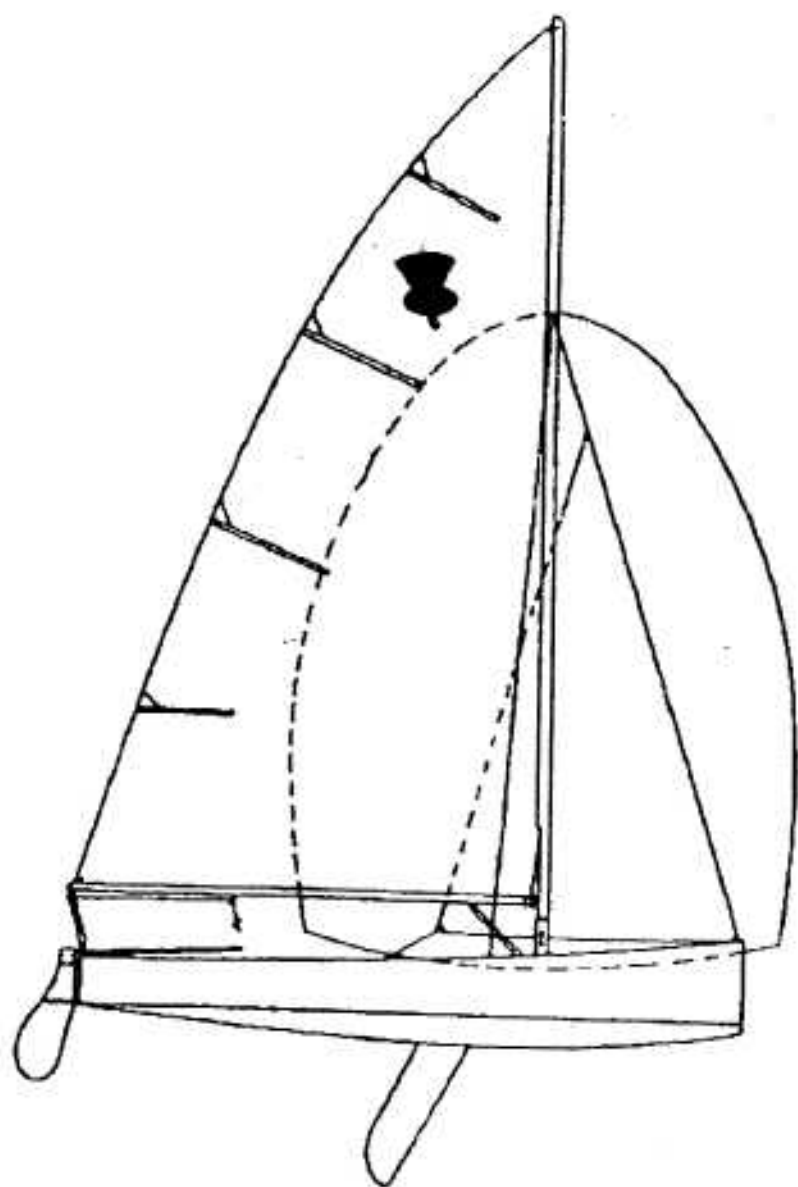


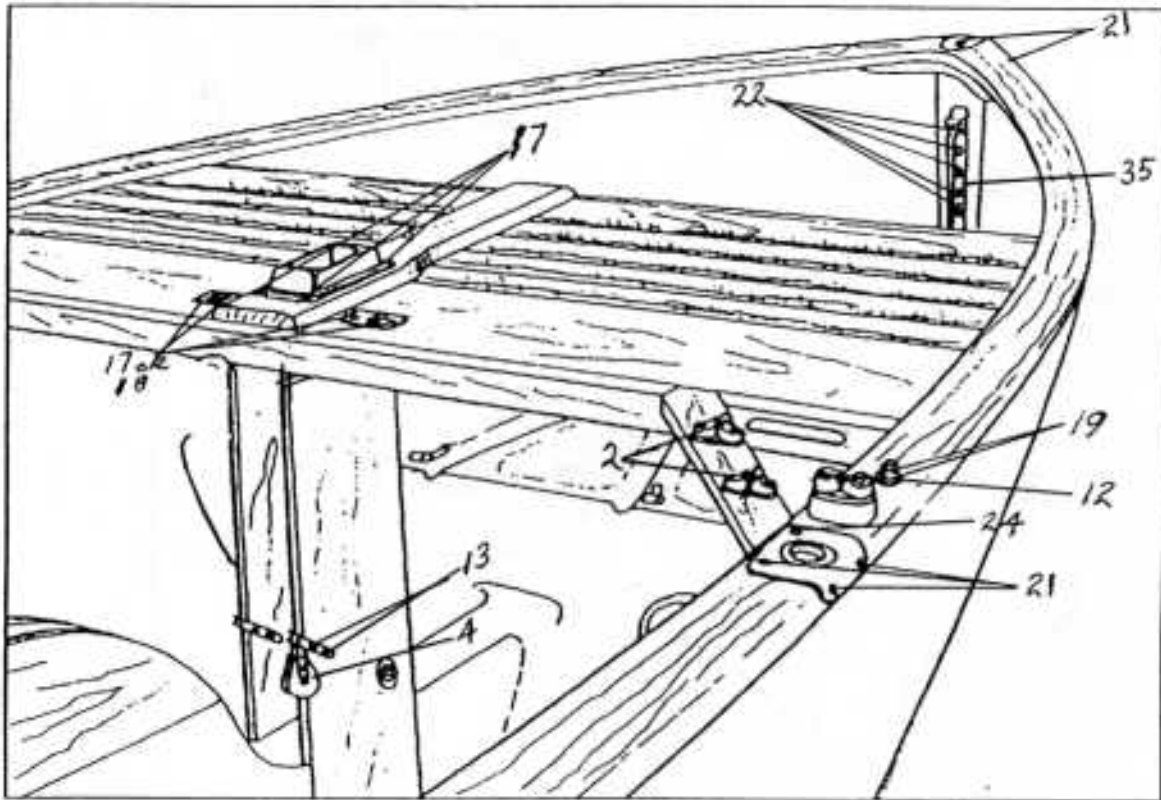
Great Midwest Thistles



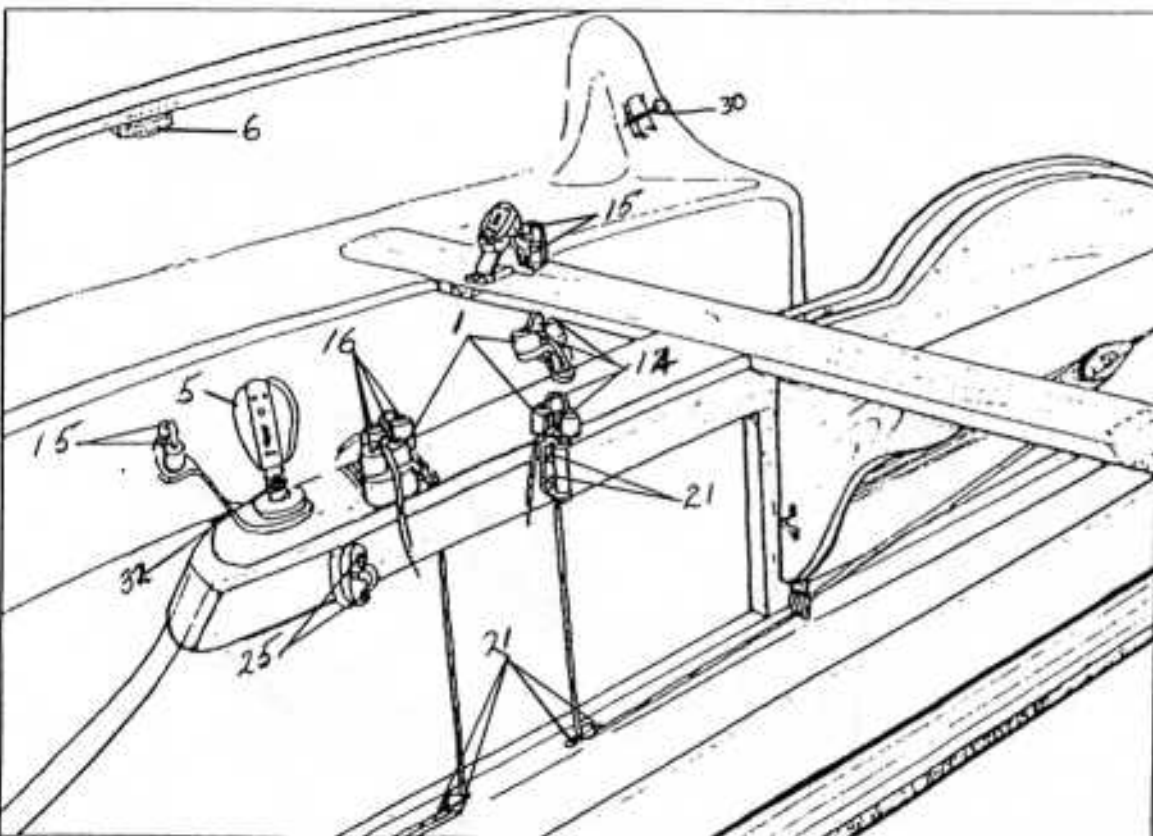
L.O.A.	17'0"	Sail Area:	
L.W.L.	17'0"	Main	136 sq. ft.
Beam	6'0"	Jib	55 sq. ft.
		Spinnaker	200 sq. ft.
Draft	Board up 9"	Total Crew Capacity:	
	Board down 4'6"	Racing	3
Hull	Fiberglass	Day Sailing	up to 6
Spars	Aluminum	Designer	Sandy
Hull Weight	515 lbs.		Douglass

Item	Location on Boat	Description	Material 300 Series S/S	Size, Dia, Hole centers	Mfg or Source	Mfg's Model #	Qty / Thistle
1		Cam-Matic Cleat			Harken	150	8 to 10
2		Micro Carbo Cam w/ fairlead			Harken	427	4
3		Block, single	3/8" Line	2-1/2"	Harken	125	2
4		Block, single micro	1/4" Line	1-1/2"	Harken	224	
5		Block, single Hexaratchet	3/8" Line		Harken	019	
6		Block, cheek Hexaratchet	3/8" Line	3-3/16"	Harken	017	
7		Block, cheek	5/16" Line	2-3/16"	Harken	092	9
8		Block, micro cheek	1/4" Line	2-1/16"	Harken	233	
9		Thru-Deck Block for spinaker	3/8" Line	2 x 1.5"	Harken	046	2
10	for spin pole top lift & traveler fasten	Thru-Deck Block	5/16" Line	2.25"	Harken	88	4
11		Screw, Machine, Slotted Flat Hd	18-8 S/S	#10-24 x 2-3/4"			
12		Screw, Machine, Slotted Flat Hd	18-8 S/S	#10-24 x 3"			
13	for item 9 & gudgeon	Screw, Machine, Slotted Rd Hd	18-8 S/S	#10-24 x 1"	MSC	87924502	
14		Screw, Machine, Slotted Rd Hd	18-8 S/S	#10-24 x 1-1/2"	MSC	87924502	
15		Screw, Machine, Slotted Rd Hd	18-8 S/S	#10-24 x 1-3/4"	MSC	87924510	4
16		Screw, Machine, Slotted Rd Hd	18-8 S/S	#10-24 x 3"	MSC	87924544	
17		Screw, Sheet Metal, Oval Hd Phillips	18-8 S/S	#8 x 3/4"	MSC	67605923	12
18		Screw, Sheet Metal, Oval Hd Phillips	18-8 S/S	#10 x 1"	MSC	67606285	
19		Screw, Sheet Metal, Pan Hd Slotted	18-8 S/S	#6 x 3/4"			
20		Screw, Sheet Metal, Pan Hd Phillips	18-8 S/S	#10 x 5/8"	MSC	87923264	
21		Screw, Sheet Metal, Pan Hd Slotted	18-8 S/S	#10 x 3/4"	MSC		
22		Screw, Sheet Metal, Pan Hd Slotted	18-8 S/S	#10 x 1"			
23	forward grating to rail	Screw, Sheet Metal, Pan Hd Slotted	18-8 S/S	#10 x 1-1/4"			
24		Screw, Sheet Metal, Pan Hd Slotted	18-8 S/S	#10 x 1-1/2"			
25	traveler & spin cam cleat	Screw, Sheet Metal, Flat Hd Phillips	18-8 S/S	#10 x 2"	MSC	87923819	
26		Washer, Flat, .062" thick	18-8 S/S	#10	MSC	87925343	
27		Washer, Split Lock	18-8 S/S	#10	MSC	87925145	
28		Nut, Hex Locknut with Nylon Insert	18-8 S/S	#10-24	MSC	67337360	
29		Nut, Hex Machine Screw	18-8 S/S	#10-24	MSC	87925541	
30		Pins, Quick Release 3/16 x 1	300 S/S		MSC		4
31		Pins, Clevis 3/16 x 3/4	18-8 S/S	3/16"D x 21/32"	MSC	67926600	
32		Pins, Clevis 3/16 x 1	18-8 S/S	3/16"D x 29/32"	MSC	67926683	
33	goose neck on mast	Pins, Clevis 1/4 x 1	18-8 S/S	1/4"D x 29/32"	MSC	67931246	
34		Pins, Clevis 1/4 x 1.25	18-8 S/S	1/4"D x 1-5/32"	MSC	67931329	
35		Pins, Clevis 1/4 x 1-3/8	18-8 S/S	1/4"D x 1-9/32"	MSC	67931360	
36		Cam Swivel Base for main		4.5" high	Harken	205	

Forward Grating and Stanchions



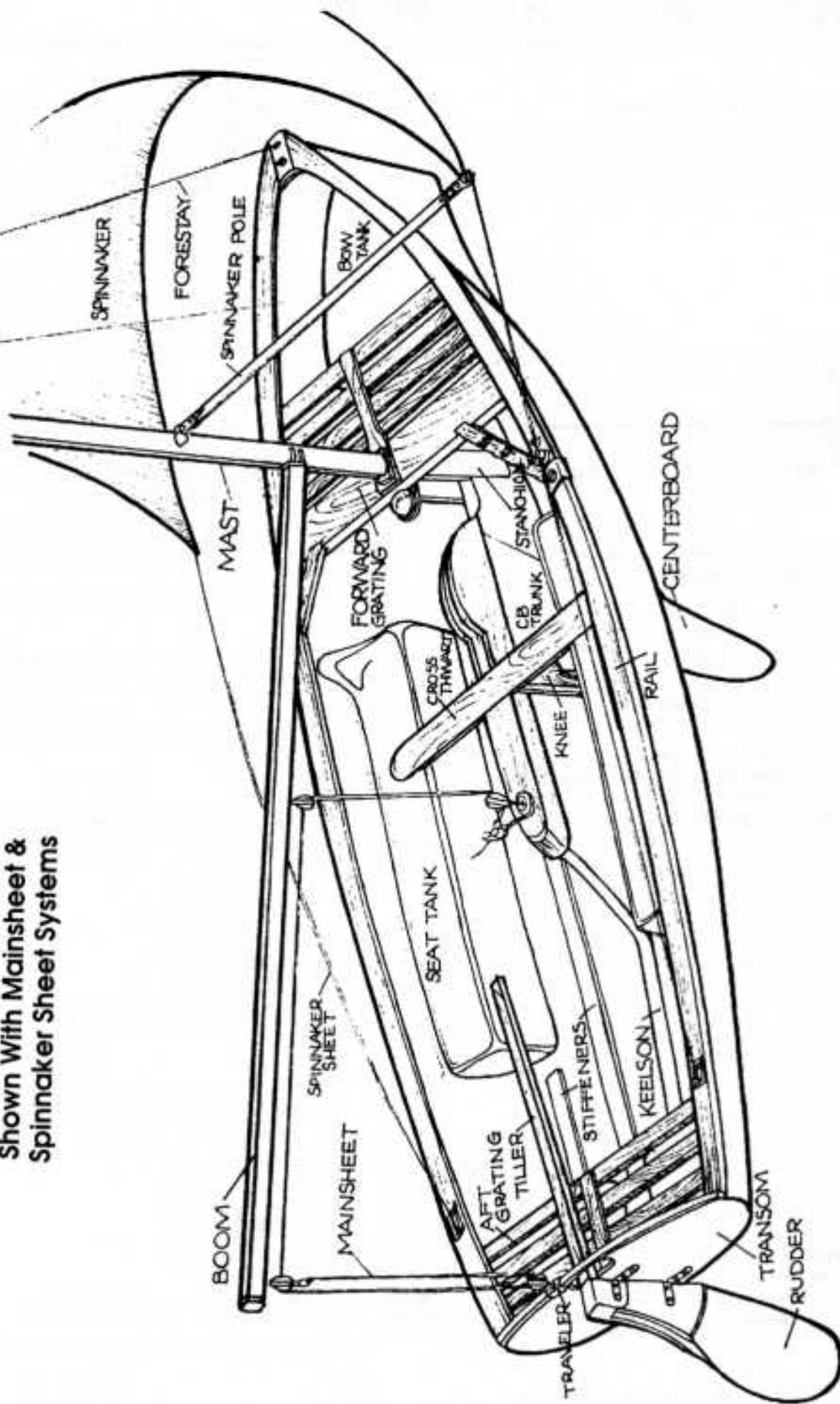
Centerboard Trunk and Cross-thwart



1/19/62

GMW THISTLE

Shown With Mainsheet & Spinnaker Sheet Systems



Boom & Boom Hardware

Great Midwest Boom

Available in black or clear anodized, the boom comes equipped with cast aluminum end fittings, a stainless claw bale for the boom vang, and two track sliders for mainsheet blocks. (C, D)

Fully rigged, standard – includes 4:1 internal outhaul, external clam cleat, self-fairleading swivel turning block.

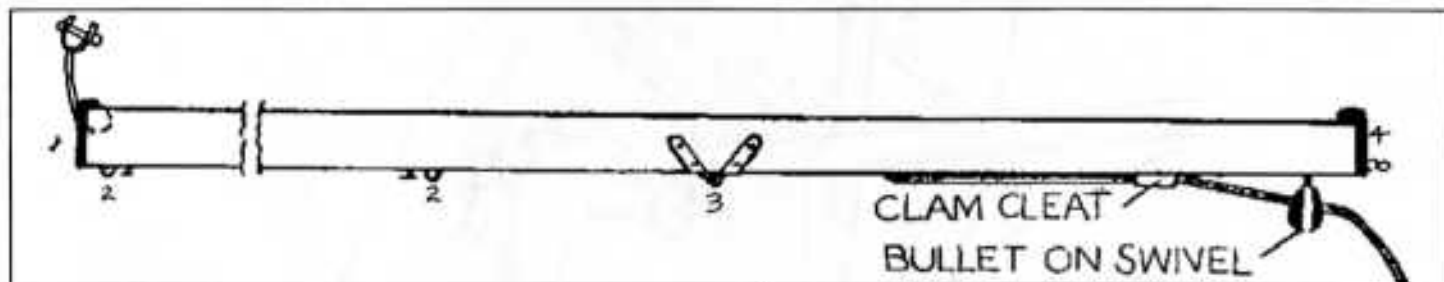
4:1 Black GF180	\$305.00
4:1 Silver GF181	\$305.00

Fully rigged, high power – includes 6:1 internal outhaul, external clam cleat, and self-fairleading swivel turning block.

6:1 Black GF182	\$325.00
6:1 Silver GF183	\$325.00

Kit boom – does not include outhaul system.

Black GF185	\$250.00
Silver GF186	\$250.00



Boom Hardware

Boom end casting

- ➔ Forward, includes main tack pin GF190\$18.40
- ↳ Aft, includes outhaul sheave GF191\$18.40

- 2 **Boom slider** – for internal track booms (Kenyon, Bryant, Great Midwest) for hanging mainsheet blocks, do not use as vang. GB180\$8.75

- 3 **Vang bale** – for attaching boom vang turning block; 4-hole boom claw spreads load on boom to minimize boom bend, includes fasteners.

Wood Boom GE180	\$10.80
Aluminum Boom GE181	\$10.80

- Boom bale** – used to mount mainsheet blocks on wood boom; stainless U-strap, 2 inches long with 2 1/4-inch opening, includes fasteners (not recommended for vang use)

RL317S	\$2.05
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- Mainsheet block** – wire-hung block with keyhole plate, for wood booms (not recommended for vang use).

RL350	\$12.65
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- Main tack pin** – quick-release pin, 1/4-inch diameter, fits hole in aluminum forward boom casting.

GB185	\$3.25
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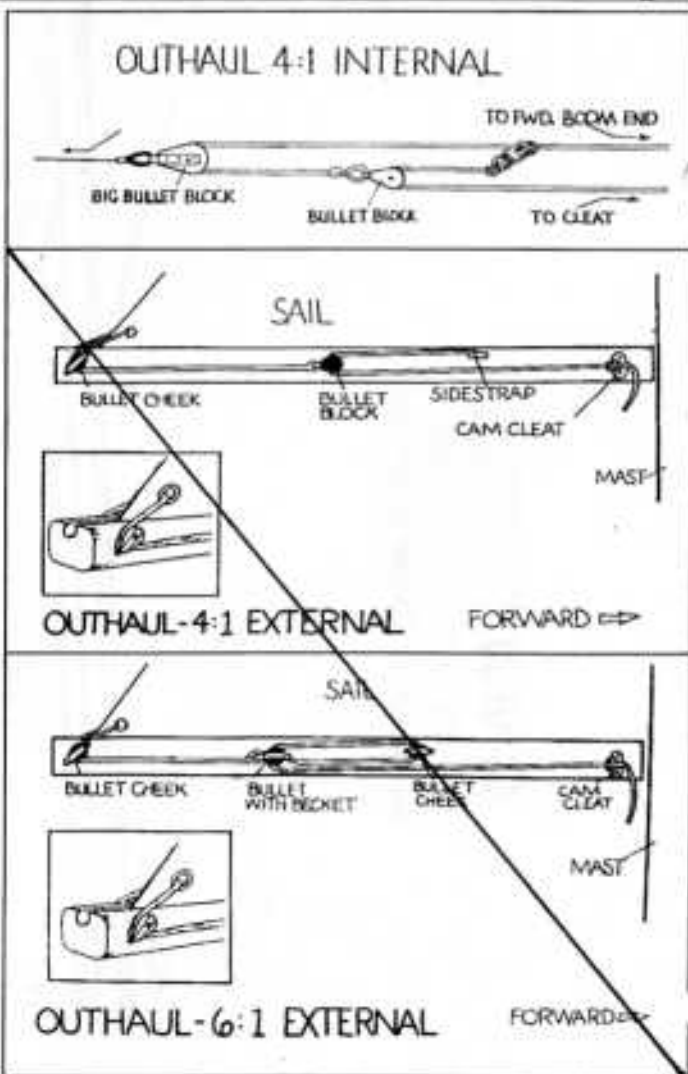
Outhaul Kits

- Internal** – for aluminum booms, includes external clam cleat and self-fairleading swivel turning block, control lines, and internal blocks.

4:1 mechanical advantage GF194	\$55.00
6:1 mechanical advantage GF195	\$66.00

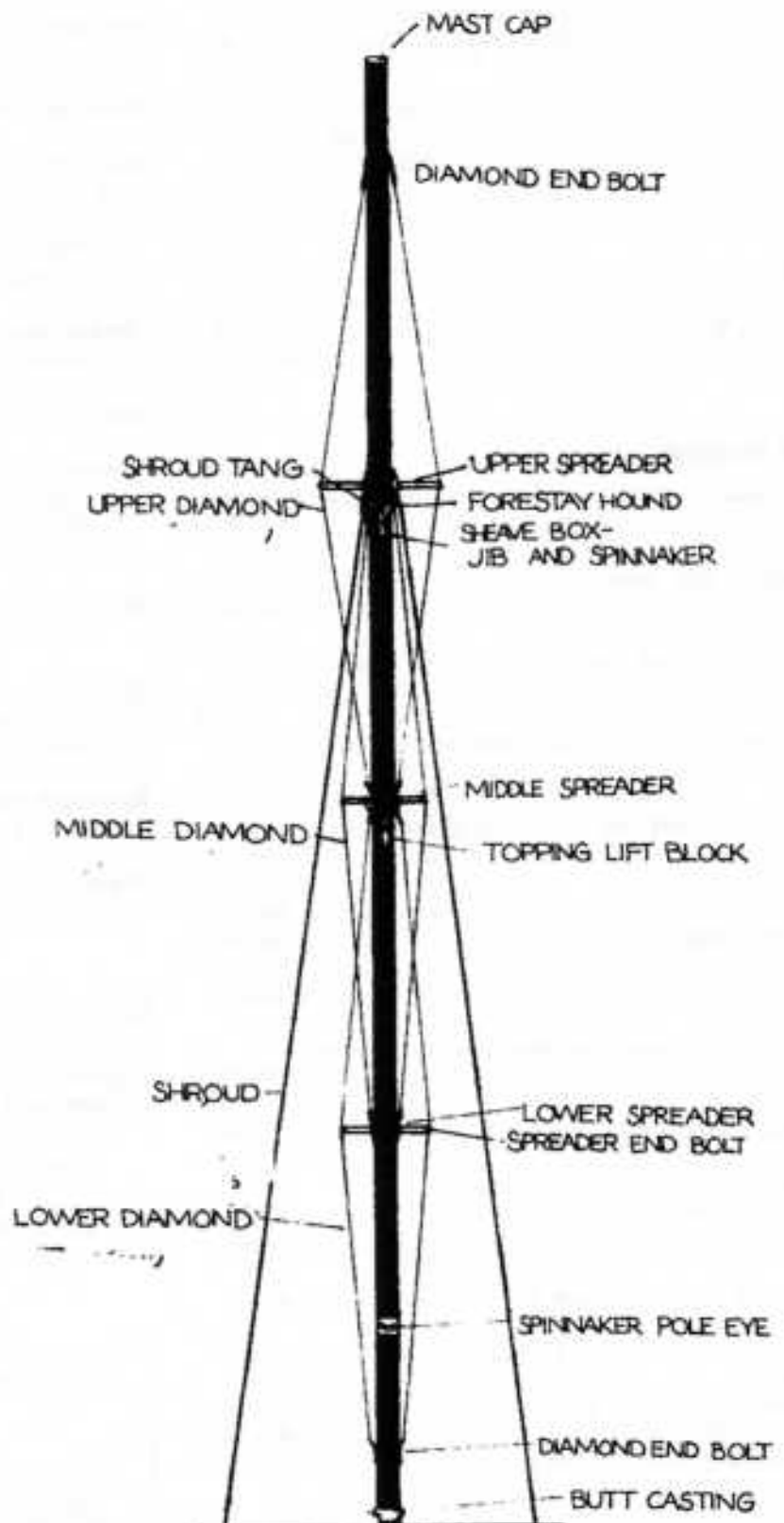
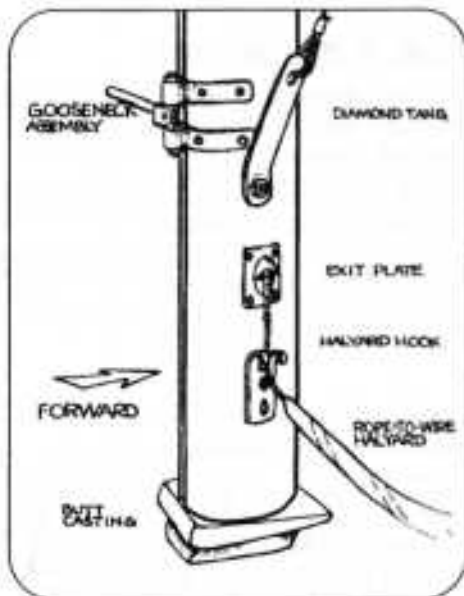
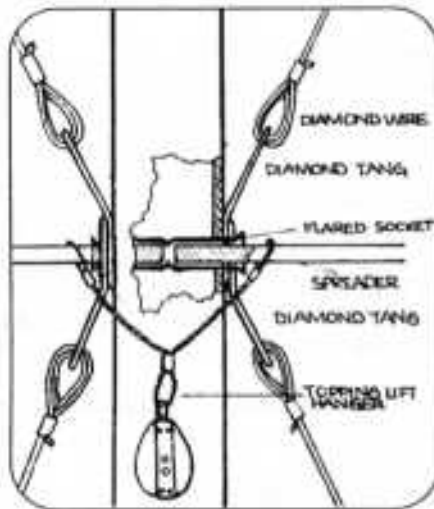
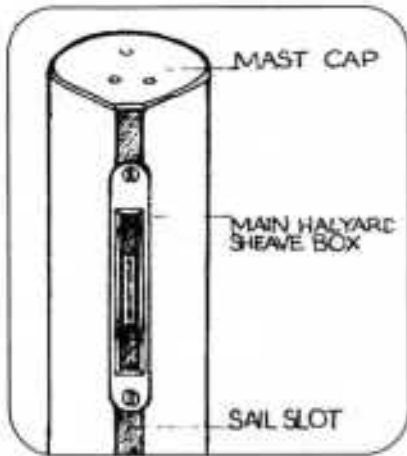
- External** – for wood booms, includes all required blocks, clam cleat and control lines.

4:1 mechanical advantage GF196	\$41.00
6:1 mechanical advantage GF197	\$50.00



Capital letters in parentheses refer to shipping codes - page 14

Great Midwest Mast



Mast, Mast Hardware, Spinnaker Pole

Great Midwest Mast

Black or silver (clear) anodized. Includes diamond stays, butt casting, mast cap, gooseneck, spinnaker pole ring, and hardware for side-exit main halyard. Does not include forestay or shrouds. (C, D)

Fully Rigged - includes rope-to-wire spliced main and jib halyards, 5/32-inch spinnaker halyard, set of six spreaders with end bolts, and wire-hung topping lift block.

Black Mast - Fully Rigged GF100\$730.00

Silver Mast - Fully Rigged GF101\$730.00

Mast Kit - deletes main and jib halyards, topping lift block, spreaders, and end bolts.

Black Mast - Kit GF105\$579.00

Silver Mast - Kit GF106\$579.00

Mast Hardware

Butt Casting - aluminum, for new style aluminum mast.
GB101\$8.00

Conversion Kit - converts bottom-exit main halyard to side exit. GC101\$7.00

Deck plate - for any aluminum mast, with fasteners.
GE101\$8.50

Deck plate - angled (milled) to provide pre-bend for selected sails. GE102\$11.50

Diamond end bolt and nut - through-mast bolt.
GC102\$0.75

Diamonds - Set of six GC110\$66.00
Upper (pair) GF113\$22.00
Middle (pair) GF112\$22.00
Lower (pair) GF111\$22.00

Exit plate - for side-exit main halyard, with fasteners.
GC103\$4.25

Forestay hound - with fasteners GB115\$8.70

Gooseneck assembly - with fasteners.
Aluminum Mast GF116\$20.95
Wood Mast GB116\$20.80

Gooseneck pin and square RL1/2\$13.00

Halyards - see page 22 for details and other halyard options.

Main - GMW standard GE140\$52.00

Jib - GMW standard GE158\$47.50

Spinnaker standard GB140\$12.55

Halyard hook - with fasteners
Mast mounted GC115\$2.75

Halyard snake - tool to re-string new or lost-in-the-mast halyards. GB145\$19.50

Mast cap - aluminum, with fasteners GF122\$6.25

Mast crank - for mast winches on old-style aluminum or wood mast.

Cast Aluminum GB110\$3.35

Stainless Steel with Plastic

Roller Handle GB111\$19.00

Sheave box - for main halyard HA5\$11.50

for jib and spinnaker halyard HA7\$17.15

Spinnaker pole eye - with fasteners RF602\$15.50

Spreader socket - Set of three GC150\$21.00

Upper GE152\$7.25

Middle GE151\$7.25

Lower GE150\$7.25

Spreader socket installation tools
GC140\$18.50

Spreaders - Set of Six GC120\$70.00

Short (middle or lower) each GE121\$11.50

Long (top), each GE122\$13.00

Spreader end bolts and adjusting nuts - for diamond tensioning, set of six GC125\$3.00

Topping lift hanger - wire-hung bullet block.
GF123\$10.00

Spinnaker Pole & Hardware

High strength 1 1/4-inch diameter aluminum tubing, wood plugs seal ends. Complete with eyestay for topping lift and stainless steel bronze end fittings. (B)

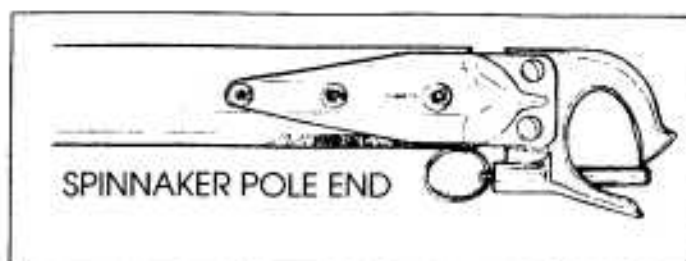
Complete GF130\$124.40

Pole only - no plugs, ends, or hardware

GF131\$35.00

Pole end - for 1 1/4-inch aluminum pole

RF677\$36.00



Capital letters in parentheses refer to shipping codes - page 14

Spinnaker Sheet System

Under-rail blocks are either big bullets (standard) or little Hexaratchets (deluxe) for more holding power. System includes spinnaker sheet, guy hooks, cleats and wedges, under-rail blocks, and through-rail blocks. Endless line reduces amount of line in bilge and makes it easier to grab when trimming the spinnaker.

Standard, endless sheet GC314	\$170.90
Standard, double-ended GC316	\$174.00
Deluxe, endless-sheet GC310	\$215.80
Deluxe, double-ended GC312	\$218.90

Traveler Control Systems

Trunk Cap Control - Double-ended 2:1 control system with controls mounted on trunk cap allows traveler movement to weather. Uses Harken blocks. Includes all turning blocks, control cleats, and control lines. Different makes of boats and trunk-cap widths require different turning blocks. Does not include traveler.

GMW, wood boat, 5-inch cap GC320	\$113.70
D&M early glass, Clark, 5-inch cap GC321	\$111.60
D&M late glass, 5-inch cap GC322	\$134.75
D&M wood, 3-inch cap GC323	\$107.60
D&M early glass, Clark, 3-inch cap GC324	\$104.65
D&M late glass, 3-inch cap GC325	\$128.20

Under-rail control - Double-ended 2:1 control system with control mounted under the rail, approximately 18 inches aft of the cross thwart. Includes turning blocks, cleats, mounting wood, and control lines. *Does not include traveler.*

GC328	\$89.80
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Traveler Track and Car - Harken low-profile track and car with 2 fixed sheaves for traveler control lines and eye strap for mainsheet block.

Car, track, and end stops (B) GC330	\$137.00
Car only H159	\$94.40
Track only (B) GB300	\$40.30
Standard end stops, pair H173	\$2.35
Traveler car balls, high load H177	\$23.00

Transom-Profile Pattern - A new transom top curve is required to mount Harken traveler. This pattern reduces the transom height to minimum. GG300

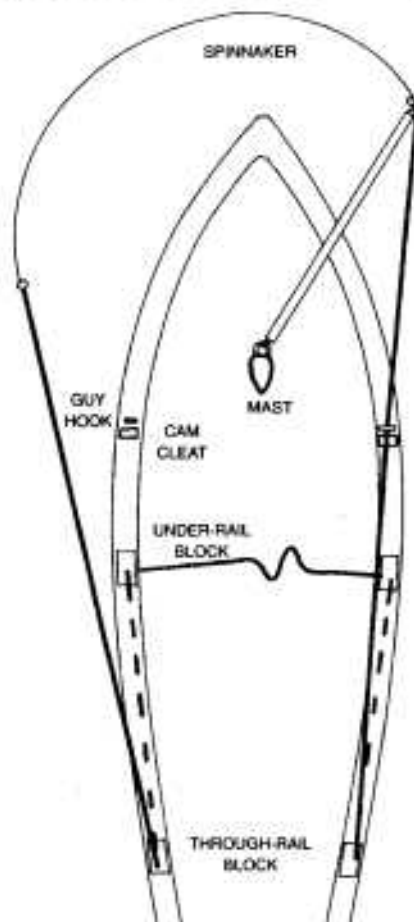
GG300	\$3.00
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PREVENTING TRAVELER DAMAGE

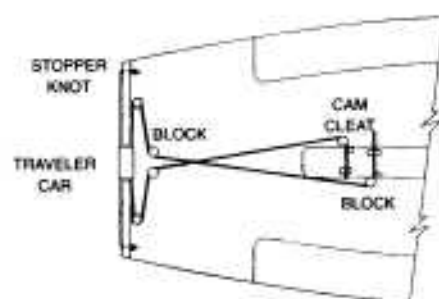
A problem common enough to comment on: "The car came off the traveler track. What do I do now?"

While the fix is not too difficult - new traveler balls can be purchased and installed using the blue gadget supplied with the car - the problem can be avoided. To quote the 1992 Harken catalog: "Arrange traveler tackle so that cars don't hit end stops, but are stopped by the rope."

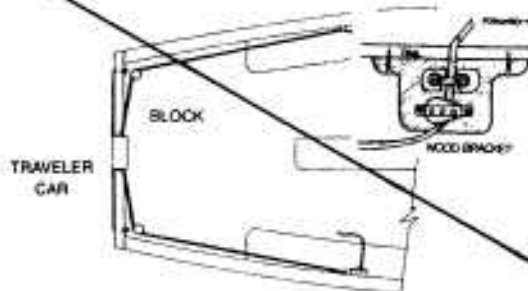
Spinnaker Sheet System-Endless



Trunk Cap Traveler Control



Under Rail Traveler Control



Kits

Boom Vang

These vang systems combine plenty of power with ease of use. All systems include blocks, mounting hardware and fasteners, control lines, and trunk-cap-mounted "360 Plus" control cleat.

8:1 track-mounted, Ronstan blocks:

GMW, wood boats GC340	\$150.00
Clark, D&M glass GC341	\$161.00

8:1 floating, Harken blocks:

GMW, wood boats GC344	\$154.00
Clark, D&M early glass GC345	\$157.60
D&M late glass GC346	\$159.60

12:1 floating, Hi power, Harken blocks:

GMW, wood boats GC347	\$174.00
Clark, D&M early glass GC348	\$177.70
D&M late glass GC349	\$180.00

Centerboard Hoist

This 10:1 drum system uses a nylon Holt-Allen drum winch. Includes haul strap, control line, turning block, bushings, and trunk-cap-mounted "360 Plus" control cleat.

GMW, wood boats GF350	\$155.70
Clark, D&M glass GF351	\$162.70

Cunningham

Double-ended systems allow access from either side of boat. Includes all required blocks, lines, and cleats.

Grating mount (plastic clam) GC370	\$32.60
Grating mount (aluminum clam) GC371	\$42.60
45° brace mount (cam) GC372	\$76.00

Topping Lift

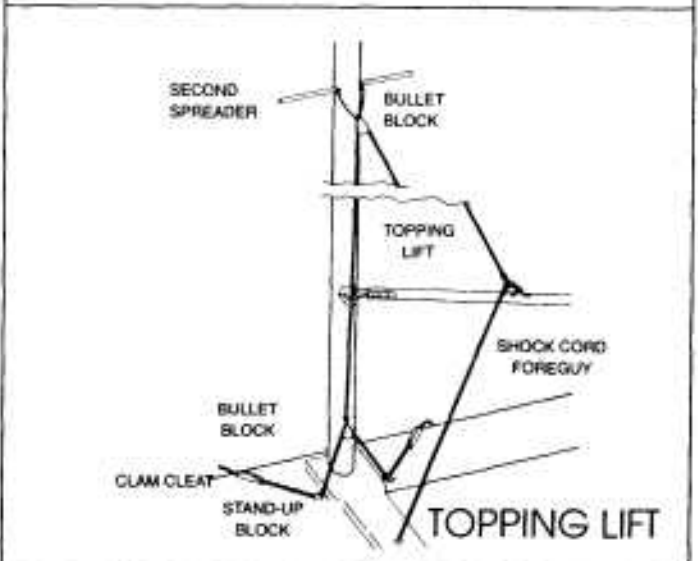
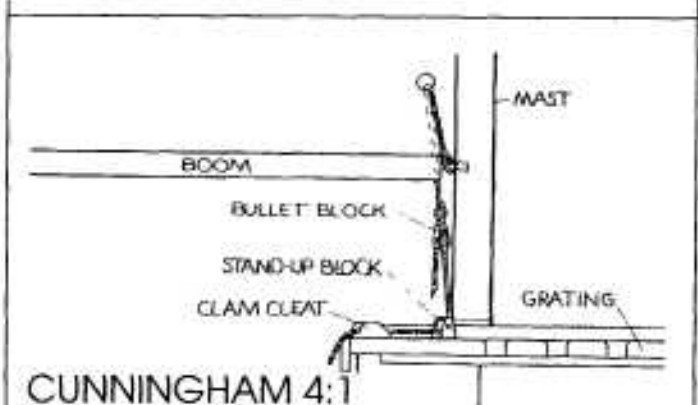
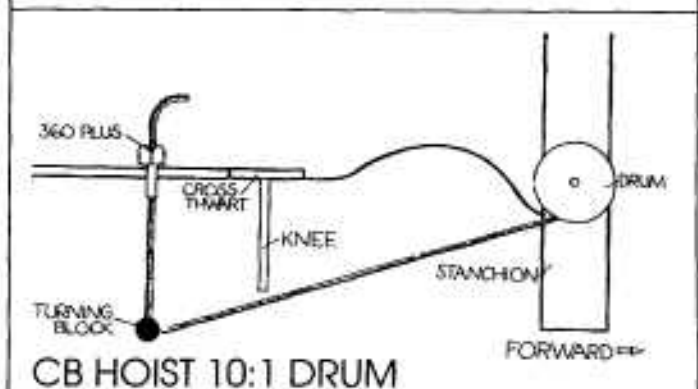
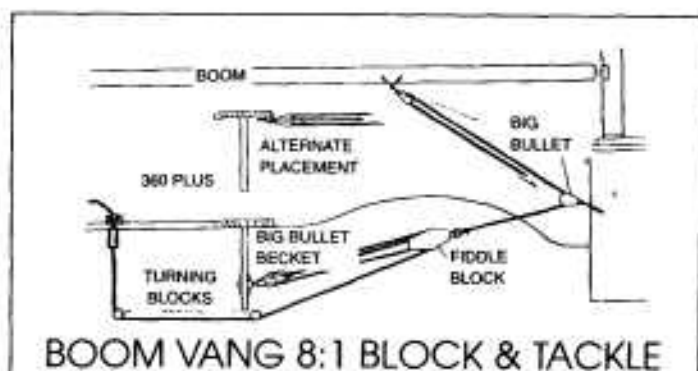
Double-ended systems. Includes wire-hung topping lift block on mast (see mast drawing), turning blocks, lines, cleats, and shock cord downhaul.

Grating mount (plastic clam) GC381	\$51.00
Grating mount (aluminum clam) GC382	\$69.00
Stanchion mount (plastic clam) GC383	\$59.00
Stanchion mount (aluminum clam) GC384	\$69.00
45° brace mount (cam) GC388	\$93.60

Spinnaker Halyard System

Block and heavy-duty Harken cam cleat are aligned to automatically lead halyard through cam cleat. Includes turning block on stanchion.

With halyard GC390	\$51.90
Without halyard GC391	\$39.35



More Kits

Bow Lever Assembly

Allows above-rail attachment of forestay. Pigtail attaches the forestay to on-off lever. Turnbuckle on forestay provides fine adjustment.

Complete assembly GF400	\$70.80
Cover plate GB400	\$13.75
Lever and keeper GC402	\$34.95
Jib tack - bolt swivel GC403	\$5.80
Pigtail (short) GE400	\$16.50
Forestay with turnbuckle	
Standard GE160	\$42.50
North Sails - '91 or later GE161	\$42.50
Pigtail	
Short, 3/4" dia. fairlead GE400	\$16.50
Long, 3/4" dia. fairlead GE404	\$16.50
Long, 1/2" dia. fairlead GE405	\$18.50
Jib tack - plate swivel RF121	\$9.95
Stem wedge with fiberglass GF801	\$10.00

Complete assembly (above) is for new, kit, or rebuilt boats. Older boats / upgrades can re-use some existing parts - see table below.

Builder/Bow Plate distinguishing features				
ITEMS	D&M-Brass Thick plate, rectangular hole	D&M-Stainless thin plate round hole	Clark forestay tang above rail	GMW-Early forestay tang above rail
Modifications to Bow Plate	enlarge hole to 3/4"	-	enlarge hole to 3/4"	enlarge hole to 3/4"
Pigtail	long-3/4" fair lead	long-1/2" fair lead	short-3/4" fair lead	short-3/4" fair lead
Lever & keeper	new req'd	new req'd	new req'd	new req'd
Jib Tack	Plate Swivel req'd	Plate Swivel req'd	-	-
Stem Wedge	-	-	new req'd	-
Forestay	new req'd	new req'd	-	-
Cat No. Kit	GF401	GF402	GF403	GF404
Price Kit	\$99.70	\$101.70	\$61.45	\$51.45

Jib Quick-up

System is normally port-mounted. Please specify if starboard mounting is desired. Includes track, slider, turning block, and control lines. Does not include halyard. Requires use of halyard with stop for attachment to halyard hook.

Standard - 4:1 system uses a slide-mounted fiddle block joined to a halyard hook. The cleat is integral with the fiddle block. GF410\$59.70

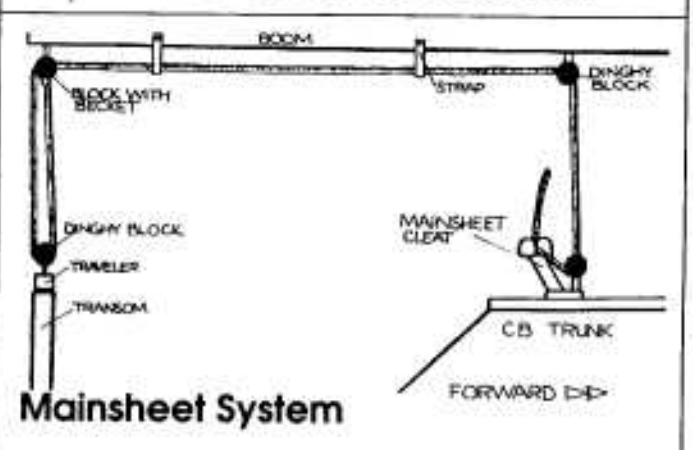
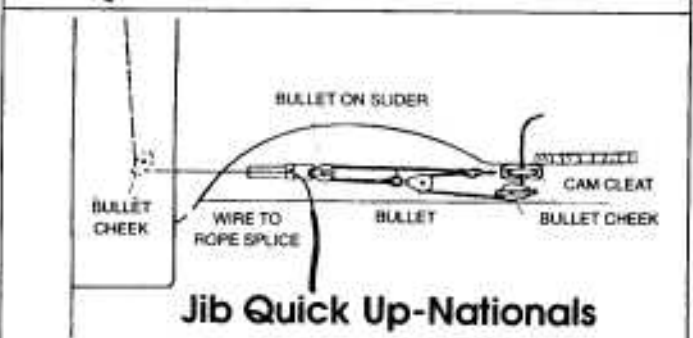
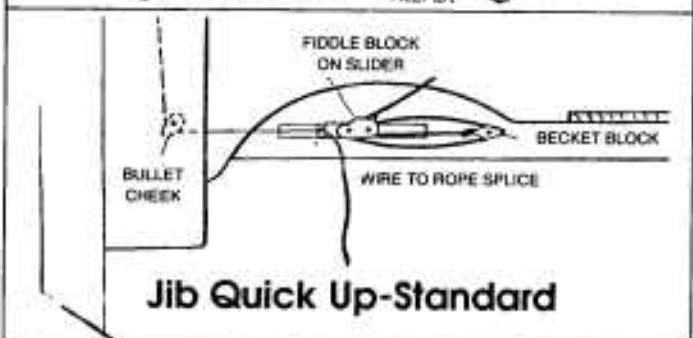
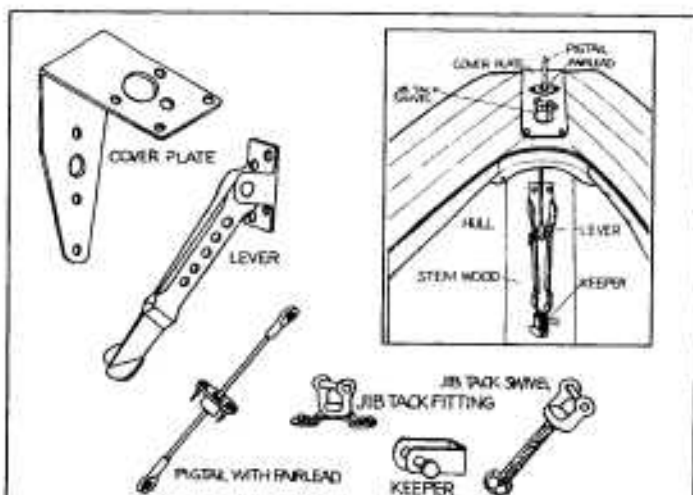
Nationals - 4:1 system allows the halyard to be adjusted from either side of the boat. The cleat is mounted on the trunk side forward of the cross-thwart.

GMW, Wood GF415\$69.85
Clark, D&M fiberglass GF416\$68.60

Mainsheet System

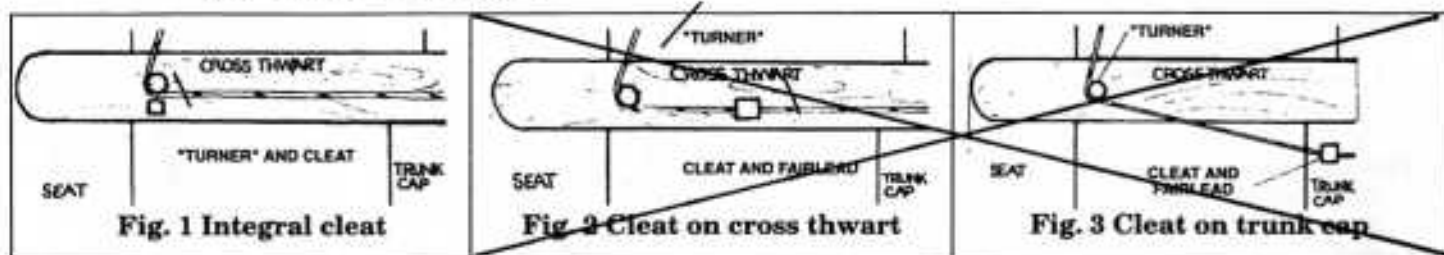
3:1 system uses Harken 144 mainsheet cleat with either dinghy block (standard), or small Hexaratchet (deluxe) for greater holding power. Also includes mainsheet blocks on boom and traveler car.

Standard GC420\$171.35
Deluxe GC425\$191.15

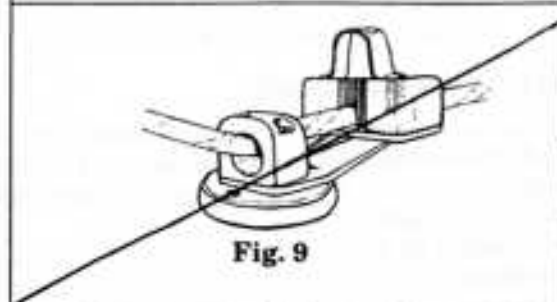
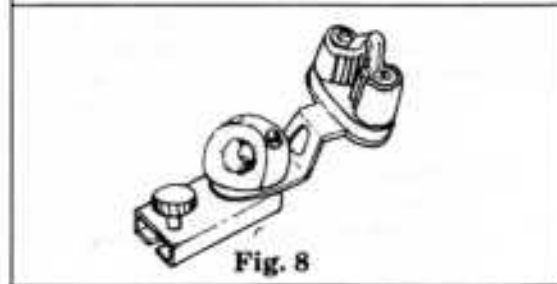
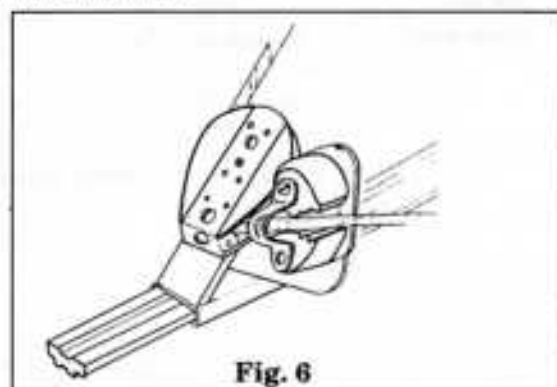
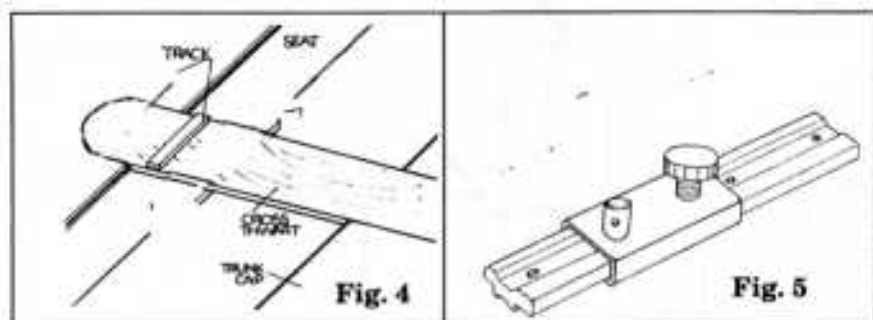


Jibsheet Cleating

All jibsheet cleating systems turn the jibsheet on the seat tank or cross thwart, using fairlead or a block. The systems differ in where the cleats are located. The cleats can be: integral with the fairlead and/or block (Fig. 1), located inboard on the cross-thwart (Fig. 2), or located on the centerboard trunk cap (Fig. 3).



The turning point can be fixed (pad-eye mount) or adjustable (track mount). If track is used, it can be mounted on the cross-thwart, on the seat, or a pair of moveable wood bars that "sandwich" the cross-thwart. (Figure 4) Track can be "T" or "internal" (Figure 5) and table below.



Cars, Track, and Blocks

ITEM	Track Style			
	T-Track		Internal 5/8"	
	Cat. No.	Price	Cat. No.	Price
Cat. Dingy Block and Spring	GC451	\$33.95	GC461	\$35.25
Cat. Hexalatchet and Spring	GC452	\$53.75	GC462	\$55.00
Cat. Only	GB450	\$12.65	GB460	\$13.95
Track for Thwart Mount 5 1/2"	GE450	\$4.00	GE460	\$5.00
Track for Seat or Jib Bars 12"	GB451	\$5.50	GB461	\$8.50
End Stops for Track	-	-	GB462	\$1.60

Integral Cleating Systems — Each cleat includes heavy-duty Harken ball-bearing cam cleat; adjustable systems require T-track. Price is per pair.

Block and Cleat

- Adjustable - Jib master (Figure 6) GE455\$144.30
- Fixed - Harken (Figure 7) H205\$116.90

Fairlead and Cleat

- Adjustable with cleat (Figure 8) GE458\$127.70
- Fixed - Fairlead and cleat assembly (Figure 9) H240\$81.70

Miscellaneous Parts

Ash Jib Bars Complete assembly

- T-Track GF457\$45.00
- Internal Track GF407\$51.00
- Bars and end bolts only GE457\$30.00

Fairlead, Cleat and Wedge Assembly GC459\$29.60

Have a question? Call us at (614) 965-4511.
 FAX (614) 965-3704

Blocks and Cleats

Bullet Blocks

Sheave diameter 1 1/8 inch - for 3/16 and 1/4 inch line.

Bullet - for traveler, Cunningham, topping lift, miscellaneous H082.....\$6.15

Bullet with becket - for external outhaul
Single Bullet with becket H083.....\$7.75

Double Bullet - for various multi part control systems
H084.....\$17.65

Through-deck bullet - for traveler control at trunk cap, Cunningham H088.....\$9.30

Bullet cheek - turning block for halyards, centerboard control, vang control, traveler control, topping lift control H092.....\$8.40

Stand-up bullet - for Cunningham, topping lift H096.....\$9.45

Bullet on swivel - for turning block on boom, topping lift H166.....\$10.75

Big Bullet Blocks

Sheave diameter 1 1/2 inch - for line up to 3/8 inch

Big bullet - for turning block at stanchion for boom vang, internal outhaul H125.....\$11.00

Big bullet cheek - for under-rail turning block for spinnaker sheet H132.....\$14.20

Big bullet with becket - for low-friction boom vang H126.....\$13.75

Dinghy Blocks

Sheave diameter 1 3/4 inch - for line up to 3/8 inch

Dinghy block - for mainsheet H021.....\$16.20

Dinghy with becket - for mainsheet H022.....\$17.85

Dinghy with swivel - for jibsheet cleating, mainsheet cleat H023.....\$16.75

Through-deck dinghy - for through-rail block for spinnaker sheet H046.....\$20.20

Hexaratchet Blocks

Sheave diameter 2 1/4 inch - for line up to 3/8 inch, with on/off ratchet action for extra holding power

Little Hexaratchet - for mainsheet cleat, jibsheet H019.....\$36.55

Little Hexaratchet cheek - under-rail turning block for spinnaker sheet

starboard H017.....\$36.55

port H018.....\$36.55

Miscellaneous Blocks

Stand-up block - small block for Cunningham, topping lift, with fasteners
RF569.....\$6.00

Mainsheet block - wire-hung block with keyhole plate, for wood booms RL350.....\$12.65

Fiddle block - small stainless fiddle block for boom vang RF186.....\$16.80

Fiddle block with V-jamb - small stainless fiddle block with V-jamb cleat for jib halyard
RF187.....\$19.20

Harken fiddle block - ball bearing fiddle block for boom vang. When coupled with Harken 126 (big bullet with becket) gives 4:1 mechanical advantage.
H053.....\$31.50

Cleats

Clam cleat - medium, black plastic cleat for Cunningham, topping lift CL203.....\$4.95

Clam cleat - medium, aluminum cleat, for Cunningham, topping lift CL211-I.....\$9.95

Clam cleat - small, aluminum cleat, (small base) on hook for outhaul CL211-II.....\$8.50

Cam cleat - small, for external outhaul, control lines Servo 11 CB370.....\$14.55

Cam cleat - light duty, ball bearing cleat, for Cunningham, traveler, topping lift, vang, external outhaul H200.....\$11.40

Cam cleat - heavy duty, ball bearing cleat, for mainsheet cleat, jibsheet cleat, spinnaker guy cleat, spinnaker halyard H150.....\$21.75

Mainsheet cleat - ball bearing swivel base, includes heavy duty ball-bearing Harken cleat
H144.....\$65.10

360 Plus - 360° swivel cleat with Harken 200 cleat, for trunk cap controls, GF360.....\$49.25
Without cam cleat GB360.....\$33.00

Gift Certificates

Gift certificates from Great Midwest make the perfect present for your favorite Thistler.

Available in amounts of
\$25 \$50 \$100

Gift certificates can be used to purchase any item available from Great Midwest.

Foils & Tillers

Centerboards

All centerboards are close to minimum weight and extremely stiff. Includes roller assembly. (C,D)

Standard — Fits all boats except as noted below
GF200.....\$465.00

Late-model D & M— head is shortened and tip profile changed to allow board to fully retract in newer D & M boats
GF202.....\$465.00

Schock — Thickness of head is reduced to 1 inch to fit narrow trunk
GF204.....\$565.00

Rudders

Laminated mahogany, shaped and covered with clear fiberglass for extra strength and durability. Can be ordered in various stages of completion. (B, D)

Rudder blank — profiled to TCA outline, 13/16 inch thick, with no shaping or cheeks. Requires hand shaping, fiberglassing, sanding, coating, and installation of cheeks
GF210.....\$45.00

Rudder blade, shaped, fiberglassed — requires installation of cheeks, painting or resin coating, and sanding
GF211.....\$200.00

Rudder blade, shaped, fiberglassed, sprayed — needs wet sanding and installation of cheeks
GF212.....\$220.00

Rudder, complete no hardware
GF213.....\$325.00

Rudder, complete with hardware mounted — includes stainless rudder cap and two heavy duty pintles
GF214.....\$385.00

Rudder cheeks — to attach to top of blade, pair
GF216.....\$15.00

Rudder Fittings

Pintle — heavy duty, 3/8 inch diameter pins (pintles are the fittings with pins)
short pin (upper) RL490S\$14.55
long pin (usually lower) RL490L\$14.85

Gudgeon — heavy duty double strap
RL490.....\$8.80

Rudder cap — stainless steel, with fasteners
GB220\$19.85

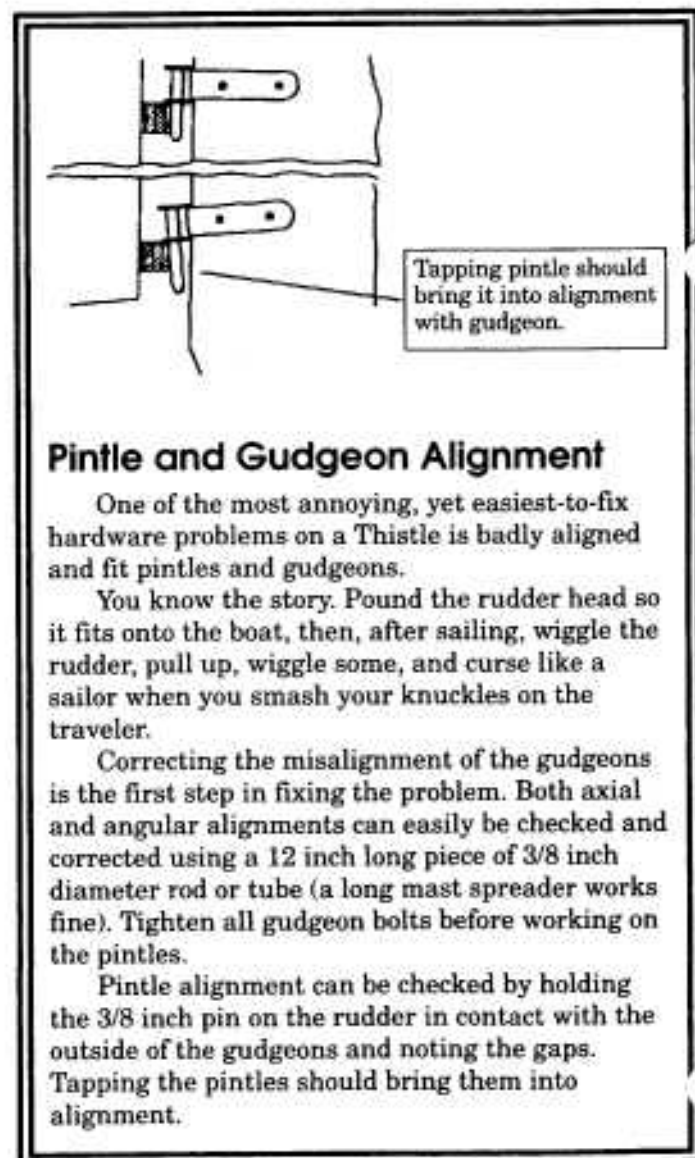
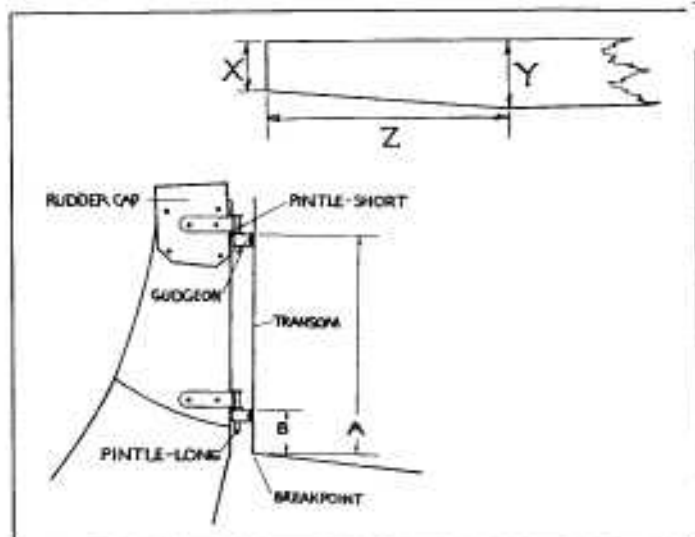
Tillers

Tiller — ash, varnished, specify dimensions of tiller as shown in sketch (B) GE240\$38.00

Tiller extension — 42 inch teak hiking stick, with T-grip, oiled (B) GE245\$30.00

Tiller swivel — stainless universal swivel joint
RF127.....\$16.35

Tiller assembly — complete, with teak hiking stick and stainless tiller swivel (B)
GF240.....\$89.50



Pintle and Gudgeon Alignment

One of the most annoying, yet easiest-to-fix hardware problems on a Thistle is badly aligned and fit pintles and gudgeons.

You know the story. Pound the rudder head so it fits onto the boat, then, after sailing, wiggle the rudder, pull up, wiggle some, and curse like a sailor when you smash your knuckles on the traveler.

Correcting the misalignment of the gudgeons is the first step in fixing the problem. Both axial and angular alignments can easily be checked and corrected using a 12 inch long piece of 3/8 inch diameter rod or tube (a long mast spreader works fine). Tighten all gudgeon bolts before working on the pintles.

Pintle alignment can be checked by holding the 3/8 inch pin on the rudder in contact with the outside of the gudgeons and noting the gaps. Tapping the pintles should bring them into alignment.

Capital letters in parentheses refer to shipping codes - page 14

Stainless Hardware

Bales

Stainless U-strap — 2 inch long with 3/4 inch opening, for stanchion mounting of vang
RL317A\$1.20

Stainless U-strap — 3 1/4 inch long with 3/4 inch opening, for stanchion mounting of vang
RL317B\$1.95

Stainless U-strap — 2 inch long with 2 1/4 inch opening, for mounting mainsheet blocks to wood boom, includes fasteners (not recommended for vang block)
RL317S\$2.05

Vang Bale — 4-hole boom claw spreads load on boom to prevent bend, includes fasteners
Wood GE180\$10.80
Aluminum GE181\$10.80

CB Trunk Nose Plate

Stainless plate — fits at front of centerboard trunk opening. Eliminates wear by line or wire.
Includes fasteners GB800\$12.65

Chain Plate

U-Channel, 4 inch long — attaches shroud to seat, 10 adjustment holes
RL352\$3.25

Clevis Pins

3/16 inch diameter stainless pins (length measured from under head to center of hole)

Short — 1/2 inch long, attaches shroud and forestay to mast
GB150\$.55

Medium — 11/16 inch long, for small shackles
GB340\$.50

Long — 15/16 inch long, for head of dinghy blocks
GB341\$.65

Eyestraps

Small — 1 1/4 inch between centers
H073\$1.00

Medium — 1 1/2 inch between centers, fits Harken 150 & 200
H137\$1.35

Medium — low profile, 1 1/2 inch between centers, fits Harken 150 & 200
H201\$1.05

Large — 4-hole eyestrap, 3 1/2 inch long, for aft lifting strap
RL314B\$1.75

Sidestrap — 2 inch long, for hiking strap attachment, turning blocks
RL319\$2.00

Quick Release Pins

Solid stainless steel with ring on one end and ball detent on the opposite end

Small — fits 3/16 inch hole, attaches shroud to chain plate
GB005\$2.25

Large — fits 1/4 inch hole, use as main tack pin on boom
GB185\$3.25

Ring Dings

Small — 3/16 inch
GB155\$.10

Medium — 1/4 inch
GB156\$.11

S-Hook

Stainless steel hook — for topping lift, lifting bridle
RF48A\$4.70

Shackle

Small — with clevis pin and ring for Harken dinghy blocks
H072\$1.95

D-shackle — 1 inch long, with screw pin, for lifting bridle
RF622\$2.65

Double hole — couples Harken dinghy or hexaratchet to jib car or mainsheet base
H093\$3.95

Shroud Adjuster

Attaches between chain plate and end of shroud (eye swage only), to provide vernier adjustment, includes 2 clevis pins and rings
GB011\$13.00

Shroud Plate Assembly

Includes pair of wrap-around shroud plates, nylon bushings, fasteners, and instructions
GB015\$19.15

Spinnaker Guy Hook

Stainless guy hook with through-bolt, and rubber pad
RF91\$12.10

Replacement pad
GB310\$2.50

Stand-Up Spring

Small — for bullet blocks
H097\$.40

Large — for dinghy blocks
H071\$.65

Miscellaneous Hardware and Accessories

Bailer — Andersen (Elvstrom) Super-max, self-bailing bailer with stainless body. Fits hole 2 3/16-inch x 4 3/8-inch, with fasteners and gaskets GB020\$64.00

Bailer Gaskets — Rubber, for Andersen bailer, used as spacer to bring bottom of bailer flush with outside of hull. Specify thick (1/8-inch), medium (1/16-inch) or thin (1/32-inch). Thick GB021\$2.95
Medium GB022\$2.95
Thin GB023\$2.95

Bilge Stiffener Kit — for fiberglass boats, provides two stiffeners from forward tank to stern tank, and two stiffeners from seat tank to stern tank. Includes stiffener strips of closed-cell PVC foam, fiberglass mat, and instructions. *Does not include resin.* (B)
GB820\$40.00

Boom Crutch — wood support to hold boom horizontal when boat is at anchor or on trailer. Slides through bracket on aft grating, rests in wood socket on keelson. Mounting hardware included (B)
Mahogany GB590\$17.25
Teak GB690\$20.75

Bulleyes — deck mounted stand-up line leads.
Black plastic, center hole holds up to 1/2-inch line
GB802\$5.00

Bushings — CB drum shaft bushings — nylon
3/4-inch GB811\$1.40
1-inch GB812\$1.50
Adaptor, from 1 inch to 3/4-inch diameter shaft
GB813\$1.50
Shroud plate bushings — white nylon inserts
GB016\$1.35

CB Drum — 10:1 Holt Allen drum with 3/4-inch diameter aluminum shaft, for CB hoist, includes nylon bearings, spacer washers, end bolt and mounting instructions GF810\$65.00

CB Gasket — sailcloth gasket for centerboard slot
GB825\$26.00

CB Haul Strap — 1-inch wide webbing strap couples drum and centerboard, includes retainer bar for attachment to drum shaft, and shackle to attach to CB tangs GB815\$9.00

CB Roller Assembly — includes two rubber rollers, two stainless tangs, bolt and nut.
Assembly GF215\$11.50
Roller only, each GB215\$2.50

CB Shims — set of plastic strips, fasten to sides of centerboard at head to eliminate side motion in centerboard slot, includes fasteners.
GF220\$12.00

Compass — Ritchie RU90, sailboat racing compass, blue face with white rim and numbers, fits 3 1/2-inch to 4-inch hole, mounts in compass mount
GB830\$90.00

Compass Mount — unfinished compass mount fits between stanchions at rear of forward grating. Fits Ritchie RU90 or Danforth compass. Specify type and diameter of compass, wood, and distance between stanchions.
Mahogany GE591\$24.00
Teak GE691\$30.00

Course Computer — Hazard course computer allows quick, easy determination of upwind tacking angles, course to next mark GB841\$9.00

Flotation — positive flotation made from 1 lb./sq. ft. styrofoam. (B)
Bow — contoured for under forward grating in wood boats GE840\$97.00
Seat — contoured for under seats in wood boats (4 pieces) GE841\$87.45
Stern — contoured for under aft grating of boats without stern tanks (2 pieces) GE843\$55.00
Stick — for tanks in glass boats, (25 pieces) 1 set per tank GE845\$30.00

Hiking Strap — 2-inch polypropylene webbing straps.
Straight — attach to cross thwart, bow tank and transom (pair) GB850\$30.00
Droop — adds buckled straps above cross-thwart for maximum hiking (pair) GB851\$45.00

Inspection Port — white plastic, mounts in 4-1/2-inch hole, complete with O-ring seal, fasteners.
GB855\$6.30

Keel Strip — 1/2-inch oval aluminum strip predrilled and countersunk for No. 6 screw. (B)
Set — includes 1 aft, 2 trunk, 1 bow (extends down stem and aft 1 foot), 1 forward (between bow and trunk) GE820\$30.00
Per Foot GE825\$1.25
Screws — for full set GB720\$3.50
Each GB721\$0.07

More Hardware and Accessories

Lifting Bridle — 3/8 inch Dacron line, with 2 stainless S-hooks for attachment to forward grating, and D-shackle for aft attachment. Grating hardware included; aft hardware not included

	GF820.....	\$37.60
Bridle only	GF821.....	\$30.20

Mast Support — plywood support for carrying mast while trailering, sits on aft grating with toggle to fit through tiller hole, padded edges

GE830.....	\$12.00
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Rubber Pad — replacement pad for spinnaker guy hook

GB310.....	\$2.50
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Tension Gauge — Loos tension gauge for checking tension on rigging

GB860.....	\$38.95
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Wood Wedges

20° angle, teak — for Harken cleat (traveler on trunk cap, jib sheet cleating) GE361.....\$1.85

45° angle, teak — for bullet cheek on stanchion (topping lift) GE381.....\$1.85

Flat, teak — for Harken camcleat on rail (spinnaker sheeting) GE311.....\$1.85

Rectangular — for hiking strap attachment under cross thwart, set of 4 GE3850.....\$8.00

Stem wedge, cedar — for boats with no wood in stem (Clark), needed for bow lever, includes fiberglass mat, filler GF801.....\$10.00

360 Plus Mounting block — to mount 360 Plus cleat on boats with no wood under trunk cap, includes filler and fiberglass mat GE360.....\$8.00

Who Built My Boat?

This is the most common question asked of us by new Thistlers. You might need this info when you order, or you may just be curious.

We'll list the builders, some general background, and then some identifying details on the boats built by the main builders.

This discussion will apply to factory-built boats — rebuilds, major repairs, and kit-builts will obviously change some of the observations.

The class has had 14 builders over its 48-year life. One builder constructed wood boats only, two built in wood and fiberglass, and the remaining 11 built only

fiberglass boats.

Of the fiberglass builders, 7 designed interior tanks, modified details, and built their own mold sets. Five of them built 50 boats or more. The other builders either built molds under license or bought molds when one of the major builders (or successors) disposed of the molds.

As an additional identifier, all builders of boats since 1972 are/were required by Federal law to display an identifying serial number on the transom — either molded in or on a nameplate. The builder of a boat constructed after 1972 should be identifiable from its nameplate or serial number.

Builder	Type	Mold	Years	Number
Douglas & McLeod	W, F	D	45-78	lots
Schock	W, F	S	56-76	lots
Clark	F	C	66-75	lots
Great Midwest	F	G	75-93	275
Fox	F	F	79-84	50
Fox River	W	-	47-49	10
Ellie	F	D	65±	10

Some of the major distinguishing features of the major builders:

Interior surface — all D & M had roving as interior surface

Interior spatter pattern — D & M used dot pattern; GMW, Fox, Clark, Schock used spatter

Rail hull joint details

thickness of rail — Schock rails were 1" thick, others were 3/4"

thru-hull appearance — Schock, GMW, Fox did not show hull edge

Bow tank appearance/size — Clark had molded-in Thistle emblem, Clark and Schock had lip at

Builder	Type	Mold	Years	Number
Filip	F	D	61 ±	10
Aleph	F	A	76-78	5
Northwind	F	D	73-75	10
McLaughlin	F	C	79±	2
First to the Mark	F	C	78-80	20
Spens	F	C	86-90	10
McCartney	F	A	92-93	2

aft edge, GMW has drainage grooves running parallel to hull-tank edge, Clark and GMW used max-height tank (14" from rail), D & M used same color and texture as hull interior

Stern tank

arched — late D & M; **full stern** — some Schock;

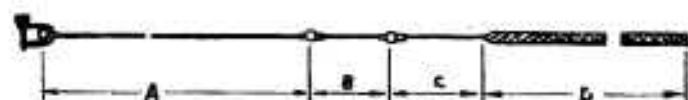
no tank — some early D & M, some Schock;

pair — some D & M, all Clark

Crossthwart/seat joint — Schock has 5" lap, others 11" lap, GMW and Fox had curved ends

Knees — Clark used hollow, wide knees; early D & M used thin FG with flanged edges, late D & M used gel-coated wood

Wire, Line, Halyards



Wire — Forestay

GMW standard — 1/8-inch 1x19 wire, swage fork top, turnbuckle lower end; attaches to fixed tang or forestay lever wire above rail. Length is with turnbuckle half open.

GMW Standard Length 17' 3" GE160	\$42.50
North Standard Length 17' 4 1/2" GE161	\$42.50

Custom length - turnbuckle end — 1/8-inch 1 x 19 wire, swage fork top, turnbuckle lower end. Specify length between holes with turnbuckle half open.

GE165	\$46.70
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Custom length - fixed lower end — 1/8-inch 1 x 19 wire, swage fork top. Specify distance between holes.

Swage Fork Lower GE166	\$33.25
Swage Eye Lower GE167	\$28.50

Wire — Shroud

1/8-inch 1 x 19 wire, swage fork each end

GMW standard length 18' 3", pair GE170	\$56.00
D&M standard length 18' 5-1/2", pair GE171	\$56.00
Custom length, pair GE179	\$60.00

Line — Custom Cut

3/8-inch Samson XLS Yacht braid white/blue GB870	\$.80/ft
1/4-inch Samson XLS Yacht braid white/blue GB871	\$.45/ft
white/red GB872	\$.45/ft
3/16-inch Samson XLS Yacht braid white/blue GB874	\$.27/ft
white/red GB875	\$.27/ft
5/32-inch Marlowe Prestretch GB877	\$.23/ft
Shock cord GB878	\$.20/ft
Leech line - 1/8-inch dacron GB879	\$.15/ft

Pre-cut Line

Mainsheet — 45 feet (3/8-inch) GB420	\$34.20
Jibsheet — endless, 29 feet (3/8-inch) GB421	\$22.05
Spinnaker sheet — endless, 61 feet (1/4-inch) GB315	\$26.85
Spinnaker sheet — Double-ended, 38 feet each GB316	\$29.95

Halyards

Jib halyard — 3/32-inch wire spliced to 3/16-inch line "D" above is 18' 6".

GMW standard — clips on adjustable hook on side of centerboard trunk, 1 ball near spliced, distance between ball and ball on shackle is 21' 8" ("A" above)

GE158	\$47.50
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Custom length GE159

Main halyard — 3/32-inch wire spliced to 3/16-inch line, "D" above is 25' 0"

GMW standard — exits side of mast, two balls near splice, distance between top ball and ball on shackle 24' 0" ("A" above)

GE140	\$52.00
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Custom spacing of balls GE149

CB trunk or stanchion lengths — specify distance from top ball to ball on shackle GE141

Spinnaker halyard — 54 feet, 6 inch long (5/32-inch)

Standard length GB140	\$12.55
Custom length GB141	\$.23/ft

Halyard snake tool to re-string new or lost-in-the-mast halyards GB145

Rigging Tip

The stock D&M forestay used 3/32-inch diameter wire. With today's higher rig tension, 3/32-inch wire allows too much stretch, so we recommend using 1/8-inch wire. If your forestay wire is smaller in diameter than your sidestay, you probably have 3/32-inch wire and might want to replace it.

Wood, Tools & Supplies

Structural Wood Components

Inwales, set (C, D)

Regular — glass or wood hulls

Teak GE602.....\$275.00
Mahogany/Ash GE502.....\$195.00

Glass-hiding, glass hulls only

Teak GE603.....\$295.00
Mahogany/Ash GE503.....\$215.00

Outwales, set (C, D)

Teak GE605.....\$110.00
Ash GE505.....\$70.00

Rail replacement kit — Regular inwales, outwales, and all required screws, bolts, plugs, epoxy glue, filler, set of shroud plates, counterbore, long drill bit, packing charge and instruction. (C, D)

Teak GF600.....\$555.00
Mahogany/Ash GF500.....\$435.00
Add for "glass hiding" GG600.....\$35.00

Grating, (C, D) —

Forward — Teak

unassembled, drilled, screws GE610.....\$280.00
as above, edge-routed GE611.....\$290.00
fully assembled GF610.....\$340.00

Forward — Mahogany

unassembled, drilled, screws GE510.....\$170.00
as above, edge-routed GE511.....\$180.00
fully assembled GF510.....\$230.00

Aft — Teak

unassembled, drilled, screws GE620.....\$160.00
as above, edge-routed GE621.....\$170.00
fully assembled GF620.....\$200.00

Aft — Mahogany

unassembled, drilled, screws GE520.....\$105.00
as above, edge-routed GE521.....\$115.00
fully assembled GF520.....\$140.00

Trunk Cap — 5 inches x 30 inches (B)

Teak GE630.....\$35.00
Mahogany GE530.....\$20.00

Thwart — 6 inches x 60 inches (B)

Teak GE635.....\$55.00
Mahogany GE535.....\$35.00

Stanchion — 6 inches x 25 inches, set (B)

Teak GE640.....\$65.00
Mahogany GE540.....\$40.00

45° braces — set

Teak GE645.....\$26.00
Mahogany GE545.....\$20.00

Tools

Bunkers — Lateral hull support members, cut from 2x8's to shape of hull. Two pieces fit at the aft end of the seats and at the mast stanchions. Can be used on sawhorses or to build a cradle. (B2) GE702.....\$14.00

Templates for full bunkers — cut hull bunkers from your 2x8 lumber — you will need bandsaw or stout saber saw
GG700.....\$5.00

Counterbore — 3/8 inch diameter, attaches to 13/64 inch drill bit. Cuts holes for wood plugs.
Drill bit not included GB710.....\$7.20

Plug cutter — Cuts 3/8 inch wood plugs, requires drill press
GB711.....\$9.70

Long drill bit — Drills holes for long (2 1/2 inch) No. 10 outwale screws — 6 inch long GB712.....\$4.25

Spreader socket installation tools — large diameter steel bearing and flared punch to assist in flaring spreader sockets
GC715.....\$18.00

Supplies

Epoxy — System III, boat builder's epoxy, 2:1 mix
quart GB730.....\$31.00

Fiberglass fabric — 10 oz. per sq. yd. cloth, standard boat cloth in 50-inch width
GB740.....\$8.65

Plugs (bungs) — 3/8 inch diameter wood plugs to cover fastener heads; teak, ash, or mahogany bag of 100 plugs
GB680 \$8.00

Teak Oil — WATCO Marine teak oil
quart GB733.....\$10.90

Thickener — polypropylene fibers used to thicken epoxy or polyester resins (large bag will do entire rail job)
small bag GB735.....\$1.00
large bag GB736.....\$2.00

Varnish — Z-Spar Captain's with UV filter
quart GB750.....\$22.25

Capital letters in parentheses refer to shipping codes on page 14