



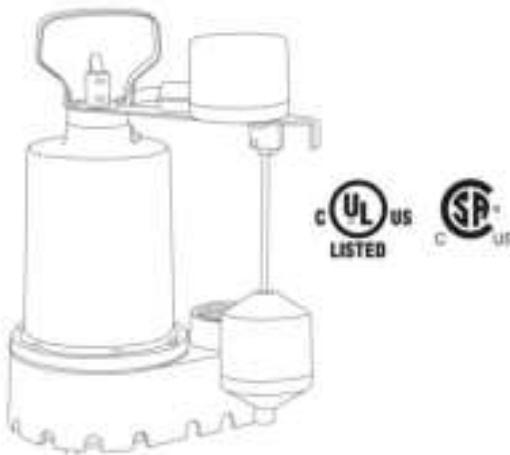
INSTALLATION & OPERATION MANUAL SUBMERSIBLE SUMP PUMPS

Models:

PF92331, PF92341

PF92352, PF92352-25

PF92501, PF92511



Safety Guidelines

Carefully read, understand and follow all safety instructions in this manual.

 This is the safety alert symbol. When you see this symbol, look for one of the following signal words:

DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

CAUTION Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

WARNING Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Safety Information

Read these warnings carefully. Know the capabilities and limitations of this pump. Failure to follow these warnings could result in serious bodily injury or财产 damage.

DANGER RISK OF ELECTRICAL SHOCK. DO NOT unplug and disconnect power supply before removing and cleaning or installing or servicing this pump.

DANGER RISK OF ELECTRICAL SHOCK. This pump is supplied with a grounding conductor and grounding type electrical plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding type receptacle. For added safety, it is highly recommended to connect this pump to a GFCI (Ground Fault Circuit Interrupter) outlet. Connect only to a receptacle that is adequately rated for the voltage and amperage of this pump.

WARNING The installation of this pump must be in accordance with the National Electrical Code (NEC), Uniform Plumbing Code (UPC), International Plumbing Code (IPC) as well as all applicable codes and ordinances.

CAUTION Do not install this pump in any location classified as hazardous by the National Electrical Code, ANSI/NFPA70.

CAUTION Do not use this pump to pump flammable or explosive fluids such as gasoline, kerosene, etc. Do not use this pump in flammable or explosive environments. Use only with liquids compatible with pump component materials.

WARNING RISK OF ELECTRICAL SHOCK. This pump has not been investigated for use in swimming pools or marine areas.

WARNING RISK OF ELECTRICAL SHOCK. DO NOT use the power cord to remove or cover the pump into the basin. The cord may pull apart exposing bare wires which could cause a fire or electrical shock. Use the handle supplied with the pump for handling and removing the pump from the basin.

WARNING Do not run the pump dry. This pump relies on water for cooling. Turning the pump dry can cause the pump to overheat and the possibility of burns to anyone that touches the pump. Turning the pump dry will void the warranty.

WARNING Don't expose pump to freezing temperatures. Steel base lines exposed to freezing temperatures should be set sloped with a downward slope to prevent freezing.

Safety Information (continued)

WARNING Do not use this pump for potable drinking water. Use only in applications for which the pump is designed for.

WARNING According to the state of California Prop 65, this product contains chemicals known to the state of California to cause cancer and/or defects or other reproductive harm.

WARNING DO NOT UNDER ANY CIRCUMSTANCES REMOVE THE GROUND PIN. The 3-prong plug must be inserted into a matching 3-prong grounded receptacle. If the installation does not have such a receptacle, it must be changed to the proper type, wired and grounded in accordance with the National Electrical Code and all applicable local codes and ordinances.

WARNING All wiring must be performed by a qualified electrician.

WARNING Keep hands clear of suction & discharge openings. To prevent injury, never insert fingers into pump while it is plugged in.

WARNING Suction hoses must be vented according to local plumbing codes.

CAUTION Do not handle this pump with wet hands or while standing on wet or damp surfaces or in water.

WARNING If a flexible discharge hose is used, make sure the pump is secured in the basin to prevent movement. Failure to secure the pump could result in flooding from pump malfunction.

CAUTION This pump motor is equipped with an automatic resetting thermal protector and may restart unexpectedly.

Description

This Sump pump is designed to remove ground water from residential sump pits. The motor is O-Ringed and thermally sealed. A float switch is provided for automatic operation and is equipped with a 10' 3 prong grounding type power cord.

Specifications

Model	A-82351	A-82341	A-82350	A-82350-05	A-82501	A-825-1
P	1/2	1/2	1/2	1/2	1/2	1/2
Volt	120V 60Hz 1Ph					
Amps	4.1 Amps	4.1 Amps	2.8	2.8	1.8	1.8
C	60Hz	60Hz	60Hz	60Hz	60Hz	60Hz
Phase	1	1	1	1	1	1
Impeller Size	1/2" x 1/2"					
Max. Suction Hose	100' Spherical					
Efficiency Capacity	120 GPM @ 120' 100' Spherical					
Head (ft.)	10'	10'	10'	10'	10'	10'
Sight Type	Plugged	View Port	View Port	View Port	Plugged	View Port
Sight Glass (Plastic or Glass)	PC	PC	PC	PC	PC	PC
Sight Glass (Plastic or Glass)	PC	PC	PC	PC	PC	PC
Flow Rating (Plastic or Glass)	120 GPM					
Flow Rate (Plastic or Glass)	120 GPM					
Impeller	Shredder Guard	Shredder Guard	Plugged by impeller	Plugged by impeller	Plugged by impeller	Plugged by impeller
Valve Site	Shredder Guard					
Site Seal	Carbureted Carbureted Shredder Guard					
Warranty	Shredder Guard					
Strainer	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Vol %	100	100	100	100	100	100

Installation

Removing old pump (if necessary)

1. Remove the old pump from the basin. If you need to cut the old discharge pipe to remove the pump, cut it as close to the eye as possible. The check valve is attached to the pump. Be prepared for water to leak from the eye. Allow water to drain into the sump basin.
2. Inspect the basin for accumulated mud, sand, silt or small stones. Clean out the basin if necessary.

Install new pump

1. Connect the discharge pipe to the pump's discharge. Do not use pipe joint compound on cast pipe or cast pump threads as this can degrade the plastic. Use Teflon® tape if necessary.
2. Install a full flow, swing type check valve (or separately) either directly in front of the pump discharge or on the discharge pipe. Make sure the check valve is positioned in the correct direction of flow.
3. Place the pump on a solid, level surface in the basin. Use blocks or blocks to raise the pump off the sump basin. Do not place the pump directly in mud, sand, silt or on rocky surfaces as these materials can clog or cause damage to the pump. Do not over tighten the pump into the basin by the power/coupling discharge pipe, use the all-thread handle.
4. Position the pump in the basin making sure that the float switch will operate freely without coming in contact with the sides of the basin.
5. Once the pump is positioned in the basin, mark and cut your existing discharge pipe to fit the location of the pump or continue installation of discharge pipe to the outside of the building.

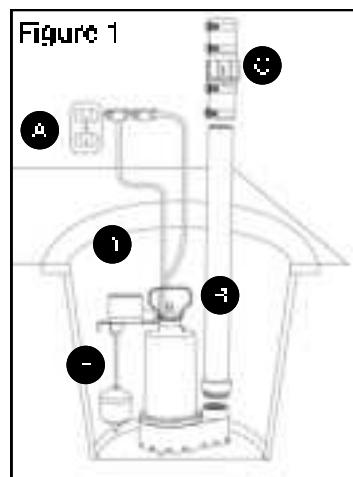


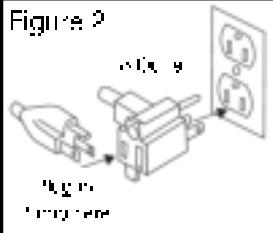
Figure 1

- A. Grounded Outlet. A GFCI outlet is strongly recommended.
- B. Discharge Pipe
- C. FullFlow swing type check valve
- D. Sump Basin
- E. Position pump so the float switch operates freely without touching the sides of the basin.

Operation

1. Plug the piggy-back plug of the float switch into a 120 volt grounded outlet. The use of a GFCI is strongly recommended. Plug the pump plug into the back of the float switch plug. See Figure 2.
2. Test your installation by filling the basin with water. Observe the float switch through at least one complete cycle to ensure it operates freely and does not contact the sides of the basin. If necessary, adjust the float switch or reposition the pump to ensure proper operation.
3. This pump is equipped with an anti-air lock hole. A stream of water will emit from this hole when the pump is operating. This is a normal feature of this pump. The anti-air lock hole should be cleared periodically to prevent the pump from seizing or locking.
4. Do not let the pump run dry. The pump depends on water for cooling and lubrication. Operating the pump without water may cause the motor to overheat or cause damage to internal parts. It may also shorten the life of your pump.
5. Your pump motor is thermally protected. It is not recommended for pumping liquids over 120° F (49° C). The thermal overload protector will automatically shut down the pump in an overheat situation. The pump will reset itself once the pump cools down. This overheat is designed as a safety device and it will fail after repeated use. Normal operation is for fluids between 32° F & +20° F (0° C - 29° C).

Figure 2



Maintenance

- DANGER** Risk of electric shock. Always disconnect the power supply before attempting to install, service or perform maintenance on the pump.
- WARNING** All repairs must be made by an authorized service center.
- CAUTION** This submersible pump contains oil which may become pressurized and hot under normal operating conditions - allow the pump to cool for 2-3 hours before servicing.

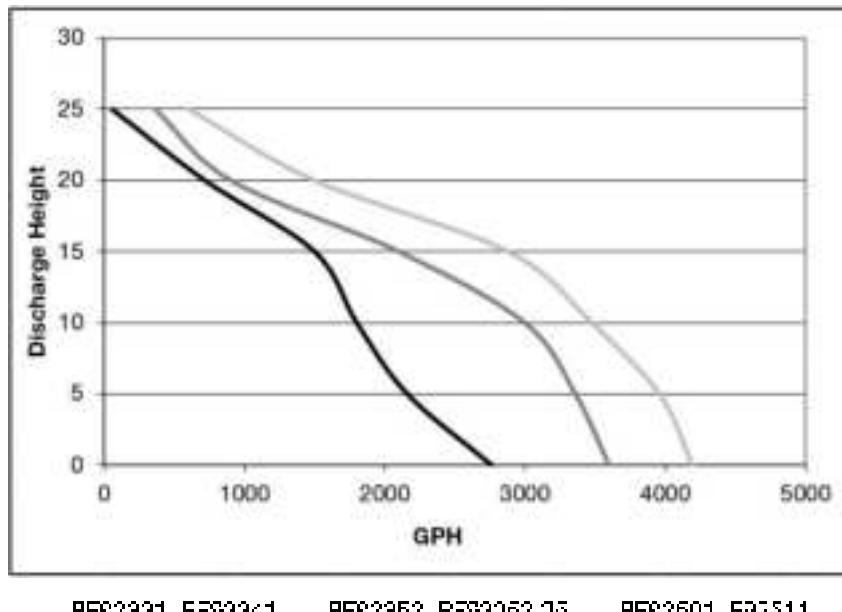
1. The pump motor is permanently sealed in the housing and does not require any service. Disassembly of the motor housing or modification of the sewer vent voids the warranty.
2. Periodically check the sump basin for accumulation of mud, silt, sand and foreign objects. Clean the basin as needed to prevent damage or clogging of the pump.
3. Periodically check the removable intake screen for obstructions. Clean if necessary.
4. Periodically inspect and clean the anti-air lock hole.
5. Inspect the float switch for any accumulated debris that may inhibit it from operating properly. Clean if necessary.
6. Inspect the impeller for signs of wear and obstructions.
7. Inspect the power cord for signs of damage or wear. Do not operate the pump if the cord is damaged or worn.
8. In situations where the pump may not activate for extended periods of time, it is recommended to cycle the pump at least once per month to ensure the pumping system is working properly when needed.

Troubleshooting

Problem	Possible Causes	How to Correct
The pump does not start or runs	Pump is not coupled in, switch or breaker is turned off	Plug pump in at L.M or reset breaker
	Check for blown fuses or tripped circuit breakers or tripped GFCI outlets	Replace fuse, reset breaker, reset GFCI outlet
	Float switch is defective	Check and replace if necessary
	Motor thermal protector tripped	Allow pump to cool. Pump will reset automatically
	Float switch is stuck or obstructed	Remove obstruction or position pump so the float switch will operate freely
The pump starts and stops too often	Backflow of water from discharge hose/pipe	Install or replace check valve
	Float switch is defective	Replace float switch
The pump runs but moves little or no water	Clogged or堵塞的 discharge hose/pipe	Remove clog
	Frozen discharge hose/pipe	Allow hose/pipe to thaw
	Pump is air locked	Check airlock hole for obstructions and clean if necessary
	Low line voltage	Check wire size and increase if necessary
	Check valve is stuck in the closed position	Assemble, repair or replace if necessary
	Check valve is installed backwards	Make sure check valve is installed in the correct direction of flow
	Clogged intake screen	Clean or replace screen
	Worn, damaged or clogged pump seals	Assemble, fix, clean, damage or clog and clean or replace part if necessary
Pump does not shut off	Float switch is obstructed or stuck	Remove obstruction
	Defective float switch	Replace float switch

Performances

size, and/or piping restriction will reduce the pump's output performance. It is recommended to use the same size or larger pipe as the pump discharge for optimum performance.

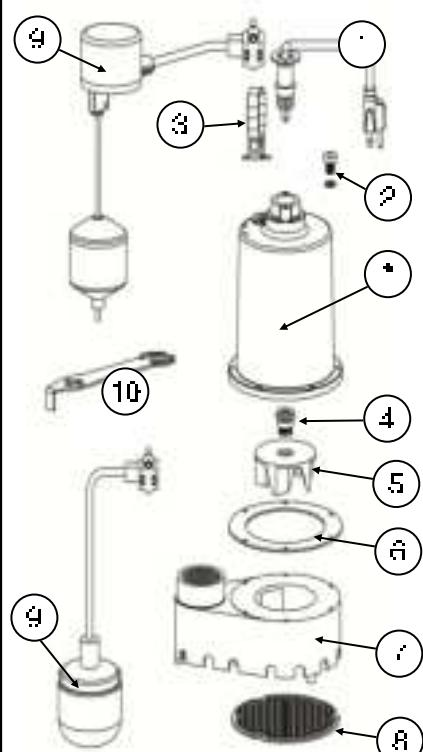


—PF92931, PF92941 —PF92952, PF92952-25 —PF92501, PF92511

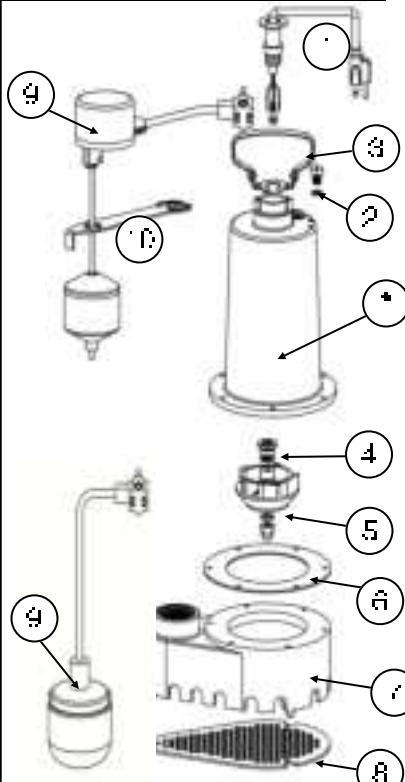
Model	Discharge Height	0'	5'	10'	15'	20'	25'
PF92501 PF92511	Gallons Per Minute	46	36	30	25	12	1
PF92552 PF92552-25	Gallons Per Minute	60	56	50	36	16	6
PF92501 PF92511	Gallons Per Minute	70	66	58	48	26	10

Replacement Parts - To order replacement parts call 800-6-PROFLO

#-82351 & #-82341



#-82350, #82352-05, #82354 & #82355



	Receptacle	#-82351 #-82341	#-82350	#-82350- 05	#-82351 #-82341
1	15 Ft. Power Cord	93-05	93-05	-	93-05
1	25 Ft. Power Cord	-	-	93-05	-
2	Oil Filling Plug with O-ring	93058	93058	93058	93058
3	Handle	93057	93057	93057	93057
4	Shut Off	93057	93057	93057	93057
5	Impeller	93098	93098	93098	93098
6	Cassette	93055	93054	93054	93054
7	Base/Volute	93075	93071	93071	93071
8	Wave Screen	93073	93074	93074	93074
9	Hose Switch (800-6 Vertical) Hose Switch held in station, Hose rod, Hose ball and grommet	93015	93015	93015	93015
		93015			93015
10	Vertical Hose Switch Bracket	Va	93-05	93-05	Va
		93-05			93-05

Noles

LIMITED WARRANTY - SUMP PUMPS

Significantly, however, if the company has agreed to buy the goods or services in the event of bankruptcy or insolvency, it may be entitled to purchase during the time agreed and subject to the terms and conditions, the main contractor will generally be subject to the original price of purchasing any supplies to the supplier, which perhaps is beneficial, or may be misleading or misleading. At all times the supplier, including the general contractor, will be entitled to deduct the amount of defective equipment, services or equipment. The main contractor has the option to cancel any supplies, by notice given, entirely to the company, that the works are not being carried out satisfactorily, after which the company will be liable for the main contractor's legal obligations and payment of supplies, namely for debts to suppliers, without deducting a sum due to the supplier for supplies supplied.

WARRANTY PERIOD - PAGE 2

In either event, if a product fails by the guarantee period or is otherwise defective from the date of delivery or handing over, the product shall be repaired or replaced at the manufacturer's option, subject to the terms and conditions set out below during the guarantee period. If repair or replacement is required, or reasonably practicable, in the absence of a service point in the purchase locality, the supplier agrees to pay warranty & handling fees for products despatched from the nearest service point.

LAODICEA, ETC. COSTS

The employer may deduct the cost of VDTs as an expense or credit on the cost of held labor or other charges by itself or by its agents in performing work, allowing a principal agent or supervisor to do so.

РАЗВИТИЕ ИННОВАЦИЙ

The manager reserves the right to change or impose its charges at any point, except where it is obliged to provide a full charge or remuneration for costs and other expenses prior to such change or increase.

GENERAL TERMS AND CONDITIONS

The element of shading may be removed by the use of DCC, which uses a mask and layer, several implementations exist and the user is urged to experiment with such features, ignoring or overriding beyond the point of the main condition, the shading will apply in certain situations, for example, if the angle of the surface, and hence shade, is less than a pre-set value, shaded components, for example, a cylinder, need to be unshaded, using the *Shade* command, and then, the user can proceed to remove all shading from all components by the use of the *Shade All* command. There is also the *Weld* command, the following section details its use.

- 1. Fossil fuel energy imposes other than energy on the environment (greenhouse effect, acid rain)
 - 2. Fossil fuel is used in dependence with apparently finite resources, therefore, one good time after use
 - 3. Fossil energy is very large, but has already been used up almost entirely
 - 4. Energy used in fossil fuel is limited to the following: coal, gas oil, natural gas, propane, etc., or gasoline, which is the reason of price fluctuations.
 - 5. Energy has been used in many ways above type
 - 6. Fossil energy is expected to last for about 100 years

DISCLAIMER

Any user is eligible to submit the product made by the seller. They must register their user account, or sign off from the system as a guest. The user can submit the product to the user and general pool of the product library. System will then evaluate any damage or defect by user and reject the product if it is not fit for repair by the user, and reject the product if it is beyond repair. RUDIMENTARY (0.1-1.0) 1000 KRW (0.1-1.0) 1000 KRW
0.1-1.0 1.0-1.5 1.5-2.0 2.0-2.5 2.5-3.0 3.0-3.5 3.5-4.0 4.0-4.5 4.5-5.0 5.0-5.5 5.5-6.0 6.0-6.5 6.5-7.0 7.0-7.5 7.5-8.0 8.0-8.5 8.5-9.0 9.0-9.5 9.5-10.0 10.0-10.5 10.5-11.0 11.0-11.5 11.5-12.0 12.0-12.5 12.5-13.0 13.0-13.5 13.5-14.0 14.0-14.5 14.5-15.0 15.0-15.5 15.5-16.0 16.0-16.5 16.5-17.0 17.0-17.5 17.5-18.0 18.0-18.5 18.5-19.0 19.0-19.5 19.5-20.0 20.0-20.5 20.5-21.0 21.0-21.5 21.5-22.0 22.0-22.5 22.5-23.0 23.0-23.5 23.5-24.0 24.0-24.5 24.5-25.0 25.0-25.5 25.5-26.0 26.0-26.5 26.5-27.0 27.0-27.5 27.5-28.0 28.0-28.5 28.5-29.0 29.0-29.5 29.5-30.0 30.0-30.5 30.5-31.0 31.0-31.5 31.5-32.0 32.0-32.5 32.5-33.0 33.0-33.5 33.5-34.0 34.0-34.5 34.5-35.0 35.0-35.5 35.5-36.0 36.0-36.5 36.5-37.0 37.0-37.5 37.5-38.0 38.0-38.5 38.5-39.0 39.0-39.5 39.5-40.0 40.0-40.5 40.5-41.0 41.0-41.5 41.5-42.0 42.0-42.5 42.5-43.0 43.0-43.5 43.5-44.0 44.0-44.5 44.5-45.0 45.0-45.5 45.5-46.0 46.0-46.5 46.5-47.0 47.0-47.5 47.5-48.0 48.0-48.5 48.5-49.0 49.0-49.5 49.5-50.0 50.0-50.5 50.5-51.0 51.0-51.5 51.5-52.0 52.0-52.5 52.5-53.0 53.0-53.5 53.5-54.0 54.0-54.5 54.5-55.0 55.0-55.5 55.5-56.0 56.0-56.5 56.5-57.0 57.0-57.5 57.5-58.0 58.0-58.5 58.5-59.0 59.0-59.5 59.5-60.0 60.0-60.5 60.5-61.0 61.0-61.5 61.5-62.0 62.0-62.5 62.5-63.0 63.0-63.5 63.5-64.0 64.0-64.5 64.5-65.0 65.0-65.5 65.5-66.0 66.0-66.5 66.5-67.0 67.0-67.5 67.5-68.0 68.0-68.5 68.5-69.0 69.0-69.5 69.5-70.0 70.0-70.5 70.5-71.0 71.0-71.5 71.5-72.0 72.0-72.5 72.5-73.0 73.0-73.5 73.5-74.0 74.0-74.5 74.5-75.0 75.0-75.5 75.5-76.0 76.0-76.5 76.5-77.0 77.0-77.5 77.5-78.0 78.0-78.5 78.5-79.0 79.0-79.5 79.5-80.0 80.0-80.5 80.5-81.0 81.0-81.5 81.5-82.0 82.0-82.5 82.5-83.0 83.0-83.5 83.5-84.0 84.0-84.5 84.5-85.0 85.0-85.5 85.5-86.0 86.0-86.5 86.5-87.0 87.0-87.5 87.5-88.0 88.0-88.5 88.5-89.0 89.0-89.5 89.5-90.0 90.0-90.5 90.5-91.0 91.0-91.5 91.5-92.0 92.0-92.5 92.5-93.0 93.0-93.5 93.5-94.0 94.0-94.5 94.5-95.0 95.0-95.5 95.5-96.0 96.0-96.5 96.5-97.0 97.0-97.5 97.5-98.0 98.0-98.5 98.5-99.0 99.0-99.5 99.5-100.0

THE WARRANTY AND REMEDY DESCRIBED IN THIS LIMITED WARRANTY IS AN EXCLUSIVE WARRANTY AND REMEDY AND IS IN LIEU OF ANY OTHER WARRANTY OR REMEDY, EXPRESSED OR IMPLIED, WHICH OTHER WARRANTIES AND REMEDIES ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; TO THE EXTENT EITHER APPLIES TO A PRODUCT SHALL BE LIMITED IN DURATION TO THE PERIOD OF THE EXPRESSED WARRANTY PROVIDED ABOVE.

Some states and countries do not allow the exchange or transfer of or how long an insured warranty holds or the exchange or transfer of nearly all or all consequential damages so the above explanation of damages may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



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