# LUNMAR INSTALLATION GUIDE 3000, 4000, & 6000 PONTOON AND CATAMARAN CRADLE KIT

READ ALL INSTRUCTIONS BEFORE STARTING

#### PARTS LIST-3000#

1--AMS 3000 GEARBOX
2--102L STRAP BEARINGS
2--560L PULLEYS
2--9' CRADLE BEAMS
8--GALV 1/4 CABLE CLAMPS
8--1/2 FLAT WASHERS

1--3/4 ELECTRIC MOTOR
4--108 BEARING BRACKETS
1--80' 1/4" GALV CABLE
1--ELECTRIC SWITCH W/GFI
4--1 1/2X1/2 BOLT/NUT/LOCK
8--3/8X4 GALV CARRIAGE BOLTS

#### PARTS LIST-4000#

ALL THE PARTS IN THE 3000# EXCEPT THE ELECTRIC MOTOR IS 1HP INSTEAD OF 3/4

#### PARTS LIST-6000#

ALL THE PARTS IN THE 3000# EXCEPT THERE IS 140' OF CABLE INSTEAD OF 80' PLUS: 4--560 PULLEYS

#### PARTS LIST-3000# (STEEL MOUNT KIT)

1--AMS 3000 GEARBOX 2--102L STRAP BEARINGS 2--560 PULLEYS 2--9' CRADLE BEAMS 8--GALV 1/4 CABLE CLAMPS 1--3/4 ELECTRIC MOTOR
1--80' 1/4" GALV CABLE
1--ELECTRIC SWITCH W/GFI
4--1 1/2X1/2 BOLT/NUT/LOCK
8--3/8X4 GALV CARRIAGE BOLTS

8--1/2 FLAT WASHERS

#### PARTS LIST-4000# (STEEL MOUNT KIT)

ALL THE PARTS IN THE 3000# EXCEPT THE ELECTRIC MOTOR IS 1HP INSTEAD OF 3/4

PARTS LIST-6000# (STEEL MOUNT KIT)

ALL THE PARTS IN THE 3000# EXCEPT THERE IS 140' OF CABLE INSTEAD OF 80' PLUS: 4--560 PULLEYS

### PARTS LIST-3000# [FOR 6" CHANNEL KIT]

1--AMS 3000 GEARBOX
2--102L STRAP BEARINGS
2--102 BACKPLATES
2--9' CRADLE BEAMS
8--GALV 1/4 CABLE CLAMPS
8--1/2 FLAT WASHERS

1--3/4 ELECTRIC MOTOR
4--8X1/2 BOLT/NUT/LOCK/FLAT
1--80' 1/4" GALV CABLE
1--ELECTRIC SWITCH W/GFI
4--1 1/2X1/2 BOLT/NUT/LOCK
8--3/8X4 GALV CARRIAGE BOLTS

4--560C PULLEY

#### PARTS LIST--4000#

ALL THE PARTS IN THE 3000# EXCEPT THE ELECTRIC MOTOR IS 1HP INSTEAD OF 3/4

#### PARTS LIST--6000#

ALL THE PARTS IN THE 3000# EXCEPT THERE IS 140' OF CABLE INSTEAD OF 80' PLUS: 4--560 PULLEYS

#### ADDITIONAL PARTS REQUIRED

1--2"X 20' SCHEDULE 40 GALVANISED PIPE
2--BUNK BOARDS--(USUALLY TREATED 2X12X16)
10--1/2 BOLTS--MEASURE THE THICKNESS OF WOOD BEAM AND ADD 1"
(THESE ARE FOR BOLTING GEARBOX TO BEAM AND PIPE BRACKETS TO BEAM)

#### OPTIONAL PARTS AVAILABLE

HOIST COVERS-----CABLE WEIGHTS-----REMOTES
STAINLESS STEEL CABLE----CABLE GUIDE POSTS-----GALV GEAR PLATES

### DO NOT USE THIS LIFT TO PICK UP HUMANS!!!!!!

#### **NEVER WORK UNDER A HANGING BOAT!!!!!**

# ANY ELECTRICAL MODIFICATIONS MUST BE DONE BY A CERTIFIED ELECTRICIAN!!

#### INSTALLATION INSTRUCTIONS

- 1) MAKE SURE ALL PARTS ARE IN BOX BEFORE DELIVERY DRIVER LEAVES
- 2) CONNECT 102L TO 108 WITH SUPPLIED BOLTS AND WASHERS
- 3) SLIDE 102 ASSEMBLIES ON TO 2" PIPE.
- 4) TIE A ROPE TO EACH END OF PIPE AND HOIST UP TO LOCATION. PIPE SHOULD BE RUNNING PARALLEL WITH BOAT AND CAN BE MOUNTED ON EITHER SIDE.
- 5) MARK HOLE THROUGH 108 ONTO BEAM AND DRILL.
- 6) BOLT 102 ASSEMBLIES TO BEAM MAKING SURE THE PIPE IS LEVEL AND RIDING IN 102L'S EVEN.





7) MEASURE APPROXIMATELY 10' ACROSS FROM PIPE DOWN THE WOOD BEAM FOR LOCATION OF THE 560L LONG SNATCH BLOCK.

- 8) ANGLE THE 560L INWARDS APPROXIMATELY 30' AND MARK HOLES MAKING SURE THE 560L IS LOWER THAN THE 102L ASSEMBLY BY AT LEAST 1".
- 9) DRILL HOLES AND BOLT UP THE 560L'S
- 10) ATTACH MOTOR TO GEARPLATE AND TIGHTEN BELT
- 11) SLIDE GEARBOX ASSEMBLY ON TO PIPE AND LINE UP AGAINST BEAM AND MARK HOLES MAKING SURE THE GEARBOX IS PERPENDICULAR TO THE PIPE. IF NOT SHIM THE GEARBOX AS NEEDED.
- 12) BOLT UP GEAR BOX
- 13) DRILL 1/2 HOLE IN 2" PIPE AND MOUNT GEARBOX TO PIPE WITH SUPPLIED BOLT.
- 14) DRILL 5/16 HOLE THOUGH PIPE IN THE CENTER OF THE 102L.
- 15) RUN CABLE THOUGH PIPE -----THROUGH THE 260---DOWN TO CRADLE BEAM AND CLAMP WITH 2 SUPPLIED CLAMPS (IF 6000# RUN THROUGH 560S AND DEADMAN OFF ON OVERHEAD BEAM)
  16) WITH NO WRAPS OF CABLE ON THE PIPE YOU CAN LEVEL CRADLE BEAMS BY PULLING DOWN ON CABLE.
- 17) GREASE THE GEARBOX AT THE THREE ZERTS AND APPLY A LIBERAL AMOUNT OF GREASE TO FLYWHEEL AND WORM GEAR. APPLY A SMALL AMOUNT OF GREASE ON THE 102L WHERE THE PIPE RUBS.
- 18) LAY THE 2 BUNKS BOARDS FLAT ON THE CRADLE BEAMS.
  MEASURE THE DISTANCE BETWEEN PONTOONS AND USE THIS
  DISTANCE TO CENTER BOARDS ON CRADLE.
- 19) DRILL 3/8 HOLE THROUGH BUNK BOARDS AND CRADLE BEAM AND ATTACH WITH THE SUPPLIED 8 CARRIAGE BOLTS.
- 20) RUN ELECTRICAL WIRE AND PLUG IN UNIT MAKING SURE SWITCH IS OFF AND ALL PERSONS ARE CLEAR.
- 21) HOLDING TENSION ON EACH CABLE TURN WINCH ON AND GUIDE CABLES SO THAT CABLES WRAP OPPOSING EACH OTHER WITHOUT STACKING.
- 22) LOWER WINCH AND SLIDE BOAT ON TO LIFT.
- 23) TURN WINCH ON TO PICK UP BOAT.
- 24) GREASE WINCH EVERY 3 MONTHS/ CHECK CABLES EVERY 3 MONTHS.

## **TROUBLESHOOTING**

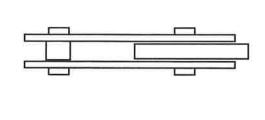
BOAT LIFT MAKES EXCESSIVE AMOUNTS OF NOISE 102 ARE OUT OF ALIGNMENT UNIT IS NOT GREASED PROPERLY GEARBOX IS NOT 90' TO PIPE CABLE IS RIDING AGAINST 102L ASSEMBLY

BOAT LIFT WILL NOT PICK UP BOAT BOAT WEIGHS MORE THAN LIFT CAPACITY LOW VOLTAGE TO MOTOR—#1 PROBLEM BAD ALIGNMENT BELT IS SLIPPING

LUNMAR BOAT LIFTS 3715 HIGHWAY 27 SOUTH SULPHUR, LA 70665 (337)558-7200

6000 CRADLE KIT

560S PULLEY



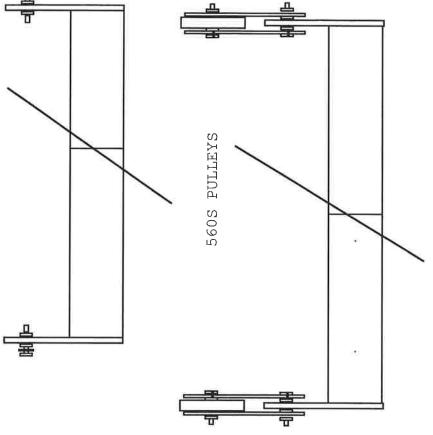
TO SLING OR OILITE BUSHING TO ATTACH TO SLING OF REMOVE BOLT AND CRADLE



INTO OILITE BUSHING AS 1) INSERT BOLT/WASHER SHOWN LEFT

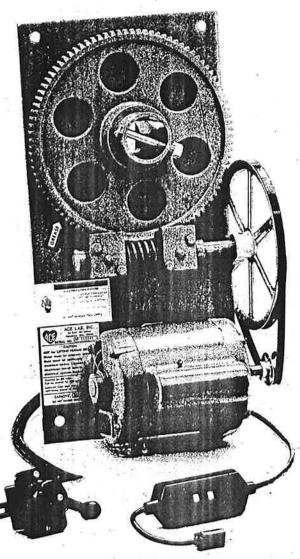
DRIVE BUSHING HALF 2) WITH A HAMMER

OILITE BUSHING



STRIKING BOLT HEAD AS WAY INTO PAD EYE BY SHOWN RIGHT

# Now featuring a Ground Fault Circuit Interrupter for powering boat lift systems with maximum safety!



INDIVIDUAL BRANCH CIRCUITS FOR SINGLE-PHASE MOTOR					
MOTOR	9 1	MINIMUM WIRE SIZE (GAGE) FOR BRANCH CIRCUITS INDICATED			
HP	volts	0·50 FT.	100 FT.	200 FT.	500 FT.
1/4	230 115	14 14	14 12	12 10	8
1/3	230 115	14 14	14 12	12 310	8° 4
112	230 115	14 12	12 10	10 8	6 4
3/4	230 115	-1.4 -12	12 8	10 6	6 2
1	230 115	14 10	10 8	8 6	4

Made in America of 100% American parts in Pataskala, Ohio, the new Ace 401 Power Hoist is better than ever. With the addition of a new safety feature, the Ground Fault Circuit Interrupter (GFCI), the Ace 401 Power Hoist will help prevent shocks from faults in the wiring by sensing any deviation in the flow and return of the current.

Incorporated in all Ace electrically operated boat lift systems, the 401 Power Hoist with GFCI will typically trip within half a second when it detects a 5 milliamp variation in the current.

Designed for use in Ace Davits, Verti-Lifts, Elev-Verts, Boat House installations, Personal Watercraft and Jetboat Lifts, it can also be readily adapted to most other existing lift systems. The quality and reliability of the Ace 401 Power Hoist is indicative of Ace's leadership in the boat hoist industry.

# SPECIFICATIONS:

*Motor:* 3/4 hp, 1725 rpm, capacitor start, 115V @ 11.2 amps/230V @ 5.6 amps, J-56 frame.

*Switch:* UL approved, full contact breaking, reversing type, plastic UV protected mounting box.

Wire: Factory pre-wired for 115V, standard with 16' of 16/5 SJTWA weatherproof control cable from the switch to the motor and 9' long GFCl-protected 3-prong AC cord.

Capacity: 2,800# straight lift (3.5 rpm @ 24" per minute travel), 5,600# compound lift (3.5 rpm @ 12" per minute travel).

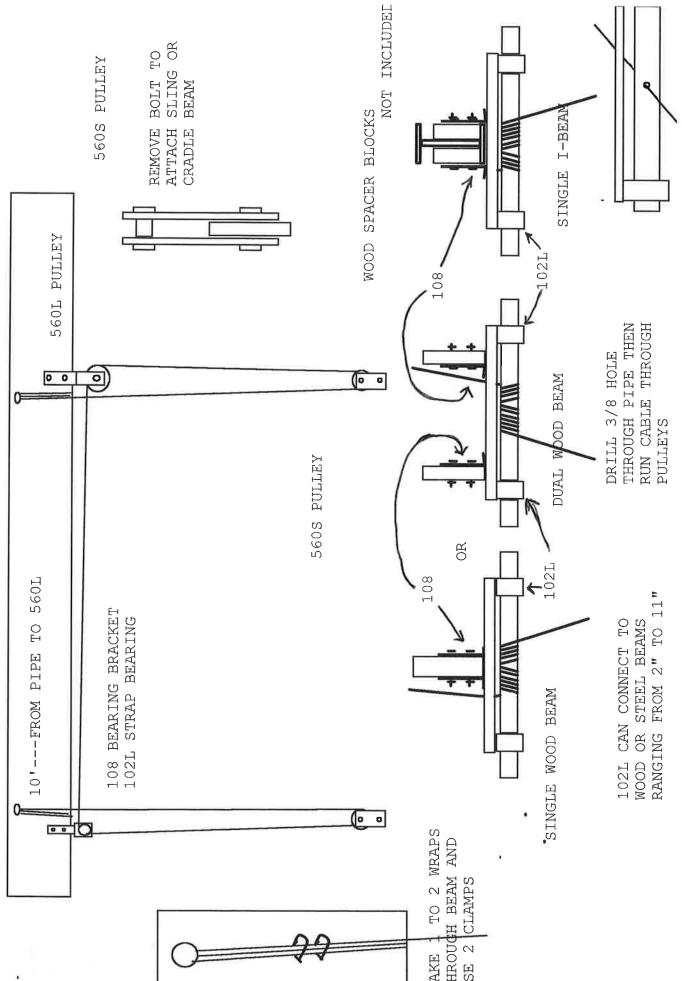
Base Plate: 24" x 12" x 14" cold formed steel.

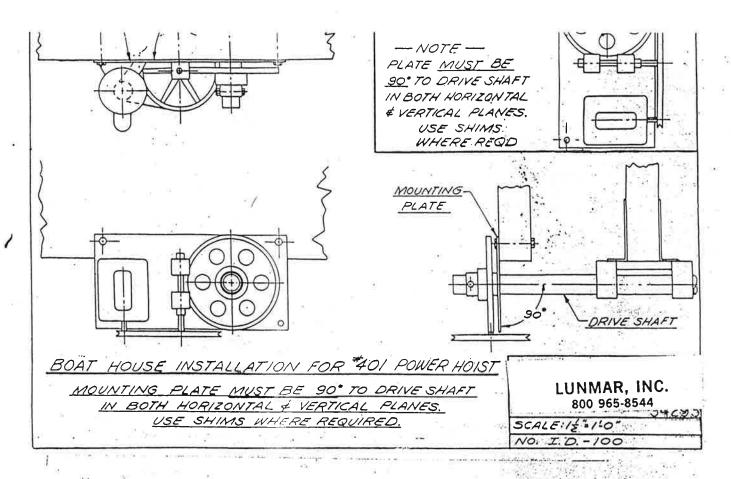
*Options:* #101P Hoist Cover (protects motor side of gear plate), includes pulley guard and mounting hardware.

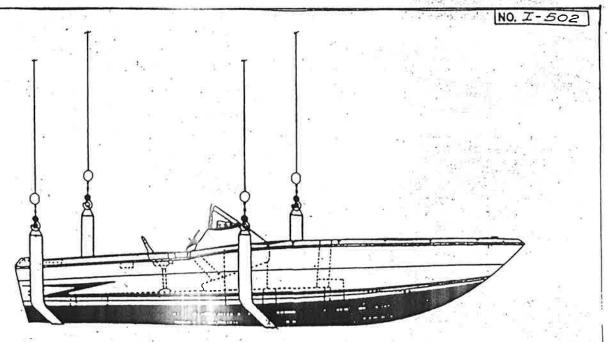
T.E.F.C. Motors (Totally Enclosed Fan Cooled).

Optional lengths of 16/5 control wire available on request.

Momentary switches.



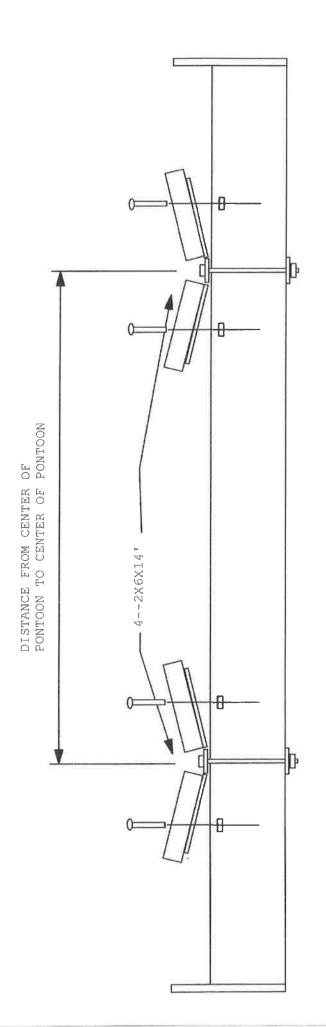




# FOR OPTIMUM PERFORMANCE:

EQUAL WEIGHT DISTRIBUTION IS REQUIRED ON ALL 4 CABLES.

4-POINT SLING HOIST



LUNMAR PONTOON CHOCK BRACKETS

LUNMAR BOAT LIFTS 3715 HWY 27 SOUTH SULPHUR LA 70665 337-558-7200 337-558-7202 (FAX)

LUNMAR WOOD MOUNT KITS USING THE PILING MOUNT 102 G AND 560 PARTS