

The logo for Therma San features the word "therma" in a bold, black, lowercase sans-serif font, with a red wavy pattern behind it. The word "san" is in a bold, white, lowercase sans-serif font, set against a solid black rectangular background.

Owner's Manual

Congratulations:

SERIAL NUMBER	CHASSIS
5D3G24017	AB-B
SERVICE NUMBER	
10AB0402VB01	

You have purchased one of the most useful, time saving, and carefully engineered products in the recreation field. The Thermasan system offers you independence from routine evacuation of your holding tank.

Thermasan is a unique device that utilizes the heretofore unused heat of the exhaust system to destroy waste in your recreational vehicle. In other words, it applies waste to destroy waste. This provides a better way to solve our environmental problems.

Thermasan represents a solution to pollution. Lawmakers and citizens everywhere are taking action to control recreational pollution. For example, most campgrounds and roadside parks no longer permit washwater to be spread on park roadways. People everywhere are developing interest in the control of impolite indiscretions on our highways and roadside parks. Recreational vehicle owners with Thermasan units avoid inappropriate temptations between dump stations. Recreational vehicle pollution will subside as more owners become Thermasan users.

Waste heat attacking waste from the holding tank does not increase the pollution content of the exhaust pipe. Waste is a fuel and will burn as surely in your exhaust system as it does in the thousands of incinerators found in most metropolitan areas of our country. Odors in waste are simply harmless molecular particles that can easily be disintegrated by high temperatures. Bacteria are readily destroyed in a confined, heat controlled environment like an exhaust system.

The federal and state criteria for vehicle exhaust emission have for standards the control of unburned hydrocarbons, carbon monoxide, and oxides of nitrogen. An operating Thermasan system does not increase the amounts of the above atmospheric pollutants. An exhaust system that will meet federal and state standards will meet the same with a Thermasan unit installed.

Your Thermasan system not only provides you with unprecedented freedom and convenience, it also enables you to join the ranks of those interested in contributing to the control of recreational pollution.

You Should Know

1. When on a vacation or trip, we recommend operating the unit some each day. This way you can keep ahead and have reserve tank space available for periods when you wish to stop for a few days. Generally you may figure that you must operate the system one hour to burn the waste created in one day by each person in your party.
2. Holding tanks on recreational vehicles are not easily cleaned. For this reason we recommend that napkins, kleenex, or other "wet strength" articles be kept from your holding tank. Furthermore, in the interest of safety, do not put kerosene, fuel oil, or alcohol in your holding tank.
3. Occasional draining of your holding tank by conventional sewer hookup is recommended. This should be done at least annually to remove any foreign particles or other insoluble matter.
4. During cold weather operation, your system may not react at the same lower speed as it did during summer type conditions. You may find that the reaction light glows at 45 instead of 40 miles per hour. This is due to heat losses from the outside surface of the exhaust pipe, and does not impair the effectiveness of your Thermasan system.
5. Frozen waste lines or a frozen holding tank will inhibit the system's ability to destroy waste. You may overcome this by using a holding tank anti-freeze like Thetford's Aqua-Thaw. Do not use kerosene.

Maintenance

Your Thermasan system has been carefully designed to minimize the need for routine maintenance. All bearings are lifetime oiled and sealed. No lubrication is required. Furthermore, adjustments to the system are not necessary.

The exhaust system of your vehicle is made of ordinary steel—and for good reason. Steel rusts and this rust provides the seal between sections of the exhaust system. However, it may also cause your Thermasan components to adhere to the rusted steel, even though your Thermasan is made of stainless and other special steels.

Chances are that your Thermasan unit will far outlast the

exhaust system of your recreational vehicle. Please advise the muffler mechanics to take care in removing the components of your Thermasan. Thermasan cannot take the responsibility for installation or re-installation damage.

You should advise the mechanic to take particular care with the thermal sensing probe. It may be necessary to apply penetrating oil with heat to loosen some sections that are particularly rust encrusted.

A trouble shooting guide has been included with this owner's manual. You will find it in the cover pocket.

Commonly Asked Questions

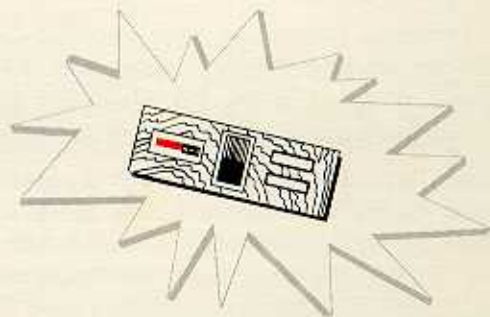


- Q.** If the unit is frozen, will it be damaged?
- A.** No. The unit is designed to accept freezing without damage. If the unit is started in the frozen condition, a fuse failure will result. Simply replace the fuse if this happens. The unit can be winterized by pumping the lines clean after emptying the holding tank.
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- Q.** Will the Therman system rust the exhaust system of my motorhome, truck, or tow vehicle?
- A.** No. It does not produce enough water. Water is a natural by-product of the combustion in a gasoline engine. A gallon of gasoline in the process of burning will chemically create five (5) gallons of water. This means that a recreational vehicle, which gets 12 miles per gallon, at 60 miles per hour, will produce 25 gallons of water per hour through its exhaust system.

$$\frac{5 \text{ gal. water}}{\text{gal. gas}} \times \frac{\text{gal. gas}}{12 \text{ mi.}} \times \frac{60 \text{ mi.}}{\text{hr.}} = \frac{25 \text{ gal. water}}{\text{hr.}}$$

With this amount of water present in the exhaust system as a result of normal operation, you can readily see that the addition of only five (5) or more gallons per hour will not adversely affect the exhaust system.





- Q.** Will other people on the highway know that my Thermasan unit is operating?
- A.** No. Your exhaust emission will be free of visible steam and odor. The products of combustion reaction are invisible. Furthermore, none of the components of the Thermasan system are visible from outside of the vehicle.
- Q.** Can the Thermasan unit damage my recreational vehicle engine?
- A.** No. The waste is added to the exhaust system downstream from the engine. The engine does not know that it is there.



- Q.** Are there any materials that should not be put in my holding tank or should not be mixed with the waste?
- A.** Do not put any highly combustible materials such as kerosene, alcohol, or gasoline in your holding tank. Do not winterize your vehicle with fuel oil or kerosene, which might get into the holding tank. We also recommend that facial type tissue (Kleenex, etc.) be kept from the holding tank because they have "wet strength" and they will not properly dissolve for passage through the waste pump.



- Q.** Should I be cautious of the Thermasan system?
- A.** The process of combustion reaction does not increase the temperature of the exhaust system. An excess of raw gasoline or other combustibles in the system could cause a condition no more forceful than a normal automobile "backfire".
- Q.** Does the unit make noise?
- A.** No. Its operation is silent.
- Q.** Does it harm the Thermasan system by running it when my holding tank is empty?
- A.** No. The Thermasan unit is designed to operate no matter whether the tank is full or empty. When the tank is empty, the Thermasan waste pump will simply pump air instead of waste.

Warranty Claims

Should it be necessary to make a warranty claim, contact the dealer from whom you received your Thermasan system, or contact any Certified Service Center of Thetford Corporation.

Because Thetford Corporation is the recreation market representative for Thermasan Corporation, all Thetford

Service Centers are equipped to repair these systems. Enclosed is a list of service centers.

You may obtain a copy of Thermasan's Service Manual by sending a request with \$3.00 to Thermasan Corporation, P. O. Box 1940, Ann Arbor, Michigan 48106.

Warranty

Thermasan Corporation, the Manufacturer herein, warrants solely to the original retail purchaser of each new Thermasan Waste Unit that each part of this unit is free, under normal use and service, from defects in material and workmanship for a period of twelve months from the date of purchase of said unit. Manufacturer assumes no obligation for defects caused by installation of said unit. Manufacturer's obligation, under this warranty, is strictly limited to the repair or replacement of any defective parts which have been returned to it and which part has been determined by the Manufacturer to be defective. This warranty is expressly in lieu of any other express or implied warranties, and of any other obligation on the part of the seller. No person, agent or dealer is authorized to give any other warranties on Manufacturer's behalf or to assume for it any other liability.

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