

Sealand®

by Dometic GROUP

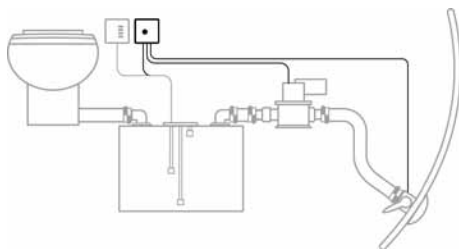
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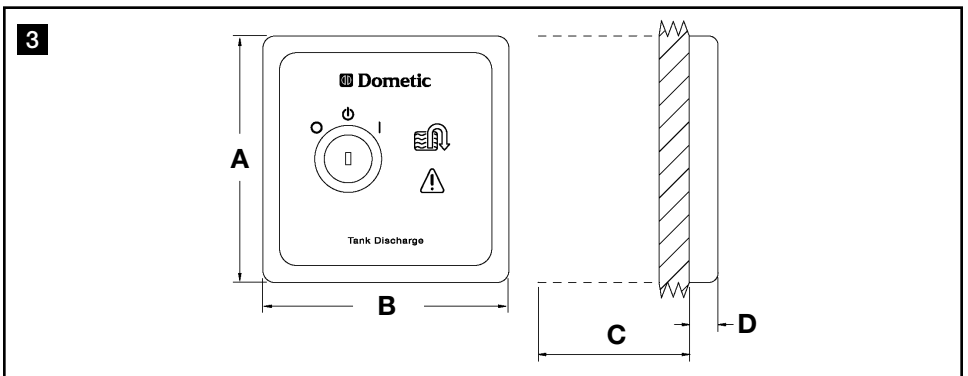
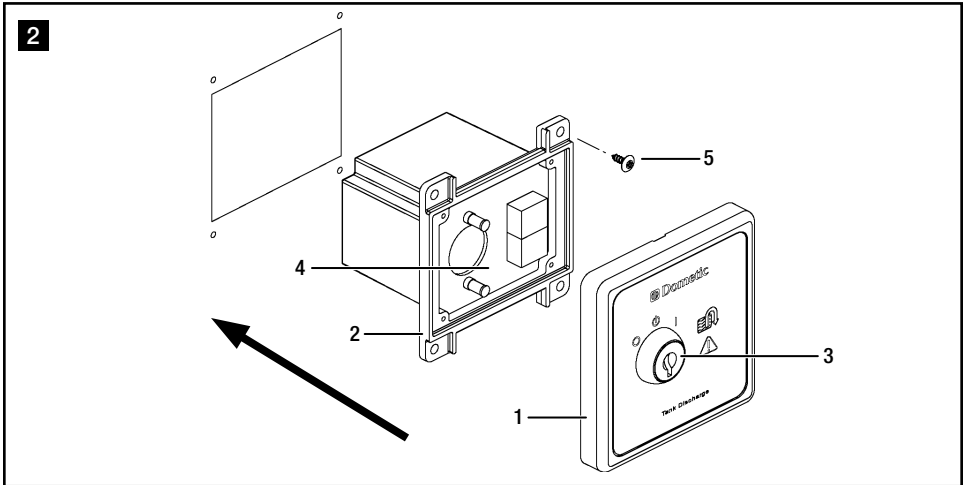
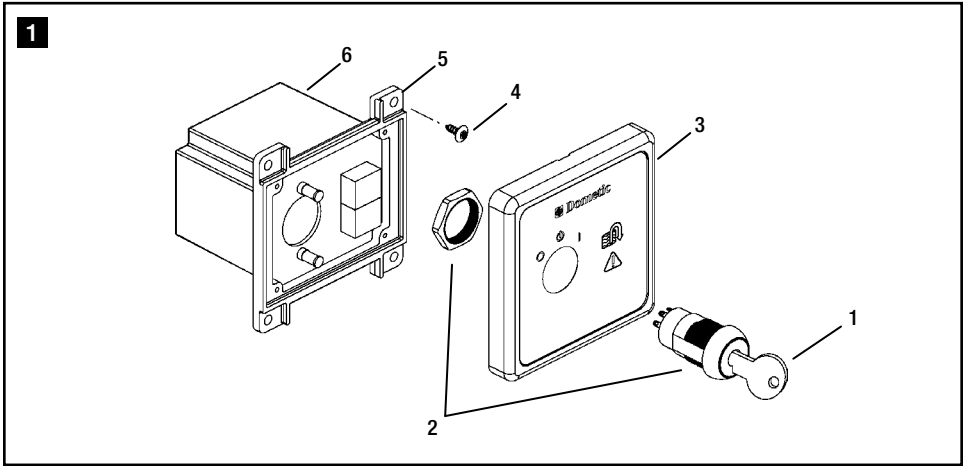
**Tank Discharge Control
with Seacock Monitor**
Instruction manual

DTD02

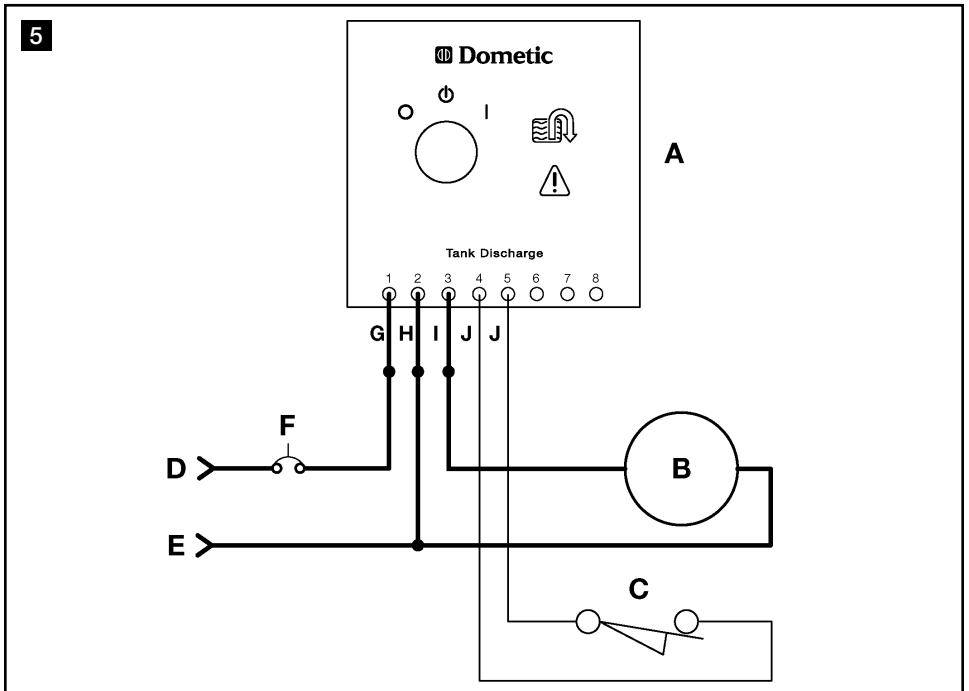
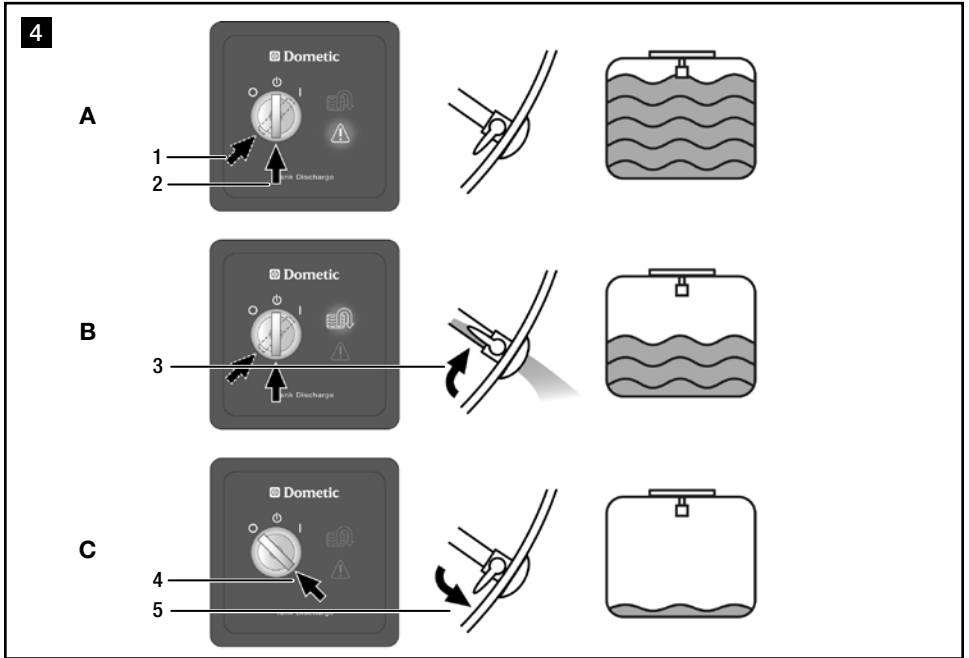


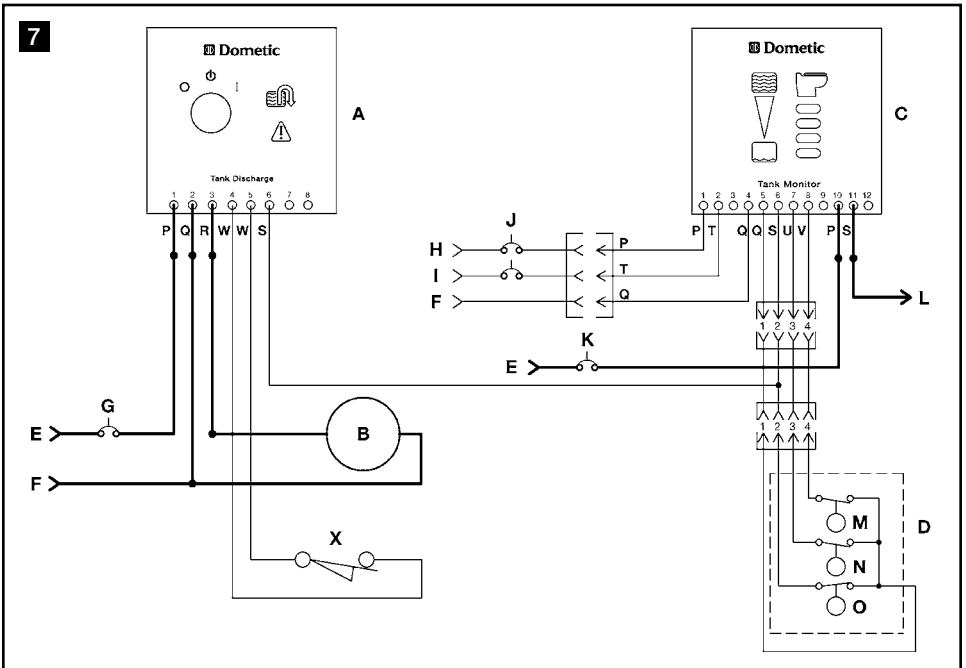
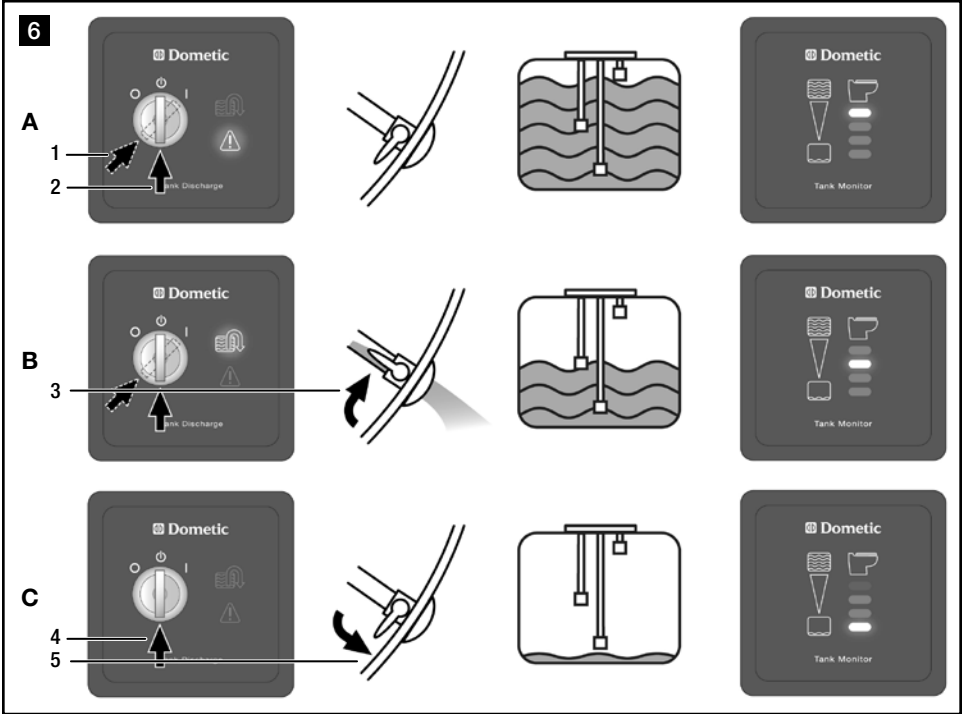
DTD02 Tank Discharge Control with Seacock Monitor





Dometic Tank Discharge Control





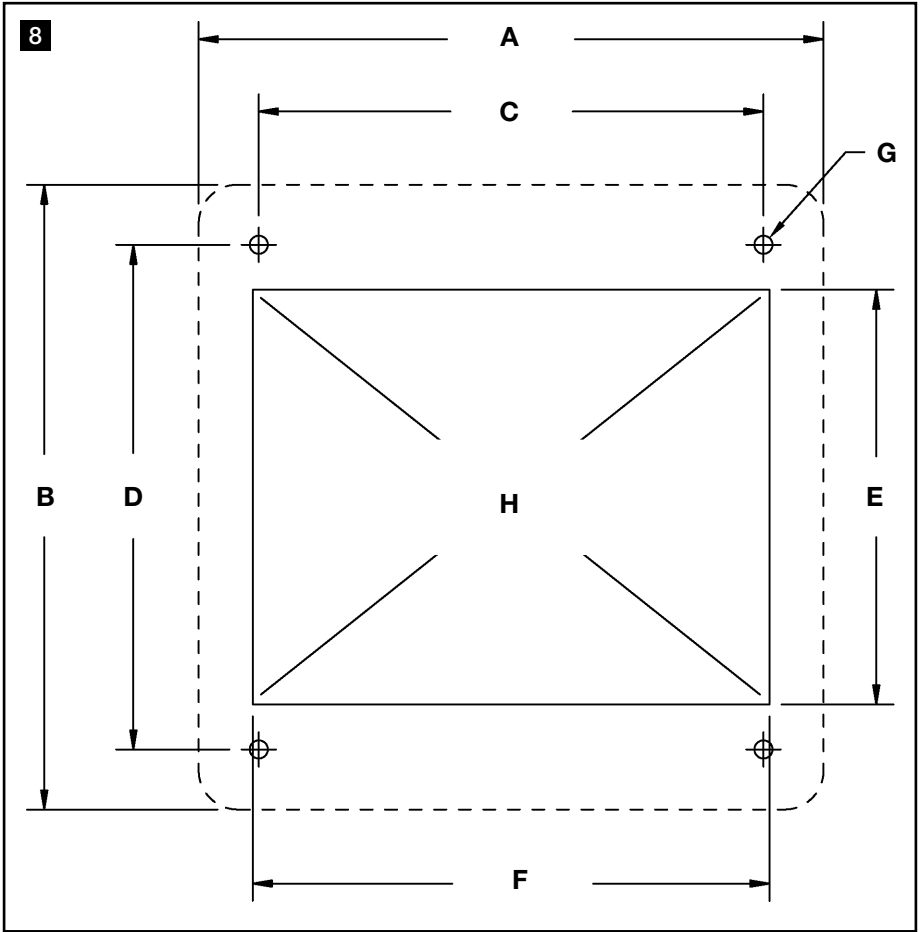


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1 Notes on using the manual



Caution!

Safety Instruction: Failure to observe this instruction can cause material damage and impair the function of the device.



Note

Supplementary information for operating the device.

fig. **1** 2, page 2 : This refers to an element in an illustration. In this example, item 2 in figure 1 on page 2.

2 General safety instructions

The manufacturer will not be held liable for claims for damage resulting from the following:

- Faulty installation or connection
- Damage to the unit from mechanical influences, misuse or abuse
- Alterations to the unit without express written permission from the manufacturer
- Use for purposes other than those described in this manual

3 Intended use

3.1 OPTION 1: DTD02 discharge control panel only

DTD02 Tank Discharge Control panel provides a key-operated switch to activate a discharge pump that will empty a holding tank. A green light indicates when the discharge pump is operating. The DTD02 can be used with virtually any electric discharge pump that operates on the same rated voltage (12 V DC or 24 V DC) and a maximum circuit breaker or fuse rating of 20 amps.

Because attempting to pump-out a holding tank can be harmful if the seacock to the overboard discharge fitting is closed, the DTD02 panel also includes a yellow warning light that indicates when the seacock is closed. The DTD02 panel connects to two Dometic seacock switches (available separately):

- 385310675 - seacock interlock switch and relay for Conbraco 7014701
- 385310705 - seacock interlock switch and relay for Groco BV1500

3.2 OPTION 2: DTD02 discharge control panel with DTM04 tank monitor system

When integrated with the Dometic DTM04 Tank Monitor System, the DTD02 Tank Discharge Control panel will automatically shut off the discharge pump when the holding tank is empty.



Caution!

Operator must know local regulations for emptying a holding tank.



Note

The US Coast Guard allows a key-operated switch as a means to secure an overboard discharge pump system. Turn off DTD02 system and remove key from switch when boating in "No Discharge" waters.

3.3 Features

Secure discharge pump control. Key-operated switch provides convenient means to secure discharge pump operation without use of padlocks or other mechanical fasteners.

Helps prevent pump burn-out. Activated panel light indicates when discharge pump is operating. Reminds operator to shut off pump when tank discharge is complete.

Prevents potential damage from discharging tank against closed seacock. Activating a discharge pump while seacock is closed can cause pressure build-up in discharge hose which may damage pump or boat and result in costly repairs. The seacock interlock switch (available separately) greatly reduces this possibility.

Automatic pump shut-off with DTM04 tank monitor system. Discharge pump stops when tank level drops below "empty" level probe (fig. 6 C, page 4).

Simplifies plumbing system. Eliminates wye valves and vented loops of multi-toilet systems.

4 Specifications

4.1 Materials

Panel frame and mounting frame: ABS

Panel surface: Polycarbonate resin

Circuit assembly housing: High-density polyethylene

4.2 Electrical current draw (panel only)

System Voltage	Pump Off (amp)	Pump On (amp)
12 V DC	0	0.16
24 V DC	0	0.095

Specifications subject to change without notice.

Maximum relay rating for 12 or 24 V DC discharge pump: 20 amps.

Float Switch Rating: 20 watts with resistive load (when used with DTM04 system).

4.3 Dimensions (fig. 3 , page 2)

Ref.	Dimension	Ref.	Dimension
A	3.25 in. / 83 mm	C	51 mm / 2 in. clearance behind wall
B	3.25 in. / 83 mm	D	0.38 in. / 10 mm

4.4 Approvals

ISO 8846; EMC Directive 2004/108/EC; CE approved for electromagnetic compatibility

5 Components (fig. 1, page 2)

Ref	Description	Item Number (North America / Europe)
1	Replacement key	385311036 / 860003853110362
2	Switch assembly	385311610 / 860003853116104
3	DTD02 panel cover, black DTD02 panel cover, white	385311674 / 860003853116740 385311675 / 860003853116757
4	#6 fastener	385311612 / 860003853116120
5	Mounting frame	385311613 / 860003853116138
6	DTD02 circuit ass'y, 12 V DC DTD02 circuit ass'y, 24 V DC (includes item 5)	385311676 / 860003853116765 – 12 V DC 385311677 / 860003853116773 – 24 V DC

6 Installation

6.1 Tank discharge control panel (fig. 2, page 2)



Caution!

Do not install DTD02 panel in an atmosphere with potentially flammable or explosive vapors.

- Select panel location away from direct contact with water and oil.
- Confirm clearance for wire connections behind wall, hull liner or bulkhead.
- Using control panel template (fig. 8, page 5), cut out panel access hole (E, F) and drill fastener holes (G).
- With electrical power off, route wire from power source, through circuit breaker or fuse (not provided), to panel location. Route additional wires from discharge pump, seacock relay and “full tank” probe according to diagram on page 3 or 4, depending on your application, to panel location (see Section 6.2 or 6.3, wiring diagram key). Make sure wires extend out through panel access hole.
- Make proper wiring connections to wires extending from bottom of circuit assembly (fig. 2 4, page 2).
- Remove panel cover (fig. 2 1, page 2) from mounting frame (2) by carefully pulling them apart. Make sure wires between key switch (3) and circuit assembly (4) remain attached. (Key pin 1 – red; pin 2 – brown; pin 7 – blue)
- Install mounting frame to wall with four fasteners (5).
- Tuck key switch wires into circuit assembly housing, and push panel cover onto mounting frame until it locks into place.
- Turn on electrical power.

DTD02 Panel Template Dimensions (fig. 8, page 5)

Ref.	Dimension
A	3.25 in. / 83 mm
B	3.25 in. / 83 mm
C	2.63 in. / 67 mm
D	2.63 in. / 67 mm
E	2.16 in. / 55 mm
F	2.69 in. / 68 mm
G	0.10 in. / 2 mm dia.
H	Cut-out area. Allow 2 in. / 51 mm clearance behind wall.

6.2 Key to DTD02 - discharge pump system wiring (fig. **5**, page 3)

Ref.	Description	Ref.	Description
A	DTD02 control panel	F	Discharge pump circuit breaker or fuse
B	Discharge pump	G	Red
C	Seacock interlock switch	H	Black
D	12 or 24 V DC	I	Brown
E	V DC ground	J	White

1. Heavy lines in wiring diagram represent stranded copper wire to be sized according to ABYC recommendations.
2. Other wire can be 18 gauge stranded copper wire or larger.
3. Maximum discharge pump circuit breaker or fuse rating: 20 amps.

6.3 Key to DTD02-DTM04 system wiring (fig. **7**, page 4)

Ref.	Description	Ref.	Description
A	DTD02 control panel	M	Full level probe
B	Discharge pump	N	Mid level probe
C	DTM04 indicator panel	O	Low/Empty level probe
D	Wastewater tank	P	Red
E	12 or 24 V DC	Q	Black
F	V DC ground	R	Brown
G	Discharge pump circuit breaker or fuse	S	Green
H	12 V DC	T	Blue
I	24 V DC	U	Yellow
J	1-amp circuit breaker or fuse	V	Orange
K	Toilet system circuit breaker or fuse	W	White
L	+ V DC to electric toilet system	X	Seacock interlock switch

1. Heavy line indicates 14 gauge or larger stranded copper wire is required.
2. Other wire can be 18 gauge stranded copper wire or larger.
3. Maximum discharge pump circuit breaker or fuse rating: 20 amps.

7 Operation

**Caution!**

Operator must know local regulations for emptying a holding tank.

7.1 OPTION 1: DTD02 discharge control panel (fig. 4, page 3)

1. When boat is in unrestricted waters and pump-out is desired, insert key into switch and turn to momentary “start” position (A 1). Allow key to rebound to “pump on” position (A 2).
2. If seacock is closed, the interlock switch sends a signal to the panel, the yellow “caution” indicator turns on, and the discharge pump will not start. Open the seacock (B 3), turn key to momentary “start” position, then let it rebound to “pump on” position. Green light indicates when the discharge pump is operating.
3. When pump-out is complete, turn key to “Off” position (C 4), close seacock (C 5), and remove key from switch.

**Caution!**

Do not allow discharge pump to operate for an extended period of time when there is no discharge from holding tank. Damage to pump may result.

7.2 OPTION 2: DTD02 discharge control panel with DTM04 tank monitor system (fig. 6, page 4)

1. When the Dometic Tank Monitor panel reads “full” and boat is in unrestricted waters, insert key into switch and turn to momentary “start” position (A 1). Allow key to rebound to “pump on” position (A 2).
2. If seacock is closed, the interlock switch sends a signal to the panel, the yellow “caution” indicator turns on, and the discharge pump will not start. Open the seacock (B 3), turn key to momentary “start” position, then let it rebound to “pump on” position. Green light indicates when the discharge pump is operating.
3. When pump-out is complete and Tank Monitor panel reads “empty”, pump will automatically shut off and green light will shut off while key remains in “pump on” position (C 4). Turn key to “off” position, close seacock (C 5), and remove key from switch after pump-out is complete to secure pump.

8 Warranty and product liability

North America:

Manufacturer's One-Year Limited Warranty

Dometic LLC, Sanitation Division (Dometic) warrants to the original purchaser only that this product, if used for personal, family or household purposes, is free from defects in material and workmanship for a period of one year from the date of purchase.

If this Dometic product is placed in commercial or business use, it will be 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.

Dometic reserves the right to replace or repair any part of this product that proves, upon inspection by Dometic, to be defective in material or workmanship. All labor and transportation costs or charges incidental to warranty service are to be borne by the purchaser-user.

EXCLUSIONS

IN NO EVENT SHALL DOMETIC BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, FOR DAMAGES RESULTING FROM IMPROPER INSTALLATION, OR FOR DAMAGES CAUSED BY NEGLIGENCE, ABUSE, ALTERATION OR USE OF UNAUTHORIZED COMPONENTS. ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, ARE LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE.

IMPLIED WARRANTIES

No person is authorized to change, add to, or create any warranty or obligation other than that set forth herein. 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.

OTHER RIGHTS

Some states do not allow limitations on the duration of an implied warranty and some states do not allow exclusions or limitations regarding incidental or consequential damages; so, the above limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

To obtain warranty service, first contact your local dealer from whom you purchased this product or go to <http://www.dometic.com> for a dealer near you.

Europe:**Warranty and Customer Service**

Warranty arrangements are in accordance with EC Directive 44/1999/CE and the normal conditions applicable for the country concerned. For warranty or other service, please contact our Dometic Service department listed elsewhere in this manual. Any damage due to improper use is not covered by the warranty.

The warranty does not cover any modifications to the product or the use of non-original Dometic parts; the warranty does not apply if the installation and operating instructions are not adhered to and no liability shall be entertained.

Product Liability

Product liability of Dometic Group and its subsidiary companies does not include damages which may arise from: faulty operation; improper alterations or intervention in the equipment; adverse effects from the environment which may impact the equipment itself or the direct vicinity of the equipment or persons in the area.

To obtain warranty service, first contact your local dealer from whom you purchased this product or go to <http://www.dometic.com> for a dealer near you.

9 Customer service

There is a strong, worldwide network to assist in servicing and maintaining your toilet system. For the Authorized Service Center near you, please call from 8:00 a.m. to 5:00 p.m. (ET) Monday through Friday.

You may also contact or have your local dealer contact the Parts Distributor nearest you for quick response to your replacement parts needs. They carry a complete inventory for the Dometic product line.

Telephone:	1 800-321-9886	U.S.A. and Canada
	330-439-5550	International
Fax:	330-496-3097	U.S.A. and Canada
	330-439-5567	International
Web sites:	http://www.Dometic.com	
	http://www.DometicSanitation.com	

Dometic Group is a customer-driven, world-leading provider of leisure products for the RV, automotive, truck and marine markets. We supply the industry and aftermarket with a complete range of air conditioners, refrigerators, awnings, cookers, sanitation systems, lighting, mobile power equipment, comfort and safety solutions, windows, doors and other equipment that make life more comfortable away from home.

Dometic Group supplies a wide range of workshop equipment for service and maintenance of built-in air conditioners. Dometic Group also provides specially designed refrigerators for hotel rooms, offices, wine storage and transport and storage of medical products.

Our products are sold in almost 100 countries and are produced mainly in wholly-owned production facilities around the world.