

SUNFLOWER 3.3 MODEL: SB194

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SPECIFICATIONS

Length 11'	Sail Area
Beam3'6"	Hull Weight50 lbs.
Freeboard	Crew Capacity

NOTICE

IMPORTANT OWNER'S RESPONSIBILITY

BE SURE TO READ THE FOLLOWING BEFORE LAUNCHING YOUR SAILBOAT

- A. Before operating your boat, read the Snark Sailing Manual carefully and be thoroughly familiar with the rules for safe operation.
- B. Do not overload your boat. Capacities are clearly stated on the Capacity Information Plate located on the transom of the boat.
- C. The Sunflower is a small boat and caution must always be used, particularly when operating on open bodies of water where conditions can be unexpectedly severe.
- D. Always carry a Coast Guard approved personal flotation device for each person aboard and check with local authorities for regulations governing registration and operation of your boat. If capsizing should occur, stay with your boat until help arrives. It will not sink and it is far easier for rescuers to see than a lone swimmer.
- E. Transporting any boat on a cartop rack places considerable stress on the hull unless properly supported. Care must be used in adjusting straps, cables and clamps to prevent excessive pressure on the boat. The boat should rest inverted on its gunwales. Padding should be placed between the gunwales and the cartop carrier to prevent chaffing. In addition to securing the boat to the cartop carrier, the bow and stern should be secured to the vehicle to prevent longitudinal movement.
- F. To minimize needless wear and excessive scratching avoid dragging your boat over abrasive surfaces such as concrete launching ramps, coral or rocky beaches, garage floors, etc.
- G. Cleaning your Sunflower is easily accomplished with soap and water and a brush. Avoid strong detergents, alkalis and organic solvents. Suntan oils, cosmetics, and grease should be removed promptly to avoid permanent stains. Over a period of time, sunlight may cause fading. Periodic waxing will help prevent this discoloration.
- H. The Armour Clad construction is exceptionally strong, but like other boat construction materials, it is not indestructible. The Sunflower will absorb impact exceptionally well. However, severe localized impact can cause a fracture. (It is improbably that the fracture would affect more than the impacted skin and the adjacent foam.) Repairs can be made relatively easily using the Armour Clad Repair Kit.

^{*}Do not allow raw gasoline or other petroleum based products to come in contact with styrene (core of hull).

*Standing in boat on land may cause delamination of hull covering.

ASSEMBLY

1. RUDDER AND TILLER

- a. Locate the following items in the accessory parts box:
 - 1. Black rudder head (14)
 - 2. Aluminum rudder "L" pin (6) and hairpin type cotter pin (13)
 - 3. Pre-assembled aluminum tiller and mount (4)
 - 4. 10-32 x 1" long hexbolt and locknut (29)
 - 5. Wood rudder blade (3)
 - 6. 5/16" carriage bolt, washer and nut (15)
- b. Place the black rudder head (14) on the hinge plate (17) with the pointed end up. Secure in position by sliding the rudder "L" pin (6) through the flanges. Insert the hairpin through the small hole in the lower end of the "L" pin.
- c. Slide the tiller mount (4) over the pointed end of the rudder head (14) and align the rear most hole in the tiller mount with the hole in the top of the rudder head. Secure with 1" bolt and locking nut (29).
- d. Insert the carriage bolt (15) through the square hole in the center of the rudder head. This bolt must pass from the left side to the right side. Install the rudder blade (3) with 5/16" washer and locknut.
- e. Install wood rudder blade (3) on the carriage bolt and secure with locknut. The nut should only be tight enough to give a slight resistance when you try to lift the blade.

2. BOW EYE

 a. Insert the bow eye (7) through the predrilled hole in the bow (front) of the hull and sandwich the hull with large washers and nut.

3. SPLASH DECK

- b. Position splash deck (28) on the bow so that hole in wood seat and hole in deck lines up and point of deck lines up with point of boat.
- c. Insert mast through splash deck and mast seat (5) and into mast socket in hull.
- d. Install cleat (21) on right side of mast sleeve, using 1 1/2" long slotted machine screws, flat washers and nuts through predrilled holes in splash deck and mast seat (5).
- e. Parts for splash deck are packed in a separate bag. They consist of screws, washers and a punch nail. Align the front of the splash deck with the center of the Sunflower bow, starting with the two aft (rear) holes first. Make a small starter hole with a punch nail and secure the deck with a screw and finishing washer. Repeat this procedure on all other predrilled holes in the splash deck. **NOTE:** To assure good installation, it is important that you **do not** over tighten the screws securing the splash deck.

4. SAIL ASSEMBLY

- Slide the crimped end of the spar (39) into the upper end of the spar (10). NOTE: The spar and boom have the same hole
 patterns.
- b. Fit caps (41) into the ends of the boom (11) and the spar (39 & 10).
- c. Lay out the sail (12), boom and spar as shown in figure.
- d. Starting at the "clew" (rear part of the sail, closest to the boom) insert the forward end of the boom (end with predrilled holes through both sides) into the hem of the sail and slide it all the way through the sail.
- e. Position the boom guide (20) over the two predrilled holes in the forward end of the boom. Secure with two 3/4" long slotted sheet metal screws. Make sure boom guide is facing starboard (right) side of the boom.
- f. Starting at the "head" (top part of the sail) insert the lower end of the spar (end with predrilled holes through both sides) into sail hem and slide it through entire sail.
- g. Connect boom and spar with double eyebolt (42) and nuts. This is the "tack" of the sail.
- h. Using eyestraps (18) and 1/2" long slotted sheet metal screws, install plastic rings (19) on boom at points "A" and "B" as shown in figure.
- i. Using sheet metal screws, install eyestraps (18) on spar at points "D" and "C" as shown in figure.
- j. There are short lengths of line attached to grommets at each corner of the sail. Tie those at the "head", "clew" and "tack."

5. RIGGING

- a. Place the mast cap (22) on one end of the mast (9).
- b. Lay the folded sail assembly along the centerline of the huil so the boom guide (20) is centered over the mast sleeve (8).
- c. Locate the line supplied with the boat. Cut this line in half and seal the ends with a match or other flame. Allow the ends to cool before touching. Pass one end through eyestrap and tie around spar (not around eyestrap). Pass the other end through the mast cap (22) and tie a knot as close as possible to the end.
- d. Insert the mast (9) through the boom guide (20) and into the mast sleeve, insuring that the boom is to the port (left) side of the mast.

- e. Pull down on the line (halyard sheet) (16) to raise the sail. Raise the sail as high as possible, then tie the line (halyard) around the cleat (21) at the right of the mast.
- f. Locate the remaining half of the line supplied with the boat for the main sheet. Tie one end of the main sheet line to the eyestrap preinstalled on the tiller mount (4).
- g. Thread the free end through ring "A" on the base of the boom nearest the stern of the boat, then through ring "B" nearest the mast. Tie a figure "8" knot at the end of the line.
- h. Insert the daggerboard (2) into the daggerboard well.
- I. Now read your Sailing Manual and enjoy your Sunflower.

TRANSPORTING YOUR SAILBOAT

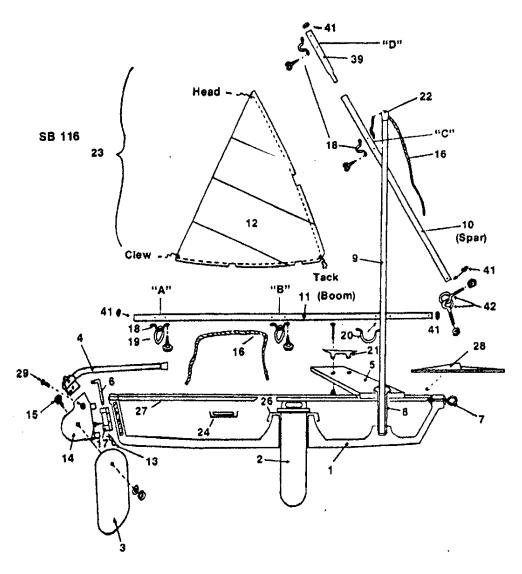
Transporting any boat on a cartop carrier places considerable stress on the hull unless properly supported. Care must be used in adjusting straps, cables, and clamps to prevent excessive pressure on the boat. If cartop carrier is not wide enough, a board such as 2 x 4 across carrier could provide a good boat support and place to tie spar (mast & boom) when transporting.

The boat should rest inverted on its gunwaies. Padding may be placed between the gunwales and the cartop carrier to prevent chaffing. In addition to securing the boat to the cartop carrier, the bow and stern should be tied to prevent sway or other movement.

MAINTENANCE

YOUR BOAT: Your boat should be kept inside or covered when not in use. Avoid long periods of exposure to direct sunlight or weather. To minimize needless wear and excessive scratching, avoid dragging your boat over abrasive surfaces such as concrete launching ramps, coral, rocky beaches, garage floors, etc.

CAUTION: If the ABS skin is fractured and the EPS foam core exposed, gasoline or oil spillage will cause damage. Repairs to the exposed area should be made immediately using the Epoxy Repair Kit #BA302 available from Snark Boats



Replacement Parts

NOTE: Items with Asterisk (*) must be shipped by common carrier. Prices and Specifications are subject to change without notice.

Sunflower 3.3 MODEL: SB194

 Key No.	Quantity	Part No.	Description	Retail Price
1 .	1	74830*	Hull Only	
ż	i	62420	Daggerboard, Wood	
3	•	62760	Rudder Blade, Wood	
4	1	P-74060	Tiller Assembly with Mount	
-	•	1 1 4000	(74060 Tiller; 60100 Screw; 61010 Locknut)	
5	1	P-62350	Mast Seat Assembly	
•	•	, 02000	(62350 Wood Mast Seat; 62410 4-Screws; 62510 4-Washers)	
6	1	62250	Rudder "L" Pin	
7	ì	P-62360	Bow Eye Assembly	
			(62360 Bow Eye; 62660 Locknut; 62670 2-Washers)	
8	1	74870	Mast Sleeve	
9	1	62820	Mast (99")	
10	1	74850°	Spar (120")	
11	1	74850*	Boom (120")	
12	1	40164	Sail (55 Sq. Ft.)	
13	1	60060	Hair Pin Cotter	
14	1	P-62020	Rudder Head	
			(62020 Rudder Head; 62560 Bolt; 61620 Washer; 62660 Locknut)	
16	1	74080	Line Set	
17	1	P-62010	Gudgeon Assembly (62010 Black Gudgeon; 60900 4-Screws)	
18	1	P-61000	Eyestrap Assembly (61000 Eyestrap; 20840 2-Screws)	
19	1	62430	Nylon Ring	
20	1	P-62440	Boom Guide Assembly (62440 Boom Guide: 62490 2-Screws)	
21	1	P-30680	Cleat Assembly	
			(30680 Cleat; 31000 2-Screws; 31350 2-Locknuts; 62630 2-Washers)	
22	1	62460	Mast Cap	
28	1	P-74855*	Splash Deck Assembly	
			(74855 Splash Deck w/Gasket; 61380 1-Screw Package)	
39	1	74840	Spar Extension	
41	1	61370	End Cap, Metal (1),	
42	1	P-61350	Jointed Eyeboit Assembly	
			(61350 Jointed Eyebolt; 61010 2-Locknuts)	
23	1	89150*	Sail Assembly (55 Sq. Ft.)	
			40164 55-Sq. Ft. Sail; 74860 Boom, Spar, Mast;	
			74840 Spar Extension; 74080 Line; 62430 2 Nylon Rings;	
			61000 4-Eyestraps; 20840 8-Screws; 62440 Boom Guide:	
			62490 2-Screws; 61350 Jointed Eyebolt; 61010 2-Locknuts;	
0.4		2000-	61370 4-End Caps; 62460 Mast Cap	
24	1	63930	Seat, Center (Optional)	
26	1	74220	Well Cap, White	
27	1	61990	Black Bumper (Rubber)	

