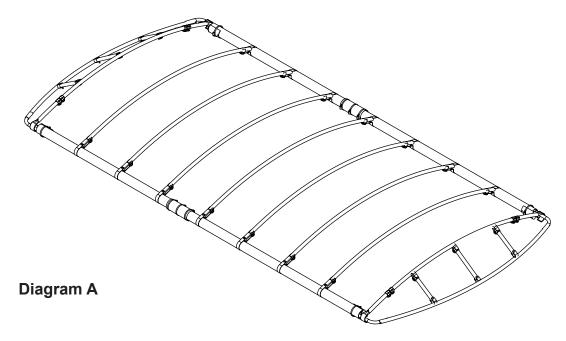


CF18-100N, CF20-100N & CF22-100N Canopy Frames Fitting:

Aluminum Hoist Models: SSV15100, SSV20100, SS15100 DW & SSV20100 DW

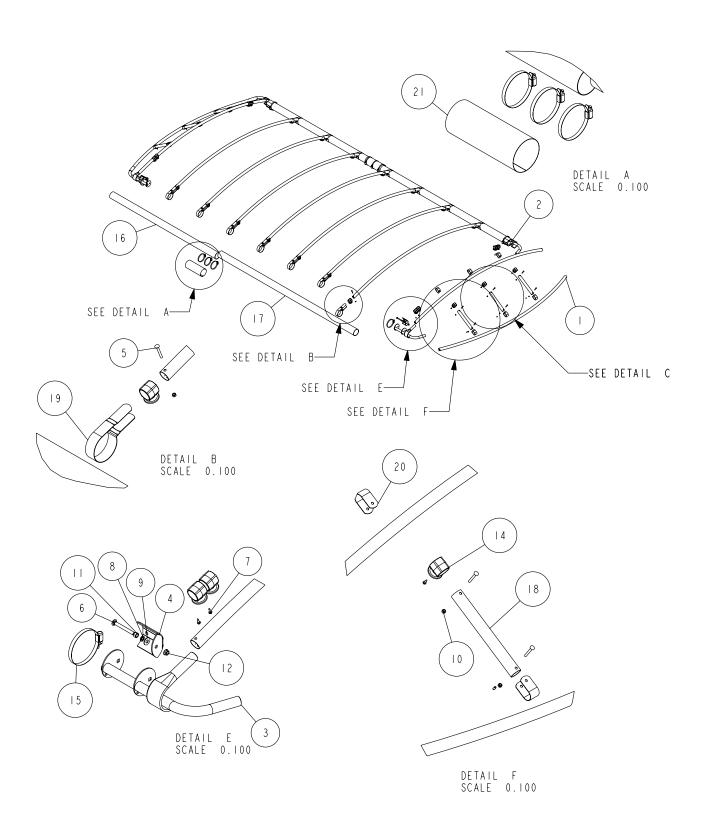
Steel Hoist Model: SS3698



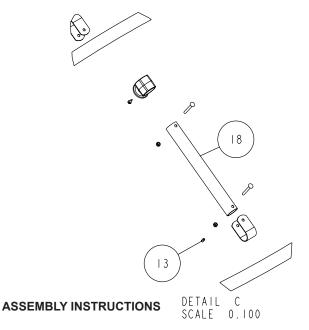
MODEL		LENGTH (foot.)	NUMBER OF HOOPS	HOOP PART NUMBER	SPLICE INCLUDED (A180)	SIDE FRAME TUBE NUMBER(S)	
CF18-100N	100	18	11	62586	Υ	3900524	3900525
CF20-100N	100	20	12	62586	Υ	3900525	3900525
CF22-100N	100	22	13	62586	Υ	3900526	3900525

THE ABOVE ASSEMBLY (18-100N) IS USING HA0036 CANOPY ATTACHING KIT THE ABOVE ASSEMBLY USING A CANOPY COVER REQUIRING SIDE STRAPS, SPRINGS AND CORDS USE HA0038 CANOPY ATTACHING KIT

ALL MEMBERS OF THIS GROUP, CF18-100N, CF20-100N, AND CF22-100N WILL ALL USE THE SAME ATTACHING KITS AS SHOWN ABOVE.



ITEM	PART #	DESCRIPTION	QTY	NOTE
1	62586	CANOPY BOW FOR 1001N FRAME	11	
2	67330	CANOPY END WMENT - RIGHT	2	
3	67331	CANOPY END WMENT - LEFT	2	
4	69231	CANOPY END BRACKET	4	
5	0210051	CARR 1/4-20 X 2 1/4 GR5	26	
6	0210145	CARR 3/8-16 X 3 1/2 FULLTHRD GR5	4	
7	0810925	SCREW SELFDRILL HWH #10-16 X 3/4	14	
8	1340030	LOCKWASHER 3/8 S/T MED ULTRASEAL	4	
9	1340095	WASHER USS FLAT 3/8	4	
10	1410049	HEX NUT FINISH 1/4-20	26	
11	1410109	HEX NUT 3/8-16	4	
12	1440101	HEX LOCKNUT FLANGE 3/8-16 W/T&T	4	
13	3510252	CAP BLACK VINYL.240 X 1/2 HIGH TEMP	6	
14	3510276	CANOPY CORD SPOOL HOOK	28	
15	3610162	HOSE CLAMP N-STYLE STAINLESS	10	
16	3900524	ALUM TUBE 4 OD X .072 W X 83.25 IN	2	
17	3900525	ALUM TUBE 4 OD X .072 W X 107.25 IN	2	
18	A171	CANOPY END SPACER TUBE X 12 3/41N.	6	
19	A173	HOOP MTG BRKT LOOP	14	
20	A177	END HOOD LOOPS	12	
21	A180	SPLICER C20 AND C22	2	



Break bundles and hardware box. Sort all parts according to size. Depending on the model ordered, you may have extra parts.

END HOOD ASSEMBLIES (Refer to Diagram A for a final assembly view)

The first step will be to assemble the end hoods. Locate the adjustable canopy end assemblies. Note that there are two- right and two- left hand assemblies. (See Diagram B, Detail E.)

Next locate two of the canopy bows and place them on the floor or ground with one each of the right and left hand assemblies placed at each end of the bows.

Identify the canopy bow that will be installed as the bow that will form the upper curved portion of the canopy end section. Slide two (2) each of the plastic canopy cord spool hooks on each end of this canopy bow. A total of four canopy cord spool hooks will be placed on this bow.

Insert one end of the two canopy bows over the round tubes on one of the adjustable canopy end assemblies. Note that one bow will lay flat on the floor while the other bow with the canopy cord spool hooks installed will curve upward in the form of the canopy once it is completely assembled.

Insert the other ends of the canopy bows onto the round tubes on the second adjustable end assembly. The canopy bows must be slid onto the round tubes as far as they can without jamming or driving them on.

Mark the centers on the two canopy bows. Locate one of the 16" canopy end spacer tubes (Item 19 in Diagram B, Detail C). Attach it to the canopy bow that is laying flat on the floor or ground at the center location just marked. Secure together with an end hood loop using a 1/4" x 2-1/4" carriage bolt and nut provided as shown. Slip one of the canopy cord spool hooks onto the 16" canopy end spacer tube. Secure the other end of the spacer tube to the top bow with a second end hood loop and 1/4" x 2-1/4" carriage bolt. Secure with a 1/4" hex nut. Tighten.

Locate one of the 12 $\frac{3}{4}$ " canopy end spacer tubes (Item 18 in Diagram B, Detail F). Attach it to the canopy bow that is laying flat on the floor or ground at the $\frac{1}{4}$ point (center between the end of the canopy bows and the 16" spacer tube just installed in the center). Secure together with an end hood loop using a $\frac{1}{4}$ " x 2- $\frac{1}{4}$ " carriage bolt and nut provided as shown. Slip one of the canopy cord spool hooks onto the 12 $\frac{3}{4}$ " canopy end spacer tube. Rotate the spacer tube up and slide either towards or away from the 16" center spacer tube until it will fit between the two canopy bows. Secure the other end of the spacer tube to the top bow with a second end hood loop and $\frac{1}{4}$ " x 2- $\frac{1}{4}$ " carriage bolt. Secure with a $\frac{1}{4}$ " hex nut. Tighten. Repeat on the other side of the end hood assembly.

Locate the $\frac{1}{2}$ " long black plastic caps supplied in the hardware. Push one of them onto each of the bolts sticking through the nut securing the spacer tube to the flat canopy bow. This will protect the vinyl cover from fraying when it comes in contact with the bolt.

Measure up and place a mark at 7 $\frac{1}{2}$ " and 10 $\frac{1}{2}$ " from each end of the upper canopy bow forming the top curve. Place the mark on the bottom side of the tube.

Locate a No. 10 x 3 2 " self-drilling screw. Position the bottom edge of the canopy cord spool hook on the 10 1 2 " mark. Position so the spool of the molding is pointing directly down. Secure in this position by placing the self-drilling screw into the center hole of the spool, then drilling the screw in to attach it to the canopy bow.

Place the bottom edge of the second canopy cord spool hook at the 7 ½" mark. Position so the spool of the molding is pointing directly down. Secure in this position by placing the self-drilling screw into the center hole of the spool, then

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0003524 REV A 4/11/06 drilling the screw in to attach it to the canopy bow.

Measure and place a mark at 2° from the top of the 16° and the 12° %" canopy end spacer tubes. Locate a No. $10 \times 3^{\circ}$ %" self-drilling screw. Position the top edge of the canopy cord spool hook on the 2° mark. Position so the spool of the molding is pointing inward as shown. Secure in this position by placing the self-drilling screw into the center hole of the spool, then drilling the screw in to attach it to the canopy bow.

Repeat the above process on the other end hood assembly.

FRAME ASSEMBLY INSTRUCTIONS

Locate the four 4" side frame tubes. Note that there are two different lengths. Identify a smooth flat surface that they can be laid on during assembly because it makes the process much easier to accomplish. Measure and place a mark at 6" from one end of each of the side frame tubes. Loosen four of the stainless steel hose clamps large enough so they will slide over the side frame splice, Item No. 24 in Detail A. Mate the marked ends of a short and long side frame tube together.

Slide the splice onto the first side frame tube until it meets the 6" mark. Place the second side frame tube into the splice until the ends of the side frame tubes touching each other. Note: The side frame tubes nudged together is very important because it adds considerable strength to the joint once it is fully assembled and tightened properly. The ends of the side frame tubes must be centered in the splice.

Repeat the above process on the other side frame tube.

Tighten the stainless steel hose clamps evenly and securely around the side frame splice placing two of the clamps at the very ends of the side frame splice and one in the center of the splice where the ends of the side frame tubes meet inside the splice.

The frame is easiest assembled when it is assembled on four sawhorses or something of this height. Place the two side frame tubes on the sawhorses located at a spacing that is comparable to the width of the canopy once it is assembled. Place the two side frame tube assemblies so the splicers are directly across from each other (long side frame tubes are at same end of canopy). Insert the two end hood assemblies just assembled into the ends of the 4" diameter side frame tubes. This will properly space the tubes and keep them positioned while the balance of the bows are assembled to the side frames. Make sure the adjustable end hood assemblies are slid completely in and against the end of the side frame tube. Secure in this position by placing a stainless steel hose clamp around the side frame tube and also around the end hood tube stop weldment approximately 1" from the end of the side frame tube. Position the tightening mechanism on the clamp so it is located on the inside of the side frame tube and in a position that won't interfere with the canopy cover when it is pulled around the side frame tube during installation.

The canopy bows are to be spaced on 24" centers. Using a tape measure, place the first mark at 22". Then mark The balance of the side frame 24" intervals the full length of the side frame tubes.

Locate the balance of the canopy bows. Slide two (2) each of the canopy cord spool hooks on each bow, then attach them to the side frames using the hoop mounting bracket loops provided.

Note that they have to be formed around the side frame tube when assembling. Align the hole in each end of the hoop mounting loop with the holes in the end of the canopy bow. Secure together using 1/4" x 2-1/4" carriage bolts and hex nuts. Thread on the nuts but do not tighten until instructed. Repeat the above process on all of the canopy bows. Once they are all attached to the side frames, relocate them so they are on the 24" marks identified earlier.

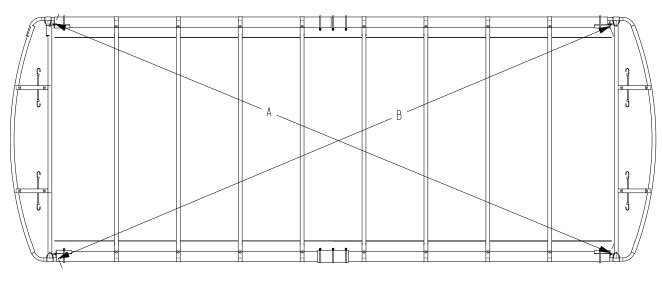


Diagram AA

CHECKING FOR CANOPY FRAME SQUARE

Check for square by using a tape measure or string. Measure from one end of the side frame tube on one side of the framework to the other side frame tube on the other side of the framework.

Pull a tape measure or string from the opposite ends of the canopy side frames across the framework as shown in the above diagram.

Measurements A and B must match each other in order for the framework to be square. If they don't, slide one side frame either forward or backward until matching measurements are achieved. Once achieved, tighten all of the bolts attaching the canopy bows to the side frames. the framework assembly is now complete.

The canopy post assembly and installation instructions are supplied with the canopy post bundles and are located in the support cup box. Please use these instructions to attach the canopy posts to your hoist.

The following canopy post bundles are required to fit the following hoist.

CF18-100N

Bundle Number	dle Number Description	
69088	Side Frame Tube Bundle - 18'	1
62982	Hoop Bundle - F181	1
69089	Hdwe Box - Canopy Frame 18/20/22	1
HA0036	Canopy Attach Hdwe 20-88/18/20/22	1

CF20-100N

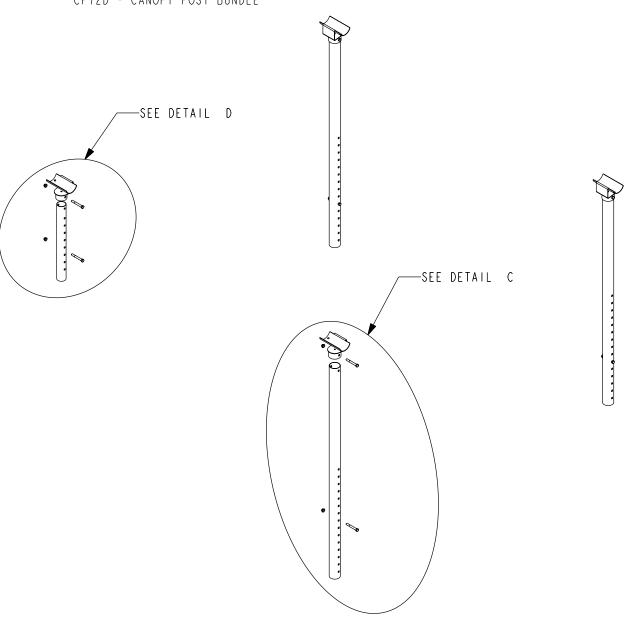
Bundle Number	Description	Quantity
69086	Side Frame Tube Bundle - F20A	1
62576	Hoop Bundle - F201	1
69089	Hdwe Box - Canopy Frame 18/20/22	1
HA0036	Canopy Attach Hdwe 20-88/18/20/22	1

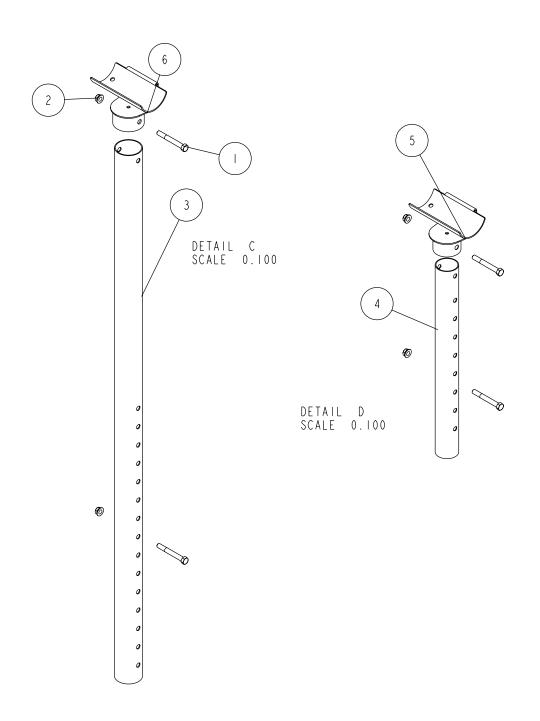
CF22-100N

Bundle Number	Description	Quantity
69090	Side Frame Tube Bundle - F22	1
62578	Hoop Bundle - F221	1
69089	Hdwe Box - Canopy Frame 18/20/22	1
HA0036	Canopy Attach Hdwe 20-88/18/20/22	1

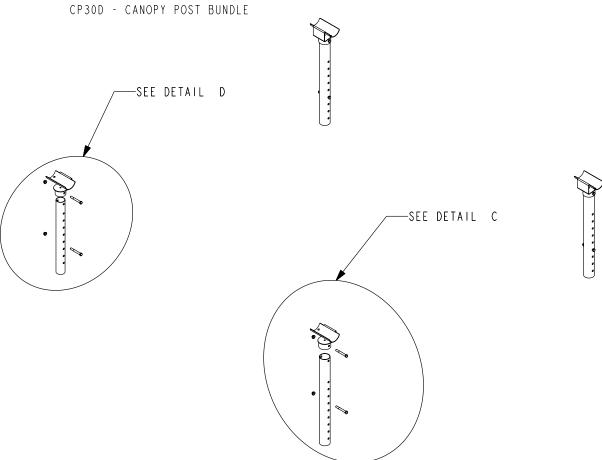
Hoist Model	Canopy Post Required	Consists of Bundles
SSV15100	CP72D	68318, 68324
SSV20100	CP72D	68318, 68324
SS3698 (Steel Hoist)	CP57G	68319, 68326

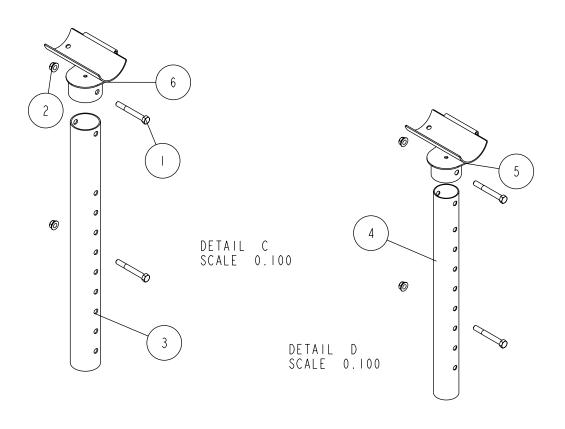
Once the canopy posts have been installed on your hoist continue to attach the canopy frame and vinyl, refer to pages 10 and 11 of this service manual.





BILL OF MATERIALS			
ITEM	PART #	DESCRIPTION	QTY
I	0110114	HH 1/2-13 X 4 CS GR5	8
2	1440102	HEX LOCKNUT FLANGE 1/2-13 W/T&T	8
3	A167	CANOPY EXTENSION LEG 72"	3
4	A184	ALUM CANOPY LEG 25 1/2 IN	1
5	A187	SUPPORT CUP WITH 3 1/80D TUBE	1
6	A209	SUPPORT CUP WITH 3 1/2 OD TUBE	3





BILL OF MATERIALS			
ITEM	PART #	DESCRIPTION	QTY
1	0110114	HH 1/2-13 X 4 CS GR5	8
2	1440102	HEX LOCKNUT FLANGE 1/2-13 W/T&T	8
3	A102	ADJUSTABLE LEG 3 1/80D X 30 1/2	3
4	A I 8 4	ALUM CANOPY LEG 25 1/2 IN	1
5	A I 8 7	SUPPORT CUP WITH 3 1/80D TUBE	1
6	A209	SUPPORT CUP WITH 3 1/2 OD TUBE	3

ATTACHING THE CANOPY FRAME TO THE CANOPY POSTS



Determine the end of the hoist that your boat will enter the hoist. This is the same end that the motor stop will be mounted on. Your boat will then be positioned on the hoist so that more boat will be extending forward of the hoist upright post than what will be extended to the rear. This is important because you will want to position the canopy side frames so that the longer section of side frame extends to the front as well. This allows the splice in the side frame to be positioned more in the center of the support cups resulting in more strength.

Once the canopy is properly positioned, raise the canopy frame up and place it so the side frame tubes are resting in the support cups on top of the canopy posts. Position the canopy frame to the proper position to best protect your boat by sliding it either forward or backward in the support cups. Also the framework should be checked again for being square. It is possible that this may have changed in the process of raising it into position. When the desired position is achieved secure it to the support cups by placing the large stainless steel adjustable hose clamps around the support cup and the canopy side frame. Two hose clamps must be placed on each end of each support cup. Place the hose clamps so that the tightening mechanism of the clamp is located on the inside portion of the canopy side frame tube. Tighten. The tightening mechanism is to be located in this position so that it doesn't interfere with the cover when it is installed.

THE FRAME INSTALLING THE VINYL COVER TO



Remove the vinyl cover from the box. Unroll the vinyl cover down the side frame as shown. When completely unrolled, unfold the cover across the canopy bows and pull down over the framework.



The bungee cords are manufactured to the correct length before they are installed in the cover at the factory.

The installation process is as follows:

Stretch and attach the end loops on the side frame bungee cords over the rim of the plastic canopy cord spool hook attached at the 10 ½" mark.

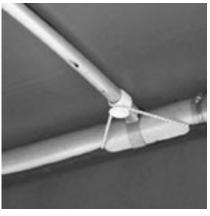
Stretch and attach the end loops on the bungee in the end of the canopy to the canopy cord spool hook positioned at the 7 $\frac{1}{2}$ mark in a similar manner.

Pull the end bungee cord from the next slot in the end strap back up and over the same canopy cord spool hook as shown. Repeat on the other side of the canopy.



Hook the center bungee up over the canopy cord spool hook located at the top of the 16" canopy spacer tube. Then hook over the canopy cord spool hooks at the top of the 12 3/4" spacer tubes.

Repeat this procedure on the other end of the cover making sure the cover is centered the same on each end.



Starting at the middle of the side frames front to rear, pull the bungee cord on the sides of the canopy cover over the top side of the canopy cord spool hooks. Alternate from side to side of the canopy so the cover stays centered on the frame. Continue until they are all attached.

Once the bungee has been looped over all of the canopy cord spool hooks, check each one for adequate tension. The bungee can be pulled through the sewn in pocket so that the tension of the cord over each spool hook can be made even the full length and width of the cover.

Check for tension again. If bungee appears tight, assembly is complete.

If the bungee feel like they need to be tighter, they can be tightened by wrapping an additional wrap of the bungee cord around one of the canopy cord spool hooks. It may be tightened more by repeating this process on as many canopy cord spool hooks as needed.

CANOPY END HOOD ADJUSTMENT

Your new canopy frame has adjustable end hood brackets which allow the frame to be adjusted a total of 1-1/2" shorter or 1-1/2" longer from its normal shipped position. This allows you to adjust your frame to fit the cover for length should it need adjusting. The following instructions will assist you in adjusting the frame length.

- Loosen the nuts on the adjusting bolts located in the end of the sideframe tube weldments.
 Doing so will shorten the overall length of the frame.
- The frame can be lengthened to fit the cover by tightening the nuts on the bolts in the side frame tube stop weldments just loosened in Step 1.

Turn clockwise. As the nut is threaded onto the bolt it will pull the end hood out of the side frame thus increasing the length of the canopy framework.

Continue to lengthen the frame until it is the right length to fit the cover.

3. Once the proper length for the frame has been achieved, stop turning the nut.

Adjustment is complete.

CANOPY COVER (VINYL) MAINTENANCE

This canopy contains a mildew retardant. Please follow these recommendations to insure that this agent is not destroyed and that the vinyl will not be damaged.

- 1. Ordinary oil and dirt can be removed with soapy water such as laundry detergent. Apply with a mop, sponge, brush or cloth followed by a clear-water rinse. Stubborn spots can be removed by using rubbing (Isopropyl) alcohol in a well-ventilated area, away from open flames. DO NOT USE gasoline, kerosene, methyl ethyl Keytone (MEK) or other solvents or bleaches.
- 2. Remove canopy when hoist is in storage. Make sure canopy is dry before folding and store in a warm, dry location.

WARRANTY

Refer to your **ShoreStation** Owner's Packet for warranty information.