

LUNMAR INSTALLATION GUIDE
3000 SL &CL / 4000 SL & CL / 6000 SL & CL
KITS [FOR 6" CHANNEL]

READ ALL INSTRUCTIONS BEFORE STARTING!!!

THE LUNMAR KIT [FOR 6" CHANNEL] IS DESIGNED TO ATTACH TO 6" CHANNEL THAT IS RUNNING OVERHEAD AND PERPENDICULAR TO THE BOAT OVER THE LIFT POINTS. THE KIT REQUIRES NO DRILLING SINCE ALL COMPONENT ARE CLAMPED TO BEAMS. MOUNTING OF THE GEARBOX, PIPE AND PULLEYS ON THE 3000, 4000, AND 6000 ARE THE SAME.

THE TORQUE PIPES CONNECT THE GEARBOX TO THE GEARBOX CLAMP PLATES WHICH ARE SECURED TO THE CHANNEL (AS SHOWN IN DIAGRAM 1). (MAKE SURE THE GEARBOX IS 90 DEGREES TO THE PIPE.)

MOUNT THE STRAP BEARING (AS SHOWN IN DIAGRAM 2) USING THE 8" BOLTS AND STRAP BEARING CLAMPS. THE PIPE SHOULD BE MOUNTED DOWN THE CENTER AND RUN PERPENDICULAR TO THE 6" CHANNEL. DRILL 3/8 THROUGH THE PIPE, BETWEEN THE STRAP BEARING, TO RUN THE CABLE.

MOUNT THE PULLEY (AS SHOWN IN DIAGRAM 3), MAKING SURE YOU HAVE 4 WASHERS ON EACH SIDE OF THE SHEAVE.

THE LUNMAR 3000, 4000, AND 6000 BASIC INSTALLATION ARE THE SAME. THE 3000 AND 4000 WORK BASED ON A SINGLE LINE PULL AND THE 6000 WORKS BASED ON A DOUBLE LINE PULL. THE OVERHEAD INSTALLATION OF THESE KITS ARE THE SAME EXCEPT ON THE 3000 AND 4000 THE CABLE CONNECTS DIRECTLY TO THE SLING OR CRADLE BEAM AND ON THE 6000 IT PASSES THROUGH A PULLEY AND THEN BACK UP TO DEADMAN OFF ON AN OVERHEAD BEAM. LUNMAR KITS ARE DESIGNED FOR A 2" SCHEDULE 40 GALVANISED PIPE TO RUN DOWN CENTER FROM THE OVERHEAD BEAMS WHICH RUN PERPENDICULAR TO THE BOAT BY STRAP BEARINGS AND BEARING BRACKETS. THE BEAMS WHICH THE KIT ATTACH TO ARE USUALLY 10' TO 12' APART DEPENDING ON LENGTH OF BOAT AND THE DISTANCE BETWEEN THE STRAP BEARING AND THE 560 PULLEYS ARE 10' IF THE BOAT IS 8' WIDE. WHEN DESIGNING THE BOAT HOUSE OR ADDING BEAMS TO AN EXISTING BOAT HOUSE

FOLLOW THESE STEPS FIRST:

- 1) THE STANDARD LUNMAR KIT REQUIRES TWO 6" CHANNELS RUNNING PERPENDICULAR TO THE BOAT.
- 2) PULL THE BOAT INTO THE BOAT SLIP.
- 3) THE AFT CHANNEL SHOULD BE LOCATED 1' TO 2' FROM TRANSOM.
- 4) THE NEXT BEAM SHOULD BE LOCATED ABOVE THE BOAT WHERE YOU WOULD WANT THE FRONT SLING TO HIT THE BOAT. USUALLY 10' TO 12'.

PARTS LIST
KITS [FOR 6" CHANNEL]

CHECK BOXES FOR ALL PARTS BEFORE FREIGHT COMPANY LEAVES!!!

LUNMAR 3000 SL (SLING)

1--3/4 MOTOR/SWITCH/GFI
1--AMS 3000 GEARPLATE
2--102G STRAP BEARINGS
2--102 BACKPLATES
4--8" BOLTS
4--560SM PULLEYS
2--12" TORQUE PIPES
1--80' 1/4" GALV. CABLE
8--CABLE CLAMPS
2--4"X14' NYLON SLINGS
2--1/2" X 14" BOLTS/NUTS/LOCKS/FLATS

LUNMAR 4000 SL (SLING)

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

LUNMAR 6000 SL (SLING)

ALL THE PARTS IN THE 3000SL
PLUS: 4--560 PULLEYS
140' 1/4" GALV. CABLE

ADDITIONAL PARTS REQUIRED

1--2" SCHEDULE 40 GALVANISED PIPE (21')

LUNMAR 3000 CL (CRADLE)

1--3/4 MOTOR/SWITCH/GFI
1--AMS 3000 GEARPLATE
2--102G STRAP BEARINGS
2--102 BACKPLATES
4--8" BOLTS
4--560SM PULLEYS
2--12" TORQUE PIPES
1--80' 1/4" GALV. CABLE
8--CABLE CLAMPS
2--5"X9' CRADLE BEAMS
8--834 CHOCK BRACKETS
8--1/2"X4 1/2" BOLTS
8--3/8"X4" CARRIAGE BOLTS
2--1/2" X 14" BOLTS/NUTS/LOCKS/FLATS

LUNMAR 4000 CL (CRADLE)

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

LUNMAR 6000 SL (SLING)

ALL THE PARTS IN THE 3000CL
PLUS: 4--560 PULLEYS
140' 1/4" GALV. CABLE

ADDITIONAL PARTS REQUIRED

1--2" SCHEDULE 40 GALVANISED PIPE (21')
2--BUNK BOARDS (2 X 12 X 16 ROUGH CUT TREATED)

*THE PONTOON CRADLE KITS ARE THE SAME AS THE CRADLE KITS, LESS THE (8) 834
CHOCK BRACKETS AND THE (8) 1/2" X 4 1/2" BOLTS.*

OPTIONAL PARTS AVAILABLE

HOIST COVERS----WEIGHTED SLINGS----CABLE WEIGHTS----REMOTES
STAINLESS STEEL CABLE----GALV GEAR PLATES----6"/8"/10" SLINGS
CABLE GUIDE POSTS----GREASE GUTTERS

THIS KIT IS A BOATLIFT AND IS INTENDED TO BE USED AS ONLY A BOATLIFT. DO NOT USE THIS LIFT TO PICK UP HUMANS.

DO NOT WORK UNDER A HANGING BOAT!!!!!!

ALL ELECTRICAL MODIFICATIONS MUST BE DONE BY A CERTIFIED ELECTRICIAN!!!!

TOOLS REQUIRED FOR INSTALLATION:

ELECTRIC DRILL-----1/2 WOOD BITS-----1/2 STEEL BIT-----5/16 STEEL BITS
HAMMER-----WRENCHES-----SCREW DRIVERS-----LEVEL-----ROPE-----PENCIL

FOLLOW THESE STEPS IN ORDER TO SAVE TIME!!!!

- 1) CHECK ALL PARTS.
- 2) REMOVE TOP BOLT FROM PULLEY ASSEMBLY, HANG ON 6" CHANNEL, REPLACE BOLT, LEAVE ALL HARDWARE LOOSE.
- 3) INSTALL TWO PULLEYS ON EACH CHANNEL CENTERED OVER BOAT SLIP 10' APART AND ANGLE IN AS MUCH AS POSSIBLE.
- 4) TIGHTEN PULLEYS AND TEST SHEAVE MAKING SURE IT SPINS FREELY. IF NOT ADJUST ACCORDINGLY.
- 5) LOCATE THE TWO 102 STRAP BEARINGS, FOUR 8" BOLTS, AND THE 5" BACKING PLATES.
- 6) CLAMP THE 102 TO THE 6" CHANNEL BY RUNNING THE 8" BOLTS THROUGH THE 102 AND BACKING PLATE. MAKE SURE THE NUTS ARE ON THE TOP SIDE OF THE CHANNEL AND NOT IN THE 102.
- 7) LEAVE THIS ASSEMBLY LOOSE CENTERED BETWEEN THE PULLEYS.
- 8) CUT THE 2" SCHEDULE 40 GALVANIZED PIPE (NOT SUPPLIED) TO LENGTH. LENGTH OF PIPE CAN BE DETERMINED BY MEASURING THE DISTANCE BETWEEN FRONT AND BACK CHANNEL AND ADDING 30".
- 9) SLIDE PIPE INTO PLACE THROUGH THE 102 STRAP BEARINGS.
- 10) INSTALL MOTOR ON GEARPLATE, ALIGN PULLEY, AND TIGHTEN BOLT.
- 11) SLIDE GEARBOX ASSEMBLY ON END OF 2" PIPE.
- 12) REMOVE 1 BOLT FROM EACH GEARBOX MOUNT AND CLAMP AROUND CHANNEL LEAVING ASSEMBLY LOOSE.
- 13) ROTATE GEARBOX ON SIDE SO MOTOR PULLEY IS POINTED DOWN.
- 14) BOLT GEARBOX MOUNT TO EACH TOP CORNER OF GEARBOX.
- 15) DRILL 1/2" HOLE THROUGH 2" PIPE TO MOUNT GEARBOX.
- 16) DRILL 3/8" HOLE THROUGH 2" PIPE BETWEEN THE 102 STRAP BEARINGS.
- 17) ATTACH DOUBLE CABLE CLAMPS TO EACH END OF CABLE.
- 18) GREASE GEARBOX AND STRAP BEARINGS.
- 19) ATTACH SLINGS OR CABLES AS SHOWN.

SKIP TO 21 IF INSTALLING A 6000# KIT.

- 20) CUT CABLE IN HALF AND RUN THROUGH PIPE AND OVER TO PULLEY ATTACHING LOOSE ENDS TO SLINGS (OR CRADLE BEAM) WITH THE PROVIDED CLAMPS. ***GO TO 24.***

- 21) RUN CABLE THROUGH PIPE OVER TO 560 LONG PULLEY DOWN TO 560 PULLEY AND DEADMAN OFF ON OVERHEAD BEAM.
- 22) ATTACH PULLEY TO SLING OR CRADLE BY REMOVING BOLT ON PULLEY.
- 23) YOU CAN LEVEL THE SLING OR CRADLE BEAM BY PULLING DOWN ON CABLE.
- 24) ONCE LEVEL TURN ON WINCH. ONCE TWO WRAPS ARE MADE ON TO PIPE THE CABLE IS LOCKED INTO POSITION AND WILL NOT MOVE.
- 25) MAKE SURE CABLES WRAP OPPOSING EACH OTHER WITHOUT STACKING (STACKING CABLES WILL REDUCE THE LIFE OF THE CABLES).
- 26) GREASE GEARBOX AT THE THREE ZERTS AND SPREAD A LIBERAL AMOUNT OF GREASE ON FLYWHEEL. APPLY SMALL AMOUNT OF GREASE ON THE 102'S TO ELIMINATE SQUEALING.

IF YOU ARE INSTALLING A SLING KIT YOU ARE FINISHED.

FINAL CRADLE INSTALLATION

- 27) **PONTOON APPLICATION** -- LAY BUNK BOARDS FLAT ON CRADLE BEAMS SO PONTOONS WILL LINE UP. DRILL 3/8 THROUGH BUNK BOARD AND CRADLE BEAM AND BOLT UP BOARD.
V-BOTTOM FOR FLAT BOTTOM BOAT APPLICATION -- ASSEMBLE CHOCK BRACKETS AS SHOWN IN DIAGRAM AND CONNECT TO CRADLE BEAM. THE BUNK BOARDS SHOULD BE ANGLED TO CONFORM TO THE BOTTOM OF THE BOAT. ON AN 8 1/2 BOAT THE AFT CHOCK BRACKETS SHOULD BE ABOUT 60" APART AND THE FORWARD CHOCK BRACKETS SHOULD BE ABOUT 56" APART. ON FLAT BOTTOM BOAT STAND THE BOARDS SO THAT THEY ARE 90 DEGREES TO THE BUNK BOARDS.
- 28) IF YOU PURCHASED THE OPTIONAL CABLE GUIDE POSTS CONNECT BETWEEN THE CRADLE AND THE 560 PULLEYS.

TROUBLESHOOTING

LIFT WILL NOT PICK UP BOAT

- 1) BOAT WEIGHS MORE THAN LIFT CAPACITY
- 2) LOW VOLTAGE
- 3) BELT SLIPPING
- 4) GEARPLATE OR PIPE BINDING DUE TO IMPROPER ALIGNMENT

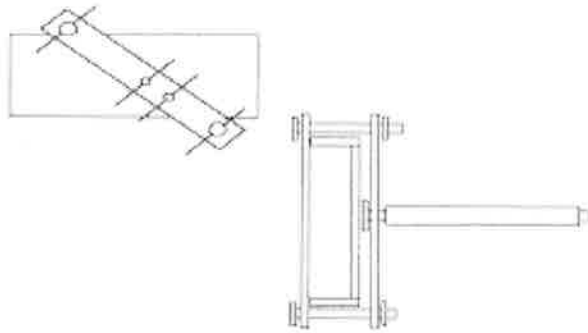
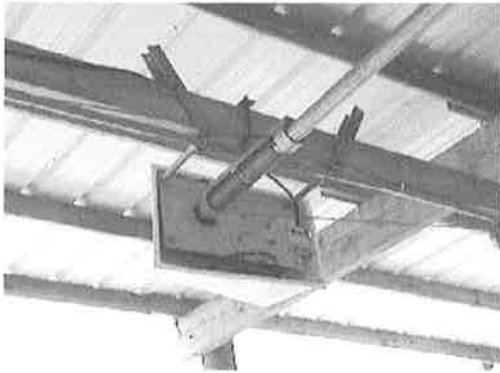
LIFT MAKING EXCESSIVE NOISE

- 1) NEEDS TO BE GREASED
- 2) PIPE OR GEARBOX OUT OF ALIGNMENT
- 3) CABLES RUBBING AGAINST 102 ASSEMBLIES

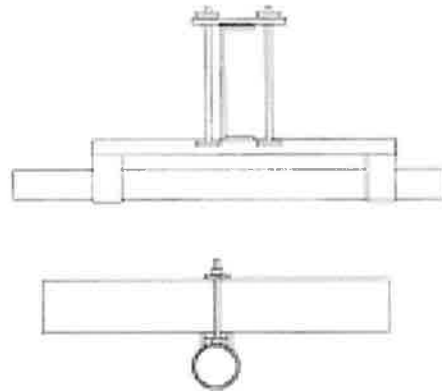
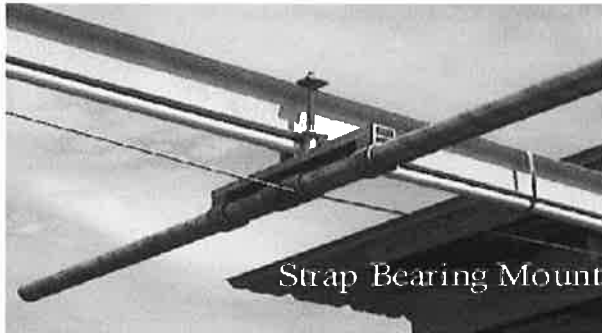
CABLES BACKLASHING

- 1) ADD CABLE WEIGHTS TO PULLEYS
- 2) UPGRADE TO WEIGHTED SLINGS
- 3) CABLES RUBBING AGAINST 102 ASSEMBLY

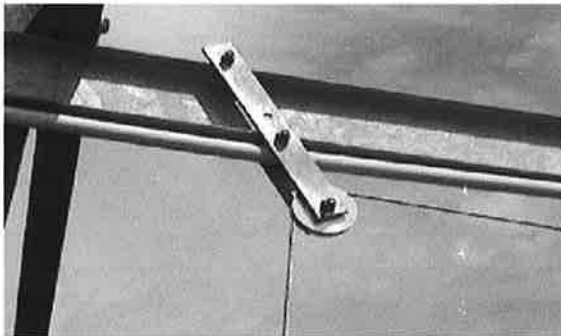
**GEARBOX MOUNT
(DIAGRAM 1)**



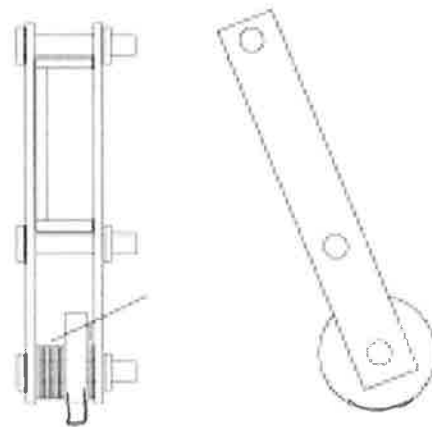
**STRAP BEARING MOUNT
(DIAGRAM 2)**



**560SM PULLEY MOUNT
(DIAGRAM 3)**



**ANGLE THE PULLEY ASSEMBLY IN TOWARDS
THE DRIVE PIPE.
PLACE SUPPLIED WASHERS BETWEEN THE
SHEAVE AND PLATES TO FILL THE VOID.**



STANDARD LAYOUT

