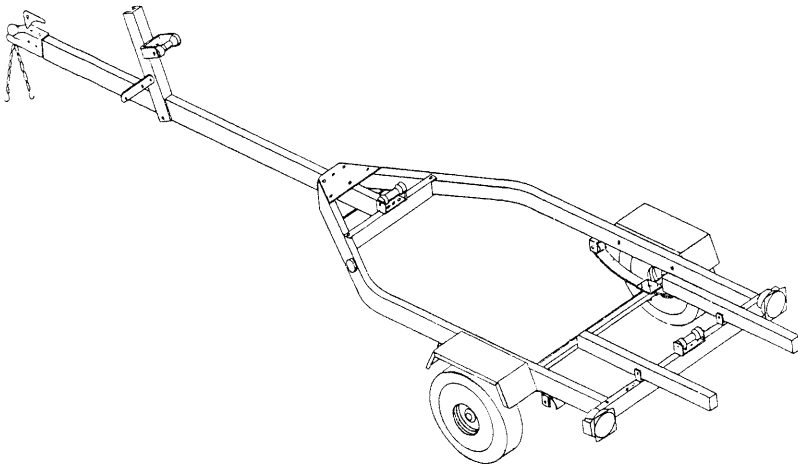


OWNER'S INSTRUCTIONS DIY BOAT TRAILER



WARNING! **IMPORTANT INFORMATION**

This trailer's Hitch Coupler **MUST** be properly secured to the hitch ball of the towing vehicle. After assembly and attachment, pull up and down on the Hitch Coupler to make sure the hitch ball is fitting snugly in the Hitch Coupler. **There must be no play between the hitch ball and Hitch Coupler.** If there is play, tighten the Adjustment Nut until no play is present. If the Adjustment Nut is too tight, the Handle will not lock. **Carefully read and follow the complete instructions in this manual BEFORE setup or use.**

If the Coupler is not secured properly, the ball could come loose while the trailer is in motion, possibly causing property damage, SERIOUS PERSONAL INJURY, or DEATH.

SPECIFICATION :

Item No. : 5002

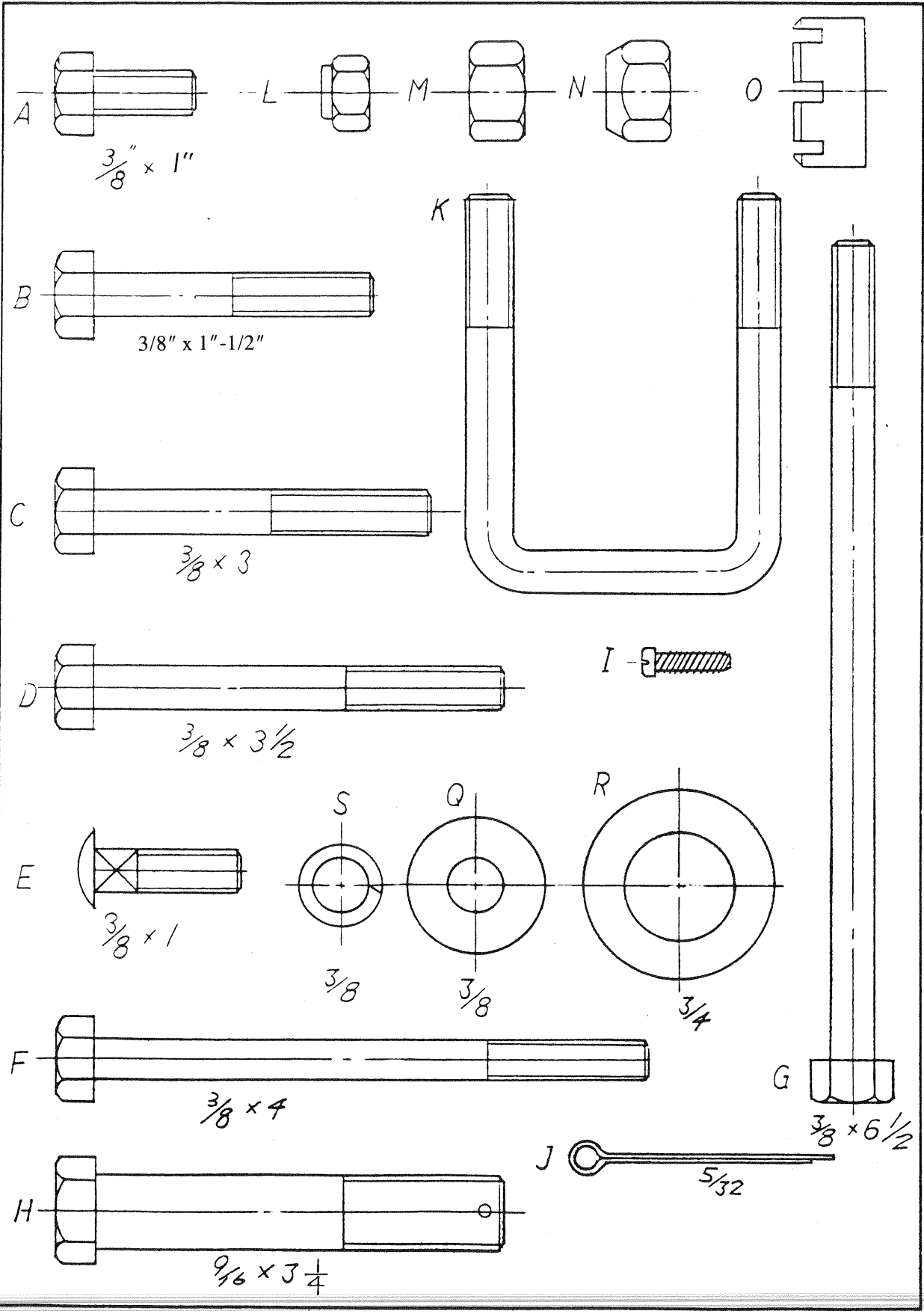
Overall length : 154"

Overall width : 52-1/2"

Max. load capacity : 600 LBS

Coupler capacity : Class I, 2000 LBS. max gross load, fit for 1-7/8" ball

REV 10/04



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.

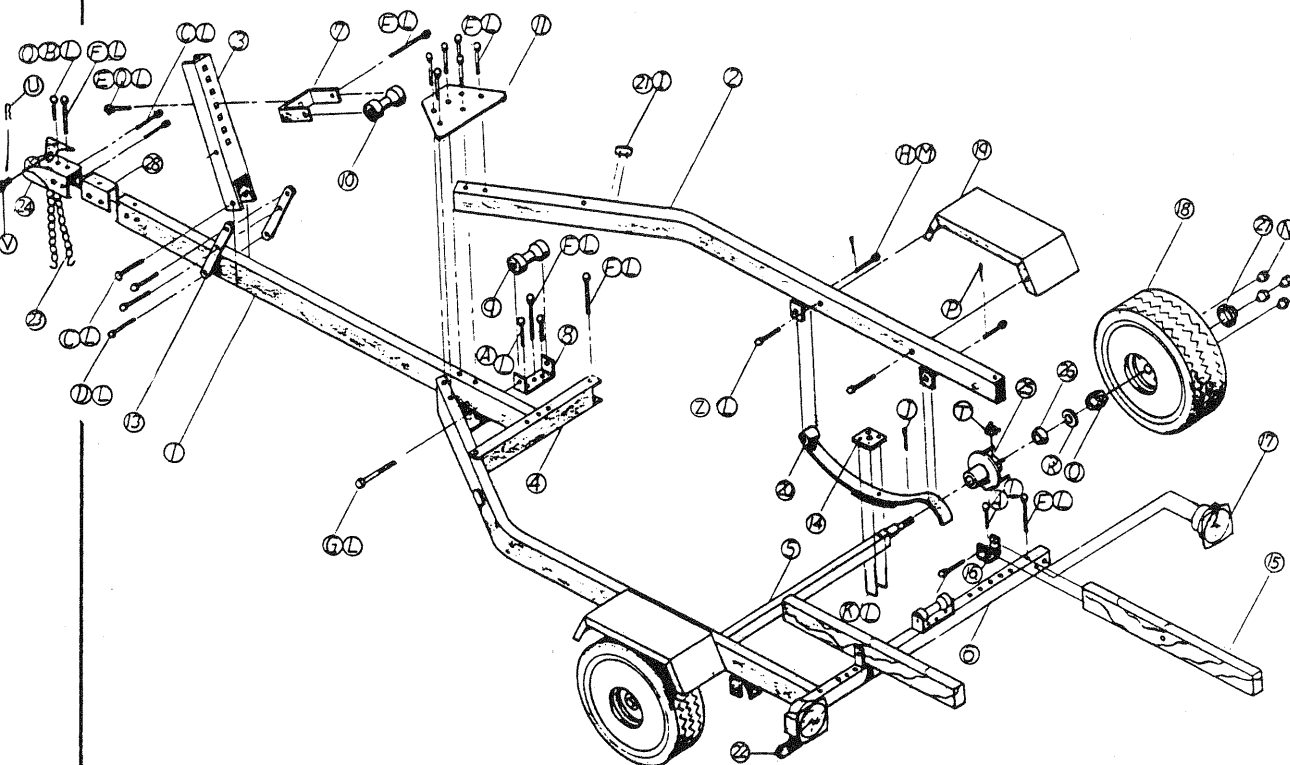
TOOLS NEEDED:

- 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.

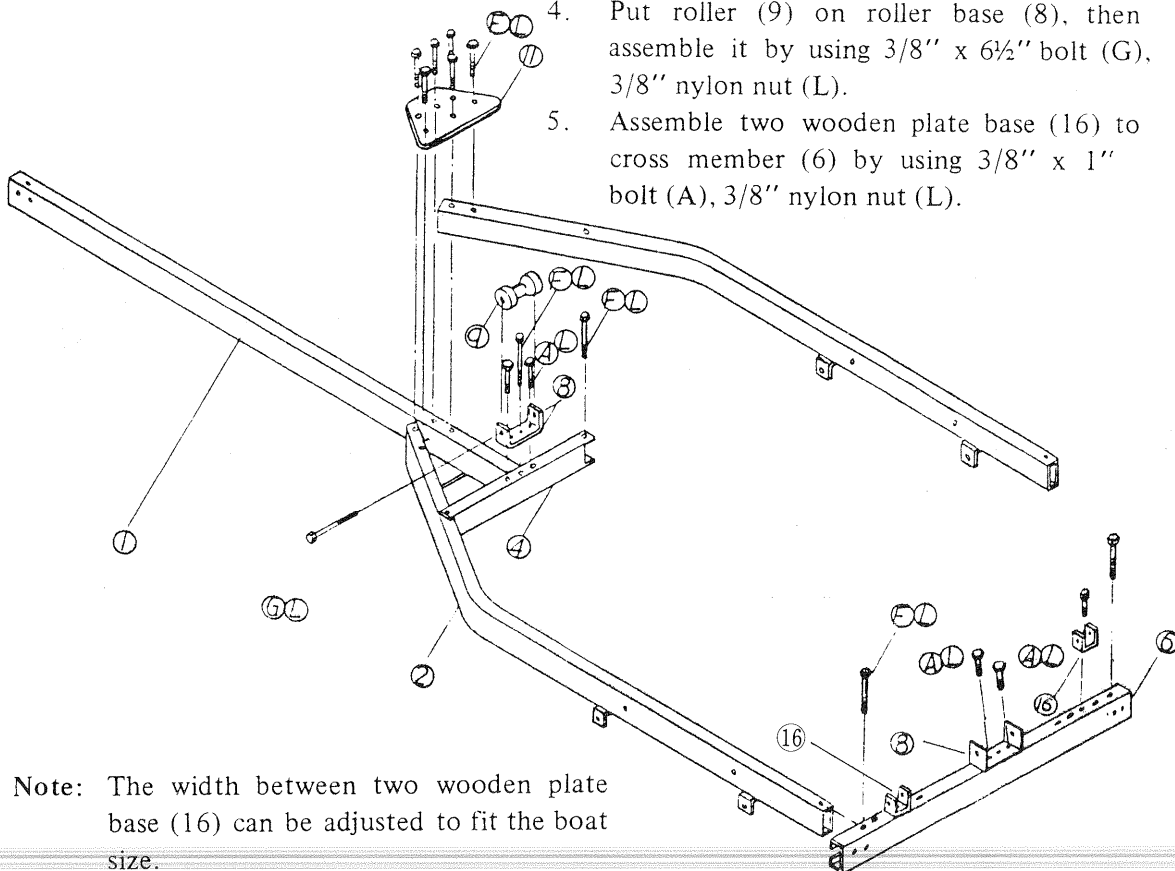


STEP 1

NO.	QTY	DESCRIPTION
1	1	Towbar
2	2	Side Rail
4	1	Connecting Rod
6	1	Cross Member
8	2	Roller Base (Large)
9	2	Roller (Large)
11	2	Connecting Plate
16	2	Wooden Plate Base
A	6	3/8" x 1" Bolt
F	11	3/8" x 4" Bolt
G	2	3/8" x 6 1/2" Bolt
L	19	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 (1,2,4,6,11) using 3/8"x4" bolt, 3/8" nylon nut (F,L).
The same time put one roller base (large) (8) on center of connecting rod (4) using 3/8"x4"bolt (A) through the center hole of roller base (8), connecting rod (4) and tow bar (1) then lock with 3/8" nylon nut (L). Use 3/8"x1" bolt (A) through both side hole of roller base (8), connecting rod (4) then lock with 3/8" nylon nut (L).
Put another roller base (8) on center of cross member (6) using 3/8"x1" bolt (A) through both side hole of roller base (8) and cross member (6) then lock with 3/8" nylon nut (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 1/2" bolt (G), 3/8" nylon nut (L).
5. Assemble two wooden plate base (16) to cross member (6) by using 3/8" x 1" bolt (A), 3/8" nylon nut (L).

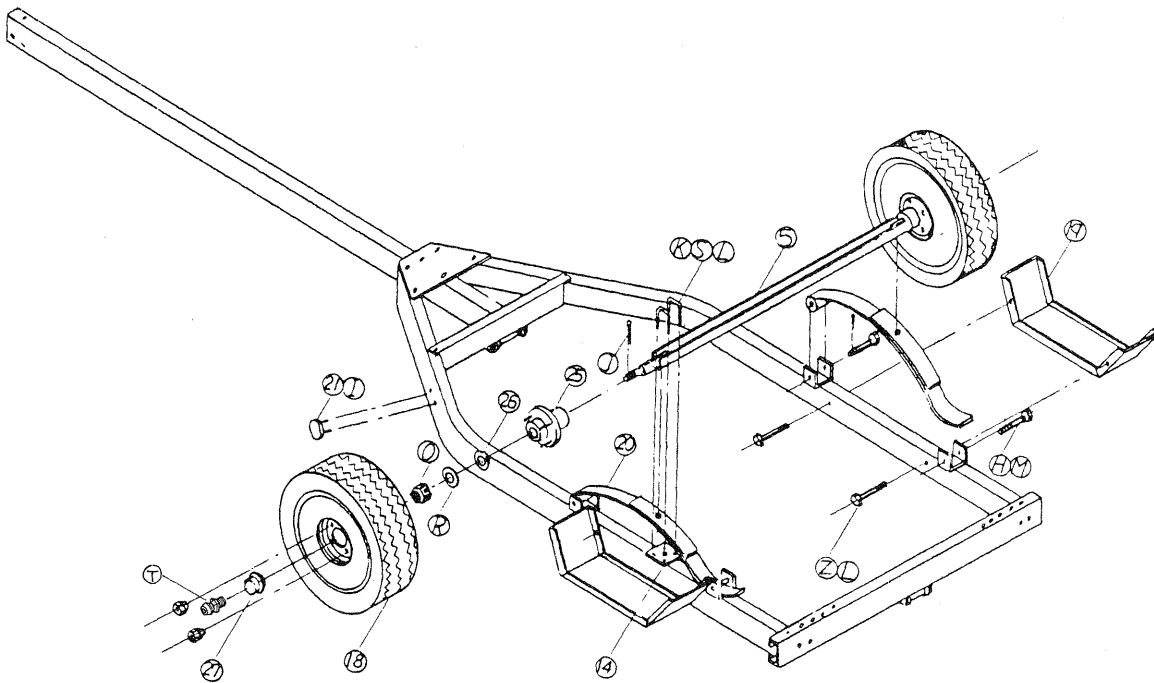


Note: The width between two wooden plate base (16) can be adjusted to fit the boat size.

STEP 2

NO.	QTY	DESCRIPTION
5	1	Axle
14	2	Spring Plate
18	2	Tire
19	2	Fender
20	2	Spring
21	2	Side Running Light
25	2	Hub
26	4	Bearing
27	2	Dust Cap
H	4	9/16" x 3" Bolt
I	4	Self Tapping Screw

NO	QTY	DESCRIPTION
J	2	Cotter Pin
K	4	"U" Bolt
L	12	3/8" Nylon Nut
M	4	9/16" Nylon Nut
N	8	Lug Nut
O	2	Castle Nut
R	2	3/4" Flat Washer
S	8	Spring Washer
T	2	Grease Fitting
Z	4	3/8"x2-1/2" Bolt



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 3-1/4" bolt (H) by going through spring hanger, lock it with 9/16" 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" "U" bolt (K) pass through axle, spring and spring plate, then lock it with spring washer (S) and 3/8" nylon nut (L).
4. 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
NOTE: BACK OFF SLIGHTLY A LITTLE BIT SO THAT WHEEL CAN JUST MOVE FREELY
Follow the Bearing Packing Instructions as explained on the last page of this manual.
5. 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.
6. Push a cotter pin (J) 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, then fix grease fitting (T) to the end of dust cap (27).
7. 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.
8. Bolt fender (19) to side rail by using 3/8" x 2-1/2" bolt (Z), nylon nut (L).

STEP 3

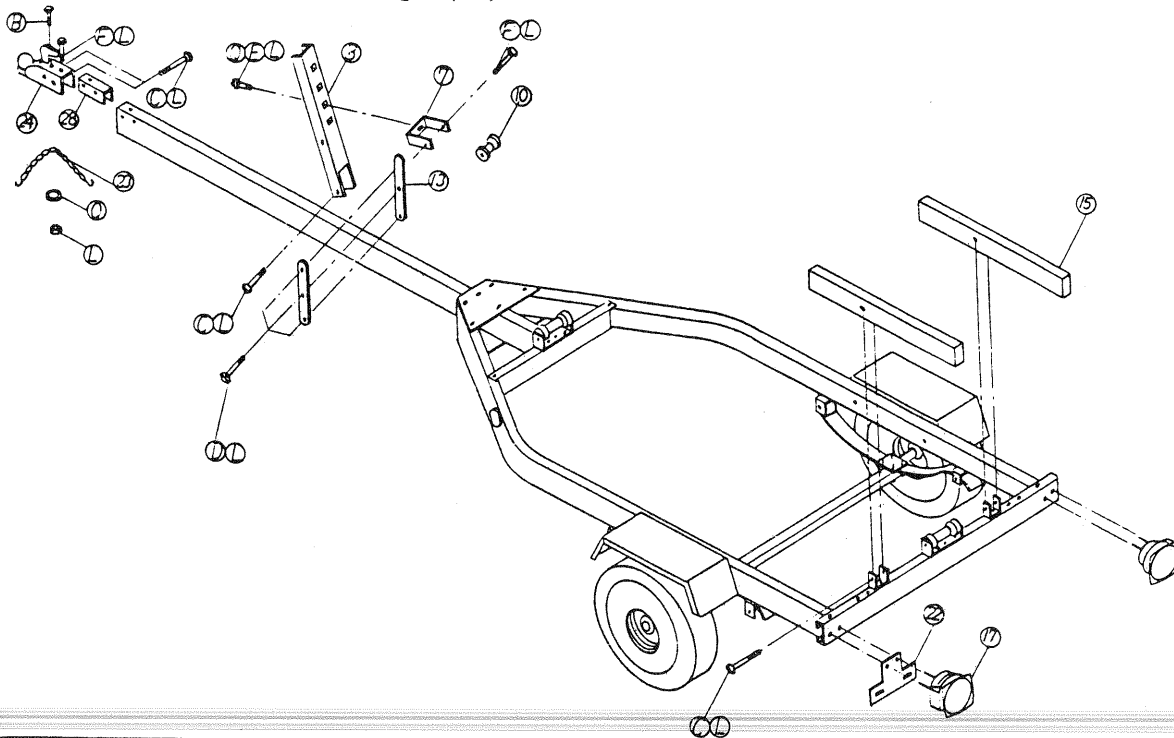
NO.	QTY	DESCRIPTION
3	1	Orientation Bar
7	1	Roller Base (Small)
10	1	Roller (Small)
13	2	Brace
15	2	Wooden Plate
17	2	Tail Light
22	1	License Plate Bracket
23	1	Safety Chain
24	1	Coupler
28	1	Coupler Base
B	1	3/8" x 1 -1/2" Bolt
C	5	3/8" x 3" Bolt
D	3	3/8" x 3 1/2" Bolt
E	1	3/8" Carriage Bolt
F	2	3/8" x 4" 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), Coupler Base (28) to Towbar (1), by using 3/8" x 3" Bolt, Nylon Nut (C,L). through the side of coupler (24).
3. Attach safety chain (23) to coupler with 3/8" x 1-1/2" bolt (B) go through the top front hole of coupler and center link of the chain, lock with 3/8" flat washer (Q) and 3/8" nut (L). Note: Make sure safety chain is the same length each side. Using 3/8" x 4" bolt (F) go through top rear hole of coupler and towbar to lock with 3/8" nylon nut (L).
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" x 4" bolt, 3/8" nylon nut (F.L.).

Note: The position of roller base can be adjusted to fit the boat size.

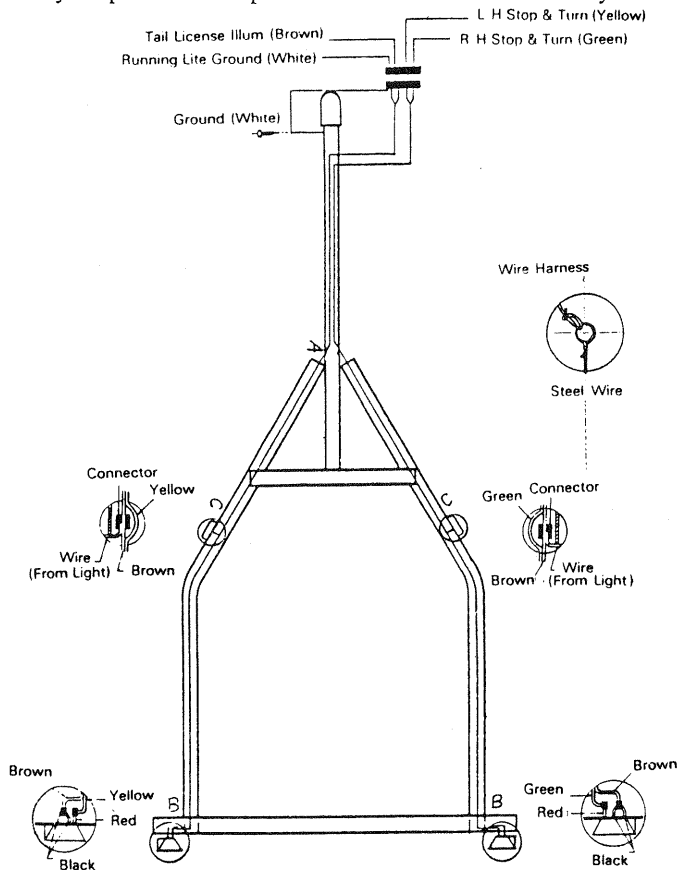
5. Install orientation bar (3) to towbar (1) with braces (13) on both side of towbar, using 3/8" x 3 1/2" bolt, brace, Nylon nut (D, 13, L).
6. Install wooden plate (15) to wooden plate base (16) by using 3/8" x 3" bolt, nylon nut (C.L.). as shown.
7. Install license plate bracket (22) and left tail 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.



Please add note here that says:
"NOTE: Some trailer tail lights will have two leads instead of three. They connect to the harness leads the same way; brown to brown, color to color."

1. Attach white 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 3/4".
5. Make taillight connections as per color code:

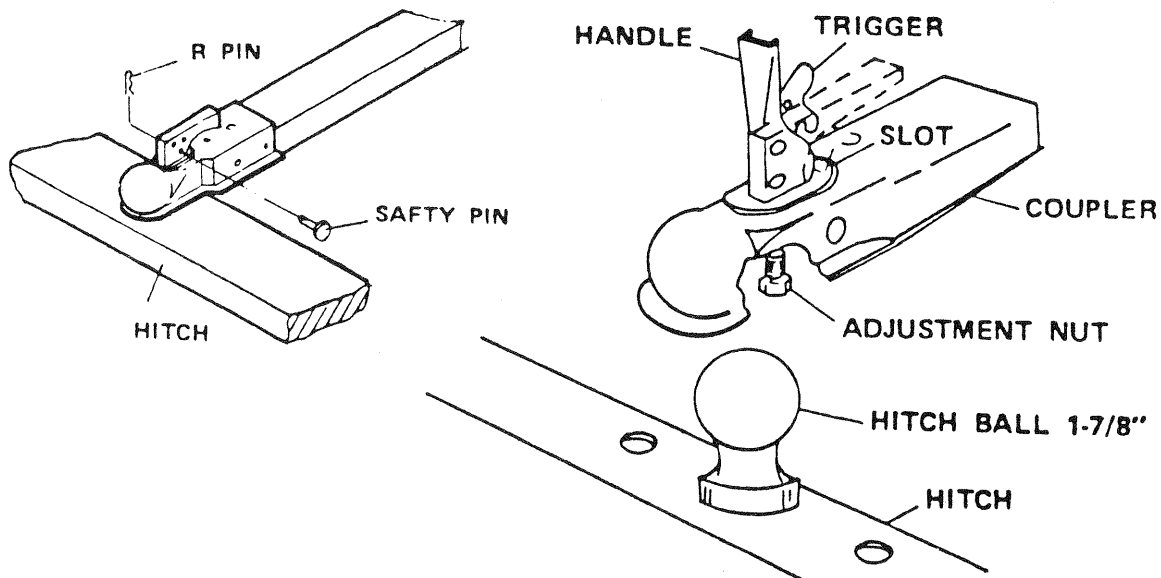
Left side	Right side
Yellow-Red wire	Green-Red wire
Brown-Two black wires	Brown-Two black wires

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.

SAFE USE AND OPERATION RULES

CAUTION

Care must be taken when backing up the Trailer; only back up the trailer on a straight path. If the Trailer is allowed to turn off the straight path while backing up, the Trailer could jackknife, causing severe damage to the trailer and to the towing vehicle.

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 –

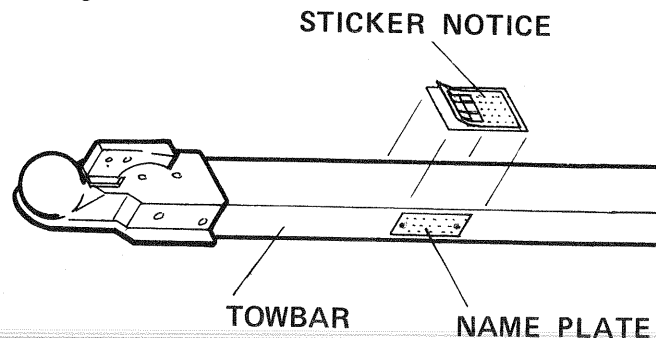
- Know how to properly control your towing vehicle-trailer combination on the highway under all conditions. Remember the loaded weight of the trailer will increase your braking and stopping distances appreciably.
- When towing a trailer over long distances stop and check tightness of all connections 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. INSPECTION, MAINTENANCE, AND CLEANING

- **BEFORE EACH USE**, inspect the general condition of the Trailer. Check for loose Bolts and Nuts, misalignment or binding of moving parts, cracked, bent, or broken parts, excessively worn Safety Chain , damaged Tail Lights/Side Running Lights/Wiring Harness, loose Lug Nuts, loose Hitch connection, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. Do not use damaged equipment.
- **BEFORE EACH USE**, check the Tires for wear and proper inflation (60 PSI).
- **BEFORE EVERY USE AND AT 500 MILE INTERVALS DURING EVERY TRIP**, check and tighten the Tire Lug Nuts. Torque from 85 to 90 Ft.-Lbs.
- **EVERY 2,000 TO 3,000 MILES OF USE**, lubricate the Hub Assemblies with a heavy weight bearing grease. **Follow the Bearing Packing Instructions as explained on the last page of this manual.** After each Hub Assembly is reassembled, tighten the Castle Nut until the wheel starts spinning with slight resistance. Loosen the Castle Nut about 1/6 turn from this point. Insert a new Cotter Pin through the Castle Nut and the hole in the axle. Bend the Pin back, locking it and the Nut in place.
- **TO CLEAN**, use only water and a mild detergent.

IMPORTANT

Attached
"STICKER NOTICE" to the towbar
as shown. And before using, be
sure each is followed.



Bearing Packing Instructions

Important

Read and adhere to the following instructions; failure to read and obey all of the following instructions COMPLETELY will void the warranty and can result in damage to the trailer, property damage, or SERIOUS PERSONAL INJURY.

Whenever a hub is disassembled (if a hub on a new unit requires assembly or a hub is disassembled for maintenance), the following procedure MUST be followed.

1. Using a suitable solvent, thoroughly clean the bearings and the rest of the parts in the Hub assembly of all grease, dirt, metal shavings, or any other foreign object. **The parts must be cleaned even if they are new or *appear* clean.**
2. Allow all pieces to dry completely.
3. Make sure that your hands are thoroughly clean and the bearing packer (not included) is also thoroughly clean.
4. Place fresh, clean bearing grease in the packer.
5. With the grease-filled bearing packer in one hand and the bearing in the other, press the bearing into the grease, forcing the grease inside the slots in the bearing, continue doing this until every slot in the bearing is completely full of grease.
6. Finish assembling the hub/wheel assembly as explained in this manual, being careful not to get any dirt or debris on any part of the assembly.