

THETFORD

Aqua-Magic®

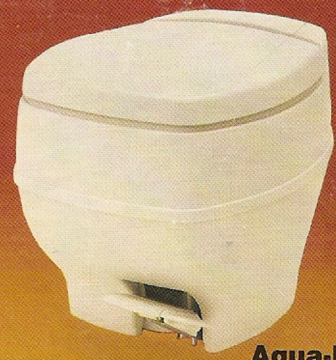
Owner's Guide For:



**Aqua-Magic®
Galaxy High**



**Aqua-Magic®
Galaxy Low**



**Aqua-Magic®
Starlite High**



**Aqua-Magic®
Starlite Low**



THETFORD

Congratulations...



With the purchase of your Aqua-Magic fresh-water flush toilet, you now own a unit that is the industry standard in reliability, efficiency and style.

Whether you have chosen the Galaxy or Starlite Aqua-Magic model, Thetford has built in the quality that has made us the leading supplier of sanitation products to the RV and marine industries for 25 years.

Among the special features of your Aqua-Magic are: a new “homelike” seat and bowl, a convenient dual-foot pedal flush, water-saving capabilities, an easy-to-clean finish, lightweight yet durable construction, and colors to match any bathroom decor.

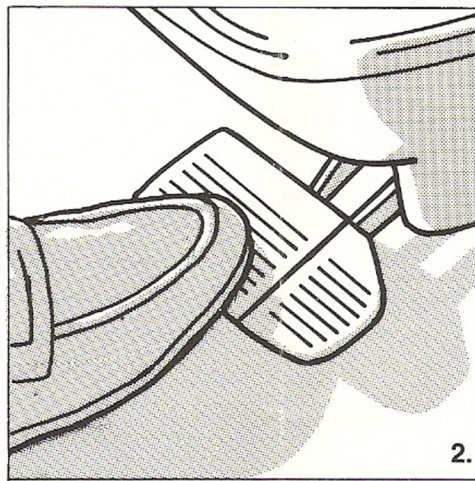
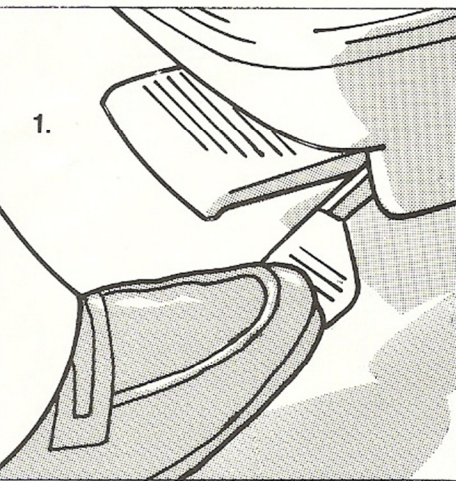
It all adds up to the fact that Thetford products are designed to make your family's RV experience enjoyable.

Easy Operation & Maintenance

Operation

The operation of your Aqua-Magic unit is as easy as 1-2-3: 1) step on the small pedal and hold until a desired amount of water—beyond the two inches which

automatically fills the bowl—enters the unit; 2) step on the large pedal to flush; and, 3) remember to release both operating pedals slowly.



Maintenance

Thetford's Aqua-Bowl[®], an effective, non-abrasive cleaner, is specially formulated to help you keep your Aqua-Magic toilet and other bathroom fixtures fresh and spotless. Use Aqua-Bowl for scratch-free cleaning of your unit. Avoid acid-type household cleaners since they will damage the unit's seals and finish. Also, avoid abrasive cleaners, since these can scratch the unit's surface and lead to unsightly staining.

Other than regular cleaning and winterizing, no routine maintenance of your Aqua-Magic toilet is required.

Winterizing

There are two ways to prepare your Aqua-Magic for winter, either by 1) draining or applying anti-freeze.

To drain the toilet, the water supply line must be completely empty and the water supply valve left open by inserting a round object, such as a soft drink bottle,

into the flush hole in the bowl. (**Caution:** if using air pressure to drain the water line, the toilet valve should be held in the open position.)

Instructions for using anti-freeze are included in your vehicle owner's manual. To prevent damage to the toilet, do not

attempt to flush when it contains frozen water. This may cause breakage of the toilet's internal valves.

CAUTION: Only use potable water system anti-freeze, rather than the automotive type, which is highly toxic in a fresh-water system.

Removal/Installation

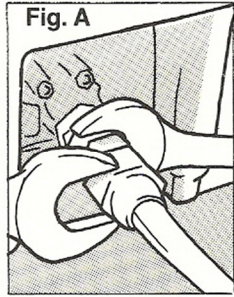
Tools To Have Ready

- Cord or wire
- 12-point, 1/2" ratchet box end wrench
- 1/2" socket and universal attached to 12" extension
- Marker or chalk
- 2 1/2" diameter object (such as a soft drink bottle)
- RTV silicone cement
- Coins—a dime and a nickel

Removal

1) Turn off the water supply to the toilet (see your vehicle owner's manual for detailed instructions).

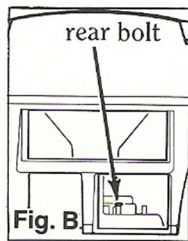
2) Remove the water line from the water valve (Fig. A).



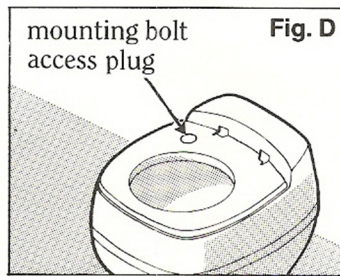
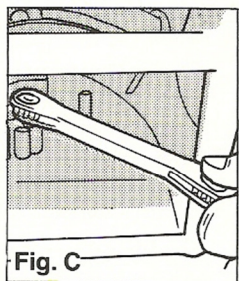
Brace the ball valve fitting with a wrench while carefully loosening the water line nut. Avoid excessive force and bending, which may crack or damage the water valve.

3) Detach front bolt. Insert a 2 1/2" object, secured with a cord or wire outside the unit, in the flush hole. The front mounting bolt, which can be reached through the opening above the foot pedals, can now be removed with a 12-point, 1/2" ratcheting box end wrench.

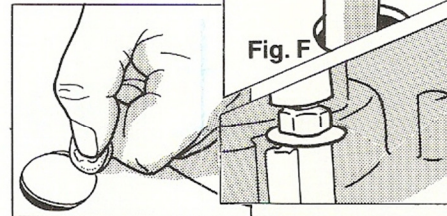
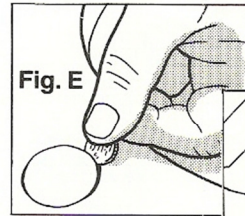
4) Locate rear bolt. Keep the wrench on hand to remove the rear mounting bolt nut at the back of the toilet (Fig. B). The rear bolt can be reached directly, if there is adequate room between the toilet and the wall behind the toilet (Fig. C), or through the top of the toilet at the mounting bolt access plug. The plug is located at the 11 o'clock



position beneath the seat on the left-hand side of the unit (Fig. D).



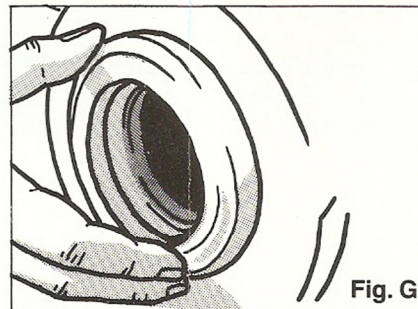
5) Access rear bolt. Pry the edge of the plug with a dime or use a larger coin (nickel) to press down on the side of the plug nearest the front edge of the bowl (Fig. E). The rear bolt should now be visible.



6) Detach rear bolt with a deep 1/2" socket and universal attached to a 12" extension (Fig. F). Lift and remove toilet.

Installation

1) Attach closet flange seal on the bottom of the toilet so that the inner lip of the seal points toward the closet flange (Fig. G).

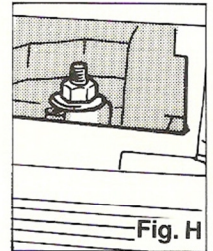


2) Position Aqua-Magic over the closet flange with the mounting bolts installed. If the bathroom floor is carpeted, trace a line around the unit's base with a marker or chalk.

3) Remove the toilet and cut away the carpet to expose the bare floor.

4) Attach the rear bolt. Place the toilet on the floor so that the holes in the base of the toilet fit over the mounting bolts. Finger-tighten a nut on the rear-mounting bolt first.

5) Locate the front bolt. Secure a 2 1/2" diameter object with a cord or wire (to prevent it from falling into the bowl) and use the object to prop open the flush hole. The front bolt is now visible through the opening above the foot pedals (Fig. H).

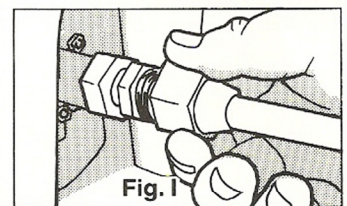


6) Attach front bolt with a nut. Finger-tighten.

7) Tighten front and rear mounting bolts with a 12-point, 1/2" ratcheting box end wrench. To avoid overtightening and ensure that the blade in the toilet opening closes properly, check for free movement of the blade. If it does not move freely, loosen the bolts slightly.

8) Connect the water line to the water valve. Put a small amount of RTV silicone cement on the water line fitting threads (3/8"—18-pipe thread).

9) Before allowing the cement to dry, screw fitting into the water valve so that it is finger-tight. Hold the water valve with a wrench and tighten the water line fitting by no more than one and one-half additional turns. **(CAUTION: Overtightening can damage the seal and cause leakage. Do not solder metal fittings while connected to the plastic water valve because heat and soldering can damage the plastic parts and cause leakage.)**

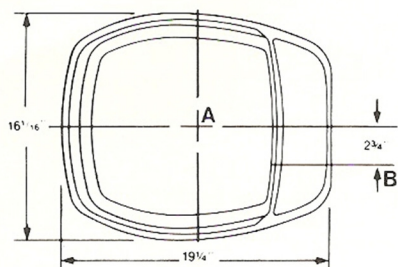


10) Attach the water line to the water line fitting (Fig. I). Hold fitting with wrench while tightening.

11) Turn on water.

12) Give your Aqua-Magic a trial flush. Check for leaks and free blade movement. If the blade in the flush hole doesn't close properly, it may be necessary to adjust the mounting bolts (see Step 7).

Rough-In Specifications



Note: When installing the Aqua-Magic Galaxy or Starlite low profile toilet, use the rough-in dimension shown. Minimum recommended distance from back and/or sidewall to centerline of closet flange is 11" (Fig. J). When mounting the toilet, the edge of the mounting base should extend a maximum of 1" from the front edge of the toilet base (Fig. K).

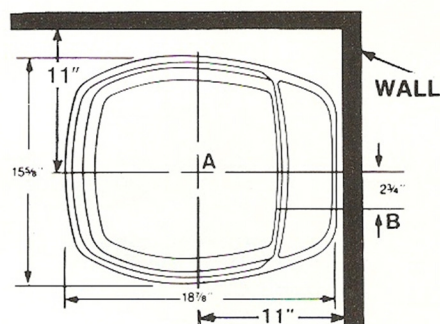


Fig. J

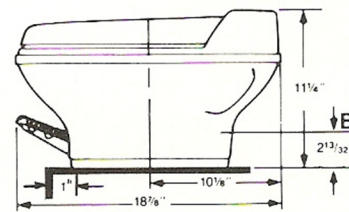
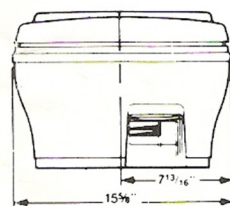
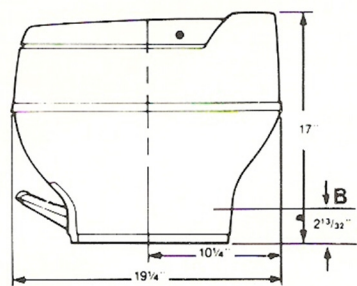
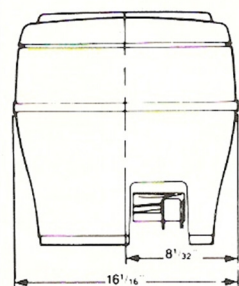


Fig. K

"A" is centerline of toilet outlet (closet flange). "B" is centerline of water valve.

Troubleshooting

1) Water keeps running into the bowl:

Clean to assure that no foreign material is in the groove where the valve blade sits in the flush hole.

2) Leaks: There are several possible sources of a leak: a) If the vacuum breaker leaks while flushing, it should be replaced. b) If the vacuum breaker leaks when not flushing, a new ball valve may

be needed. c) A leak also may occur at the bowl-to-mechanism seal, requiring a new seal and/or mechanism. d) If the leak is at the closet flange to floor seal, check the flange nuts for tightness. If the leak continues, remove the toilet and check the flange height. Adjust, if necessary to $\frac{1}{4}$ " to $\frac{7}{16}$ " above the floor. Replace the flange seal if damaged.

3) Harder than normal foot pedal operation or a sticking blade:

Check the mounting bolts to assure they are not overtightened; apply a light film of silicone spray on the blade. (Note: Lubricating spray **MUST** be silicone. Hydrocarbon based lubricants will damage the seals and other surfaces in the toilet.)

Helpful Holding Tank Hints

1) To ensure complete flushing of waste material into an outside sewer line, leave the vehicle termination valve on the Black Water (toilet waste) holding tank **closed until it is at least three-quarters full**. Unlike your toilet at home, which uses between 4-7 gallons of water for each flush, the average RV toilet uses from one cup (8 oz.) to several quarts of water per flush. If there is insufficient water in the holding tank, waste materials may not evacuate properly—leading to clogging and potentially costly service work.

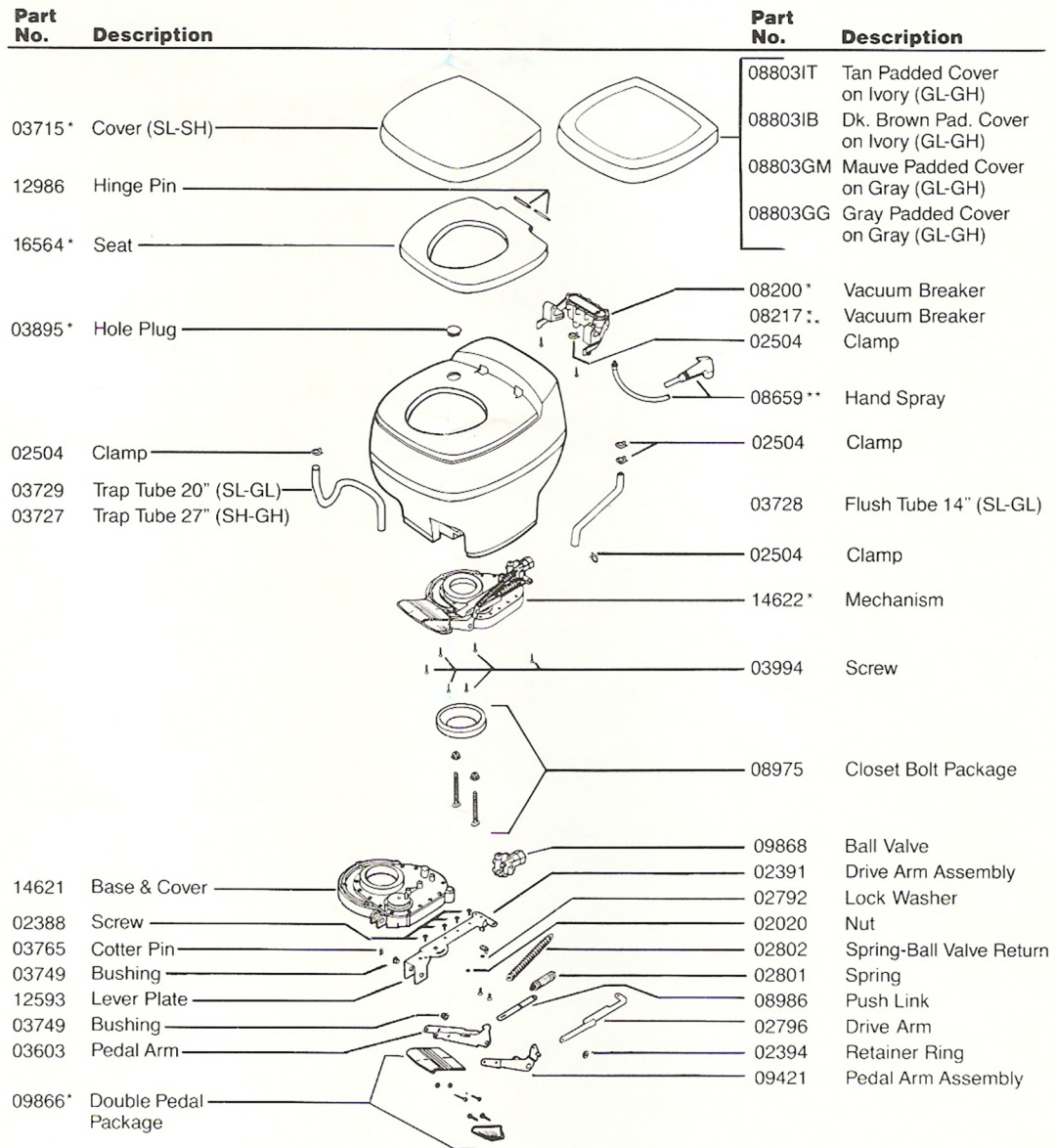
2) To empty the Black Water holding tank, open the termination valve. After emptying, rinse the tank with Aqua-Bowl® Cleaner and several gallons of fresh water. Remember to close the valve after emptying.

3) If you have two holding tanks—one for Black Water and one for Gray Water (sink and shower waste)—there will be two vehicle termination valves, one for each holding tank. You may leave the Gray Water termination valve open during hook-up to an outside sewer line. (Gray Water contains few solid particles and will not clog the holding tank. However, you should rinse the Gray Water

tank with clear water and Aqua-Bowl® before closing the termination valve.) It is sometimes advantageous to leave the Gray Water valve closed and use it to flush out the Black Water from the drain pipe after emptying your Black Water holding tank.

4) Home-made tank deodorants, as well as household detergents and cleaning compounds, CAN DAMAGE YOUR UNIT. Thetford companion products are designed to protect the longevity and utility of your Aqua-Magic toilet. For more information on holding tank maintenance, write for the Thetford brochure "RV Sanitation...From The Inside Out."

Parts & Accessories



*Specify color when ordering
**Water Saver Option Only

Toilet Key
GH—Galaxy High GL—Galaxy Low
SH—Starlite High SL—Starlite Low

Color Key
Toilet Colors: I—Ivory G—Gray
Pad Colors: T—Tan B—Brown
M—Mauve G—Gray

Service & Parts

Contact a local Thetford Certified Service Center (CSC) or RV dealer for parts and service.

If it becomes necessary to send part(s) to a Thetford CSC for warranty consideration or to contact the factory, please include this information: 1) Your name and address.

2) The product name, model, serial number and color. (Note: Serial numbers are visible on the front base of the unit when the foot pedal is depressed.)

3) The type of vehicle (brand name and year) on which the product is used.

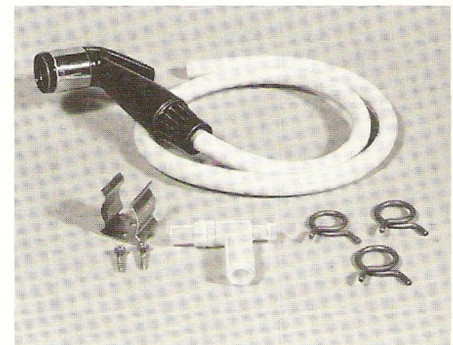
4) The reason for return.

5) Proof of date of purchase.

Accessory

Water Saver Package Part No. 08993

This hand spray water saver package is an alternate to the standard flushing mode. It requires less fresh water and helps make bowl cleaning easier. Quickly and easily attaches to any Aqua-Magic Galaxy or Starlite (high or low) fresh-water toilet.



For Best Results, Always Specify Genuine Thetford Companion Products

Thetford Companion Products, available at your local Thetford Certified Service Center (CSC) or RV dealer, are specially made to keep your Aqua-Magic toilet running efficiently.

Aqua-Bowl®

Non-Abrasive Bathroom Cleaner

No-grit formula safely cleans and freshens toilets, bathtubs, showers and sinks in RV's and at home.

Aqua-Kem®

Concentrated Liquid Holding Tank Deodorant

Easily, quickly and effectively eliminates odors and aids in waste digestion. Non-staining.

Aqua-Soft®

Quick-Dissolving Toilet Tissue

Specially-formulated to flush away easily and prevent messy clogs.

Dri-Kem®

Granular Holding Tank Deodorant

Fast-acting, non-dusting granules provide long-lasting odor control.

Aqua-Zyme®

Digests Waste, Controls Odors

3-in-1 non-formaldehyde formula also cleans holding tanks.

Holding Tank Chemicals

Non-Staining, Worry-Free Chemicals

Black Water Odor Control, Grey Water Odor Control, Drain Valve Lubricant and Tissue Digester.



Limited Warranty

Warranty

Thetford Corporation warrants, to the original purchasers only, that all of its products that are used for personal, family or household purposes are free from defects in material and workmanship for a period of **one year from the date of purchase**. All Thetford Corporation products that are placed in commercial or business use are warranted, to the original purchaser only, to be free of defects in material and workmanship for a period of ninety (90) days from the date of purchase.

Limitation of Warranty

This warranty does not apply to products which, in the judgement of Thetford Corporation, have been subjected to misuse, negligence, accident, fire, improper repair, installation or any other unreasonable use. This warranty will be void if the serial number or date of manufacture stamp has been effaced, altered, or removed, or if the product has been repaired or altered by persons other than Thetford Corporation.

Limitation of Remedy

The responsibility of Thetford Corporation under this warranty is limited to the repair or replacement at the option of Thetford Corporation, of any defective part of product provided such repair or replacement is performed by Thetford Corporation.

IN NO EVENT SHALL THETFORD CORPORATION BE RESPONSIBLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND ARISING FROM THE USE OF ITS PRODUCTS...i.e., SPILLS FROM HOLDING TANK DEODORANTS OR ADDITIVE, DAMAGE RESULTING FROM TOILET FLOODING.

Implied Warranties

IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO ONE (1) YEAR FROM THE DATE OF PURCHASE FOR PRODUCTS USED FOR PERSONAL, FAMILY, OR HOUSEHOLD PURPOSES AND NINETY (90) DAYS FROM THE DATE OF PURCHASE FOR PRODUCTS PLACED IN COMMERCIAL OR BUSINESS USE.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow any exclusion or limitation of incidental or consequential damages so that above limitations may not apply to you.

Procedure For Warranty Claims

In the event of a defect during the warranty period, Thetford Corporation will repair or replace, at its option, and at no charge to the purchaser, the product or any part of the product which is proved to the satisfaction of Thetford Corporation to have been defective at the time of purchase or which becomes defective in normal use during the warranty period. In the event of such a defect the purchaser should return the product or part to Thetford Corporation, 800 Baker Road, Dexter, Michigan, 48130, freight prepaid, properly identified and with proof of purchase date.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.