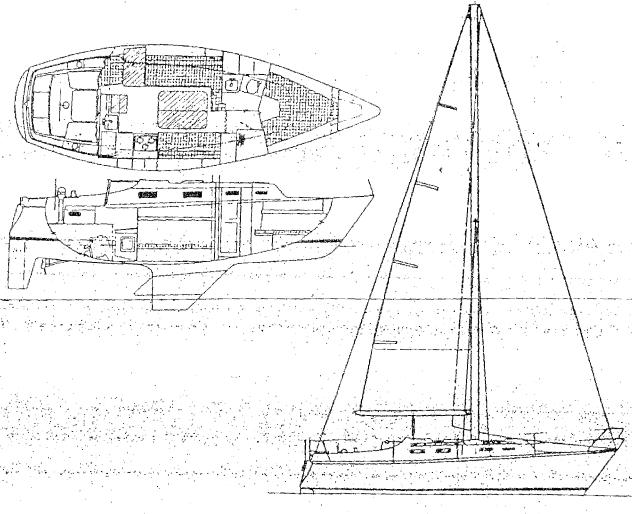
# Hunter 30



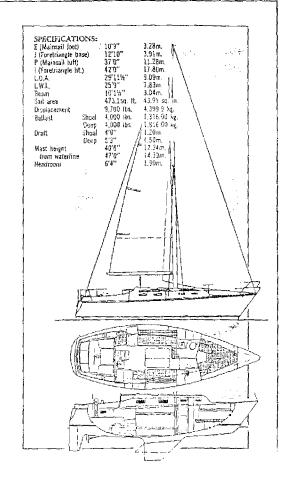
SPECIFICATIONS:		
E (Mainsail foot)	10'9"	3.28 m.
J (Foretriangle base) P (Mainsail luff)	12'10"	3.91.m.
P (Mainsail luff)	37'0"	11.28 m.
I (Foretriangle ht.)	42'0"	17.80 m.
L.O.A.	29'11 54"	9.09 m.
L.W.L.	25'9''	7.83 m.
Beam with a production of		3.04 m.
Sail area	473.1 sq. ft.	43.95 sg. m.
Displacement	9,700 lbs.	4,399.9 kg.
Ballast	Shoal 4,000 lbs.	1,816.00 kg.
	Deep 4,000 lbs.	1,816.00 kg.
Draft	Shaft 4'0"	1.20 m.
	Deep 5'3"	1.50 m.
Mast height	40'6''	12.34 m.
from waterline	47'0"	14.33 m.
Headroom	6'4''	1.90 m.

# THIRTY

The galley is very complete, with fluorescent lighting, two-burner stove, deep sink, hot and cold pressurized water, and plenty of working space.

Accommodations also include a wide quarter berth and V-berth, and the enclosed head features a stand-up shower and vanity with sink. There is lighting throughout, full standing

headroom, and nine screened, opening ports and two large hatches provide plenty of daylight and ventilation below. 110-volt dockside power is also standard.



On deck, the roomy T-shaped cockpit features pedestal steering with built-in engine controls and compass, wraparound coamings, and an interior-brightening Lexan sliding hatch. Double life-lines are standard, as is the bow pulpit, and

stern swim ladder.

Performance is enhanced by the tall rig, full complement of winches, jiffy reefing, and internal halyards led to the cockpit. Auxiliary power is supplied by an economical diesel engine.

The Hunter 30 is a solidperforming, beamy cruiser, ready for everything from extended cruising to

A teak and holly cabin sole is complemented by the use of Treadmaster\* non-skid in the shower and

# HUNTER



COMPLETE, LIVE-ABOARD SIZED CRUISER WITH EVERY COMFORT AND CONVENIENCE. Our 30 is so spacious, many of her owners live aboard. To make her as comfortable as possible, we've carefully considered every detail in designing her interior. For example, we've created an L-shaped dining area which quickly converts to a wide double berth. Generous stowage is provided by a large hanging locker, wide shelves, bookcases and numerous drawers. There's even a beverage cabinet built into the main bulkhead.

## STANDARD EQUIPMENT

1	10	22 25	27	[30	33 36	37 深緯
RIGGING	1473		/	1.79		
Dacron sails; main and (10% genea	1 :			1	THE REAL	/ A
(w/reef points)	<b>49</b>	<b>⊗</b> ⊗	49	480	(A) (A)	
Dacron sails; main, 150% genoa, 85% jib	-+7		-5.5	-		15.
Dacron sails; main, jib and staysail	<del> </del>		76	-	THE UNIT	
liffy reefing, main		<b>a a</b>	69	659		
Roller furling jib			17.64	-	An es	
Sheets	<b>4</b> b	9 0	680	<b>@</b>		
Snap shackle jib blocks		<b>30 60</b>				
Two jib sheer winches	·	(A) (B)	4	•	<b>新疆                                    </b>	
Two, rwo-speed sheet winches			-	-		
Mainsheer winch			140	-	44 O	
Two, two-speed, self-tailing jib sheet winches			Taga	-		9
		-	+ -			100
(ib halvard winch(es)  Double standing sheet stopper		<b>69 69</b>	9			
		* *		*		
Double line organizer		*	-		1777	
Internal halyards, pre-stretched dacron	₩.	0 4	4	(8)		•
Wire to rope internal halvateds			1_		<b>医生产的</b>	
Mainsheet cleat	(6)	<b>(49)</b>	(3)	(5)		9
Self racking jib traveler			1	_	<b>ARTHUR</b>	
Midboom sheeting	40		*		22 6	0 84
Main sheet traveler	(4)	<b>⊘</b>   ⊕	ــــــــــــــــــــــــــــــــــــــ	1		<b>0</b> M
Staysail traveler	!		1	<u> </u>	是影響	•
Hydraulic backstay adjuster				_	400 000	
Rod rigging	1	- 1	1.00	1	<b>画 #</b>	(A)
White aluminum must and boom	20	49	49	4	*	4
White duminum must and boom DECK	<b>39</b>	49 49	1			
		9 <b>9</b>	49			6
DECK  Bow pulpit, stainless steel  Stern rail, stainless steel					* *	<u>ن</u>
DECK Bow pulpit, stainless steel		<b>49</b>	49	*	<b>9</b> 9	6 9
DECK  Bow pulpit, stainless steel  Stern rail, stainless steel		<b>49</b>	<b>3</b>	3	9 6 9 6 5	6 P
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack		<b>39</b>	<b>3</b>	3		6 ·
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform		<b>39</b>	<b>3</b>	30	* 6 * 6 * 6 * 3 * 3 * 3 * 3	
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender eack Stainless steel swim ladder		49	9	30	* 6 * 6 * 6 * 3 * 3 * 3 * 3	
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifetines and stainless steel stanchions Double lifetines		49	***	***		
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats		3 3	3	**************************************		
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifetines and stainless steel stanchions Double lifetines Mooring cleats Stainless steel done and dotade yents		3 3	3	**************************************		
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifetines and stainless steel stanchions Double lifetines Mooring cleats Stainless steel done and dotade yents Teak handrails		3 9	***	<b>3</b>	・	
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats Stainless steel done and dorade yents Teak handrails On-deck anchor well	*	3 3	**************************************			
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifetines and stainless steel stanchions Double lifetines Mooring clears Stainless steel dome and dotade vents Teak handrails On-deck anchor well Cockpit seat lockers	\$	3 9	***		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats Stainless steel done and dotade yents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck	\$		***			
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats Stainless steel done and dorade yents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller	\$					
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats Scainless steel done and dorade yents Teak handrails On-deck anchor well Cockpit seat lockers Two tone deck Anchor roller Anchor windlass	\$					
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifetines and stainless steel stanchions Double lifetines Mooring clears Stainless steel dome and dotade vents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodget(s)	\$					
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats Stainless steel dome and dotade yents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodger(s) Watertight dinghy compartment	\$					
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifetines and stainless steel stanchions Double lifetines Mooring cleats Stainless steel dome and dotade yents Teak handrails On-deck anchor wall Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodger(s) Watertight dinghy compartment COCKPIT	\$					
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats Stainless steel done and dorade yents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodger(s) Watertight dinghy comparement COCKPCT T-shaped cockpit	\$	3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9				
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifetines and stainless steel stanchions Double lifetines Mooring cleats Stainless steel done and dotade vents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodger(s) Watertight dinghy combartment COCKPIT T-shaped cockpit Laminated wood tiller	\$					
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring clears Stainless steel dome and dotade vents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodger(s) Watertight dinghy comparement COCKPIT T-shaped cockpit Laminated wood tiller Pedestal steering, w/engine controls	\$	3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9				
DECK Bow puloit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring cleats Stainless steel dome and dotade yents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodger(s) Watertight dinghy compartment COCKPUT T-shaped cockpit Laminated wood tiller Pedestal steering, w/engine controls lighted compass	***	3 9 9		***************************************		
DECK Bow pulpit, stainless steel Stern rail, stainless steel Stern rail, stainless steel Stern rail, stainless steel w/fender rack Stainless steel swim ladder Swim platform Lifelines and stainless steel stanchions Double lifelines Mooring clears Stainless steel dome and dotade vents Teak handrails On-deck anchor well Cockpit seat lockers Two-tone deck Anchor roller Anchor windlass Spray dodger(s) Watertight dinghy comparement COCKPIT T-shaped cockpit Laminated wood tiller Pedestal steering, w/engine controls	***	3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9				

	19	2.2	25	27:	30	13			圞
Cockpit activated manual bilge pump		1	17	37		ИÈ			
Wraparound coaming			3:			批		•	
Cockpit loading ice chest				::1	<u>L</u> .	搬			協議
Insulated drink cooler locker	<u>.</u>	6	L	$g/d\tilde{x}$		Julia Julia	栖	L de	
Survival raft scorage well	1_					i Xi	Tibe	標整	
ELECTRICAL				,		Per Trans	- mate		
12 volt battery and cabin lights		4	4	(49)		15	The state of		
Dual 12 volt battery w/switch & cabin lights		<u>L</u>		<u> </u>	٠		٠	•	6
Dual battery charget			L	Mini.		312	迦		
Solar panel w/regulator		ļ	·	製	<u> </u>				
European running lights	1	160	Ŀ		*	49		•	1
Buge pump, automatic	<u> </u>		L_	4 1			•		
Bilge pump, manual	<b>(9</b> )	39	4	1.11	<u> </u>	度七	4		
Bilge pump, electric	1		<u> </u>	40	<u></u>			1,771	
110 volt dockside power, with 50' (15.2m) cord	j			-	100		(29)		<b>6</b>
AC outlets in cabin	<u> </u>			17		53			
Mast steaming light and anchor light	. <u>i</u>	50	100	1	49	幽	<b>W</b>	*	
CABIN					,				
Selected hardwood trim	49	• • •	1	4		(8)			
Teak and holly cabin sole		150	_	9	*		4		
Opening ports	<u> </u>	4	(4)	4	_	9		***	
Currains on ports		-	L	ુક્ક	4	•		0	
Tinted forward hatch	(9	(8)	*	39		69	_		
Tinted Lexan® slider hatch(es)		ļ.,	<u>_</u>	200	*				
Tinted mid-cubin vent hatch		_	Ļ	3	*		4		
Dinette table		49	9	4		4			
Full hanging locker(s)		ļ	L	*	49	4			
Sail storage locker				i		333			
Portable head	13	徽	(4)	177		*			<b>A</b>
Fully enclosed head(s) with mirror	į		(4)	*	8	*	*	•	
Pressure water in lavatory	<u> </u>			4	6	80	4		100
Shower						4			
Shower separate from head	.!		L	176		v ii	48		
Vanity in head	<u> </u>	<u></u>			*	49	100		
Navigator's station	!	_	<u></u>	1	-	(4)	(4)		
Gooseneck chart table light	1		<u>_</u>	ad:		*	40		46
Fubric cushions	<u> </u>	***	3		4		4		
Dual companionways	<u> </u>			100		32			
Teak steps to forward hatch		<u>L_</u>		110	-		8		
Ice chest	19	₩				WV.	10	4-1	
GALLEY									
Stainless seeel sink(s)				40		•			
Sink and storage compartment w/cutting board top	<u> </u>	6		3.0		*11		39.5A	
Fresh water pump	Ļ	₩	*	idenia					
Pressure water system	<del> </del>			4		AND THE			
Flot and cold pressure water system	ļ			h ghr	4	4	•	*	
Stove	<u> </u>	49				124		域	
2 burner stove w/cutting board	L.,		69	8	0	Œ.		##Z==	
Fully gimballed stove and oven w/cutting board				100				9	
Formica® counter tops	<del>                                     </del>		180	7.60			막벨		
Icebox(es)	<u> </u>		●	4	4		4	•	
Norcold® 110/12v refrigerator w/cutting board	ļ			. 941		100.1	왜의		
Fresh water tank	L.	11.4	73.7	1/21	151.4	Lead	ů.	105 375.5	
AUXILIARY POWER									
Diesel engine				*					
Outboard bracket	-		4	$u, v_i^{\sigma}$		搬			
Transom designed for outboard				239		16			
Fuel tank Cries		L	L!	6.3	17.3	<b>17.</b> C	ű.	162.5	
GENERAL/SAFETY GROUP	,			, · .					
Anchor and line	1		49					9	3.05
Life jackets, signal horn, throwable device	₩ :	₩	4	*	4	•		•	
Fire extinguisher		4	₩)	2		阳阳		3	
Emergency tiller	<u> </u>			9				•	
6-man survival rafe	<u> </u>	•				:Ar		1525	
8' fiberglass dinghy w/ours		L,J	$\perp$	(1) <sup>2</sup> v		計画			

10 22 25 27 20 37 34

### L I M I T E D W A R R A N T Y on a reasonable number of

HUNTER MARINE warrants to the first use purchaser for a period of twelve (12) months from the date of sale any part manufactured by HUNTER to be free of defects caused by faulty workmanship or materials under normal use and service.

During this period HUNTER will repair or replace any part judged to be defective by HUNTER free of charge at its plant or at the option of HUNTER, by an authorized HUNTER dealer. Transportation costs are the responsibility of the first use purchaser. The labor cost reimbursement will be based on a labor allowance schedule established by

hours as determined by HUNTER. All repairs and replacements must be approved in advance by an authorized HUNTER representative.

This warranty does not cover:

This warranty does not cover:

This warranty does not cover:

THIS WARRANT IS

EXPRESSEY IN LIEU OF ANY

AND ALL OTHER REMEDIES AND

EXPRESSED WARRANTIES, ANY

IMPLIED WARRANTIES, IN
CLUDING THE WARRANTIES OF

(1) Paint, window glass, gel coat, upholstery damage, plastic finishes, engines, engine parts, propellers, shafts, controls, instruments and equipment not manufactured by HUNTER. Any warranty made by the manufacturer of such items will be, if possible, passed on to the first purchaser.

(2) Boats or parts which have been altered or subjected to negligence or misuse. THIS WARRANTY IS
EXPRESSLY IN LIEU OF ANY
AND ALL OTHER REMEDIES AND
EXPRESSED WARRANTIES, ANY
IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF
MERCHANTIBILITY AND FITNESS
ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. Some states do not allow
limitations on how long an implied
warranty lasts, so that the above
limitation may not apply to you.

ANY CÓNSEQUENTIAL
DAMAGES WHICH MAY BE
INCURRED ARE EXCLUDED AND
THE HABILITY OF HUNTER AND
THE PURCHASER'S REMEDY
SHALL BE LIMITED TO REPAIR

OR PARTY JUDGED DEFECTIVE BY HUNTER. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

The purchaser acknowledges that no other representations were made to him with respect to the quality and function of the boat.

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

This wattanty shall not be effective unless the Hunter warranty card and precustomer delivery checklist are correctly completed and returned to HUNTER within ten (10) days after the date of sale to the first use

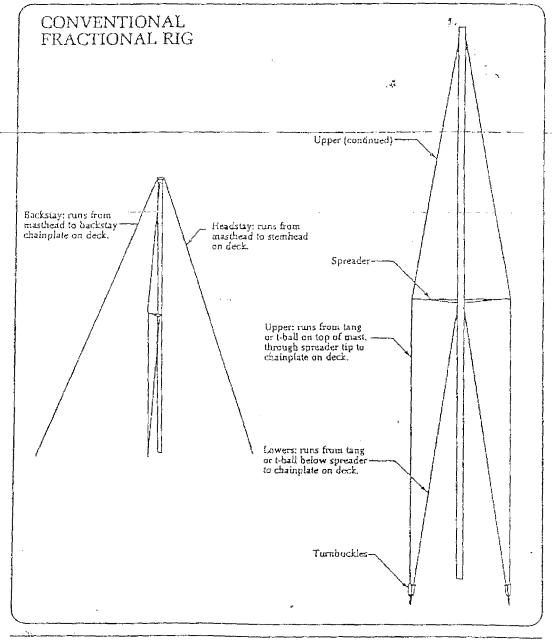
## III. Sails & Rigging

A. Tuning the Conventional Fractional Rig (Hunter 23,—30-Hunter 26.5, Hunter 333, Legend 35, Legend 37)

#### TUNING THE RIGGING:

After raising your mast, attach the headstay, backstay, upper shrouds and lower shrouds. Set the headstay turnbuckle at half open and then tighten backstay turnbuckle to medium tension.

To center the mast athwartships, start with only slight tension on the upper and lower shrouds. Check that the mast is centered in the boat by measuring



from the masthead to the chainplates with a steel tape measure hoisted completely up the main halyard. Adjust the upper shroud until the measurements port and starboard are exactly the same. Now the spar is plumb athwartships, tension both uppers equally, counting turnbuckle revolutions as you go. Tighten uppers until you have approximately one inch of "prebend" fore and aft in the mast. This is achieved because the swept spreaders will push the middle part of the mast forward as you increase tension of the uppers.

Now tighten the lower shrouds evenly, making sure the mast remains straight athwartship. Sight up the luff groove to assure this straightness. Lowers should end up almost as tight as the uppers. (The uppers should always be the tightest.) Both the Legend 35 and Legend 37 are equipped with double spreaders. The three shrouds should be made progressively tighter toward the top of the rig; the uppers should be the tightest of all. Tighten backstay to a taut position: perhaps eight to ten turns past your original tension.

Check the mast tuning by sailing in medium winds (10-12 knots). Sometimes fine tuning the upper and lower shrouds is necessary when the spar is loaded in sailing conditions. Sail on both tacks, sighting up the luff groove to check athwartship straightness. Both upper and lower shrouds should be taut on the leeward side.

When mast tuning is complete, install cotter pins in all turnbuckles and tape over sharp edges of the cotter pins with chale tape.

## B. Tuning the B&R Rig (Hunter 28.5, Legend 40, Legend 45)

#### NOMENCLATURE DESIGNATION:

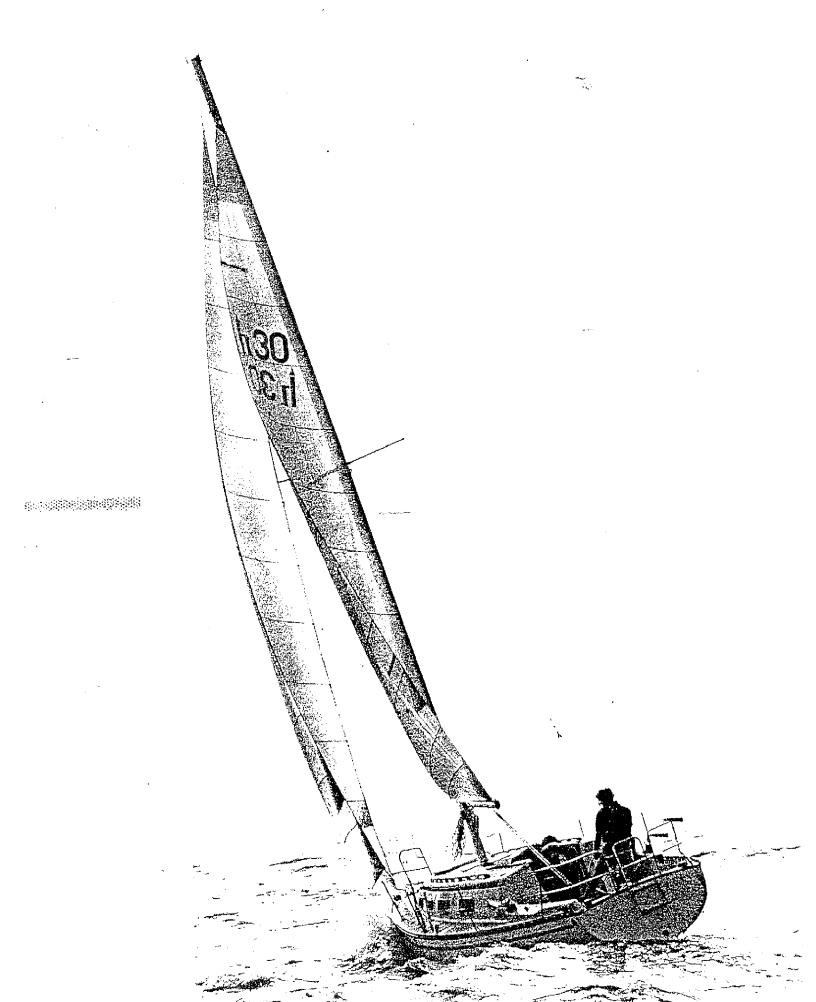
upper-upper	D3*
lower-upper	
lower-intermediate	V1
lower	D1
upper-intermediate	D2*
lower-diamond	d1
upper-diamond	d2
*D2 and D3 are cut to a fixed length (no tumbuckles)	

Initial tuning is best accomplished before the mast is stepped.

Support the mast, forward side down, about one-quarter of its length from the end and at its center. Once the mast is supported, make certain that it has no bow in any direction. Attach a small string from the masthead, in line with the sail track groove, to the base of the mast, stretching it as tight as possible. Check to make sure it is a constant distance from the mast along the entire length.

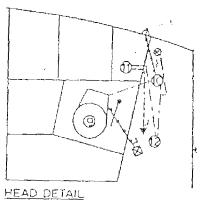
You are now ready to "tune in" the desired mast bend, which is one percent of the mast height above the boom (.01 × mast height above boom). On a 50' mast, this would be .5 feet at the mid-point of the mast.

Using the rigging diagram, locate d1 and d2. Before tuning, make sure the turnbuckles are adjusted back with equal thread showing. Carefully counting turns, adjust d1 port, d1 starboard, d2 port and d2 starboard evenly until the desired bend is induced. This is checked by measuring from the string down to the mast at the center of the mast.

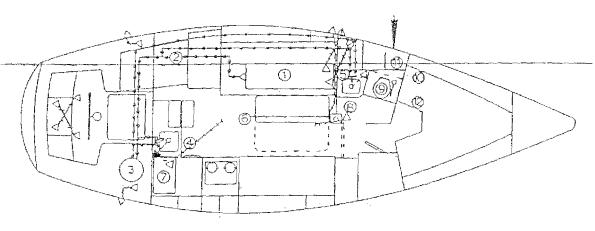


# **Hunter 30**

PLUMBING DIAGRAM

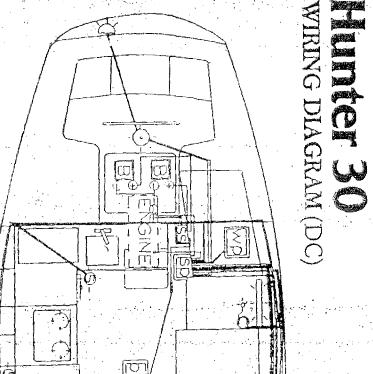


3/4" BLK. HOSE



·		
<u>LEGEND</u> :	HOSES 8	FITTINGS:
1 WATER TANK		5/8" WHL HOSE (COLD WATER)
(2) WAITER PUMP	*	5/8" WH. HOSE (HOT WATER)
3 WATER HEATER		344" SHIELDVAC (WICUFFS)
(4) GALLEY	-	1-1/2" SHIELDVAC (W/CUFFS)
D VANITY		1-1/4" SHIELOFLEX (GREEN)
10 BILGE PUMP (ELEC.)		1-1/2" SHIELDFLEX (GREEN)
(O) ICEBOX	Δ	THRU HULL (PLASTIC)
180 SHOWER		THRU HULL (BRONZE)
9 HEAD	Ø	DECK PLATE (WATER)
O HOLDING BAG	⊗	DECK PLATE (WASTE)
100 1-1/2" VENTED LOOP (BRONZE)	፟	SALT WATER PICKUP
( WASTE PUMP (MANUAL)	Δ	WATER & WASTE VENTS
	7	GATE VALVE

SUBSYSTEMS: FRESH WATER
WASTE DISPOSAL
DRAINS



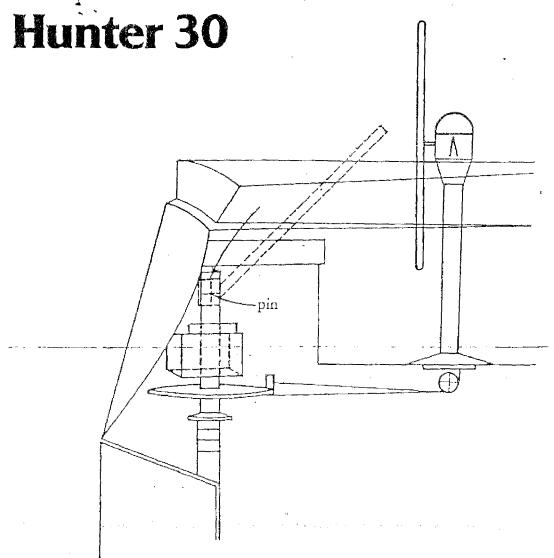
BATTERY (2-72 A.)  SWITCH PANEL  SAFETY MAIN SWITCH  SAFETY MAIN SWITCH  SAFETY MAIN SWITCH  WATER PUMP  (750 GPH)  FLOAT SWITCH  MAST  TABLE IS RED.  TABLE IS RED.	Ж	固			图	itini I			CONTROL
(E) (D) (E) (E) (E) (E) (E) (E) (E) (E) (E) (E	XIIIII	MAST	FLOAT SWITCH	BILGE PUNP	WATER PUMP	SAFETY MAIN SWITCH	SWITCH PANEL	BATTERY (2-72 A.)	
1 0/ 0/ 2 0/ 4	TABLE IS RED.	*FLUOR LIGHT AT CHAR	- N.L.NE FUSE						

- 1										_	_	<u>ئى</u>		,	
200F0	NAME   NAME	HIM NO	WALL EAS	TAM	NACAN NACAN	ひょうけん	Ξ	MHITE	BLUE	RE .	RED	WHITE .	RED	COLOR	
מראיכע אאועה		BLACK GR	S EXCEPT.	あ -	ਗੇ :-	ಶೆತ	; ;	ਨਿੰ	ক	ಸ	ざ	œ ∞	4	CALVE	r
į	ĭ <u>Z</u> O	S S S	FLOAT SWITCH	BILOE FLO		ANOHOR -	=	BUNNAG	CABIN LIG	WATER PL	DC SUPPLY	MAST GR	BATTERY	APPLICATI	
	DED TO THE ENGINE	EQUAL GAUX	CH AND MAST	LOAT SWITCH	节花		13 ST	RUNNING LIGHTS (BOW)	SIH	70	Y TO SWITC	830 830	JABLE/SAFT	82	
	E WITH AN	SE THESE	AST GROUN		ruje		STERNICON				SWITCH PANEL		ENSAFETY MAIN O		
ĵ	<i>*</i> *℃	, ,	즦	2	APT.	3	Y	1	÷,		ιç	الم	7		:. .,



ELECTRICAL DECK PLATE

SWITCH PANEL
WATER HEATER
110V OUTLET
10/3 MARINE POWER CABLE
(AC SUPPLY)



## IMPORTANT LOCATIONS

EMERGENCY TILLER INSTALLATION: lift lazerette seat, remove pin in rudder shaft, fit emergency tiller brackets over rudder shaft, re-insert pin.

DIESEL FILLER: portside cockpit coaming.

WATER FILLERS: port and starboard side decks, amidships.

WASTE PUMP OUT: starboard side deck, forward.

DOCKSIDE POWER OUTLET: starboard cockpit coaming.

## PRE-DEPARTURE CHECK-LIST

Theck bilge for excess unter.

Theck weather conditions and tides. Theck food supply. 'oul weather gear. inen, sleeping bags. 'uel. Vater. junscreens and sunglasses. lools. locking and anchorgear. lheck radio operations. lavigation charts and instruments. Toat plans to a friend or Coast Guard (See next page.) uel for stove. boking and eating utensils. heck battery water level. MI level, tight V-belts. heck for loose electrical connections in engine room. ecure tools or any loose equipment in engine room so as not to get fouled in ngine. Csystems-off; electrical cord stowed. loois and drawers secured. heck steering lock to lock. heck mast for rigging irregularities and tightness. lalyards and sheets are clear and ready to run. lo lines or other obstructions near the propeller or bow. nchor ready to run. heck lifelines for tightness. urn on fuel and water lines. towall loose gear. pen engine cooling water intege thru-hull valve.

## FLOAT PLAN

nousion mans	CENCTH  STRUPE CO		THE  STRATION &  SHORE &  PHORE &	.OK
neuseno maes aboard:		KUMBER ACE  AGE	PHONE /	.OK
neuseno maes aboard:	STRIFE CO	NUMBER ACE 9 AGE	F#O#© <b>√</b>	.OR
aboard:		ACE 3. AGE		
		ACE 3. AGE		
		AGE		
		AGE	PHONE &	
			PHONE 4	
		XGE .		
		ACE		
Towns			EHOWE &	
Terra-				
2-2-m-	·	· HUP.		FUELCAPACITY
quipment .	∏PFDs		Mirror	
	Food	□Water	EPIRB	Raft/Dingh
TAY DAY		Speci	IDATES	
ectations:		· red	JC1\JLJ	
T (APPROX. TUME)	GTAG) NO	FROM	(LOCATION)	
XXATIONQ :	RETURNING	04 MI (37'AO)	EVENT LATER THA	N (TO-LE & DATE)
ile:	LOENSE /	·		STATE
urned by	OOKOR		÷	t Guard or:
	т (арткох тика катюм ile:	ectations:  T (APPROX TUNE)  CATION  CATION  TICENSE /  COLOR	ectations:  T(APPROX THEE ON (DATE) FROM  CATION RETURNING (DATE) IN NO.  ILCENSE A  COLOR FARE	ectations:  T (APPROX TUNE) ON (DATE) FROM (LOCATION)  CATION RETURNING (DATE) IN NO EVENT LATER THA  BILE:  DOLOR PARKED AT

## CLOSING UP YOUR BOAT AFTER SAILING

When leaving your Hunter or Legend at the dock for more than a short ime, it is a good idea to review the following check list to make sure everything s in order. This will help protect the various parts of your boat and add onsiderably to their attractiveness and usable life.

Fold and bag headsails and stow below.

Furi mainsail and cover, or remove and also bag.	4
Remove and stowall portable deck hardware such as snatch blochandles, etc.	ks, winch
Secure the boom to the topping lift and set it firmly amidships wi mainsheet purchase. (It is also a good idea to rig a line from the ste wheel or tiller to a convenient cleat to keep the rudder from swing and forth with the motion of the water.)	eering
Attach the shackle ends of all halyards to convenient fittings and slack.	take up
Cleat and coil halyard tails and permanent sheets, hanging them to promote drying.	off the deck
Coil and stowall other lines.	
Cover the winches and steering pedestal when leaving the boat fo days or more.	rseveral
Close all fuel lines and gate valves.	
Turn off the electrical system.	•
Pump the bilge.	
Check air vents, secure ports and hatches, and swab the deck, part you have operated on saltwater.	icularly if
Make a final check of mooring lines, chafing gear, fenders, etc.	

## FOR SAFE BOATING

#### BE PREPARED

Take a safe boating course from the Coast Guard. You can call 800-336-BOAT for information on courses in your area.

Carry all safety equipment required by federal and state law. Federal requirements are discussed in "Federal Requirements for Recreational Boats" which can be acquired from U.S. Coast Guard Office of Boating, Public, and Consumer Affairs, Washington, D.C. 20593. State requirements will come from your local State Boating Administration. The Coast Guard also recommends a first-aid kit, a pump or bailer, a transistor or weather radio, extra fuel, a paddle, anchor and line, and extra drinking water, also, if not a requirement, flares.

Get a Coast Guard Auxiliary Courtesy Examination. This is a free, confidential safety inspection. Call your local Coast Guard Auxiliary for details.

Be familiar with the use of distress signals and PFDs.

#### AVOID FIRES

Handle fuels carefully.

Read the engine owner's manual for proper fuel-system maintenance and inspect your engine's fuel system periodically.

Heed fire extinguisher regulations and keep them in good condition.

While refueling:

- a. Fill the portable tanks on the dock.
- b. Tie the boat securely.
- c. Extinguish cigarettes and all flames on the boat. Turn off all engines and electrical equipment.
- d. Keep the hose-nozzle in contact with the fuel can or fill.
- e. Wipe up all fuel spillage.
- f. Ventilate the engine and fuel compartment.
- g. Check boat for fumes.

#### BEFORE GETTING UNDERWAY

Leave a float plan. (See example on page I-5.)

Perform pre-departure check list. (See check list on page I-4.)

Check the weather do not venture out if the weather is threatening.

#### WHILE UNDERWAY

Section .

PFDs should be worn by children and non-swimmers at all times. Everyone should wear them if conditions become hazardous.

Do not operate a boat if intoxicated, fatigued or stressed. These human factors cause 50 percent of all boating accidents.

Keep a good lookout. This is especially true of sailboats. Keep a watch to leeward under the headsail. Keep away from swimmers, divers and skiers.

Obey state and federal laws. Know your local laws and "rules of the road."

Respect bad weather: try to get to shore if the weather turns bad. Get and carry a radio with a NOAA "weather band" on FM 162.40-162.55MHZ.

## . SAFE BOATING (Continued)

#### IUBLE OCCURS

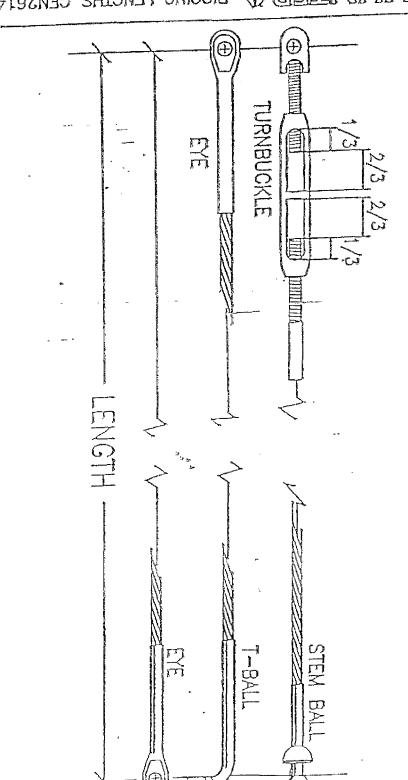
io for help. Use the emergency VHF channel (i.e., 156.8MHZ). on PFDs immediately.

, with the boat. In cold water, huddle together to prevent hypothermia.

#### 'PLAN

se copies of the example on page I-5 and use one before each trip. Fill and leave it with a reliable person who will notify the Coast Guard or escue organization if you fail to return on time. Do not forget to cancel it plan upon your return.

# HIMMLER & BIGGING LENGTHS GENZELAN



A disserthal angine mounts as necessary with a 0.00 c. 20010- 6000

## YANMAR MARINE DIESEL

## **QUICK REFERENCE LIST**

ENGINE MODEL	OIL FILTER	FUEL FILTER	ÄIR ELEMENT	COOLING WATER BELT	GENERATOR BELT	ANTICORROSIVE ZINC	E IMPELLER
1GM 2GM/3GM <sup>*</sup> (D) 2GMF/3GMF	124450-35100	104500-55710	128170-12540 128270-12540	NA 104511-78780	128170-77350 25132-003000 121150-42290	27210-200200 27210-200300	128170-42070 104211-42070 (24223-42091
1GM10 2GM20/3GM30 2GM20F/3GM30F	124450-35100		128171-12540 128270-12540	NA 104511-78780	128170-77350t 128670-77350 124732-42290	27210-200200 27210-200300 NA	128170-42070 104211-42070 124223-42091
3HM 3HMF 3HM35 3HM35F	124450-35110		124770-12540	-	128695-44780 - 123672-77370 121252-42290	NA 27210-200300 NA	-
2QM15 2QM 2QM20/3QM30 3QM	124450-35100 124550-35110	124220-35210 104500-55710 124220-35210		104514-77350 - NA NA NA	105582-77790 124240-42291 25117-003151 124240-42291	27210-200300 . X 27210-200300 . X	104211-42070 124223-42091 145410-46090
4JHE(-TE,-HTE) 4JHOTE,4JH2E (-TE, HTE,OTE) 4LH-TE/HTE 4LH/DTE	129150-35150 119100-35100 127695-35150	129470-55701 * 129470-55700 121857-55710 41650-502320	129470-12310	25132-004600 121850-42280	25132-004600  121850-42260 	NA NA NA NA	129470-42530 127610-42200
588 5812 5VE8 5VE12	104271-35130+	104500-55710 104800-55710	AN AN AN AN	NA NA NA NA	105282-77790 105582-77790 105282-77790 105582-77790	104211-41300 NA NA NA	104211-42070 104214-46830 NA
/SB8 /SB12 /SE8 /SE12	•	104500-55710 104300-55790 104500-55790	NA NA NA NA	104214-42780 104514-42780 104214-42780 104514-42780	104211-42780 104514-77350 104211-42780 104514-77350	27210-200300 104211-41300	104211-42070

X 27210-200300 USED ON FRESHWATER VERSION ONLY



#### **=MACK BORING** & PARTS COMPANY

NEW JERSEY (908) 964-0700 • FAX (908) 964-8475

NEW YORK (516) 563-3600 • FAX (516) 563-7495

MASSACHUSETTS (617) 848-9300 • FAX (617) 848-0335

t 1 GM 10 ABOVE S/N 03690 USE-105582-77790

 <sup>4</sup>JHE BELOW S/N 01179 AND 4JHTE BELOW S/N 11201 USE 129470-55600

NA NOT USED ON THIS MODEL

<sup>+</sup> METAL ELEMENT, RARELY REPLACED

ENT ENT ADJUSTING ADJUSTIN

STEP 1

STEP 2

USE FEELER GAVE TO CLECK
CONFLING GAP, THE TOLERANCE
TO CLECK ALL THE WAY
ARDIAD THE COUPLING.

NOTE CHECK COMPLING GAP
NOTE FOR TO THE PLACE.

ALIGNMENT DIAGRAM G

GEN2619A

is an especially important regular maintenance item since proper functioning of a pump could save your vessel from serious damage in the future.

Inspect all hoses for chafing and dry rot. See that hose clamps are tight. Check that the pump impeller area is clean and free of obstructions.

Inspect electrical wiring for corrosion. Make sure float switches move freely and are making an electrical connection.

The owner should become familiar with the layout of the water and waste systems by walking through the boat with the diagrams provided in this manual. It is especially important that the owner knows all thru-hull valve locations and inspects for leaks frequently.

General Thru-hull List (varies from boat to boat—see diagrams in section VI)

- 1) Engine cooling system
- 2) Galley sink
- 3) Head sink
- 4) Head toilet (water intake)
- 5) Holding tank discharge
- 6) Scupper drains

## E. Fuel System

The owner should inspect the condition of fuel lines for cracks or leaks. A primary source of fuel-related problems is water in the system. The owner should seek out only well maintained fueling facilities and make sure fuel fill caps are tightly secured after filling. Check and maintain fuel filters periodically.

### F. General Care

#### CLEANING FIBERGLASS SURFACES:

Fiberglass surfaces should be cleaned regularly. Normal accumulations of surface dirt can be removed simply by occasional rinsings with water. If your boat is operated in salt water, more frequent rinsing will be required. To remove stubborn dirt, grease or oil, use a mild detergent and a soft brush. Rinse with clean fresh water.

It is also a good idea to wax the fiberglass once or twice a year to maintain a deep, glossy appearance. Your local marine supply should be able to provide an appropriate wax.

#### FIBERGLASS REPAIRS:

Your Hunter or Legend dealer can supply you with the proper gel coat used to repair any hairline cracks or chips.

- 1. Using a mild detergent solution, clean repair area completely of wax, dirt or oil, and dry completely.
- 2. To patch "spiderweb" or hairline cracks, begin by widening the crack so that it will hold putty. This is most easily done with an electric drill or router equipped with a V-shaped grinding bit. Also, cut one-quarter inch or so beyond the end of each crack to relieve any stress.
- Brush away all dust from the crack.
- 4. Mix gel coat with filler powder to form a creamy consistency. Mix more than enough patching compound to do the job and stir to a smooth blend.

go ahead or aft to move in reverse.

CAUTION: Your rigging will conduct electricity. Always check for overhead high tension wires before proceeding. Once clear, you may increase your speed in a reasonable and safe manner as desired.

IMPORTANT: Do not shift from forward to reverse or back without first lowering engine rpm to idle. When sailing, it is best to start the engine before the sails are lowered. This way, it is still possible to maneuver if the engine should not start.

## B. Electrical System

Your Hunter is fitted with an electrical system designed for both AC (AC not available on the 26.5 and smaller) and DC. While in port, you can operate any tool, appliance or other device designed to function on regular house current (120V) simply by plugging your dockside power cord into a convenient outlet on shore and turning your AC main breaker on.

CAUTION: Do not allow your dockside power cord to come in contact with the water. Never operate any AC power tool or other electrical equipment while

you or the device are in contact with the water.

When leaving port, disconnect the dockside power cord and turn the main DC breaker on. This allows you to use the ship's lights and other equipment designed to operate on direct current. Keep in mind that your DC power source is a 12-volt battery and, just as with your automobile, it must be charged regularly by operating the engin. These a state of charge is maintained, there may not be enough power to operate the starter motor. Dangerous situations can result if the engine cannot be started when needed.

Make a regular visual check of battery(ies) to insure proper water level and inspect terminals for signs of corrosion. If your boat sits for long periods without use, it is often a good idea to remove the battery(ies) and attach them to a trickle charger to keep them fully charged and ready to use.

## C. Water System

The water heater operates either on 120 volts AC or when the engine is running. To obtain hot water from the engine, it must run a minimum of one-half hour.

CAUTION: Do not turn the water heater on until you are sure the tank is filled with water. To do so will destroy the heating element, which is not covered by the warranty.

Pressure water pumps are the demand type. Once the circuit breaker switch is on, opening the faucet will produce water flow.

NOTE: Intermittent operation of the freshwater pump while all faucets are closed usually indicates a leak somewhere in the lines. Trace the lines to locate the leak and repair.

#### D. Stove

Follow the operating instructions supplied with the unit installed with your boat.

#### E. Toilet

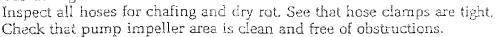
IMPORTANT: When not in use, lever must be left in the "dry" position to prevent flooding.

Before using, place the lever in the "wet" position and pump slowly to partly fill and wet the inside of the bowl. Return to "dry" position.

After using, return the lever to the "wet" position for flushing and pump until the bowl is thoroughly cleaned. Continue with several more full strokes to flush discharge lines. Return lever to the "dry" position and pump slowly until bowl is empty.

## F. Pumps

All pumps should be checked frequently to insure proper operation. This is an especially important regular maintenance item since functioning of a pump could save your vessel from serious damage at some future time.

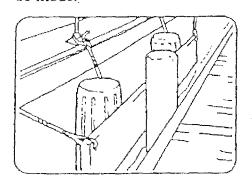


Inspect electrical wiring for corrosion.

Make sure float switch moves freely and is making an electrical connection.

## G. Docking

Docking your boat should be handled carefully to avoid potential damage. Under normal wind and water conditions, the following considerations should be made:

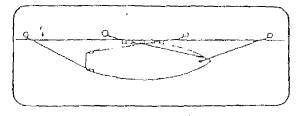


- Whenever possible, your approach should be made against the prevailing wind and current to assist in stopping the boat. Where these conditions are contrary, the strongest should be used to determine approach.
- Approaching the dock-dock lines and fenders should be at ready, loose gear stowed and decks cleared. Determine the direction of wind and current, and, once you decide which side of the boat will

be against the dock, rig dock lines and fenders on the appropriate side. One dock line should be attached to the bow cleat, another to the stern cleat opposite the side that will lie against the dock. NOTE: If the boat is to lie against a piling, rig a fender board across two or more fenders.

 $\sim 2$ 

3. Tying up—attach bow and stern lines to dock, hauling boat in with fenders against dock. Rig crossing spring lines to limit motion forward and aft. Be sure to allow some slack in all lines to compensate for tidal activity



if present. Never use bow rail, stern rail or stanchions to secure vessel, even for brief periods.

For other types of moorings, or for abnormal wind or water conditions, consult your Chapman's or other approved boating guide.

## H. Anchoring

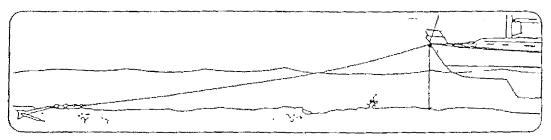
Your Hunter comes with an on-deck anchor well and a burying-type anchor as standard equipment. The anchor is selected to suit the size and weight of your boat under normal anchoring conditions, and provides its best holding characteristic in muddy or sandy bottoms.

When anchoring, pay particular attention to the scope of your anchor rode (i.e., the relationship between the depth of the water and the length of the rode). A good rule of thumb is to allow a scope of about 7:1 (a rode seven times as long as the vertical distance from the bow to the bottom). A helpful aid is to mark the rode every 20 feet or so wank knots or other types of indicators. Before dropping anchor, make sure the bitter end is secured to the cleat in the anchor well.

Also, be sure to consider wind direction, currents, mean low tide depths and other local conditions when anchoring, as well as the positions of any boats already anchored nearby.

CAUTION: Anchoring in unusual water and/or weather conditions will require additional precautions. Consult your Chapman's or other approved guide for suggestions.

To weigh anchor, motor or sail (under main only) slowly forward. When at a point directly above the anchor, a quick tug should free it from the bottom. Take care not to damage the topsides when hauling the anchor aboard. It is good practice to thoroughly clean the anchor prior to placing it in the anchor well.



It is important to make sure the mast is straight athwartships at this time.

You are now ready to step the mast.

Step the mast with all shrouds loosely attached.

Adjust the forestay and backstay to obtain the desired mast rake. The mast should be vertical or raked aft. The more rake, the greater the weather helm. The forestay and backstay should have a reasonable amount of tension on them.

Adjust V2 (port and starboard) evenly until they are tight. You should finish with approximately equal amounts of thread showing on each turnbuckle.

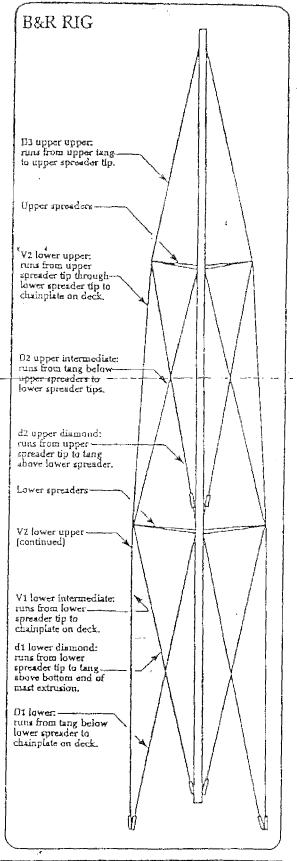
Using the jib halyard, check the mast for athwartship plumb. Pull the halyard out to the side of the boat and below the shear. Repeat the procedure on the opposite side. If you find a big difference (more than ½ inch), adjust turnbuckles an equal amount in opposite directions until the mast is straight.

Adjust V1 (port and starboard) using the above procedure.

Repeat the procedure for D1 (port and starboard).

Your mast should now have the original "pre-bend" and be straight athwartship.

Check the mast tuning by sailing in medium winds (10 to 12 knots). Sail on both tacks, sighting up the luff groove to check athwartship straightness. Shrouds should not be loose on the leeward side. (This is especially important with the B&R rig.) Follow the progressive shroud tightness routine described in the tuning instructions for the conventional rig. When mast tuning is complete, install cotter pins in all turnbuckles and tape over sharp edges of the cotter pins with chafe tape.



## C. Roller Furling

#### OPERATING THE ROLLER FURLING:

- 1. To furl the sail, release the jib sheet and pull in on furling line from cockpit. Hand power is all that's needed; only special situations necessitate using a winch.
- 2. To roll the jib tightly around the headstay, it is advisable to keep some tension on the jib sheet. This can be done by holding the jib sheet and allowing it to slide through your fingers or by leaving two turns around a winch while furling. After jib has been completely furled, furling line should be cleated and jib sheet tensioned.
- 3. To unfurl, uncleat furling line, leaving one turn around the cleat for friction. This prevents snags on the drum. The jib sheet on leeward side of boat is then pulled to unfurl sail. It may be unrolled part-way or all the way, depending on wind conditions.

#### REEFING THE ROLLER FURLING SAIL:

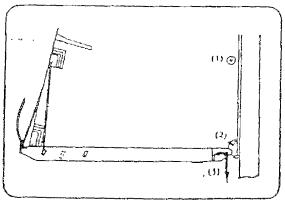
The sail should be tightly rolled to maintain optimum sail shape. Leave two
turns around the sheet winch with the tail of the jib sheet held loosely in
your hand. Then pull the furling line in against tension of jib sheet to achieve
the tightest roll (and, therefore, the best sail shape.

2. You may reef the sail to any point. Most any sail may be reefed except a large genoa which is specifically cut very full and has a lightweight cloth that cannot withstand the strain of reefing. (Consult a sailmaker if in doubt.)

## D. Reefing the Mainsail

Your Hunter or Legend is equipped with an easy-to-use jiffy reefing system. To reef the main:

- Ease the mainsheet (boom vang if installed), making sure topping lift is secured in position.
- Lower the main halyard so that tack reef cringle can be placed on gooseneck reef hook. Re-tension main halyard when hooked in place.
- 3. Clew reef line must now be tensioned so that clew reef cringle is brought down snugly against boom.
- 4. Readjust mainsheet and boom vang.
- 5. The reefed folds of cloth can be rolled up and secured with short lines through the reef points and around the folds and boom. *IMPORTANT*: Be sure to untie these first when shaking out the reef.
- 6. To unreef, reverse the procedure.



## E. Sail Care and Storage

Your Hunter or Legend comes with Dacron mainsail and 110% genca jib. To extend the life of your sails and maintain their best performance:

1. Never use them in wind ranges that exceed their capabilities.

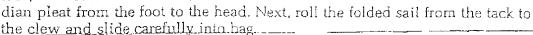
2. Never let them luff for extended periods of time.

3. Rinse your sails in freshwater whenever possible if you sail in saltwater. Tub wash them every few seasons to keep them bright and attractive. CAU-TION: Do not machine wash. Use a mild detergent in warm water, and remove all detergents completely with a thorough rinsing.

For oil and grease stains, use commercial cleaning solvents. Should a yellow stain develop, bleach with oxalic acid and rinse thoroughly. Rust stains should be soaked in a warm solution of two parts hydrochloric acid per 100 parts

water, rinsing thoroughly.

After rinsing your sails, spread them and allow to dry thoroughly before bagging. This is a good time to inspect them for minor damage. When dry, fold according to diagram. First spread sail on flat surface, then fold in a smooth, accor-



At the end of each season, it is good practice to have your local sailmaker inspect your sails for signs of wear and tear.

## F. Care of Standing Rigging

The stays and shrouds on your Hunter or Legend are highly durable stainless steel to insure years of reliable service. To protect your standing rigging, keep it clean and, whenever possible, rinse thoroughly with freshwater. Check occasionally for "fish hooks," strands of wire that have broken and curled outward. These can snag sails and inflict painful cuts in bare hands. Broken strands indicate the wire is deteriorating and should be replaced.

Also inspect turnbuckles regularly and replace any missing cotter pins. Occasional lubricating improves both the life and the function of the turnbuckles.

## G. Care of Running Rigging

To protect your running rigging (sheets, halyards) from damage, wash with cold water (and a mild detergent, if necessary), especially after exposure to saltwater. Rinse thoroughly and coil. Hang the tail ends of halyards off the deck to promote drying. Sheets should also be hung to dry.

Inspect all lines periodically for fraying and other damage. Lines showing substantial wear should be replaced.

## H. Stepping the Mast On the Hunter 23

Hunter Marine recommends that you walk through the following seven steps and assign each person their respective task and positions during the stepping of the mast. Sailing is a fun and safe sport when the crew operates as a team. Good luck and smooth sailing.

## IV. Maintenance

## A. Engine, Transmission and Drivetrain

#### ENGINE:

Follow the fuel and lubrication requirements in the Engine Manual. Check the engine oil level before and after operation and use quality motor oil (refer to Engine Manual). Be certain the proper amount of oil is in the crankcase at all times.

Engine alignment: The engine should be aligned by experienced marine service personnel. Final alignment should be done after launching, with all normal gear aboard. A description of the procedure follows:

The coupling flanges must come together evenly at all points, a feeler gauge is used to check the gap. If adjustment is necessary, the engine is tilted up or down and/or side to side until the flanges meet equally. Severe vibration will result from misalignment and can cause strut bearing and shaft damage.

Alignment should be checked again after several weeks of use. (Refer to this manual's alignment drawing.)

#### TRANSMISSION:

Follow the lubrication requirements of the Engine Manual. The oil level should be checked immediately after operation.

#### DRIVETRAIN:

The shaft log (stuffing box) should be inspected periodically.

The stuffing box is held to the shaft log tube by a rubber tube secured by hose clamps. The clamps should be tight and no water should leak from this location. A slight drip from the stuffing box at the shaft exit is necessary (four drops a minute) and normal.

To adjust, loosen the lock nut, tighten gland nut one-quarter turn, and retighten lock nut. If excessive water flow persists after adjustment, replace the packing and then adjust as above.

## B. Steering

The manufacturer's instructions for maintaining pedestal steering system should be followed closely. Wires should be periodically inspected for proper tension. Lightly oil all wire.

## C. Electrical Systems

The electrical system is a 12-volt, negative ground installation. The owner should periodically inspect battery(ies) and cables for signs of corrosion, cracks, and electrolyte leakage.

## D. Plumbing Systems

All pumps should be checked frequently to insure proper operation. This

Temperatures should be in the 60s or above, or a heat lamp should be used

for application.

5. Using a putty knife, work the mixture firmly into the crack to eliminate air bubbles. Leave an excess of about one-sixteenth of an inch above the surface of the crack to allow for shrinkage. Wet sand and buff (with compound) the repaired area.

#### TEAK CARE:

Teak wood is an extremely durable wood with a high oil content. To maintain that durable quality it should be given a coat of teak oil once a year or more in northern climates and twice a year or more in tropical climates.

Teak can be allowed to weather out, as seen on many boats, but this will

eventually lead to cracking and splitting.

If you wish to maintain your teak with varnish, resin or urethane, a sealer should be applied after cleaning and sanding. Complete finishing procedures can be obtained from your marine finish products manufacturer or supplier.

#### FABRIC CARE:

Cushions should be removed and stored at home if possible. If not, prop them vertically to promote airflow around each cushion.

#### WINCH MAINTENANCE:

Follow the maintenance instructions prescribed by the winch manufacturer.

#### GENERAL HARDWARE MAINTENANCE:

Check all fittings regularly to be sure screws are tight. Occasionally lubricate all moving parts on such fittings as blocks, tumbuckles and cam cleats, as well as the locking pins of snatch blocks, track slides, spinnaker poles, etc.

Inspect chocks, cleats and fairleads for roughness and smooth with fine-

grained emery paper if necessary.

Also, replace any missing or damaged cotter pins in turnbuckles and shackles, and either tape them or use protective covers manufactured for that purpose.

## V. Storage/Winterization

IMPORTANT: Winter storage is recommended to be done in one of the following three ways, either: 1) by blocking the boat via a cradle; or 2) with chained stands on level ground; or 3) by storing the boat in the water with a bubbler system to prevent icing. Damage to your boat, including engine misalignment caused by twisting, is not covered by the warranty.

#### A. Sails

Sails and synthetic lines should be washed and dried thoroughly. Sails should be properly folded and stowed in a dry, well ventilated place. Many sailboat owners send their sails back to the sail manufacturer at the end of each season. The sailmaker will check the stitching and sailcloth for wear and store the sails until the start of the next season.

#### B. Electrical

Remove battery from boat. (Refer to Engine Manual.)

#### C. Cushions

Cushions should be removed and stored at home if possible. If not, prop them vertically to promote airflow around each cushion.

#### D. Hatches

Hatches and floorboards should be left open a crack to provide ventilation for the whole boat. However, it is prudent to loosely cover any open hatches with a tarp or plastic sheeting.

## E. Water System-Water Heater

#### WATER SYSTEM:

Open a faucet and allow the pump to empty the tank. Then add approximately two gallons of *non-toxic* anti-freeze solution to the tank and repeat the pumping out procedure.

A second method is to disconnect the hoses at the pump, allowing them to drain. Find the lowest point in the system and disconnect the fitting. Open all faucets to allow the lines to drain. If possible, use a short piece of hose on the faucet to blow through the lines to clear all water.

#### WATER HEATER:

Open valve and drain fully. Leave valve open during lay-up time.

## F. Toilet and Holding Tank

Drain and flush toilet. Using automotive anti-freeze (ethyleneglycol) in a 50/50 mixture with water, pump through toilet and into holding tank.

## G. Engine

1. Drain the cooling water completely out of the engine and flush the line thoroughly with freshwater. Don't use high pressure through the line.

2. Remove the fuel completely from all fuel lines.

3. Disconnect the main battery cables from the battery terminals.

4. To prevent corrosion inside the cylinders, pour a little lubricating oil into the suction pipe while turning the engine. Enough oil to reach the intake/exhaust valve is sufficient.

5. Put the piston at top dead center of compression stroke so that the intakel

exhaust valves are completely closed.

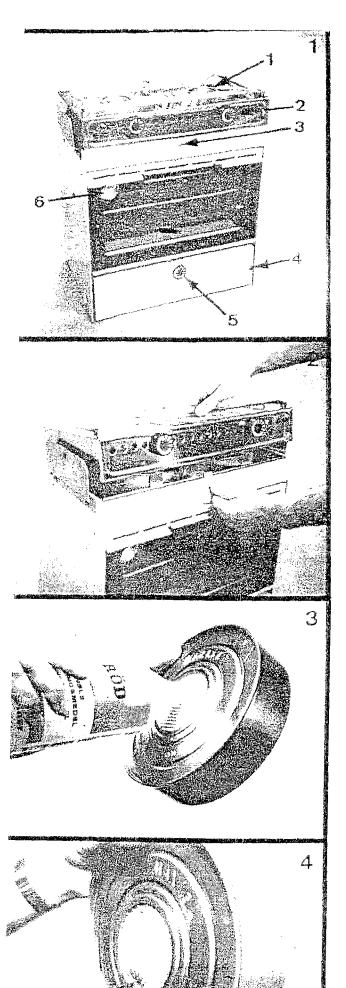
- 6. Apply a thin anti-corrosion treatment to the plating and exposed painted surfaces.
- The engine should be in a well ventilated area, and protected from any kind of dampness.

8. Put a dust cover over the engine.

Check your operation manual for engine diagram and for "Manufacturer's Recommended Winterizing Procedures."

## H. Outboard Engine

1. Take it home and store it in a safe place. Be very careful storing the gas tank as the gasoline is very flammable.





#### INSTRUCTIONS

ORIGO 6000 is a non-pressurized alcohol stove with the fuel absorbed in a non-flammable pulp. ORIGO 6000 has no valves to develop leaks or other components in need of regular service. This makes ORIGO 6000 safe and easy to maintain.

As always — when working with a naked flame — certain precautions are required. So, read the following simple instructions carefully before using your new ORIGO 6000 stove.

If an accident should ever occur, remember that burning alcohol can be extinguished with water.

#### LOCATION OF YOUR NEW ORIGO 6000

Your stove should be located in a well-ventilated space. Avoid excessive draft. Mount the stove as far away from combustible materials as possible. Preferably mount the stove in a metal-lined space.

#### DESCRIPTION (Photo 1)

- 1 Stove top burner opening
- 2 Stove top regulator knob
- 3 Catch button
- 4 Locking screw, oven burner lid
- 5 Oven burner regulator knob
- 6 Oven thermometer

#### TO FILL TOP BURNERS, OPEN THE STOVE TOP

For safety reasons the stove top can only be opened when the burner openings are completely covered by the regulating plates (flames extinguished), so turn the knobs to 0 position. Press the catch button and lift the top (Photo 2).

Lift out tank unit. Tank must not be filled near an open flame or a hot object.

It is essential that not only has the flame been completely extinguished, but that there is no heat glow on burner top.

During use, the tanks are heated and the fuel requires space to expand. It is therefore important to avoid overfilling the tanks.

The tank openings are recessed to facilitate filling.

Hold the tank as shown in photo 3, with the recess pointing down and pour the fuel directly into the opening covered by the wire mesh.

Check quantity by raising to vertical. When fuel i visible in recess, do not fill more (photo 4).

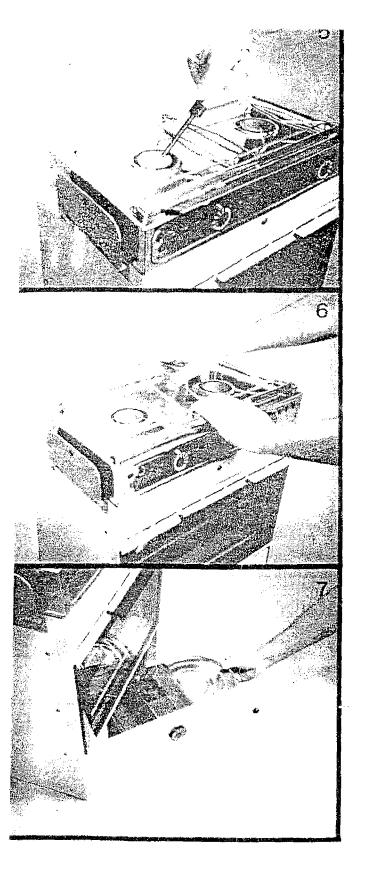
After filling, make certain no excess fuel remains in stove. Always wipe tanks dry. Place tanks in stove. Check that they fit properly in mountings. Close the stove up: Knobs in 0 position! Fold down the stove top, the catch will lock. (Make certain that the regulating plates cover the burner openings so that stove top is level).

#### TO LIGHT (Photo 5)

Turn regulator knob counter-clockwise to open burner. Place a lighted match or lighter (optional extra) at burner opening. (Match can be dropped in and removed at next filling). If the stove is warm (from previous use), burner may ignite suddenly and simultaneously snuff itself out. If this happens, blow down into burner opening to dissipate alcohol vapor, and re-light. Winterize your stove by burning remaining fuel.

#### TO EXTINGUISH

Turn regulator knob fully clockwise,



ORIGO USA INC. 1121 LEWIS AVE. SARASOTA FLORIDA 33577 USA At the back of the stove top is an oblong noie, into within the grid retaining hook fits. To remove grid, slide hook out of retaining hole, and grid can be lifted off.

#### OVEN

The tank and burner for the oven is located in the bottom of the stove. Access to fill and light is through the lower lid.

Unscrew the locking screw and open lid. Pull out the tank, while pressing the click spring (photo 7) and fill according to instuctions above. When reinserting the tank into its compartment, check that it is in the right position and that the click spring has engaged. The butner can now be lighted as described above and lid closed. Access to light the oven can also be gained by lifting the bottomlid inside the oven.

Extinguish by turning regulator knob fully clockwise. Heat oven to desired temperature with burner fully open and reduce flame when the temperature is reached.

#### INSTALLING

ORIGO 6000 is delivered with gimbals. It is recommended that these are used, but it is also possible to screw it to a horizontal surface, should this be preferred. It is possible to open the oven burner lid widely by carefully depressing the lid below the stopper to gain access to the attachment means in the bottom corners. When fitting the stove with gimbals, first determine the best position for the pivot points. This can be done by placing the stove in the desired position, open the stove top and mark through the holes in the gimbal sideplates. Remove the stove, fasten the pivotarms with fiber washers and screws removed. Fit one washer with round hole on each pivot and lift the stove from below up between the pivots so that the gimbal sideplates will spring into place on the pivots. With open stove top fit the fiber washers with oblong holes and fasten the screw. Adjust the tension of the screws to disired friction.

Whether the fixed or gimballed installement is used it is very important that there is ample\_distance to the surrounding fitments. To secure the distance along the sides the gimbal side plates shall not be removed.

At the back of the stove is an outlet for hot air so a clearance of 4 inches to the fittings behind is requiered. If gimballed, allow for ample room to swing.

#### **GASKETS**

The stove top is supplied with rubber gaskets. These are to be used if you are not using your stove for some time. Can also be used to prevent evaporation in hot climate.

Use this way: fold up the stovetop, check that the stove has become cold. Put the gaskets over the tank openings. Fold down the stovetop to horizontal position and open the burners to lock the top in closed position.

#### OPTIONAL EXTRAS

Potholders Lighter

#### WARNING

Efficiency:

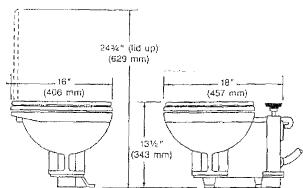
To be used only with denaturated alcohol. Must never be used with gasoline, kerosene, diesel or any other type of fuels.

#### TECHNICAL DATA

Height: 21 1/8" (537 mm) excl. cooking grid appro x Depth: 13 3/16" ( 335 mm ) approx 18 1/4" (464 mm) Length: approx approx 20 1/16" (510 mm) incl. gimbal Fuel tanks: approx 2.5 pints each tanks (1,2 L) Fuel: denatured alcohol, methylated spirit

will boil 2 pints of water in approx 7 minutes





Use these specifications to order:

Order No.	Description	Weight
752	Manual Toilet with mirror china bowl and hand pump attached. Includes seat and cover.	221/2 lbs. (10kg)

#### INSTALLATION

- Position toilet above or below water line keeping in mind the intake and discharge hoses must be routed direct as possible avoiding sharp bends.
- Fasten toilet base to floor with #14 or ¼" bronze or stainless steel screws and flat washers.
- Install water inlet hull fitting below water line with a ¾" sea cook or gate valve.
- Route ¾" I.D. hose between inlet hull fitting and inlet at toilet. Secure with stainless steef hose clamps.
- Route 1½" LD. discharge hose between toilet and holding tank, treatment device, or overboard discharge sea cock (outside U.S. waters only). Secure with stainless steel hose clamps.

#### OPERATION

- To flush toilet: move valve lever to open flush position and operate pump handle. Return valve lever to dry bowl closed position.
- To emply toilet bowl: leave valve lever in dry bowl closed position and operate pump handle.

IMPORTANT: WHEN TOILET IS INSTALLED BELOW WATER LINE, IT IS IMPERATIVE THAT VALVE LEVER BE FULLY IN DRY BOWL CLOSED POSITION WHEN TOILET IS NOT IN USE.

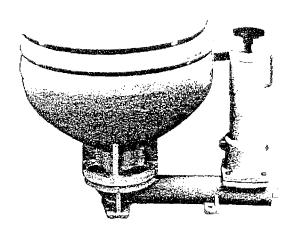
WHEN TOILET IS NOT IN USE, CLOSE THE SEA COCK.

## SeaLander™ Model 752

## manual marine toilet

The SeaLander 752 Manual Marine Toilet offers the simple solution for boats where power and space are at a premium or not available.

- Remarkably compact. Perfect for small craft and sailboats.
- Easy-to-clean vitreous china bowl with high quality white enameled seat.
- Long life hand pump.
- Combines easily with TDX systems or conventional holding tanks.
- 3/4" (19mm) intake. 11/2" (38mm) discharge.



- Four-bolt mounted hand pump allows either right side or left side installation/operation.
- Corrosion-proof fittings, pump and base.

#### CLEANING

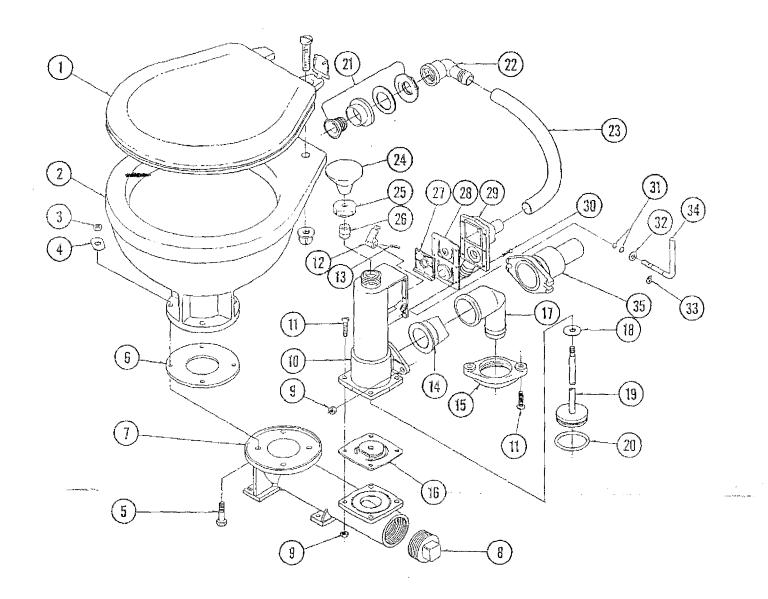
Do not use alcohol or alcohol based cleansing or deodorizing agents on the plastic parts of the toilet.

#### WINTERIZATION

- In colder climates automotive antifreeze (ethyleneglycol) can be used. A 50/50 mixture of water and antifreeze should be pumped through the toilet to the holding tank or treatment device.
- 2. Drain toilet by removing the drain plug in the base and operating the pump handle. In salt water areas a thorough flushing with fresh water will aid in removing salt from the system, thus ensuring trouble-free use the following season.



An Affiliate of N.A. Taylor Company, Inc. P.O. Box 38, Fourth Street, Blg Prairie, OH 44611 • (216) 495-3211



#### **MODEL 752 MANUAL MARINE TOILET**

#### PARTS LIST

ITEM	PART NO.	CITY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	390349078	4	Seat & Lid 751-752	21	390348260	1	Spud, 751-752
2	390349079	1	Bowl, China 750 thru 752	22	390341088	i	Elbow, 34 FPT x 1" Hose
3	390346604	4	Nut. 14-20 Hx S.S.	23	390341107	1	Hose, 34 x 1034 751-752
4	390340940	4	Washer, Oval S.S.	24	390340113	1	Knob, 752
5	390341197	4	Bolt. 1/4-20 x 11/2 Hx Hd S.S.	25	390340016	1	Nut, Piston Rod Seal
6	390340044	4	Gasket, Bowl	<b>2</b> 6	390340012	1	Seal, Piston Rod
7	390340048	1	Base, 752 with Drain Plug (Item 8)	27	390340029	1	Seat, Valve Intake
8	390340047	1	Plug, Drain	28	390341152	1	Double Flap Valve 751-752
9	390340053	6	Nut, #6-8 mm Hx S.S.	29	390340032	1	Cover, Valve
10	390340020	1	Cylinder, Pump	30	390340039	6	Screw, Valve Cover
11	390340043	6	Screw, Phillips 6-8 x 30 mm S.S.	31	390340056	2	O-Ring
12	390340021	1	Cam, Valve	32	390340055	1	Washer, Flat
13	390340081	1	Pin, Cam	<b>3</b> 3	390340054	1	Retaining Ring
14	390342310	1	Valve, Check 751-752	34	390340052	1	Handle, Valve Control
15	390340058	1	Flange, Discharge	35	381230194	1	Optional Straight Outlet
16	390340060	7	Valve, Base				(replaces Items 15 & 17)
17	390340057	1	Elbow, Discharge	Not Shown	390340059	1	Assy, Pump (Items 10, 12, 13, 24 thru 34)
18	390340051	1	Washer, Pump Shaft	Not Shown	390340115	1	Kit, repair (Items 6, 12, 13, 14,
19	390340049	1	Piston, Pump				16, 20, 26, 28, 31)
20	390340050	1	O-Ring, Piston				• • • •

#### 电多角电 对代制

	Diameter	Pitch	
<b>≅</b> 7⁴	13"	ਬਾ •	
* & &	13"	137	(1871 13"K18")
314	14"	15"	
33'	ž.4. ~	15	
34 <sup>7</sup>	ng sign da It will	12"	
35 <sup>†</sup>	16	15"	
377	र्वे द	1.5"	

Rule of Thumb: When going from 2 blade prop to 3 blade prop drop 2" in diameter. Pitch stays the same.

#### THARB

<b>27</b> 7	46 172"
<b>选模</b> 型	43"
331	477"
367	49 °
*5E	<b></b>

## Best Expected

8.0

5.5 Knots 22 5.75 23 25.5 6.25 28.5 3 1 6.5 34 6.75 37 Old 7 37 New 7.25 40 7.5

45