

LIMITED WARRANTY AND LIMITATION OF LIABILITY

This pump is warranted free from material and/or manufacturing defects for three years from date of purchase (five years on select cast iron pumps). As the sole and exclusive remedy for a breach of this limited warranty, if the product is found to be defective, it will be replaced with an equivalent product if it is returned to the place of purchase with proof of purchase. Any disassembly, modification, or abuse of this product voids this limited warranty. This product is not designed for pumping flammable or corrosive fluids, and use of this product to pump such materials also voids this limited warranty.

ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED

IMPORTANT NOTICE: Some commercial and residential insurance policies extend coverage for damages incurred by product failure. In most cases, you will need to have possession of the product to support your claim. In the case where you need to retain possession of the product to support a damage claim you submit to your insurance company, the pump will be exchanged with and equivalent or the original price will be refunded once the claim is settled with the insurer.


PF92352



OWNER'S MANUAL

INSTALLATION AND OPERATION INSTRUCTIONS FOR:

SUBMERSIBLE SUMP PUMPS

Models:

**PF92250, PF92251, PF92260
PF92330, PF92330PB, PF92331, PF92341
PF92342, PF92351, PF92352,
PF92501, PF92511**



Carefully read and understand all of the Warnings and installation instructions in this manual. Failure to follow these instructions could lead to serious bodily injury and/or property damage. Retain these instructions for future reference.

This pump has been manufactured with your needs in mind. Properly installed in the right application, your new PROFLO Pump will give you years of carefree performance.

DANGER ⚠ Water and electricity can be dangerous if certain precautions are not adhered to. This pump is designed to operate perfectly safe in a water environment; however, improper use and installation can result in personal harm from electrical shock. Please pay attention to the following warnings.

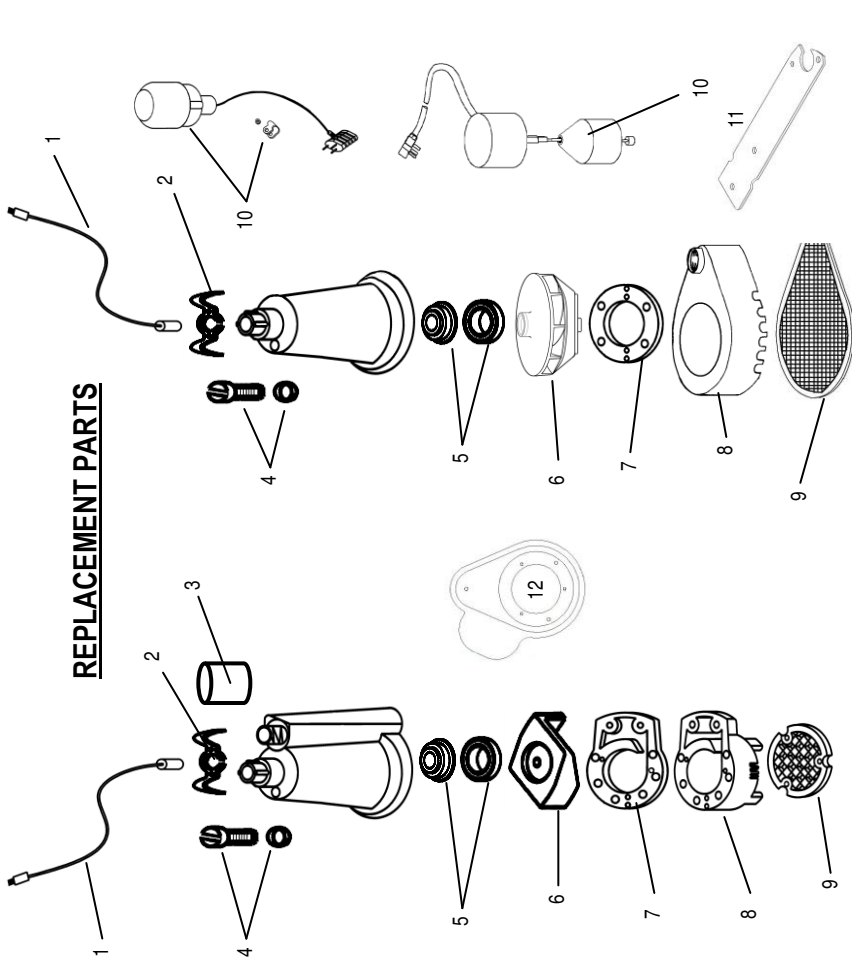
WARNING ⚠ Never touch any electrical device, including this pump, when it is touching water, in water, or even in a moist environment. Always unplug (disconnect the electricity) when working on or installing the unit.

WARNING ⚠ **RISK OF ELECTRICAL SHOCK.** This pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electrical shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.

WARNING ⚠ Do not use the power cord or discharge hose to carry or handle the pump. Doing so may cause damage to the power cord or discharge hose. Use the carrying handle supplied with the pump.

WARNING ⚠ Always use a grounded outlet. A three-prong mating type receptacle is needed for safe use. This should be in accordance with the National Electric Code and any additional codes or laws required by your local government.

NOTICE ⚠ It is strongly recommended to use a ground fault interrupt device on any electrical appliance, including this pump, when used in a wet or moist environment. This is required by many local codes and enforcement agencies



REPLACEMENT PARTS

Ref #	Description	PARTS FOR MODEL									
		PF92250 PF92260	PF92251	PF92330 PF9330PB PF92342	PF92331 PF92341	PF92351 PF92501	PF92352 PF92511	PF92352 PF92511	PF92352 PF92511	PF92352 PF92511	PF92352 PF92511
1	Power Cord	PF99008		PF99008							
2	Handle	PF99050	PF99051	PF99050	PF99051	PF99051	PF99051	PF99051	PF99051	PF99051	PF99051
3	Hose Coupling	PF99007	N/A	PF99007	N/A						
4	Oil Fill Plug with O-ring	PF99056	PF99056	PF99056	PF99056	PF99056	PF99056	PF99056	PF99056	PF99056	PF99056
5	Shaft Seal	PF99057	PF99057	PF99057	PF99057	PF99057	PF99057	PF99057	PF99057	PF99057	PF99057
6	Impeller	PF99060	PF99087	PF99065	PF99096	PF99070	PF99070	PF99070	PF99070	PF99070	PF99070
7	Gasket	PF99062	PF99088	PF99062	PF99088	PF99064	PF99064	PF99064	PF99064	PF99064	PF99064
8	Volute/Base	PF99067	PF99078	PF99069	PF99078	PF99071	PF99071	PF99071	PF99071	PF99071	PF99071
9	Intake Screen	PF99073	PF99076	PF99073	PF99076	PF99074	PF99074	PF99074	PF99074	PF99074	PF99074
10	Float Switch	PF92000	PF92000	PF92000	PF92000	PF92000	PF92000	PF92000	PF92000	PF92000	PF92000
		PF92010	PF92010	PF92010	PF92010	PF92010	PF92010	PF92010	PF92010	PF92010	PF92010
11	Vertical float Switch Bracket	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		PF99105	PF99105	PF99105	PF99105	PF99105	PF99105	PF99105	PF99105	PF99105	PF99105
12	Pump Base	N/A	N/A	PF99501*	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* Replacement power cords not available for cast iron pumps ** If motor fails, replace entire pump *PF92330PB

NOTICE ⚠ Height and/or piping restriction will reduce the pump output performance. See the performance chart below to insure you have the proper pump for your application. Whenever possible use the same size or larger pipe as the pump discharge for optimum performance. Reducing the pipe size will not harm your pump; it will just reduce the output.

PERFORMANCE CHART

Model #	Output in gallons per minute at listed discharge height above pumping level					
	0'	5'	10'	15'	20'	25'
PF92250, PF92251, PF92260	30	22	20	16	9	2
PF92330, PF92300PB, PF92342	40	34	28	22	12	2
PF92331, PF92341	46	36	30	25	12	1
PF92351, PF92352	60	56	50	35	15	6
PF92501, PF92511	70	66	58	48	25	10

SPECIFICATIONS

Model #	PF92250 PF92260	PF92251	PF92330 PF92330PB PF92342		PF92331 PF92341	PF92351 PF92352	PF92501 PF92511
			1/4	3/8	1/4	3/8	
HP	1/4	1/4	1/3	1/3	.3	1/3	1/2
Amps	3.8	3.8	4.1	4.1	4.1	7.6	7.6
Solids Handling	1/8"	3/8"	1/8"	3/8"	1/2"	1/2"	1/2"
Warranty (Years)	3	5	3	5	5	5	5
Discharge Size	1 1/4" & 1 1/2"	1 1/2"	1 1/4" & 1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"

Power supply requirements 120V, 60 Hz (15 amp)
 Motor..... Continuous Duty***, Capacitor Start, Thermally Protected
 Liquid Temperature Range 32° F - 120° F (0° C - 49° C)

***For continuous duty, the pump must be submerged to prevent overheating.

DANGER ⚠ Do not use this pump to pump chemicals, flammable liquids, sewage or corrosive liquids. You could injure yourself and the pump will fail. Pumping these types of liquids voids the warranty. Make sure you purchase a pump designed for your specific needs. This pump will handle fluids with the same characteristics as water

WARNING ⚠ Your pump has thermal over-load protection built in. It is not recommended for pumping liquids over 120° F. The thermal overload protector will automatically shut down the pump in an overheated situation. It will then reset itself once the pump cools down. This overload is designed as a safety device and it will fail after repeated use. Normal operation is for fluids between 32° F & 120° F.
DO NOT RUN THE PUMP 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 parts of the pump. It may also shorten the life of your pump.

NOTICE ⚠ **EXTENSION CORDS**
 For best performance, it is recommended to connect the power cord directly to the grounded GFCI outlet. If the use of an extension cord is necessary, always use a grounded waterproof type cord. Never use longer than a 25-ft. cord that is lighter than 14/3 gauge.

DANGER ⚠ Keep all electrical connections away from wet and moist environments. Wet connections can cause electrical shock resulting in personal injury.

USE AND INSTALLATION

WARNING ⚠ **ALWAYS DISCONNECT THE POWER SOURCE BEFORE ATTEMPTING TO INSTALL, SERVICE OR PERFORM MAINTENANCE ON THE PUMP. FAILURE TO DO SO MAY RESULT IN FATAL ELECTRICAL SHOCK.**

Your PROFLO Pump is designed and built to give you reliable performance and long life. It will pump water automatically for years when properly installed in the right environment.

REMOVING OLD PUMP. (if necessary)

1. Make sure power supply is disconnected.
2. After the power is off, remove the old pump. There are many different possible types of installations.
3. It is best to remove all old piping and start over with new piping. Be sure to clean all debris and dirt out of the sump basin before installing your new pump.

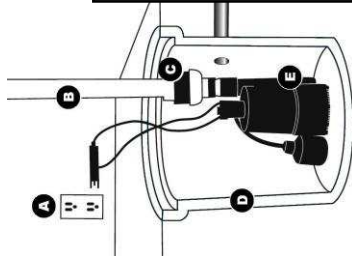
Be sure to have a grounded 120V AC outlet mounted within 6 ft. of your sump basin. Again, it is highly recommended that a GFCI (ground fault circuit interrupter) outlet be installed in the receptacle box.

NOTICE ⚠ A qualified electrician must perform all wiring.

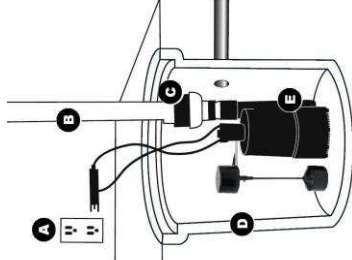
INSTALLATION (New Pump)

1. Set your new pump in the bottom of the sump basin off to one side. The pump should be placed on a solid foundation. Do not place the pump directly on the ground or sandy or rocky surfaces. Sand and small stones may clog or cause damage to your pump.
2. Make sure the float switch will swing freely from the bottom to top without coming in contact with the side of the sump basin. Contact with the side of the sump basin may cause the switch to malfunction. See figure below.

Wide Angle Switch Installations



Vertical Switch Installations



- A. Grounded Outlet. A GFCI outlet is strongly recommended.
B. Full-flow swing type check valve
C. Discharge Pipe
D. Sump basin. Min. 14" diameter
E. Position pump so the float switch operates freely without touching the sides of the basin.

3. It is highly recommended to install a full flow, swing type check valve (not included) as close to the discharge outlet on the pump as possible. A new check valve will greatly increase the life of your pump. The check valve should be the same size as the pump discharge.
4. Connect the pump and check valve together using schedule 40 PVC pipe and fittings. You can also use DWV or ABS pipe, as this is not a pressure installation. Corrugated drain hose is intended for temporary use and should not be used in a permanent installation.

5. Test your installation after you have completed setting up the pump. Plug the cord from the pump into the piggyback plug of the float switch, then plug that into your grounded outlet. The pump should not run at this point. If the pump runs, the switch is stuck in the upright position or the pump is plugged directly into the outlet and not through the piggyback switch plug. Fill the sump basin with water using buckets or a hose. When the switch floats to the upright position, the pump will turn on. The switch will turn off the pump when it reaches the down position. You may adjust the switch to meet your particular needs. Remember the switch must swing freely without touching the sides of the sump basin. NOTE: The cut out (turn off) setting is the only adjustment available on vertical type switches.

TROUBLESHOOTING		
PROBLEM	POSSIBLE CAUSES	HOW TO CORRECT
If the pump does not start or run	▪ Pump is not plugged in, switch or breaker is off	▪ Plug pump in or turn on switch/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
	▪ Float switch is stuck or obstructed	▪ Remove obstruction or position pump so it will not become stuck
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
	▪ Clogged intake screen	▪ Clean or replace screen
If the pump runs but moves little or no water	▪ Clogged discharge hose/pipe	▪ Remove clog
	▪ Frozen discharge hose/pipe	▪ Allow hose/pipe to thaw
	▪ Pump is air locked	▪ Clean out airlock hole with a paper clip or pipe cleaner
	▪ Low line voltage	▪ Check wire size and increase if necessary
	▪ Check valve is stuck in the closed position	▪ Inspect, repair or replace if necessary
	▪ Check valve is installed backwards	▪ Make sure valve is installed in the correct direction of flow
	▪ Worn, damaged or clogged pump parts	▪ Inspect for wear, damage or clog and clean or replace if necessary
	▪ Discharge head exceeds pump capacity	▪ If pumping height is over 25', the pump will not move water. See performance chart
	▪ Float switch is obstructed or stuck	▪ Remove obstruction
	▪ Defective Float Switch	▪ Replace switch

Installation and operating Instructions

⚠ DANGER

Risk of electrical shock. Can burn or kill. To reduce risk of electrical shock, disconnect power supply before replacing switch. Make sure switch is connected only to a properly grounded grounding type receptacle.

⚠ WARNING

Short circuit electrical hazard. An incorrect connection may cause electric shock, or burn out the pump motor, resulting in property damage or personal injury. Make sure all connections are correct before plugging the switch into the outlet.

⚠ WARNING

The outlet voltage and pump voltage must match. Ensure voltage is correct before installing switch. The electrical outlet must be installed outside the pump basin.

⚠ CAUTION

Risk of flooding. It is recommended to operate the pump through two or three complete cycles to ensure proper liquid level control.

1. Determine desired activation level and pumping range as shown in Figure 1. Pumping range can be adjusted by moving the float stop up or down the rod Figure 4.

2. Insert hose clamp through slots in mounting bracket as shown in Figure 2.

3. Position hose clamp around discharge pipe with bracket gripping tabs against pipe. Cable should remain outside of hose clamp.

4. Tighten the hose clamp securely.

5. Secure pump cable and switch cable to discharge pipe as shown in Figure 1*.

6. Plug the piggyback plug into a grounded outlet, then plug the pump into the piggyback plug. Refer to Figure 3.

7. Check for proper operation by filling the pump basin with water. Make sure the pump operates at the desired levels. Make any necessary adjustments at this time.

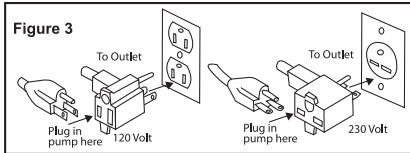


Figure 3

	Off	On
Model #	Level	Level
PF92260	2"	5"
PF92342	2"	6"
PF92341	2"	6"
PF92352	2"	9"
PF92511	2"	9"
PF93511	3"	10"

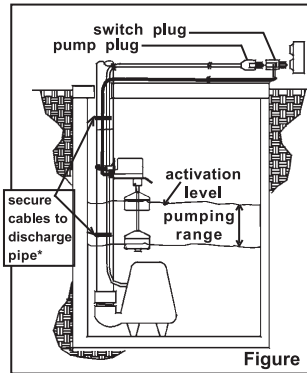


Figure 1

*Cable ties sold separately

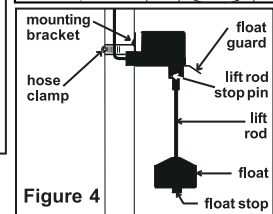
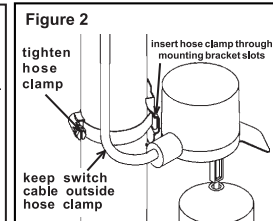


Figure 4

Instructions d'installation et d'exploitation

⚠ DANGER

Risque de choc électrique. Peut brûler ou causer la mort. Afin de réduire le risque de choc électrique, débranchez la source d'alimentation avant de remplacer l'interrupteur. Assurez-vous que l'interrupteur est branché seulement à un coffret de mise à la terre qui soit correctement mis à la terre.

⚠ AVERTISSEMENT

Danger de court circuit électrique. Une mauvaise connexion peut causer des chocs électriques ou épuiser le moteur de la pompe, ce qui pourrait causer des dommages matériels ou des blessures corporelles. Assurez-vous que toutes les connexions soient correctes avant de brancher l'interrupteur dans la prise de courant.

⚠ AVERTISSEMENT

La tension de la prise de courant et celle de la pompe doivent correspondre. Assurez-vous que la tension soit adéquate avant d'installer l'interrupteur. La prise de courant électrique doit être installée à l'extérieur du bassin de la pompe.

⚠ ATTENTION

Risque d'inondation. Il est recommandé de faire fonctionner la pompe de deux à trois cycles complets afin de s'assurer que le contrôle du niveau d'eau est adéquat.

1. Déterminer le niveau d'activation désirée et de pompage comme le montre la figure 1. Gamme de pompage peut être ajustée en déplaçant le flotteur d'arrêt haut ou le bas de la figure 4.

2. Insérez collier de serrage à travers les fentes de support de fixation comme le montre la Figure 2.

3. Collier de serrage autour du tuyau de décharge de position avec les pattes de fixation du serrage contre tuyau. Câble devraient rester en dehors du collier de serrage.

4. Serrer le collier de serrage en toute sécurité.

5. Fixez le câble et la pompe switch à tuyau d'évacuation comme le montre la Figure 1*.

6. Branchez la fiche électrique supplémentaire dans une prise mise à la terre, branchez ensuite la fiche électrique de la pompe dans la fiche électrique supplémentaire. Voir Figure 3.

7. Remplissez d'eau le bassin de la pompe afin de vérifier que l'installation soit correcte. Assurez-vous que la pompe fonctionne aux niveaux désirés. Apportez les changements nécessaires à ce moment-ci.

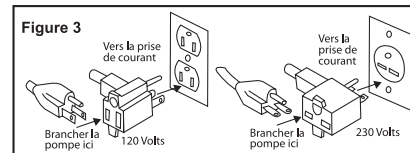


Figure 3

	Hors	Le
Modèle #	Niveau	Niveau
PF92260	2"	5"
PF92342	2"	6"
PF92341	2"	6"
PF92352	2"	9"
PF92511	2"	9"
PF93511	3"	10"

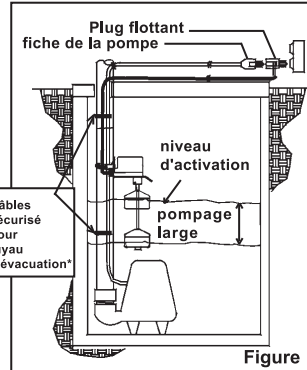


Figure 1

*Attaches de câble vendu séparément

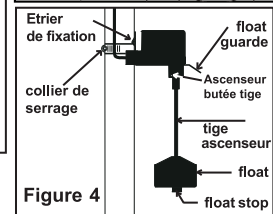
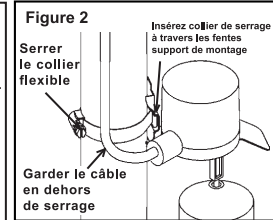


Figure 4

Instrucciones de instalación y funcionamiento

⚠ PELIGRO

Riesgo de descarga eléctrica. Puede quemar o matar. Para reducir riesgo de descarga eléctrica, desconecte la alimentación eléctrica antes de reemplazar el interruptor. Asegúrese de que el interruptor únicamente esté conectado a un receptáculo apropiado con puesta a tierra.

⚠ ADVERTENCIA

Peligro de corto circuito eléctrico. Una conexión incorrecta puede causar una descarga eléctrica o quemar el motor de la bomba, provocando daños materiales o lesiones. Siempre asegúrese de que las conexiones estén correctas antes de conectar el interruptor a la toma eléctrica.

⚠ ADVERTENCIA

El voltaje de la toma eléctrica y el voltaje de la bomba deben coincidir. Compruebe que el voltaje sea el correcto antes de instalar el interruptor. La toma eléctrica debe instalarse fuera de la cuenca de la bomba.

⚠ PRECAUCIÓN

Riesgo de inundación. Se recomienda operar la bomba dos o tres ciclos completos para asegurar el control apropiado del nivel de líquido.

1. Determinar el nivel deseado de activación y de bombeo de rango, como se muestra en la Figura 1. Rango de bombeo se puede ajustar moviendo el flotador para arriba o hacia abajo la barra de la Figura 4.

2. Inserte la abrazadera en las ranuras de soporte de montaje como se muestra en la Figura 2.

3. Posición de la abrazadera alrededor del tubo de descarga con lengüetas del soporte de sujeción contra la tubería. Cable debe quedar fuera de la abrazadera de la manguera.

4. Apriete la abrazadera de la manguera.

5. Asegure la bomba cable por cable y cambiar a la tubería de descarga como se muestra en la Figura 1*.

6. Conecte la clavija de conexión superpuesta a una toma puesta a tierra, y luego conecte la bomba a la clavija de conexión superpuesta. Vea la Figura 3.

7. Llene la cuenca de la bomba con agua para revisar que la orientación sea correcta. Compruebe que la.

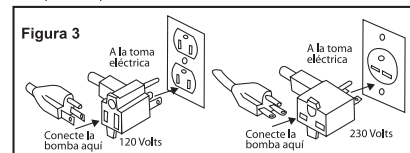


Figure 3

	Fuera de	En el
Modelo #	Nivel	Nivel
PF92260	2"	5"
PF92342	2"	6"
PF92341	2"	6"
PF92352	2"	9"
PF92511	2"	9"
PF93511	3"	10"

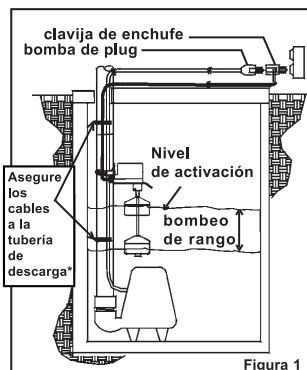


Figure 1

*Bridas para cables se venden por separado

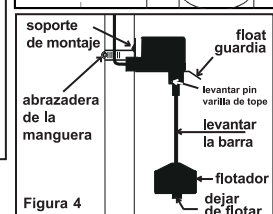
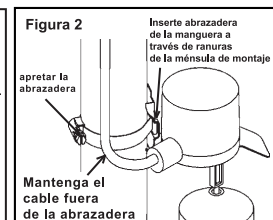


Figure 4