

# Tecma Bathroom Anywhere™

**Owner's and Installation Manual** 

# Installation

# Please keep this manual for future reference.

Read ALL these instructions before installing the Tecma Bathroom Anywhere unit.

**Warning!** Read and understand the warnings listed in this document before you install, operate, or service this system. If you do not obey these warnings there is a risk of property loss, injury, or electrocution. Do not make any changes to this unit as this could result in property damage, injury, or electrocution.

Thetford Corporation accepts no responsibility or liability for damage to equipment, injury, or death that may result from the system's improper installation, service, or operation.

Thetford Corporation recommends that plumbing and electrical work be performed by a licensed tradesperson. Local permit and code compliance is required.



**Caution:** To avoid damaging property and to make sure the unit operates correctly, please do the following:

- Do not flush anything other than human organic waste and toilet tissue. Do not flush paper towels, pre-moistened wipes, condoms, feminine hygiene products, dental floss or household garbage.
- Do not allow the Bathroom Anywhere system to freeze. See Winterization.
- Make sure that any pipe work that may be exposed to freezing temperatures is insulated.
- Make sure that plumbing fixtures attached to the pump do not leak. If there is a power failure the pump will not operate, and this could cause the unit to overflow and flood.

CAUTION: Do NOT use one-way air admittance valves (also known as cheater vents). Macerating pumps need two-way air movement.

# Electrical Cautions:

To ensure safe operation:

- The pump must be connected to a properly grounded (GFCI - ground fault circuit interrupter) receptacle on a dedicated 15 AMP circuit.
- Do not use in swimming pool or marine areas.
- Always disconnect the plug from the power source before servicing or handling the pump.
- Do not use an extension cord with this unit!
- Do not make any modifications to, or remove the ground pin from, the pump's power supply cord plug.

#### Warranty

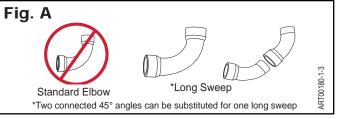
- Refer to the one-page warranty statement.
- Record your product information. Keep for future reference. Refer to Fig. B.

#### **Required Tools**

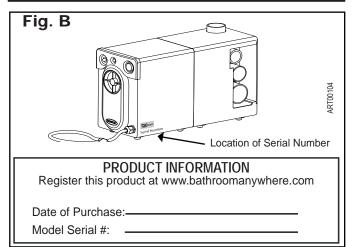
- Pipe saw
- Phillips screw driver
- Flathead screw driver
- 5/16" Socket wrench
- Hammer
- Level
- Tape Measure
- Drill
- 1/2" masonry drill bit (Concrete floors)
- 1/4" drill bit (Wood floors)

#### Materials Not Provided

- PVC/ABS primer and cement
- 1-1/4",1-1/2", and 2" rigid (Schedule 40) pipe fittings, as needed
- 3" pipe extension and 3" coupler (depends on installation)
- Tee-wye sewer connection
- Ball valves sized to inlet and discharge pipe sizes
- 2" Sewage pump check valve (depends on installation)
- For optimal performance, use long sweep 90° angles. Refer to Fig. A.



### **Product Information**



# Parts Included with Pump

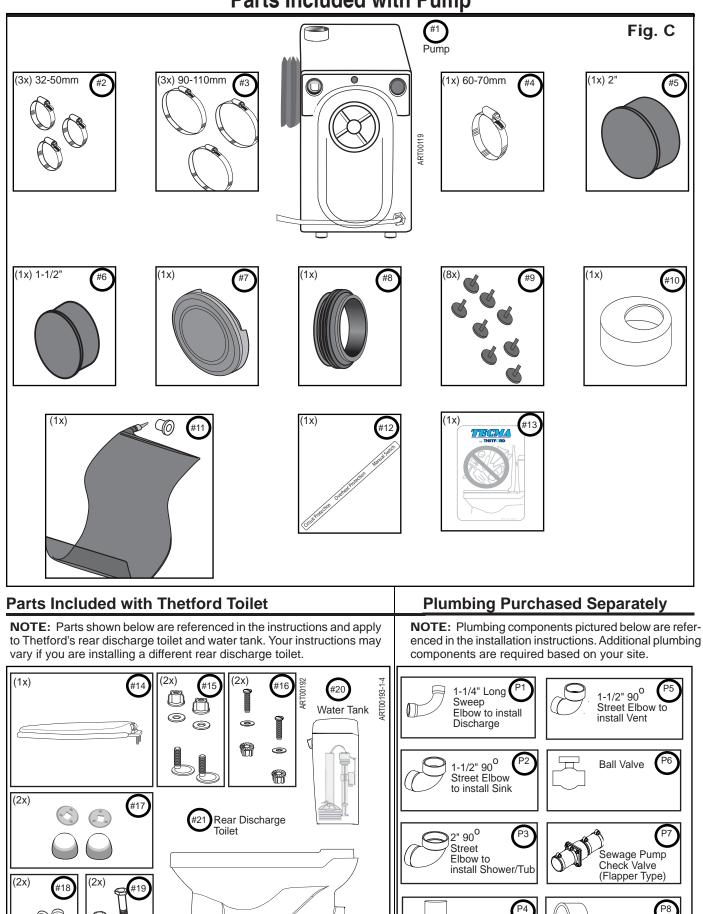


Fig. D

1-1/2" Elbow

to install Vent

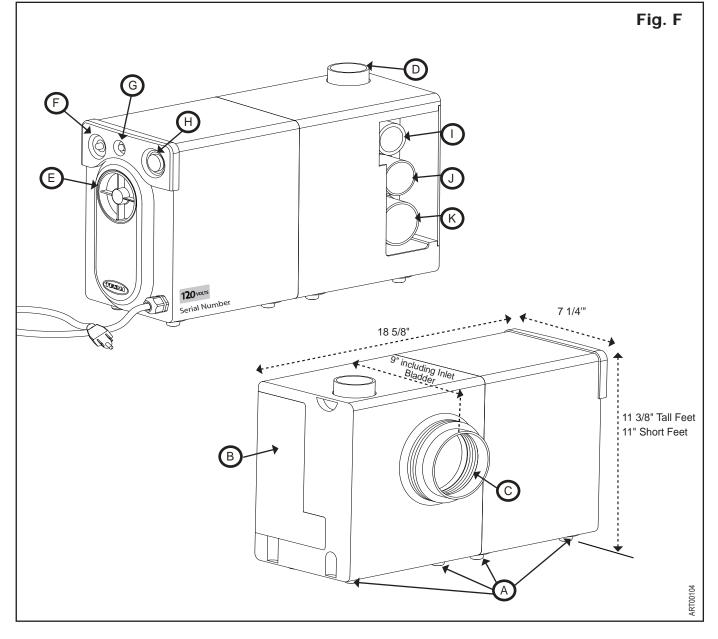
3" Coupler for 3 Extension Pipe

Fig. E

# **Technical Specifications**

CSA B45.9	The system has the NSF C-US certification. The National Sanitation Foundation (NSF) has tested and certified this system to be compliant with the ASME A119.2.3 and B45.1 standards for household macerating systems for the United States and Canada. This NSF certification ensures U.L. electrical compliance to U.L. 778 Standard. This system also complies with the Universal Plumbing Code (UPC).
Power supply	120 V
Power	600 W
Current	8.0A
Circuit Requirement	Dedicated 15 AMP
Frequency	60 Hz
Duty cycle	2.5 gpm, 10 foot lift, 1 hour on; 45 minutes off

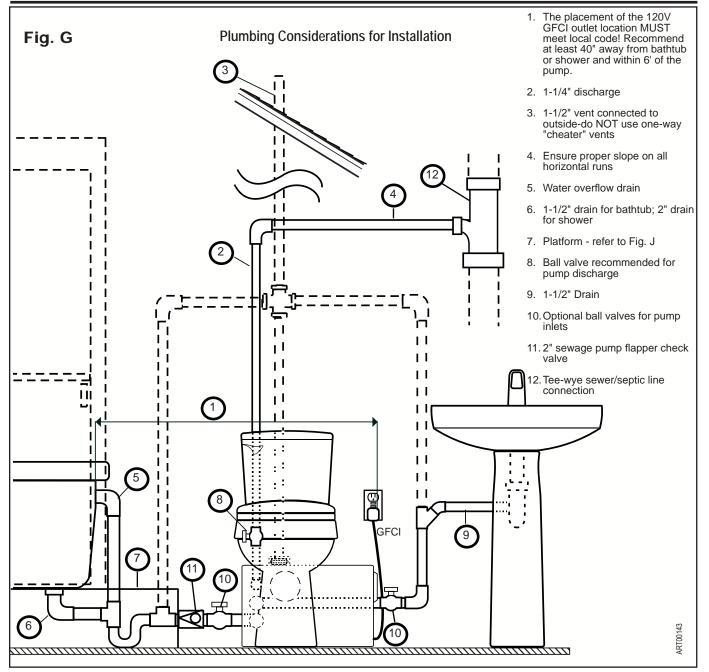
#### Terms & Dimensions



- A. Rubber Feet
- B. Side Cover
- C. Toilet Inlet
- D. 1-1/2" Vent Opening
- E. Knob to Separate Pump
- F. Circuit Protection

- G. Thermal Protection
- H. Manual Switch
- I. 1-1/4" Discharge Outlet
- J. 1-1/2" Sink Inlet
- K. 2" Sink, Bathtub or Shower Inlet

# **Planning the Installation**



- All plumbing fixtures attached to the pump must be located on the same floor of the building.
- The pump will pump up to 18' vertically or up to 150' horizontally with proper slope.
- If a vertical rise is required, it should come before any horizontal run to allow for proper operation.
- All inlets in the unit must be connected to a fixture (toilet, sink, etc.) OR covered with the plugs provided!
- Do not use any plumbing fixtures (sink, toilet, etc.) until the pump is installed and tested. Be sure the fixtures do not leak as this will cause the pump to continually operate, causing excessive wear on the pump
- Shower/tub must be elevated to ensure proper drainage. Refer to Fig. J.



**IMPORTANT:** Make sure all local plumbing and electrical codes are followed when installing the Tecma Bathroom Anywhere pump.

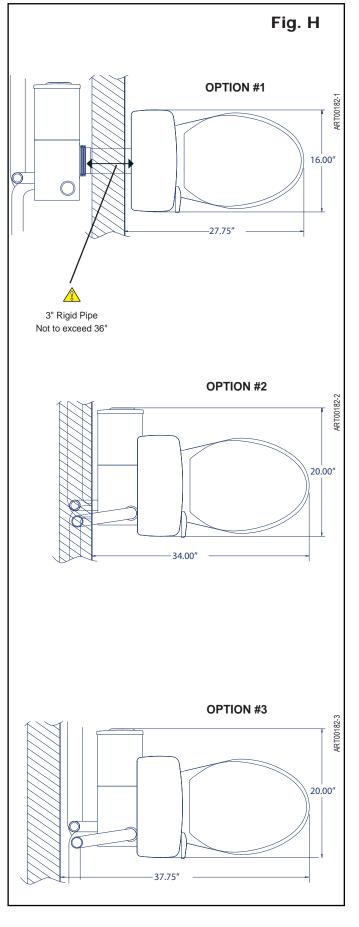
- To ensure efficient waste evacuation, the pump must have at least 3' of 1-1/4" discharge pipe before transitioning to a larger pipe size.
- All pipes must be constructed of rigid material, such as PVC. Do NOT use flexible pipes. All fittings should be primed and glued. Do NOT glue pipe to rubber tank; use clamps provided.
- Installing ball valves near the inlets and discharge pipe will make it easier to remove the unit for maintenance.
- Select the right option for your installation. Plan GFCI electrical location and placement of all fixtures before you begin the installation. Plan for maintenance accessibility.
- As you plan your installation, consider the accessibility to the air vent and water supply.

#### Which Installation Best Fits My Site?

There are three basic installation options. When planning the installation, note overall width of toilet and offset placement of pump; plan for maintenance accessibility!

#### ■ INSTALLATION OPTION #1:

**Pump and Plumbing Behind Wall** - you need a 3" rigid pipe and 3" pipe coupler (not included), and shorter foot pads (included) to achieve the proper drainage slope. Distance between toilet outlet and pump inlet can not exceed 36". Allow additional space for side-to-side maintenance access.



■ INSTALLATION OPTION #2:

**Pump Exposed and Plumbing in Wall** - place the pump in front of the wall with the plumbing in the wall. Allow additional space for side-to-side maintenance access.

#### INSTALLATION OPTION #3:

**Pump and Plumbing Exposed** - place the pump and plumbing in front of the wall. Allow additional space for side-to-side maintenance access.

# **Install Toilet and Pump**

**NOTE:** Unless otherwise noted, steps apply to ALL installation options.

### Site Preparation

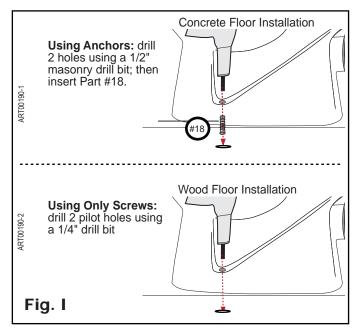
Complete the following before starting the installation:

- Installation site floor finished and level within 1/8".
- Place all components in the desired installation position; mark footprint and bolt positions. Check for all clearances including doors and cabinets. Also be sure to check for vertical clearance for any shower enclosure. Refer to Fig. G and H.
- Ensure that all plumbing and electrical do not interfere with placement of bathroom fixtures.
- Rough plumbing and electrical are completed to code.
- The placement of the 120V GFCI outlet MUST meet local code! Recommend at least 40" away from bathtub or shower and within 6' of the pump.

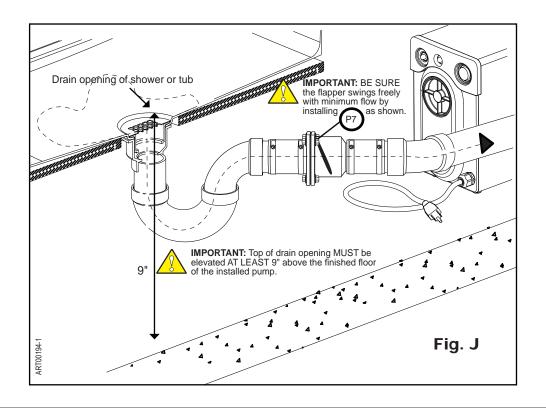
Warning! Do not use an extension cord as this is a safety hazard that can cause injury!

**IMPORTANT:** To permit proper drainage it is essential to elevate the shower/tub drain to a MINIMUM of 9" above the finished floor of the installed pump. If necessary, remember to adjust the height of the shower/tub drain upwards to allow proper grade for the plumbing connection to the PUMP. Plan accordingly; refer to Fig. J.

 Drill floor holes for toilet. If installing in concrete floor, install anchors but do NOT permanently secure fixtures until instructed. Refer to Fig. I.



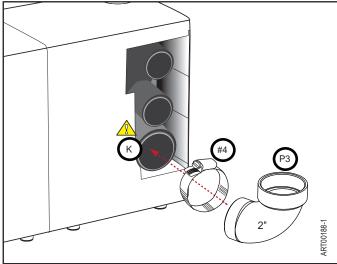
### Shower or Tub Floor Height



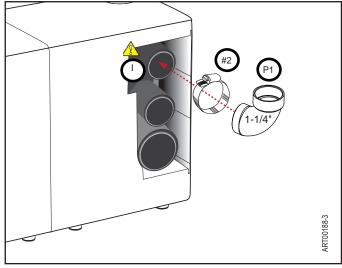
# Install Toilet and Pump, Con't. Step 1. Attach Connections

Insert the plumbing connections according to your installation plans. Refer to Fig. C, E, and F.

#### Shower/Tub

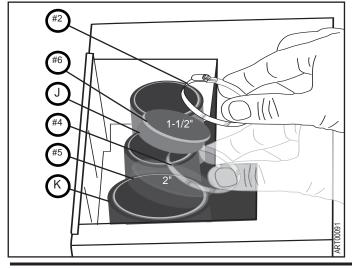


#### Discharge



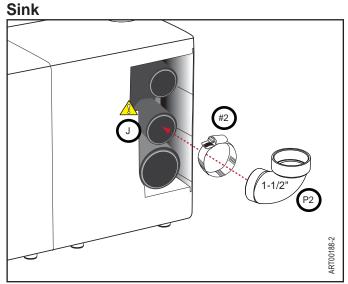
### Installations with Unused Inlets

If  $\bigcirc$  and  $\bigotimes$  are not attached to a fitting, they MUST be covered with the caps using clamps provided.

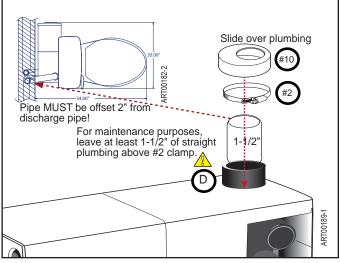


**WARNING:** Do NOT insert plumbing more than 1" deep into plumbing openings.

**WARNING:** Do NOT glue rigid plumbing to rubber inlet. Use the provided clamps

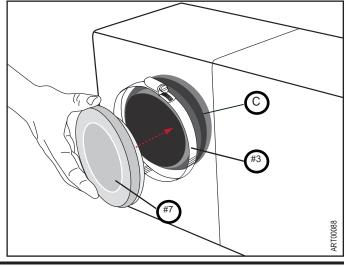




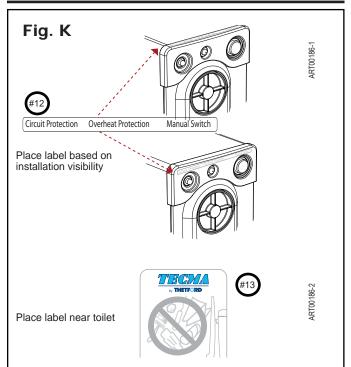


### Installations without Toilet

If  $\bigodot$  is not attached to a toilet, it MUST be covered with the cap using clamp provided.



### Step 2. Attach Labels



**CAUTION:** To verify proper lengths for plumbing, be sure to dry-fit ALL plumbing BEFORE permanently bonding plumbing connections! Place the pump in the installation position and follow the steps below.

Refer to Fig. G for Steps 3-5.

### Step 3. Connect Bath/Shower/Sink



**IMPORTANT:** Make sure there is proper slope of all horizontal runs!

#### ATTACH BATH / SHOWER

- To permit proper drainage it is essential to elevate the shower/tub drain to a MINIMUM of 9" above the finished floor of the installed pump. If necessary, remember to adjust the height of the shower/tub drain upwards to allow proper grade for the plumbing connection to the PUMP. Refer to Fig. J.
- If bathtub is connected, the 2" connection can be reduced to 1-1/2" with adequate slope into the pump.
- 1. Measure rigid pipe from 2" pump inlet to shower/bath drain.
- 2. Cut pipe to fit.
- 3. Connect shower/tub to 2" inlet with proper slope.

#### ATTACH SINK

- 1. Measure rigid pipe from sink drain to 1-1/2" pump inlet.
- 2. Cut pipe to fit.

### Step 4. Connect Vent to Vent Stack



**CAUTION:** Do NOT use one-way air admittance valves (also known as cheater vents). Macerating pumps need two-way air movement.



**IMPORTANT:** The pump must be vented to the outdoors, per your local plumbing code.

- 1. Measure rigid pipe from vent on pump to vent connection (new or existing vent stack).
- 2. Connect rigid pipe to main vent stack of house or directly outdoors.

## Step 5. Connect Discharge Line



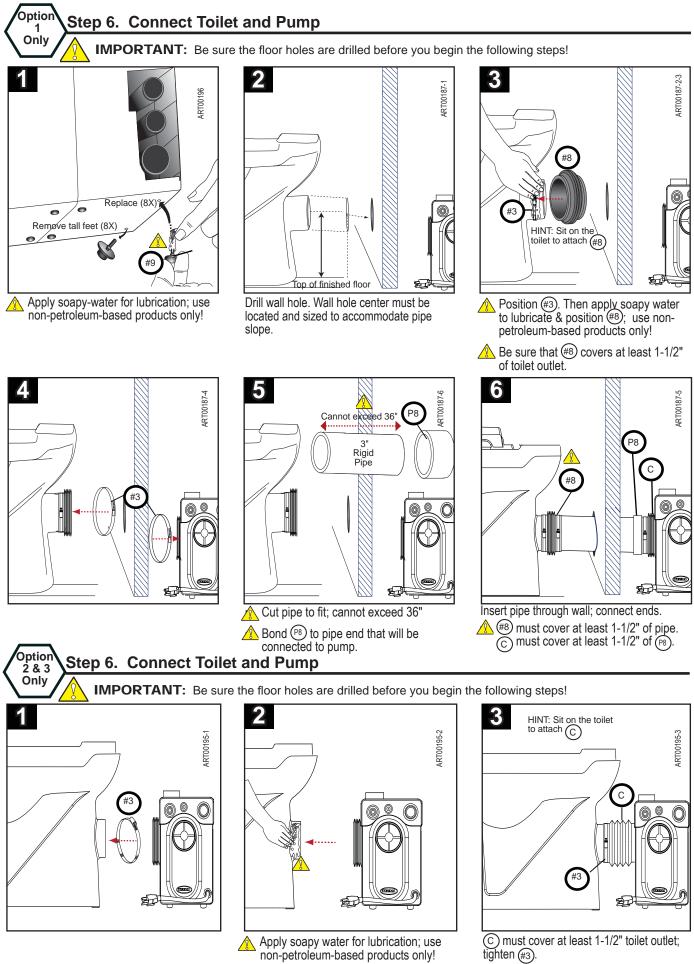
**CAUTION:** Pump discharge outlet has a built-in check valve. Do NOT install an additional check valve as this may cause the pump to malfunction.

- 1. Install 1-1/4" ball valve approximately 6" from pump discharge outlet. Plan for accessibility.
- Install 1-1/4" plumbing line to house main waste line. There must be at least 3' of run from the pump before connecting to main waste line.



**Note:** When connecting to the sewer line, use directional fittings that meet your local plumbing code.

Install Toilet and Pump, Con't.

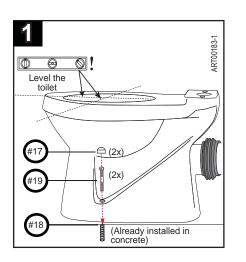


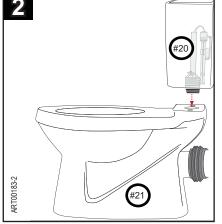
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### Step 7. Assemble & Secure Toilet

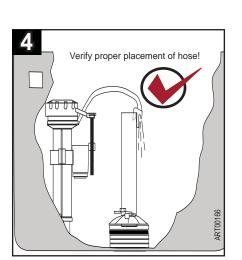


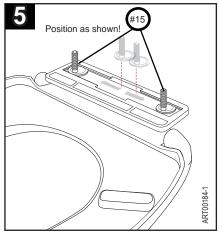
**Note:** Instructions apply to Thetford Rear Discharge Toilet. Assemble water tank; follow the instruction sheet supplied with Thetford tank BEFORE you begin the steps below.



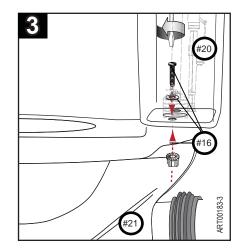


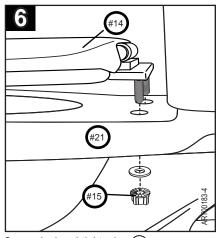
**Νοτε:** Recommend that a bead of caulk is applied around base of (#21)





Offset bolts allow for proper alignment of seat cover on bowl. Slide to adjust to toilet.

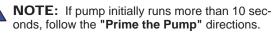




Secure by hand-tightening (#15).

### Step 8. Prep and Test the System

- 1. Finish connecting all fittings and fixtures.
- 2. Open water supply valve to toilet and/or fixtures.
- 3. Check for leaks; correct as needed.
- 4. Plug pump into wall outlet.
- 5. Flush toilet.



6. Check for leaks; tighten and adjust clamps and connections as needed.

# **System Operation**

G

# What to Expect

- This toilet operates on a different principle than a typical siphon toilet resulting in a different sound and flush action. When activated, the pump pulses a few times.
- Water spot in toilet bowl is different than the water spot in a siphon toilet.

#### Cleaning

Use only non-abrasive, non-petroleum products to clean the pump.

### **Circuit Protection**

Refer to Fig. L item (F). The circuit breaker prevents the pump from operating if the pump becomes jammed by foreign objects. After the obstruction is removed, press the circuit breaker button to reset the pump for operation.

#### **Thermal Protection**

Refer to Fig. L item G. If the system overheats, a light comes on indicating that the system is unavailable for use. Once the system cools to an acceptable temperature level, the light will turn off indicating that the system is reset and ready for use.

#### Prime the Pump

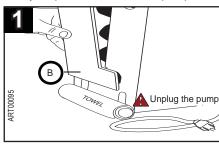
If pump initially runs more than 10 seconds, prime the pump as follows:

- a. Unplug cord from wall outlet.
- b. Wait 15 seconds. Plug cord back into wall outlet.
- c. Flush again. If pump runs more than 10 seconds, repeat Steps A-C.

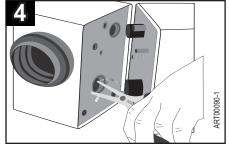
## Clearing the Pump of Debris

It may be possible to clear the pump of debris using the following steps. Do NOT use a plunger!

8

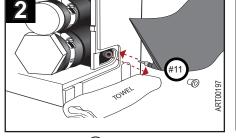


- Close discharge pipe ball valve; refer to Fig. G position 8.
- 2. Unplug pump from wall outlet.
- 3. Remove (B); place towel.

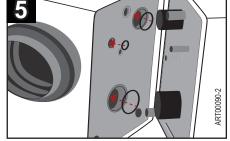


Use tool to clear debris.

- 1. Open discharge pipe ball-valve.
- 2. Plug in unit.
  - 3. Flush toilet to test.



- 1. Remove #11 plug.
- 2. Quickly insert (#11) bag.
- Drain excess liquid into bag; re-insert (#11) plug.



Verify that o-rings are positioned securely in groove!

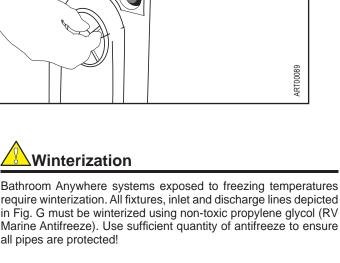
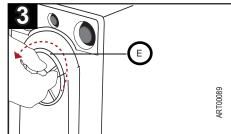


Fig. L

Steps: Shut off water supply. Flush toilet to empty tank. Pour RV/ Marine antifreeze into toilet and all fixtures. Press manual switch (H) to run antifreeze through system.



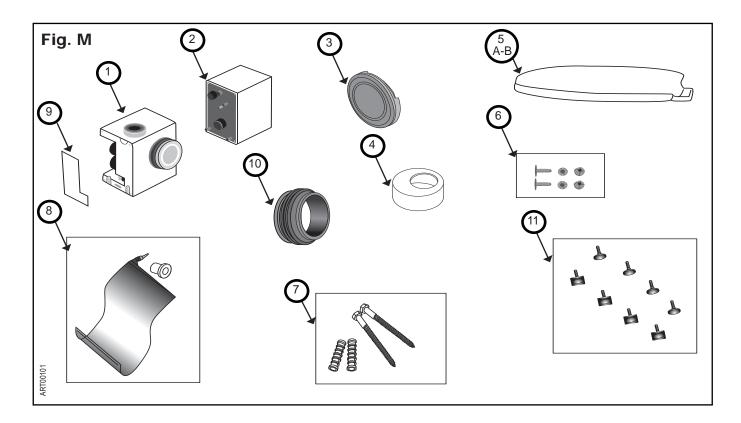
Turn (E) counter-clockwise until unit separates.



Reconnect unit; turn (E) clock-wise to re-connect.

Follow the "Prime the Pump" directions until the pump engages. Due to back pressure in the discharge line, this may require more than one attempt depending on system configuration.

6



No.	Part No.	Description
1	38705	Bathroom Anywhere Toilet Inlet Side
2	38706	Bathroom Anywhere Pump Side w/Pump
3	38707	Bathroom Anywhere Toilet Inlet Cap
4	38708	Bathroom Anywhere Vent Shroud
5A	38709	White Elongated Slow Close Seat and Lid
5B	38710	Bone Elongated Slow Close Seat and Lid
6	38711	Toilet Seat Bolts (2) Offset Bolts For Bathroom Anywhere Elongated Seat
7	38712	Bathroom Anywhere Floor Mounting Anchors and Bolts Package
8	38713	Bathroom Anywhere Drainage Bag
9	38714	L Shaped Cover
10	38725	Extension Bellows
11	38726	Rubber Feet (4 Tall, 4 Short)

# Questions? 1-800-543-1219

See your dealer for more information about Thetford products. Or, write or call:

#### www.bathroomanywhere.com



Thetford Corporation P.O. Box 1285 Ann Arbor, MI 48106 1-800-543-1219