

Underwater Light Installation Manual

▶▶ Wall Mounted Series ◀◀



(for concrete pool, vinyl liner pool ,
fiberglass pool, & fiberglass and vinyl liner pool)

1. To User



Thank you for choosing our products! In order to achieve satisfactory results, please read this manual carefully before installation to ensure the normal operation and service life of the product. At the same time, please keep this manual for reference when needed.

2. Safety Warning



1. Please read the instructions carefully before installation to ensure that you understand all installation steps and precautions. Non-professional technicians, please do not repair or modify this product without authorization.
2. During the installation, please keep the power off and wear insulation gloves to ensure safety.
3. The light is an IP68 waterproof light, which needs to be placed underwater to work, and can be immersed in an environment up to 5 meters deep.
4. It is recommended that the ambient temperature for the working of the light should be controlled between -20°C ~ 35°C to ensure the normal service life of the light.
5. It is recommended to use it with the power supply provided by our company.
6. It is recommended to use an isolation transformer to accommodate the load power.
7. The circuit system of the underwater light is recommended to be equipped with GFCI (ground fault current circuit breaker) and have a suitable rated current circuit breaker.
8. It is recommended that the length of the wire connecting the swimming pool light and the transformer should not exceed 30m, otherwise it may affect the normal operation of the underwater light.
9. The underwater light should be installed on a horizontal wall, and it is forbidden to install on an irregular wall.
10. To install this underwater light, at least a 1.5m long spare wire for connection should be reserved for future replacement and maintenance.
11. In order to achieve synchronization, all underwater lights should be connected to the same switch correctly.
12. Corrosive or soluble chemicals will destroy the protection of the light housing.
13. After installation, it is necessary to test whether the light works normally to ensure the safety of use.
14. It is forbidden to turn on the underwater light without it being submerged in water (no more than 10 minutes), otherwise it may shorten its service life and even cause burning of the integrated components that make up the LED.
15. After the underwater light is installed in the swimming pool, the swimming pool should be filled with water as soon as possible, because the underwater light should not be exposed to the sun for a long time.
16. Do not look closely at the luminaire that is working, so as to avoid eye damage due to the light.

3. Installation Preparation



1. Please confirm the completeness of the light product, including light body, mounting bracket, accessory bag and manual, etc. Make sure that the light marking voltage is consistent with the input voltage to be connected.
2. Prepare installation tools, such as screwdrivers, electric drills, drill bits, hammers, insulating tape, wire cutters, and insulating gloves, etc.
3. Confirm the installation location and check whether the wall surface is flat and has no cracks to ensure that it can be installed securely.
4. Turn off the power switch, ensure that the power is disconnected during the installation process, and wear insulating gloves to ensure safety.

4. Suggested Installation Position



Taking the concrete pool as an example, other fixtures and various types of pools (vinyl liner pools, fiberglass pools, fiberglass and vinyl liner pools) are the same as this one.

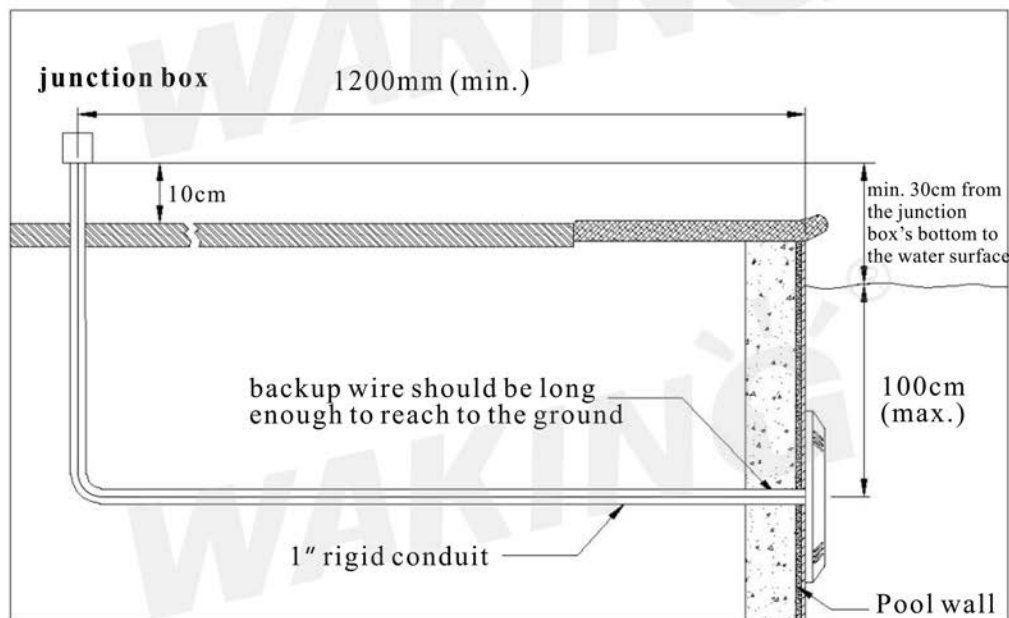


Figure 1



Figure 2

1. Installation and Parts List

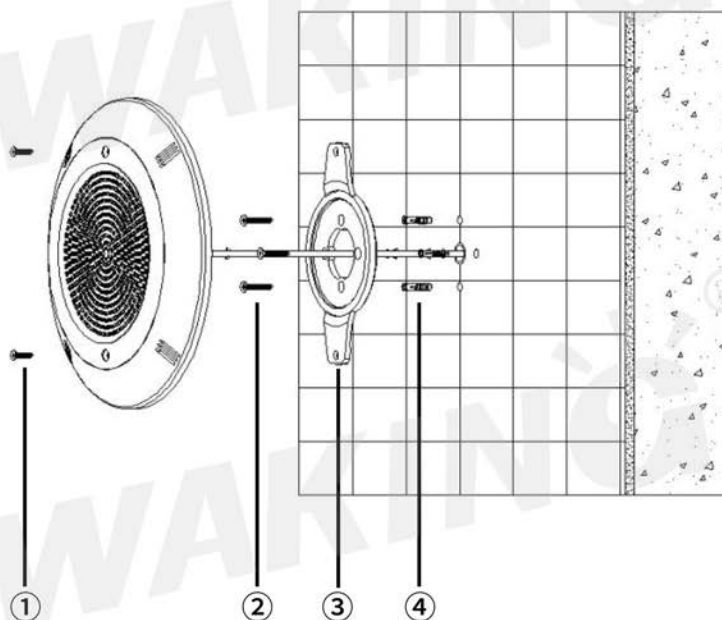


Figure 3

Parts List			
Item No.	Parts Description	Quantity	Unit
①	Screw 1	2	Piece
②	Screw 2	4	Piece
③	Plastic Bracket	1	Piece
④	Plastic Expansion Tube	4	Piece

2. Installation Steps(Concrete Pool)

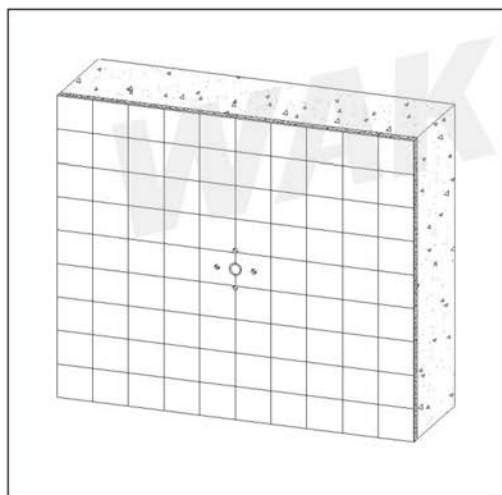


Figure 4

1. Drilling:

Mark the position of the mounting holes on the wall of the pool and use an electric drill to drill holes at the marked places (pay attention to choosing the right diameter drill bit to avoid too big or too small holes; pay attention to comparing the length of the expansion pipe to determine the depth of the holes to avoid too deep or too shallow);

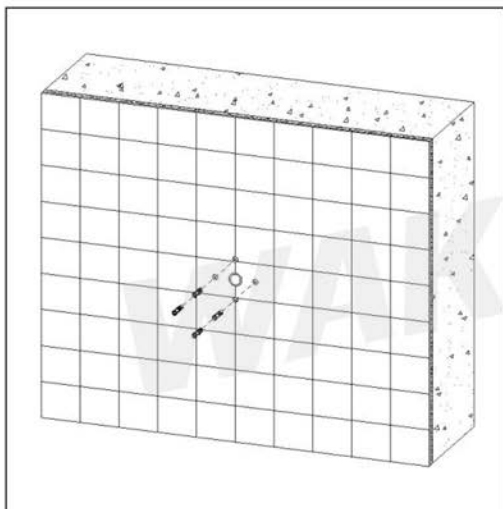


Figure 5

2. Installation of Expansion Tube:

Insert 4 ④ plastic expansion tubes into the punched mounting holes and hammer them completely into the holes (pay attention to the strength and direction of hammering to avoid damaging the expansion tubes and pool wall);

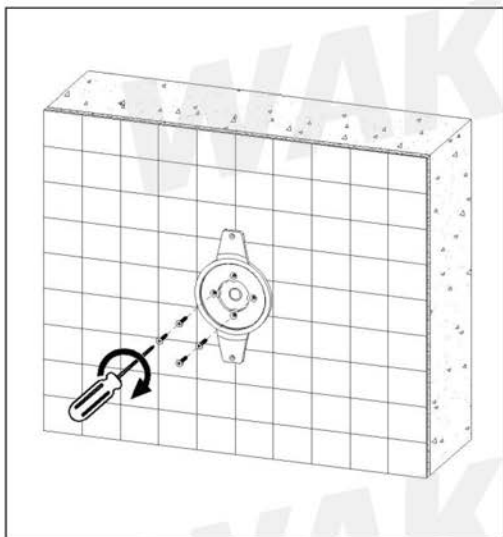


Figure 6

3. Mounting Bracket:

Set up the ③ bracket, align the screw holes on the bracket with the plastic expansion tubes, insert and tighten the 4 ② screws (pay attention to tighten the screws appropriately. Do not use excessive force to avoid damaging the bracket);

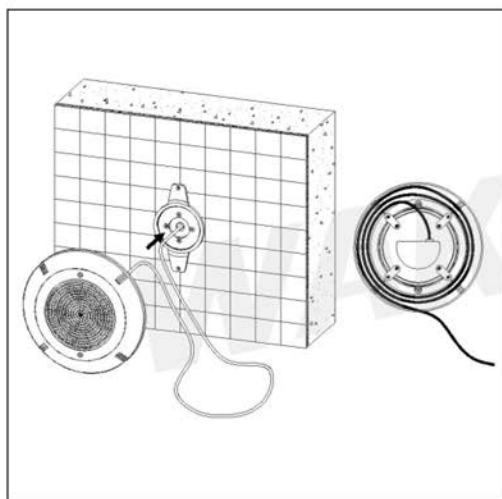


Figure 7

4. Connect the Power Cord:

Pass the wires on the lamp body through the center hole of the bracket, the threading conduit in turn, and then connect them to the junction box; wrap around the back of the lamp body reserving enough wires for future maintenance;

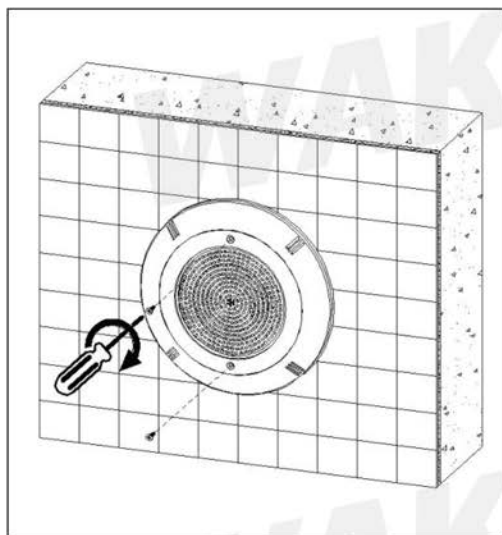


Figure 8

5. Install the Light Body:

Position the fixture, align the screw holes on the light body with the screw holes on the bracket, insert and tighten the 2 ① screws to complete the installation (note that the screws should be rotated moderately when tightening. Do not use excessive force to avoid damage to the fixture; after the installation is complete, check that the fixture is securely mounted, and shake the light body to confirm its stability).



Figure 9

1. Installation and Parts List

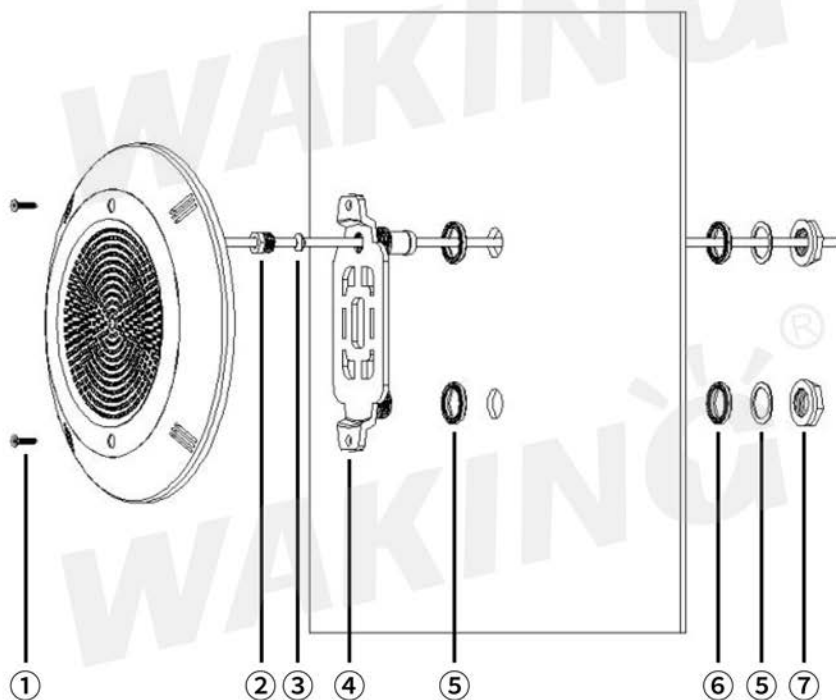


Figure 10

Parts List -V			
Item No.	Parts Description	Quantity	Unit
①	Screw	2	Piece
②	Lock Nut	1	Piece
③	Locking thread waterproof rubber ring	1	Piece
④	Plastic Bracket	1	Piece
⑤	Waterproof Gasket	4	Piece
⑥	Transparent waterproof gasket	2	Piece
⑦	Plastic Nut	2	Piece

2. Installation Steps(Vinyl Liner Pool)

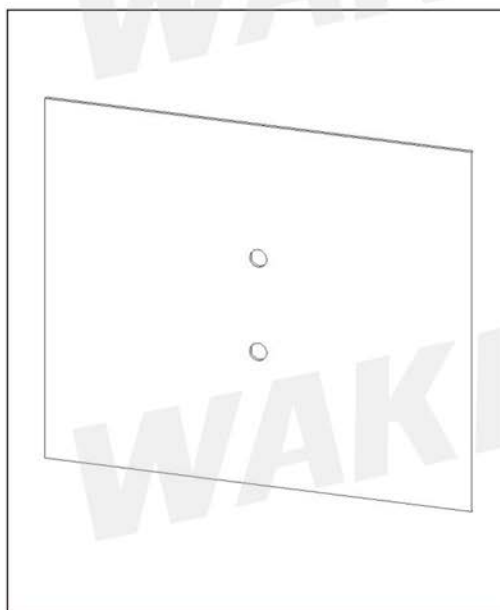
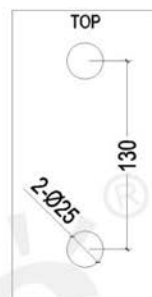


Figure 11



Pool Wall Opening
Dimension Drawing

1. Drilling:

Mark the location of the mounting holes on the pool wall and use a hole opener to open the holes at the markings (pay attention to comparing the brackets and choosing the right diameter of the hole opener to avoid too large or too small holes);

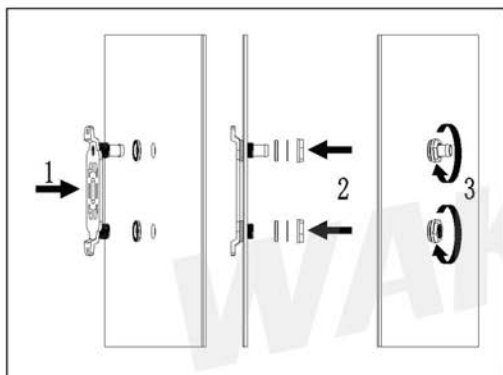


Figure 12

2. Mounting Bracket:

Set up the ④ bracket, put two ⑤ waterproof gaskets on the upper and lower threads of the bracket, then put the bracket through the hole in the wall of the vinyl liner, put the other two ⑤ waterproof gaskets on the upper and lower threads of the bracket, put two ⑥ transparent waterproof gaskets on the bracket, next to the waterproof gaskets, and finally fix the bracket on the wall of the vinyl liner with the ⑦ plastic nut (pay attention to the fact that when you tighten the nut. Don't use excessive force to avoid damaging the bracket, etc.). Note that when tightening the nut, do not use excessive force to avoid damage to the bracket;

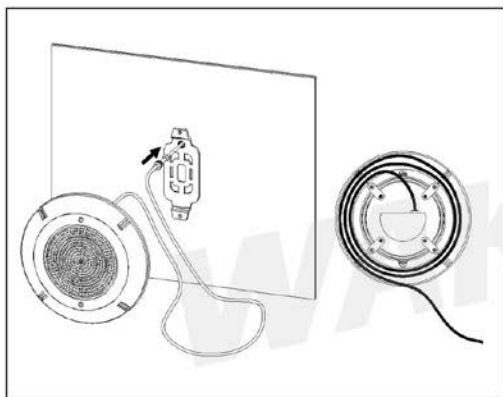


Figure 13

3. Connect the Power Cord:

Pass the wires from the lamp body through the ② locking nut, ③ locking wire waterproof rubber ring, the upper threaded hole of the bracket, threading conduit, and then connect it to the junction box; reserve enough wires at the back of the lamp body for easy maintenance in the future, and tighten the locking nut on the bracket (pay attention to the correct direction of the locking nut when threading the wires);

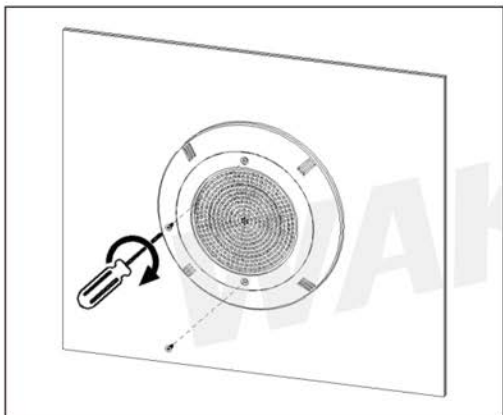


Figure 14

4. Install the Light Body:

Position the fixture, align the screw holes on the light body with the screw holes on the bracket, insert and tighten the 2 ① screws to complete the installation (pay attention to tighten the screws with moderate rotational force. Do not over-exert yourself, so as not to damage the fixture; after the installation is complete, check whether the fixture is firmly installed and shake the light body to confirm its stability).



Figure 15

1. Installation and Parts List

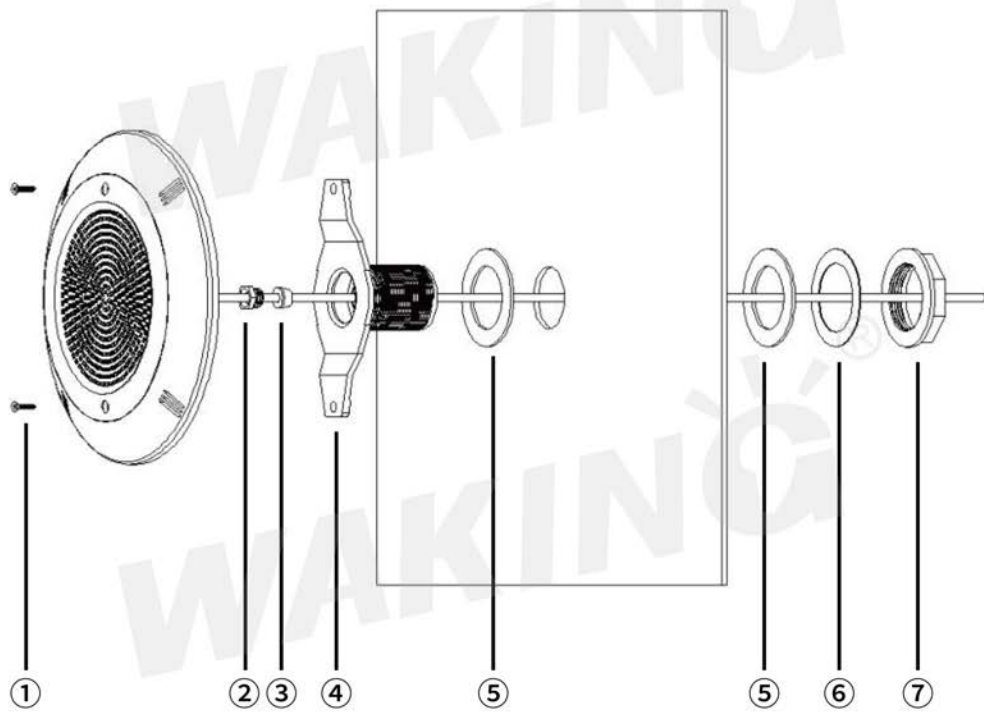


Figure 16

Parts List -FG			
Item No.	Parts Description	Quantity	Unit
①	Screw	1	Piece
②	Lock Nut	1	Piece
③	Waterproof Adhesive Ring for Locking Wire	1	Piece
④	Fiberglass Fitting WM01	1	Piece
⑤	Waterproof Gasket	2	Piece
⑥	Transparent Waterproof Gasket	1	Piece
⑦	Plastic Nut	1	Piece

2. Installation Steps(Vinyl Liner Pool)

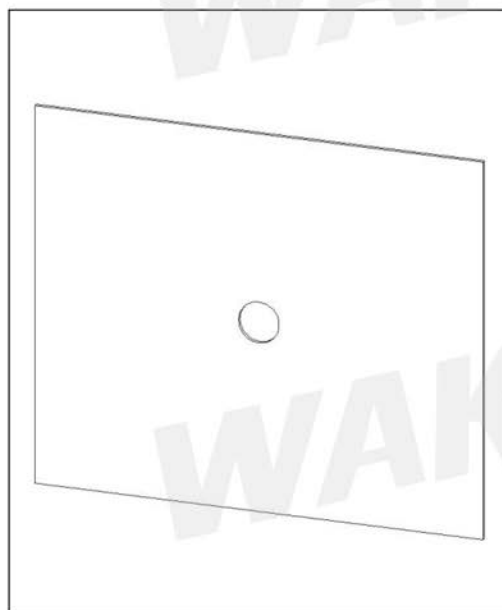
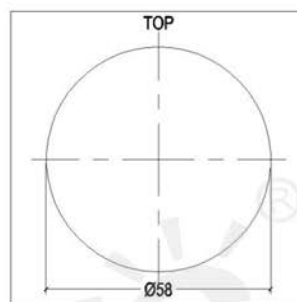


Figure 17



Pool Wall Opening Dimension Drawing

1. Drilling:

Mark the location of the mounting holes on the fiberglass pool wall and use a hole opener to open the holes at the markings (pay attention to comparing the fiberglass fitting and choose the right diameter of the hole opener to avoid too large or too small holes);

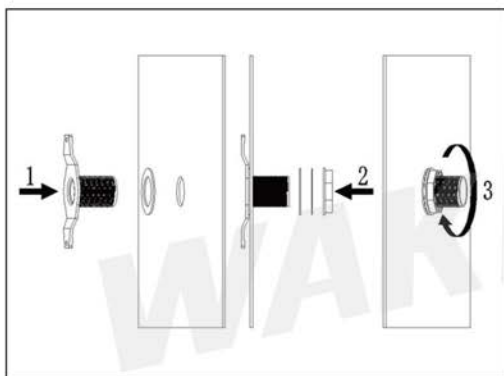


Figure 18

2. Installation of Niche:

Put one ⑤ waterproof gasket on ④ fiberglass fitting WM01, and then pass it through the hole of the glass fiber pool wall, and then put another ⑤ waterproof gasket, ⑥ transparent waterproof gasket, and ⑦ plastic nut on the external thread of the fiberglass fitting in turn, and tighten the nut by rotating it clockwise (pay attention to the tightening of the nut not to be over-exerted, so as to avoid damaging the fiberglass fitting, etc.);

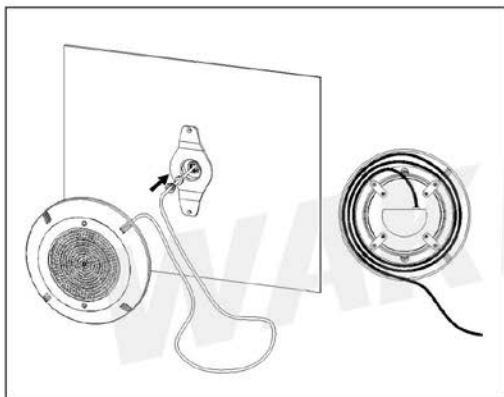


Figure 19

3. Connect the Power Cord:

Pass the wires on the lamp body through ② lock wire nut, ③ lock wire waterproof rubber ring, center threaded hole of the fiberglass fitting, threading conduit in turn, and then connect it to the junction box; wrap the back of the lamp body to reserve enough wires for easy maintenance in the future and tighten the locking nut on the fiberglass fitting (pay attention to threading the wires in the right direction of the locking nut);

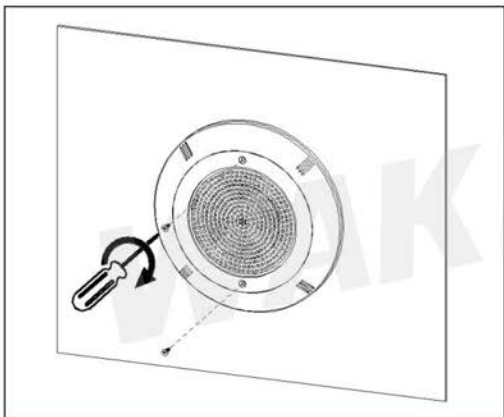


Figure 20

4. Install the Light Body:

Position the fixture, align the screw holes on the light body with the screw holes on the fiberglass fitting, insert and tighten 2 ① screws to complete the installation (note that the screws should be rotated with moderate force. Do not use excessive force, so as to avoid damage to the fixture; after the installation is completed, check whether the fixture is firmly installed and shake the body of the fixture to confirm its stability).



Figure 21

1. Installation and Parts List

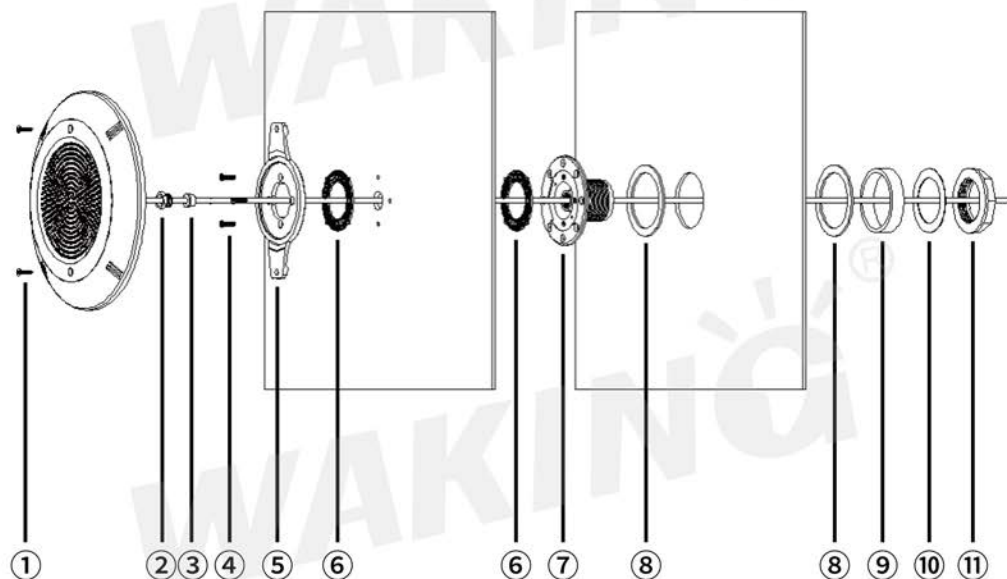


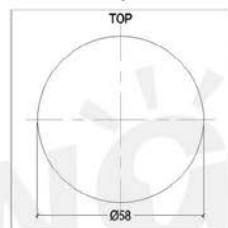
Figure 22

Parts List -FGV			
Item No.	Parts Description	Quantity	Unit
①	Screw	2	Piece
②	Lock Nut	1	Piece
③	Waterproof Adhesive Ring	1	Piece
④	Screws	4	Piece
⑤	Plastic Bracket	1	Piece
⑥	Adhesive Film Waterproof Spacer	2	Piece
⑦	Fiberglass and Vinyl Liner Spacer WM03	1	Piece
⑧	Waterproof Gasket	2	Piece
⑨	Plastic Washer	1	Piece
⑩	Transparent Waterproof Gasket	1	Piece
⑪	Plastic Nut	1	Piece

2. Installation Steps (Fiberglass & Vinyl Liner Pool)



Figure 23



Adhesive film opening size chart

1. Drilling:

Mark the location of the mounting holes on the fiberglass pool wall and use a hole opener to open the holes at the markings (pay attention to comparing the fiberglass fitting and choose the right diameter of the hole opener to avoid too large or too small holes);

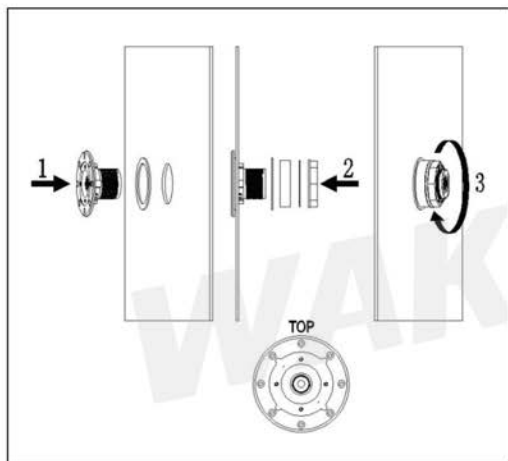


Figure 24

2. Install the Fiberglass Fitting:

Position the ⑦ fiberglass fitting WM03, 1 ⑧ waterproof gasket set in the embedded parts of the external thread, and then through the fiberglass pool wall holes, and then another ⑧ waterproof gaskets, ⑨ plastic washers, ⑩ transparent waterproof gaskets, ⑪ the plastic nut set in the embedded parts of the external thread, rotate clockwise to tighten the nut (pay attention to the nut should not be over-exerted to avoid damage to the fiberglass fitting, etc.);

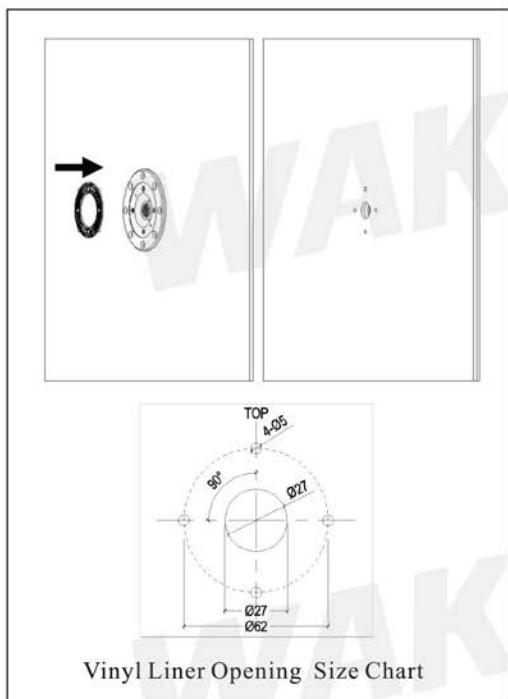


Figure 25

3. Laying of Vinyl Liner:

Install the waterproof gasket in the groove of the fiberglass fitting, then lay the vinyl liner over and cover the embedded part, mark the location and size of the hole on the vinyl liner with a marker, and then use a hole opener or other tools to open holes in the vinyl liner (pay attention to the fiberglass fitting, choose the appropriate diameter of the hole opener or drill to avoid too large or too small a hole diameter);

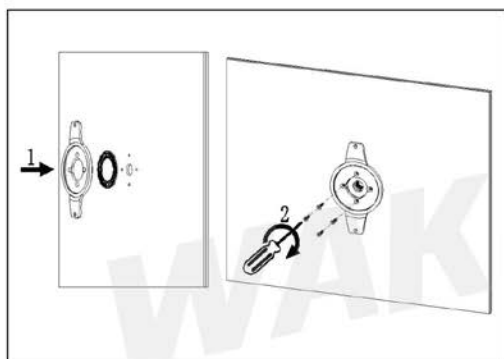


Figure 26

4. Mounting Bracket:

Place the other 1 ⑥ vinyl liner waterproof gasket against the vinyl liner and align the holes, then use the ⑤ bracket to press the waterproof gasket and align the holes, then insert the 4 ④ screws in turn and tighten them (be careful to tighten the screws appropriately and do not use excessive force to avoid damaging the bracket, etc.);

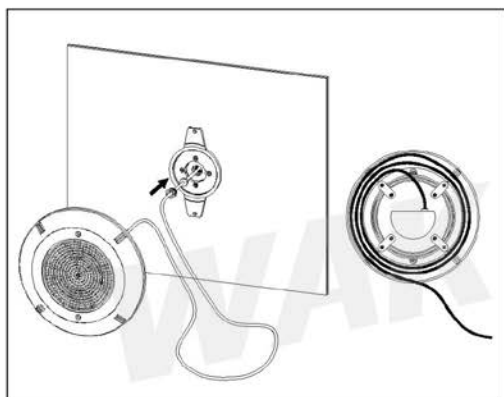


Figure 27

5. Connect the Power Cord:

Pass the wires on the lamp body through ② the lock wire nut, ③ the lock wire waterproof rubber ring, the center threaded hole of the fiberglass fitting, the threading conduit, and then connect it to the junction box; wind enough wires on the back of the lamp body for future maintenance and tighten the lock wire nut on the fiberglass fitting (pay attention to the correct direction of the lock wire nut when threading the wires);

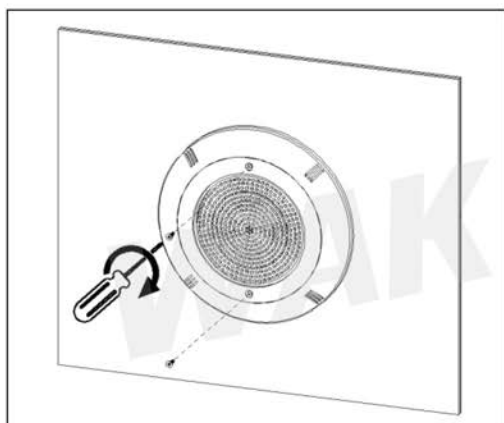


Figure 28

6. Install the Light Body:

Position the fixture, align the screw holes on the light body with the screw holes on the bracket, insert and tighten the 2 ① screws to complete the installation (pay attention to tighten the screws with moderate rotational force. Do not over-exert yourself, so as not to damage the fixture; after the installation is complete, check whether the fixture is firmly installed and shake the light body to confirm its stability).

9. Troubleshooting



Item No.	Potential Trouble	Trouble Analysis	Possible Solution
1	The light is dimming	Low voltage. The controller is not connected, or the controller is connected but not turned on.	Check the voltage output from transformer. If a controller is installed, check whether the underwater light is connected to the controller (If connected, check if it is turned on)
2	The light does not light up after power on	The power cord is not connected properly. The fuse is blown. The light is faulty.	Check the connection position of power cord. Check the fuse on the switchboard. Replace the light. Contact qualified electrician to test.
3	When the power is on, it lights up, and then it goes off after a few seconds	The transformer is faulty	Check the voltage output from transformer. Contact qualified electrician to test.

10. Maintenance



1. In order to use this product safely and efficiently, please check and clean the light regularly (recommended once every 3 months).
2. When maintaining the light, be sure to cut off the power supply to prevent electric shock.
3. During the inspection, ensure that all the connecting parts of the light body are firm to prevent accidents caused by aging, loosening, and falling off, etc.
4. Please do not use thinners, gasoline or other volatile and corrosive substances to wipe and clean the lights, otherwise it may cause the light to discolor or be damaged.

11. Conclusion



We hope the manual can provide you with detailed installation guidance. Thank you again for choosing our products. If you have any questions or need help, please feel free to contact us. We wish you a smooth installation and enjoy a comfortable and glorious lighting environment!