

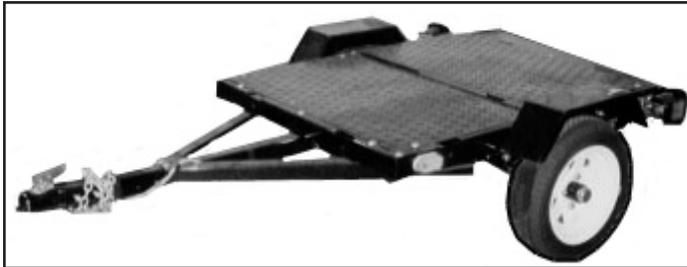


# A-TONGUE TRAILER

## 1,400 LB. WEIGHT CAPACITY

**Model 02575**

### ASSEMBLY AND OPERATION INSTRUCTIONS



#### **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.**

Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY, READ AND UNDERSTAND  
ALL WARNINGS AND INSTRUCTIONS BEFORE USE.**

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**For technical questions or replacement parts, please call 1-800-444-3353.**

Manual Revised 04j, 07f

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## CONTENTS

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<b>SPECIFICATIONS</b> .....	<b>3</b>
<b>GENERAL SAFETY WARNINGS AND PRECAUTIONS</b> .....	<b>3</b>
<b>SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS</b> .....	<b>4</b>
<b>UNPACKING</b> .....	<b>5</b>
<b>ASSEMBLY INSTRUCTIONS</b> .....	<b>6</b>
To Assemble the Tires, Wheels, and Axle: .....	6
To Assemble the Frame and Tongue: .....	7
To Attach the Springs, Tires, Wheels, and Axle to the Frame: .....	8
To Attach the Fenders: .....	10
To Attach the Side Running Lights: .....	10
To Attach the Tail Light Bracket and License Plate Bracket: .....	10
To Attach the Tail Lights: .....	10
To Attach the Trailer Beds: .....	11
<b>OPERATING INSTRUCTIONS</b> .....	<b>12</b>
<b>TIRE INFORMATION</b> .....	<b>13</b>
Tire Terminology Glossary .....	13
Tire Markings.....	14
Tire Inflation and Load Limit.....	15
<b>TIRE CARE</b> .....	<b>16</b>
Checking Tire Pressure .....	16
Steps for Maintaining Proper Tire Pressure .....	16
Tire Size .....	17
Tire Tread .....	17
Tire Rotation .....	17
Tire Balance and Alignment.....	17
Tire Repair .....	17
<b>VEHICLE LOAD LIMIT</b> .....	<b>18</b>
Steps for Determining Correct Load Limit.....	18
<b>INSPECTION, MAINTENANCE, AND CLEANING</b> .....	<b>18</b>
<b>PARTS LIST AND DIAGRAMS</b> .....	<b>19</b>
Parts List.....	19
Assembly Diagram A .....	20
Assembly Diagram B .....	21
Wiring Diagram for Lights .....	22
<b>LIMITED 90 DAY WARRANTY</b> .....	<b>23</b>

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## SPECIFICATIONS

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Maximum Payload Capacity	1400 Pounds (dead weight)
Bed Size	40" x 50"
Overall Dimensions	87-1/2" L x 52-3/4" W x 22-3/4" H
Tire Size & Type	4.80 x 12", 4 Ply, Tubeless
Tongue Level Height	14" From Ground
Ball Coupler Size	1-7/8"
Construction	Formed and Welded Steel
Net Weight	195 Pounds

### Save This Manual

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

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## GENERAL SAFETY WARNINGS AND PRECAUTIONS

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1. **KEEP WORK AREA CLEAN AND DRY.** Cluttered, damp, or wet work areas invite injuries.
2. **KEEP CHILDREN AWAY FROM WORK AREA.** Do not allow children to play on this product.
3. **STORE IDLE EQUIPMENT.** When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment, and keep out of reach of children.
4. **DO NOT USE THIS PRODUCT IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this product.
5. **USE EYE AND HAND PROTECTION.** Wear ANSI approved safety impact eye goggles when assembling this product. ANSI approved safety impact eye goggles are available from Harbor Freight Tools.
6. **DRESS SAFELY.** Do not wear loose clothing or jewelry, as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long-sleeve shirt, roll sleeves up above elbows.
7. **DO NOT OVERREACH.** Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.
8. **INDUSTRIAL APPLICATIONS MUST FOLLOW OSHA REQUIREMENTS.**

9. **STAY ALERT.** Watch what you are doing at all times. Use common sense. Do not use this product when you are tired or distracted from the job at hand.
10. **CHECK FOR DAMAGED PARTS.** Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace or repair damaged or worn parts immediately.
11. **REPLACEMENT PARTS AND ACCESSORIES:** When servicing, use only identical replacement parts. Only use accessories intended for use with this product. Approved accessories are available from Harbor Freight Tools.
12. **MAINTAIN THIS PRODUCT WITH CARE.** Keep this product clean and dry for better and safer performance.
13. **MAINTENANCE:** For your safety, service and maintenance should be performed regularly by a qualified technician.
14. **USE THE RIGHT TOOL FOR THE JOB.** Do not attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which it was intended. Do not modify this equipment, and do not use this equipment for a purpose for which it was not intended.
15. **WARNING:** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors, which cannot be built into this product, but must be supplied by the operator.

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## **SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS**

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1. TO AVOID PERSONAL INJURY AND/OR PROPERTY DAMAGE, DO NOT EXCEED THE TRAILER'S MAXIMUM PAYLOAD CAPACITY OF 1,400 POUNDS.
2. **BEFORE EACH USE, ALWAYS EXAMINE THE TRAILER FOR PROPER TIRE (23) AIR PRESSURE, DAMAGED TAIL LIGHTS (25L, 25R), DAMAGED SIDE RUNNING LIGHTS (26), LOOSE BOLTS AND NUTS, STRUCTURAL CRACKS, BENDS, AND ANY OTHER CONDITION THAT MAY AFFECT ITS SAFE OPERATION.** Do not use the Trailer even if minor damage appears.
3. **NEVER ALLOW PEOPLE OR PETS TO RIDE ON THE TRAILER.**
4. **BEFORE EACH USE, ALWAYS ATTACH THE SAFETY CHAINS (10) OF THE TRAILER TO THE TOWING VEHICLE.** Make sure the Safety Chains are attached to the towing vehicle with the same length for each side. Do not allow the Safety Chains to drag on ground.

5. **ALWAYS CHECK TO MAKE SURE THE PAYLOAD BEING TRANSPORTED IS PROPERLY AND SAFELY SECURED ON THE TRAILER.** Load the Trailer evenly from side to side with 60% of the load forward of the Axle (19).
6. **MAKE SURE THE TOWING VEHICLE IS CAPABLE OF TOWING THE TRAILER AND ITS PAYLOAD.** Make sure the hitch on the towing vehicle is capable of towing the Trailer and its payload and has 1-7/8" hitch ball. Make sure hitch ball is securely mounted. The towing capacity of the hitch is typically stamped on the hitch drawbar.
7. **MAKE SURE THE COUPLER (12) AND THE VEHICLE'S BALL HITCH (not included) ARE OF EQUAL MATING SIZE (1-7/8") AND ARE RATED EQUAL TO OR GREATER THAN THE WEIGHT OF THE TRAILER AND ITS PAYLOAD.**
8. **DO NOT EXCEED 45 MILES PER HOUR WHEN TOWING THE TRAILER.** Excess speed is an important cause of vehicle-trailer accidents.
9. **THE TAIL LIGHT BULBS SUPPLIED WITH THIS TRAILER ARE FOR A 12 VOLT DC ELECTRICAL SYSTEM ONLY.** Do not attempt to power the Light Bulbs with any other type or voltage electrical current.
10. **WHENEVER POSSIBLE, PARK THE TRAILER ON A FLAT, LEVEL, SOLID GROUND/PAVED SURFACE AND CHOCK BOTH TIRES TO KEEP THE TRAILER FROM ACCIDENTLY MOVING.**
11. **TRAILER LICENSING NOTICE:** Some states may consider this Trailer as a vehicle requiring registration, licensing, and titling. Check with your State Department of Motor Vehicles for information and guidance on registering, licensing, and titling the Trailer.

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## **UNPACKING**

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When unpacking, check to make sure all the parts shown on the **Parts List** near the end of this manual are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

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## ASSEMBLY INSTRUCTIONS

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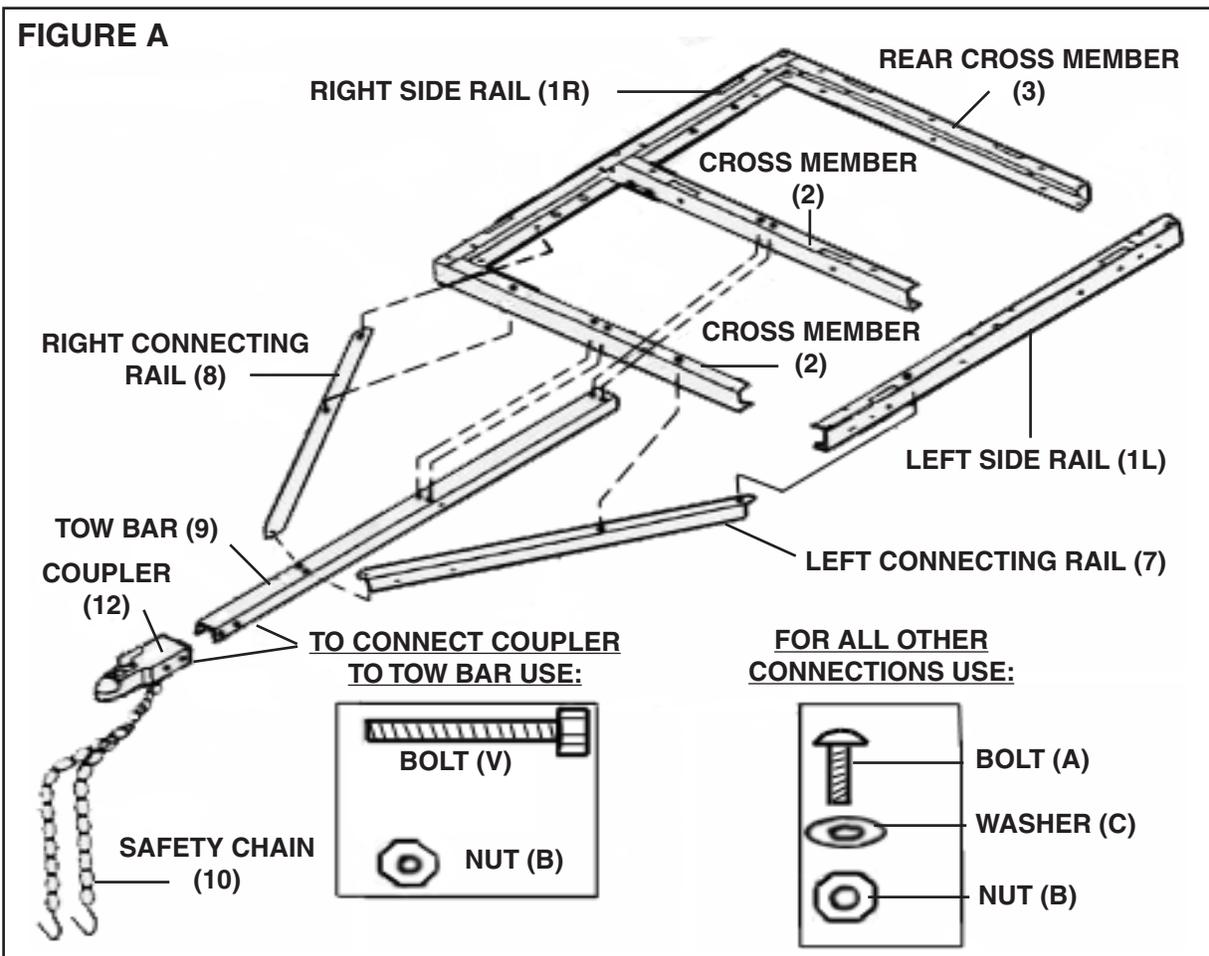
**Note:** For additional references to the parts listed below, refer to the Assembly Diagrams near the end of this manual.

### To Assemble the Tires, Wheels, and Axle:

1. Insert one Hub (20) fully onto each end of the Axle (19).
2. **BEARING PACKING INSTRUCTIONS: Read 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.
  - a. 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.**
  - b. Allow all pieces to dry completely.
  - c. Make sure that your hands are thoroughly clean and the bearing packer (not included) is also thoroughly clean.
  - d. Place fresh, clean bearing grease in the packer.
  - e. 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.
  - f. Be careful not to get any dirt or debris on any part of the assembly while you continue assembly.
3. Insert one Outer Bearing (21) into each Hub (20). Then, insert one 3/4" Flat Washer (O) fully onto each end of the Axle (19).
4. Screw one Castle Nut (Q) fully onto each end of the Axle (19). **NOTE:** Do not *overtighten* the Castle Nut. Make sure the Hub (20) turns freely. Then insert one 5/32" Cotter Pin (P) through each of the Castle Nuts, and bend each Cotter Pin to secure the Castle Nut in place.
5. Insert one Dust Cap (22) onto each of the two Castle Nuts (Q). **NOTE:** A rubber mallet (not included) may be required to firmly secure the Dust Caps onto the Castle Nuts.
6. Align the four mounting holes in a Tire & Wheel Assembly (23) with the four Lug Bolts on a Hub (20), and insert the Tire & Wheel Assembly onto the Hub. Firmly secure the Tire & Wheel Assembly to the Hub, using four Wheel Nuts (S). Then, repeat this Step for the remaining Tire & Wheel Assembly and Hub.

**To Assemble the Frame and Tongue:**

1. Position the Right Side Rail (1R) and Left Side Rail (1L) parallel and aligned with one another. **(See Figure A.)**
2. Align the mounting hole located at each *end* of a Cross Member (2) with the mounting hole located in one *end* of the Right Side Rail (1R) and one *end* of the Left Side Rail (1L). On each end insert *one* 3/8" x 7/8" Carriage Bolt (A) **upward from the underside** of the aligned mounting holes, and secure the Cross Member to the Right Side Rail and Left Side Rail with one Washer (C) and one Nut (B). **(See Figure A.)**



3. Align the mounting hole located at each *end* of the remaining Cross Member (2) with the mounting hole located in the *center* of the Right Side Rail (1R) and the *center* of the Left Side Rail (1L). Insert *one* 3/8" x 7/8" Carriage Bolt (A) **upward from the underside** of the aligned mounting holes in the Cross Member and Right Side Rail, and secure the parts with *one* Washer (C) and *one* Nut (B). Repeat this Step for the other end of the Cross Member and the Left Side Rail. **(See Figure A.)**

4. Align the mounting hole located at each *end* of the Rear Cross Member (3) with the mounting hole located in the *end* of the Right Side Rail (1R) and the *end* of the Left Side Rail (1L). On each end insert *one* 3/8" x 7/8" Carriage Bolt (A) **upward from the underside** of the aligned mounting holes, and secure the Rear Cross Member to the Right Side Rail and Left Side Rail with *one* Washer (C) and *one* Nut (B). **(See Figure A.)**
5. Align the *four* mounting holes located at the middle and rear sections of the Tow Bar (9) with the *four* mounting holes located in the middle section of each of the two Cross Members (2). Insert *four* 3/8" x 7/8" Carriage Bolts (A) **upward from the underside** of the aligned mounting holes, and secure the Tow Bar to the two Cross Members with *four* Washers (C) and *four* Nuts (B). **(See Figure A.)**
6. Align the *three* mounting holes located in the Right Connecting Rail (8) with the *one* mounting hole located in the Right Side Rail (1R), *one* mounting hole located in the forward Cross Member (2), and *one* mounting hole located in the Tow Bar (9). Insert *three* 3/8" x 7/8" Carriage Bolts (A) **upward from the underside** of the aligned mounting holes, and secure the Right Connecting Rail to the Right Side Rail, forward Cross Member, and Tow Bar, with *three* Washers (C) and *three* Nuts (B). **(See Figure A.)**
7. Align the *three* mounting holes located in the Left Connecting Rail (7) with the *one* mounting hole located in the Left Side Rail (1L), *one* mounting hole located in the forward Cross Member (2), and *one* mounting hole located in the Tow Bar (9). Insert *three* 3/8" x 7/8" Carriage Bolts (A) **upward from the underside** of the aligned mounting holes, and secure the Left Connecting Rail to the Left Side Rail, forward Cross Member, and Tow Bar, with *three* Washers (C) and *three* Nuts (B). **(See Figure A.)**
8. Insert the Coupler (12) onto the forward end of the Tow Bar (9), and align the *two* mounting holes in the Coupler with the *two* mounting holes in the Tow Bar. Secure the Coupler to the Tow Bar, using *two* Bolts (V) and *two* Nuts (B). **(See Figure A.)**

#### **To Attach the Springs, Tires, Wheels, and Axle to the Frame:**

1. Align the *two* mounting holes in a Front Spring Hanger (15F) with the *two* mounting holes located in the forward section of the Left Side Rail (1L). Insert *two* 3/8" x 7/8" Carriage Bolts (A) **upward from the underside** of the aligned mounting holes, and secure the Front Spring Hanger to the Left Side Rail with *two* Washers (C) and *two* Nuts (B).
2. Align the *two* mounting holes in the remaining Front Spring Hanger (15F) with the *two* mounting holes located in the forward section of the Right Side Rail (1R). Insert *two* 3/8" x 7/8" Carriage Bolts (A) **upward from the underside** of the aligned mounting holes, and secure the Front Spring Hanger to the Right Side Rail with *two* Washers (C) and *two* Nuts (B).

3. Align the *two* mounting holes in a Rear Spring Hanger (15R) with the *two* mounting holes located in the rear section of the Left Side Rail (1L). Insert *two* 3/8" x 7/8" Carriage Bolts (A) **upward from the underside** of the aligned mounting holes, and secure the Rear Spring Hanger to the Left Side Rail with *two* Washers (C) and *two* Nuts (B).
4. Align the *two* mounting holes in the remaining Rear Spring Hanger (15R) with the *two* mounting holes located in the rear section of the Right Side Rail (1L). Insert *two* 3/8" x 7/8" Carriage Bolts (A) **upward from the underside** of the aligned mounting holes, and secure the Rear Spring Hanger to the Right Side Rail with *two* Washers (C) and *two* Nuts (B).
5. Align the mounting hole on the end of a Spring (18) with the mounting hole located on the side of one of the *pre-attached* Front Spring Hangers (15F), and secure the Spring to the Front Spring Hanger with *one* Bolt (N) and *one* Nut (B).
6. Insert the second Spring Bolt (N) underneath the curved edge at the rear of the Spring (18) and through the mount hole of the Rear Spring Hanger (15R). Secure with one Nut (E).
7. For the remaining Spring (18), Front Spring Hanger (15F), and Rear Spring Hanger (15R), repeat Steps #5 and #6.
8. Align the center mounting hole of a Spring Plate (16) with the center mounting hole of a *pre-attached* Spring (18), and secure the Spring Plate to the Spring with two U Bolts and Nuts (U Bolts fit underneath the axles with threaded ends up). Repeat this step on opposite side of Trailer.
9. Align the center mounting hole of the remaining Spring Plate (16) with the center mounting hole of the remaining *pre-attached* Spring (18), and secure the Spring Plate to the Spring with *one* Bolt (A), *one* Washer (C), and *one* Nut (B).
10. With assistance, position the *pre-assembled* Tire, Wheel, and Axle Assembly under the mid-section of the *pre-assembled* Frame of the Trailer.
11. On the right side of the Trailer, insert *two* U-Bolts (17) upward, over the right end of the Axle (19), and through the *four* mounting holes in the Spring Plate (16). Then, secure the right end of the Axle to the Spring (18) by tightening *four* Washers (C) and *four* Nuts (B) onto the two U-Bolts.
12. On the left side of the Trailer, insert the remaining *two* U-Bolts (17) upward, over the left end of the Axle (19), and through the *four* mounting holes in the Spring Plate (16). Then, secure the left end of the Axle to the Spring (18) by tightening *four* Washers (C) and *four* Nuts (B) onto the *two* U-Bolts.

### **To Attach the Fenders:**

1. Align the *two* mounting holes in a Fender (13) with the *two* mounting holes located in the side, mid-section of the Left Side Rail (1L). Then secure the Fender to the Left Side Rail with *two* Bolts (A), *two* Washers (C), and *two* Nuts (B).
2. Align the *two* mounting holes in the remaining Fender (13) with the *two* mounting holes located in the side, mid-section of the Right Side Rail (1R). Then secure the Fender to the Right Side Rail with *two* Bolts (A), *two* Washers (C), and *two* Nuts (B).

### **To Attach the Side Running Lights:**

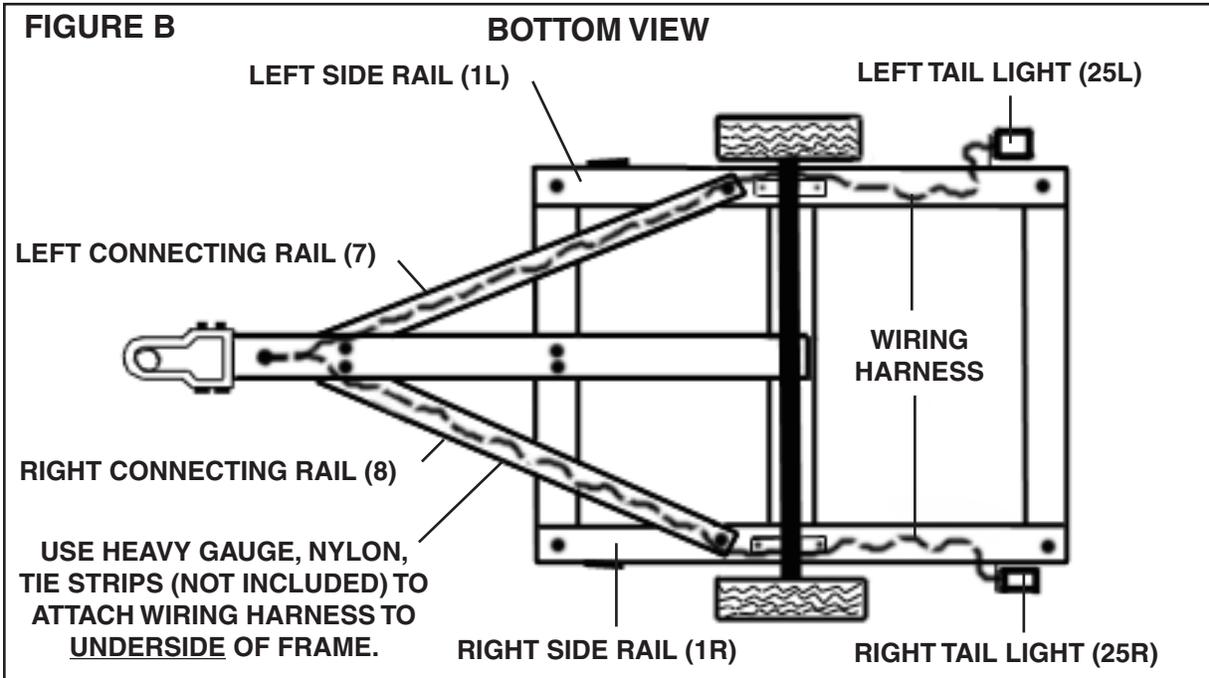
1. Align the *two* mounting holes in a Side Running Light (26) with the *two* mounting holes located in the side, forward section of the Left Side Rail (1L). Then, secure the Side Running Light to the Left Side Rail with *two* Self-Tapping Screws (J).
2. Align the *two* mounting holes in the remaining Side Running Light (26) with the *two* mounting holes located in the side, forward section of the Right Side Rail (1R). Then, secure the Side Running Light to the Right Side Rail with *two* Self-Tapping Screws (J).

### **To Attach the Tail Light Bracket and License Plate Bracket:**

1. Align *two* of the mounting holes in a Tail Light Bracket (24) with the *two* mounting holes located in the side, rear section of the Left Side Rail (1L). Then, secure the Tail Light Bracket to the Left Side Rail with *two* Bolts (A), *two* Washers (C), and *two* Nuts (B).
2. Align *two* of the mounting holes in the remaining Tail Light Bracket (24) with the *two* mounting holes located in the side, rear section of the Right Side Rail (1R). Then, secure the Tail Light Bracket to the Right Side Rail with *two* Bolts (A), *two* Washers (C), and *two* Nuts (B).

### **To Attach the Tail Lights:**

1. **See Wiring Diagram on page 15.** Insert the *two* threaded mounting bolts of the Left Tail Light (25L) through the mounting holes located in the License Plate Bracket (30) *and* Tail Light Bracket (24). Then, secure the Left Tail Light with light nuts.
2. Insert the *two* threaded mounting bolts of the Right Tail Light (25R) through the mounting holes located in the Tail Light Bracket (24) which was *pre-assembled* on the Right Side Rail (1R). Then, secure the Left Tail Light with light nuts.



3. Use heavy gauge, nylon, **tie strips** (not included) to attach the wiring harnesses of the Left and Right Tail Lights (25L, 25R) to the **underside** of the Frame and Tongue Assemblies. **(See Figure B.)**

#### **To Attach the Trailer Beds:**

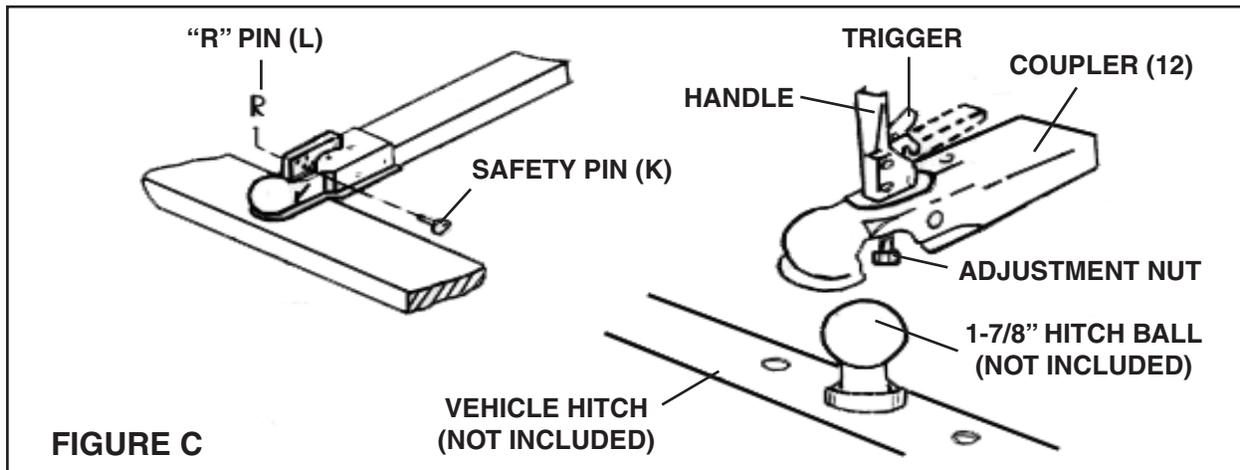
1. Align the *four* mounting holes of a Trailer Bed (X) with the *two* mounting holes in the Left Side Rail (1L) and *two* mounting holes in the Right Side Rail (1R). Secure the Trailer Bed to the Left and Right Side Rails with *four* Bolts (A), *four* Washers (C), and *four* Nuts (B).
2. Align the *four* mounting holes of the remaining Trailer Bed (X) with the *two* mounting holes in the Left Side Rail (1L) and *two* mounting holes in the Right Side Rail (1R). Secure the Trailer Bed to the Left and Right Side Rails with *four* Bolts (A), *four* Washers (C), and *four* Nuts (B).
3. Insert *three* Bolts (A) between the two *pre-assembled* Trailer Beds (X) and through the *three* mounting holes in the Cross Member (2). Make sure the heads of the Bolts overlap the edges of each of the Trailer Beds. Then firmly tighten the Bolts with *four* Washers (C) and *four* Nuts (B).
4. **The A-Tongue Trailer is now completely assembled and ready for use.**

## OPERATING INSTRUCTIONS

1. Only use a 1-7/8" ball hitch (not included) on the towing vehicle. (See Figure C.)
2. Temporarily remove the "R" Pin (L) and Safety Pin (K). Then, pull up on the Trigger and lift up on the Handle. (See Figure C.)
3. **NOTE:** To reduce friction between the hitch ball and Coupler (12), apply a layer of heavy weight grease over the hitch ball. (See Figure C.)

### 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.



4. With assistance, place the Coupler (12) over the vehicle's hitch ball and pull back on the Trigger and push down on the Handle until the Trigger locks in the slot. Pull up and down on the Coupler to make sure the hitch ball is fitting snugly in the Coupler. There should be no play between the hitch ball and Coupler.

**IMPORTANT** - If there is play, tighten the Adjustment Nut until no play is present: After unlocking the Handle, the Nut retaining plate (holding the adjusting nut in place) needs to be pressed back while the Nut is tightened. After Nut is tightened, **the retaining plate needs to fit in place against the flats of the Nut to prevent it from moving.** This adjustment should be done by 2 people. If the Adjustment Nut is too tight, the Handle will not lock.

After the Adjustment Nut is properly adjusted, pull back on the Trigger and push down on the Handle until the Trigger locks in the slot. **Pull up on Handle firmly** to make sure the Trigger is locked in place and the Handle cannot move. **Replace the Safety Pin and "R" Pin.** (See Figure C.)

5. Know how to properly control the towing vehicle-Trailer combination on the highway under all conditions. The loaded weight of the Trailer will increase the braking and stopping distances appreciably.
6. When towing the Trailer over long distances stop and check the tightness of all connections and Tail Lights (25L, 25R) *at least* every 100 miles.

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7. Carry extra bulbs and fuses if towing the Trailer at night over long distances. Carry emergency flares, and fire extinguisher, if required for operation in your state.

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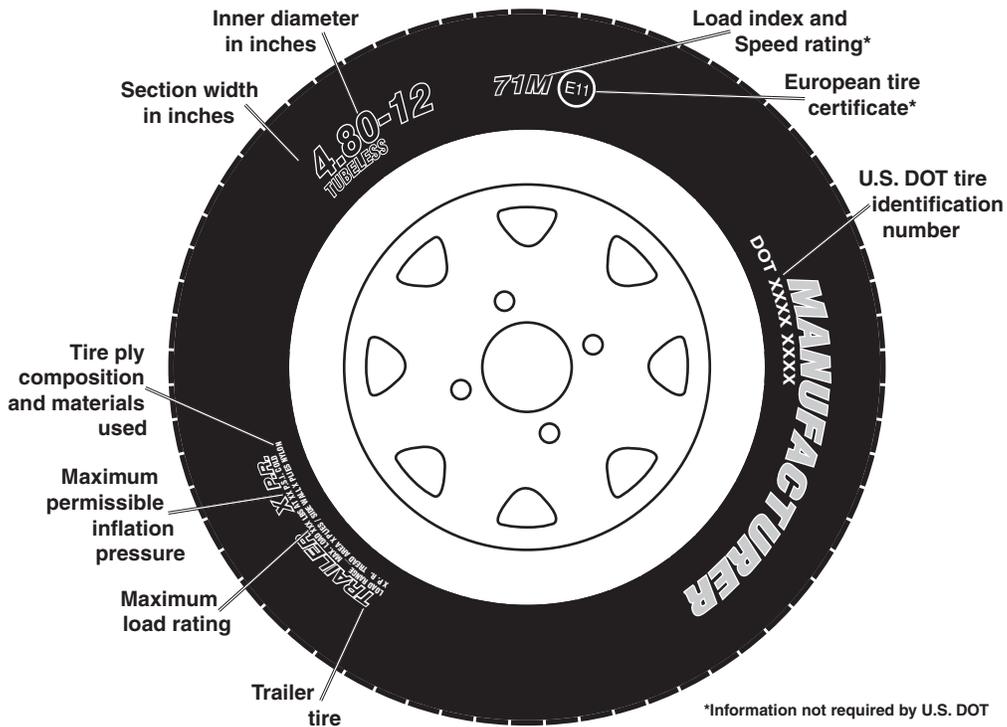
## TIRE INFORMATION

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### Tire Terminology Glossary

- **Accessory weight means**- the combined weight of automatic transmission, power steering, power brakes, power windows, power seats, radio, and heater, to the extent that these items are available as factory-installed equipment.
- **Carcass means**- the tire structure except for the tread which provides the major portion of the tire's capability to deflect in response to the vertical loads and tractive forces that the tire transmits from the roadway to the non-pneumatic rim, the wheel center member, or the vehicle and which attaches to the vehicle or attaches, either integrally or separably, to the wheel center member or non-pneumatic rim.
- **Carcass separation means**- the pulling away of the carcass from the non-pneumatic rim or wheel center member.
- **Chunking means**- the breaking away of pieces of the carcass or tread.
- **Cracking means**- any parting within the carcass, tread, or any components that connect the tire to the wheel center member.
- **Curb weight means**- the weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight optional engine.
- **Load rating means**- the maximum load a tire is rated to carry.
- **Maximum loaded vehicle weight means**- the sum of:
  - a. Curb weight;
  - b. Accessory weight;
  - c. Vehicle capacity weight; and
  - d. Production options weight.
- **Maximum tire width means**- the greater of either the linear distance between the exterior edges of the carcass or the linear distance between the exterior edges of the tread, both being measured parallel to the rolling axis of the tire.
- **Normal occupant weight means**- 68 kilograms times the number of occupants.
- **Occupant distribution means**- distribution of occupants in a vehicle.
- **Production options weight means**- the combined weight of those installed regular production options weighing over 2.3 kilograms in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.
- **Tread means**- that portion of the tire that comes in contact with the road.
- **Tread separation means**- pulling away of the tread from the carcass.
- **Vehicle capacity weight means**- the rated cargo and luggage load plus 68 kilograms times the vehicle's designated seating capacity.
- **Vehicle maximum load on the tire means**- that load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.
- **Vehicle normal load on the tire means**- that load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

## Tire Markings



- **Section width**- This number gives the width of the tire in inches. The larger the number, the wider the tire. (The markings on the example tire diagram show 4.80. The markings on your tire may differ.)
- **Inner diameter**- This number gives the inner diameter of the tire in inches. This is also the rim diameter in inches. (The markings on the example tire diagram show 12. The markings on your tire may differ.)
- **U.S. DOT tire identification number**- This begins with the letters “DOT” and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year that the tire was built. For example, the numbers 2107 mean the 21st week of 2007. Any other numbers used are marketing codes used at the manufacturer’s discretion. This information is used to contact consumers if a tire defect requires a recall.
- **Maximum Load Rating**- This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

### Load Index Rating Codes

Code	Pounds								
71	761	79	963	87	1,201	95	1,521	103	1,929
72	783	80	992	88	1,235	96	1,565	104	1,984
73	805	81	1,019	89	1,279	97	1,609	105	2,039
74	827	82	1,047	90	1,323	98	1,653	106	2,094
75	853	83	1,074	91	1,356	99	1,709	107	2,149
76	882	84	1,102	92	1,389	100	1,764	108	2,205
77	908	85	1,135	93	1,433	101	1,819	109	2,271
78	937	86	1,168	94	1,477	102	1,874	110	2,337

- **Load index**- This is a measurement of how much weight each tire can support. See chart above. (The markings on the example tire diagram show 71. The markings on your tire may differ.) Note: You may not find this information on all tires because it is not required by law.

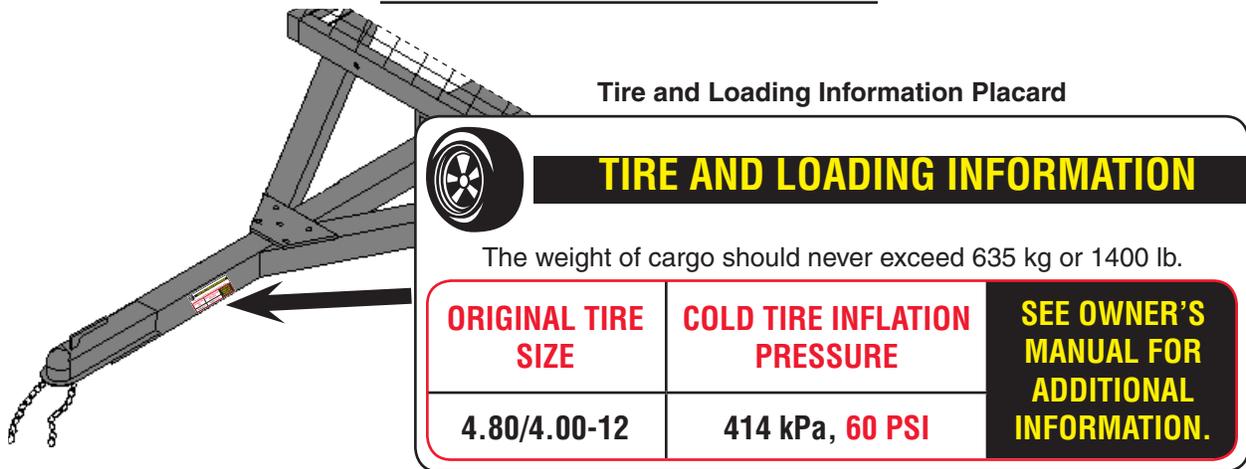
- **Speed Rating-** The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. *This does not indicate that the vehicle or rims can safely reach or maintain that speed.* These ratings are listed to the right. (The markings on the example tire diagram show M. The markings on your tire may differ.) Note: You may not find this information on all tires because it is not required by law.

### Tire Speed Rating Codes

Code	MPH	Code	MPH	Code	MPH
F	50	N	87	U	124
G	56	P	94	H	130
J	62	Q	100	V	149
K	68	R	106	Z	149
L	75	S	112	W	168
M	81	T	118	Y	186

- **Tire Ply Composition and Materials Used-** The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.
- **Maximum Permissible Inflation Pressure-** This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

## Tire Inflation and Load Limit



### Tire and Loading Information Placard Location

The Tire and Loading Information Placard displays the cold tire inflation pressure and the load limit for this vehicle. See the Tire Care section starting on the following page for an explanation of tire pressure and see the Vehicle Load Limit section following that for an explanation of load limit.

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# TIRE CARE

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## Checking Tire Pressure

**Note:** Underinflated tires can decrease handling, stopping performance, traction, tire life, and load-carrying capability, in addition to causing other negative and hazardous effects, including tire failure. Overinflated tires are at greater risk of an impact break, where the tread and casing break when striking a hard edge, often opening a huge gash across the tread. Incorrect inflation pressure also increases tires wear rate. Therefore, it is important to keep tires inflated properly.

Check all tires' pressure at least monthly, due to the following factors:

- Most tires naturally lose air gradually.
- Tires can suddenly lose air if the tire strikes a pothole, curb, or other object.
- It is usually not possible to determine underinflation of radial tires by visual inspection.

This vehicle has 60 PSI recommended cold tire inflation pressure. The term "cold" in this manual does not refer to the temperature outside, but it refers to the fact that a tire that has not been driven for a period is cooler (and therefore has lower pressure) than a tire that has been driven on. Tires heat up while being driven on. To check (or fill to) a tire's cold inflation, the tire must have not been driven for more than a mile or two for at least three hours. If you check a tires pressure when it is not "cold", the pressure will appear higher than the actual cold tire inflation.

## Steps for Maintaining Proper Tire Pressure

1. Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the owner's manual. This trailer has 60 PSI recommended cold tire inflation pressure.
2. Measure and record the tire pressure of all tires.
3. If the tire pressure is too high in any of the tires and the tires have not been driven for at least three hours, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get to the correct pressure. If the vehicle have been driven within the past three hours and the tire pressure is too high on any tires, then recheck the pressure once the tires have been allowed to sit motionless for at least three hours.
4. If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. These "missing" pounds of pressure are what you will need to add.
5. At a service station, add the missing pounds of air pressure to each tire that is underinflated.

6. Check all the tires to make sure they have the same air pressure.
7. If the tires' pressure was not measured "cold", then the pressure should be rechecked with the tires cold as soon as possible.

### **Tire Size**

To maintain safety, only purchase new tires of the same size as the original tires. Look at the Tire and Loading Information Placard, the Specifications Chart in this manual, or the sidewall of the tire being replaced. If you have any doubt about selecting the correct size, consult a tire dealer.

### **Tire Tread**

The tire tread provides traction that prevents your vehicle from slipping, especially if the road is wet or icy. Tires are unsafe and should be replaced when the tread is worn down to 1/16". Measure tread depth using a tread depth indicator (not included).

### **Tire Rotation**

Every 5,000 miles the left and right tires should be switched. This will cause the tires to wear more evenly and last longer.

### **Tire Balance and Alignment**

The tires need to be balanced to prevent vibration when driving. This involves attaching small weights to the rim to offset small differences in rim and tire weight. The tires also need to be aligned properly. Alignment is the orientation of the tires to the road surface and their being parallel. This helps the tires to wear evenly, and provide better traction. Both tire balance and alignment require specialized equipment that is not provided with this vehicle.

### **Tire Repair**

To properly repair a punctured tire, the hole needs to be properly plugged and patched from the inside of the tire. Tread punctures can be repaired if they are not too large. Sidewall punctures should not be repaired, the tire needs to be replaced if the sidewall is damaged. Tires should be removed from the rim to be inspected before being plugged and patched. A qualified mechanic should remove the tire from the rim, perform the repair, and remount the tire.

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## VEHICLE LOAD LIMIT

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### Steps for Determining Correct Load Limit

1. Locate the statement “The weight of cargo should never exceed XXX pounds” on your vehicle’s placard.
2. That figure equals the available amount of cargo and luggage load capacity.
3. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.
4. If the trailer’s load exceeds the cargo and luggage load capacity, then the trailer be unsafe resulting in hazardous effects, such as: Trailer’s tires will not be able to maintain traction properly, and stopping distance will be increased significantly.

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## INSPECTION, MAINTENANCE, AND CLEANING

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1. **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.**
2. **BEFORE EACH USE**, check the Tires according to the instructions on the previous pages.
3. **BEFORE EVERY USE AND AT 500 MILE INTERVALS DURING EVERY TRIP**, check and tighten the Tire Lug Nuts. Torque from 85 to 90 ft-lb.
4. **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 page 6 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.

**PLEASE READ THE FOLLOWING CAREFULLY**

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

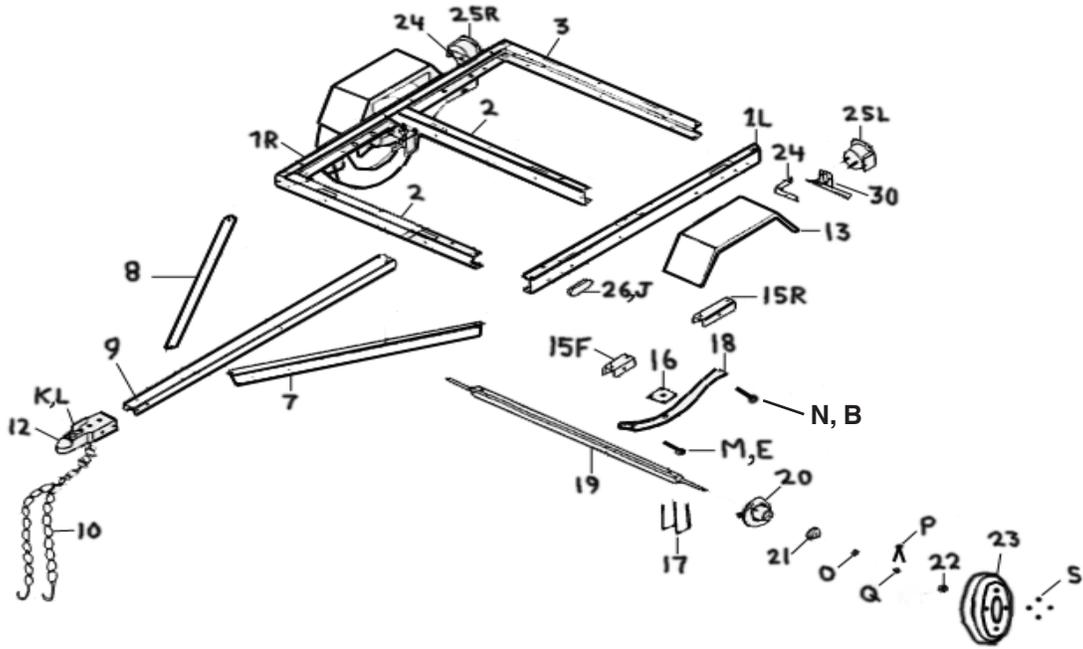
**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

**PARTS LIST AND DIAGRAMS**

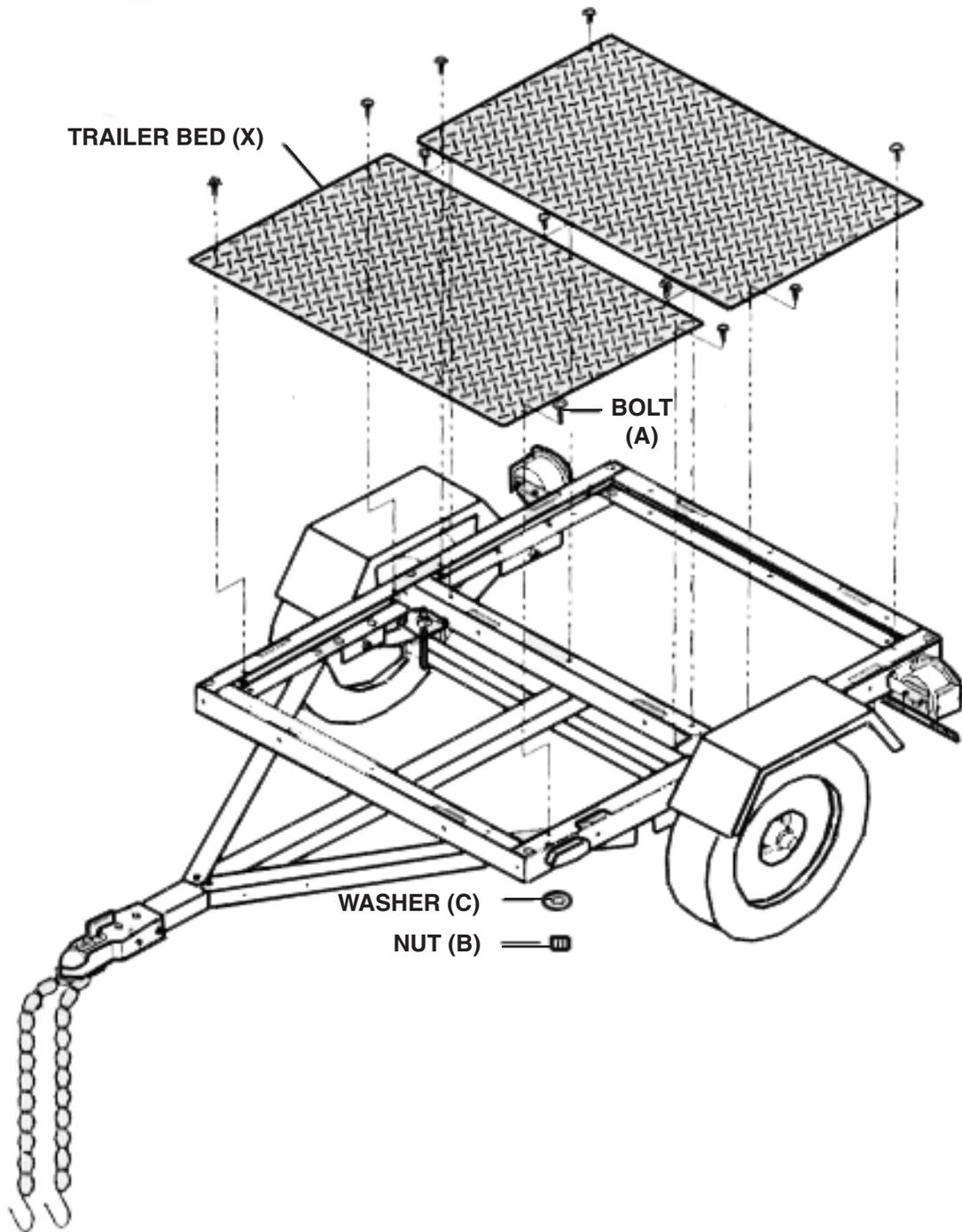
**Parts List**

<b>Part</b>	<b>Description</b>	<b>Qty.</b>	<b>Part</b>	<b>Description</b>	<b>Qty.</b>
1L	Left Side Rail	1	25L	Left Tail Light	1
1R	Right Side Rail	1	25R	Right Tail Light	1
2	Cross Member	2	26	Side Running Light	2
3	Rear Cross Member	1	30	License Plate Bracket	1
7	Left Connecting Rail	1	A	Carriage Bolt (3/8" x 7/8")	49
8	Right Connecting Rail	1	B	Nut (3/8")	61
9	Tow Bar	1	C	Flat Washer (3/8")	53
10	Safety Chain	1	E	Nut (9/16")	2
12	Coupler (1-7/8" x 2-1/2")	1	J	Self Tapping Screw (4mm)	4
13	Fender	2	K	Safety Pin	1
15F	Front Spring Hanger	2	L	R Pin	1
15R	Rear Spring Hanger	2	M	Bolt (9/16" x 3-1/4")	2
16	Spring Plate	2	N	Bolt (3/8" x 3")	2
17	U-Bolt	4	O	Flat Washer (3/4")	2
18	Spring	2	P	Cotter Pin (5/32")	2
19	Axle	1	Q	Castle Nut	2
20	Hub	2	R	Grease Fitting	2
21	Outer Bearing	2	S	Wheel Nut	8
22	Dust Cap	2	T	Self Tapping Screw (1/4")	1
23	Tire & Wheel Assembly	2	V	Bolt (3/8" x 3-1/2")	2
24	Tail Light Bracket	2	X	Trailer Bed	2

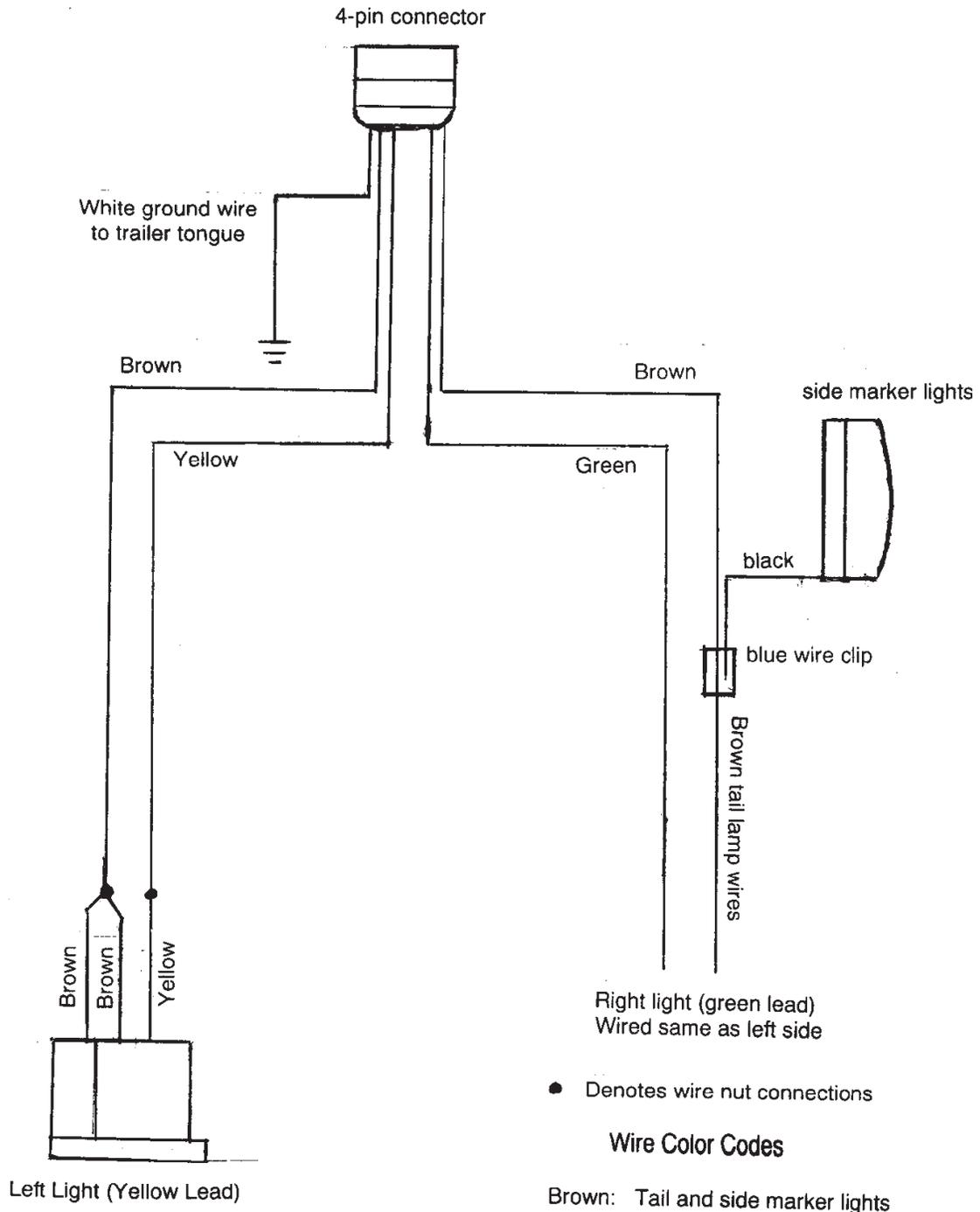
# Assembly Diagram A



## Assembly Diagram B



## Wiring Diagram for Lights



**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.

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## LIMITED 90 DAY WARRANTY

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Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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