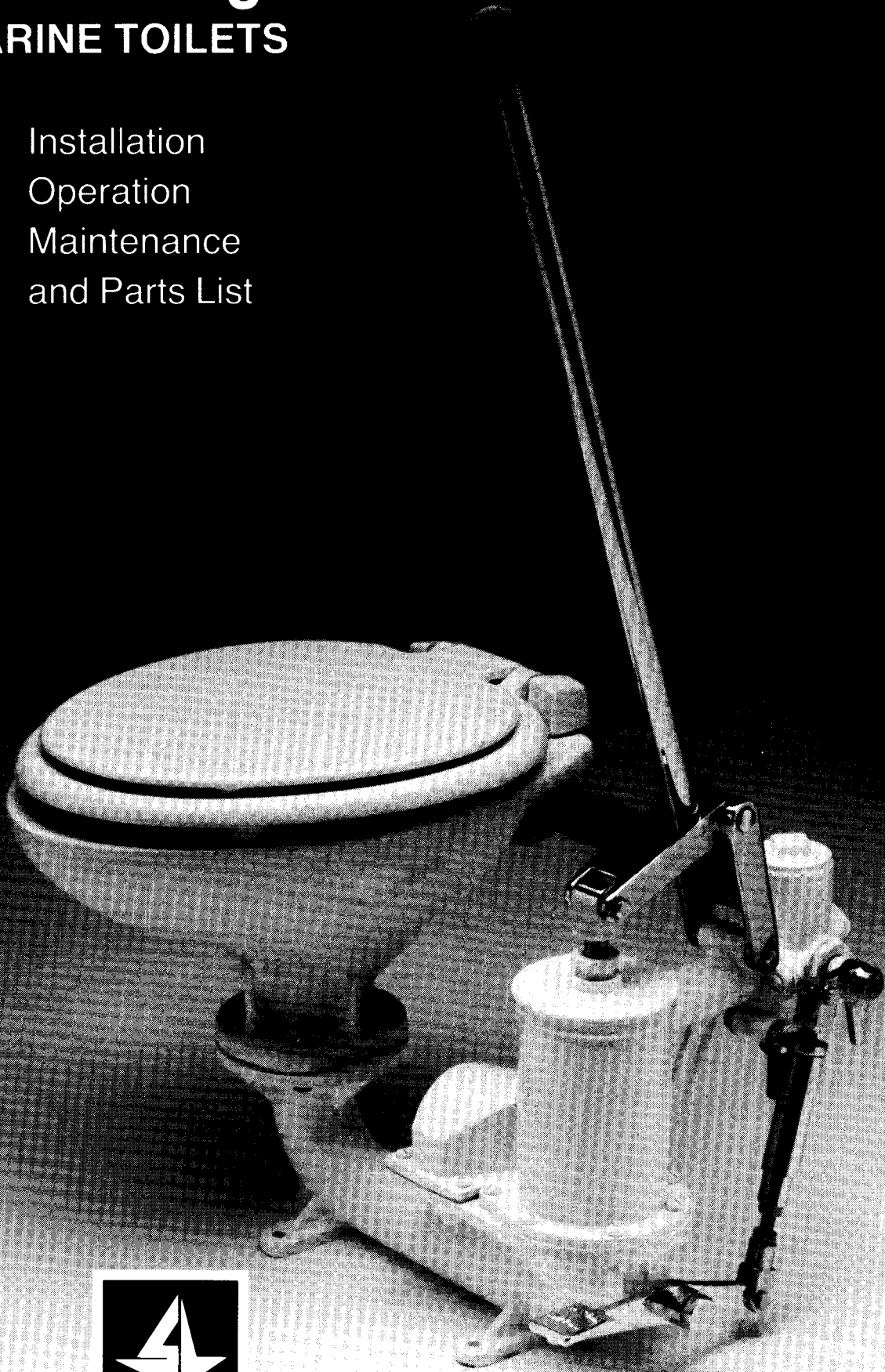


# S-L Kentigern

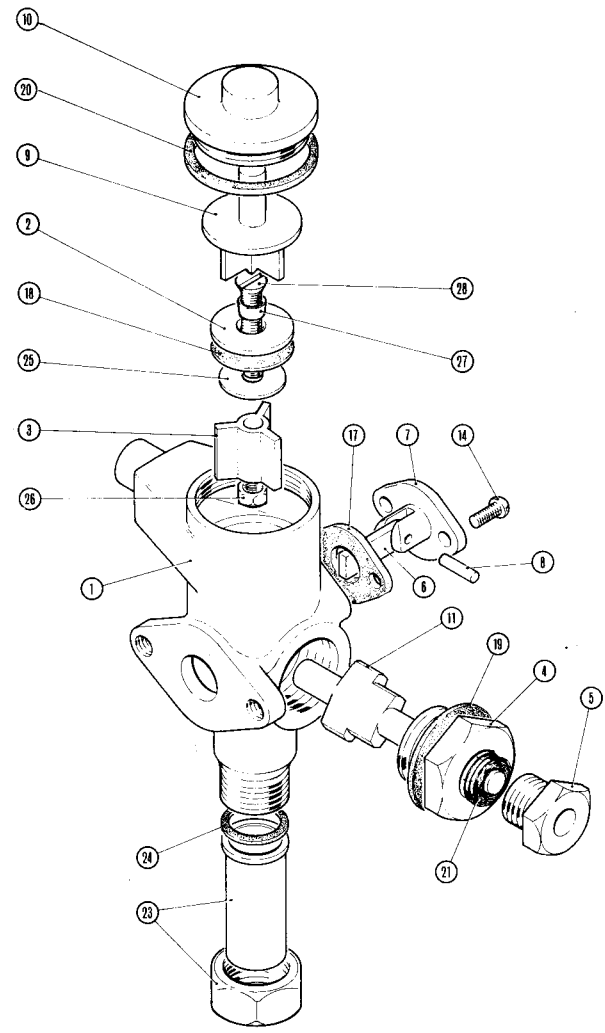
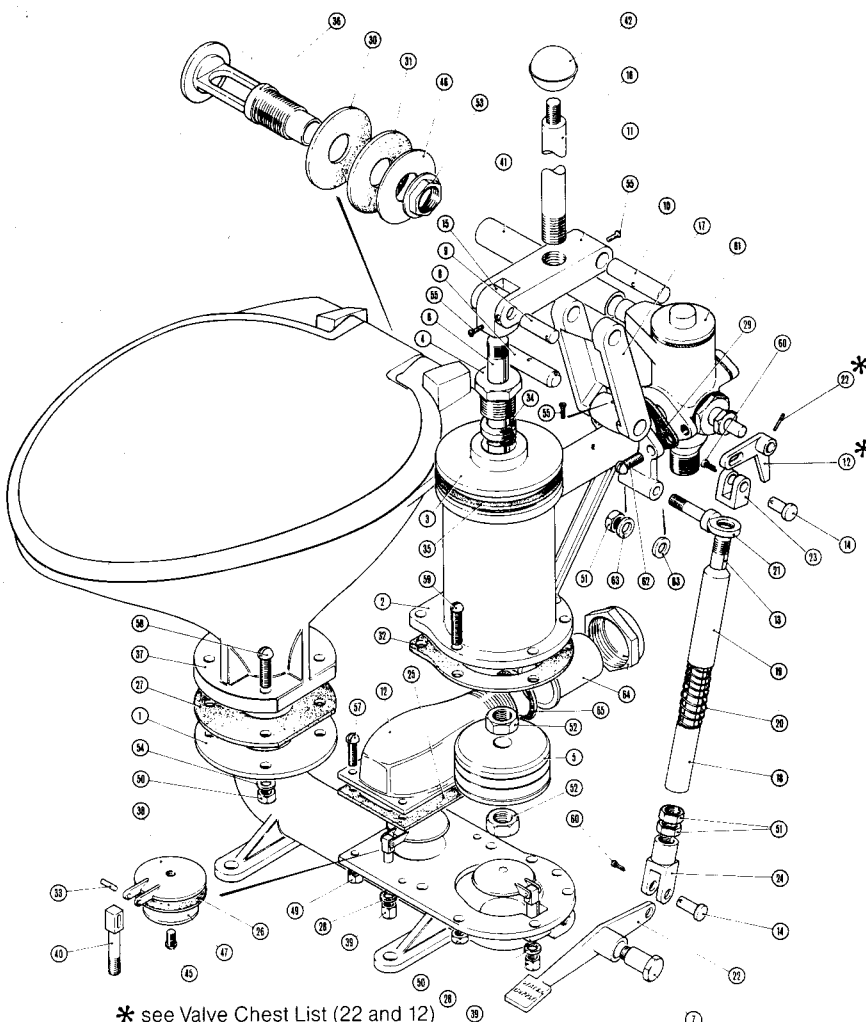
## MARINE TOILETS

Installation  
Operation  
Maintenance  
and Parts List



**Simpson-Lawrence**  
INCORPORATING CHANNEL MARINE

**Marine Equipment**



\* see Valve Chest List (22 and 12)

Ref. No.	List No.	Description	No. per Set
	<b>0439204</b>	White Plastic Seat and Cover	1
1		Base	1
2		Cylinder	1
3		Cylinder Cover	1
4		Gland Nut	1
5		Piston	1
6		Piston Rod	1
7		Foot Lever Fulcrum	1
8		Link Bottom Pin	1
9		Crosshead Pin	1
10		Rocking Lever Pin	1
11		Rocking Lever	1
12		Discharge Valve Cover	1
13		Foot Lever Rod	1
14		Foot Lever Joint Pin	2
15		Piston Rod Cross Head	1
16		Hand Lever	1
17		Link	1
18		Spring Lower Socket	1
19		Spring Upper Socket	1
20	<b>6039305</b>	Spring Foot Lever	1
21		Spring Abutment Bracket	1
22		Foot Lever	1
23		Foot Lever Joint Top	1
24		Foot Lever Joint Bottom	1
25		Discharge Valve Cover Washer.	1
26		Discharge Valve Washer	2
27	<b>6039309</b>	Basin Washer	1
28		Discharge Valve Hinge Washer	2
29		Cylinder Inlet Washer	1
30		Basin Back Connector Washer, Back	1
31		Basin Back Connector Washer, Front	1
32		Cylinder Bottom Washer	1
34		Packing	1
35		Cylinder Top Washer	1
36		Basin Back Connector	1
37	<b>6039600</b>	Basin	1
38		Discharge Valve	2
39		Nut	2
40		Valve Hinge Pin	2
41	<b>6039300</b>	Back Tube	1
42		Bakelite Knob	1
45		Screw	2
46		Washer	1
47		Washer	1
49		Nut	4
50		Nut	11

Ref. No.	List No.	Description	No. per Set
51		Nut	3
52		Nut	2
53		Nut	1
54		Washer	4
55		Screw	3
57		Screw	4
58		Screw	4
59		Screw	7
60		Split Pin	2
61	<b>6039306</b>	Inlet Valve Chest (See Separate List)	1
62		Screw	2
63		Washer	2
64		Cap and Lining	1
65		Washer	1

**INLET VALVE CHEST**

Ref. No.	List No.	Description	No. per Set
	<b>6039306</b>	Inlet Valve Chest Assembly	1
1		Valve Chest	1
2		Bottom Valve	1
3		Wings	1
4		Cam Spindle Stuffing Box	1
5		Gland	1
6		Water Discharge Valve Lever	1
7		Cover	1
8		Pivot Pin	1
9		Water Discharge Valve	1
10		Valve Chest Cover	1
11		Cam Shaft	1
12		Cam Shaft Lever	1
14		Screw	2
17		Gasket	1
18		Washer	1
19		Washer	1
20		Washer	1
21		Packing	1
22		Spring Pin	1
23		Cap and Lining	1
24		Washer	1
25		Washer	1
26		Nut	1
27		Seal	1
28		Screw	1

The Simpson-Lawrence Kentigern toilet is suitable for medium and large sized craft and has a 3½" diameter pump with specially designed valves which reduce the possibility of blockage.

The S-L Kentigern has the advantage of a domestic size seat on a system which fits even the smallest space.

Stringent quality control in material and construction minimises unnecessary maintenance. Full spares kits are, however, available which make servicing remarkably easy.

The S-L Kentigern is designed to be used either above or below the waterline. If mounted below, a suitable height of anti-syphon bend should be allowed on the discharge pipe. The inlet is controlled by a foot operated pedal.

## SPECIFICATION

<b>Basin</b>	High quality Vitreous China
<b>Pump</b>	Bronze
<b>Inlet Valve Chest</b>	Bronze
<b>Handle</b>	Bronze, Chrome Plated
<b>Base</b>	Bronze
<b>All metal parts</b>	Stove enamelled white.
<b>Weight</b>	29 kg (64 lb)
<b>Dimensions</b>	See dimensions diagram
<b>List No. 0439102</b>	S-L Kentigern complete with White seat and cover.

## SPARES KITS FOR S-L KENTIGERN

### Set of Washers consisting of:

1 x Part No. 25	:	1 x Part No. 30
2 x Part No. 26	:	1 x Part No. 31
1 x Part No. 27	:	1 x Part No. 32
2 x Part No. 28	:	1 x Part No. 35
1 x Part No. 29	:	1 x Part No. 65

### Valve Chest

1 x Part No. 17	:	1 x Part No. 20
1 x Part no. 18	:	1 x Part No. 24
1 x Part No. 19	:	

### List No. 6039301

### Handle, consisting of:

1 x Part No. 16	:	1 x Part No. 42
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### List No. 6039302

### Cylinder Assembly consisting of:

1 x Part No. 2	:	1 x Part No. 15
1 x Part No. 3	:	1 x Part No. 21
1 x Part No. 4	:	1 x Part No. 35
1 x Part No. 5	:	2 x Part No. 52
1 x Part No. 6	:	

### List No. 6039303

### Base with Valves, consisting of:

1 x Part No. 1	:	2 x Part No. 39
2 x Part No. 26	:	2 x Part No. 40
2 x Part No. 28	:	2 x Part No. 45
2 x Part No. 38	:	2 x Part No. 47

### List No. 6039304

### Discharge Valve, consisting of:

2 x Part No. 26	:	2 x Part No. 40
2 x Part No. 28	:	2 x Part No. 45
2 x Part No. 38	:	2 x Part No. 47
2 x Part No. 39	:	

### List No. 6039307

### Basin Back Connector, consisting of:

1 x Part No. 30	:	1 x Part No. 46
1 x Part No. 31	:	1 x Part No. 53
1 x Part No. 36	:	

### List No. 6039308

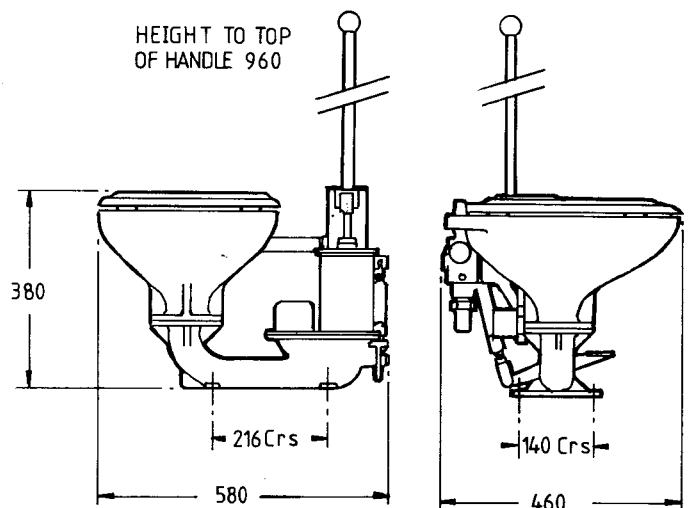
## INSTALLATION

The toilet is supplied complete with instructions. Two seacocks are required as part of the toilet installation, 19mm (¾") and 38mm (1½"). The former is the water inlet and the latter the discharge outlet. The inlet seacock should be fitted well below the waterline and, if possible, located on the other side of the vessel from the discharge seacock. If this is not possible, the inlet seacock should be fitted forward of and further below the waterline than the discharge seacock. The discharge seacock should be below the normal waterline of the vessel.

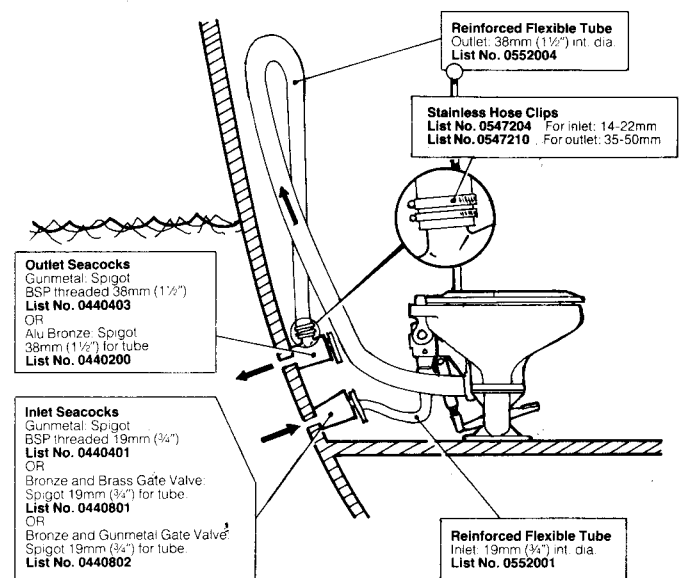
A list of S-L components to complete your installation are shown in installation diagrams A and B.

Locate the toilet in a convenient position and check that the handle can be operated backwards and forwards and that the foot pedal can be depressed conveniently. Ensure that the toilet door can close properly. Securely bolt the toilet to the ships structure. The inlet tube can be led directly to the inlet seacock on the underside of the inlet valve chest. The discharge tube should be taken from the discharge outlet of the toilet in an upward loop well above the waterline (the heeled waterline in a sailing vessel), before returning to the discharge seacock. The purpose of this loop is to prevent the possible syphoning of seawater into the toilet should blockages occur in the discharge valves.

## DIMENSIONS



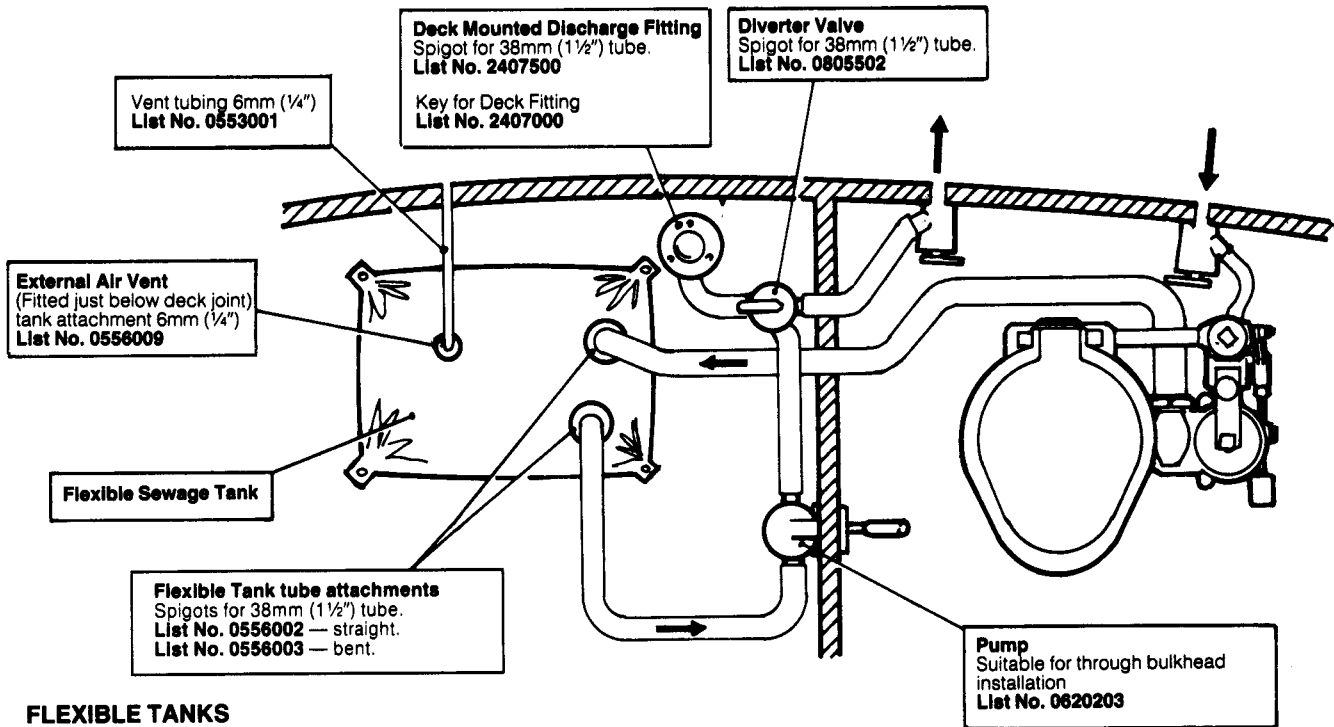
## INSTALLATION DIAGRAM A Normal installation of Sea-Toilet in small craft



Note: Adaptors for using tube on BSP threaded Seacocks

List No. 0545002 19mm thread to 19mm tube.  
List No. 0545004 38mm thread to 38mm tube

**INSTALLATION DIAGRAM B**  
**Toilet installation with separate sewage tank**



**FLEXIBLE TANKS**

List No.	Capacity		Dimensions Empty	
	Litres	Gallons	mm	ins
0554001	55	12	660 x 610	26 x 24
0554002	90	20	660 x 850	26 x 33 1/2
0554003	135	30	660 x 1155	26 x 45 1/2
0554004	260	57	825 x 1385	32 1/2 x 54 1/2

**OPERATION**

Ensure both inlet and outlet seacocks are open. The pump is double acting; flushing water is pumped through the cylinder above the piston and soil is pumped through the cylinder below the piston. To operate the pump, the handle is pulled backwards and forwards. When the foot pedal is not depressed the toilet can discharge only, but when the foot pedal is depressed both flushing of the basin and discharge will take place simultaneously.

Commence the discharge of the toilet by depressing the foot pedal and pump until the basin is clear. Release the foot pedal and continue pumping to completely empty the toilet. It is good practice to flush a considerable amount of water through the toilet after use to ensure that all soil is discharged from the outlet pipe as well as the toilet. A small amount of water should remain at the bottom of the basin to provide an odour trap.

**NOTE:** Always shut off seacocks when vessel is unattended. This instruction is in keeping with good seamanship.

**MAINTENANCE**

We recommend the use of S-L Loosan liquid disinfectant for normal cleaning (List No. 4916100). Calcium scale will, in the course of time, build up on the inside of the valves, pump and pipe work. We recommend an annual pump and pipe work

overhaul to remove any scale. Scale can be removed from pipe work by vigorous flexing and the next toilet flush will eject the loose scale.

If the vessel is to be unused for long periods, use Loosan and leave to stand. During winter conditions in countries where freezing might be encountered, the toilet and associated pipe work should be drained to avoid ice damage. Regularly examine the gland nut, Part 4, on top of the cylinder and gland nut, Part 5, on the inlet valve chest for leaks. Tighten as required but avoid over-tightening as this will cause stiffness in operation. Oil should be applied to the packing regularly. Should leaks not cease by tightening gland nuts, repack as necessary.

A few drops of oil should be applied to all moving parts of the toilet, particularly the handle, linkage, pins and foot pedal mechanism. The exploded diagram on page 2 indicated clearly the configuration of the separate parts.

**WARRANTY**

The Simpson-Lawrence warranty covers the S-L Kentigern toilet for a period of one year to be free from defects in material and workmanship. This warranty is subject to proper installation and use in service as described in this literature.



**Simpson-Lawrence**  
INCORPORATING CHANNEL MARINE

**Marine Equipment**

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