Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's Date Code in the back of the manual (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference. 25d

HAULMASTER™

CUSTOM 5 FT. X 10 FT. TRAILER

It is highly recommended that this assembly manual be used in conjunction with the assembly video for accurate assembly. This QR code will take you to the assembly video.

Visit our website at: https://www.harborfreight.com
Email our technical support at: productsupport@harborfreight.com

59846

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

Table of Contents

SAFETY

ASSEMBLY

OPERATION

MAINTENANCE

HAULMASTER™

WARNING SYMBOLS AND DEFINITIONS	
⚠	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
⚠DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
⚠WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
⚠CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE CAUTION	Addresses practices not related to personal injury.

VDC	Volts Direct Current
A	Amperes
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.

	Read the manual before set-up and/or use.
	WARNING marking concerning Risk of Fire. Connect trailer wiring to properly fused circuit only.

IMPORTANT SAFETY INFORMATION

⚠WARNING

Read all safety warnings and instructions.
Failure to follow the warnings and instructions may result in serious injury.
Save all warnings and instructions for future reference.

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Assembly safety

1. Keep work area clean and dry.
   Cluttered, damp, or wet work areas invite injuries.
2. Keep children away from work area.
3. Use eye protection. Wear ANSI-approved safety impact eye goggles when assembling this Trailer.
4. Do not modify this Trailer, and do not use this Trailer for a purpose for which it was not intended.

Connection safety

1. Dress safely while connecting/disconnecting. 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. Wearing safety work shoes is recommended.
2. Do not setup or use this Trailer 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 Trailer.
3. Stay alert. Watch what you are doing at all times. Use common sense. Do not setup or use this Trailer when you are tired or distracted from the job at hand.
4. The tail light bulbs supplied with this Trailer are for a 12 volt DC (negative ground) electrical system only. Do not attempt to power the Light Bulbs with any other type or voltage electrical current.
5. Make sure the Hitch Coupler (9) and the vehicle's ball hitch (not included) are of equal mating size (2″) and are rated equal to or greater than the weight of the Trailer and its payload.
6. Before each use, attach the Trailer's Safety Chain (56) to the towing vehicle. Attach the Safety Chain to the towing vehicle with equal length on each side. Do not allow the Safety Chain to drag on the ground.

Loading safety

1. The combined weight of Trailer and payload should not exceed Trailer's GVWR of 2700 lb.
2. Properly and safely secure the payload in the Trailer.
   Load the Trailer evenly from side to side with 60% of the load forward of the Axle (38).
3. Make sure the towing vehicle and its hitch are both rated to safely tow the Trailer and its payload. The towing capacity of the hitch is typically stamped on the hitch drawbar.

Operation Safety

Note: Selected recommendations in this section are adapted from *TOWING A TRAILER - Being Equipped for Safety*, published by NHTSA. For full details, see that document.

1. This Trailer is not a toy.
   Do not allow children to play on or near this item.
2. Take time to practice before driving on main roads.
3. Never allow anyone to ride in or on the trailer.
4. Do not transport animals in this trailer.

Before Each use

1. Check Tire (37) condition and air pressure.
2. Make sure wheel lug nuts/bolts are properly tightened.
3. Make sure hitch, coupler, draw bar, and other equipment that connect the trailer and the tow vehicle are properly secured and adjusted.
4. Make sure wiring is properly connected — not touching the road, but loose enough to make turns without disconnecting or damaging the wires.
5. Make sure all running lights, brake lights, turn signals, and hazard lights are working.
6. Check that all items are securely fastened on and in the trailer.
7. Be sure the trailer jack, tongue support, and any attached stabilizers are raised and locked in place.
8. Check load distribution to make sure the tow vehicle and trailer are properly balanced front to back and side to side.

9. Check side- and rear-view mirrors to make sure you have good visibility.
10. Check routes and restrictions on bridges and tunnels.
11. Make sure you have wheel chocks and jack stands.
12. Check trailer for loose bolts and nuts, structural cracks and bends, and any other condition that may affect its safe operation. Do not use the Trailer even if minor damage appears.

General Handling

1. Use the driving gear that the towing vehicle manufacturer recommends for towing.
2. Drive at moderate speeds. This will place less strain on your tow vehicle and trailer. Trailer instability (sway) is more likely to occur as speed increases. **Do not exceed 75 miles per hour when towing the Trailer.**
3. Avoid sudden stops and starts that can cause skidding, sliding, or jackknifing.
4. Avoid sudden steering maneuvers that might create sway or undue side force on the trailer.
5. Slow down when traveling over bumpy roads, railroad crossings, and ditches.
6. Make wider turns at curves and corners. Because your trailer's wheels are closer to the inside of a turn than the wheels of your tow vehicle, they are more likely to hit or ride up over curbs.
7. To control swaying caused by air pressure changes and wind buffeting when larger vehicles pass from either direction, release the accelerator pedal to slow down and keep a firm grip on the steering wheel.

Braking

1. Allow considerably more distance for stopping.
2. If you have an electric trailer brake controller and excessive sway occurs, activate the trailer brake controller by hand. Do not attempt to control trailer sway by applying the tow vehicle brakes; this will generally make the sway worse.
3. Always anticipate the need to slow down. To reduce speed, shift to a lower gear and press the brakes lightly.

Acceleration and Passing

1. When passing a slower vehicle or changing lanes, signal well in advance and make sure you allow extra distance to clear the vehicle before you pull back into the lane.
2. Pass on level terrain with plenty of clearance. Avoid passing on steep upgrades or downgrades.
3. If necessary, downshift for improved acceleration or speed maintenance.
4. When passing on narrow roads, be careful not to go onto a soft shoulder. This could cause your trailer to jackknife or go out of control.

Downgrades and Upgrades

1. Downshift to assist with braking on downgrades and to add power for climbing hills.
2. On long downgrades, apply brakes at intervals to keep speed in check. Never leave brakes on for extended periods of time or they may overheat.
3. Some tow vehicles have specifically calibrated transmission tow-modes. Be sure to use the tow-mode recommended by the manufacturer.

Backing Up

1. Put your hand at the bottom of the steering wheel. To turn left, move your hand left. To turn right, move your hand right.
2. Back up slowly.
3. Because mirrors cannot provide all of the visibility you may need when backing up, have someone outside at the rear of the trailer to guide you whenever possible.
4. Use slight movements of the steering wheel to adjust direction. Exaggerated movements will cause greater movement of the trailer.
5. If you have difficulty, pull forward and realign the tow vehicle and trailer and start again.

Parking

1. Try to avoid parking on grades.
2. If possible, have someone outside to guide you as you park.
3. **Once stopped, but before shifting into Park:**
   a. Have someone place blocks on the downhill side of the trailer wheels.
   b. Apply the parking brake.
   c. Shift into Park. (first or reverse gear for manual transmissions)
   d. Then remove your foot from the brake pedal.

   Following this parking sequence is important to make sure your vehicle does not become locked in Park because of extra load on the transmission.
4. **Before uncoupling a trailer:**
   a. Place blocks at the front and rear of the trailer tires to ensure that the trailer does not roll away when the coupling is released.
   b. An unbalanced load may cause the tongue to suddenly rotate upward; therefore, before uncoupling, place jack stands under the rear of the trailer to prevent injury.

Trailer Sway Control

Note: Trailer sway is a dangerous condition in which a trailer begins to swerve uncontrollably during travel. There are several factors that can induce trailer sway during towing. Follow these recommendations to reduce the risk of trailer sway.

1. Ensure all tires are inflated to the proper pressure as noted on sidewall of trailer.
2. Ensure that trailer is loaded so that it is sitting level (trailer Tongue should not angle up or down).
3. Ensure that vehicle hitch height is adjusted so that Tongue is level to the ground.
4. Do not exceed recommended tow speed for trailer as stated in the manual.
5. Ensure that load is adequately tied down and secure on the trailer.
6. Keep the load's center of gravity as low to trailer deck as possible.

TRAILER LICENSING NOTICE

Some states may consider this Trailer 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.

Maintenance safety

1. Maintain labels and nameplates on the trailer. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. Replacement parts and accessories: when servicing, use only identical replacement parts. Only use accessories intended for use with this Trailer. Approved accessories are available from Harbor Freight Tools.
3. Maintain this Trailer with care. Keep this Trailer clean and dry for better and safer performance.
4. For your safety, service and maintenance should be performed regularly by a qualified technician.
5. When not in use, store Trailer in a dry location to inhibit corrosion. Lock up Trailer, and keep out of reach of children.

⚠ SAVE THESE INSTRUCTIONS.

Assembly Instructions

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this Trailer.

Note: For additional information regarding the parts listed in the following pages, refer to *Parts List and Diagram* on page 30 and 31.

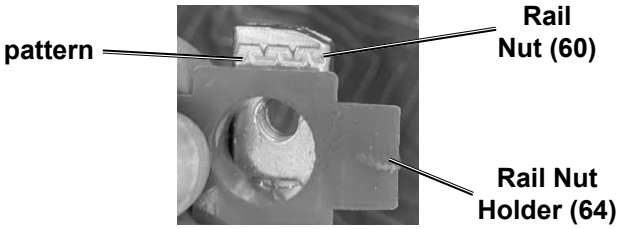
Recommended Tools

To assemble this Trailer, various tools will be required. Tools not included. Some recommended tools are as follows:

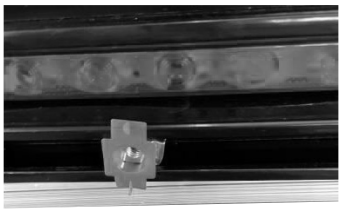
1. Rubber/non-marring Mallet
2. Cross head screwdriver
3. Flat head screwdriver
4. Tape measure
5. Needle nose pliers
6. Deep well sockets: 13/16″, 7/16″, & 9/16″
7. Ratchet
8. Box end wrenches: 7/16″ & 9/16″
9. Adjustable wrench up to 1-1/2″
10. Utility Knife
11. Torque wrench up to 25 ft-lb
12. Two toggle clamps capable of opening to 11″

Rail Nut Installation

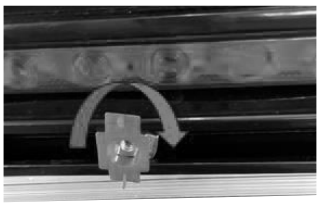
1. Use a Rail Nut Holder (64) to position each Rail Nut (60) in place.
2. Snap Rail Nut Holder to the patterned side of Rail Nut.



3. Use Rail Nut Holder to insert Rail Nut into Rail at the correct position.



4. Rotate Rail Nut Holder clockwise 90 degrees to secure Rail Nut into Rail. Rail Nut can slide in the Rail as needed.



5. Leave Rail Nut Holders in place during assembly.

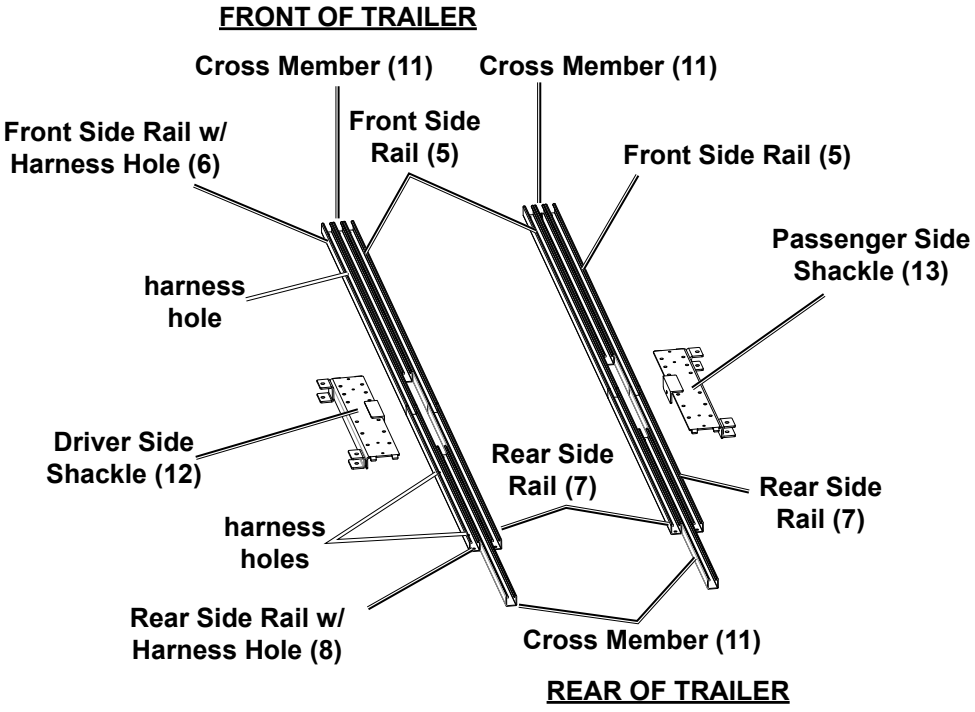
6. To remove Rail Nut, rotate Rail Nut Holder counterclockwise.

Square Washer Wrench

When installing the Square Washers (23) later during assembly, use the Square Washer Wrench (66) to hold them in alignment while tightening the hardware.

General Assembly

1. On a flat, level surface, lay out all components. See below. Note the position of the harness holes on the Front and Rear Side Rails w/ Harness Hole (6, 8).

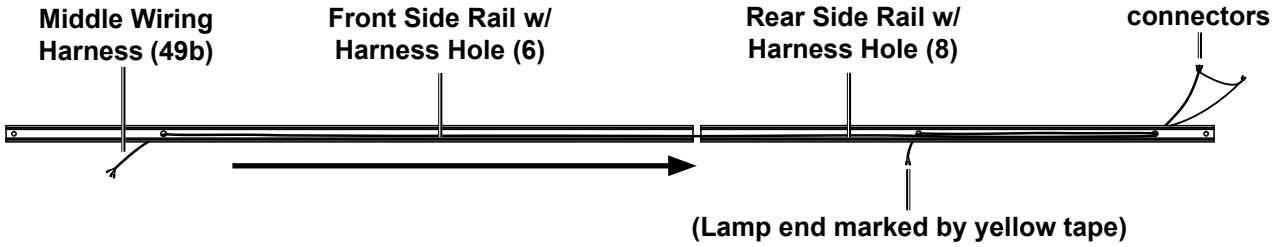


Note: Use Cross Members (11) as spacers to assist with assembly. They will be removed during step 17.

2. Insert Middle Wiring Harness (49b) into Front Side Rail w/ Harness Hole (6) with the yellow taped end first. Thread it through until only the 6″ with 4 connectors remains.

3. Feed Wiring all the way through to the hole at the end of the Rear Side Rail w/ Harness Hole (8) extending the two connector ends through the hole, as shown below.

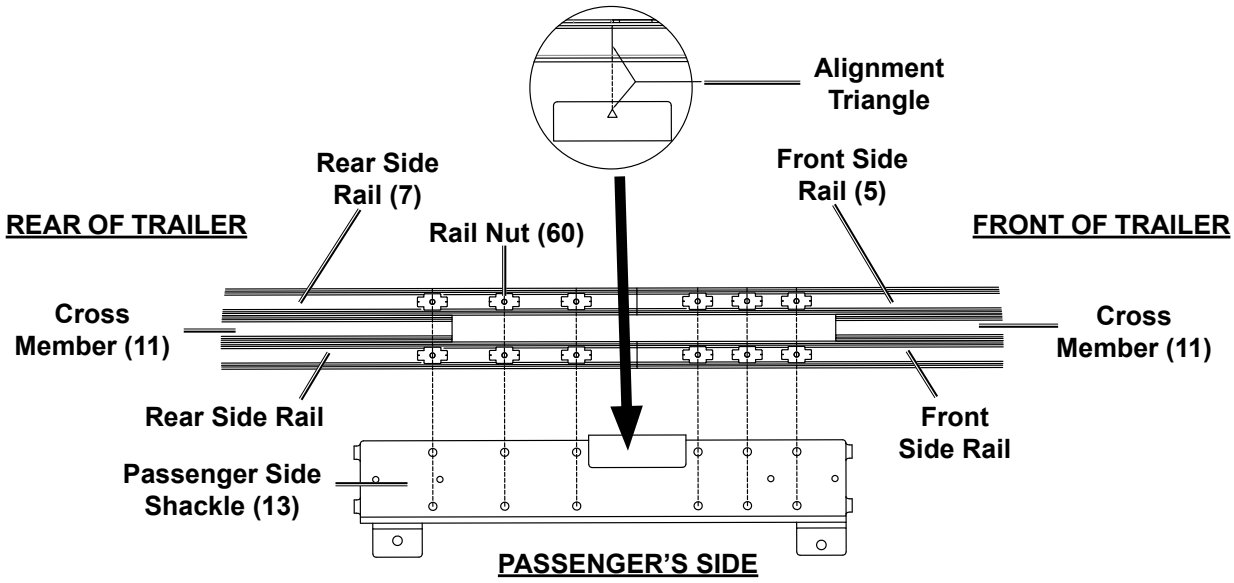
4. Feed Harness end with yellow tape back out of the hole in the middle of the Rear Side Rail w/ Harness Hole (8), as shown below.



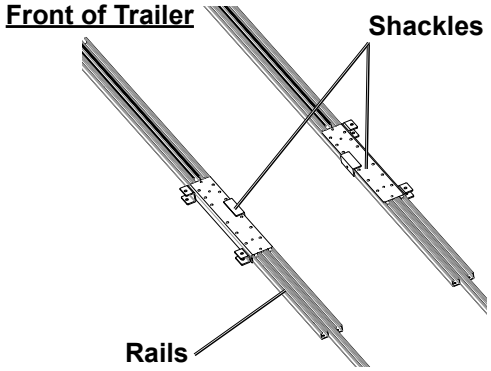
5. With Passenger Side Shackle (13) placed below Rails, position Shackle so that the triangle shown below aligns with the ends of the Rear Side Rail (7) and the Front Side Rail (5). See below.

6. Place 12 Rail Nuts (60) in the Side Rails - 3 Rail Nuts in each one. Align them to the 12 holes shown below.

7. Repeat Steps 5-6 for the Driver Side Shackle (12) and its Rails and Rail Nuts.

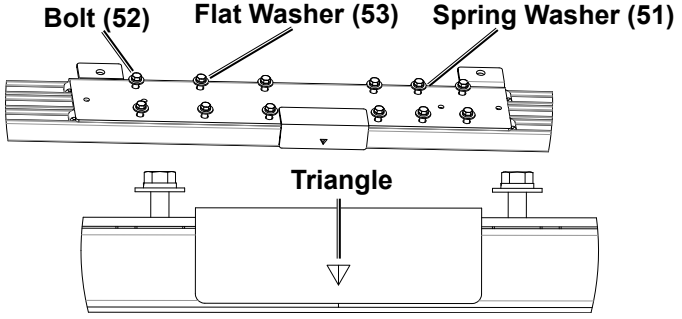


8. Lift Shackles and place them on top of Rails, then align Top Rail ends with the triangle.

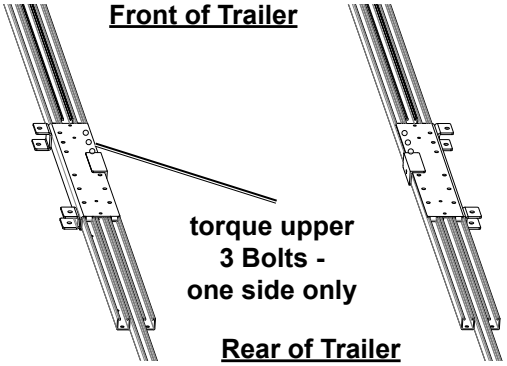


9. If Rail Nuts do not line up with holes in Shackles, align them manually by placing a screwdriver in Shackle holes and shifting Rail Nuts until all holes align between Rail Nuts and Shackles.

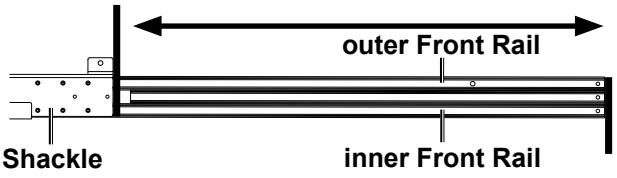
10. Place a Bolt (52) through a Spring Washer (51) and Flat Washer (53) into each of the 12 holes on both Shackles. Finger tighten all Bolts and check that Rails (front and rear) are meeting at the point of each Shackle's triangle as shown below.



11. Once aligned, tighten the front 3 Bolts on the inside of one Shackle to 25 ft-lb on <u>one side</u> of the Trailer.



12. Measure distance from front of Shackle to end of inner Front Rail tightened previously. Distance is measured between black lines shown below.

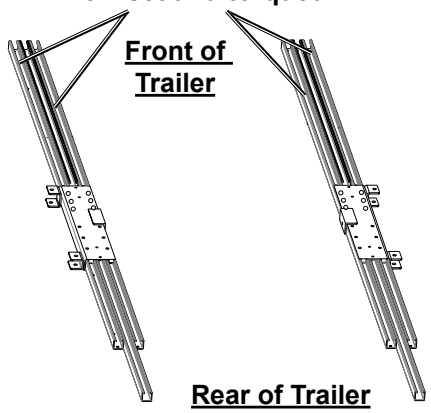


13. Shift other Front Rail to achieve same dimension as above. Once both inner and outer Front Rail distances are identical, torque outer Front Rail's 3 Bolts to 25 ft-lb.

14. Repeat Steps 11-13 for the other Shackle, Front Rails, and Bolts.

15. Check that all Rails at front end of Trailer have the same distance from the Shackle to front of Trailer. All front 6 Bolts on both Shackles should now be torqued to 25 ft-lb.

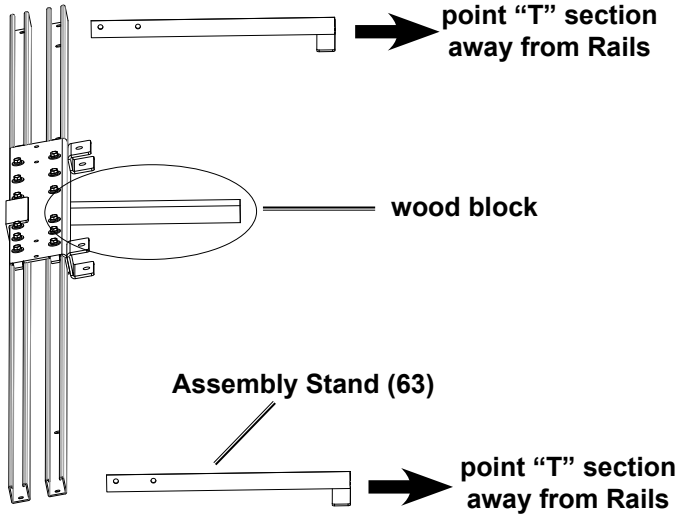
All 4 Front Rails are now set and torqued



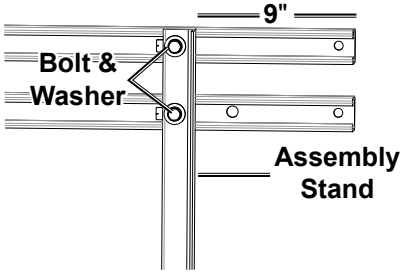
16. Lightly tap all Rear Rails (inner and outer) until they touch Front Rails. Torque all 12 Bolts at Trailer's rear to 25 ft-lb.

17. Remove all 4 Cross Members (11) that were used as spacers.

18. On either side of Trailer, place a block of wood under Shackle, as shown below. Place an Assembly Stand (63) at each end of the rail assembly. Position the "T" section of each Assembly Stand on the same side of the assembly as the brackets on the Shackle as shown.



19. Use 2 Bolts (52) and Flat Washers (53) to fasten each Assembly Stand to the rail assembly, 9″ from the front and 9″ from the rear. Tighten Bolts.

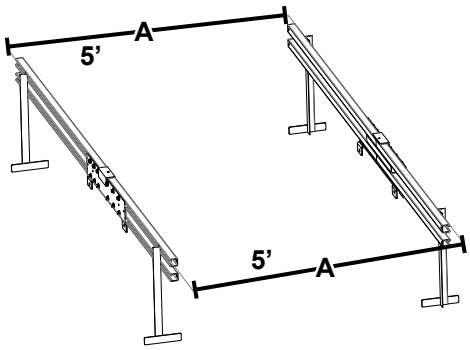


20. Confirm all Bolts on this assembly are tight.

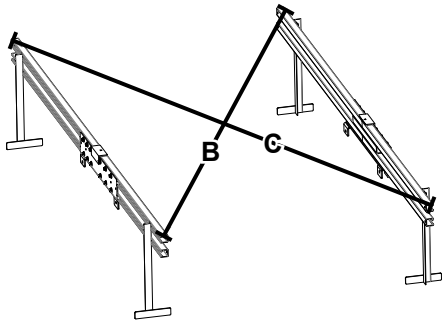
21. Repeat Steps 18-20 for the other rail assembly.

22. Stand up each rail assembly on the Assembly Stands. The assembly area must be a flat, hard, level surface.

23. Place both rail assemblies parallel 5 feet apart. Move the two rail assemblies until both A measurements equal 5 feet, and measurement B is equal to measurement C. See illustrations below. This is the basic layout of the Trailer.

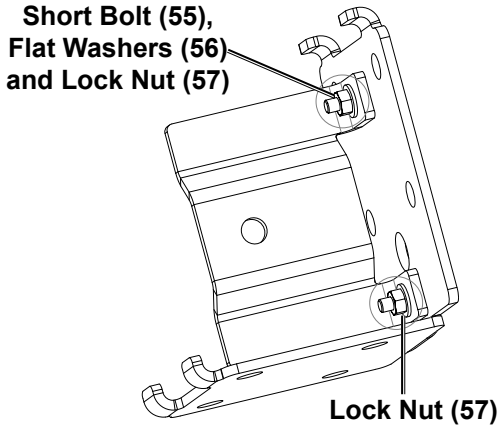


Measurement A



Measurement B = Measurement C

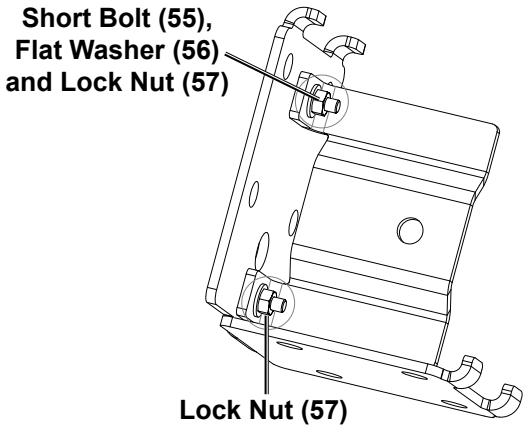
24. Assemble an Inner Cross Member Bracket (21) to a Corner Bracket (19) in the "right-handed orientation" pictured below. Insert a Short Bolt (55) through a 1/4″ Flat Washer (56), a Corner Bracket, an Inner Cross Member Bracket, another 1/4″ Flat Washer, and into a 1/4″ Lock Nut (57). Hand tighten Bolt. Repeat for the other hole.



Right-handed Orientation

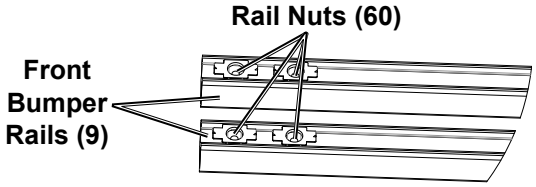
25. Repeat step 24 to assemble a second right-handed Corner Bracket Assembly.

26. Assemble an Inner Cross Member Bracket (21) to a Corner Bracket (19) in the “left-handed orientation” pictured below. Insert a Short Bolt (55) through a 1/4″ Flat Washer (56), a Corner Bracket, an Inner Cross Member Bracket, another 1/4″ Flat Washer, and into a 1/4″ Lock Nut (57). Hand tighten Bolt. Repeat for the other hole.

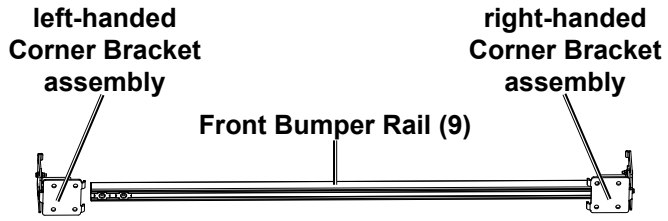


27. Repeat step 26 to assemble a second left-handed Corner Bracket Assembly.

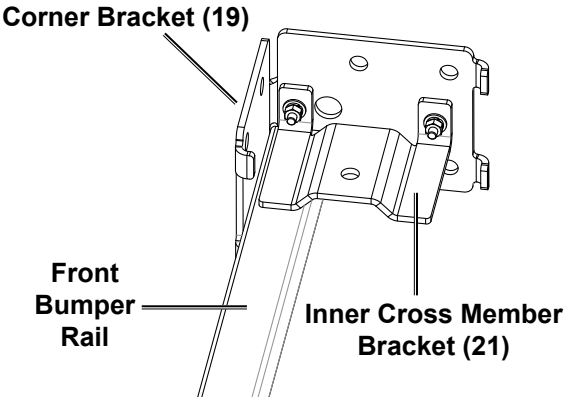
28. Place two Rail Nuts (60) into each end of each Front Bumper Rail (9).



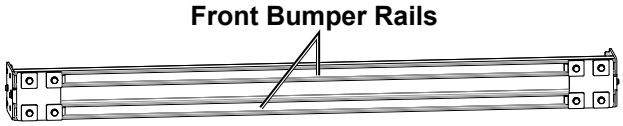
29. Rotate one Front Bumper Rail so that the Rail Nuts are facing rear end of the Corner Brackets. Place the Corner Bracket assemblies as shown, with the left-handed assembly on the left and the right-handed assembly on the right. The Short Bolt heads should face outwards.



30. Position the Front Bumper Rail against each Corner Bracket assembly. Press it into place against each Corner Bracket and Inner Cross Member Bracket. Use 4 Bolts (52) through a Spring Washer (51) and Square Washer (23) each into the Rail Nuts to fasten and tighten the lower Front Bumper Rail to Corner Bracket on both ends. Torque to 25 ft-lb.

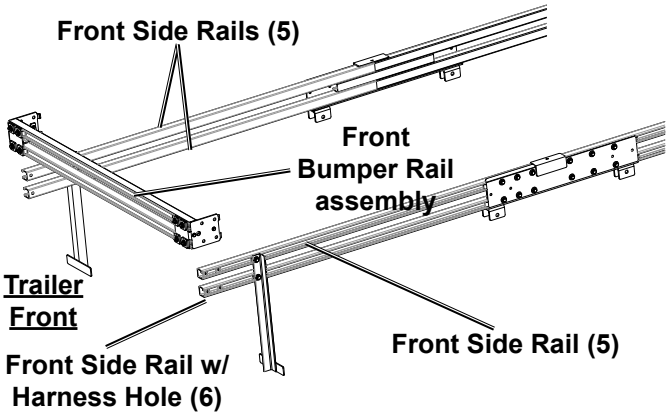


31. Repeat Steps 29 and 30 for top Front Bumper Rail. The assembly should look like the following illustration.



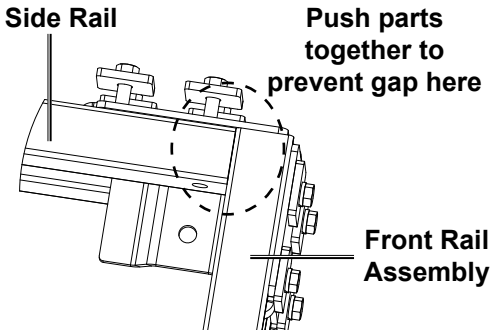
32. Place 2 Rail Nuts into the end of each Front Side Rail.

33. Lift and place Front Bumper Rail assembly onto Trailer and hook into place with Corner Bracket tabs to hold Front Bumper Rail assembly.



34. At one corner of Trailer, hold and push Front Bumper Rail assembly so that Front Side Rails are flush with Front Bumper Rail assembly. Attach the Corner Bracket to the Rail Nuts in the Side Rail using a Bolt (52) through a Spring Washer (51) and a Square Washer (23) into each Rail Nut. Tighten and torque all Bolts at corner to 25 ft-lb.

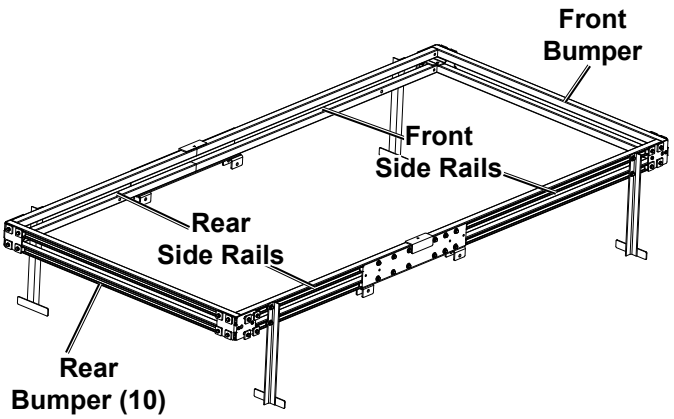
Note: A Clamp can be used to hold each part flush while tightening.



35. Repeat Step 34 for opposite corner.

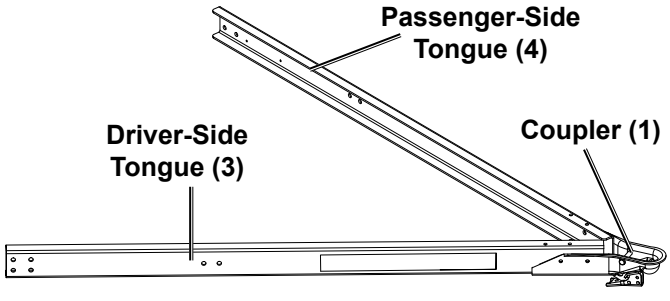
36. Place 2 Rail Nuts into the end of each Rear Side Rail.

37. Repeat Steps 34 and 35 for rear of Trailer, using Rear Bumper (10). See below for intended result.



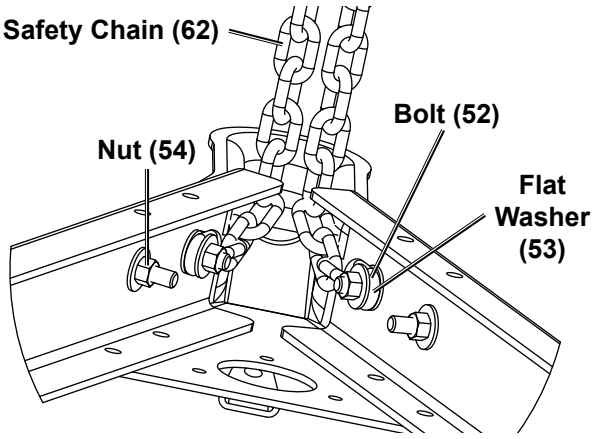
38. Refer back to Step 23 and repeat exact measurements, then adjust the whole Trailer assembly to ensure it is square.

39. Place both Tongues (3,4) and Coupler (1) upside-down, aligned as shown below. Turn the Tongues on their sides so the concave sides face each other. The Driver-Side Tongue has labels on it. The labels should be oriented at this time so they are upside-down. The assembly will be turned right-side-up later.



40. Insert 4 Bolts (52) from the outside of the Coupler into the holes on the ends of the Tongues. Place a 3/8″ Flat Washer (53) on each Bolt.

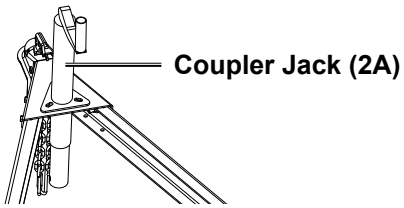
41. Attach one end of each Safety Chain (62) to the innermost Bolts using an additional 3/8″ Flat Washer (53), and a 3/8″ Nut (54) on each as shown below.



42. Secure the outer Bolts using the 3/8″ Flat Washers (53) already in place and a 3/8″ Nut (54) on each. See illustration above.

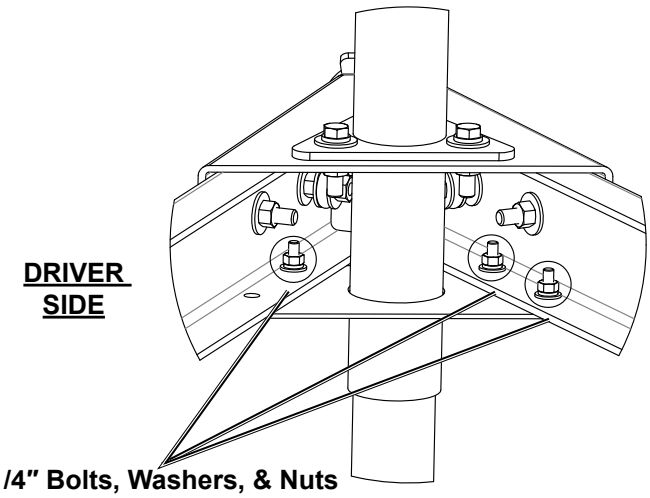
43. Torque all 4 Tongue Bolt connections to 25 ft-lb.

44. Turn Coupler Assembly over and insert Coupler Jack (2A) through the top of Coupler. Secure each corner with a 3/8″ Bolt (52) through a 3/8″ Flat Washer (53) and a Spring Washer (51).



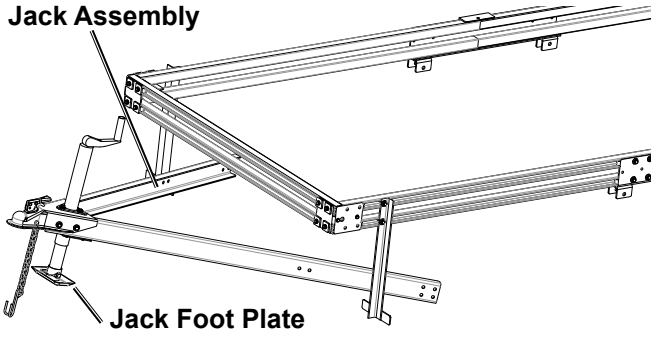
45. Connect Lower Jack Plate (14) through 3 of the 4 holes in bottoms of the Tongues. Use 3 1/4″ Bolts (55), 6 1/4″ Flat Washers (56) top and bottom, and 3 1/4″ Nuts (57). Torque Bolts to 10 ft-lb.

NOTE: At this point only install the 3 bolt assemblies shown below.

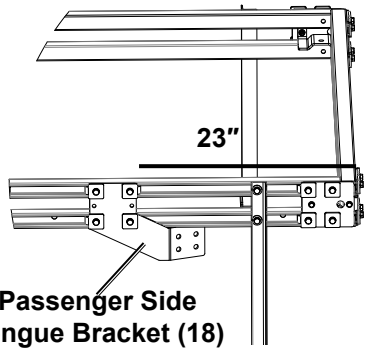


46. Remove the pin from the Jack Foot Plate (2b). Place Jack Foot Plate onto the bottom of the Jack and secure it in place with the pin.

47. Place the tongue assembly at the front of Trailer. Use Jack to raise the coupler end of the assembly. See below.

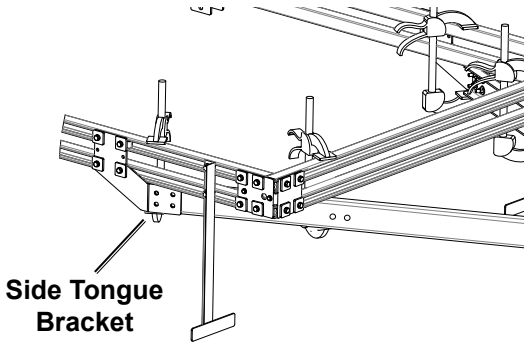


48. Place Passenger Side Tongue Bracket (18) 23″ from front of Side Rail on passenger side of trailer, as shown below. Using the Bracket as a guide, place 4 Rail Nuts in Front Side Rails (5) so that they align with holes in Tongue Bracket. Use 4 3/8″ Bolts through 4 Spring Washers and 4 Square Washers to secure Side Tongue Bracket to Side Rails. Make sure Bracket is flush with bottom Rail and torque Bolts to 25 ft-lb.



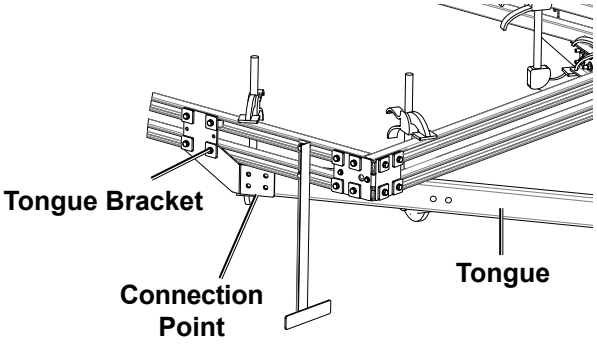
49. Repeat installation steps for opposite side of the Trailer, using Driver Side Tongue Bracket (17).

50. Use 4 clamps to position Tongue Assembly to Trailer and clamp in place. Side Tongue Brackets should be on the outside of the Tongue on both sides. See below.

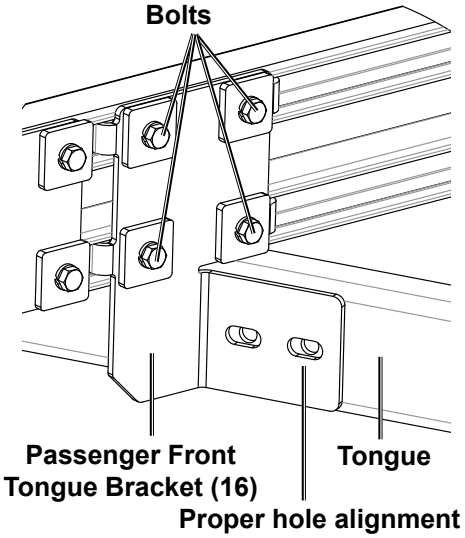


Note: Crank Coupler Jack up or down to level coupler/tongue assembly.

51. Use 8 3/8″ Bolts (52), 16 Flat Washers (53) and 8 Lock Nuts (54) to secure both Side Tongue Brackets to Tongues. Make sure Brackets are flush with bottom Rail and torque Bolts to 25 ft-lb.



52. Place Passenger Front Tongue Bracket (16) onto Trailer. Holes in Bracket should line up with holes in Tongue. Use Bracket as a guide to place Rail Nuts into Front Rails. Use 4 3/8″ Bolts (52) through 4 Spring Washers (51) and 4 Square Washers (23) to secure Front Tongue Bracket to Front Rails. Make sure Bracket is flush with bottom Rail and torque Bolts to 25 ft-lb.

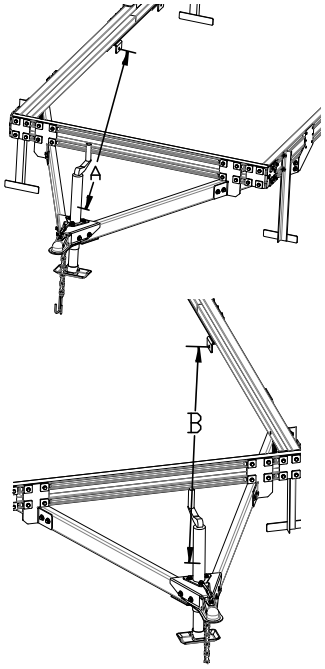


53. Repeat step 52 for Driver Front Tongue Bracket (15) on the driver side of Trailer.

54. Use 2 3/8″ Bolts (52), 4 3/8″ Flat Washers (53), and 2 3/8″ Nuts (54) to secure Passenger Front Tongue Bracket to Passenger-Side Tongue. Use one Flat Washer under each Bolt head and another under each Nut. Tighten Bolts and Nuts snug for now.

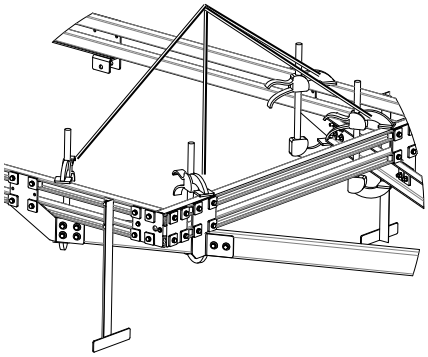
55. Repeat step 54 to attach Driver Front Tongue Bracket to Driver-Side Tongue.

56. Measure from front end of Shackle to center of Coupler. Make sure measurements are exact for both sides. This ensures that the Tongue is square to Axle.

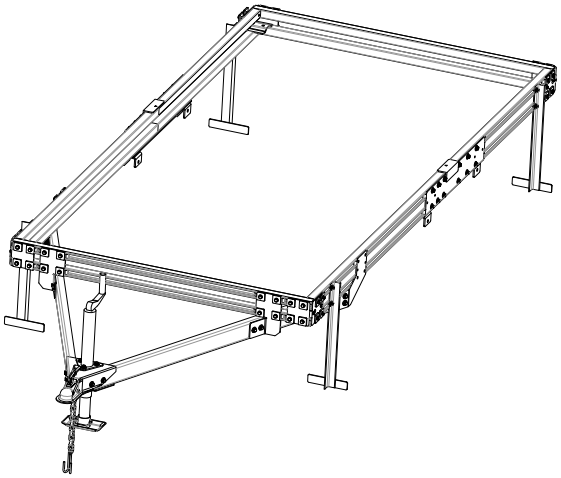


57. Make sure Clamps are holding Tongue tightly against bottom Rail. Torque Bolts and Nuts on Tongues to 25 ft-lb.

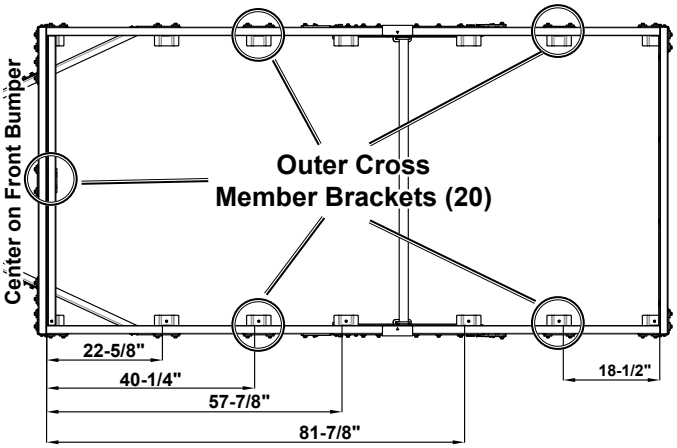
Clamps



58. Remove Clamps. See below for intended result.

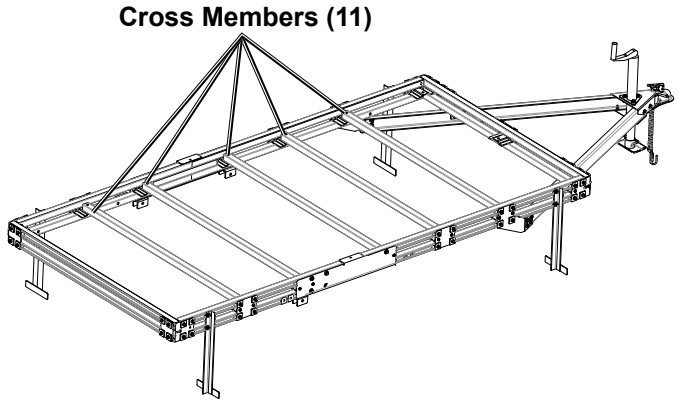


59. Secure an Inner Cross Member Bracket (21) to the inside of the Passenger Side Tongue Bracket (18) and the inside of the Driver Side Tongue Bracket (17). Secure each connection using a Short Bolt (55) through a 1/4″ Flat Washer (56) on each side of the connection and into a 1/4″ Lock Nut (57). Mount the Inner Cross Member Brackets so the bulge is on top. Finger tighten Bolts.
60. Secure two Inner Cross Member Brackets (21) to the inside of the Passenger Side Shackle (13), one on each end. Secure each connection using a Short Bolt (55) through a 1/4″ Flat Washer (56) on each side of the connection and into a 1/4″ Lock Nut (57). Mount the Inner Cross Member Brackets so the bulge is on top. Finger tighten Bolts.
61. Repeat step 60 for the Driver Side Shackle (12) as well.
62. Secure an Inner Cross Member Bracket (21) to all 5 Outer Cross Member Brackets (20) Insert a Short Bolt (55) through a 1/4″ Flat Washer (56), a Corner Bracket, an Inner Cross Member Bracket, another 1/4″ Flat Washer, and into a 1/4″ Lock Nut (57). Finger tighten Bolts.
63. Following the illustration below, place all 5 assemblies of Outer Cross Member Brackets with Inner Cross Member Brackets at dimensions shown. (All measurements in inches.)



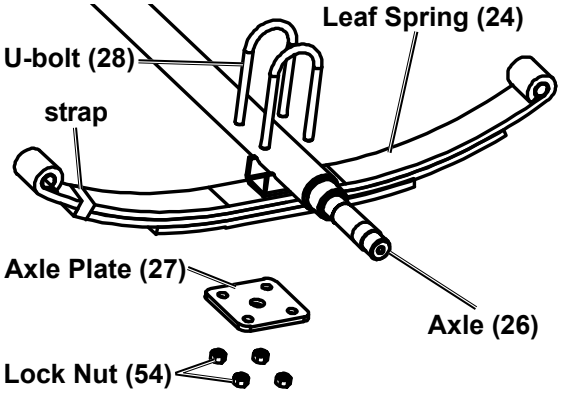
64. Place four Rail Nuts (60) into Rails at each of the 5 locations shown. Align Rail Nuts to the holes in the Outer Cross Member Brackets. Using Bolts (52), Spring Washers (51), and Square Washers (23), fasten Outer Cross Member Brackets to Side Rails. Finger tighten Bolts.
65. Place a Rail Nut into each end of each Cross Member (11).

66. Place Cross Members on Inner Cross Member Brackets as shown below. Attach each end of Cross Member with a 3/8″ Bolt (52) through Flat Washer (53), Spring Washer (51), and Bracket and into Rail Nut on the end of the Cross Member. Finger tighten Bolts.



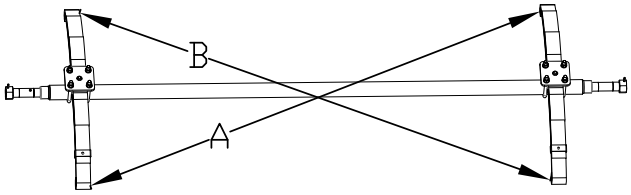
67. Verify the positions of Cross Member Brackets (explained in step 63) one more time, then torque all bolts on the Cross Members and Cross Member Brackets:
Torque all 1/4″ Bolts to 10 ft-lb.
Torque all 3/8″ Bolts to 25 ft-lb.

68. Place a Leaf Spring (24) on one end of the Axle (26). Fit the alignment nub in the middle of the Leaf Spring into the hole in the bracket on the Axle. Place U-bolts (28) around Axle and fasten Leaf Spring to Axle using Axle Plate (27) and Nuts (54). The hole in the center of the Axle Plate goes over the bolt in the back of the Leaf Spring. Finger tighten Lock Nuts.

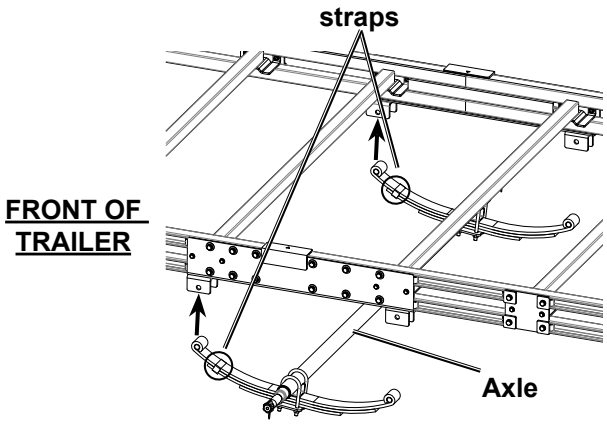


69. Repeat step 68 for the other Leaf Spring. Make sure that the straps on both Leaf Springs are on the same side of the Axle.

70. Measure and move Springs until the ends are an equal distance diagonally from each other. Torque Lock Nuts in a cross pattern to 25 ft-lb.



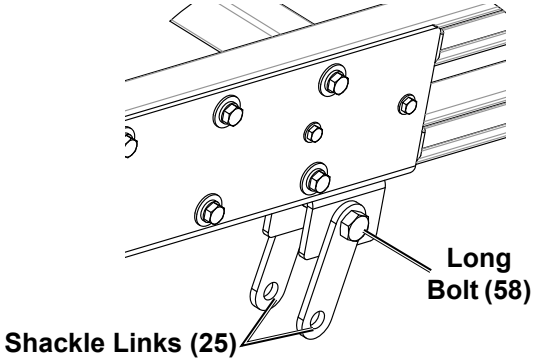
71. Place Axle underneath Trailer with the strap on each Leaf Spring facing forward, as shown below.



72. Lift front of Axle assembly up and insert a 9/16″ Long Bolt (58) through the bracket on the Shackle and the front of the Leaf Spring. Secure the Bolt with 9/16″ Lock Nut (59). Finger tighten at this point.

73. Repeat step 72 for other Leaf Spring and Shackle on the other side of the trailer.

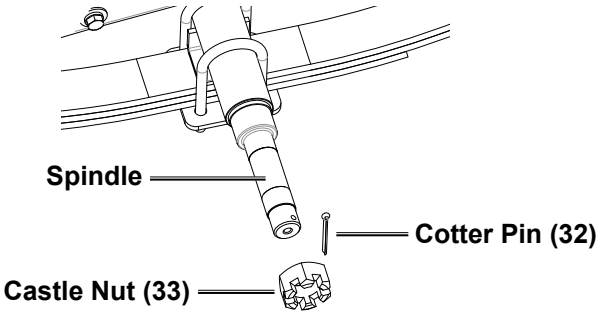
74. Secure two Shackle Links (25) to rear bracket on each Shackle using 9/16″ Long Bolt (58) and 9/16″ Lock Nut (59).



75. Swing Leaf Springs up and align the Shackle Links with the ends of them. Secure two Shackle Links to the end of each Leaf Spring using a Long Bolt (58) and Lock Nut (59). Secure both Leaf Springs to the Shackle Links.

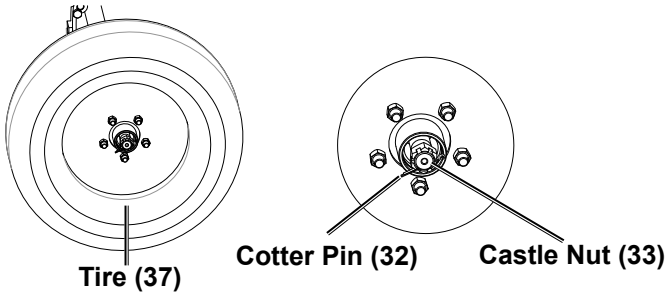
76. Tighten each Bolt and Nut holding the Shackle Links and Leaf Springs to Shackle brackets. Nuts should be snug against Shackle Links at the rear, and flush against Shackle bracket at the front.

77. Remove Castle Nut (33) and Cotter Pin (32), if installed, from each end of Axle.



78. Place Hub Assembly (31) on Axle. Tighten Nut while spinning the tire. Continue to tighten Nut until the Wheel completes 1-2 rotations after a hard spin.

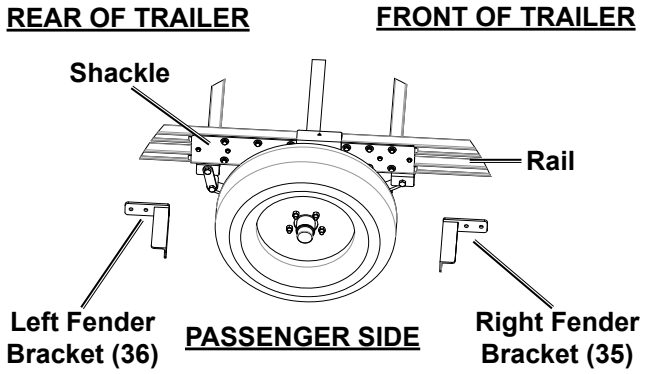
79. Make sure opening in Castle Nut is aligned with the hole in Axle spindle. Install Cotter Pin (32) into hole at the end of spindle and bend Cotter Pin to hold in place.



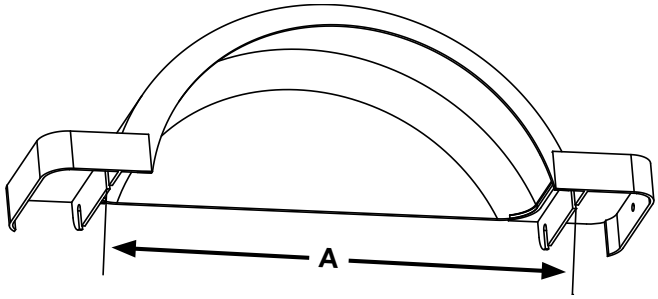
80. Repeat for opposite end of Axle.

81. On the passenger side, position Right Fender Bracket (35) on **lower** Front Side Rail (5) so that rear end of Bracket is flush with front end of Shackle.

82. Insert Rail Nuts (60) into Front Side Rail aligned with holes in Bracket. Secure Bracket to Side Rail using 2 Bolts (52), 2 Flat Washers (53), and 2 Spring Washers (51). Torque Bolts to 25 ft-lb. Keep Bracket level with the ground while tightening.

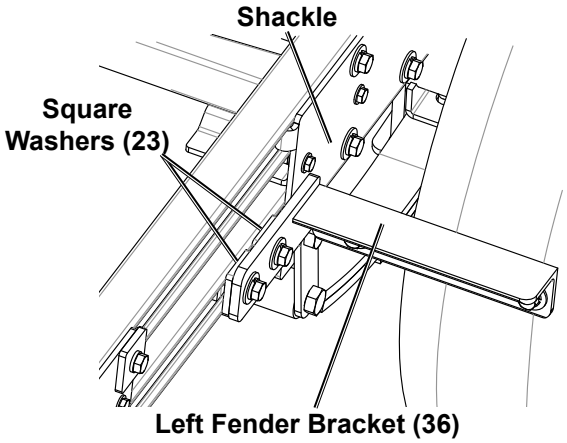


83. Record the exact dimension of Measurement A on Passenger Side Fender (40). See below.



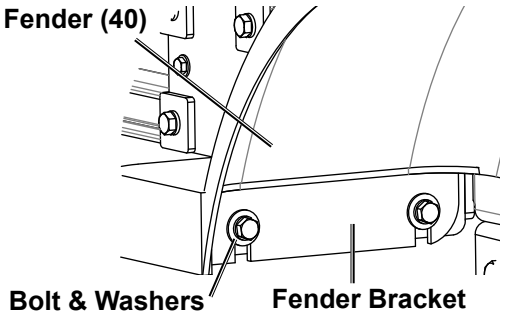
84. Position Left Fender Bracket (36) behind Shackle so that the distance between Right and Left Fender Brackets equals Measurement A above.

85. Insert Rail Nuts (60) into Rear Side Rail aligned with holes in Bracket. Use Square Washers (23) between the Bracket and the lower Rear Side Rail as spacers. Secure Bracket to Side Rail using 2 Bolts (52), 2 Flat Washers (53), and 2 Spring Washers (51). Keep Bracket level with the ground while torquing Bolts to 25 ft-lb.



86. Repeat Steps 81-85 for driver side of Trailer. Use a Left Fender Bracket on the front of the Shackle, and a Right Fender Bracket on the back of the Shackle. Measure the Driver Side Fender (39) instead as part of step 83 this time.

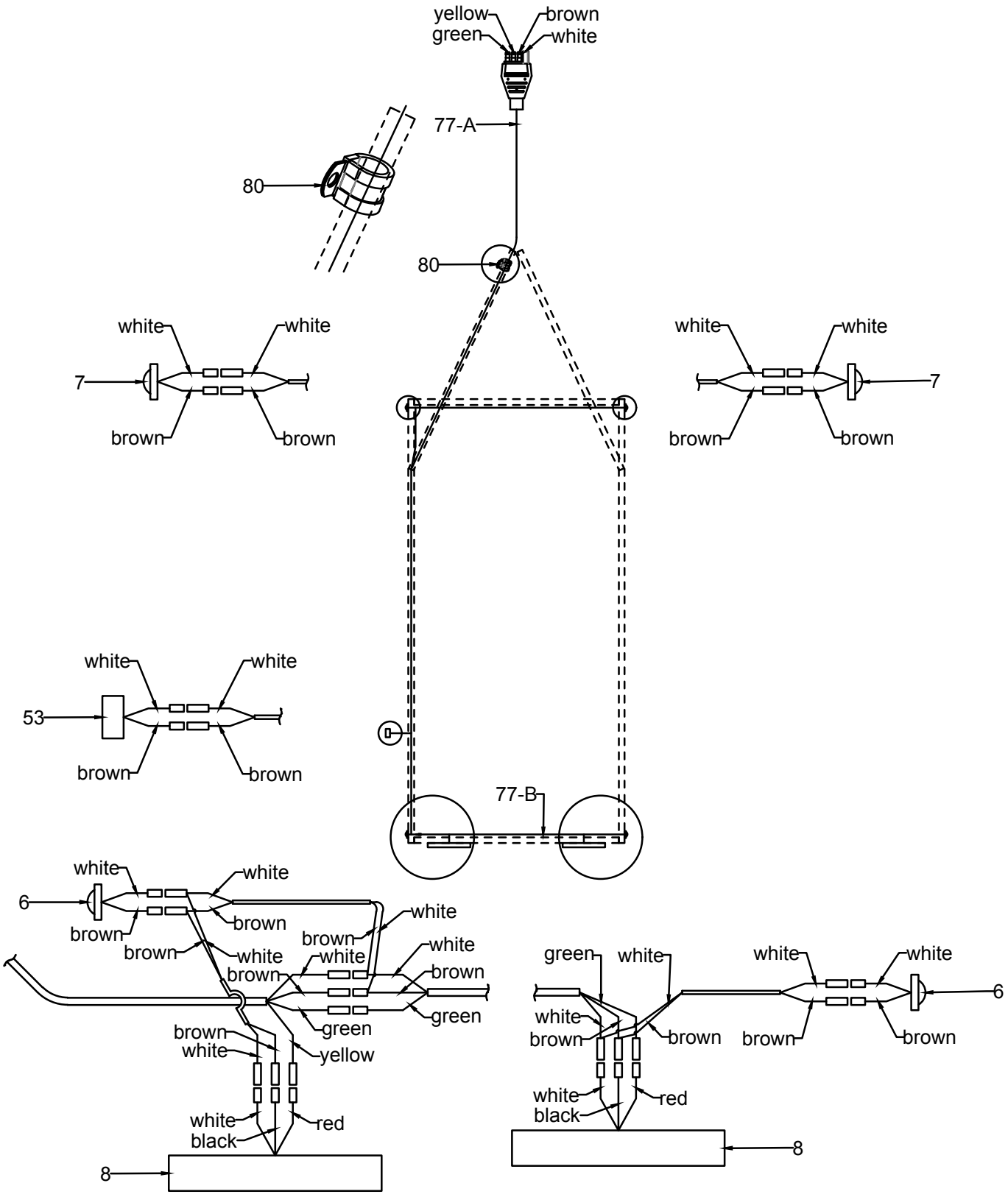
87. Set Passenger Side Fender (40) on top of brackets that were installed in previous steps. Fasten Fender to Fender Brackets with 2 Bolts (52), 4 Flat Washers (53) and 2 Nuts (54) on each end of Fender.



88. Repeat Step 87 for Driver Side Fender (39) on opposite side of Trailer.

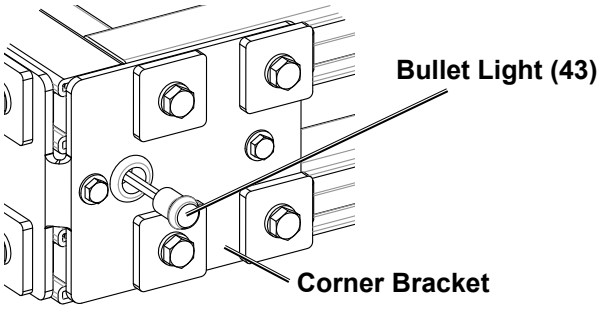
Note: For Steps 89-92 refer to *Wiring Diagram* below.

WIRING DIAGRAM



89. To install Amber Bullet Lights (43) at the Trailer's front, pull back grommet from Light, insert wires through grommet and into hole, push grommet into hole, then press Light into the grommet.

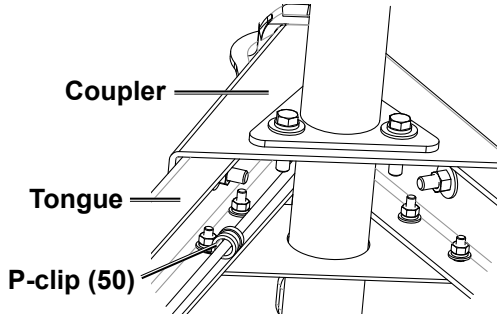
90. Plug the wires of each Light into Wiring Harness (49).



91. Repeat Steps 89-90 to install Red Bullet Lights (42) at Trailer's rear.

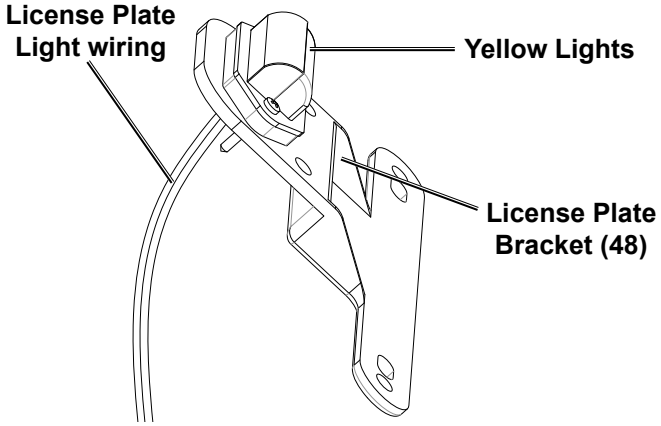
92. Place Rear Wiring Harness (49c) and connect according to Wiring Diagram above.

93. Route Harness through Tongue and underneath Coupler. Place P-clip (50) around Harness in the open hole remaining from the previous step. Using a Bolt (55), Flat Washer (56), and Lock Nut (57), fasten P-clip to Tongue and tighten to 10 ft-lb.

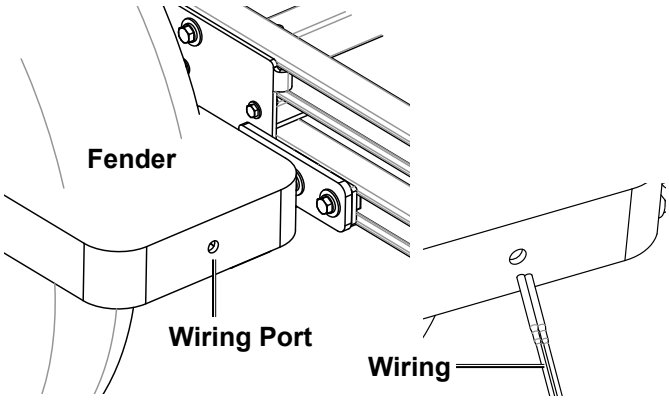


94. Place Chrome Ring around License Plate Light (47) so that both yellow lights are visible.

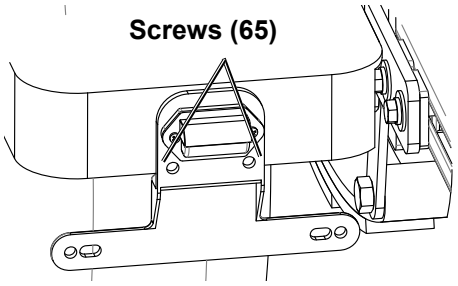
95. Feed License Plate Light wiring through License Plate Bracket (48).



96. Feed wiring through the opening at the rear of Driver Side Fender.



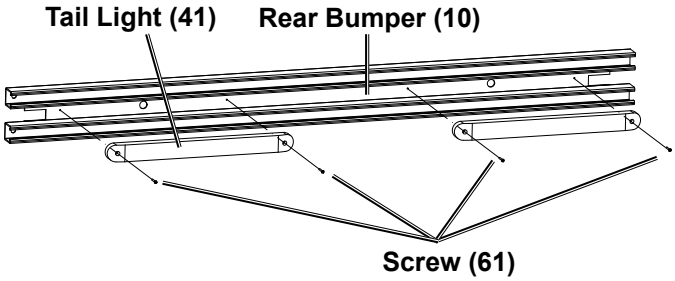
97. Fasten License Plate Light and License Plate Holder to Fender using 2 Screws (65) through Light.



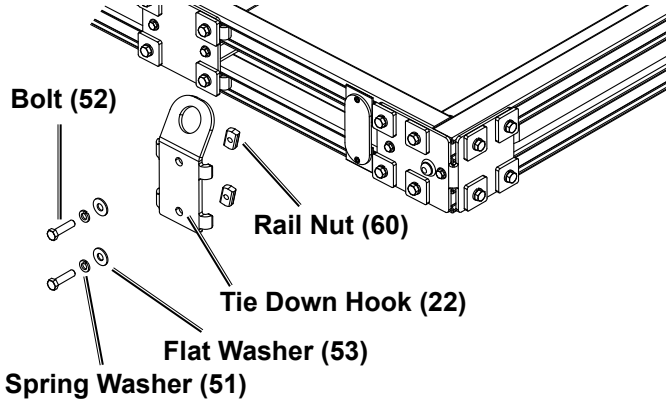
Note: Refer to *Wiring Diagram* to see how License Plate Light plugs into Harness with the yellow tape.

98. Plug all light connections into Harness. Use adhesive strips and self-adhesive zip tie blocks to secure Wiring Harness to Trailer.

99. Secure 2 Tail Lights (41) to Rear Bumper (10) using 4 Screws (61) then plug into Rear Harness (49c). Refer back to Wiring Diagram.

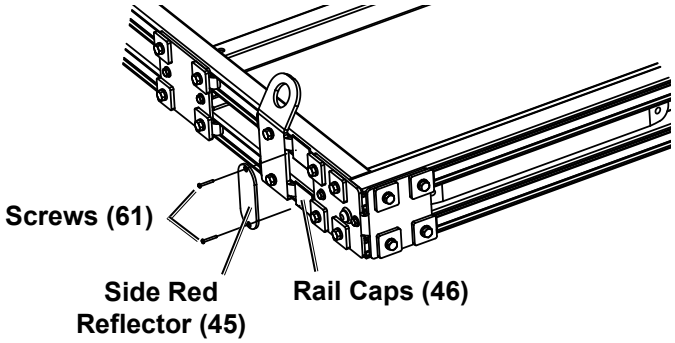


100. Secure 4 Tie Down Hooks (22) to Trailer at any point along front, back, or sides using 2 Bolts (52), 2 Flat Washers (53), 2 Spring Washers (51), and 2 Rail Nuts (60).



101. Cut and place all Rail Caps (46) onto Trailer to cover channel openings.

102. Install Side Red Reflectors (45) onto Rail Caps using Screws (61). Do this on both sides of Trailer, as far rearward as possible.



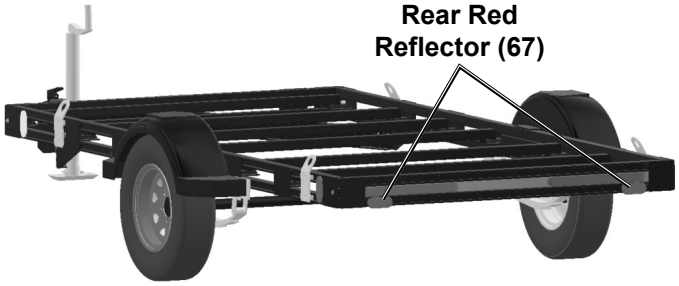
103. Install Amber Reflectors (44) onto Rail Caps using Screws (61). Do this on both sides of Trailer, as far forward as possible.

104. Remove the 4 Assembly Stands (63) from the completed trailer.

105. Peel the liner off of the back of each Rear Red Reflector (67).

106. **If the Ramp Holder accessory will <u>not</u> be installed:**

a. Attach a Rear Red Reflector onto each end the Rail Cap at the back of the Trailer as shown.



b. Install the Rear Red Reflectors <u>on the rear</u> of both the driver's side and passenger's side, so both Reflectors are visible from <u>behind</u> the Trailer.

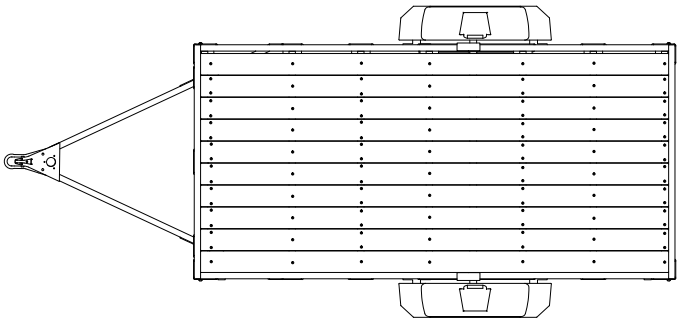
107. **If the Ramp Holder accessory <u>will be</u> installed:**

a. Finish installing the Ramp Holder first according to the instructions provided with it.

b. Attach a Rear Red Reflector onto each Ramp Flag at the back of the Trailer as shown.

c. Install the Rear Red Reflectors <u>on the rear</u> of both the driver's side and passenger's side, so both Reflectors are visible from <u>behind</u> the Trailer.

Deck Placement



The Trailer can be decked with 10 pieces of pressure treated lumber, 5/4" x 6" x 10' in dimension.

1. Cut lumber to a length of 9' 11-7/8".
2. Pre-drill each fastener location with a 1/8" drill bit.
3. Drill through the lumber and Cross Member, then insert fastener.

<u>Note:</u> For lumber with two fasteners: Place fasteners between 1-1/2" to 2" from the edge of the wooden board.

<u>Note:</u> The two outermost pieces of lumber have only one fastener in the center of each drilling location.

Specifications

Trailer GVWR	2700 lb.
Bed Dimensions	5’ x 10’
Deck Height	21"
Hitch Ball Size	2″
Wheel Rim Diameter/Width	13-3/4" / 4-3/4"
Quantity Wheel Lug Nuts	5
Tire Size	ST175 80 R13
Required Tire Air Pressure	50 PSI

Note: Payload and weight cannot exceed overall GVWR of Trailer.

Operating Instructions

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this Trailer.

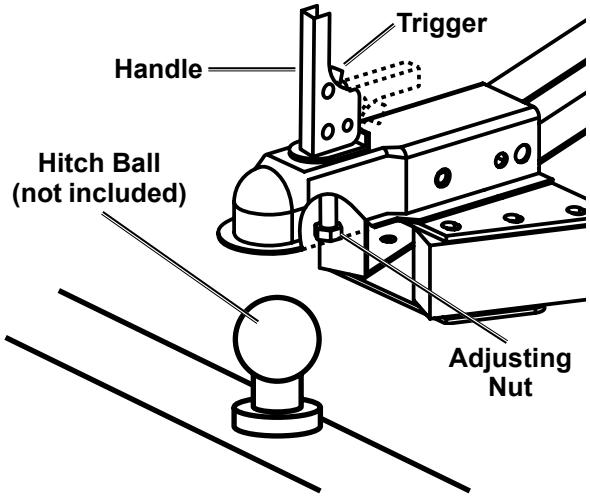
Before each use

1. Check Tire (39) condition and air pressure.
2. Make sure wheel lug nuts/bolts are properly tightened to 85-90 ft-lb.
3. Make sure hitch, coupler, draw bar, and other equipment that connect the trailer and the tow vehicle are properly secured and adjusted.
4. Make sure wiring is properly connected — not touching the road, but loose enough to make turns without disconnecting or damaging the wires.
5. Make sure all running lights, brake lights, turn signals, and hazard lights are working.
6. Check that all items are securely fastened on and in the trailer.
7. Be sure the trailer jack, tongue support, and any attached stabilizers are raised and locked in place.
8. Check load distribution to make sure the tow vehicle and trailer are properly balanced front to back and side to side.
9. Check side- and rear-view mirrors to make sure you have good visibility.
10. Check routes and restrictions on bridges and tunnels.
11. Make sure you have wheel chocks and jack stands.
12. Check trailer for loose bolts and nuts, structural cracks and bends, and any other condition that may affect its safe operation. Do not use the Trailer even if minor damage appears.

Connection

WARNING! TO PREVENT SERIOUS INJURY: Only use a 2″ ball hitch (not included) on the towing vehicle.

1. To reduce friction between the hitch ball and Hitch Coupler, apply a thin layer of heavy weight grease over the hitch ball.
2. Pull up on the Trigger and lift the Handle.
3. With assistance, place the Hitch Coupler 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.



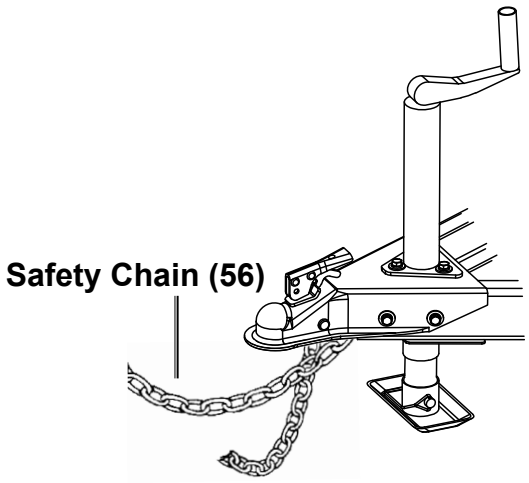
4. Pull up and down on the Coupler to make sure the hitch ball is fitting snugly in the Coupler. There must be no play between the hitch ball and Coupler.

   CAUTION! If there is play, tighten the Adjusting Nut until no play is present.

   After unlocking the Handle, press back on the nut retaining plate (holding the Adjusting Nut in place) while the Nut is tightened. After the Nut is tightened, **the retaining plate must fit in place against the flats of the Nut to prevent it from moving**. This adjustment should be done by two people. If the Adjusting Nut is too tight, the Handle will not lock.

5. After the Adjusting 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.

6. Attach the Safety Chain (56) to the towing vehicle's rear bumper or frame with equal length on each side and chains crossed under the trailer tongue. Allow just enough chain length for unrestricted turning without dragging chain on the ground.



7. Connect the Wiring Harness to the towing vehicle's 12 Volt DC system.

Note: Consult the operator's manual of the towing vehicle for proper connection instructions.

8. When towing the Trailer over long distances stop and check the tightness of all connections, Side Running Lights, and Tail Lights *at least* every 100 miles.

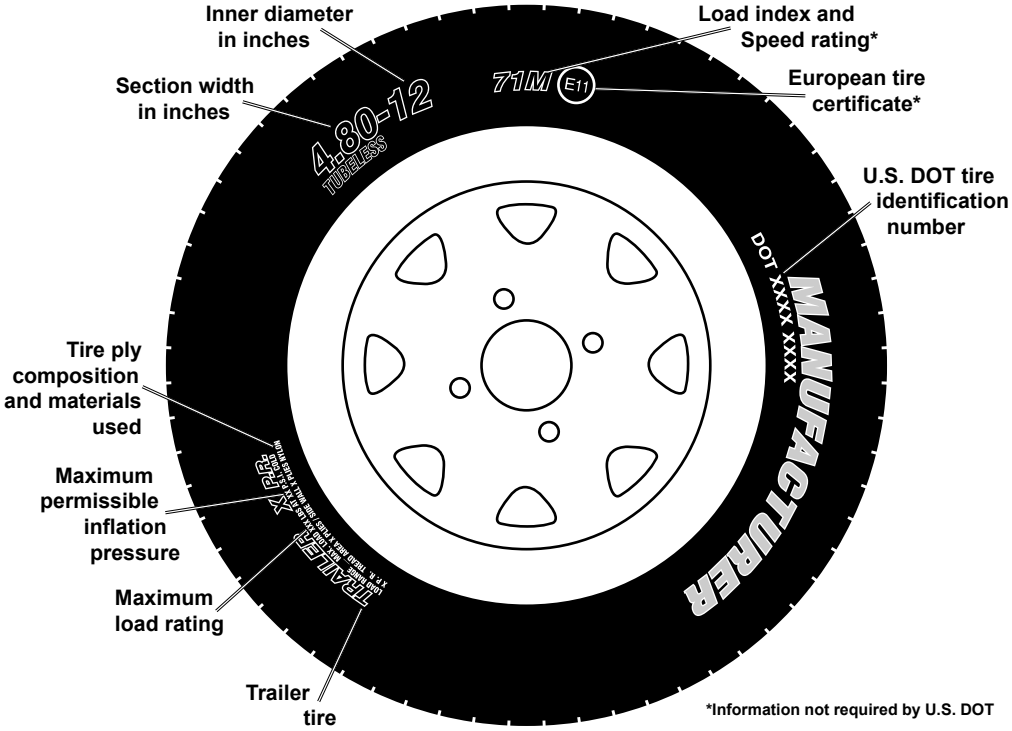
9. Carry emergency flares and fire extinguisher, if required for operation in your state. Carry extra bulbs and fuses if towing the Trailer at night over long distances.

Tire information

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**- This is a measurement of how much weight each tire can support. See chart below. (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.

Code	Pounds	Code	Pounds	Code	Pounds	Code	Pounds	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

Table A: Load Index Rating Codes

- **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 below. (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.

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

Table B: Tire Speed Rating Codes

- **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

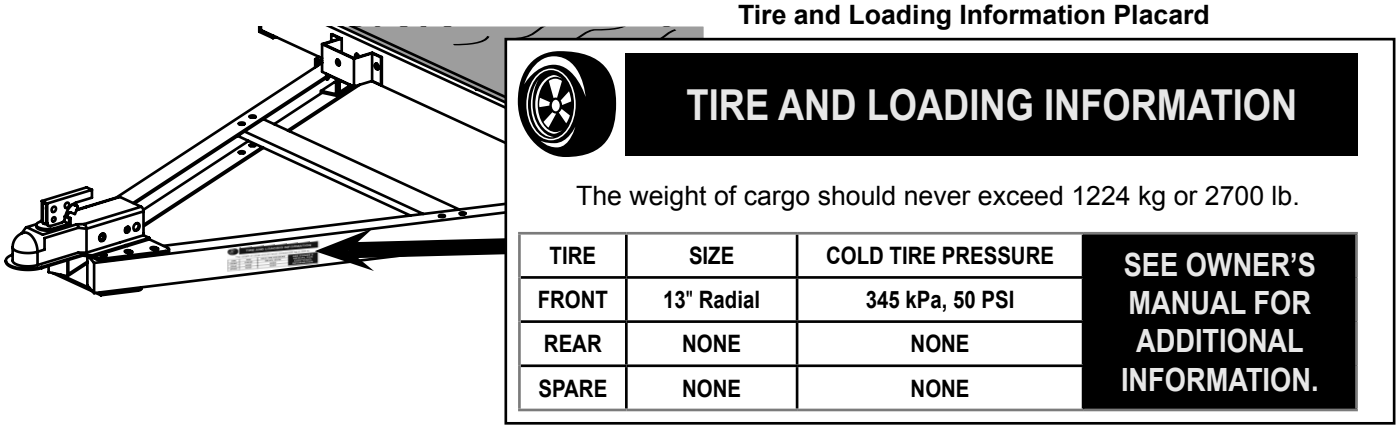


Figure A: Tire and Loading Information Placard Location

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 following that for an explanation of load limit.

Tire care

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 50 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 has 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.

Vehicle Load Limit

Steps for Determining Correct Load Limit

1. Locate the GVWR of Trailer.
2. The combined weight of Trailer, accessories/attachments, and payload cannot exceed Trailer's GVWR.
3. Determine the combined weight of luggage, accessories/attachments, and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.

If the Trailer's load exceeds the cargo and luggage load capacity or if the load on the Trailer is uneven, then the Trailer will 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.

Loading the Trailer

IMPORTANT! Damage caused by improper loading procedures or improper weight distribution will void your warranty.

1. Attach Trailer to towing vehicle and block Trailer Wheels before loading or unloading the Trailer.
2. **WARNING! TO PREVENT SERIOUS INJURY FROM TRAILER BENDING: Before loading the Trailer using ramps, support both corners of the rear end of the Trailer using blocks or jacks, not included.**
3. Load the trailer with about 55% of the weight in front of the axle and about 45% of the weight behind the axle.
4. Load the trailer evenly from side-to-side.
5. Secure the load to the Trailer using appropriately rated tie-downs.

Operation Safety

Note: Selected recommendations in this section are adapted from *TOWING A TRAILER - Being Equipped for Safety*, published by NHTSA. For full details, see that document.

1. This Trailer is not a toy. Do not allow children to play on or near this item.
2. Take time to practice before driving on main roads.
3. Never allow anyone to ride in or on the trailer.
4. Do not transport animals in this trailer.

General Handling

1. Use the driving gear that the towing vehicle manufacturer recommends for towing.
2. Drive at moderate speeds. This will place less strain on your tow vehicle and trailer. Trailer instability (sway) is more likely to occur as speed increases. **Do not exceed 45 miles per hour when towing the Trailer.**
3. Avoid sudden stops and starts that can cause skidding, sliding, or jackknifing.
4. Avoid sudden steering maneuvers that might create sway or undue side force on the trailer.
5. Slow down when traveling over bumpy roads, railroad crossings, and ditches.
6. Make wider turns at curves and corners. Because your trailer's wheels are closer to the inside of a turn than the wheels of your tow vehicle, they are more likely to hit or ride up over curbs.
7. To control swaying caused by air pressure changes and wind buffeting when larger vehicles pass from either direction, release the accelerator pedal to slow down and keep a firm grip on the steering wheel.

Braking

1. Allow considerably more distance for stopping.
2. If you have an electric trailer brake controller and excessive sway occurs, activate the trailer brake controller by hand. Do not attempt to control trailer sway by applying the tow vehicle brakes; this will generally make the sway worse.
3. Always anticipate the need to slow down. To reduce speed, shift to a lower gear and press the brakes lightly.

Acceleration and Passing

1. When passing a slower vehicle or changing lanes, signal well in advance and make sure you allow extra distance to clear the vehicle before you pull back into the lane.
2. Pass on level terrain with plenty of clearance. Avoid passing on steep upgrades or downgrades.
3. If necessary, downshift for improved acceleration or speed maintenance.
4. When passing on narrow roads, be careful not to go onto a soft shoulder. This could cause your trailer to jackknife or go out of control.

Downgrades and Upgrades

1. Downshift to assist with braking on downgrades and to add power for climbing hills.
2. On long downgrades, apply brakes at intervals to keep speed in check. Never leave brakes on for extended periods of time or they may overheat.
3. Some tow vehicles have specifically calibrated transmission tow-modes. Be sure to use the tow-mode recommended by the manufacturer.

Backing Up

1. Put your hand at the bottom of the steering wheel. To turn left, move your hand left. To turn right, move your hand right.
2. Back up slowly.
3. Because mirrors cannot provide all of the visibility you may need when backing up, have someone outside at the rear of the trailer to guide you whenever possible.
4. Use slight movements of the steering wheel to adjust direction. Exaggerated movements will cause greater movement of the trailer.
5. If you have difficulty, pull forward and realign the tow vehicle and trailer and start again.

Parking

1. Try to avoid parking on grades.
2. If possible, have someone outside to guide you as you park.
3. **Once stopped, but before shifting into Park:**
   a. Have someone place blocks on the downhill side of the trailer wheels.
   b. Apply the parking brake.
   c. Shift into Park. (first or reverse gear for manual transmissions)
   d. Then remove your foot from the brake pedal.

   Following this parking sequence is important to make sure your vehicle does not become locked in Park because of extra load on the transmission.
4. **Before uncoupling a trailer:**
   a. Place blocks at the front and rear of the trailer tires to ensure that the trailer does not roll away when the coupling is released.
   b. An unbalanced load may cause the tongue to suddenly rotate upward; therefore, before uncoupling, place jack stands under the rear of the trailer to prevent injury.

TRAILER LICENSING NOTICE

Some states may consider this Trailer 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.

Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠WARNING

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:
Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Note: Tow vehicles often have more frequent maintenance requirements, including changes of engine and transmission oils and filters, lubrication of components, and cooling system checks. Check your owner's manual for information on scheduled maintenance of your tow vehicle.

BEFORE EACH USE: Inspect the trailer and tow vehicle according to the instructions on page 25.

Tires

1. Periodic inspection and maintenance of tires and wheels are essential to towing safety, including spare tires. Proper tire pressure affects vehicle handling and the safety of your tires. You can find the correct tire pressure for your tow vehicle on the tire information placard.
2. Underinflation reduces the load-carrying capacity of your tow vehicle or trailer, may cause sway and control problems, and may result in overheating, causing blowouts or other tire failure.
3. Overinflation causes premature tire wear and affects the handling characteristics of the tow vehicle or trailer.

Wheel Bearings

1. **EVERY 2,000 TO 3,000 MILES OF USE,** lubricate the Hub Assemblies with a heavy weight bearing grease.
2. Using a grease gun (not included), add grease to Hub Assemblies through the grease zerk fitting on each wheel bearing. Use a high-quality, water-resistant grease that is rated by the NLGI.

Hitch

Check the nuts, bolts, and other fasteners to ensure that the hitch remains secured to the tow vehicle and the coupler remains secured to the trailer. The connection point may require periodic lubrication to permit free movement of the coupler to the hitch ball.

Wiring

1. Make sure connector-plug prongs and receptacles, light bulb sockets, wire splices, and ground connections are clean and shielded from moisture. Lightly coat all electrical terminal connections with nonconducting (dielectric), light waterproof grease.
2. Clean the prongs with very fine sandpaper, being careful not to damage the contact area.
3. Turn lights off, then clean the surface deposits in the connector holes. Try to clean off only the deposits and lubricate lightly with dielectric, light waterproof grease.

Record Product's Date Code Here:_____

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Specify UPC 193175487896 when ordering parts.

Note: If product has no Date Code, record month and year of purchase instead.

PLEASE READ THE FOLLOWING CAREFULLY

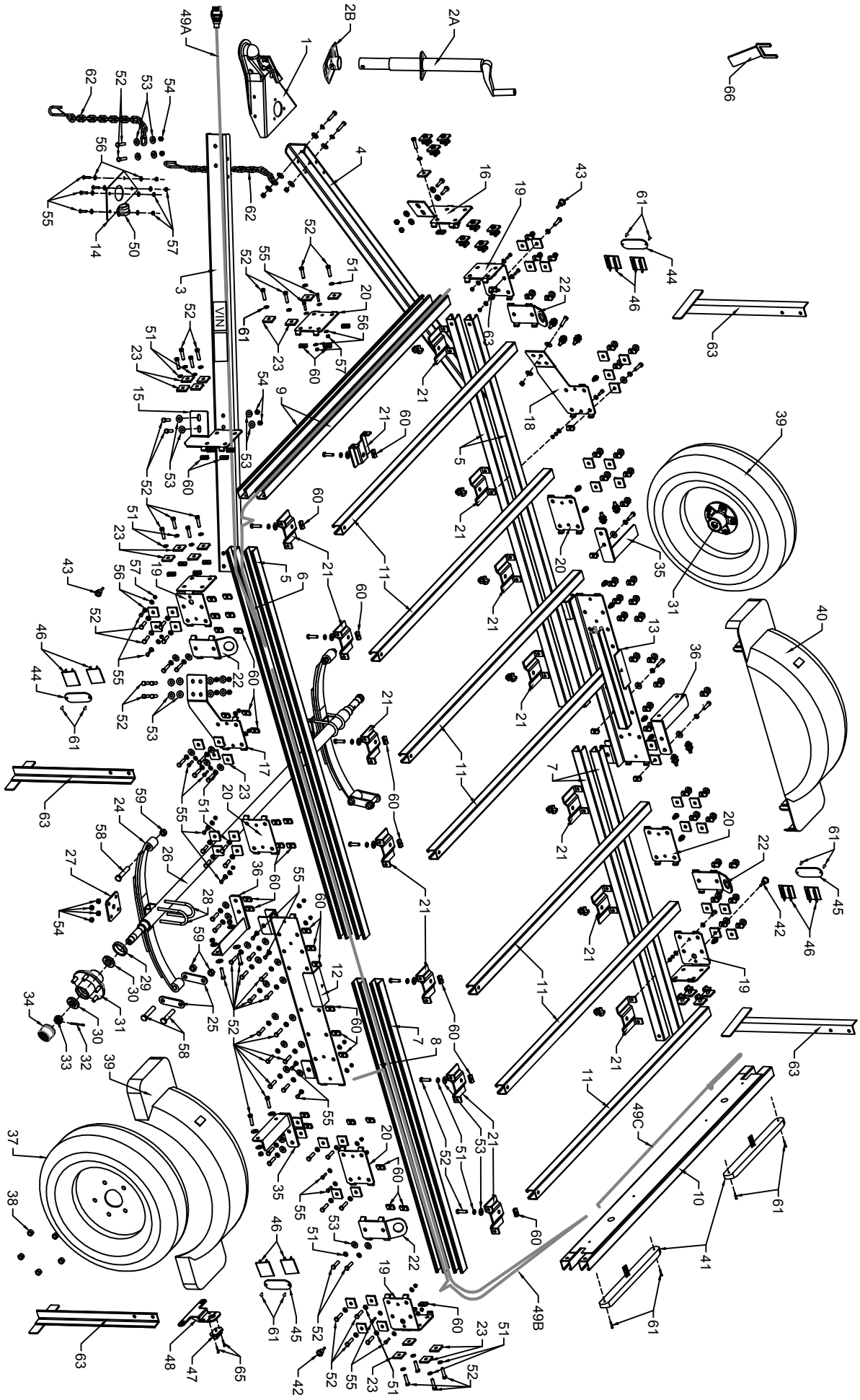
THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE 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.

Parts List

Part	Description	Qty.
1	Coupler	1
2a	Coupler Jack	1
2b	Jack Foot Plate	1
3	Driver-Side Tongue	1
4	Passenger-Side Tongue	1
5	Front Side Rail	3
6	Front Side Rail w/Harness Hole	1
7	Rear Side Rail	3
8	Rear Side Rail w/Harness Hole	1
9	Front Bumper Rail	2
10	Rear Bumper	1
11	Cross Member	7
12	Driver Side Shackle	1
13	Passenger Side Shackle	1
14	Lower Jack Plate	1
15	Driver Front Tongue Bracket	1
16	Passenger Front Tongue Bracket	1
17	Driver Side Tongue Bracket	1
18	Passenger Side Tongue Bracket	1
19	Corner Bracket	4
20	Outer Side Cross Member Bracket	5
21	Inner Cross Member Bracket	15
22	Tie Down Hook	4
23	Square Washer	72
24	Leaf Spring	2
25	Shackle Link	4
26	Axle	1
27	Axle Plate	2
28	U-Bolt	4
29	Grease Seal	2
30	Bearing	4
31	Hub Assembly	2
32	Cotter Pin	2
33	Castle Nut	2
34	Dust Cup	2

Part	Description	Qty.
35	Right Fender Bracket	2
36	Left Fender Bracket	2
37	Tire	2
38	Lug Nut	10
39	Driver Side Fender	1
40	Passenger Side Fender	1
41	Tail Light	2
42	Bullet Light (Red)	2
43	Bullet Light (Amber)	2
44	Amber Reflector	2
45	Side Red Reflector	2
46	Rail Cap	13
47	License Plate Light	1
48	License Plate Bracket	1
49a	Front Wiring Harness	1
49b	Middle Wiring Harness	1
49c	Rear Wiring Harness	1
50	P Clip	1
51	3/8 Spring Washer	126
52	3/8-16*1-1/2" Bolt	150
53	3/8 Flat Washer	108
54	3/8-16 Lock Nut	32
55	1/4-20*1" Short Bolt	34
56	1/4 Flat Washer	68
57	1/4-20 Lock Nut	34
58	9/16-18*3" Long Bolt	6
59	9/16-18" Lock Nut	6
60	3/8"-16 Rail Nut	123
61	M3.5*19mm Screw	12
62	Safety Chain	2
63	Assembly Stand	4
64	Nut Holder (not shown)	123
65	M3.5*25mm Screw	2
66	Square Washer Wrench	1
67	Rear Red Reflector (not shown)	2

Assembly Diagram



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 Traffic Safety Administration (NHTSA) in addition to notifying Jinhua Yongqiang Vehicles Factory. If NHTSA receives similar complaints, it may open an investigation. And if it finds that a safety defect exist in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Jinhua Yongqiang Vehicles Factory. To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 424-9393 or 202-366-0123 or write to NHTSA, U. S. Department, 400 7th Street SW NSA-11, Washington, DC 20590. You can also obtain other information about motor vehicle safety from the Hotline.

Note: Check with your local department of Motor Vehicles for registration procedures. Some DMV's require the Certificate of Origin to be notarized, others do not.

Limited 90 Day Warranty

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.

HAULMASTER™

26677 Agoura Road • Calabasas, CA 91302 • 1-800-444-3353