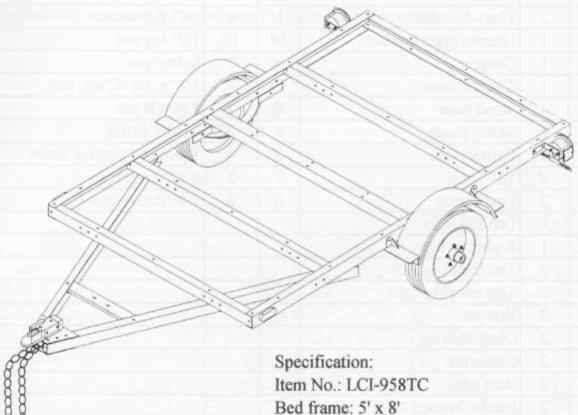
# OWNER'S INSTRUCTION D.I.Y. TRAILER KIT



Tire: 5.30-12, 6PR

Coupler: class II, 3500 lbs max. gross load

fit for 2" hitch ball

GVWR: 1,980 lbs

PARTS			AILER PARTS LIST HARDWARE		
NO.	Q'TY		NO.	Q'TY	DESCRIPTION
1L	1	Left side rail	A	36	3/8" x 1" hex bolt
1R	1	Right side rail	В	71	3/8" nylon nut
2	4	Cross member	C	69	3/8" flat washer
3	1	Center cross member	D	1	3/8" x 1-1/2" carriage bolt
5	2	Towbar (identical)	Е	2	3/8" x 3" hex bolt
6	1	Spare tire bar	F	20	3/8" x 7/8" carriage bolt
7	2	Front spring hanger (shorter)	G	2	9/16" x 3-1/4" hex bolt
8	2	Rear spring hanger (longer)	Н	2	9/16" nylon nut
9	4	Hole spacer (6mm thick)	I	2	1/2" x 3-3/4" hex bolt
10	1	Axle	J	1	1/2" x 1" hex bolt
11	2	Fender	K	3	1/2" nylon nut
12	2	Tire/wheel assy.	L	6	1/2" falt washer
13	1	License plate bracket	M	10	1/2" lug nut
14	1	Coupler	N	1	Safety pin
15	1	Coupler base	0	4	3/8" x 1-1/4" hex bolt
16	1	Stand base	Q	1	2 mm R pin
17	1	Safety chain	R	2	Grease fitting
18	2	Spring plate	S	4	4 mm self tapping screw
19	4	" U " bolt	T	2	5/32" cotter pin
20	2	Leaf spring	U	2	3/4" flat washer
21	1	Left tail light			
22	1	Right tail light			
23	2	Tail light bracket			
25	2	Side running light			
26	2	Hub set			
27	2	Outer bearing			
28	2	Castle nut			
29	2	Dust cap			
30	2	Fender bracket A			
31	2	Fender bracket B			

Read the instruction 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 three hours. You'll need the following tools to assemble your trailer.

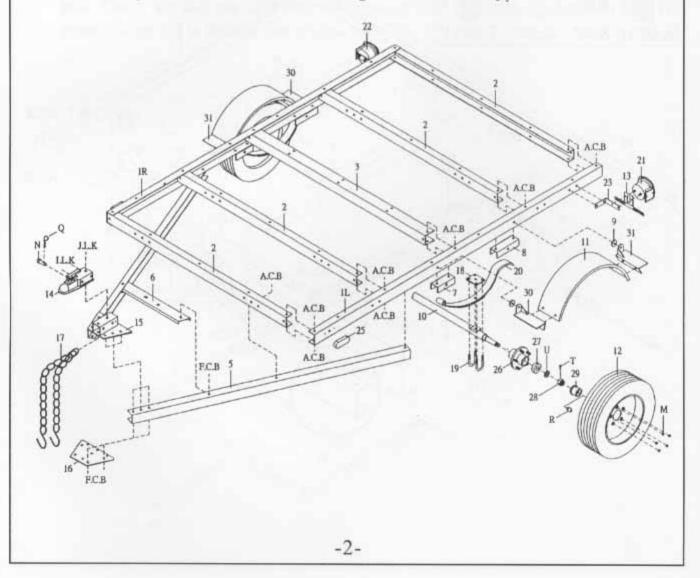
#### TOOL NEEDED.

7/8" socket or lug wrench 9/16" open end wrench screwdriver

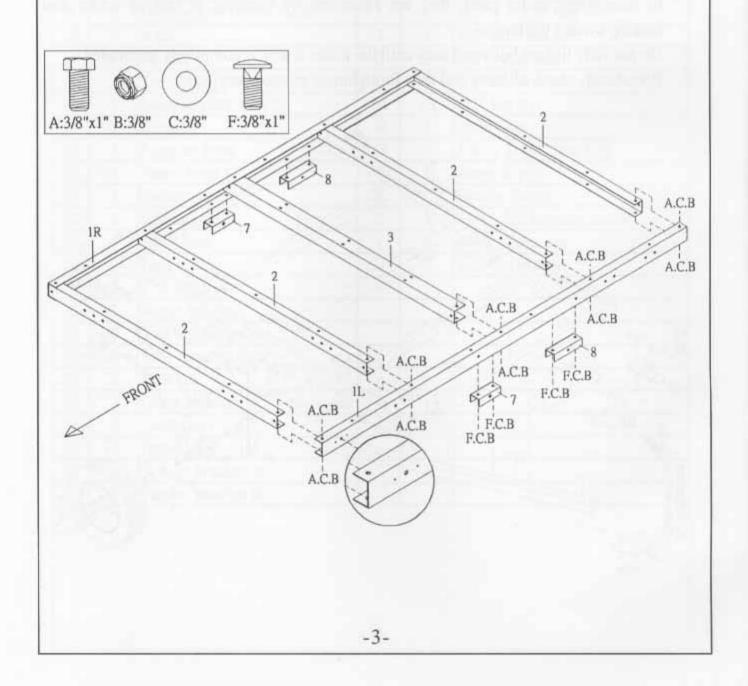
9/16" box end wrench plier

#### NOTE:

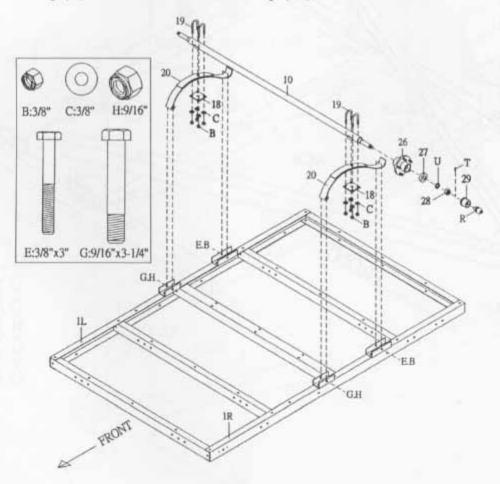
- In assembling trailer parts, they are identified by standing at rear of trailer and looking toward the tongue.
- 2. Do not fully tighten bolts and nuts until the trailer frame is completely assembled.
- 3. Periodically check all bolts and nuts for tightness as necessary



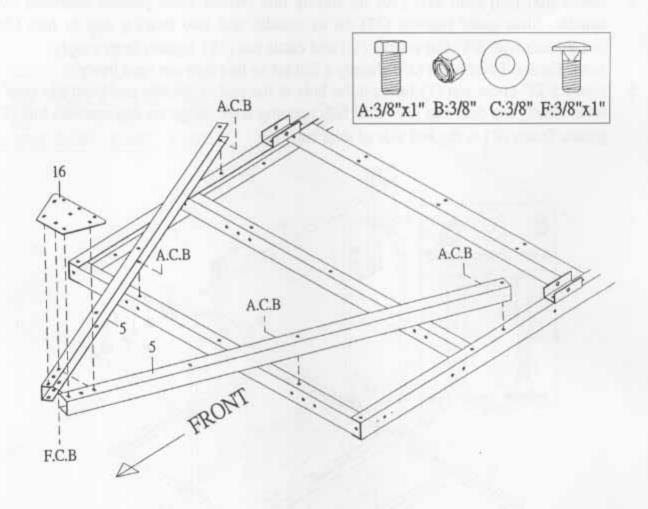
- Lay out right & left side rail (1L,1R), three cross member (2) and center cross member (3) as shown.
- Note: there are 2 small holes with one regular hole on the wall of side rail as circle must be toward the front.
- Assemble side rail (1L,1R) with cross member and center cross member (2,3) using 3/8" x 1" hex bolt, 3/8" flat washer and 3/8" nylon nut (A,C,B) as shown.
- Bolt front spring hanger (shorter) and rear spring hanger (longer) (7,8) to the bottom
  of side rail by 3/8" x 1" carriage bolt, 3/8" flat washer and 3/8" nylon nut (F,C,B) as
  shown.



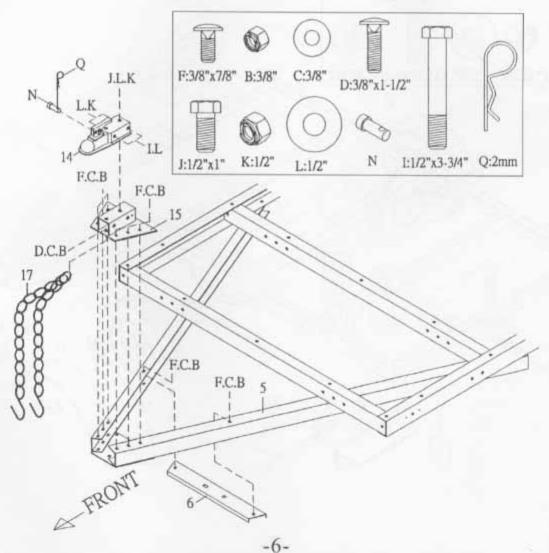
- Turn the trailer upside down.
- Put leaf spring (20) on spring hanger (7,8) with spring eye forward, secure with 9/16" x 3-1/4" hex bolt (G) and 9/16" nylon nut (H) at front portion, 3/8" x 3" hex bolt (E) and 3/8" nylon nut (B) at rear portionas shown. (Do not overtight)
- 3. Place axle (10) on the leaf spring (20) Note: axle with hole base must be downward. The bolt head of leaf spring insert to the both end holes on axle. Put spring plate (18) under leaf spring (20), using "U" bolt (19) pass through axle (10), leaf spring (20) and hole of spring plate (18), then lock with 3/8" flat washer (C) and 3/8" nylon nut (B) as shown.
- 4. Install hub (26) onto axle (10) by sliding hub (wheel studs pointed outward) over spindle. Slide outer bearing (27) on to spindle and into bearing cap in hub (26). Secure hub with 3/4" flat washer (U) and castle nut (28), tighten them snugly. Note: Back off castle nut (28) slightly a littl bit so that hub can spin freely.
- Insert 5/32" cotter pin (T) through the hole at the end of spindle and bend pin over to lock. Gently tap dust cap (29) over hub opening until flange on cap seats on hub. Fix grease fitting (R) to the end side of dust cap (29).



- Attach tow bar (5) to side rail (1L,1R) and front cross member (2). Note: tow bar with three square holes is toward the front. Secure with 3/8" x 1" hex bolt, 3/8" flat washer and 3/8" nylon nut (A,C,B) as shown.
- Place stand base (16) on the front of tow bar (5), secure with four holes by 3/8" x 7/8" carriage bolt, 3/8" flat washer and 3/8" nylon nut (F,C,B) as shown.

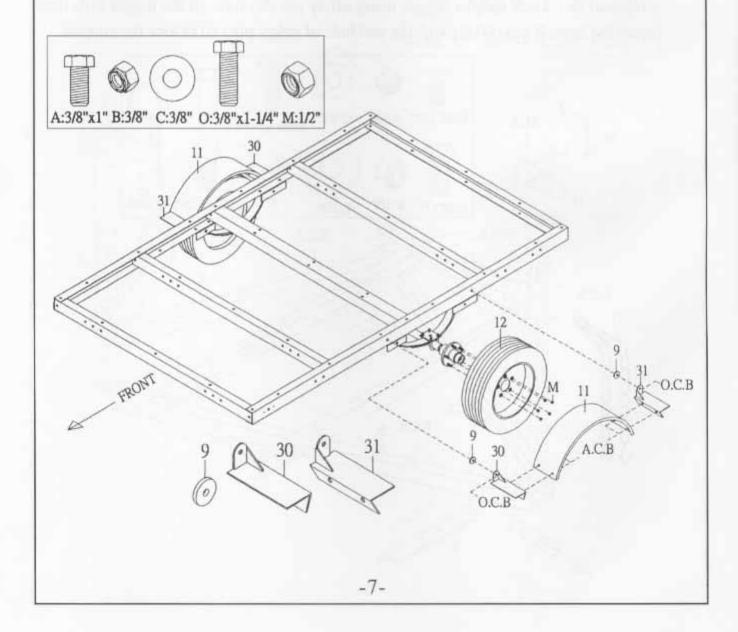


- 1. Turn over the trailer assembly.
- Attach spare tire bar (6) to the "U" channel of tow bar and put the coupler base (15) on the tow bar as shown, secure with 3/8" x 7/8" carriage bolt, 3/8" flat washer and 3/8" nylon nut (F,C,B).
- Attached safety chain (17) to the bottom of coupler base (15) using 3/8" x 1-1/2" carriage bolt (D) by go through the center link of safety chain, lock with 3/8" flat washer and 3/8" nylon nut (C,B) as shown.
- 4. Install coupler (14) to coupler base (15), using two 1/2" x 3-3/4" hex bolt (I) with 1/2" flat washer (L) go through the side wall hole of coupler and coupler base then lock with 1/2" flat washer (L) and 1/2" nylon nut(K) as shown. Insert 1/2" x 1" hex bolt (J) with 1/2" flat washer (L) to the top hole of coupler (14) then lock with 1/2" nylon nut (K). Lock coupler trigger using safety pin (N) through the trigger hole then insert the 2mm R pin (Q) through the end hole of safety pin (N) to lock the coupler.

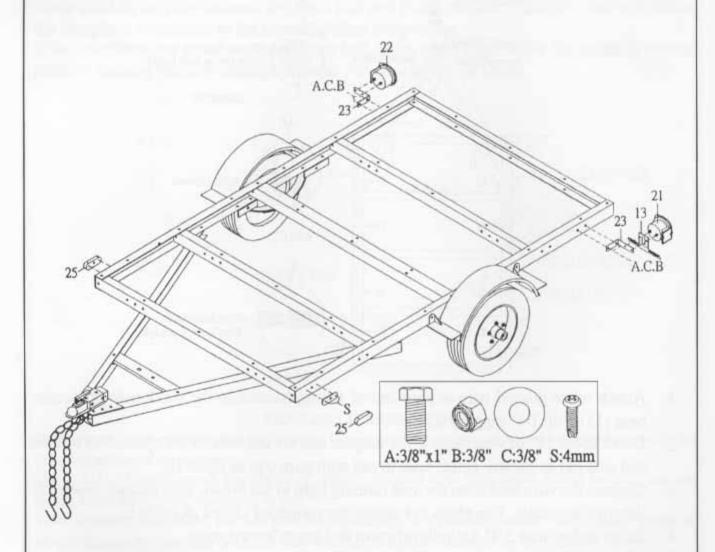


- 1. Mount fender bracket A (30) with hole spacer (9) to the front of left side rail using 3/8" x 1-1/4" hex bolt, 3/8" flat washer and 3/8" nylon nut (O,C,B) and mount fender bracket B (31) with hole spacer (9) to the rear of left side rail (1L) using 3/8" x 1-1/4" hex bolt, 3/8" flat washer and 3/8" nylon nut (O,C,B) as shown. Do the same way for opposite but fender bracket A (30) mounted at the rear and fender bracket B (31) mounted at the front of right side rail (1R). Note: Fender bracket A and B are mirror image each other. Install fender (11) to fender bracket A and B (30, 31) using 3/8" x 1" hex bolt, 3/8" washer and 3/8" nylon nut (B) as shown.
- Put tire/wheel assy (12) on hub set (26) then lock with 1/2" lug nut (M) tighten with socket or lug wrench to 90 ft/lbs (Very tighten).

Caution: Periodically grease the grease to the grease fitting on dust cap.



- Assemble tail light bracket (23) to the end of left and right side rail (1L,1R) using 3/8"x 1" hex bolt, 3/8" flat washer and 3/8" nylon nut (A,C,B). Install license plate bracket (13) with left tail light (21) to left side rail (1L) using supplied hardware. Note: Left tail light is with a clear window. Install right tail light (22) to right side rail.
- Open the lens of side running light (25) by coin with 4 mm self tapping screw (S) and run wire lead through the center hole to firm wire to side rail then cover with the lens.



#### TRAILER LIGHT KIT

#### WIRING DIAGRAM AND INSTRUCTION

Check alignment of all parts and install 4-wire vehicle connector in trunk area of your car. Locate the connector plug near the hitch ball and lay out wires. Connect the brown wire to tail light by stripping, wrapping and taping connector; similarly connect the yellow wire to left signal & stop light wire and green wire to the right signal & stop light wire. Some foreign vehicle may require an adaptor to convert their 5-wire system to 4-wire vehicle connector.

Tail License Illum

L. Stop &Tum (Yellow)

Tail License Illum - L. Stop &Turn (Yellow) Running Light (Brown) - R. Stop &Turn (Green) Ground (White) Ground (White) Brown Wire Brown/Green Brown/Yellow Wire (From Side Light) Connector Wire Hamess D--D Wire Clip -D D-Wire Harness & D-Wire from Tail Light Connector

- Attach white ground wire at plug end of wiring harness to the small hole on coupler base (15) with 1/4" tapping screw.
- Leave about 18" of wire beyond the coupler and lay out wire to the channel of tow bar and side rail as shown. Holds wire to rail with wire clip as circle D.
- Connect the wire lead from the side running light to the brown wire on each side with the wire connector. Use pliers to squeeze the connector closed as circle E.
- 4. Strips end of wire 3/4" for yellow/brown and green/brown wires.
- 5. Make tail light connections as per color code with connector as circle C:

Left Side

Yellow - Red wire

Brown - Two black wires

Right Side

Green - Red wire

Brown - Two black wires

#### SPECIAL NOTICE FOR COUPLER

Only use a 2" ball hitch on your towing vehicle. Pull trigger and lift handle. Place coupler over trailer ball and push down on handle until trigger locks in slot.

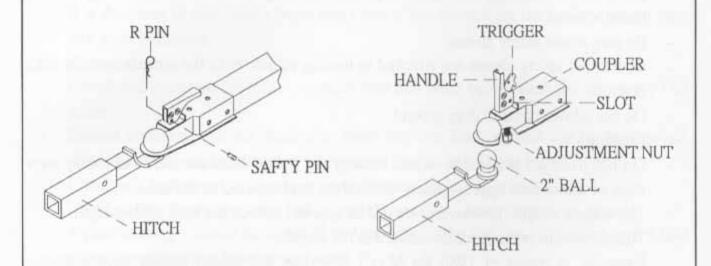
Pull up and down on the coupler to insure the ball is fitting snugly in the coupler. There should be no play between the ball and coupler. If there is play, tighten the adjustment nut until no play is present. If the nut too tight, the handle will not lock.

Note: To reduce friction the ball hitch and coupler. Apply a layer of multipurpose lithium grease over ball hitch. Wipe off excess when not in use to avoid staining clothes.

#### WARNING IMPORTANT

The trailer's Hitch Coupler Must be properly secured to the hitch ball of the towing vehicle. There must be no play between the hitch ball and Hitch coupler. Carefully read and follow the completes instruction in the manuel Before setup or use.

If the coupler is not secured properly, the ball could come loose while the trailer in motion possibly causing property damage, Serious Personal Injury, or Death.



#### TRAILER LICENSE NOTICE

Some states may consider that the trailer kit is specially construction or homemade vehicle for licensing and/or titling purposes.

The M.C.O. (Manufacturer's Certificate of Origin) supplied with your trailer should be filed out and 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 of sale showing the purchase price 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 appropraiate 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 title/registration/license.

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

#### SAFE USE AND OPERATION RULES

- 1. Towing Vehicle -
- Make sure the vehicle you are using to tow the trailer is capable of towing the trailer.
- The M.G.T.W. (maximum Gross Trailer Weight) is shown on the plate of the trailer.
   Check the Owner's Manuel for towing capability of the towing vehicle.
- Excess speed is the second most important cause of car-trailer accidents.
   Recommended max. speed for all passenger cars towing trailer is 45 MPH.
- 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 the hitch drawbar.
- Make sure the coupler and the ball are mating sizes and are rated equal to or greater than the road.
- 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 chain.
- Do not allow chains to drag ground.
- 4. Loading -
- Do not overload the trailer. When loading the trailer distribute the load evenly over floor of trailer with approximately 60% of the load forward of the axle.
- The tongue weight (downward) should be approx. 10% of the total traile weight.
- Tongue weight is the force downward at the coupler.
   Example: A trailer of 1980 lbs M.G.T.W. when full loaded should have a tongue weight of 190 lbs to 198 lbs. If half loaded the tongue weight should be 100 lbs.
- Reduce weight in car trunk and rear seat areas by amount of tongue weight of your trailer.
- 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 wire for good connections and possible fraying or wearing of insulation.
- Bulbs supplied with this trailer are for 12 volt system.
- Bulbs used tail light are: Number 1157 stop and tail.
- Bulbs for front clearance is: Number 194

- Some automobiles require a light converter installation at the automobile to convert
  the auto wiring to standard U.S. trailer wiring. Converters may be purchased at your
  local automotive parts store or where you purchased your trailer.
- 6. Tire -
- Check tire for wear and proper inflation before each use and every 100 miles.
- Check and tighten lug nuts. Torque to 85-90 ft/lbs. Retorque after 50 miles.
- 7. Operation -
- Know how to properly control your towing vehicle-trailer combination on the 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 lights and running gear every 100 miles.
- Carry emergency flares and tire extinguisher if require 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 100 miles.
- Inspect hitch and ball for damage in every day use. Ball or hitch can be damaged in parking, hitting curbs, dragging when cross ditches or railroad tracks.
- Check and tighten all bolts on trailer and hitch. (including wheels)
- Check safety chains for wear and do not allow safety chains to drag on ground.
- Wheel bearings should be checked and repacked after the first 100 miles and 4,000 miles thereafter or at least once a year.
- Use wheel bearing grease or a good grade of multi-purpose grease for wheel bearings.
- Warning -
- When towing your trailer it is important that the trailer bed is level with the ground.
   Failure to follow the above may result in an accident while towing.
- After your trailer has been properly attached to the tow vehicle. Make sure the area
  you are working in is level and both the surface area and trailer are dry to avoid
  slipping when loading or unloading.
- It is the owner's responsibility to determine if assistance is needed to load or unload your particular equipment. However, for safety, help should be acquired prior to any attempt to load or unload your equipment.
- It is user responsibility to ensure that the load is properly ensure to the trailer for

- transport. Because of the varity of terrain and variable factors involved, the user must use comm sense when securing the load.
- Pull up one L lock pin in one time for opening the ramp. The assistance may be required
- Keep the clear at the rear of the trailer when operate the ramp.
- Prohibit the children to step on the ramp, it may cause personal series injury.

# 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.

- 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.
- 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.
- Finish assembling the hub/wheel assembly as explained in this manuel, being careful to get any dirt or debris on any part of the assembly.

#### **IMPORTANT**

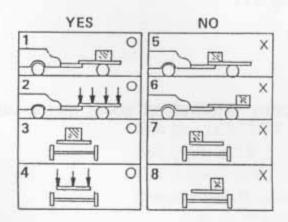
The purpose of following notices are to give you tips on safe use and operation of your trailer.

- Please read the instructions carefully and follow them step-by-step for easy please maintain this instructions in your file.
- 2. Please double check the assembling step-by-step, be sure that each is followed.
- 3. Be sure to apply for license as required.
- 4. Before using, please inspect your trailer.

#### Notice:

- Re-fill grease on bearing after every 1000 milesof use or yearly.
- Keep tire presure (PSI) as shown on the tire.
- Please insure you comply with the following before using your trailer.
  - 1. Tighten U-bolt.
  - 2. Tighten lug nuts.
  - 3. Tighten trigger lock on coupler.
  - 4. Hook up safety chain.
  - Trailer load should not excees it's 1,585 lbs capacity and should be properly secured.
  - 6. Trailer load size should not exceed trailer's bed board size.

#### Correct way to load your trailer



# Long Chih Ind. Co., Ltd.

# P.O. Box 22793, Taipei, Taiwan, R.O.C.

### Reporting Safety Defects

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administrations (NHTSA) in addition to notifying Long Chih Ind. Co., Ltd.

If NHTS receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in any individual between you, your dealer, or Long Chih Ind. Co., Ltd.

To contact NHTSA you may either call the Auto Safety. Hotline toll-free at 1-800-424-9393 (366-0123 in Washington, DC area) or write to:

#### NHTSA

U.S. DEPARTMENT of TRANSPORTATION

400 7th Street SW. (NSA-11)

Washington, DC 20590

You can also obtain other information about motor vehicle safety from the hotline.