

# SUMMIT MARINE CABLE LIFT INSTRUCTIONS SPRING 2010 Document CL100-211 Models SMCL45120, SMCL45132, SMCL60120, SMCL60132

Hardware Checklist: These items are packed inside the hardware box.

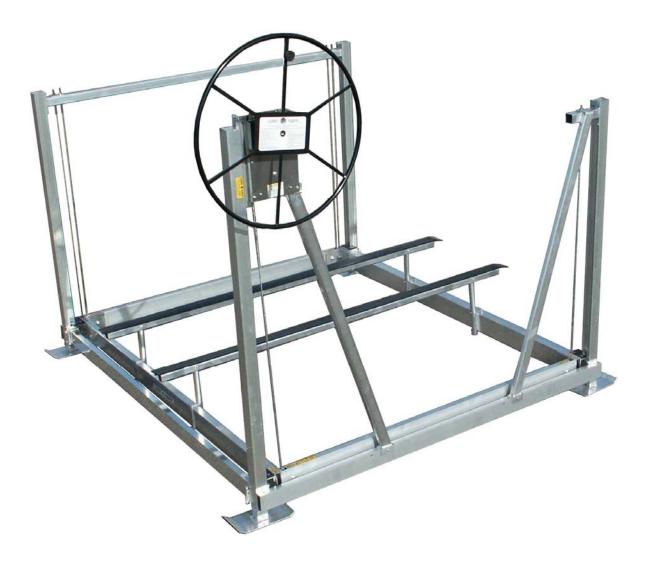
O	Winch with (1) 5/16-18 x 1.5" screw, (1) 5/16 fender washer, and (1) fiber brake disc.
0	(4) Feet
0	(4) Beam Insert Plates
0	Bunk Supports (4) ½ x 2 flat aluminum backer plates (4) 1.25 sch 40 (1.66" dia.) Pipe.
0	Bag 1, Canopy screws (4) 3/8 x 1" screws (4) 3/8 square nuts – brass
0	Bag 2, Leg and Foot screws (8) 3/8 x 3.5" screws (8) 3/8 hex nuts – brass
0	Bag 3, Base, Front, Rear, and Side Beam screws (16) 3/8 x 1" screws (16) 3/8 x .75" screws (16) 3/8 square nuts – brass (16) 3/8 hex nuts – brass (16) 3/8 washers
0	Bag 4, Winch screws (2) 3/8 x .75" screws (2) 3/8 square nuts – brass (2) Washers (1) Spinner Knob w (2) washers and (1) 3/8 nut –stainless steel Nylock
0	Bag 5, V Brace and Horizontal Brace screws (6) 3/8 x .75" screws (6) Square nuts – brass (14) Washers (2) 3/8 x 2.75" screws (1) 3/8 x 1" screw (3) 3/8 hex nuts – brass
0	Bag 6, Bed screws (4) 3/8 x 3" screws (4) 3/8 hex nuts – brass (4) Washers
0	Bag 7, Cable Retainer screws (4) 5/16 x 1" carriage screws (4) 5/16 hex nuts - brass (4) 5/16 washers (5) ½ hex nuts – aluminum (4) ½" washers
0	Bag 8, Bunk screws (8) 3/8 x 4.5" screws (4) 3/8 x 2.75" screws (12) 3/8 hex nuts – brass
0	Bag 9, Caps (1) rubber cap (4) plastic caps

## SUMMIT MARINE CABLE LIFT INSTRUCTIONS SPRING 2008

Models SMCL45120, SMCL45132, SMCL60120, SMCL60132

These instructions are also available in <u>color</u> on the web at <u>www.summitmarine.com</u> Select – Assm Manuals – Cable Lift Instructions.

Thank you for your vote of confidence in our products. Please take a few minutes to familiarize yourself with these important instructions to correctly assemble your new lift. Following these simple steps will not only save you assembly time but will assure you many years of trouble free service.



# **Tools Required:**

1/2" wrench 9/16" wrench 3/4" wrench (2) 12" adjustable wrenches 5/32" socket head, Allen wrench

# **Bundles:**

Bundle 1 of 6: 4 Corner Posts (1 long and 3 short), and 4 Base Tubes. Bundle 2 of 6: 4 Leg Tubes, 48" long each. Bundle 3 of 6: 4 Bed Frame Tubes with pre-strung cables. Bundle 4 of 6: 2 Carpeted Bunks and 3 Frame Diagonal Tubes.

Bundle 5 of 6: Hardware Box. (not shown)

Bundle 6 of 6: 42" Wheel.



Find a level spot to work on, concrete is best, however, grass or sand will work if you have a 2' square piece of plywood to assemble and flush Base parts with. Caution: sand inside the channel parts will impede assembly.



1: Insert Canopy screws into Corner Posts.

**Bundle 1: Corner Posts and Base Tubes.** 

Bag 1: Canopy screws.

Locate the (4) Corner Posts. On the opposite end, of the away from alpha stickers is a hole, 8" or 17" from the end in the small channel. Slide (1) brass square into the small channel and screw (1) 3/8 x 1" into the square nut and through the hole in each Corner Post. Tighten. This will simplify future canopy installation without removing frame screws.

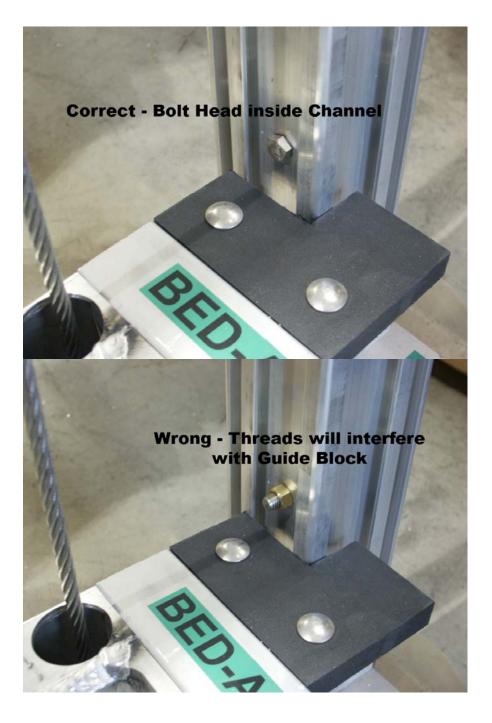
Photo below shows the Canopy screw (bottom screw) and Brace screw (upper screw) from step # 8.



2: Slide Leg Tubes into Corner Posts.

Bundle 2: Leg Tubes, 48" long Bag 2: Leg and Foot screws

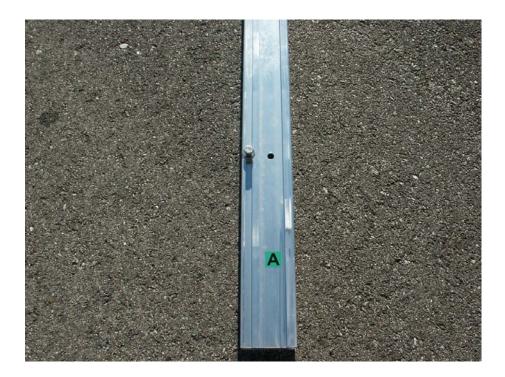
Note the placement of the alpha (A,B,C,D) sticker on the Corner Posts, stickers indicate bottom. Slide the Leg Tube into the Corner Posts, matching the holes and allowing the single hole (for the foot later) facing out (or down). Slide Leg Tube into Corner Posts as far as possible. Fasten Leg Tube with (1) 3/8 x 3.5" screw and nut. Insert screw into the channel side so the threads are facing out. This will eliminate the screw from binding on the black plastic guide block. Hand tighten for now, as this screw will be removed in step 6 for Foot attachment. Repeat for 3 other Corner Posts.



## 3: Attach Corner Posts to Base Tubes

## Bag 3: Base screws

At the bottom of the Corner Post, slide (1) square nut, (1) washer, and (1) 3/8 x .75" screw into the small channel, hand tighten about 7" from the end. Repeat for the other channel, and repeat for the other (3) Posts. Totaling (8) screws. (2) in each post. These screws will be retightened over the top of the Base Beam slot in the next step.



Lay out the Base Tubes and Corner Posts matching the alpha stickers. The alpha stickers progress clockwise, starting with 'A' – the longer Corner Post that the winch will attach to. Select the (4) Beam Insert Plates, insert (4) 3/8" x 1" long bolts as shown below, finger tighten brass nuts on bolts.

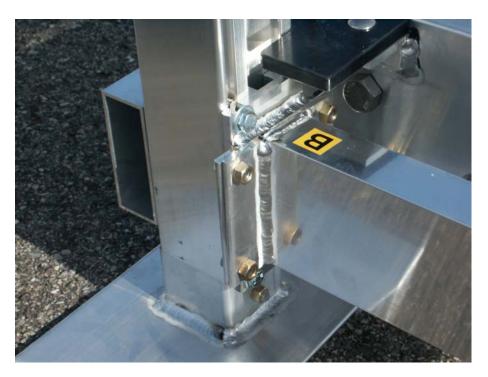


These Beam Insert Plates will attach to the ends of Beam AB and Beam CD, so slide them up the corresponding Corner Posts first. Use the screw from the beginning of this step to tighten these (4) Beam Insert Plates as shown below.



5: While holding the Corner Post 'A' vertical, insert Side Beam 'A', into channel, until the Corner Post is flush with the bottom of the Side Beam Channels. Loosen the screws from the previous step and snug over the channel slots as shown.

Repeat this for the other (3) corners. Then fasten the remaining (8) sets of screws, washers and hex nuts into the bottom channel. Tighten all (16) screws.



6: Attach Foot Pad to the Leg Tube using the remaining (4)  $3/8 \times 3.5$ " screws/nuts from Bag 2. This may require removing the screw, (fastened in step 2), lifting the Corner Post, sliding the Leg out a few inches and sliding the Foot Pad on. Attach with  $3/8 \times 3.5$ " screw and hex nut.

7: Winch Assembly

Winch Bag 4

Slide one of the 3/8 x .75" screws, square nut and washer down the small channel of the Corner Post 'A'. This screw will be in the same channel as the canopy screw from Step 1. Slide down about 21" and hand tighten. Slide Winch Channel into this Corner Post Channel as shown. Slide down to stop. Loosen the screw underneath the Winch channel and slide up into the slot and tighten. Position other 3/8 x .75" screw, square nut, and washer onto the top slot, tighten. Set Bag 4 aside for now.



# 8: V Brace and Horizontal Brace Assembly

Bundle 4 Bag 5



Slide  $3/8 \times .75$ " screw, washer and square nut down Corner Post B, C, and D about 8" and finger tighten. Use the same small channel as the Canopy Screw fastened in step 1.



Slide the Horizontal Brace onto Corner Post B and C. Flush the tops and fasten with the previously finger tightened screws. Add an additional  $3/8 \times .75$ " screw, square nut and washer to the top slots and tighten all (4) screws.



9: Slide Tube Connector onto Corner Post D. Tighten with the  $3/8 \times .75$ " screws, washers and square nuts as shown.



- 10: Attach V Brace as shown below. Fasten bottom Winch brace first with  $3/8 \times 4.5$ " screw, washers on both sides, and brass hex nut. Keep this screw loose for now. Attach Brace to Winch using  $3/8 \times 1.5$ " screw, washer and brass hex nut. Brace is positioned between Winch plates, fastened to the outside plate.
- 11: Attach Rear V Brace bottom next using 3/8 x 4.5" screw, (2) washers and brass hex nut. Again keep loose for now. Attach upper V Brace to Tube Connector using 3/8 x 5" screw, (2) washers and brass hex nut.
- 12: Tighten these (4) screws.



# 13: Bed Beam assembly.

Bundle 3 Bag 6

Grab (4) wood boards about 24" long, 4x4's work great. Position these in the corners of the newly assembled frame to support the Bed Beams in the next assembly steps. Position 'Bed A's' in the 'A' corner, 'Bed B's' in the 'B' corner... etc... Rotate all the Bed Beams to the right about 10" to facilitate assembly.



AS YOU ASSEMBLE THE BED BEAMS CHECK THE PULLYS FOR PROPER WINDING!!!

14: Without removing the ¾-10 SS screw, remove the aluminum ¾-10 nut from Front Beam ('Bed A – Bed B' beam), again DO NOT REMOVE THE ¾" SCREW. Slide the ¾-10 screw onto the welded angle of the Side Beam ('Bed D – Bed A'). Finger tighten the aluminum screw and attach the 3/8 x 3" screw, washer toward the outside, and 3/8 nut – brass as shown. Finger tighten for now. Repeat this for the remaining 3 corners. Tighten all screws. As you tighten the ¾-10 screws bear in mind there is a stainless steel axle that the pulley rotates on inside the aluminum tube. It is this axle that is being tightened and not the pulley. The pulley has the proper spacers assembled inside this tube to allow smooth rotation. Double check pulley clearance. Note: pulley may seem to drag due to the cable wrap, pull the cable free from the pulley and recheck.



15: After the <sup>3</sup>/<sub>4</sub>-10 screws and the 3/8-16 screws are tightened, rotate the Bed assembly to the left, counter-clockwise into position on top of the wood blocks.

## 16: Cable Attachment

Bag 7
Attach the (4) lower cables into the slots in the Base Channels as shown.



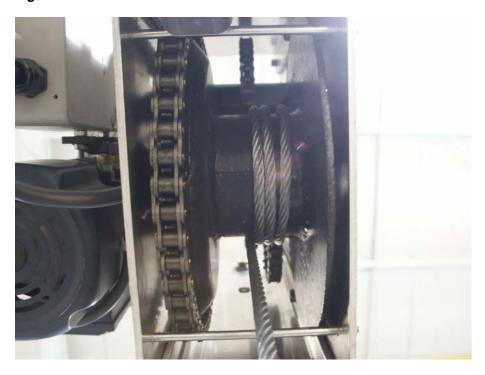
17: Attach the (5) upper cables as shown. The Horizontal Brace side will have (4)  $\frac{1}{2}$ " washes to run the cables through. You may want to lift the bed slightly to facilitate this step. Screw the  $\frac{1}{2}$ -13 nuts onto the screw ends. Level the bed, and snug the screws without over tightening. Too tight and the Bed will tilt down toward the winch, too loose and the Bed will tilt up toward the winch. Jam the second  $\frac{1}{2}$ -13 hex nut on the screw.



18: Attach the 5/16 carriage bolt, washer, and nut to the lower cable angles. Repeat this for all (4) angles.



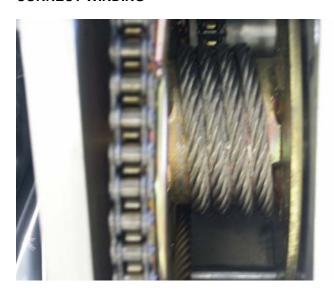
19: Loosen the winch cable retainer located on the winch drum. The winch corner ('Bed A') will have an unfinished cable end. Feed this end up into the winch hub as shown. Note the direction of the cable. Thread through the hole until it is flush with the exit hole. Tighten the set screws.



20: Winch Wheel. Remove the bolt and washer from the winch. Screw the 42" wheel onto the threaded shaft, rotate clockwise and wind the cable onto the drum evenly. Premature cable failure will result if this cable crosses over itself unevenly. Tighten bolt and washer. NOTE: SCREW WILL NOT TIGHTEN ON WASHER. There should be a gap here to allow the wheel to loosen on the winch to allow the brake disk to disengage to lower the boat.

CHECK ALL PULLYS AGAIN TO BE CERTAIN ALL CABLES ARE WRAPING PROPERLY.

## **CORRECT WINDING**



## **INCORRECT WINDING**



## 21: Bunk Supports and Support Brackets.

## Bag 8

(4) ¼ x 2 flat aluminum backer plates (4) 1.66" dia. Pipe.

Using your boat trailer as a template, measure the distance and height of those bunks. Duplicate using Pipe and aluminum backer plates, attach with the 3/8" x 4.5" screws. The bunks are attached using 3/8" x 2.75" screws. Double check clearance for the boat keel. Adjust Bunks up and closer if needed. Tighten all screws.



Bunks can be adjusted parallel or angled as shown below.



Double check all screws for tightness. This concludes the assembly.

#### Installation:

#### **Tools required:**

- 1. (2) 9/16 wrenches.
- 2. Water shoes.

#### Instructions:

- Survey the installation area for rocks, stumps or other obstructions, remove debris or relocate lift site.
- Inspect boat hull for any protrusions, such as turn fins, speedometer pickups, live well
  inlets, cruise control pickups, etc. Compare location of obstruction with Bunk spacing.
  Remove or relocate if needed. In some cases, Centering Guides may be all that's required
  to position your boat for interference free lifting.
- 3. Lift unit into position. DO NOT DRAG. Dragging may cause unnecessary fatigue on Side Beams and Front/Rear Beams weldaments.
- 4. If you require longer legs than standard for deeper water application you will require cross bracing. Contact your dealer.
- 5. Raise bunks until they are even with the water. Adjust legs until all 4 ends of the bunks are level. Retighten legs.
- 6. Inspect the lake bottom areas once again to ensure only the 4 Foot Pads contact the lake bottom. Clear any obstructions and sand away from under beams and pulleys.
- 7. Lower lift to the lowest position. Double check that the cables are wrapping on the pulleys.
- 8. Float, (DO NOT DRIVE), your boat on at this time. DO NOT RAISE THE LIFT YET. Check for potential interference. Never power your boat onto the bunks. Bunks should always be low enough to float on.
- Raise the lift until the bunks just contact the hull bottom. STOP. Check for clearance one more time.
- 10. If all is clear between the hull and lift bunks, raise lift 6" more. WAIT. In softer areas lift feet may settle into lake bottom, causing tilt situation. Lower lift, remove boat and repeat step 5 thru 9 until lift is on solid footing. Relocate lift unit or shore up soft areas with sand, gravel or plywood sheets.
- 11. When satisfied with footings, raise lift in 6" increments. STOP, check level and continue. BE PREPARED to lower lift immediately should footings become unstable.

#### **Annual Inspection:**

- 1. Wearing gloves, check all cables for wear and broke strands, replace if necessary, check all cables for alignment on pulleys, remove pulley and realign if necessary.
- 2. Check all pulleys for wear, replace as needed.
- 3. Check guide block wear (shown on page 6). Abnormal wear on this item usually means uneven leveling condition.
- 4. Check winch for loose or broken chain, repair as necessary.
- Check for stress cracks (caused by storm and wind damage as well as dragging lift or powering on, ice damage can cause cracks also). Contact you dealer for procedure to repair.
- 6. Finally check all fasteners for tightness.
- 7. Lightly grease chain in the winch box.

#### Storage:

 Lift (do not drag) unit out of the water. Store in an area free from falling limbs and ice buildup.