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LONG CHIH INDUSTRIAL CO., LTD.

IMPORTERS & EXPORTERS-MANUFACTURERS

ORIGINAL

August 18, 1988

19 pgs.

National Highway Traffic
Safety Administration
400 Seventh Street, S.W.
Washington, DC 20590
U.S.A.

Attn: VIN Coordinator

Dear Sirs:

We herewith provide the following information in accordance with 49 CFR Section 566.5 required to be registered as a manufacturer of Boat Trailer.

- a) Name: Long Chih Industrial Co., Ltd.
- b) Address: NO. 8, Alley 14, Lane 151, Chung Shan Rd. Sec. 2,
Shu-Lin, Taipei Hsien, Taiwan, R.O.C.
P.O. Box 22793 Taipei, Taiwan, R.O.C.
TEL: 886-2-6832345
- c) Description of Boat Trailer
 1. Construction: heavy duty steel (K.D. type).
 2. Tires - 4.80-8 tubeless, 4 ply rating.
 3. Wheel - 4 bolt demountable.
 4. Safety Chain - with "S" hook.
 5. Width - 40"
 6. Tread Width - 46½"
 7. Overall Length - 154"
 8. Coupler - class 1, for 1-7/8" ball
 9. GVWR - 600 LBS
 10. GAWR - 1080 LBS with 4.80-8(B) tires, 8x3.75 rims at 60 PSI cold.

8, ALLEY 14, LANE 151,
CHUNG SHAN RD. SEC. 2
SHU-LIN, TAIPEI HSIEN,
TAIWAN R. O. C.

TEL: (02) 683-2345-9
P. O. BOX 22793 TAIPEI
TAIWAN, R. O. C.

TELEX: 23058 LONGCHIH
CABLE: "LONGCHIH" TAIPEI



LONG CHIH INDUSTRIAL CO., LTD.

IMPORTERS & EXPORTERS-MANUFACTURERS

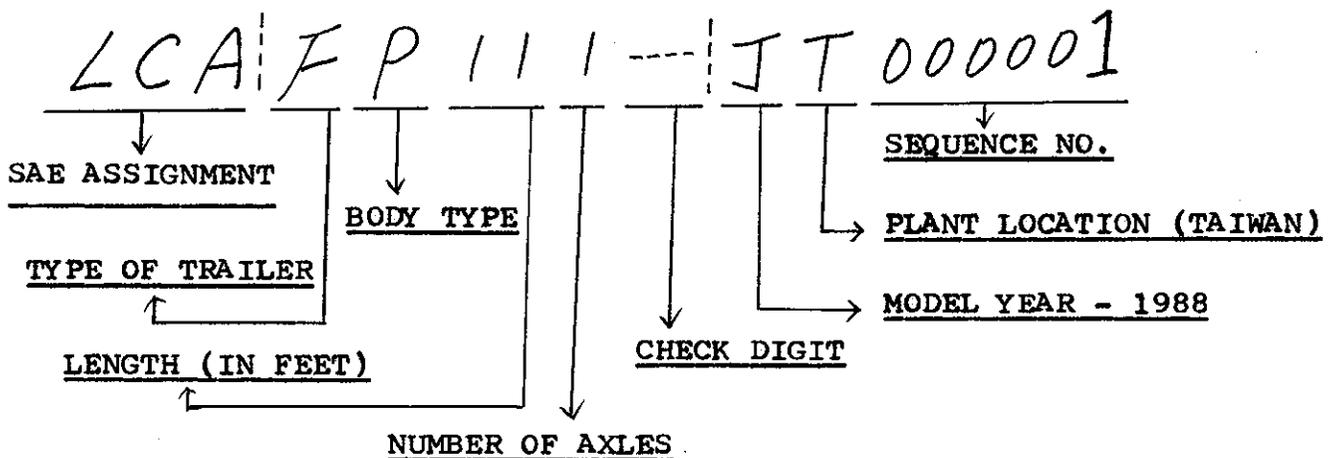
National Highway Traffic
Safety Administration

-Page 2-

August 18, 1988

Attn: VIN Coordinator

d) VIN Scheme-Drawing and explanation as follows:



Sincerely yours,
LONG CHIH INDUSTRIAL CO., LTD.

Frank Juan

Frank Juan
Managing Director

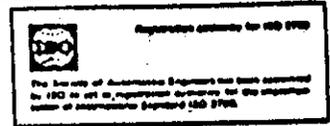
Encls. SAE Confirmation
Picture of LCI-880P
Boat Trailer

8, ALLEY 14, LANE 151,
CHUNG SHAN RD. SEC. 2
SHU-LIN, TAIPEI HSIEN,
TAIWAN R. O. C.

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P. O. BOX 22793 TAIPEI
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TELEX: 23058 LONGCHIH
CABLE: "LONGCHIH" TAIPEI

 The Engineering
Resource For
Advancing Mobility



50 COMMONWEALTH DRIVE, WARRENDALE, PA. 15096 (412)776-4841 TELEX NO. 866-355 CABLE ADDRESS: SOCAUTOENG. I

June 24, 1983

Mr. Ken Leathers
Moss Manufacturing Co., Ltd.
7600 N. W. 69th Avenue
Miami, FL 33152

Dear Mr. Leathers:

In reply to the telex sent by Long Chih Industrial Co., Ltd. on June 24, 1983, we hereby confirm the following assignment for the first three characters:

Long Chih Industrial Co., Ltd.
4-6 Fl, Shinshen S. Road
P. O. Box 22793
Sec. 3 Taipei, Taiwan
REPUBLIC OF CHINA

L C A

Reserved/Trailers

Also enclosed is a copy of the Federal Safety Standard MVSS 115 that will assist you in determining the rest of the seventeen characters.

Sincerely,



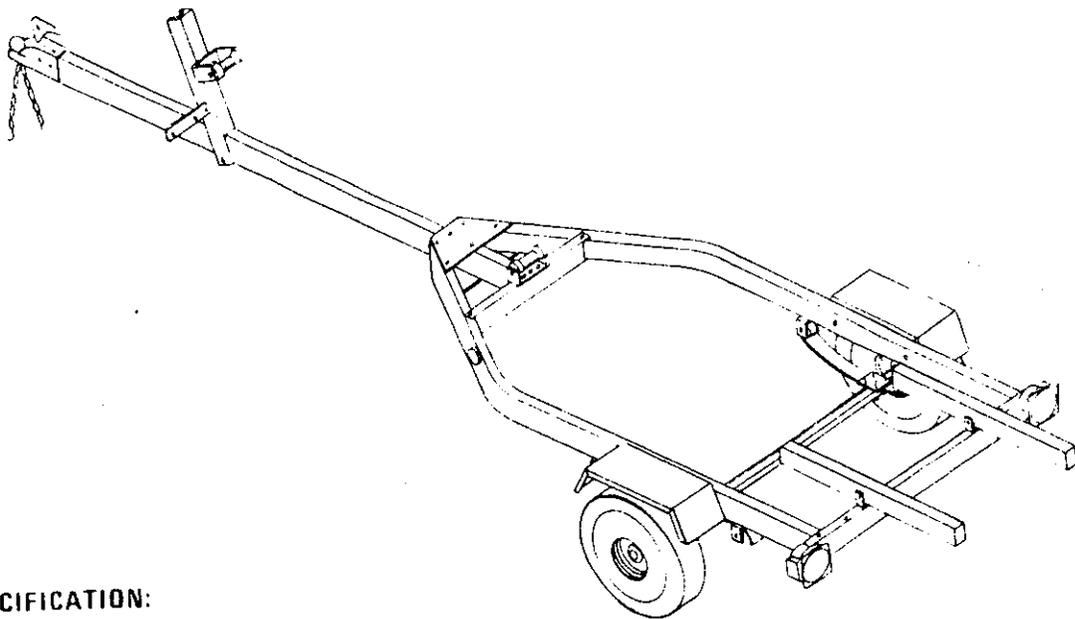
David P. Martus
Manager, Motor Vehicle Safety
and Environment Program

/mls

Enclosure

cc: M. R. Dixon
N. F. Erickson
R. Huang
B. P. Hickey

OWNER'S INSTRUCTIONS DIY BOAT TRAILER



SPECIFICATION:

Item No.: **LCI-880P**, LCI-880G

Over length: **154"**

Shipping weight: **187 LBS**

Max. load capacity: **600 LBS**

Tire: **4.8-8 (B) tubeless, 4 PR**

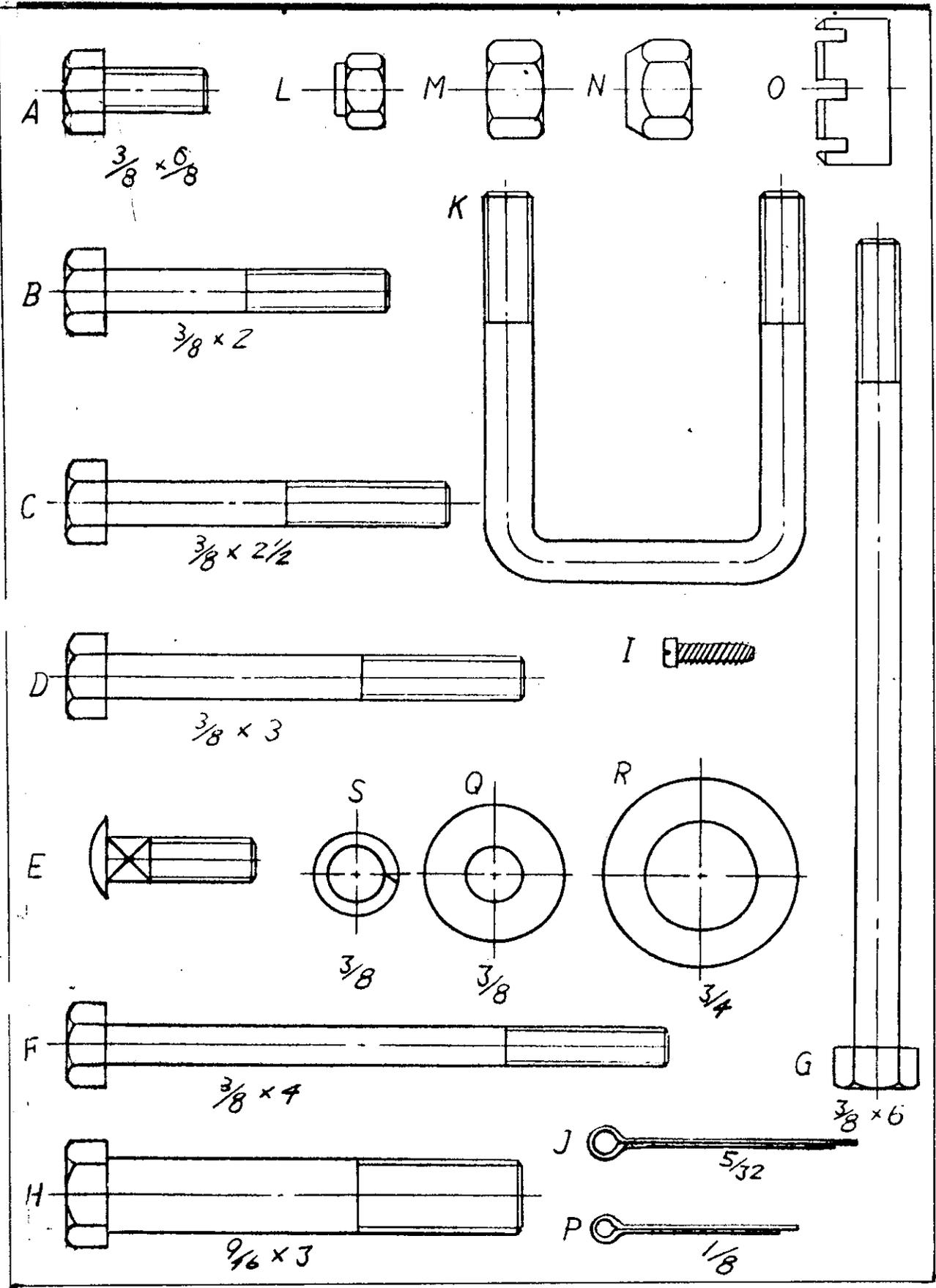
Wheel: **4 bolt demountable**

Coupler capacity: **class 1, 2000 LBS. max gross load. fit for 1 7/8" ball**

LCI-880P
LCI-880G

BOAT TRAILER PARTS LIST

PARTS			HARDWARE		
NO.	QTY	DESCRIPTION	NO.	QTY	DESCRIPTION
1	1	Towbar	A	4	3/8" x 3/4" Bolt
2	2	Side Rail	B	1	3/8" x 2" Bolt
3	1	Orientation Bar	C	9	3/8" x 2-1/2" Bolt
4	1	Connecting Rod	D	3	3/8" x 3" Bolt
5	1	Axle	E	1	Carriage Bolt
6	1	Cross Member	F	13	3/8" x 4" Bolt
7	1	Roller Base (Small)	G	1	3/8" x 6" Bolt
8	1	Roller Base (Large)	H	4	9/16" x 3" Bolt
9	1	Roller (Large)	I	4	Self Tapping Screw
10	1	Roller (Small)	J	2	Cotter Pin
11	2	Connecting Plate	K	4	"U" Bolt
12	4	Spring Hanger	L	40	3/8" Nylon Nut
13	2	Brace	M	4	9/16" Nut
14	2	Spring Plate	N	8	Lug Nut
15	2	Wooden Plate	O	2	Castle Nut
16	2	Wooden Plate Base	P	4	1/8" Cotter Pin
17	2	Tail Light	Q	2	3/8" Flat Washer
18	2	Tire	R	2	3/4" Flat Washer
19	2	Fender	S	8	Spring Washer
20	2	Spring	T	2	Grease Fitting
21	2	Side Running Light			
22	1	License Plate Bracket			
23	1	Safety Chain			
24	1	Coupler			
25	2	Hub			
26	4	Bearing			
27	2	Dust Cap			



Read the instructions carefully and follow them step-by-step for easy assembly. You'll find a complete parts list on the previous page. Average assembly time is approximately 3 hrs. You'll need the following tools to assemble your Boat Trailer.

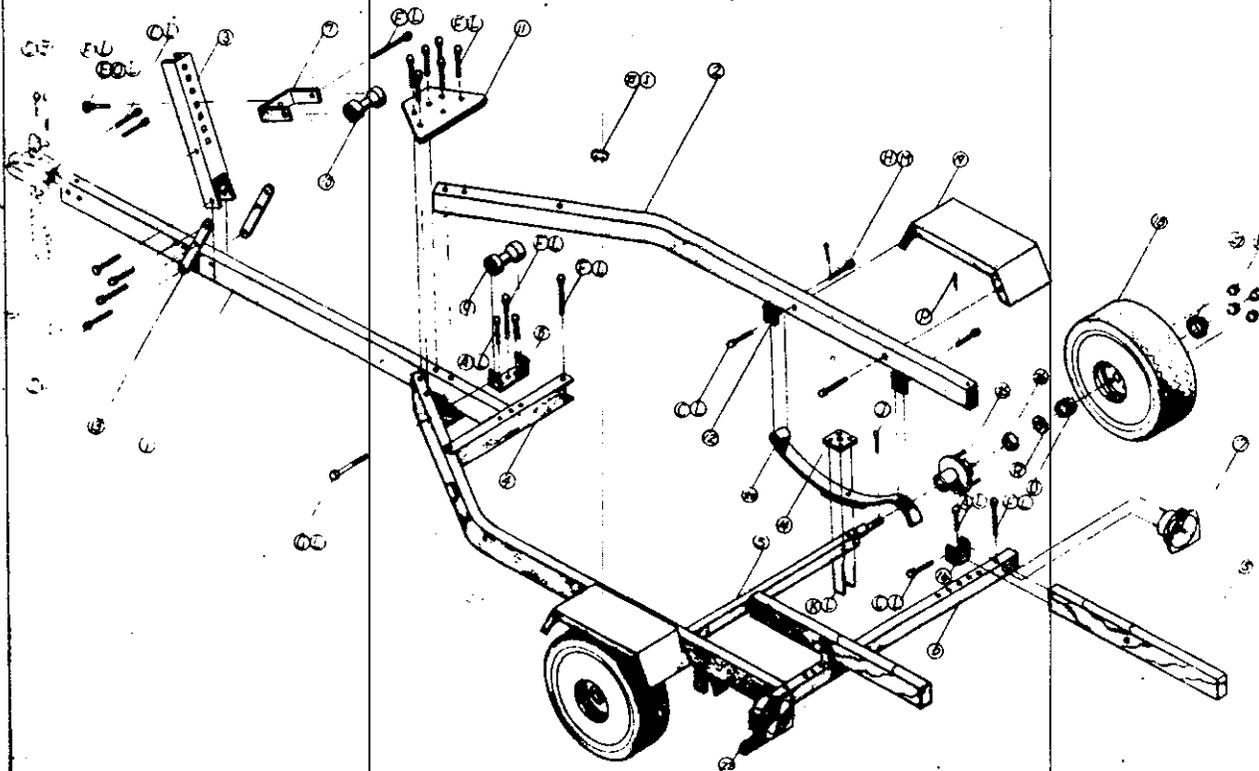
TOOLS NEEDED:

9/16" box end wrench
9/16" open end wrench
3/4" socket or lug wrench

Pliers
Channel lock pliers
Screwdriver

NOTE:

1. In assembling trailer parts, they are called out by standing at rear of trailer and looking toward tongue.
2. The nuts and bolts shouldn't be completely tightened until the entire trailer is assembled. All the nuts and bolts should be checked periodically for tightness...and you should retighten the lug bolts on the wheels after the first 20 miles of use.



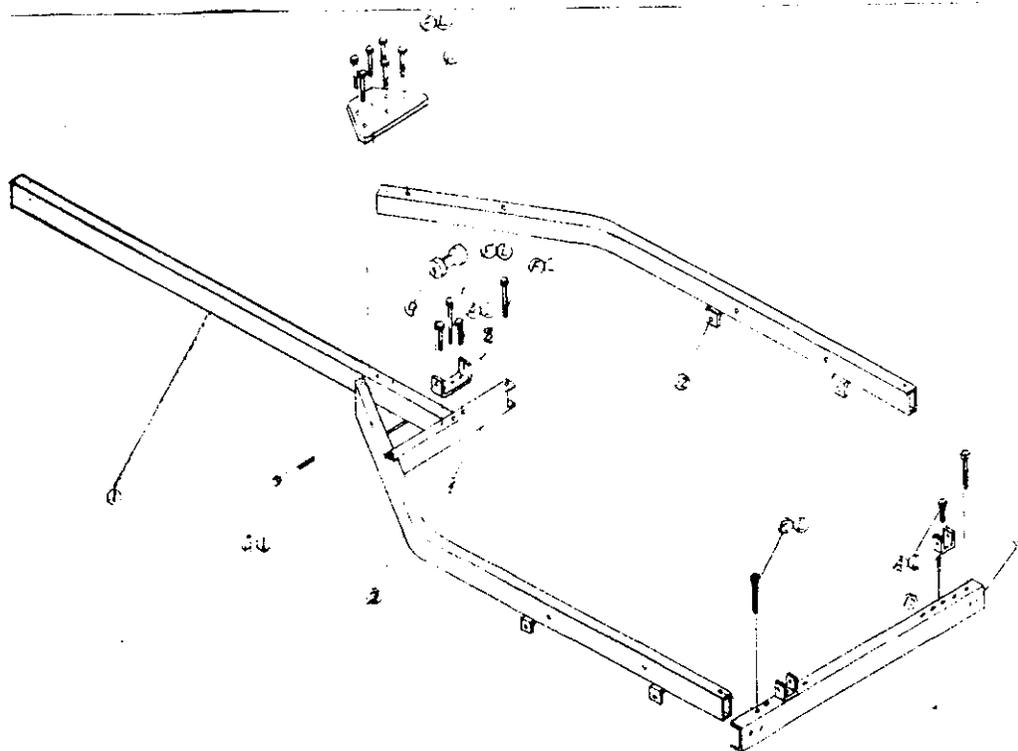
STEP 1

NO.	QTY	DESCRIPTION
1	1	Towbar
2	2	Side Rail
4	1	Connecting Rod
6	1	Cross Member
8	1	Roller Base(Large)
9	1	Roller(large)
11	2	Connecting Plate
16	2	Wooden Plate Base
A	4	3/8" X 3/4" Bolt
F	11	3/8" X 4" Bolt
G	1	3/8" X 6" Bolt
L	16	3/8" Nylon Nut

STEP 1

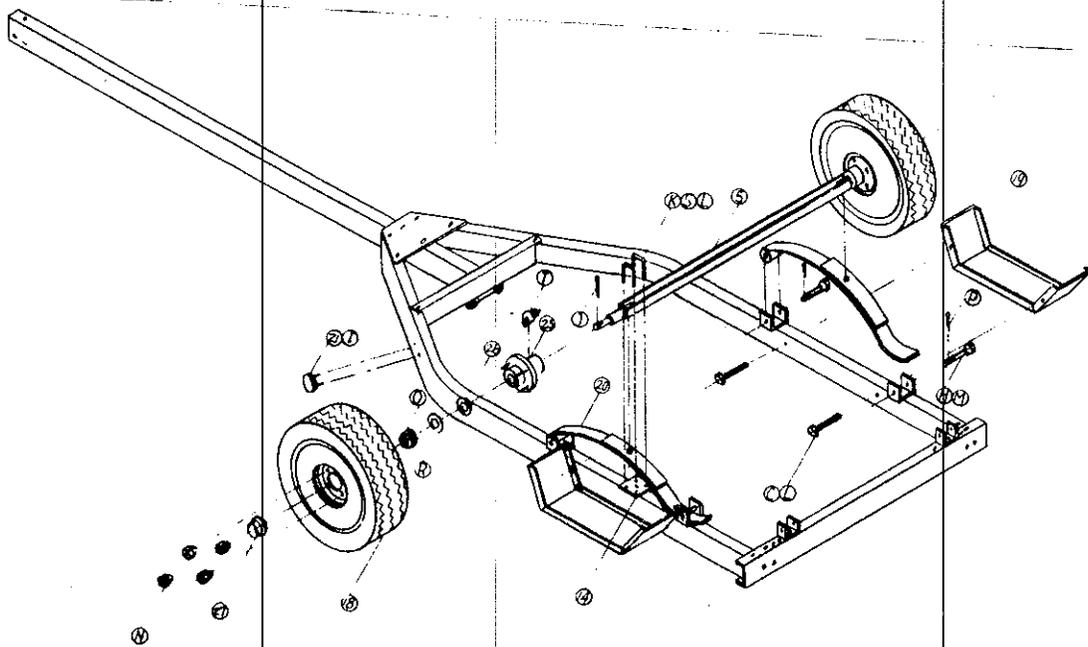
1. Lay out two side rail (2), towbar (1), Connecting rod (4), cross member (6), roller base (8) and connecting plate (11), as shown.
2. Assemble (1,2,4,6,8,11) by using 3/8" x 4" bolts, 3/8" nylon nuts (F.L.).
3. Do not tighten nylon nuts until all bolts are positioned in place.
4. Put roller (9) on roller base (8), then assemble it by using 3/8" x 6" bolt (G), 3/8" nylon nut (L)
5. Assemble two wooden plate base (16) to cross member (6) by using 3/8" x 3/4" bolt (A), 3/8" nylon nut (L).

Note: The width between two wooden plate base (16) can be adjusted to fit the boat size.



STEP 2

NO.	QTY	DESCRIPTION	NO.	QTY	DESCRIPTION
5	1	Axle	I	4	Self Tapping Screw
14	2	Spring Plate	J	2	Cotter Pin
18	2	Tire	K	4	"U" Bolt
19	2	Fender	L	12	3/8" Nylon Nut
20	2	Spring	M	4	9/16" Nut
21	2	Side Running Light	N	8	Lug Nut
25	2	Hub	O	2	Castle Nut
26	4	Bearing	P	4	1/8" Cotter Pin
27	2	Dust Cap	R	2	3/4" Flat Washer
C	4	3/8" x 2-1/2" Bolt	S	8	Spring Washer
H	4	9/16" x 3" Bolt	T	2	Grease Fitting



STEP 2

1. Turn the frame upside down.
2. Put the spring (20) on the spring hanger (12) with spring eyes forward, secure with 9/16" x 3" bolt (H) by going through spring hanger, lock it with 9/16" nylon nut (M). Then push a cotter pin (P) through the hole in the end of the bolt and spread it.
3. Place Axle (5) on the top of spring (20), place spring plate (14) under spring, using 3/8" bolt (K) pass through axle, spring and spring plate, then lock it with spring washer (S) and 3/8" nylon nut (L).
4. Fix grease fitting (T) on hub (25).
5. Carefully slide hub (25) over spindle at each end of axle and push outer bearing and 3/4" flat washer (R), then castle nut, tighten them snugly, Back off slightly a little bit so that wheel can just move freely.
6. Put tire (18) on hub set (25), then lock with 4 lug nuts (N) tighten with socket or lug wrench to 90 LBS (VERY TIGHT).

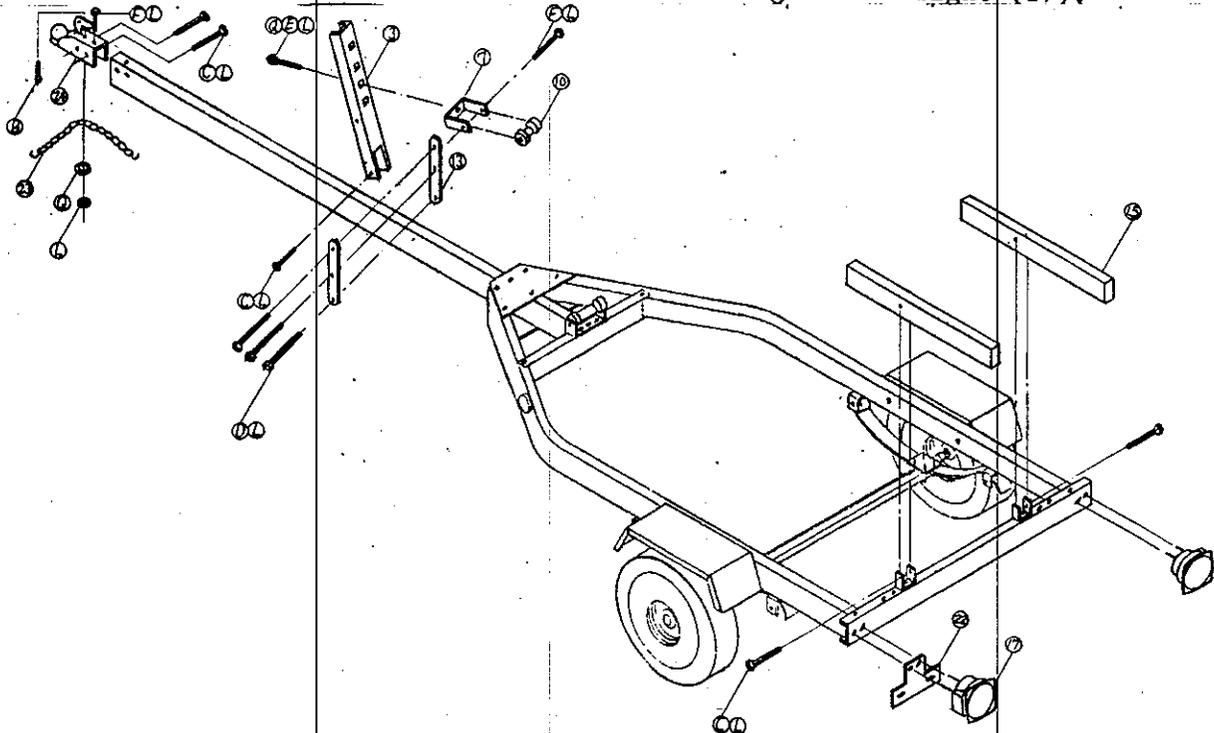
Note: Air valve should be on outside of rim. Be sure that axle is perpendicular to side rail and springs are parallel to side rail.
7. Push a cotter pin (T) through the hole at the end of the spindle, spread cotter pin, 1/4 fill the dust cap (27) with automotive grease then press it onto the hub.
8. Open the lens of side running light (21) with self tapping screw (I) and screws run wire lead through the center hole to firm wire tightly on side rail.
9. Bolt fender (19) to side rail by using 3/8" x 2-1/2" bolt (C), nylon nut (L).

STEP 3

NO.	QTY	DESCRIPTION
3	1	Orientation Bar
7	1	Roller Base (Small)
10	1	Roller (Small)
13	2	Brace
15	2	Wooden Plate
17	2	Tail Light
22	1	License Plate Bracket
23	1	Safety Chain
24	1	Coupler
B	1	3/8"x2" Bolt
C	5	3/8"x2-1/2" Bolt
D	3	3/8"x3" Bolt
E	1	3/8" Carriage Bolt
F	2	3/8"x4" Bolt
L	12	3/8" Nylon Nut
Q	2	3/8" Flat Washer

STEP 3

1. Turn over the trailer assembly make two tires touch ground.
2. Bolt coupler (24) to towbar (1), by using 3/8"x2-1/2" bolt, nylon nut (C, L).
3. Attach safety chain (23) to coupler with 3/8"x4" (F) bolt by go through the center link of the chain, lock with 3/8" flat washer (Q) and 3/8" nut (L). Note: Make sure safety chain is same length each side.
4. Bolt roller base (small) (7) to orientation bar (3) with carriage bolt(E) and nylon nut (L)then assemble roller (10) to roller base (7) with 3/8"x4" bolt, 3/8" nylon nut (F.L.). Note: The position of roller base can be adjusted to fit the boat size.
5. Install orientation bar (3) to towbar (1)with braces (13) on both side of towbar, using 3/8"x3" bolt,brace, Nylon nut (D, 13, L).
6. Install wooden plate (15) to wooden plate base (16) by using 3/8"x2-1/2" bolt, nylon nut (C.L.). as shown.
7. Install license plate bracket (22) and left tail light (17) (with clear lens for light) with nuts then install right tail light (17).

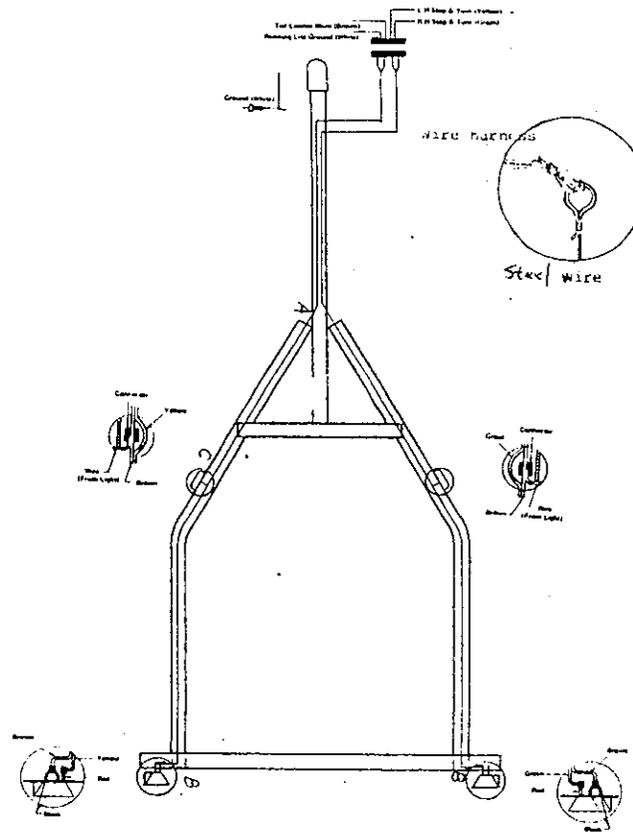


STEP 4

TRAILER LIGHT KIT

WIRING DIAGRAM AND INSTRUCTION

NOTE: Insert a steel wire through A and B hole to pull wire harness out. Check alignment of all parts and install the 4-wire vehicle connector in the trunk area of your car. Locate the connector plug near the hitch ball and lay out wires (Refer NOTE to lay out wires) Connect the white wire to the frame or body of the car; connect the brown wire to the tail light by stripping, wrapping and taping connector; similarly connect the yellow wire to the left signal and stop light wire and the green wire to the right signal and stop light wire. Some foreign vehicles may require an adaptor to convert their 5 wire system to wire vehicle connector.



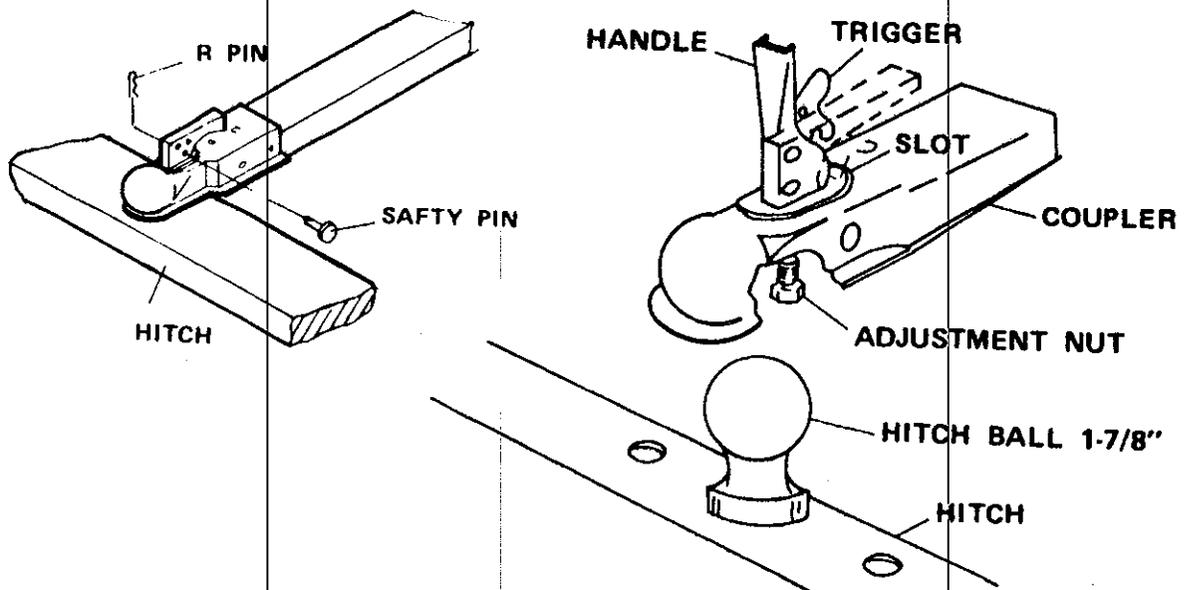
1. Attach wire ground wire at plug end of wiring harness to the small hole in right tongue with safety tapping screw.
2. Leave about 18" of wire beyond the coupler and lay out wire on the inside of right tongue to the side rail joint (as shown), then from this joint, split the yellow/brown wire and green/brown wire. Make yellow/brown go through cross member to left running light, make green/brown wire go to the right running light.
3. Connect the wire lead from the running lights to the brown wire on each side with the wire connector. Use pliers to squeeze the connector closed.
4. Cut yellow/brown and green/brown wires to appropriate lengths and strip ends of wires $\frac{3}{4}$ ".
5. Make tail light connections as per color code:

Left side	Right side
Yellow-Red wire	Green-Red wire
Brown-Two black wires	Brown-Two black wires

SPECIAL NOTICE FOR COUPLER

Only use a 1-7/8" ball hitch on your towing vehicle. Pull trigger and lift handle. Place coupler over trailer hitch ball and push down on handle until trigger locks in slot. Pull up and down on the coupler to see if the ball is fitting snugly in the coupler. There should be no play between the ball and coupler. If there is play, tighten the adjustment nut until no play is present. If the nut is too tight, the handle will not lock.

NOTE: To reduce friction between the ball hitch and coupler, apply a layer of multi-purpose lithium grease over ball hitch. Wipe off excess grease when not in use to avoid staining clothes.



TRAILER LICENSING NOTICE

Some states may consider that this trailer kit is a specially constructed or homemade vehicle for registration, licensing and/or titling purposes.

The M.C.O. (Manufacturer's Certificate of Origin) supplied with your trailer should be filled out and signed by the dealer transferring ownership to you.

When licensing your trailer, you will need the signed M.C.O. a purchase invoice, cash register receipt, or bill of sale showing the purchase and retail sales tax or use tax collection by the retailer.

Take these to your local Department of Motor Vehicle and upon payment of the appropriate State fees, you will be issued a title, registration and license plate (if required). Some states will require inspection of the assembled and finished trailer kit before issuing a titleregistration/license.

If you require additional information or guidance on licensing or titling, please consult your State Department of Motor Vehicles.

ONE YEAR WARRANTY

The Manufacturer warrants this trailer to be free from defects in materials and workmanship for one year after the date of purchase. The warranty is not transferable.

Return the warranty card provided with the product within thirty days from purchase is an essential requirement to obtain warranty performance.

The manufacturer reserves the right to replace any warranted defect at its discretion of such part or parts as inspection shall disclose to be defective provided the defective part(s) is (are) shipped within the warranty period to be Manufacturer assigned service agent with return freight prepaid.

Damages from abuse, misuse, overloading, improper assemble, alteration from its' original manufacturer condition or failure to perform normal maintenance-see owner's instructions, are specifically excluded from coverage under this warranty.

Paint surface and light bulbs are not covered by this warranty.

The Manufacturer makes no warranty with respect to trade accessories, including damage to property are excluded from this warranty. Some states don't allow the exclusion or limitation of incidental or consequential damages. So above limitation or exclusion may not apply to you.

Any implied warranties, including the implied warranties of merchantability and fitness for a particular purpose are limited in duration to one year from date of purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

MANUFACTUER

LONG CHIH INDUSTRIAL CO., LTD. (TAIWAN)

SERVICE CENTER

P.O. BOX 6370

ROSEMEAD CA. 91770-6370

TEL: (818) 573-5826

PLEASE FILL OUT AND MAIL BACK "WARRANTY REGISTRATION CARD"
WITHIN 30 DAYS OF PURCHASE, TO INSURE PROMPT SERVICE.
FEDERAL REGULATIONS REQUIRE YOU TO RETURN THIS CARD PROMPTLY

SAFE USE AND OPERATION RULES

1. TOWING VEHICLE--

- Make sure vehicle is capable of towing the load.
- Excess speed is the second most important cause of car-trailer accidents. Recommended maximum speed for all passenger cars towing trailers is 45 M.P.H.

2. HITCH, BALL, COUPLER--

- Check that the hitch on the towing vehicle is capable of towing the trailer. The towing capability of the hitch is normally stamped on hitch drawbar.
- Make sure the coupler and the ball are mating sizes and are rated equal to or greater than the load.
- Never attach anything other than the proper size coupler to the ball for towing.

3. SAFETY CHAINS--

- Be sure to use safety chains.
- Check that safety chains are attached to towing vehicle with the same length for each side.
- Do not allow chains to drag on ground.

4. LOADING--

- Never overload trailer. Maximum load is 600 Pounds.
- It is important that the tongue be pressing down on the hitch, but not exceeding a downward force of 60 Pounds.
- It is against the law to carry passengers in the back of any trailer.

5. LIGHTING--

—Check lighting before each use and every 100 miles to be sure stop tail and turn signals are working properly.

Replace any broken lenses, reflectors or bulbs.

—Check wires for good connections and possible fraying or wearing of insulation.

—Bulbs supplied with this trailer are for 12 volt system.

—Bulbs used in tail light are: Number – 1157 – Stop and Tail.

—Bulb for clearance is: Number – 1895.

6. TIRES--

—Check tire for wear and proper inflation before each use and every 100 miles.

—Tire pressure should be kept at 60 PSI.

—Check and tighten lug nuts. Torque to 85-90 FT-LBS.

Retorque after first 50 miles.

7. OPERATION--

—Know how to properly control your towing vehicle-trailer combination on the highway under all conditions. Remember the loaded weight of the trailer will increase your braking and stopping distances appreciably.

—When towing a trailer over long distances stop and check tightness of all connections lights and running gear every 100 miles.

—Carry emergency flares, and fire extinguisher if required for operation in your state.

—It is desirable to carry extra bulbs and fuses if you are towing the trailer at night over any great distances.

8. MAINTENANCE--

—Check and maintain the trailer, coupler, ball and hitch before each use and every 200 miles.

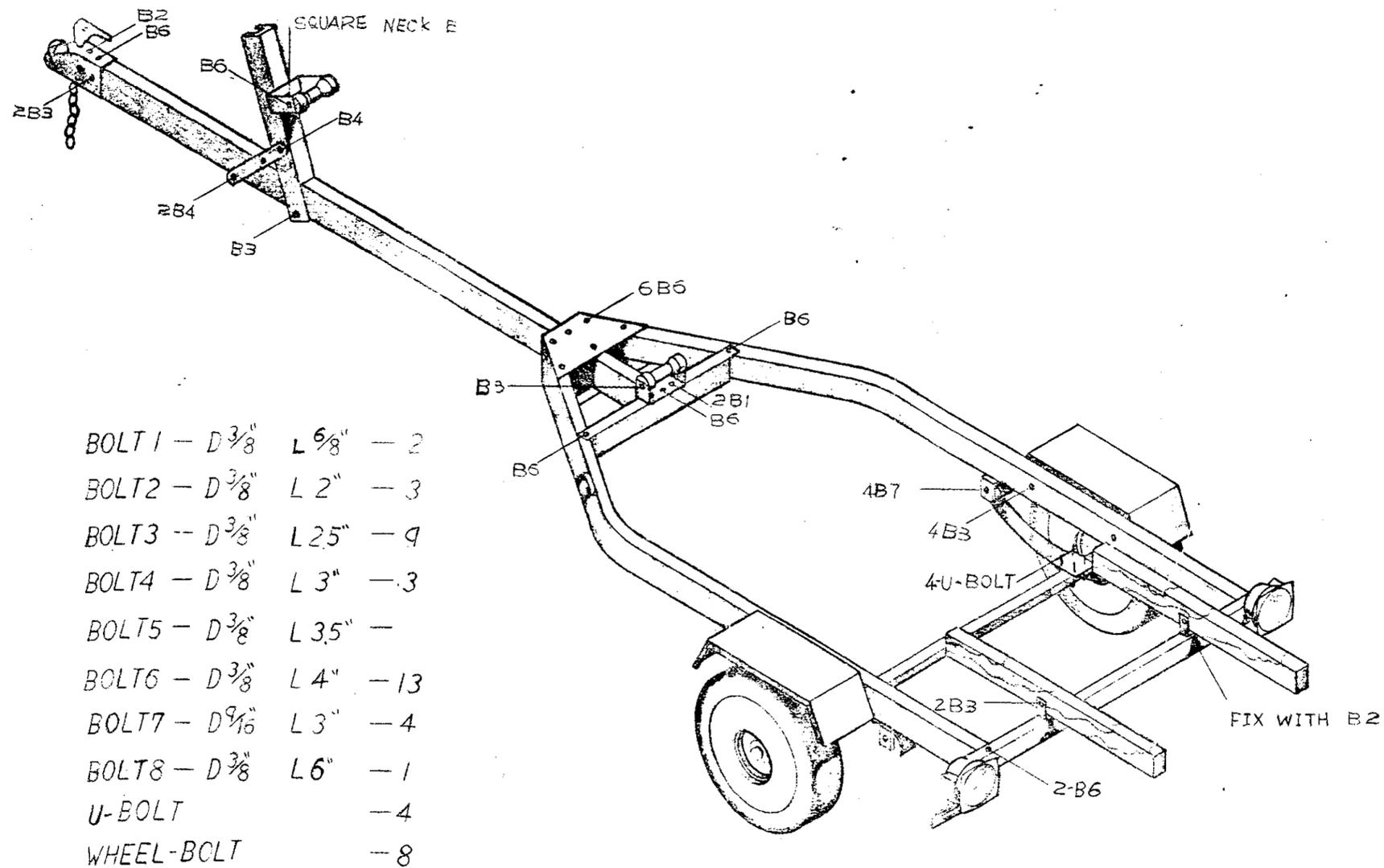
—Inspect hitch and ball for damage in every day use.

—Ball or hitch can be damaged in parking, hitting curbs, dragging when crossing ditches or railroad tracks.

—Check safety chains for wear, and do not allow safety chains to drag on ground.

—To prevent bearing damage, disassemble and repack wheel bearing with a good grade of wheel bearing grease every 2000-3000 miles or yearly.

—If you don't know how to repack wheel bearing, take your trailer to a garage for advice.



龍志工業有限公司

圖號	100-1000	圖名	拖車
比例	1:1	日期	1951.11
設計	張	校核	張
繪圖	張	審核	張
材料	鋼	備註	

