

BEFORE YOU BEGIN

- Please read these instructions carefully to familiarize yourself with the required tools, materials, and installation sequences. Follow the sections that pertain to your particular installation. This will help you avoid costly mistakes. In addition to proper installation, read all operating and safety instructions.
- All information in these instructions is based upon the latest product information available at the time of publication. Kohler China reserves the right to make changes in product characteristics, packaging, or availability at any time without notice.
- These instructions contain important care, cleaning, and warranty information - **please leave instructions for the consumer.**

安装之前

- 请通读本说明书，以便了解所需工具、材料及安装程序。请遵照相关章节进行安装，以避免由于安装不当而导致不必要的损失。除了有关正确的安装方法之外，还务请详阅所有操作及安全说明。
- 本说明书所含一切资料，均以印刷时所有的最新产品为准，科勒中国保留随时更改产品特性、包装或供应情况的权利，恕不另行通知。
- 本说明书也包含了有关护理、清洁及保养等重要资料 - 请交予用户保存。

RECOMMENDED TOOLS AND MATERIALS

- Open end/adjustable wrenches
- Tape measure
- Basin wrench
- Pipe wrench
- Square
- Level
- Pliers
- Socket wrench with sockets
- Screw driver
- Seal tape
- Connection wire
- Wire cutter
- Insulation tape
- Bushing
- Drill
- Sealant

所需工具及材料

- 开口/活动板钳
- 卷尺
- 梅花板钳
- 管扳手
- 直角尺
- 水平尺
- 老虎钳
- 管钳子
- 十字螺丝刀
- 生料带
- 连接线
- 剥线器
- 绝缘胶布
- 电工套管
- 冲击钻
- 密封胶

SENSOR SPECIFICATIONS

感应器规格

| | | |
|--------------------|---|-----------------|
| Model | 16321T-M | 16321T-MC05 |
| Power | 2 "AAA" size alkaline batteries | 220V AC 50/60Hz |
| Liter per flushing | Water pressure at 0.18~0.55 MPa: No more than 1L | |
| Temperature | Environmental temperature: 1 to 55°C | |
| Starting pressure | 0.05~0.86MPa | |
| Sensing distance | 70cm away from sensing window (Automatic adjustment range: 50~70cm) | |
| Testing time | About 2 seconds or 5 seconds (Automatic adjustment) | |

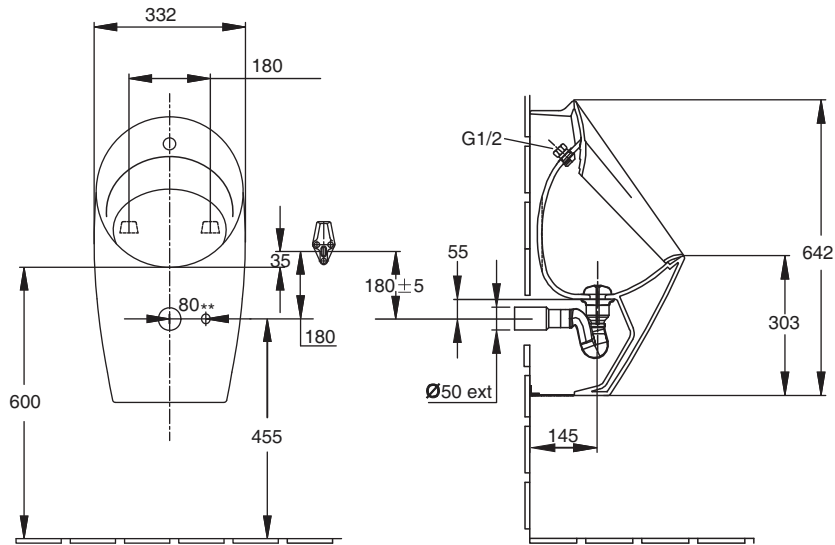
Note: the sensing distance in the table is measured with a 30 × 30cm² white board as the reflecting surface.

| | | |
|------|-------------------------------|-----------------|
| 型 号 | 16321T-M | 16321T-MC05 |
| 电 源 | 2节7号碱性电池(AAA × 2) | 220V 50/60Hz交流电 |
| 冲洗水量 | 水压为0.18~0.55MPa.时, 不大于1L | |
| 使用温度 | 环境温度:1~ 55°C | |
| 启动压力 | 0.05~0.86MPa. | |
| 感应范围 | 距感应窗口70cm以内(自动调节范围约: 50~70cm) | |
| 检测时间 | 约2秒或5秒(自动调节) | |

注意: 表中感应范围距离的测定是以30 × 30cm²白纸为反射平面。

Reference Value
参考值

Unit:mm
单位: 毫米



科勒公司保留随时变更图中标示尺寸的权利，无需另行通知。
Kohler reserves the right to change marked dimensions without prior notice.

- Notice:**
- a. The dimensions above are just for reference.
 - b. The layout dimensions of water inlet and outlet see installation step B(Install the hook).
 - c. ** Indicates the location of inlet pipe, while inlet connector size is G 1/2.

- 注意:
- a. 以上尺寸仅供参考。
 - b. 进水口和排污口布局尺寸见安装步骤B(安装挂钩)。
 - c. **为进水管位置，进水接口尺寸为G 1/2。

Notice: To ensure an effective flush performance, strongly recommended inner diameter of water supply (including water meter, valve, etc.) is no less than 25mm, and supplied water pressure (sensor inlet dynamic pressure) is 0.18MPa ~0.55MPa.

注意: 为保证有效冲洗，推荐供水管路(包括水表、阀等)内径不小于25mm，推荐供水水压(冲洗器进水口流动水压): 0.18MPa ~0.55MPa。

INSTALLATION

安装步骤

1. Please install 16321T-MC05(AC) as below:

Please directly reference to Step 2 when installing 16321T-M (DC).

A. Please match 16306T-NA AC power unit when installing 16321T-MC05 (AC).



CAUTION:

- Outlet of AC power unit upward prohibited.
- Do not connect 220V AC power supply to DC wiring terminal.
- Do not damage the covering of AC power unit or remove screws to avoid leakage.

1. 安装16321T-MC05(交流型)请参照以下说明:

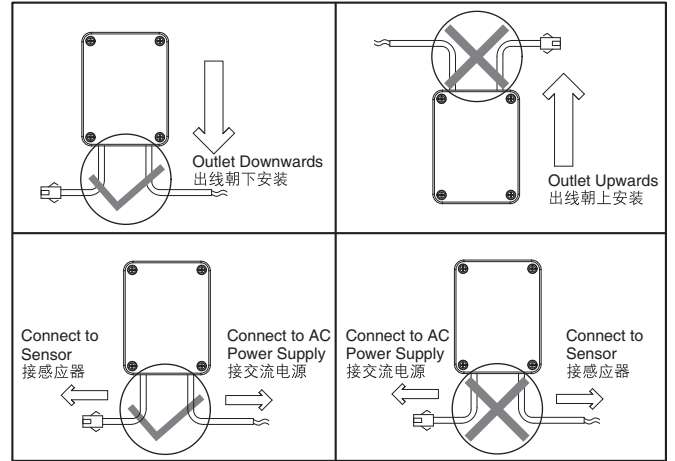
安装16321T-M(直流型)请直接参照第2步。

A. 安装16321T-MC05(交流型)请选配16306T-NA交流电源盒。



警告:

- 禁止将电源盒出线朝上安装。
- 禁止将交流220V接入直流DC接线端。
- 安装时严禁损伤交流电源盒外壳或拧动电源盒盖螺钉，以防止受潮漏电。



B. AC power unit connected to electric control box by connection wire.

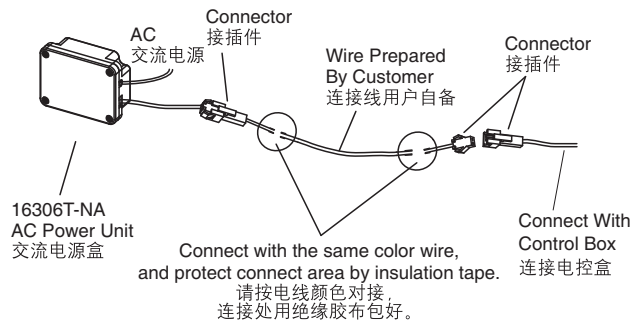


Notice: The length of the connection wire should keep the connector out of the urinal. It's convenient connect.

B. 交流电源盒通过连接线与电控盒相连。



注意: 连接线的长度应保证接插件能露在小便器外面，以方便连接感应器。



C. When installing the power unit on the ceiling, please chisel out a slot and layout bushing according to Fig., and thread wire through the bushing.

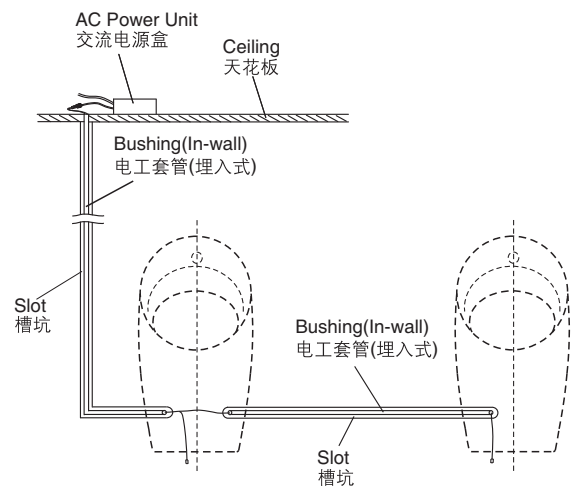


CAUTION: One AC power unit can supply two sensors at most.

C. 将电源盒放在天花板上时，如图示凿槽坑安装电工套管，管内装入电线。交流电源盒安装位置如示意图。



警告: 一个交流电源盒最多可连接两个感应器。



- ⚠ Notice:**
- Keep the connector away from water.
 - Do not connect the DC output of AC power unit to AC power supply.
 - Do not connect to power supply while installing. Connection line is not supplied. AC connection wire with insulating sleeving is recommended. Wire of which the nominal section area of conductor is not less than 0.5mm^2 is also recommended. DC connection line use wire of which the nominal section area is not less than 0.3mm^2 . It is cut according to acted installation requirements(The length of cut wire is recommended less than 10m).
 - The head AC power supply must be protected with appropriate fuse.
 - Please confirm the AC power supply and water supply should be shut off before maintaining the products with AC power related.
 - Don't install the AC power unit in the free space behind the urinal to avoid damaging the AC power unit.

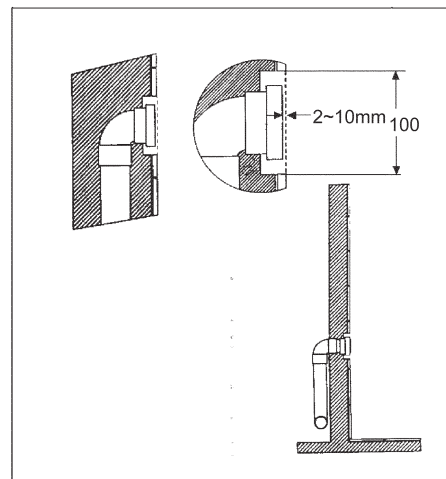
- ⚠ 注意:**
- 不要让电线接插件接触水。
 - 不可将交流电源盒的直流输出端与交流电连接。
 - 安装时不要向电源盒供电。连接线请用户自备，建议交流电源线采用导体标称截面积 $\geq 0.5\text{mm}^2$ 的电线，直流连接线采用导体标称截面积 $\geq 0.3\text{mm}^2$ 的电线，电线长度根据实际安装需要自行裁剪(建议连接线长度小于10m)。
 - 交流电的总电源必须有合适的熔断丝加以保护。
 - 维修时必须断开交流电源并关闭水源。
 - 请勿将交流电源盒安装在小便器后面的空闲部位，以免造成交流电源盒的损坏。

2. Install urinal

- ⚠ Notes:**
- Observe all local plumbing and building codes.
 - Shut off the water supply.
 - Carefully inspect the new fixture for any sign of damage.
 - Be very careful while hand ling vitreous china products.

2. 安装小便器

- ⚠ 注意:**
- 遵守当地所有给排水及建筑规定。
 - 安装前请关闭水源。
 - 安装前请小心检查小便器是否有损坏的迹象。
 - 釉面陶瓷小便器须小心轻放，以免其破坏和崩裂。



A. Install outlet connection

Ascertain the position for outlet connection according to rough-in dimension.

Connect the outlet connection with the S-trap way. Insert the gasket into the S-trap way as shown. Apply sealant on outlet pipe, connect the outlet connection with outlet pipe.

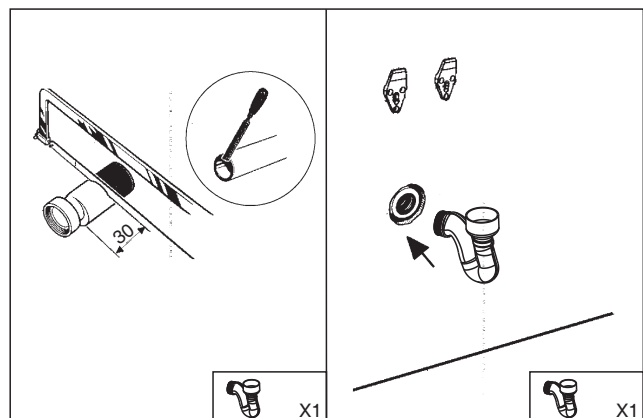
Note: Maybe different for different outlet connections.

A. 安装排水接口

根据安装尺寸示意图确定排水接口安装位置。

将排水接口和S型排水管组件连接在一起，按图示把橡胶密封圈插入到S型组件，然后在排水接口涂抹密封胶，将排水接口连接到排水管。

注意：根据选用排水接口的不同，安装图示可能不同。

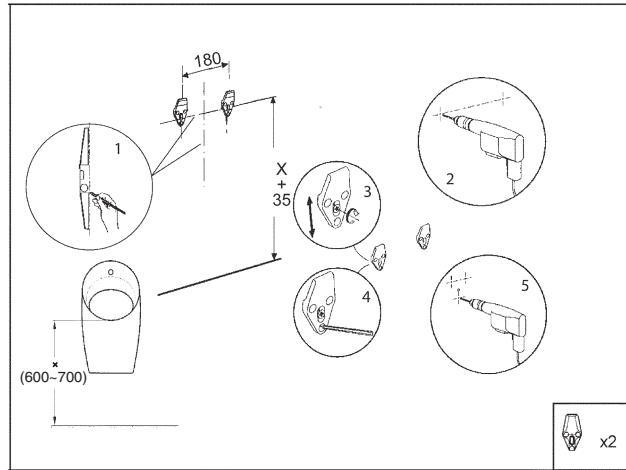
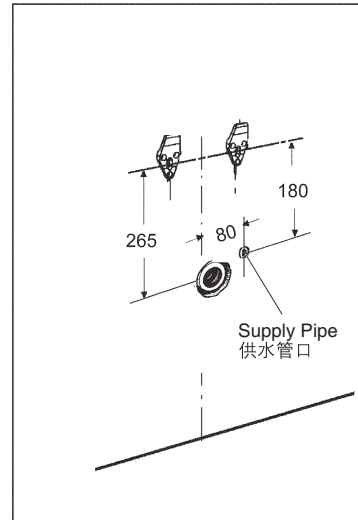


B. Install hook

Drill 2 mounting holes on the wall and install hook. Fix hook on the wall by tightening screws.

B. 安装挂钩

按图中的安装尺寸在安装墙面打两个安装孔，将挂钩安装槽对准安装孔，将塑料套管插入安装孔，用螺丝将挂钩紧固在安装墙面。



C. Install the inlet hose of valve assy.

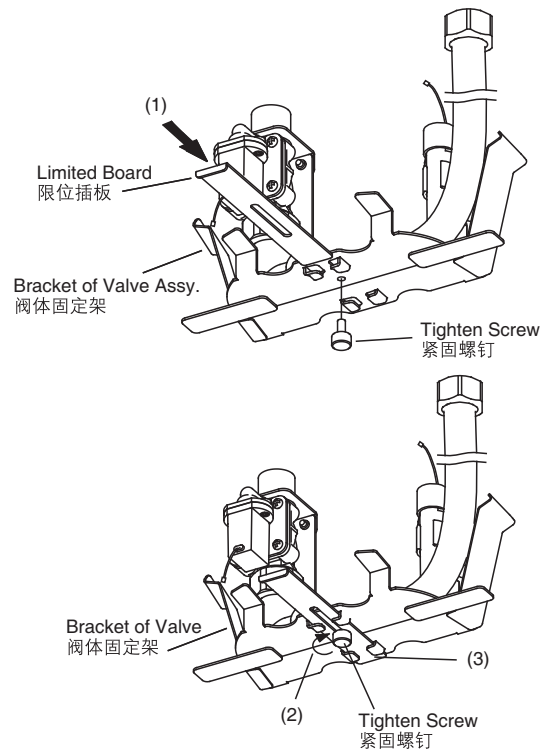
Take out the bracket of valve assy. Install the limited board (1). Tighten the tighten screw (2). The inserting depth position is shown as (3).

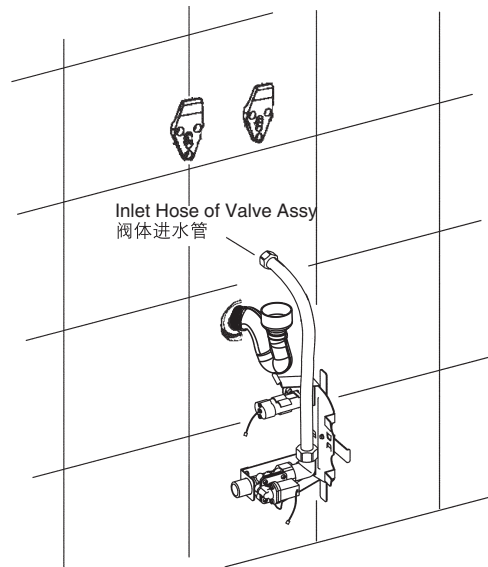
Connect the inlet pipe with the water supply on the wall.

C. 安装阀体进水管

取出阀体支架组件，装入限位插板(1)。拧紧紧固螺钉(2)，限位插板装入深度如图示位置(3)。


将阀体进水管安装到墙上的供水管接口上。

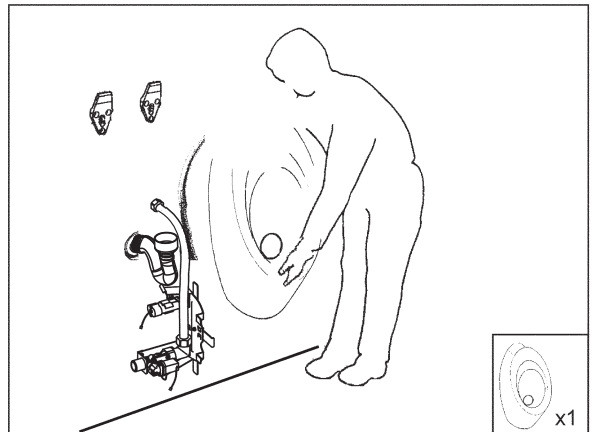




D. Install urinal


Lift up the urinal, level the installing hole on the back of the urinal with the hook. Level the outlet connection which is installed together with the strainer and the gasket on the S-trap way. Then insert the outlet connection into the gasket. (While the outlet connection is inserted, the S-trap way can be crutched by hard extended via the gap in the bottom of the urinal to install it decently.) Then fix the urinal on the hook.

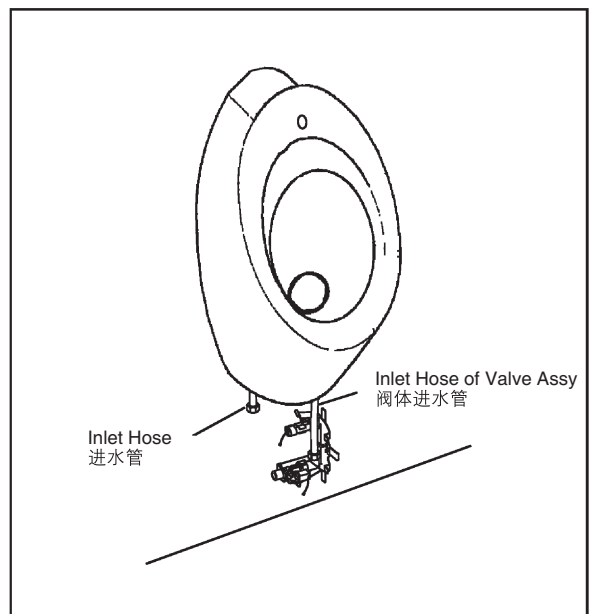
-  **Notice:**
- Avoid the urinal fallen on the floor to damage the urinal or hurt somebody.
 - Avoid damaging the valve assy and wires.
 - Confirm the wires bare out of urinal base.
 - Set the inlet hose and the inlet hose of valve assy respectively on the both sides of the S-trap way before installing urinal.



D. 安装小便器

将小便器提起扶稳，将小便器背部安装孔对准挂钩，同时，与滤网安装在一起的排水接头要与S型排水组件上的密封圈对准并插入(插入时可以用手通过小便器底部的空隙，把S型排水组件扶正，避免安装不到位)，然后将小便器固定在挂钩上。

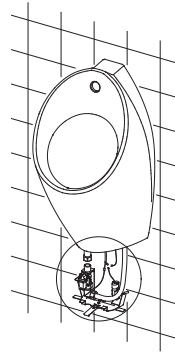
-  **注意:**
- 防止小便器跌落损坏或造成人身伤害。
 - 此安装过程中防止损坏阀体部件和导线。
 - 确认导线接插件端露出小便器底部。
 - 安装小便器前将进水管与阀体进水管分别置于S型排水管组件两侧。



3. Install the bracket assy.

A. Connect the outlet of valve assy, with the inlet hose.

The way of 16321T-M(DC) installation is as below:
Take out the battery box from the bracket assy. Loose the screws of the battery box assy with a screw driver. Put 2 "AAA" size alkline batteries and tighten the battery box's cover with the screws. Replace the battery box. Connect the wires with the same color wires.



Note: Don't mistake the polarity of the batteries and don't mix the new and used batteries together.

Installing 16321T-MC05(AC) must connect the AC power unit with control box assy with the same color wires.

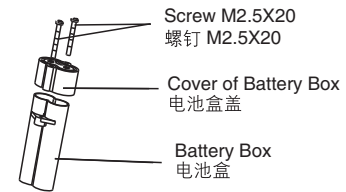
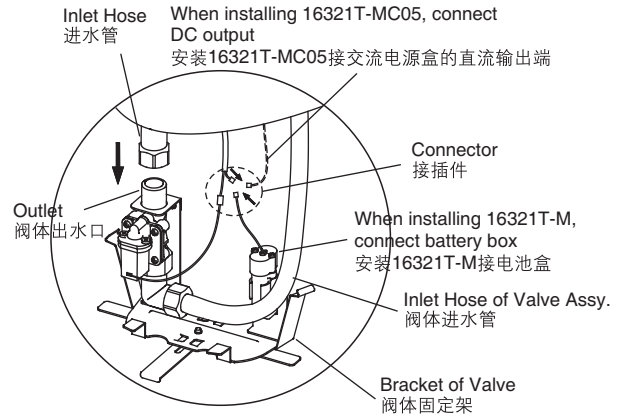
3. 安装阀体固定架

A. 将阀体出水口与进水管连接。

安装16321T-M(直流型)操作如下:
从阀体固定架上取下电池盒组件, 用十字螺丝刀旋开电池盒盖螺丝, 装入2节7号碱性电池, 拧紧电池盖的螺丝后, 将电池盒放回原处, 并按电线颜色连接好接插件。

注意: 电池极性不能装反, 新旧电池不能混用。

安装16321T-MC05(交流型)按电线颜色连接好交流电源接插件。

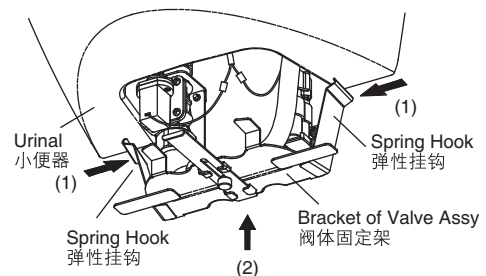
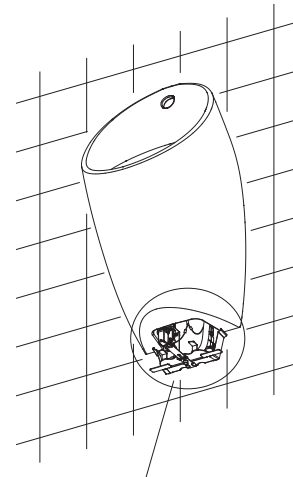


B. Press the two sides spring hooks of bracket of valve assy close to the center(1). Press the bracket up along the wall and push it into arc gap of the urinal base(2) until the spring hooks hangs on the urinal.

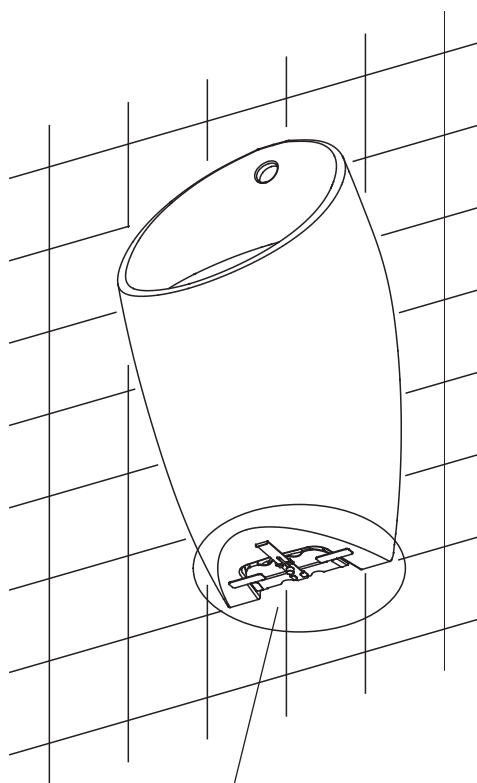
Note: Please carefully handle the stainless steel plate for its sharp edge will cause possible handcut.

B. 将阀体固定架左右的弹性挂钩向中间压拢(1), 并把阀体固定架贴墙面向上推入小便器底部的弧形缺口中(2), 直到弹性挂钩挂在小便器上。

注意: 请注意妥善处理不锈钢板, 以免其锋利边缘引起割伤。



- C. Push the bracket away from the wall(3), until the front hook of the bracket hanging on the urinal.
- C. 将阀体固定架水平推离墙面(3)，直到让阀体固定架前端的挂钩挂在小便器上。

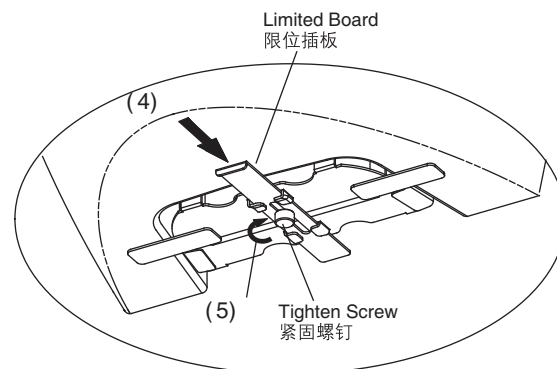
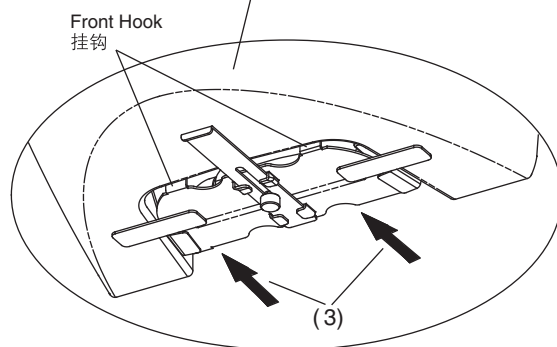


- D. Loosen the tighten screw. Push the limited board to the urinal withstanding the wall (4) and then tighten the tighten screw (5).

- ⚠ Note:** a. When installing the 16321T-MC05(AC), do not connect to power supply until finish installation.
 b. Taking out the bracket just need to athwort the way of installations.


- D. 拧松紧固螺钉(5)，将阀体固定架上的限位插板推向墙面直到顶住墙面(4)，再拧紧紧固螺钉(5)。


- ⚠ 注意:** a. 安装16321T-MC05(交流型)，在安装步骤全部完成后接通220V交流电。
 b. 将安装阀体固定架的步骤反向操作即可取下固定架。



USER'S GUIDE

使用说明

-  Don't use this system until the power is on for 10 minutes.
The sensing distance will be adjusted and the system will not work during this time.

-  请在通电10分钟后开始使用该系统。
因为此段时间设定为调节感应范围的待机状态，此时系统不工作。

Working Satus Flushing

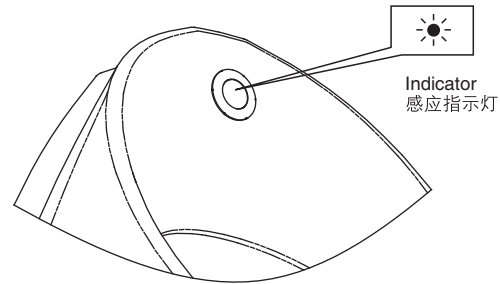
Before powering on, clear the unwanted objects in front of the sensor window lest shortening the sensing distance.

工作状态

在接通电源之前，务必清理感应冲洗器感应窗口前的杂物，以免影响自动调距。

Replacement of Batteries(Only for 16321T-M)

When out of power, the indicator will flash every 2 seconds and the sensor will not work until new batteries are supplied. When replacing batteries, open the cover of battery box and put in new batteries.



电池的更换(仅适用于16321T-M)

电池耗尽时，电池指示灯每隔2秒闪烁一次，感应器停止工作，直至更换电池。更换电池时只需打开电池盒盖装入新电池即可。

Deodorizing Flushing


The urinal will take a flush automatically when it's used 3 or 4 times in 2 minutes.

防臭冲洗

当2分钟内连续3-4人以上使用时，小便器自动冲洗一次。


Manual Flushing

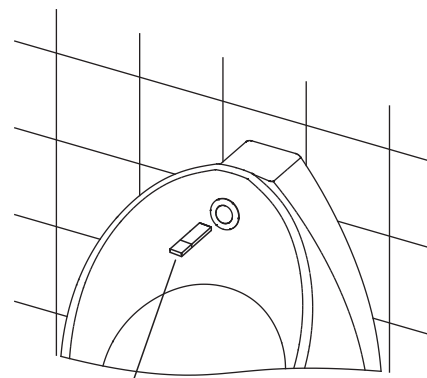
Approach the supplied special magnetic stick (flushing control stick) to the sensor lens. The system is now at a manual status and the indicator will flash every 1 seconds. Approach the flushing control stick to the sensor lens once, it'll flush once. This status will last for about 8 minutes until turns to the normal working status.

-  **Notice:** If the flushing control stick keeps near to the sensing window for 30 seconds, the manual status will be terminated automatically and reassume the normal working status.

手控冲洗

用配备的专用磁棒(冲洗控制棒)靠近感应窗口，此时系统进入手控状态，感应指示灯每1秒闪烁一次。用冲洗控制棒每靠近感应窗口一次，小便器即放水冲洗一次。此状态维持约8分钟，结束后转为正常工作状态。

-  **注意：** 冲洗控制棒如持续超过30秒一直不离感应窗口，将自动解除手控冲洗状态回复到正常工作状态。



1020016
Flushing Control Stick
冲洗控制棒

MAINTENANCE


维护保养


Urinal Repair

修理小便器

When repairing, you don't have to dismount the sensor. Cover the sensing window with tape and work with ease.

修理小便器时，不必拆下感应器，只需用电工胶布粘住感应窗口，您便可放心修理设备。


 **Notice:** Don't use very adhesive tape in case the scar will be hard to remove.

 **注意：** 不要用强力胶布，因为粘痕会难以清除，而产生误动作。

Clean the Filter Screen

If the flushing volume declines sharply after installation or used for a long time with no cause from water pressure, the filter may need a wash. Please operate as following steps:


Remove the bracket of valve assy. Loose the inlet hose firstly. Loose the inlet hose of valve assy. and then take out the filter. Clean it with a brush and reinstall.

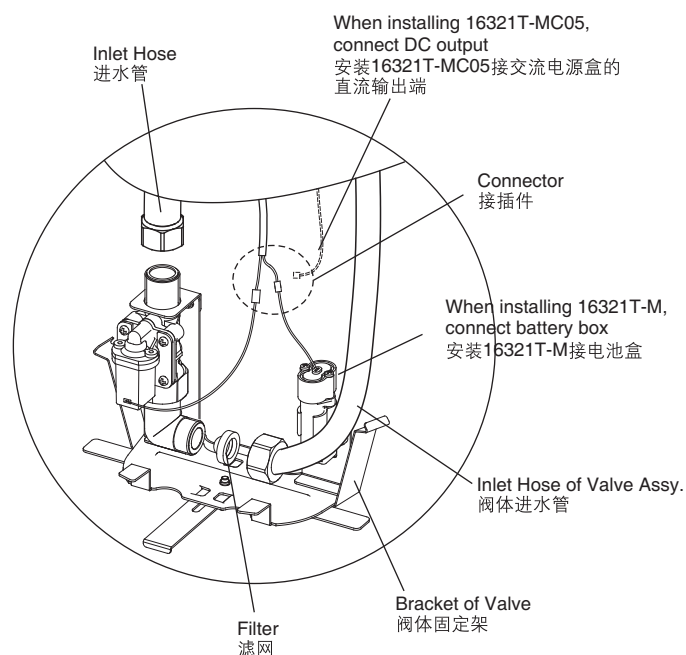
 **Caution:** a. Turn off the water supply before cleaning the filter, also power off when used the AC power supply.
b. Avoid damaging or losing the filter during cleaning.

清洗过滤装置

初装或使用较长时间后，如发现出水量明显变小，而非水压原因，可进行以下操作：

将阀体固定架拆下，先拧下进水管，再拧下阀体进水管，取出滤网，刷洗干净后重新装入即可。

 **警告：** a. 清洗前，请先关闭水源，使用交流电源时必须先切断电源。
b. 清洗滤网过程中防止滤网变形损坏或丢失。



Care & Clean

Keep the sensing window clean. Wipe with soft cloth and mild cleaner.



Notice:

- Do not use dust-removing powder, abrasive powder or cleaner containing oil, acid or alkaline ingredient.
- Do not spray air-refresher, disinfectant, or other deodorizing, cleaning solvent directly into the sensing window.
- Keep wire away from water.
- Don't attack the sensor window.

清洁保养

保持感应窗口清洁，可用蘸有中性清洁剂的软布擦洗。



注意：

- 禁止使用去污粉、研磨粉及油类、酸性类、碱性类清洁剂。
- 禁止直接对感应窗口喷洒空气清新剂、消毒液或其他除臭、清洁类有机溶剂。
- 避免水直接接触电线接插件。
- 勿撞击感应窗口。

TROUBLESHOOTING

Please make following checks before repair:

| Symptoms | Probable causes | Corrective actions |
|---|---|--|
| No flushing (Indicator not flashing). | <ol style="list-style-type: none"> No power or mistake connected. There is an object within the sensing distance. The sensing window needs cleaning. | <ol style="list-style-type: none"> Check the power connect. Remove the object . Clean the window. |
| No flushing or poor flushing while the indicator can flash. | <ol style="list-style-type: none"> Still in the waiting status. Adjusting bolt not fully open Low water pressure. Filter is obstructed. The connector is not connected well. | <ol style="list-style-type: none"> Wait for 10 minutes. Open the adjusting bolt. Improve water supply. Clean the filter. Check the connector. |
| Keep flushing indicator not flashing. | <ol style="list-style-type: none"> The small hole of valve core is blocked. The filter of valve core is blocked. | <ol style="list-style-type: none"> Clean the small hole of valve core with thin steel wire. Wash the filter of valve core with a brush. |
| Battery indicating light keeps flashing and no flushing. | Out of electricity. (Only for 16321T-M) | Replace batteries. |

If the trouble remains after above-mentioned actions are taken, please contact with us via distributor.

简单故障排除

请在委托修理前做以下检查：

| 现象 | 可能原因 | 处理方法 |
|-----------------------|--|--|
| 不出水 (感应指示灯不亮) | <ol style="list-style-type: none"> 无电源或接线有误 感应范围内有其它物体一直被感应 感应窗口较脏 | <ol style="list-style-type: none"> 检查电源连接 清理物体 清洁窗口 |
| 感应指示灯闪烁 而无水流出或出水较差 | <ol style="list-style-type: none"> 通电待机状态 调节栓未完全打开 水压太低 过滤装置脏堵 接线端未接好 | <ol style="list-style-type: none"> 等待10分钟 打开调节栓 改善供水情况 清洗过滤装置 检查接线端 |
| 不停水 感应灯也不在闪烁 | <ol style="list-style-type: none"> 阀芯小孔堵塞 阀芯滤网脏堵 | <ol style="list-style-type: none"> 用细钢丝清理阀芯小孔 清洗阀芯滤网 |
| 电池指示灯连续 闪烁而不出水 | 电池耗尽(仅适用于16321T-M) | 更换新电池 |

如按以上操作仍未解除故障，请通过销售商与本公司联系。

Consumer Responsibilities

1. Do not attack the sensor.
2. Do not directly flush the sensor with water. The sensor is an electronic instrument.
3. Do not let sunlight or other light source enter or be reflected into Sensor Window.
4. Do not hang on the opposite wall any reflective items or install light/electronic sensor such as toilet flushing sensor.
5. Do not make Sensor Window near strong ultraviolet or electromagnetic field.
6. Keep the sensor window clean.
The sensor cover can be cleaned by soft rag with neutral liquid detergent.
Do not use eradicator, abrasive powder or oil, acid or alkali liquid detergent.
Do not spray air freshener, disinfectant or other kinds of odious removing, cleaning organic liquid to the sensor directly.
7. Urinal is designed for use with potable water. Avoid water that includes a lot of contaminants or acid/alkali water and impure water.
8. When AC power unit is connected to 220V AC power supply, corresponding protective measures should be taken.
9. Please confirm no water penetration at the connection area of AC wire, and the connection area is not easy to be affected by damp.
10. Don't connect power unit to AC power supply until the sensor installation is finished.
11. The head AC power supply must be protected with appropriate fuse.
12. Please confirm the AC power supply and water supply should be shut off before maintaining the products with AC power related.
13. All electrical connection must be compliance with related regulation and codes.
14. All installation staff should be well familiar with installation instruction.

用户责任

1. 请勿敲击感应窗口。
2. 感应器为电子器具，请勿直接用水冲洗。
3. 避免阳光或其他光源直接或反射进入感应窗口。
4. 请勿在感应器正面墙壁上挂贴易反射的物体或安装光电感应器(如大便自动感应冲洗器)。
5. 请勿靠近强烈紫外线或电磁场。
6. 保持感应窗口清洁。
窗口外壳可用蘸有中性清洁剂的软布擦洗。
禁止使用去污粉、研磨粉及油类、酸性类、碱性类清洁剂。
禁止直接对感应窗口喷洒空气清新剂、消毒液或其他除臭、清洁类有机溶剂。
7. 使用水源为自来水或可供饮用井水。
避免使用含有杂质较多或带有酸、碱性的处理水或未加工处理的水。
8. 将交流电源盒接入220V电源时，应采取相应的防卫措施。
9. 应确保交流导线连接处无水渗入以及不易受潮。
10. 务必在感应器安装完毕后，才向交流电源盒供电。
11. 交流电的总电源必须有合适的熔断丝加以保护。
12. 维修交流供电型的产品时，必须首先断开交流电源并关闭水源。
13. 所有电路连接必须符合相关规范和条例要求。
14. 所有参与安装人员都必须熟知安装说明。