


**LAKESHORE LIFT
1600# BOAT LIFT
ASSEMBLY INSTRUCTIONS & MANUAL**

Before you begin, read all instructions and check to be sure that you have all parts needed.

****** IMPORTANT ******

Inspect your lift often to insure safe operation. Replace frayed or rusted cable, worn or bent parts immediatly!! Do not operate lift if any parts are worn or damaged.

This lift is not intended to be used for human transport. Board the boat only after it is clear of the lift. Do not play on or around the lift.



LAKESHORE PRODUCTS

TEN YEAR LIMITED WARRANTY

Lakeshore Products, Inc. (Seller) warrants the aluminum structure on docks and lifts of its manufacture to be free from defects caused by faulty material or poor workmanship. Seller will at its option, repair or replace any such goods found on examination by Seller, to be defective under normal use and service within ten years from date of purchase. Upon discovery of any such defect, Buyer must notify Seller in writing of defect and provide proof of purchase. Seller warrants cast aluminum parts, mechanical components and hardware for one year.

Seller shall not be held responsible for repairs or modifications to its docks or lifts unless authorization has been obtained from Seller. This warranty does not cover damage caused by incorrect assembly or adjustments, overloading, improper use, neglected maintenance, alterations or damage caused by accident, ice, saltwater or acts of God.

Components obtained from other manufacturers and used in Sellers products will be covered under the manufacturers warranty and shall not be the responsibility of the Seller.

Sellers responsibility under this warranty shall be the repair or replacement of defective items. Seller is not liable for incidental or consequential damages of any kind.

1600# BOAT LIFT PART NUMBERS

Part#	Qty	Description
201	1	MAINFRAME SIDE
202	1	MAINFRAME SIDE
203	1	FRONT CRADLE UNIT
204	1	REAR CRADLE UNIT
205	1	MAINFRAME SPREADER TUBE (FRONT)
206	1	MAINFRAME SPREADER TUBE (REAR)
207	2	CRADLE SPREADER TUBE
208	2	H-SUPPORT UNIT
A100	1	WINCH - COMPLETE
B100	2	ADJUSTABLE 18" CARPETED CRADLE
B110	1	35" CARPETED BUNK
C100	1	41" WHEEL COMPLETE
D100	2	ADJUSTABLE 36" FRONT LEG
D110	2	ADJUSTABLE 36" LG REAR LEG
E100	1	34' X 1/4" CABLE ASSEMBLY
G100	4	PULLEY ASSEMBLY
J100	2	ANGLE BRACE
Z101	4	PLASTISOL RED CAP
Z110	1	YELLOW WARNING LABEL
Y526H	4	1/2" X 6 1/2" HEX BOLT
Y516H	4	1/2" X 4" HEX BOLT
Y552	8	1/2" FLAT WASHER
Y551	8	1/2" NYLON LOCK NUT
Y410H	4	3/8 X 2 1/2" HEX BOLT
Y414H	18	3/8" X 3 1/2" HEX BOLT
Y414C	4	3/8" X 3 1/2" CARRIAGE BOLT
Y424H	2	3/8" X 6" HEX BOLT
Y450	28	3/8" HEX NUT
Y452	36	3/8" FLAT WASHER

1600# CAPACITY LIFT

ASSEMBLY INSTRUCTIONS

1) Identify all parts on parts list and locate on exploded view. Open package of nuts, bolts, and washers and lay them out by size. Compare with list in Accessory Package.

2) See to it you have the necessary tools to assemble your new LAKESHORE LIFT.

- 2 - 9/16 WRENCHES (FOR 3/8" BOLTS)
- 2 - 3/4 WRENCHES (FOR 1/2" BOLTS)
- 1 - TAPE MEASURE
- 1 - TIN SNIPS TO CUT STEEL BANDING
- 1 - SMALL STEP LADDER

3) After identifying all individual component parts, stand up the 2 MAINFRAME SIDES on a flat level area. Have someone hold these mainframe sides so they will not fall over and injure someone before step (4) is completed. (The side with the decals should be the winch side!).

4) Bolt the main frame sides together now using the front and rear MAINFRAME SPREADER TUBES. Each corner will need (3) 3/8" x 3 1/2" hex bolts and (1) 3/8" x 3 1/2" carriage bolt with (4) 3/8" washers and (4) 3/8" nuts. See figure (B).

It is VERY IMPORTANT at this point to follow the following procedure:

- a) All bolts must be installed with the nuts on the outside of the lift.
- b) Be sure to use the carriage bolt in the square hole in each corner (3/8" x 3 1/2").
- c) After installing all (12) 3/8" bolts at the corners (washers under the nut only), tighten them only to finger tight.
- d) Now install (2) angle braces on the front legs as shown. Only tighten the bolts to finger tight.
- e) Before you use your 9/16" wrenches to tighten the 3/8" bolts, you must measure diagonally across the lift and see to it that your measurements are equal to within 1/4". If you find one diagonal longer than the other, gently push the lift at this corner until diagonal measurements are equal. be

sure you measure from the same points in each direction.

f) Now tighten the bolts on the corners - one at a time - again checking with your tape to see that your lift has stayed square to within $1/4$ ".

g) Now tighten the (2) $3/8$ " nuts used on the angle braces.

5) Install the "H" support units as shown in FIGURE (A). Use the (4) $1/2$ " x $6 1/2$ " bolts (nuts on the outside of the lift, $1/2$ " washer under nut) and tighten only until the special lock nut snugs up against the washer and plate.

6) Install the FRONT CRADLE and the REAR CRADLE (the one with the engine stop), with the pulleys toward the front of the lift. Use the (6) $1/2$ " x 4" bolts with $1/2$ " washers and lock nuts. Again, only tighten until nut and washer are snug against brackets. DO NOT OVER-TIGHTEN THESE BOLTS as this will bend the angle brackets and prevent the "H" units from rotating to lift boat.

7) Install the two $102 1/4$ " x 2" x $2 1/2$ " cradle spreader tubes as shown in FIGURE (C) and secure with the (8) $3/8$ x $3 1/2$ " bolts, 16 flat washers and 8 nuts. TIGHTEN THESE BOLTS TIGHT!

8) Using the step ladder, mount the winch using (2) $3/8$ " x 6" bolts and washers (2 per bolt) to the outside of the MAINFRAME TUBE. Install wheel over the aluminum hub on the winch and secure with the $3/8$ " x $2 1/2$ " bolt provided. Do not overtighten the wheel nut as it may affect the braking mechanism. Install your 4 red caps at this time over the tops of the MAINFRAME tubes.

9) Now string the 34' of $1/4$ " cable at this time. (SEE CABLE RIGGING DIAGRAM).

a) Start by laying the cable out in a straight line being very careful not to kink it in any way.

b) Install the eyebolt end into the hole in the front leg of the MAINFRAME side opposite the winch.

c) Run the cable through the pulley on the cradle closest to you (A), then across the lift to the other cradle pulley (B). Now string the cable up over the midframe pulley (C) down to the lower pulley (D) and up to the winch.

D) Wrap the cable around the front side of the winch drum and insert the end through the small hole at the side of the drum and clamp

SPECIAL NOTES:

1. A second safety decal is provided in the accessories box. If when you assembled the lift the decal is not easily seen, then install this extra decal so anyone using the lift can read the VERY IMPORTANT safety rules!

2. After moving the lift into the water, be sure to LEVEL the lift. This is accomplished by using the adjustable legs and is critical to the lift's operation.

3. Ideally your lift should be operated in about 18" to 30" of water leaving approximately 5' of post out of the water. This may vary due to water level and boat size.

4. If after fully assembling the lift you discover that your winch should have been set up on the opposite side - DON'T PANIC!!

Follow the following steps:

a) Remove the cable completely from the lift.

b) Move the winch to the other side of the lift.

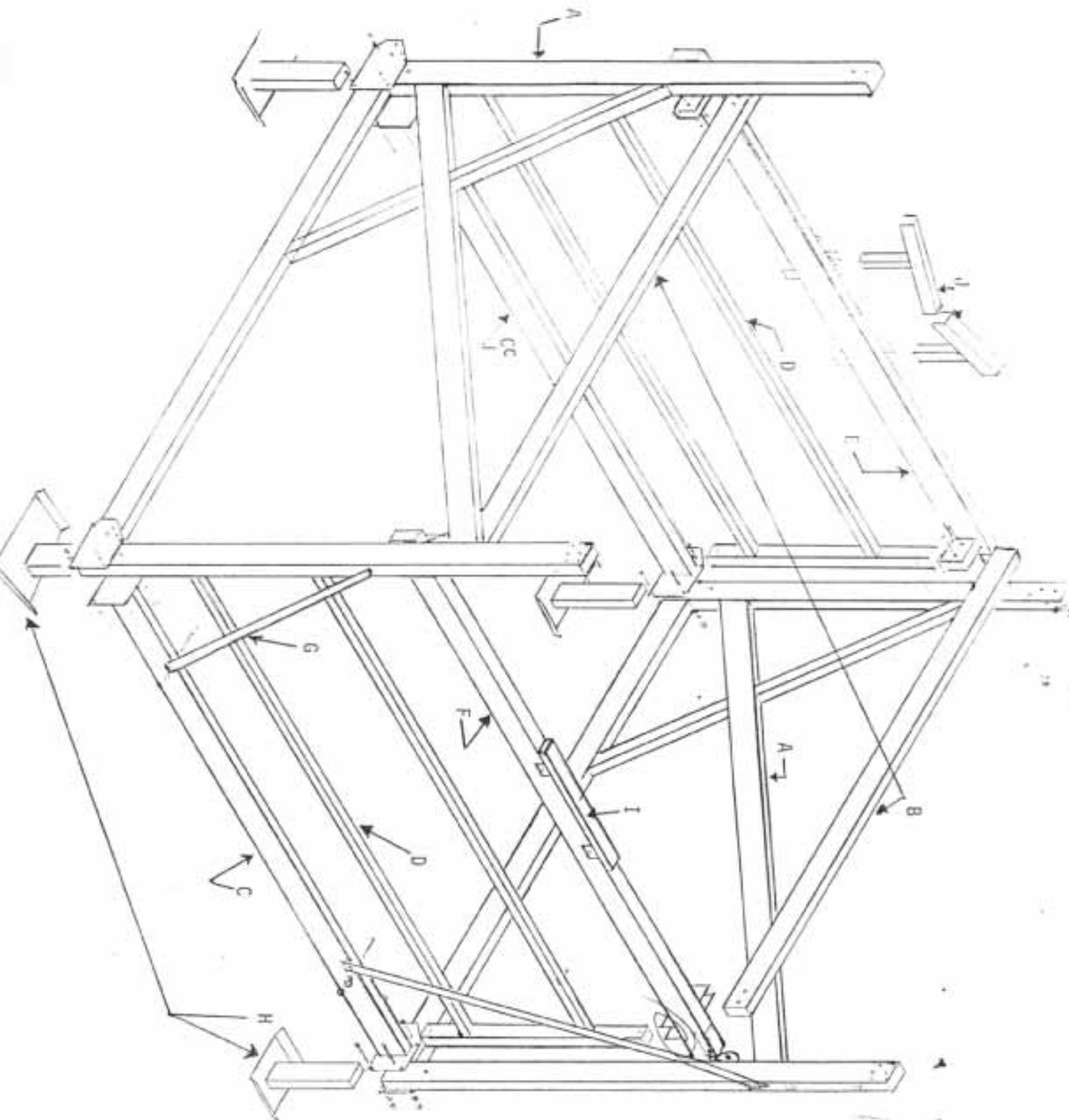
c) Move the lower pulley to the opposite side of the front mainframe spreader tube.

d) Reinstall the cable as described in step #9.

5. Always be sure that all pulleys are turning freely and inspect the cable to be sure it has no worn or frayed ends. Replace the cable at once if either of these conditions are present.

CAUTION!!!

Do not over-tighten bolts & nuts on your lift. The over-tightening of bolts may severely damage the structural integrity of your lift. When tightening a regular nut against an aluminum tube, tighten until the surface of the tube dimples slightly (1/8"). All lock nuts should be tightened until at least one to one and a half treads of the bolt are showing thru the nut. If you crush the tube, it can crack and under pressure the crack can extend and cause the tube to fail.



- A - Mainframe (2)
- B - Cradle Spreader Tube (2)
- C - Front Mainframe Spreader
- CC - Rear Mainframe Spreader
- D - H-Support Unit (2)
- E - Rear Cradle
- F - Front Cradle

- G - Angle Brace (2)
- H - Adjustable Foot (4)
- I - Front Cradle Bunk
- J - Rear Cradle Bunk (2)
- Wheel (41")
- 25dlb Dutton Lainson Winch

Not Shown***

34' Cable
Motor Stop

FIGURE A



FIGURE B

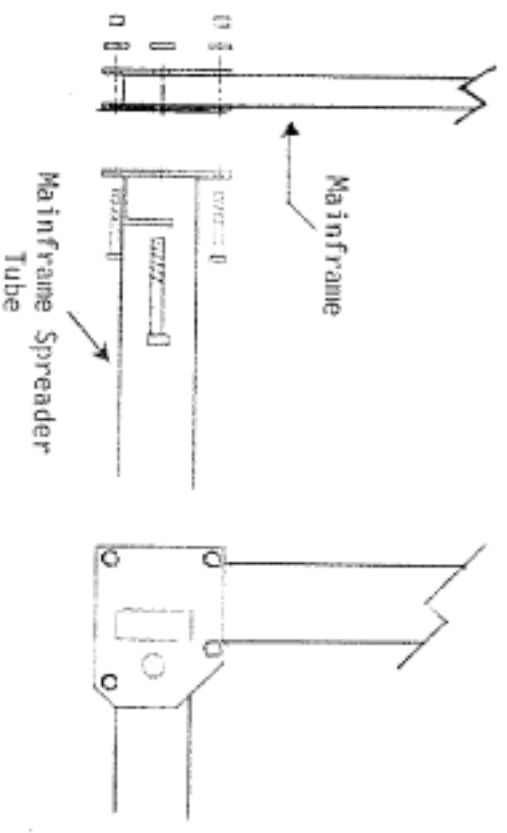
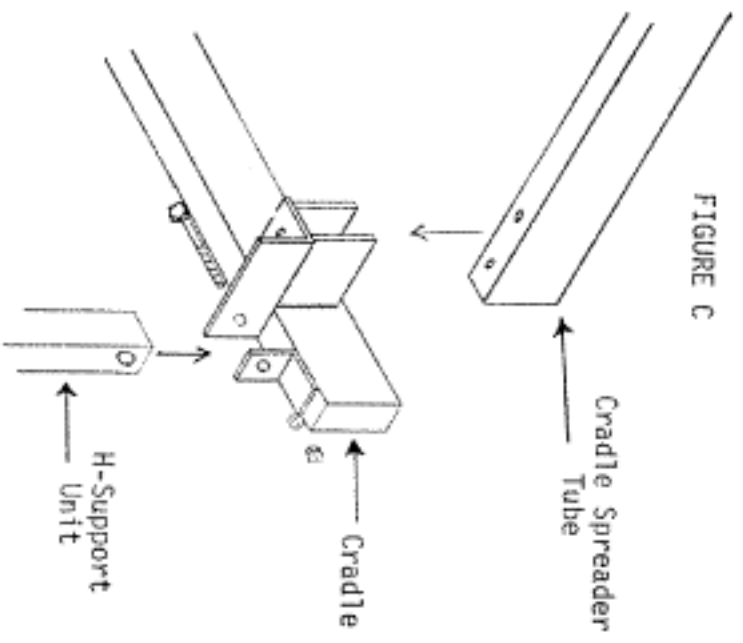
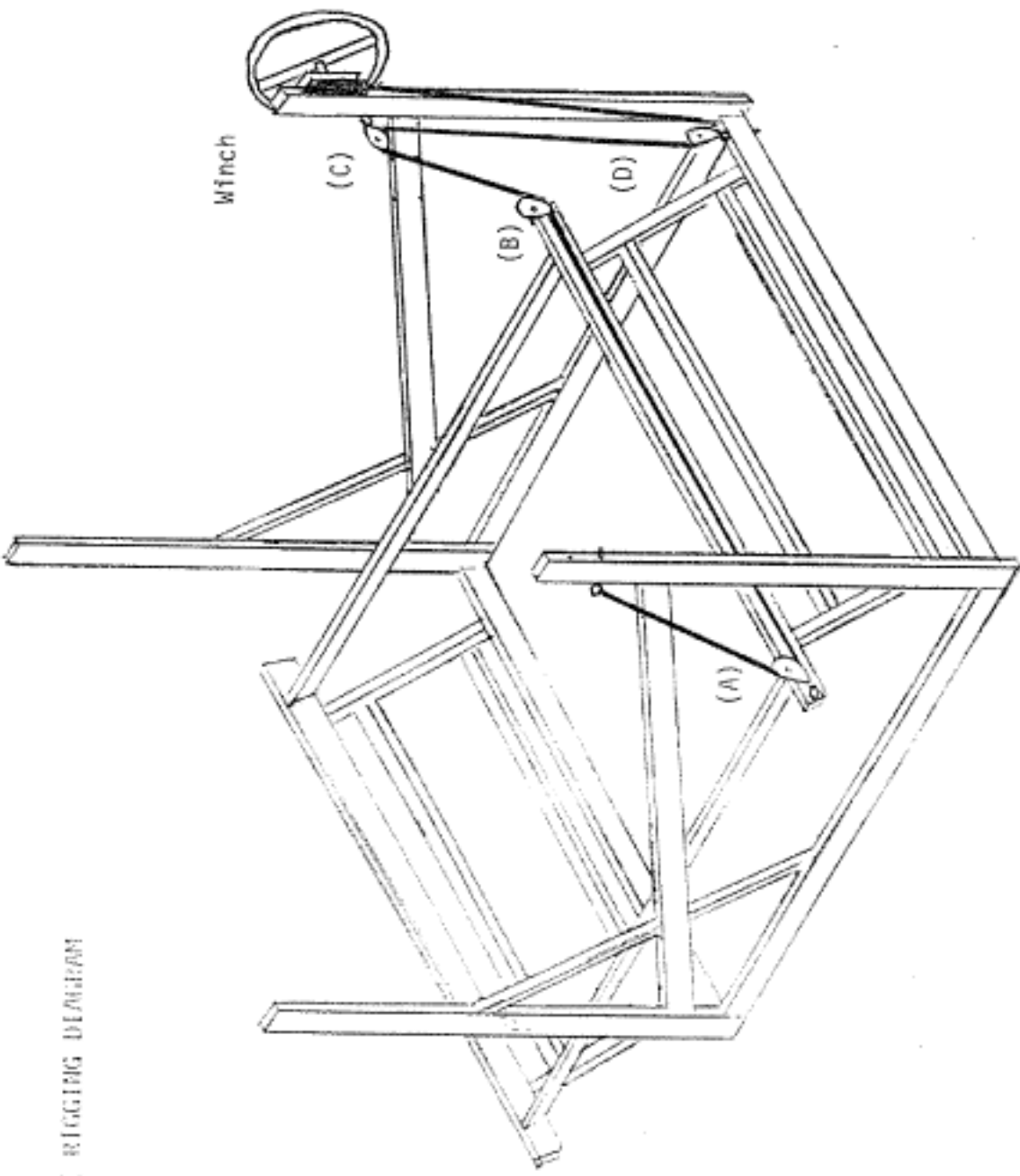


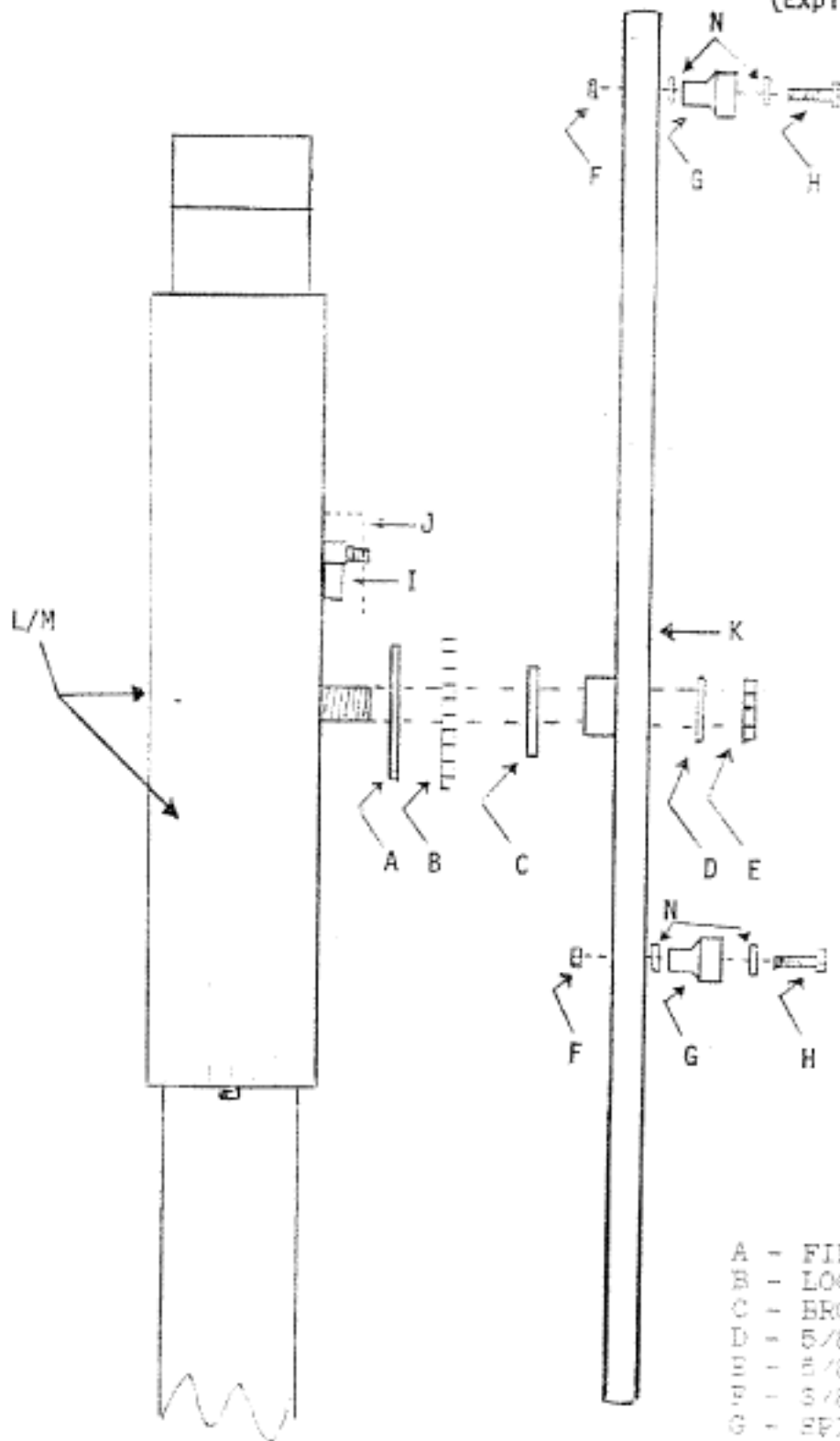
FIGURE C



CABLE RIGGING DIAGRAM



LAKESHORE WHEEL ASSEMBLY
(Exploded View)



- A - FIBER BRAKE PAD
- B - LOCKING SPROCKET
- C - BRONZE THRUST WASHER
- D - 5/8" FLAT WASHER
- E - 5/8" JAM NUT
- F - 3/8" HEX NUT
- G - SPINNER KNOB
- H - 3/8" X 3-1/2" HEX BOLT
- I - FLIPPER SPROCKET LOCK
- J - FLIPPER STOP COVER
- K - 41" WHEEL
- L/M - WINCH/WINCH COVER
- N - 3/8" FLAT WASHER