

# 6 Awws Grey FlowPRO

**Domestic - Underground Two Stage Series** 

# OIM Manual

Operation - Installation - Maintenance



**Greyflow PRO Builder's Kit (GFPRO-A)** 

# **Grey Water Reuse System**



<b>Greyflow PRO Finishing Kit Manual F</b>	iltration
100W Pump (GFPRO-B-M1) 300W Pump (GFPRO-B-M3)	400W Pump (GFPRO-B-M4)

**Greyflow PRO Finishing Kit Automatic Filtration** 

100W Pump (GFPRO-B-M1)	300W Pump (GFPRO-B-S3)	400W Pump (GFPRO-B-S4)
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## Selection & Operation

Congratulations, You've taken an important step towards environmentally friendly living with your purchase of the Grey Flow PRO two stage greywater diversion and reuse system.

The Grey Flow PRO two stage was developed for below ground partially or fully buried installations and can be retrofitted into almost any house.

**Please note**: Water from the kitchen is not considered to be grey water, and is NOT suitable to use with the Grey Flow PRO System

Manual diversion of the greywater to sewer is achieved by capping off the filter outlets into the tank.

The GreyFlow PRO comes in two different configurations and three pump size options:

## Configurations:

- 1. Manual Clean Filters
- 2. Automatic Self-Cleaning Filters

#### **Pump Size Options:**

- 1. 100W Pump (Max Head 6.5m; Max Flow 70LPM)
- 2. 300W Pump (Max Head 8m; Max Flow 180LPM)
- 3. 400W Pump (Max Head 21m; Max Flow 180LPM)

For subsurface irrigation of lawn areas, with the new Greyflow XR dripline, only the 400W pump is suitable

## Requirements

- The water discharge should be kept below mulch or soil (check for local state, municipal & council laws and regulations)
- 220 Volts power supply should be available
- Any PVC plumbing connections should be performed by a license plumber
- The Grey Flow PRO must be turned off during wet conditions and any sign of accumulation or run-off
- All minimum irrigation areas and set back distances must be in accordance to local regulations
- Table 1.0 provides an estimated average volume of greywater that is generated in various parts of the house. Refer to your greywater state guidelines to evaluate your minimum requirements.

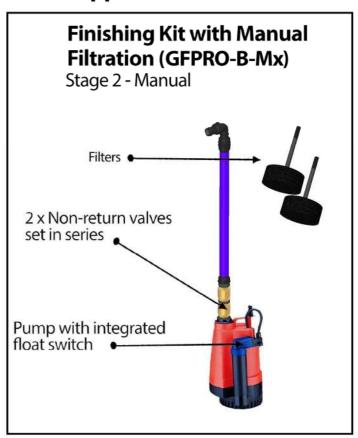
#### Table 1.0

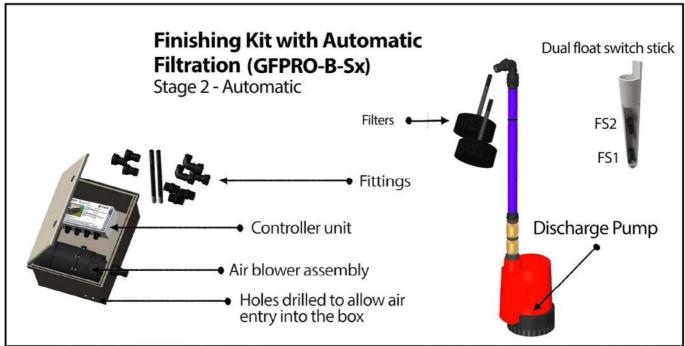
Number of Bedrooms In the House	Assumed Number of People	Quantity of Grey Water Generated in L/day		Soil Types	Minimum Garden Area In Square m		Recommended Maximum area In Square m	
		Laundry Only	Whole of House		Laundry	House	Laundry	House
	-			Sandy	12	30	24	60
2	3	120	300	Loamy	18	45	36	90
				Clay	24	60	48	120
				Sandy	16	40	32	80
3	4	160	400	Loamy	24	60	48	120
_				Clay	32	80	64	160
				Sandy	20	50	40	100
4	5	200	500	Loamy	30	75	60	150
				Clay	40	100	80	200
				Sandy	24	60	48	120
5	6	240	600	Loamy	36	90	72	180
				Clay	48	120	96	240
				Sandy	28	70	56	140
6	7	280	700	Loamy	42	105	84	210
				Clay	56	140	112	280
				Sandy	32	80	64	180
7	8	320	800	Loamy	48	120	96	240
				Clay	64	160	128	320

## Parts List

## The Grey Flow PRO 2 Stage series is supplied with:

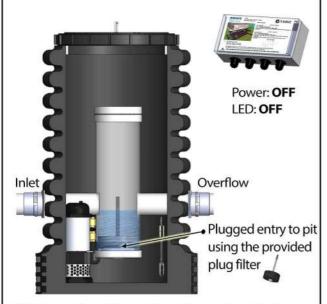






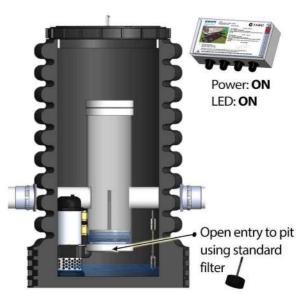
## Operating Modes - Self cleaning filter option

#### Shut off mode



Water enters the system from the inlet pipe, and exits via the overflow pipe

## Standby mode



Water level in the main pit is below the FS1 float switch level

#### **Operating mode**



Power: **ON** LED: **BLINKING** 

#### Second Float

Water reaches the second float level, pump starts and the water is directly pumped into the irrigation system.

#### First Float

Water enters the pit and reaches the first float switch level, the pump is still on standby mode.

#### Filter Backflush mode



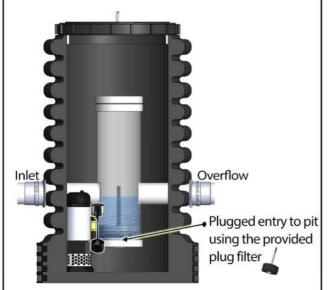


Every 10 pump-out cycle: The water pump turns off, The incoming water oveflows to sewer, The air blower mechanism is activated for 2.5 minutes

Note that the pump will attemp to empty the pit once every 24 hours regardless of the position of the FS2 float switch

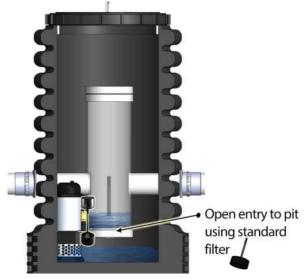
# Operating Modes - Manual Filtration Option

## **Shut off mode**



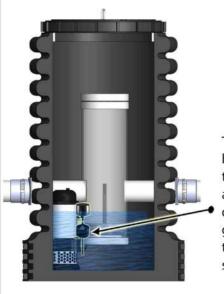
Water enters the system from the inlet pipe, and exits via the overflow pipe

## Standby mode



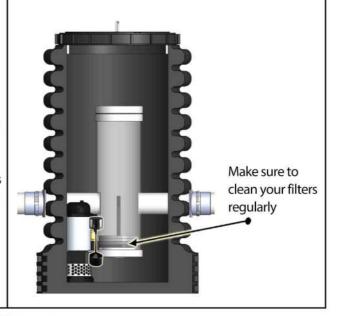
Water level in the main pit is below the float switch trigger level

## **Operating mode**



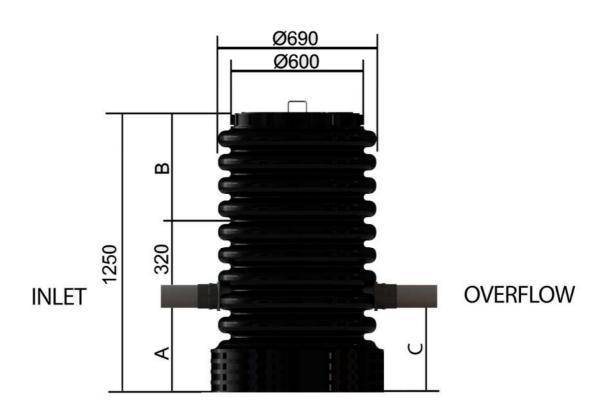
The float switch has reached its trigger point and the pump is discharging the greywater into the irrigation system

#### **Manual Filter Maintenance**



# **System Dimensions**

The height of the tank is fully adjustable, cut the height to the desired height

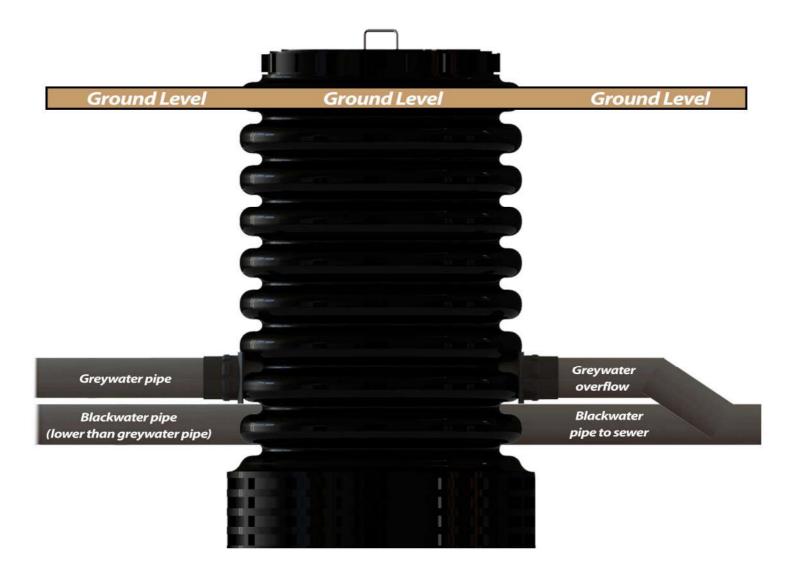


Item Code	Capacity (Litre)	A(mm)	C(mm)
GF-PRO	120	450	400

Note: B is fully adjustable

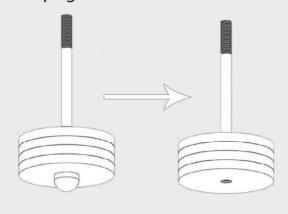
# Step 1: Installing Builder's Kit

The builder's kit is installed by a licenced plumber at pre-lay stage

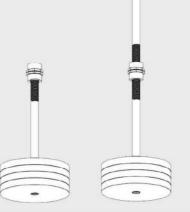


## **Step 2:** Installing the Finishing Kit (Manual Filtration)

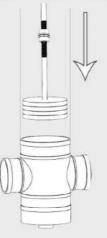
1. Remove plug filter and replace with non-plug filter



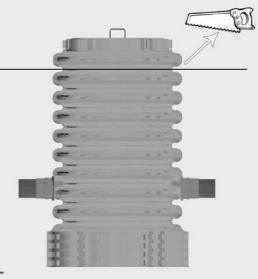
2. Extend filters with 0.5" risers if required



3. Insert filters back in filter casings



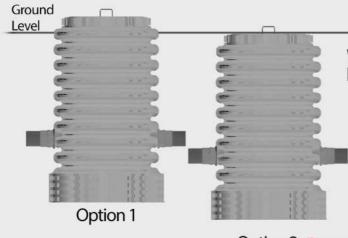
4. Cut and adjust the poly tank to the desired height



We recommend that the tank be adjusted:

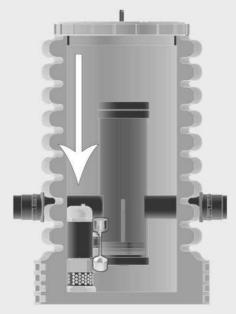
- In garden bed areas 100mm above ground level
- 2. In paving areas so that the cover is leveled with the paving

Option 2 (Pit extensions are available if the pit is not long enough)



## **Step 2:** Installing the Finishing Kit (Manual Filtration)

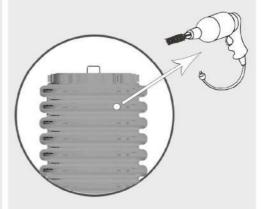
#### 5. Install pump in the tank



Install the pump all the way into the pit

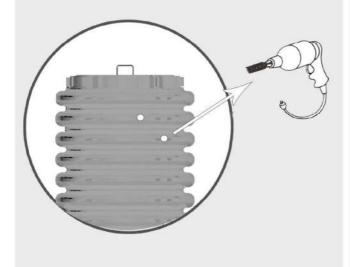
Secure the pump on the bottom of the pit

6. Drill for pump discharge outlet

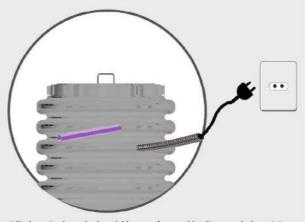


With 25mm low density poly pipe a 29mm hole is required

#### 7. Drill for electrical conduit



# 8. Run cable through electrical conduit to wall mounted powerpoint

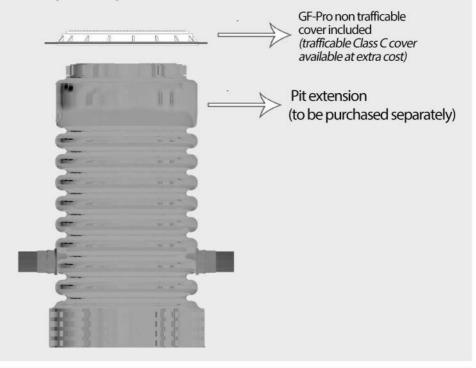


All electrical work should be performed by licensed electrician

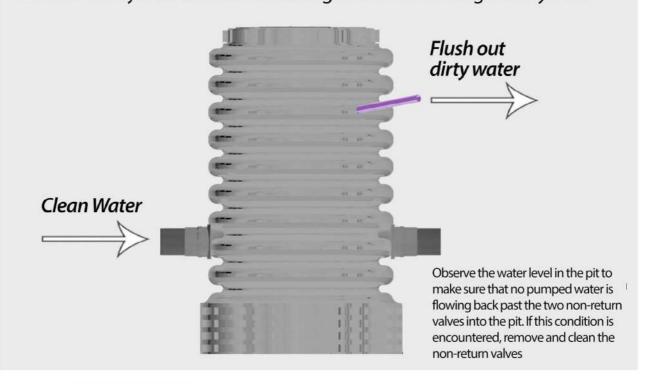
Make sure to seal all drilled holes after inserting pipe/conduit

## **Step 2:** Installing the Finishing Kit (Manual Filtration)

#### 9. Installing the extension pit if required



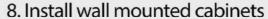
## 10. Flush the system before connecting to subsurface irrigation system

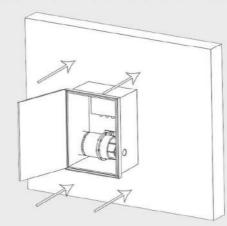


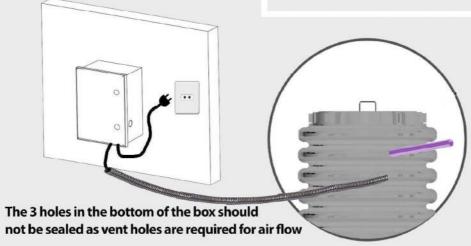
## **Step 2:** Installing the Finishing Kit (Automatic Filtration)

Step 1 - 7. Same as Installing the Finishing Kit with Manual Filtration

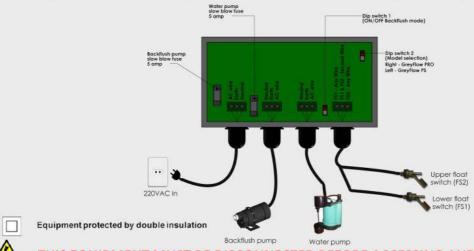
Run cables (power cord & float switch cables) through electrical conduit to wall mounted cabinet







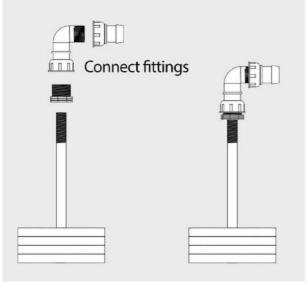
10. Wire up controller as per drawing below (all electrical work should be performed by a licensed electrician



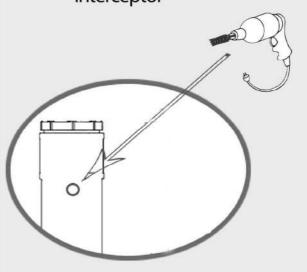
THIS EQUIPMENT MUST BE DISCONNECTED BEFORE ACCESSING AND/OR SERVICING

## **Step 2:** Installing the Finishing Kit (Automatic Filtration)

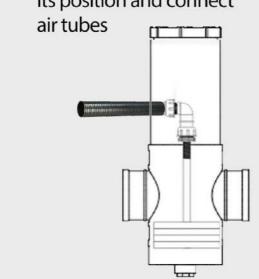
11. Prepare filters for connection to blower



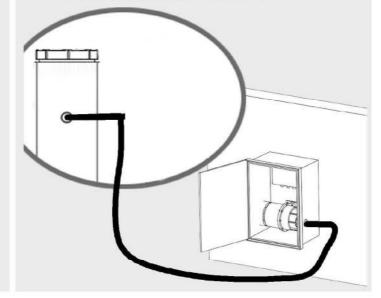
12. Drill a 29mm hole in 250mm interceptor



13. Secure the filters back to its position and connect air tubes



14. Run 25mm low density poly pipe from air blowers to filters



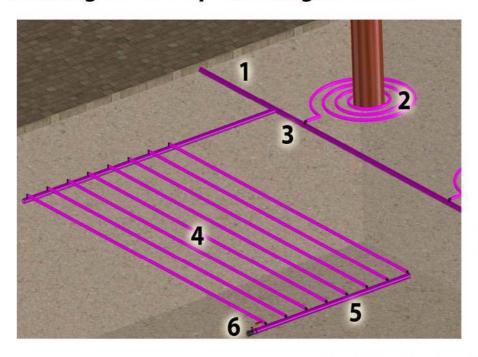
Step 14 - 15. Same as Step 9 - 10 of Installing Finishing Kit for Manual Filtration

# Step Three: Installing the Irrigation System

## **Option 1: Single Station GFPS PRO with GF Drip-Tube Kit**



### Installing the GF Drip-Tube irrigation lines



- 1.25mm or larger feeder pipe
- 2. Coil of GF Drip-Tube around trees
- 3. Elbow take-off adaptor
- 4. 16mm GF Drip-Tube (no more than 7m length
- 5. 25mm flush manifold
- 6. Manual flush valve

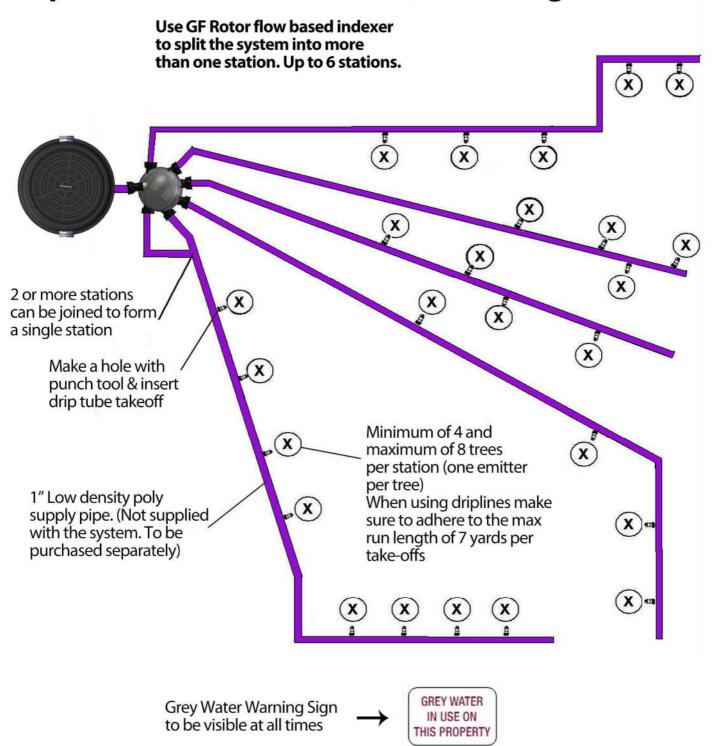
Grey Water Warning Sign to be visible at all times

\*Use of a non Grey Flow dripline will void the system warranty

**GREY WATER** IN USE ON THIS PROPERTY

# Step Three: Installing the Irrigation System

## **Option 2: Multi station distribution using GF Rotor**



## Maintenance

To retain the original reliability and performance of the GFPRO System the following maintenance procedure should be followed. Please ensure that you wash your hands thoroughly after contact with greywater or handling any part of the GFPRO System.

# The following maintenance steps should be carried every year and not less than once every 2 years:

- Open top cover of the GFPRO Tank
- Remove the filters and wash thoroughly in a bucket, with a garden hose or in any basin not connected to the dedicated grey water line.
- Wash thoroughly the tank, the pump and the float switch with a garden hose.
- Disconnect the GFPRO pump and connect directly the scheme water supply to the pump discharge
- Flush the greyflow emitters with fresh water for about five minutes.
- Re-insert the filters to their original position, close the lid of the tank and the system is ready to operate again.
- Top up mulch over the Grey Flow emitters to a minimum depth of 2".

# Limited Consumer Warranty

#### ADVANCE WASTE WATER SYSTEMS

### **Two Year Limited Warranty**

Advance Waste Water Systems (AWWS) warrants this product against material defects in materials and workmanship for a period of TWO YEAR from the date of the original retail purchase (warranty period). Warranty work will be done in accordance with the following terms and conditions. This warranty only benefits the original purchaser.

# THIS WARRANTY COVERS ONLY DEFECTS IN MATERIAL AND WORKMANSHIP. THIS WARRANTY DOES NOT COVER ANY OF THE FOLLOWING:

- Expendable items that can wear out from normal use, including but not limited to, filters, or similar perishable parts.
- 2. Damage to or failure of this system if it is not installed, operated, or maintained according to all instructions supplied with the system.
- 3. Damage to or failure of this system resulting from accident, abuse, misuse, or use for other than its intended purpose, Act of God.
- 4. Damage to or failure of parts or system resulting incomplete or improper installation or from unauthorized modifications made to this system.
- 5. If you purchase the system from an unauthorized retailer or dealer.
- Damage caused by power surges, electrical storm damage, incorrect power supply, or insect or vermin infestation
- 7. Damage to or failure of parts if this system is serviced or rapaired by anyone other than an Authorized Service Center.
- 8. This warranty extends only to you, the original purchaser. It is not transferable to anyone who subsequently purchased this product from you.
- Use for more than a single family or use in a commercial establishment or for commercial non-household purposes.
- 10. Parts and systems not supplied by AWWS are not covered by this warranty

Any item which has been repaired or replace under this warranty shall be covered for the remainder of this original warranty as extended by the number of days that the product has been out of your hands for repair.

## Disclaimer

## Disclaimer of implied warranties; Limitation of remedies

- 1. All implied warranties, including implied warranties of merchant ability and fitness for a particular purpose, are limited in duration to one year from the date you purchased the product.
- 2. Neither AWWS nor its affiliates are responsible or liable for any loss, inconvenience or damage, whether special, exemplary, direct, incidental, consequential or otherwise, and whether known or should have been known to AWWS including damage to or replacement of other equipment and property and personal injury resulting from any breach of warranty, the inability to use the product or under any legal theory in contract or tort. There warranties and remedies are the sole and exclusive warranties and remedies given by AWWS in connection with the sale and use of the product. No other warranties, oral or written, express or implied are given.
- 3. In any event, AWWS's entire liability shall be limited to the actual purchase price you paid to the retail seller of the defective product. This limitation applies whether damages are sought or a claim made, under this warranty or as a tort claim (including negligence and strict product liability), a contract claim or any other claim. This limitation cannot be waived or amended by any person. This limitation of liability is effective even is AWWS or any authorized repre sentative of AWWS has been advised by you of the possibility of such damages. This limitation of liability, however, shall not apply to claims of personal injury.
- 4. No AWWS dealer, agent or employee is authorized to make any modification, extension, change or amendment to this warranty.

#### YOUR RESPONSIBILITY

The above limited warranties are subject to the following conditions:

You must provide your original bill of sale, invoice or other proof of purchase of the system showing that you are the original purchaser, that the purchase was made within two years of the date of your claim and that you purchased it from an authorized dealer or retailer. No warranty work will be done without this information. Keep a copy of your receipt or invoice for your own records. These limited warranties are effective only if this system is purchased and used in AU region Labor and service charges for warranty repair, installation, set up, and adjustment of customer control are not covered by these limited warranties. Should you encounter a defect in the system, www.greyflow.net.au to find the closest authorized service center. Contact the center and it will arrange for an inspection and corrective action, if needed and if covered by this warranty.

Should the center determine that the system is not covered by this warranty; any corrective work will be performed at your request and at your expense. If the center makes a second and/or subsequent visit and determines that there is no problem or that the system is not covered, the service call will be charged to you.

When making a warranty clain, please be prepared to provice a description of the system, your name, address, work day telephone number, a description of the problem, the date you purchase the system and the identity of the seller.





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