常现象。如果空气进入到水泵中, 会发出比正常工作的声音更大的声响。此时请切断电源, 放出金属桶或水泵中的空气再使用。如果水泵中有空气仍然继续使用的话, 水泵可能会发生故障。
- 请把本产品放在平稳的地方使用。考虑到万一有漏水的情况, 所以请不要在周围放置电器产品。
- 本产品严禁在倒下或倾斜的状态下使用。否则有漏水或水泵损坏的情况发生。
- 金属桶内有滤材和水时非常重。移动时请把水放空, 注意安全。搬运时, 请一定托住金属桶底部。请不要仅仅拿水泵或桶盖部位, 否则会有漏水或金属扣损坏的情况发生。
- 如果从高处掉落, 受到较大冲击时, 有发生变形或破损的危险。所以在搬运移动时请小心轻放。请一定不要在变形的状态下使用, 否则会发生漏水。
- 每个产品都经过精心制作并检查。但是不排除密封圈内侧有毛刺、或产品边缘锋利的情况。请在更换滤材或关上桶盖等时小心使用, 不要被划伤。

English

1. Before use

- Before the installation of this product, make sure to read this instruction manual carefully and understand all of its directions.
- Please keep this instruction manual even after reading it and refer back to it when needed.
- Please be forewarned that ADA is not responsible for any breakage, damage and/or accident caused by improper use of this product.
- Never use the pump with the pump running idle. Always connect tubes and hoses correctly, and let water circulate in the filter (pump) before turning the power on.
- Black Rubber hose connecting Canister and Pump wears with time. Replace with a new hose immediately in case a crack is developed on the surface or water seeps out from the hose. In case urgent replacement is required, cut the attached Clear Hose short and use the shortened Clear Hose as a substitute.
- SUPER JET FILTER cannot be used with a sponge attached to the inflow area, or a prefilter connected with SUPER JET FILTER. They may cause breakage of the Pump.
- SUPER JET FILTER cannot be used for marine aquariums.
- Pay special attention to decrepit fish and small fish as they can be sucked into the inflow area.
- ADA shall not be responsible for any disease and death of fishes, and condition of plants.

2. Safety instructions

※Read the following safety instructions carefully.

[CAUTION] Using this product without observing the following precautions may cause serious bodily harm or damage of property.

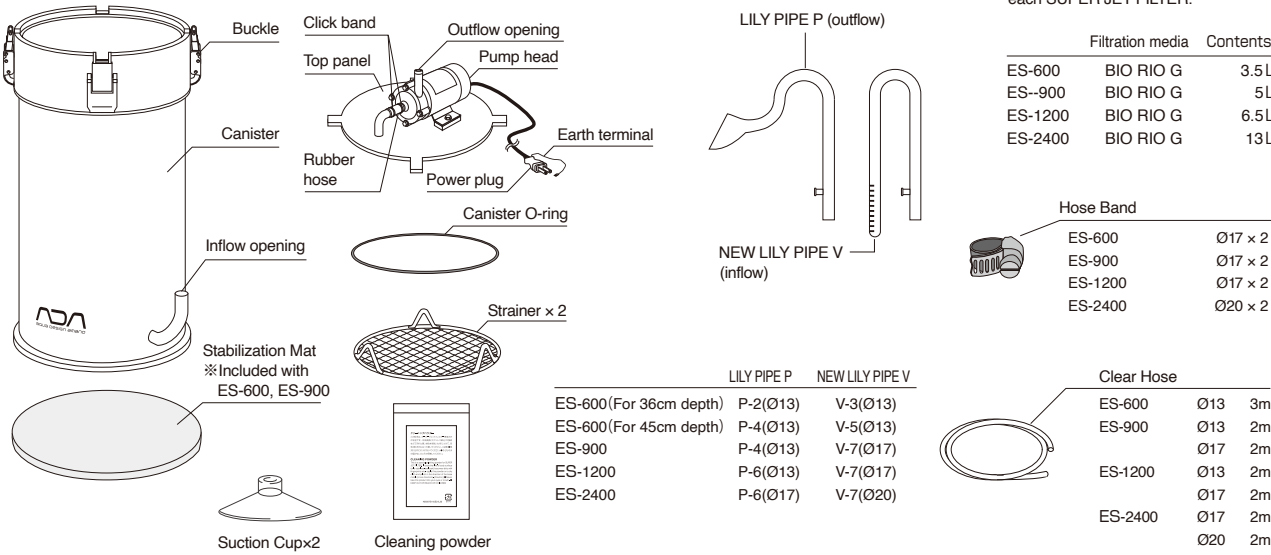
- Insert Power plug into an outlet securely. The Power plug of SUPER JET FILTER is equipped with anti-arc tracking structure, but pay attention to avoid water splashing on the Power plug and dust accumulating on it. Make sure to mount the Earth terminal. Mounting circuit breaker for electrical leakage is recommended.
- Unplug the Power plug when putting your hands in the aquarium water as it may cause electrical shock otherwise.
- The Pump does not have dust-proof and water-proof structure. There is a risk of electrical shock or short circuit in case of using it at places with a lot of moisture and high humidity. Do not touch the product with wet hands.
- This product can be used at 50Hz and 60Hz, but it needs to be used at proper power-supply voltage(AC 100V). Improper use may cause fire, electrical shock, or breakage.
- Do NOT damage the Power plug or mishandle it. It may cause fire, electrical leakage, or electrical shock.
- Never mount an intermediate switch to the Power plug or convert the Pump. It may cause breakage or serious accident.
- This product is designed for indoor use. Use it only indoors.
- There is a risk of injury by cutting yourself with the sharp part of the metal or broken glass pipe.
- The surface of the pump gets hot. Be careful not to get burned. KEEP OUT OF REACH OF CHILDREN.
- Do not plug or unplug with the power plug and hands wet. It may cause fire, electric shock, or malfunction.

3. Special features of SUPER JET FILTER SERIES

- It is an external filter, ideal for Nature Aquarium. It can be used widely for keeping fish, aquatic plants, etc. (for fresh aquarium only). Each filter matches with the tank size as following:
-ES-600 : W60 × D30 × H36cm tank - W60xD45xH36cm tank -ES-900 : W90xD45xH45cm tank -ES-1200 : W120xD50xH50 tank
-ES-2400 : W150xD60xH60cm tank - W180xD60xH60 tank (※Multiple filters are required for larger tanks)
- It adopts a specially developed magnetic drive pump, and with this, decreased water flow caused by clogged filtration media (manufacturer: IWAKI CO.,LTD.) is less likely to occur. Its structure with separated Pump and Canister enables to reduce the heat produced by the Pump and negative effect to filtration bacteria caused by the electromagnetic ray.
- The Canister made of stainless steel (SUS304) in a cylindrical form has eliminated excessive structure inside, so that its volume capacity can be utilized to the maximum extent.

4. Parts

Before setting up the product, please check if all below parts are contained in the package.



5. Usage

●Setting up the filtration media

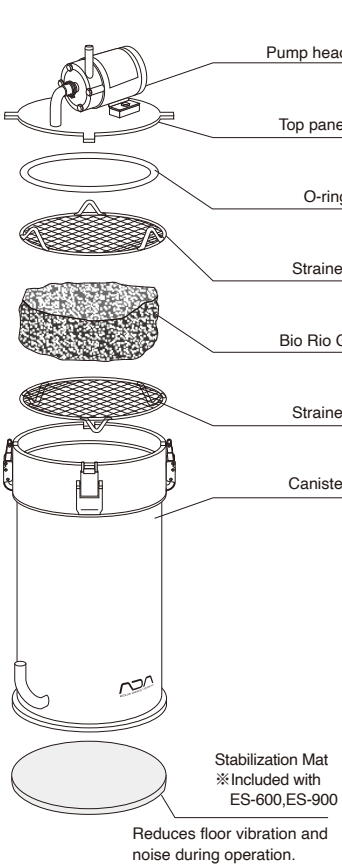
- ①Unlock the Buckles, open the Top panel, and take out the upper Strainer and Bio Rio G in a net from the Canister. ※Be careful not to damage your nails when unlocking the Buckles.
- ②Take out Bio Rio G in a net from a plastic bag, clean Bio Rio G lightly only to rise fine powders away while keeping the Bio Rio G in the net.
- ③Place the followings in the Canister in the order of lower Strainer, Bio Rio G in a net, and upper Strainer.
- ※When placing Bio Rio G in the Canister, be careful not to tear the net with the edge of the Canister.

●Setting up the Top plate

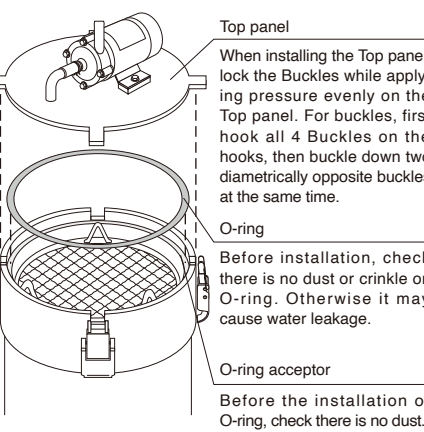
- ①After setting the filtration media, wipe off the particles of filtration media and dust remaining on the O-ring acceptor using a cloth.
- ②Make sure there is no dust on the O-ring then set the O-ring to the O-ring acceptor, without having a crinkle.
- ※Pay extra attention at the setup as remaining dust or crinkle on the O-ring may become a cause of water leakage.
- ③Set the Top plate on the Canister after making sure that there is no dust on the back side of the Top plate. In order to lock the buckles properly, hook all four buckles on the hooks first, then buckle down two diametrically opposite buckles at the same time.

※Be very careful not to get your fingers caught in the buckles when locking the Buckles.

The way of setting up (for ES-600)



Installation of Top panel



●Installing and starting the filter

- ①When installing the filter, make sure that the position of the Pump is lower than the water surface. Install the Pump at a position 30cm or more below the water surface in order for the filter to start smoothly and avoid troubles during operation.
- ②Prepare the Inflow pipe and Outflow pipe referring to the figure on above right. Decide the position of the pipes and the length of the hose, and cut the hose at the appropriate length.
- ※Clear Hose should be cut with some extra length not to bend it when installed to the tank. If Clear Hose is cut too short, without any extra length, it may be difficult to handle during the maintenance. If too long, the hose may bend and block the water flow.
- ③Connect the Inflow pipe and Outflow pipe with Clear Hose referring to the figure on above right. Make sure to clamp the connecting part of the filter with Hose Band firmly to avoid the hose to be unexpectedly disconnected.
- ※For attaching Hose Band to ES-600, use tools such as nipper. For ES-1200 and ES-2400, use a screwdriver for clamping.
- ※Please note that if you tighten the Hose Band too much, it may cause damage to the parts.
- ④Before operating the Pump, make sure there is an adequate amount of water in the aquarium tank then start circulating the water by pump priming. Pump priming can be easily done by disconnecting the Outflow pipe once and sucking the hose at the Outflow side with your mouth lightly. When the water gets inside of the Pump, connect the hose and Outflow pipe again.
- ※Never operate the filter without water circulating in it. It may cause breakage.
- ⑤Before turning on the filter, make sure that water is not leaking around the Top plate and connecting part of Clear Hose. If water leakage is found, remove the water from the filter once and check if O-ring is set properly (without any crinkle and dust). Water leakage at the connecting part of the upper Canister can also be due to improper setting of O-ring.
- ⑥Insert the Power plug into an outlet and start the Pump. In case water leakage or abnormal sound occurs, unplug the Power plug immediately and check the connection is correct. Right after the initial operation of the Pump, it may produce a hissing sound and fine bubbles in the outflow water if air is remaining inside the filter. However, in normal case, these symptoms will disappear in few minutes.

※In case of using new filtration media at initial operation, it may take some time for the air to be removed completely. In some cases, air may be accumulated inside the filter during the use, and fine bubbles may be mixed intermittently in the water flow, but it is not abnormal.

- ⑦Make sure to check there is no water leakage from the filter and hose, and the Pump is operating properly 30 to 60 minutes after starting the filter.

●Handling of Click band for Rubber hose

The Rubber hose connecting the Canister and Pump is equipped with a special Click band. At maintenance, disconnect and reinstall the Click band according to the figure on the right.

- Use flat-blade screwdriver to remove Click band (Figure 1).
- When mounting the Click band, close it until you feel the click, using a tool such as multi-grip plier (Figure 2).
- ※Handle with care not to hurt yourself with the corner of Click band. Be careful not to hurt yourself with tools when removing and reinstalling.
- ※For storage, keep out of reach of children to prevent them from accidentally ingesting the part.

6. LILY PIPE P (outflow) and NEW LILY PIPE V (inflow)

This product comes with a set of outflow pipe, LILY PIPE P, and inflow pipe, NEW LILY PIPE V.

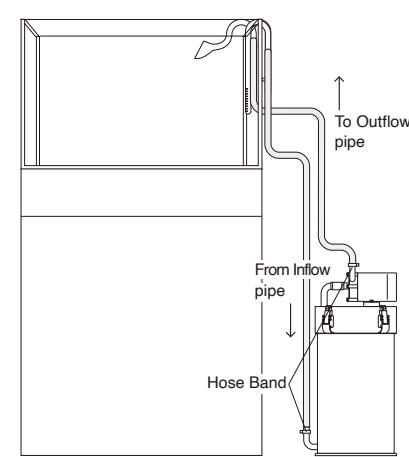
[Safety instruction] ※Please read carefully.

- Avoid mishandling, dropping, and exposing to sudden pressure as they may cause breakage. Handle with care especially when removing and reinstalling a hose and a suction cup, setting up to the tank, and cleaning. Never subject glassware to sudden temperature change, for example, exposing to hot water for cleaning.
- In case the glassware is broken, be careful NOT to touch the broken part and step on broken fragment. They may cause injury.
- If you experience any issues, contact your local ADA distributors.
- ADA shall not be responsible for any disease and death of fishes, and condition of plants.
- KEEP OUT OF REACH OF CHILDREN

[Usage instruction]

- Use a new hose for connecting to the glass pipes. Do NOT use a used hose as it is inelastic and it easily comes off.
- In case it is hard to connect a hose, moisturizing inside of the hose and outside of the pipe with water makes the operation easy. In case it is hard to remove the hose from the pipe, push the pipe into the hose once then gently disconnect.
- When removing and reinstalling hose or suction cup, make sure to hold a point close to the suction cup connecting part of the pipe. Holding a point away from the suction cup connecting part gives unnecessary force to the pipe and may cause breakage. When removing the suction cup, please detach in vertical direction (perpendicular against pipe). Removing them in a horizontal direction may cause damage to the pipes.
- If leaves of aquatic plants stick to inlet slits of Inflow pipe, remove them immediately. Do NOT attach a sponge at the inflow opening. Clogging of the inflow opening causes unnecessary force to the Pump and breakage of the part.
- For cleaning of glassware, use a special detergent for cleaning glassware, SUPERGE and SPRING WASHER (both are sold separately), and wash according to the procedure in the SUPERGE's instruction manual.

Installing and starting SUPER JET FILTER



7. Maintenance

●Daily check and caution

- Conduct a periodical check to see if the amount of water flow from the Outflow pipe has been decreased. Usually, the amount of water flow decreases if dust or sludge is accumulated inside the filter. In such case, stop the filter, take out the filtration media to a container such as a bucket, and wash it lightly with the aquarium water (once every 2 to 3 months). If the inlet slits of Inflow pipe is clogged with leaves of aquatic plants, if the hose is bent in the middle, or if foreign subject gets into the Pump, the flow rate significantly decreases. For such cases, stop the filter and take appropriate action (removing dust or correcting the bent hose).
- The Pump stops its operation when the water level becomes low and air is sucked into the Pump due to evaporation of water or water change. In case air gets into the Pump, stop the Pump immediately and add some water to the tank; leaving the symptom untreated may cause damage to the Pump. When re-starting the Pump, always perform pump priming and let some water circulate in the Pump.
- Be careful not to get water on the Pump or Power plug when changing water.

●Filter maintenance

- When opening the filter to clean or replace the filtration media, unplug the Power plug, remove Inflow and Outflow pipes to a bucket, and drain the water in the filter. Handle with care as the weight of the filter containing filtration media and water can be quite heavy.
- Do NOT clean the filtration media and change water at the same time. For cleaning of filtration media, washing lightly with the aquarium water in a bucket is enough.
- When opening the filter to set the O-ring, make sure that there is no dust or crinkle. When O-ring is worn out, replace it promptly.
- If algae is accumulated inside of hose or pipe, wash it using SPRING WASHER (sold separately).
- Do NOT open the Front casing of the Pump unless absolutely necessary. In such case, for example foreign subject including filtration media accidentally gets into the Pump or dust is accumulated inside it, unplug the Power plug first then remove the foreign subject or dust according to the following procedure:

- ①Remove the Pump from Top plate using tools such as screw wrench. Remove Click band and black Rubber tube as well.
- ②Remove the Bolt that is holding the Front casing.
- ③Remove the Front casing and take out the foreign subject carefully with a pair of tweezers. Do NOT detach parts including Impeller, Ceramic spindle and Thrust unless it is necessary. If they need to be detached, be careful not to lose any parts. If Impeller gets dirty, wash off the dirt with a brush.
- ※For ES-1200 and ES-2400, Impeller, Ceramic spindle and Thrust are in a combined unit.
- ④Reinstall the removed parts and clamp the Front casing with Bolt. Ceramic spindle with ES-600 and ES-900 has a certain direction. Thus, please refer to the illustration on the right and check the correct direction.
- ※When installing the O-ring, make sure to check that there is no crinkle, damage, or accumulating dust. When O-ring is worn out, replace it promptly.
- ⑤Connect the Pump and the elbow part of the Top plate using the Rubber hose. Moisturizing inside of the hose with water makes the operation easy. Depending on how the Rubber hose is connected, water may distill from the end of the hose. Always use Click band together. Rubber hose deteriorates in time due to temperature, humidity, and ultraviolet light. If deterioration of Rubber hose is observed, replace with a new rubber hose sold separately to avoid water leakage.
- ⑥Clamp the Pump on the Top plate.
- ※Do NOT detach the Pump or break it into parts unless absolutely necessary. Never open the parts (Capacitor, Motor, and Rear casing) other than Front casing.

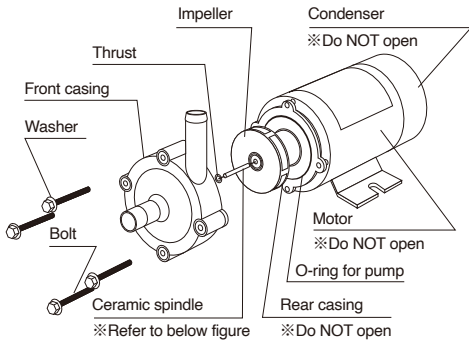
●Cautions for storage

- If this product would remain unused for a long period of time, remove the water and filtration media from the filter, wash the inside of the Canister, and completely wipe off the water with a dry towel before storing.
- If this product is left wet for a long period of time, red rust may appear on welding area of the elbow part of Top plate or the inside of the Canister. It is not corrosion of the stainless steel itself, but in case it is disturbing for you, the rust can be wiped off with rust removal that is available in market. After using the rust removal, rinse this product thoroughly and keep the chemical agent out of the aquarium.

8. Usage instruction

- The Pump installed in this product is not a self-suction pump. Place the Pump more than 30cm lower from the water surface as it may suction air if the height difference between water surface and the Pump is too small.
- Do NOT attach a sponge to the Inflow pipe as it causes unnecessary force. Prefilter cannot be connected to this product. Putting too much stress on the inflow side would result in wear of internal Impeller, and troubles like air entrainment or stopping of the Pump occur more frequently.
- Do NOT place paper, cloth, or any other object on the filter. It may cause overheating.
- The Pump produces heat from its surface even during the normal operation. Especially surfaces of ES-1200 and ES-2400 get hot. Do NOT touch the Pump when it is in operation. For maintenance of the Pump, unplug the Power plug and wait until it cools down before starting the maintenance work.
- SUPER JET FILTER always produces operating sound when it is working. The operating sound is not abnormal. However, in case air gets into the Pump, it produces a loud sound that is different from the normal operation sound. In such case, unplug the Power plug and remove the air from the Pump and Canister completely, and re-start the Pump. If the Pump is kept working with air trapped inside, it may cause the Pump to stop or breakdown.
- Place this product at a stable location. Considering the possibility of water leakage, do NOT place this product around electrical products.
- Do NOT lay or lean this product when in use. It may cause water leakage and breakage of the Pump.
- This product becomes significantly heavy when filtration media and water are contained. When moving it, drain the water first, and always protect your safety first. Never carry this product only by holding the Pump and/or Top plate. It may cause water leakage and breakage of the Buckle. When moving, always carry the body of Canister.
- Dropping this product from high place or exposing it to extreme shock may result in deformation or breakage. Handle with care when carrying and moving. If this product gets deformed, stop using it as continued use of the deformed product may lead to water leakage or other problems.
- This product is made with careful finishing treatment, but in rare case, burr may be found on the inside of O-ring acceptor or the cross section of the product may be sharp. When replacing the filtration media or closing the Top plate, pay extra attention not to hurt yourself.

Parts of the Pump head (ES-600)



Direction of Ceramic spindle (For ES-600 and ES-900)

Ceramic spindle has a certain direction. If accidentally removed, check the correct direction in below before re-installing.

