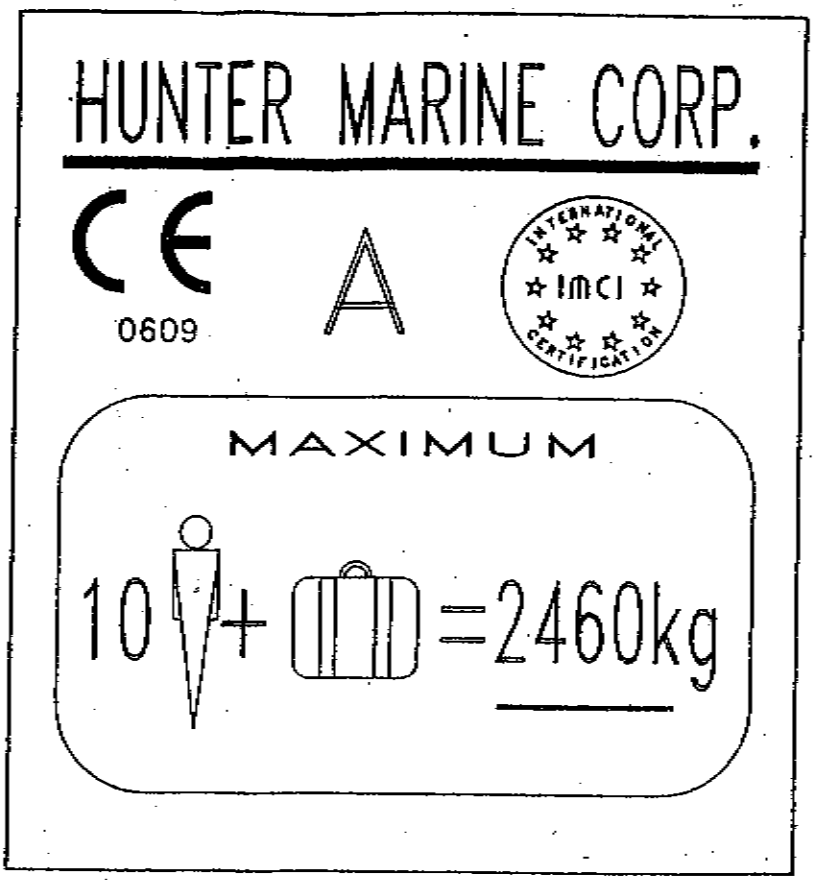
BUILDER'S INFORMATION PLATE

HUNTER MARINE CORPORATION

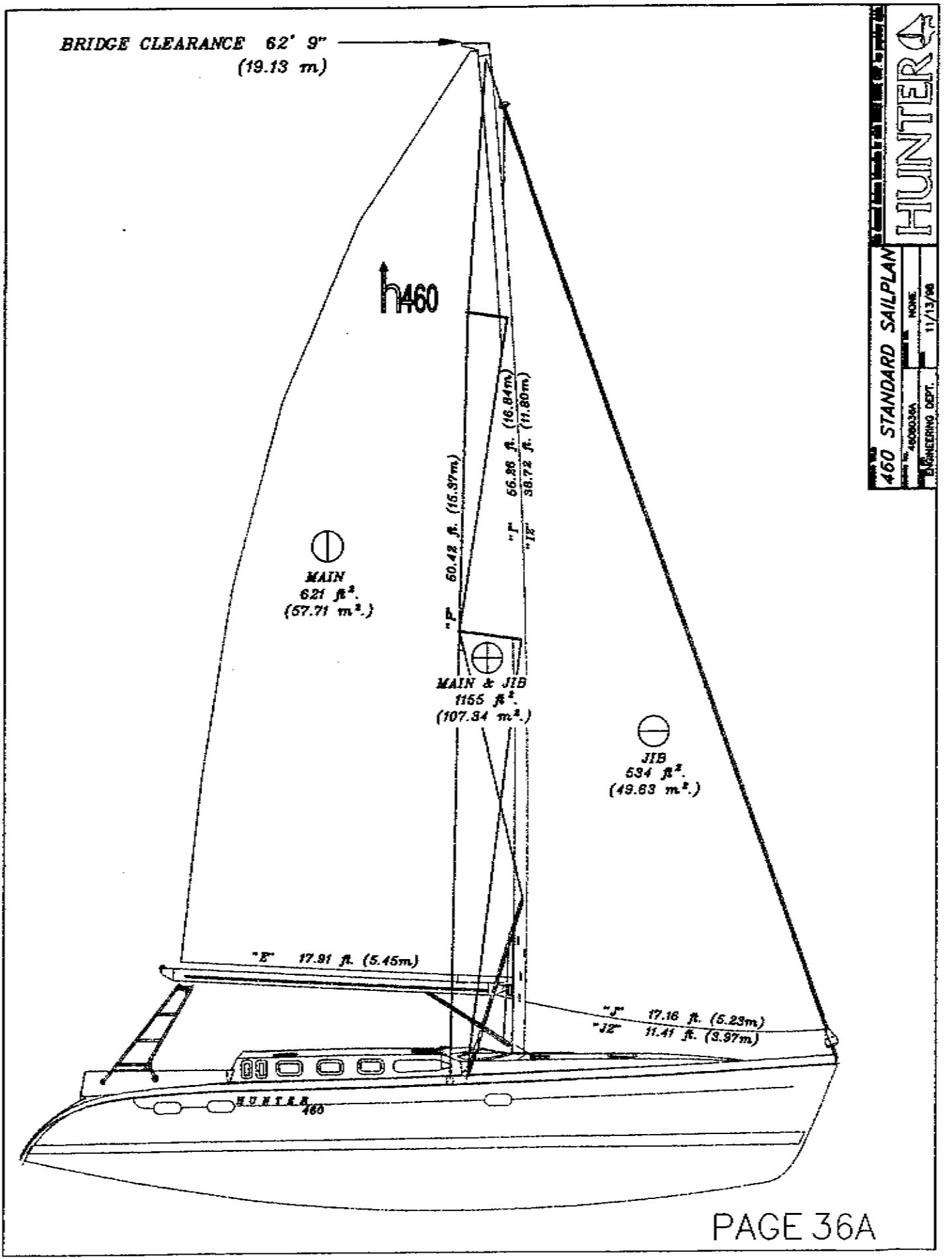
H460

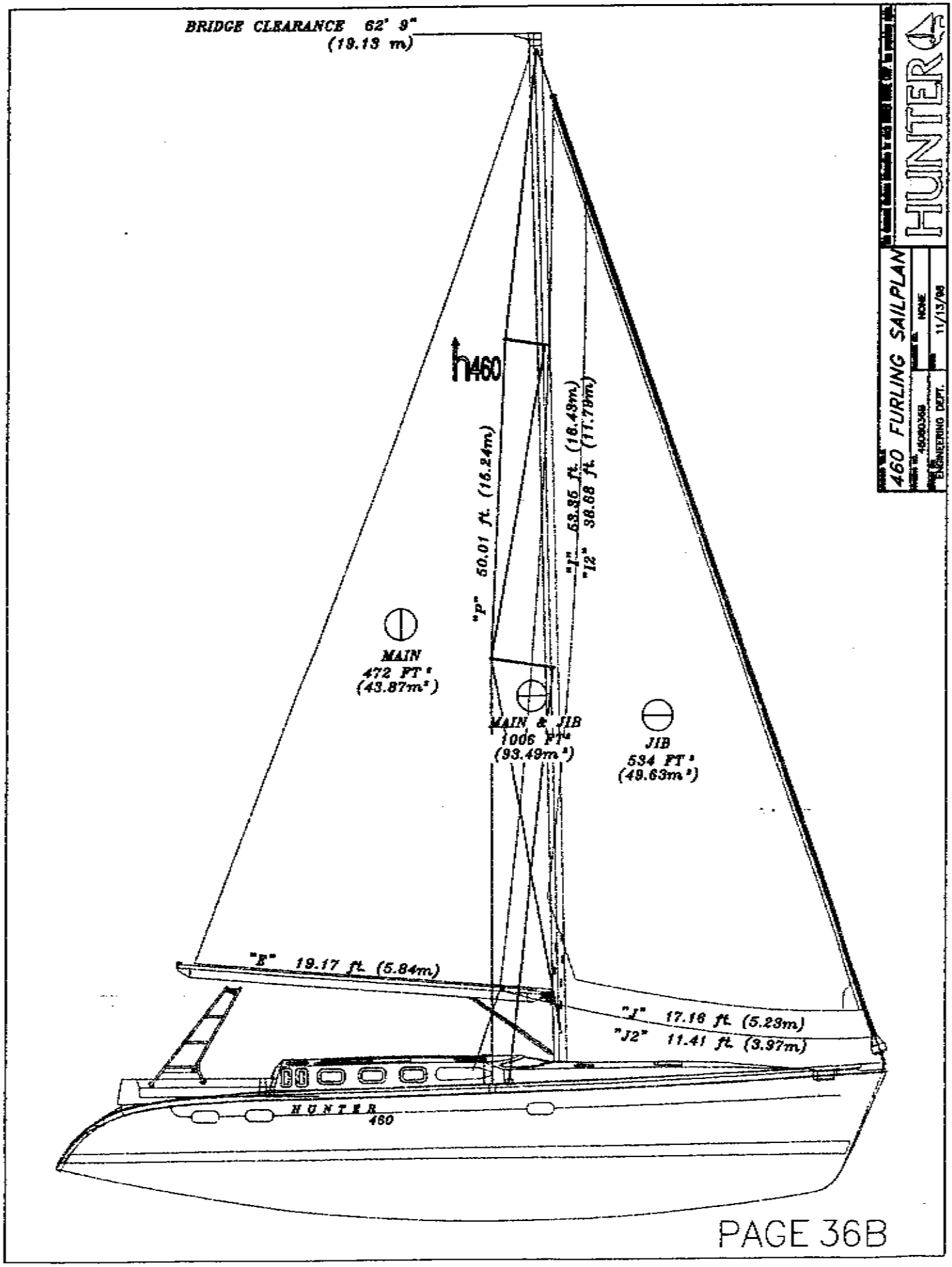


LIGHTSHIP DISPLACEMENT = 11,360Kg (24,992Lb)
FULL LOAD DISPLACEMENT = 13,820Kg (30,404Lb)
SINK @ FULL LOAD = 85mm (3.34")

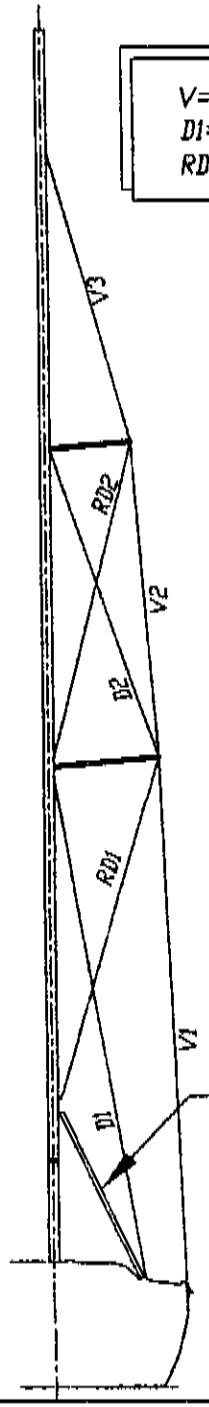
EACH HUNTER 460 MODEL WITH THE CE MARK IS AND WILL CONTINUE TO BE IDENTICAL TO THE INDIVIDUAL UNIT OF THAT MODEL WHICH WAS OFICIALLY INSPECTED AND APPROVED

MODEL YEAR 1999

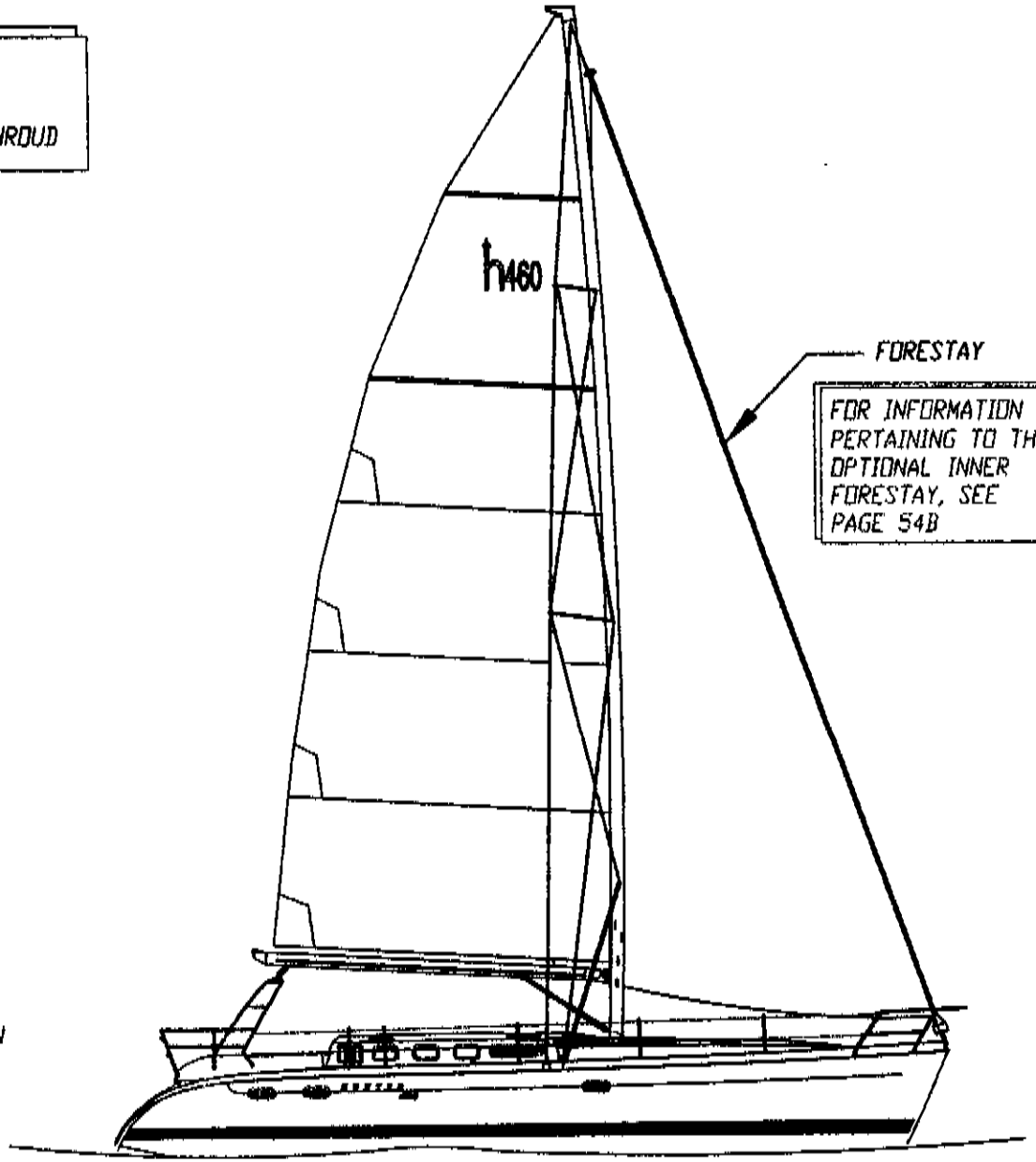

BRIDGE CLEARANCE 62' 9"
(19.13 m)
h460
MAIN
621 ft².
(57.71 m².)
"P" 60.42 ft. (15.97m)
"I" 55.88 ft. (16.84m)
"I2" 38.72 ft. (11.80m)
MAIN & JIB
1155 ft².
(107.34 m².)
JIB
534 ft².
(49.63 m².)
"E" 17.91 ft. (5.45m)
"J" 17.16 ft. (5.23m)
"J2" 11.41 ft. (3.97m)
HUNTER 460
460 STANDARD SAILPLAN
HUNTER
NONE
11/13/98
ENGINEERING DEPT.


BRIDGE CLEARANCE 62' 9"
(19.13 m)
460
"P" 50.01 ft. (15.24m)
"I" 53.95 ft. (16.43m)
"J2" 38.68 ft. (11.78m)
MAIN
472 FT²
(43.87m²)
MAIN & JIB
1006 FT²
(93.49m²)
JIB
534 FT²
(49.63m²)
"E" 19.17 ft. (5.84m)
"J" 17.16 ft. (5.23m)
"J2" 11.41 ft. (3.97m)
HUNTER
460
460 FURLING SAILPLAN
HUNTER
NONE
11/13/98
ENGINEERING DEPT.

V= VERTICAL SHROUD
D1= DIAGONAL SHROUD
RD= REVERSE DIAGONAL SHROUD



NOTE:
STRUTS UTILIZED ON STANDARD MASTS ONLY.



FORESTAY

FOR INFORMATION PERTAINING TO THE OPTIONAL INNER FORESTAY, SEE PAGE 54B

460 STANDARD RIG DEFINITIONS

46080.38C	NONE
ENGINEERING DEPT	11/13/98

HUNTER

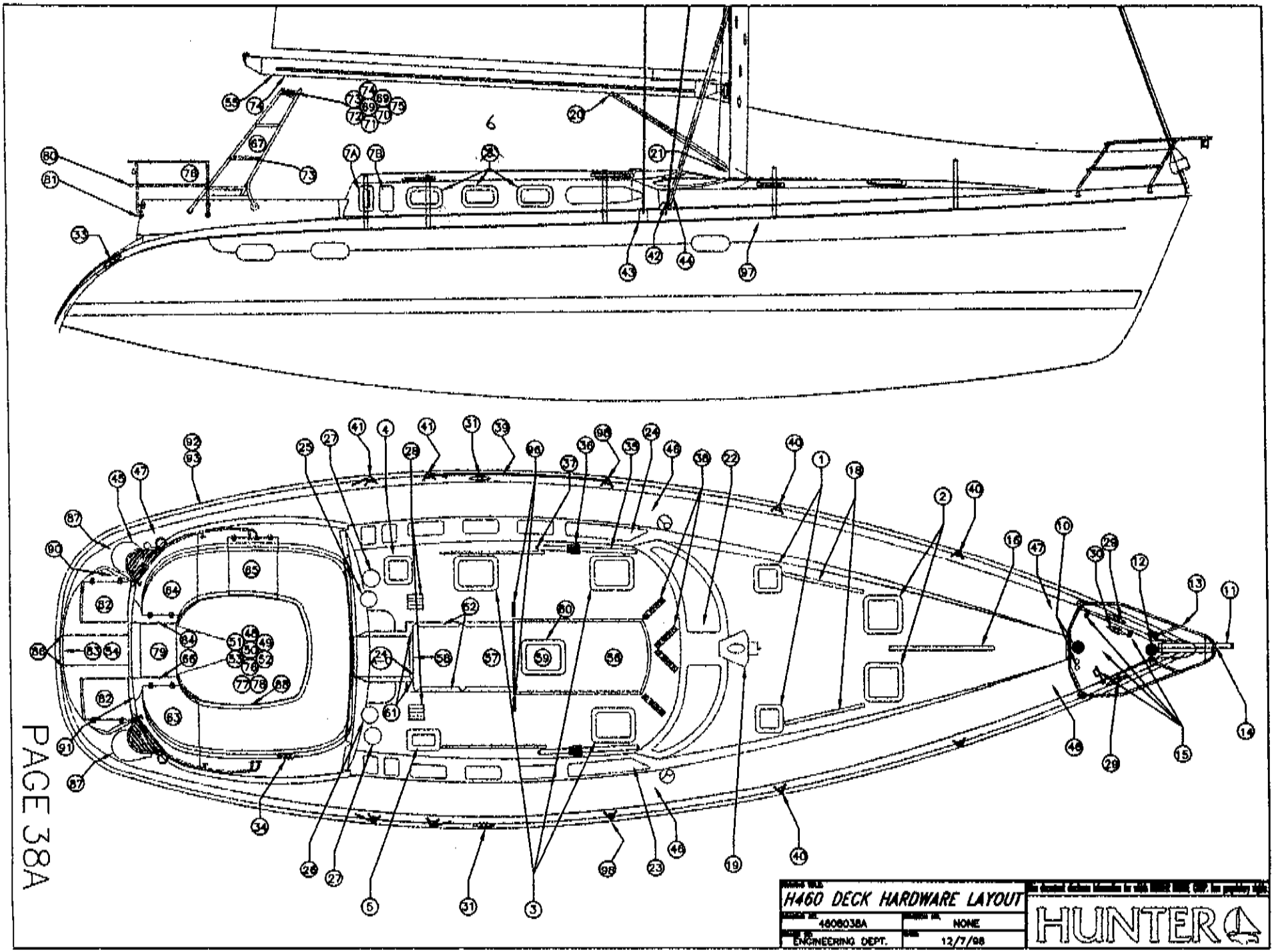
DIMENSIONS, CAPACITIES, ETC.

HUNTER 460

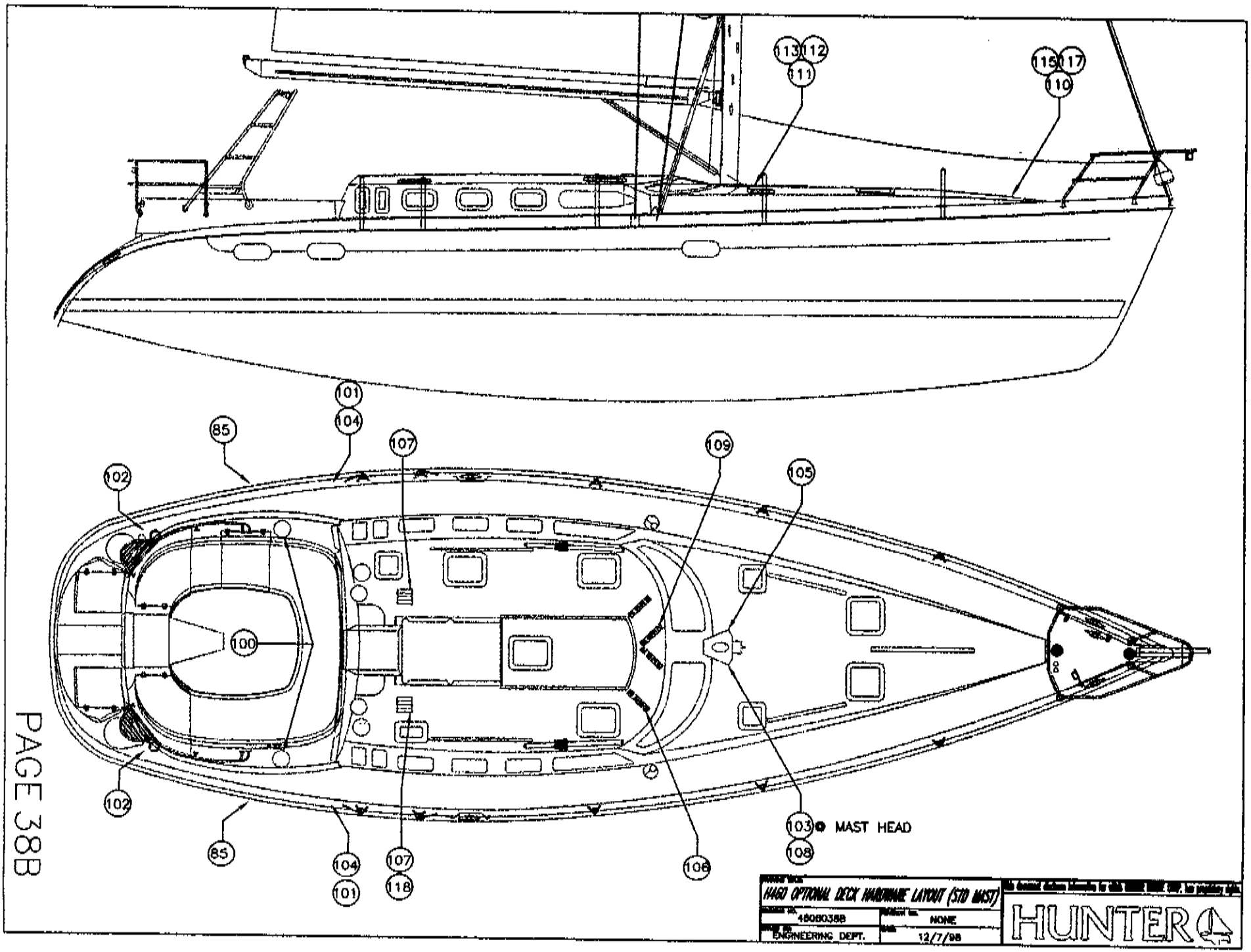
LENGTH OVERALL (LOA)	44'3"	13.49m
LENGTH OF WATERLINE (LWL)	38'8"	11.79m
BEAM (MAX)	14'0	4.27m
DRAFT	5'6"	1.68m
DISPLACEMENT	28,000 lbs.	12,698 kg
BALLAST	9,500 lbs.	4,309 kg
SAIL AREA (100% TRAINGLES)	908.1 sq. ft.	84.4 sq.m
SAIL AREA (ACTUAL W/STANDARD SAILS)	1155 sq. ft.	81.29 sq.m
I	55.26 ft.	16.84m
J	17.16 ft.	5.23m
P	50.42 ft.	15.37m
E	17.91 ft.	5.45m
MAST HEIGHT (FROM WATERLINE)	62' 9"	19.13m
HEADROOM	6'6"	1.98m
WATER CAPACITY	200 U.S. gal.	757 liters
HOLDING TANK CAPACITY	50 U S gal.	189 liters
FUEL TANK CAPACITY	100 US gal.	378 liters
LPG TANK CAPACITY	10 lbs.	4.54 kg
BATTERY CAPACITY	85 amp (1)	START BATTERY
	235 amp (2)	HOUSE BATTERIES
ELECTRICAL VOLTAGES	12 V.D.C./ 110 V.A.C.	
	(SELECT OVERSEAS MODELS 220 V)	
INBOARD ENGINES	62 hp	37.3 kw
	76 hp OPTIONAL	47.3 kw OPTIONAL
OPTIONAL GENERATOR		6 kw
MAXIMUM LOADING	10 PEOPLE	2460 kg (INCLUDING LUGGAGE)
LIFTING POINTS	INDICATED BY "SLING" LABELS ON HULL	

PROP DIAMETER & PITCH

	2 BLADE
YANMAR 4JH2TE (62 H.P.)	18" X 17 R.H.(457.2mm X 431.8mm)
YANMAR 4JH2HTE (76 H.P.)	NOT OFFERED
	3 BLADE
YANMAR 4JH2TE (62 H.P.)	18" X 16 R.H.(457.2mm X 406.4mm)
YANMAR 4JH2HTE (76 H.P.)	18" X 17 R.H.(457.2mm X 431.8mm)


H460 DECK HARDWARE LAYOUT
4606038A
NONE
ENGINEERING DEPT.
12/7/98
HUNTER

PAGE 38A


113
112
111
115
117
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107
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105
102
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102
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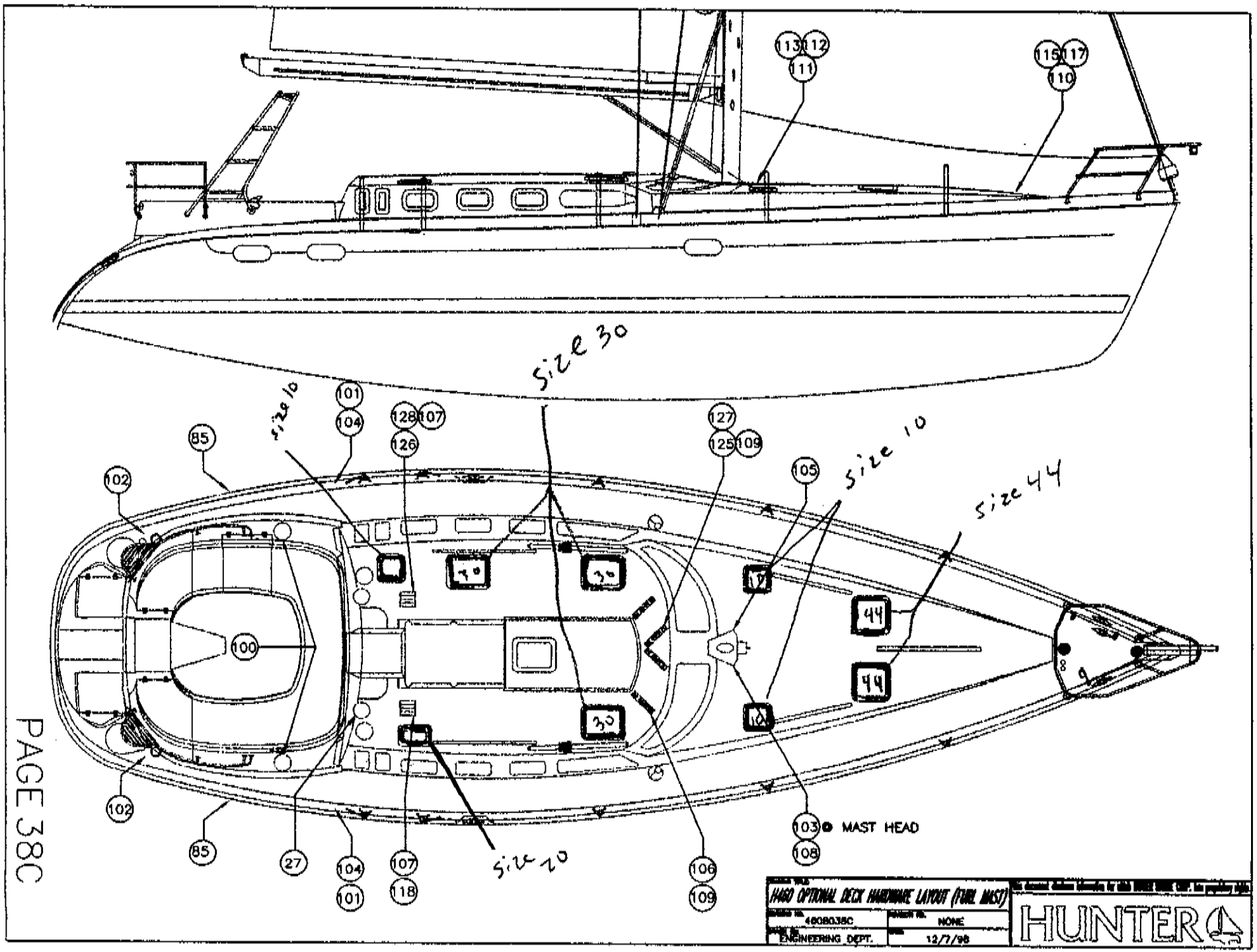
104
101
107
118
106
103
MAST HEAD
108
HAGO OPTIONAL DECK HARDWARE LAYOUT (STD MAST)
46080388
NONE
ENGINEERING DEPT.
12/7/98
HUNTER



46080386	NONE
ENGINEERING DEPT.	12/7/98

HAGO OPTIONAL DECK HARDWARE LAYOUT (FURL MAST)

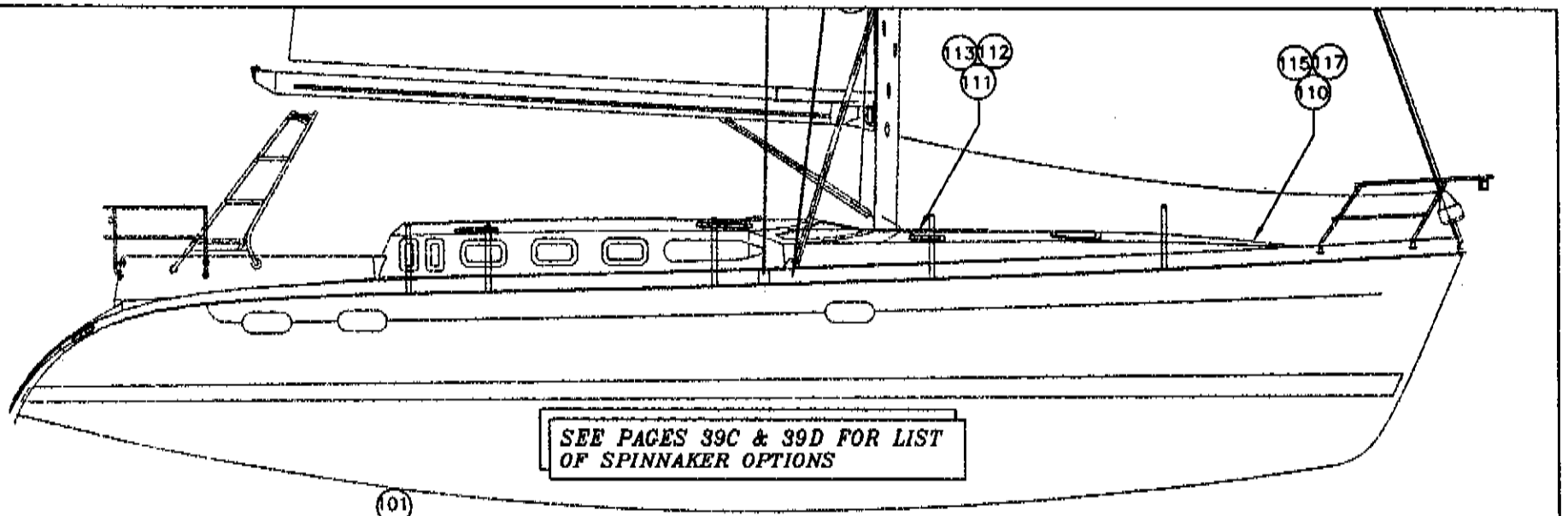
HUNTER

	REVISION #	3/23/99					
	HUNTER P460 DECK HARDWARE						
	GEN.DESCR.	LOC. & TYPE	VENDOR	MDL/NAME/#	#REQ.	PART #	DWG #
1	HATCH	FWD. HEAD	LEWMAR	COAST S-10	2	300210	
	SCREEN	"	"	"	2	300220	
	TRIM RING	"	"	"	2	300230	
2	HATCH	FWD.S/R CABIN TOP	LEWMAR	COAST S-44	2	NEW	
	SCREEN	"	"	"		NEW	
	TRIM RING	"	"	"		NEW	
3	HATCH	MAIN SALOON & GALLEY	LEWMAR	COAST S-30	3	301050	
	SCREEN	"	"	"	3	301060	
	TRIM RING	"	"	"	3	301070	
4	HATCH	GALLEY	LEWMAR	COAST S-10	1	300210	
	SCREEN	"	"	"	1	300220	
	TRIM RING	"	"	"	1	300230	
5	HATCH	AFT HEAD	LEWMAR	COAST S20	1	300910	
	SCREEN	"	"	"	1	300920	
	TRIM RING	"	"	"	1	300940	
6	HATCH	HOUSE SIDE	LEWMAR	COAST S-20	6	300910	
	SCREEN	"	"	"	6	300920	
	TRIM RING	"	"	"	6	300940	
7A	PORTLIGHT	HOUSE SIDE	LEWMAR	SIZE 0	2	300484	
	SCREEN	"	"	"	2	300490	
7B	AFT FIXED CABIN WINDOW	P &S AFT HOUSE SIDE	NO. FLORIA GLASS	PLEXI	2	425540	
8	FIXED PORTLIGHT	HULL SIDE			3	424860	
	TRIM RING	"			3	300290	
9	FIXED PORTLIGHT	HULL SIDE	LEWMAR		2	300850	
	SCREEN	"	"		2	300860	
10	WINDLASS	ANCHOR LKR.	HORIZON	1500GD	1	310520	
	DUAL CONTROL BOX	WINDLASS			1	310550	
	DECK SWITCH - UP	WINDLASS			1	310570	
	DECK SWITCH - DOWN	WINDLASS			1	310600	
11	BOW ROLLER	BOW	HUNTER	450	1	304400	4462044A
12	FURLING UNIT	STEM	FURLEX		1	NEW	N/A
13	BOW RAIL	BOW	HUNTER	C/O 450	1	307820	4462024A
14	BOW LIGHT	ON BOW PULPIT	C/O 410	EL0344	1	255806	
15	ANCHOR HATCH	BOW		FIBERGLASS	1		N/A
	ANCHOR LATCH (HANDLE)	ANCHOR LOCKER		C/O 450	1	315700	N/A
	STRIKER PLATE	ANCHOR LOCKER		C/O 450	1	309740	
	HINGE	ANCHOR LOCKER		C/O 450	2	315059	
	EYE STRAP	ANCHOR LOCKER		C/O 450	4	315590	
	BUNGEE CORD	ANCHOR LOCKER		C/O 450	1	318530	
16	HANDRAILS	FWD. TRUNK CENTER	48"	WOOD	1		
17	HANDRAILS	FWD TRUNK EDGE	24"	WOOD	2		
18	HANDRAILS	CABIN TOP	48"	WOOD	2		
19	MAST STEP	MID DECK	SELDEN	450	1		
20	VANG BLOCK		SCHAEFER	705-55	1	302630	
21	VANG BLOCK		SCHAEFER	705-45	1	302340	
22	CABIN WINDSHIELD		NO. FLORIA GLASS	NEW DESIGN	1 SET	P4655	N/A
23	CABIN SIDE PLEXI (P&S)	FWD END OF CABIN SIDES	NO. FLORIA GLASS	NEW DESIGN	1 SET	P4614	
24A	PIN BOARDS-TOP	COMPANIONWAY	NO. FLORIA GLASS	PLEXI (TOP)	1	P4612	
24B	PIN BOARDS-MID	COMPANIONWAY	NO. FLORIA GLASS	PLEXI (MID)	1	P4613	
24C	PIN BOARDS-BOTTOM	COMPANIONWAY	NO. FLORIA GLASS	PLEXI (BOTTOM)	1	P4624	
25	WINCH	HALYARD	LEWMAR	COAST STD.44ST	1	308620	
26	WINCH	HALYARD-ELEC.	LEWMAR	COAST 48EST	1	308890	
27	WINCH	COCKPIT / JIB SHEET	LEWMAR	COAST 48ST	2	308630	
28	SHEETSTOPPER	PORT & STBD	SPINNLOCK	XT/3 TRIPLE	2	304020	
29	CLEAT	BOW	NORTH/JUDD	14051	2	308835	
30	CLEAT	ANCHOR LOCKER	NORTH/JUDD	14051	1	308835	
31	CLEAT	MIDSHIPS	NORTH/JUDD	14051	2	308835	
33	CLEAT	STERN	NORTH/JUDD	14051	2	308835	
34	CLEAT (FURL)	ON ARCH	4" SILVER	C/O 450	1	303850	
35	JIB TRACK	MID TRUNK	SCHAEFER	C/O 450	2	303152	
36	JIB CARS		SCHAEFER	C/O 450	2	302190	
37	JIB TRACK ENDS		SCHAEFER	C/O 450	4	302170	
38	DK. ORGANIZER (TRIPLE)	2 PORT & 2 STBD@ MAST	HARKEN	1590	4	303305	
39	LIFE LINES	ABOVE GUNN'LS				NEW	
40	STANCHION W/ BASE	ALONG GUNN'LS		C/O 410	6	305140	N/A
41	STANCHION GATE	PORT AND STARBOARD		380 GATE FWD	2 PR	304975	

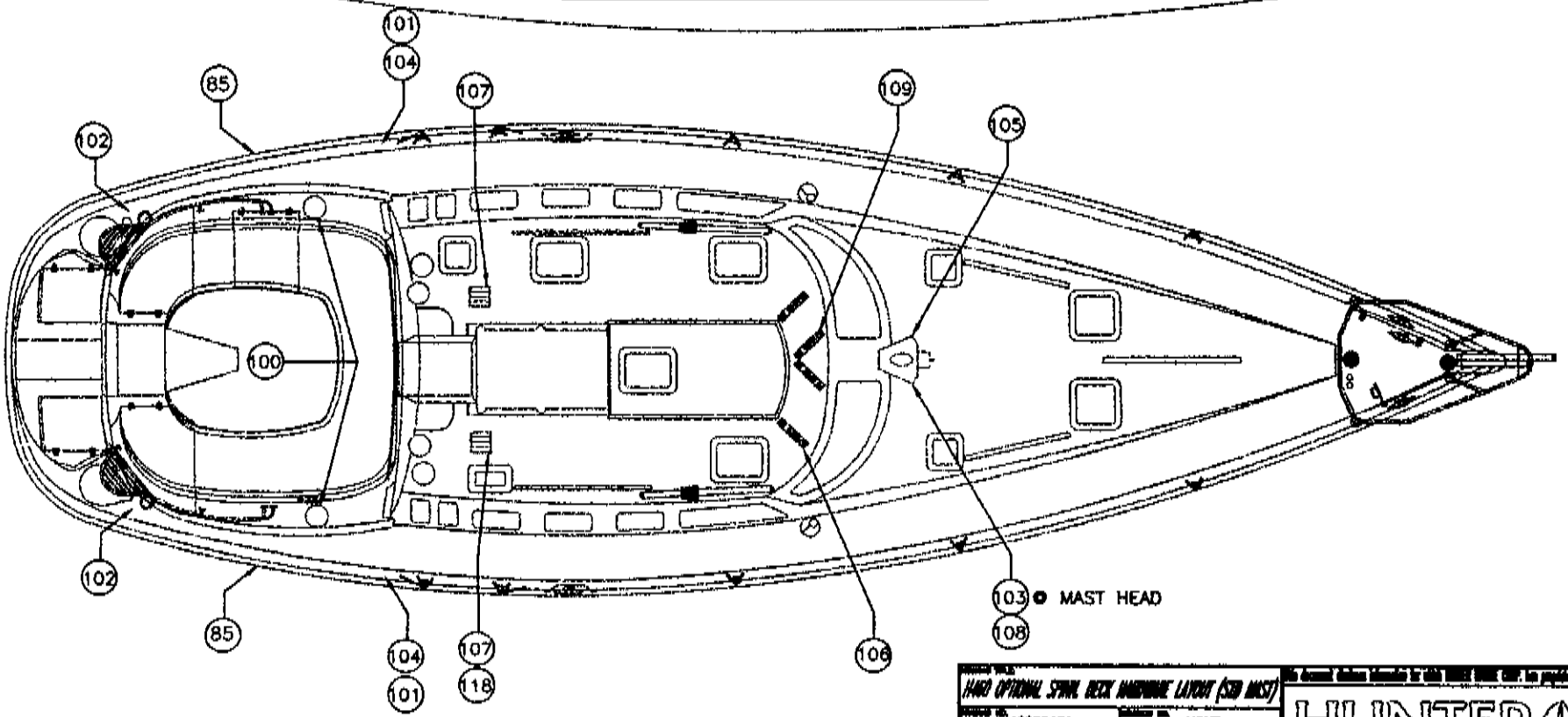
	REVISION #	3/23/99					
	HUNTER P460 DECK HARDWARE						
	GEN.DESCR.	LOC. & TYPE	VENDOR	MDL/NAME/#	#REQ.	PART #	DWG #
42	CHAIN PLATE	UPPER SHROUD	NEW DESIGN		2	NEW?	
43	CHAIN PLATE	LOWER SHROUD	NEW DESIGN		2	NEW?	4462020A
44	STRUTS	MAST	NEW LENGTH		2	NEW?	4462034A
45	FILL PLATE	DIESEL		PL1126	1	356191	4462037A
46	FILL PLATE	WATER		PL1130	3	356199	
47	FILL PLATE	WASTE		PL1140	2	356217	
48	STEERING CONSOLE	IN COCKPIT	HUNTER	C/O380	1		***
49	WHEEL	WHITEWATER	42"	WHITEWATER	1	310850	
50	STEERING SYSTEM	IN CONSOLE	EDSON	C/O 380	1	311630	
	"		"	"	1	311695	
51	SHIFT CONTROL	PEDESTAL		C/O 410	1		N/A
52	QUAD COVER	COCKPIT	C/O 380	GLASS PART	1		***
53	GRABRAIL, AFT CONSOLE	STEERING CONSOLE	C/O 380		1 EA	307130	***
	GRAB HANDLE, CONSOLE	STEERING CONSOLE	C/O 380			306080	***
54	EMERG.TILL ACCESS	IN QUAD COVER		C/O 380	1	300520	
55	MAINSHEET BLOCK	AFT END BOOM	HARKEN			303302	
56	SEA HOOD	FWD OF COMPANIONWAY		NEW DESIGN	1		N/A
57	SLIDING HATCH	COMPANIONWAY		NEW LENGTH	1	P4628	
58	SLIDER STOP	COMPANIONWAY HATCH	HUNTER	STARBOARD	1		
59	SOLAR PANEL	ON SEA HOOD		C/O 410	1	258092	
60	SOLAR PANEL MOUNT PLATE		ON SEA HOOD	GLASS PART	1		4462027A
61	COMPANIONWAY TRACK/SLIDER		HUNTER		1 PR		P4632
62	COMPANIONWAY HANDRAIL	COMPANIONWAY		SOUTHCOAST	PR	307280	
63	STBD GULLWING SEAT	COCKPIT	HUNTER	C/O 380	1	FRP	***
	HINGES	GULLWING		C/O 380	2	314900	***
	EYE STRAP	GULLWING				315590	
64	PORT GULLWING SEAT	COCKPIT	HUNTER	C/O 380	1	FRP	***
	HINGES	GULLWING			2	314900	
	EYE STRAP	GULLWING				315590	
65	EURO HATCH	COCKPIT	HUNTER	C/O 380	1	FRP	***
	EURO HATCH HINGE				2	314900	
	SPRING CLAMP	EURO HATCH		502-2	PR	303800	
	SPRING CLAMP	EURO HATCH		502-1	PR	303790	***
	EYE STRAP	EURO HATCH			2	315590	
66	MANUAL BILGE PUMP	IN COCKPIT	C/O 410	PL0371	1	352185	N/A
67	ARCH	ABOVE COCKPIT	HUNTER	STAINLESS	1		***
68	MAINSHEET TRAVELER TRACK	ON ARCH	HARKEN 516-5	AS ON 450	1		
70	" CONTROL BLOCK	" "	HARKEN 1845	MOUNTED ON CAR	2		
72	FIXED CONTROL BLOCK	MOUNTED ON ARCH	HARKEN 132		2		
73	CLEAT AND BLOCK	PIVOTING EXIT BLOCK	HARKEN 141	PIVOTING BLOCK	2		
74	SHACKLE	5/16" D SHACKLE		INVENTORY	2		
75	TRAVELER CAR	AS PER 450	HARKEN 1928		1		
76	ENGINE PANEL	ON COCKPIT CONSOLE	YANMAR "C"	C/O 450	1	312130	
77	LIGHT ON CONSOLE	ON ARCH		C/O 380	1		4465007A
78	SPEAKERS	ON COCKPIT CONSOLE		C/O 380	2		
79	HELM SEAT	COCKPIT	HUNTER	C/O 380	1	FRP	***
	HINGES	HELM SEAT		C/O 380	2	314920	
	RUBBER LATCHES	HELM SEAT		C/O 380	2	315430	
	EYE STRAP	HELM SEAT		C/O 380	2	315590	
80	STERN RAIL	STERN		C/O 380	ST	306785	***
81	STERN LIGHT	ON SERN RAIL	C/O 380	EL0389	1	255878	
82	SWIMSEAT LID	STERN	HUNTER	C/O 380	2	FRP	***
	HINGE (SWIMSEAT LOCKER)	STERN		C/O 380	4	314900	
	RUBBER LATCH	SWIMSEATS		C/O 380	2	315430	
83	SWIM LADDER	STERN	WINDLINE	C/O 380	1	303650	4462015A
84	COCKPIT SHOWER	COCKPIT			1	351267	
86	SWIM GRAB HANDLE	STERN		C/O 410	2	307800	N/A
87	LPG LOCKER LID	PORT COCKPIT COAMING	HUNTER	C/O 380	1 SET	FRP	***
	PULL, PROPANE LOCKER	LPG LOCKER			2	315023	***
	STAINLESS, 1/8 x1 304 TRUE BAR			C/O 380	2	705235	***
	EYE STRAP	LPG LOCKER		C/O 380	4	315590	***
88	PORTLIGHT	COCKPIT	LEWMAR		1	300590	***
89	HATCH	HULLSIDE	LEWMAR	HW0074	2	300850	***

	REVISION #	3/23/99					
	HUNTER P460 DECK HARDWARE						
	GEN.DESCR.	LOC. & TYPE	VENDOR	MDL/NAME/#	#REQ.	PART #	DWG #
90	SHORE WATER			PL1175	1	331700	
91	SHORE PWR.	TRANSOM			1	331780	
	"	"	"		1	331820	
92	RUBRAIL	GUNN'L	BARBOUR	380 STYLE (ROUND	100'	NEW STYLE	
93	KEEPER, RUBRAIL	GUNN'L	BARBOUR			NEW STYLE	
94	CHEEK BLOCK (JIB SHEET)	AFT OUTBRD CABIN TOP				302760	
96	CHAFE GUARD	CABIN HOUSE TOP	HUNTER	SS CHAFE GUARD	2	P4666	
97	SS RUB RAIL INSERT	PT & STBD RUBRAIL		SS RUB RAIL		P4653	
98	SS VENTED STANCHION	PT & STBD SS VENTED STAN	HUNTER	SAME AS 420		305145	
	OPTIONAL GEAR (STD MAST)						
	SPIN OPTION						
100	WINCH	COCKPIT / SPINN.SHEET	LEWMAR	COAST STD.50ST	2	308640	
101	SNATCH BLOCK	MID RAIL	SCHAEFER	11-99	2	303143	
102	SPIN BLOCK	AFT RAIL	SCHAEFER	10-15	2	303192	
103	SPIN. MAST BLOCK	MAST STEP	RUTGERSON		1	302263	
104	PADEYE	ON RAIL AFT OF GATE	SCHAEFER	78-99	2	303740	
105	SPINNAKER MAST BLOCK	MAST HEAD	RUTGERSON	600 W/SPRING	1	302263	
106	DK ORGANIZER (QUAD)	PORT SIDE AT MAST	HARKEN		2	303307	
		REPLACES ONE TRIPLE FROM ITEM 38		(REDUCE #38 TO 2)			
107	SHEET STOPPER	PORT SIDE	SPINLOCK	XT/4	1	304030	
		REPLACES ONE TRIPLE FROM ITEM 28					
	SPINNAKKER SHEETS						
	STAYSAIL OPTION						
108	STAYSAIL MAST BLOCK	MAST STEP	RUTGERSON	600 W/SPRING	1	302263	
109	DK ORGANIZER (QUAD)	STBD SIDE AT MAST	HARKEN		2	303307	
		REPLACES ONE TRIPLE FROM ITEM 38		(REDUCE #38 TO 2)			
110	INNER FORESTAY BASE		SCHAEFER		1	NEW	
111	STRAP IFS	JUST FWD OF MAST		C/O 450		304270	
112	U-BOLT	JUST FWD OF MAST				318030	
113	PADEYE	FWD OF MAST	SCHAEFER 78-01		2	303760	
114	HALYARD, STAYSAIL	IN MAST		C/O 450		40015577	
115	INNER FORESTAY, W/REL LEVER			C/O 450		40018577	
116	SHEETS, STAYSAIL			C/O 450		400170	
117	TURNBUCKLE			C/O 450		400200	
118	SHEET STOPPER	STBD SIDE	SPINLOCK	XT/4	1	304030	
		REPLACES ONE TRIPLE FROM ITEM 28					
	SPIN & STAYSAIL OPTION						
100	WINCH	COCKPIT / SPINN.SHEET	LEWMAR	COAST STD.50ST	2	308640	
101	SNATCH BLOCK	MID RAIL	SCHAEFER	11-99	2	303143	
102	SPIN BLOCK	AFT RAIL	SCHAEFER	10-15	2	303192	
103	SPIN. MAST BLOCK	MAST STEP	RUTGERSON		1	302263	
104	PADEYE	ON RAIL AFT OF GATE	SCHAEFER	78-99	2	303740	
105	SPINNAKER MAST BLOCK	MAST STEP	RUTGERSON	600 W/SPRING	1	302263	
106	DK ORGANIZER (QUAD)	PORT & STBD	HARKEN		4	303307	
		REPLACES ITEM 38					
107	SHEET STOPPER	PORT & STBD	SPINLOCK	XT/4	2	304030	
		REPLACES ITEM 28					
108	STAYSAIL MAST BLOCK	MAST STEP	RUTGERSON	600 W/SPRING	1	302263	
110	INNER FORESTAY BASE		SCHAEFER		1	NEW	
111	STRAP IFS	JUST FWD OF MAST		C/O 450		304270	
112	U-BOLT	JUST FWD OF MAST				318030	
113	PADEYE	FWD OF MAST	SCHAEFER 78-01			303760	
114	HALYARD, STAYSAIL	IN MAST	7/16 X 107'??????	C/O 450		40015577	
115	INNER FORESTAY, W/REL LEVER		1x19 x44'????	C/O 450		40018577	
116	SHEETS, STAYSAIL		7/16x40'	C/O 450		400170	
117	TURNBUCKLE		1/4" T-BOLT W/TO	C/O 450		400200	
	OPTIONAL GEAR (FURLING MAST)						
	FURLING, NO SPIN OR STAYSAIL						
125	DK ORGANIZER (QUAD)	PORT SIDE AT MAST	HARKEN		2	303307	
		REPLACES ONE TRIPLE FROM ITEM 38		(REDUCE #38 TO 2)			
126	SHEET STOPPER	PORT SIDE	SPINLOCK	XT/4	1	304030	
		REPLACES ONE TRIPLE FROM ITEM 28					

	REVISION #	3/23/99					
	HUNTER P460 DECK HARDWARE						
	GEN.DESCR.	LOC. & TYPE	VENDOR	MDL/NAME#	#REQ.	PART #	DWG #
	SPIN OPTION						
100	WINCH	COCKPIT / SPINN.SHEET	LEWMAR	COAST STD.50ST	2	308640	
101	SNATCH BLOCK	MID RAIL	SCHAEFER	11--99	2	303143	
102	SPIN BLOCK	AFT RAIL	SCHAEFER	10--15	2	303192	
103	SPIN. MAST BLOCK	MAST STEP	RUTGERSON		1	302263	
104	PADEYE	ON RAIL AFT OF GATE	SCHAEFER	78-99	2	303740	
105	SPINNAKER MAST BLOCK	MAST HEAD	RUTGERSON	600 W/SPRING	1	302263	
127	ORGANIZER, 3DECK STACK	PORT SIDE AT MAST	HARKEN	1503	2	303370	
		REPLACES ONE TRIPLE FROM ITEM 38		(REDUCE #38 TO 2)			
107	SHEET STOPPER	PORT SIDE	SPINLOCK	XT/4	1	304030	
		REPLACES ONE TRIPLE FROM ITEM 28					
128	SHEET STOPPER	PORT SIDE	SPINLOCK	XT/1	1	???	
	STAYSAIL OPTION						
85	PADEYE	ON RAIL AMIDSHIPS	SCHAEFER	78-99	2	303775	
108	STAYSAIL MAST BLOCK	MAST STEP	RUTGERSON	600 W/SPRING	1	302263	
109	DK ORGANIZER (QUAD)	PORT & STBD AT MAST	HARKEN		4	303307	
		REPLACES ITEM 38					
110	INNER FORESTAY BASE		SCHAEFER		2	NEW	
111	STRAP IFS	JUST FWD OF MAST		C/O 450		304270	
112	U-BOLT	JUST FWD OF MAST				318030	
113	PADEYE	FWD OF MAST	SCHAEFER 78-01			303760	
114	HALYARD, STAYSAIL	IN MAST	7/16 X 107'??????	C/O 450		40015577	
115	INNER FORESTAY, W/REL LEVER		1x19 x44'????	C/O 450		40018577	
116	SHEETS, STAYSAIL		7/16x40'	C/O 450		400170	
117	TURNBUCKLE		1/4" T-BOLT W/TO	C/O 450		400200	
118	SHEET STOPPER	STBD SIDE	SPINLOCK	XT/4	2	304030	
		REPLACES ITEM 28					
	SPIN & STAYSAIL OPTION						
100	WINCH	COCKPIT / SPINN.SHEET	LEWMAR	COAST STD.50ST	2	308640	
101	SNATCH BLOCK	MID RAIL	SCHAEFER	11--99	2	303143	
102	SPIN BLOCK	AFT RAIL	SCHAEFER	10--15	2	303192	
103	SPIN. MAST BLOCK	MAST HEAD	RUTGERSON		1	302263	
104	PADEYE	ON RAIL AFT OF GATE	SCHAEFER	78-99	4	303740	
105	SPINNAKER MAST BLOCK	MAST STEP	RUTGERSON	600 W/SPRING	1	302263	
127	ORGANIZER, 3DECK STACK	PORT SIDE AT MAST	HARKEN	1503	2	303370	
		REPLACES ONE TRIPLE FROM ITEM 38		(REDUCE #38 TO 2)			
107	SHEET STOPPER	PORT SIDE	SPINLOCK	XT/4	1	304030	
		REPLACES ONE TRIPLE FROM ITEM 28					
128	SHEET STOPPER	PORT SIDE	SPINLOCK	XT/1	1	???	
108	STAYSAIL MAST BLOCK	MAST STEP	RUTGERSON	600 W/SPRING	1	302263	
109	DK ORGANIZER (QUAD)	PORT & STBD AT MAST	HARKEN		4	303307	
		REPLACES ITEM 38					
110	INNER FORESTAY BASE		SCHAEFER		1	NEW	
111	STRAP IFS	JUST FWD OF MAST		C/O 450		304270	
112		0 JUST FWD OF MAST				318030	
113	PADEYE	FWD OF MAST	SCHAEFER 78-01		2	303760	
114	HALYARD, STAYSAIL	IN MAST	7/16 X 107'??????	C/O 450		40015577	
115	INNER FORESTAY, W/REL LEVER		1x19 x44'????	C/O 450		40018577	
116	SHEETS, STAYSAIL		7/16x40'	C/O 450		400170	
117	TURNBUCKLE		1/4" T-BOLT W/TO	C/O 450		400200	
118	SHEET STOPPER	STBD SIDE	SPINLOCK	XT/4	2	304030	
		REPLACES ONE ITEM 28					

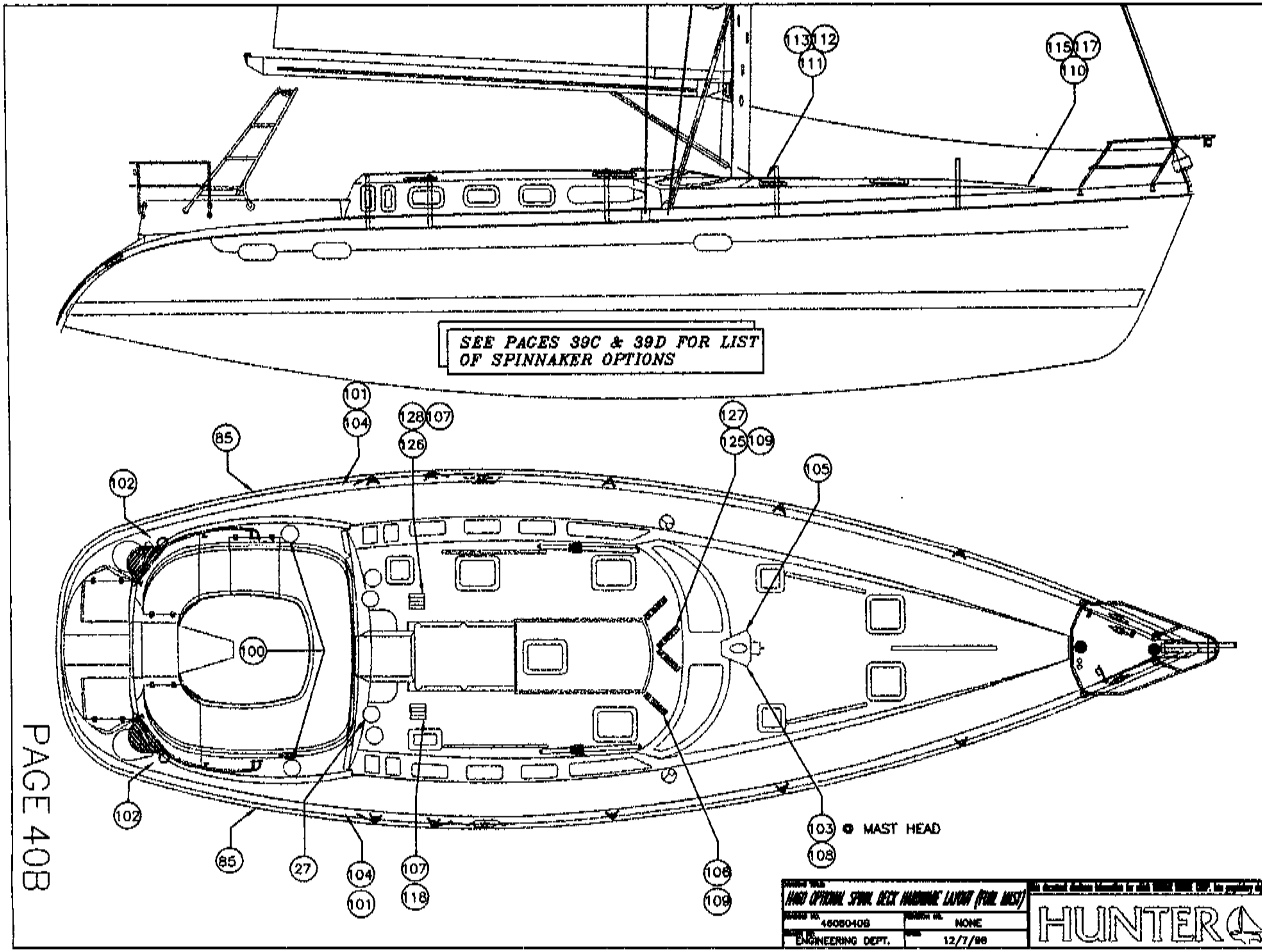


SEE PAGES 39C & 39D FOR LIST OF SPINNAKER OPTIONS

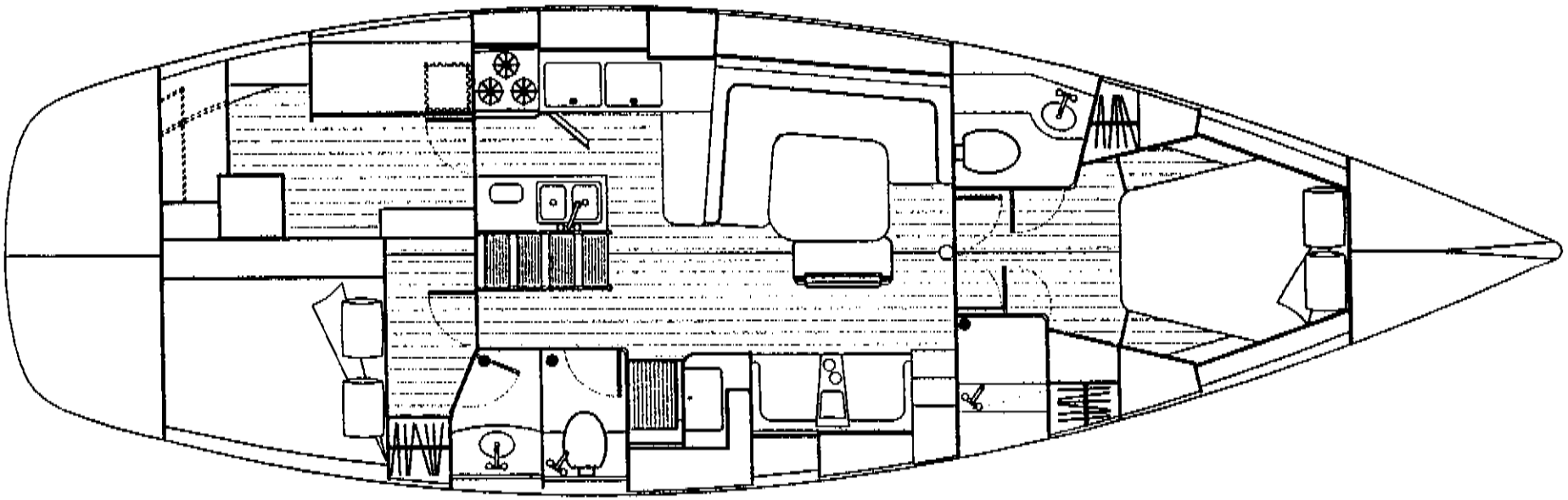


HARD OPTIONAL SPINN. DECK HARDWARE LAYOUT (53D MAST)	
46080404	NONE
ENGINEERING DEPT.	12/7/98

HUNTER

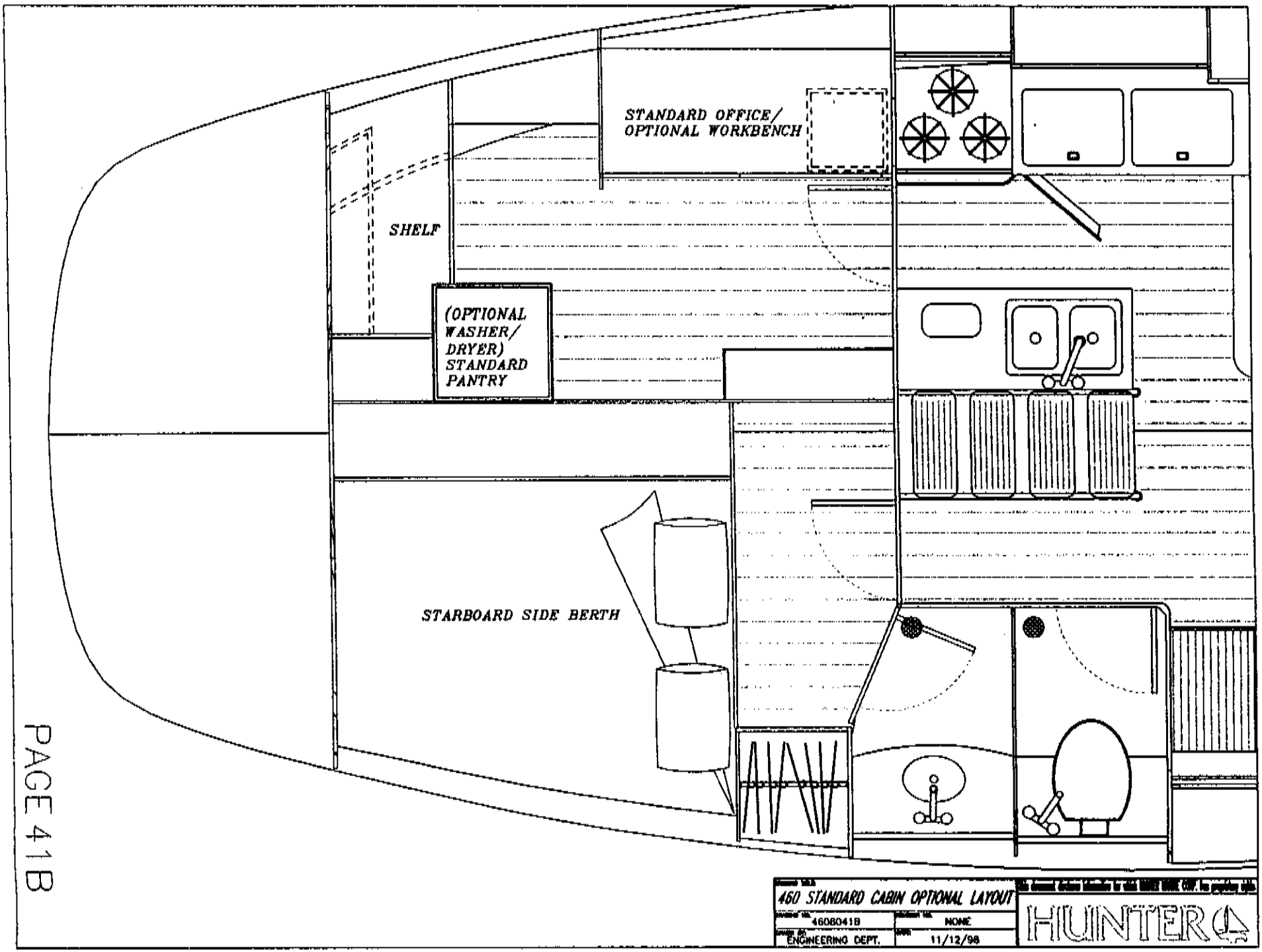

113 112
111
115 117
110
SEE PAGES 39C & 39D FOR LIST
OF SPINNAKER OPTIONS
101
104
85
102
128 107
126
127
125 109
105
100
102
85
27
104
101
107
118
106
109
103 MAST HEAD
108
NONE
ENGINEERING DEPT.
12/7/98
HUNTER

460 STANDARD INTERIOR



460 STANDARD CABIN INTERIOR LAYOUT	
4608041A	NONE
ENGINEERING DEPT.	11/12/98

HUNTER

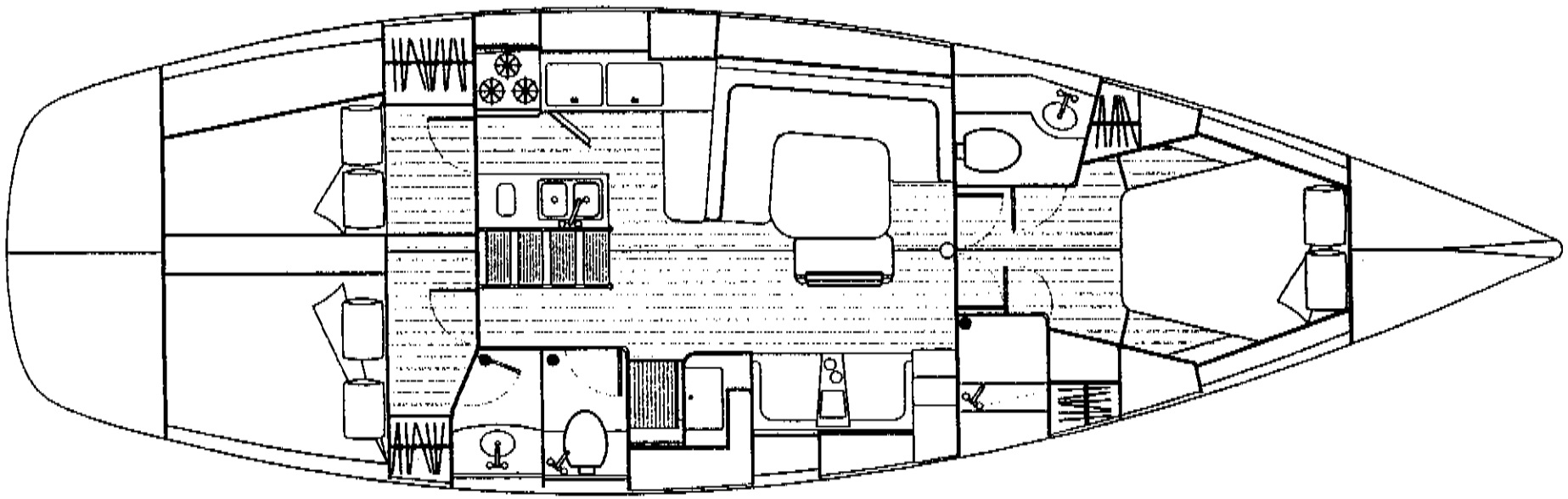


460 STANDARD CABIN OPTIONAL LAYOUT

4606041B	NONE
ENGINEERING DEPT.	11/12/98

HUNTER

460 TRI CABIN OPTION INTERIOR

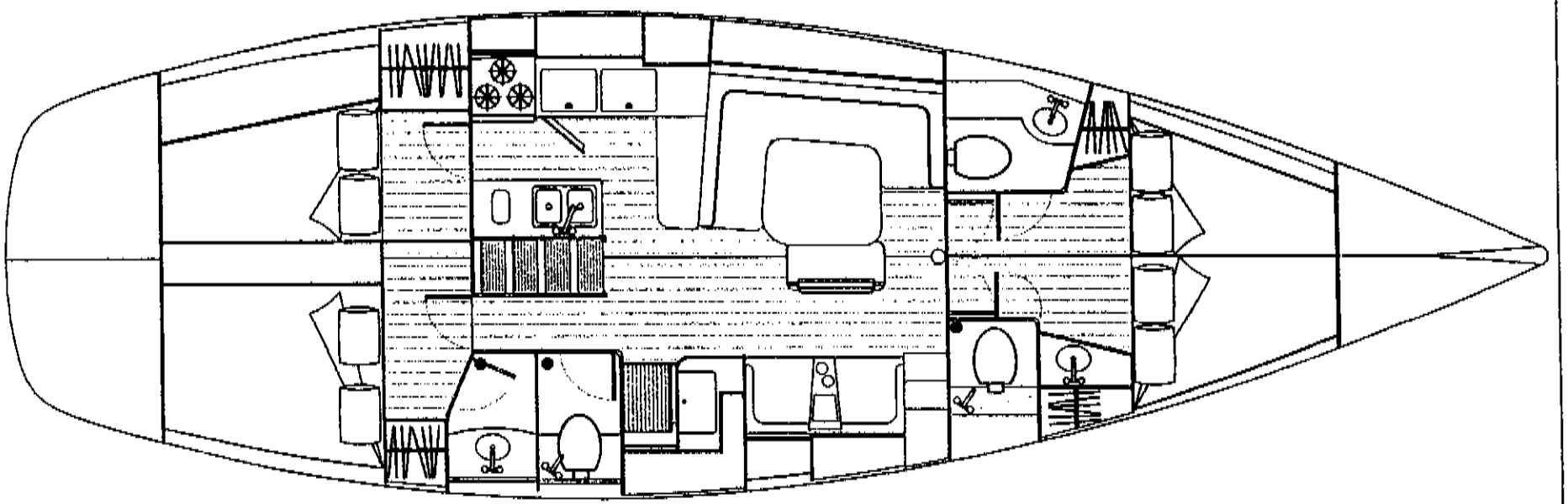


PAGE 41C

460 TRI CABIN (OPT) INTERIOR LAYOUT	
4608041C	NONE
ENGINEERING DEPT.	11/12/98

HUNTER

460 QUAD CABIN OPTION INTERIOR



PAGE 41D

460 QUAD CABIN INTERIOR LAYOUT	
46D8041D	NONE
ENGINEERING DEPT.	11/12/98

HUNTER

EXAMPLE: TO LOWER

Ⓐ LOOSEN CLAMP WITH COUNTER CLOCKWISE MOTION

Ⓑ AT THE CENTER OF THE TABLE, APPLY DOWNWARD PRESSURE UNTIL THE TABLE REACHES THE DESIRED HEIGHT.

Ⓒ CONTINUE APPLYING PRESSURE WHILE RE-TIGHTENING THE CLAMP IN A CLOCKWISE MOTION

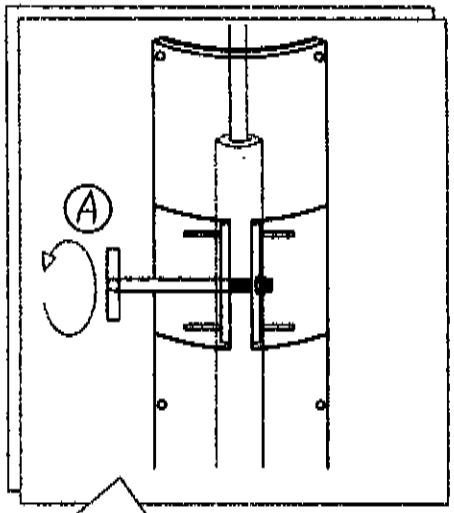
Ⓓ SEE NOTE BELOW BEFORE ADJUSTING.

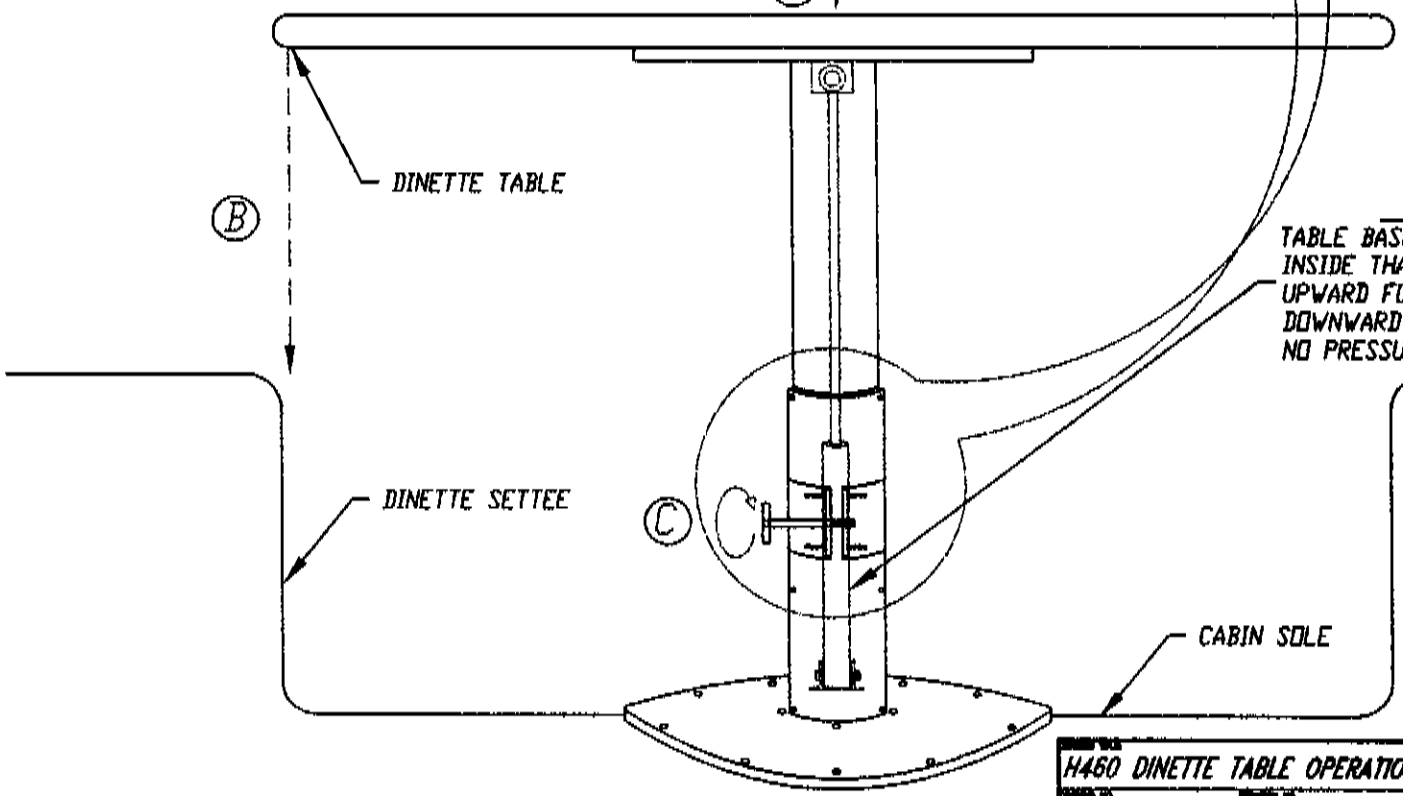
TO RAISE:

A. LOOSEN CLAMP

B. TABLE RAISES AUTOMATICALLY.

C. RE-TIGHTEN THE CLAMP





Ⓓ NOTE:

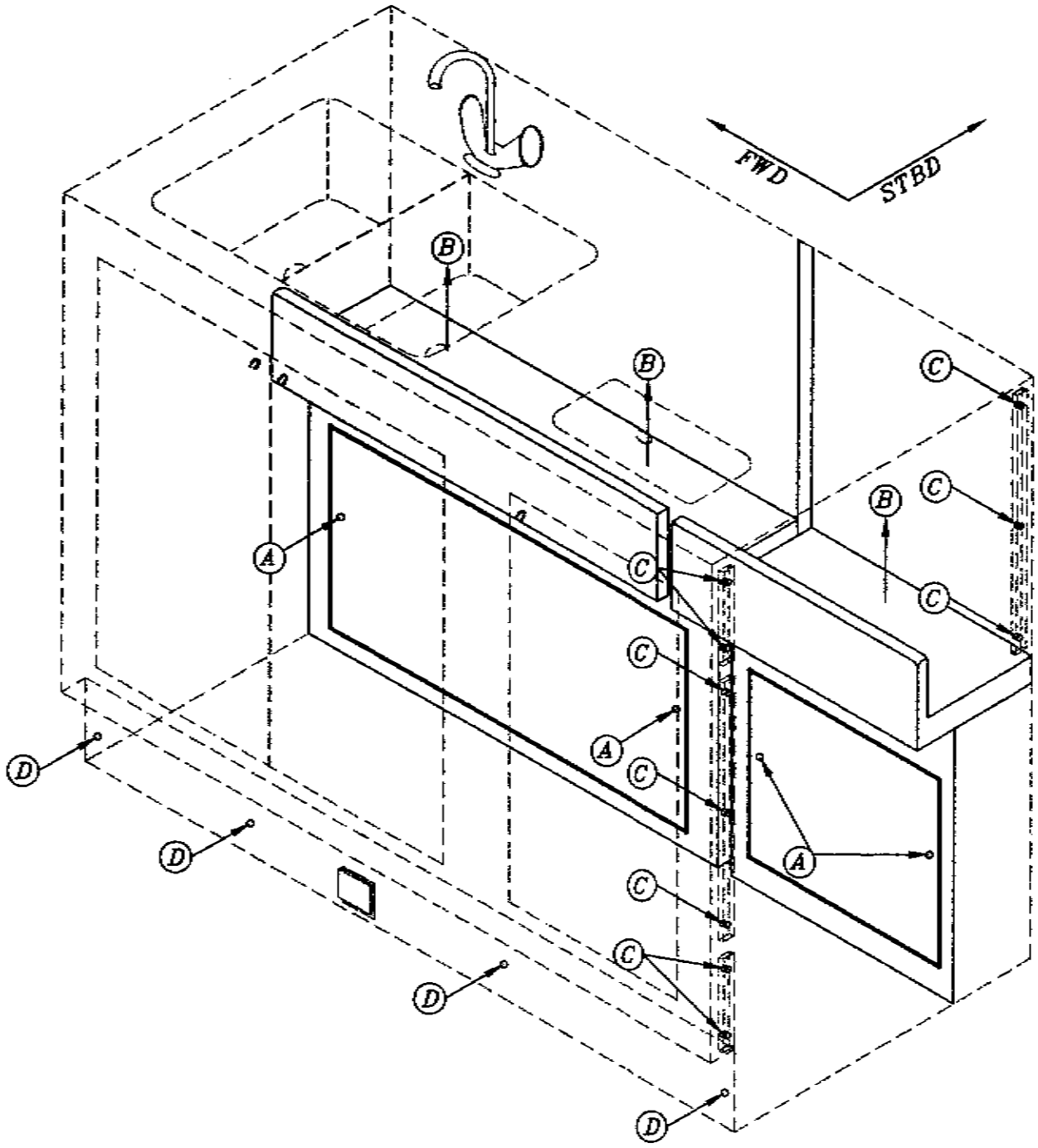
TABLE BASE FITTED WITH "GAS SHOCK" INSIDE THAT CONSTANTLY APPLIES AN UPWARD FORCE. TO LOWER, APPLY DOWNWARD PRESSURE. TO RAISE, NO PRESSURE OR LIFTING IS NEEDED.

H460 DINETTE TABLE OPERATION

46080411E | NONE

ENGINEERING DEPT. | 11/12/98

HUNTER



460 GALLEY ACCES INSTRUCTIONS

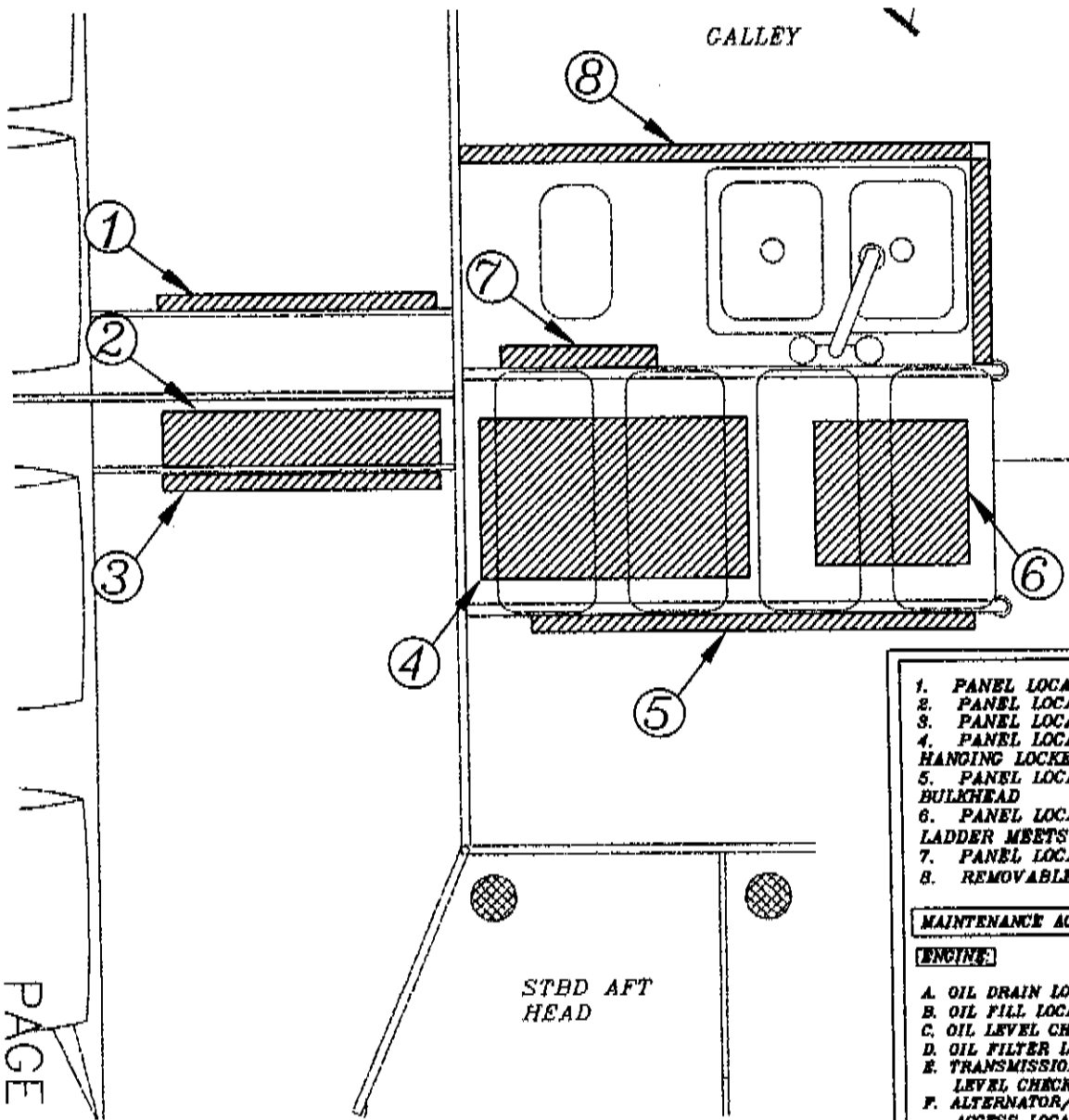
HUNTER

TO ACCESS ENGINE COMPARTMENT THRU GALLEY:

THIS IS POSSIBLE BY TWO WAYS.

1. REMOVE LOWER CABINET FACE ACCESS PANELS FASTENERS (A) . (AND /OR) LIFT UP AND REMOVE CABINET SHELVING (B). THIS WILL PROVIDE ACCESS TO THE ENGINE BEHIND THE GALLEY.

2. REMOVE THE BATTENS INSIDE THE CABINET (C) . THEY ARE LOCATED AT AFT OF THE UNIT. (ONE PIECE TO THE STBD, AND THREE PIECES TO THE PORT) ALSO REMOVE THE FASTENERS LOCATED ON THE INBOARD FACE OF THE GALLEY TOE KICK (D) . AT THIS POINT THE WHOLE GALLEY UNIT SHOULD NOW PIVOT TO THE PORT, ON THE TOE KICK, PROVIDING ACCESS TO THE ENGINE.



1. PANEL LOCATED IN PORT AFT STATEROOM ON STBD. SHELF FACE.
2. PANEL LOCATED TOP OF STBD. AFT STATROOM SHELF
3. PANEL LOCATED IN STBD AFT STATEROOM ON PORT SHELF FACE
4. PANEL LOCATED UNDER COMPANIONWAY LADDER AT WET GEAR HANGING LOCKER
5. PANEL LOCATED STBD. SIDE LOWER ENGINE COMPARTMENT BULKHEAD
6. PANEL LOCATED UNDER COMPANIONWAY LADDER (WHERE THE LADDER MEETS THE SOLE)
7. PANEL LOCATED INSIDE GALLEY ISLAND STBD. AFT SIDE
8. REMOVABLE GALLEY ISLAND (SEE PAGE 41F FOR FURTHER INFO)

MAINTENANCE ACCESS:

ENGINE:

A. OIL DRAIN LOCATION (#5)
B. OIL FILL LOCATION (#5,6)
C. OIL LEVEL CHECK LOCATION (#5)
D. OIL FILTER LOCATION (#5)
E. TRANSMISSION FLUID LEVEL CHECK LOCATION (#4,5)
F. ALTERNATOR/STARTER ACCESS LOCATION (#7,8)
G. FAN BELT(S) (#4,5)

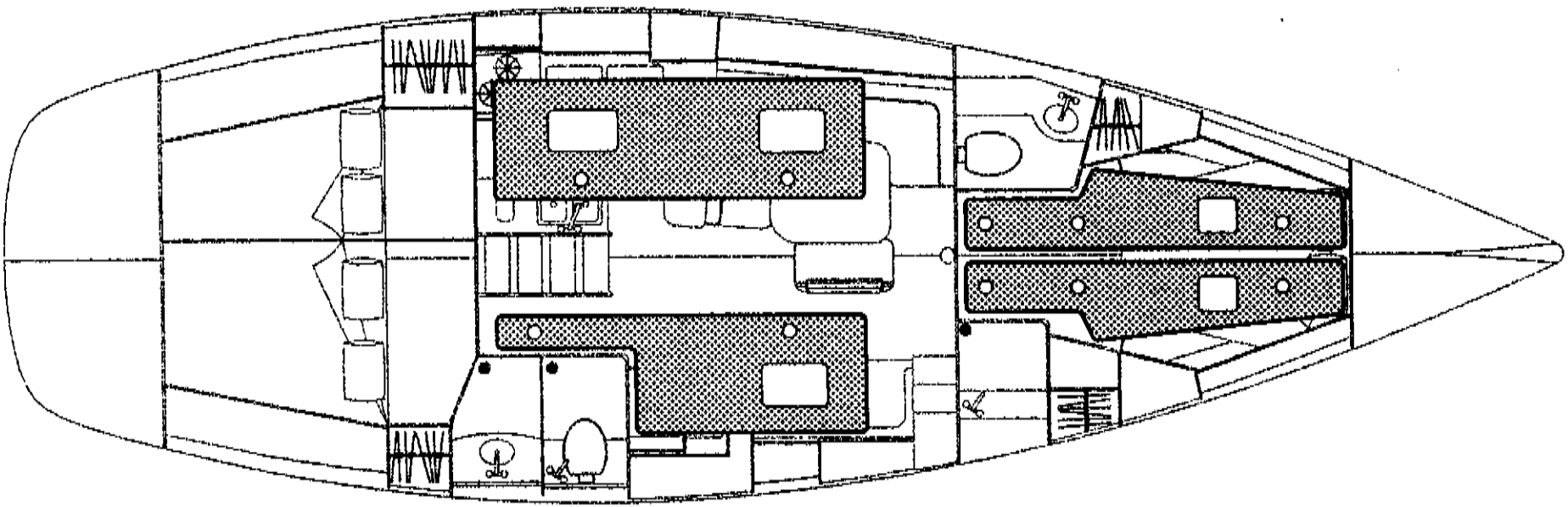
OPTIONAL GENERATOR:

A. OIL DRAIN LOCATION (#3,2)
B. OIL FILL LOCATION (#3,2)
C. OIL LEVEL CHECK LOCATION (#3,2)
D. OIL FILTER LOCATION (#3,2)
E. GENERATOR FUSE LOCATION (#1)
F. ALTERNATOR/STARTER ACCESS LOCATION (#1)
G. FAN BELT(S) (#1,2)

460 ENGINE/OPT. GENERATOR ACCESS LOCATIONS

46050410	NONE
ENGINEERING DEPT.	3/2/99

HUNTER

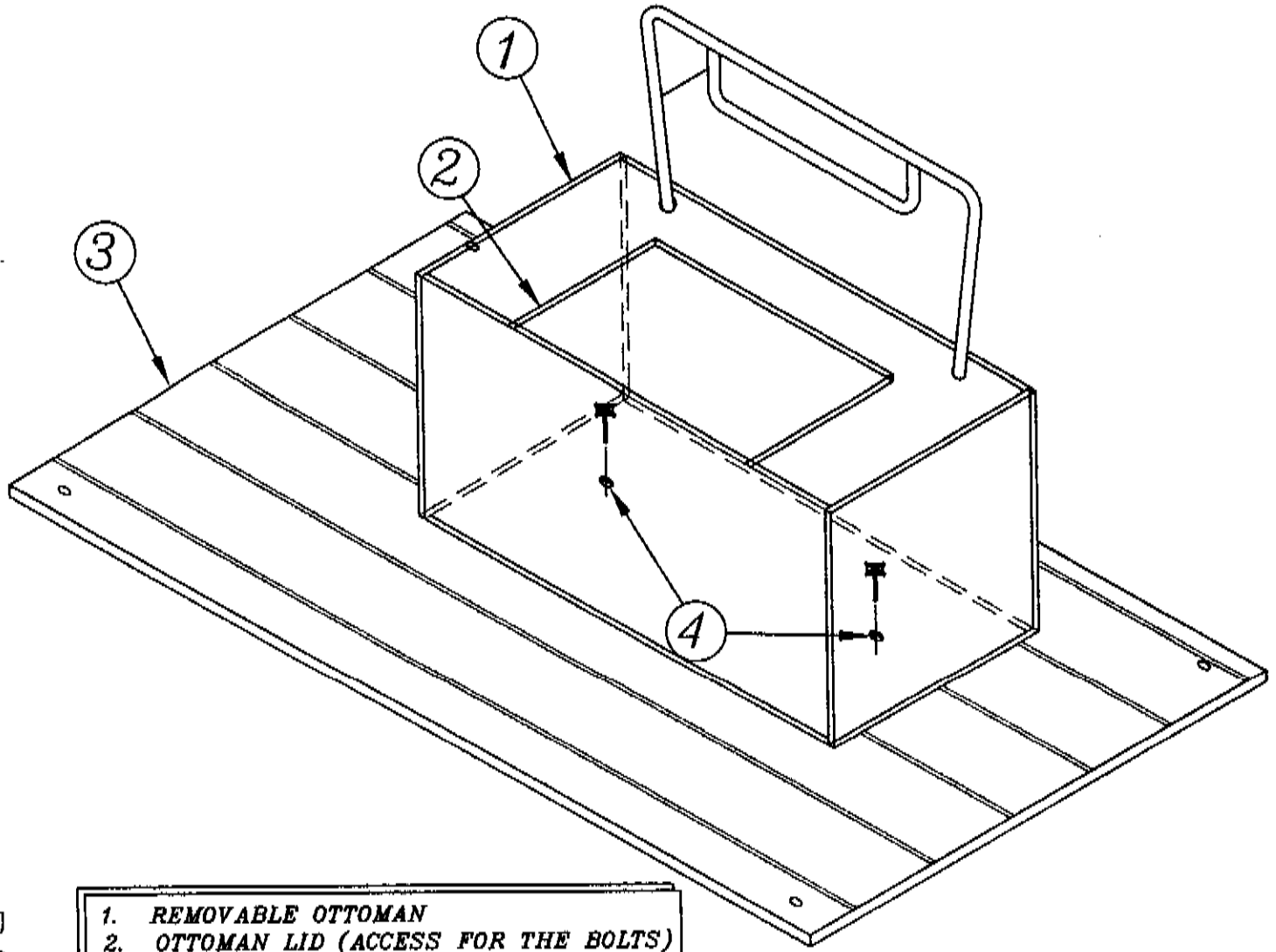


LOCATION OF "SOFT" HEADLINER ACCESS PANELS.

SEE "WHISPER" INSERT IN OWNERS MANUAL FOR FURTHER INSTRUCTIONS

PAGE 41H

460 SOFT HEADLINER ACCES PANEL LOCATIONS		
4608041H	NONE	HUNTER
ENGINEERING DEPT.	3/1/99	



1. *REMOVABLE OTTOMAN*
2. *OTTOMAN LID (ACCESS FOR THE BOLTS)*
3. *FLOOR BOARD SECTION (SECURED IN THE FOUR CORNERS)*
4. *OTTOMAN SECURING BOLTS*

NOTE: BE SURE THE OTTOMAN IS TIGHTLY SECURED AT ALL TIMES. THERE EXISTS A POSSIBILITY OF INJURY IF IT IS NOT.

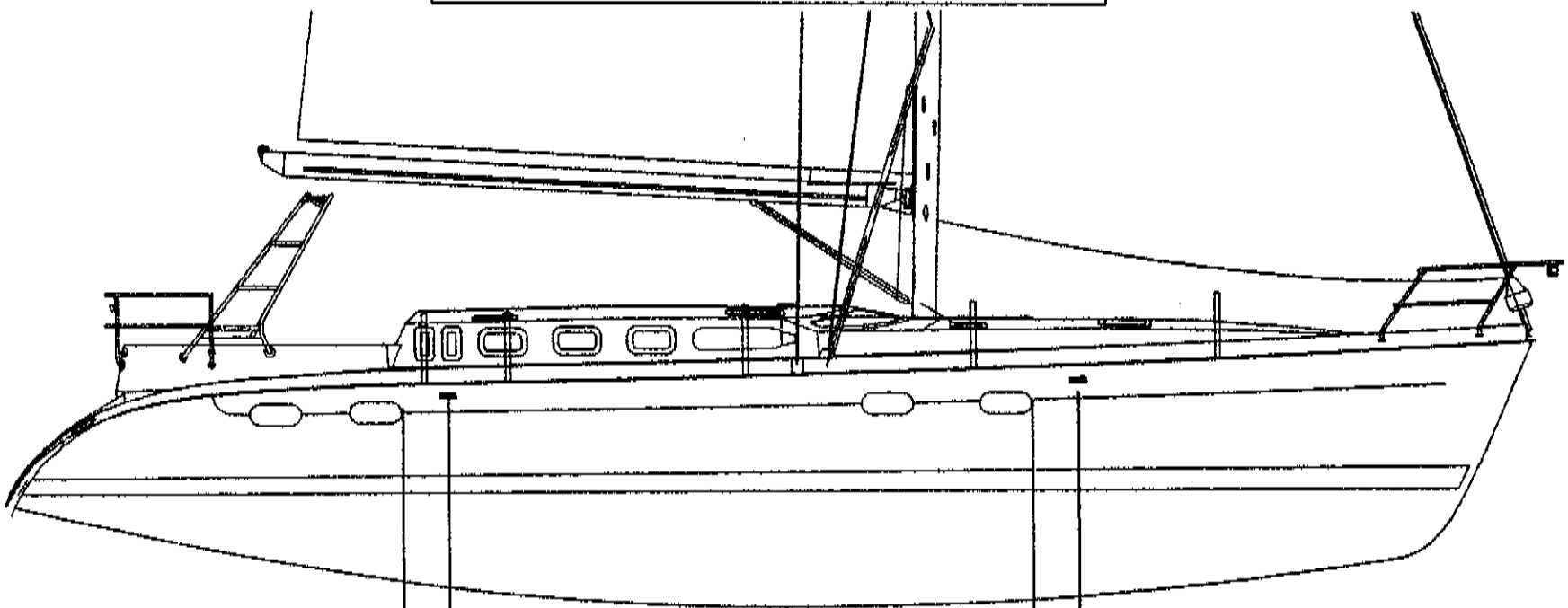
H460 OTTOMAN SECURING INSTRUCTIONS	
45080411	NONE
ENGINEERING DEPT.	10/29/99

HUNTER

IMPORTANT

NOTE: BE AWARE OF THE STAINLESS STEEL RUB RAIL INSERT WHEN LIFTING THE BOAT.

IT IS NECESSARY TO PROTECT THE RUB RAIL FROM THE LIFTING STRAPS TO AVOID DAMAGE.



18" (457.2mm)
(FROM FWD EDGE OF WINDOW)

18" (457.2mm)
(FROM FWD EDGE OF WINDOW)

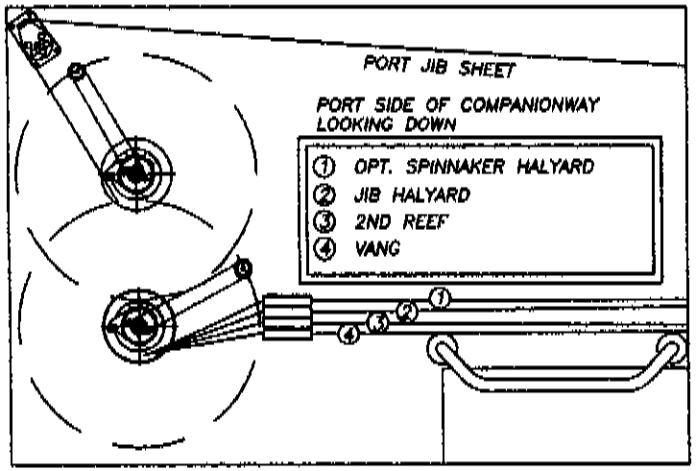
PAGE 41J

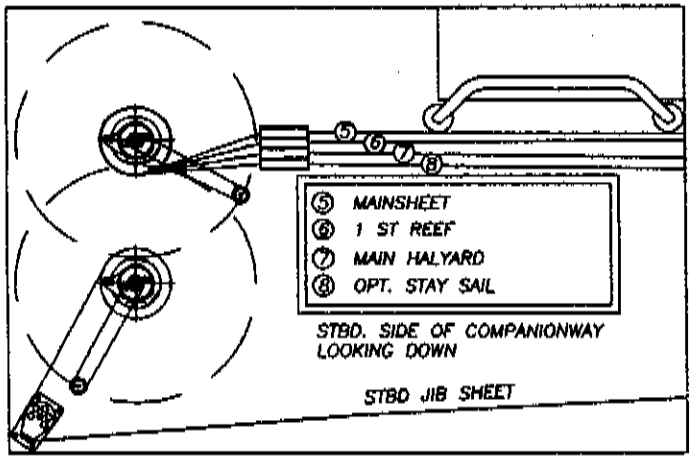
SLING LOCATIONS

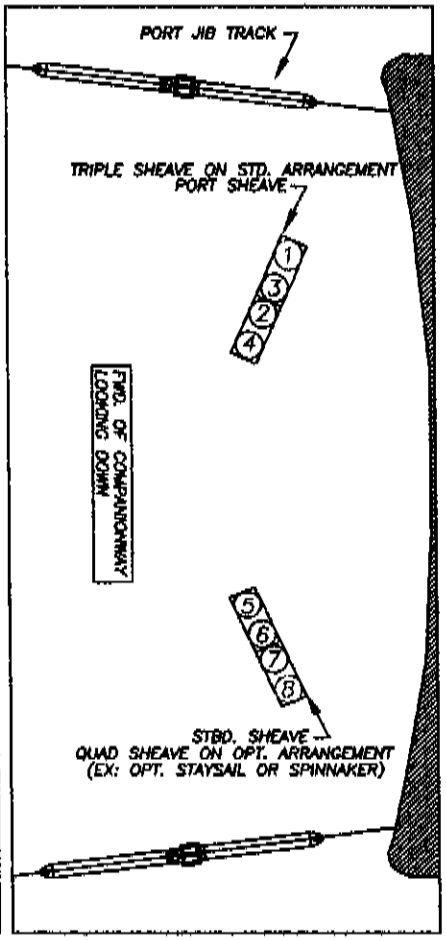
HAGO SLING LOCATION/ RUB RAIL PROTECTION DWG	
45080411	NONE
ENGINEERING DEPT.	2/22/08

HUNTER

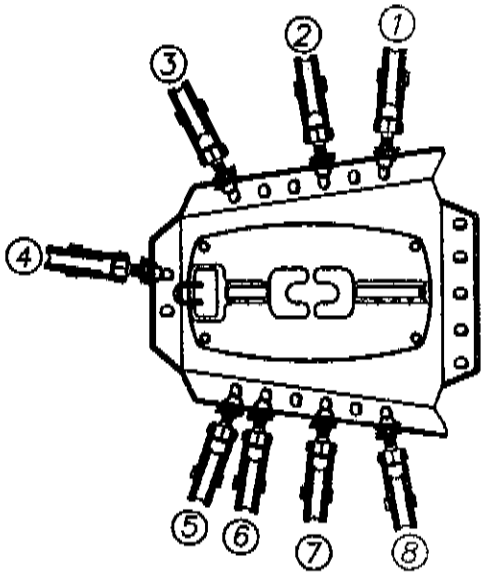
SELDEN STANDARD MAST STEP







STANDARD MAST STEP W\SPINNAKER OPTION



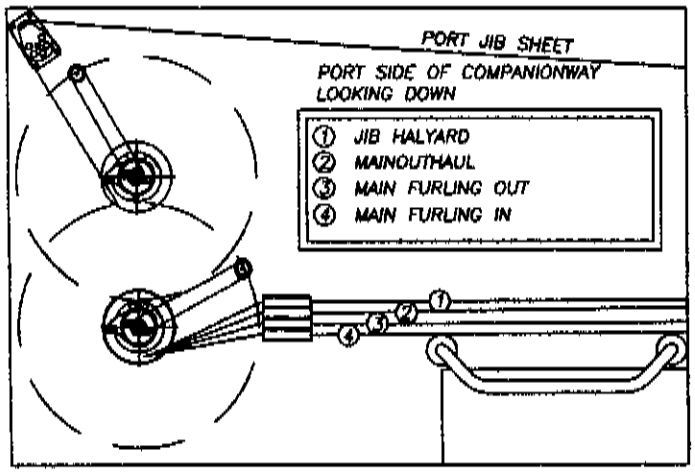
NOTE:
ALL BLOCKS RUTGERSON SERIES 600 W/ SPRINGS.

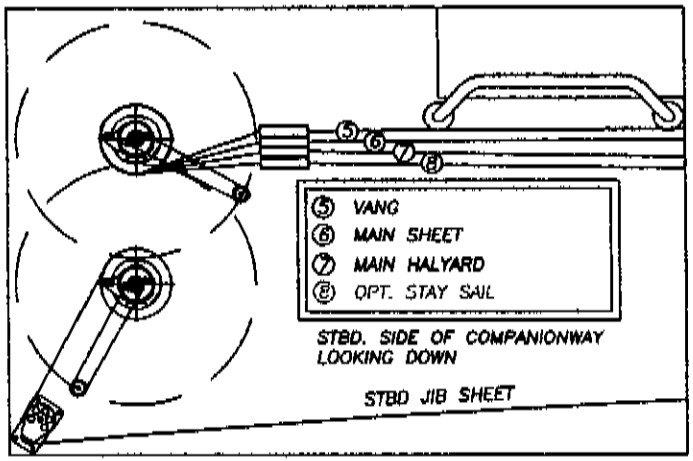
PAGE 42A-1

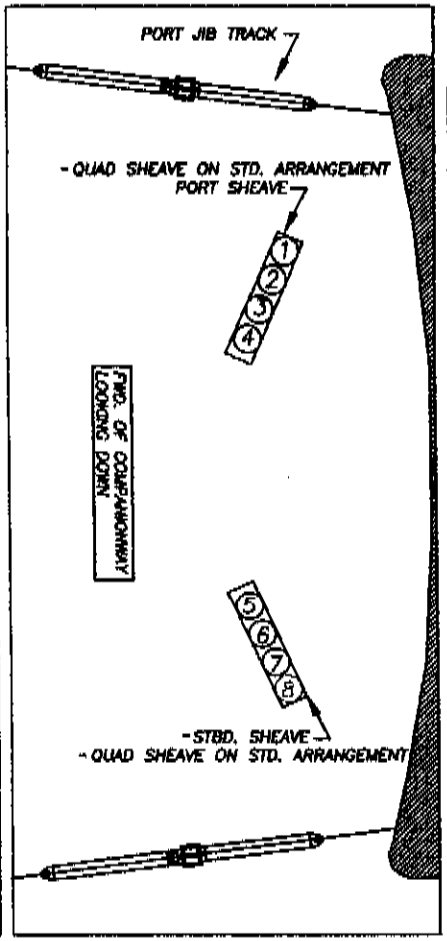
H460 STANDARD RUN. RIG & MAST STEP DETAIL	
4606042A-1	NONE
ENGINEERING DEPT.	11/12/96

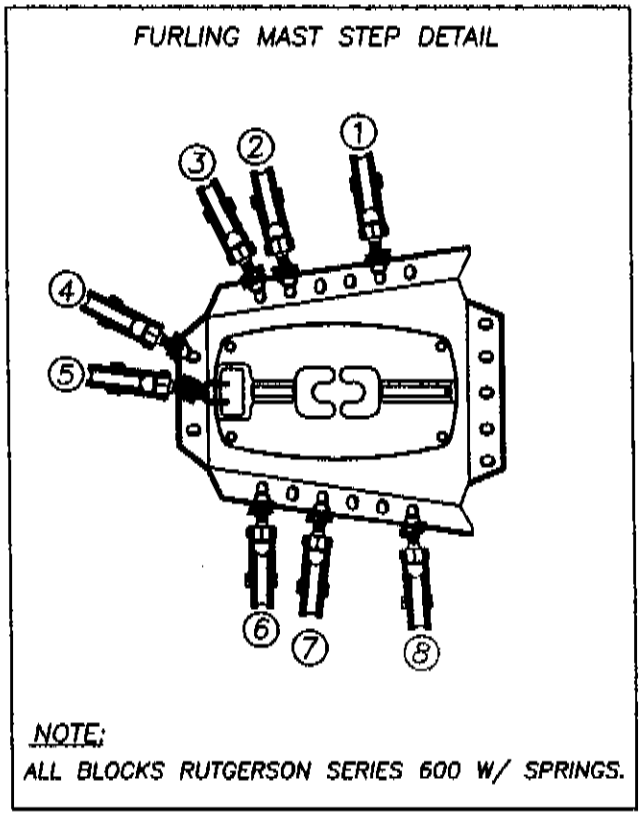
HUNTER

SELDEN FURLIN' MAST STEP LAYOUT
WITHOUT SPINNIKER OPTION







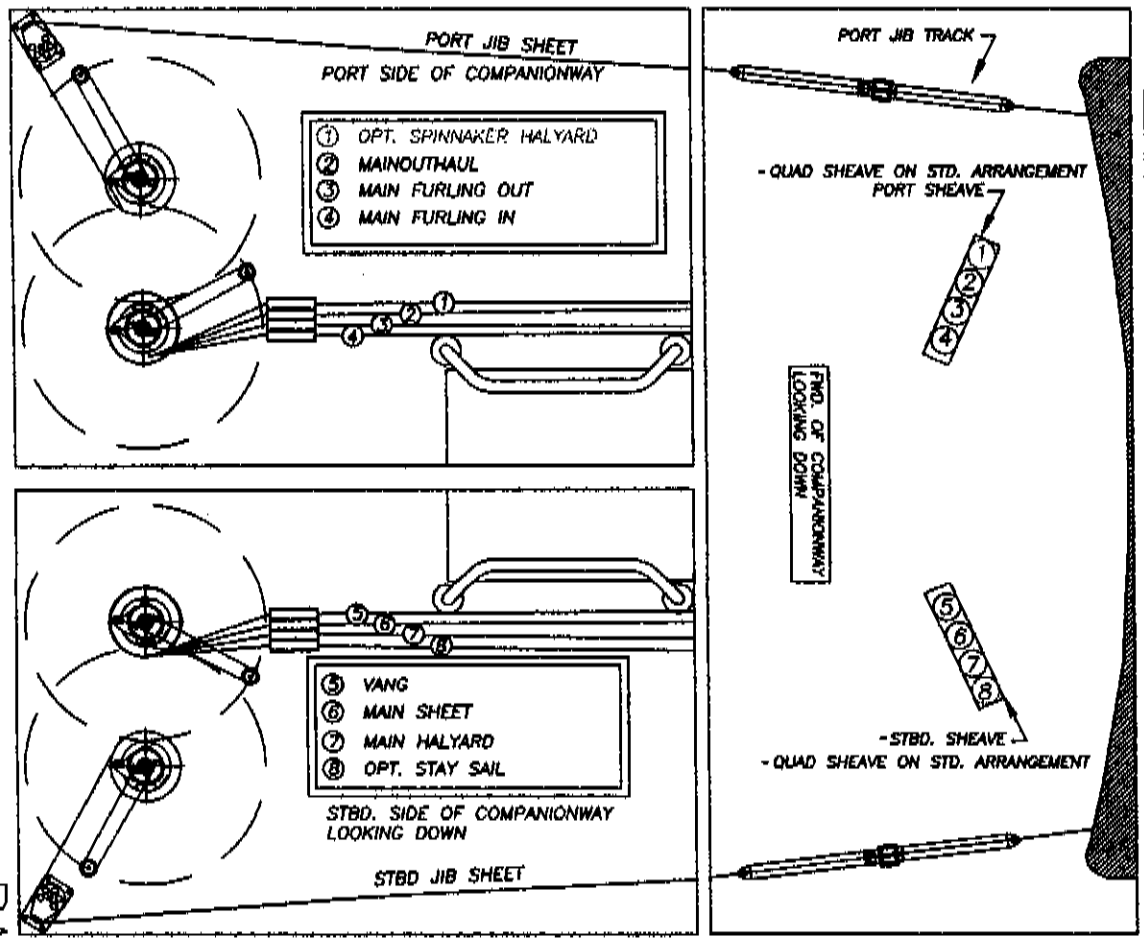


PAGE 42A-2

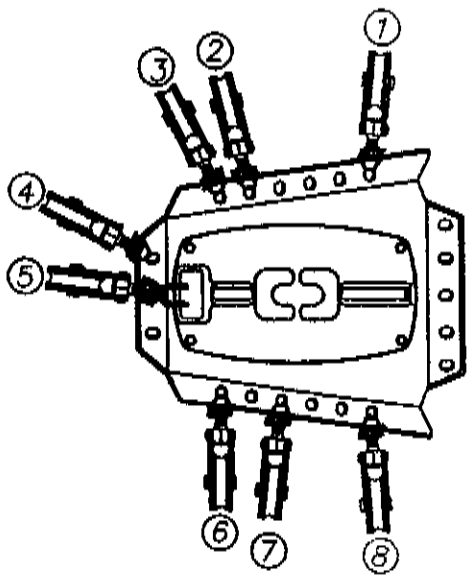
HAGO FURL. RUN. RIG & MAST STEP DETAIL (#1)	
4608042A-2	NONE
ENGINEERING DEPT.	11/12/96

HUNTER

SELDEN FURLIN' MAST STEP LAYOUT
WITH SPINNAKER OPTION



FURLING MAST STEP W\SPINNAKER OPTION

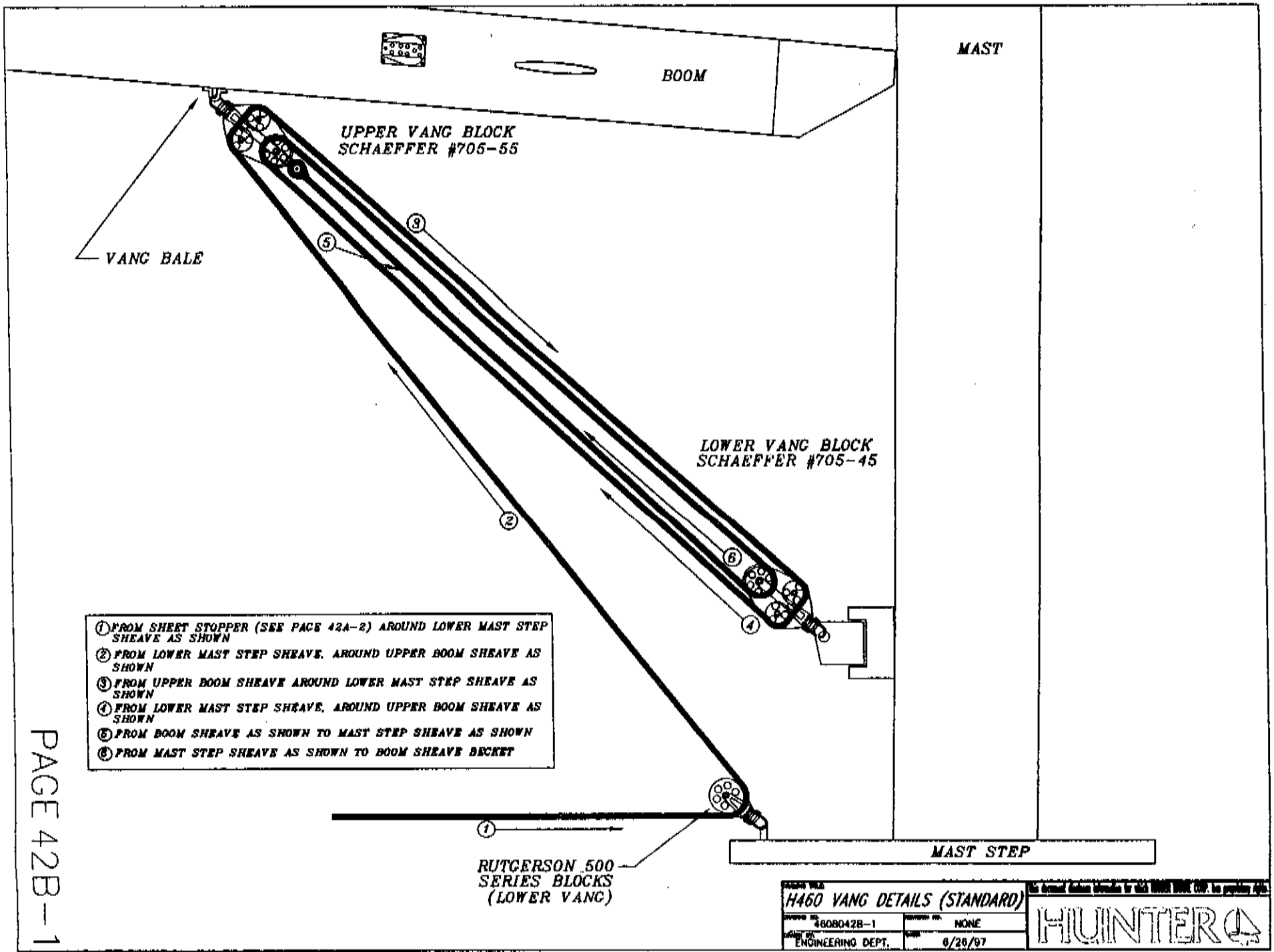


NOTE:
ALL BLOCKS RUTGERSON SERIES 600 W/ SPRINGS.

NOTE:
ON FURLING MASTS, WHEN AN OPTIONAL SPINNAKER IS PRESENT, THE JIB HALYARD IS "LOCKED OFF", AND THE TAIL END OF THE HALYARD IS STOWED IN THE HOLE ON THE LOWER PORT SIDE OF THE MAST. IF A SPINNAKER IS DESIRED, THE PORT SIDE DEFLECTOR SHEAVE SHOULD BE CHANGED OUT AND REPLACED BY TWO TRIPLE, STACKED SHEAVES, INSTEAD OF A SINGLE QUAD.

HA60 FURL. RUN. RIG & MAST STEP DETAIL (#2)	
4606042A-3	NONE
ENGINEERING DEPT.	3/24/99

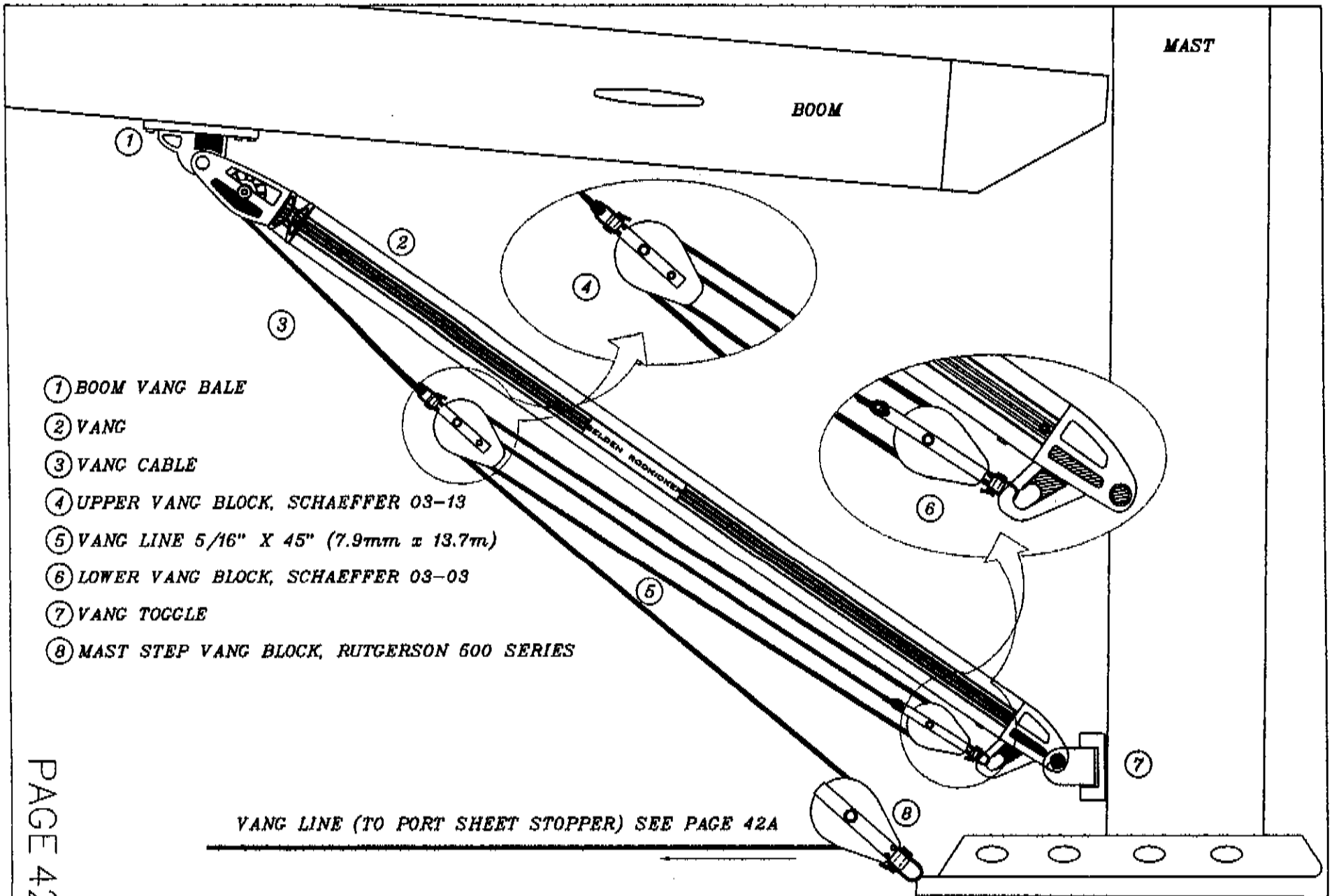
HUNTER



H460 VANG DETAILS (STANDARD)

4608042B-1	NONE
ENGINEERING DEPT.	6/26/97

HUNTER



1. BOOM VANG BALE
2. VANG
3. VANG CABLE
4. UPPER VANG BLOCK, SCHAEFFER 03-13
5. VANG LINE 5/16" X 45" (7.9mm x 13.7m)
6. LOWER VANG BLOCK, SCHAEFFER 03-03
7. VANG TOGGLE
8. MAST STEP VANG BLOCK, RUTGERSON 600 SERIES

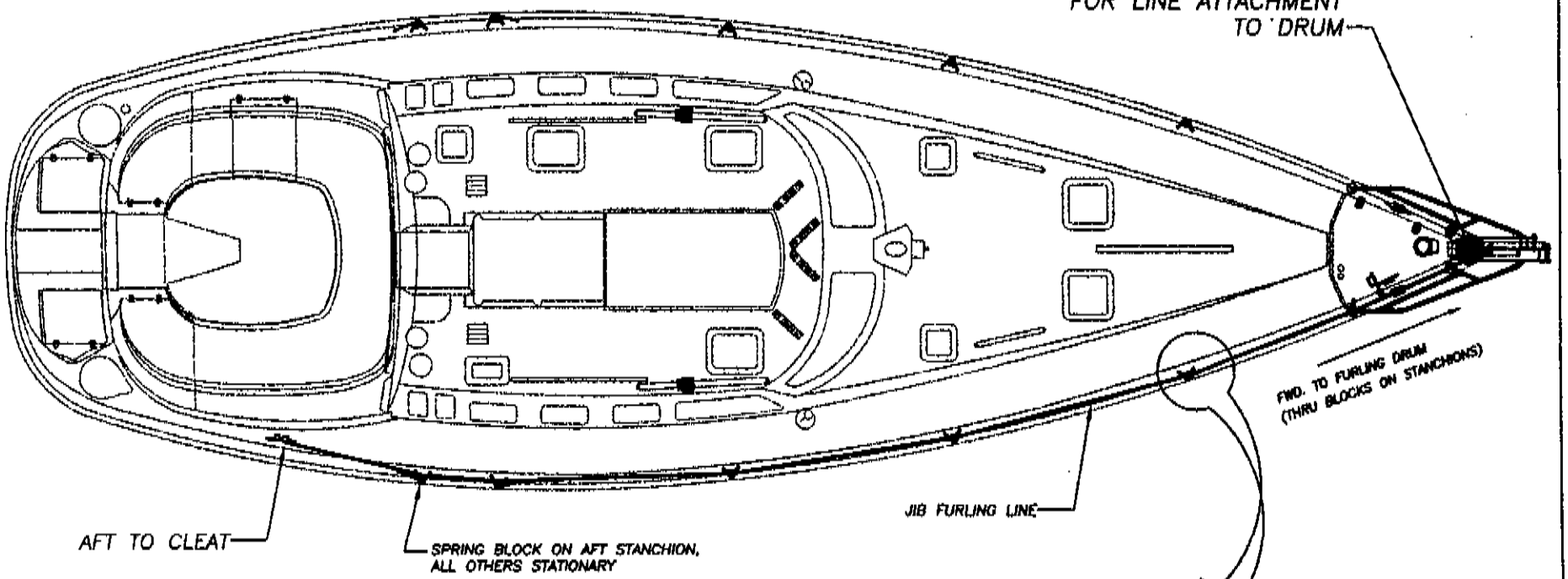
VANG LINE (TO PORT SHEET STOPPER) SEE PAGE 42A

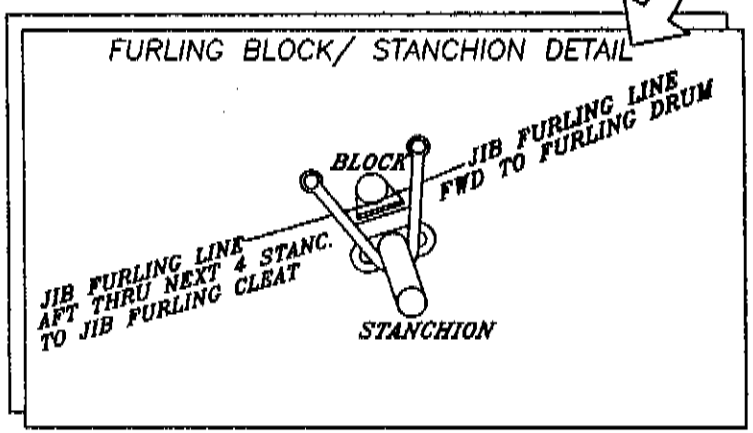
H460 RIGID VANG DETAILS (FURLING/OPT.)

46060428-2	NONE
ENGINEERING DEPT.	11/12/98

HUNTER

JIB FURLING SYSTEM





PAGE 42C

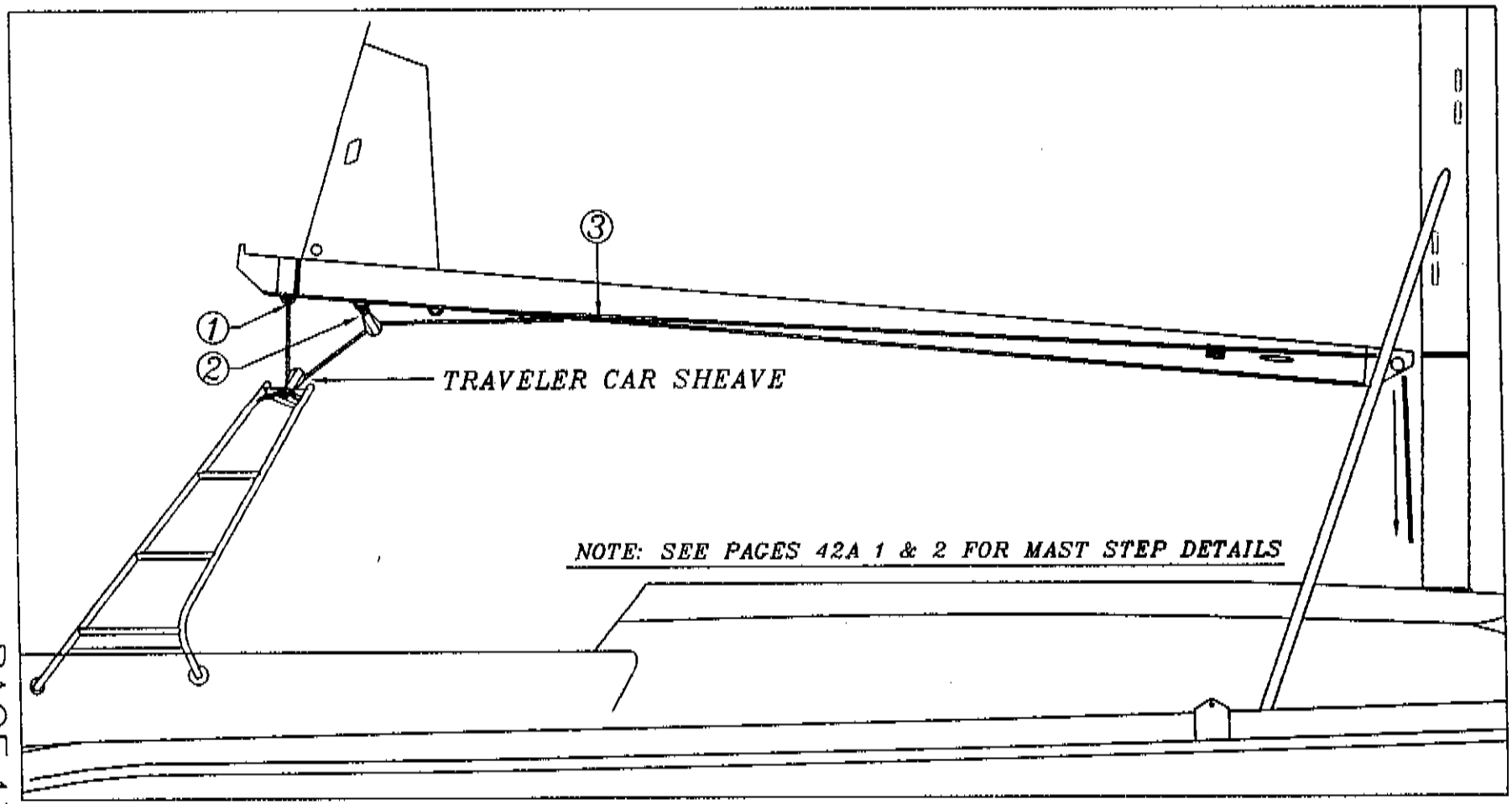
H460 JIB FURLING LINES LAYOUT	
46060420	NONE
ENGINEERING DEPT.	11/12/98

HUNTER

MAINSHEET PURCHASE

① BALE, MAINSHEET END
② BALE, MAINSHEET BLOCK
③ EXIT, MAINSHEET

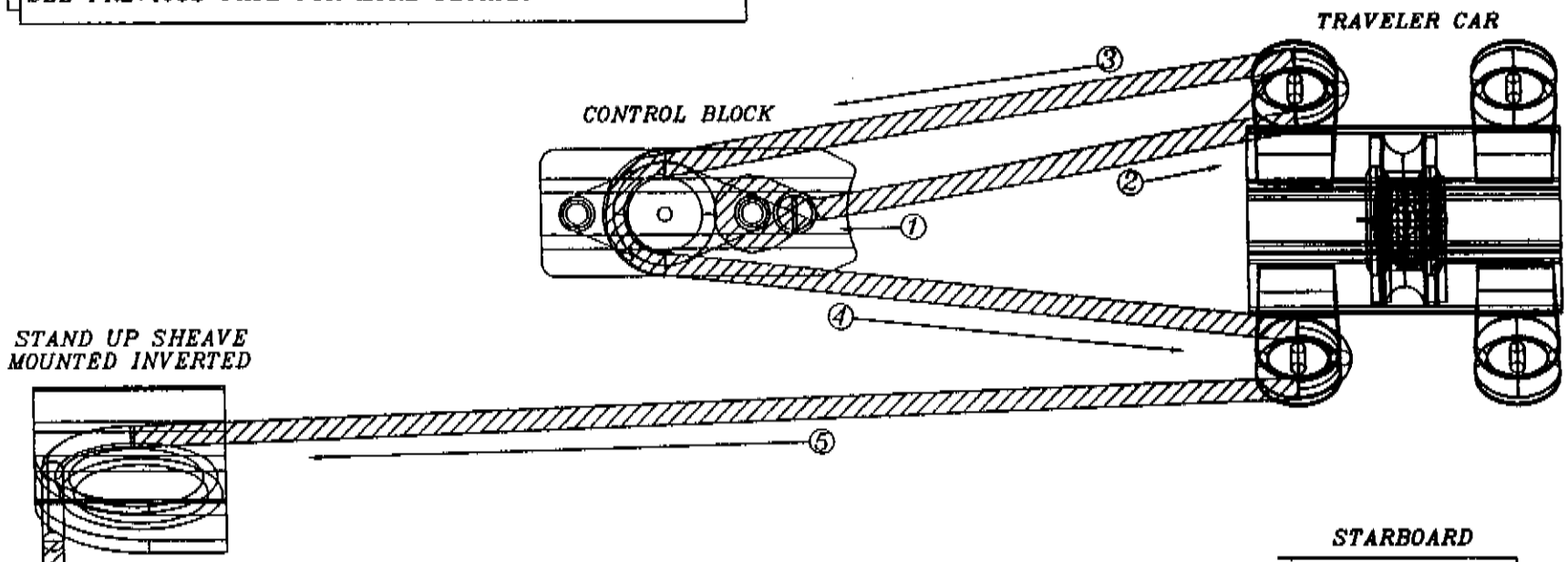
NOTE:
SEE PAGE 43C FOR TRAVELER DETAILS



H460 MAINSHEET PURCHASE (STD)	
46080434	NONE
ENGINEERING DEPT.	5/28/98

HUNTER

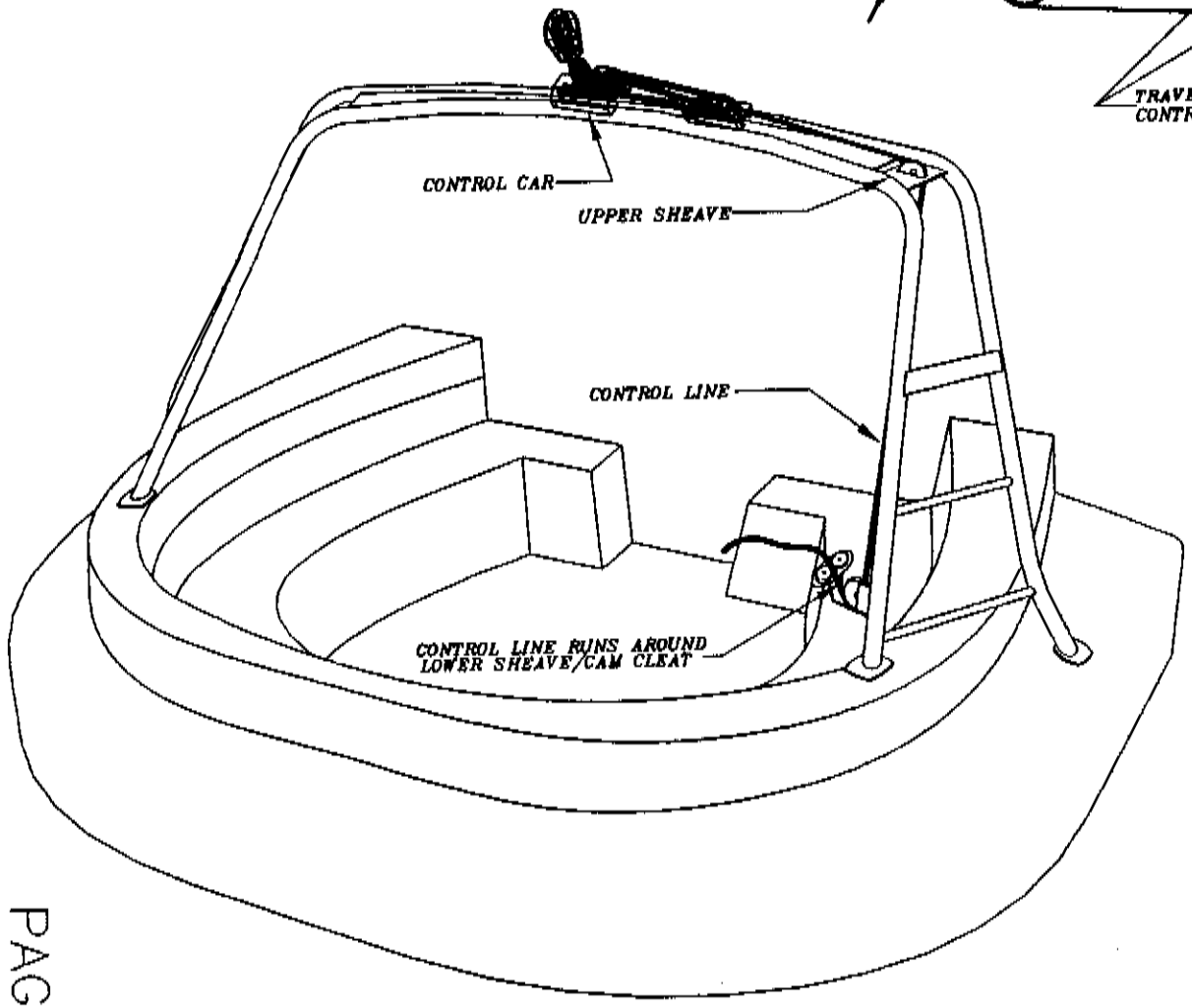
NOTE: ARCH & TRAVELER BAR NOT SHOWN FOR CLARITY.
STARBOARD SIDE SHOWN, PORT SIDE IS MIRROR IMAGE
SEE PREVIOUS PAGE FOR MORE DETAILS

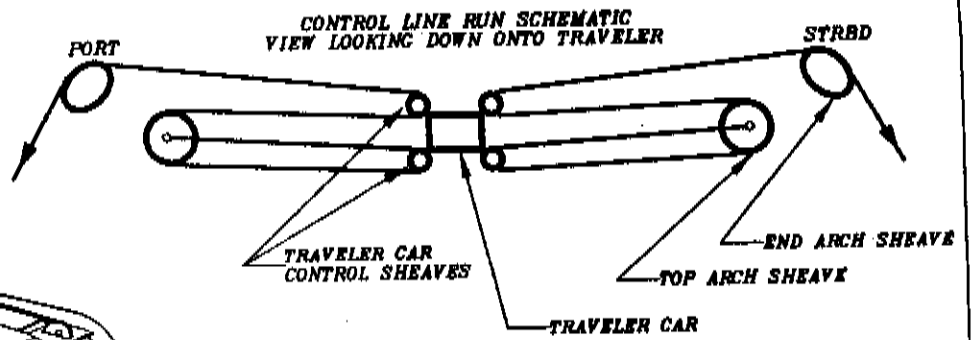


1. SECURE END OF CONTROL LINE TO BECKET ON CONTROL BLOCK
2. LEAD LINE AROUND FWD. SIDE OF AFT TRAVELER CAR SHEAVE AS SHOWN
3. LEAD LINE FROM AFT SIDE OF AFT TRAVELER CAR SHEAVE TO AFT SIDE OF CONTROL BLOCK SHEAVE
4. LEAD LINE FROM FWD. SIDE OF CONTROL BLOCK SHEAVE TO AFT SIDE OF FWD. TRAVELER CAR SHEAVE
5. LEAD LINE FROM FWD. SIDE OF FWD. TRAVELER CAR SHEAVE TO STAND UP SHEAVE
6. LEAD LINE AROUND STAND UP SHEAVE THEN DOWN THRU ARCH AND AROUND LOWER SHEAVE TO CAM CLEAT

H460 TRAVELER LAYOUT	
46080438	NONE
ENGINEERING DEPT.	10/7/98

HUNTER





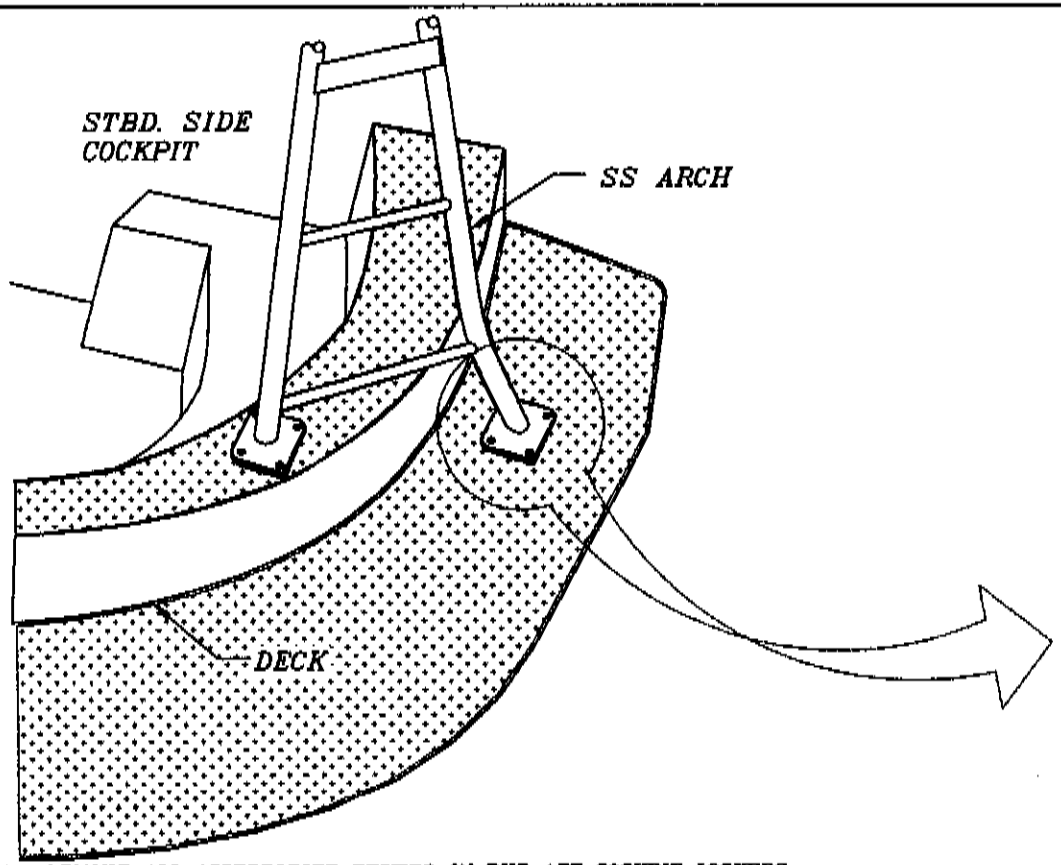
SEE PC 43B FOR DETAILS

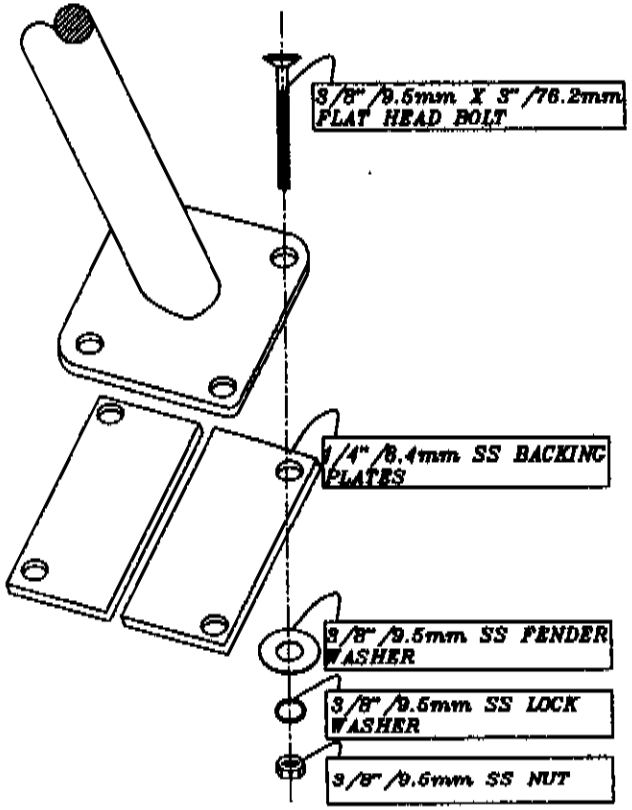
SEE PAGE 43A FOR
MAIN SHEET LINE RUNS

NOTE: PORT SIDE SHOWN,
STBD SIDE IS A MIRROR IMAGE.

H460 TRAV. CONTROL LINE DETAILS	
4608043C	NONE
ENGINEERING DEPT.	3/3/99

HUNTER





1. REMOVE ALL ACCESSORIES STOWED IN THE AFT COCKPIT LOCKERS.
2. ACCESS ARCH FOOT LOCATIONS:
   STBD FWD: THRU ACCESS PANEL IN AFT STRM. HEADLINER
   STBD AFT: THRU STBD SIDE LAZZARETTE
   PORT FWD: THRU ACCESS HOLE IN PORT SIDE AFT SWIM LOCKER
   PORT AFT: THRU PORT SIDE LAZZARETTE
   (IT MAY BE NECESSARY TO CLIMB INTO THE LOCKER FOR EASIER ACCESS.)
3. CLEAN AREAS AROUND THE ARCH MOUNTING HOLES AND APPLY DOW 795 SEALANT GENEROUSLY AROUND HOLES.
4. ALIGN THE ARCH FEET PRE-DRILLED HOLES AND THE COAMING PRE-DRILLED MOUNTING HOLES.
5. INSTALL THE (3/8" /9.5mm) FLAT HEAD BOLTS THRU THE ARCH FEET AND DOWN INTO THE DECK.
6. INSTALL THE (1/4" /6.4mm) ARCH FEET BACKING PLATES ON THE UNDERSIDE OF THE DECK, AND ALIGN WITH THE ARCH MOUNTING HOLES. SEE ACCESS LOCATIONS ABOVE. THE F.H. BOLTS NOW SHOULD PASS THRU THE ARCH FEET, THE DECK LAMINATE, AND THE ARCH BACKING PLATES.
7. LOOSELY INSTALL THE FENDER WASHERS, LOCK WASHERS AND NUTS FROM THE UNDERSIDE OF THE DECK. APPLY A SMALL AMOUNT OF NEVER SEIZE TO THE BOLTS TO PREVENT GAULING OF THE THREADS
8. CHECK FOR EVEN SPACING OF THE ARCH ONTO THE COAMING AND ADJUST ACCORDINGLY
9. SECURELY TIGHTEN ALL ARCH MOUNTING NUTS USING A "CROSS TIGHTENING" PATTERN. THIS WILL ALLOW BOTH SIDES OF THE ARCH TO TIGHTEN EVENLY AGAINST THE COAMING.
10. CLEAN OFF EXCESS SEALANT AROUND ARCH AND COAMING AREAS USING ALCOHOL.
11. APPLY A "FINAL" BEAD OF SEALANT AROUND EACH ARCH FOOT

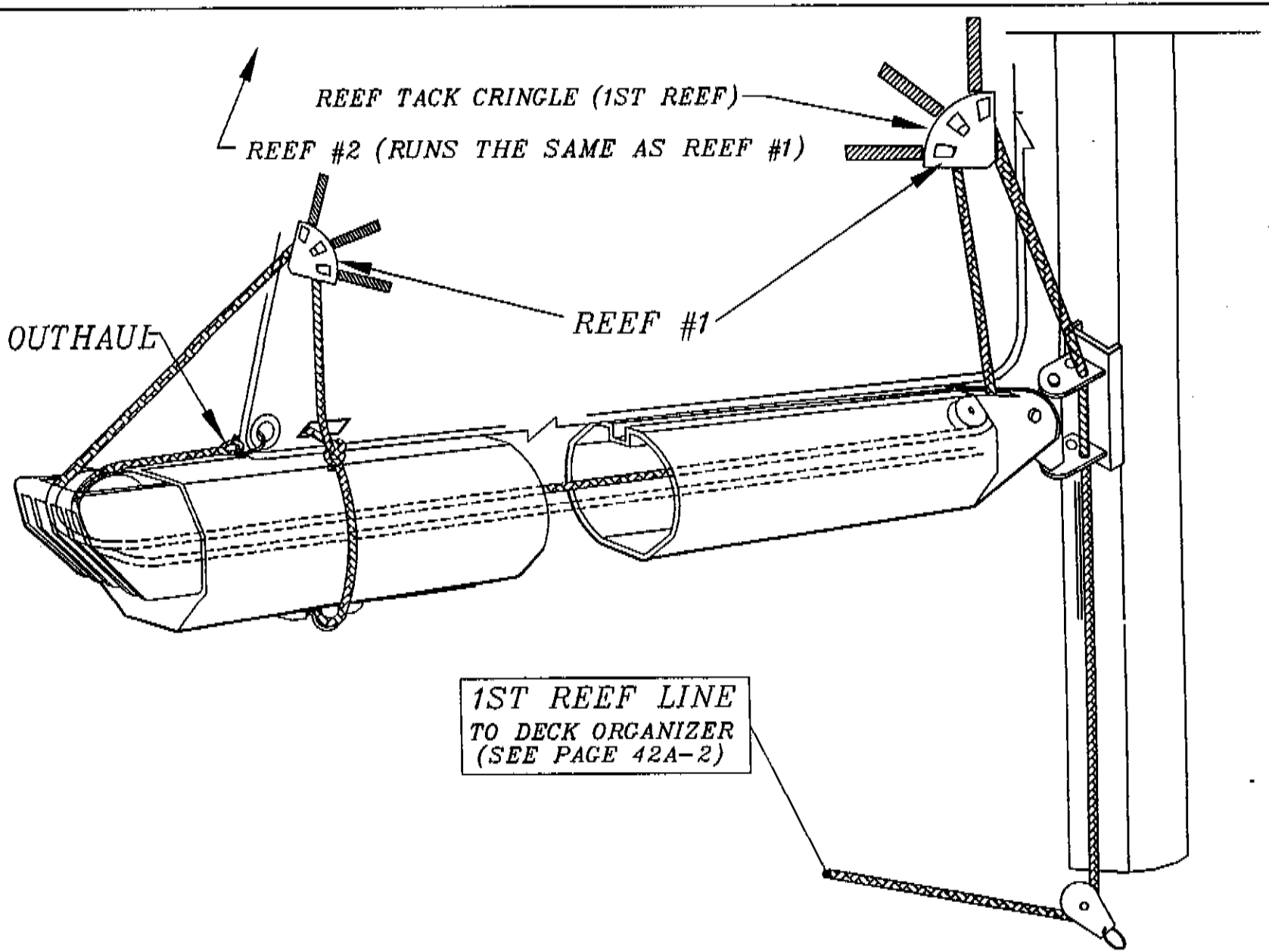
SUGGESTED TOOL LIST:
- 3/8" DRIVE RATCHET
- 6" EXTENSION
- 9/16" DEEP & REGULAR SOCKET
- 9/16" WRENCH
- SCREW DRIVER--PHILLIPS HEAD
- CAULK GUN
- TUBE OF SEALANT (DOW 795)
- NEVER SEIZE (BOLT LUBE)
- RAZOR KNIFE
- RAGS
- ALCOHOL / CLEAN UP

THIS JOB REQUIRES THREE PEOPLE!
ONCE ARCH HAS BEEN SET IN PLACE, CONTINUE HOLDING ARCH UPRIGHT UNTIL IT HAS BEEN SECURED COMPLETELY.

IMPORTANT: REMEMBER TO CHECK ALL NUTS AND BOLTS AFTER INITIAL SEA TRIAL AND RETIGHTEN AS NECESSARY.

H460 ARCH INSTALLATION INSTRUCTIONS	
46060430	NONE
ENGINEERING DEPT.	3/3/99

HUNTER



H460 BOOM AND REEF LAYOUT	
4606044A	NONE
ENGINEERING DEPT.	3/11/99

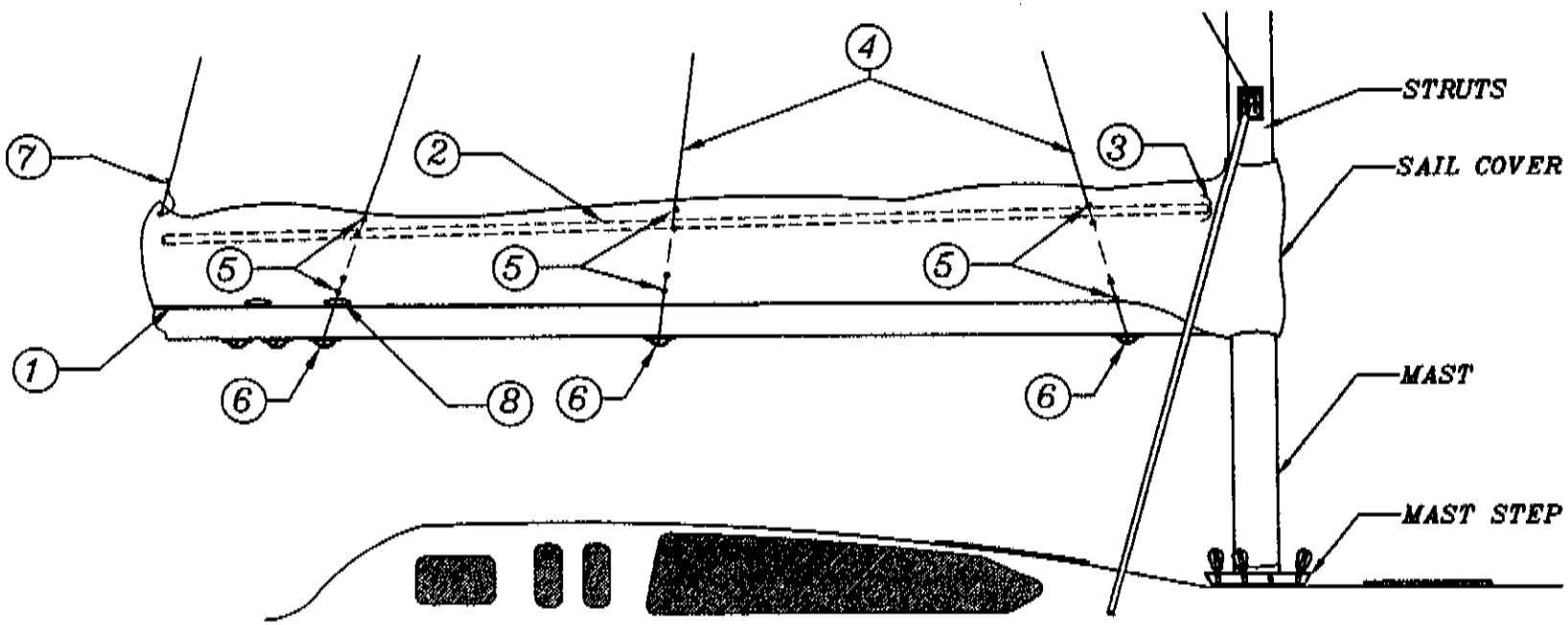
HUNTER

SLIDE THE BOLTROPE ON THE TWO HALVES OF THE COVER INTO THE BOLTROPE TRACKS (1) ON BOTH SIDES OF THE BOOM. START FROM THE AFT END AND MAKE YOUR WAY FORWARD.

INSTALL THE PVC BATTENS (2) INTO EACH HALF OF THE SAIL COVER. THERE ARE POCKETS (3) THAT OPEN TOWARDS THE FRONT, ON THE INSIDE OF THE COVER. SLIDE THE BATTENS INTO PLACE FROM THE FRONT, AND ROLL THE INSIDE LIP OF THE POCKET BACK IN ORDER TO HOLD THE BATTENS STATIONARY.

FEED THE LAZYJACK LINES (4) DOWN THROUGH THE GROMMETS/RINGS (5) IN THE SAIL COVER, STARTING AT THE TOP AND COMING OUT AT THE BOTTOM OF THE COVER. DEAD END THE LINES TO THE BAILS ON THE UNDERSIDE OF THE BOOM (6).

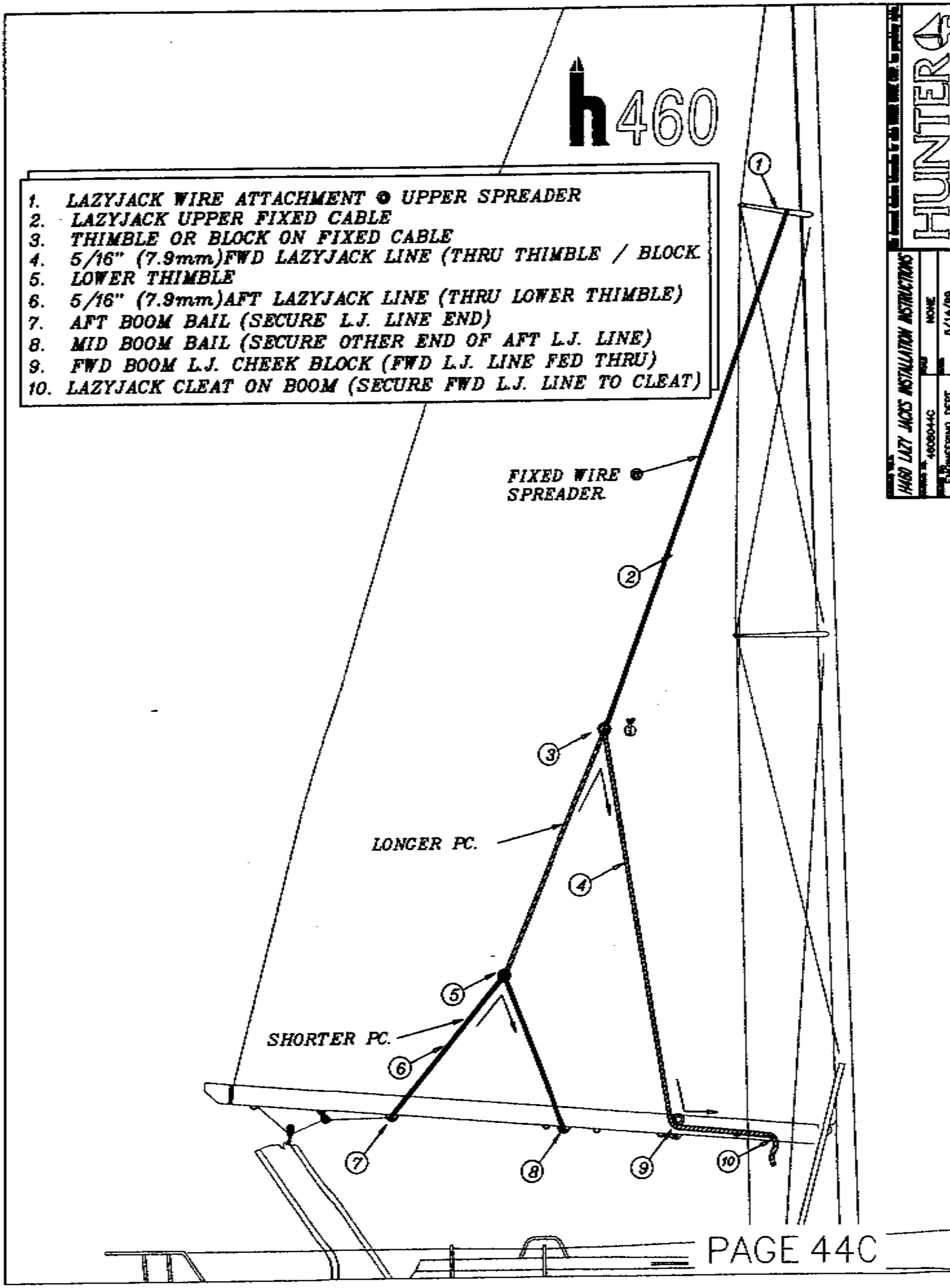
TIE THE AFT END OF THE SAIL COVER UP TO THE TOPPING LIFT LINE USING THE PIECE OF STRING PROVIDED (7). USE HALF HITCH KNOTS TO SECURE THE COVER IN PLACE AT THE OUTER END OF THE BOOM. THE REEF LINES RUN OUT THROUGH THE COVER SLOTS (8) AND TIE OFF.



SAIL COVER ONLY OFFERED ON STANDARD MAST BOATS

H460 HUNTER LAZYJACK SAIL COVER	
45080448	NONE
ENGINEERING DEPT	3/11/98

HUNTER


h460
1. LAZYJACK WIRE ATTACHMENT @ UPPER SPREADER
2. LAZYJACK UPPER FIXED CABLE
3. THIMBLE OR BLOCK ON FIXED CABLE
4. 5/16" (7.9mm)FWD LAZYJACK LINE (THRU THIMBLE / BLOCK
5. LOWER THIMBLE
6. 5/16" (7.9mm)AFT LAZYJACK LINE (THRU LOWER THIMBLE)
7. AFT BOOM BAIL (SECURE L.J. LINE END)
8. MID BOOM BAIL (SECURE OTHER END OF AFT L.J. LINE)
9. FWD BOOM L.J. CHEEK BLOCK (FWD L.J. LINE FED THRU)
10. LAZYJACK CLEAT ON BOOM (SECURE FWD L.J. LINE TO CLEAT)
FIXED WIRE @ SPREADER
LONGER PC.
SHORTER PC.
1
2
3
4
5
6
7
8
9
10
HUNTER
H460 LAZY JACKS INSTALLATION INSTRUCTIONS
46080044C
NONE
ENGINEERING DEPT
5/14/99

REEFING INSTRUCTIONS

1. SHACKLE TACK REEF BLOCKS TO FIRST AND SECOND REEF TACK CRINGLES.

2. RUN BOTH REEFING LINES AS ILLUSTRATED IN THE BOOM & REEF LAYOUT. BOTH PORTIONS OF THE REEFING LINE LEADING TO THE REEF TACK BLOCK MUST RUN THROUGH THE GOOSE NECK ON THE AFT OF THE SPAR. THE SHORTER REEF LINE WILL BE USED ON THE FIRST REEF (STARBOARD SIDE, GREEN) THE LONGER REEF LINE ON THE SECOND REEF (PORT SIDE, RED.)

3. RAISE THE MAIN SAIL.

4. EASE THE MAINSHEET AND VANG.

5. LOWER THE MAIN SAIL TO APPROXIMATELY THE FIRST REEF POSITION.

6. TAKE UP THE SLACK IN THE FIRST REEF LINE UNTIL THE TACK AND THE CLEW ARE DOWN TO ABOUT 2" ABOVE THE BOOM.

7. ADJUST THE MAIN HALYARD SO THAT THE TACK REEF BLOCK IS NOT CONTACTING THE GOOSE NECK ON THE FRONT OF THE SPAR AND IS APPLYING TENSION TO THE LUFF OF THE MAIN ABOVE THE REEF, NOT BELOW. THERE WILL BE APPROXIMATELY 6" (150mm) OF STRECH IN THE MAIN LUFF AND MAIN HALYARD WHEN THE REEFING LINE IS TENSIONED, SO MAKE SURE THAT THIS IS ALLOWED FOR WHEN ADJUSTING THE MAIN HALYARD TO LOCATE THE TACK REEF BLOCK.

8. ALSO, TENSION THE REEF LINE WITH THE APPROPRIATE SELF-TAILING WINCH UNTIL THE CLEW REEF CRINGLE IS BROUGHT DOWN TO THE BOOM.

9. CONFIRM THAT THE TACK REEF BLOCK IS STILL CLEAR OF THE TACK SHACKLE AND THAT ONLY THE MAIN LUFF ABOVE THE REEF CRINGLE IS TENSIONED, NOT THE LUFF BETWEEN THE CRINGLE AND THE TOP STACKED SAIL SLIDE. EASE THE REEF LINE AND READJUST THE HALYARD IF NECESSARY.

10. MARK THE HALYARD AT THE STOPPER WITH A 1" (25mm) SINGLE BAND OF INDELIBLE MARKER INK. BY DROPPING THE HALYARD TO THIS MARK EVERY TIME A REEF IS REQUIRED THE HALYARD IS AUTOMATICALLY IN THE CORRECT POSITION FOR THE REEF.

11. REPEAT THE PROCEDURE FOR THE SECOND REEF, USING DOUBLE BANDS TO MARK THE HALYARD IN THE CORRECT POSITION.

REEFING PROCEDURE

1. HEAD UP INTO THE WIND.

2. EASE THE MAINSHEET AND VANG.

3. CHECK THE TOPPING LIFT FOR ADEQUATE BOOM SUPPORT.

4. LOWER THE MAIN HALYARD TO THE APPROPRIATE MARK, AND SNUB THE LINE WITH THE STOPPER.

5. TENSION THE REEFING LINE WITH THE SELF-TAILING WINCH UNTIL THE REEF CLEW IS BROUGHT DOWN TO THE BOOM. APPLY STOPPER AND TENSION THE MAIN HALYARD BACK UP. EASE THE TOPPING LIFT. (IF NEEDED)

SHAKING OUT A REEF

1. HEAD UP INTO THE WIND.

2. EASE THE MAINSHEET AND VANG. TENSION TO TOPPING LIFT. (IF NEEDED)

3. RELEASE THE REEF STOPPER AND REMOVE REEF LINE FROM WINCH.

4. TENSION THE MAIN HALYARD TO RAISE SAIL, MAKING SURE REEF LINES RUN FREELY WHILE SAIL IS BEING RAISED. APPLY STOPPER TO MAIN HALYARD.

5. RE-TENSION VANG AND MAINSHEET. EASE THE TOPPING LIFT. (IF NEEDED)

H460 STANDARD REEFING INSTRUCTIONS	
46OB045	NONE
ENGINEERING DEPT.	10/7/98

HUNTER

H460 SELDEN RUNNING RIGGING SPECIFICATIONS

BOAT: H460
BY: KJC
CHECKED BY:
REVISION:
DATE: 7/24/98
DATE:

	OPT/STD	ITEM	QUANTITY	LINE SIZE	LINE TYPE	COLOR	END 1	LENGTH		END 2
1	STD	MAIN HALYARD	1	7/16" (11MM)	XLS EXTRA	BLUE	HEADBOARD SHACKLE	39.0 m	128 ft	BARE
2	STD	JIB HALYARD	1	7/16" (11MM)	XLS EXTRA	RED	EYE	40.1 m	132 ft	BARE
3	STD	MAIN TRAVELER LINE	2	5/16" (8MM)	LS	WHITE	SMALL EYE	7.0 m	23 ft	BARE
4	STD	MAINSHEET	1	7/16" (11MM)	XLS	BLUE FLECK	SMALL EYE	22.8 m	75 ft	BARE
5	STD	BOOM TOPPING LIFT	1	3/8" (9.5MM)	LS	WHITE	BARE	33.0 m	108 ft	BARE
6	STD	REEFING LINE #1	1	7/16" (11MM)	LS	GREEN FLECK	BARE	24.8 m	82 ft	BARE
7	STD	REEFING LINE #2	1	7/16" (11MM)	LS	RED FLECK	BARE	35.2 m	116 ft	BARE
8	STD	JIB SHEET	2	1/2" (12.5MM)	LS	RED FLECK	BARE	15.2 m	50 ft	BARE
9	OPT	CRUISING SPINN. SHEET	2	7/16" (11MM)	LS	BLACK FLECK	BARE	30.5 m	100 ft	BARE
10	OPT	SPINNAKER HALYARD	1	7/16" (11MM)	XLS	BLACK	SNAP SHACKLE NF11000s	40.1 m	132 ft	BARE
11	OPT	STAYSAIL HALYARD	1	7/16" (11MM)	XLS	GREEN	SNAP SHACKLE NF11000s	32.7 m	107 ft	BARE
12	OPT	STAYSAIL SHEETS	2	7/16" (11MM)	LS	GREEN FLECK	BARE	12.2 m	40 ft	BARE
13	STD	LAZY JACK WIRE	2	5/32" (4MM)	PLASTIC COATED 1x19 WIRE	WHITE	EYE & THIMBLE,SMALL SHACKLE	4.9 m	16 ft	EYE & THIMBLE, HARKEN 125 OR SCHAEFER 300-02
14	STD	FIXED LAZY JACK LINE	2	3/8" (9.5MM)	LS	WHITE	BARE	7.1 m	23 ft	BARE
15	STD	ADJUSTABLE LAZY JACK LINE	2	3/8" (9.5MM)	LS	WHITE	SS THIMBLE SPLICED	12.2 m	40 ft	BARE

H460 RUNNING RIGGING SPECS. (STD.)
46060454
NONE
HUNTER

FURLING MAST RUNNING RIGGING SPECIFICATIONS

BOAT: H460	FILE NAME: H460 SELDEN RUNNIN(	REVISION: REMOVED MAIN HALYARD 8/28/98
BY: KJC	DATE: 2/6/98	
CHECKED BY:	DATE:	

	OPT/STD	ITEM	QUANTITY	LINE SIZE	LINE TYPE	COLOR	END 1	LENGTH		END 2
1	STD	JIB HALYARD	1	7/16" (11MM)	XLS EXTRA	RED	EYE	40.1 m	132 ft	BARE
2	STD	MAIN TRAVELER LINE	2	5/16" (8MM)	LS	WHITE	SMALL EYE	7.9 m	26 ft	BARE
3	STD	MAINSHEET	1	7/16" (11MM)	XLS	BLUE FLECK	SMALL EYE	22.8 m	75 ft	BARE
4	STD	BOOM TOPPING LIFT	1	3/8" (9.5MM)	LS	WHITE	BARE	33.0 m	108 ft	BARE
5	STD	JIB SHEET	2	1/2" (12.5MM)	LS	RED FLECK	BARE	15.2 m	50 ft	BARE
6	STD	MAIN FURLING LINE	1	3/8" (9.5MM)	LS	BLUE	BARE	12.3 m	41 ft	BARE
7	OPT	CRUISING SPINN. SHEET	2	7/16" (11MM)	LS	BLACK FLECK	BARE	30.5 m	100 ft	BARE
8	OPT	SPINNAKER HALYARD	1	7/16" (11MM)	XLS	BLACK	SNAP SHACKLE NF11000s	40.1 m	132 ft	BARE
9	OPT	STAYSAIL HALYARD	1	7/16" (11MM)	XLS	GREEN	SNAP SHACKLE NF11000s	32.7 m	107 ft	BARE
10	OPT	STAYSAIL SHEETS	2	7/16" (11MM)	LS	GREEN FLECK	BARE	12.2 m	40 ft	BARE

H460 RUNNING RIGGING SPECS. (FURL.)

46080469 | NONE

ENGINEERING DEPT. | 11/12/98

HUNTER

H460 B&R RIG WITH STRUTS DESCRIPTION

The B&R rig, utilized on the Hunter H460, eliminates the need for a backstay to allow for a more efficient mainsail shape. Fixed backstays are commonly being designed out of today's performance-oriented boats to allow the mainsail to incorporate a full roach design - a more aerodynamic shape both for racing and cruising performance.

To accomplish this, the B&R rig has 30 degree swept spreaders, creating 120 degrees between each rigging point. This tri-pod arrangement has excellent strength for sailboat rigs, and has been used for years to support huge radio towers.

The latest advancement to the B&R rig is the addition of mast struts. These struts stabilize the lower section of the mast, allowing compression loads to be spread, reducing the point loading at the mast base. They also create a strong point for the boom and spinnaker pole loadings. The struts function also allow us to use a smaller mast section reducing weight aloft to decrease the heeling and pitching moments, making for a more comfortable ride. Additionally, they provide a secure handhold when going forward.

The struts perform an important structural function, **therefore never sail your boat without the struts properly fitted**. If your H460 is equipped with the in-mast furling option, the mast is a larger section size and the struts are not utilized.

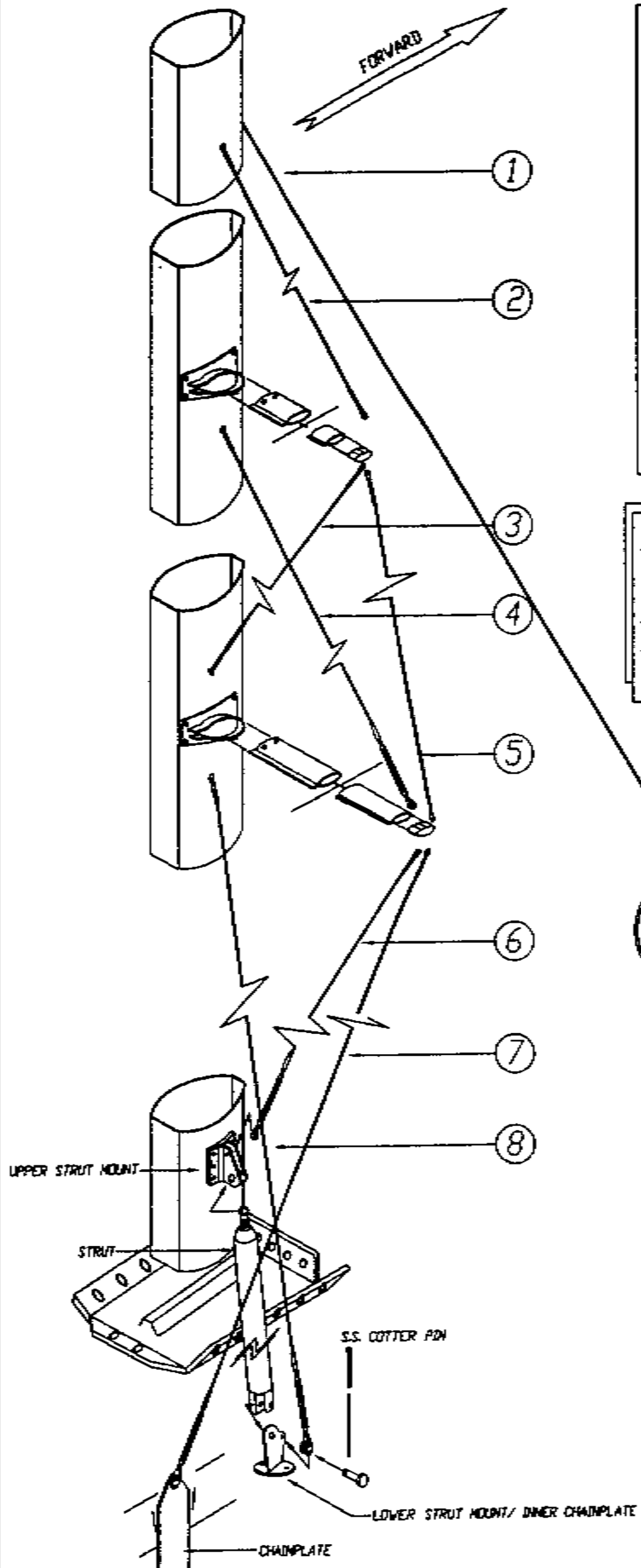
Additional support is given to the B&R rig (and is unique to it) with the addition of reverse diagonal rigging. For example, the diagonals that you see beginning by the top of the mast strut, ending at the tip of the spreader, supports and stabilizes the lower section of the mast as it creates a triangle with the lower shroud. The top RD2 runs from above the lower spreader base to the end of the top spreader, and stabilizes the top section of the mast.

The B&R rig is designed to be pre-bent to further add rigidity to the mast section and eliminate the need for adjustable rigging (like backstay adjusters). This design should prove more reliable than a rig with adjustable backstays or runners, as there is less chance for error.

The large main, small jib, sail plan on the H460 also eliminates the need for large overlapping headsails (genoas), as the driving power comes from the much improved shape and size of the mainsail. This allows for an easier tacking small jib, creating good performance and more comfortable sailing as it is less work for the crew.

As the large main is creating additional mainsheet and leach loading, Hunter has included a cockpit arch whereby the mainsheet and leech loads are directed to the strong part of the boom (the outboard end) and is located at the heaviest loading point of the mainsail. The cockpit arch serves addition safety and comfort functions as handholds and cockpit canvas attachment points.

B&R rigs have been used on thousands of sailboats, and we are proud to incorporate this successful design on your new Hunter.



① FORESTAY 3/8" (9.5mm) 1 X 19

② D3 3/8" (9.5mm) 1 X 19

③ RD2 1/4" (6.4mm) 1 X 19

④ D2 5/16" (7.9mm) 1 X 19

⑤ V2 3/8" (9.5mm) 1 X 19

⑥ RD1 1/4" (6.4mm) 1 X 19

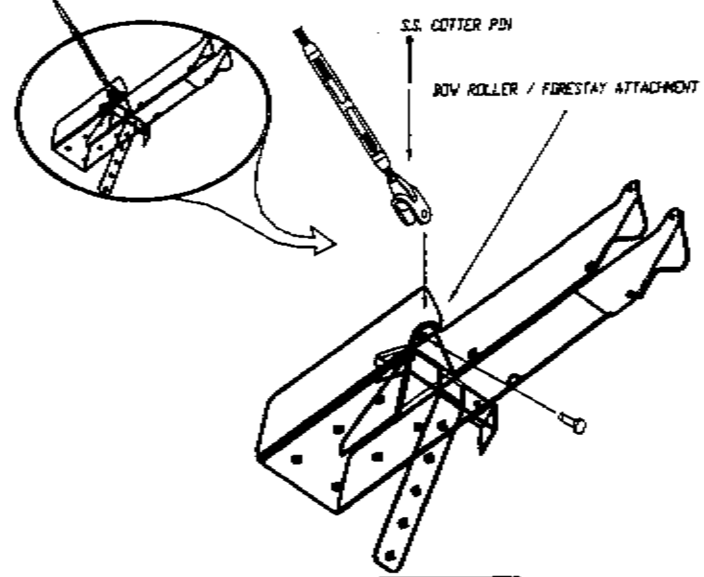
⑦ V1 3/8" (9.5mm) DYFORM

⑧ D1 3/8" (9.5mm) DYFORM

NOTE: SEE PAGES 49A & B FOR SPREADER TIP DETAILS.

SEE PAGE 50A FOR STANDARD RIG STANDING RIG LENGHTS.

SEE PAGE 51 FOR FITTINGS DESC.



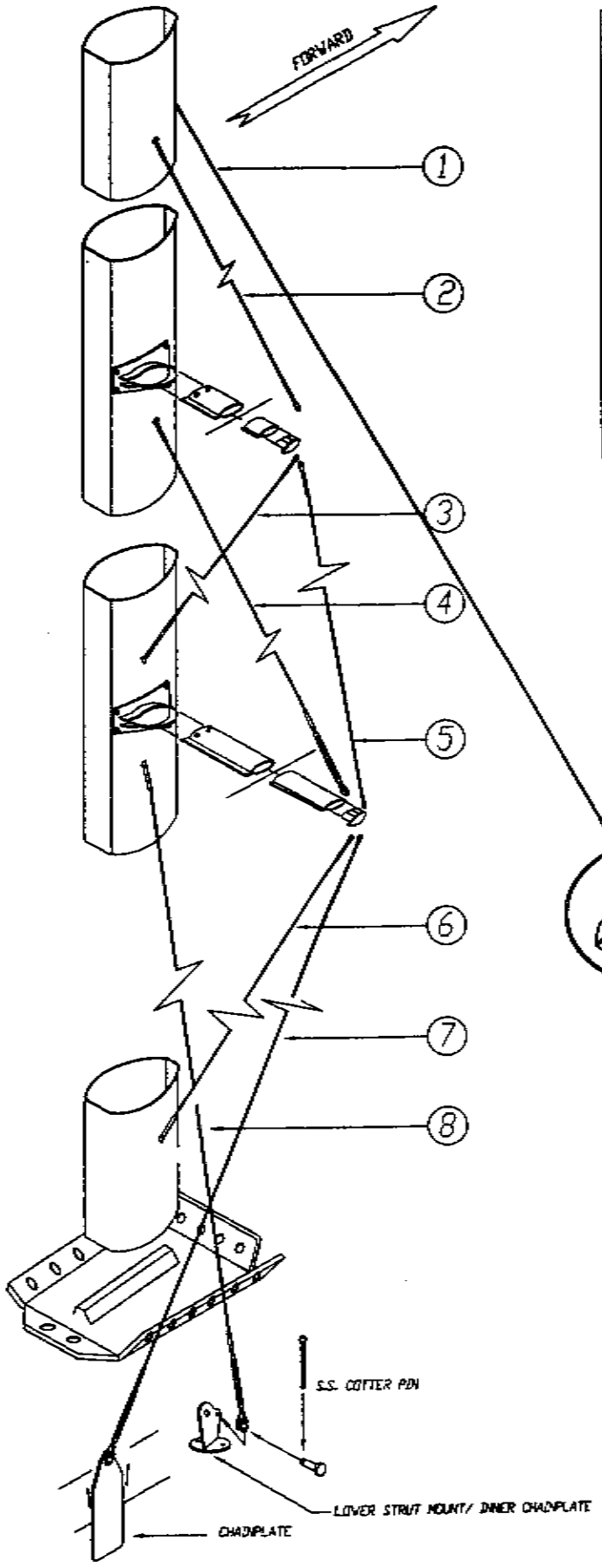
NOTE: NEVER TRY TO SAIL THE VESSEL WITHOUT THE STRUTS IN PLACE AND PROPERLY FASTENED (SEE PAGE 48B)

NOTE: IN-MAST FURLING OPTION USES A LARGER MAST SECTION AND THE STRUTS ARE NOT UTILIZED. SEE FOLLOWING PAGE

H460 STANDING RIGGING (STANDARD)

46080+48A-1 | NONE | ENGINEERING DEPT. | 11/12/97

HUNTER

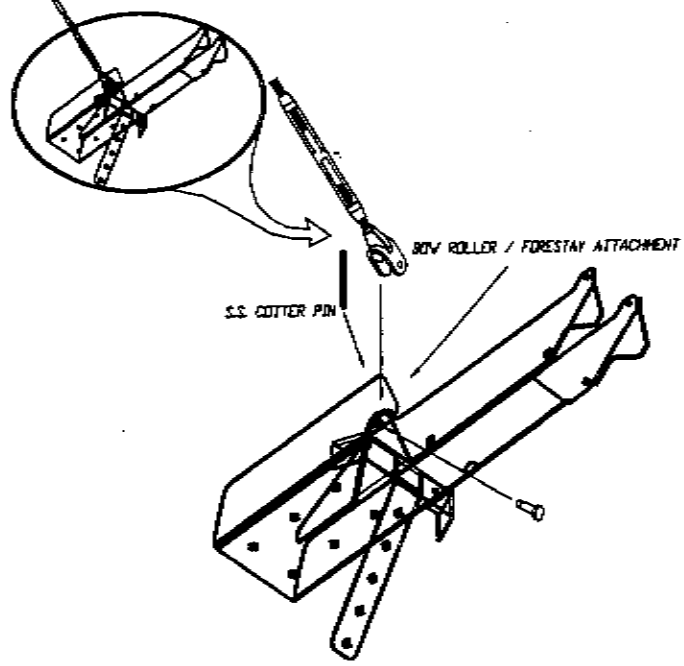


1. FORESTAY 3/8" (9.5mm) 1 X 19
2. D3 3/8" (9.5mm) 1 X 19
3. RD2 1/4" (6.4mm) 1 X 19
4. D2 5/16" (7.9mm) 1 X 19
5. V2 3/8" (9.5mm) 1 X 19
6. RD1 1/4" (6.4mm) 1 X 19
7. V1 3/8" (9.5mm) DYFORM
8. D1 3/8" (9.5mm) DYFORM

NOTE: SEE PAGES 49A & B FOR SPREADER TIP DETAILS.

SEE PAGE 50B FOR FURLING RIG LENGHTS.

SEE PAGE 51 FOR FITTINGS DESC.

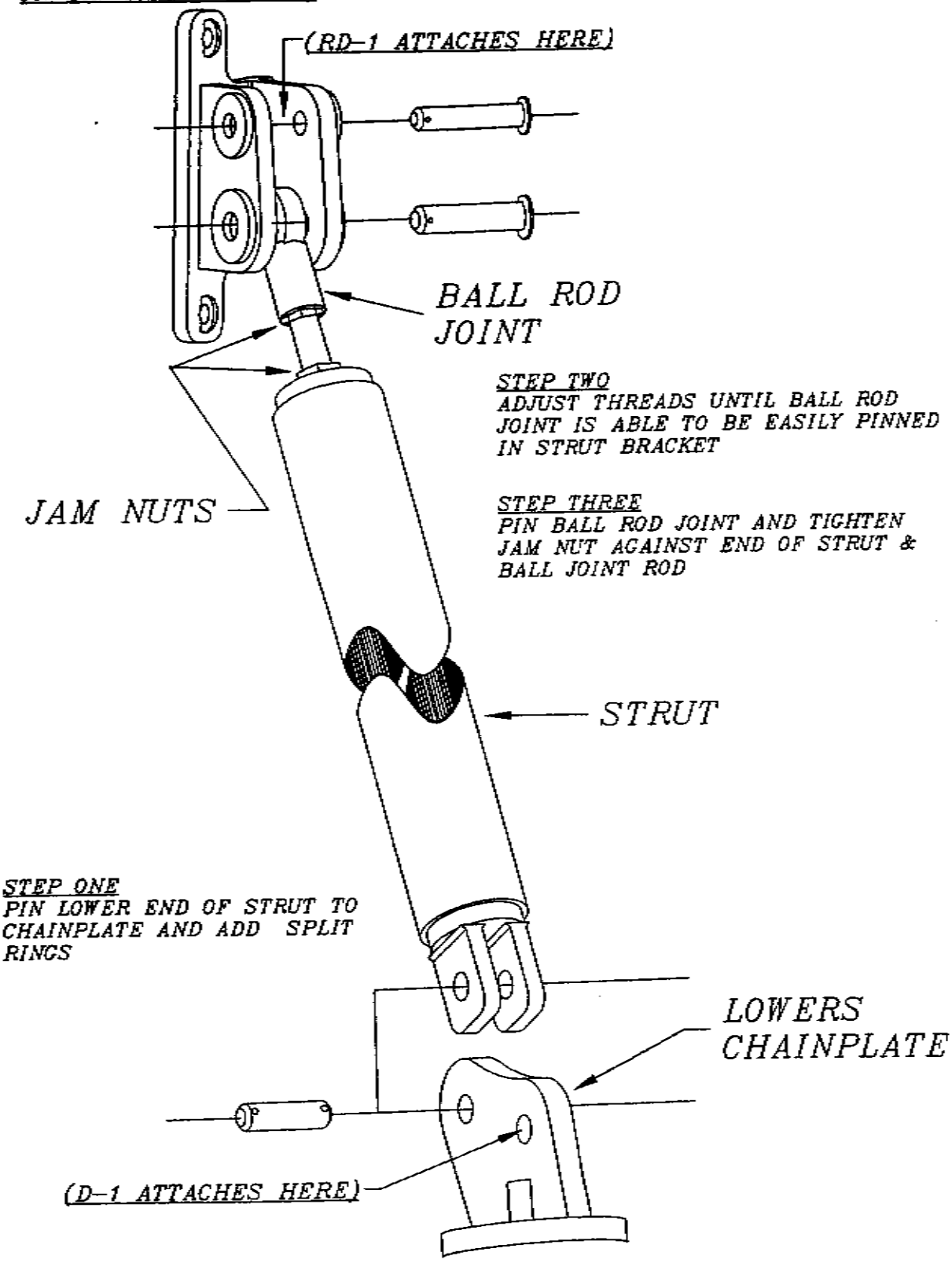


NOTE: IN-MAST FURLING OPTION USES A LARGER MAST SECTION AND THE STRUTS ARE NOT UTILIZED.

H460 STANDING RIGGING (FURLING)

DRAWING NO. 4008048-2 | DRAWN BY: NONE | DATE: 6/24/97 | ENGINEERING DEPT.

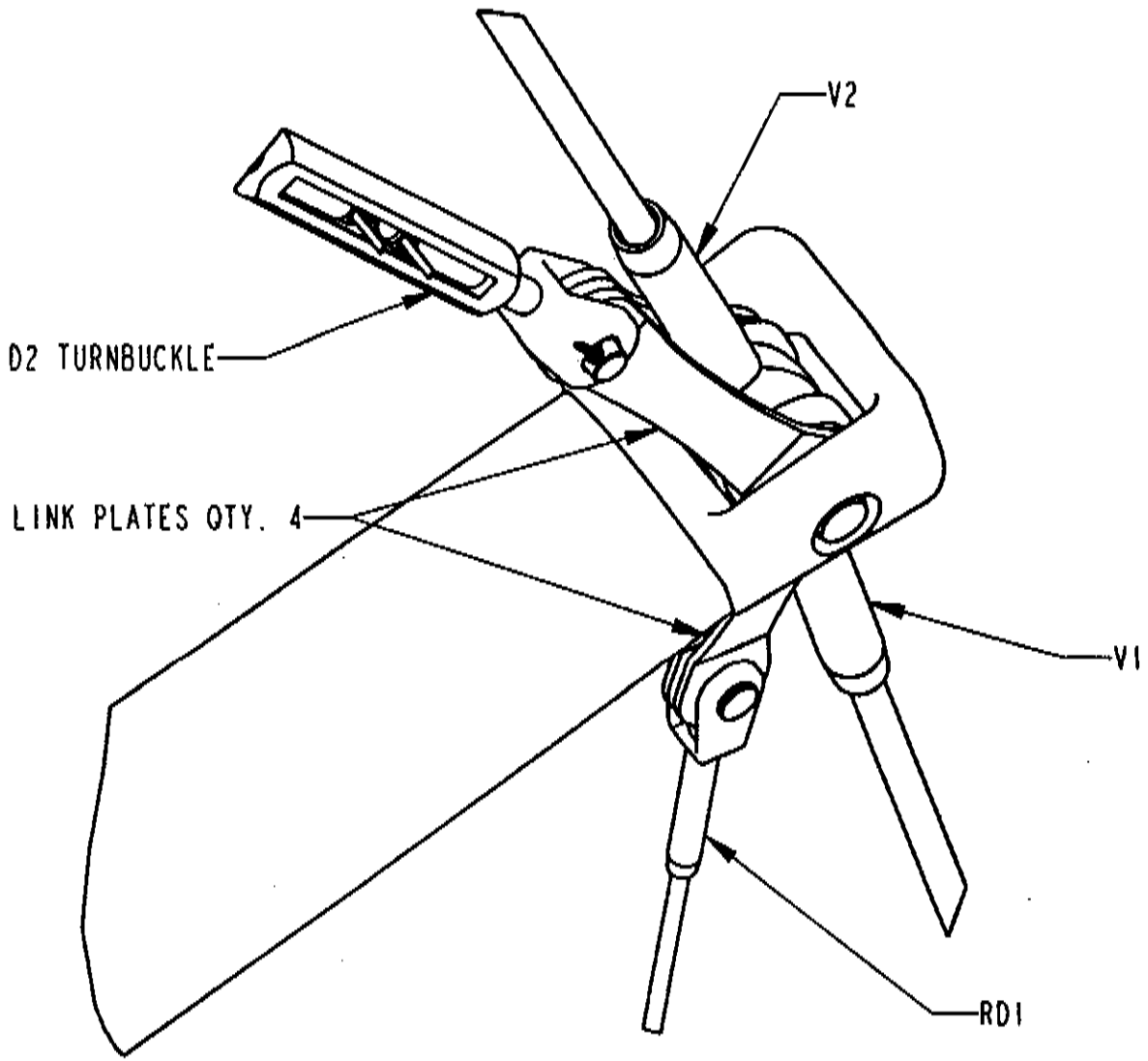
HUNTER 46



H460 STRUT ASSEMBLY

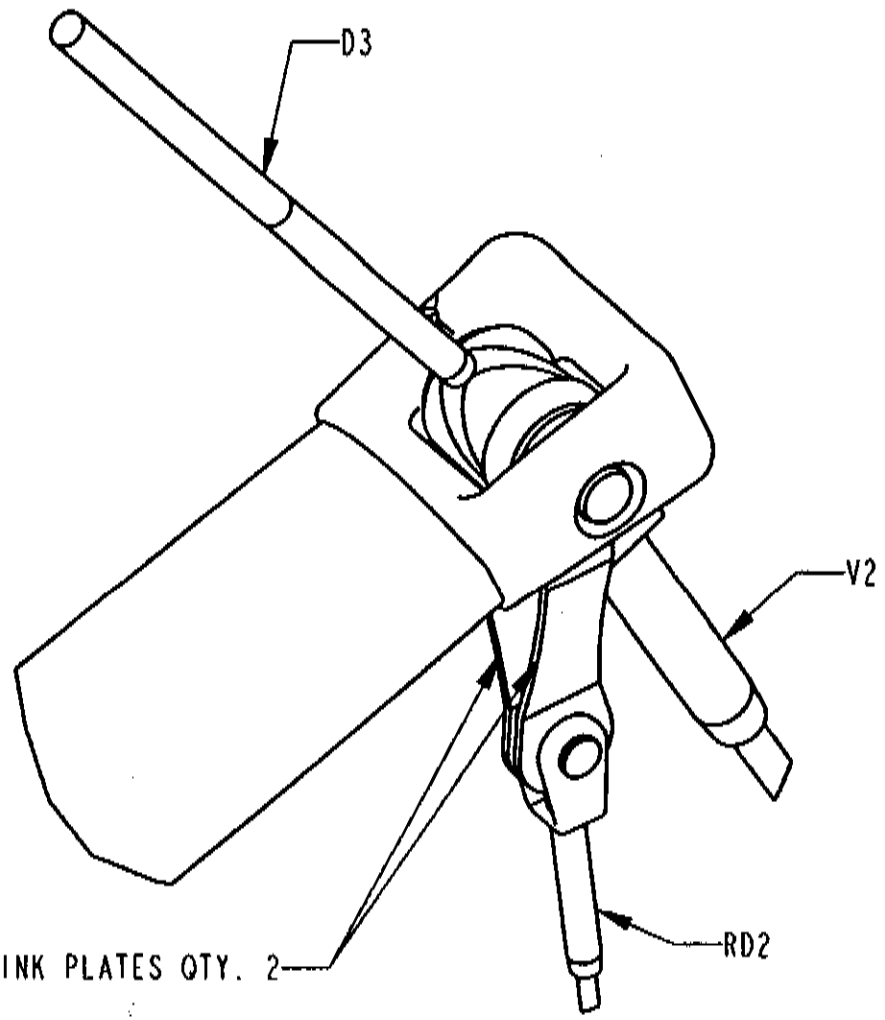
HUNTER

PAGE 48B



SELDEN MAST LOWER SPREADER TIP

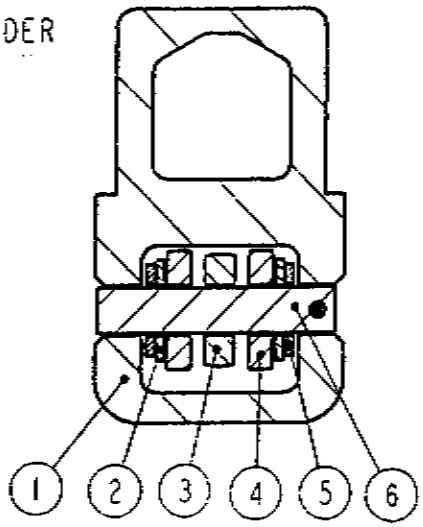
HUNTER

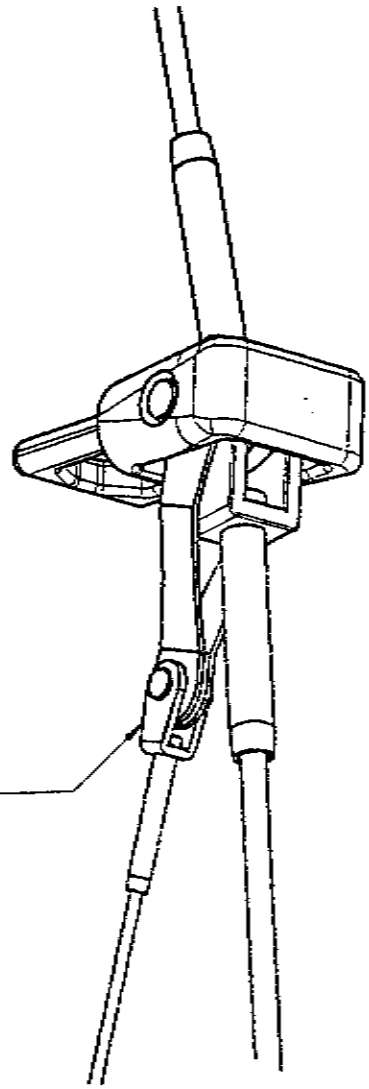


SELDEN MAST UPPER SPREADER TIP

HUNTER

UPPER SPREADER



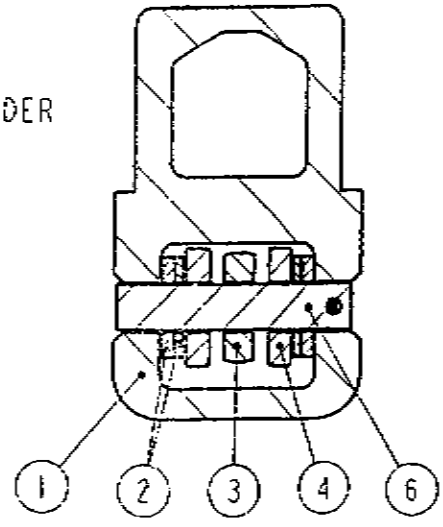


NYLON WASHERS
BETWEEN STRIPS
TO FILL OUT
EXCESSIVE PLAY

1. *SPREADER TIP CASTING*
2. *NYLON WASHER*
3. *MARINE EYE*
4. *TOGGLE*
5. *LINK PLATES*
6. *SPREADER TIP PIN*

NOTE: OTHER LINK PLATES WILL ATTACH TO SPREADER TIP ON EITHER SIDE OF #3.

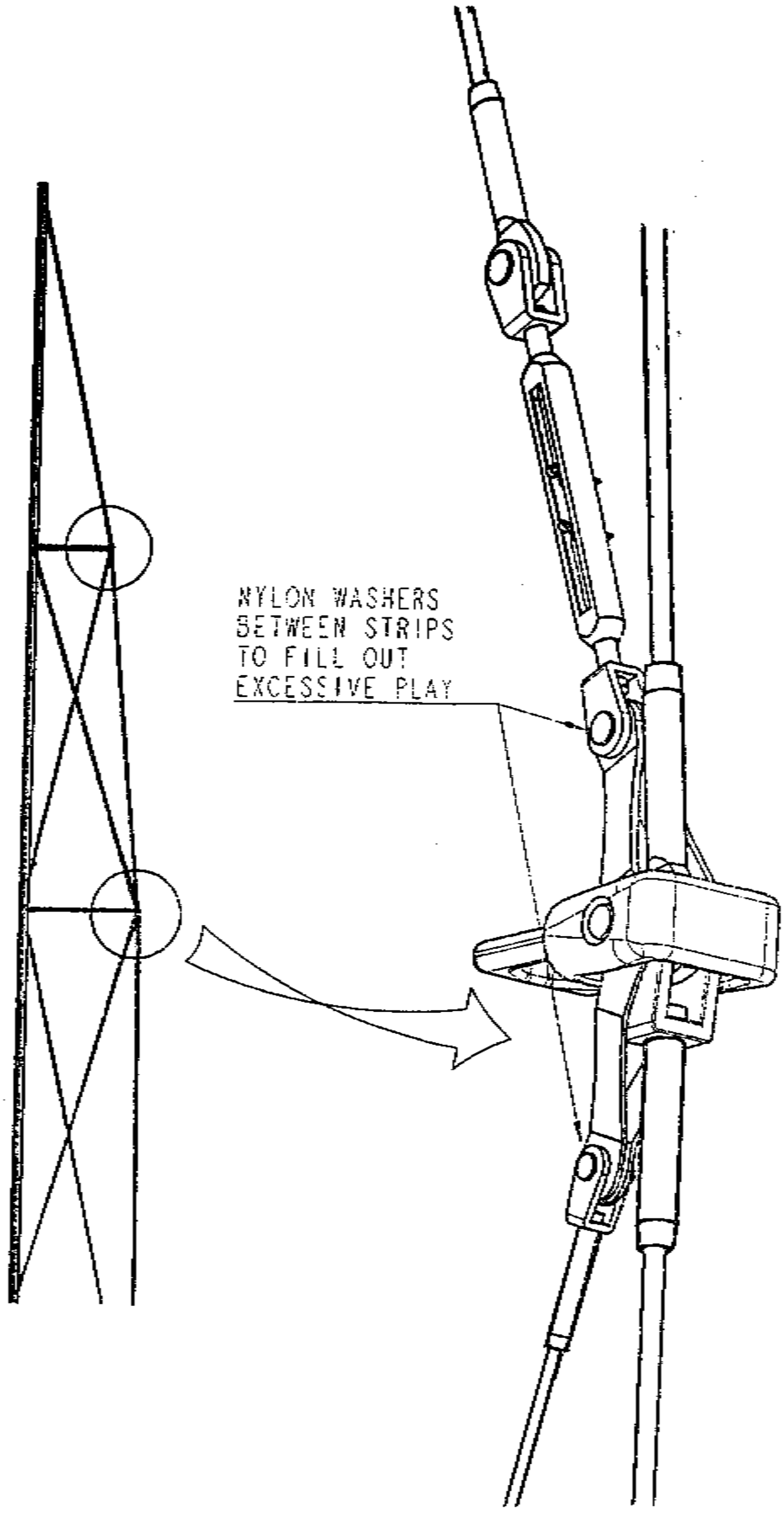
LOWER SPREADER



HUNTER

SELDEN MAST SPREADER TIP DETAIL

ENGINEERING DEPT. 3/3/99



SELDEN MAST SPREADER TIP DETAIL CONT

4608049D

NONE

ENGINEERING DEPT.

3/3/99

HUNTER

h460 SELDEN STANDARD STANDING RIGGING SPECIFICATIONS

BY: KJC | DATE: 25-Jan-98 | **REVISION:** SHORTEN V1 BY 1.5" FROM 24'-1" TO 23'-11.5" 3/18/99

	OPT/STD	ITEM	QUANTITY	WIRE SIZE	UPPER END	LENGTH		LOWER END
1	STD	D3	2	3/8" (9.5mm) 1x19	841-3/8 SHROUD TERMINAL	4.089 m	13 ft. 5 in.	MARINE EYE FOR 5/8" PIN
2	STD	V2	2	3/8" (9.5mm) 1x19	JAW TOGGLE FOR 5/8" PIN	5.293 m	17 ft. 4 3/8 in.	MARINE EYE FOR 5/8" PIN
1	STD	D2	2	5/16" (8mm) 1x19	841-5/16 SHROUD TERMINAL	5.197 m	17 ft. 5/8 in.	10-16-16 TURNBUCKLE W/ EYE FOR 5/8" PIN
2	STD	V1	2	3/8" (9.5mm) DYFORM	JAW TOGGLE FOR 5/8" PIN	7.303 m	23 ft. 11 1/2 in.	12-20-20 TURNBUCKLE
3	STD	D1	2	3/8" (9.5mm) DYFORM	841-3/8 SHROUD TERMINAL	7.112 m	23 ft. 4 in.	12-20-20 TURNBUCKLE
3	STD	UPPER DIAMOND, RD2	2	1/4" (6.4mm) 1x19	JAW TOGGLE W/ 1/2" PIN	5.197 m	17 ft. 5/8 in.	8-12-12 T-TANG W/ 841-1/4 BACKING PLATE
4	STD	LOWER DIAMOND, RD1	2	1/4" (6.4mm) 1x19	JAW TOGGLE W/ 1/2" PIN	4.645 m	15 ft. 2 7/8 in.	8-12-12 TURNBUCKLE WITH UPSET EYE/JAW TOGGLE (1/2" PIN)
	OPT.	INNER FORESTAY	1	9/32" (7.1mm) 1x19	841-9/32 SHROUD TERMINAL	12.579 m	41 ft. 3 1/4 in.	FORESTAY QUICK RELEASE LEVER W/ 1/2" PIN
5	STD	FORESTAY	1	3/8" (9.5mm) 1x19	MARINE EYE WITH 5/8" HOLE	17.729 m	58 ft. 2 in.	GIBB 10-20-20 TURNBUCKLE W/ JAW TOGGLE LOOSE

H460 STANDING RIGGING SPECS. (STD.) | 4608050A | NONE | HUNTER

H460 SELDEN FURLING STANDING RIGGING SPECIFICATIONS

BY: KJC | DATE: 12-Nov-98 | REVISION:

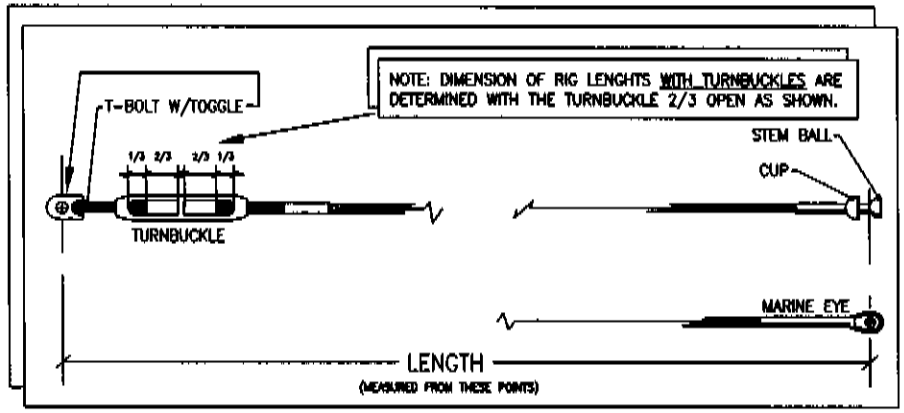
	OPT/STD	ITEM	QUANTITY	WIRE SIZE	UPPER END	LENGTH		LOWER END
1	STD	D3	2	3/8" (9.5mm) 1 X 19	RBS 10, BC10, SB12 STEMBALL IN BACKING SHELL	4.54 m	14.91 ft.	ME12 MARINE EYE
2	STD	V2	2	3/8" (9.5mm) 1 X 19	RTJ1220 JAW TOGGLE	5.24 m	17.18 ft.	ME12 MARINE EYE
1	STD	D2	2	5/16" (8mm) 1 X 19	RTJ1220 JAW TOGGLE	5.15 m	16.88 ft.	TB122020 12-20-20 TURNBUCKLE
2	STD	V1	2	3/8" (9.5mm) DYFORM	RBS 07A, SB10 STEMBALL IN BACKING SHELL	6.92 m	22.69 ft.	10-16-16 TURNBUCKLE W/ EYE
3	STD	D1	2	3/8" (9.5mm) DYFORM	RBS 10, BC10, SB12 STEMBALL IN BACKING SHELL	6.67 m	21.87 ft.	12-20-20 TURNBUCKLE W/ JAW TOGGLE
3	STD	UPPER DIAMOND, RD2	2	1/4" (6.4mm) 1 X 19	MEO8 MARINE EYE	5.15 m	16.90 ft.	8-12-12 STEMBALL TURNBUCKLE IN BACKING SHELL
4	STD	LOWER DIAMOND, RD1	2	1/4" (6.4mm) 1 X 19	MEO8 MARINE EYE	6.04 m	19.82 ft.	8-12-12 STEMBALL TURNBUCKLE WITH JAW TOGGLE
	OPT.	INNER FORESTAY	1	9/32" (7.1mm) 1 X 19	SBENG116 J2001616, MEO9, STEMBALL EYE, JAW TOGGLE	12.49 m	40.98 ft.	FORESTAY QUICK RELEASE LEVER
5	STD	FORESTAY	1	3/8" (9.5mm) 1 X 19	SBENG220, J2002020, MEO12, STEMBALL EYE, JAW TOGGLE	17.32 m	56.81 ft.	GIBB 10-20-20 TURNBUCKLE W/ JAW TOGGLE LOOSE

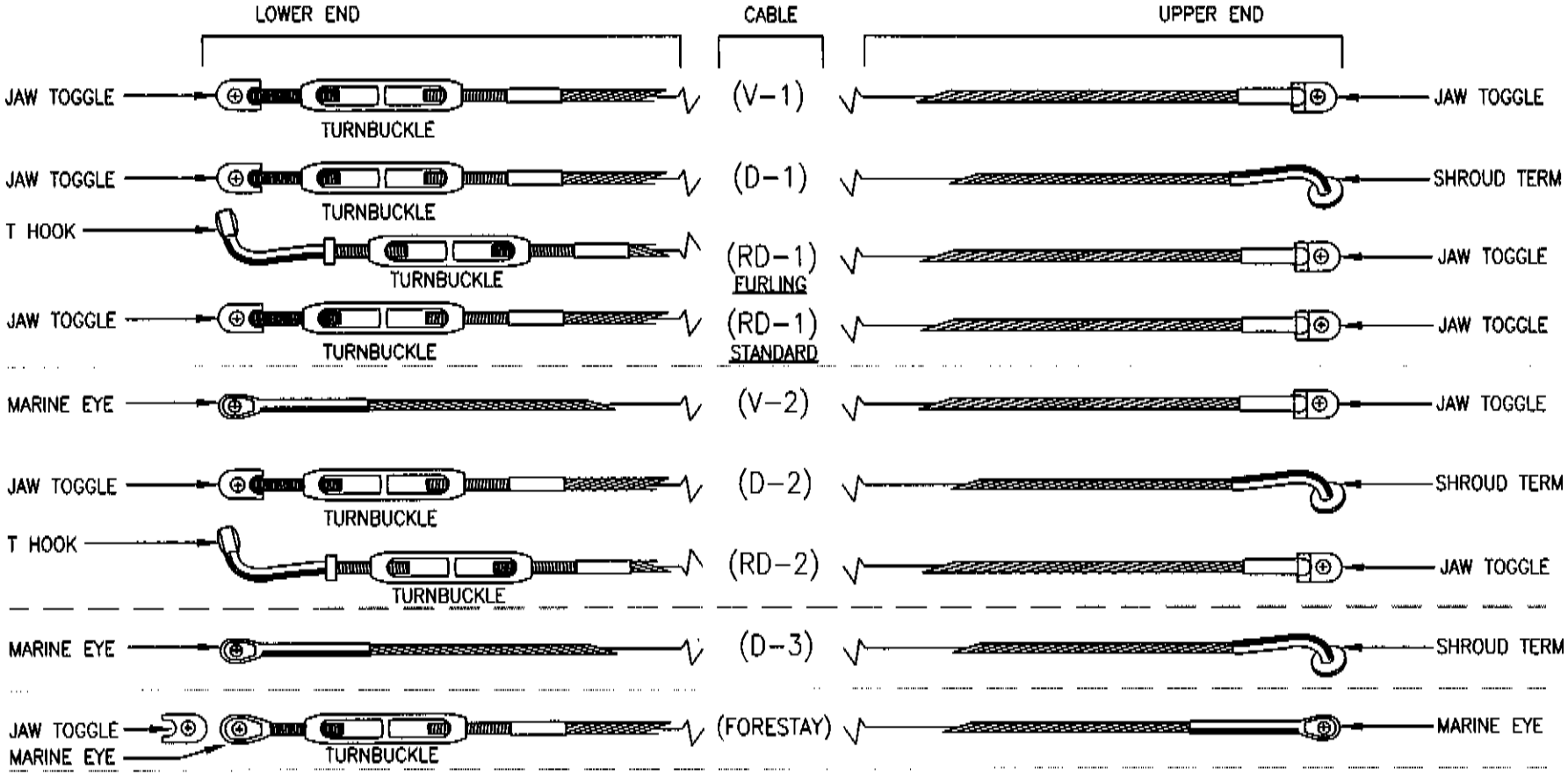
H460 STANDING RIGGING SPECS. (FURL.) | 46080508 | NONE | HUNTER

NOTE: SEE PAGES 50A & 50B FOR ACTUAL RIG LENGHTS.

V = VERTICAL
D = DIAGONAL
RD = REVERSE DIAGONAL

1 = LOWER
2 = INTER.
3 = UPPER





PAGE 51

H460 RIGGING LENGTHS DETAIL	
4608051	NONE
ENGINEERING DEPT	11/12/98

HUNTER

TUNING THE H460 B&R RIG

The easiest method for tuning the B&R rig is to perform step one as follows before the mast is stepped, with it lying aft side down on two sawhorses. Begin with all rigging slack. If the mast is already stepped, loosen all the rigging, and then proceed to step one.

1. Start with all the rigging slack. Then induce the mast bend by tightening the reverse diagonals (diamonds). Measure the bend by tensioning a line or the main halyard between the masthead and the gooseneck. The maximum amount of bend should be no more than 10" (254.0mm)for the standard rig and no more than 2" (50 mm) for the furling mast measured perpendicular from the aft face of the mast to the halyard at the deepest part of the bend. It can be less than that based on the sail shape and your own preference. The bend should also be evenly distributed along the mast to give a smooth shape. Keep in mind that bending a furling mast may make it more difficult to furl and will not do much to flatten the sail as in a standard rig. It is very important that the mast also be straight from side to side at this time. Tighten or loosen the reverse diagonals to achieve this.

2. Step the mast with all shrouds attached but with the turnbuckles completely loosened (if the mast was not already stepped).

3. Attach the jib halyard to a cleat on the bow to support the mast in a raked position (the masthead should be about 1-1/2' behind the step). Attach the verticals and tighten them until you can just see the hole for the cotter pin in the turnbuckle. Tighten the jib halyard until you can attach the forestay. At this point the masthead should be raked so that a weight hung on the main halyard hangs about 1' behind the mast step.

4. Use the main halyard to check that the mast is centered from side to side. Pull it tight and mark the halyard next to the verticals chainplate. Now do the same to the other side to see if the marks line up. If not, tighten and/or loosen the verticals until the marks line up. Once the masthead is centered, begin tightening the verticals until the turnbuckles are approximately half closed. While tightening the verticals you may notice the bend in the mast increasing. Now you can tighten the lowers which will tend to straighten the lower part of the mast. Be sure to tighten port and starboard sides evenly.

5. Now you should tighten the headstay until it is approximately half closed as well. This should induce the appropriate amount of headstay tension. *Never* use anything more than a pair of wrenches to tighten your rigging. If you use an extended piece of pipe on the handle of a wrench you can over tighten the rigging and do damage to the mast or rigging.

6. On the Hunter H460 it is necessary to go up the mast in a bosun's chair to tighten the number 2 diagonal shroud (D2 or intermediate shroud). Always use caution when "going aloft". You should always use a mountain climbing harness or Bosun's Chair intended for this use. Always tie into the harness with the halyard using a bowline and then secure the shackle as a back up as the knot is more reliable than a mechanical fastener. The person hoisting you aloft should keep the halyard stopper closed to prevent falls. Good communication between the two of you is also important. Tighten the D2 until it has just become tight and then add two complete turns. While at the first spreader, look up the back of the mast to see if it is straight. If not then adjust the appropriate D2 to straighten it.

7. Have the person on deck carefully lower you. They should keep the halyard wrapped at least twice around the winch and should always have one hand able to stop the halyard from running free. Once on deck look up the back of the mast and see if it is straight. if not then adjust the lowers (D1) until it is.

8. If you have the standard rig you need to attach the struts at this time. Attach the lower end of the strut to the smaller hole in the chainplate. Adjust the length by turning

the ball joint bearing in the upper end of the strut until the holes in the pin can be attached. It is normal to have some play between the strut and the chainplate and strut bracket

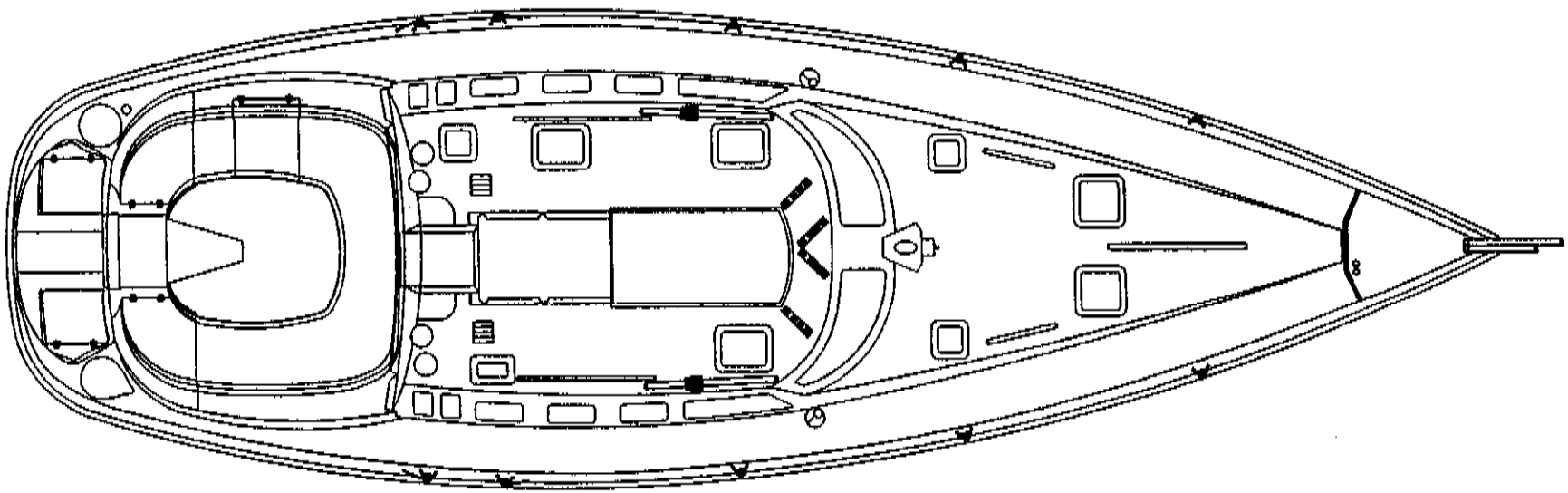
9. The final test is to go sailing in 10-15 knots of wind. First, adjust the tension in the shrouds. If when sailing upwind, the shrouds on the leeward side are slack then tighten them to remove about half the slack keeping note of the number of turns. Then tack and do the same to the other side. Do this until you are happy with the tension and the leeward side does not get loose when the boat is heeled. Now sight up the mast to be sure it is still relatively straight from side to side. If it is not then adjust to appropriate rigging to correct it. For example: if the mast is straight until the upper spreader and then hooks to the windward side then you will have to revisit steps 6 and 7 above. Remember to always tighten the leeward shroud, tack and tighten the new leeward shroud the same amount. This prevents damage to the turnbuckles and is also much easier to do. Keep in mind it is also possible to have something too tight such as a diagonal shroud.

10. At this point you should have adequate headstay tension. The sails are built for about 14" of headstay sag, the bend in the standard mast should be about 1' and 4" in the furling mast and it should be nearly straight from side to side when sailing upwind. If any of these are not true then revisit the appropriate step above to correct it. If the sag in the headstay is too much then adding tension to the verticals will fix it.

11. Once the rig is tuned you should make sure to add the cotter pins to all the rigging bending back the ends and taping them to prevent snagged lines sails and fingers.

Remember that rigging, like everything else, can age. As it gets older it may need to be replaced. The frequency for which this becomes necessary depends on the climate and conditions in which the boat is sailed. For example: if you sail in the Caribbean it should be replaced every 2-3 years compared to every 10 for the great lakes. You should consult a professional rigger for advice.

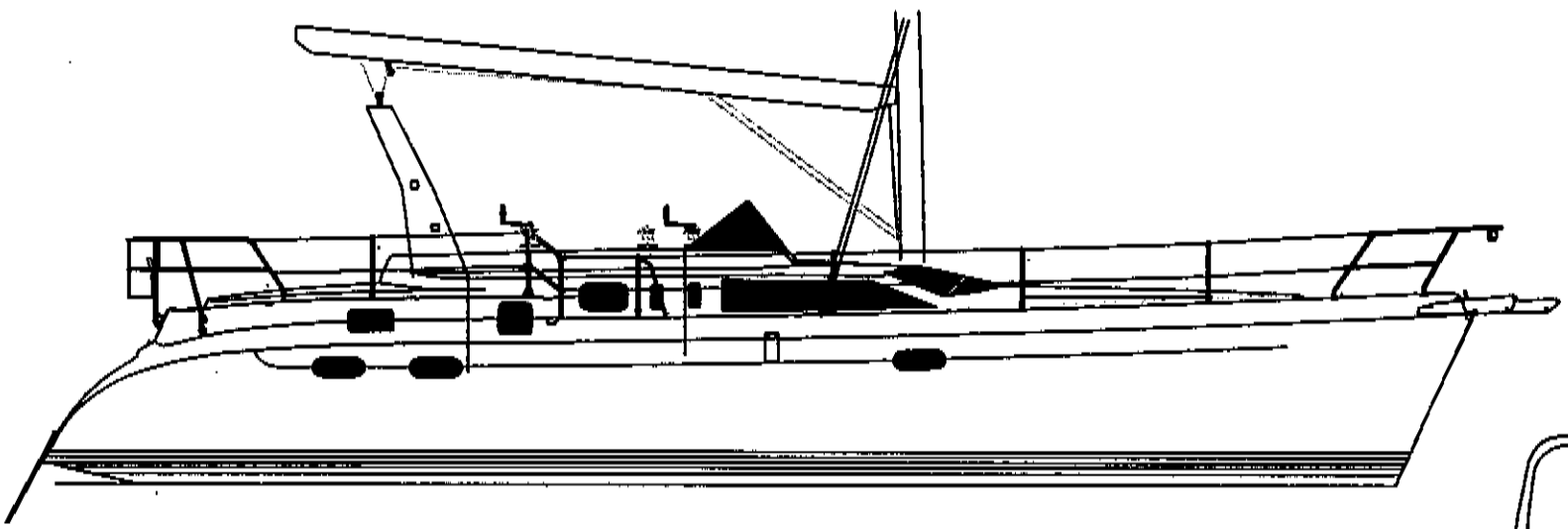
SEE PAGES 38B &38C ALSO 40A & 40B FOR OPTIONAL DECK HARDWARE INFORMATION.

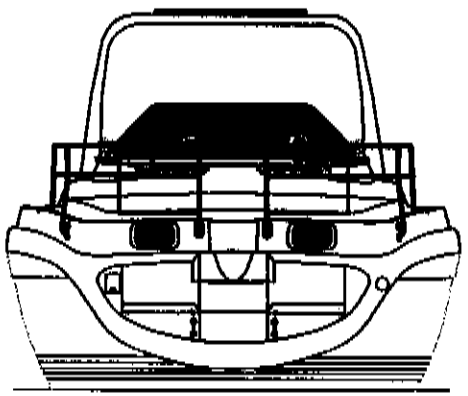


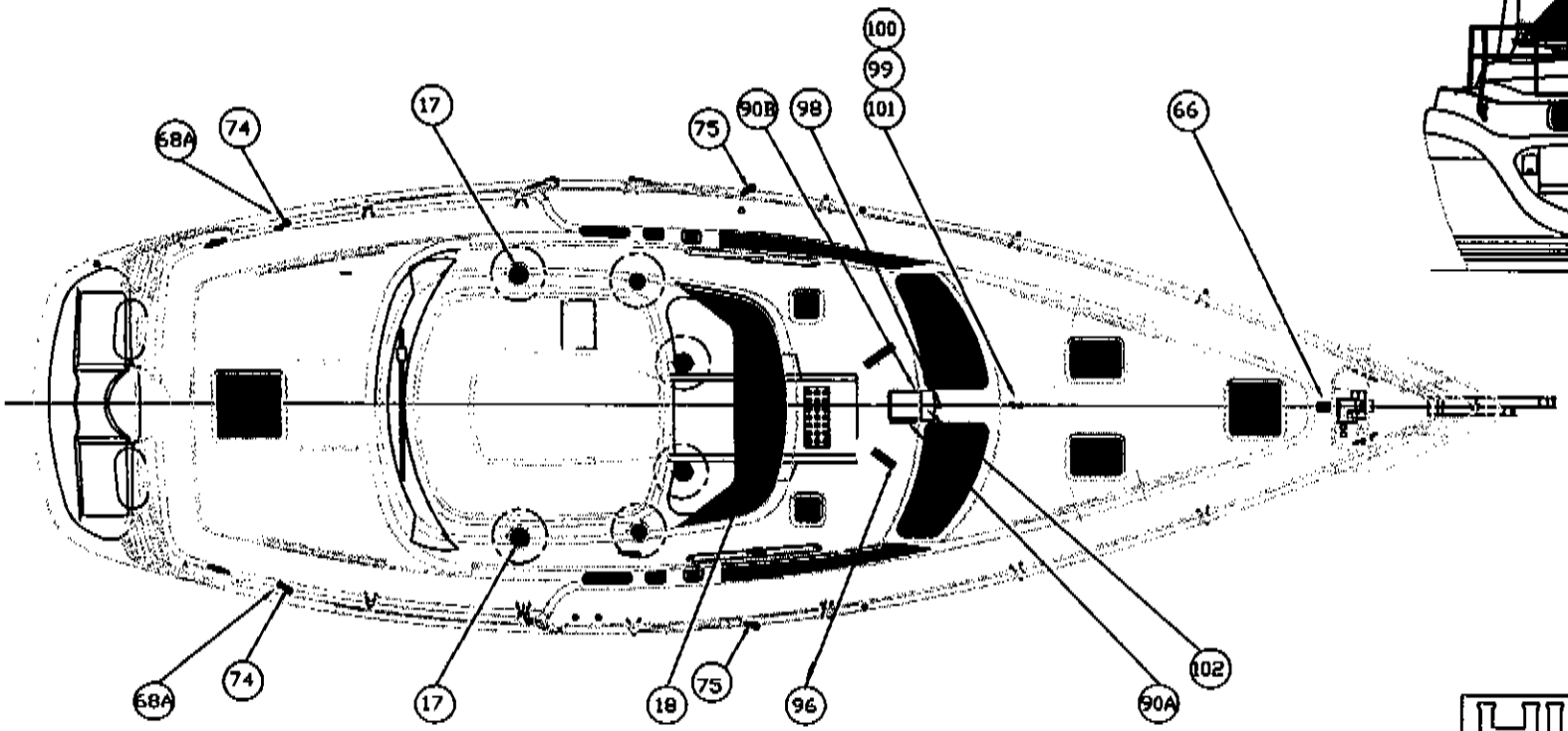
PAGE 54A

H460 OPTIONAL SPINNAKER HARDWARE LAYOUT	
4608054A	NONE
ENGINEERING DEPT.	11/13/98

HUNTER







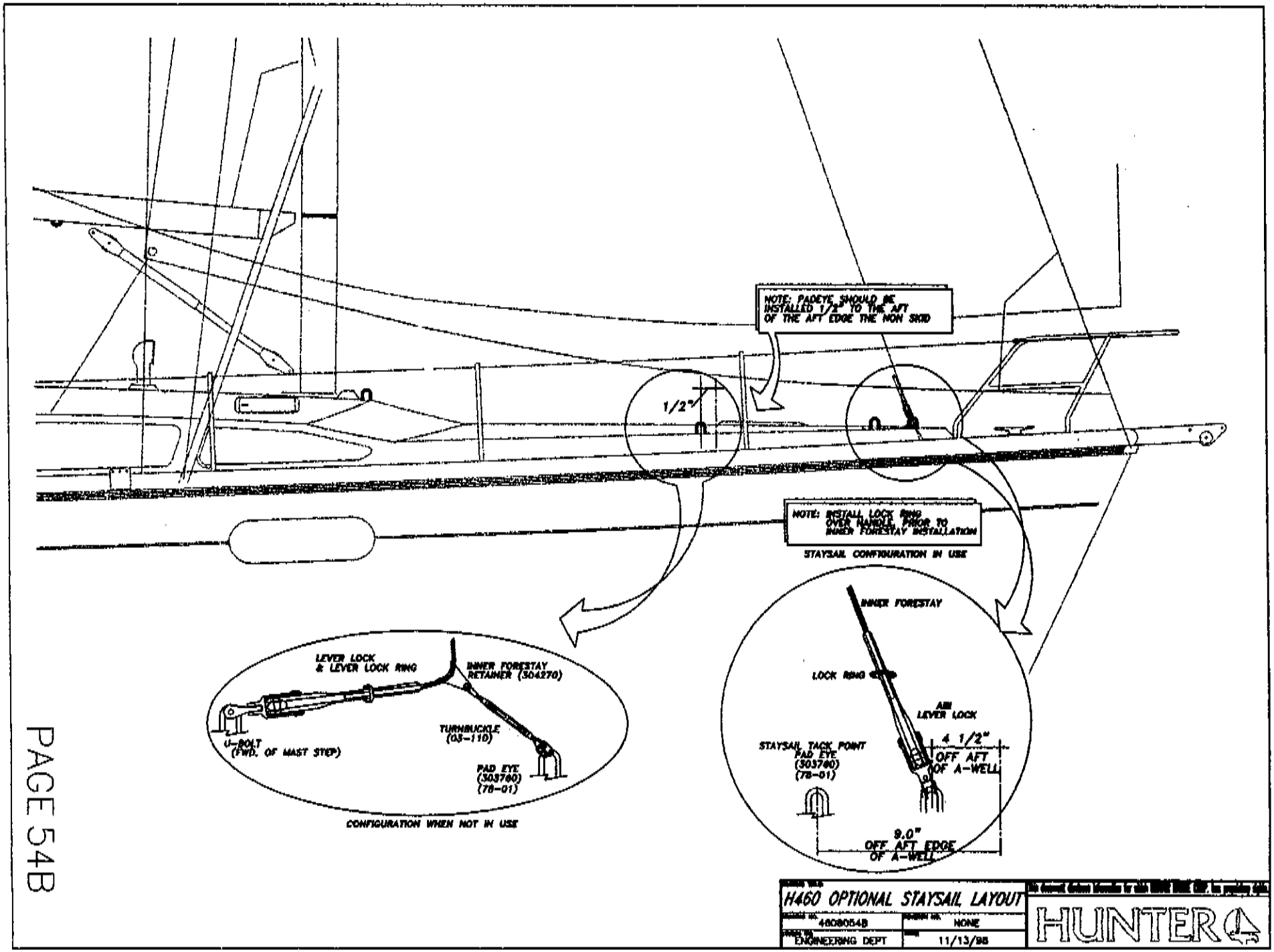
OPTIONAL SPINNAKER/STAYSAIL/HDWE. LAYOUT

HUNTER

H-450 OPT.HDWE

446D1401.THAW SPIN. & STAYS. & OWNMANOPT. LAYERS

PAGE 54A


NOTE: PADEYE SHOULD BE INSTALLED 1/2" TO THE AFT OF THE AFT EDGE THE NON SKID
1/2"
NOTE: INSTALL LOCK RING OVER HANDLE PRIOR TO INNER FORESTAY INSTALLATION
STAYSAIL CONFIGURATION IN USE
LEVER LOCK & LEVER LOCK RING
INNER FORESTAY RETAINER (504270)
TURNBUCKLE (03-110)
U-BOLT (FWD. OF MAST STEP)
PAD EYE (503780) (78-01)
CONFIGURATION WHEN NOT IN USE
INNER FORESTAY
LOCK RING
AIR LEVER LOCK
4 1/2" OFF AFT OF A-WELL
STAYSAIL TACK POINT PAD EYE (503780) (78-01)
9.0" OFF AFT EDGE OF A-WELL
H460 OPTIONAL STAYSAIL LAYOUT
46080548
NONE
ENGINEERING DEPT
11/13/98
HUNTER

OPTIONAL GEAR

	SPIN. WINCH OPTION						
17	WINCH	COCKPIT / SPINN.SHEET	LEWMAR	COAST STD.50ST		2	HW2553
75	SNATCH BLOCK	MID RAIL	SCHAEFER	11--99		2	
	SPIN OPTION						
74	SPIN BLOCK	AFT COAMINGS	SCHAEFER	10--15		2	
90A	SPIN. MAST BLOCK		Z-SPAR	PN288		1	
	SPIN. MAST HEAD BLOCK	MAST HEAD	HARKEN		1540	1	
	CRUSING SPINN. SHEET					2	R10905-09
	SPINN. HALYARD					1	R10905-10
	CRUISING SPIN. OPTION						
68A	PAD EYE		SCHAEFFER	78-99		2	HW0841
	STAYSAIL OPTION						
98	U - BOLT	IN FRONT OF MAST	EPCO			1	HW5512
101	PADEYE	IN FRONT OF MAST	SCHAEFER	78-01		1	HW0850
100	TURNBUCKLE	IN FRONT OF MAST	JOHNSON	03-110		1	RIO124
99	INNER FORSTAY RETAINER	IN FRONTOF MAST				1	RIO122
66	INNER FORESTAY BASE		ABI	2140CH		1	HW1617
	INNER FORESTAY MOUNTING HDWR.						
90B	STAYSAIL MAST BLOCK		Z-SPAR	PN288		1	
96	DK ORGANIZER (SIX)	STARBOARD	HARKEN		1503	2	HW0384
		REPLACES ITEM# 95					
18	SHEET STOPPER (QUAD)	STARBOARD	SPINLOCK	QUAD(XT/4)		1	HW1283
		REPLACES ITEM # 97					
	STAYSAIL HALYARD					1	R10905-11
	STATSAIL SHEETS					2	R10905-12
	FURLING OPTION						4462063A
102	FURLING MAST STEP		Z-SPAR			1	RIO499

ENGINE OPERATING INSTRUCTIONS:

① FILL DIESEL TANK WITH DIESEL FUEL
② CHECK ENGINE OIL LEVEL (SEE YANMAR MANUAL)
③ OPEN ENGINE RAW WATER PICKUP SEACOCK (SEE PAGE 60A)
④ TURN ON "START BATTERY SELECTOR SWITCH" (LOCATED AT NAVIGATION STATION)
⑤ TURN KEY TO START POSITION, RELEASE WHEN ENGINE STARTS
NOTE" IF ENGINE APPEARS TO HAVE TROUBLE STARTING, SEE YANMAR MANUAL
⑥ TO SHUT ENGINE DOWN: PUSH RED BUTTON AT KEY SWITCH PANEL
UNTIL ENGINE STOPS RUNNING THEN TURN KEY TO OFF POSITION.

WARNING: DO NOT LEAVE AFT HATCHES/ PORTS OPEN WHILE ENGINE IS RUNNING. THERE EXISTS A POSSIBILITY OF EXHAUST POISIONING, OR EVEN DEATH.

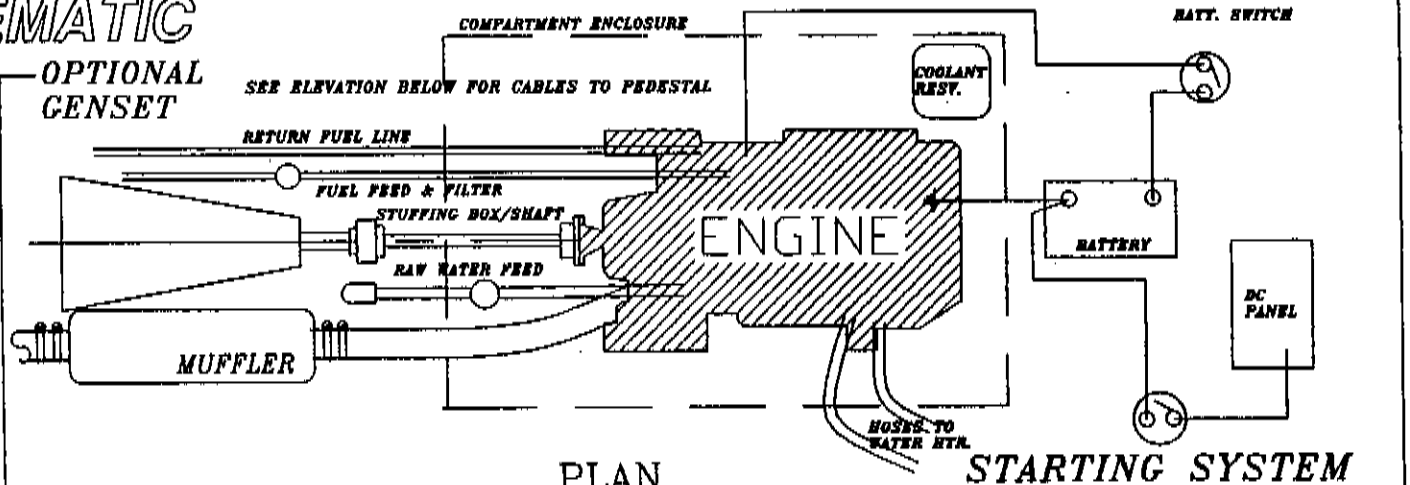
SEE PAGE 63E-1 FOR OPTIONAL GENERATOR OPERATING INSTRUCTIONS

H460 ENGINE OPERATING INST.	
46080554	NONE
ENGINEERING DEPT.	11/21/97

HUNTER

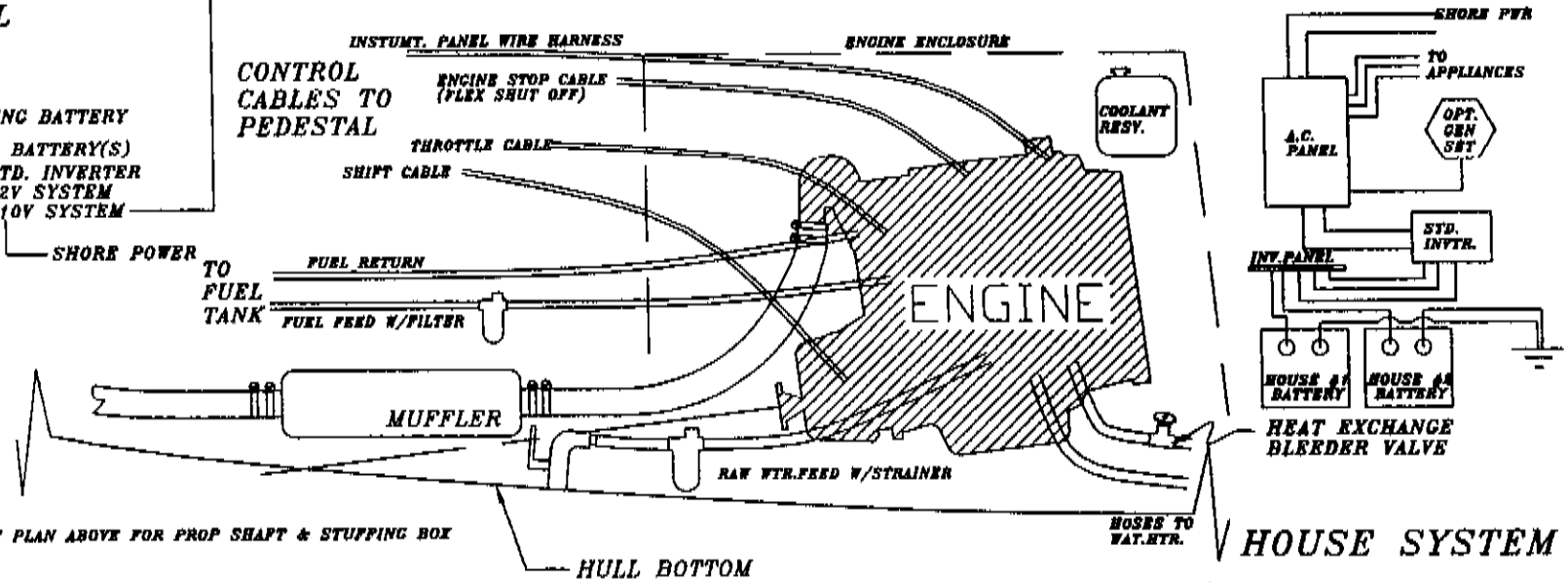
SYSTEMS SCHEMATIC

- ENGINE
  - WATER INTAKE — THRU-HULL, SEA COCK, STRAINER
  - EXHAUST — ELBO, HOSE, MUFFLER
  - FUEL SYSTEM — FEED, RETURN, TANK; FILTER; VALVE @ TANK
- RUNNING GEAR
  - SHAFT
  - COUPLING
  - DRIPLESS
- CONTROLS
  - SHIFT
  - THROTTLE
  - PANEL HARNESS
- ELECTRICAL SYSTEM
  - BATT SW — STARTING BATTERY
  - HOUSE BATTERY(S)
    - STD. INVERTER
    - 12V SYSTEM
    - 110V SYSTEM
  - SHORE POWER
- OPTIONAL GENSET



PLAN

STARTING SYSTEM



ELEVATION

HOUSE SYSTEM

NOTE: THIS DWG. IS SCHEMATIC FORM SEE SPECIFIC SYSTEM DWGS. FOR BATTERIES/SWITCHES/ CHARGER ETC. LOCATIONS AND WIRE RUNS.

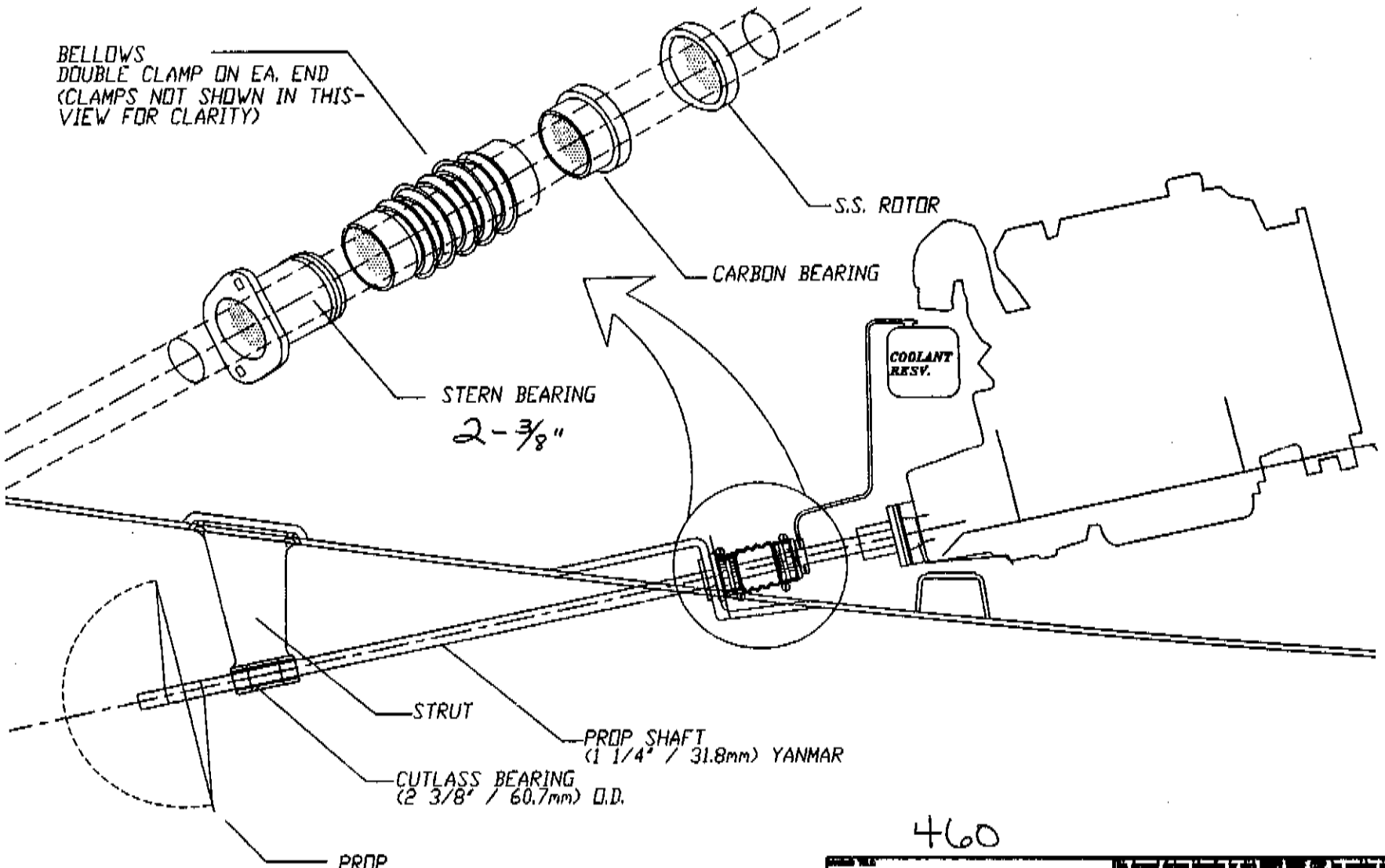
H460 ENGINE COMPARTMENT LAYOUT	
4608055B	NONE
ENGINEERING DEPT.	11/21/98

HUNTER

Stern Bearing
5" Long x 1½ OD x 1¼"

DRIPLESS PACKING GLAND DETAIL

SEE FOLLOWING PAGES FOR DETAILED INSTALLATION & TROUBLESHOOTING DETAILS

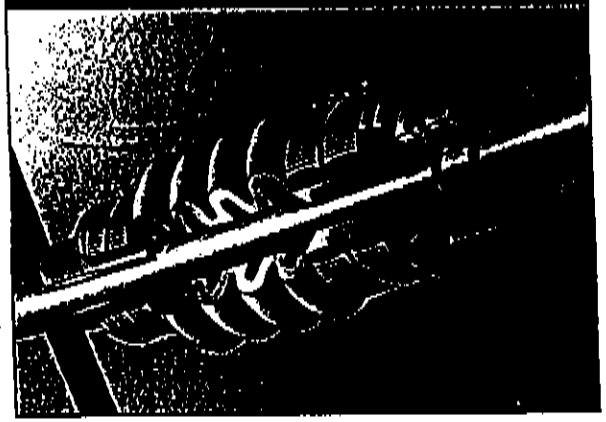


460

H460 PROP SHAFT & STUFFING BOX DETAIL	
4608058A	NONE
ENGINEERING DEPT.	11/21/96

HUNTER

PACKLESS SEALING SYSTEM



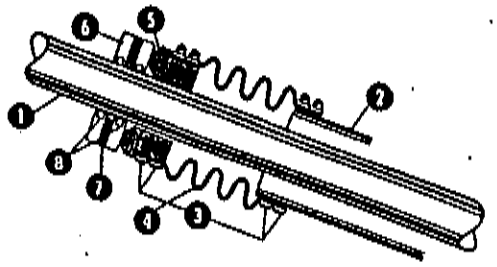
SHAFT SEAL

INSTALLATION INSTRUCTIONS

For Shafts: 3/4" to 3 3/4" (22mm to 90mm)

STANDARD SP[illegible]S.S SHAFT SEAL:

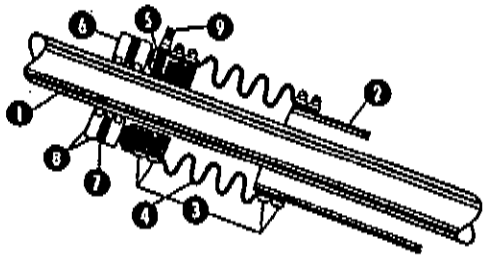
Hull Speed Under 12 Knots.
(Boats equipped with water injected stuffing box, use high speed.)



1. Propeller Shaft
2. Shaft Log (Stern Tube)
3. Stainless Steel Hose Clamps (4)
4. Reinforced Bellow (1)
5. Carbon Graphite Flange (1)
6. Stainless Steel Rotor (1)
7. Stainless Steel Set Screws (5 total / 4 for Rotor, 1 Spare)
8. Nitrile O-Rings (2 in Rotor / 2 Spare)

HIGH SPEED P.S.S. SHAFT SEAL:

Hull speed over 12 knots and boats with water injected stuffing box.



1. Propeller Shaft
2. Shaft Log (Stern Tube)
3. Stainless Steel Hose Clamps (4)
4. Reinforced Bellow (1)
5. Carbon Graphite Flange (1)
6. Stainless Steel Rotor (1)
7. Stainless Steel Set Screws (5 total / 4 for Rotor, 1 Spare)
8. Nitrile O-Rings (2 in Rotor / 2 Spare)
9. Nylon Hose Barb Fitting

READ INSTRUCTIONS THOROUGHLY

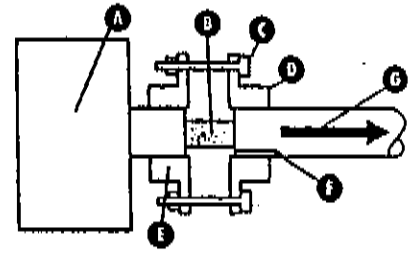
- Do not use grease or oil to slide the stainless steel rotor down the shaft.
- Do not allow petroleum based antifreeze to come in contact with face of the seal when winterizing engine.
- Install the P.S.S. Only when the boat is out of the water.
- Do not damage the carbon flange or stainless steel rotor while unpacking and handling.
- Do not tighten nylon hose barb fitting or replace with stainless or

INSTALLATION INSTRUCTI[illegible]

1. Unbolt the shaft coupling from the transmission coupling.
2. Remove the shaft coupling from the shaft. (On most installations the coupling is fixed to the shaft by two set screws that are wired together).

   Helpful hint: Removing the shaft from the shaft coupling may be difficult. The drawing below shows the use of a spacer as a press between the propeller shaft and the transmission coupling:

REMOVING THE SHAFT COUPLING:



- A. Transmission
- B. Spacer
- C. Bolts
- D. Shaft Coupling
- E. Transmission Coupling
- F. Key
- G. Shaft

   A. Insert a spacer (with a diameter smaller than the shaft) between the shaft and transmission coupling.

   B. Bolt the transmission coupling and shaft coupling back together with the spacer fit between (note: this may require longer bolts). The spacer will act as a press to drive the shaft from the shaft coupling as the bolts are tightened.

3. Remove the old stuffing box and rubber hose to expose the shaft log (stern tube).

   * *If your boat is equipped with a bolt-on or rigid stuffing box, please refer to heading: Bolt-on or rigid stuffing boxes.*

   ** *If your boat is equipped with a threaded stuffing box, please refer to heading: Threaded stuffing boxes.*

4. Slide the open end of the bellow and two hose clamps over the shaft log. The carbon flange (5) should already be securely attached to the bellow.
5. Clean the shaft (1) with very fine sand paper or emery paper (400 to 600 grit), paying particular attention to the shaft keyway to make certain there are no burrs or sharp edges that could tear the O-rings.
6. Make sure the O-rings (8) are positioned in the grooves of the rotor (spare O-rings are provided) and that the set screws (7) are backed out so that they do not extend into the inside bore of the rotor. Slide the stainless steel rotor (6) onto the shaft using a water soluble lubricant like dish soap to help the rotor slide easily. Do not use grease or oil.

7. Attach ...aft and shaft coupling (do not forget to secure coupling ... set screws. Wire set screws together to avoid loosening).
8. Position the bellow on the stern tube so the carbon is centered around shaft (the carbon graphite flange is bored larger than the shaft to compensate for vibration or misalignment). Clamp the cuff of the bellow to the shaft log (❷) with the two stainless steel hose clamps (❸).
9. Slide the stainless steel rotor (❻) down the shaft so it just comes in contact with the carbon graphite flange (❶). Mark this "neutral" position on the shaft just in front of the stainless steel rotor with a marker or tape.
10. Using the stainless steel rotor (❻), compress the bellow (❹) the amount indicated on the bellow compression chart (the "neutral" mark on the shaft is used as a reference to measure the amount of compression). While keeping the bellow compressed, tighten the two set screws to secure the rotor to the shaft. Once these set screws are secured, a second pair of screws are stacked on top of the first to act as locking screws to prevent the lower screws from possibly backing away from the shaft.

BELLOW COMPRESSION CHART:

Shaft diameter	*Compression amount*
3/4" to 1 1/8" (22mm to 30mm)	3/4" (20mm)
1 1/4" to 2" (32mm to 55mm)	1" (25mm)
2 1/4" to 3 3/4" (60mm to 95mm)	1" (25mm)

Note: amount of compression may vary depending on motor mounts and shaft misalignment.

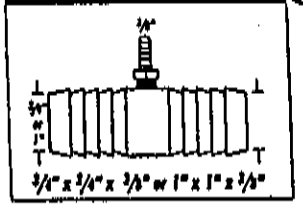
11. High speed seals with nylon hose barb fitting reference 11-A; Standard speed seals reference 11-B.

11-A. High speed seals with a nylon hose barb fitting require that water be plumbed into the seal to cool and lubricate the seal. There are three methods for plumbing water into the seal:

1. Remove the plug from heat exchanger and replace plug with a hose barb fitting (this plug would normally be used to drain water from the engine).Run a reinforced hose to the shaft seals nylon hose barb (3/8"). Secure both with hose clamps.

2. Cut into the exhaust line of the cooling system before hot water is discharged overboard. Fit t-adapter into line and plumb water into shaft seal nylon hose barb (3/8"), using reinforced hose. Secure all connections with hose clamps.

T-ADAPTER



T-KIT

Note: P.Y.I. T-adapter fittings or T-adapter kits (T-adapter, 6' reinforced hose, 4 hose clamps) are available for 3/4" or 1" internal hose diameters.

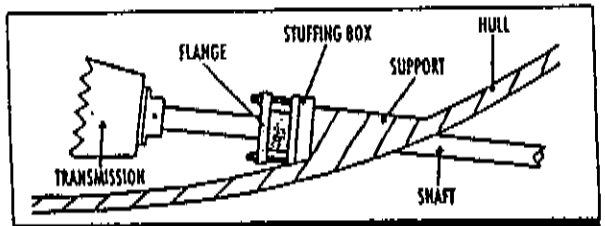
3. For keel cooled or in-line systems, water can be plumbed into the seal from an underwater scoop.

11-B. Standard speed seals. When a boat with a watertight (P.S.S.) Seal goes back in the water, there will be an air pocket trapped in the shaft log (stern tube). This air pocket must be vented when the boat is launched, so water can reach the face of the seal to help cool and lubricate it. To vent the air pocket, simply compress the bellow (push the carbon away from the stainless steel rotor with your hand) so that water fills the shaft log (stern tube). A small amount of water will enter the boat at this time and will stop as soon as you release the bellow, allowing the two faces to come back in contact.

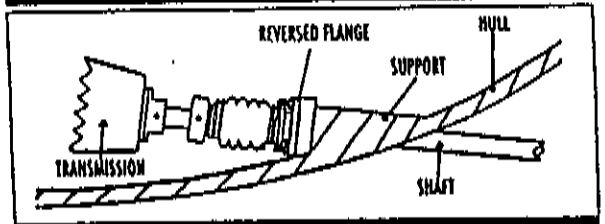
This procedure should be done every time the boat goes back in the water and is not required with high speed seals.

BOLT-ON OR RIGID STUFFING BOXES:

If your stuffing box is a bolt-on or rigid type, you will need to reverse the flange that was used to compress the packing. This flange will be bolted to the face of the bolt-on stuffing box and sealed with a gasket so no water can leak through. Once reversed, the bellow can be fit over the tube that was used to compress the packing. When completed, proceed with step #4 of instructions.



BEFORE



AFTER

THREADED STUFFING BOXES:

If your old stuffing box was threaded directly into ... hull, you will need to cover the threads with a liquid gasket material like "form-a gasket" to prevent the threads from cutting into the bellow. When completed, proceed with step #4 of instructions.

BREAK-IN PERIOD:

There is, on average, a 10 minute break-in period when the carbon graphite flange will polish the face of the stainless steel rotor. During this break-in period there will be a very fine black mist being emitted when shaft is turning at high R.P.M.'s.

TROUBLESHOOTING:

1. Spray or mist during operation:

Dimensions provided in the bellow compression chart are an average and should act as a guide. If you should experience any spray or misting during high speed operation (after break-in period), add an additional 1/8" compression to the bellow with the rotor and repeat until the spray has stopped.

2. Dripping while not operational:

If the seal leaks when the shaft is not turning, some foreign material such as grease or oil may be prohibiting the two faces from seating properly. To clean this foreign material from the two faces, insert a clean cloth rag between the carbon graphite and stainless steel rotor and rotate it around the shaft vigorously. As you do this, water will flush both faces of any impurities. Remove the rag from the seal and the leak should stop.

PYI INC.

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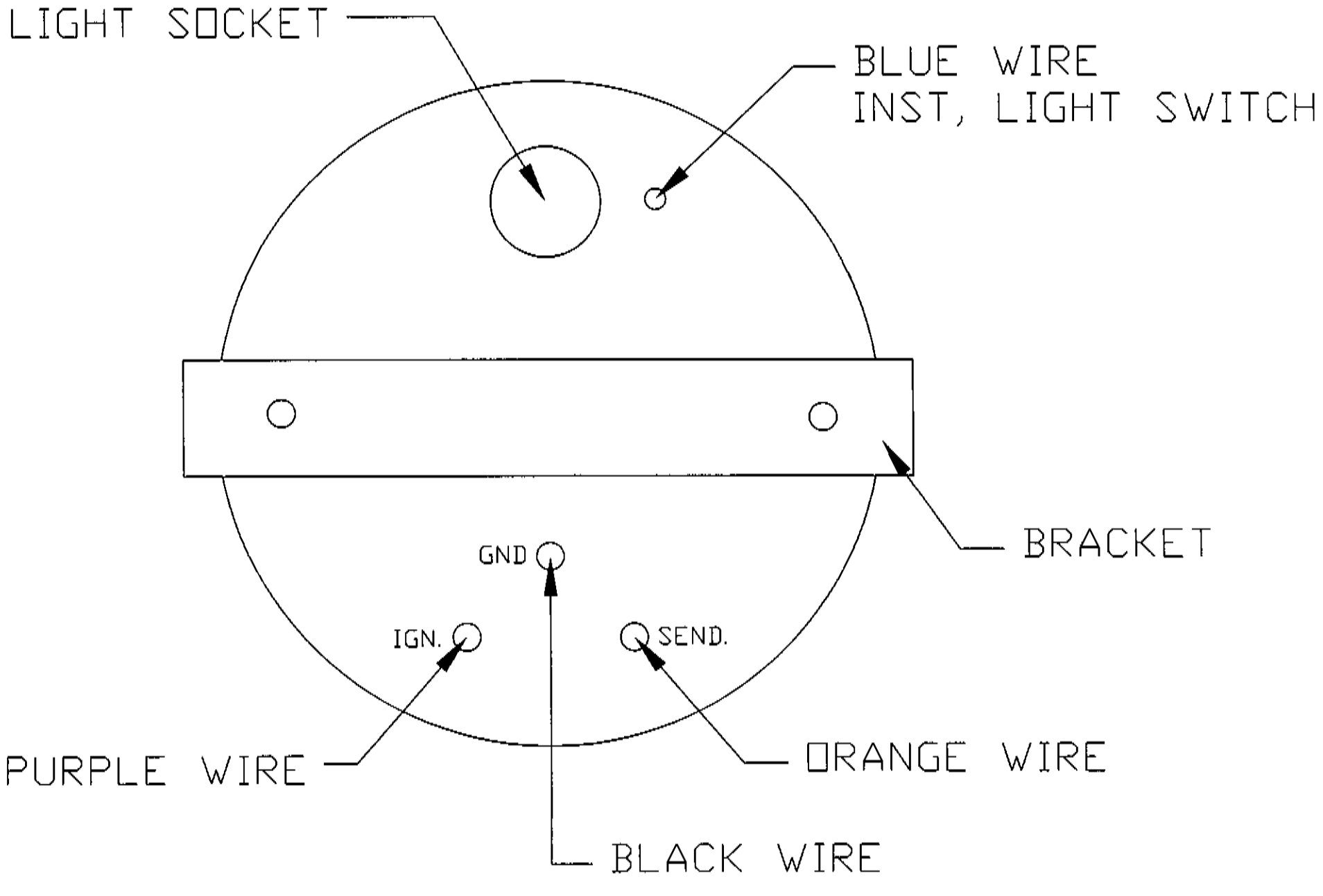
460 Tachometer



Stage	Component	Useq	PC	Description	UM	Net Quantity
	.....BB020025	30	5	H460-ENGINE CONTROL	EA	1.0000
56	256742	50	300	BUSS BAR #M449 - 10 GANG	EA	1.0000
34	312590	60	150	PANEL,ENGINE,"C"#12974-91160,H460	EA	1.0000
56	313010	80	150	CONTROL RIGHT HAND MV-2 BERKELEY #3	EA	1.0000
26	313173	35	150	CABLE, CONTROL CC172 3300-22'	EA	1.0000
26	313177	30	150	CABLE CONTROL 33C @20'	EA	1.0000
26	313185	70	150	CABLE BRAKE, 44386 MORSE	EA	1.0000
27	460210	10	600	CABLE TIES 8" BLACK W/EYE	EA	20.0000
27	466670	20	600	P/H PHIL #10 X 3/4" S/S T/A	EA	20.0000
	....BB030001	20	5	SHAFT INSTALLATION SUB ASSEMBLY	EA	1.0000
	.....BB030005	10	5	H460-SHAFT INSTALLATION	EA	1.0000
27	101130	80	105	CAULK 5200	TB	0.5000
26	316570	50	150	STRUT H-42 H-43 #SEF 4855	EA	1.0000
27	462290	30	600	F/H PHIL 3/8-16 X 3" S/S M/S	EA	4.0000
27	465110	10	600	NUT HEX 3/8-16 S/S H/N	EA	4.0000
27	469270	40	600	WASHER FLAT 3/8" S/S F/W	EA	4.0000
27	469510	20	600	WASHER LOCK 3/8" S/S L/W	EA	4.0000
	.....BB030015	20	5	H460-SHAFT THRU HULL MOUNTING	EA	1.0000
27	101130	70	105	CAULK 5200	TB	0.2500
26	310290	90	150	STERN BEARING (2-3/8 OD)	EA	1.0000
26	312971	60	150	SEAL,SHAFT,DRIPLESS,01-114-212	EA	1.0000
27	460370	20	600	CAR HD 3/8-16 X 2" S/S C/B	EA	2.0000
27	465110	10	600	NUT HEX 3/8-16 S/S H/N	EA	2.0000
27	469510	30	600	WASHER LOCK 3/8" S/S L/W	EA	2.0000
27	469610	40	600	WASHER NEO 3/8" S/S W/N/B 7/8 O	EA	2.0000
	.....BB030025	30	5	H460-SHAFT MOUNTING	EA	1.0000
26	316310	10	150	SHAFT,PROP, 1.25"X67.39" W/YANMAR C	EA	1.0000
96	316630	70	888	NUT - HEAVY - 1 1/4" PROP SHAFT	EA	1.0000
96	316640	40	888	NUT - JAM - 1 1/4" PROP SHAFT	EA	1.0000
96	333475	30	888	PROP. SHAFT KEY FOR 1 1/4" S/S SHAF	EA	1.0000
96	333480	20	888	PIN,PROPELLER SHAFT FOR 1 1/4" SHAF	EA	1.0000
27	460190	60	600	CABLE TIES 15" W/O EYE BLACK	EA	1.0000
	....BB040001	30	5	ENGINE COOLING SYSTEM SUB ASSEMBLY	EA	1.0000
	.....BB040005	10	5	H460-ENGINE COOLING	EA	1.0000
27	101130	110	105	CAULK 5200	TB	0.2500
26	286370	100	560	LABEL,THRUHULL,"ENGINE PICKUP"	EA	1.0000
26	352635	20	250	BRASS THRU HULL FITTING 1" #65-BN7-	EA	1.0000
26	352761	30	150	STRAINER, 1" LINE 18005	EA	1.0000
26	353193	120	250	CLAMP DG-20	EA	2.0000
26	353391	50	250	HOSE CLAMP #16	EA	4.0000
26	353877	60	250	BALL VALVE (1") BRASS #70-105-10	EA	1.0000
26	355353	80	250	BARB, PIPE TO HOSE, PVC #8003 (1")	EA	1.0000
26	355821	130	250	ELBOW 90 DEG.STR/SLL BR. 1"	EA	1.0000
26	358197	90	250	HOSE SHIELDFLEX 1" TYPE 100-0346	FT	5.0000

Stage	Component	Useq	PC	Description	UM	Net Quantity
27	466670	10	600	P/H PHIL #10 X 3/4" S/S T/A	EA	4.0000
27	467010	140	600	P/H PHIL #8 X 7/8 S/S T/A	EA	3.0000
26	......P4621	160	999	NIPPLE,1"X4"BRASS,H420	EA	1.0000
	.....BB040015	20	5	H460-COOLANT ANTI SIPON	EA	1.0000
26	311850	50	150	VACUUM BREAK 1/8" 28.5'30'33.5'40'	EA	1.0000
26	311870	40	550	SYPHON VENTED LOOP 1" X 180 DEG.	EA	1.0000
10	359004	20	250	COUPLING,HALF,1/8"S/S 4464K72	EA	1.0000
10	706393	30	240	STAINLESS,1/8X3/4,"TRUE BAR"304 SS	FT	0.6660
10	707700	10	240	TUBING, 1" 16GA 304 X 20'2"	FT	1.3330
26	353391	10	250	HOSE CLAMP #16	EA	4.0000
26	358197	20	250	HOSE SHIELDFLEX 1" TYPE 100-0346	FT	1.5000
26	358197	30	250	HOSE SHIELDFLEX 1" TYPE 100-0346	FT	2.0000
27	466350	70	600	P/H PHIL #14 X 1" S/S T/A	EA	2.0000
	.....BB040025	30	5	H460-COOLANT OVER FLOW	EA	1.0000
26	312000	10	883	OVERFLO BOTTLE W/HOSE (ENGINE)	EA	1.0000
27	466350	20	600	P/H PHIL #14 X 1" S/S T/A	EA	2.0000
	....BB050001	40	5	ENGINE FUEL SUPPLY SUB ASSEMBLY	EA	1.0000
	.....BB050005	10	5	H460-ENGINE FUEL SYSTEM	EA	1.0000
56	253826	10	300	PANEL, UP7-WF,7 POSITION TANK DISPL	EA	1.0000
27	257714	30	300	TERMINAL C1614-10R 450/LB BLU	EA	2.0000
26	318430	250	150	NEOPREME RUBBER 60 1/4"	FT	16.0000
26	353157	70	250	FUEL VENT #503-4 (WATER)	EA	1.0000
26	353355	90	250	HOSE CLAMP #10	EA	4.0000
26	353427	100	250	HOSE CLAMP #24	EA	4.0000
26	354260	140	999	FITTING, 5/16"BARBX3/8"MPT BRASS	EA	2.0000
26	354633	210	200	FUEL PLUG BRASS 1/4"	EA	4.0000
26	355317	130	250	BARB, PIPE TO HOSE PVC #8001 (1/2"	EA	1.0000
31	356181	120	200	DECK PLATE FUEL (DIESEL) GREEN	EA	1.0000
26	357101	160	270	BRACKET,"J"HOOK,FUEL,H/DWN,H46	EA	3.0000
26	357819	60	250	HOSE 5/8 FUEL SAEJ1527A2 TYPE A	FT	3.0000
26	358251	80	250	HOSE FUEL FILL 1 1/2" 375-1126 TY A	FT	2.0000
27	460210	20	600	CABLE TIES 8" BLACK W/EYE	EA	20.0000
27	466670	50	600	P/H PHIL #10 X 3/4" S/S T/A	EA	20.0000
28	656700	40	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	32.0000
26	......P4616	240	999	TANK,FUEL,93GAL, H460	EA	1.0000
	.....BB050015	20	5	H460-FUEL FILTER MOUNTING	EA	1.0000
26	352512	50	999	FILTER, RACOR 660R-RAC-02	EA	1.0000
26	353319	10	250	HOSE CLAMPS #6 NARROW BAND	EA	10.0000
26	354260	60	999	FITTING, 5/16"BARBX3/8"MPT BRASS	EA	2.0000
26	355749	20	250	ELBOW 90 DEGREE STR/ELL BR. 3/8"	EA	2.0000
26	357801	30	250	HOSE, FUEL, 5/16" TYPE "A"	FT	23.0000
26	357801	40	250	HOSE, FUEL, 5/16" TYPE "A"	FT	18.0000
27	461410	80	600	F/H PHIL #10 X 1 1/4" TEAK WOOD W/S	EA	3.0000
27	466710	70	600	P/H PHIL #14 X 1 1/4" S/S T/A	EA	2.0000

Stage	Component	Useq	PC	Description	UM	Net Quantity
	....BB060001	50	5	ENGINE EXHAUST SUB ASSEMBLY	EA	1.0000
	.....BB06005	10	5	H460-ENGINE EXHAUST	EA	1.0000
26	353265	60	250	CLAMP #DG56 ALUM. 27P	EA	3.0000
26	353535	40	250	HOSE CLAMP # 52	EA	8.0000
26	356095	50	999	MUFFLER, TO PRINT XH HUN2180 H41	EA	1.0000
26	358503	20	250	HOSE 3" CORRIGATED EXHAUST TYPE 20	FT	4.0000
26	358503	30	250	HOSE 3" CORRIGATED EXHAUST TYPE 20	FT	13.0000
10	358845	10	150	TUBE GLASS 3" X 1/4 S-500	FT	0.6500

H460 ENGINE ASSEMBLY PARTS LIST CONT'

HUNTER

NONE

460B056F

ENGINEERING DEPT

FRESH WATER SYSTEM OPERATION:

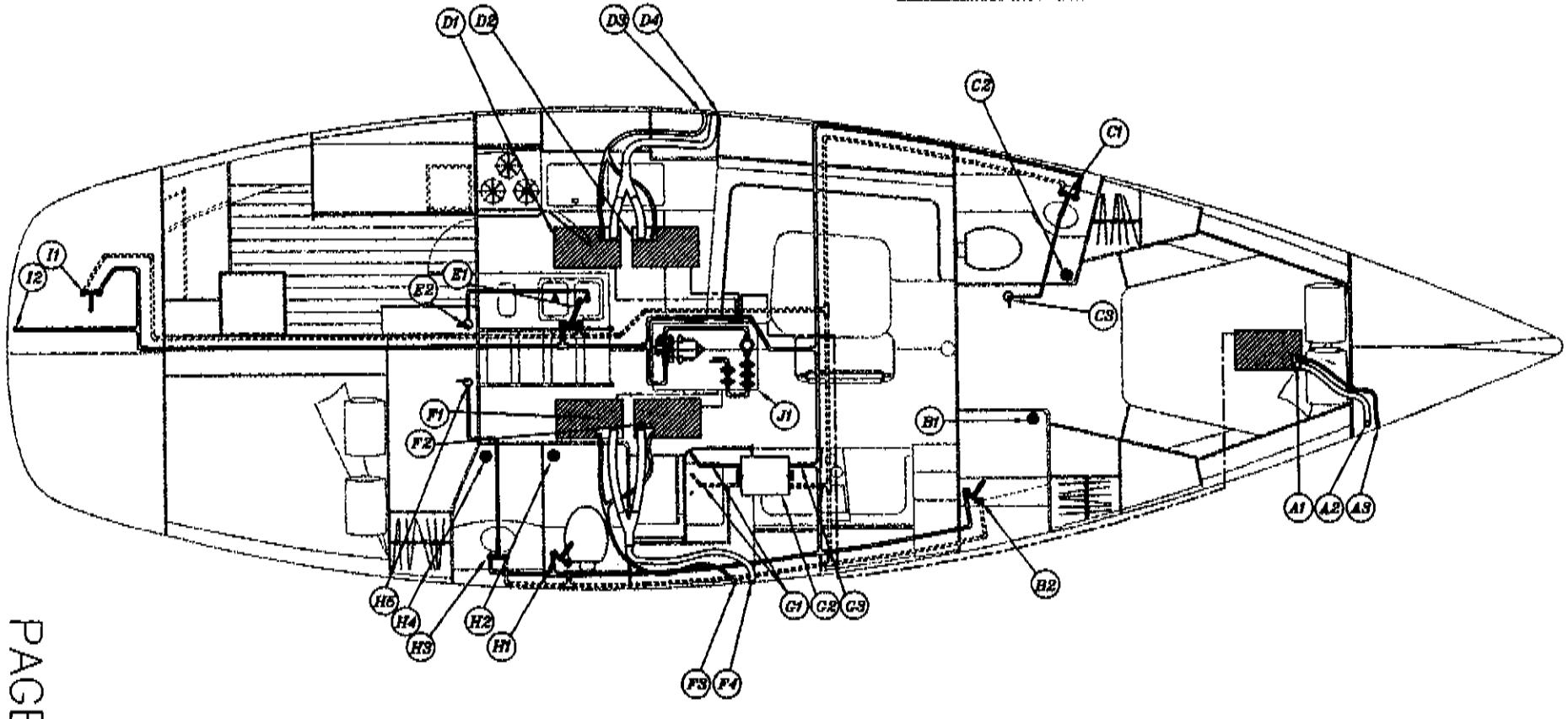
① FILL TANK/S WITH FRESH WATER (SEE PAGE 60 FOR FILL LOCATIONS)
② OPEN DESIRED MANIFOLD VALVE/S (SEE PAGE 57B-1 FOR MANIFOLD LOCATION)
③ TURN HOUSE BATTERY SELECTOR SWITCH TO DESIRED HOUSE BATTERY
"FLIP" MAIN PANEL BREAKERS @ BATTERY SWITCH TO THE "ON" POSITION
(SEE PAGE 63A-8 FOR SWITCH LOCATION)
④ TURN ON "D.C. MAIN" BREAKER ON MAIN BREAKER PANEL
⑤ TURN ON "WATER PRESSURE" BREAKER ON MAIN BREAKER PANEL
⑥ "HOT WATER" IS ATTAINABLE BASICALLY IN TWO WAYS...
Ⓐ BY HEATING THE WATER THRU THE ENGINE EXCHANGER UNIT
Ⓑ BY SUPPLYING 110V.A.C. BY "DOCKSIDE SHORE POWER" OR GENERATOR POWER.
⑦ TO HEAT BY "ENGINE" SEE PAGE 55 FOR ENGINE OPERATING INST.
NOTE: WHEN COOLANT IS INSTALLED, BLEED AIR FROM HEAT EXCHANGER LINES TO WATER HEATER. CRANK ENGINE, OPEN BLEEDER VALVE (SEE PAGE 55A) UNTIL AIR IS GONE FROM LINES
⑧ TO HEAT BY "SHORE POWER"
Ⓐ HOOK UP SHORE POWER CABLE/S
Ⓑ TURN ON A.C. MAIN BREAKER ON MAIN BREAKER PANEL
Ⓒ TURN ON "WATER HEATER BREAKER" ON MAIN BREAKER PANEL
⑨ TO HEAT BY "GENERATOR POWER"... SEE PAGE 63E-1 FOR GENERATOR OPER. INSTRUCTIONS
THEN FOLLOW STEPS #8 B & C (THIS PAGE) UNDER "TO HEAT BY SHORE POWER".

NOTE: AS WITH ALL WATER HEATERS, BE SURE WATER TANK IS FULL BEFORE APPLYING POWER TO UNIT, TO AVOID DAMAGE TO HEATING ELEMENT

GENERATOR IS OPTIONAL

H460 FRESH WATER OPERATING INST.	
4008057A	NONE
ENGINEERING DEPT	11/21/98

HUNTER



46050578-1	NONE
ENGINEERING DEPT.	11/12/98

H460 FRESH WATER SYSTEM LAYOUT (TRI CABIN)

HUNTER

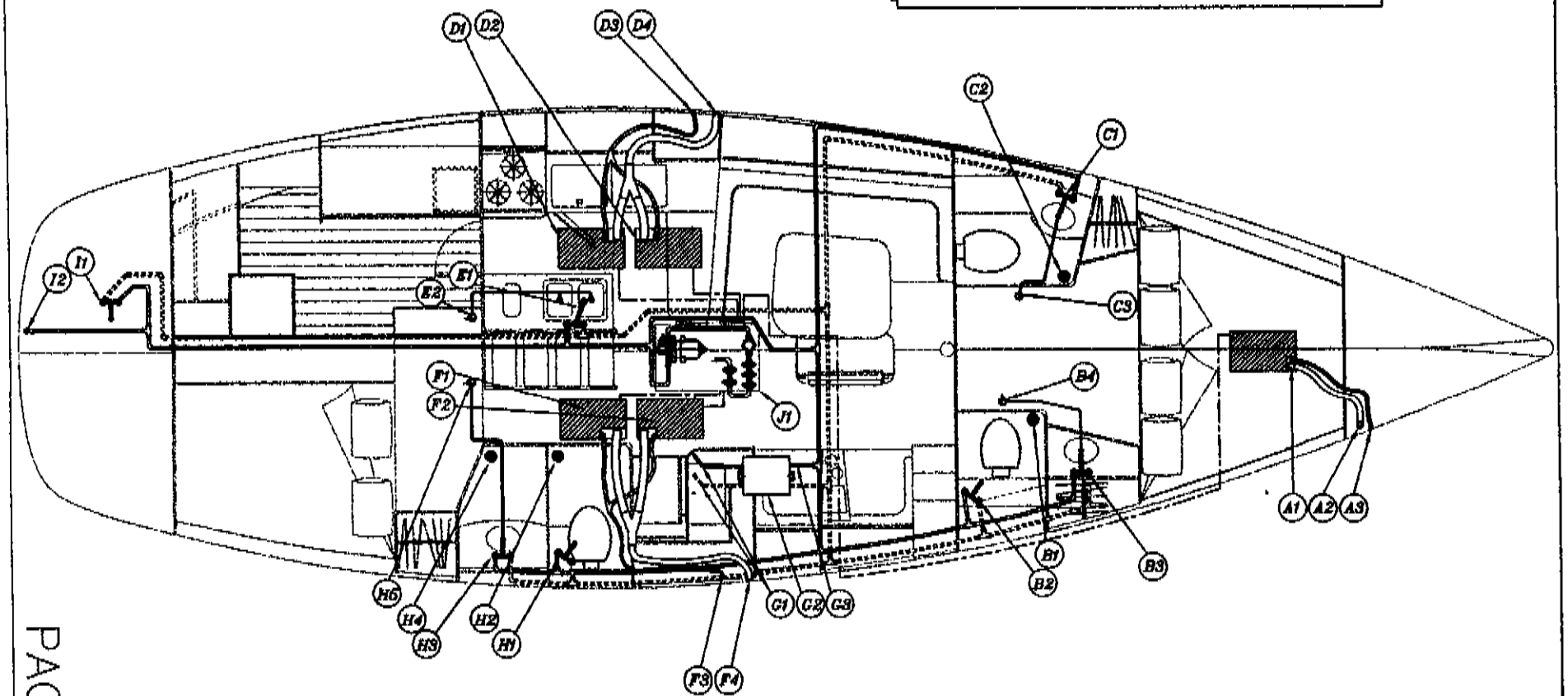
FRESH WATER SYSTEM LAYOUT LIST

Components	Code	Description
FWD WATER TANK COMPONENTS	A1	FWD WATER TANK (66 GALLONS/249 LITERS)
	A2	TANK FILL LOCATION (DECK FITTING)
	A3	TANK FILL VENT LOCATION (HULL FITTING)
FWD STBD. VANITY COMPONENTS	B1	FWD STBD. (OPTIONAL) SHOWER DRAIN (SEE PG. 57B-6)
	B2	FWD STBD. SHOWER FAUCET
FWD PORT HEAD COMPONENTS	C1	FWD PT. VANITY FAUCET
	C2	FWD PT. SOLE DRAIN (SEE PG. 57B-6)
	C3	FWD PT. VANITY SINK DRAIN (SEACOCK FITTING)
PORT WATER TANKS COMPONENTS	D1	PORT AFT WATER TANK (36 GALLONS/132 LITERS)
	D2	PORT FWD WATER TANK (18 GALLONS/68 LITERS)
	D3	PORT FWD AND PORT AFT WATER TANK FILL VENT (VENTED STANCHION/DECK HDWR.) **(ONE VENT LOCATION FOR BOTH TANKS)
	D4	PORT FWD AND PORT AFT WATER TANK FILL LOCATIONS (DECK FITTING) **(ONE FILL LOCATION FOR BOTH TANKS)
GALLEY SINK COMPONENTS	E1	GALLEY FAUCET
	E2	GALLEY SINK DRAIN (SEACOCK FITTING)
STBD. WATER TANKS COMPONENTS	F1	AFT STBD. WATER TANK (21 GALLONS/79LITERS)
	F2	FWD STBD. WATER TANK (45 GALLONS/170 LITERS)
	F3	STBD. FWD AND STBD. AFT WATER TANK FILL VENT (VENTED STANCHION/DECK HDWR.) **(ONE VENT LOCATION FOR BOTH TANKS)
	F4	STBD. FWD AND STBD. AFT WATER TANK FILL LOCATION (DECK FITTING) **(ONE FILL LOCATION FOR BOTH TANKS)
WATER HEATER COMPONENTS	G1	WATER HEATER HEAT EXCHANGER LINES TO ENGINE
	G2	WATER HEATER (11 GALLONS/41.7 LITERS)
	G3	IN LINE CHECK VALVE (PREVENTS HOT WATER BACK FILL)
AFT HEAD COMPONENTS	H1	AFT HEAD SHOWER FAUCET
	H2	AFT HEAD SHOWER DRAIN (SEE PG. 57B-6)
	H3	AFT HEAD VANITY FAUCET
	H4	AFT VANITY SHOWER DRAIN (SEE PG. 57B-6)
	H5	AFT HEAD VANITY SINK DRAIN (SEACOCK FITTING)
TRANSOM SHOWER/ SHORE WATER COMPONENTS	I1	TRANSOM SHOWER FAUCET
	I2	SHORE WATER INLET FITTING
MANIFOLD COMPARTMENT COMPONENTS	J1	SEE PAGE 57B-5 FOR THE WATER MANIFOLD COMPARTMENT LAYOUT

HUNTER

H460 FRESH WATER SYSTEM LAYOUT LIST (TIM CARL)

460B057B-2 | NONE | ENGINEERING DEPT | 11/21/98



H460 FRESH WATER SYSTEM LAYOUT (QUAD CABIN)	
460B0578-3	NONE
ENGINEERING DEPT.	11/12/96

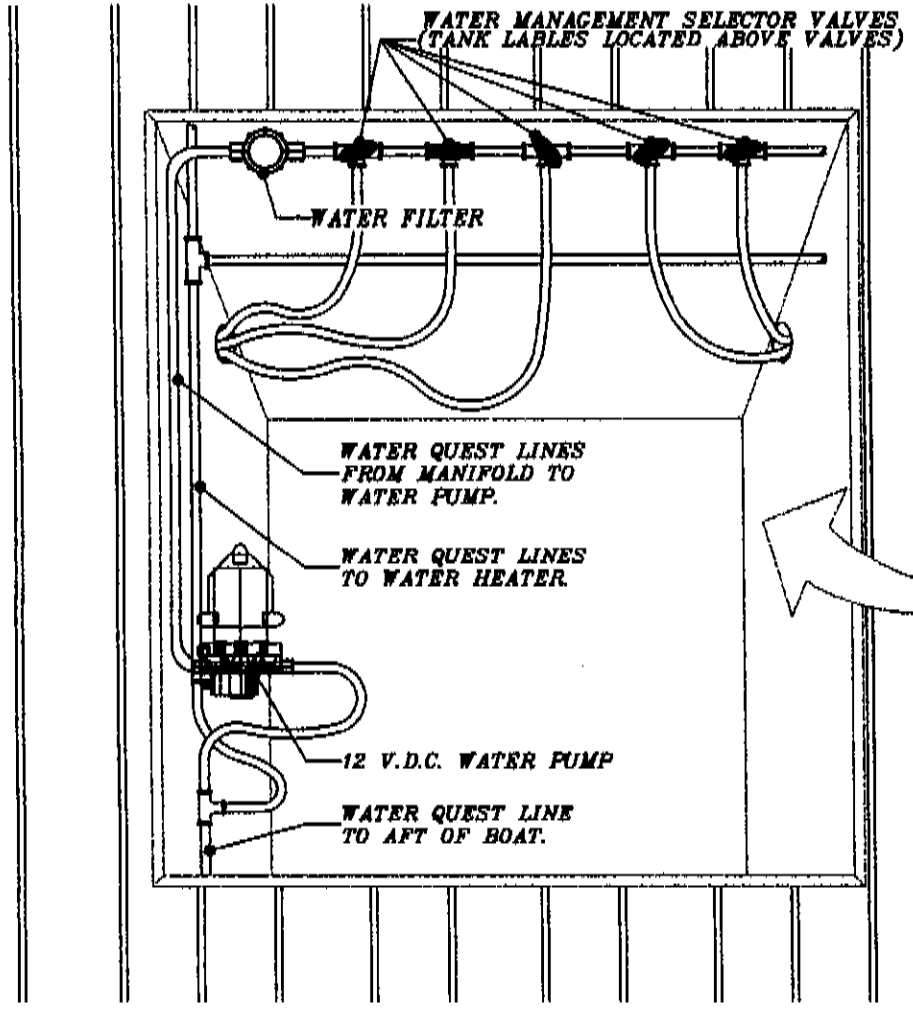
HUNTER

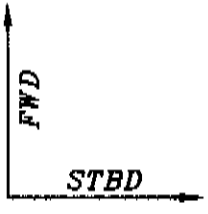
FRESH WATER SYSTEM LAYOUT LIST

Components	Item	Description
FWD WATER TANK COMPONENTS	A1	FWD WATER TANK (66 GALLONS/249 LITERS)
	A2	TANK FILL LOCATION (DECK FITTING)
	A3	TANK FILL VENT LOCATION (HULL FITTING)
FWD STBD. VANITY COMPONENTS	B1	FWD STBD. SHOWER DRAIN (SEE PG. 57B-6)
	B2	FWD STBD. SHOWER FAUCET
	B3	FWD STBD. VANITY FAUCET (OPT.)
	B4	FWD STBD. VANITY SINK DRAIN (SEACOCK FITTING)
FWD PORT HEAD COMPONENTS	C1	FWD PT. VANITY/SHOWER FAUCET
	C2	FWD PT. SHOWER DRAIN (SEE PG. 57B-6)
	C3	FWD PT. VANITY SINK DRAIN (SEACOCK FITTING)
PORT WATER TANKS COMPONENTS	D1	PORT AFT WATER TANK (36 GALLONS/132 LITERS)
	D2	PORT FWD WATER TANK (18 GALLONS/68 LITERS)
	D3	PORT FWD AND PORT AFT WATER TANK FILL VENT (VENTED STANCHION/DECK HDWR.) **(ONE VENT LOCATION FOR BOTH TANKS)
	D4	PORT FWD AND PORT AFT WATER TANK FILL LOCATIONS (DECK FITTING) **(ONE FILL LOCATION FOR BOTH TANKS)
GALLEY SINK COMPONENTS	E1	GALLEY FAUCET
	E2	GALLEY SINK DRAIN (SEACOCK FITTING)
STBD. WATER TANKS COMPONENTS	F1	AFT STBD. WATER TANK (21 GALLONS/79LITERS)
	F2	FWD STBD. WATER TANK (45 GALLONS/170 LITERS)
	F3	STBD. FWD AND STBD. AFT WATER TANK FILL VENT (VENTED STANCHION/DECK HDWR.) **(ONE VENT LOCATION FOR BOTH TANKS)
	F4	STBD. FWD AND STBD. AFT WATER TANK FILL LOCATION (DECK FITTING) **(ONE FILL LOCATION FOR BOTH TANKS)
WATER HEATER COMPONENTS	G1	WATER HEATER HEAT EXCHANGER LINES TO ENGINE
	G2	WATER HEATER (11 GALLONS/41.7 LITERS)
	G3	IN LINE CHECK VALVE (PREVENTS HOT WATER BACK FILL)
AFT HEAD COMPONENTS	H1	AFT HEAD SHOWER FAUCET
	H2	AFT HEAD SHOWER DRAIN (SEE PG. 57B-6)
	H3	AFT HEAD VANITY FAUCET
	H4	AFT VANITY SHOWER DRAIN (SEE PG. 57B-6)
	H5	AFT HEAD VANITY SINK DRAIN (SEACOCK FITTING)
TRANSOM SHOWER/ SHORE WATER COMPONENTS	I1	TRANSOM SHOWER FAUCET
	I2	SHORE WATER INLET FITTING
MANIFOLD COMPARTMENT COMPONENTS	J1	SEE PAGE 57B-5 FOR THE WATER MANIFOLD COMPARTMENT LAYOUT

HUNTER

H460 FRESH WATER SYSTEM LAYOUT LIST (QUAD CAB.)
460B0057B-4
NONE
11/21/96
ENGINEERING DEPT



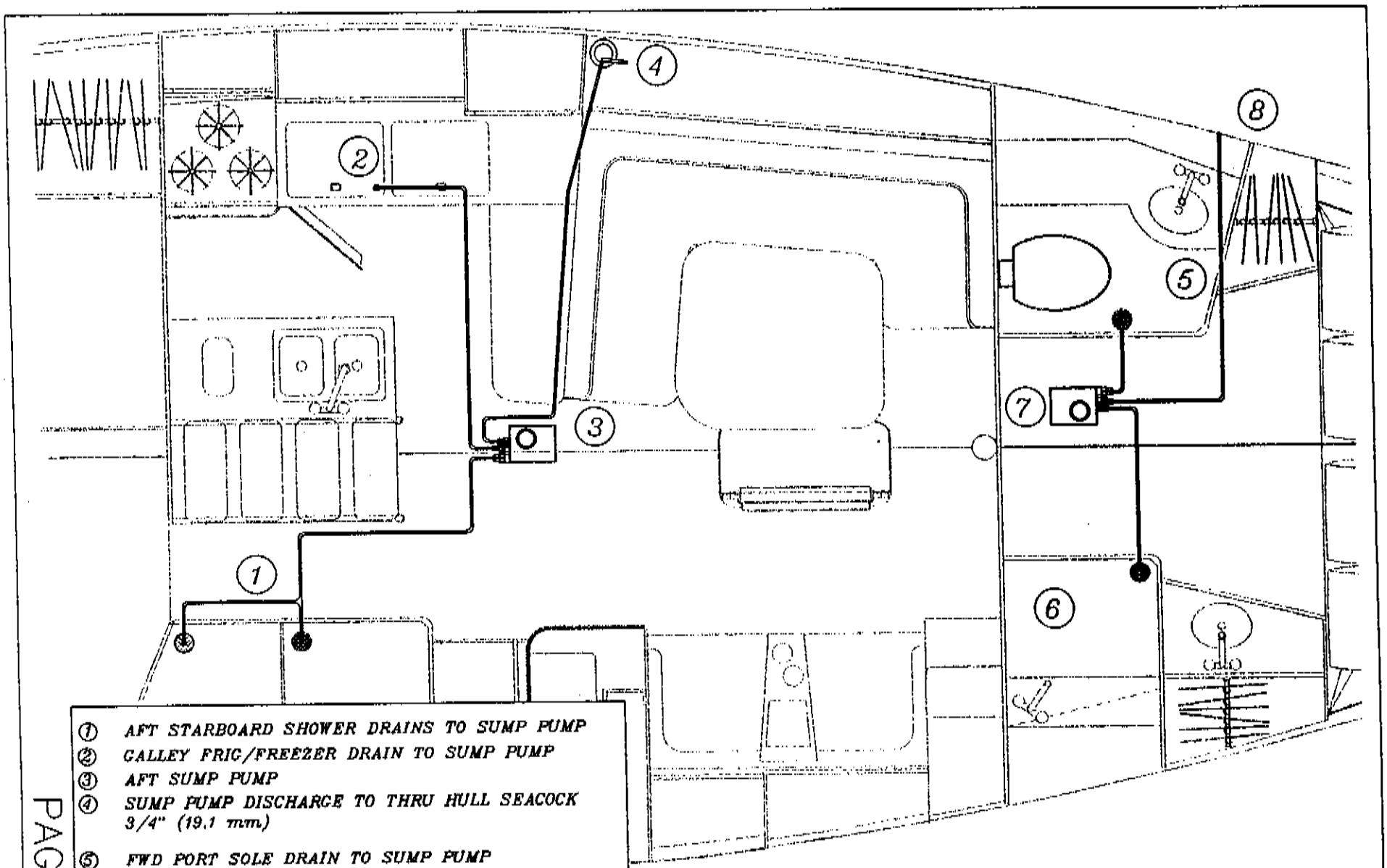


MANIFOLD COMPARTMENT LOCATED FORWARD OF COMPANIONWAY LADDER.

460 WATER MANIFOLD COMPARTMENT LAYOUT

460B057B-5	NONE
ENGINEERING DEPT.	11/23/98

HUNTER 46



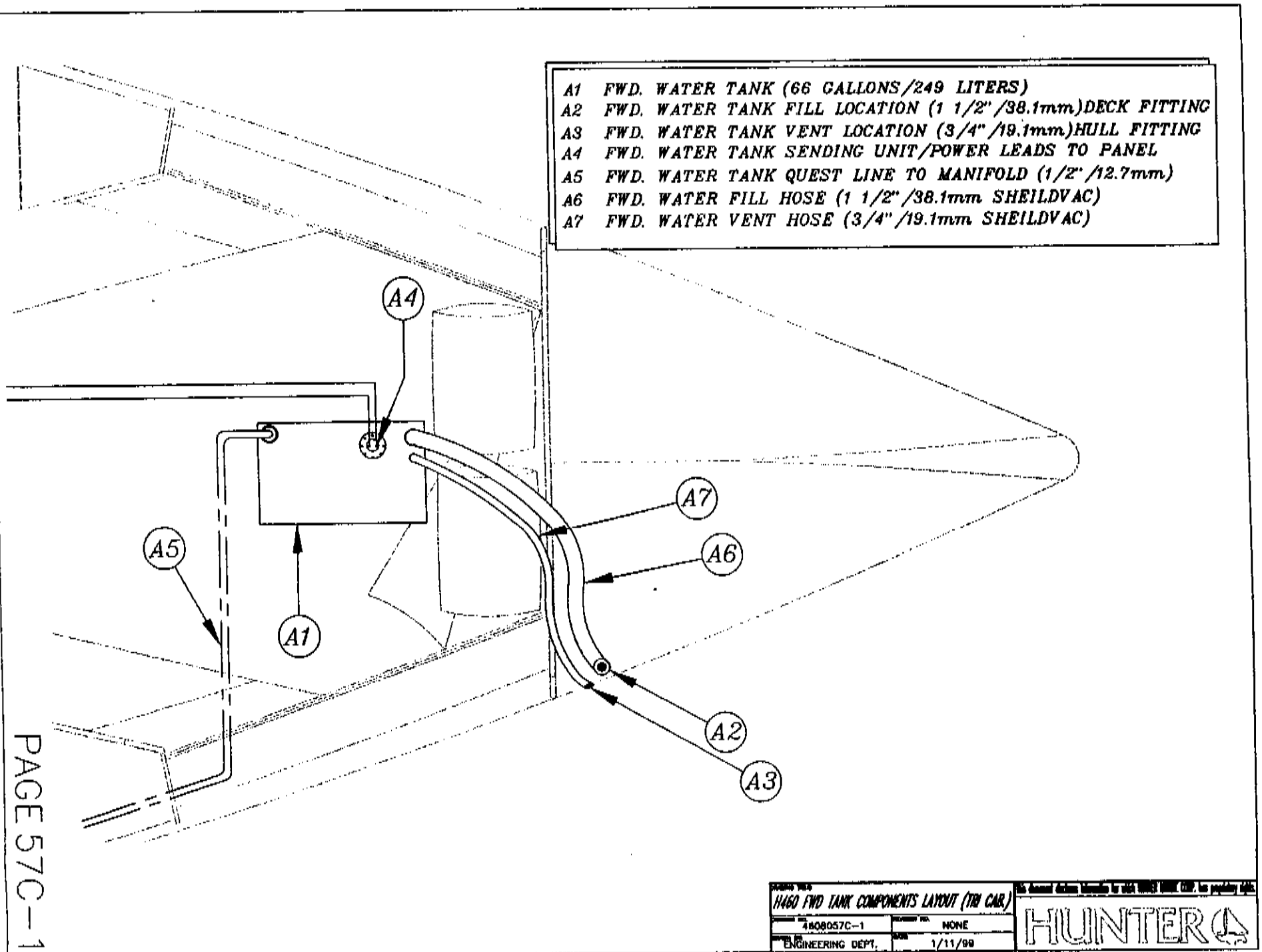
① AFT STARBOARD SHOWER DRAINS TO SUMP PUMP
② GALLEY FRIG/FREEZER DRAIN TO SUMP PUMP
③ AFT SUMP PUMP
④ SUMP PUMP DISCHARGE TO THRU HULL SEACOCK 3/4" (19.1 mm)
⑤ FWD PORT SOLE DRAIN TO SUMP PUMP
⑥ FWD STARBOARD SHOWER DRAIN TO SUMP PUMP
⑦ FWD SUMP PUMP
⑧ SUMP PUMP DISCHARGE TO THRU HULL 3/4" (19.1 mm)

SEE PAGE 59D FOR INFORMATION

H460 SUMP PUMP SYSTEM LAYOUT

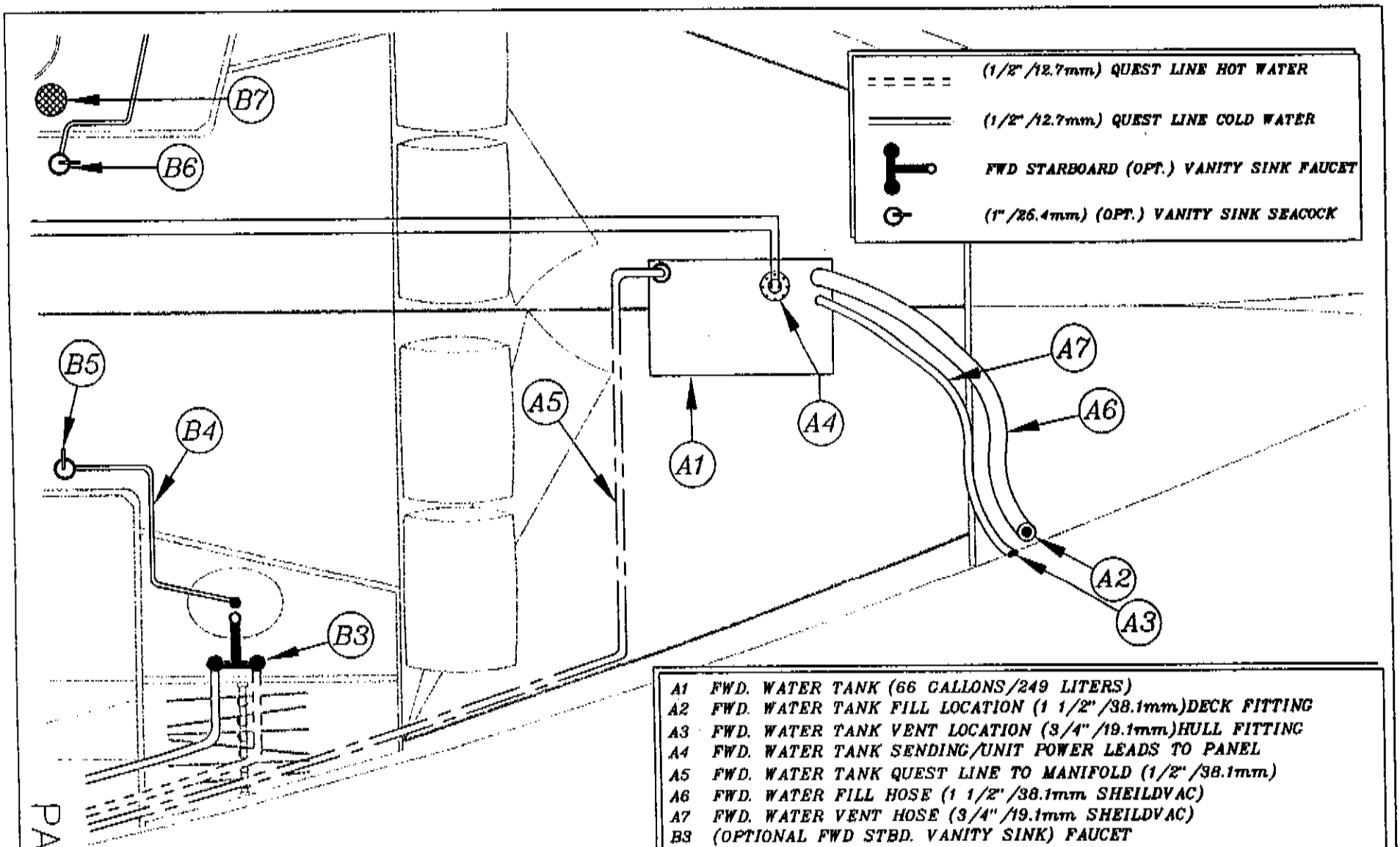
46080578-6	NONE
ENGINEERING DEPT.	1/7/99

HUNTER



H460 FWD TANK COMPONENTS LAYOUT (TRI CAB)	
4808057C-1	NONE
ENGINEERING DEPT.	1/11/99

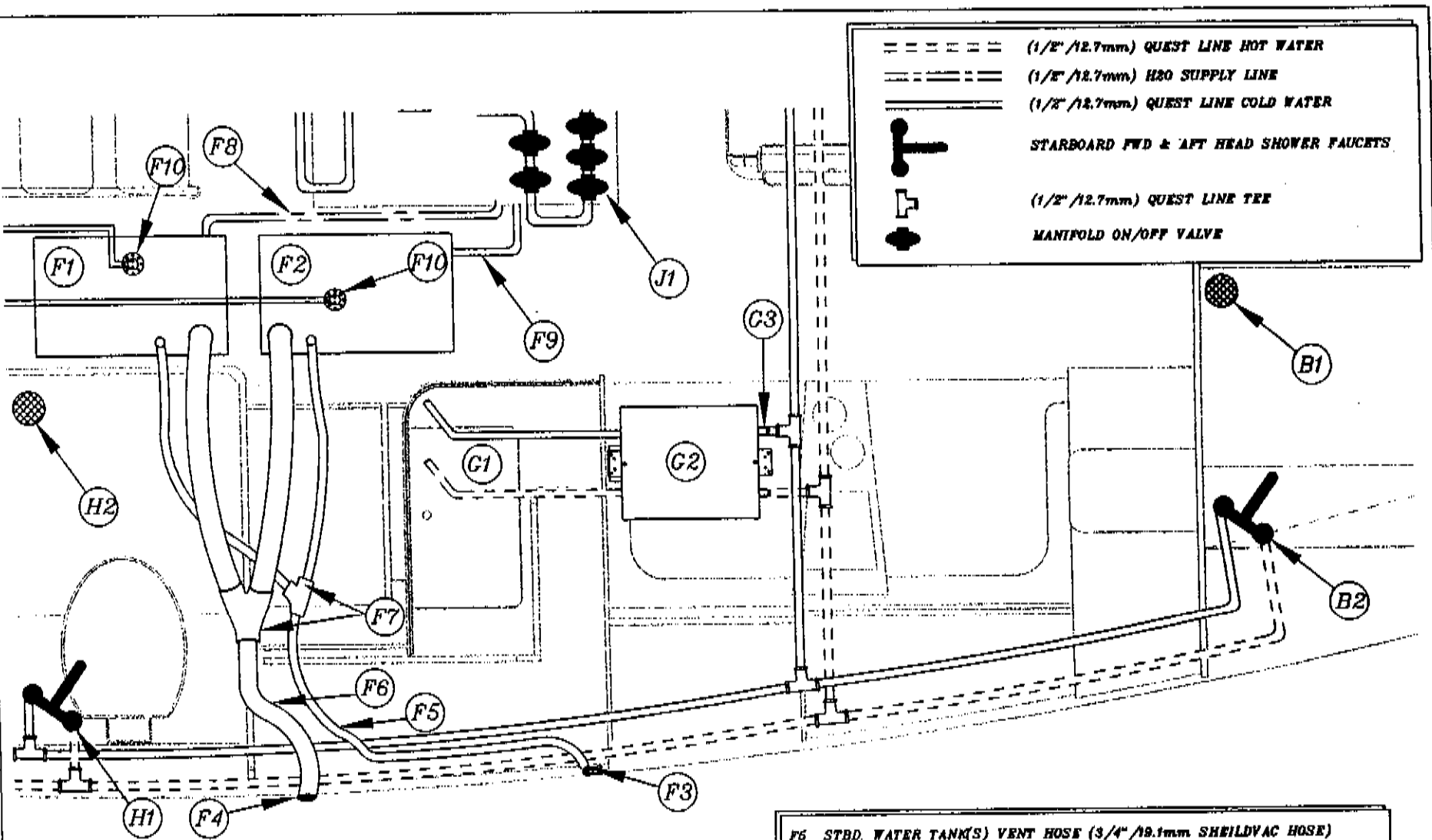
HUNTER



A1	FWD. WATER TANK (66 GALLONS/249 LITERS)
A2	FWD. WATER TANK FILL LOCATION (1 1/2" /38.1mm)DECK FITTING
A3	FWD. WATER TANK VENT LOCATION (3/4" /19.1mm)HULL FITTING
A4	FWD. WATER TANK SENDING/UNIT POWER LEADS TO PANEL
A5	FWD. WATER TANK QUEST LINE TO MANIFOLD (1/2" /38.1mm)
A6	FWD. WATER FILL HOSE (1 1/2" /38.1mm SHEILDVAC)
A7	FWD. WATER VENT HOSE (3/4" /19.1mm SHEILDVAC)
B3	(OPTIONAL FWD STBD. VANITY SINK) FAUCET
B4	(OPT. FWD. STBD. VANITY SINK) DRAIN HOSE (1" /25.4mm SHEILDVAC)
B5	(OPTIONAL FWD. STBD. VANITY SINK) DISCHARGE SEACOCK (1" /25.4mm)
B6	FWD. PORT VANITY SINK DISCHARGE SEACOCK (1" /25.4mm)
B7	FWD. PT. HEAD SHOWER DRAIN (SEE PG. 57B-6 FOR INFO)

1460 FWD H20 TANK COMPONENTS LAYOUT (QUAD CAB)	
46080570-2	NONE
ENGINEERING DEPT.	1/11/99

HUNTER 46



B1 FWD. STBD. VANITY SHOWER FAUCET DRAIN (SEE PG 57B-6 FOR INFO)
B2 FWD. STBD. VANITY SHOWER FAUCET
J1 WATER MANIFOLD ACCESS COMPARTMENT (SEE PG 57B-6 FOR INFO)
C1 WATER HEATER HEAT EXCHANGE LINES TO ENGINE
C2 WATER HEATER (11 GALLONS/41.7 LITERS)
C3 IN LINE CHECK VALVE (PREVENTS HOT WATER BACK FILL)
F1 STBD. AFT WATER WATER TANK (36 GALLONS/132 LITERS)
F2 STBD. FWD. WATER WATER TANK (18 GALLONS/68 LITERS)
F3 STBD. WATER TANKS VENT LOCATION (VENTED STANCHION DECK HARDWARE) (3/4" /19.1mm) NOTE: ONE LOCATION VENTS BOTH TANKS
F4 STBD. WATER TANKS FILL LOCATION (1 1/2" /38.1mm.)DECK FITTING NOTE: ONE LOCATION FILLS BOTH TANKS

F5 STBD. WATER TANK(S) VENT HOSE (3/4" /19.1mm SHEILDVAC HOSE)
F6 STBD. WATER TANK(S) FILL HOSE (1 1/2" /38.1mm SHEILDVAC HOSE)
F7 TANK FILL/VENT "Y".
F8 STBD. AFT WATER TANK QUEST LINE TO MANIFOLD (1/2" /38.1mm.)
F9 STBD. FWD. WATER TANK QUEST LINE TO MANIFOLD (1/2" /38.1mm.)
F10 STBD. FWD/AFT. WATER TANK SENDING UNITS
H1 AFT STBD. HEAD SHOWER FAUCET
H2 AFT STBD. HEAD SHOWER DRAIN (SEE PG 57B-6 FOR INFO)

H460 FWD STARBOARD H2O LAYOUT

46060570	NONE
ENGINEERING DEPT.	1/1199

HUNTER

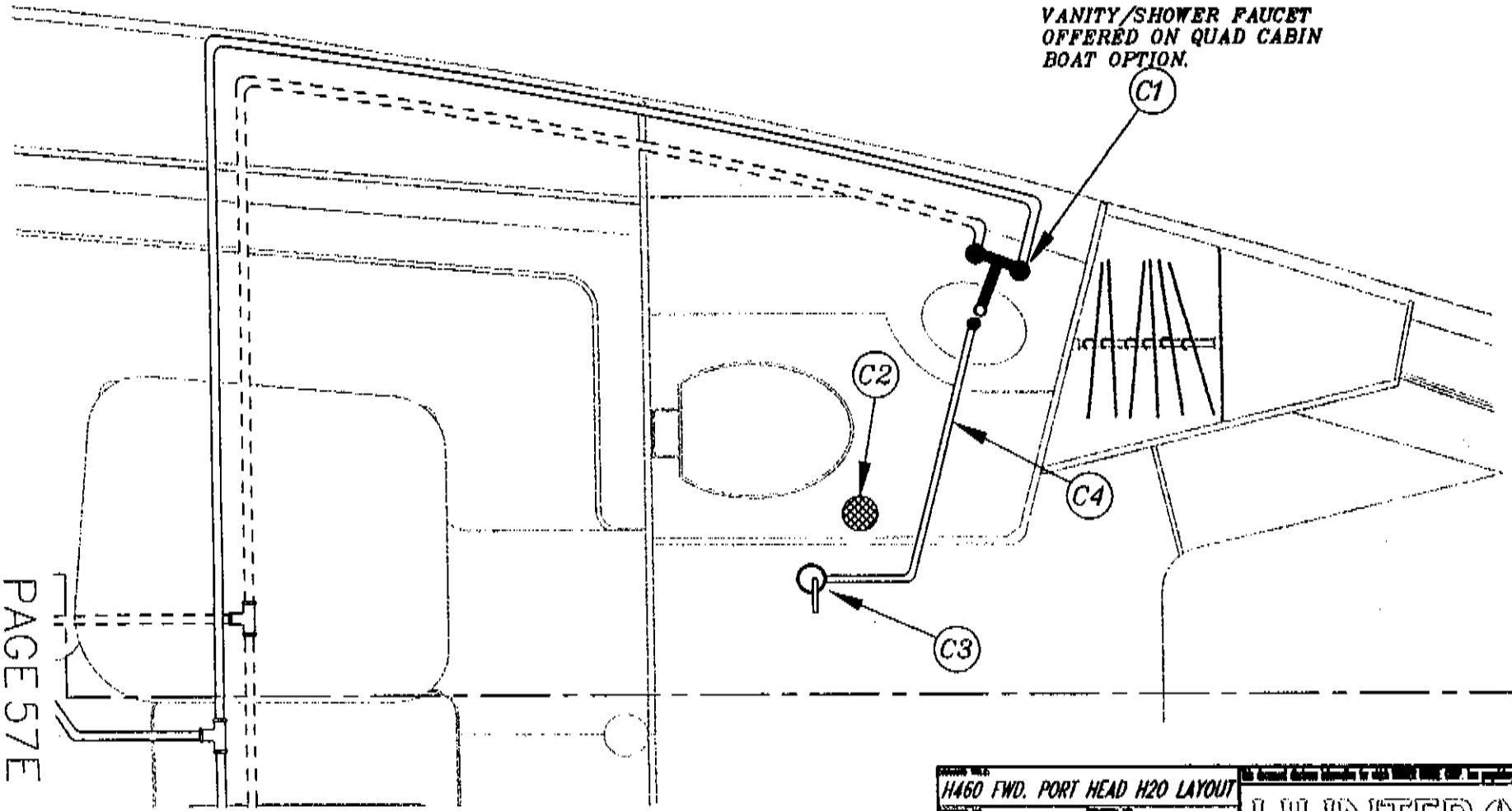
= = = = = = = =	1/2"/12.7mm) QUEST LINE HOT WATER
———	(1/2"/12.7mm) QUEST LINE COLD WATER
	(1/2"/12.7mm) QUEST LINE TEE
	(1"/25.4) FWD PORT HEAD VANITY SEACOCK
	FWD PORT HEAD SHOWER & VANITY FAUCETS

C1 FWD. PORT HEAD VANITY/SHOWER FAUCET (SHOWER OPTL.)

C2 FWD. PORT HEAD SHOWER DRAIN (SEE PG 57B-6 FOR INFO)

C3 FWD. PORT HEAD VANITY SINK DISCHARGE SEACOCK (1"/25.4mm)

C4 FWD. PORT HEAD VANITY SINK DRAIN HOSE (1"/25.4mm SHEILDVAC)



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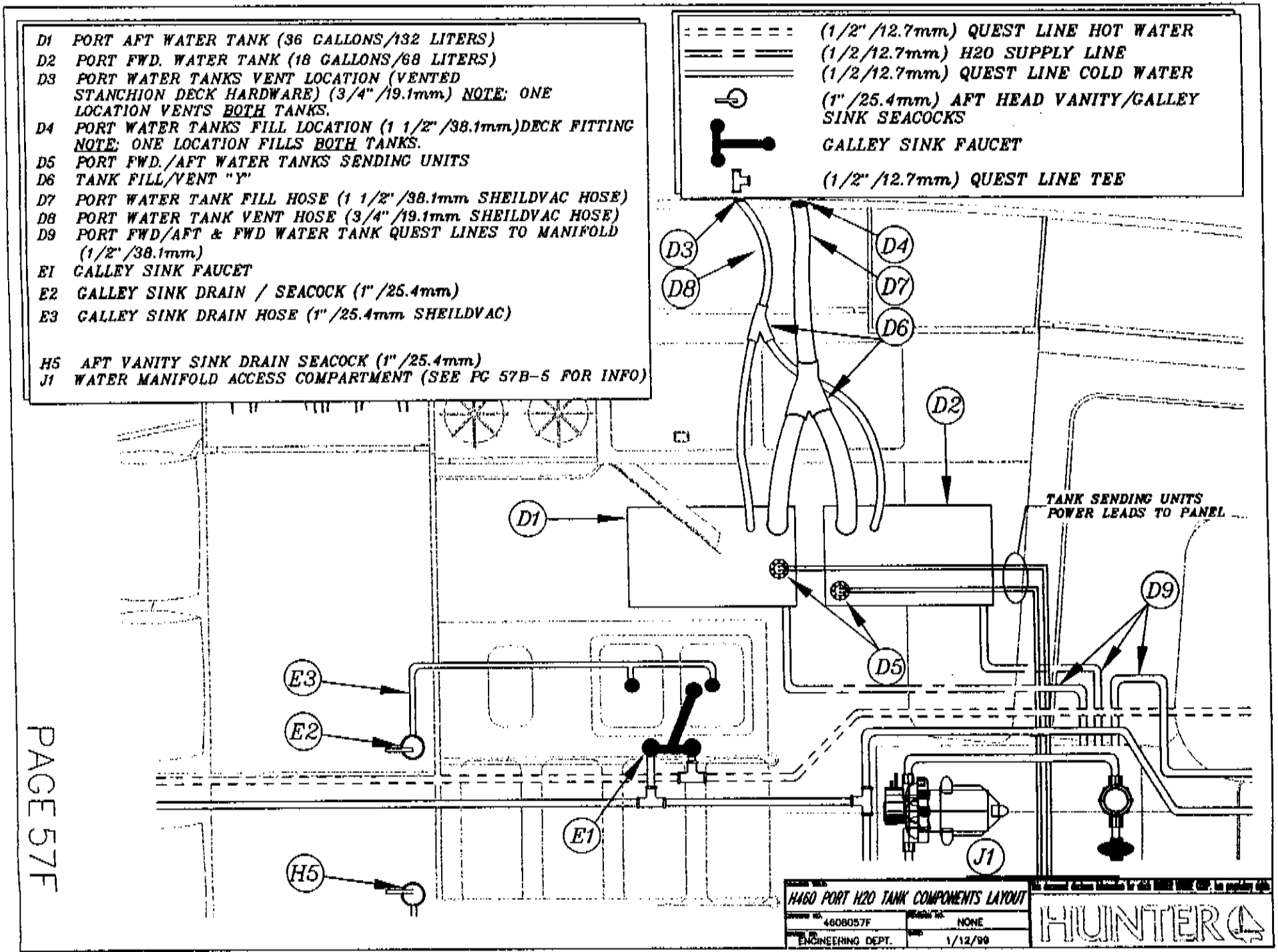
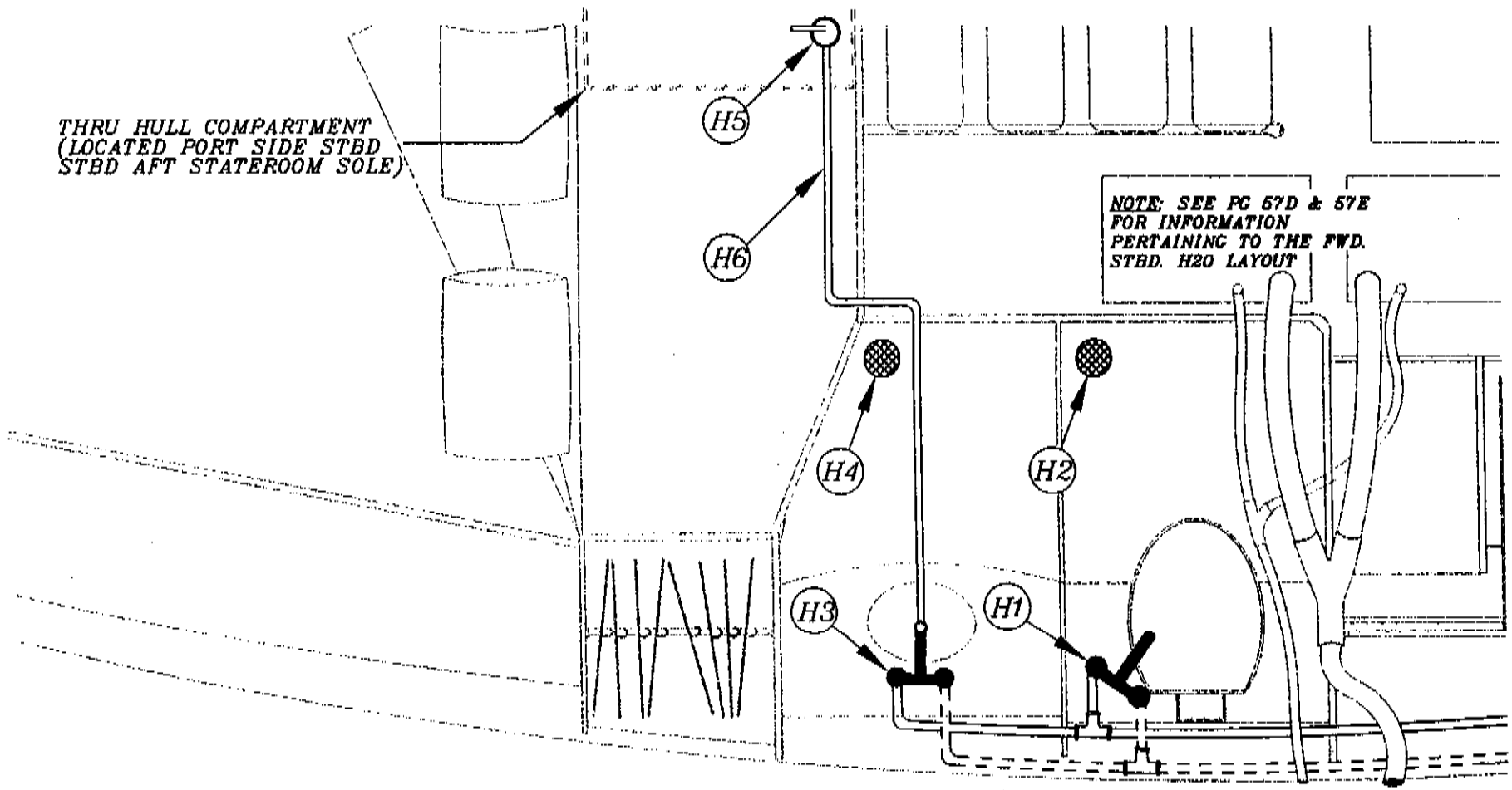
H460 FWD. PORT HEAD H2O LAYOUT	
48080572E	NONE
ENGINEERING DEPT.	1/12/99

HUNTER


D1 PORT AFT WATER TANK (36 GALLONS/132 LITERS)
D2 PORT FWD. WATER TANK (18 GALLONS/68 LITERS)
D3 PORT WATER TANKS VENT LOCATION (VENTED STANCHION DECK HARDWARE) (3/4"/19.1mm) NOTE: ONE LOCATION VENTS BOTH TANKS.
D4 PORT WATER TANKS FILL LOCATION (1 1/2"/38.1mm)DECK FITTING NOTE: ONE LOCATION FILLS BOTH TANKS.
D5 PORT FWD./AFT WATER TANKS SENDING UNITS
D6 TANK FILL/VENT "Y"
D7 PORT WATER TANK FILL HOSE (1 1/2"/38.1mm SHEILDVAC HOSE)
D8 PORT WATER TANK VENT HOSE (3/4"/19.1mm SHEILDVAC HOSE)
D9 PORT FWD/AFT & FWD WATER TANK QUEST LINES TO MANIFOLD (1/2"/38.1mm)
E1 GALLEY SINK FAUCET
E2 GALLEY SINK DRAIN / SEACOCK (1"/25.4mm)
E3 GALLEY SINK DRAIN HOSE (1"/25.4mm SHEILDVAC)
H5 AFT VANITY SINK DRAIN SEACOCK (1"/25.4mm)
J1 WATER MANIFOLD ACCESS COMPARTMENT (SEE PG 57B-5 FOR INFO)
(1/2"/12.7mm) QUEST LINE HOT WATER
(1/2/12.7mm) H20 SUPPLY LINE
(1/2/12.7mm) QUEST LINE COLD WATER
(1"/25.4mm) AFT HEAD VANITY/GALLEY SINK SEACOCKS
GALLEY SINK FAUCET
(1/2"/12.7mm) QUEST LINE TEE
D3
D8
D4
D7
D6
D2
D1
TANK SENDING UNITS POWER LEADS TO PANEL
D9
D5
E3
E2
E1
H5
J1
H460 PORT H20 TANK COMPONENTS LAYOUT
4608057F
NONE
ENGINEERING DEPT.
1/12/99
HUNTER



H1	AFT HEAD SHOWER FAUCET
H2	AFT HEAD SHOWER DRAIN (SEE PG 57-B FOR INFO)
H3	AFT HEAD VANITY SINK FAUCET
H4	AFT VANITY SOLE DRAIN (SEE PG 57-B FOR INFO)
H5	AFT HEAD VANITY SINK DRAIN SEACOCK (1"/25.4mm)
H6	AFT HEAD VANITY SINK DRAIN HOSE (1"/25.4mm SHEILDVAC)

= = = = = (1/2" 12.7mm) QUEST LINE HOT WATER

═══ (1/2" 12.7mm) QUEST LINE COLD WATER

(1"/25.4mm) AFT VANITY SINK SEACOCK

AFT HEAD VANITY SINK/SHOWER FAUCETS

H460 AFT HEAD H2O LAYOUT

46060570 | NONE

ENGINEERING DEPT. | 1/12/99

HUNTER

(1/2"/12.7mm) QUEST LINE HOT WATER

(1/2"/12.7mm) QUEST LINE COLD WATER

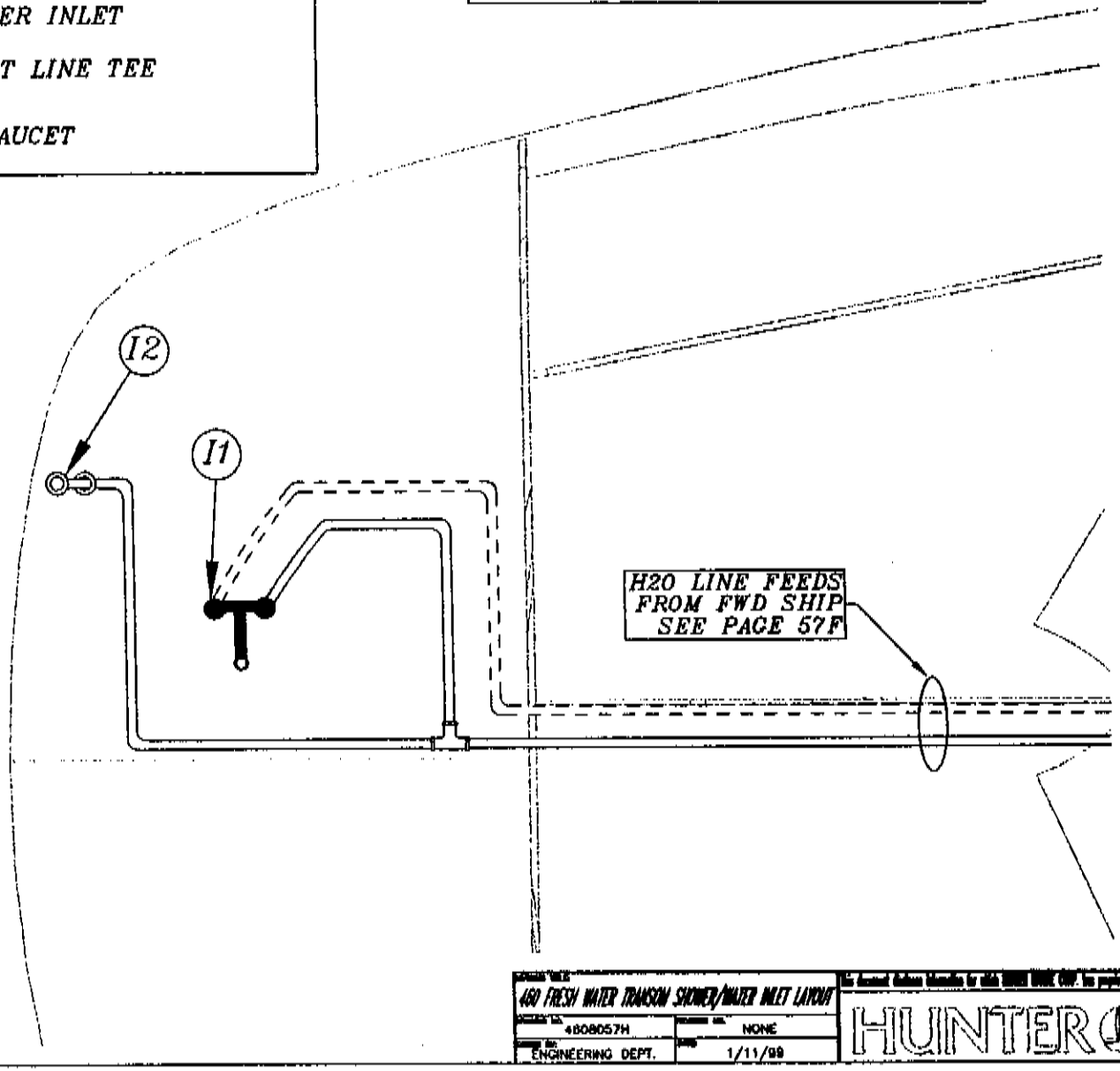
FRESH "SHORE" WATER INLET

(1/2"/12.7mm) QUEST LINE TEE

TRANSOM SHOWER FAUCET

I1 TRANSOM SHOWER FAUCET

I2 TRANSOM FRESH WATER INLET



460 FRESH WATER TRANSOM SHOWER/WATER INLET LAYOUT

4808057H | NONE

ENGINEERING DEPT. | 1/11/99

HUNTER

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HUNTER

460 FRESH WATER SYSTEM PARTS LIST

46080571 | NONE | 3/25/99

ENGINEERING DEPT.

Stage	Component	Useq	PC	Description	UM	Net Quantity
	...BD010001	390	5	PLUMBING ASSEMBLY	EA	1.0000
	....BD020001	10	5	FRESH WATER PLUMBING SUB ASSEMBLY	EA	1.0000
	.....BD020005	10	5	H460-FWD WATER TANK ASSEMBLY	EA	1.0000
25	102030	150	105	FOAM FILLER CF124 (750 ML)	EA	2.5000
27	257570	180	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
26	266100	210	210	LABEL PHENOLIC "FWD WATER TANK"	EA	1.0000
26	353157	30	250	FUEL VENT #503-4 (WATER)	EA	1.0000
26	353355	40	250	HOSE CLAMP #10	EA	3.0000
26	353427	50	250	HOSE CLAMP #24	EA	4.0000
26	354867	160	250	ELBOW PVC 1 1/2" SLIP X MPT	EA	1.0000
26	355425	60	250	BARB 1/2"MPTX3/4"HB SHIELDS WHITE	EA	1.0000
26	355479	200	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	1.0000
26	355767	190	250	ELBOW,ST PLSTC 3/4"	EA	1.0000
31	356199	70	200	DECK PLATE WATER BLUE	EA	1.0000
26	357981	80	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	7.0000
26	358017	90	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	8.0000
26	358089	100	250	HOSE CUFFS 3/4" (142-0340)	EA	2.0000
26	358143	110	250	HOSE CUFFS 1 1/2"(142-1120)	EA	2.0000
26	359025	120	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	130	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	25.0000
28	460050	290	600	BANDING BUCKLE PVC	EA	8.0000
28	460090	280	600	BANDING MATERIAL PVC	FT	4.0000
27	465770	20	600	O/H PHIL #10 X 3/4" S/S T/A	EA	3.0000
28	656700	140	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	28.0000
24	......P4617	230	999	TANK,WATER,STBD,66G,103066,H460	EA	1.0000
	.....BD020025	40	5	H460-FWD VANITY PLUMBING	EA	1.0000
43	351375	10	250	FAUCET - VANITY - W/O SHOWER #10-30	EA	1.0000
26	355407	70	250	BARB, PIPE TO HOSE,PVC #8005 (1.5"	EA	1.0000
26	359025	20	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	30	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	2.0000
26	359044	50	250	TUBING,QUEST, RED STRIPE."HOT"	FT	2.0000
26	359115	40	250	ELBOW STR. 1/2" MPT X 1/2 FPT #QSE	EA	2.0000
	.....BD020045	50	5	H460-PORT WATER TANK	EA	1.0000
26	353355	30	250	HOSE CLAMP #10	EA	4.0000
26	353427	40	250	HOSE CLAMP #24	EA	8.0000
26	354867	580	250	ELBOW PVC 1 1/2" SLIP X MPT	EA	1.0000
26	355335	610	250	BARB, PIPE TO HOSE PVC #8002 (3/4")	EA	1.0000
26	355461	570	250	FITTING,1.5""Y" TEE SLIPXSLIP PVC	EA	1.0000
26	355479	550	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	4.0000
26	355767	590	250	ELBOW,ST PLSTC 3/4"	EA	1.0000
31	356199	60	200	DECK PLATE WATER BLUE	EA	1.0000
26	357981	80	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	4.0000
26	357981	85	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	2.3330
26	358017	90	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	6.0000
26	358017	95	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	1.0000
26	358089	100	250	HOSE CUFFS 3/4" (142-0340)	EA	4.0000
26	358143	110	250	HOSE CUFFS 1 1/2"(142-1120)	EA	4.0000
26	359025	120	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	130	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	2.0000
32	465770	70	600	O/H PHIL #10 X 3/4" S/S T/A	EA	3.0000
27	656700	140	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	16.5000

HUNTER

460 FRESH WATER SYSTEM PARTS LIST CONT

46080057J

NONE

ENGINEERING DEPT.

3/25/98

Stage	Component	Useq	PC	Description	UM	Net Quantity
24	......P4615	530	999	TANK,WATER,18GAL,H460	EA	1.0000
26	......P4623	620	999	LABEL,"PORT FWD WATER TANK" h420	EA	1.0000
	.....BD020055	60	5	H460-STBD WATER TANK	EA	1.0000
26	353355	40	250	HOSE CLAMP #10	EA	4.0000
26	353427	50	250	HOSE CLAMP #24	EA	8.0000
26	354867	250	250	ELBOW PVC 1 1/2" SLIP X MPT	EA	1.0000
26	355335	320	250	BARB, PIPE TO HOSE PVC #8002 (3/4")	EA	1.0000
26	355461	260	250	FITTING,1.5""Y" TEE SLIPXSLIP PVC	EA	1.0000
26	355479	230	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	4.0000
26	355767	290	250	ELBOW,ST PLSTC 3/4"	EA	1.0000
31	356199	70	200	DECK PLATE WATER BLUE	EA	1.0000
26	357981	75	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	2.3300
26	357981	80	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	4.5000
26	358017	100	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	5.5000
26	358017	105	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	1.0000
26	358089	300	250	HOSE CUFFS 3/4" (142-0340)	EA	4.0000
26	358143	110	250	HOSE CUFFS 1 1/2"(142-1120)	EA	4.0000
26	359025	120	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	140	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	2.0000
27	465770	20	600	O/H PHIL #10 X 3/4" S/S T/A	EA	3.0000
28	656700	240	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	12.0000
24	......P4620	170	999	TANK,WATER,STBD,45GAL,H460	EA	1.0000
26	......P4622	85	999	LABEL,"STBD FWD WATER TANK" H420	EA	1.0000
	.....BD020065	70	5	H460-FRESH WATER PUMP	EA	1.0000
53	102180	10	78	FREEZE BAN	GL	5.0000
27	257570	60	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
26	351951	70	250	PUMP,FRESH WATER,2088-423-244, 2.8G	EA	1.0000
26	352095	80	250	PUMP STRAINER #36400-1010	EA	1.0000
26	355461	150	250	FITTING,1.5""Y" TEE SLIPXSLIP PVC	EA	1.0000
26	359025	90	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	120	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	1.3300
26	359061	100	250	COUPLING, QC33F, 1/2"X1/2"FEMALE	EA	2.0000
27	466570	20	600	P/H PHIL #10 X 1" S/S T/A	EA	27.0000
27	469590	30	600	WASHER NEO 1/4" S/S W/N/B	EA	4.0000
28	654500	40	300	WIRE BLACK SC-12 GAUGE	FT	17.0000
28	655200	110	300	WIRE BROWN SC-12 GAUGE	FT	17.0000
28	656500	50	300	CONDUIT 3/4" 125-0340	FT	6.0000
	.....BD020075	80	5	H460-WATER MANIFOLD	EA	1.0000
26	353193	90	250	CLAMP DG-20	EA	2.0000
26	358971	30	250	SHUT OFF VALVE 1/2" X 1/2"	EA	5.0000
26	359061	50	250	COUPLING, QC33F, 1/2"X1/2"FEMALE	EA	11.0000
26	359079	100	250	TEES 1/2X1/2X1/2-1500 (T333T)	EA	6.0000
26	359115	110	250	ELBOW STR. 1/2" MPT X 1/2 FPT HOSE	EA	5.0000
26	359205	80	250	ELBOW 1/2" X MPT X 1/2"MPT #E33T/15	EA	2.0000
32	461330	70	600	F/H PHIL #10 X 1 1/2" S/S T/A	EA	6.0000
27	466670	10	600	P/H PHIL #10 X 3/4" S/S T/A	EA	6.0000

Stage	Component	Useq	PC	Description	UM	Net Quantity
	.....BD020085	90	5	H460-GALLEY FAUCET	EA	1.0000
43	351285	30	250	FAUCET - GALLEY W/HANDLES - #10-310	EA	1.0000
26	359025	40	250	SEATING 1/2 O.D. 500FNCR-2	EA	4.0000
26	359043	110	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	18.0000
26	359044	120	250	TUBING,QUEST, RED STRIPE,"HOT"	FT	27.0000
26	359079	80	250	TEES 1/2X1/2X1/2-1500 (T333T)	EA	2.0000
26	359115	100	250	ELBOW STR. 1/2" MPT X 1/2 FPT #QSE	EA	6.0000
	.....BD020095	100	5	H460-FRESH WATER INLET	EA	1.0000
34	353859	20	250	CHECK VALVE 1/2"	EA	1.0000
34	354327	70	250	NIPPLES BRASS 1/2" X 2"	EA	1.0000
34	356433	10	250	FRESH WATER INLET FITTING #499-000	EA	1.0000
34	359025	30	250	SEATING 1/2 O.D. 500FNCR-2	EA	4.0000
34	359079	40	250	TEES 1/2X1/2X1/2-1500 (T333T)	EA	1.0000
26	359205	50	250	ELBOW 1/2" X MPT X 1/2"MPT #E33T/15	EA	1.0000
	.....BD020115	110	5	H460-AFT SHOWER	EA	1.0000
43	351303	10	250	FAUCET - VANITY - W/SHOWER #10-324	EA	1.0000
61	351447	70	250	SHOWER HOLDER HAND #100100-SD	EA	1.0000
26	359025	20	250	SEATING 1/2 O.D. 500FNCR-2	EA	8.0000
26	359043	80	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	17.0000
26	359044	90	250	TUBING,QUEST, RED STRIPE,"HOT"	FT	17.0000
26	359079	30	250	TEES 1/2X1/2X1/2-1500 (T333T)	EA	2.0000
26	359115	40	250	ELBOW STR. 1/2" MPT X 1/2 FPT #QSE	EA	2.0000
	.....BD020125	120	5	H460-AFT VANITY FAUCET	EA	1.0000
43	351375	10	250	FAUCET - VANITY - W/O SHOWER #10-30	EA	1.0000
26	359025	20	250	SEATING 1/2 O.D. 500FNCR-2	EA	8.0000
26	359043	30	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	11.0000
26	359044	40	250	TUBING,QUEST, RED STRIPE,"HOT"	FT	11.0000
	.....BD020175	130	5	H460-AFT COCKPIT FAUCET	EA	1.0000
31	351267	10	250	SHOWER, STOWAWAY #48500	EA	1.0000
26	359025	20	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	30	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	15.0000
26	359044	40	250	TUBING,QUEST, RED STRIPE,"HOT"	FT	15.0000
26	359115	60	250	ELBOW STR. 1/2" MPT X 1/2 FPT #QSE	EA	2.0000
27	460250	70	600	CABLE TIES BLACK, 15" W/ EYE .	EA	15.0000
27	465770	80	600	O/H PHIL #10 X 3/4" S/S T/A	EA	15.0000
27	466670	90	600	P/H PHIL #10 X 3/4" S/S T/A	EA	15.0000
	.....BD020185	140	5	H460-STB AFT WATER TANK	EA	1.0000
27	257570	190	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
26	353355	320	250	HOSE CLAMP #10	EA	6.0000
26	353427	60	250	HOSE CLAMP #24	EA	8.0000
26	354849	350	250	TEE,PVC, 3/4" HOSE	EA	1.0000

HUNTER

460 FRESH WATER SYSTEM PARTS LIST CONT'

PART NO. 4600057K | REVISION NO. NONE | DATE 3/25/99

ENGINEERING DEPT.

Stage	Component	Useq	PC	Description	UM	Net Quantity
26	354867	180	250	ELBOW PVC 1 1/2" SLIP X MPT	EA	1.0000
26	355335	170	250	BARB, PIPE TO HOSE PVC #8002 (3/4")	EA	1.0000
26	355479	360	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	1.0000
26	355767	200	250	ELBOW,ST PLSTC 3/4"	EA	1.0000
26	357981	80	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	6.0000
26	358017	90	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	8.5000
26	358017	370	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	3.0000
26	358089	100	250	HOSE CUFFS 3/4" (142-0340)	EA	2.0000
26	358089	340	250	HOSE CUFFS 3/4" (142-0340)	EA	4.0000
26	358143	110	250	HOSE CUFFS 1 1/2"(142-1120)	EA	2.0000
26	359025	120	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	130	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	2.0000
26	359205	140	250	ELBOW 1/2" X MPT X 1/2"MPT #E33T/1S	EA	1.0000
27	460250	20	600	CABLE TIES BLACK, 15" W/ EYE .	EA	10.0000
27	656700	150	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	22.0000
10	......P4619	240	999	TANK,WATER,STBD AFT ,21GAL,H460	EA	1.0000
26	......P4622	270	999	LABEL,"STBD FWD WATER TANK" H420	EA	1.0000
	.....BD020195	160	5	PORT AFT WATER TANK	EA	1.0000
27	257570	30	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
26	286130	40	210	LABEL PHENOLIC "PORT WATER TANK"	EA	1.0000
26	353355	50	250	HOSE CLAMP #10	EA	2.0000
26	353427	60	250	HOSE CLAMP #24	EA	4.0000
26	354849	280	250	TEE,PVC, 3/4" HOSE	EA	1.0000
26	354867	70	250	ELBOW PVC 1 1/2" SLIP X MPT	EA	1.0000
26	355335	80	250	BARB, PIPE TO HOSE PVC #8002 (3/4")	EA	1.0000
26	355479	300	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	1.0000
26	355767	100	250	ELBOW,ST PLSTC 3/4"	EA	1.0000
26	357981	130	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	2.0000
26	358017	140	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	7.0000
26	358089	150	250	HOSE CUFFS 3/4" (142-0340)	EA	2.0000
26	358143	160	250	HOSE CUFFS 1 1/2"(142-1120)	EA	2.0000
26	359025	170	250	SEATING 1/2 O.D. 500FNCR-2	EA	2.0000
26	359043	180	250	TUBING 3/8 I.D. X 1/2" O.D."COLD WA	FT	3.0000
27	460250	200	600	CABLE TIES BLACK, 15" W/ EYE .	EA	10.0000
28	656700	210	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	19.0000
24	......P4618	220	999	TANK,WATER,35G,AFT,PORT,H460	EA	1.0000
	....BD030001	20	5	WASTE WATER PLUMBING ASSEMBLY	EA	1.0000
	.....BD030005	1	5	ANCHOR WALL DRAIN	EA	1.0000
51	314250	10	250	MIDGET CLAMSHELL VENT	EA	4.0000
32	466850	50	600	P/H PHIL #6 X 5/16" TY A S/S H29.5	EA	12.0000
	.....BD030025	10	5	H460-FWD WASTE TANK	EA	1.0000
56	253700	10	300	GUAGE, WASTE WATER, HTG-1	EA	1.0000
26	253754	210	300	SENDER,WASTE TANK, 2SECTION SH2 H	EA	1.0000
27	257570	20	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
24	352941	220	250	TANK,HOLDING, H460,209022	EA	1.0000
26	353157	30	250	FUEL VENT #503-4 (WATER)	EA	1.0000
26	353355	40	250	HOSE CLAMP #10	EA	3.0000
26	353427	50	250	HOSE CLAMP #24	EA	4.0000
26	354687	290	250	PLUG, PVC-DWD, 1 1/2" MPT	EA	1.0000
26	354885	300	250	ELBOW 90DEGREE 1 1/2" SLIP X SLIP	EA	2.0000
26	355335	70	250	BARB, PIPE TO HOSE PVC #8002 (3/4")	EA	1.0000
26	355425	80	250	BARB 1/2"MPTX3/4"HB SHIELDS WHITE	EA	1.0000

HUNTER

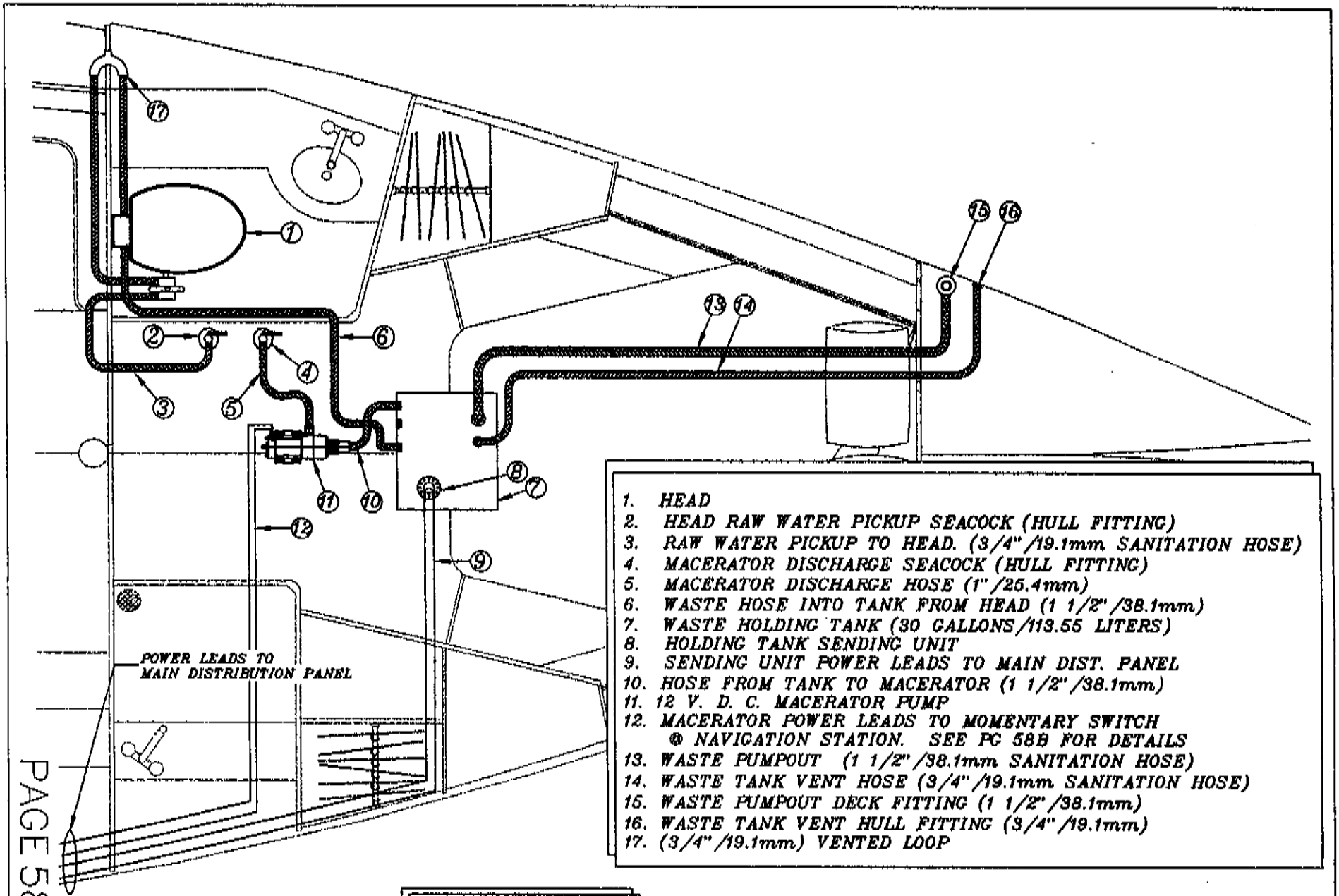
460 FRESH WATER SYSTEM PARTS LIST CONT

NONE

3/25/98

ENGINEERING DEPT.

Stage	Component	Useq	PC	Description	UM	Net Quantity
26	353427	60	250	HOSE CLAMP #24	EA	2.0000
26	353931	70	250	BALL VALVE 3/4" #70-104-10	EA	1.0000
26	354057	80	250	BARB, HOSE, BRASS, 3/4"	EA	1.0000
26	355767	90	250	ELBOW,ST PLSTC 3/4"	EA	1.0000
26	358035	100	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	8.0000
26	358035	110	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	10.5000
26	358035	120	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	7.0000
26	358413	160	250	HOSE,SANI,1.5""LOW PERM" 104-1126	FT	6.0000
27	464070	130	600	HEX HD 5/16 X 1 1/2" S/S L/B	EA	4.0000
27	469530	150	600	WASHER LOCK 5/16" S/S L/W	EA	4.0000
27	469610	140	600	WASHER NEO 3/8" S/S W/N/B 7/8 O	EA	4.0000
	.....BD030045	70	5	H460-PORT FWD VANITY	EA	1.0000
26	286280	10	560	LABEL,THRUHULL,VANITY DISCHARGE	EA	1.0000
43	350655	20	250	SINK DRAIN #SW2 90DEGREE #907014	EA	1.0000
26	352635	30	250	BRASS THRU HULL FITTING 1" #65-BN7-	EA	1.0000
26	353373	40	250	HOSE CLAMP #12	EA	4.0000
26	353877	100	250	BALL VALVE (1") BRASS #70-105-10	EA	1.0000
26	354075	50	250	BARB,HOSE, BRASS, 1"	EA	1.0000
26	358071	70	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	7.5000
26	358107	80	250	HOSE CUFFS 1" (100-1000)	EA	2.0000
26	355443	140	250	ADAPTER,1.5"MPT X 1.5"SLIP PVC SCH4	EA	2.0000
26	355479	90	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	2.0000
25	355803	120	150	ELBOW 90 DEG.STR/ELL BR. 3/4"	EA	1.0000
31	356217	130	200	DECK PLATE WASTE BROWN	EA	1.0000
26	357108	330	150	TUBE,TANK,FWD WASTE DISCH.H460	EA	1.0000
26	358035	310	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	15.0000
26	358143	145	250	HOSE CUFFS 1 1/2"(142-1120)	EA	15.0000
26	358413	180	250	HOSE,SANI,1.5""LOW PERM" 104-1126	FT	0.5000
25	358683	100	250	PIPE 1 1/2" PVC SCH160	FT	0.3330
32	465770	190	600	O/H PHIL #10 X 3/4" S/S T/A	EA	3.0000
28	656700	200	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	28.0000
	.....BD030035	40	5	H460-FWD HEAD PLUMBING	EA	1.0000
26	286430	10	560	LABEL,THRUHULL,"HEAD PICKUP"	EA	1.0000
26	314430	170	200	CHAFE GUARD,PLASTIC,2" 450	EA	2.0000
26	350295	180	250	TOILET,MANUAL "HOUSEHOLD"#29120-000	EA	1.0000
26	352293	30	250	VENTED LOOP,W/VALVE,3/4"PVC	EA	1.0000
26	352617	40	250	BRASS THRU HULL FITTING 3/4" #65-BN	EA	1.0000
26	353355	50	250	HOSE CLAMP #10	EA	7.0000



1. HEAD
2. HEAD RAW WATER PICKUP SEACOCK (HULL FITTING)
3. RAW WATER PICKUP TO HEAD. (3/4"/19.1mm SANITATION HOSE)
4. MACERATOR DISCHARGE SEACOCK (HULL FITTING)
5. MACERATOR DISCHARGE HOSE (1"/25.4mm)
6. WASTE HOSE INTO TANK FROM HEAD (1 1/2"/38.1mm)
7. WASTE HOLDING TANK (30 GALLONS/113.55 LITERS)
8. HOLDING TANK SENDING UNIT
9. SENDING UNIT POWER LEADS TO MAIN DIST. PANEL
10. HOSE FROM TANK TO MACERATOR (1 1/2"/38.1mm)
11. 12 V. D. C. MACERATOR PUMP
12. MACERATOR POWER LEADS TO MOMENTARY SWITCH @ NAVIGATION STATION. SEE PG 58B FOR DETAILS
13. WASTE PUMPOUT (1 1/2"/38.1mm SANITATION HOSE)
14. WASTE TANK VENT HOSE (3/4"/19.1mm SANITATION HOSE)
15. WASTE PUMPOUT DECK FITTING (1 1/2"/38.1mm)
16. WASTE TANK VENT HULL FITTING (3/4"/19.1mm)
17. (3/4"/19.1mm) VENTED LOOP

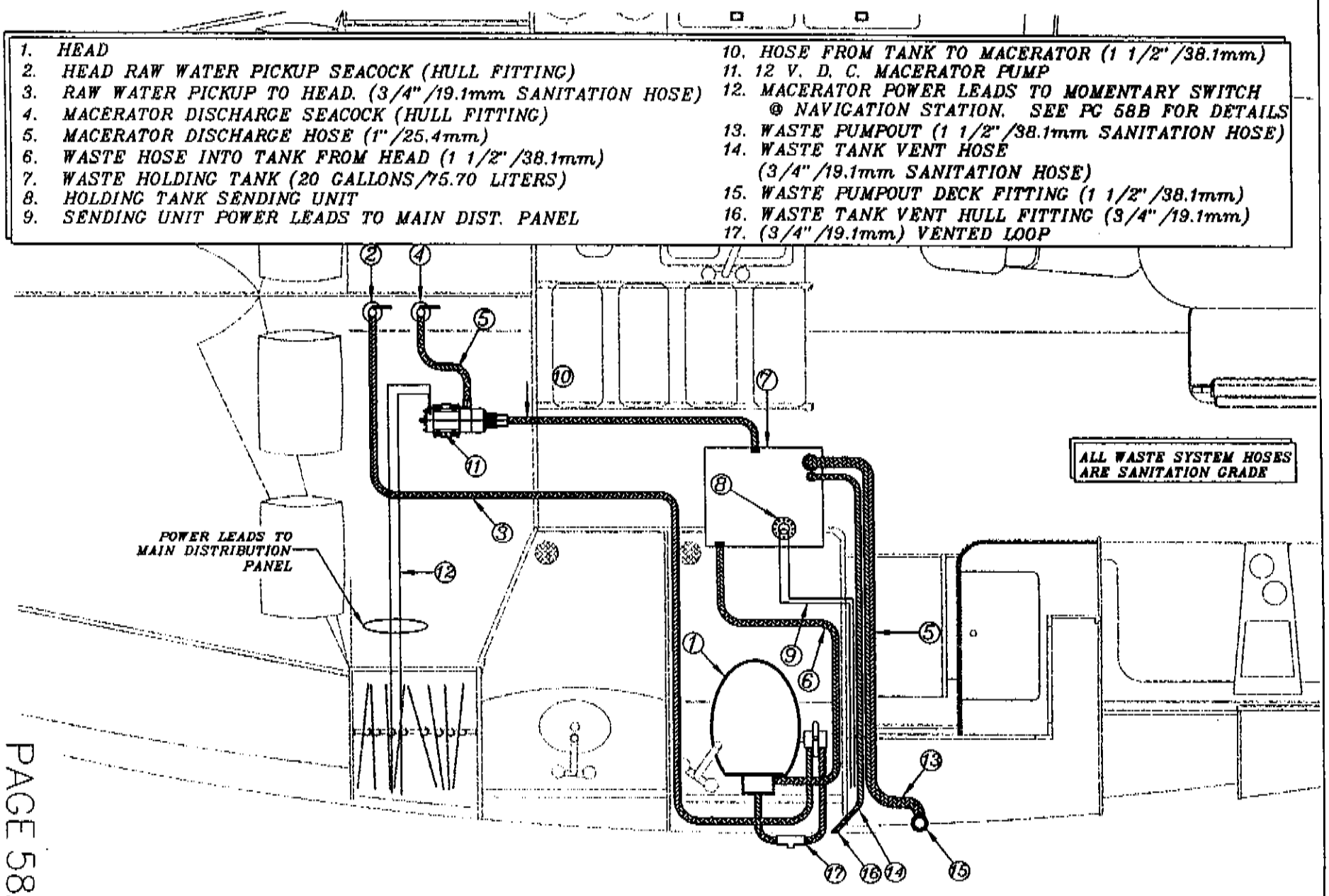
ALL WASTE SYSTEM HOSES ARE SANITATION GRADE

460 (STD.) FWD HEAD WASTE SYSTEM LAYOUT

46060S8A-1	NONE
ENGINEERING DEPT.	1/18/99

HUNTER

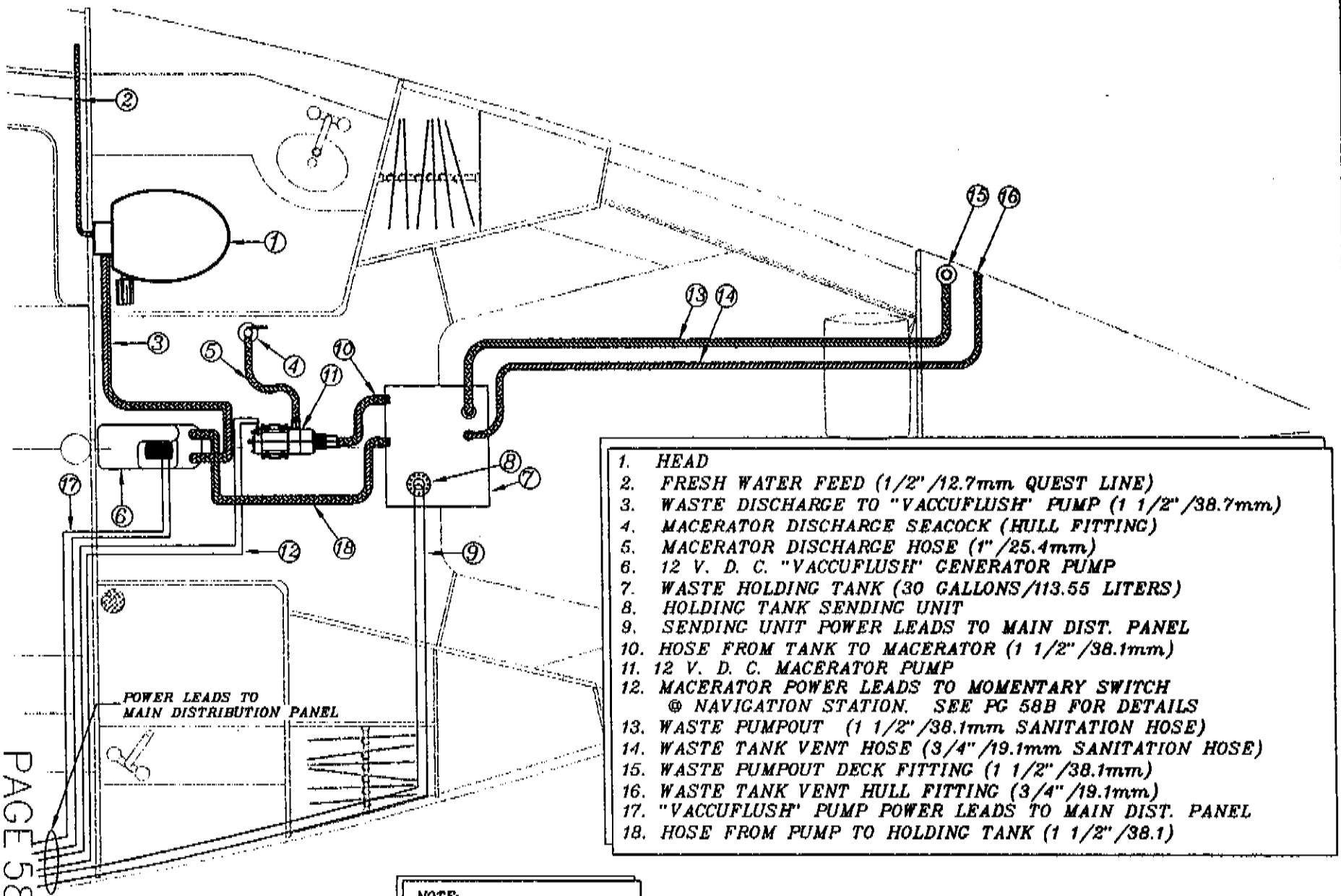
1. HEAD
2. HEAD RAW WATER PICKUP SEACOCK (HULL FITTING)
3. RAW WATER PICKUP TO HEAD. (3/4"/19.1mm SANITATION HOSE)
4. MACERATOR DISCHARGE SEACOCK (HULL FITTING)
5. MACERATOR DISCHARGE HOSE (1"/25.4mm)
6. WASTE HOSE INTO TANK FROM HEAD (1 1/2"/38.1mm)
7. WASTE HOLDING TANK (20 GALLONS/75.70 LITERS)
8. HOLDING TANK SENDING UNIT
9. SENDING UNIT POWER LEADS TO MAIN DIST. PANEL
10. HOSE FROM TANK TO MACERATOR (1 1/2"/38.1mm)
11. 12 V. D. C. MACERATOR PUMP
12. MACERATOR POWER LEADS TO MOMENTARY SWITCH @ NAVIGATION STATION. SEE PG 58B FOR DETAILS
13. WASTE PUMPOUT (1 1/2"/38.1mm SANITATION HOSE)
14. WASTE TANK VENT HOSE (3/4"/19.1mm SANITATION HOSE)
15. WASTE PUMPOUT DECK FITTING (1 1/2"/38.1mm)
16. WASTE TANK VENT HULL FITTING (3/4"/19.1mm)
17. (3/4"/19.1mm) VENTED LOOP



460 (STD.) AFT HEAD WASTE SYSTEM LAYOUT

4608058A-2	NONE
ENGINEERING DEPT.	1/18/99

HUNTER 46



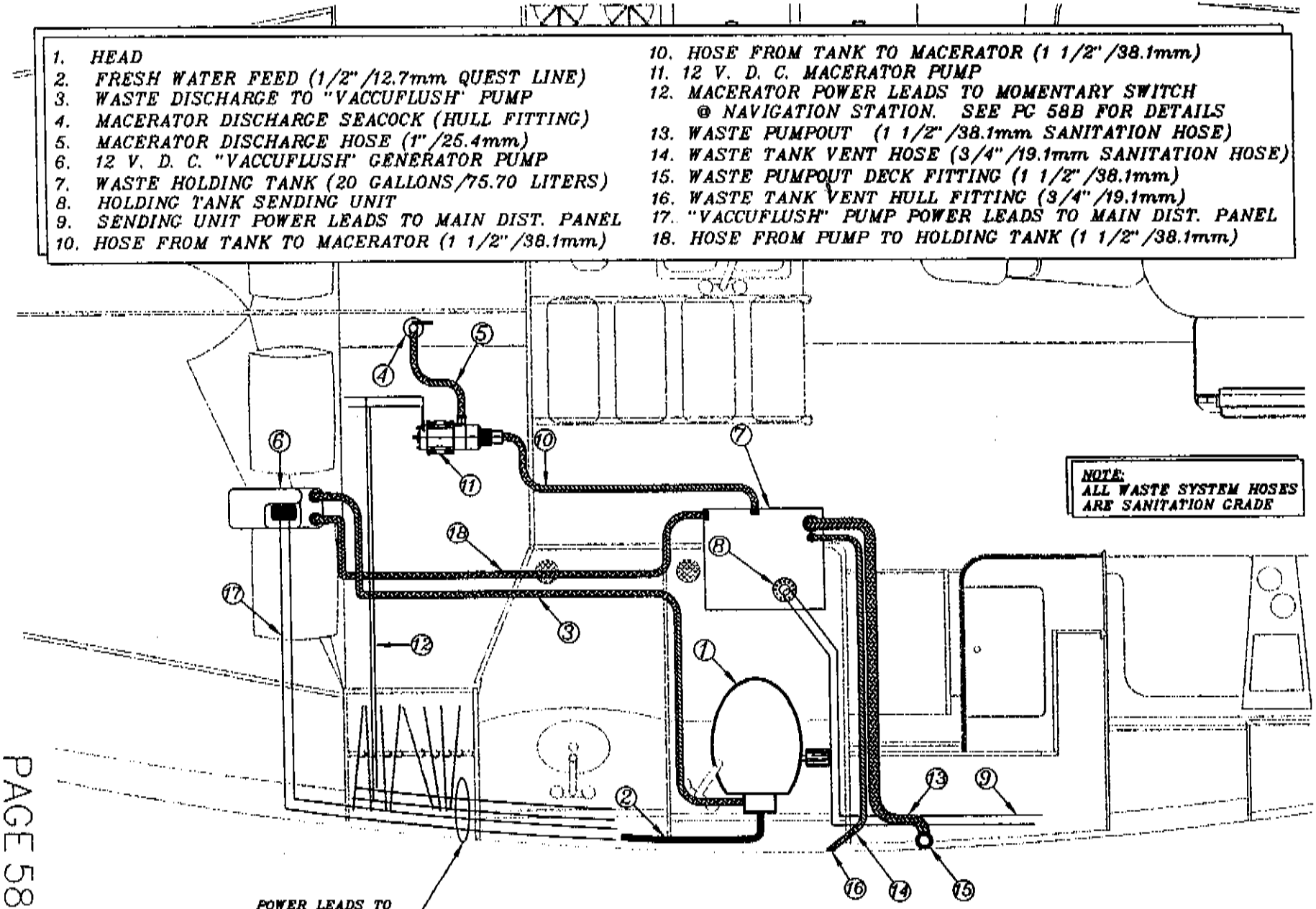
1. HEAD
2. FRESH WATER FEED (1/2"/12.7mm QUEST LINE)
3. WASTE DISCHARGE TO "VACCUFLUSH" PUMP (1 1/2"/38.7mm)
4. MACERATOR DISCHARGE SEACOCK (HULL FITTING)
5. MACERATOR DISCHARGE HOSE (1"/25.4mm)
6. 12 V. D. C. "VACCUFLUSH" GENERATOR PUMP
7. WASTE HOLDING TANK (30 GALLONS/113.55 LITERS)
8. HOLDING TANK SENDING UNIT
9. SENDING UNIT POWER LEADS TO MAIN DIST. PANEL
10. HOSE FROM TANK TO MACERATOR (1 1/2"/38.1mm)
11. 12 V. D. C. MACERATOR PUMP
12. MACERATOR POWER LEADS TO MOMENTARY SWITCH @ NAVIGATION STATION. SEE PG 58B FOR DETAILS
13. WASTE PUMPOUT (1 1/2"/38.1mm SANITATION HOSE)
14. WASTE TANK VENT HOSE (3/4"/19.1mm SANITATION HOSE)
15. WASTE PUMPOUT DECK FITTING (1 1/2"/38.1mm)
16. WASTE TANK VENT HULL FITTING (3/4"/19.1mm)
17. "VACCUFLUSH" PUMP POWER LEADS TO MAIN DIST. PANEL
18. HOSE FROM PUMP TO HOLDING TANK (1 1/2"/38.1)

NOTE:
ALL WASTE SYSTEM HOSES ARE SANITATION GRADE.

480 (OPT.) FWD HEAD "VACCUFLUSH" WASTE SYSTEM LAYOUT	
1808058A-3	NONE
ENGINEERING DEPT.	1/18/99

HUNTER 48

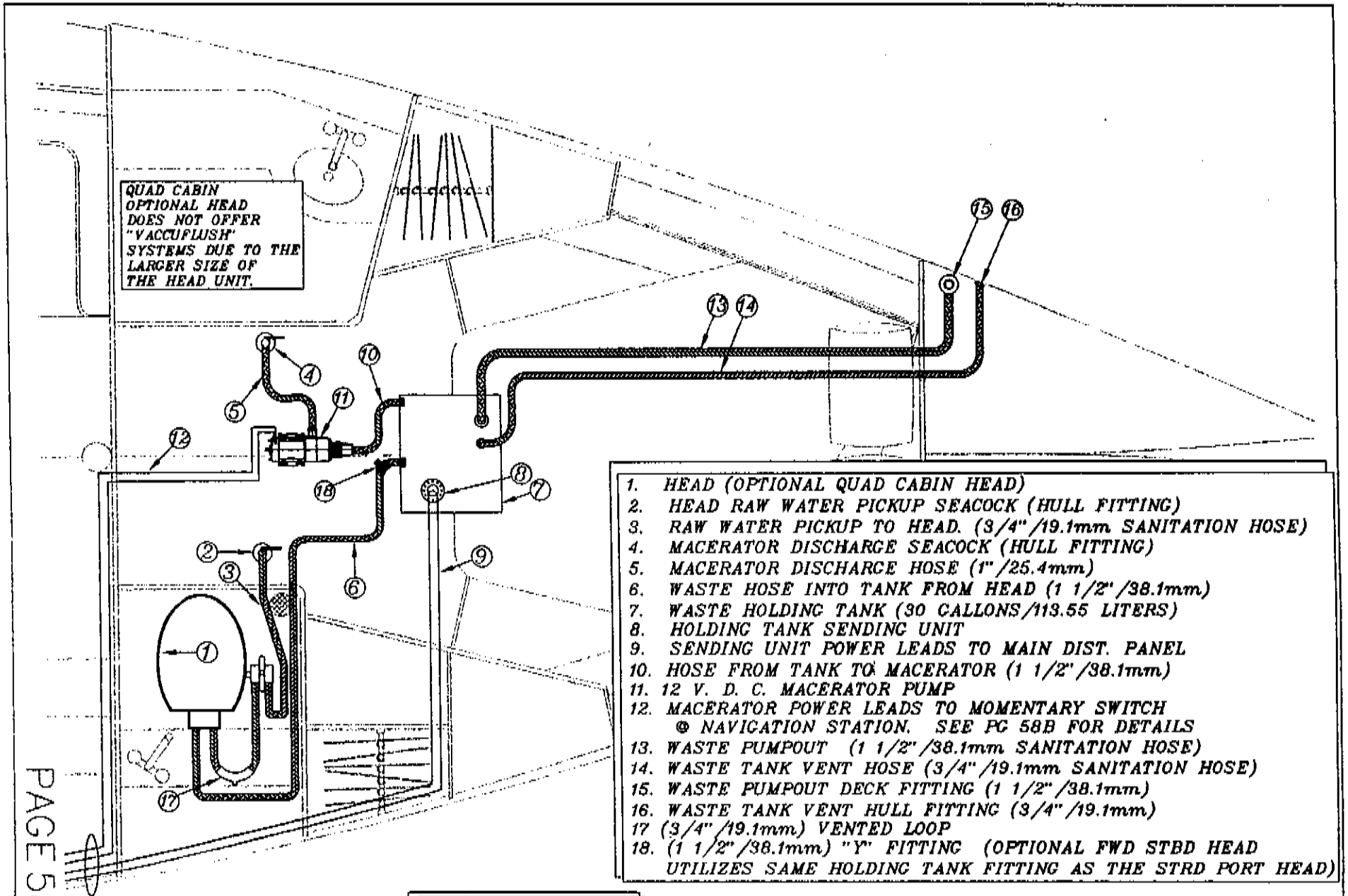
1. HEAD
2. FRESH WATER FEED (1/2"/12.7mm QUEST LINE)
3. WASTE DISCHARGE TO "VACCUFLUSH" PUMP
4. MACERATOR DISCHARGE SEACOCK (HULL FITTING)
5. MACERATOR DISCHARGE HOSE (1"/25.4mm)
6. 12 V. D. C. "VACCUFLUSH" GENERATOR PUMP
7. WASTE HOLDING TANK (20 GALLONS/75.70 LITERS)
8. HOLDING TANK SENDING UNIT
9. SENDING UNIT POWER LEADS TO MAIN DIST. PANEL
10. HOSE FROM TANK TO MACERATOR (1 1/2"/38.1mm)
10. HOSE FROM TANK TO MACERATOR (1 1/2"/38.1mm)
11. 12 V. D. C. MACERATOR PUMP
12. MACERATOR POWER LEADS TO MOMENTARY SWITCH @ NAVIGATION STATION. SEE PG 58B FOR DETAILS
13. WASTE PUMPOUT (1 1/2"/38.1mm SANITATION HOSE)
14. WASTE TANK VENT HOSE (3/4"/19.1mm SANITATION HOSE)
15. WASTE PUMPOUT DECK FITTING (1 1/2"/38.1mm)
16. WASTE TANK VENT HULL FITTING (3/4"/19.1mm)
17. "VACCUFLUSH" PUMP POWER LEADS TO MAIN DIST. PANEL
18. HOSE FROM PUMP TO HOLDING TANK (1 1/2"/38.1mm)



460 (OPT.) A/T HEAD "VACCUFLUSH" WASTE SYSTEM LAYOUT

4608058A-4	NONE
ENGINEERING DEPT.	1/18/99

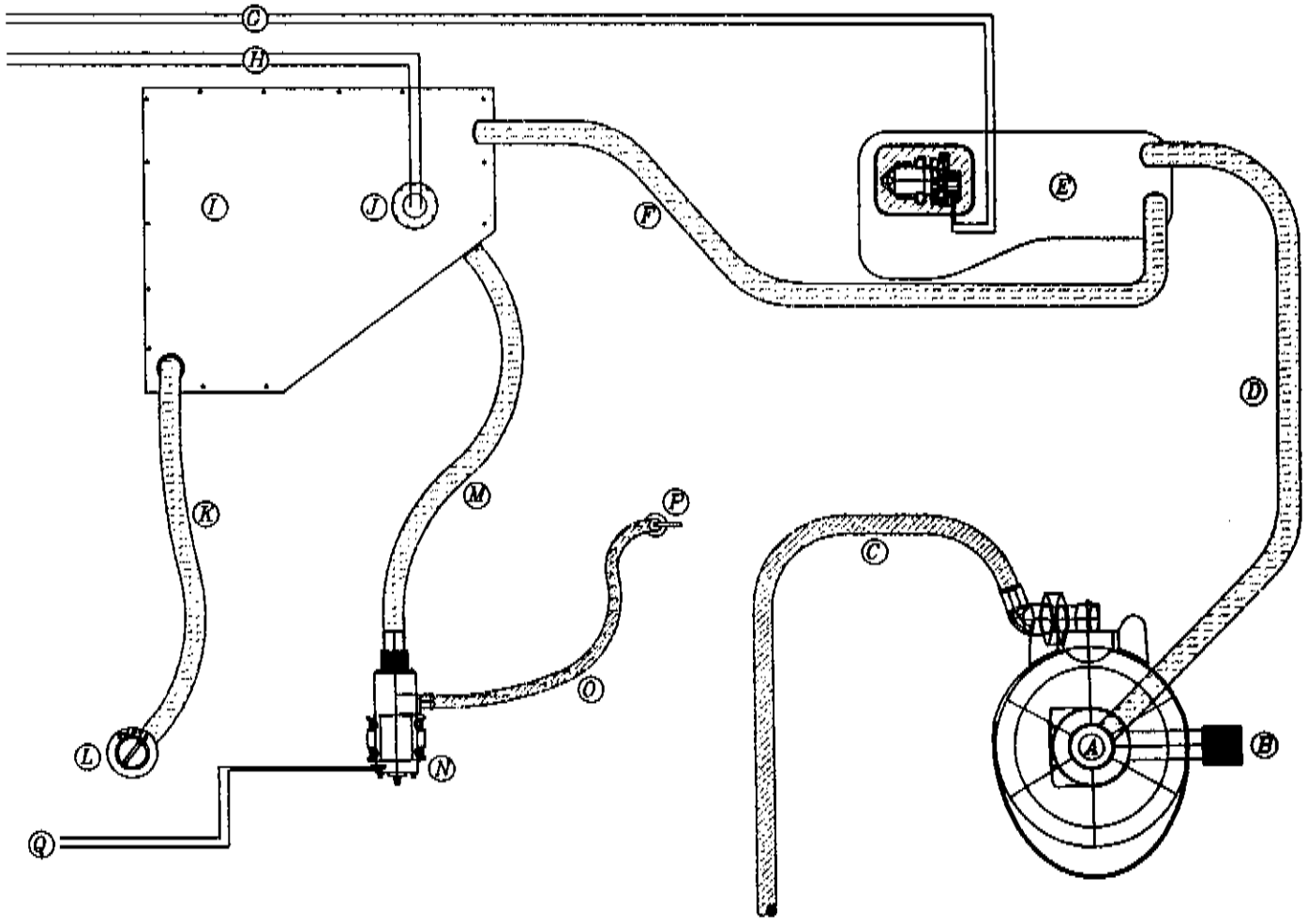
HUNTER



1. HEAD (OPTIONAL QUAD CABIN HEAD)
2. HEAD RAW WATER PICKUP SEACOCK (HULL FITTING)
3. RAW WATER PICKUP TO HEAD. (3/4"/19.1mm SANITATION HOSE)
4. MACERATOR DISCHARGE SEACOCK (HULL FITTING)
5. MACERATOR DISCHARGE HOSE (1"/25.4mm)
6. WASTE HOSE INTO TANK FROM HEAD (1 1/2"/38.1mm)
7. WASTE HOLDING TANK (30 GALLONS/113.55 LITERS)
8. HOLDING TANK SENDING UNIT
9. SENDING UNIT POWER LEADS TO MAIN DIST. PANEL
10. HOSE FROM TANK TO MACERATOR (1 1/2"/38.1mm)
11. 12 V. D. C. MACERATOR PUMP
12. MACERATOR POWER LEADS TO MOMENTARY SWITCH @ NAVIGATION STATION. SEE PG 58B FOR DETAILS
13. WASTE PUMPOUT (1 1/2"/38.1mm SANITATION HOSE)
14. WASTE TANK VENT HOSE (3/4"/19.1mm SANITATION HOSE)
15. WASTE PUMPOUT DECK FITTING (1 1/2"/38.1mm)
16. WASTE TANK VENT HULL FITTING (3/4"/19.1mm)
17. (3/4"/19.1mm) VENTED LOOP
18. (1 1/2"/38.1mm) "Y" FITTING (OPTIONAL FWD STBD HEAD UTILIZES SAME HOLDING TANK FITTING AS THE STRD PORT HEAD)

460 (OPT.) QUAD CABIN STBD HEAD WASTE SYSTEM LAYOUT	
4508058A-5	NONE
ENGINEERING DEPT.	1/18/99

HUNTER 46

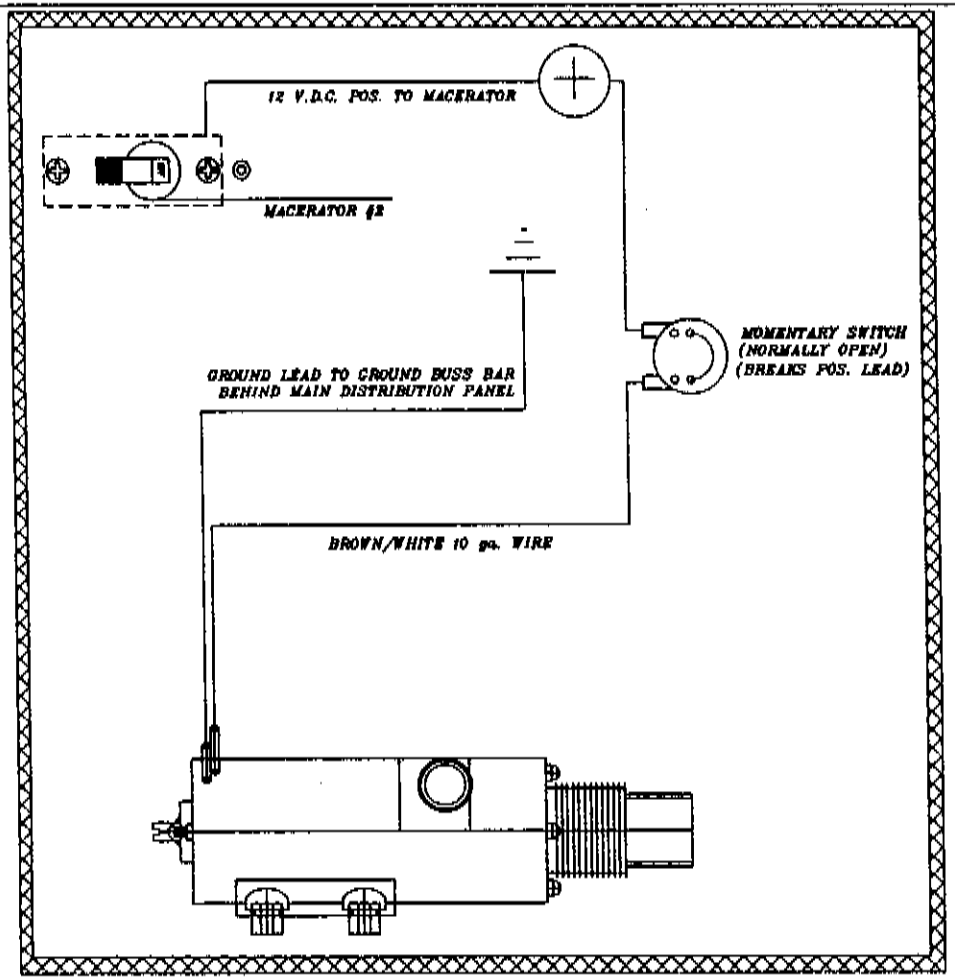


- (A) *"VACCUFLUSH" HEAD*
- (B) *PEDAL TO ENGAGE FLUSHING SECQUENCE*
- (C) *FRESH H20 QUEST LINE FEED. TEED FROM CLOSEST SOURCE. (EX. VANITY SINK OR SHOWER)*
- (D) *WASTE HOSE FROM HEAD TO GENERATOR.*
- (E) *"VACCUFLUSH" GENERATOR PUMP*
- (F) *WASTE HOSE FROM GEN. TO HOLDING TANK*
- (G) *GEN. POWER LEAD TO MAIN DIST. PANEL.*
- (H) *SENDING UNIT POWER LEAD TO MAIN DIST. PANEL.*
- (I) *TYP. WASTE HOLDING TANK*
- (J) *SENDING UNIT.*
- (K) *WASTE HOSE TO DECK PUMP OUT.*
- (L) *DECK FITTING.*
- (M) *WASTE HOSE FROM TANK TO MACER.*
- (N) *MACERATOR*
- (O) *WASTE HOSE FROM TANK TO MACER.*
- (P) *WASTE HOSE FROM MACER. TO SEACOCK.*
- (Q) *MACER. DISCHARGE THRU HULL SEACOCK.*

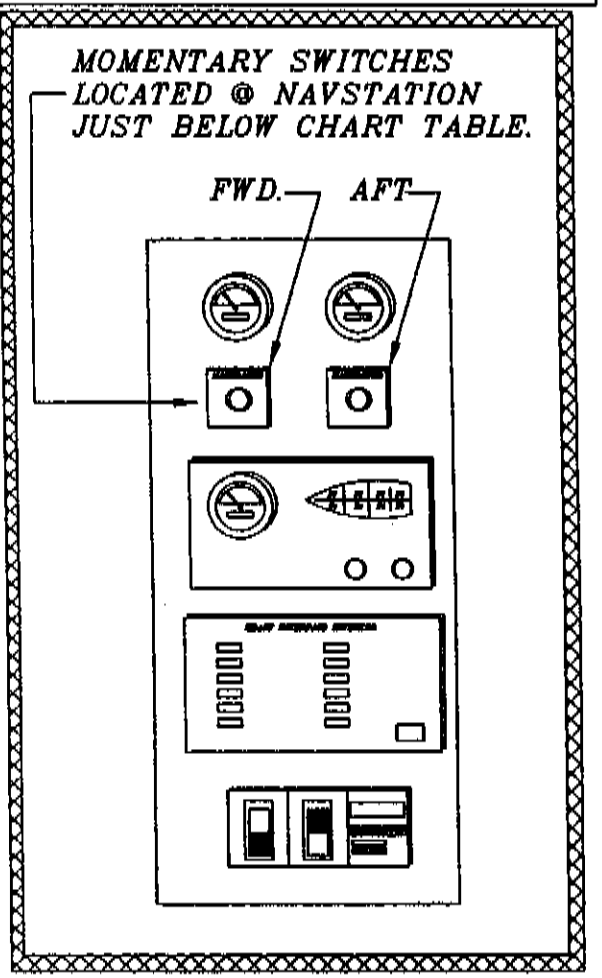
HARD OPT. "VACUFLUSH" BASIC WASTE SYSTEM SCHEMATIC	
4808058A-6	NONE
ENGINEERING DEPT.	1/19/99

HUNTER

THE MACERATOR MOMENTARY SWITCH IS PROVIDED TO PROHIBIT THE "DRY RUNNING" OF THE MACERATOR. TO OPERATE THE MACERATOR, TURN THE MACERATOR BREAKER TO THE "ON" POSITION. WHILE EITHER WATCHING THE WASTE TANK LEVEL INDICATOR, OR LISTENING TO THE PITCH OF THE PUMP, PUSH THE MOMENTARY SWITCH IN. THIS WILL ACTIVATE THE MACERATOR. ONCE THE TANK LEVEL INDICATOR REACHES "EMPTY", OR THE PITCH CHANGES NOTICABLY, RELEASE THE MOMENTARY SWITCH AND TURN THE BREAKER TO THE "OFF" POSITION. NOTE: OCCASIONALLY THE TANK SENDING UNIT BECOMES STUCK, THEREFORE IT IS MORE AFFECTIVE AND SAFER FOR THE PUMP IF THE OPERATOR USES THE "LISTENING" METHOD TO DETERMINE IF THE TANK HAS BEEN EMPTIED.



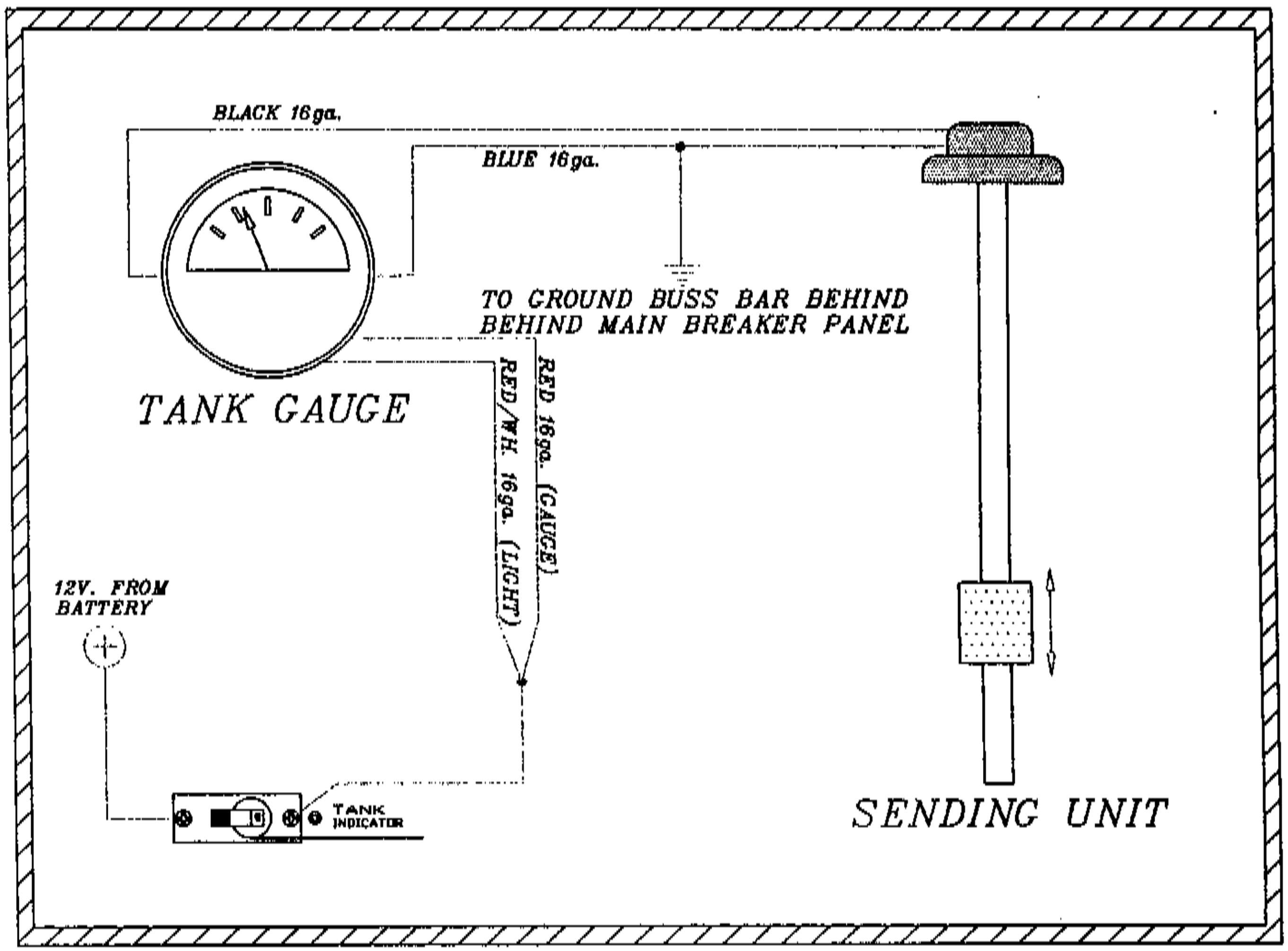
MACERATOR SCHEMATIC
TYPICAL



MOMENTARY SWITCH LOCATION

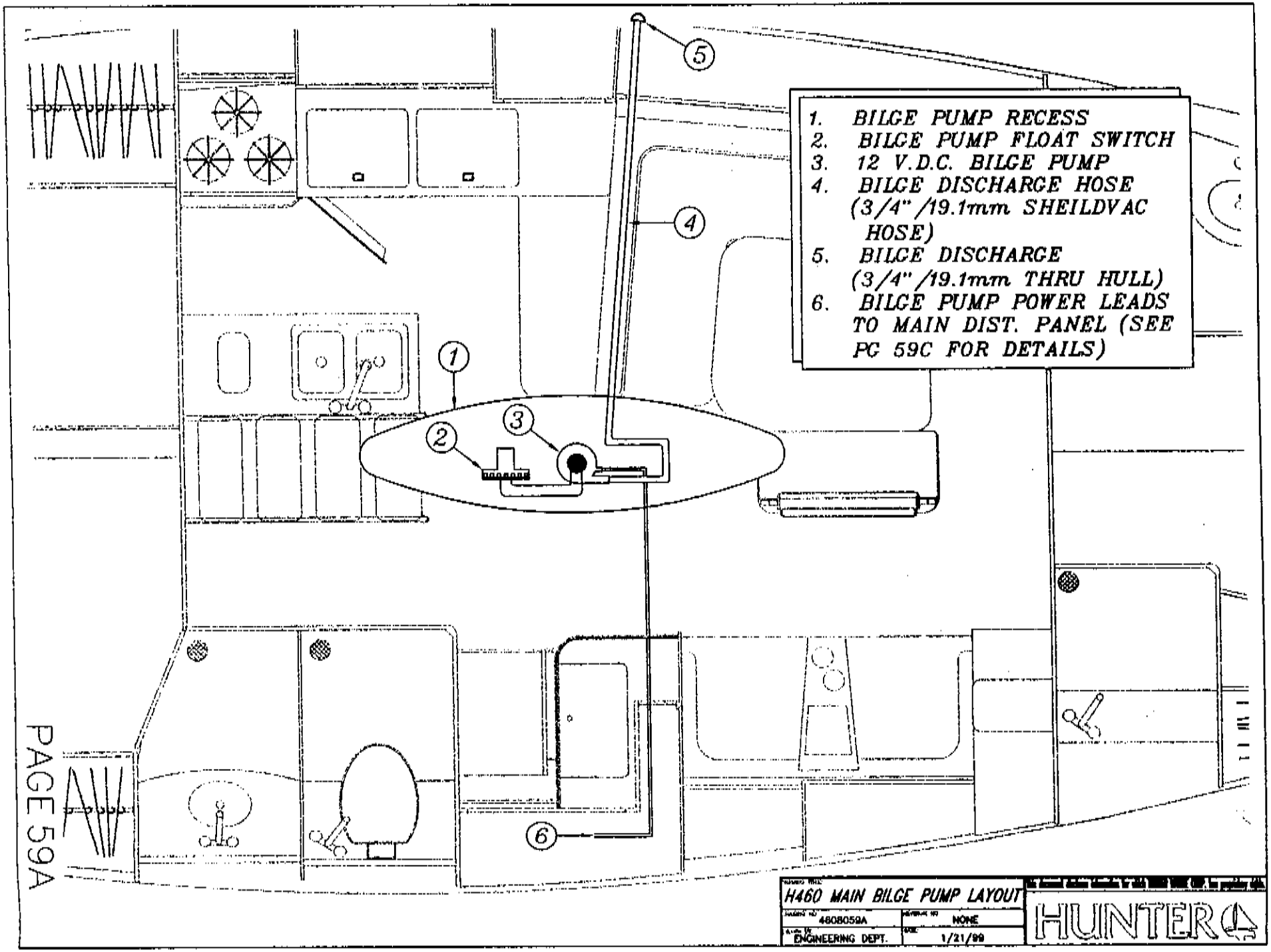
H460 BASIC MACERATOR WIRING SCHEMATIC	
42080588	NONE
ENGINEERING DEPT	1/20/98

HUNTER



NOTE:
ALWAYS KEEP WASTE DISCHARGE BALL
VALVES CLOSED WHEN SYSTEM IS NOT IN USE.

H460 WASTE TANK(S) SENDING UNIT SCHEMATIC		HUNTER
4608058C	NONE	
ENGINEERING DEPT.	1/20/99	



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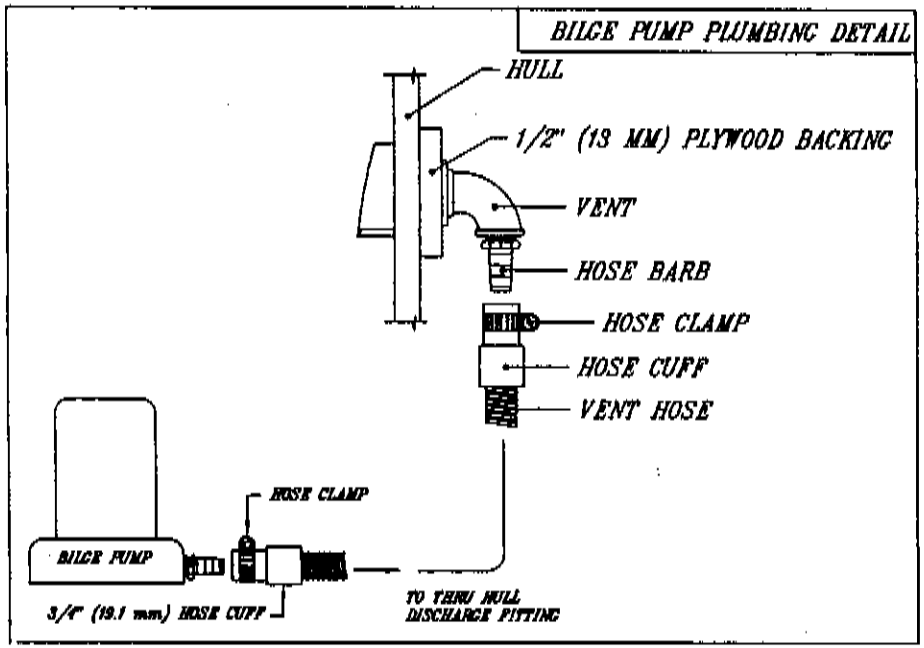
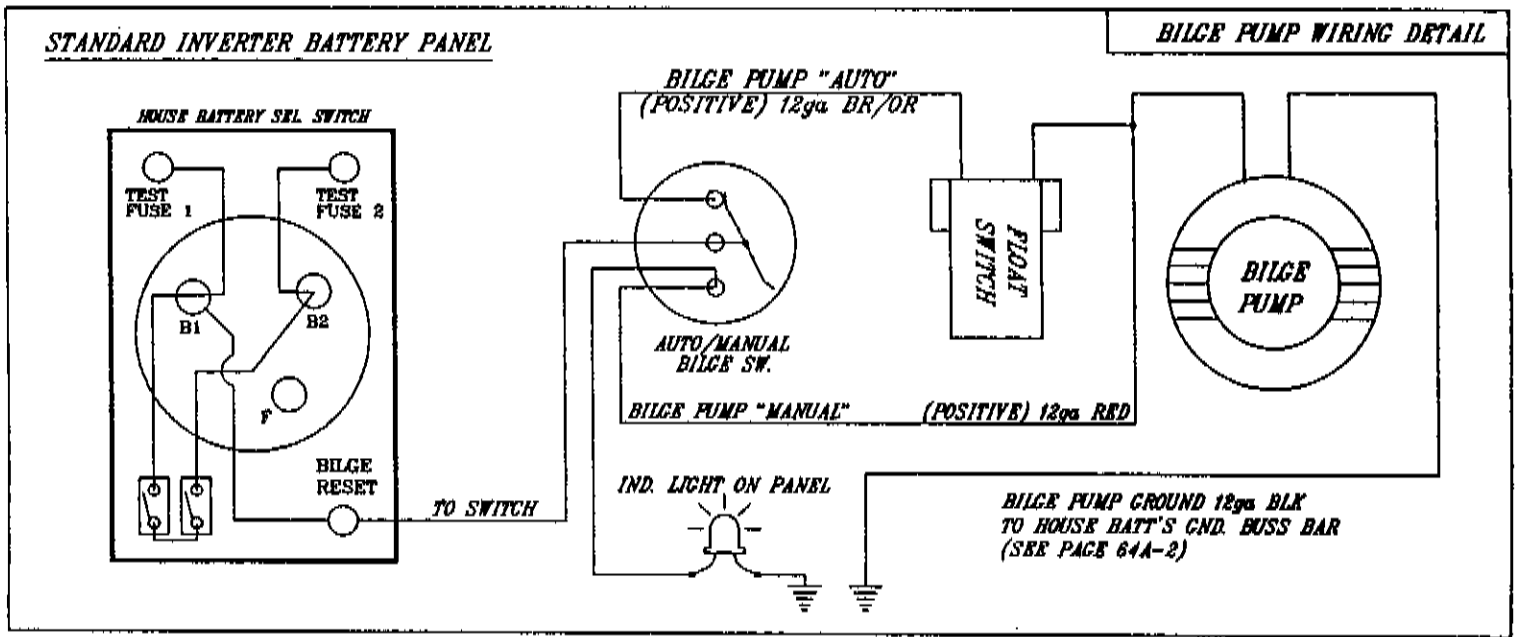
H460 MAIN BILGE PUMP LAYOUT

4608059A	NONE
ENGINEERING DEPT.	1/21/99

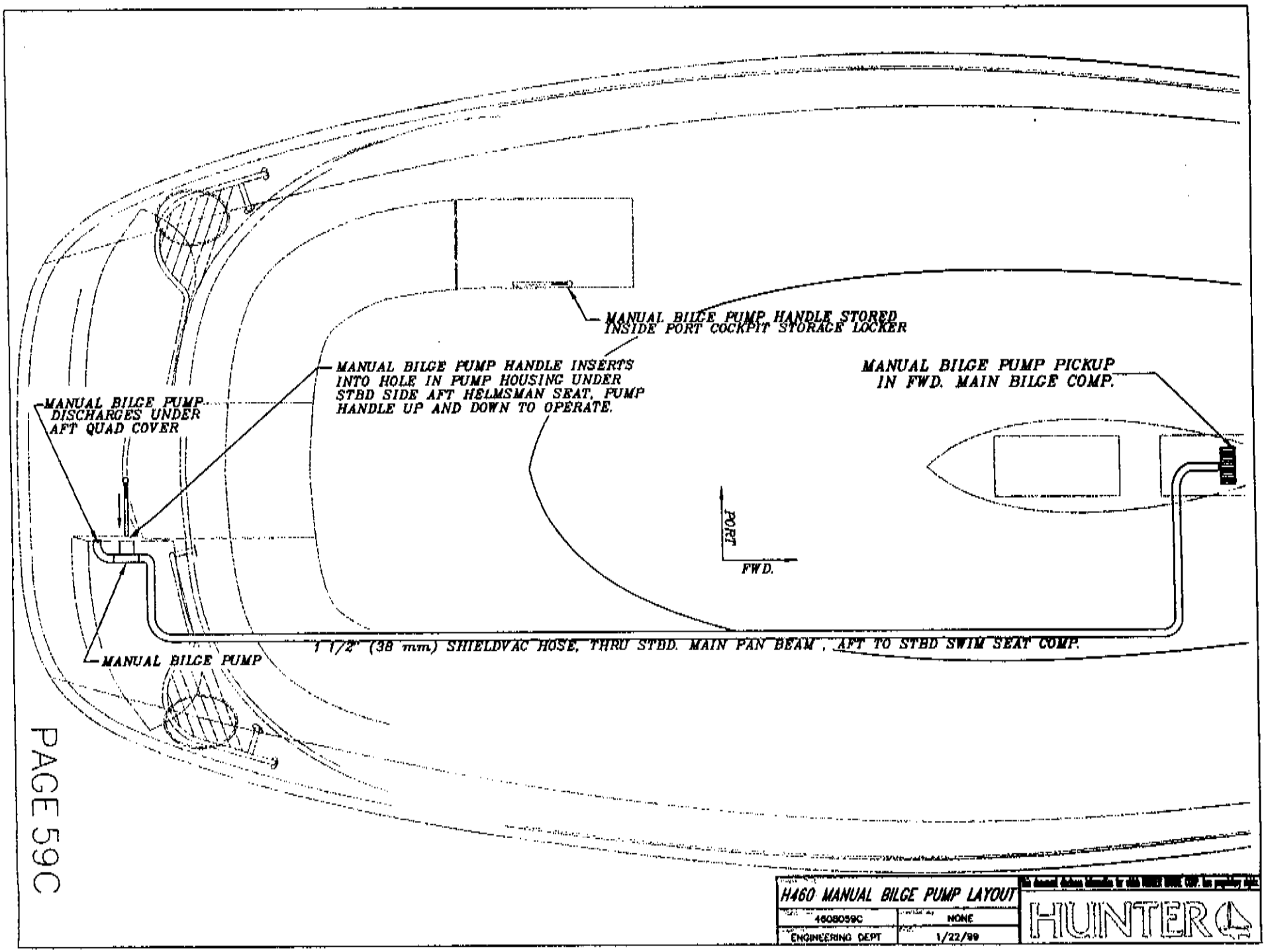
HUNTER





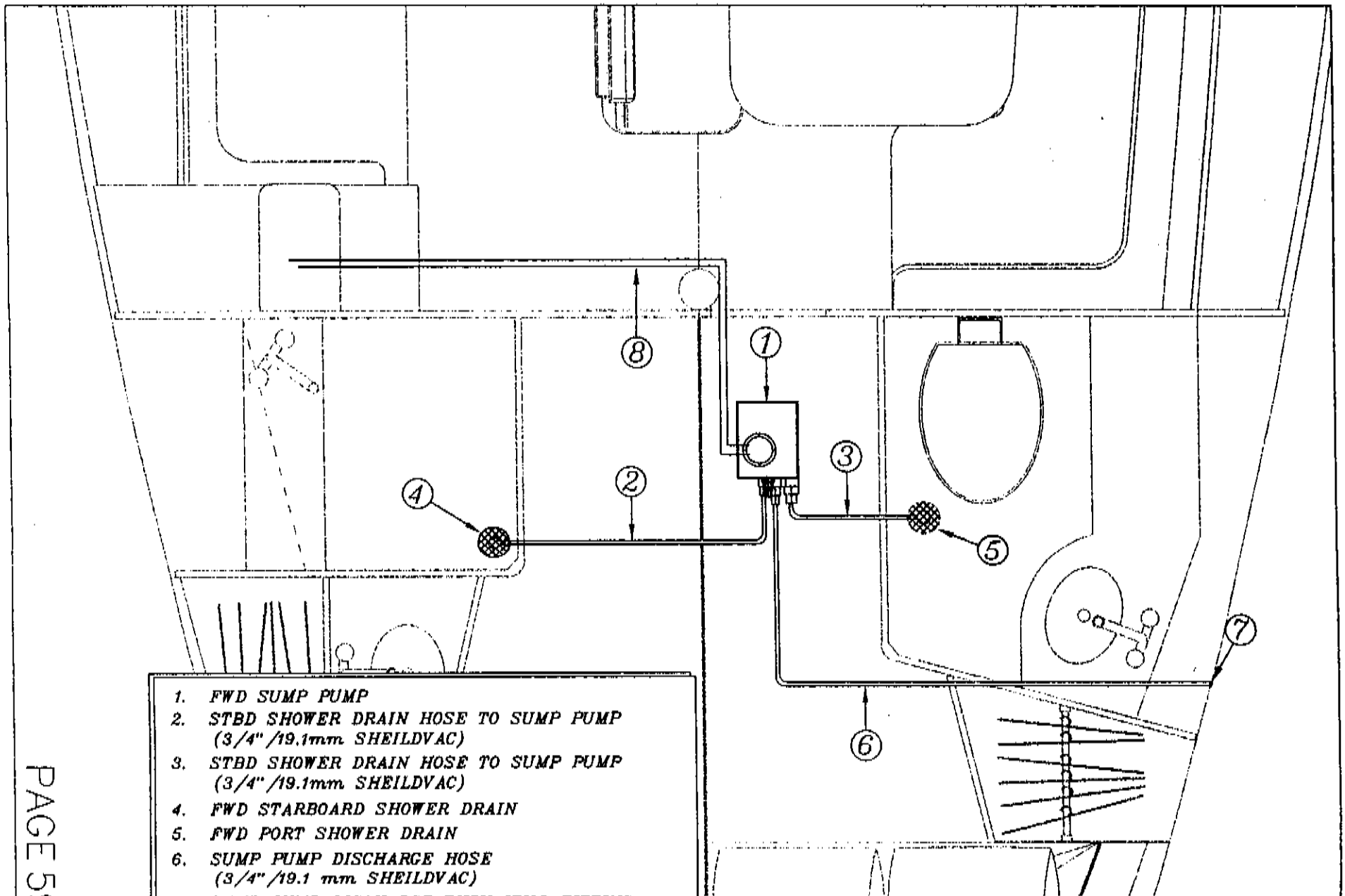
H460 BILGE SYSTEM DETAILS	
46080598	NONE
ENGINEERING DEPT.	1/21/99

HUNTER



H460 MANUAL BILGE PUMP LAYOUT	
4608059C	NONE
ENGINEERING DEPT	1/22/99

HUNTER

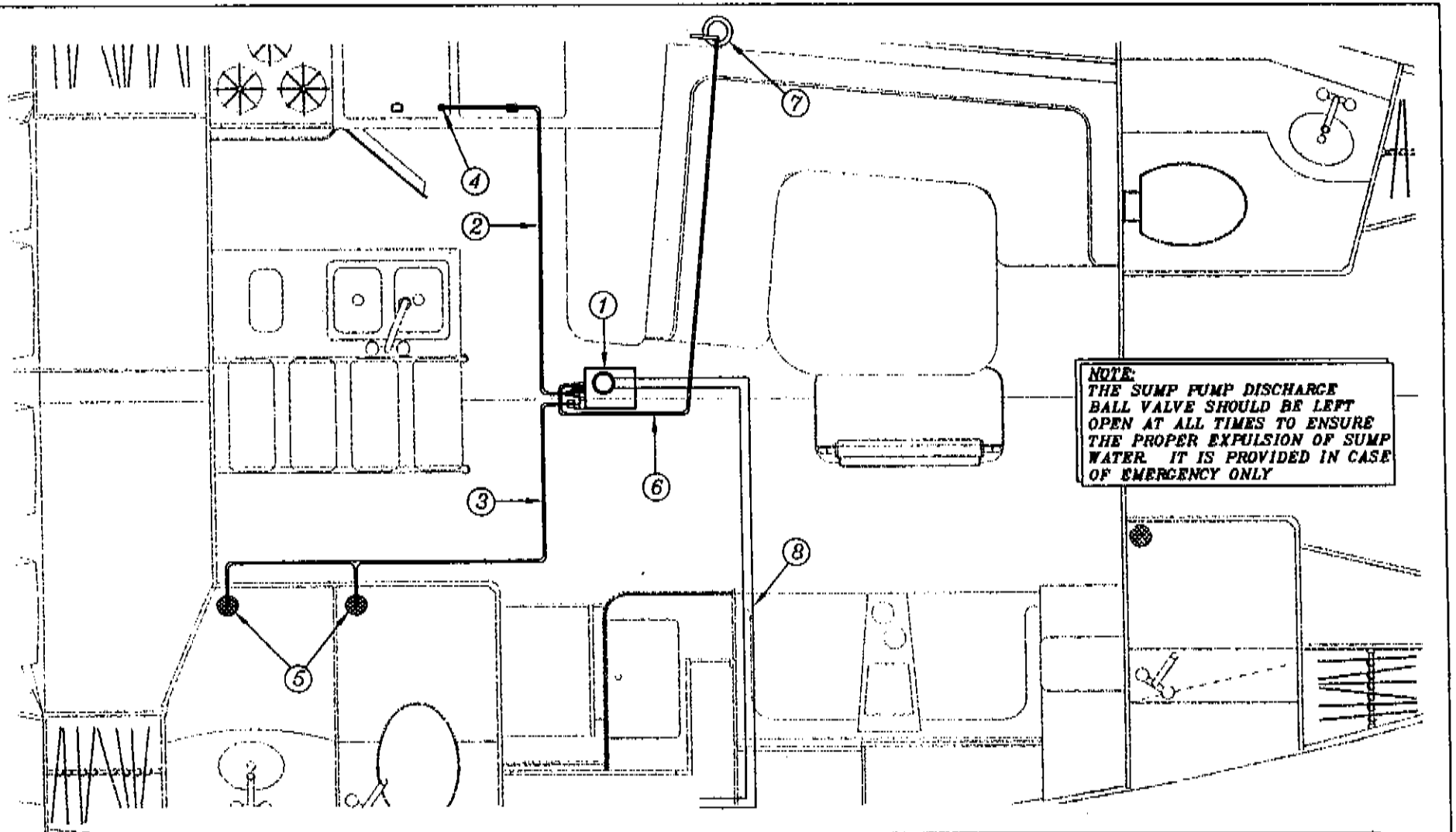


1. FWD SUMP PUMP
2. STBD SHOWER DRAIN HOSE TO SUMP PUMP (3/4"/19.1mm SHEILDVAC)
3. STBD SHOWER DRAIN HOSE TO SUMP PUMP (3/4"/19.1mm SHEILDVAC)
4. FWD STARBOARD SHOWER DRAIN
5. FWD PORT SHOWER DRAIN
6. SUMP PUMP DISCHARGE HOSE (3/4"/19.1 mm SHEILDVAC)
7. SUMP PUMP DISCHARGE THRU HULL FITTING (3/4"/19.1 mm SHEILDVAC)
8. SUMP PUMP POWER LEADS TO MAIN DIST. PANEL

H460 FWD SUMP PUMP SYSTEM LAYOUT

4605059D	NONE
ENGINEERING DEPT.	1/7/99

HUNTER

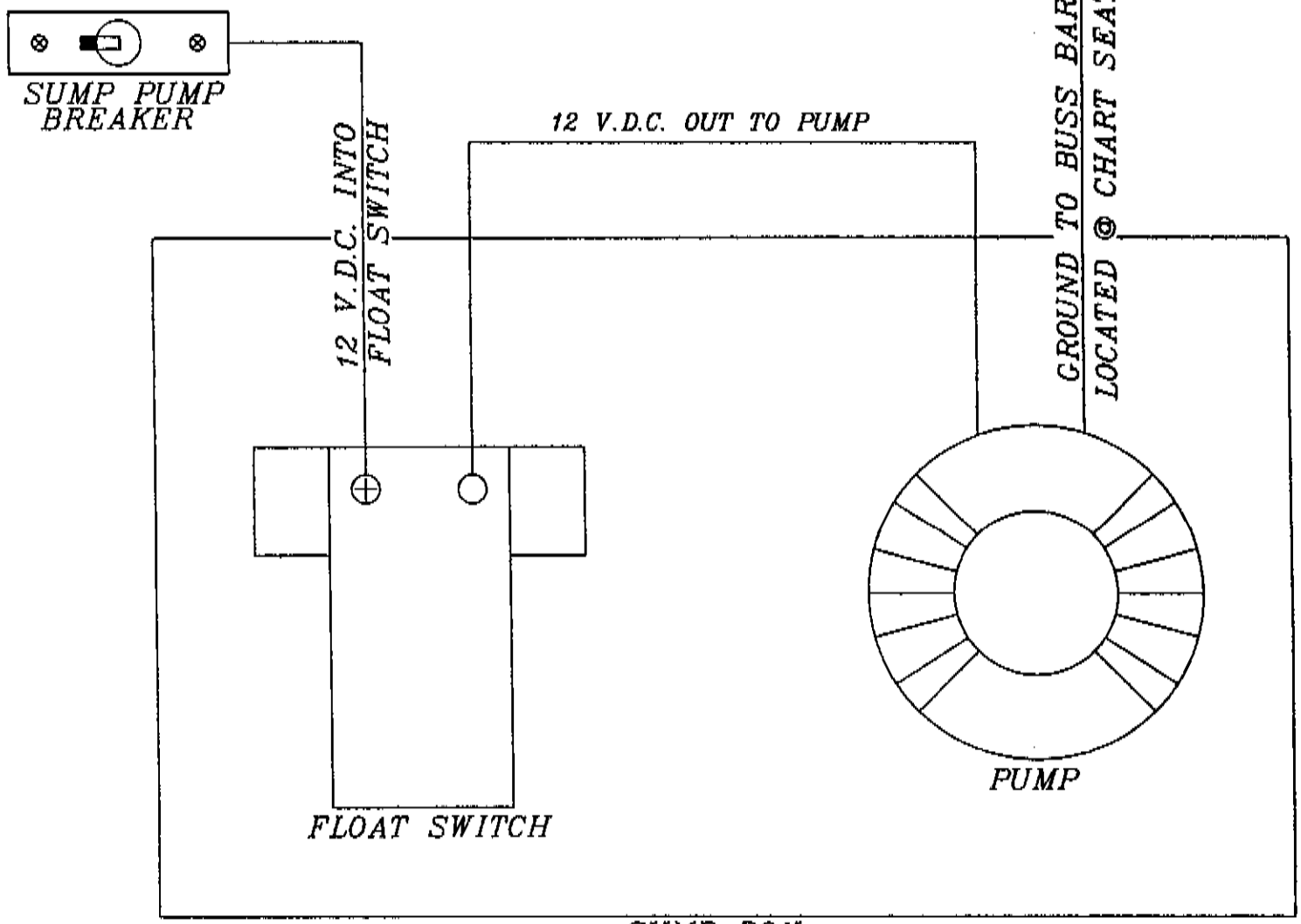


1. AFT SUMP PUMP
2. FRIG/FREEZER DRAIN HOSE TO SUMP PUMP (3/4"/19.1mm SHEILDVAC)
3. STBD AFT SHOWER DRAIN HOSE TO SUMP PUMP (3/4"/19.1mm SHEILDVAC)
4. FRIG/FREEZER DRAIN
5. STBD. AFT SHOWER DRAIN(S)
6. SUMP PUMP DISCHARGE HOSE (3/4"/19.1 mm SHEILDVAC)
7. SUMP PUMP DISCHARGE THRU HULL BALL VALVE (3/4"/19.1 mm SHEILDVAC)
8. SUMP PUMP POWER LEADS TO MAIN DIST. PANEL

H460 AFT SUMP PUMP SYSTEM LAYOUT

4608059E	NONE
ENGINEERING DEPT.	1/22/99

HUNTER



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H460 SUMP PUMP SCHEMATIC

4606059F | NONE

ENGINEERING DEPT. | 1/22/99

HUNTER

Stage	Component	Useq	PC	Description	UM	Net Quantity
	.....BD030065	80	5	H460-AFT WASTE TANK	EA	1.0000
56	253700	10	300	GUAGE, WASTE WATER, HTG-1	EA	1.0000
26	253754	180	300	SENDER,WASTE TANK, 2SECTION SH2 H	EA	1.0000
27	257570	80	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
26	314430	240	200	CHAFE GUARD,PLASTIC,2" 450	EA	1.0000
26	314440	130	200	CHAFE GUARD, PLASTIC, 3" H450	EA	1.0000
24	353031	190	250	TANK,HOLDING,AFT,PLASTIC 30GAL H	EA	1.0000
26	353157	150	250	FUEL VENT #503-4 (WATER)	EA	1.0000
26	353355	40	250	HOSE CLAMP #10	EA	3.0000
26	353427	20	250	HOSE CLAMP #24	EA	4.0000
26	353913	210	250	BALL VALVE 1/2" #70-103-10	EA	1.0000
26	354327	220	250	NIPPLES BRASS 1/2" X 2"	EA	1.0000
26	354867	160	250	ELBOW PVC 1 1/2" SLIP X MPT	EA	1.0000
26	355335	140	250	BARB, PIPE TO HOSE PVC #8002 (3/4")	EA	1.0000
26	355425	30	250	BARB 1/2"MPTX3/4"HB SHIELDS WHITE	EA	1.0000
26	355479	120	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	2.0000
26	355803	250	150	ELBOW 90 DEG.STR/ELL BR. 3/4"	EA	1.0000
31	356217	50	200	DECK PLATE WASTE BROWN	EA	1.0000
26	358035	60	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	9.5000
26	358413	90	250	HOSE,SANI,1.5""LOW PERM" 104-1126	FT	11.0000
26	358413	110	250	HOSE,SANI,1.5""LOW PERM" 104-1126	FT	4.0000
28	656700	70	300	WIRE, DUPLEX, UL BOAT CABLE 16/2 BL	FT	30.0000
	.....BD030085	91	5	H460-GALLEY DRAIN PLUMBING	EA	1.0000
26	286250	10	560	LABEL,THRUHULL,"GALLEY DISCHARGE"	EA	1.0000
26	314430	150	200	CHAFE GUARD,PLASTIC,2" 450	EA	2.0000
43	351015	140	250	SINK,NY1019-12 DOUBLE	EA	1.0000
43	351033	130	250	DRAIN, 1 1/4" NY1039-00	EA	2.0000
43	351069	20	250	DRAIN,SINK, 90DEG. #101041-00	EA	2.0000
26	352653	30	250	BRASS THRU HULL FITTING 1 1/4" #65-	EA	1.0000
26	353391	40	250	HOSE CLAMP #16	EA	12.0000
26	353967	50	250	BALL VALVE 1 1/4" #70-106-10	EA	1.0000
26	354111	60	250	BARB, HOSE, BRASS, 1 1/4"	EA	1.0000
26	354759	160	250	STREET ELBOW 90DEG BRASS 1 1/4"	EA	1.0000
26	354795	70	250	TEE,PVC HOSE BARB 1 1/4"	EA	1.0000
26	358053	80	250	HOSE SHIELDVAC 1 1/4" (#145-1140)	FT	2.5000
26	358053	90	250	HOSE SHIELDVAC 1 1/4" (#145-1140)	FT	3.0000
26	358053	110	250	HOSE SHIELDVAC 1 1/4" (#145-1140)	FT	6.0000
26	358125	120	250	HOSE CUFFS 1 1/4"(142-1140)	EA	6.0000
	.....BD030095	100	5	H460-ICE BOX DRAIN PLUMBING	EA	1.0000
11	350659	40	250	SINK DRAIN, 1"WHITE PLASTIC	EA	1.0000
26	353373	30	250	HOSE CLAMP #12	EA	2.0000
26	358071	10	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	7.0000
26	358107	20	250	HOSE CUFFS 1" (100-1000)	EA	2.0000
	.....BD030110	110	5	H460-PORT LOCKER	EA	1.0000
31	355245	20	250	THRU HULL 3/4" #328-S STR.PLAS	EA	1.0000
	.....BD030125	130	5	H460-AFT VANITY DRAIN	EA	1.0000
26	286280	10	560	LABEL,THRUHULL,VANITY DISCHARGE	EA	1.0000
26	314440	100	200	CHAFE GUARD, PLASTIC, 3" H450	EA	1.0000

HUNTER

H460 WATER DRAINAGE SYSTEM PARTS LIST

DRAWING NO. 46080590 | REVISION NONE | DATE 3/25/99 | ENGINEERING DEPT.

Stage	Component	Useq	PC	Description	UM	Net Quantity
26	...353931	70	250	BALL VALVE 3/4" #70-104-10	EA	1.0000
26	...354057	80	250	BARB, HOSE, BRASS, 3/4"	EA	1.0000
26	...358035	100	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	9.0000
26	...358035	110	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	7.0000
26	...358035	120	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	8.0000
26	...358413	150	250	HOSE,SANI,1.5""LOW PERM" 104-1126	FT	1.0000
26	...358413	170	250	HOSE,SANI,1.5""LOW PERM" 104-1126	FT	6.0000
27	...464070	130	600	HEX HD 5/16 X 1 1/2" S/S L/B	EA	4.0000
27	...469610	140	600	WASHER NEO 3/8" S/S W/N/B 7/8 O	EA	4.0000
	..BD030115	20	5	H460-AFT HEAD PLUMBING	EA	1.0000
26	...286430	10	560	LABEL,THRUHULL,"HEAD PICKUP"	EA	1.0000
26	...314430	140	200	CHAFE GUARD,PLASTIC,2" 450	EA	1.5000
26	...350295	160	250	TOLIET,MANUAL "HOUSEHOLD"#29120-000	EA	1.0000
26	...352293	30	250	VENTED LOOP,W/VALVE,3/4"PVC	EA	1.0000
26	...352617	40	250	BRASS THRU HULL FITTING 3/4" #6S-BN	EA	1.0000
26	...353355	50	250	HOSE CLAMP #10	EA	7.0000
26	...353931	60	250	BALL VALVE 3/4" #70-104-10	EA	1.0000
26	...354057	70	250	BARB, HOSE, BRASS, 3/4"	EA	1.0000
26	...355821	150	250	ELBOW 90 DEG.STR/ELL BR. 1"	EA	1.0000
26	...358035	80	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	9.0000
26	...358035	90	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	7.0000
26	...358035	100	250	HOSE,WHITE, 3/4"D.SANTI HOSE,148-03	FT	9.0000
27	...464070	110	600	HEX HD 5/16 X 1 1/2" S/S L/B	EA	4.0000
27	...469530	130	600	WASHER LOCK 5/16" S/S L/W	EA	4.0000
27	...469610	120	600	WASHER NEO 3/8" S/S W/N/B 7/8 O	EA	4.0000
	.BD040330	90	5	H460-LPG MOUNTING	EA	1.0000
41	..307150	40	550	RAIL,GALLEY STOVE, TO PRINT, H376	EA	1.0000
41	..307330	120	550	STOVE SPLASH GUARD S/S H-35.5	EA	1.0000
41	..316810	50	250	STOVE,3BURNER,LPG,60351H,	EA	1.0000
56	..316933	60	250	PANEL ONLY - LPG	EA	1.0000
34	..316940	70	250	REGULATOR,WALLMT,W/FITTINGS	EA	1.0000
26	..316950	130	300	HOSE LPG @ 25' #93162	EA	1.0000
96	..317040	80	250	TANK,ALUM 10#,VERTICAL DOT	EA	2.0000
37	..466670	100	600	P/H PHIL #10 X 3/4" S/S T/A	EA	6.0000
37	..466790	90	600	P/H PHIL #6 X 1/2" S/S T/A	EA	5.0000
43	350655	20	250	SINK DRAIN #SW2 90DEGREE #997014	EA	1.0000
26	352635	30	250	BRASS THRU HULL FITTING 1" #65-BN7-	EA	1.0000
26	353373	40	250	HOSE CLAMP #12	EA	2.0000
26	353877	50	250	BALL VALVE (1") BRASS #70-105-10	EA	1.0000
26	354075	60	250	BARB,HOSE, BRASS, 1"	EA	1.0000
26	358071	80	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	9.0000
26	358107	90	250	HOSE CUFFS 1" (100-1000)	EA	2.0000
	.....BD030205	131	5	MANUAL BILGE PUMP	EA	1.0000
32	303790	50	200	SPRING CLAMP #502-1	PR	1.0000
31	352185	60	250	PUMP BILGE THRU/DECK #DP3804/BP1740	EA	1.0000
26	352851	70	250	NAVY PUMP STRAINER #722	EA	1.0000
26	353427	80	250	HOSE CLAMP #24	EA	4.0000
56	353427	90	250	HOSE CLAMP #24	EA	4.0000
26	354345	100	250	BRASS NIPPLE 1 1/4" (CLOSE)	EA	1.0000
34	355029	160	250	ELL. 90 DEG.(PVC) 1 1/2" FPT	EA	1.0000
31	355299	110	250	THRU HULL 1 1/2" #328-8 PVC	EA	1.0000

Stage	Component	Useq	PC	Description	UM	Net Quantity
26	357981	120	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	25.0000
25	357981	130	250	HOSE SHIELDVAC 1 1/2"(145-1120)	FT	3.0000
26	358143	140	250	HOSE CUFFS 1 1/2"(142-1120)	EA	2.0000
26	358143	150	250	HOSE CUFFS 1 1/2"(142-1120)	EA	2.0000
32	465210	30	600	NUT LOCK 10-24 S/S L/N	EA	4.0000
32	466030	20	600	O/H PHIL 10-24 X 2" S/S M/S	EA	4.0000
32	466930	10	600	P/H PHIL #8 X 1/2" S/S T/A	EA	4.0000
32	469170	40	600	WASHER FINISH #10 F/W S/S	EA	4.0000
	.....BD030215	132	5	SCUPPER DRAIN	EA	1.0000
	.....BD030235	170	5	LPG BOX DRAIN	EA	1.0000
26	353157	40	250	FUEL VENT #503-4 (WATER)	EA	2.0000
34	353355	10	250	HOSE CLAMP #10	EA	4.0000
34	355191	20	250	THRU HULL 3/4" 90%	EA	2.0000
26	355425	50	250	BARB 1/2"MPTX3/4"HB SHIELDS WHITE	EA	2.0000
34	357891	30	250	HOSE WATER 3/4"BLACK TYPE HEATER HW	FT	2.0000
34	357891	35	250	HOSE WATER 3/4"BLACK TYPE HEATER HW	FT	1.0000
	....BD040001	30	5	COMBINED PLUMBING/ELECTRICAL SUB AS	EA	1.0000
	.....BD040015	10	5	H460-FWD SHOWER SUMP	EA	1.0000
10	256445	220	350	ABS,SHOWER DRAIN,BEIGE	EA	2.0000
10	309575	10	350	ABS,BEIGE,.125X48"X96"	SF	0.5000
27	257570	10	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
26	350421	20	250	COVER,DRAIN, S/S 4" W/SCREWS H280	EA	1.0000
26	350655	30	250	SINK DRAIN #SW2 90DEGREE #907014	EA	1.0000
26	352023	40	210	SUMP PUMP, 4137-1	EA	1.0000
26	353355	50	250	HOSE CLAMP #10	EA	2.0000
26	353373	60	250	HOSE CLAMP #12	EA	2.0000
26	355191	210	250	THRU HULL 3/4" 90%	EA	1.0000
26	358017	80	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	10.5000
26	358071	90	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	2.5000
26	358089	100	250	HOSE CUFFS 3/4" (142-0340)	EA	2.0000
26	358107	110	250	HOSE CUFFS 1" (100-1000)	EA	2.0000
27	466670	120	600	P/H PHIL #10 X 3/4" S/S T/A	EA	15.0000
27	654500	130	300	WIRE BLACK SC-12 GAUGE	FT	15.0000
28	656400	150	300	CONDUIT 3/8" 125-0380	FT	5.0000
	.....BD040020	20	5	H460-STB FWD SHOWER DRAIN	EA	1.0000
26	350421	3	250	COVER,DRAIN, S/S 4" W/SCREWS H280	EA	1.0000
26	350655	20	250	SINK DRAIN #SW2 90DEGREE #907014	EA	1.0000
26	353373	30	250	HOSE CLAMP #12	EA	2.0000
26	358071	40	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	6.0000
26	358107	50	250	HOSE CUFFS 1" (100-1000)	EA	2.0000
27	461050	10	600	F/H PHIL #10 X 1" S/S T/A	EA	3.0000
	.....BD040025	30	5	H460-FWD HEAD MACERATOR	EA	1.0000
56	250425	150	300	PANEL,SWITCH,MOMENT."MACERATOR"30AM	EA	1.0000
27	257552	10	600	TERMINAL C1210-SC 180/LB YELLOW	EA	2.0000
26	286310	20	560	LABEL,THRUHULL,"MACERATOR DISCHARGE	EA	1.0000
26	351969	30	250	PUMP MACERATOR #18590-500 L-400	EA	1.0000
26	352635	40	250	BRASS THRU HULL FITTING 1" #65-BN7-	EA	1.0000

HUNTER

H460 WATER DRAINAGE SYSTEM PARTS LIST CONT

48080091 NONE

ENGINEERING DEPT. 3/25/99

Stage	Component	Useq	PC	Description	UM	Net Quantity
26	353391	50	250	HOSE CLAMP #16	EA	3.0000
26	353427	60	250	HOSE CLAMP #24	EA	4.0000
26	353877	70	250	BALL VALVE (1") BRASS #70-105-10	EA	1.0000
26	354075	80	250	BARB,HOSE, BRASS, 1"	EA	1.0000
26	354813	170	250	ELBOW - PVC - 1 1/2 SLIP X 1 1/2 FP	EA	1.0000
26	355479	180	250	ADAPTER 1 1/2" X 1 1/2" #341513	EA	1.0000
26	358197	100	250	HOSE SHIELDFLEX 1" TYPE 100-0346	FT	4.0000
27	466570	110	600	P/H PHIL #10 X 1" S/S T/A	EA	4.0000
27	654400	120	300	WIRE BLACK SC-10 GAUGE	FT	45.0000
27	655800	130	300	WIRE BROWN W/WHITE STRIPE 10GA.TINN	FT	45.0000
	.....BD040045	41	5	MAIN BILGE PUMP	EA	1.0000
26	253916	10	200	SWITCH, BILGE, AUTO,	EA	1.0000
27	257570	20	300	TERMINAL C1614-SC 400/LB BLUE	EA	3.0000
26	352318	140	150	THRU-HULL,CHR,1",65-CN7-51	EA	1.0000
26	353373	30	250	HOSE CLAMP #12	EA	2.0000
26	353643	40	250	BILGE PUMP #02 1500GPH	EA	1.0000
26	355353	160	250	BARB, PIPE TO HOSE, PVC #8003 (1")	EA	1.0000
26	358071	60	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	14.0000
26	358107	70	250	HOSE CUFFS 1" (100-1000)	EA	2.0000
27	461850	110	600	P/H PHIL #8 X 3/4" S/S T/A	EA	2.0000
27	466670	120	600	P/H PHIL #10 X 3/4" S/S T/A	EA	12.0000
27	654500	80	300	WIRE BLACK SC-12 GAUGE	FT	22.0000
27	655600	90	300	WIRE BROWN W/ORANGE STRIPE 12GA.	FT	22.0000
27	655700	170	300	WIRE BROWN W/RED STRIPE 12 GA	FT	22.0000
	.....BD040065	50	5	H460 - AFT HEAD MACERATOR COMPONENT	EA	1.0000
56	250425	150	300	PANEL,SWITCH,MOMENT."MACERATOR"30AM	EA	1.0000
27	257552	10	600	TERMINAL C1210-SC 180/LB YELLOW	EA	2.0000
26	286310	20	560	LABEL,THRUHULL,"MACERATOR DISCHARGE	EA	1.0000
26	351969	30	250	PUMP MACERATOR #18590-500 L-400	EA	1.0000
26	352635	40	250	BRASS THRU HULL FITTING 1" #65-3N7-	EA	1.0000
26	353391	50	250	HOSE CLAMP #16	EA	3.0000
26	353427	60	250	HOSE CLAMP #24	EA	4.0000
26	353877	70	250	BALL VALVE (1") BRASS #70-105-10	EA	1.0000
26	354075	80	250	BARB,HOSE, BRASS, 1"	EA	1.0000
26	354867	160	250	ELBOW PVC 1 1/2" SLIP X MPT	EA	1.0000
26	358197	100	250	HOSE SHIELDFLEX 1" TYPE 100-0346	FT	4.0000
27	466570	110	600	P/H PHIL #10 X 1" S/S T/A	EA	4.0000
27	654400	120	300	WIRE BLACK SC-10 GAUGE	FT	28.0000
27	655800	130	300	WIRE BROWN W/WHITE STRIPE 10GA.TINN	FT	28.0000
	.....BD040075	60	5	H460-AFT SHOWER SUMP	EA	1.0000
10	256445	220	350	ABS,SHOWER DRAIN,BEIGE	EA	2.0000
10	309575	10	350	ABS,BEIGE,.125X48"X96''	SF	0.5000
27	257570	10	300	TERMINAL C1614-SC 400/LB BLUE	EA	3.0000
26	350421	20	250	COVER,DRAIN, S/S 4" W/SCREWS H280	EA	2.0000
26	350655	30	250	SINK DRAIN #SW2 90DEGREE #907014	EA	2.0000
26	352023	40	210	SUMP PUMP, 4137-1	EA	1.0000
26	352317	200	150	THRU-HULL,3/4"CHR,65-CN7-50	EA	1.0000
26	353355	50	250	HOSE CLAMP #10	EA	2.0000
26	353373	60	250	HOSE CLAMP #12	EA	6.0000

HUNTER

H460 WATER DRAINAGE SYSTEM PARTS LIST CONT

4608059J

NONE

3/25/98

ENGINEERING DEPT.

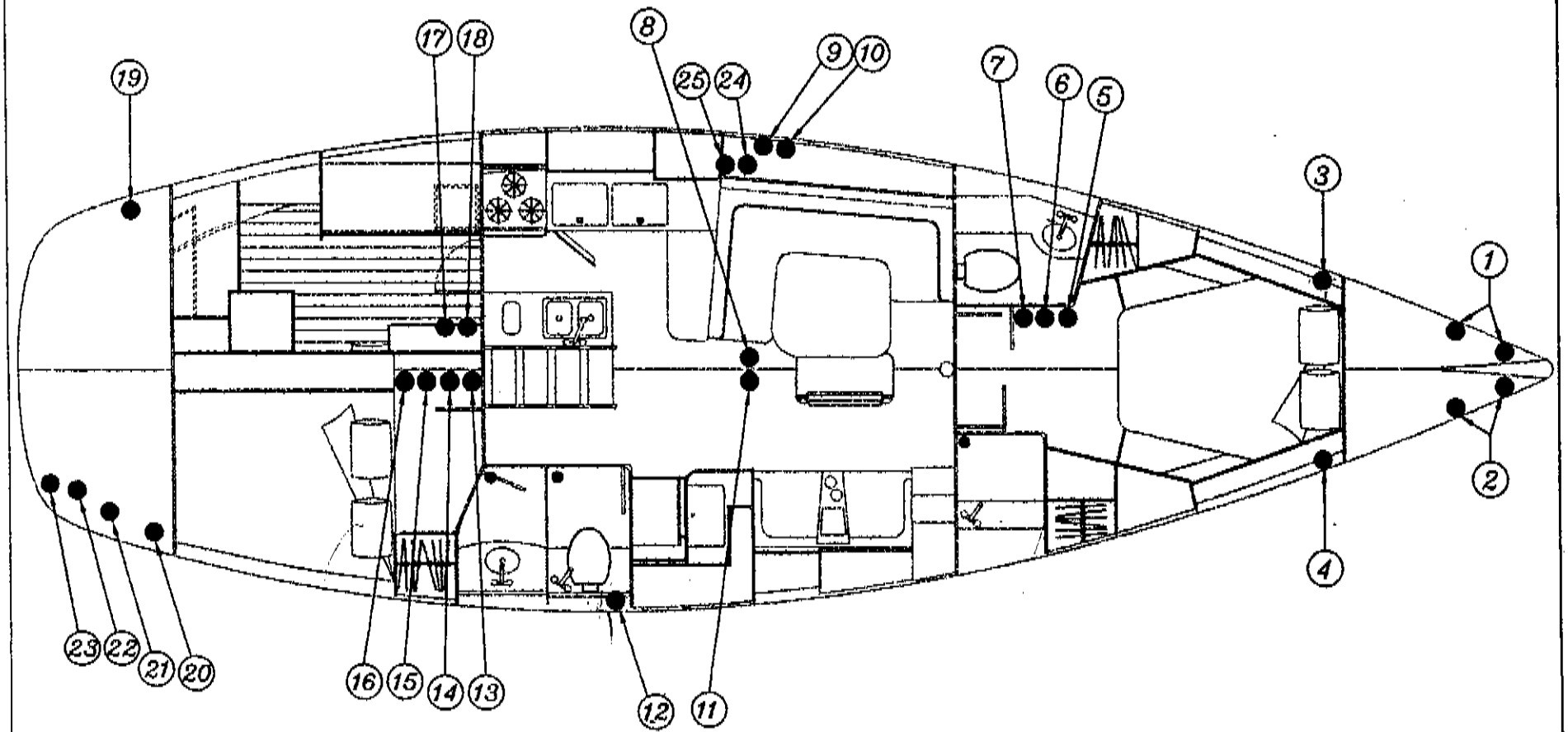
Stage	Component	Useq	PC	Description	UM	Net Quantity
26	353931	190	250	BALL VALVE 3/4" #70-104-10	EA	1.0000
26	355335	170	250	BARB, PIPE TO HOSE PVC #8002 (3/4")	EA	1.0000
26	355803	180	150	ELBOW 90 DEG.STR/ELL BR. 3/4"	EA	1.0000
26	355821	160	250	ELBOW 90 DEG.STR/ELL BR. 1"	EA	1.0000
26	358017	80	250	HOSE SHIELDVAC 3/4" (140-0340)	FT	15.0000
26	358071	90	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	2.0000
26	358071	130	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	3.0000
26	358071	140	250	HOSE SHIELDVAC 1"(140-1000) LH	FT	7.0000
26	358089	100	250	HOSE CUFFS 3/4" (142-0340)	EA	2.0000
26	358107	120	250	HOSE CUFFS 1" (100-1000)	EA	6.0000
27	461850	110	600	F/H PHIL #8 X 3/4" S/S T/A	EA	2.0000
26	.....P4636	210	999	TEE, 1" PVC, HOSE BARB H46	EA	1.0000

HUNTER

H400 WATER DRAINAGE SYSTEM PARTS LIST CONT

1408059K | NONE | 3/25/99

ENGINEERING DEPT.

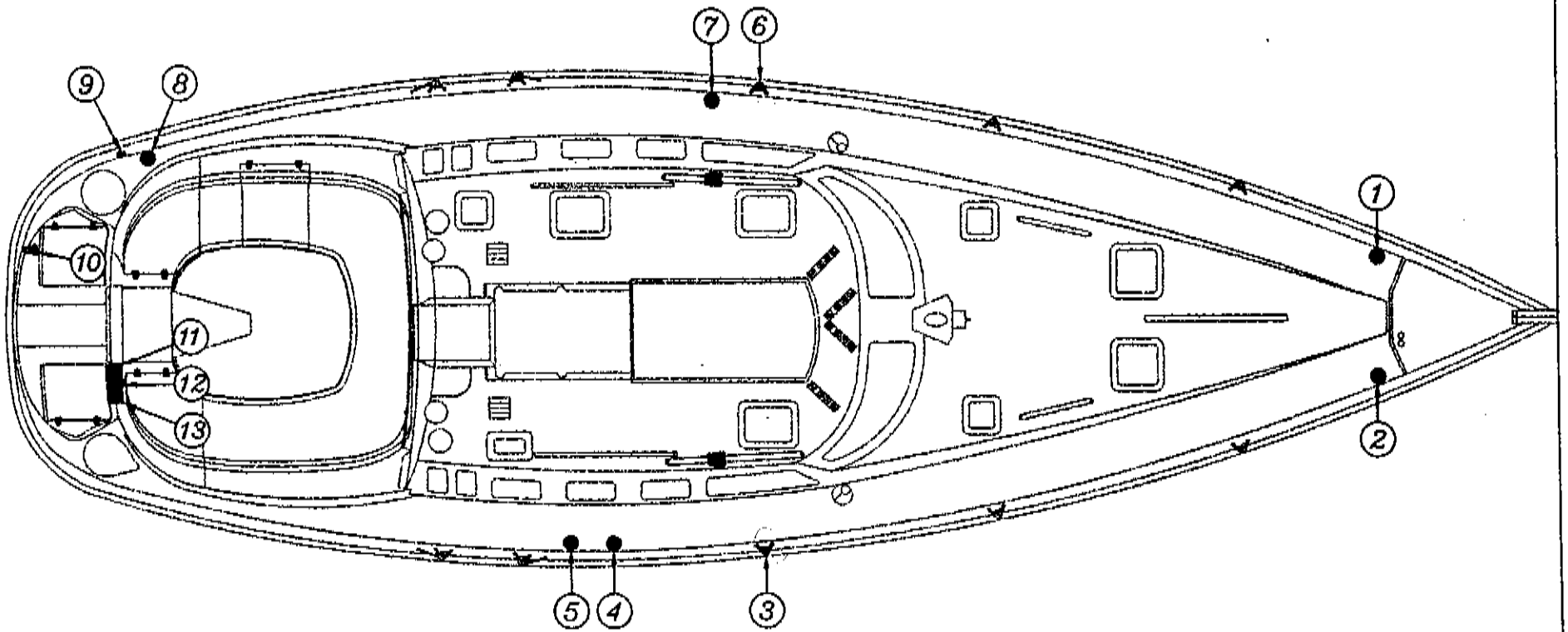


1. PORT ANCHOR WELL DRAIN
2. STARBOARD ANCHOR WELL DRAIN
3. FWD WASTE TANK VENT
4. FWD WATER TANK VENT
5. FWD MACERATOR DISCHARGE
6. FWD VANITY DRAIN DISCHARGE
7. FWD HEAD RAW WATER PICK UP
8. A.C RAW WATER PICK UP
9. BILGE PUMP DISCHARGE
10. SUMP PUMP DISCHARGE
11. REFRIG. RAW WATER PICK UP
12. AFT WASTE TANK VENT
13. GENERATOR RAW WATER PICK UP
14. AFT VANITY DRAIN DISCHARGE
15. AFT HEAD RAW WATER PICK UP
16. AFT MACERATOR DISCHARGE
17. ENGINE RAW WATER PICKUP
18. GALLEY DRAIN DISCHARGE
19. PORT LPG LOCKER DRAIN
20. STBD. LPG LOCKER DRAIN
21. AFT AC RAW WATER DISCHARGE
22. ENGINE EXHAUST DISCHARGE
23. GENERATOR EXHAUST DISCHARGE
24. FWD AC RAW WATER DISCHARGE
25. REFRIGERATION RAW WATER DISCHARGE

H460 THRU HULL LOCATIONS

48080460A	NONE
ENGINEERING DEPT.	1/21/99

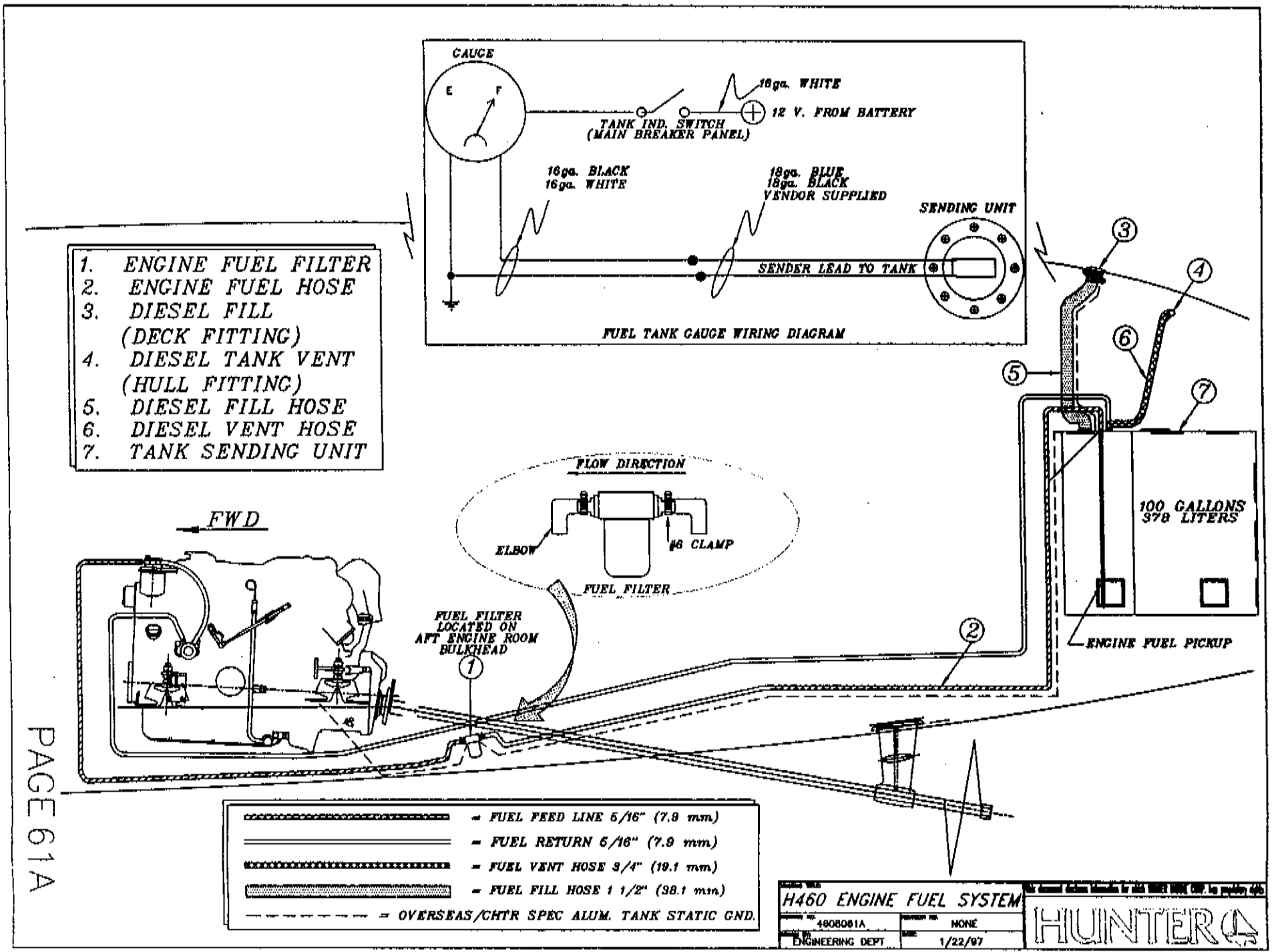
HUNTER

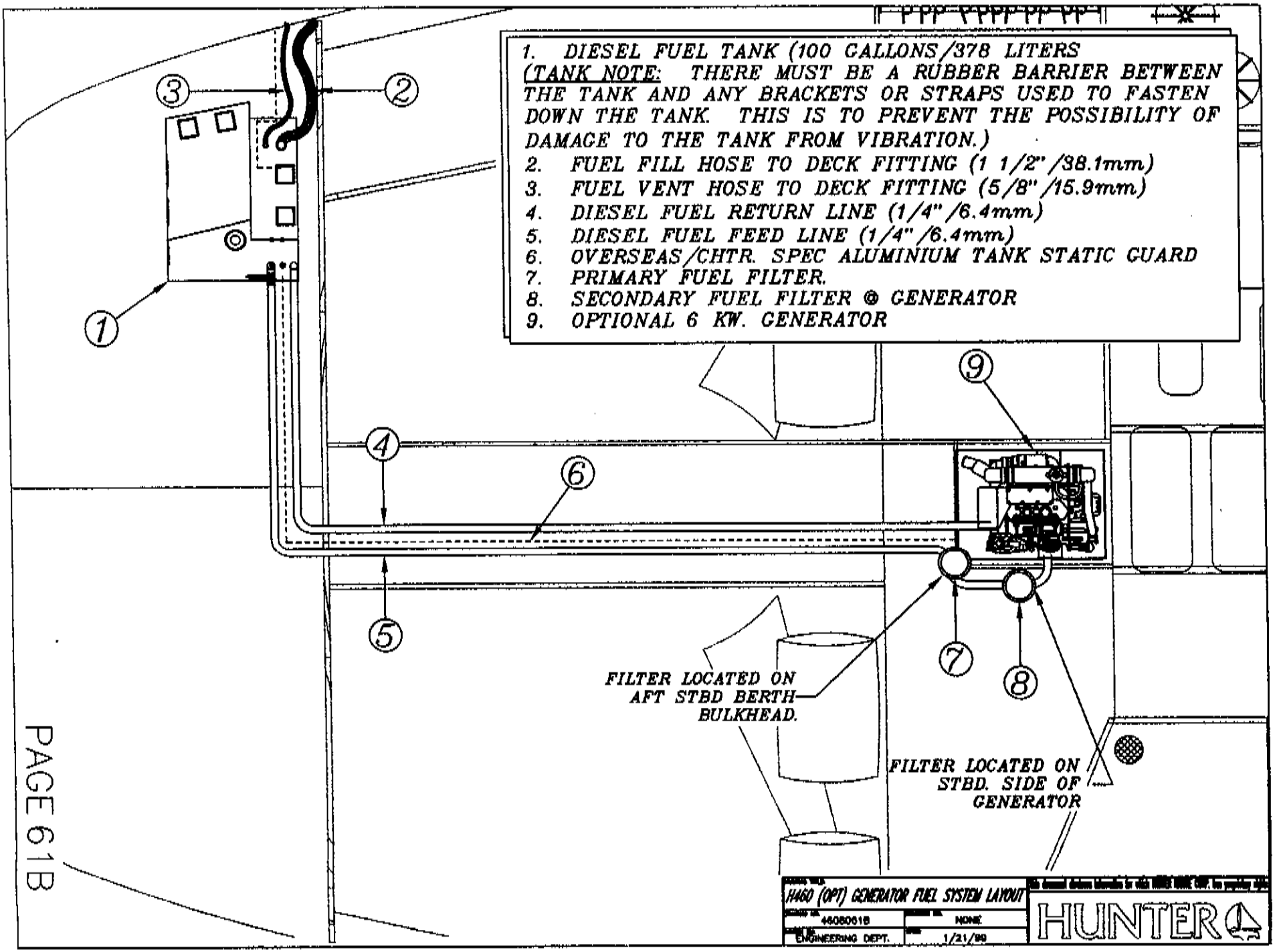


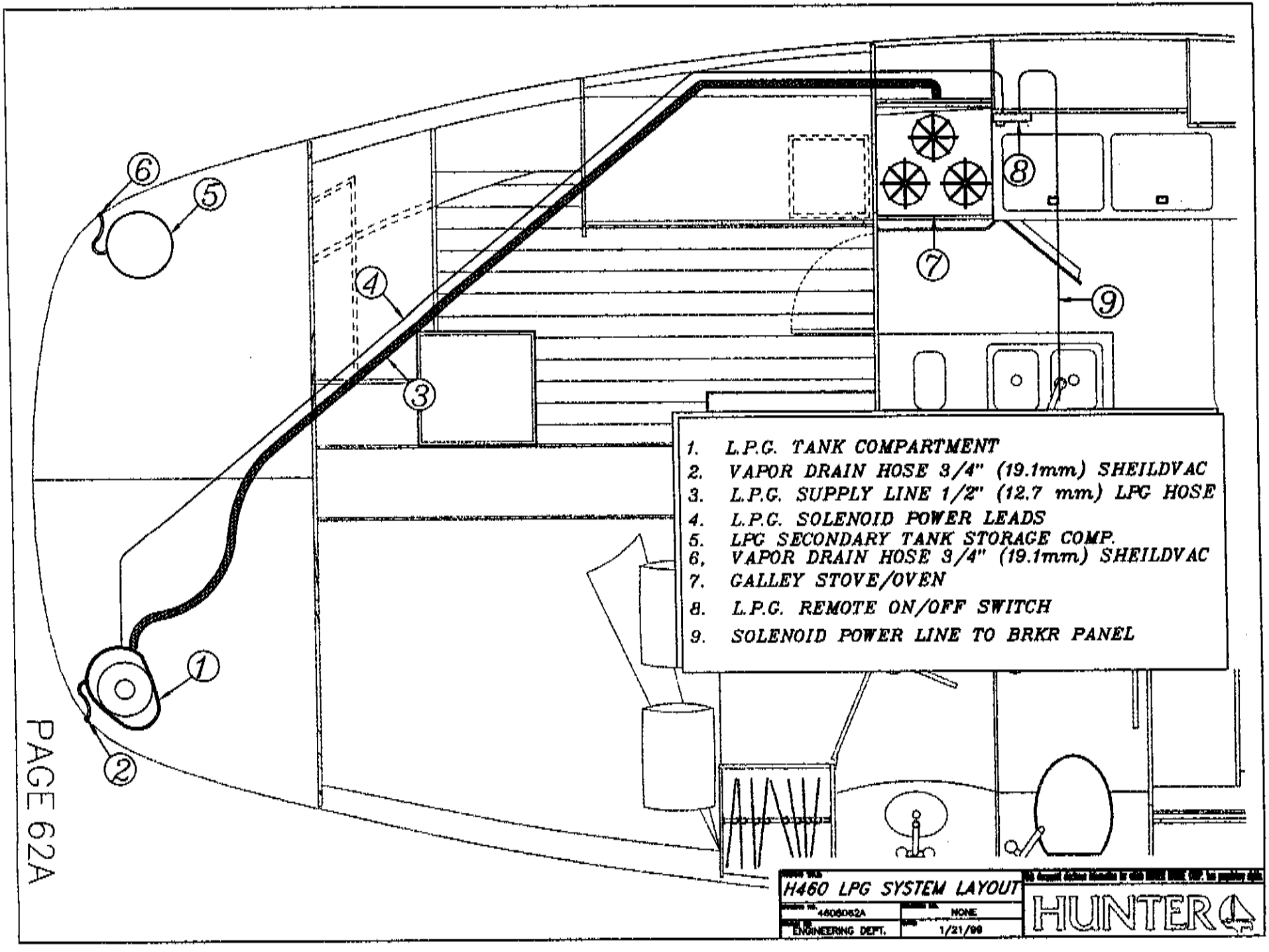
1. FWD WASTE TANK PUMP OUT LOCATION
2. FWD WATER TANK FILL LOCATION
3. STBD. WATER TANK VENT LOCATION (VENTED STANCHION)
4. STBD. WATER TANK FILL LOCATION
5. AFT HOLDING TANK PUMP OUT LOCATION
6. PORT WATER TANK VENT LOCATION (VENTED STANCHION)
7. PORT WATER TANK FILL LOCATION
8. FUEL TANK FILL LOCATION
9. FUEL TANK FILL VENT LOCATION
10. "SHORE" WATER INLET VALVE LOCATION
11. SHORE POWER # 1 INLET LOCATION
12. SHORE POWER #2 INLET LOCATION
13. TV COAX/PHONE INLET LOCATION

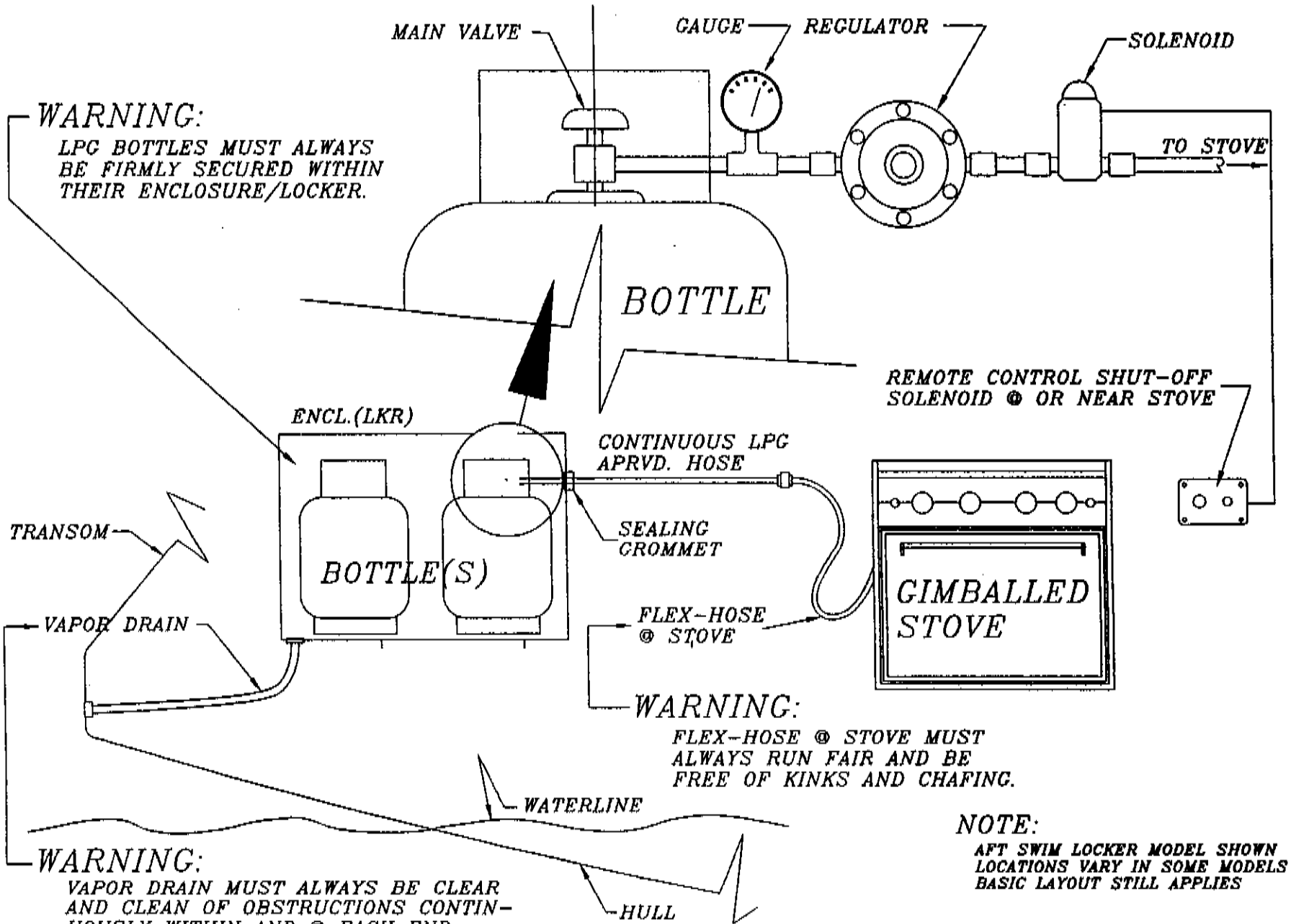
H460 THRU DECK LOCATIONS	
46080809	NONE
ENGINEERING DEPT.	1/22/99

HUNTER


CAUGE
E
F
16ga. WHITE
12 V. FROM BATTERY
TANK IND. SWITCH
(MAIN BREAKER PANEL)
16ga. BLACK
16ga. WHITE
18ga. BLUE
18ga. BLACK
VENDOR SUPPLIED
SENDING UNIT
SENDER LEAD TO TANK
FUEL TANK CAUGE WIRING DIAGRAM
1. ENGINE FUEL FILTER
2. ENGINE FUEL HOSE
3. DIESEL FILL (DECK FITTING)
4. DIESEL TANK VENT (HULL FITTING)
5. DIESEL FILL HOSE
6. DIESEL VENT HOSE
7. TANK SENDING UNIT
FLOW DIRECTION
ELBOW
#6 CLAMP
FUEL FILTER
FWD
FUEL FILTER LOCATED ON AFT ENGINE ROOM BULKHEAD
100 GALLONS 378 LITERS
ENGINE FUEL PICKUP
= FUEL FEED LINE 5/16" (7.9 mm)
= FUEL RETURN 5/16" (7.9 mm)
= FUEL VENT HOSE 3/4" (19.1 mm)
= FUEL FILL HOSE 1 1/2" (38.1 mm)
= OVERSEAS/CHTR SPEC ALUM. TANK STATIC GND.
H460 ENGINE FUEL SYSTEM
4606061A
NONE
ENGINEERING DEPT
1/22/97
HUNTER


1. DIESEL FUEL TANK (100 GALLONS/378 LITERS
(TANK NOTE: THERE MUST BE A RUBBER BARRIER BETWEEN THE TANK AND ANY BRACKETS OR STRAPS USED TO FASTEN DOWN THE TANK. THIS IS TO PREVENT THE POSSIBILITY OF DAMAGE TO THE TANK FROM VIBRATION.)
2. FUEL FILL HOSE TO DECK FITTING (1 1/2"/38.1mm)
3. FUEL VENT HOSE TO DECK FITTING (5/8"/15.9mm)
4. DIESEL FUEL RETURN LINE (1/4"/6.4mm)
5. DIESEL FUEL FEED LINE (1/4"/6.4mm)
6. OVERSEAS/CHTR. SPEC ALUMINIUM TANK STATIC GUARD
7. PRIMARY FUEL FILTER.
8. SECONDARY FUEL FILTER @ GENERATOR
9. OPTIONAL 6 KW. GENERATOR
FILTER LOCATED ON AFT STBD BERTH BULKHEAD.
FILTER LOCATED ON STBD. SIDE OF GENERATOR
HA60 (OPT) GENERATOR FUEL SYSTEM LAYOUT
46060618
NONE
ENGINEERING DEPT.
1/21/99
HUNTER


1. L.P.G. TANK COMPARTMENT
2. VAPOR DRAIN HOSE 3/4" (19.1mm) SHEILDVAC
3. L.P.G. SUPPLY LINE 1/2" (12.7 mm) LPG HOSE
4. L.P.G. SOLENOID POWER LEADS
5. LPG SECONDARY TANK STORAGE COMP.
6. VAPOR DRAIN HOSE 3/4" (19.1mm) SHEILDVAC
7. GALLEY STOVE/OVEN
8. L.P.G. REMOTE ON/OFF SWITCH
9. SOLENOID POWER LINE TO BRKR PANEL
H460 LPG SYSTEM LAYOUT
4606052A
NONE
ENGINEERING DEPT.
1/21/98
HUNTER



H460 L.P.G. SYSTEM LAYOUT (BASIC)

46080628	NONE
ENGINEERING DEPT.	3/25/99

HUNTER

NOTE TO CONSUMER

THE FOLLOWING PAGES PROVIDE DETAILED INFORMATION, SCHEMATICS ETC. PERTAINING TO THE H460 **STANDARD** ELECTRICAL SYSTEMS AS WELL AS THE **OPTIONAL** ELECTRICAL SYSTEMS.

READ THE DRAWING TITLE IN THE TITLE BLOCK TO BE SURE YOU ARE REFERRING TO THE CORRECT SYSTEM FOR YOUR MODEL.

H460 ELECTRICAL SYSTEM CONTENTS

H460 POWER SYSTEMS OPERATIONS PROCEDURES

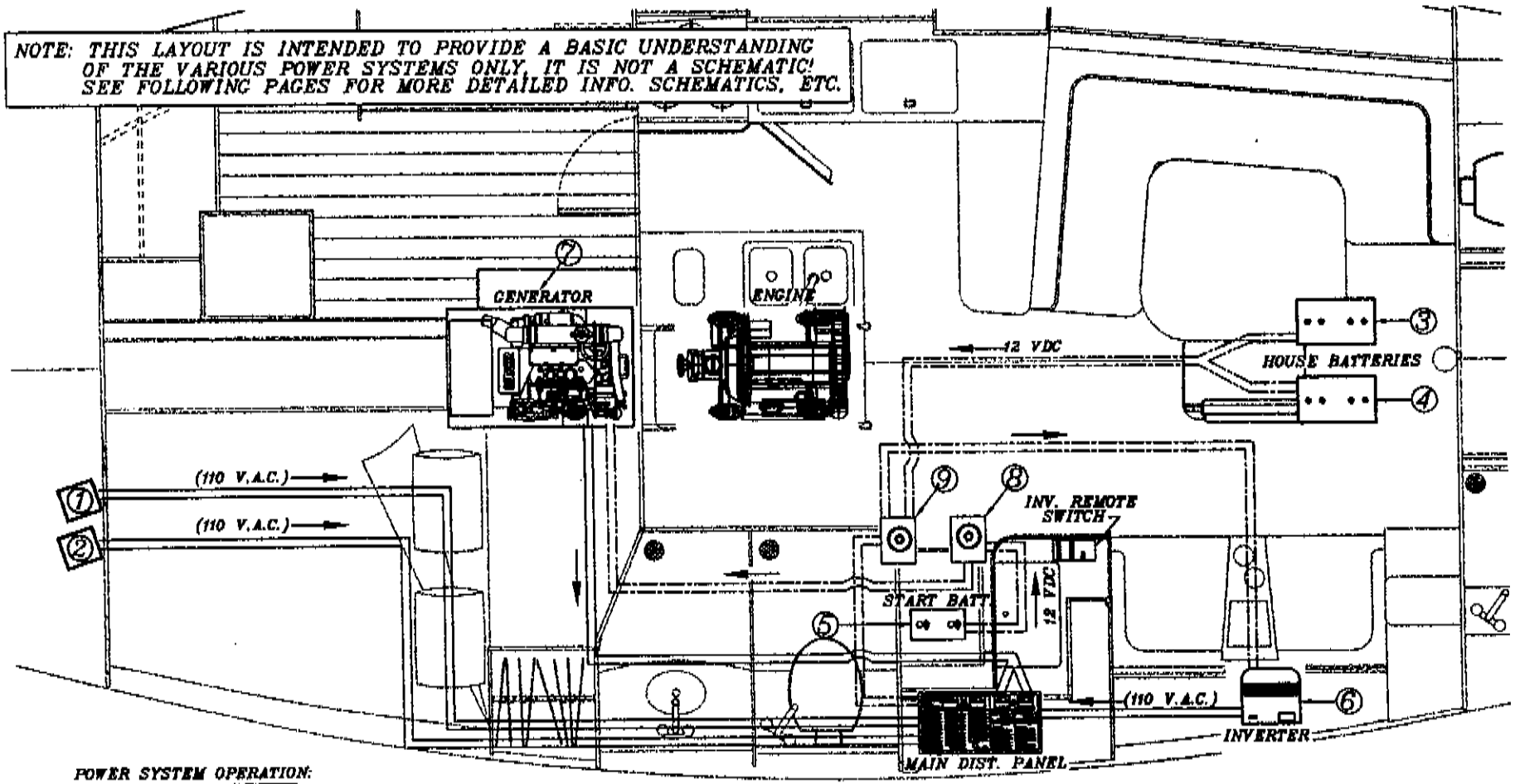
POWER SOURCE:	TO OPERATE:
"D.C. MAIN"	TURN ON "D.C. MAIN" BRKR. ON D.C. SIDE OF MAIN DISTRIBUTION PANEL. IT IS NOT NECESSARY TO TURN ON THE INVERTER/DRAW SEL. SW. TO EITHER THE #1, #2, OR BOTH POSITION, THIS PORTION OF THE INV/DRAW SEL. SW. IS FOR THE CHARGING/INVERTING SYSTEM (AND ISOLATION OF) ONLY. IT IS NECES. HOWEVER TO TURN ON EITHER THE "PANEL #1", OR "PANEL #2", BREAKER/S LOCATED ON THE BOTTOM OF THE INV/DRAW SEL. SW. PANEL TO PROVIDE POWER TO D.C. PANEL FROM EITHER THE HOUSE BATT. #1 OR HOUSE BATT. #2. (PANEL #1 "BREAKER" = HOUSE BATTERY #1) (PANEL #2 "BREAKER" = HOUSE BATTERY #2) IF NO POWER: CHECK 300 amp IN LINE FUSE AT EACH HOUSE BATTERY IN HOUSE BATTERY COMPARTMENT, AND/OR BATTERY CONNECTIONS IF NECESSARY.
SHORE POWER "A"	1. CONNECT SHORE POWER CABLE #1, TO SUPPLY POWER TO "A" SIDE OF A.C. POWER MAIN DISTRIBUTION PANEL 2. TURN ON MAIN BREAKER ON SHORE POWER "A" SIDE OF PANEL 3. "A" SIDE OF A.C. POWER MAIN DISTRIBUTION PANEL SHOULD NOW BE OPERABLE (NOTE: INVERTER CAUSES APPROX. 15 SECOND DELAY) IF NO POWER TO "A" SIDE OF PANEL CHECK THE FOLLOWING: 1. BREAKER AT DOCKSIDE POWER SUPPLY BOX 2. BREAKER #1 LOCATED IN HEADLINER STBD. AFT STRM. (ON 220V.A.C. MODELS IN STBD. AFT SWIMSEAT LOCKER.)
SHORE POWER "B"	1. CONNECT SHORE POWER CABLE #2, TO SUPPLY POWER TO "B" SIDE OF A.C. POWER MAIN DISTRIBUTION PANEL 2. TURN ON MAIN BREAKER ON SHORE POWER "B" SIDE OF PANEL 3. "B" SIDE OF A.C. POWER MAIN DISTRIBUTION PANEL SHOULD NOW BE OPERABLE IF NO POWER TO "B" SIDE OF PANEL CHECK THE FOLLOWING: 1. BREAKER AT DOCKSIDE POWER SUPPLY BOX 2. BREAKER #2 LOCATED IN HEADLINER STBD. AFT STRM. (ON 220V.A.C. MODELS IN STBD. AFT SWIMSEAT LOCKER.)
"INVERTER"	1 CHOOSE HOUSE BATTERY/S TO DRAW POWER FROM BY TURNING INV/DRAW (HOUSE BATT'S) SEL. SWITCH TO 1,2, OR BOTH POSITION, LOCATED AFT END PORT SETTEE MAIN CABIN (THIS SW. PROVIDES ISOLATION CAPABILITY IN THE EVENT OF A BAD BATTERY, FOR EX. A DEAD CELL) 2. TURN THE INVERTER REMOTE SWITCH (LOCATED AT NAV. STATION) TO THE "ON" POSITION, LOCATED AFT END PORT SETTEE IN MAIN CABIN. 3. TURN ON DESIRED BREAKER (EX. OUTLETS) ON "A" SIDE OF A.C. MAIN DISTRIBUTION PANEL
WHEN IN INVERT MODE (CONVERTS 12V.D.C. TO 110V.A.C.)	NOTE: IT TAKES 10D.C. AMPS TO CREATE 1A.C. AMP, IF THE BATTERY VOLTAGE DROPS BELOW 10.5V. THE INVERTER WILL AUTOMATICALLY SHUT DOWN. (SEE "BATT. SEL. SW" & "METERS" ON PAGE 63A-6) NOTE: THE INVERTER WILL NOT POWER THE WATER HEATER OR AIR COND. SYSTEM, THE WATER HEATER IS POWERED BY "SHORE POWER A" CABLE OR OPT. GENERATOR. THE AIR COND'S ARE POWERED BY THE "SHORE POWER B" CABLE OR THE OPT. GENERATOR. NOTE: IF ANY OTHER APPLIANCES ARE TO BE USED WITH AIR COND'S RUNNING WHEN ON SHORE POWER BOTH "SHORE POWER A" AND "SHORE POWER B" CABLES MUST BE CONNECTED.
POWERS "A" SIDE OF A.C. PANEL ONLY WHEN INVERTING	
USED WHEN NO SHORE POWER OR GEN.POWER BEING USED.	TO POWER D.C. SIDE OF PANEL AND "A" SIDE OF A.C. PANEL SIMULTANEOUSLY USING INVERTER: 1. TURN ON D.C. MAIN BREAKER ON D.C. SIDE OF MAIN DISTRIBUTION PANEL 2. TURN THE INV/DRAW (HOUSE BATT'S) SELECTOR SWITCH TO THE #2 POSITION 3.TURN THE #1 BREAKER LOCATED AT THE BOTTOM OF THE INV/DRAW SEL. SWITCH PANEL TO THE "ON" POSITION. AND TURN THE #2 BREAKER TO THE "OFF" POSITION. 4. TURN INVERTER REMOTE SWITCH TO THE "ON" POSITION THIS PROCEDURE ALLOWS INVERTER TO SUPPLY 110V.A.C. POWER TO "A" SIDE OF A.C. PANEL BY DRAWING POWER FROM HOUSE BATTERY #2, WHILE D.C. SIDE OF PANEL DRAWS POWER FROM HOUSE BATTERY #1. THIS ISOLATION PROCEDURE COMES IN HANDY FOR EXAMPLE WHEN USING A HIGHER AMPERAGE APPLIANCE OFF OF THE INVERTER THAT MIGHT CAUSE A MOMENTARY VOLTAGE DROP THAT COULD EFFECT EQUIP. (SUCH AS THE OPT. AUTOPILOT) THAT IS VOLTAGE SENSITIVE CAUSING THE UNIT TO TURN OFF. (THIS APPLIES WHEN THERE IS NO SHORE OR GENERATOR POWER BEING SUPPLIED TO PANEL)
BUILT IN INVERTER-TRANSFER SWITCH.	THE INVERTER AUTOMATICALLY TRANSFERS SHORE POWER TO THE A.C. PANEL WHEN "SHORE POWER A" CABLE CONNECTED AND DOCKSIDE POWER PRESENT AT A.C. PANEL, BYPASSING THE INVERT MODE CAPABILITIES.
OPTIONAL GENERATOR	1.TURN (START) BATTERY SWITCH TO THE "ON" POSITION 2. CHECK SEA STRAINER AND OPEN RAW WATER SEACOCK, SEE PAGE 60 FOR LOCATIONS 3. START GENERATOR (FOLLOW STARTING INSTRUCTIONS PROVIDED IN THE "GENERATOR MANUAL") 3. RAISE SLIDE BAR ON "A" SIDE OF A.C. PANEL AND TURN GENERATOR BREAKER TO THE "ON" POSITION TO POWER "A" SIDE OF A.C. MAIN DISTRIBUTION PANEL;. 4. TO POWER "B" SIDE OF A.C. PANEL (TO USE AIR COND'S) RAISE SLIDE BAR ON "B" SIDE OF A.C. PANEL AND TURN PARALLEL BREAKER TO THE "ON " POSITION

H460 POWER SYSTEMS OPERATIONS PROCEDURES

H460 BATTERY CHARGING SYSTEMS OPERATION PROCEDURES

ENGINE ALTERNATOR	1. TURN (START) BATTERY SELECTOR SWITCH TO THE "ON" POSITION, LOCATED ON STBD. AFT ENGINE ROOM BULK. IN AFT STRM. 2. CHECK SEA STRAINER & OPEN RAW WATER SEACOCK, SEE PAGE 60 FOR LOCATIONS 3. START SHIP'S ENGINE (FOLLOW STARTING INSTRUCTIONS IN THE "ENGINE MANUAL") 4. TURN "INV/DRAW" (HOUSE) BATTERY SWITCH TO THE "BOTH" POSITION
INVERTER INVERTER HAS A BUILT IN AUTO. CHARGING SYSTEM	1. CONNECT SHORE POWER CABLE #1 TO POWER "A" SIDE OF A.C. POWER MAIN DISTRIBUTION PANEL AND TURN ON "SHORE POWER A" MAIN BREAKER 2. TURN INVERTER REMOTE SWITCH (LOCATED AT NAV. STATION) TO THE "OFF" POSITION 3. TURN INVERTER/DRAW (HOUSE BATT'S) SELECTOR SWITCH TO THE "BOTH" POSITION, LOCATED AFT END PORT SETTEE MAIN CABIN. NOTE: IT IS NOT NECESSARY TO TURN ON THE "START" BATTERY SWITCH TO PROVIDE CHARGING POWER TO THE START BATTERY. NOTES: WHEN LEAVING BOAT UNATTENDED, BE SURE INVERTER REMOTE SWITCH IS IN THE "OFF" POSITION, THIS WAY IF SHORE POWER IS LOST FOR ANY REASON, THIS WILL PREVENT THE INVERTER FROM CONVERTING 12V.D.C. TO A.C. VOLTAGE CAUSING HOUSE BATTERIES TO BE DRAINED. WHEN THE INVERTER REMOTE SWITCH IS IN THE "OFF" POSITION THE INVERTER AUTOMATICALLY GOES INTO CHARGE MODE INVERTER CHARGE MODE WORKS ONLY WHEN THERE IS POWER TO THE "A" SIDE OF THE A.C. PANEL
OPTIONAL GENERATOR	1. TURN (START) BATTERY SWITCH TO THE "ON" POSITION, LOCATED ON STBD. AFT ENGINE ROOM BULK. IN AFT STRM. 2. CHECK SEA STRAINER & OPEN RAW WATER SEACOCK, SEE PAGE 60 FOR LOCATIONS 2. START GENERATOR (FOLLOW STARTING INSTRUCTIONS IN THE "GENERATOR MANUAL" 4. TURN THE INVERTER REMOTE SWITCH TO THE "OFF" POSITION. 5. TURN THE INV/DRAW SELECTOR SWITCH TO THE "BOTH" POSITION

NOTE: THIS LAYOUT IS INTENDED TO PROVIDE A BASIC UNDERSTANDING OF THE VARIOUS POWER SYSTEMS ONLY, IT IS NOT A SCHEMATIC! SEE FOLLOWING PAGES FOR MORE DETAILED INFO. SCHEMATICS, ETC.



POWER SYSTEM OPERATION:

(1) SHORE POWER "A" POWERS "A" SIDE OF A.C. PANEL.

(2) SHORE POWER "B" POWERS "B" SIDE OF A.C. PANEL.

(3) & (4) HOUSE BATTERY PROVIDES 12V.D.C. VOLTAGE TO D.C. SIDE OF DISTRIBUTION PANEL AND INVERTER.

(5) START BATTERY PROVIDES 12 V.D.C. POWER TO ENGINE & GEN. STARTERS. (NOTE: ISOLATOR PREVENTS INVERTER FROM DRAWING POWER FROM START BATTERY.

(6) INVERTER CONVERTS 12 V.D.C. TO A.C. VOLTAGE AND POWERS "A" SIDE OF A.C. PANEL ONLY. (WITH THE EXCEPTION OF THE WATER HEATER) (LOCATED UNDER CHART SEAT, SHOWN HERE FOR CLARITY)

(7) OPT. GENERATOR PROVIDES A.C. POWER TO BOTH "A" & "B" SIDES OF PANEL WHEN GENERATOR AND PARALLEL BREAKERS ARE IN THE "ON" POSITION WHILE GENERATOR RUNNING.

(8) START BATTERY "ON/OFF" SWITCH

(9) INVERTER/ DRAW SELECTOR SWITCH

◎ = BATTERY SELECTOR SWITCHES

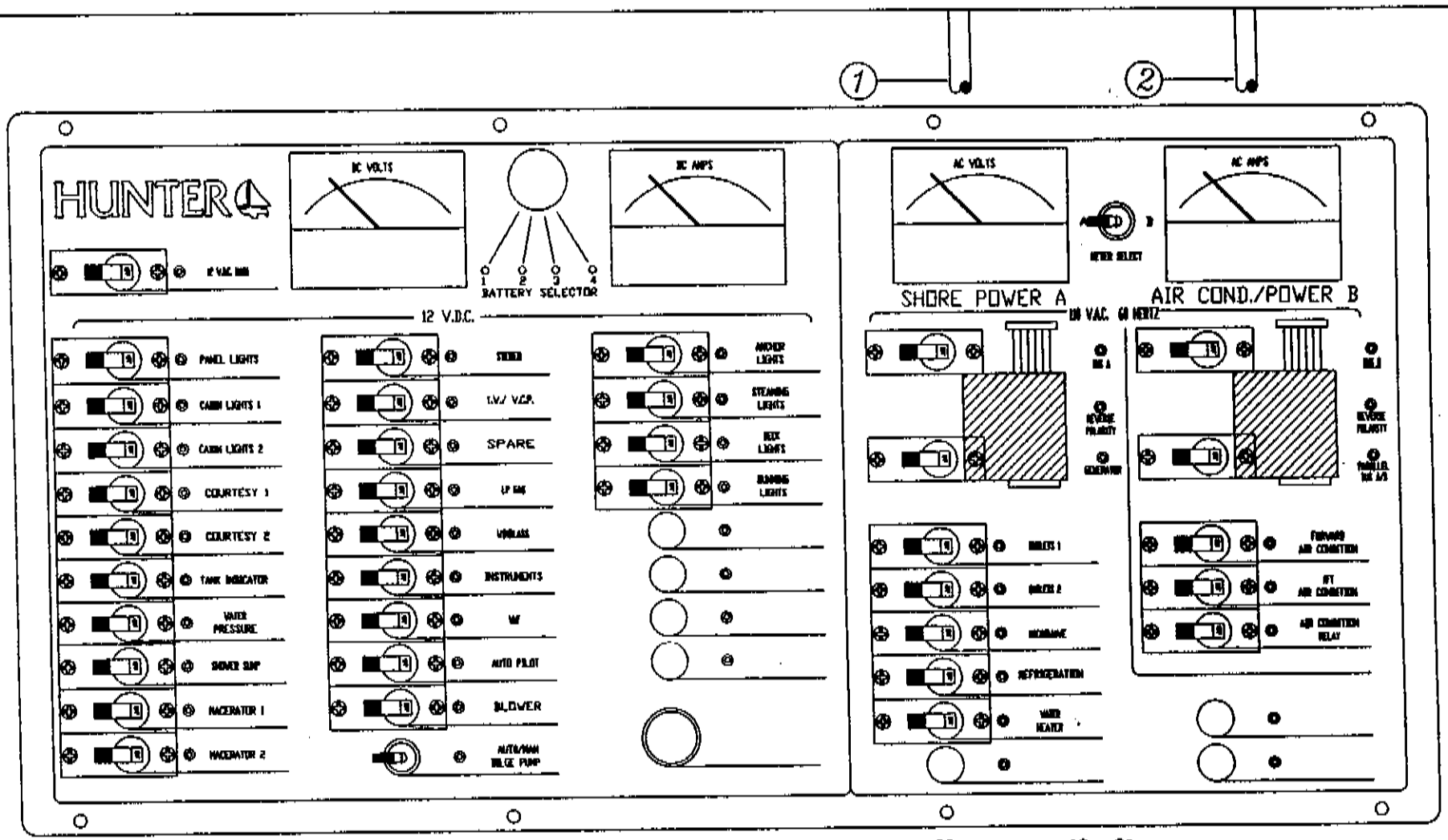
→ = POWER FLOW DIRECTION

= 12 V.D.C.

= 110 V.A.C. (220 V.A.C. OVERSEAS MODELS)

H460 BASIC POWER SYSTEM LAYOUT	
6080063A-3	NONE
ENGINEERING DEPT.	1/21/99

HUNTER



1. SHORE POWER "A" TO "A" SIDE OF AC PANEL
2. SHORE POWER "B" TO "B" SIDE OF AC PANEL
3. HOUSE BATTERY "1" TO DC SIDE OF PANEL
4. HOUSE BATTERY "2" TO DC SIDE OF PANEL
5. INVERTER TO "A" SIDE OF AC PANEL
6. OPTIONAL GENERATOR POWER TO AC SIDE OF PANEL

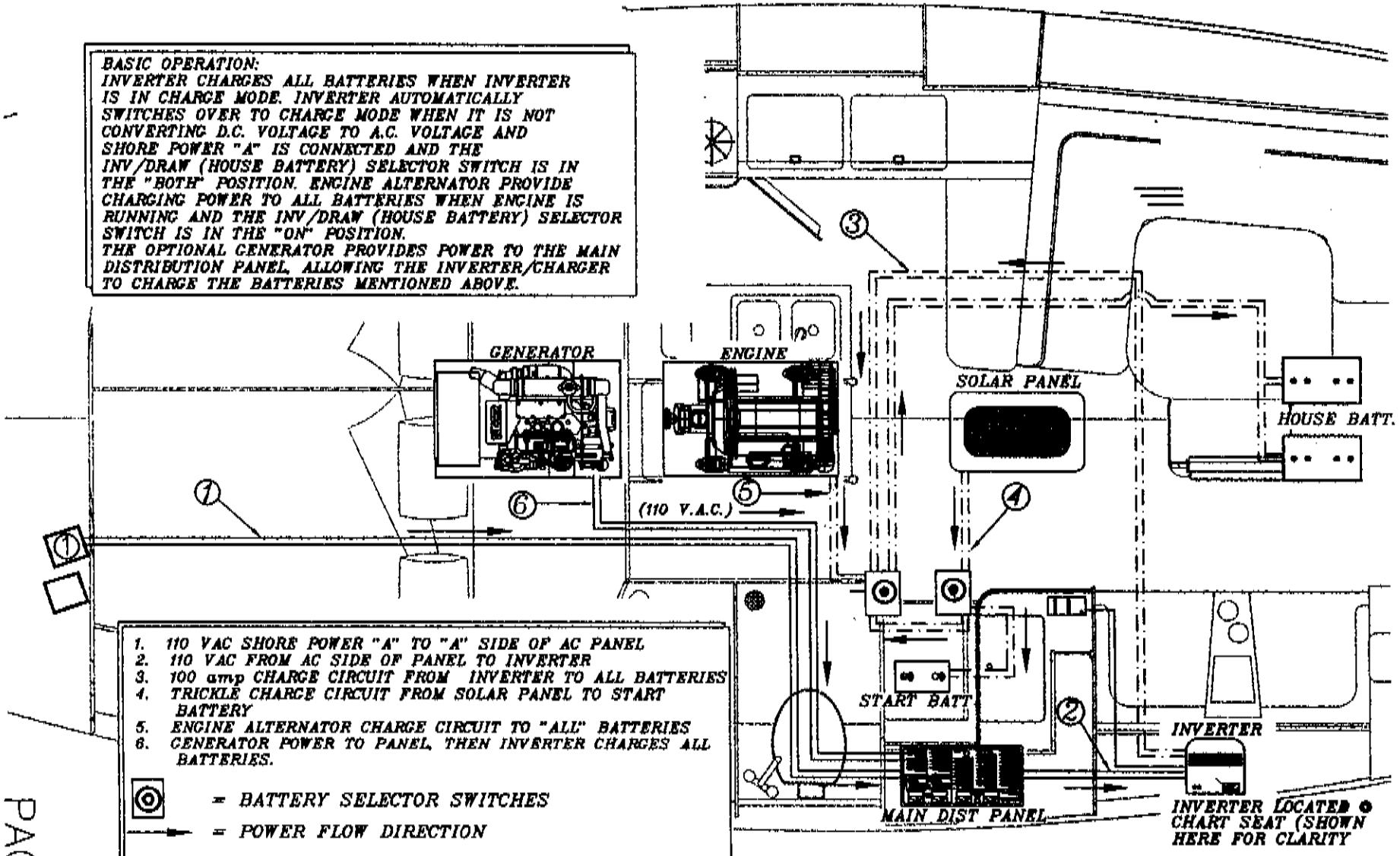
H460 MAIN DISTRIBUTION PANEL LAYOUT

4606063A-4	NONE
ENGINEERING DEPT.	1/29/99

HUNTER

PAGE 63A-4

BASIC OPERATION:
INVERTER CHARGES ALL BATTERIES WHEN INVERTER IS IN CHARGE MODE. INVERTER AUTOMATICALLY SWITCHES OVER TO CHARGE MODE WHEN IT IS NOT CONVERTING D.C. VOLTAGE TO A.C. VOLTAGE AND SHORE POWER "A" IS CONNECTED AND THE INV/DRAW (HOUSE BATTERY) SELECTOR SWITCH IS IN THE "BOTH" POSITION. ENGINE ALTERNATOR PROVIDE CHARGING POWER TO ALL BATTERIES WHEN ENGINE IS RUNNING AND THE INV/DRAW (HOUSE BATTERY) SELECTOR SWITCH IS IN THE "ON" POSITION.
THE OPTIONAL GENERATOR PROVIDES POWER TO THE MAIN DISTRIBUTION PANEL, ALLOWING THE INVERTER/CHARGER TO CHARGE THE BATTERIES MENTIONED ABOVE.



1. *110 VAC SHORE POWER "A" TO "A" SIDE OF AC PANEL*
2. *110 VAC FROM AC SIDE OF PANEL TO INVERTER*
3. *100 amp CHARGE CIRCUIT FROM INVERTER TO ALL BATTERIES*
4. *TRICKLE CHARGE CIRCUIT FROM SOLAR PANEL TO START BATTERY*
5. *ENGINE ALTERNATOR CHARGE CIRCUIT TO "ALL" BATTERIES*
6. *GENERATOR POWER TO PANEL, THEN INVERTER CHARGES ALL BATTERIES.*

= *BATTERY SELECTOR SWITCHES*
= *POWER FLOW DIRECTION*
= *CHARGE CIRCUITS*
= *110 V.A.C. (220 V.A.C. OVERSEAS MODELS)*

NOTE:
THIS LAYOUT IS INTENDED TO PROVIDE A BASIC UNDERSTANDING OF THE CHARGING SYSTEM ONLY, IT IS NOT A SCHEMATIC SEE FOLLOWING PAGES FOR MORE DETAILED INFO, SCHEMATICS, ETC.

HARD CHARGING SYSTEM LAYOUT W/ OPT. GENERATOR	
46080634-5	NONE
ENGINEERING DEPT.	1/21/99

HUNTER

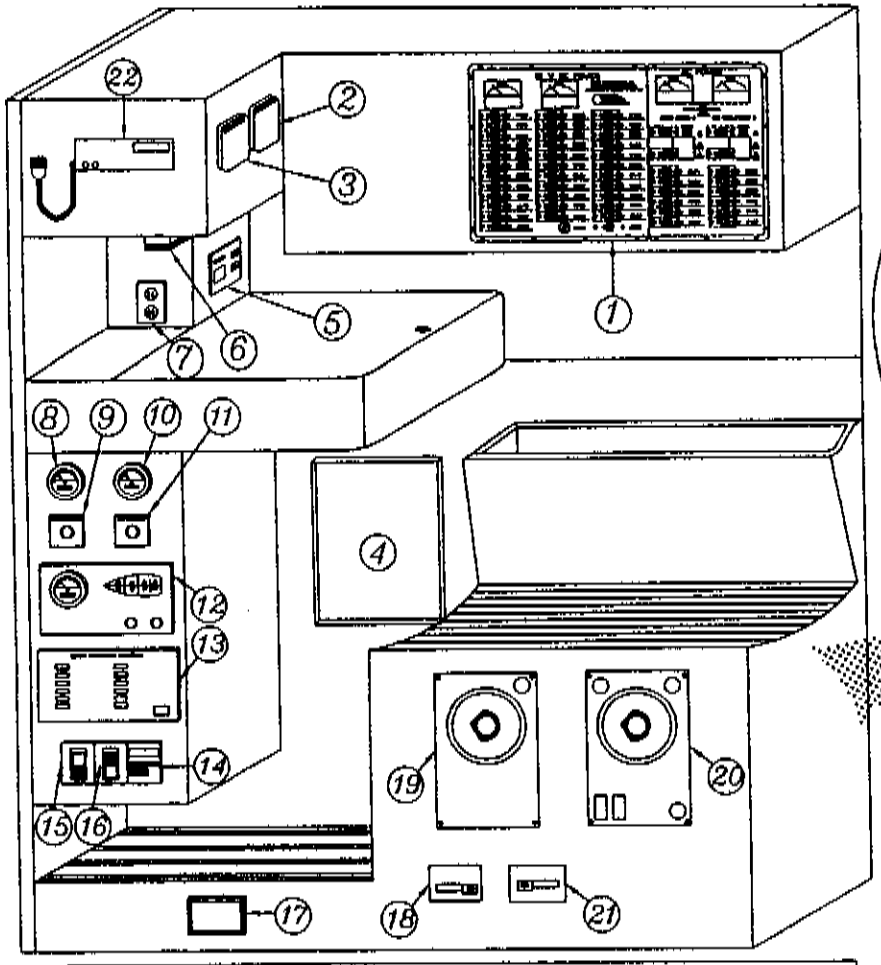
12 V.D.C. DISTRIBUTION PANEL

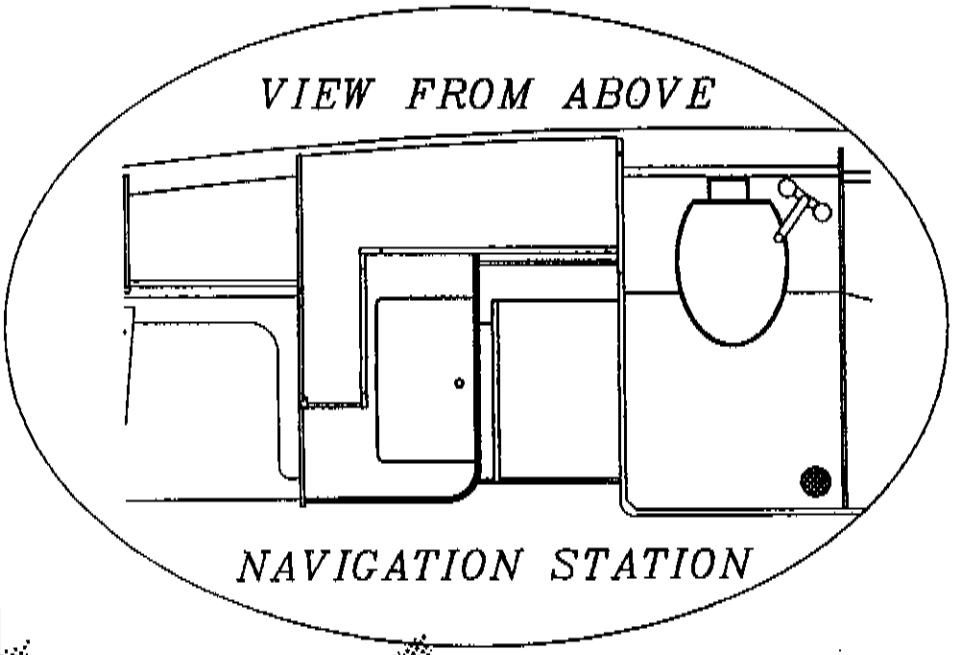
BREAKER	DESCRIPTION
D.C. MAIN	SUPPLIES 12 V.D.C. POWER FROM HOUSE BATTERIES TO ALL BREAKERS ON D.C. SIDE OF PANEL.
PANEL LIGHTS	ILLUMINATES BOTH A.C. & D.C. SIDES OF THIS PANEL FOR NIGHT USE
CABIN LIGHTS 1	SUPPLIES POWER TO CABIN LIGHTS FORWARD OF THE GALLEY AND NAVIGATION STATION
CABIN LIGHTS 2	SUPPLIES POWER TO CABIN LIGHTS AFT OF THE GALLEY AND NAVIGATION STATION
COURTESY 1	SUPPLIES POWER TO SWITCHED CTSY. LIGHTS, THESE ARE THE FRIDGE/FREEZER, BILGE COMPTS. AND COCKPIT
COURTESY 2	SUPPLIES POWER TO ALL CABIN SOLE LIGHTS LOCATED AT THE GALLEY, NAV. STA., AFT STRM. FWD STRM
COCKPIT LIGHTS	SUPPLIES POWER TO COCKPIT LIGHTS IN THE ARCH
WATER PUMP	SUPPLIES POWER TO FRESH WATER PUMP TO PRESSURIZE H20 SYSTEM.
SUMP PUMP	SUPPLIES POWER TO BOTH FWD. AND AFT SHOWER SUMP BOXES. (SELF CONTAINED FLOAT SWITCH IN EACH SUMP ACTIVATES PUMP INSIDE EACH SUMP BOX. (SEE PAGE 59A FOR SUMP LOCATIONS)
TV/VCP	SUPPLIES POWER TO TV/VCP (VIDEO CASSETTE PLAYER)
STEREO	SUPPLIES POWER TO STEREO UNIT AND AMPLIFIER
ANCHOR LIGHT	SUPPLIES POWER TO 360 DEGREE LIGHT AT TOP OF MAST, USE WHEN ANCHORED AT NIGHT.
STEAMING LIGHT	SUPPLIES POWER TO STEAMING LIGHT LOCATED ON FWD. SIDE OF MAST APPROXIMATELY AT THE HEIGHT OF THE LOWER SPREADERS. USE AT NIGHT WHEN VESSEL UNDERWAY BY ENGINE POWER. (ALONG W/RUNNING LTS.)
DECK LITES	SUPPLIES POWER TO DECK LIGHT (IS COMBINATION WITH STEAMING LIGHT) PROVIDES LIGHT TO DECK BELOW.
RUNNING LIGHTS	SUPPLIES POWER TO THE BOW, STERN , & COMPASS LIGHT. USE AT NIGHT UNDER SAIL AND/OR ENGINE POWER.
INSTRUMENTS	SUPPLIES POWER TO KNOT, DEPTH, & SPEED REPEATERS LOCATED ON HELM CONSOLE.
VHF	SUPPLIES POWER TO THE VHF RADIO LOCATED INSIDE COMPANIONWAY OPENING
NAV. INST.	THIS BREAKER PROVIDED FOR OPTIONAL NAVIGATION INSTRUMANTS SUCH AS RADAR.
WINDLASS	SUPPLIES POWER TO UP/DOWN CONTROLS AT ANCHOR WELL. **NOTE: BECAUSE THE WINDLASS DRAWS IT'S POWER FROM THE START BATTERY, IT IS GOOD PRACTICE TO START THE SHIPS ENGINE PRIOR TO OPERATING WINDLASS TO PREVENT BATTERY DRAIN. (IF NO POWER, CHECK RESET ON REMOTE PANEL)**
AUTOPILOT	THIS BREAKER PROVIDED FOR AN OPTIONAL AUTUPILOT SYSTEM.
MACERATOR 1	SUPPLIES POWER TO FWD. MACERATOR (LOCATED UNDER FWD. STRM BUNK)
MACERATOR 2	SUPPLIES POWER TO AFT MACERATOR (LOCATED UNDER AFT STRM. BUNK, **NOTE: THESE DEVICES ARE USED FOR DIRECT OVERBOARD DISCHARGE OF RAW SEWAGE, BE AWARE OF YOUR LOCAL BOATING REG. BEFORE USING.**
L. P. GAS	SUPPLIES POWER TO L.P. GAS SWITCH AT GALLEY. SEE "SEAWARD MANUAL" FOR OPER. & SAFETY INST.
BLOWER	SUPPLIES POWER TO ENGINE ROOM COOLING FAN & SHOULD BE "ON" WHEN RUNNING ENG. OR OPT. GEN
TANK INDICATOR	SUPPLIES POWER TO TANK SELECTOR SWITCH (AT NAV STATION) ROTATE SWITCH TO DESIRED TANK, TO VIEW TANK LEVEL ON LEVEL GAUGE.
BILGE PUMP	TOGGLE SWITCH STAYS IN THE "AUTO" POSITION, THIS ALWAYS FEEDS POWER TO THE FLOAT SWITCH (AS LONG AS BATTERIES ARE CONNECTED AND HAVE AMPLE CHARGE) FOR MANUAL USE, PUSH SWITCH TO "MANUAL" ILLUMINATED L.E.D. INDICATES POWER TO PUMP AND PUMP SHOULD BE RUNNING. PRIOR TO LEAVING VESSEL "MANUALLY" TEST PUMP AND CHECK BATTERY LEVEL. SEE BATTERY SELECT SWITCH BELOW.
BATT. SEL. SW.	USE TO REVIEW STATUS OF EA. BATTERY ROTATE TO SELECT BATTERY, VIEW STATUS ON METERS.
METERS	D.C. VOLTS DISPLAYS **AVAILABLE VOLTAGE** FROM SELECTED BATTERY D.C. AMPS DISPLAYS **AMPERAGE BEING DRAWN** FROM SELECTED BATTERY.
SPARES/ACCESSORY	1 15amp BREAKER PROVIDED FOR ADDITIONAL 12 V.D.C. ACCESSORY
YELLOW L.E.D.'S	LIGHT EMITTING DIODES ILLUMINATE WHEN 12 V.D.C. POWER PRESENT.
NOTE:	IF THE OPTIONAL AUTOPILOT WAS INSTALLED AT THE FACTORY, THE "INSTRUMENTS" POWER LEADS ARE WIRED TO THE AUTOPILOT BREAKER. THIS ALLOWS THESE UNITS TO WORK SIMULTANEOUSLY OFF THE AUTOPILOT BREAKER. **SEE PAGE 64A FOR BREAKER AMPERAGES.**

110V.A.C. (220 OVERSEAS MODELS) DISTRIBUTION PANEL

BREAKERS	DESCRIPTION
	"A" SIDE OF A.C. PANEL
REFRIGERATION	SUPPLIES POWER TO REF. COMPRESSOR, ADJUST THERMOSTATS INSIDE FRIDGE/FREEZER TO DESIRED TEMP.
SHORE POWER "A"	PROVIDES A.C. VOLTAGE TO "A" SIDE OF MAIN DISTRIBUTION PANEL WHEN SHORE POWER CORD "A" IS CONNECTED TO OUTLET AT DOCKING FACILITY.
GENERATOR	SUPPLIES POWER FROM GENERATOR TO SHORE POWER "A" (AND SHORE POWER "B" IF DESIRED) PANEL. NOTE: TO PROVIDE POWER TO SHORE POWER "B" SIDE OF PANEL MOVE SLIDE BAR UP AND TURN ON THE PARALLEL BREAKER ON THE SHORE POWER "B" SIDE OF PANEL.
OUTLETS 1	PROVIDES A.C. POWER TO THE OUTLETS ON THE PORT SIDE OF BOAT.
OUTLETS 2	PROVIDES A.C. POWER TO THE OUTLETS ON THE STBD. SIDE OF BOAT.
MICROWAVE	SUPPLIES POWER TO OUTLET BEHIND MICRO. IN WHICH MICROWAVE IS PLUGGED INTO.
WATER HEATER	SUPPLIES POWER TO WATER HEATER. **BE SURE TANK IS FULL AND SYSTEM IS FREE FROM AIR BEFORE APPLYING POWER TO HEATER TO PREVENT ELEMENT BURNOUT.**
REFRIGERATION	SUPPLIES POWER TO REF. COMPRESSOR, ADJUST THERMOSTATS INSIDE FRIDGE/FREEZER TO DESIRED TEMP.
	"B" SIDE OF PANEL
SHORE POWER "B"	PROVIDES A.C. VOLTAGE TO THIS SIDE OF PANEL WHEN SHORE POWER CORD "B" IS CONNECTED TO OUTLET AT DOCKING FACILITY.
PARALLEL	PROVIDES POWER FROM GENERATOR TO THIS SIDE OF PANEL.(MOVE SLIDE BAR UP TO TURN BREAKER ON.)
FWD/AFT AIR COND.	PROVIDES POWER TO EITHER FWD. OR AFT AIR COND. UNITS (SEE "MARINE AIR MANUAL" FOR OPER. INSTRUCTIONS.
AIR COND. RELAY	PROVIDES POWER TO RAW WATER CIRCULATION PUMP USED TO COOL AIR COND. COMPRESSORS UNITS, THIS BREAKER **MUST BE ON WHEN OPERATING AIR COND. UNIT/S.**
	MISC. INFO
SPARE/ACCESSORY	3 15amp BREAKERS PROVIDED FOR ADDITIONAL 12V.D.C. ACCESSORIES
RED L.E.D.'S	ILLUMINATE WHEN A.C. POWER PRESENT.
METER SEL. SWITCH	ALLOWS VOLTAGE BEING SUPPLIED AND AMPERAGE BEING DRAWN TO BE DISPLAYED ON VOLT & AMP METERS SWITCH POSITION "A" = "A" SIDE OF PANEL. SWITCH POSITION "B" = "B" SIDE OF PANEL.
REV. POLARITY	IF REVERSED POLARITY L.E.D./S ILLUMINATE AFTER CONNECTING SHORE POWER HAVE DOCKSIDE POWER CHECKED BY QUALIFIED PERSONELL.
NOTE:	SEE PAGE 63A-14 FOR BREAKER AMPERAGES

NOTE: A PRUDENT MARINER REALIZES THAT THE RESOURCES TO POWER A VESSEL ARE LIMITED. WHEN USING THE INVERTER OR GENERATOR ONE SHOULD BE CONSERVATIVE AND AWARE OF THE AMOUNT OF POWER BEING SUPPLIED VERSES POWER BEING DRAWN. THIS IS ESPECIALLY IMPORTANT WHEN USING OPTIONAL INVERTER POWER. CONSULT THE "INVERTER MANUAL" FOR POWER OUTPUT CAPABILITIES.





1. MAIN DISTRIBUTION PANEL
2. (OPTIONAL) AUTOPILOT MASTERVIEW
3. (OPTIONAL) AUTOPILOT REMOTE
4. NAVIGATION STATION ACCESS PANEL
5. FWD. AIR CONDITIONING CONTROL UNIT
6. NAVIGATION STATION CHART LIGHT
7. NAVIGATION STATION GFI OUTLET
8. FWD. (#1) WASTE TANK LEVEL INDICATOR
9. FWD. (#1) MACERATOR MOMENTARY SWITCH
10. AFT (#2) WASTE TANK LEVEL INDICATOR
11. AFT (#2) MACERATOR MOMENTARY SWITCH

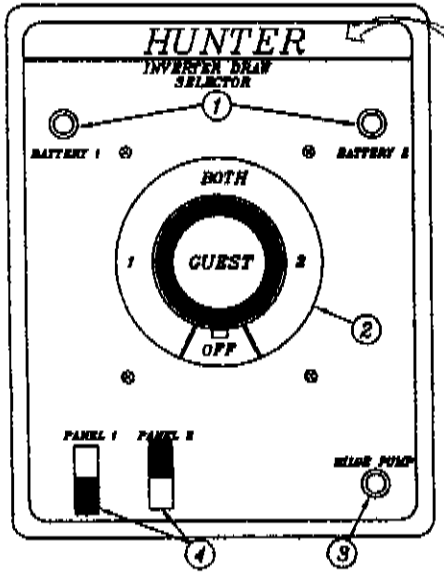
12. FUEL/WATER TANK SELECTOR SWITCH LEVEL INDICATOR LOCATION ALSO.
13. INVERTER REMOTE SWITCH PANEL
14. (OPTIONAL) GENERATOR HOURS METER
15. (OPTIONAL) GENERATOR PREHEAT/STOP SWITCH
16. (OPTIONAL) GENERATOR START SWITCH
17. NAVIGATION STATION COURTESY LIGHT
18. ANCHOR WINDLESS RESET BREAKER
19. START BATTERY ON/OFF SWITCH
20. INVERTER DRAW (HOUSE BATT. SELECTOR) SWITCH
21. ELECTRIC HALYARD RESET BREAKER. (NOT OFFERED ON ROLLER FURLING MAST BOATS)
22. LOCATION OF VHF RADIO FOR OVERSEAS MODELS ONLY (ON DOMESTIC BOATS: RADIO LOCATED PORT SIDE COMPANIONWAY ENTRANCE.)

460 NAVIGATION STATION LAYOUT

4608063A-8	NONE
ENGINEERING DEPT.	1/18/99

HUNTER

INVERTER/DRAW (HOUSE BATTERY) SELECTOR SWITCH

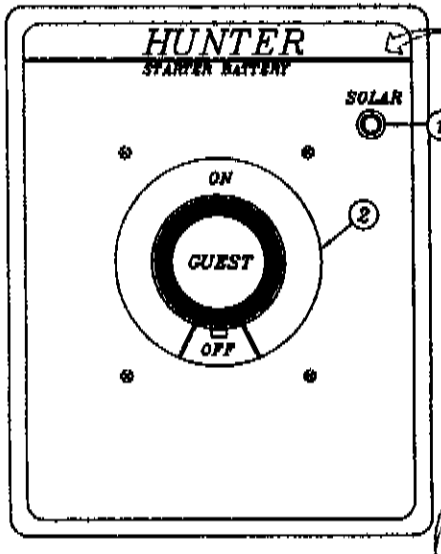


1. IN LINE FUSES FROM HOUSE BATTERY #1 OR #2 (TEST CIRCUIT) USED TO DISPLAY AVAILABLE VOLTAGE FROM HOUSE BATTERIES. SEE BATTERY SELECTOR SWITCH & METERS PAGE 63A-6.
2. INVERTER/DRAW SELECTOR SWITCH. SUPPLIES POWER TO THE PANEL FROM EITHER #1,#2 OR BOTH HOUSE BATTERIES. SEE BATTERY SELECTOR SWITCH & METERS PAGE 63A-6.
3. BILGE PUMP RESET. PUSH TO RESTORE POWER TO BILGE PUMP.
4. HOUSE BATTERY BREAKERS SUPPLY POWER FROM HOUSE BATTERIES 1 & 2 TO MAIN DC PANEL.

PANEL #1= HOUSE BATTERY #1
PANEL #2= HOUSE BATTERY #2

SEE PAGE 63A-8 "INVERTER" FOR OPERATING DETAILS

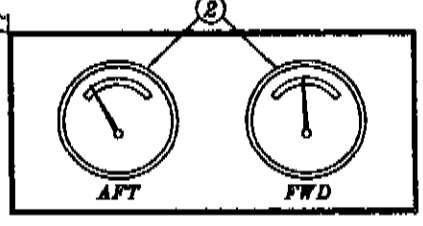
START BATTERY ON/OFF SAFETY SWITCH PANEL



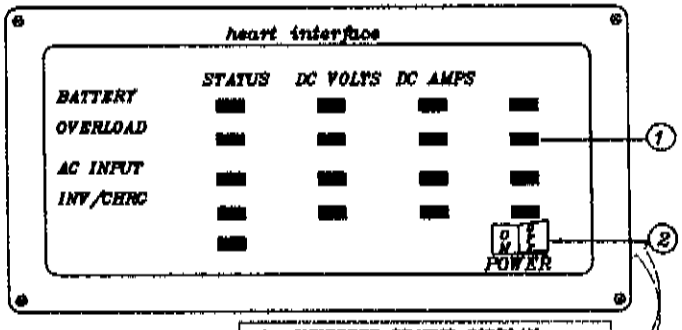
1. ON/OFF SWITCH SUPPLIES POWER FROM START BATTERY TO ENGINE AND OPTIONAL GENERATOR. STARTER(S)
2. SOLAR PANEL CHARGE CIRCUIT FUSE.

1. TANK SELECTION DISPLAY
2. WASTE GUAGES #1 & #2
3. TANK SELECTION ROTARY SWITCH
4. TANK GUAGES ON/OFF SWITCH
5. WATER/FUEL TANK GUAGES

OPERATION: TURN #4 SWITCH "ON" ROTATE #3 TO DESIRED TANK. TANK SELECTED ILLUMINATES ON DISPLAY TANK LEVEL IS DISPLAYED ON GUAGE.

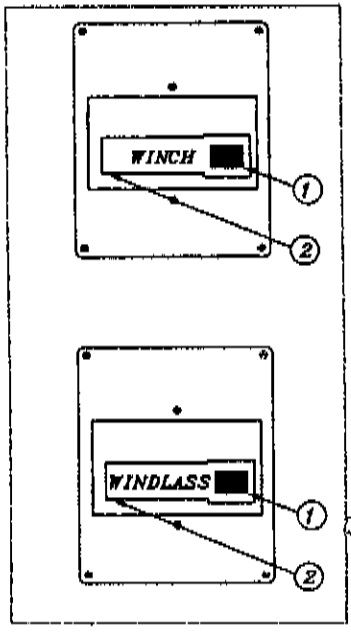


INVERTER REMOTE ON/OFF SWITCH PANEL



1. INVERTER STATUS DISPLAY
2. INVERTER ON/OFF SWITCH

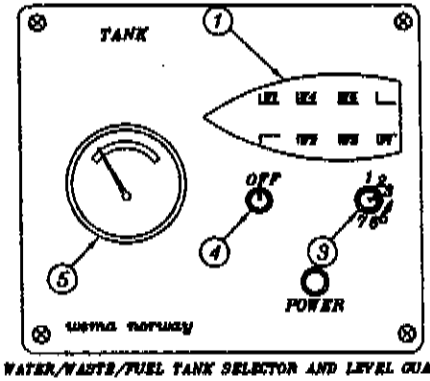
SEE PAGE 63A-8 "INVERTER FOR OPERATION DETAILS.



1. (TEST) ON/OFF BUTTON. PUSH TO TRIP RESET
2. "RESET" PUSH UP TO RESTORE POWER.

NOTE: WINDLASS PANEL SUPPLIES POWER TO THE WINDLASS MOTOR. THE "WINDLASS BREAKER" ON THE DC MAIN DISTRIBUTION PANEL, SUPPLIES POWER TO THE UP/DOWN CONTROLS IN THE ANCHORWELL LOCKER.

THE HALYARD WINCH PANEL SUPPLIES POWER TO THE SWITCH,(LOCATED ON STBD SIDE BLKHD OF COMPANIONWAY OPENING) WHICH SUPPLIES POWER TO THE WINCH. WINDLASS IS OPTIONAL ELECTRIC HALYARD IS STD. (EXCEPT ON FURLING MASTS)



WATER/WASTE/FUEL TANK SELECTOR AND LEVEL GUAGES

H460 NAV STATION SELECTOR SWITCH PANELS	
460063A-9	NONE
ENGINEERING DEPT.	1/21/99

HUNTER

12V.D.C. SYSTEM TROUBLESHOOTING GUIDE

TO POWER PANEL: TURN ON "D.C. MAIN" BREAKER ON PANEL, IT IS NOT NECESSARY TO TURN INV/DRAW SELECTOR SWITCH ON.
IF NO POWER TO PANEL, CHECK **BREAKER/S** ON INV/DRAW SELECTOR SW. PANEL
"BREAKER" # 1= HOUSE BATTERY # 1
2= HOUSE BATTERY # 2
AND BATTERY CONNECTIONS IF NECESSARY

COMPONENT	SYMPTOM	POSSIBLE SOLUTION/S
D.C. MAIN	NO POWER TO PANEL	SEE "TO POWER PANEL" ABOVE BATTERY/S CHARGED?
PANEL LIGHTS	PANEL WON'T ILLUMINATE	SEE "TO POWER PANEL" ABOVE BATTERY TERMINALS CLEAN? SEEK QUALIFIED PERSONELL
CABIN LIGHTS	WON'T ILLUMINATE	SEE "TO POWER PANEL" ABOVE BULB/S NEED REPLACING?
COURTESY LIGHTS	WON'T ILLUMINATE	SEE "TO POWER PANEL" ABOVE BULBS/S NEED REPLACING?
COCKPIT LIGHTS	WON'T ILLUMINATE	SEE "TO POWER PANEL" ABOVE BULBS/S NEED REPLACING?
WATER PUMP	NO POWER CYCLES ON/OFF EXCESSIVELY	SEE "TO POWER PANEL" ABOVE FAUCETS OFF? LEAK IN SYSTEM SEE PAGEC 57A FOR CONNECTION LOC.
SUMP PUMP	WON'T PUMP WHEN SUMP BOX FILLED (PUMP WON,T QUIT RUNNING) PUMP MAKES NOISE, DOESN'T PUMP PUMP RUNS BUT DOESN'T PUMP	SEE "TO POWER PANEL" ABOVE IS FLOAT SWITCH STUCK? DEBRIS IN PUMP IMPELLER? DISCHARGE HOSE CLOGGED?
TV/VCP	WON'T TURN ON	SEE "TO POWER PANEL" ABOVE REPLACE BATTERIES IN REMOTE
STEREO	WON'T TURN ON	SEE "TO POWER PANEL" ABOVE CHECK INLINE FUSE BEHIND STEREO.
ANC., ST., DECK, & RUNNING. LIGHTS	WON'T ILLUMINATE	SEE "TO POWER PANEL" ABOVE CHECK CONNECTIONS IN ACCESS PANEL AT TOP OF COMPRESSION POST BULBS NEED REPLACING?
INSTRUMENTS	REPEATERS DON'T OPERATE	SEE "TO POWER PANEL" ABOVE DO TRANSDUCERS NEED CLEANING? SEE "INSTRUMENTS" MANUAL
V.H.F. RADIO	WON'T OPERATE TURNS ON WON'T TRANSMIT/RECEIVE	SEE "TO POWER PANEL" ABOVE RADIO TURNED ON? ANTENNA CONNECTED PROPERLY?
OPT. NAV. INST.	WON'T OPERATE	SEE "TO POWER PANEL" ABOVE IS UNIT/S ON?
WINDLASS	UP/DOWN CONTROLS DON'T OPERATE WINDLASS	SEE "TO POWER PANEL" ABOVE IS RESET "TRIPPED" ON WINDLASS RESET PANEL?
OPT. AUTO PILOT	WON'T OPERATE WON,T HOLD STEADY COURSE CONSTANTLY ADJUSTING HELM	SEE "TO POWER PANEL" ABOVE IS THERE ANY METAL OBJECTS NEAR THE FLUX GATE COMPASS LOCATED IN THE STBD. AFT MAIN BUNK COMP.? SENSITIVITY SETTING SET TO HIGH, SEE "AUTO PILOT MANUAL" FOR SENS. ADJ.
MACERATOR/S	WON'T TURN ON RUNS BUT DOESN'T DISCHARGE PUMP MAKES NOISE, DOESN'T PUMP	SEE "TO POWER PANEL" IS DISCHARGE SEACOCK OPEN? IS WASTE DECK FITTING SECURE, IS IT PULLING AIR THRU? IF SO, TIGHTEN CAP OR REPLACE O- RING ON CAP. IS TANK VENT (HULL FITTING) CLOGGED? SEE PAGE 60 FOR LOCATIONS LODGED DEBRIS, **TURN OFF POWER** TO PUMP, INSERT SCREWDRIVER INTO PUMP ARMATURE AT END OF PUMP AND TURN TO DISLODGE DEBRIS

NOTE: COMPONENT/S FAILURE COULD ALSO BE THE RESULT OF A POOR "GROUND" CONNECTION. SEE PAGE 64B FOR GROUND SYSTEM LAYOUT AND GROUND STUD/BUSSBAR LOCATIONS. DUE TO VIBRATION, WEATHER CONDITIONS, ECT. OCCASIONAL INSPECTION, CLEANING AND TIGHTENING OF THESE TERMINALS (BY QUALIFIED PERSONELL) MAY BE NECESSARY.

12V. D.C. SYSTEM TROUBLESHOOTING GUIDE CONT:

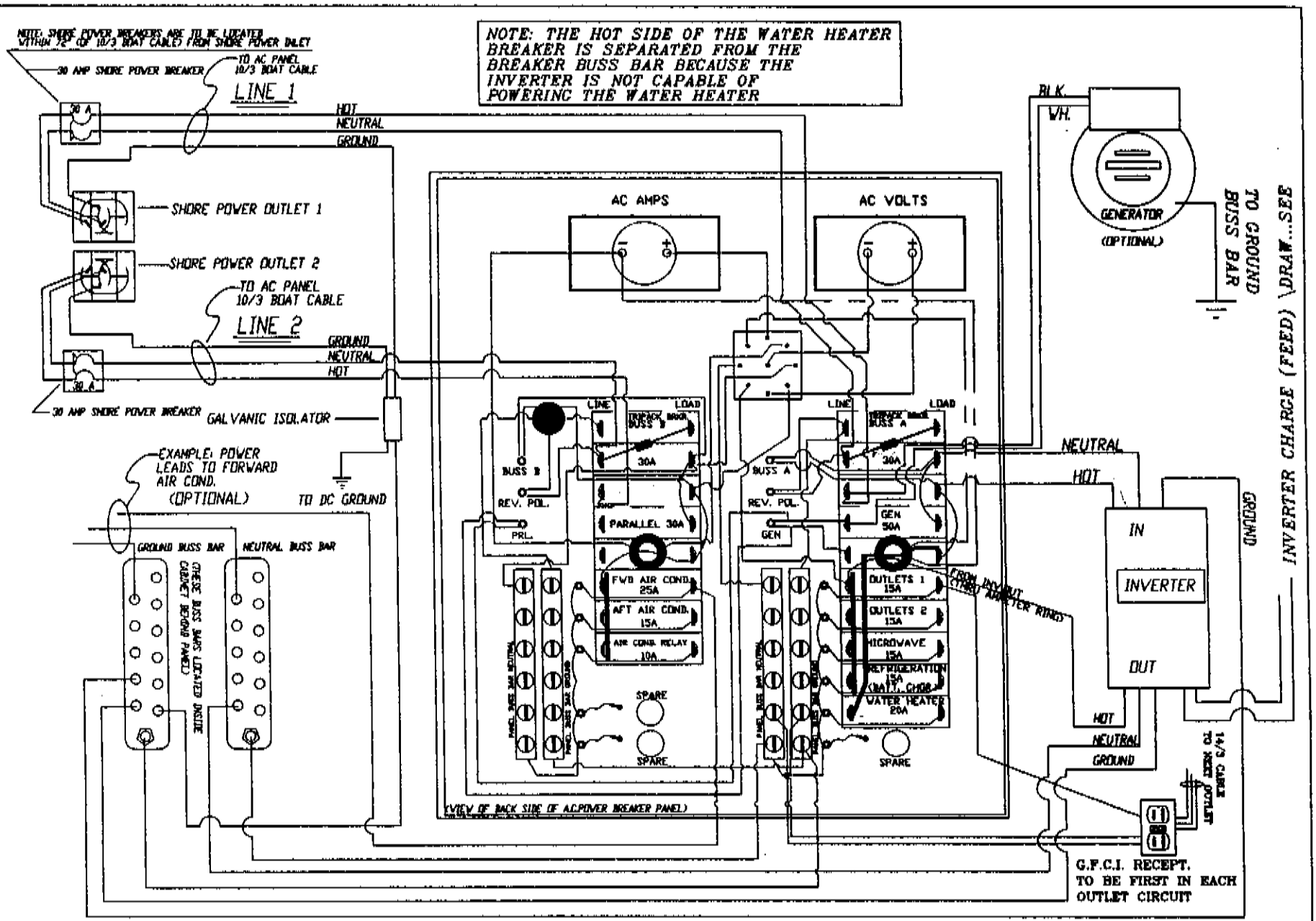
COMPONENT	SYMPTOM	POSSIBLE SOLUTION/S
L.P. GAS	NO POWER TO SWITCH AT GALLEY SYSTEM TURNS ON, NO GAS PRESENT	SEE "TO POWER PANEL" PREV. PAGE IS TANK VALVE OPEN? IS TANK EMPTY? SEE "STOVE/OVEN" MANUAL
BLOWER	WON'T TURN ON	SEE "TO POWER PANEL" PREV. PAGE
BILGE PUMP	WON'T OPERATE AUTO OR MANUAL PUMP MAKES NOISE, DOESN'T PUMP PUMP RUNS BUT DOESN'T DISCHARGE	BATTERY LEVEL O.K.? SEE VOLT METER CHECK BILGE RESET ON INV/DRAW BATT. SWITCH PANEL, AND (IF APPLIES) RESET ON MAIN DISTRIBUTION PANEL. BATTERY CONNECTIONS GOOD? DEBRIS IN PUMP IMPELLER? DISCHARGE HOSE CLOGGED?
VOLT METER	NO VOLTAGE DISPLAYED	SEE "TO POWER PANEL" PREV. PAGE IS SEL. BATT. SW. ON #4? IF SO THIS POSITION AVAILABLE FOR ADDITIONAL BATTERY, USE #1,2, OR 3 POSITION. CK. FUSES ON INV/DRAW SEL. SW. PANEL ARE BATTERY CONNECTIONS GOOD? HAVE BATTERIES CHECKED HAVE METER CHECKED BY QUALIFIED PERSONELL.
AMP METER	NO AMPERAGE DISPLAYED	IS D.C. MAIN ON? IS ANYTHING IN THE 12V. SYSTEM TURNED ON & RUNNING? HAVE METER CHECKED BY QUALIFIED PERSONELL.
SOLAR PANEL	NO OUTPUT TO BATTERY/S	CK. FUSE ON START BATTERY ON/OFF SWITCH PANEL.

110V.A.C. (220V. OVERSEAS MODELS) SYSTEM TROUBLESHOOTING GUIDE

COMPONENT	SYMPTOM	POSSIBLE SOLUTION/S
SHORE POWER "A"	NO POWER TO PANEL	SEE "POWER SYSTEM OPERATIONS" PAGE 63A-2 CHECK DOCKSIDE BREAKER AND/OR BREAKER LOCATED INSIDE STARBOARD AFT STATEROOM HEADLINER (220V. MODELS INSIDE STB. SWIMSEAT LOCKER) CHECK RESET/S ON INVERTER. SEE "INV MANUAL" FOR LOCATION OF RESETS
OUTLETS #1 & 2	NO POWER	SEE "POWER SYSTEM OPERATIONS" PAGE 63A-2 IS OUTLET BREAKER/S ON? CHECK RESET ON G.F.I. OUTLETS AT GALLEY & AT NAV. STATION. CHECK INPUT/OUTPUT RESETS ON OPT. INVERTER MODELS SEE "INV MANUAL" FOR LOCATION OF RESETS.
MICROWAVE	NO POWER	IS BREAKER ON? SEE "POWER SYSTEM OPERATIONS" PAGE 63A-2 IS MICROWAVE ON? SEE "MICRO MANUAL"
REFRIGERATION	WON'T GET COLD	SEE "POWER SYSTEM OPERATIONS" PAGE 63A-2 THERMOSTATS TURNED ON? SEEK QUALIFIED PERSONELL
WATER HEATER	NO POWER WON'T HEAT WATER WATER TO COLD/HOT	IS BREAKER ON? SEE "POWER SYSTEM OPERATIONS" PAGE 63A-2 CHECK "RESET" ON WATER HEATER SEE "WATER HEATER MANUAL" FOR LOCATION. SEE "WATER HEATER MANUAL" FOR THERMOSTAT ADJUSTMENT AND/OR ELEMENT REPLACEMENT, SEEK QUALIFIED PERSONELL
INVERTER/BATT. CHARGER	INV. NOT SUPPLYING A.C.POWER INV. ON BUT UNABLE TO OPERATE DESIRED APPLIANCE/S	IS INVERTER REMOTE SWITCH AT NAV. STATION ON? IS DESIRED APPLIANCE BREAKER ON? IS BATTERY VOLTAGE LOW? SEE VOLTAGE DISPLAY ON INVERTER REMOTE PANEL, SELECT OTHER BATTERY ON INVERTER/DRAW SELECTOR SWITCH PANEL IN AFT STRM. ARE YOU ASKING THE INVERTER TO POWER MORE THAN IT IS CAPABLE? SEE "INVERTER MANUAL" FOR INFORMATION REGARDING POWER OUTPUT CAPABILITIES.
INVERTER/BATT. CHARGER	NOT CHARGING BATTERY/S	IS SHORE POWER "A".ON? SEE "POWER SYSTEM OPERATIONS" PAGE 63A-2 IS INVERTER DRAW SELECTOR SWITCH IN "BOTH" POSITION? CHECK IN-LINE FUSE AT BATTERY/S ARE BATTERY CONNECTIONS GOOD? INVERTER REMOTE SWITCH SHOULD BE IN THE "OFF" POSITION. (THIS IS NECESSARY IN THE EVENT YOU "LOSE" SHORE POWER, THE INVERTER DOESN'T GO INTO INVERT MODE CAUSING BATT./S TO DRAIN IF YOU LEFT AN A.C. APPLIANCE ON..

110V.A.C. (220V. OVERSEAS MODELS) SYSTEM TROUBLESHOOTING GUIDE CONT:

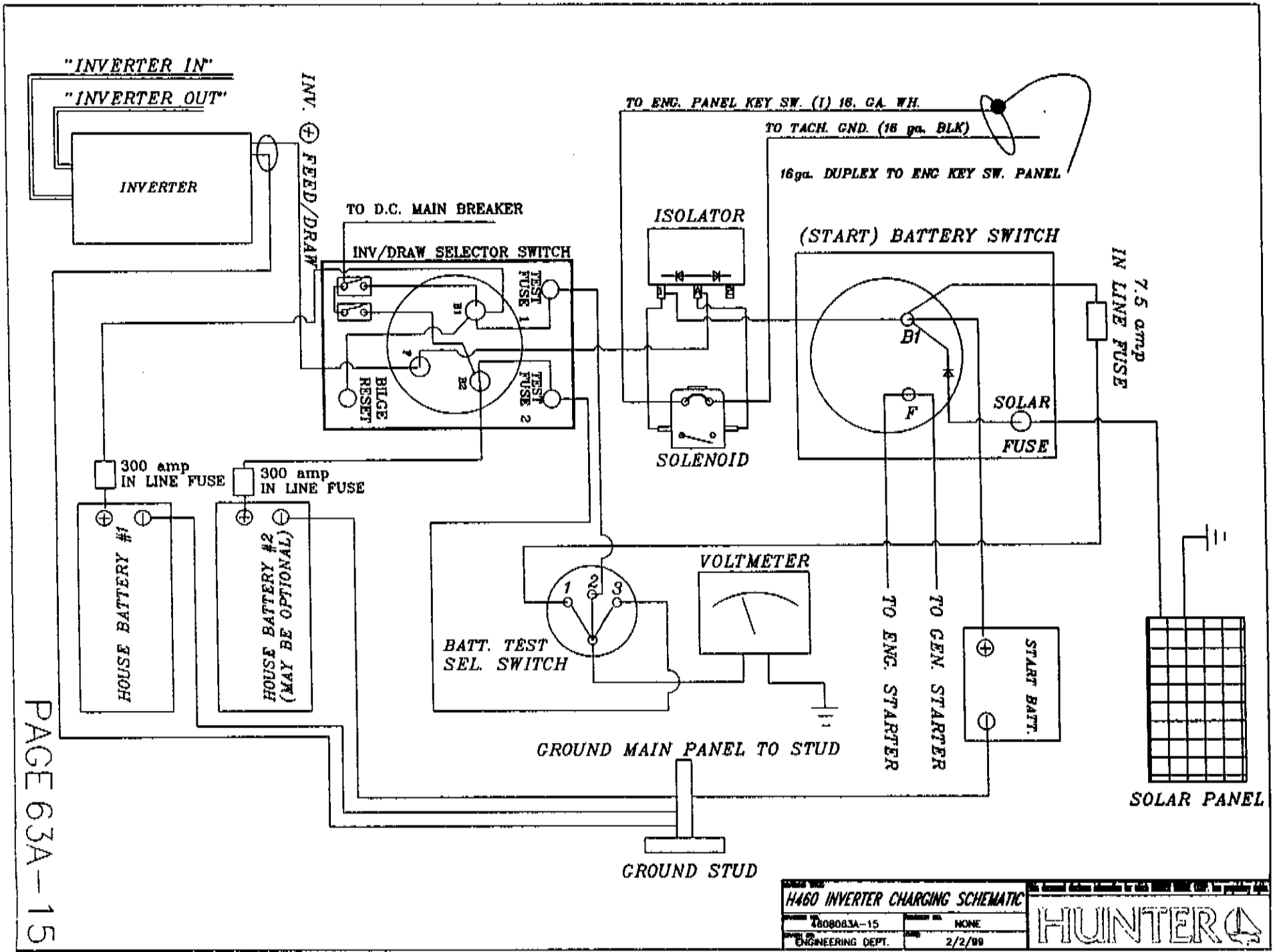
COMPONENT	SYMPTOM	POSSIBLE SOLUTIONS
SHORE POWER "B"	NO POWER TO PANEL	IS SHORE POWER "B" BREAKER ON? CHECK DOCKSIDE BREAKER CHECK SHORE POWER BREAKER LOCATED IN HEADLINER STBD. AFT STRM. (ON 220V.A.C. MODELS IN STBD. AFT SWIMSEAT LOCKER.)
AIR COND. FWD/AFT	WON'T TURN ON	ARE APPROPRIATE BREAKER/S ON? SEE "POWER SYSTEMS OPERATION" PAGE 63A-2 SEE "MARINE AIR" MANUAL
	TURNS ON THEN SHUTS DOWN	IS AIR COND. RELAY "ON" ? IS AIR COND. RAW WATER SEACOCK OPEN? IF SO, IS WATER CIRCULATING? SEE PAGE 60 FOR AIR COND. DISCHARGE THRUHULL LOCATION, IF NOT IS AIR COND. PICKUP BEING RESTRICTED BY DEBRIS?
	OTHER	SEE "MARINE AIR" MANUAL
	OPTIONAL GENERATOR (APPLIES TO BOTH "A" & "B" SIDES OF A.C. PANEL)	
GENERATOR	NO POWER TO STARTER RUNNING, BUT NO POWER AT PANEL.	IS START BATT. SELECTOR SWITCH ON? IS "GENERATOR BREAKER" ON "A" SIDE OF PANEL ON? (MOVE SLIDE BAR UP TO TURN THIS BREAKER ON). IS "PARALLEL BREAKER" ON "B" SIDE OF PANEL ON? (TO POWER "B" SIDE OF A.C. PANEL) SEE GENERATOR MANUAL
	WON'T START	DID YOU FOLLOW PROPER STARTING PROCEDURE AS DESCRIBED IN THE "GENERATOR MANUAL"? DO YOU HAVE AN AMPLE AMOUNT OF DIESEL FUEL? REMEMBER THE GENERATOR FUEL PICKUP TUBE IS SHORTER THAN THE PICKUP TUBE FOR THE ENGINE, THIS PREVENTS GENERATOR FROM DRAINING TANK SINCE ENGINE POWER IS MORE IMPORTANT THAN GENERATOR POWER. REFER TO GENERATOR MANUAL FOR POSSIBLE FUSE OR RESET ON GENERATOR.
	GEN. STARTS THEN SHUTS DOWN	IS RAW WATER PICKUP SEACOCK OPEN? IS RAW WATER PICKUP BEING RESTRICTED BY DEBRIS?



NOTE: IF OPTIONAL WASHER/DRYER CHOSEN INSTALL BREAKER (CORRECT AMPERAGE) BUT DO NOT CONNECT HOT SIDE OF BREAKER TO BREAKER BUSS BAR, THE INVERTER IS NOT CAPABLE TO POWER THE WASHER\DRYER

H460 AC PANEL SCHEMATIC	
4608063A-14	NONE
ENGINEERING DEPT.	2/2/99

HUNTER



PAGE 63A-15

H460 INVERTER CHARGING SCHEMATIC	
4808063A-15	NONE
ENGINEERING DEPT.	2/2/99

HUNTER

H460 WATTAGE DEMAND FOR ELECTRICAL EQUIPMENT AND APPLIANCES

NOTE: A PRUDENT MARINER REALIZES THAT THE RESOURCES TO POWER A VESSEL ARE LIMITED. WHEN USING THE ALTERNATE POWER SOURCES ONE SHOULD BE CONSERVATIVE AND AWARE OF THE AMOUNT OF POWER BEING SUPPLIED VERSES POWER BEING DRAWN THIS IS ESPECIALLY IMPORTANT WHEN USING THE INVERTER POWER. CONSULT THE "INVERTER MANUAL" FOR POWER OUTPUT CAPABILITIES.

FIXED APPLIANCES:

SEE MANUALS AND/OR SPECIFICATION SHEETS IN YOUR OWNER'S PACK

PORTABLE APPLIANCES:

BELOW ARE APPROXIMATE EXAMPLES OF THE AMPERAGE DRAW ASSOCIATED WITH CERTAIN ITEMS.

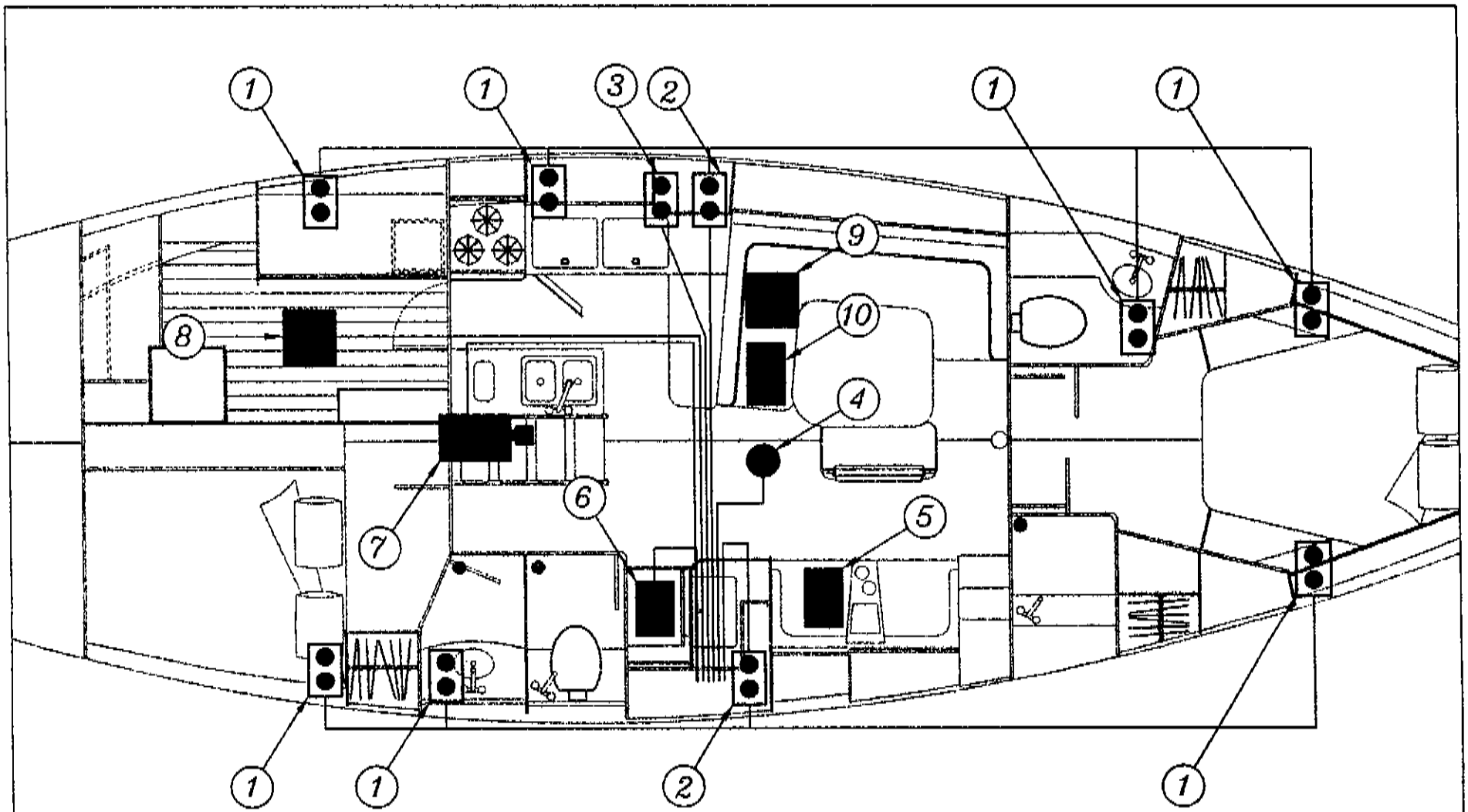
APPLIANCES: / WATTS:

COFFEE MAKER.....800 - 1,000 WATTS
FRYING PAN.....1,000 - 2,500 WATTS
TOASTER.....800 - 1,000 WATTS
FAN.....75 - 300 WATTS
RADIO.....60 - 150 WATTS
TV.....250 - 600 WATTS
HOT PLATE.....800 - 1,200 WATTS
HAIR DRYER.....700 - 1,100 WATTS
SHAVER.....50 - 100 WATTS
CLOCK.....25 - 50 WATTS
BLENDER.....250 - 350 WATTS
TOASTER OVEN.....1,250 - 1,700 WATTS

ALTERNATE POWER SOURCES: / PROVIDED WATTS:

SMALLER MODEL INVERTER.....1,000 WATTS
LARGER MODEL INVERTER.....2,000 WATTS (THIS MODEL ON YOUR BOAT)
SMALLER MODEL GENERATOR.....5,500 WATTS
LARGER MODEL GENERATOR.....8,000 WATTS
SHORE POWER (PER INLET).....3,500 WATTS

EXAMPLE: TV (250-600)+ TOASTER (800-1,000)+ HAIR DRYER (700-1,100) = TOTAL (1,750-2,700)
THUS, IF THE WATTS BEING USED EXCEEDS THE WATTS BEING PRODUCED, THEN SOME OF THE ITEMS IN USE WILL NOT BE FUNCTIONAL. AGAIN, IT IS IMPORTANT TO BE AWARE OF THE AMPERAGE DRAW VERSUS THE AMPERAGE OUTPUT AT ALL TIMES.

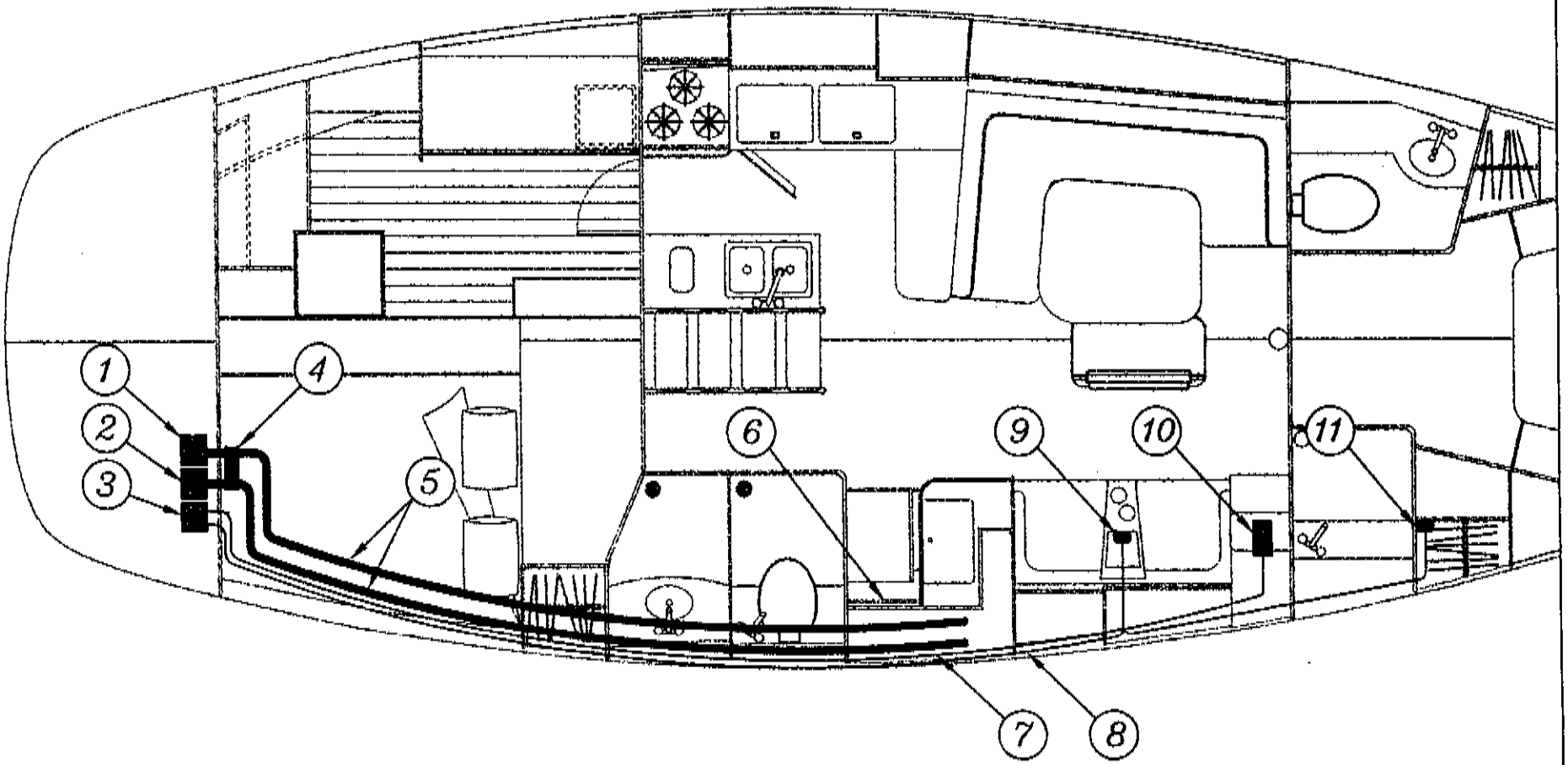


1. POWER OUTLETS	6. INVERTER
2. GFI POWER OUTLETS	7. OPTIONAL GENERATOR
3. MICROWAVE OVEN OUTLET	8. (OPT) AFT AIR CONDITIONER COMPRESSOR
4. AIR CONDITIONER WATER PUMP	9. (OPT) FWD AIR CONDITIONER COMPRESSOR
5. WATER HEATER	10. 110 VAC REFRIGERATION COMPRESSOR

H460 AC POWER PAN WIRING SCHEMATIC

48080638	NONE
ENGINEERING DEPT.	2/2/99

HUNTER



1. SHORE POWER "1" INLET
2. SHORE POWER "2" INLET
3. TV COAX/PHONE LINE INLET
4. 30 AMP SHORE POWER BREAKERS (LOCATED IN STBD COCKPIT LOCKER)
5. 10/3 SHORE POWER CABLE TO MAIN PANEL
6. MAIN DISTRIBUTION PANEL @ NAV STATION
7. TV COAX CABLE RUN
8. TELEPHONE LINE WIRE RUN
9. MAIN SALON PHONE JACK (LOCATED BETWEEN SALON CHAIRS)
10. TV COAX OUTLET (LOCATED BEHIND TV/VCP FWD SALON)
11. FWD STATEROOM PHONE JACK (LOCATED ON TOP OF STBD HANGING LCKR)

460803C	NONE
ENGINEERING DEPT.	2/2/00

H460 AC POWER HEADLINER WIRING SCHEMATIC

HUNTER

SECTION 63D...OPTIONAL AIR COND. SYSTEMS

BASIC OPERATING INSTRUCTIONS:

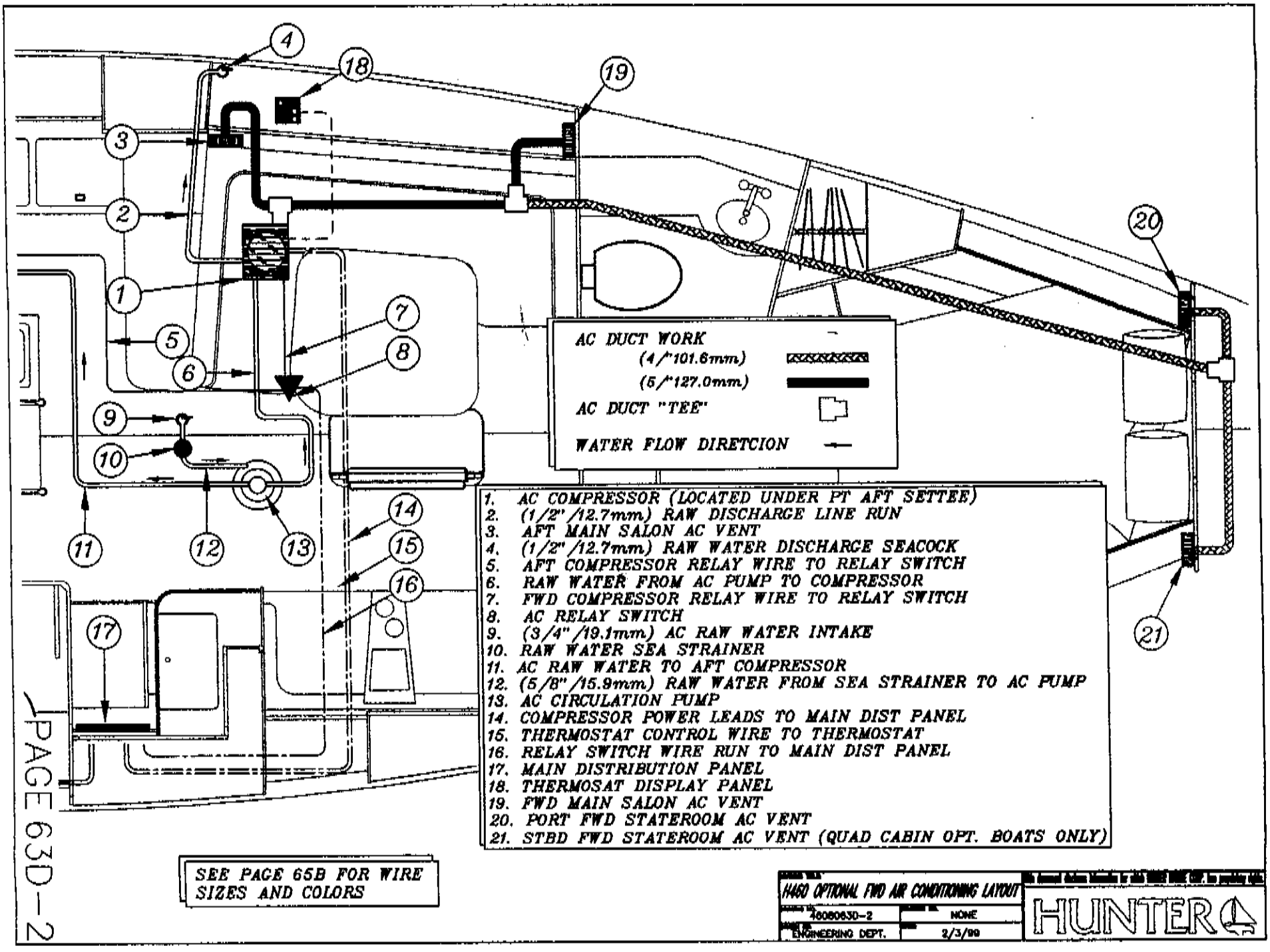
1. CHOOSE POWER SOURCE (SHORE POWER OR GENERATOR) SEE PAGES 63A-2
2. CHECK AIR COND. SEA STRAINER, (AFT MAIN BILGE) CLEAN IF NECESSARY
4. OPEN THE RAW WATER PICKUP SEACOCK (3/4"/19.1mm)
4. ENSURE THE 1/2" (12.7mm) DISCHARGE SEACOCK IS OPEN.
   (SEACOCK ACCESSED THRU HOLE IN SETTEE BACK, BEHIND STBD FWD SETTEE CUSHION)
5. TURN A.C. (BUS "B") BREAKERS (FWD, AFT & RELAY) ON AT MAIN A.C. PANEL
6. TURN ON UNIT AT THERMOSTAT DISPLAY PANEL AND SET TEMP.

NOTE:

IF ANY OTHER APPLIANCES ARE TO BE USED WHEN AIR CONDITIONER IS RUNNING WHEN ON SHORE POWER, BOTH "SHORE POWER A" AND "SHORE POWER B" CABLES MUST BE HOOKED UP.

IF THERE IS NO POWER AT PANEL WHEN CONNECTED TO SHORE POWER, CHECK MAIN BREAKERS INSIDE STBD AFT COCKPIT LOCKER

SEE AIR CONDITION MANUAL FOR DETAILED OPERATING PROGRAMMING/TROUBLESHOOTING INSTRUCTIONS



1. AC COMPRESSOR (LOCATED UNDER PT AFT SETTEE)
2. (1/2"/12.7mm) RAW DISCHARGE LINE RUN
3. AFT MAIN SALON AC VENT
4. (1/2"/12.7mm) RAW WATER DISCHARGE SEACOCK
5. AFT COMPRESSOR RELAY WIRE TO RELAY SWITCH
6. RAW WATER FROM AC PUMP TO COMPRESSOR
7. FWD COMPRESSOR RELAY WIRE TO RELAY SWITCH
8. AC RELAY SWITCH
9. (3/4"/19.1mm) AC RAW WATER INTAKE
10. RAW WATER SEA STRAINER
11. AC RAW WATER TO AFT COMPRESSOR
12. (5/8"/15.9mm) RAW WATER FROM SEA STRAINER TO AC PUMP
13. AC CIRCULATION PUMP
14. COMPRESSOR POWER LEADS TO MAIN DIST PANEL
15. THERMOSTAT CONTROL WIRE TO THERMOSTAT
16. RELAY SWITCH WIRE RUN TO MAIN DIST PANEL
17. MAIN DISTRIBUTION PANEL
18. THERMOSAT DISPLAY PANEL
19. FWD MAIN SALON AC VENT
20. PORT FWD STATEROOM AC VENT
21. STBD FWD STATEROOM AC VENT (QUAD CABIN OPT. BOATS ONLY)

SEE PAGE 65B FOR WIRE SIZES AND COLORS

H460 OPTIONAL FWD AIR CONDITIONING LAYOUT

46060630-2	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

AC DUCT WORK

(4"/101.6mm.)

(5"/127.0mm.)

(6"/152.4mm.)

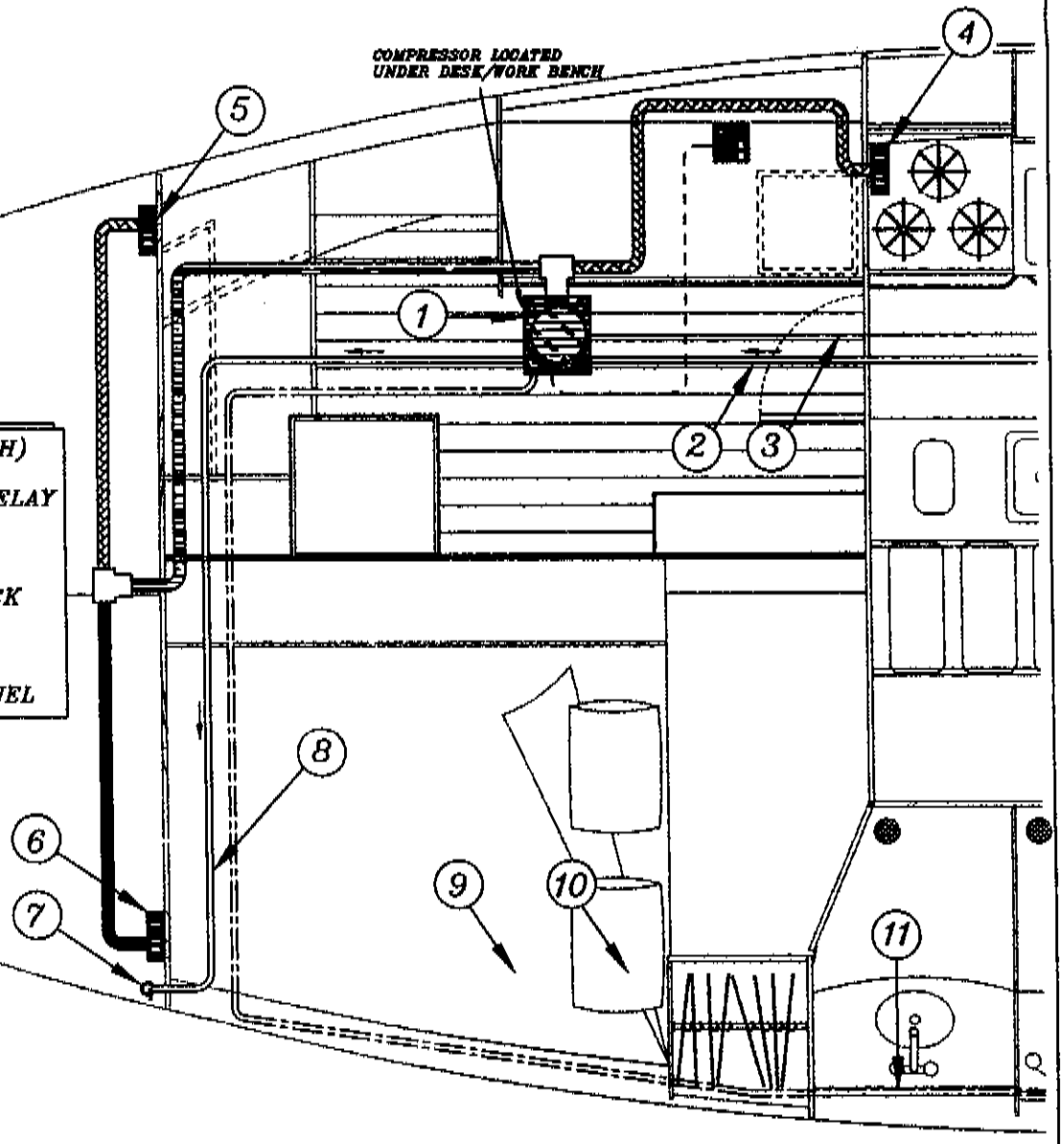
AC DUCT "TEE"

WATER FLOW DIRETCION

AC LAYOUT IS THE SAME FOR ALL OPTIONS OFFERED ON THIS MODEL

1. AC COMPRESSOR (LOCATED UNDER STBD AFT BERTH)
2. RAW WATER FROM AC PUMP
3. AFT COMPRESSOR RELAY WIRE RUN FWD TO AC RELAY
4. GALLEY AC VENT
5. PORT AFT STATEROOM AC VENT
6. STBD AFT STATEROOM AC VENT
7. (1/2"/12.7mm) AC RAW WATER DISCHARGE SEACOCK
8. (1/2"/12.7mm) AC DISCHARGE HOSE RUN
9. THERMOSTAT CONTROL WIRE TO THERMOSTAT
10. THERMOSTAT DISPLAY PANEL
11. AC COMPRESSOR POWER LEADS TO MAIN DIST. PANEL

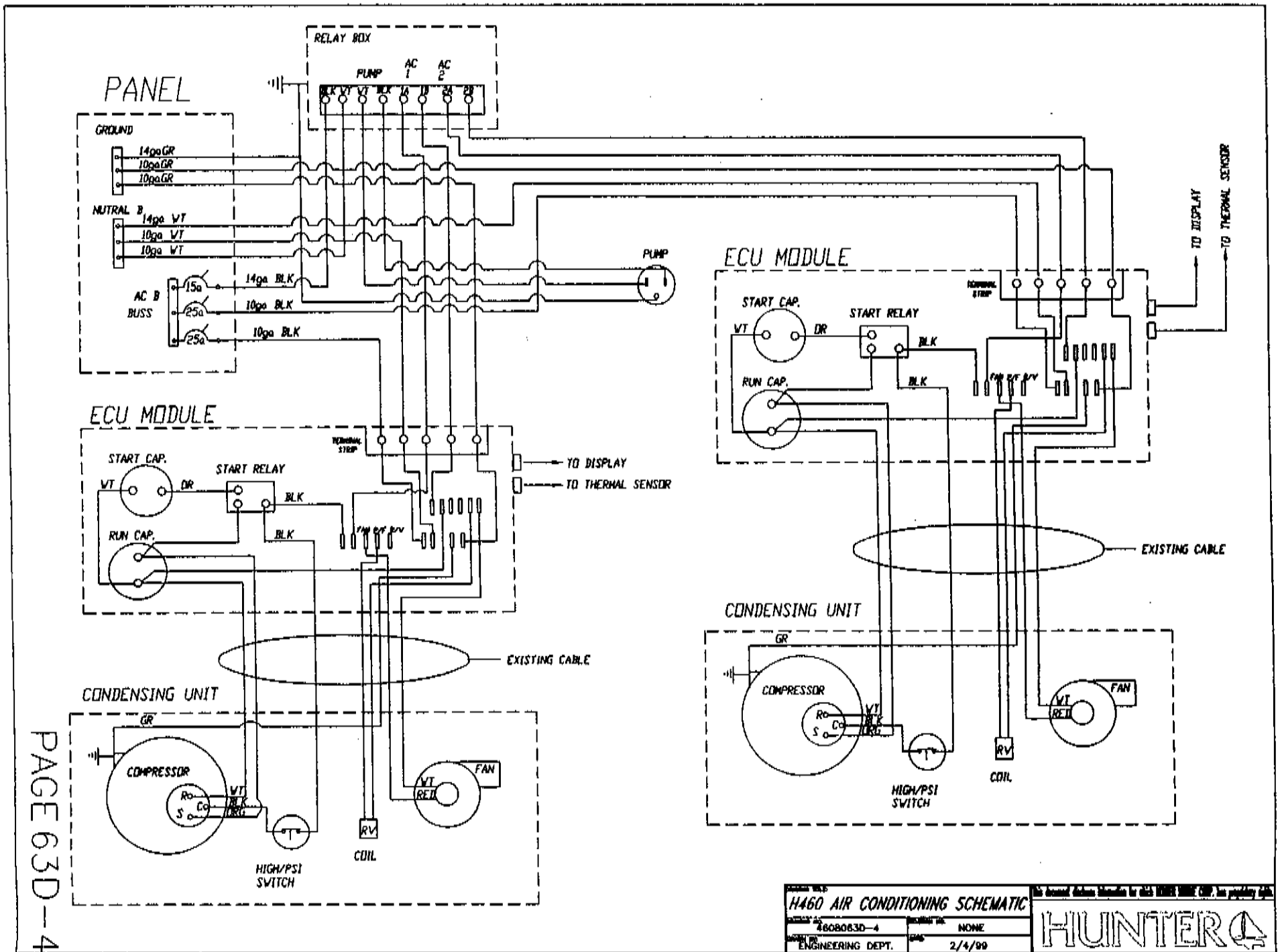
SEE PAGE 65B FOR WIRE SIZES AND COLORS



H460 OPTIONAL AFT AIR CONDITIONING LAYOUT

19080630-3	NONE
ENGINEERING DEPT.	2/3/99

HUNTER 46



PAGE 63D-4

H460 AIR CONDITIONING SCHEMATIC	
46080630-4	NONE
ENGINEERING DEPT.	2/4/99

HUNTER

SECTION 63E OPTIONAL GENERATOR SYSTEM...

BASIC OPERATING INSTRUCTIONS: (NOTE: READ GENERATOR MANUAL BEFORE OPERATING GEN.)

① FILL DIESEL FUEL TANK WITH DIESEL FUEL
② CHECK OIL LEVEL IN GENERATOR (SEE GEN. MANUAL FOR INST.)
③ TURN ON START BATTERY SELECTOR SWITCH (AT NAV. STA.)
④ CHECK SEA STRAINER (INSIDE SHAFT LOG COMPARTMENT, AFT OF ENGINE)
⑤ OPEN RAW WATER SEACOCK (INSIDE SHAFT LOG COMPARTMENT, AFT OF ENGINE)
⑥ PUSH START SWITCH ON GEN. START PANEL AT NAV. STATION TO START GEN. DO NOT RUN STARTER FOR MORE THAN 10 SECONDS AT A TIME WITH 15 SECONDS INBETWEEN. IF GENERATOR DOESN'T START CONSULT THE GENERATOR MANUAL.

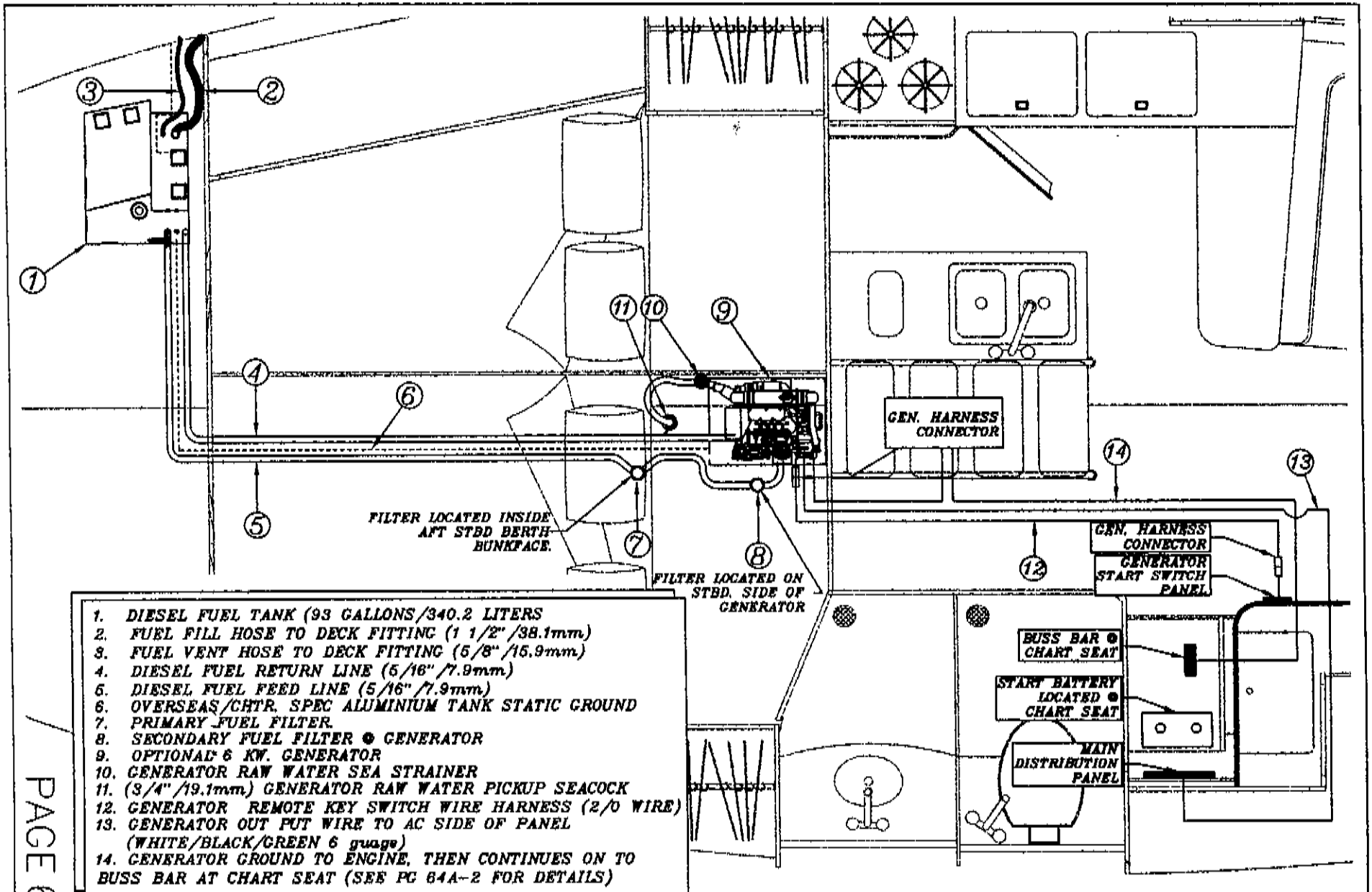
⑦ TURN ON THE "GENERATOR" BREAKER ON "A" SIDE OF MAIN A.C. PANEL. TO POWER "B" SIDE, RAISE THE SLIDE BAR ON "B" SIDE OF MAIN A.C. PANEL AND TURN "PARALLEL" BREAKER "ON". A.C. PANEL SHOULD NOW BE OPERABLE.

⑧ TO SHUT GEN. DOWN PUSH STOP SWITCH UNTIL GEN STOPS.

NOTE: SEE GENERATOR MANUAL FOR PROPER MAINTENENCE, TRUOBLESHOOTING, ETC.

63E-1

H460 GENERATOR OPERATION INSTRUCTIONS		HUNTER 46
460806 3E-1	NONE	
ENGINEERING DEPT.	2/3/99	

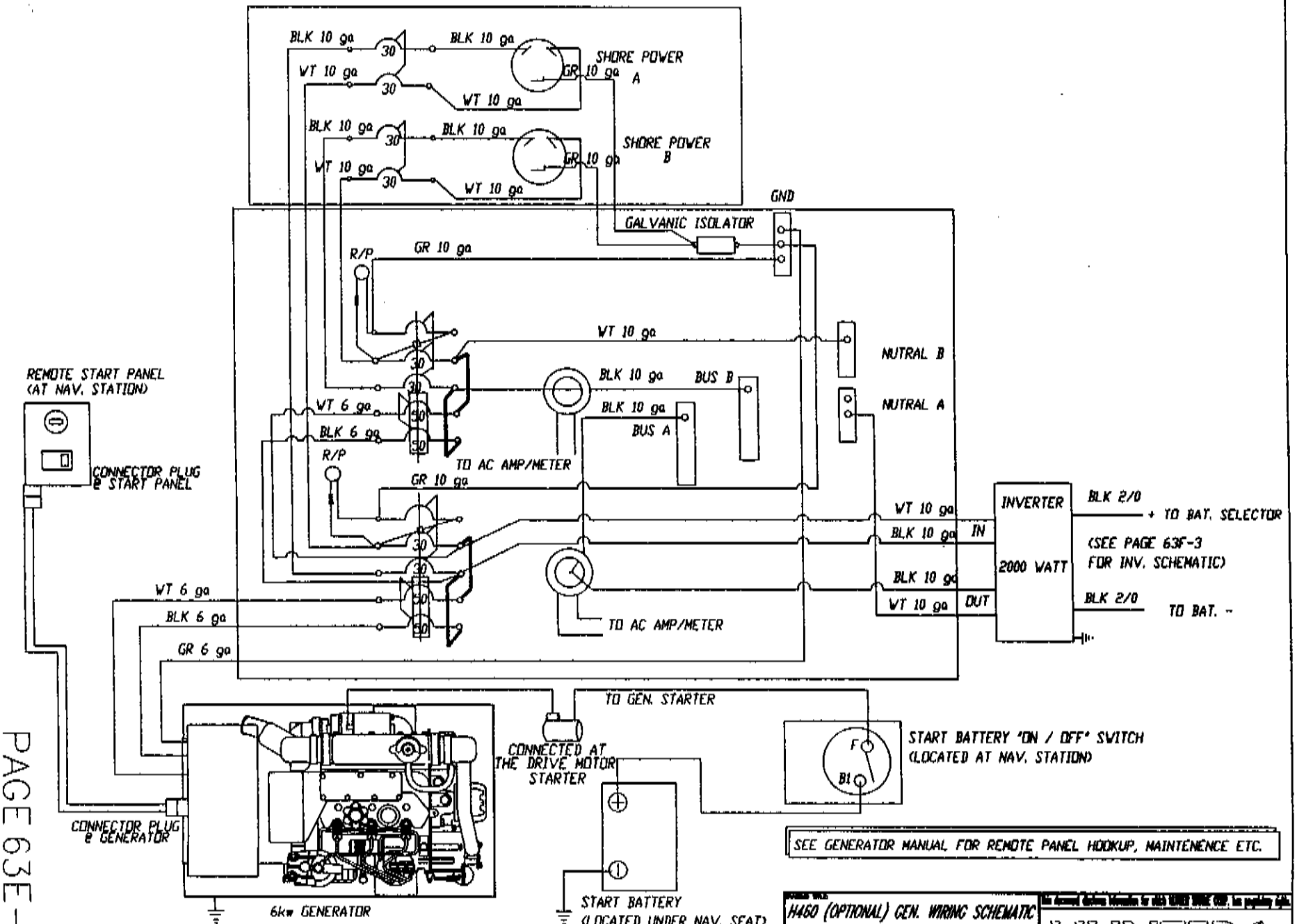


1. DIESEL FUEL TANK (93 GALLONS/340.2 LITERS
2. FUEL FILL HOSE TO DECK FITTING (1 1/2"/38.1mm)
3. FUEL VENT HOSE TO DECK FITTING (5/8"/15.9mm)
4. DIESEL FUEL RETURN LINE (5/16"/7.9mm)
5. DIESEL FUEL FEED LINE (5/16"/7.9mm)
6. OVERSEAS/CHTR. SPEC ALUMINIUM TANK STATIC GROUND
7. PRIMARY FUEL FILTER.
8. SECONDARY FUEL FILTER @ GENERATOR
9. OPTIONAL 6 KW. GENERATOR
10. GENERATOR RAW WATER SEA STRAINER
11. (3/4"/19.1mm) GENERATOR RAW WATER PICKUP SEACOCK
12. GENERATOR REMOTE KEY SWITCH WIRE HARNESS (2/0 WIRE)
13. GENERATOR OUT PUT WIRE TO AC SIDE OF PANEL (WHITE/BLACK/GREEN 6 guage)
14. GENERATOR GROUND TO ENGINE, THEN CONTINUES ON TO BUSS BAR AT CHART SEAT (SEE PG 64A-2 FOR DETAILS)

H460 (OPT) GENERATOR SYSTEM LAYOUT

480808JE-2	NONE
ENGINEERING DEPT.	1/21/99

HUNTER



H460 (OPTIONAL) GEN. WIRING SCHEMATIC

408063E-3	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

SECTION 63F.....INVERTER SYSTEM

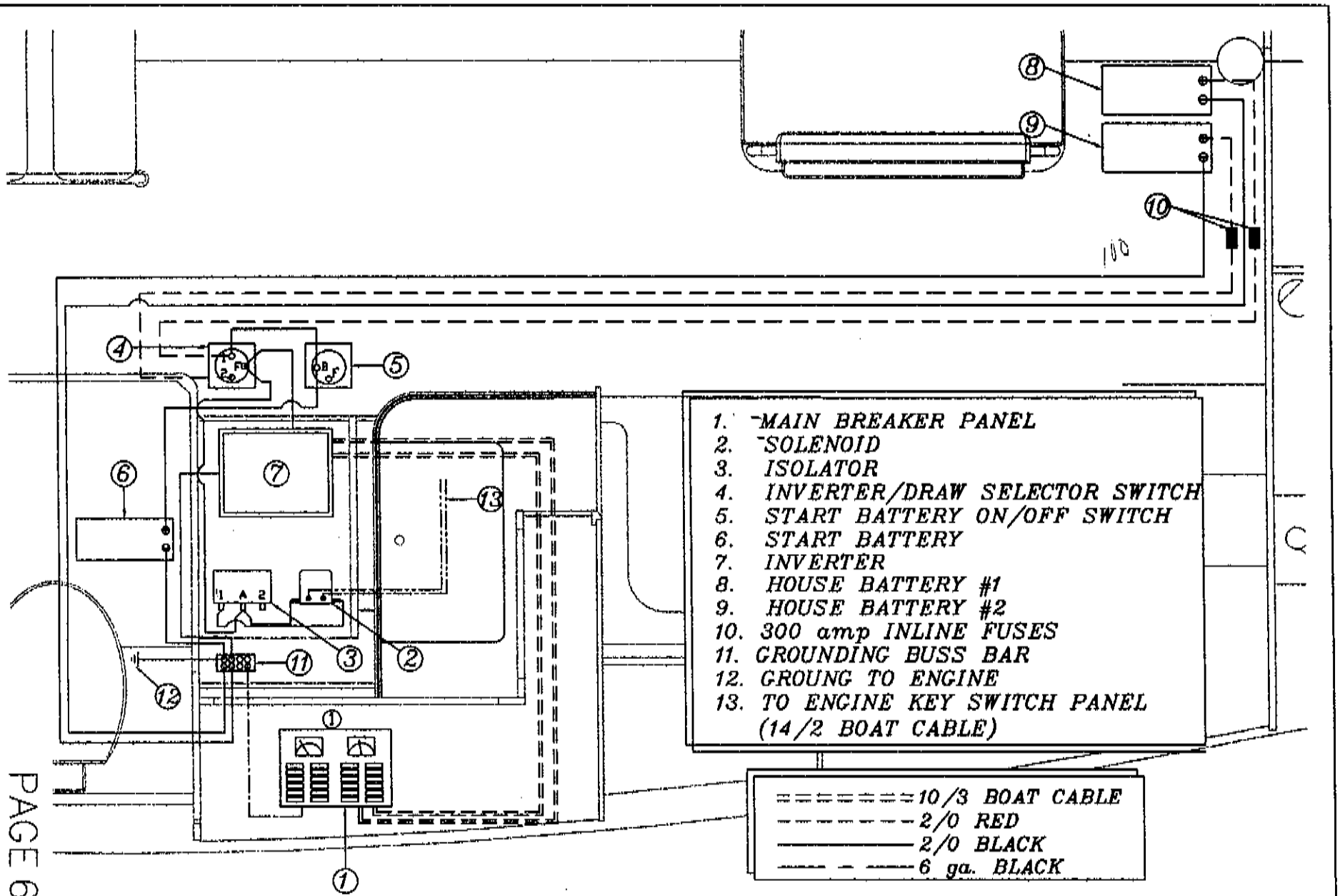
BASIC OPERATING INSTRUCTIONS: (FOR INVERTING D.C. POWER TO A.C. POWER)

① TURN INVERTER THE DRAW SELECTOR (HOUSE BATTERY) SWITCH TO EITHER THE "1, 2, OR BOTH" POSITIONS.
② TURN ON INVERTER REMOTE PANEL AT THE NAVIGATION STATION.
③ TURN ON APPROPRIATE APPLIANCE BREAKER ON A.C. SIDE OF PANEL.

NOTE:
READ "INVERTER" SECTION ON PAGE 63A-2 FOR INVERTER SYSTEM DETAILS

SEE INVERTER MANUAL FOR TECHNICAL DATA, TROUBLESHOOTING, ETC. OPERATING/PROGRAMMING INSTRUCTIONS

H460 INVERTER OPERATING INSTRUCTIONS
4608063F-1 | NONE
ENGINEERING DEPT. | 2/3/99
HUNTER

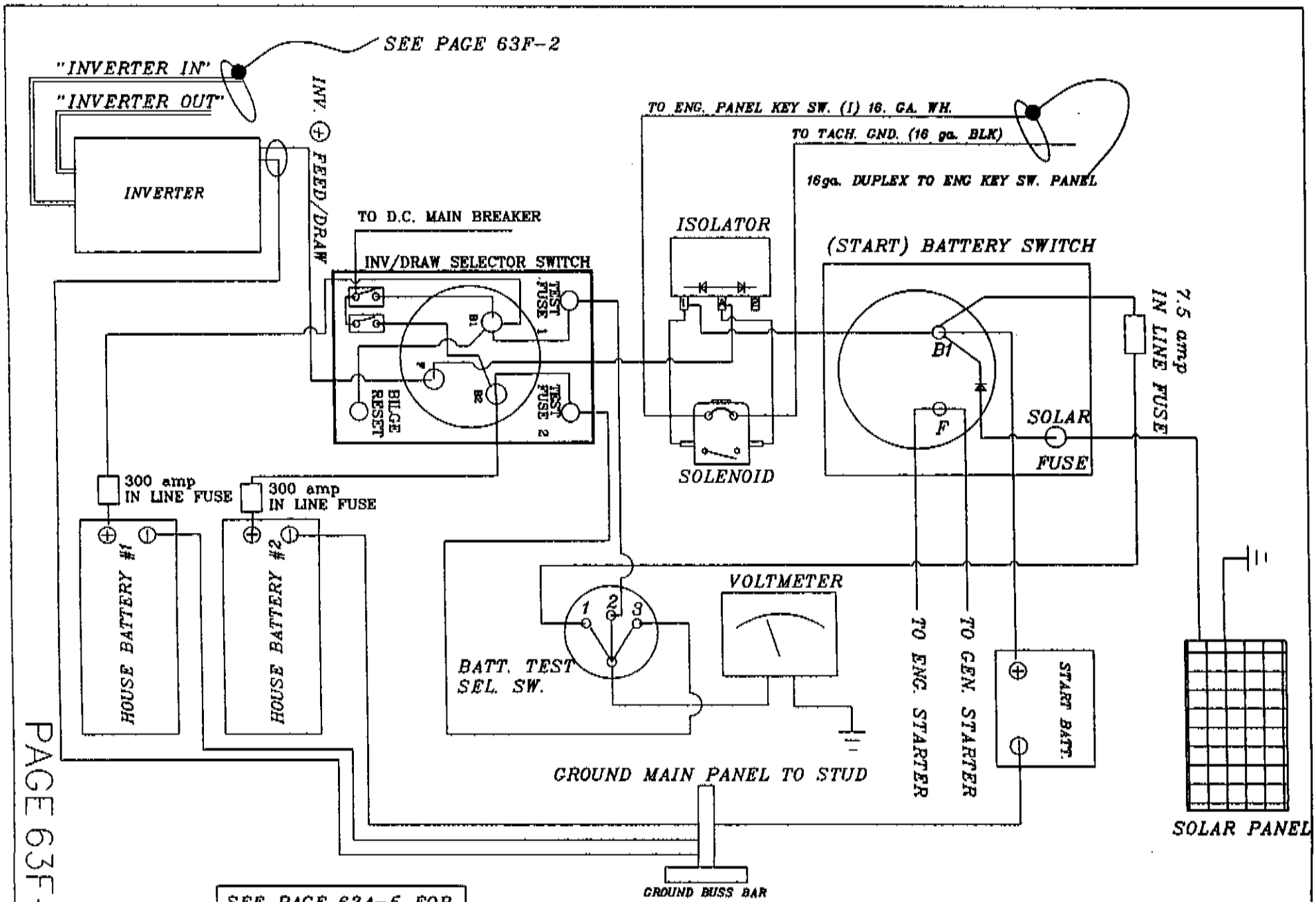


H460 INVERTER SYSTEM LAYOUT

460063F-2	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

PAGE 63F-2



PAGE 63F-3

H460 INVERTER SYSTEM SCHEMATIC	
4608063F-3	NONE
ENGINEERING DEPT.	2/2/99

HUNTER

SECTION 63G...REFRIGERATION SYSTEM

BASIC OPERATING INSTRUCTIONS:

① CHECK SEA STRAINER & OPEN RAW WATER PICK UP SEACOCK (IN MID CABIN MAIN BILGE LOCKER)
② ENSURE THE 3/4"/(19.1mm) DISCHARGE SEACOCK IS OPEN.
(SEACOCK ACCESSED THRU HOLE IN SETTEE BACK, BEHIND AFT PORT SETTEE CUSHION.)
③ SELECT HOUSE #1 OR #2 AT INVERTER / DRAW SELECTOR SWITCH,
UNLESS ON SHORE POWER OR GENERATOR (LOCATED AT NAVIGATION STATION)
④ TURN ON MAIN A.C. BREAKER AT MAIN "A" SIDE BREAKER PANEL
⑤ TURN ON REFRIG. BREAKER
⑥ SET THERMOSTATS TO DESIRED TEMP.

NOTE: KEEP SEA STRAINER CLEAN TO PREVENT IMPROPER CIRCULATION
IF LEAVING UNIT ON WHEN AWAY FROM BOAT
BE SURE SHORE POWER CABLES ARE CONNECTED.
INVERTER WILL PREVENT BATTERY DRAIN
(INVERTER "CHARGE" CIRCUIT
IS AUTOMATIC IF SHORE POWER IS CONNECTED AND HAS
POWER TO MAIN DISTRIBUTION PANEL.)

OPERATING INSTRUCTIONS FOR HOLDOVER PLATE SYSTEM

OPERATING INSTRUCTIONS FOR THE REFRIGERATION SYSTEM ON THE HUNTER 450 AND 460.

TURN THE BREAKER ON AT THE SHIP'S PANEL AND SET BOTH THERMOSTATS TO THE COLDEST SETTING. ATTACH A THERMOMETER TO THE FREEZER PLATES NEAR THE SENSING TUBE OF THE THERMOSTAT. PLACE ANOTHER THERMOMETER IN THE CENTER OF THE REFRIGERATOR. ALLOW THE SYSTEM TO RUN UNTIL THE FREEZER PLATE REACHES −4°F. TURN THE FREEZER THERMOSTAT COUNTERCLOCKWISE UNTIL YOU HEAR A CLICK WHICH INDICATES THAT THE THERMOSTAT HAS SATISFIED. WHEN THE REFRIGERATOR BOX REACHES 38°, TURN THE REFRIGERATOR THERMOSTAT COUNTERCLOCKWISE UNTIL THE SYSTEM CYCLES OFF.

KEEP IN MIND THAT THE FREEZER OPERATES DIFFERENTLY THAN THE REFRIGERATOR. IN THE FREEZER, THE THERMOSTAT CONTROLS THE PLATE TEMPERATURE AND IN THE REFRIGERATOR, THE THERMOSTAT CONTROLS THE BOX TEMPERATURE.

DRIVING THE FREEZER PLATE TEMPERATURE LOWER THAN −4°F WILL RESULT IN EXTENDED RUN TIME AND WILL NOT ACHIEVE ANY BETTER PERFORMANCE.

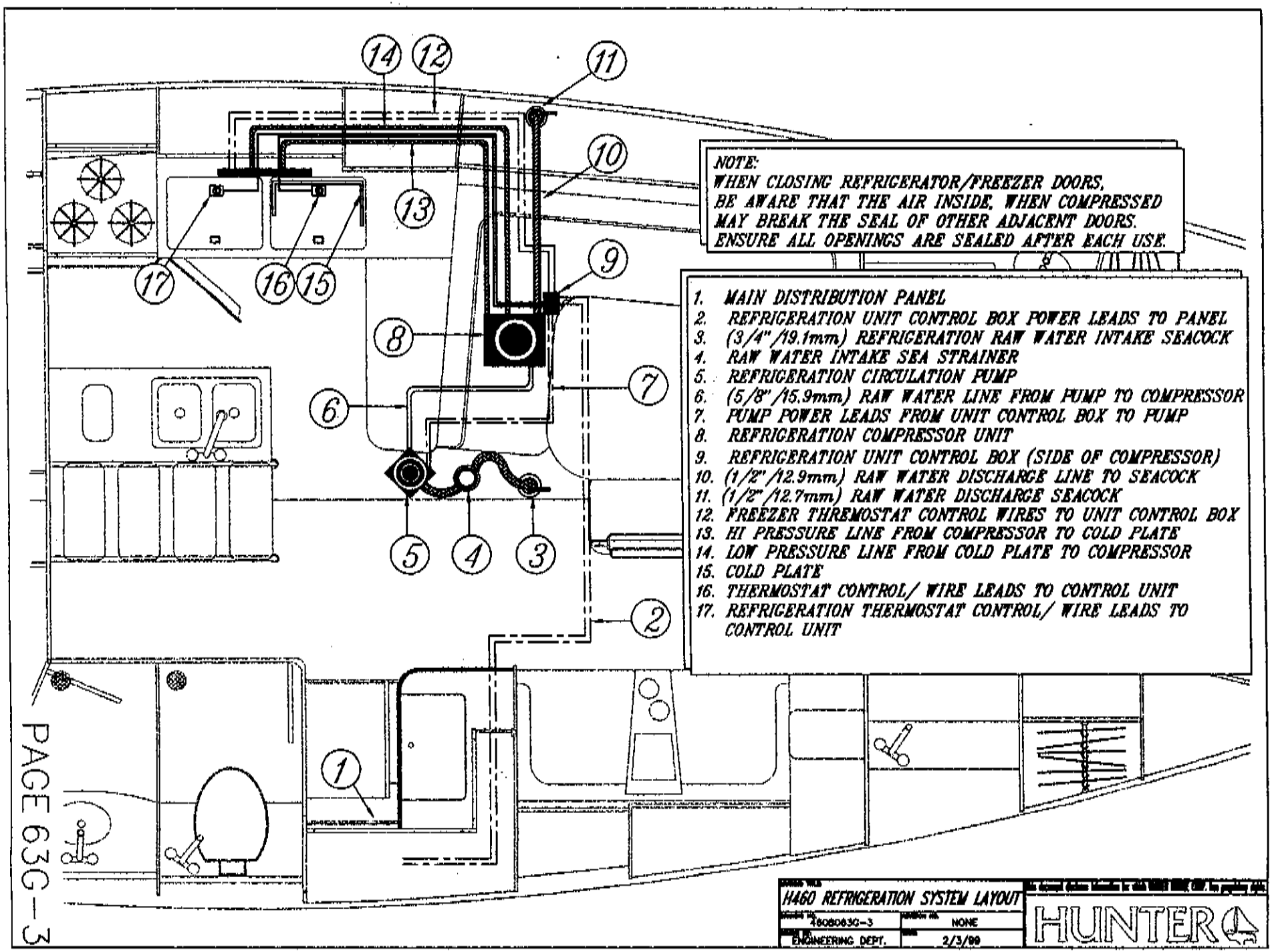
THIS SYSTEM IS NOT FROST FREE. FROST MAY BUILD UP ON THE PLATES WHICH WILL REQUIRE PERIODIC DEFROSTING.

IF IT BECOMES NECESSARY TO DEFROST THE PLATES, TURN THE SYSTEM OFF AT THE SHIPS PANEL, REMOVE THE DRAIN PLUG FROM THE BOTTOM OF THE REFRIGERATOR AND POUR SOME TAP WATER OVER THE PLATES. WIPE WITH A CLEAN CLOTH AND THEN REPLACE THE DRAIN PLUG. (NOTE: THE DRAIN PLUG MUST BE IN PLACE FOR PROPER OPERATION OF THE SYSTEM.) TURN THE SYSTEM ON TO RESUME OPERATION. IT IS NOT NECESSARY TO MAKE ANY ADJUSTMENTS TO THE THERMOSTATS AFTER DEFROSTING.

LIVE ABOARDS, MAY EXPERIENCE THE NEED FOR MORE FREQUENT DEFROSTING DUE TO HEAVIER USE. UNDER THESE CONDITIONS THEY MAY ALSO EXPERIENCE EXTENDED DUTY CYCLES.

HUNTER

1460 HOLDOVER PLATE SYSTEM INSTRUCTIONS	
DRAWING NO. 60606363-2	DRAWING NO. NONE
DRAWN BY ENGINEERING DEPT.	DATE 2/3/99



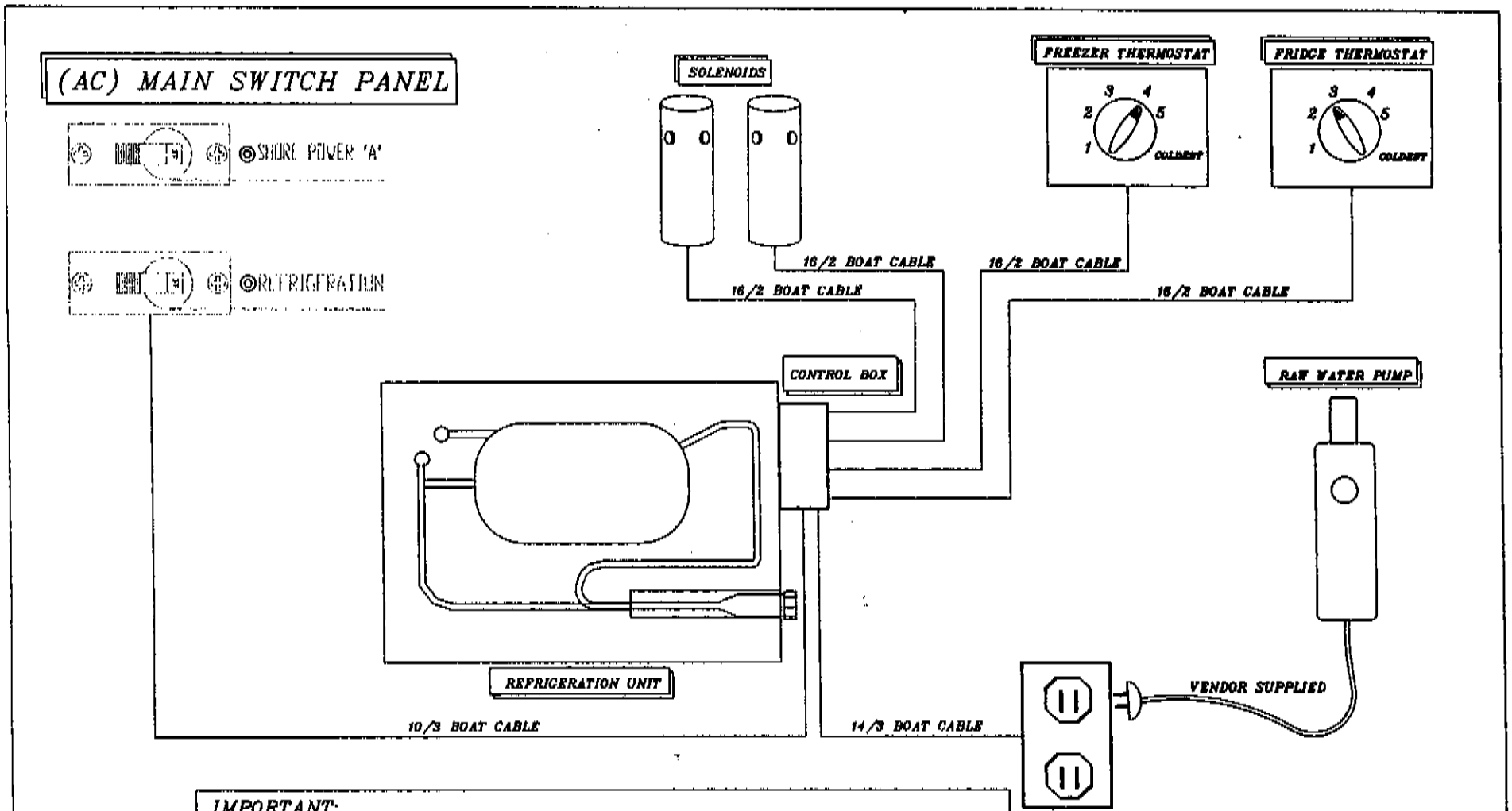
NOTE:
WHEN CLOSING REFRIGERATOR/FREEZER DOORS, BE AWARE THAT THE AIR INSIDE, WHEN COMPRESSED MAY BREAK THE SEAL OF OTHER ADJACENT DOORS. ENSURE ALL OPENINGS ARE SEALED AFTER EACH USE.

1. MAIN DISTRIBUTION PANEL
2. REFRIGERATION UNIT CONTROL BOX POWER LEADS TO PANEL
3. (3/4" /19.1mm) REFRIGERATION RAW WATER INTAKE SEACOCK
4. RAW WATER INTAKE SEA STRAINER
5. REFRIGERATION CIRCULATION PUMP
6. (5/8" /15.9mm) RAW WATER LINE FROM PUMP TO COMPRESSOR
7. PUMP POWER LEADS FROM UNIT CONTROL BOX TO PUMP
8. REFRIGERATION COMPRESSOR UNIT
9. REFRIGERATION UNIT CONTROL BOX (SIDE OF COMPRESSOR)
10. (1/2" /12.9mm) RAW WATER DISCHARGE LINE TO SEACOCK
11. (1/2" /12.7mm) RAW WATER DISCHARGE SEACOCK
12. FREEZER THREMOSTAT CONTROL WIRES TO UNIT CONTROL BOX
13. HI PRESSURE LINE FROM COMPRESSOR TO COLD PLATE
14. LOW PRESSURE LINE FROM COLD PLATE TO COMPRESSOR
15. COLD PLATE
16. THERMOSTAT CONTROL/ WIRE LEADS TO CONTROL UNIT
17. REFRIGERATION THERMOSTAT CONTROL/ WIRE LEADS TO CONTROL UNIT

H460 REFRIGERATION SYSTEM LAYOUT

46080630-3	NONE
ENGINEERING DEPT.	2/3/99

HUNTER



IMPORTANT:
THE REFRIGERATION RAW WATER PUMP PLUGS DIRECTLY INTO AN A.C. RECEPTACLE LOCATED INSIDE THE PORT SETTEE ON THE AFT INTERIOR FACE. THE RECEPTACLE IS WIRED DIRECTLY TO THE REFRIGERATION CONTROL BOX. THIS WAS DONE TO SIMPLIFY THE "CHANGING OUT" OF THE WATER PUMP IN CASE OF A MALFUNCTION. BE AWARE OF THE RECEPTACLE THE PLUG WAS ORIGINALLY PLUGGED INTO, (UPPER OR LOWER PLUG), DUE TO THE FACT THAT THE OTHER RECIEVER MAY NOT HAVE A POWER FEED OR MAY BE ASSIGNED TO THE OPTIONAL AIR CONDITIONING RAW WATER PUMP.

H460 BASIC REFRIGERATION SCHEMATIC

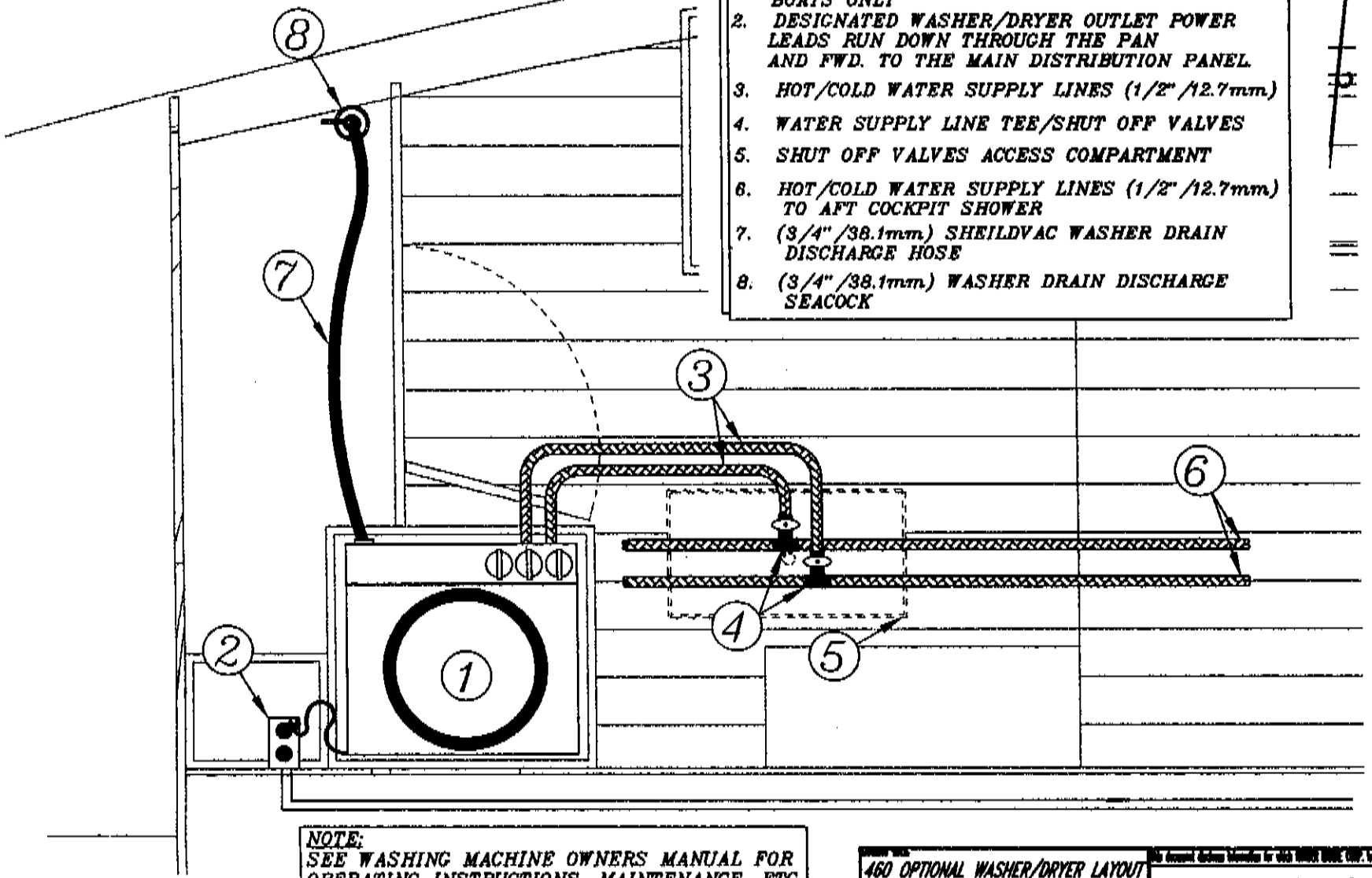
46080630-4	NONE
ENGINEERING DEPT.	1/25/98

HUNTER 44

NOTE:
BE SURE THAT THE WASHER DISCHARGE SEACOCK IS OPEN DURING DRAINAGE, AND CLOSED WHEN MACHINE IS NOT IN USE.IMPORTANT: BE AWARE OF LOCAL REGULATIONS REGARDING OVERBOARD DISCHARGES OF "GRAY WATER", BEFORE USING THIS SYSTEM.

NOTES: *WHEN A WASHER AND DRYER IS OPTIONED, A 15 amp FUSE IS INSTALLED @ THE MAIN BREAKER PANEL, LOCATED @ NAV STATION.*

1. *WASHER/DRYER UNIT LOCATED IN PORT AFT STRM. IN OFFICE/WORK BENCH OPTIONED BOATS ONLY*
2. *DESIGNATED WASHER/DRYER OUTLET POWER LEADS RUN DOWN THROUGH THE PAN AND FWD. TO THE MAIN DISTRIBUTION PANEL.*
3. *HOT/COLD WATER SUPPLY LINES (1/2" /12.7mm.)*
4. *WATER SUPPLY LINE TEE/SHUT OFF VALVES*
5. *SHUT OFF VALVES ACCESS COMPARTMENT*
6. *HOT/COLD WATER SUPPLY LINES (1/2" /12.7mm.) TO AFT COCKPIT SHOWER*
7. *(3/4" /38.1mm.) SHEILDVAC WASHER DRAIN DISCHARGE HOSE*
8. *(3/4" /38.1mm.) WASHER DRAIN DISCHARGE SEACOCK*

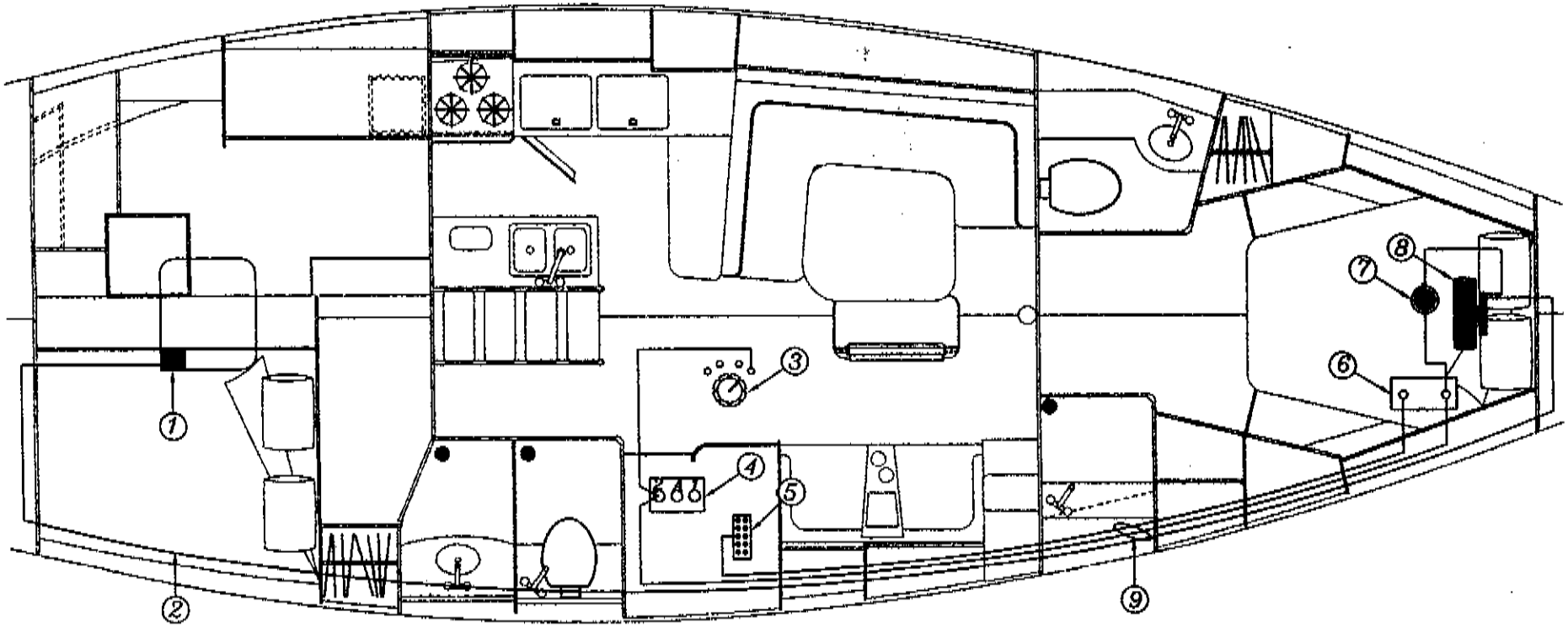


NOTE:
SEE WASHING MACHINE OWNERS MANUAL FOR OPERATING INSTRUCTIONS, MAINTENANCE, ETC.

460 OPTIONAL WASHER/DRYER LAYOUT

4606063H	NONE
ENGINEERING DEPT.	2/11/99

HUNTER



1. BOW THRUSTER REMOTE CONTROL LOCATION (ON COCKPIT CONSOLE)
2. REMOTE WIRE RUNS (THRU HEADLINER) 4 WIRES
3. BATTERY TEST PANEL SELECTOR SWITCH (@ MAIN DIST. PANEL)
4. ISOLATOR LOCATION (UNDER NAVIGATION SEAT)
5. GROUNDING STUD LOCATION (BEHIND NAVIGATION STATION)
6. POWER SOURCE (BATTERY LOCATION) UNDER FWD V-BERTH)
7. BATTERY ON / OFF SWITCH LOCATION (UNDER FWD V-BERTH)
8. BOW THRUSTER
9. POWER / ISOLATOR LEADS (THRU PAN)

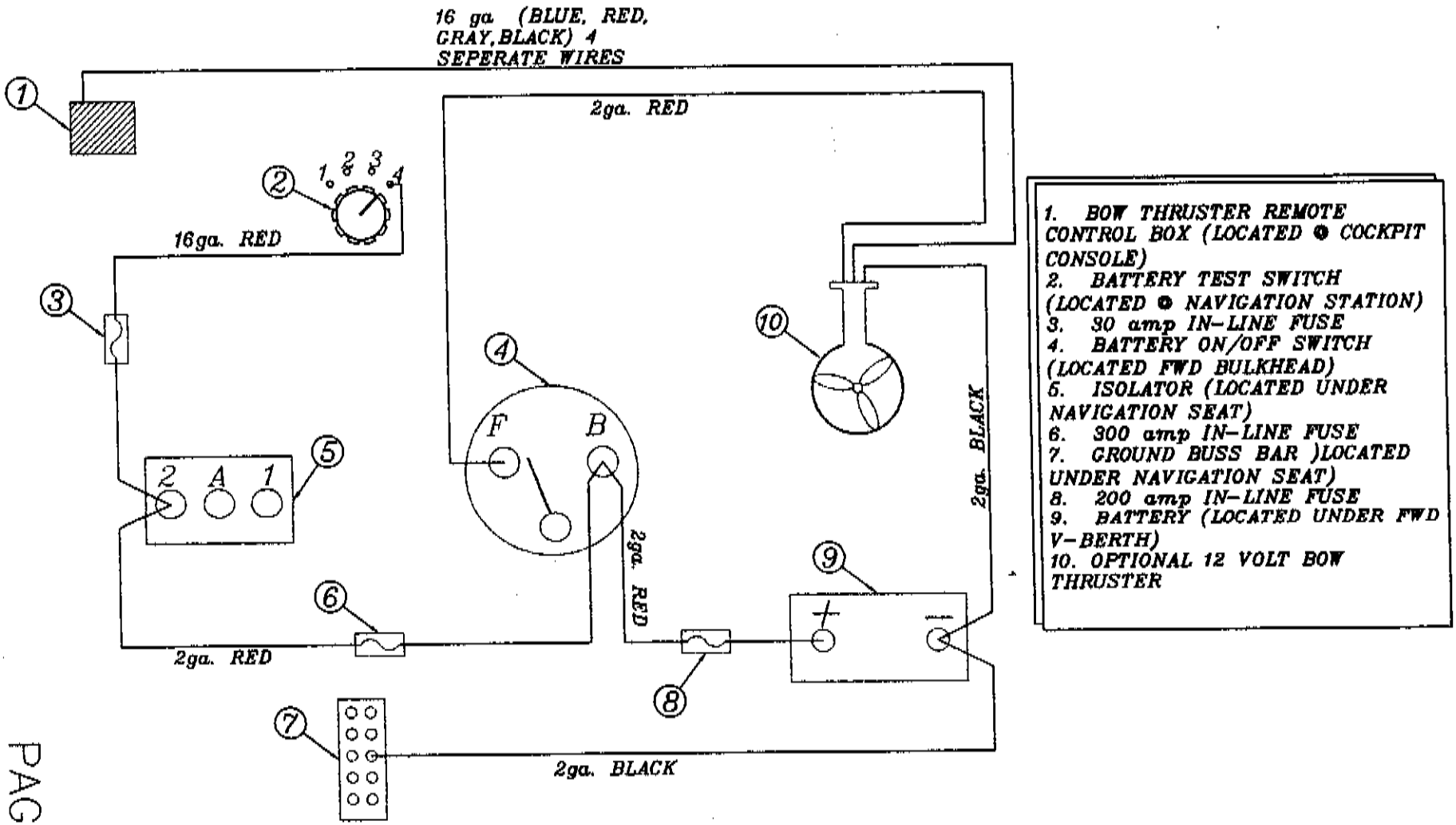
IMPORTANT NOTES:

1. SEE PAGE 63J FOR MORE DETAILS AND A SCHEMATIC FOR THE OPTIONAL BOW THRUSTER AND ITS COMPONENTS
2. SEE BOW THRUSTER OWNERS MAUNAL FOR GUIDELINES, INSTRUCTIONS AND MAINTENANCE. (EX: OIL FILL RESIVOIR AND BATTERYY STATUS WHEN NOT IN USE.)

PAGE 63I

460 OPTIONAL BOW THRUSTER COMPONENT LAYOUT

460B063I	NONE
ENGINEERING DEPT.	4/29/99

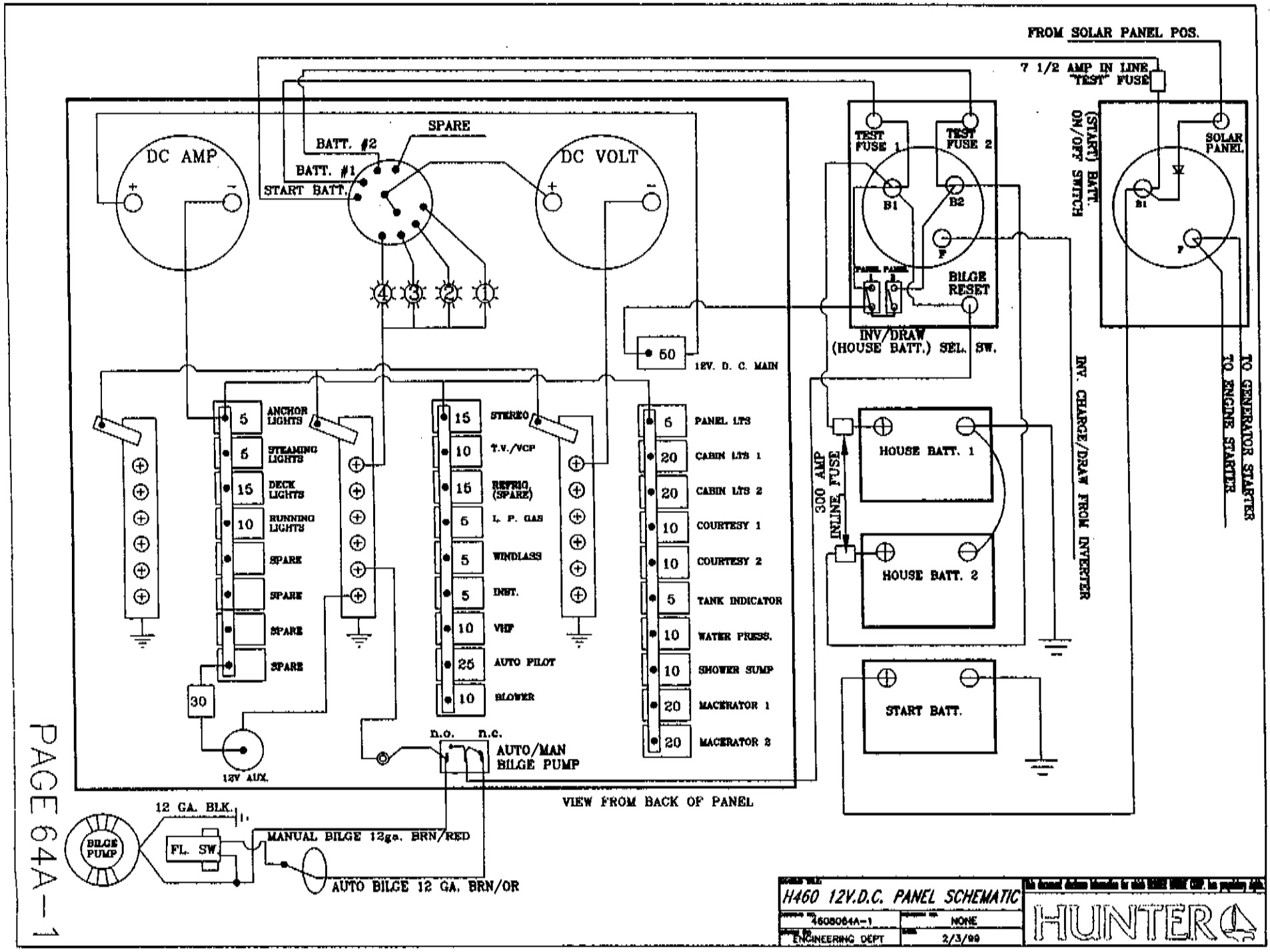


1. BOW THRUSTER REMOTE CONTROL BOX (LOCATED @ COCKPIT CONSOLE)
2. BATTERY TEST SWITCH (LOCATED @ NAVIGATION STATION)
3. 30 amp IN-LINE FUSE
4. BATTERY ON/OFF SWITCH (LOCATED FWD BULKHEAD)
5. ISOLATOR (LOCATED UNDER NAVIGATION SEAT)
6. 300 amp IN-LINE FUSE
7. GROUND BUSS BAR)LOCATED UNDER NAVIGATION SEAT)
8. 200 amp IN-LINE FUSE
9. BATTERY (LOCATED UNDER FWD V-BERTH)
10. OPTIONAL 12 VOLT BOW THRUSTER

460 OPTIONAL BOW THRUSTER SCHEMATIC

460606JJ	NONE
ENGINEERING DEPT.	11/12/98

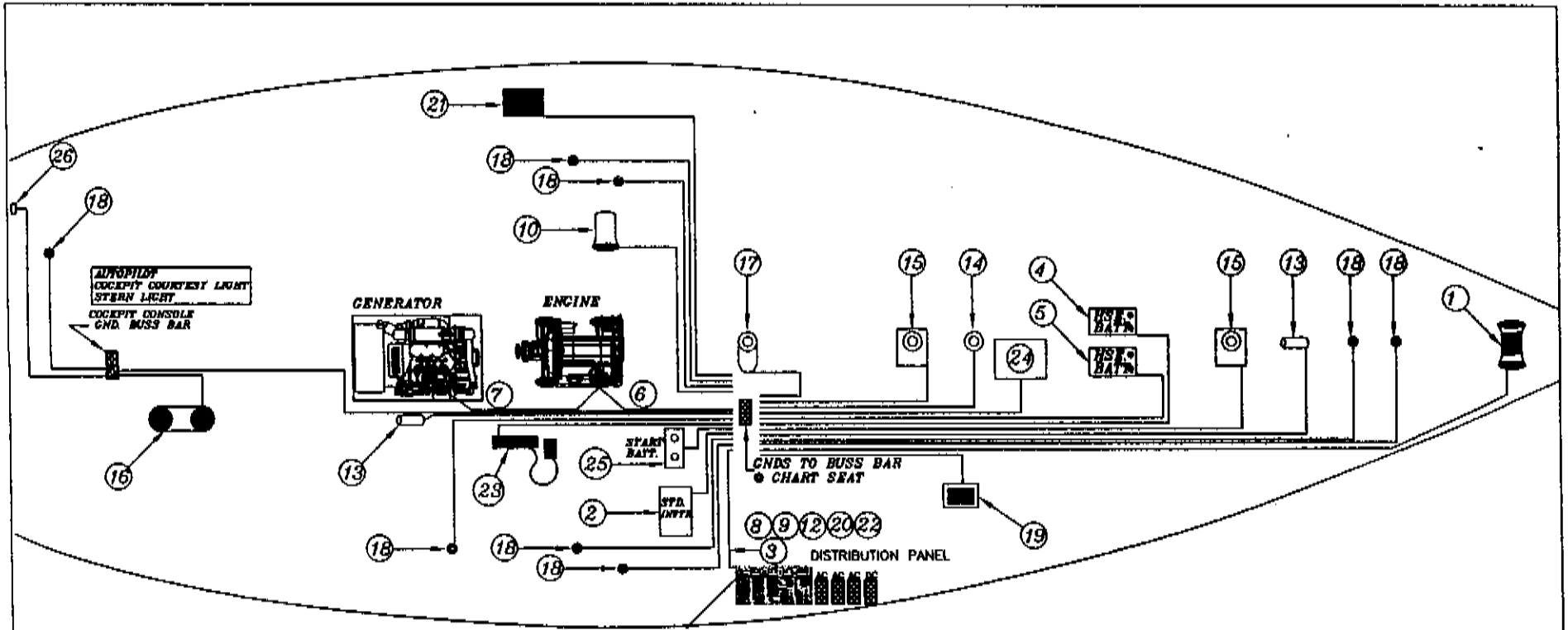
HUNTER



PAGE 64A-1

H460 12V.D.C. PANEL SCHEMATIC	
46080064A-1	NONE
ENGINEERING DEPT	2/3/99

HUNTER



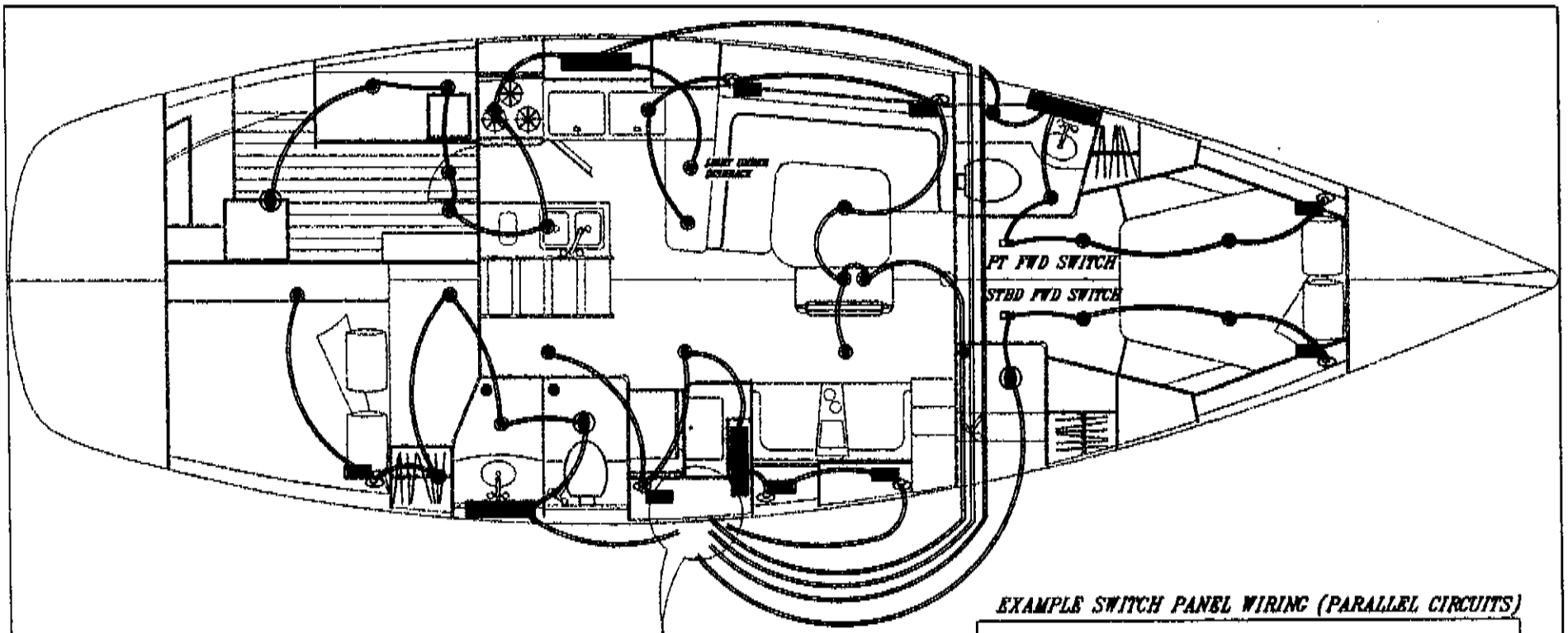
GROUND WIRE/CABLE SPECS: (ALL WIRES NOTED BELOW ARE (BLACK) GROUND)

(1) WINDLASS (OPTIONAL).....2ga. WIRE
(2) INVERTER.....2/0 CABLE
(3) PANEL GND. TO BUSS BAR.....6ga. WIRE
(4) HOUSE BATT. #1 GND TO BUSS BAR.....2/0 CABLE
(5) HOUSE BATT. #2 GND TO BUSS BAR.....2/0 CABLE
(6) ENGINE GND. TO BUSS BAR.....2/0 CABLE
(7) GENERATOR (OPTIONAL) GND. TO ENGINE.....2/0 CABLE
(8) TO PORT CTSY LIGHTS.....16ga. WIRE
(9) ALL CABIN LIGHTS.....16ga. WIRE
(10) OPTIONAL ELEC. HALYARD.....2 ga. WIRE
(11) COCKPIT GROUND TO BACK OF PANEL.....6ga. WIRE
(12) STARBOARD CTSY. LIGHTS.....16ga. WIRE
(13) MACERATOR(S).....10ga. WIRE
(14) BILGE PUMP.....12ga. WIRE
(15) SHOWER SUMP(S).....12ga. WIRE
(16) OPTIONAL AUTO PILOT.....8ga. WIRE
(17) WATER PRESSURE PUMP.....12ga. WIRE
(18) TANK SEND UNIT.....16ga. WIRE
(19) TV/VCP.....16ga. WIRE
(20) STEREO.....16ga. WIRE
(21) L.P.G. SOLENOID.....16ga. WIRE
(22) INSTRUMENTS.....MANUF. SUPPLIED CABLE
(23) VHF RADIO.....18ga. WIRE
(24) ANC./STEAM./DECK/RUNNING LIGHTS (TERMINAL STRIP ATOP COMP POST).....16ga. WIRE
(25) START BATTERY.....2/0 CABLE
(26) STERN LIGHT.....16 ga. WIRE

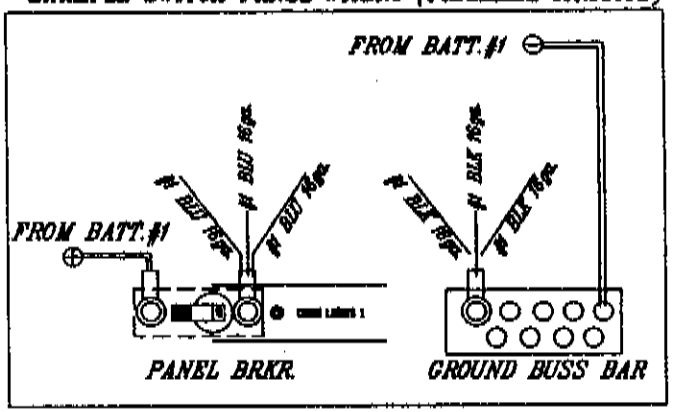
NOTE: WIRE RUNS & COMPNTS. ARE SHOWN IN SCHAMATIC FORM FOR CLARITY

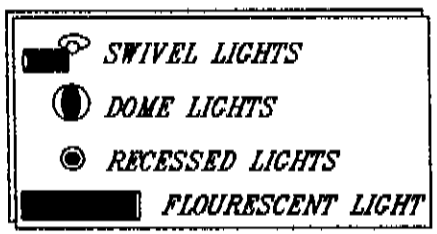
H460 D.C. GROUNDING SYSTEM LAYOUT	
1608084A-2	NONE
ENGINEERING DEPT.	2/3/99

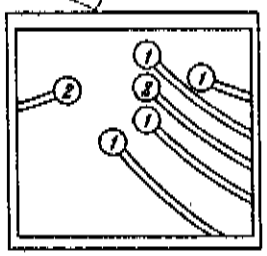
HUNTER 46



EXAMPLE SWITCH PANEL WIRING (PARALLEL CIRCUITS)







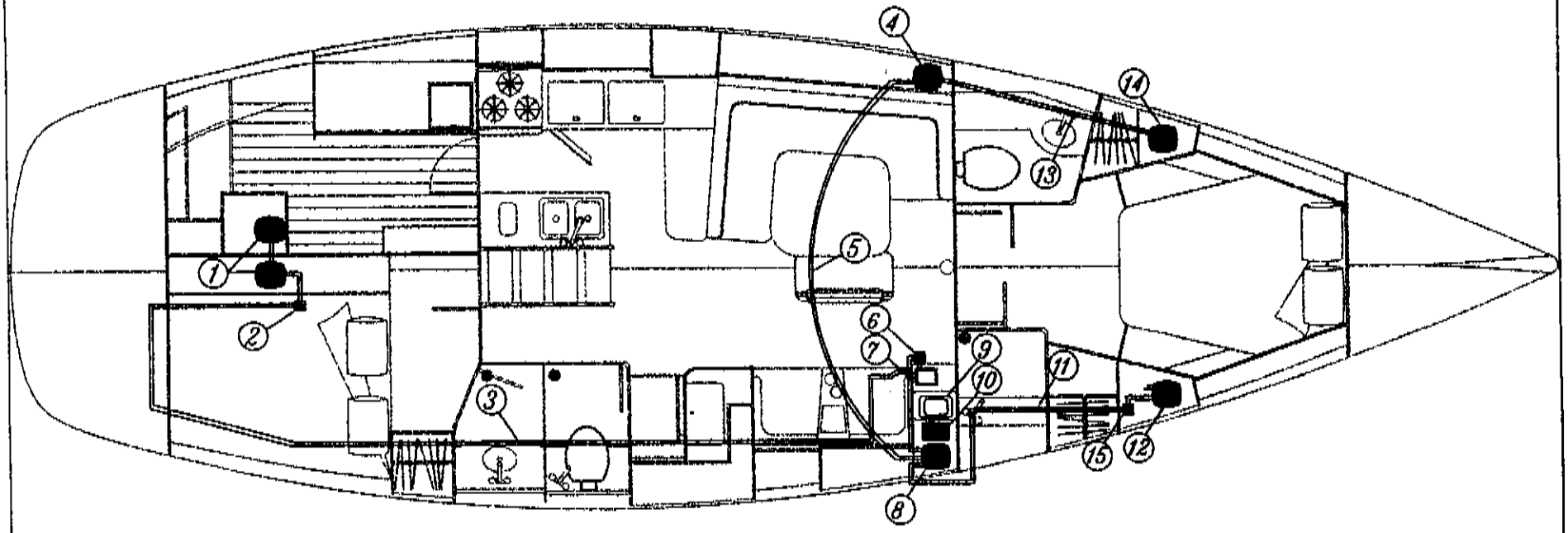
#1 & #2 = CABIN LIGHTS #1 & #2 CIRCUITS TO MAIN DISTRIBUTION PANEL

EACH CIRCUIT IN PARALLEL, 16ga. BLU (LOAD TO BREAKER) AND 16ga. BLK GROUND TO GROUND BUSS BAR (SEE EX.)

H460 12V. LIGHTS WIRING (HEADLINER)	
46080648-1	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

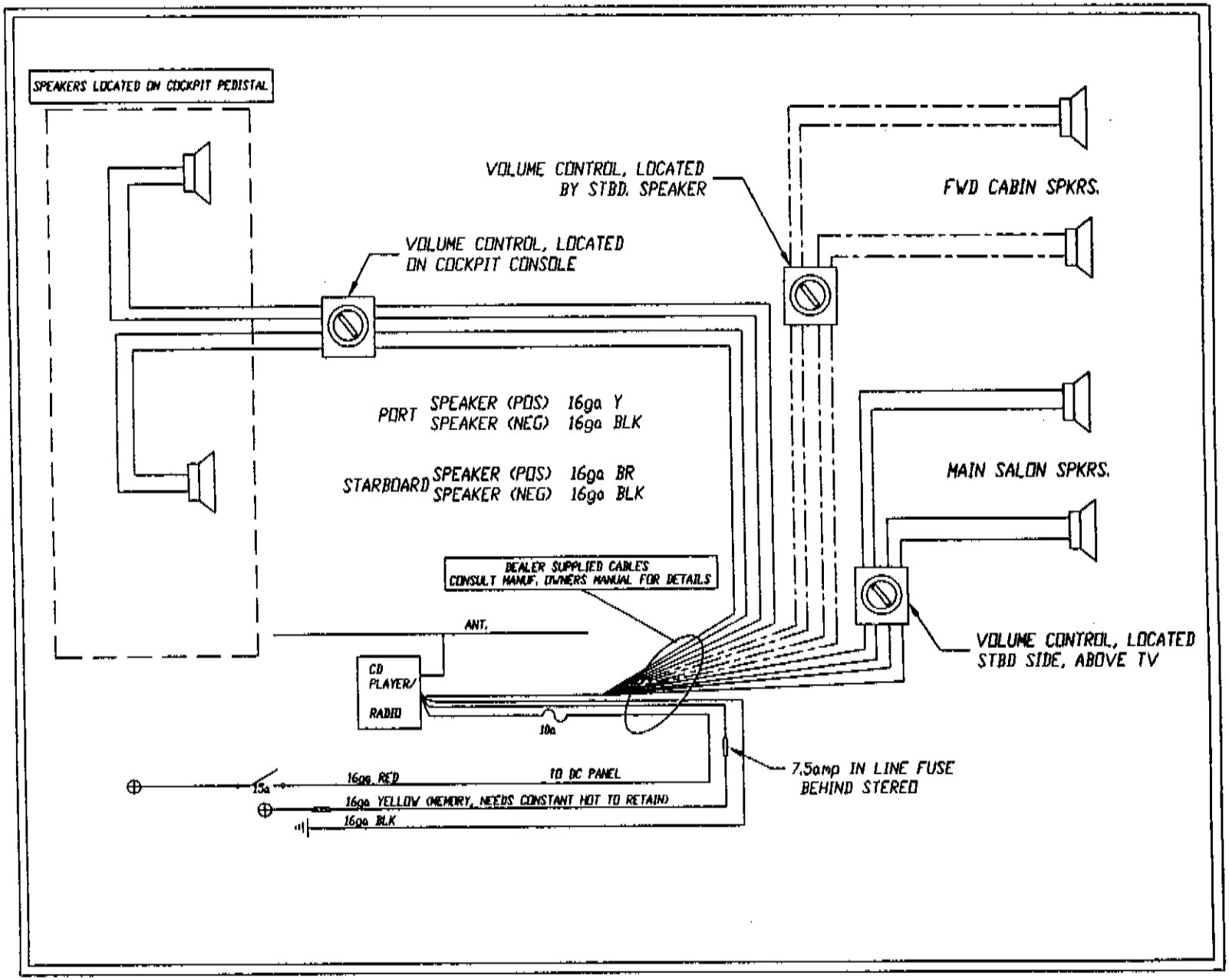
1. COCKPIT SPEAKERS (LOCATED ON COCKPIT CONSOLE)
2. COCKPIT SPEAKER VOLUME CONTROL (STBD. FWD CONSOLE)
3. COCKPIT SPEAKER WIRE RUN
4. STBD FWD MAIN SALON SPEAKER
5. STBD MAIN SALON SPEAKER WIRE RUN
6. MAIN SALON SPEAKER VOLUME CONTROL
7. SPEAKER WIRE RUNS TO RADIO (FWD PORT MAIN SALON
8.. PORT FWD MAIN SALON SPEAKER
9. T.V./VCP
10. T.V./VCP SPEAKER
11. STBD FWD CABIN SPEAKER WIRE RUNS
12. STBD FWD CABIN SPEAKER
13. PORT FWD CABIN SPEAKER WIRE RUN
14. PORT FWD CABIN SPEAKER
15. FWD CABIN SPEAKER VOLUME CONTROL



H460 SPEAKER WIRING (HEADLINER)

46080648-2	NONE
ENGINEERING DEPT.	2/3/99

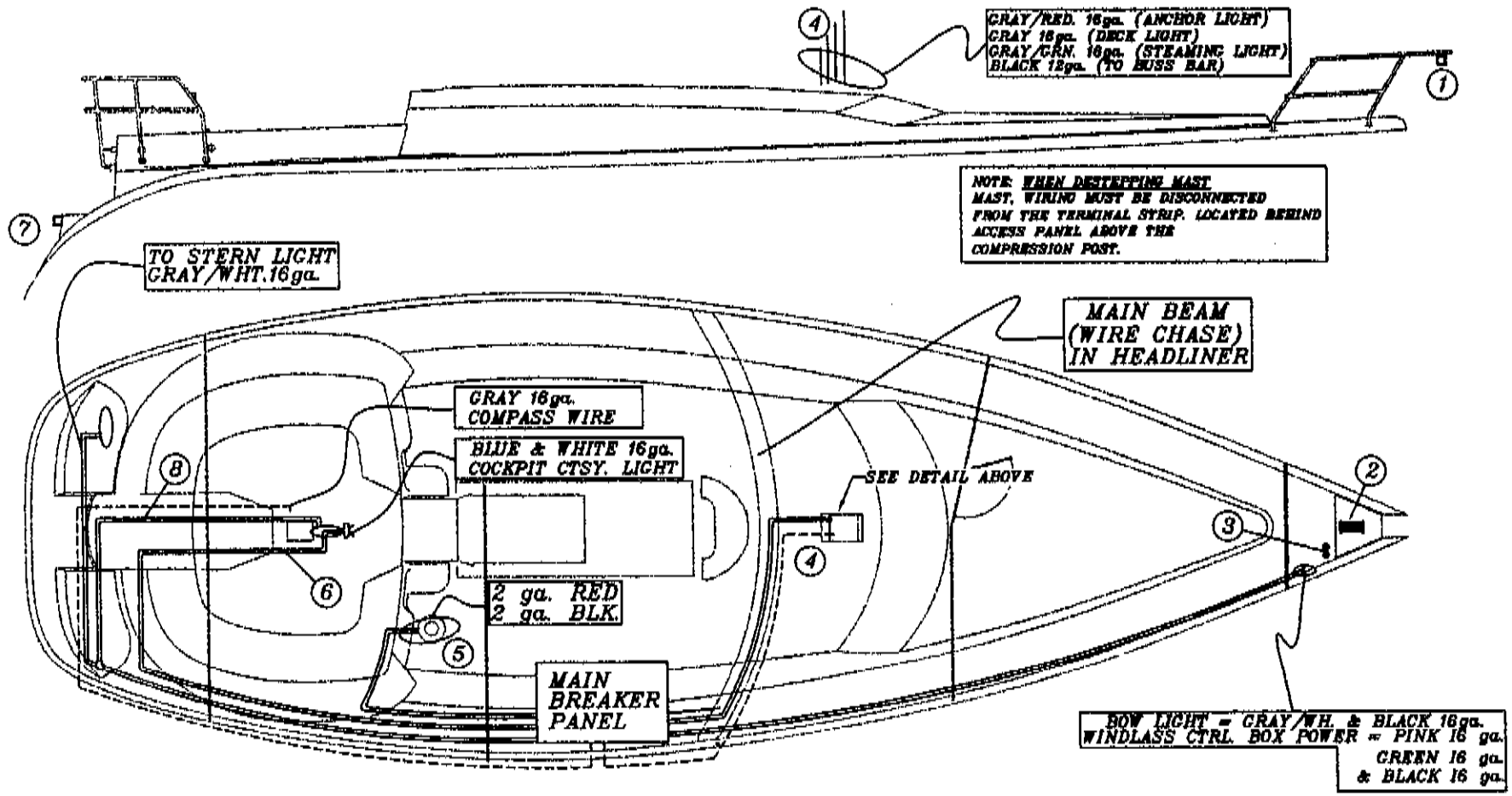
HUNTER



H460 BASIC STEREO WIRING SCHEMATIC

46080848-3	NONE
ENGINEERING DEPT.	2/3/99

HUNTER



1. BOW LIGHT
2. OPTIONAL ANCHOR WINDLASS (SEE PAGE 64D-1 & 64D-2)
3. WINDLASS CONTROLS
4. POWER LEADS TO ANCHOR, DECK, STEAMING LIGHTS
5. OPTIONAL ELEC. HALYARD (SEE PAGE 64E-1 & 2)
6. COURTESY LIGHT (IN COCKPIT CONSOLE BASE)
7. STERNLIGHT
8. COMPASS WIRE RUN

---------- = VHF COAX CABLE (CONNECTOR ABOVE MAST POST)

NOTE: SOME WIRE RUNS SHOWN IN APPROXIMATE LOCATIONS FOR CLARITY, SEE PAGE 64F FOR WIRE CHASE LOCATIONS

H460 12V. WIRING DECK	
46080640	NONE
ENGINEERING DEPT	2/4/99

HUNTER

SECTION 64D...OPTIONAL WINDLASS SYSTEM

BASIC OPERATING INSTRUCTIONS:

LOWERING ANCHOR....

1. TURN ON START BATTERY SWITCH UNDER NAV. STATION.
2. TURN ON WINDLASS BRKR. ON MAIN D.C. BRKR. PANEL.
3. ENSURE THE RESET BREAKER @ NAVIGATION STATION IS "RESET"
4. PUSH WINDLASS "DOWN" BUTTON INSIDE ANCHOR WELL LOCKER.

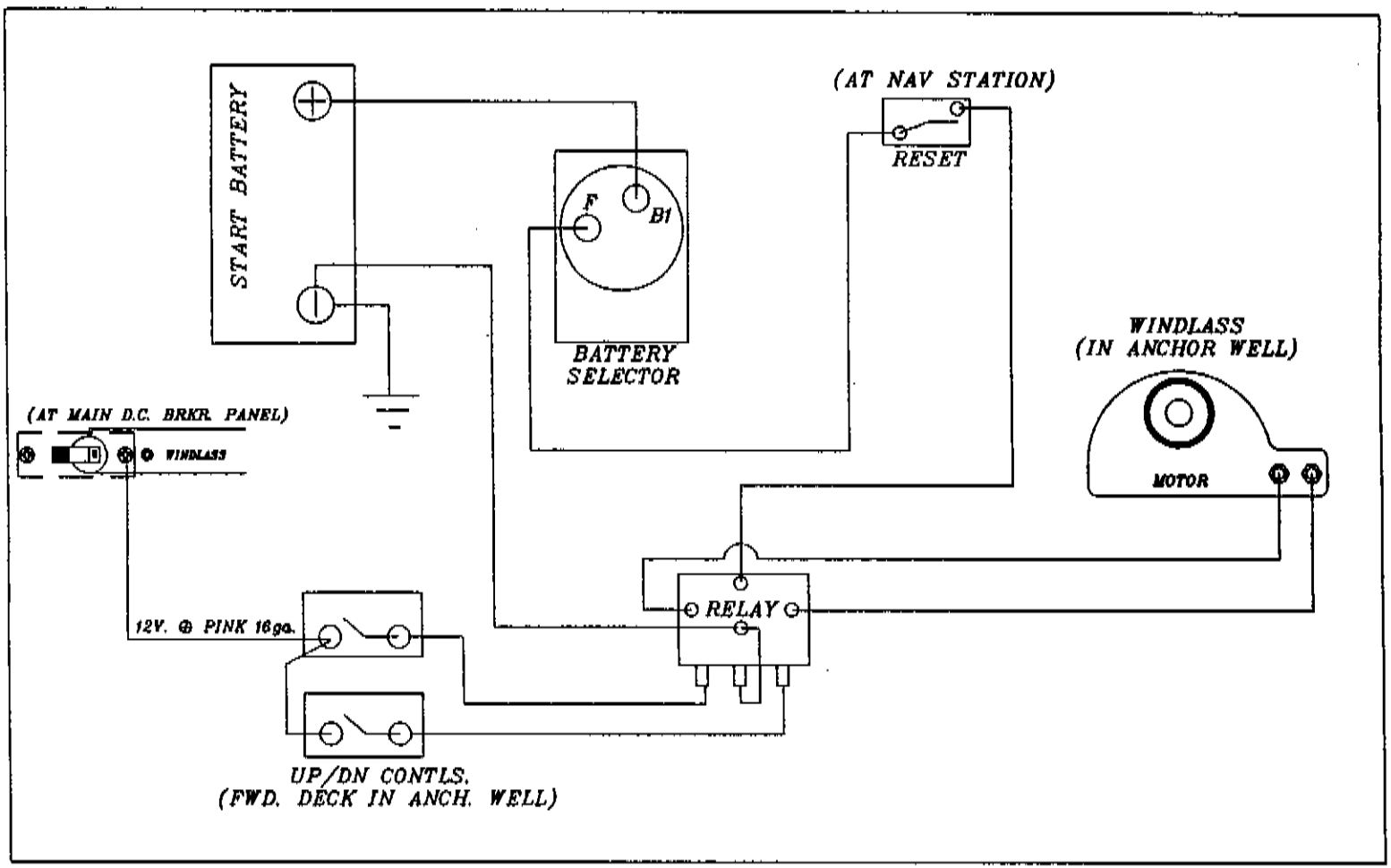
NOTE: "BUMP" SWITCH UNTIL ANCHOR CLEARS ANCHOR ROLLER AND HULL BEFORE LETTING ANCHOR DOWN FREELY.

RAISING ANCHOR...

1. START BOAT ENGINE, THIS WILL ALLOW CONTROL OF BOAT WHEN ANCHOR BECOMES FREE, AS WELL AS REDUCING LOAD ON BATTERY
2. SAME AS STEP #1 OF LOWERING ANCHOR
3. SAME AS STEP #2 OF LOWERING ANCHOR
4. PUSH WINDLASS "UP" BUTTON (LOCATED-NEXT TO "DOWN BUTTON" BEING CAREFUL AS THE ANCHOR APPROACHES THE HULL AND ANCHOR ROLLER) UNTIL THE ANCHOR RESTS IN THE STEMHEAD PROPERLY.

NOTE: IF IT APPEARS THERE IS NO POWER TO THE WINDLASS, CHECK RESET BRKR. AT THE NAV. STATION.
IF WINDLASS BECOMES INOPERABLE ELECTRICALLY, A MANUAL WINCH HANDLE IS SUPPLIED, SEE THE "WINDLASS MANUAL" SUPPLIED IN YOUR OWNERS MANUAL PACKAGE FOR INSTRUCTIONS.

H460 OPTIONAL WINDLASS OPERATING INST.
46080640-1 | NONE
ENGINEERING DEPT. | 2/3/99
HUNTER



NOTE: SEE PAGE 64C FOR POWER FEED/WIRE RUN LOCATIONS

H460 OPTIONAL WINDLASS WIRING	
46080640-2	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

SECTION 64E...OPTIONAL ELEC. HALYARD SYSTEM

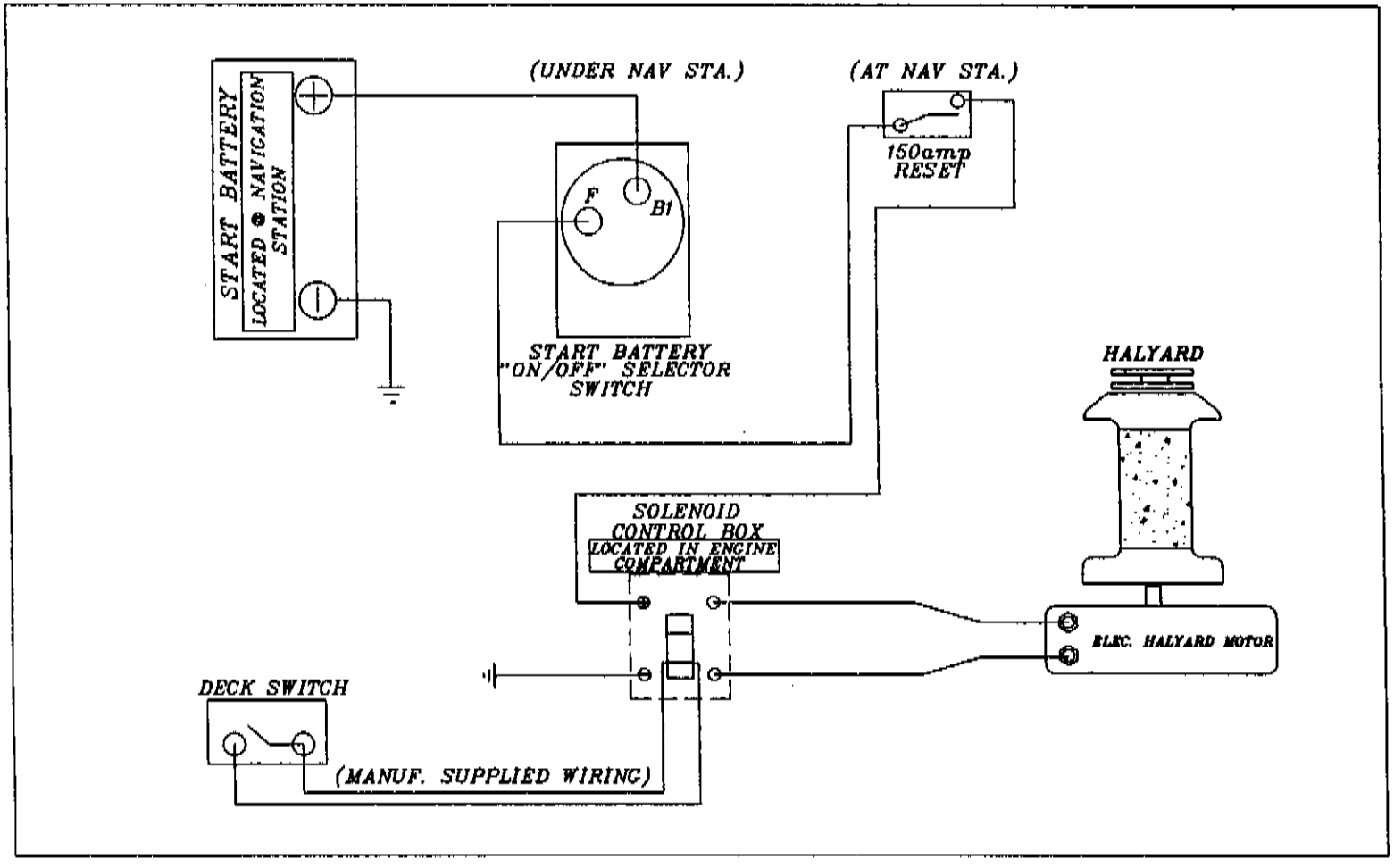
BASIC OPERATING INSTRUCTIONS:

1. TURN THE START BATTERY SELECTOR SWITCH TO THE "ON" POSITION. (FOUND @ NAVIGATION STATION)
2. HALYARD SWITCH ON DECK SHOULD NOW OPERATE WINCH

SEE PAGE 63A-9 FOR FURTHER OPERATING DETAILS

H460 ELEC. HALYARD OPERATING INST.	
4606064E-1	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

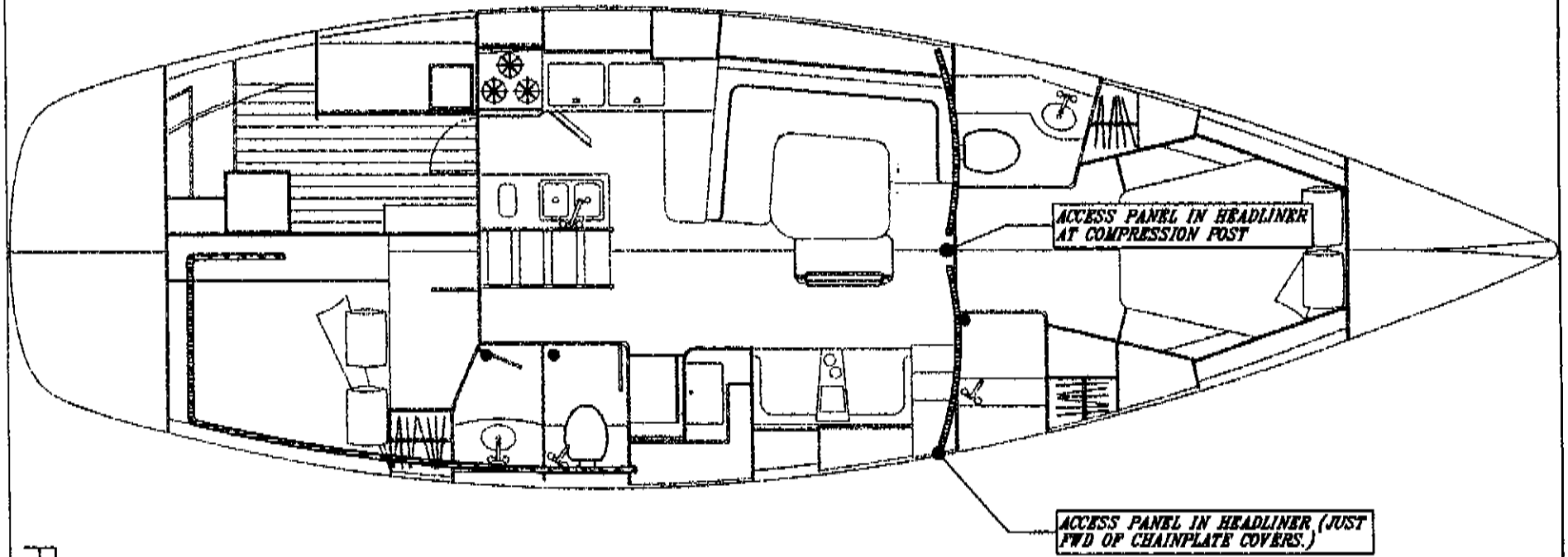


NOTE: SEE PAGE 64C FOR MORE DETAILS

H460 ELECTRIC HALYARD SCHEMATIC	
4808064E-2	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

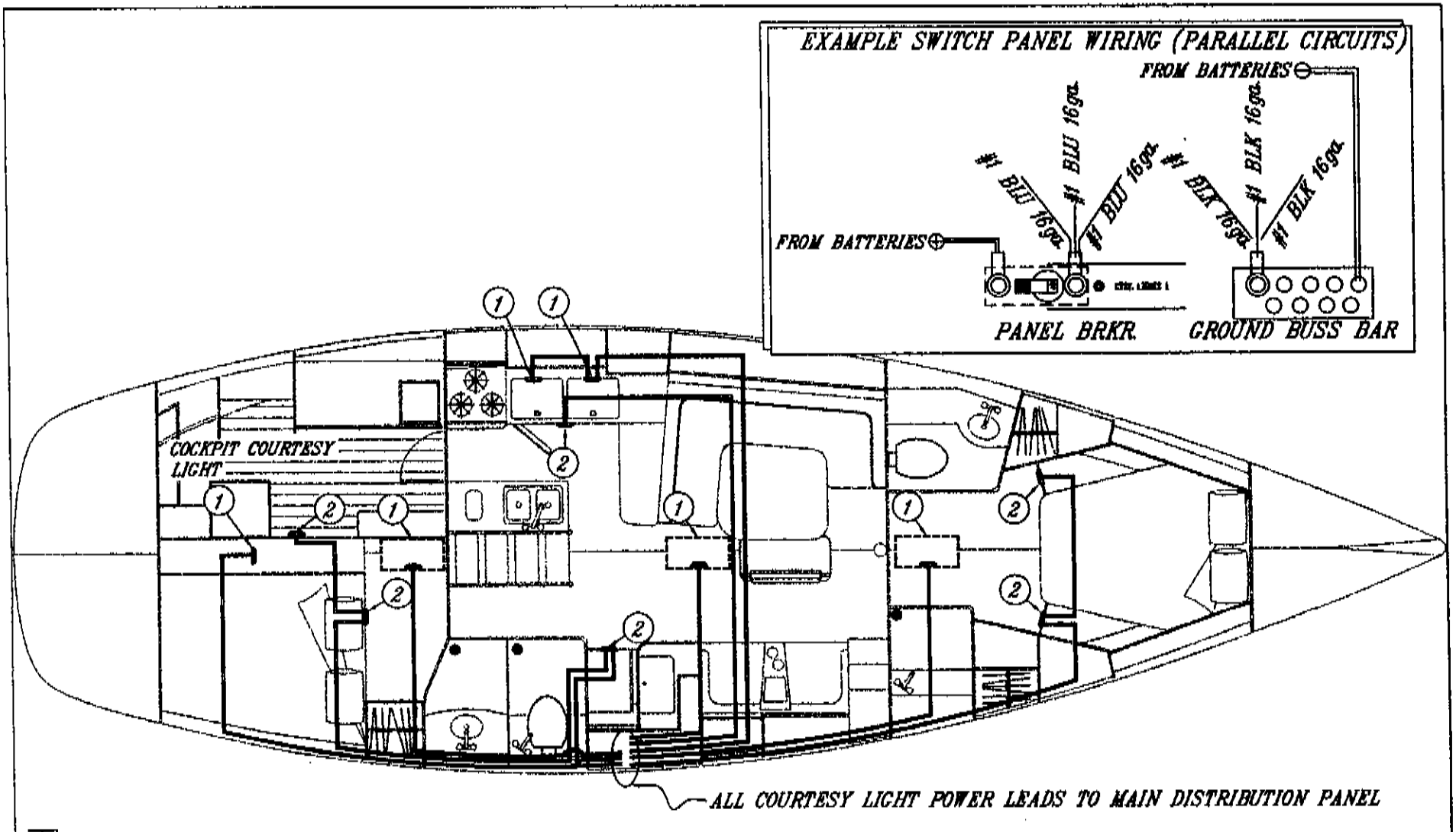
(2"/50.8mm) BLACK FLEX TUBE HEADLINER WIRE CHASES



PAGE 64F

H460 HEADLINER WIRE CHASE LOCATIONS	
48080644F	NONE
ENGINEERING DEPT.	2/3/99

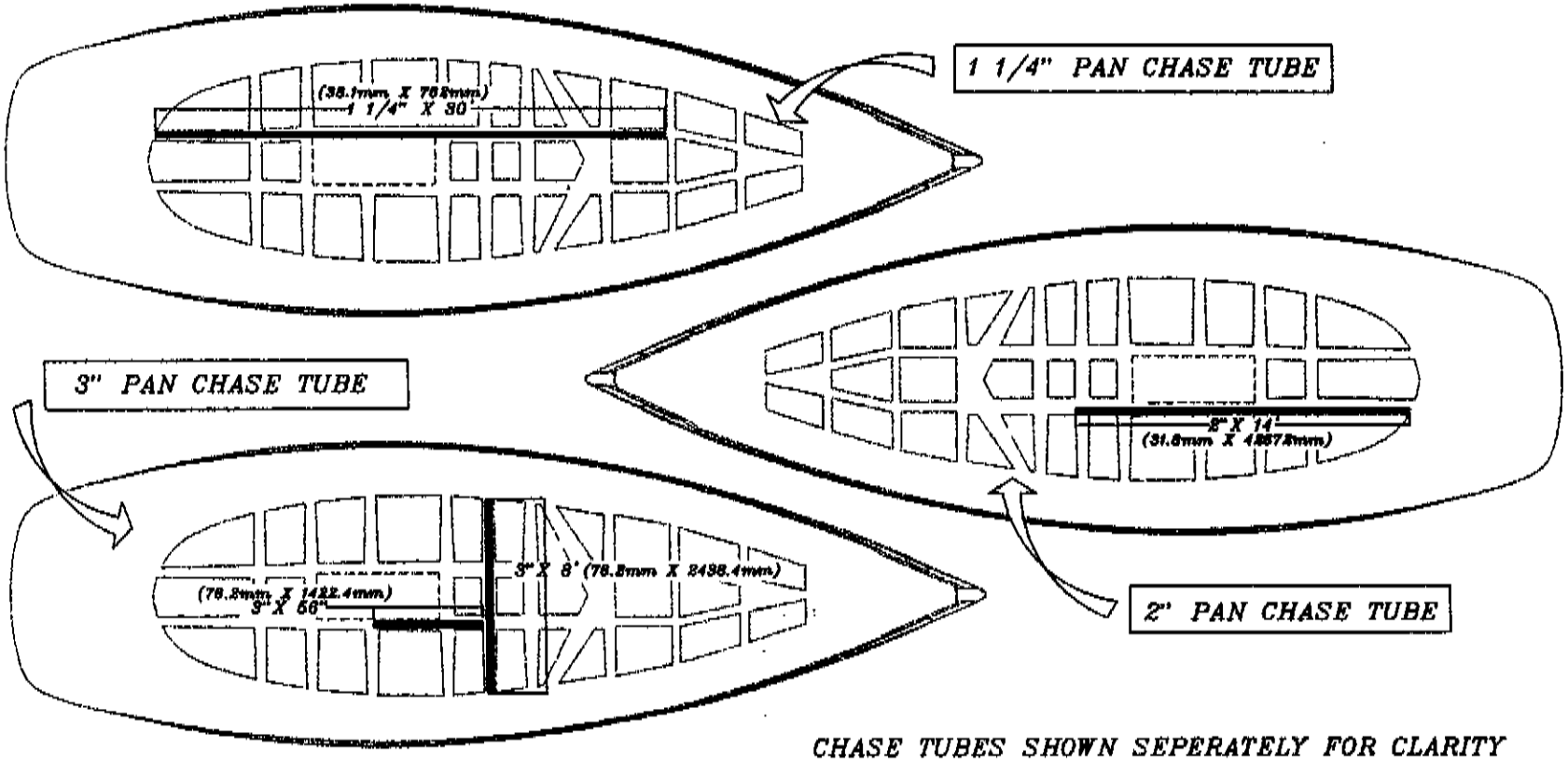
HUNTER



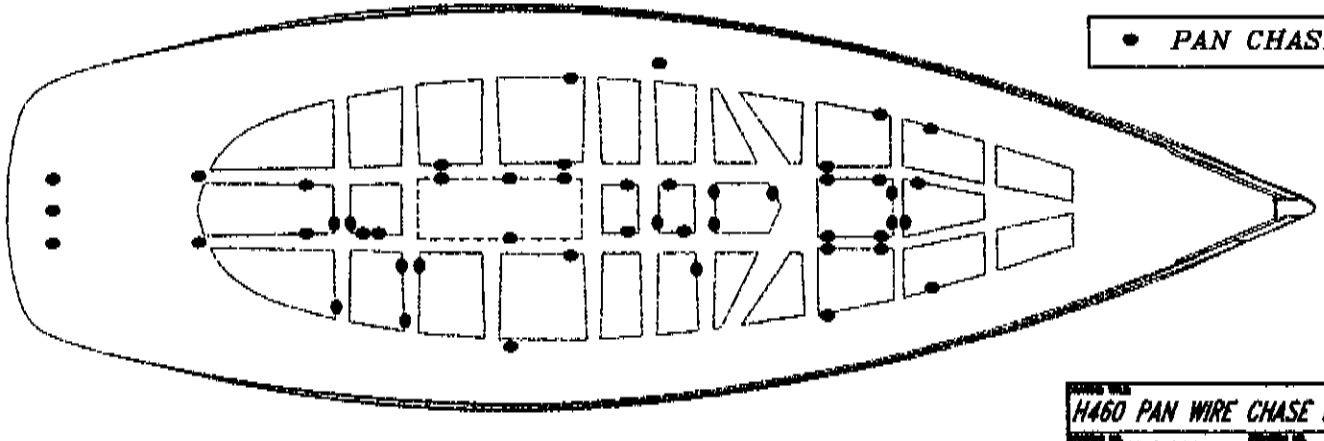
1. #1 COURTESY LIGHT CIRCUIT (INCLUDES FRIG/FREEZER, BILGE COMPARTMENT, SEACOCK COMPARTMENT(S), AND COCKPIT SWITCHED COURTESY LIGHTS.)
2. #2 COURTESY LIGHT CIRCUIT (INCLUDES "RED" COURTESY FLOOR LIGHTING,@ NAV STATION AND STATEROOMS, AND "WHITE" GALLEY TOE KICK)

H460 COURTESY LIGHTS WIRING SCHEMATIC	
46080640	NONE
ENGINEERING DEPT.	2/3/99

HUNTER



CHASE TUBES SHOWN SEPERATELY FOR CLARITY



PAGE 64H

H460 PAN WIRE CHASE LOCATIONS	
460B064H	NONE
ENGINEERING DEPT.	2/4/99

HUNTER

THIS PAGE IS PROVIDED FOR ANY ADDITIONAL DC ELECTRICAL INFORMATION.

1. ALL DC WIRING WITHIN 12" OF ANY COMPASS SHALL BE TWISTED PAIRS... THAT IS THE HOT LINE AND GROUND SHALL BE TWISTED TOGETHER.

H460 DC CONSUMER NOTES

HUNTER

Stage	Component	Useq	PC	Description	UM	Net Quantity
	..BE000001	50	5	ELECTRICAL SYSTEM	EA	1.0000
	...BE010001	310	5	ELECTRICAL ASSEMBLY	EA	1.0000
	....BE020001	10	5	110 VOLT ELECTRICAL SUB ASSEMBLY	EA	1.0000
	.....BE020015	40	5	H460-A/C STANDARD KIT	EA	1.0000
10	256435	130	300	ABS,BLK,A/C PLENUM,H420	EA	3.0000
10	309552	10	350	ABS,BLACK,.177X4'X8' HAIRCELL 1SIDE	SF	9.0000
26	256666	160	300	GRILL KIT, H460, A/C, STD	KT	1.0000
41	258632	140	300	DUCTING A/C, 4"	FT	25.0000
41	258650	150	300	DUCTING A/C, 5"	FT	20.0000
26	258663	10	300	HOSE, A/C, 5/8" SEAWATER	FT	45.0000
28	652500	20	300	WIRE 10/3 MARINE POWER	FT	30.0000
27	652500	25	300	WIRE 10/3 MARINE POWER	FT	40.0000
28	652500	30	300	WIRE 10/3 MARINE POWER	FT	25.0000
28	652500	30	300	WIRE 10/3 MARINE POWER	FT	15.0000
28	656300	40	300	CONDUIT 1 1/4" BLACK 125-1140	FT	10.0000
28	656400	50	300	CONDUIT 3/8" 125-0380	FT	8.0000
	...BE040110	10	5	H460-MICROWAVE 110V COMPONENTS	EA	1.0000
56	259838	10	300	PLATE,RECEPTABLE,IVORY,PLASTIC H37	EA	1.0000
56	251162	50	300	DUPLEX RECEPTACLES #5320-1 IVORY	EA	1.0000
56	251584	20	300	SWITCH BOX SWB RACO #410 3"X2" NON-	EA	1.0000
57	257714	30	300	TERMINAL C1614-10R 450/LB BLU	EA	6.0000
61	318500	60	300	MICROWAVE,.6 CF GOLDSTAR MA630	EA	1.0000
58	653100	40	300	WIRE 14/3 MARINE POWER	FT	28.0000
	..BC000000A	60	5	AMERICAN LOOSE GEAR	EA	1.0000
	...BC030010	40	5	GENERAL LOOSE GEAR COMPONENTS	EA	1.0000
96	308670	10	200	HANDLE, WINCH, 10" ALUM	EA	1.0000
96	308680	20	200	HANDLE, WINCH, 10" CHROME LOCK IN	EA	1.0000
96	312060	190	888	TOOL BOX (ENGINE)	EA	1.0000
96	330100	30	570	GELCOAT REPAIR KIT "BRUISE PACK"	KT	1.0000
96	330220	40	570	CORIAN HOME CARE KIT	EA	1.0000
96	330980	50	570	PLATE,DINNER,10" WHITE, MARINE NON	EA	6.0000
96	331020	60	570	BOWL,8"SERVING,WHITE	EA	6.0000
96	331060	70	570	MUG, 11 3/4 OZ. NON SKID WHITE	EA	6.0000
96	333340	90	210	WASTE BASKET	EA	1.0000
96	333380	100	200	WASTEBASKET, 54661RU, 28 1/8 QTS BE	EA	1.0000
96	335820	110	570	CHAPMANS MANUAL 62ND EDITION	EA	1.0000
96	335940	120	570	WINDEX #15 - 28' AND UP	EA	1.0000
95	337050	130	570	OWNER'S MANUAL P450	EA	1.0000
95	337460	140	570	CRUISE PAC BOX 17" X 12"	EA	1.0000
96	350043	180	250	CURTAIN SHOWER WHT FWD. (58"X64")	EA	1.0000
96	350061	160	250	HOOKS, SHOWER CURTAIN H42	EA	10.0000
96	351105	170	250	EMERGENCY STOPPER #1960-1010-3318	EA	2.0000
95	....S0466	150	78	BOX,LOOSE GEAR,26X10X6 (RADIOS)	EA	1.0000
	...BJ030020	50	5	SAFETY GEAR COMPONENTS	EA	1.0000
96	330380	10	570	FIRE EXTINGUISHER 10BC	EA	3.0000
96	331140	20	570	LIFE JACKET #8716 ORANGE	EA	6.0000
96	332020	40	570	HORN, AIR, 8.5OZ,#82800-7	EA	1.0000

H460 ELECTRICAL SYSTEM COMPONENTS PARTS LIST

NO. 4608064J | NONE | 3/25/99

ENGINEERING DEPT.

Stage	Component	Useq	PC	Description	UM	Net Quantity
27	653100	90	300	WIRE 14/3 MARINE POWER	FT	15.0000
	...BD040045A	20	5	MAIN BILGE DISCHARGE COMPONENTS	EA	1.0000
26	353877	20	250	BALL VALVE (1") BRASS #70-105-10	EA	1.0000
26	355821	10	250	ELBOW 90 DEG.STR/ELL BR. 1"	EA	1.0000
	..BE00000A	70	5	AMERICAN ELECTRICAL	EA	1.0000
	...BE020010	40	5	H460-RECEPTACLE	EA	1.0000
56	250838	10	300	PLATE,RECEPTABLE,IVORY,PLASTIC H37	EA	6.0000
56	251000	100	300	RECEPTACLE,WATERP.PLASTIC,4976-WH	EA	2.0000
56	251162	20	300	DUPLEX RECEPTACLES #5320-1 IVORY	EA	8.0000
56	251684	30	300	SWITCH BOX SWB RACO #410 3"X2" NON-	EA	8.0000
56	254636	40	300	ELECTRICAL COVER SM.(VACCUM) BLACK	EA	5.0000
57	257570	50	300	TERMINAL C1614-SC 400/LB BLUE	EA	15.0000
57	257714	60	300	TERMINAL C1614-1CR 450/LB BLU	EA	40.0000
57	257732	70	300	TERMINAL C1210-1CR 250/LB YELLO	EA	50.0000
57	466790	80	600	P/H PHIL #6 X 1/2" S/S T/A	EA	45.0000
28	653100	90	300	WIRE 14/3 MARINE POWER	FT	150.0000
	...BE020020	50	5	H460-GFI RECEPTACLE	EA	1.0000
56	251126	10	300	BOX - RECEPTACLE #LCCW (FOR GFI REC	EA	2.0000
56	251756	20	300	RECETACLE - GFI #6599I	EA	2.0000
57	257714	30	300	TERMINAL C1614-1CR 450/LB BLU	EA	3.0000
56	257732	40	300	TERMINAL C1210-1CR 250/LB YELLO	EA	10.0000
56	466790	50	600	P/H PHIL #6 X 1/2" S/S T/A	EA	10.0000
	...BE020070	60	5	H460-SHORE POWER	EA	1.0000
34	252566	10	300	PANEL,SHOREPOWER RESET BREAKER,ALUM	EA	1.0000
37	257732	20	300	TERMINAL C1210-1CR 250/LB YELLO	EA	9.0000
34	331700	30	300	INLET #303SSEL-B (SHIP/SHORE)	EA	2.0000
61	331740	40	886	LABEL, WARNING,	EA	1.0000
96	331760	50	300	ADAPTER #104A (SHIP/SHORE)	EA	2.0000
96	331820	60	300	CORDSET MOLDED 50' #50PCM	EA	2.0000
37	460250	70	600	CABLE TIES BLACK, 15" W/ EYE .	EA	15.0000
37	465630	90	600	O/H PHIL #10 X 1" S/S T/A	EA	8.0000
37	466670	80	600	P/H PHIL #10 X 3/4" S/S T/A	EA	15.0000
13	652500	100	300	WIRE 10/3 MARINE POWER	FT	40.0000
13	652500	110	300	WIRE 10/3 MARINE POWER	FT	40.0000
	...BE030100	70	5	H460-VHF RADIO	EA	1.0000
34	250352	20	300	BARREL,PL258, GOOD DESCRIPTION	EA	2.0000
56	250370	30	300	CONNECTOR, MALE, PL259 39N030	EA	1.0000
56	251270	40	888	HARNESS, VHF, RAY52	EA	1.0000
96	252692	120	300	RADIO, VHF, RAY52,E43009	EA	1.0000
34	252710	50	300	FLUSH MOUNT KIT, FOR RAY 52	EA	1.0000
37	257570	60	300	TERMINAL C1614-SC 400/LB BLUE	EA	2.0000
37	257714	70	300	TERMINAL C1614-1CR 450/LB BLU	EA	2.0000
96	462898	110	600	6MM X 12 HEX HEAD CAP SCREW S/S	EA	2.0000
37	466170	80	600	O/H PHIL 6 X 3/4" BLK OX.	EA	6.0000
13	652500	100	300	WIRE, 13GA, C1176, RG213/U	FT	50.0000
13	653300	10	300	WIRE, 16GA,RED/WHITE TRACER,TINN/CO	FT	40.0000
13	654500	90	300	WIRE BLACK SC-12 GAUGE	FT	40.0000

H460 ELECTRICAL SYSTEM COMPONENTS PARTS LIST CONT'

4608064K

NONE

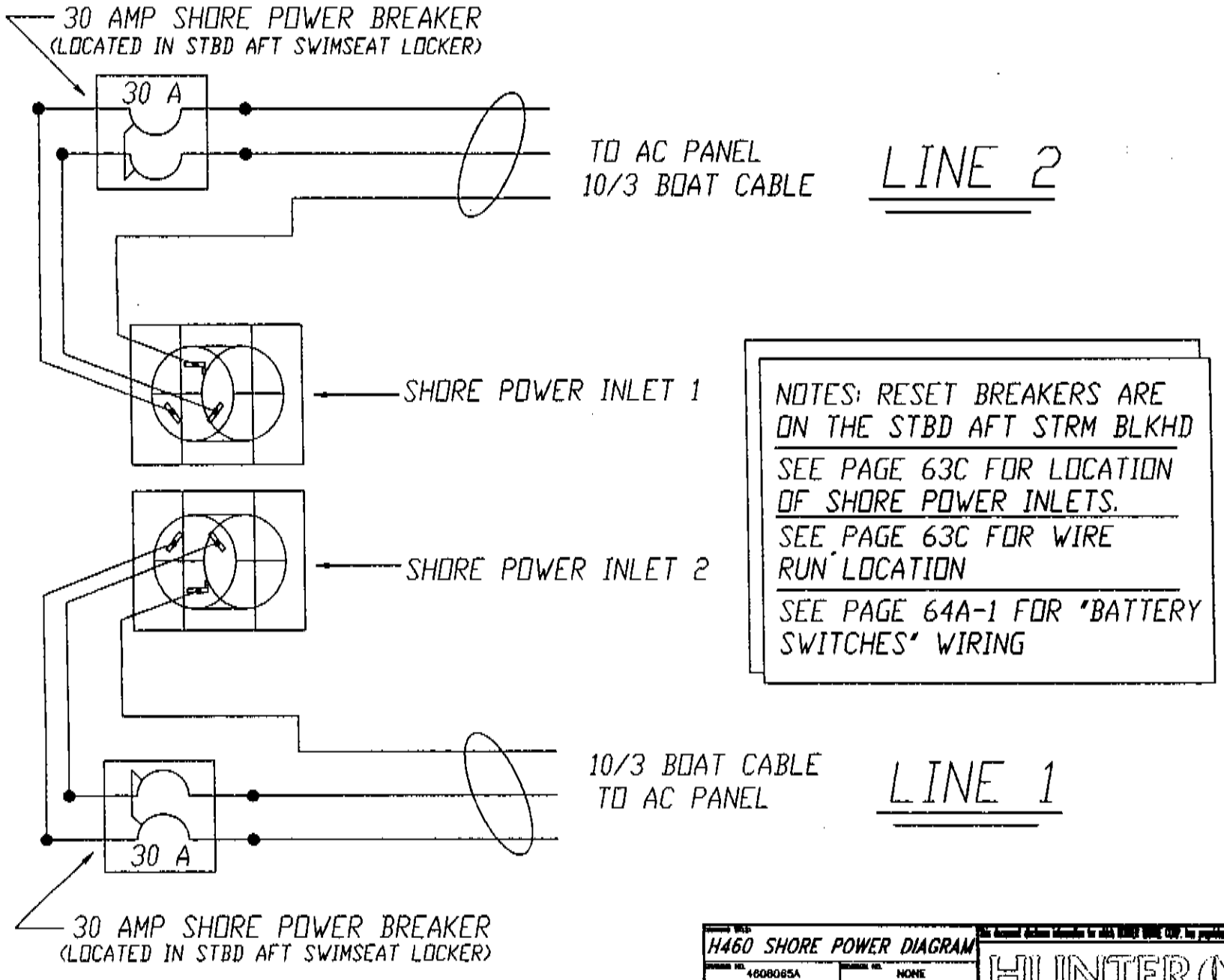
3/26/99

ENGINEERING DEPT.

Stage	Component	Useq	PC	Description	UM	Net Quantity
	...BE040020	30	5	H460-AC/DC 110 SWITCH PANEL COMPCN	EA	1.0000
56	254708	90	300	COVER - SPEAKER BACKSIDE 7"X7"X2.5"	EA	1.0000
56	256742	10	300	BUSS BAR #M449 - 10 GANG	EA	4.0000
57	257642	20	300	TERMINAL C 8-1/4R 200/LB RE	EA	10.0000
57	257696	30	300	TERMINAL C 8-10R RE	EA	10.0000
60	257714	40	300	TERMINAL C1614-10R 450/LB BLU	EA	60.0000
57	257732	50	300	TERMINAL C1210-10R 250/LB YELLO	EA	70.0000
57	257750	60	300	TERMINAL PC-128-FF 320/LB YELLOW SL	EA	5.0000
56	258043	70	300	PANEL,AC/DC,110VOLT,H380/410/450	EA	1.0000
	...BE040030	80	5	H460-REFRIGERATION COMPONENTS	EA	1.0000
56	250838	330	300	PLATE,RECEPTABLE,IVORY,PLASTIC H37	EA	1.0000
43	250964	30	300	SWITCH,PUSH,MOTOR BOX,8423K1	EA	3.0000
56	251162	340	300	DUPLEX RECEPTACLES #5320-1 IVORY	EA	1.0000
56	251432	360	300	ROMEX CONNECTOR 3/8" #20 STEEL	EA	2.0000
56	251684	350	300	SWITCH BOX SWB RACO #410 3"X2" NON-	EA	1.0000
43	255410	20	300	LIGHT,UTLITIY,WHITE, #140 H376	EA	2.0000
42	257570	120	300	TERMINAL C1614-SC 400/LB BLUE	EA	9.0000
57	257786	130	300	TERMINAL PC-1614-FF 390/LB BLUE SL	EA	6.0000
26	258542	260	300	REFRIGERATION COMPRESSOR 110 VAC	EA	1.0000
26	258578	230	570	REFRIGERATION PUMP 110 VAC	EA	1.0000
26	286400	80	550	LABEL,THRUHULL,"REF.PICKUP"	EA	1.0000
26	352316	220	210	THRU-HULL,CHR,1/2" 65CN7-63	EA	1.0000
25	352563	290	210	STRAINER,INTAKE, #65-005-PLB	EA	1.0000
26	352797	270	150	STRAINER, 3/4" LINE 18001(AC/GEN CP	EA	1.0000
26	353313	160	250	BALL VALVE 1/2" #70-103-10	EA	1.0000
26	353331	300	250	BALL VALVE 3/4" #70-104-10	EA	1.0000
25	354057	310	250	BARB, HOSE, BRASS, 3/4"	EA	1.0000
25	354777	190	250	HOSE BARB - 1/2/ X 1/2 MPT,BRASS	EA	1.0000
25	355731	170	150	ELBOW 90 DEG.STR/ELL BR. 1/2"	EA	1.0000
26	358215	280	250	HOSE SHIELDFLEX 3/4" TYPE 2091	FT	1.0000
61	386522	320	550	LABEL,REF OPERATING INST.	EA	2.0000
27	466670	10	600	P/H PHIL #10 X 3/4" S/S T/A	EA	6.0000
25	652500	140	300	WIRE 10/3 MARINE POWER	FT	25.0000
25	654600	110	300	WIRE BLACK SC-16 GAUGE TINNED/COPPE	FT	20.0000
25	655100	90	300	WIRE BLUE W/ WHITE STRIPE 16GA.	FT	25.0000
25	655300	60	300	WIRE BROWN SC-16 GAUGE	FT	15.0000
25	659800	100	300	WIRE YELLOW SC-16 GAUGE	FT	20.0000
26	....P4630	240	999	REF, (ENG STAGE KIT) H460	UT	1.0000
43	....P4633	250	999	REFRIGERATION, (MILL STAGE)KIT H460	KT	1.0000
	...BE040090	100	5	H460-INVERTER OPTION 110V COMPONENT	EA	1.0000
56	250280	170	300	FUSES 7 1/2 AMP AGC	EA	2.0000
56	250460	180	300	FUSE HOLDER BUSSMAN HKP-HH	EA	2.0000
56	250730	190	300	FUSE, 300A INLINE 84-4152-00 H43	EA	2.0000
56	253898	160	300	SAFETY MAIN SWITCH - ON/OFF/BOTH	EA	1.0000
26	254456	10	300	INVERTER,FREEDOM 20 W/82-0100-03 1	EA	1.0000
26	254541	200	300	REMOTE,FREE25/12,82-0100-03	EA	1.0000
56	254996	140	300	ISOLATOR,MULTI-BATTERY, #2430 120A	EA	1.0000
56	257279	150	175	PANEL,INVERTOR SWITCH TO PAINT	EA	1.0000
27	257552	60	600	TERMINAL C1210-SC 130/LB YELLOW	EA	12.0000
27	460190	70	600	CABLE TIES 15" W/O EYE BLACK	EA	10.0000

H460 ELECTRICAL SYSTEM COMPONENTS PARTS LIST CONT
4808064L
NONE
3/26/99
ENGINEERING DEPT.

Stage	Component	Useq	PC	Description	UM	Net Quantity
27	465190	100	600	NUT LOCK 1/4-20 S/S L/N	EA	4.0000
27	466670	80	600	P/H PHIL #10 X 3/4" S/S T/A	EA	4.0000
27	467030	90	600	P/H PHIL 1/4-20 X 1 1/2"S/S MS	EA	4.0000
27	468710	120	600	T/H PHIL #8 X 3/4" BLACK OXIDE S/S	EA	4.0000
27	469370	110	600	WASHER FLAT 1/4" S/S F/W	EA	4.0000
28	652500	20	300	WIRE 10/3 MARINE POWER	FT	15.0000
96	333220	60	200	BELL, FOG, 8" H40.5,H42,H43	EA	1.0000
96	333260	50	500	FLARE KIT, 3-R2 HAND HELD (3PER P	EA	1.0000
96	602839	30	570	BOUYANT CUSHION #9351-01	EA	1.0000
	...BJ030030	60	5	AMERICAN LABELS AND DOCUMENTATION	EA	1.0000
61	281210	130	560	DECAL "NO STEP"(1,000 PER RL)	EA	1.0000
61	281420	10	560	STICKER, "NMMA" CERTIFICATION YELLO	EA	1.0000
61	281450	20	560	LABEL, "SWIM LADDER WARNING" ADHESI	EA	1.0000
61	281660	30	560	LABEL, "5 YEAR WARRANTY"BLUE	EA	1.0000
61	282080	40	560	LABEL DISCHARGE OF OIL PROHIBITED	EA	1.0000
61	282310	50	560	LABEL, "HEAD USE" INSTRUCTION	EA	2.0000
61	282290	60	560	LABEL,"HEAD FLUSH"INSTRUCTION	EA	2.0000
61	282500	70	560	LABEL [TOE RAIL] "SLING"	EA	8.0000
61	282740	80	888	LABEL,"NOTICE TO INSTALLER"-AMERICA	EA	2.0000
61	282950	90	560	LABEL, "LPG CAUTION"	EA	1.0000
61	283730	100	560	LOGO"CRUISE PAC" LARGE	EA	2.0000
61	285140	110	900	LABEL,"ELECTRIC SHOCK" (TRIANGLE)	EA	2.0000
61	286520	120	560	LABEL, "DO NOT USE VANG ON ELEC WIN	EA	1.0000
	.BB020005T	60	5	62 HP YANMAR ENGINE OPTION	EA	1.0000
25	..100360	10	100	ANTIFREEZE	GL	1.2500
10	..102210	30	150	FUEL DIESEL	GL	25.0000
25	..312431	20	150	ENGINE, 63HP, D.ANGLE,4JH2TBE,H420	EA	1.0000
28	..656500	40	300	CONDUIT 3/4" 125-0340	FT	25.0000
	.BB0200622	70	5	62HP 2 BLADE PROP OPTION	EA	1.0000
96	..334020	30	150	PROP,18X16X1 1/4" 3BLADE,YANMAR 62H	EA	1.0000
	.BD030000H	30	5	STANDARD HEAD OPTION	EA	1.0000
	..BD030030	10	5	H460-FWD STB HEAD PLUMBING	EA	1.0000
26	...286430	10	560	LABEL,THRUHULL,"HEAD PICKUP"	EA	1.0000
26	...334430	160	200	CHAFE GUARD,PLASTIC,2" 450	EA	1.5000
26	...350205	190	250	TOILET, 29090-0001, H280-H630 [LEFT	EA	1.0000
26	...352293	30	250	VENTED LOOP,W/VALVE,3/4"PVC	EA	1.0000
26	...352627	40	250	BRASS THRU HULL FITTING 3/4" #65-BN	EA	1.0000
26	...353355	50	250	HOSE CLAMP #10	EA	7.0000
26	...353427	60	250	HOSE CLAMP #24	EA	2.0000



H460 SHORE POWER DIAGRAM

4608065A	NONE
ENGINEERING DEPT.	4/14/98

HUNTER

H460 ELECTRICAL WIRING/CABLE DATA

12V.D.C. SYSTEM

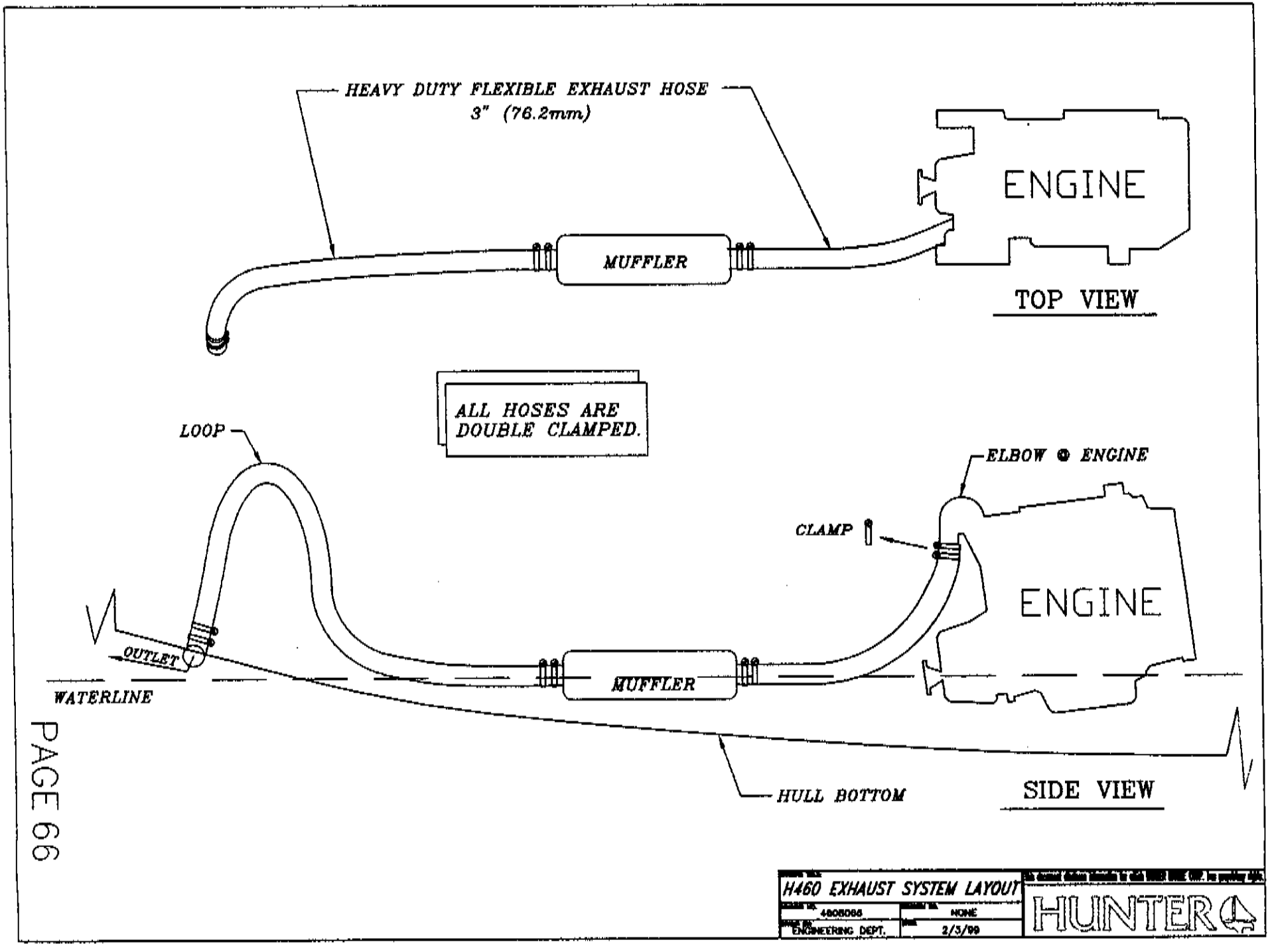
CIRCUIT/BREAKER	AMPERAGE	WIRE SIZE	WIRE COLOR
D.C. MAIN	50amp	6gague	ORANGE/RED
PANEL LIGHTS	5amp	INTERN. WIRED	RED
CABIN LIGHTS 1	20amp	16gauge	BLUE
CABIN LIGHTS 2	20amp	16gauge	BLUE
COURTESY 1	10amp	16gauge	BLUE/WHITE
COURTESY 2	10amp	16gauge	BLUE/WHITE
TANK INDICATOR	5amp	16/2 BOAT CABLE	BLACK (NEG.) & WHITE (POS.)
WATER PRESSURE	10amp	12gauge	BROWN
FWD.SHOWER SUMP	10amp	12gauge	BROWN/YELLOW
AFTSHOWER SUMP	10amp	12gauge	BROWN/BLACK
MACERATOR 1	20amp	10gauge	BROWN/WHITE
MACERATOR 2	20amp	10gauge	BROWN/WHITE
STEREO	10amp	16gauge	RED & YELLOW
STEREO W/AMPLIFIER	20amp	12gauge	RED
REFRIGERATION	15amp	8gauge	RED
L.P. GAS	5amp	16/2 BOAT CABLE	BLACK (NEG.) & WHITE (POS.)
WINDLASS (SWITCH)	5amp	16gauge	RED/WHITE & RED/BLACK
INSTRUMENTS	5amp	VENDOR SUPPLIED	RED & YELLOW (SCREEN)
G.P.S.	5amp	16gauge	RED/BLACK
V.H.F.	10amp	16gauge	RED & WHITE
AUTO-PILOT	VARIES PER MODEL	8gauge	RED
ANCHOR LIGHT	5amp	16gauge	GRAY/RED
STEAMING LIGHT	5amp	16gauge	GRAY/GREEN
DECK LIGHT	15amp	16gauge	GRAY
RUNNING LIGHTS	10amp (LGR. MOD.)	16gauge	GRAY/WHITE
RUNNING LIGHTS	5amp (SM. MOD.)	16gauge	GRAY/WHITE
COMPASS (TIES TO RUN. LIGHTS)		16gauge	GRAY/WHITE
BATTERY CABLES		2/0	RED
ENGINE STARTER CABLE		2/0	RED
HALYARD WINCH		2gauge	RED
WINDLASS (MOTOR) CABLE		2gauge	RED

110V.A.C. SYSTEM

SHORE POWER A.C. MAIN/S	30 amp	10/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
OUTLETS	15amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
MICROWAVE OVEN	15amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
WATER HEATER	20amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
BATTERY CHARGER	15amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
INVERTER	INTERNAL	10/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
AIR CONDITIONING	25amp	10/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)

220V.A.C. SYSTEM (ON SELECT OVERSEAS MODELS ONLY)

SHORE POWER A.C. MAIN/S	15 amp	10/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
OUTLETS	10amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
MICROWAVE OVEN	10amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
WATER HEATER	10amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
BATTERY CHARGER	10amp	14/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
INVERTER	N/A	10/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)
AIR CONDITIONING	15amp	10/3 BOAT CABLE	BLACK (HOT) & WHITE (NEU.)



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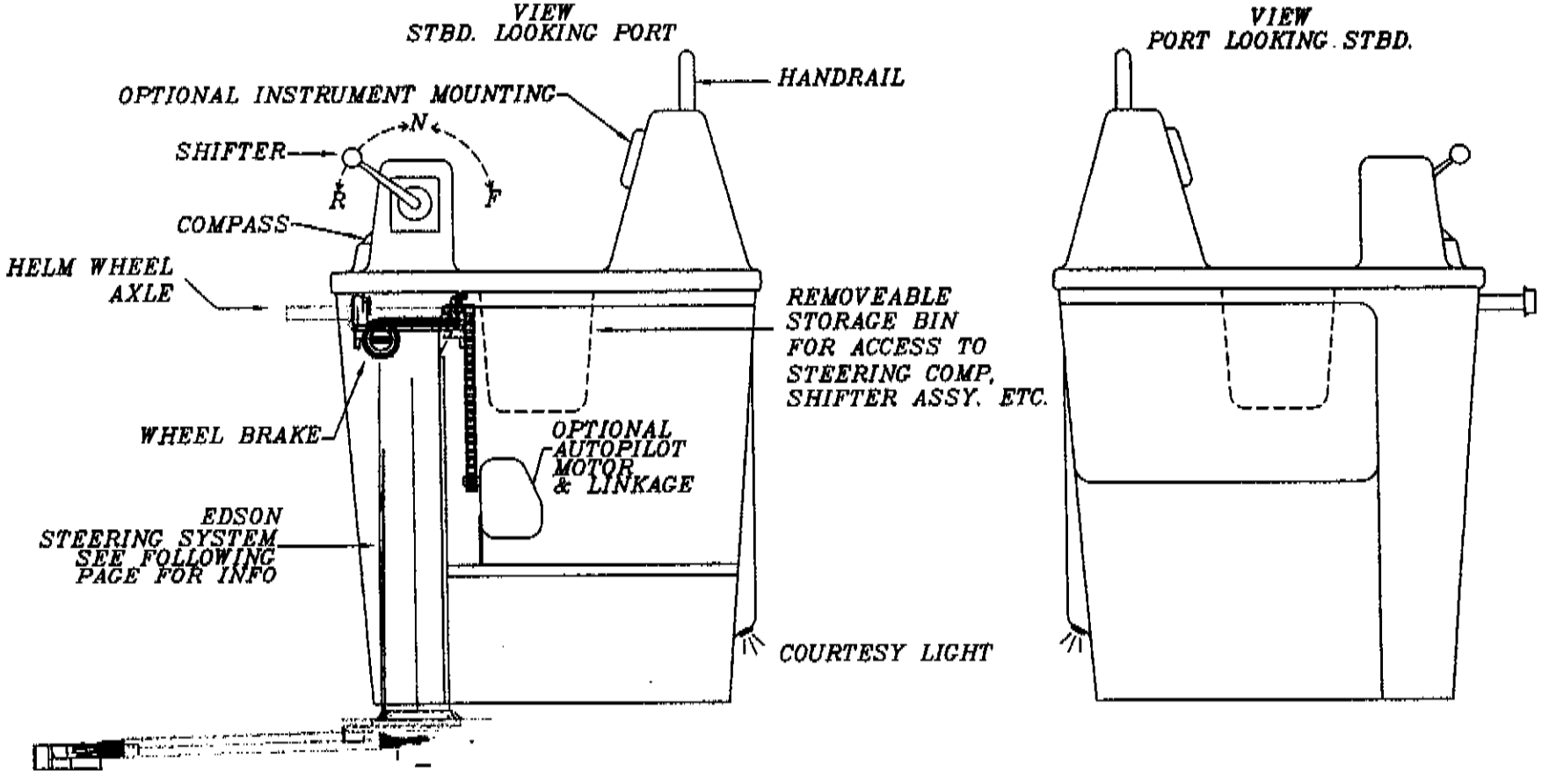
H460 EXHAUST SYSTEM LAYOUT	
4805066	NONE
ENGINEERING DEPT.	2/3/99

HUNTER



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H460 STEERING/CONSOLE LAYOUT	
4608067A	NONE
ENGINEERING DEPT.	2/3/99

HUNTER

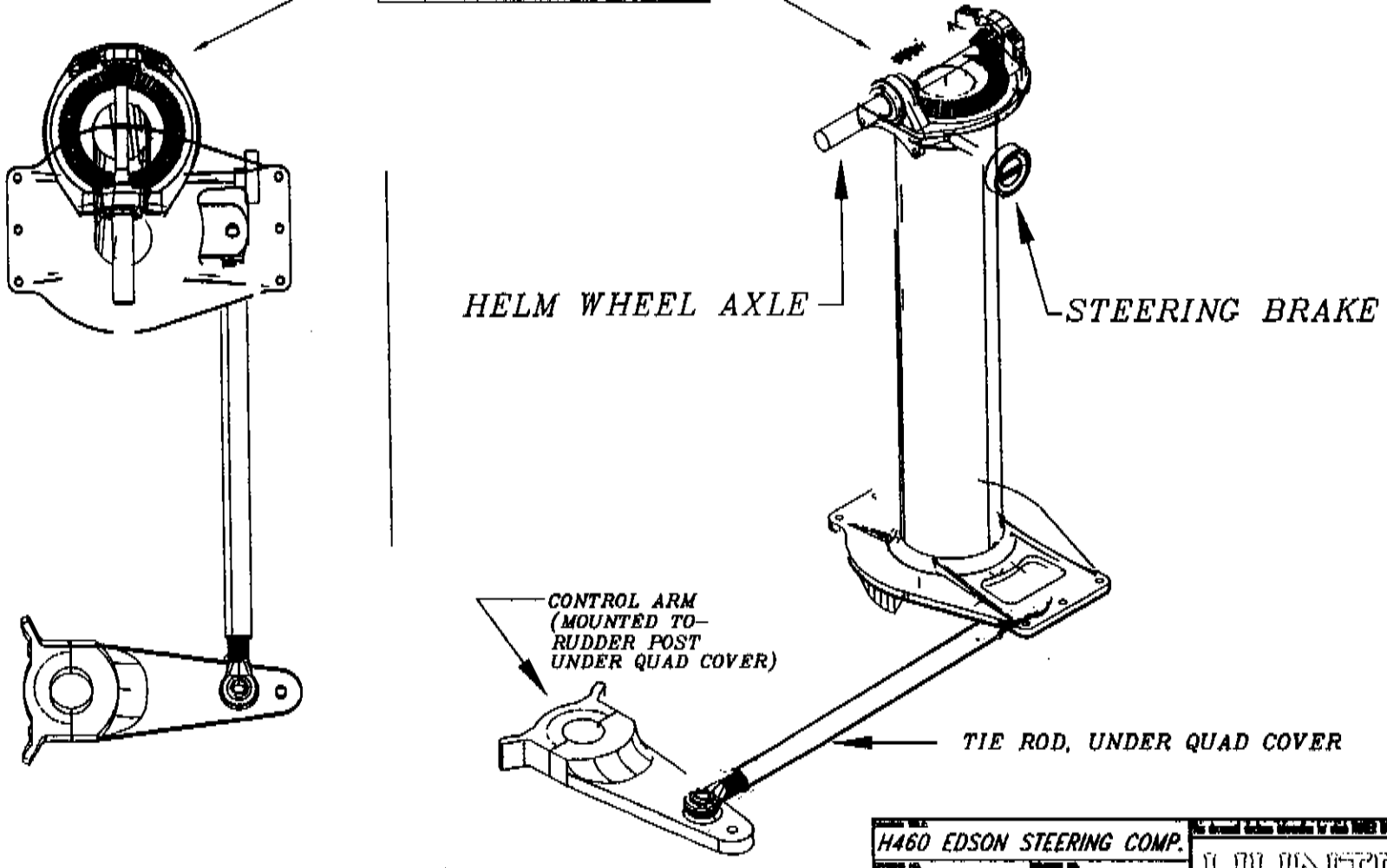
IMPORTANT:

SEE EDSON STEERING MAINTENANCE UNDER "MAINTENANCE" FOR A COMPLETE DESCRIPTION OF STEERING COMPONENTS AND VITAL ROUTINE MAINTENANCE PROCEDURES.

NOTE: THIS UNIT IS INSIDE COCKPIT CONSOLE. CONSOLE NOT SHOWN FOR CLARITY

PLAN VIEW

ISO VIEW



H460 EDSON STEERING COMP.	
4808067B	NONE
ENGINEERING DEPT.	2/3/99

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EDSON ENGINEERING BULLETIN

CD–i COMPACT RACK AND PINION PEDESTAL STEERING MAINTENANCE

THE EDSON CD–i GEARED STEERING SYSTEM HAS BEEN DESIGNED FOR YEARS OF TROUBLE–FREE SERVICE. BUT AS WITH ALL SYSTEMS USED IN THE HARSH MARINE ENVIORNMENT, PROPER MAINTENANCE AND CARE IS REQUIRED SO THAT THE SYSTEM REMAINS IN LIKE–NEW CONDITION.

HUNTER

TITLE	H460 EDSON STEERING MAINTENANCE
DRAWING NO.	NONE
PART NO.	480800670
DATE	2/3/00
DEPT.	ENGINEERING DEPT.

THE EDSON CD–i SYSTEM SHOULD BE LUBRICATED WITH HEAVY–DUTY TEFLON GREASE, SUCH AS EDSON'S PART #827. THE TOP RACK AND PINION GEARS, UPPER AND LOWER GREASE FITTINGS FOR THE NEEDLE BEARINGS REQUIRE ANNUAL LUBRICATION.

RACK AND PINION TEETH: GRADUALLY TURN THE WHEEL FROM PORT TO STARBOARD WHILE APPLYING GREASE TO THE INDIVIDUAL TEETH TO INSURE THAT THE ENTIRE TOOTH SURFACES ARE BEING LUBRICATED.

DOWNTUBE NEEDLE BEATINGS: GREASE FITTINGS ARE LOCATED ON THE INSIDE OF THE DOWNTUBE JUST BELOW THE WHEEL SHAFT AND JUST ABOVE THE LOWER END OF THE DOWNTUBE ON THE FORWARD SIDE. BOTH BEARINGS SHOULD BE LUBRICATED AT THESE LOCATIONS. BECAUSE OF THE VERY TIGHT TOLERANCES OF THE BEARINGS, A LITTLE GREASE GOES A LONG WAY– DO NOT OVER LUBRICATE THE SYSTEM. THE SYSTEM SHOULD BE LUBRICATED AT LEAST ONCE A YEAR.

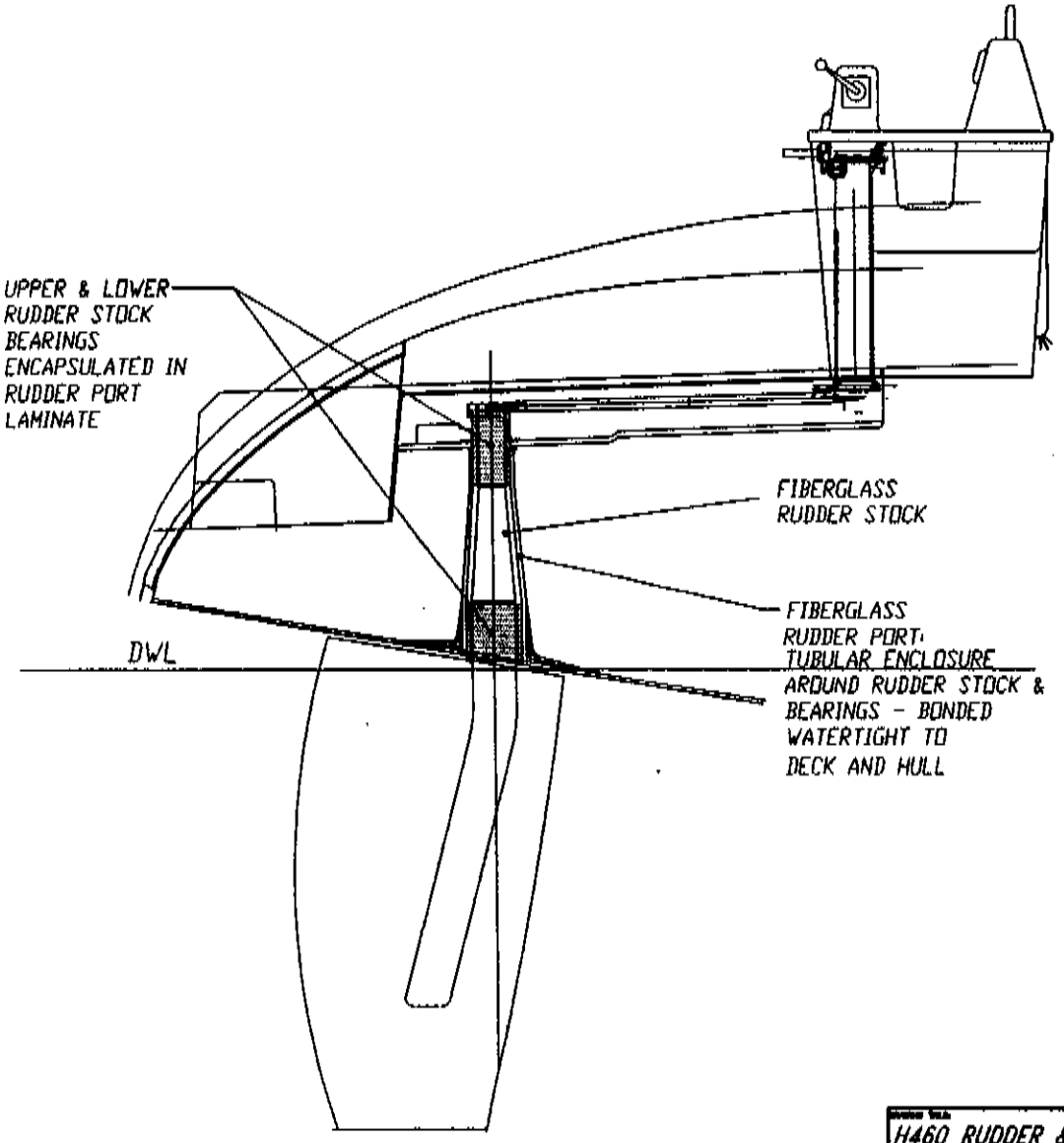
IMPORTANT
TO PROPERLY MAINTAIN THE MOVING PARTS IN THE EDISON CD–i COMPACT RACK AND PINION STEERING SYSTEM, IT IS NECESSARY TO REMOVE THE COMPASS AND ITS CYLINDER. FOR PROPER ALIGNMENT WHEN REINSTALLING THE COMPASS, WE RECOMMEND PLACING THREE OR FOUR PIECES OF TAPE ON THE PEDASTAL AND COMPASS. SLIT THE TAPE WHEN REMOVING THE COMPASS FOR VISUAL REALIGNMENT,
TOUR COMPASS MUST THEN BE CHECKED FOR ACCURACY BEFOR USING THE BOAT

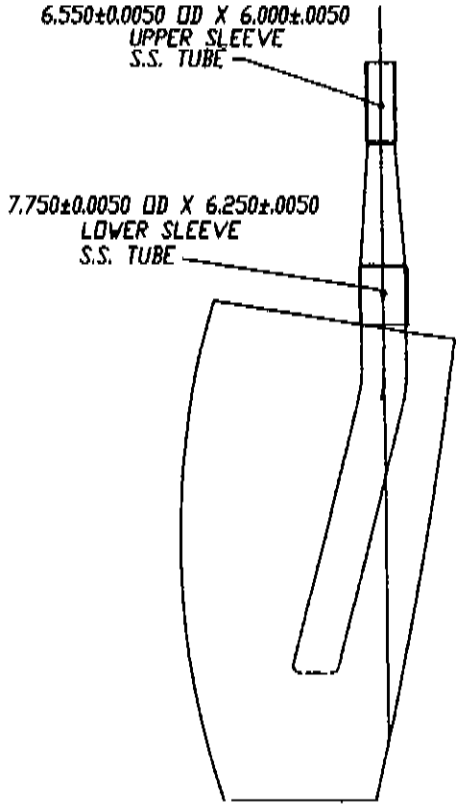
DRAG LINK END FITTINGS: THE BALL JOINT AT BOTH ENDS OF THE DRAG LENGTHS SHOULD BE LUBRICATED ANNUALLY WITH TEFLON GREASE AS WELL. APPLY A SMALL AMOUNT OF GREASE TO THE BALL JOINT AND MOVE THE BALL SIDE–TO–SIDE TO LUBRICATE THE ENTIRE BEARING SURFACE. REMOVING THE DRAG LINK ENDS FROM THE TILLER ARMS MAY BE NECESSARY.

SPECIAL INFORMATION FOR EDSON INTERNAL CD–i STEERING SYSTEMS INSTALLED ON HUNTER YATCHS:

BOTH THE DOWNTUBE AND STEERING SHAFT BEARINGS REQUIRE LUBRICATION WITH TEFLON GREASE. THE UPPER BEARING GREASE FITTING IS LOCATED JUST UNDER THE TOP BOWL CASTING ON THE FORWARD SIDE OF THE OUTER TUBE. THE LOWER BEARING GREASE FITTING IS LOCATED JUST ABOVE DECK LEVEL ON THE FOWARD SIDE OF THE OUTER TUBE. THE STEERING WHEEL SHAFT NEEDLE BEARING GREASE FITTING IS LOCATED ON THE TOP OF THE AFT BEARING RACE. THE FORWARD BEARING IS SEALED AND REQUIRES NO LUBRICATION.

INFORMATION CONTAINED ON THIS PAGE AS PER "EDSON INTERNATIONAL"





H460 RUDDER & SHAFT DETAILS

4608068	NONE
ENGINEERING DEPT.	2/4/99

HUNTER

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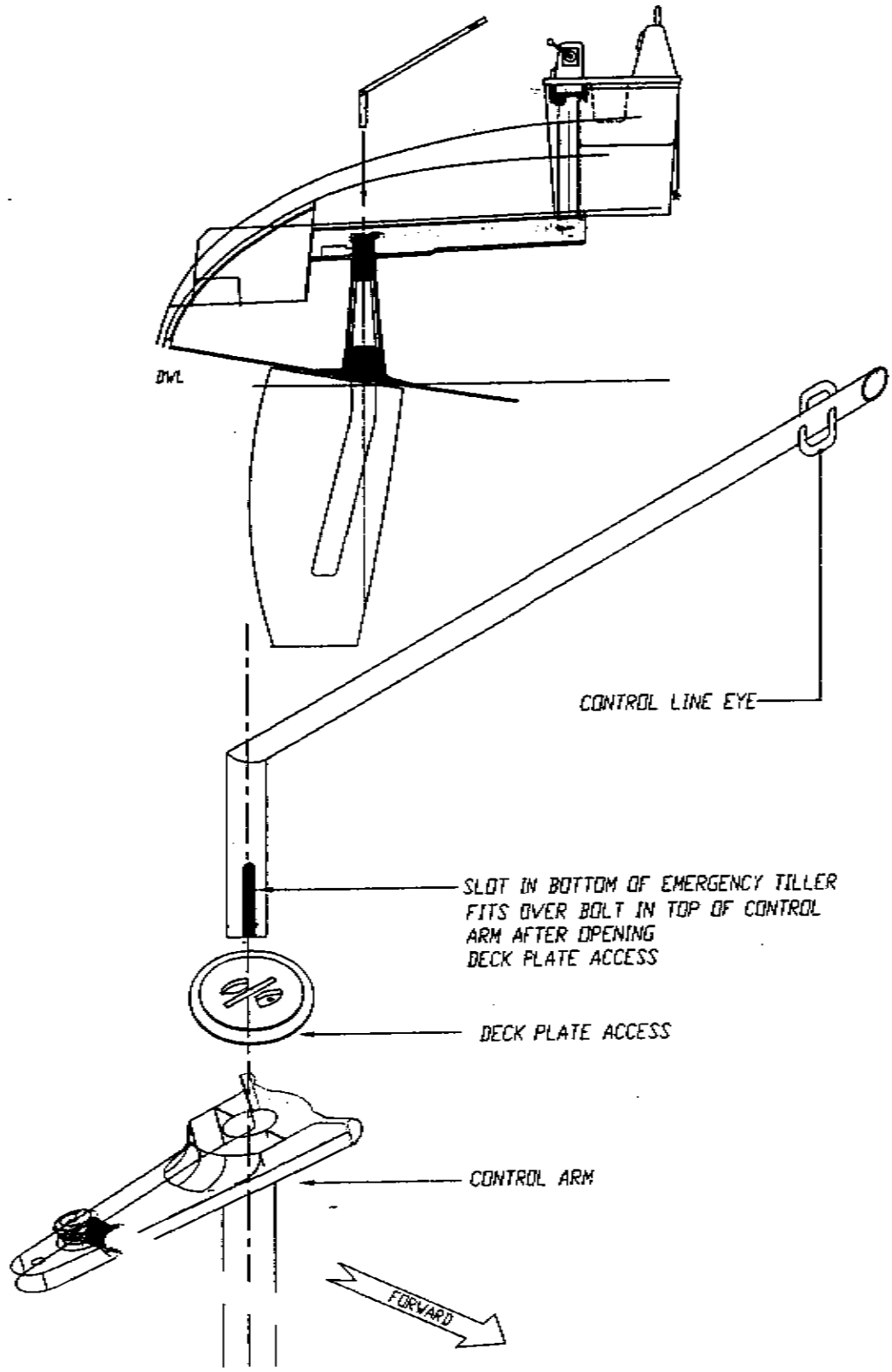

H460 EMERGENCY TILLER

HUNTER

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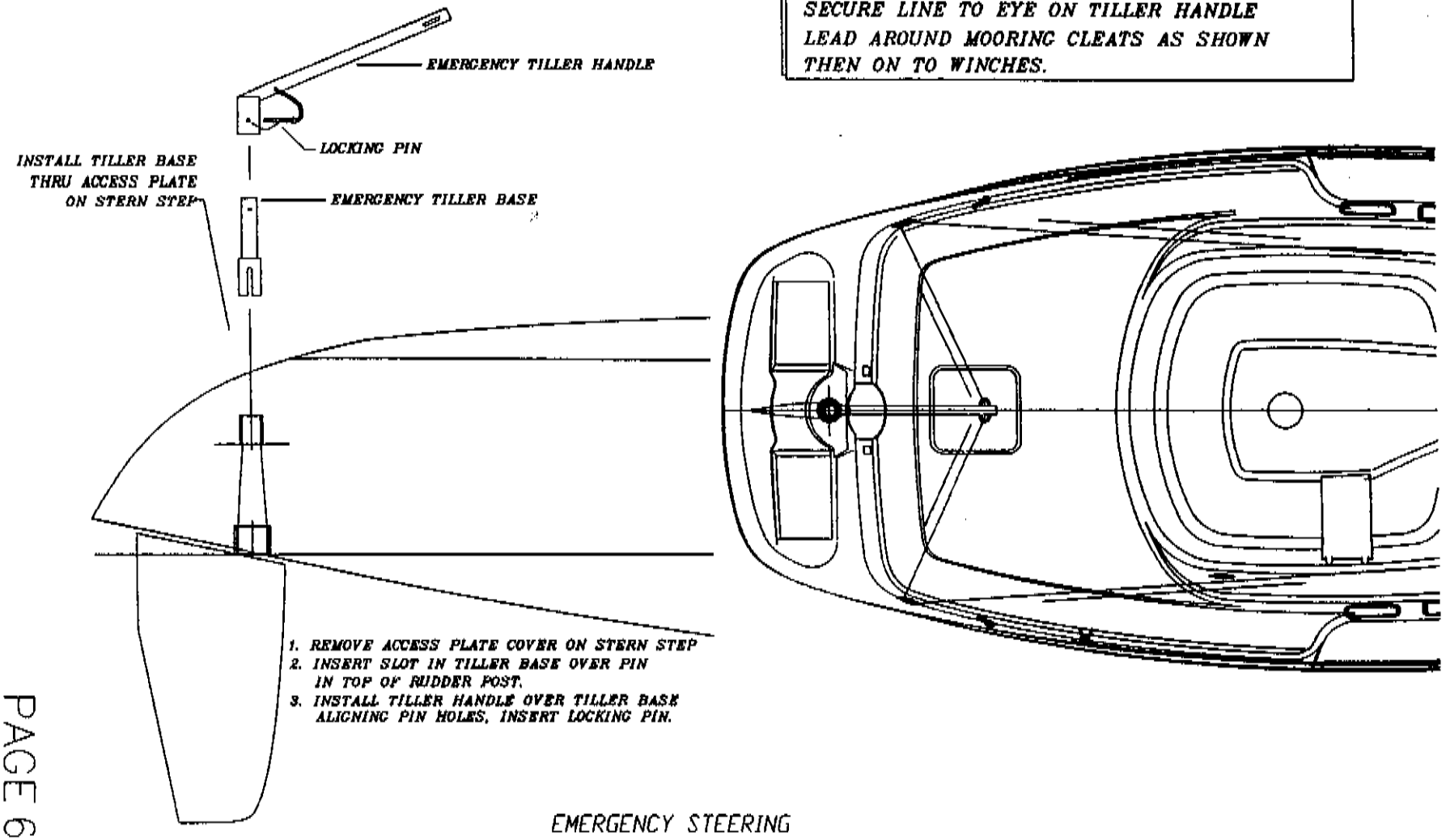
NOTE: IF SECURING TILLER BECOMES NECESSARY-
OR IF YOU DESIRE TO STEER FROM COCKPIT

SECURE LINE TO EYE ON TILLER HANDLE
LEAD AROUND MOORING CLEATS AS SHOWN
THEN ON TO WINCHES.



EMERGENCY STEERING

H460 EMERGENCY TILLER SECURING LINE LAYOUT	
46080698	NONE
ENGINEERING DEPT.	3/26/99

HUNTER

Stage	Component	Useq	PC	Description	UM	Net Quantity
	..BH000001	62	5	H 460 STEERING SYSTEM	EA	1.0000
	...BH010001	10	5	STEERING ASSEMBLY	EA	1.0000
	....BH030001	10	5	WHEEL STEERING SUB ASSEMBLY	EA	1.0000
	.....BH030010	10	5	STEERING PEDISTAL/BEAM COMPONENTS	EA	1.0000
	.....BH030020	20	5	RUDDER MOUNTING COMPONENTS	EA	1.0000
11	309555	60	200	RUDDER BRG ASSY,RS-HUN450-00	EA	1.0000
11	309556	70	200	RUDDER BRG ASSY,RS-HUN450-01	EA	1.0000
	.....BH030030	30	5	STEERING HARDWARE MOUNTING COMPONET	EA	1.0000
		100	450	STEERING WHEEL #S24-42"-909 35'37"4	EA	1.0000
96	310850	110	450	PEDESTAL NUT (STEERING)S/S H673ST 1	EA	1.0000
96	311080	130	450	DRAG LINK,STEER,CUT 34 1/2",H410-46	EA	1.0000
81	311648	140	450	TILLER ARM,STEER,H836,4"X5/8"H46	EA	1.0000
81	311651	120	450	STEER,W/LEFT EYE,H470,H380-460	EA	1.0000
31	311695					
	.....BH030040	40	5	PEDISTAL GUARD MOUNTING COMPONENTS	EA	1.0000
	.....BH030050	50	5	RUDDER FINISHING COMPONENTS	EA	1.0000
80	101730	10	105	EPOXY INTERLUX 2000/2001 KIT	KT	0.5000
	.....BH030060	60	5	EMERGENCY TILLER COMPONENTS	EA	1.0000
81	101340	100	400	COTTON CAULKING KEEL	FT	2.0000
81	314055	110	550	TILLER,EMERGENCY, H460	EA	1.0000
10	706996	20	792	PIPE, BLACK, PS 1" X21'	FT	2.4156
10	707092	30	240	PIPE,BLACK,SCH80 2"BPE (EMERG TILL	FT	0.6660
10	707220	10	240	ROUND BAR, 1/4" DIA X 12' TY304	FT	0.6663

HUNTER

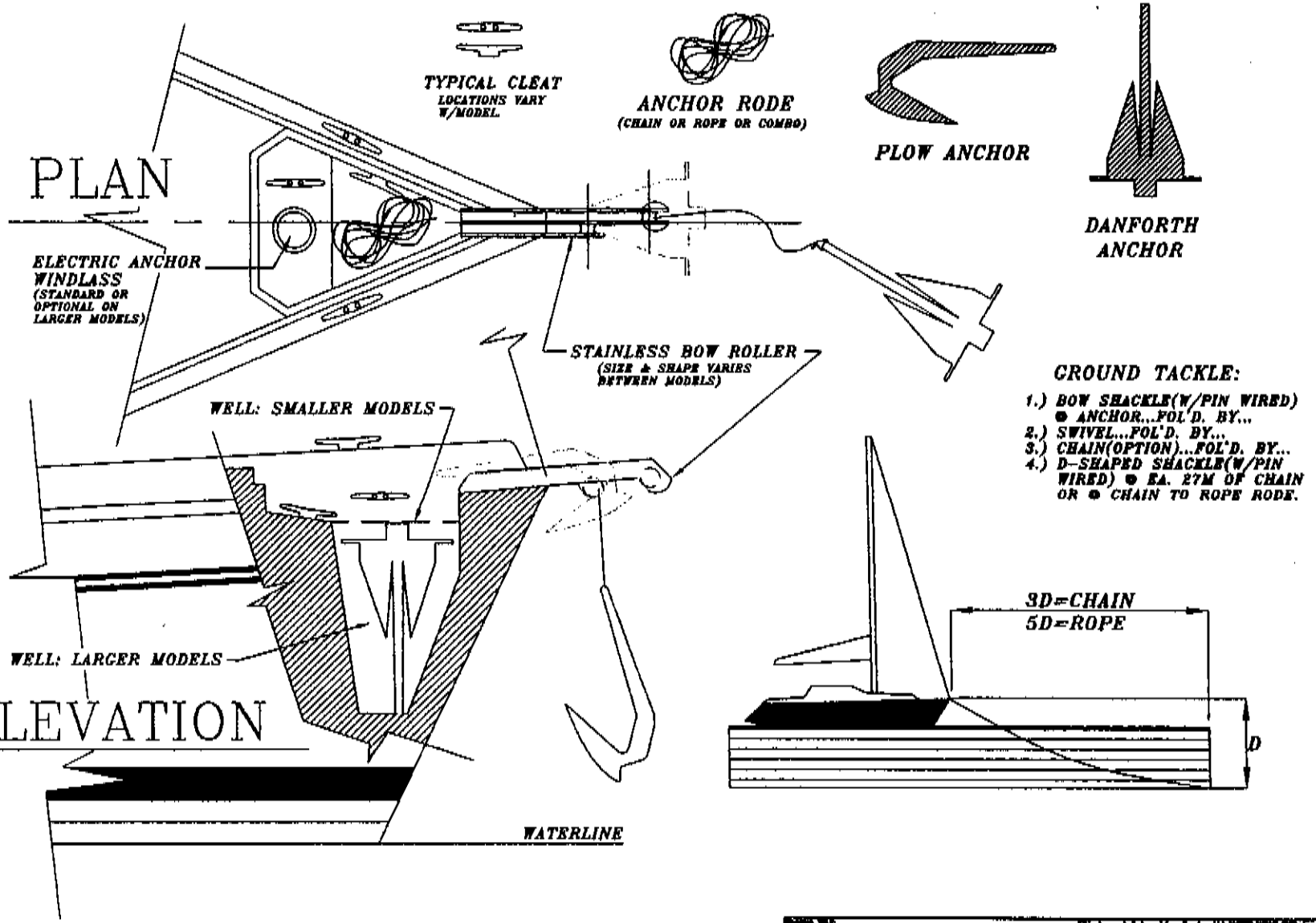
H460 STEERING COMPONENTS PARTS LIST

NONE

3/26/99

4600689C

ENGINEERING DEPT.



H460 BASIC ANCHORING DIAGRAM		
4608070	NONE	HUNTER
ENGINEERING DEPT.	2/4/99	