



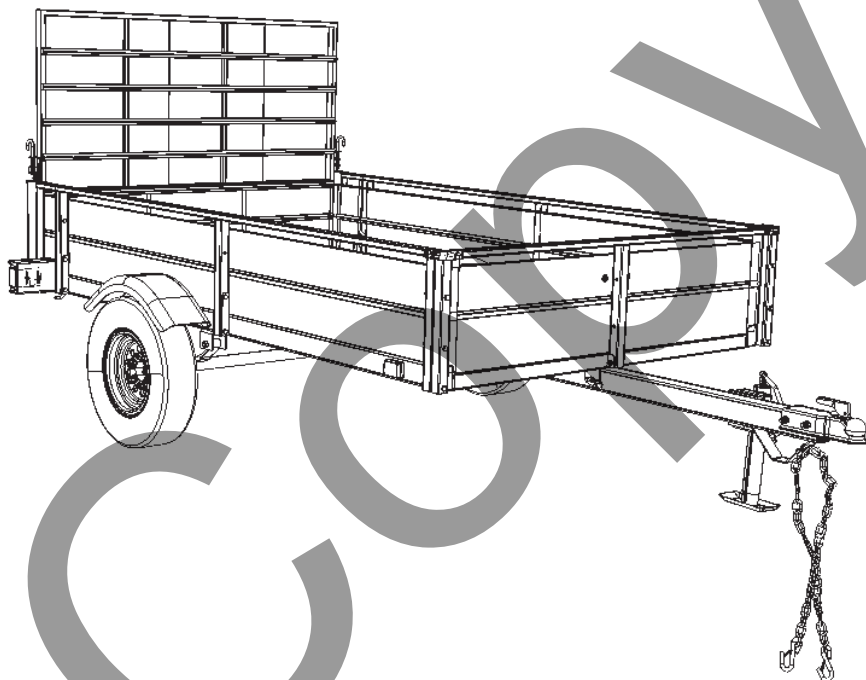
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WWW.LIFETIME.COM

Metal Utility Trailer

MODEL #65001

User's Manual and Maintenance Guide



IMPORTADOR:

Servicios Home Depot, S.A. de C.V.

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R.F.C.:SHD-940509-I58, Tel. 81 55 70 00



Warning: For safe operation of this trailer, be sure to read all instructions and warnings. Failure to follow instructions and warnings could result in property damage, serious injury and death.

In case we need to contact you about your trailer, please register on the
Internet today at:

www.lifetime.com

Copy

Lifetime Products, inc.
Metal Utility Trailer Model 65001

WARNING

This User's Manual contains safety information and instructions for your trailer. You must read this manual before loading or towing your trailer. You must follow all safety precautions and instructions.

customercare@lifetime.com

NHTSA Notification Statement:

If you believe that your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Lifetime Products.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you and Lifetime Products.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153), go to <http://www.safercar.gov>; or write to: Administrator, NHTSA, 1200 New Jersey Avenue, SE., Washington, DC 20590. You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

Call 1-800-225-3865 to reach our Customer Service line.

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SECTION 1: SAFETY INFORMATION

SAFETY ALERT SYMBOLS AND SIGNAL WORDS

	The safety information in this manual is denoted by the safety alert symbol:
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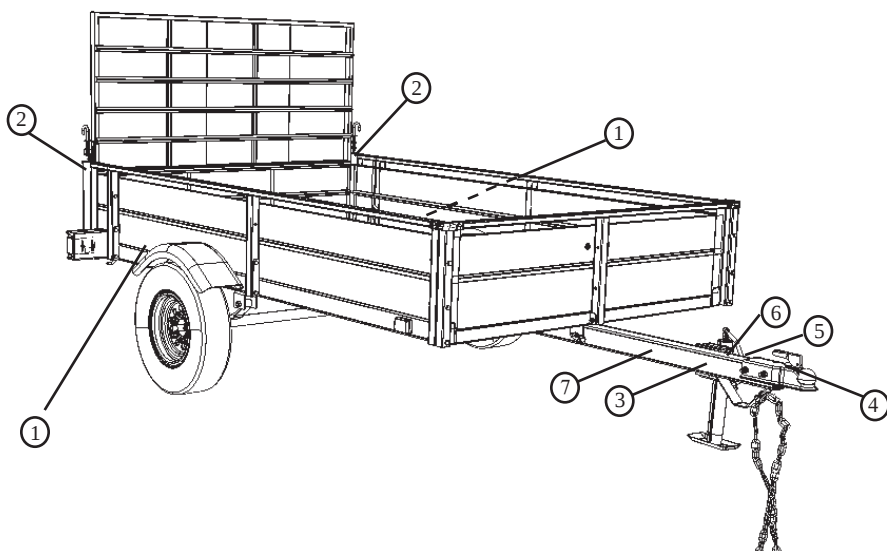
The level of risk is indicated by the following signal words:

SIGNAL WORDS	
Warning	Hazards or unsafe practices which COULD result in severe personal injury or death if the warning is ignored.
Caution	Hazards or unsafe practices which could result in minor or moderate injury if the warning is ignored.

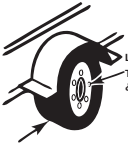
If a label becomes unreadable, you can re-order them from Customer Service:

customercare@lifetime.com

Warning Labels & Locations



1 Lug Nuts and Tire Pressure

 WARNING	 ADVERTENCIA	 Lug Nuts TIGHT? Tuercas a las llantas ¿BIEN APRETADAS? Tires and Wheels OK? Las llantas y ruedas ¿ESTÁN BIEN?
Tire, wheel or lug nut failure can cause loss of control. Before towing, you must CHECK: 1. Tire pressure and tread. 2. Tires and wheels for damage. 3. Lug nuts for tightness. For new and remounted wheels, Retighten lug nuts at the first 10, 25 and 50 miles of driving. © 2002 NATM	Las fallas en las llantas, ruedas o tuercas a las llantas pueden provocar pérdida del control. Antes de realizar un acarreo, DEBE REVISAR: 1. Presión y costura de las llantas. 2. Daños en llantas y ruedas. 3. Tuercas a las llantas bien apretadas. Para llantas nuevas y reacondicionadas, apriete nuevamente las tuercas a las llantas a los primeros 16 kilómetros, 40,2 kilómetros y 80,5 kilómetros de manejo.	

Re-order #1027939

The proper tightness (torque) for lug nuts is 95-120 *ft./lb.* DO NOT EXCEED 120 *ft./lb.* Use a torque wrench to tighten the lug nuts. If you do not have a torque wrench, use a lug wrench (from your tow vehicle) and tighten the nuts as much as you can. Then have a service garage or trailer dealer tighten the lug nuts to the proper torque. See the section “Tire and Safety Information” for more details concerning tire safety.

Lug nuts are also prone to loosen after first being assembled. When driving a new trailer (or after wheels have been remounted), check to make sure they are tight after the first 10, 25 and 50 miles of driving and before each tow thereafter. Failure to perform this check can result in a wheel parting from the trailer and a crash, leading to death or serious injury.

2 Securely Latching the Trailer Gate


CAUTION

**SECURE GATES
BEFORE MOVING
TRAILER**

PRECAUCIÓN

**¡ASEGURE LOS
PORTONES ANTES
DE MOVER EL
REMOLQUE!**

#1027932

Ensure latches on trailer gate are secure during towing and when not in use. The trailer gate must be locked down during use and during storage. Failure to lock gate securely could result in serious property damage, personal injury and death. See the section “Trailer Features” for information regarding latching the trailer gate.

Re-order #1027932

5

Tire and Loading Information

MFD BY: LIFETIME PROD. INC. FABRICADO POR: LIFETIME PROD. INC.		COLD INFLATION PRESSURE PRESIÓN DEL NEUMÁTICO EN FRÍO		DATE/FECHA: 800.25.380
TIRE NEUMÁTICO		RIM (IN) LLANTA (CM)		SGL/DUAL UNICO/DUAL
GAWR				SINGLE/ÚNICO

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS) IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.
ESTE VEHICULO CUMPLE CON TODAS LAS NORMAS FEDERALES DE SEGURIDAD VIGENTES EFECTIVO EN LA FECHA DE FABRICACION MOSTRADA ARRIBA.

VIN: N11V
TIPO DE VEHICULO:

INFORMACIÓN SOBRE NEUMÁTICOS Y CARGA
El peso del cargamento nunca deberá exceder los

TIRE AND LOADING INFORMATION
The weight of cargo should never exceed

NEUMÁTICO	TAMAÑO	PRESIÓN DEL NEUMÁTICO EN FRÍO

TIRE	SIZE	COLD TIRE PRESSURE

VEA EL MANUAL DEL USUARIO PARA INFORMACIÓN ADICIONAL

SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION

No re-orders

Always check tire pressure to ensure optimum life and performance from your tires. The tires that came with your trailer should have a tire pressure of 80 psi. Lifetime Products cannot be held responsible for damages caused by uneven tread wear and blow outs from an under-inflated or over-inflated tire.

The load should never exceed the Gross Vehicle Weight of 2000 lb. Whenever loading the trailer, always check to see if you're within this limit. See the section "Loading the Trailer" for information regarding how to check.

This sticker also displays your Vehicle Identification Number (VIN) in the bottom, left-hand corner.

6

NATM Compliance



Re-order #1014245

Your trailer is in compliance with the guidelines of the National Association of Trailer Manufacturers. Your trailer has its own unique number. **Note:** This is **not** your Vehicle Identification Number (VIN).

7

Patent Advisory



No re-orders

This sticker displays the various patents applicable to the trailer.

SECTION 2: TRAILER PARTS & HARDWARE

PARTS LIST

ID	Part #	Description	Qty	✓
AA	1013284	Tongue/2" Coupler/Jack Assembly	1	☐
AB	1013279	Right Side Panel	1	☐
AI	1013279	Left Side Panel	1	☐
AC	1013276	Left Rear Side Extension Panel	1	☐
AD	1013275	Right Rear Side Extension Panel	1	☐
AE	1013280	Front Panel	1	☐
AF	1013282	Tailgate	1	☐
AG	1013252	Trailer Bed	1	☐
AH	1013274	Rear Bed Extension	1	☐
AK	1016242	Cotter Key	2	☐
AL	1022463	1/2"-13 x 4 1/2" Hex Bolt	2	☐
Parts Bag (1024674)				
BA	1012273	Corner Guard	2	☐
BG	1014296	#10 x 3/4" Self-Tapping Screw	4	☐
BI	1024334	Guard Rail Sleeve	2	☐
Hardware Bag (1018013)				
BB	300138	3/8"-16 X 2 1/2" Hex Bolt	11	☐
BF	300013	3/8" Nylock Nut	11	☐
Hardware Bag (1018014)				
BC	1012016	3/8"-16 X 2 3/4" Hex Bolt	7	☐
BF	300013	3/8" Nylock Nut	7	☐
Hardware Bag (1018015)				
BE	1012020	3/8"-16 X 3 3/4" Hex Bolt	6	☐
BF	300013	3/8" Nylock Nut	6	☐
Hardware Bag (1022647)				
BD	300031	3/8" Flat Washer	8	☐
BH	BN02100	1/2"-13 Nylock Nut	2	☐

TOOLS NEEDED (NOT INCLUDED)

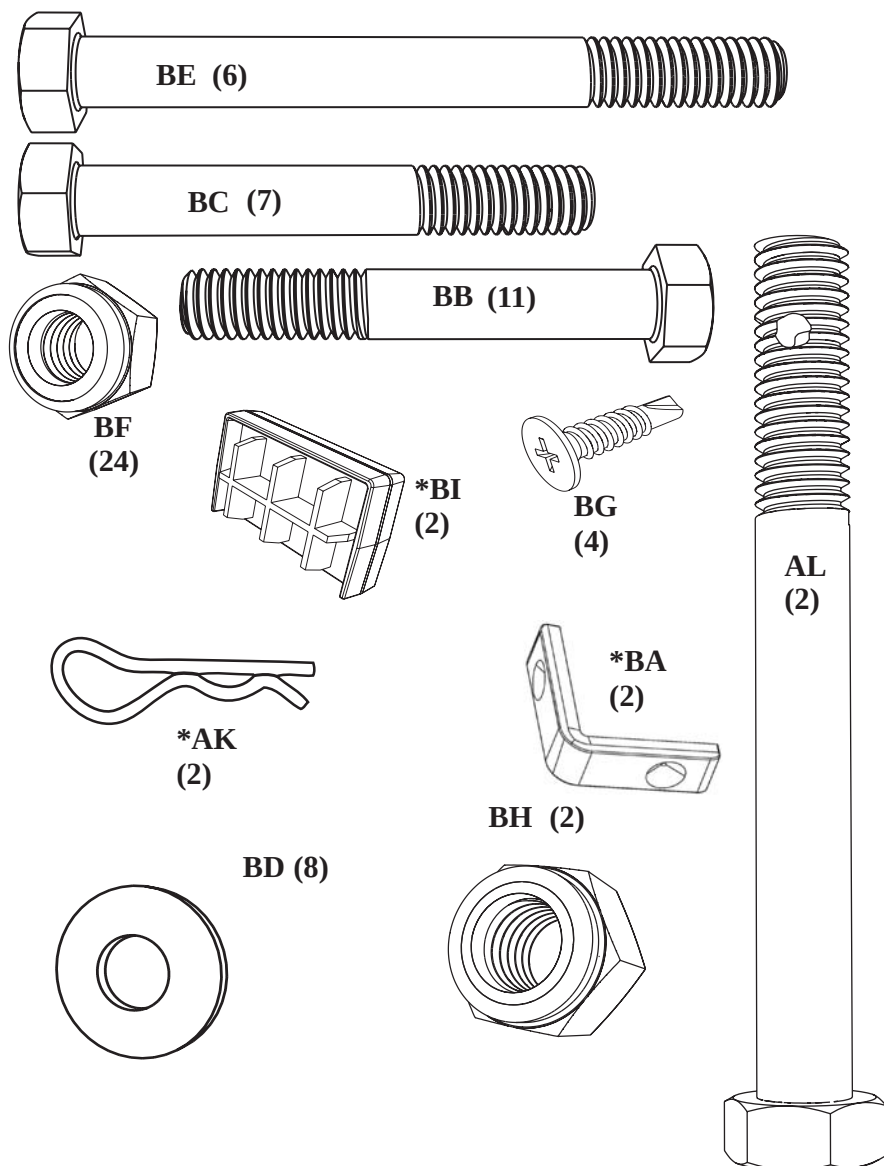
1. Electric Drill
2. 1/8" Drill Bit
3. #2 Phillips Bit
4. Socket Wrench with 9/16" shallow socket (2) (Recommended), or 9/16" Open-face Wrench (2), or Adjustable Wrench (2)
5. Rubber Mallet (Recommended) or Hammer
6. Utility Knife
7. 13/16" Lug Wrench or Tire Iron (For periodic tightening of lug nuts)
8. 7/16" Wrench or Socket Wrench
9. 3/4" Wrench or Socket Wrench with 3/4" Socket

HARDWARE IDENTIFIER

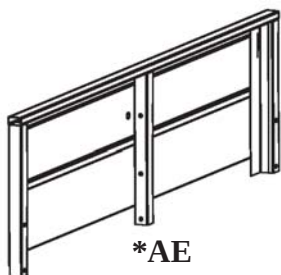
Note: The hardware is in clear plastic bags within the plastic bag labeled 1024674 located under a Rear Side Extension (AC or AD) on the Trailer bed.

***Note:** Parts are actual size unless noted otherwise.

Before beginning assembly, inventory all parts using the Parts List (below) and the Hardware Identifier (next two pages). If all parts are not present, do NOT assemble the trailer. Call Lifetime Products at the number on the cover of this manual.



***Not to Scale**



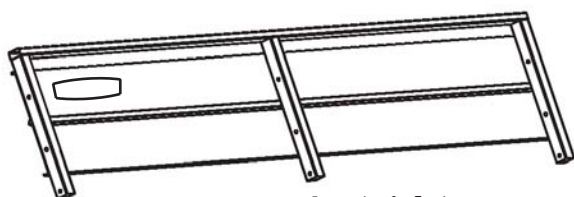
***AE**



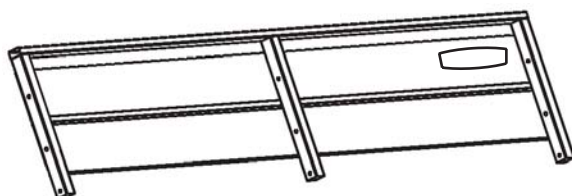
***AC (Left)**



***AD (Right)**



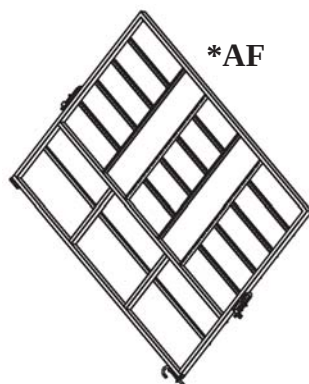
***AB (Right)**



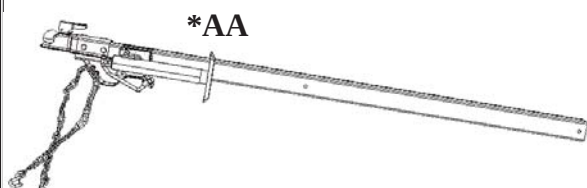
***AI (Left)**



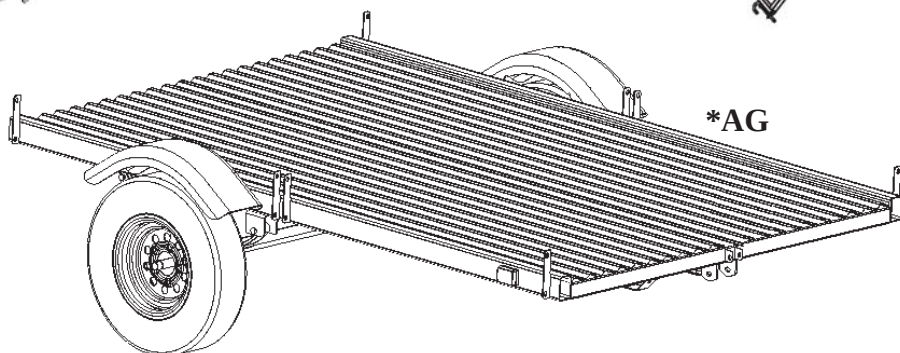
***AH**



***AF**



***AA**



***AG**

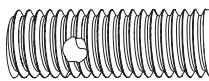
SECTION 3:

PRE-TAKE-HOME ASSEMBLY

Hardware Used:



***AK (2)**



***AL (2)**



*Not actual size

****At Least 2 Adults Required for the Following Steps****

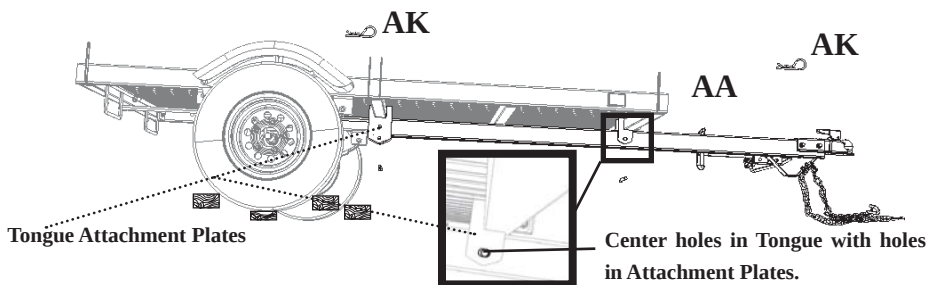
Before towing your trailer home you must first assemble the tongue. You must slide the tongue out and lock it in place before attaching the trailer to your tow vehicle.

Note: If you've already towed your new trailer home, skip to the section "Trailer Assembly" to continue.

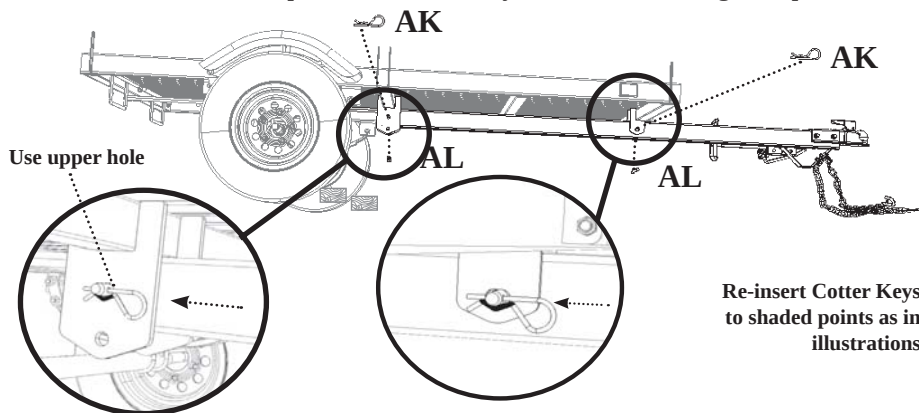
3.1 Chock the Tires, front and rear, with bricks or wooden blocks.

3.2 While one adult supports the Trailer, remove the two **Cotter Keys (AK)** holding the **1/2"-13 x 4 1/2" Hex Bolts (AL)** and **Tongue (AA)** in place. Remove the two **Bolts** and slide **Tongue** forward from under **Trailer Bed** until the holes in the **Tongue** are centered with the holes in the **Tongue Attachment Plates**.

⚠Warning: Be careful when removing pins. Tongue could fall causing serious injury.



3.3 Re-insert **Bolts** and replace the **Cotter Keys** to secure the **Tongue** in place.





WARNING



Do NOT remove or loosen banding until you're ready to assemble the trailer. If you loosen the banding, trailer parts may dislodge, fall off the trailer during towing and cause an accident. Failure to follow this warning could result in property damage, serious injury and death.

Lug Nuts: Tightening Sequence, Torque Requirements



WARNING



Lug nuts are prone to loosen after initial installation possibly causing the wheel to separate from the trailer leading to property damage, death or serious injury.

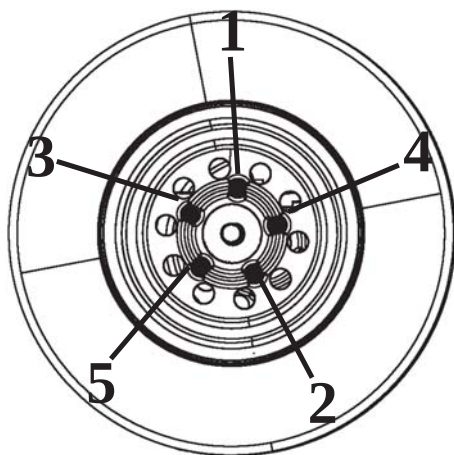
- Check lug nuts for tightness on a new trailer or when wheel(s) have been remounted after the first 10, 25 and 50 miles of driving and after any impact.
- Lug nuts for the tires must be tightened by the user before each use.
- Lifetime Products cannot be held responsible for damages caused by loosened lug nuts.

- Before towing the Trailer, you must ensure the lug nuts are tightened to the proper torque.
- The torque requirements for the **Lug Nuts** are **95 - 120 ft./lb.** Do not exceed 120 ft./lb of torque. Tighten the **Lug Nuts** in the sequence below **before** you leave the dealer.

Verify the proper PSI for your tire.

- Tire pressure for a 12" rim & tire should be at **80 psi.**

**Tighten lug nuts
in the following
order:**





WARNING



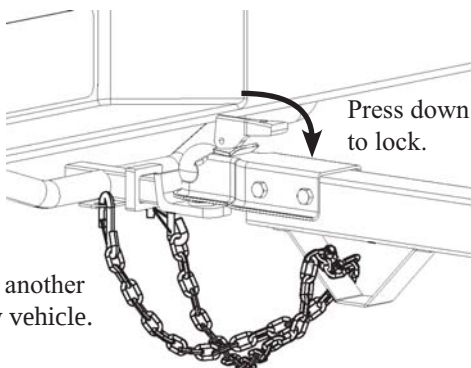
Improper rigging of the safety chains can result in loss of control of the trailer and the tow vehicle, leading to death or serious injury, if the trailer uncouples from the tow vehicle.

- Fasten chains to frame of tow vehicle. Do not fasten chain to any part of the hitch unless the hitch has holes or loops specifically for that purpose.
- Cross chains underneath hitch and coupler with enough slack to permit turning, and to hold tongue up, if the trailer comes loose.

To help ensure your safety as well as other drivers' safety, you must correctly hitch your new Trailer to the Tow Vehicle. Your new trailer comes with a **2-inch Coupler**. The tow vehicle must have a **2-inch Ball** to match.

Cross the chains and insert each end through the Tow Vehicle's hitch. Connect hook to chain (as illustrated).

Follow local and state speed limit laws, but do **not** exceed 65 mph.



Cross chains over one another before securing to tow vehicle.

Connecting the Electrical Cables

Connect the trailer lights to the tow vehicle's electrical system using the electrical connectors.

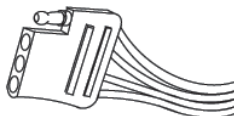
- Check all lights for proper operation.
 1. Clearance and Running Lights (Turn on tow vehicle headlights).
 2. Brake Lights (Step on tow vehicle brake pedal).
 3. Turn Signals (Operate tow vehicle directional signal lever).
 4. Backup Lights (Put tow vehicle gear shift into reverse).

To ensure your trailer lights function properly, firmly insert the **Male Plug (Trailer)** into the **Female Receptor (Tow Vehicle)**.

From Trailer

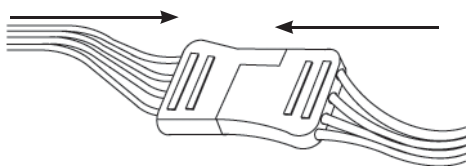


From Tow Vehicle



From Trailer

From Tow Vehicle



WARNING

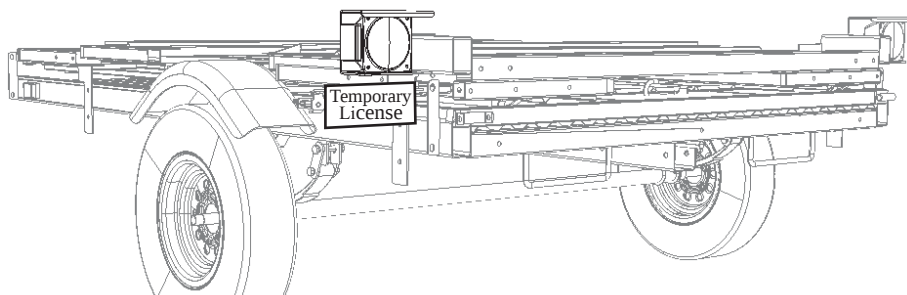


Check the connection periodically to ensure tail and break lights function properly. Failure to follow this warning could result in property damage, serious personal injury and death.

Note: If you still have the four (4) wooden blocks bolted to the four corner brackets of the trailer, remove them using a 7/16" wrench.

Connecting Temporary License Plate

If your state requires a temporary license on your trailer, secure the license to the license plate holder located on the left blinker before towing your trailer home.



WARNING



Do NOT remove or loosen banding until you're ready to assemble the trailer. If you loosen the banding, trailer parts may dislodge, fall off the trailer during towing causing an accident. Failure to follow this warning could result in property damage, serious personal injury and death.

Note: For all inquiries regarding trailer title and registration, please contact your local Department of Motor Vehicles (DMV) or your local county tax assessor's office.



WARNING

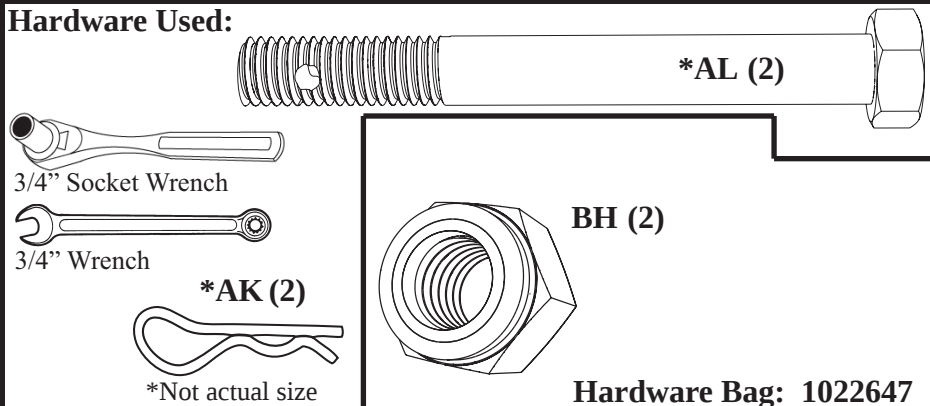


Do not transport people in the trailer. Failure to heed this warning could result in serious injury such as broken bones, brain damage, paralysis or death.

SECTION 4:

TRAILER ASSEMBLY

Hardware Used:



****At Least 2 ADULTS Required for the Following Steps****

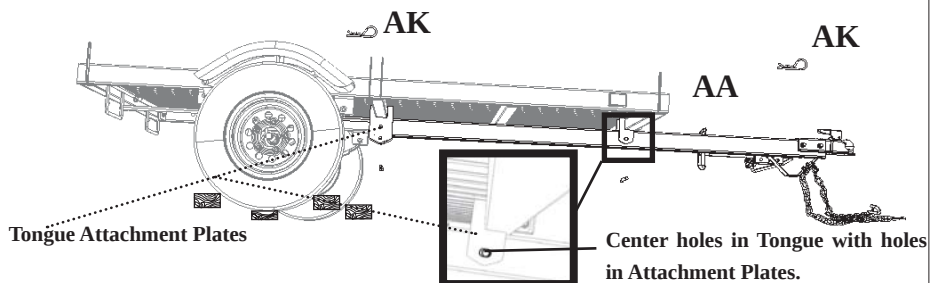
If you haven't done so already, first assemble the tongue before towing your trailer home. Refer to the section "Pre-Take-Home Assembly".

4.1 Secure Tongue

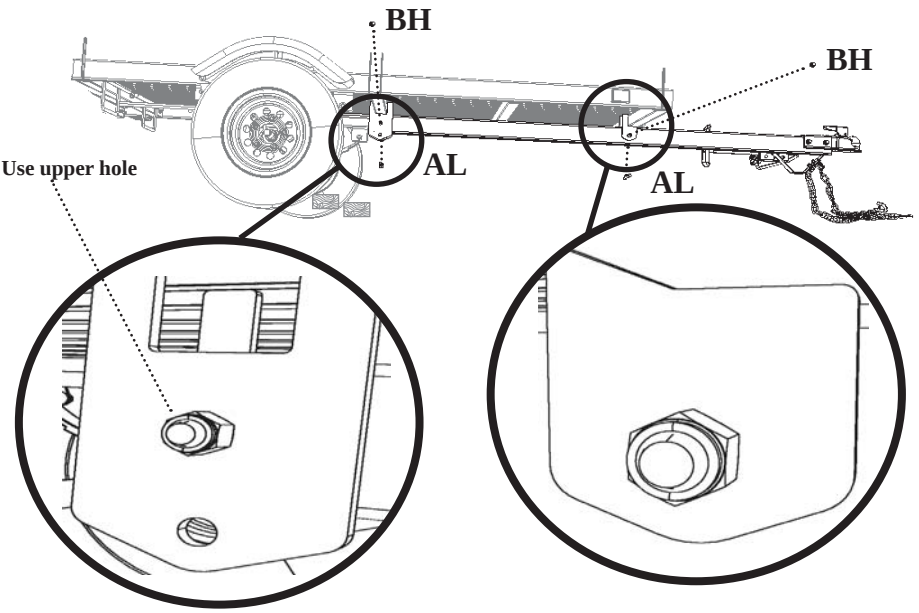
4.1.1 Chock the Tires, front and rear, with bricks or wooden blocks.

4.1.2 While one adult supports the Trailer, remove the two **Cotter Keys (AK)** holding the **Bolts (AL)** and **Tongue (AA)** in place.

⚠Warning: Be careful when removing pins. Tongue could fall causing serious injury.



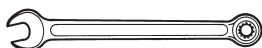
4.1.3 Replace the **Cotter Keys** with two (2) 1/2"-13 Nylock Nuts (**BH**) to secure the **Tongue** in place. Discard **Cotter Keys**.



Hardware Needed:

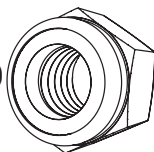


9/16" Socket Wrench

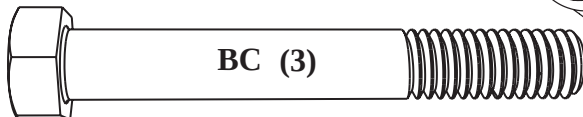


9/16" Wrench

BF (3)



Rubber Mallet



BC (3)



Utility Knife

Hardware Bag: 1018014

****At Least Two ADULTS Required for Assembly****

Before beginning this step, use a Utility Knife to cut the banding around Trailer.

Important: While another adult prevents the Rear Floor Extension from falling, carefully remove all loose parts from the bed of the Trailer. Inventory all parts and hardware to ensure you received all necessary pieces. The Parts List and Hardware Identifier are located on pages 11-13.

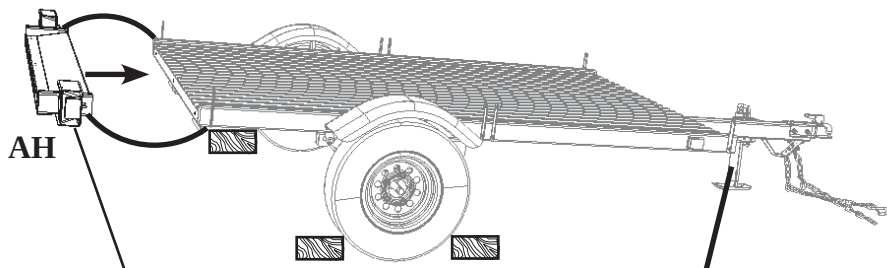
4.2 Attach Rear Floor Extension

4.2.1 Rotate and lower the **Tongue Jack** into position and chock the **Wheels**. See the section "Trailer Features" for details on using the Tongue Jack.

4.2.2 Carefully lift the **Rear Bed Extension (AH)** off the **Trailer Bed** and attach to the back of the trailer.

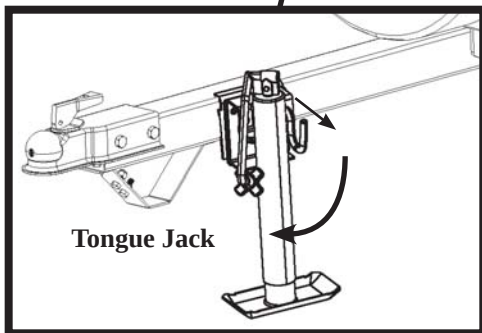


WARNING: Watch for pinch points as serious injury could occur.



Rear Floor Extension

Be careful not to damage the wiring insulation (the colored plastic around the wires).

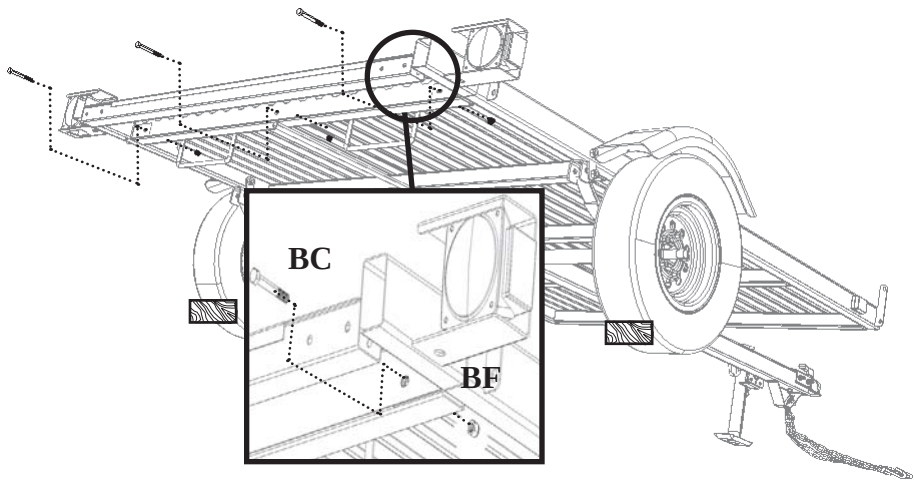


Tongue Jack

4.2.3 While another adult holds the Rear Bed Extension in place, secure the **Rear Bed Extension** to the back of the **Trailer Bed** using three (3) **3/8"-16 x 2 3/4" Hex Bolts (BC)** and three (3) **3/8"-16 Nylock Nuts (BF)**.

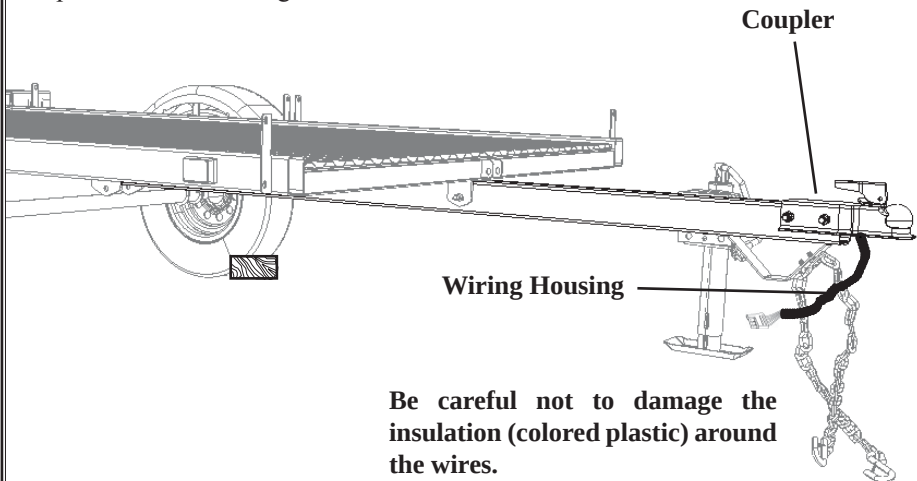
Note: If necessary, after aligning the holes gently tap the Bolt with a Rubber Mallet or Hammer to help pass the Bolts through the holes.

**DO NOT COMPLETELY TIGHTEN
THE NYLOCK NUTS YET.**



4.2.4 Starting at the Coupler on the Tongue, gently pull **Excess wire** from the back of the Trailer through the center Conduit and into the Tongue.

4.2.5 Tuck any **Excess Wire** extending out of the Coupler back underneath the Coupler and into the Tongue.

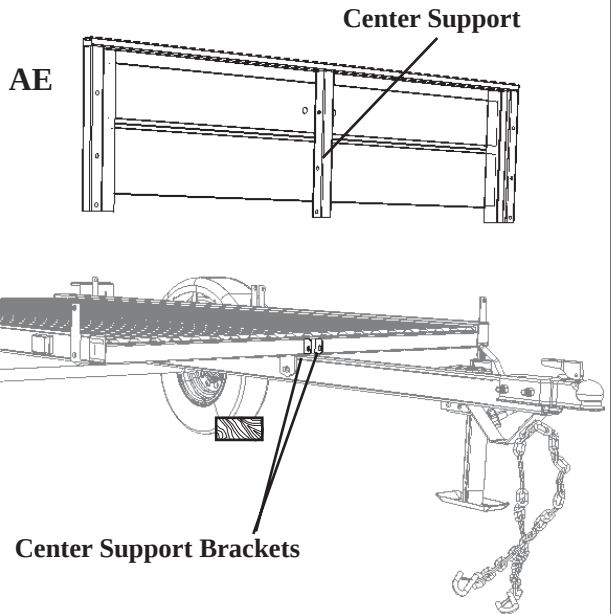


4.3 Attach Front Panel

4.3.1 Slide the **Front Panel (AE)** down between the two front **Center Support Brackets** of the **Trailer Bed**.



WARNING: Watch for pinch points as serious injury could occur.



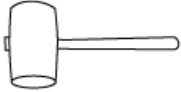
Hardware Needed:



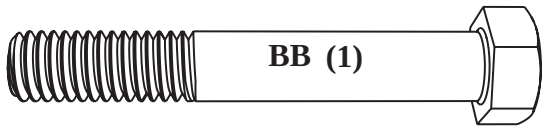
9/16" Socket Wrench



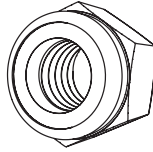
9/16" Wrench



Rubber Mallet



BB (1)

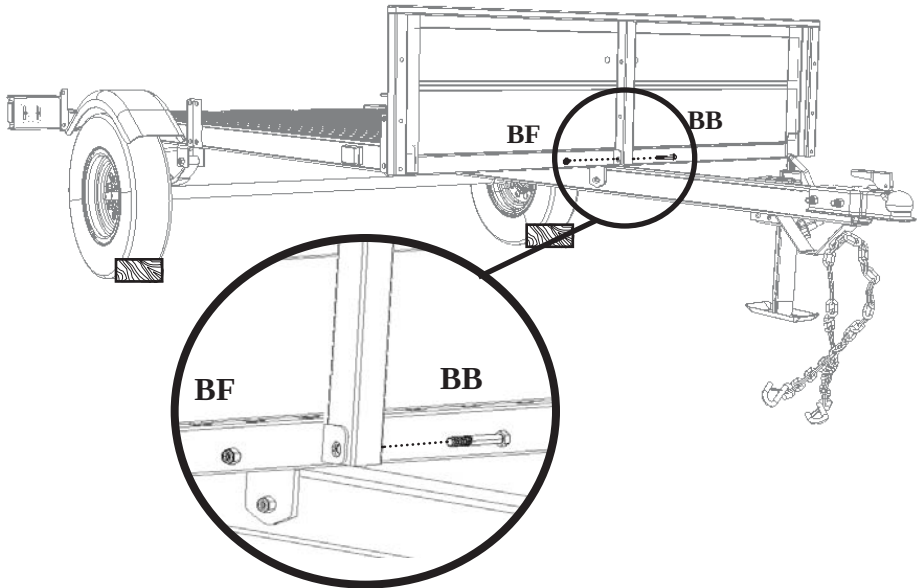


**BF
(1)**

Hardware Bag: 1018013

4.3.2 Insert one (1) 3/8"-16 x 2 1/2" Hex Bolt (**BB**) and one (1) 3/8"-16 Nylock Nut (**BF**).

Note: If necessary, after aligning the holes gently tap the Bolt with a Rubber Mallet or Hammer to help pass it through the holes.



**DO NOT COMPLETELY TIGHTEN
THE NYLOCK NUTS YET.**

CAUTION

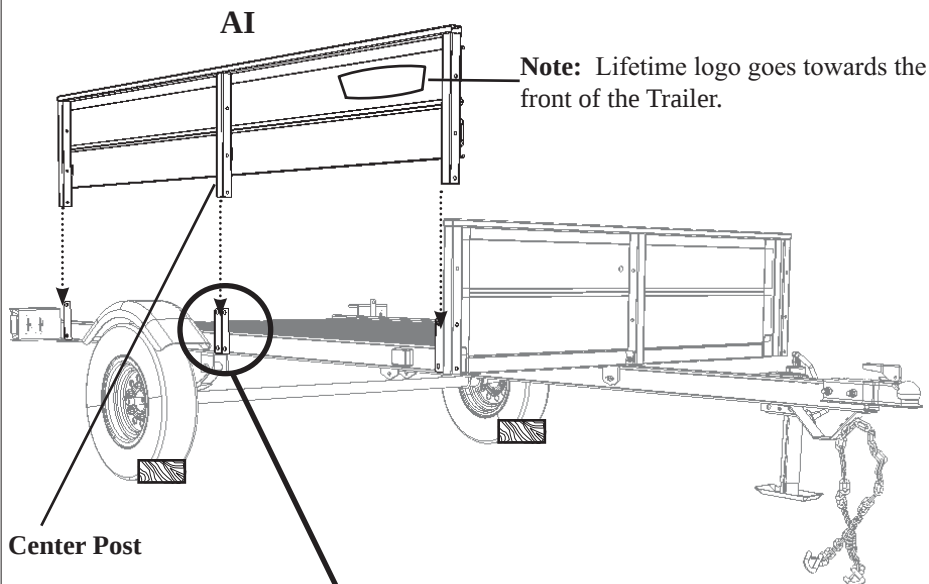
Be careful when standing in the Trailer. The Trailer Bed may be slippery when wet causing you to fall.

4.4 Attach Side Panels

4.4.1 Slide the **Left Side Panel (AI)** down into position so the Center Post fits between the side Center Support Brackets.



WARNING: Watch for pinch points as serious injury could occur.



Center Post

Note: Lifetime logo goes towards the front of the Trailer.

Side Center Support Brackets

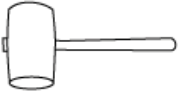
Hardware Needed:



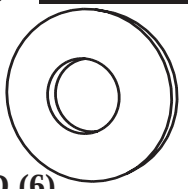
9/16" Socket Wrench



9/16" Wrench



Rubber Mallet

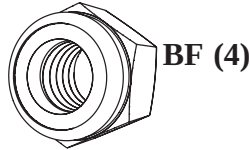


BD (6)

Hardware Bag: 1022647



BB (4)

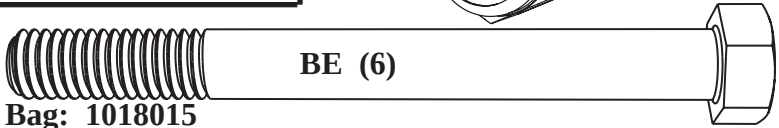


BF (4)

Hardware Bag: 1018013



BF
(6)



BE (6)

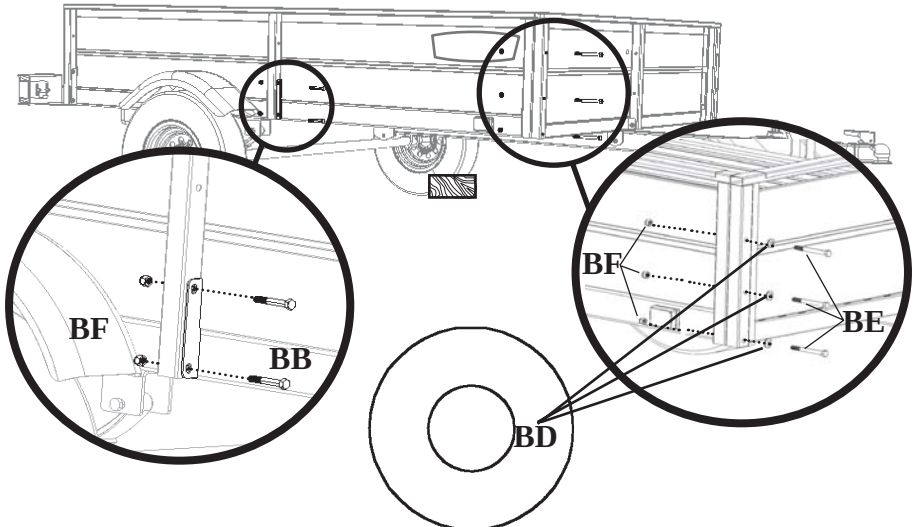
Hardware Bag: 1018015

4.4.2 Starting at the bottom hole, secure the Side Panel to the Front Panel using three (3) 3/8"-16 x 3 3/4" Hex Bolts (BE), three (3) 3/8" Flat Washers (BD) and three (3) 3/8"-16 Nylock Nuts (BF).

4.4.3 Starting at the bottom hole, secure the Side Panel to the Side Center Support Brackets using two (2) 3/8"-16 x 2 1/2" Hex Bolts (BB) and two (2) 3/8"-16 Nylock Nuts (BF).

4.4.4 Repeat steps 4.4.1 - 4.4.3 for the other Side Panel.

Note: If necessary, after aligning the holes gently tap the Bolts with a Rubber Mallet or Hammer to help pass them through the holes.

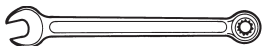


**DO NOT COMPLETELY TIGHTEN
THE NYLOCK NUTS YET.**

Hardware Needed:



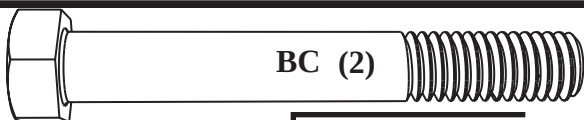
9/16" Socket Wrench



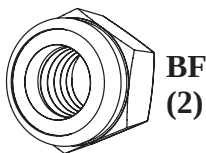
9/16" Wrench



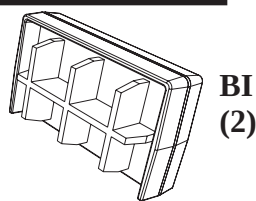
Rubber Mallet



BC (2)



BF
(2)



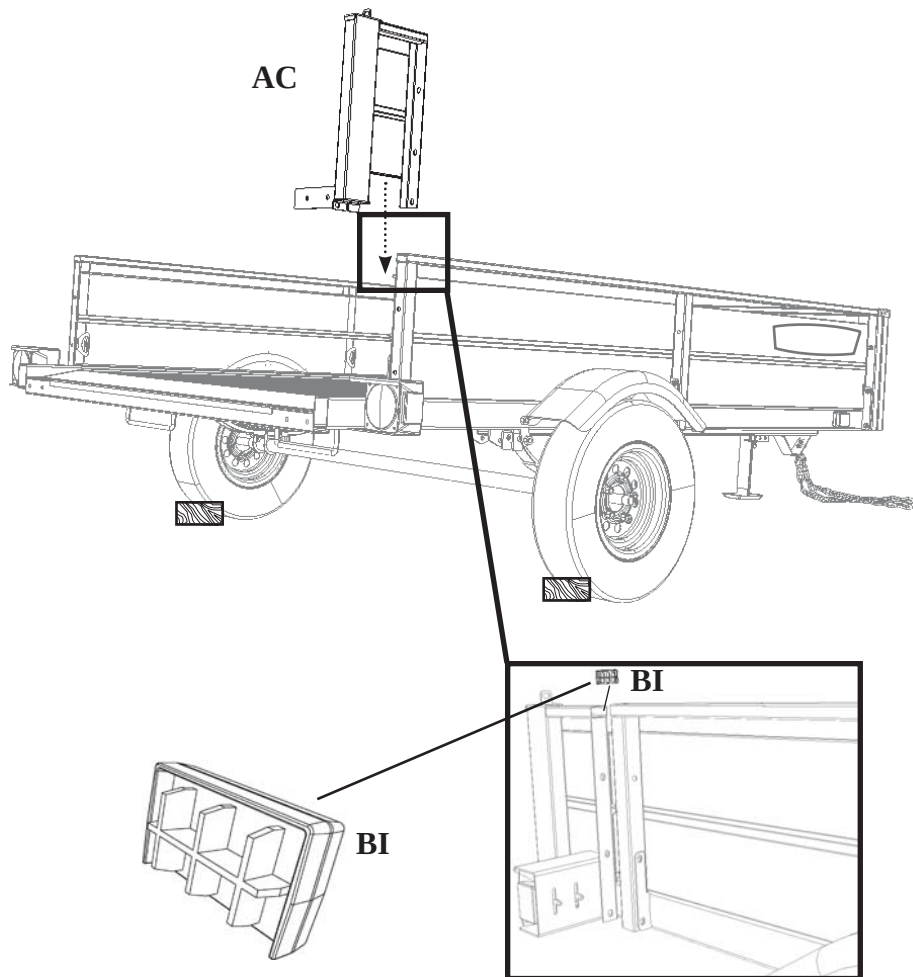
BI
(2)

Hardware Bag: 1018014

Parts Bag: 1024674

4.5 Attach Rear Side Extension Panels

4.5.1 While sliding the **Left Rear Side Extension (AC)** down into position, insert one (1) **Guard Rail Sleeve (BI)** between the two rails as shown (When looking from the back of the Trailer, the Left Rear Side Extension goes on the right side).

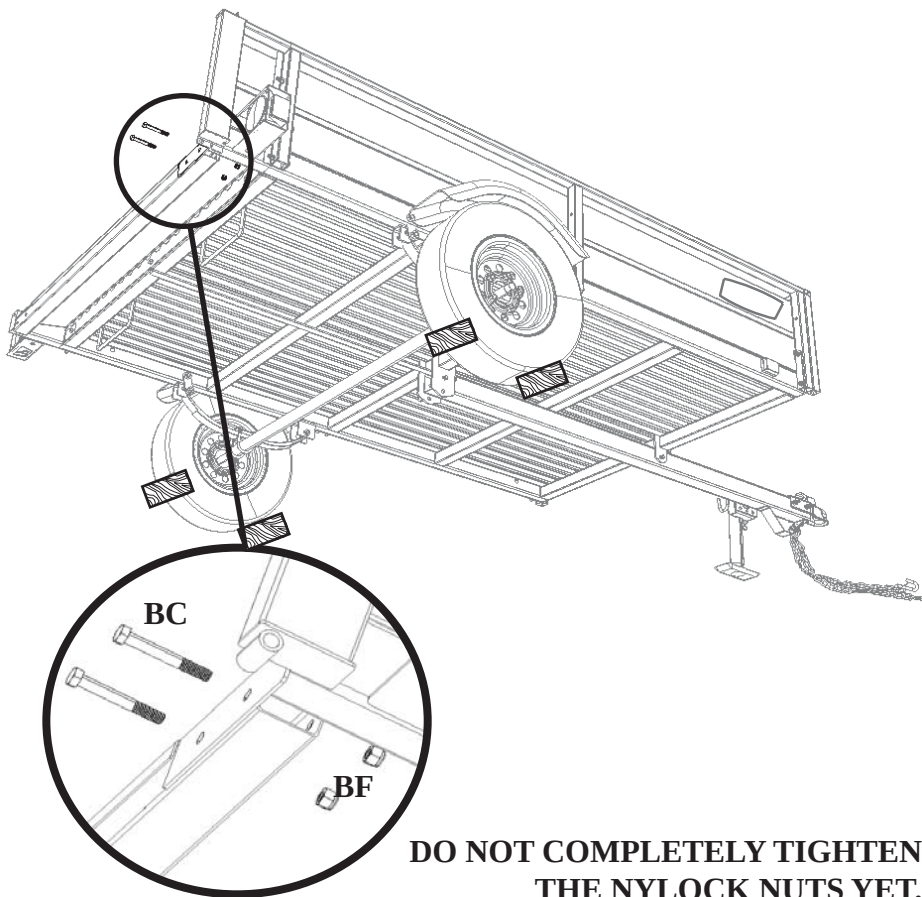


4.5.2 Secure the Left Rear Side Extension Panel (AB) to the Bed Extension using two (2) 3/8"-16 x 2 3/4" Hex Bolts (BC) and two (2) 3/8"-16 Nylock Nuts (BF).

Note: If necessary, after aligning the holes gently tap the Bolts with a Rubber Mallet or Hammer to help pass them through the holes.



WARNING: Watch for pinch points as serious injury could occur.



**DO NOT COMPLETELY TIGHTEN
THE NYLOCK NUTS YET.**

Hardware Needed:



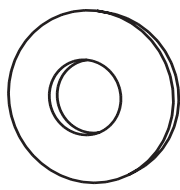
9/16" Socket Wrench



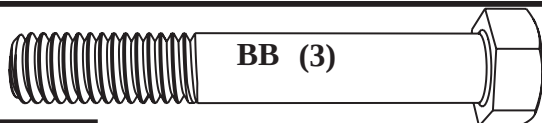
9/16" Wrench



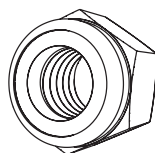
Rubber Mallet



BD (1)



BB (3)



BF
(3)

Hardware Bag: 1022647

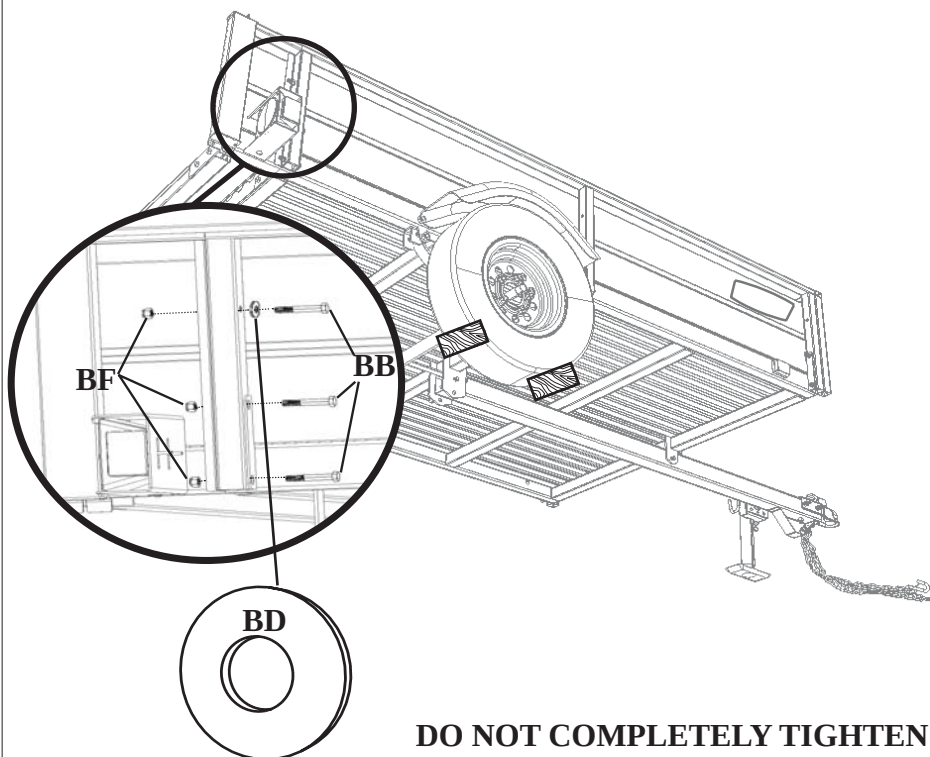
Hardware Bag: 1018013

4.5.3 Starting at the bottom hole, secure the Left Rear Side Extension to the Side Panel and Rear Side Bracket using three (3) 3/8"-16 x 2 1/2" Hex Bolts (BB), one (1) 3/8" Flat Washer (BD) and three (3) 3/8"-16 Nylock Nuts (BF).

Note: If necessary, after aligning the holes gently tap the Bolts with a Rubber Mallet or Hammer to help pass them through the holes.

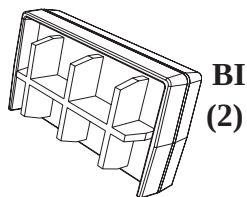


WARNING: Watch for pinch points as serious injury could occur.



**DO NOT COMPLETELY TIGHTEN
THE NYLOCK NUTS YET.**

Hardware Needed:

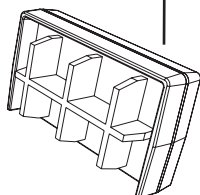
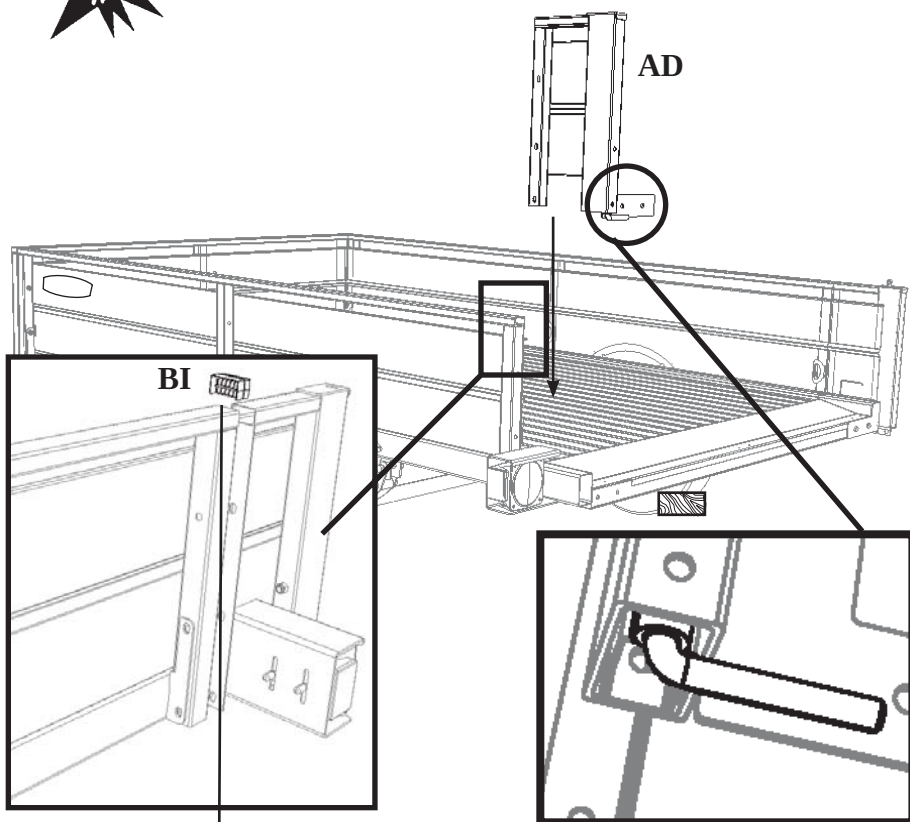


Parts Bag: 1024674

4.5.4 While sliding the **Right Rear Side Extension Panel (AD)** down into position, insert one (1) **Guard Rail Sleeve (BI)** between the two rails as shown (When looking from the back of the Trailer, the Right Rear Side Extension goes on the left side).



WARNING: Watch for pinch points as serious injury could occur.



BI

**DO NOT COMPLETELY TIGHTEN
THE NYLOCK NUTS YET.**

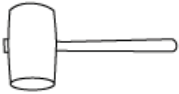
Hardware Needed:



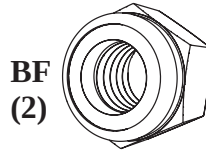
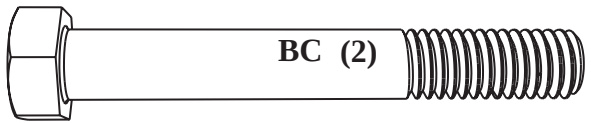
9/16" Socket Wrench



9/16" Wrench



Rubber Mallet



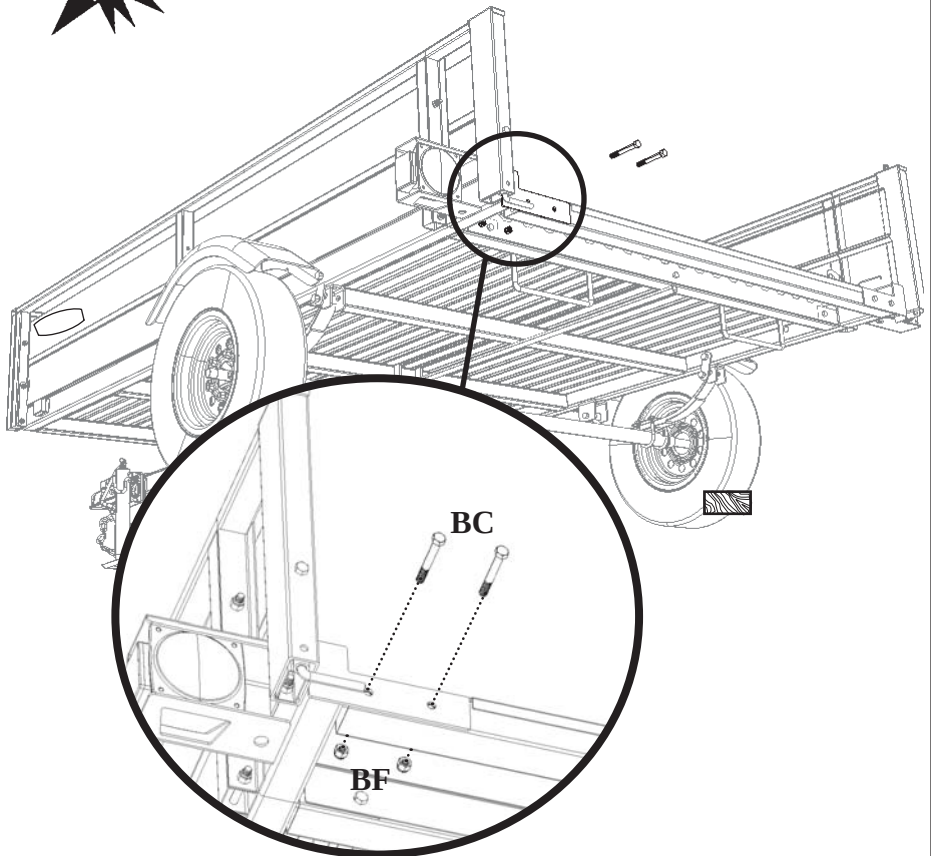
Hardware Bag: 1018014

4.5.5 Secure the **Right Rear Side Extension Panel (AB)** to the Bed Extension using two (2) 3/8"-16 x 2 3/4" Hex Bolts (**BC**) and two (2) 3/8"-16 Nylock Nuts (**BF**).

Note: If necessary, after aligning the holes gently tap the Bolts with a Rubber Mallet or Hammer to help pass them through the holes.



WARNING: Watch for pinch points as serious injury could occur.



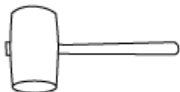
Hardware Needed:



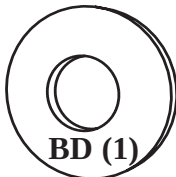
9/16" Socket Wrench



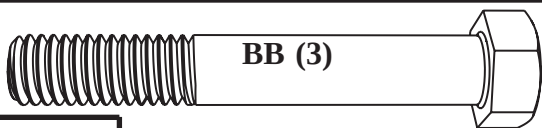
9/16" Wrench



Rubber Mallet

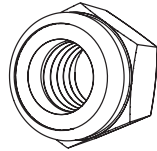


BD (1)



BB (3)

BF
(3)



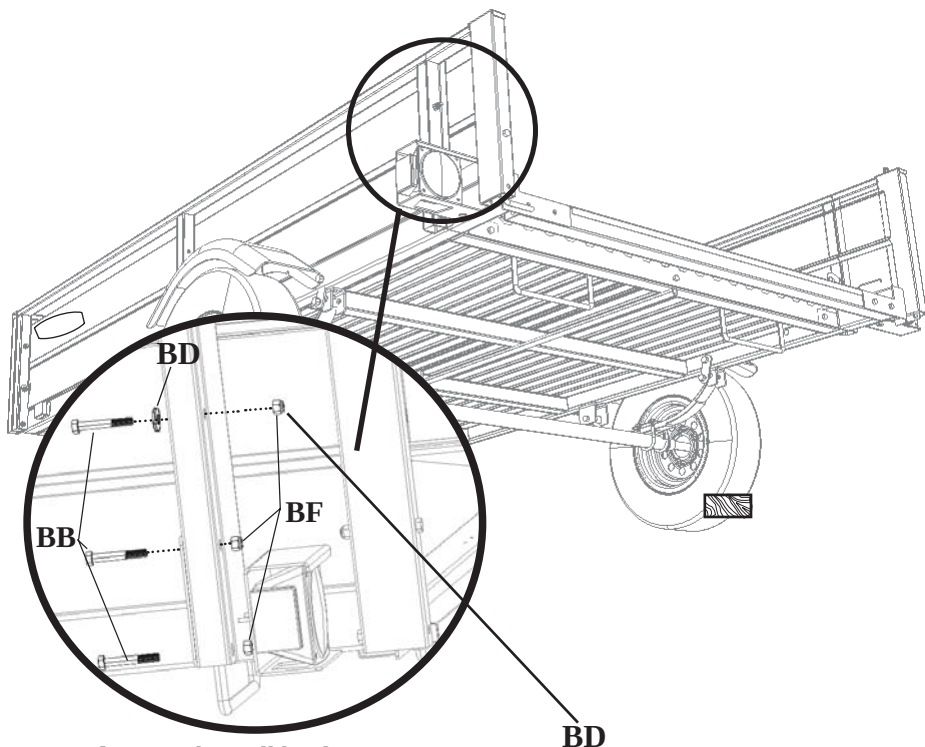
Hardware Bag: 1022647

Hardware Bag: 1018013

4.5.6 Starting at the bottom hole, secure the Right Rear Side Extension Panel to the Side Panel and Rear Side Panel Bracket using three (3) **3/8"-16 x 2 1/2" Hex Bolts (BB)**, one (1) **3/8" Flat Washer (BD)** and three (3) **3/8"-16 Nylock Nuts (BF)**.

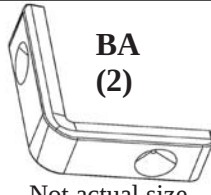
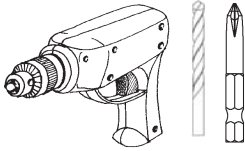
Note: If necessary, after aligning the holes gently tap the Bolts with a Rubber Mallet or Hammer to help pass them through the holes.

4.5.7 Tighten all hardware from steps 4.2.3 - 4.5.6, but do not overtighten.



Remember: Tighten all hardware before proceeding to the next step, but do not overtighten.

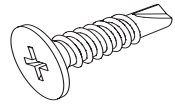
Hardware Needed:



**BA
(2)**

Not actual size

BG (4)



Hardware Bag: 1022656

4.6 Attach Corner Guards

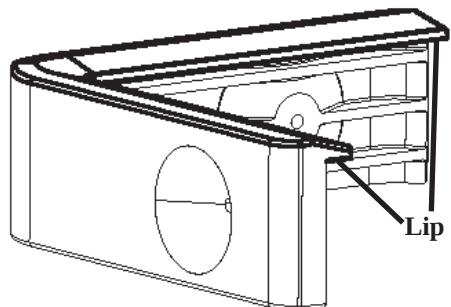
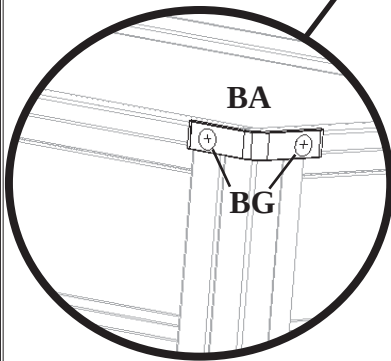
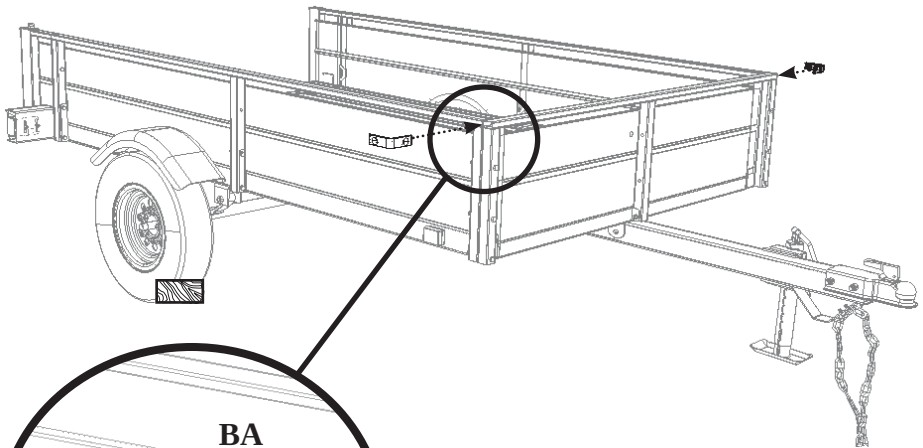
Important: If you have not tightened all hardware, do so before beginning this step, but do **not** overtighten.

4.6.1 Set the **Corner Guard (BA)** in place on the corner of the **Front and Side Panels**. Drill an **1/8" Pilot hole** through the holes in the Corner Guard and into the Panels.

4.6.2 Fasten a **Corner Guard (BA)** to the front left and right corners of the panels with two (2) **#10 x 3/4" Self-Tapping Screws (BG)**. Repeat for other Corner Guard.



WARNING: Watch for pinch points as serious injury could occur.



Corner Guard

Note: Set the lip of the Corner Guard over the top edges of the Panels.

****Two People Required for These Steps****



WARNING



The trailer gate must be locked down during use and during storage. Failure to lock gate securely could allow gate to open unexpectedly resulting in serious property damage, personal injury and death.

4.7 Attach Tailgate

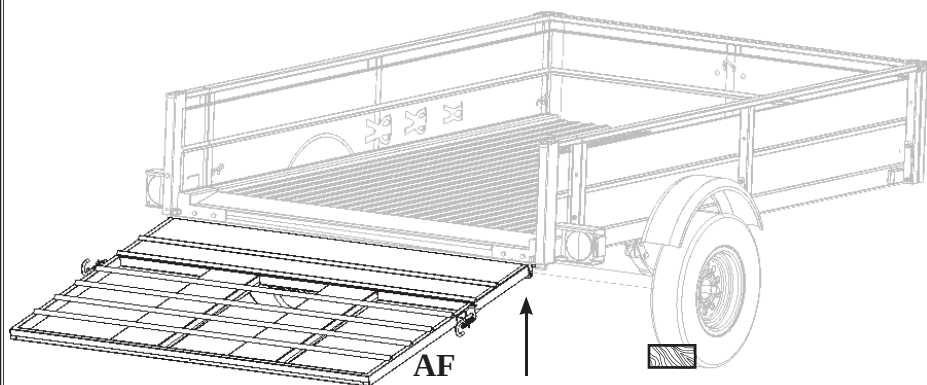
4.7.1 Lay **Tailgate (AF)** on the ground behind the trailer and lift bottom end up towards the trailer as shown.



WARNING: To help ensure your safety, do not attempt to hold the tailgate upright while fastening it to the trailer. Tailgate could fall causing injury.



WARNING: Watch for pinch points as serious injury could occur.



WARNING



Do not play or hang on tailgate. If not secured properly, tailgate could open suddenly or fall. Failure to comply with this warning could result in property damage, serious injury or death.

CAUTION

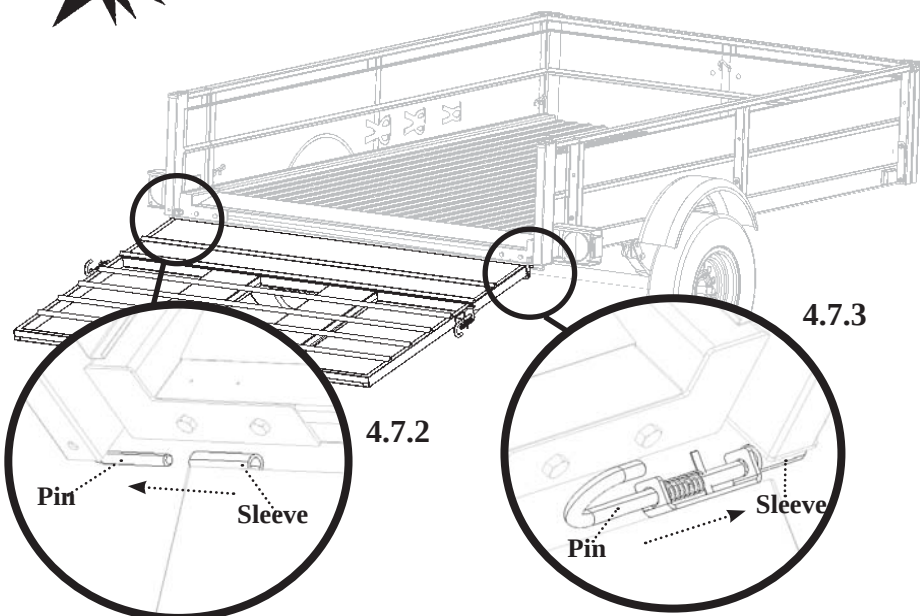
Be careful when standing in the Trailer. The Trailer Bed may be slippery when wet causing you to fall.

4.7.2 Slide the **Tailgate Sleeve** over the **Pin** as shown.

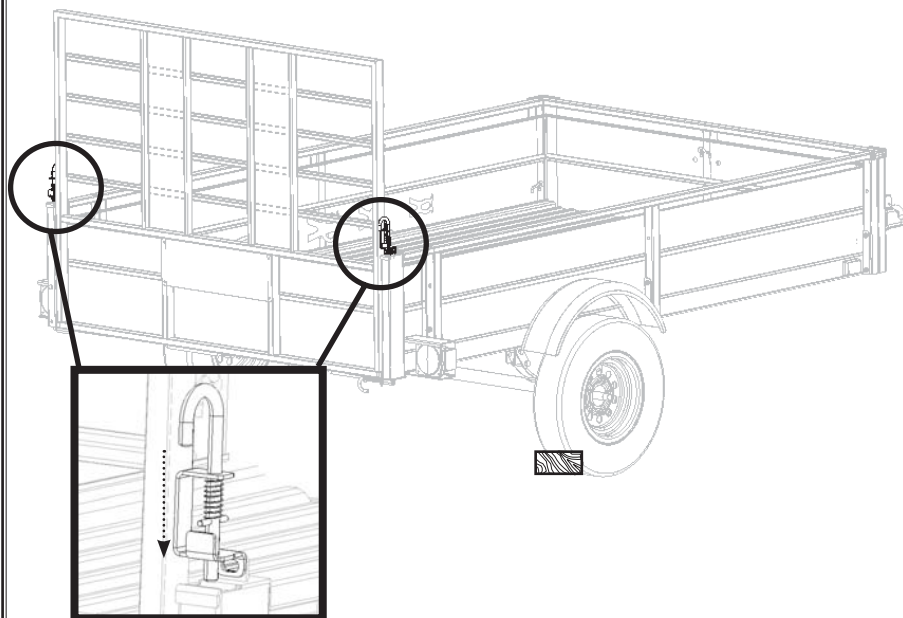
4.7.3 Pull back on the right **Pin** and insert the Pin into the **Sleeve**.



WARNING: Watch for pinch points as serious injury could occur.

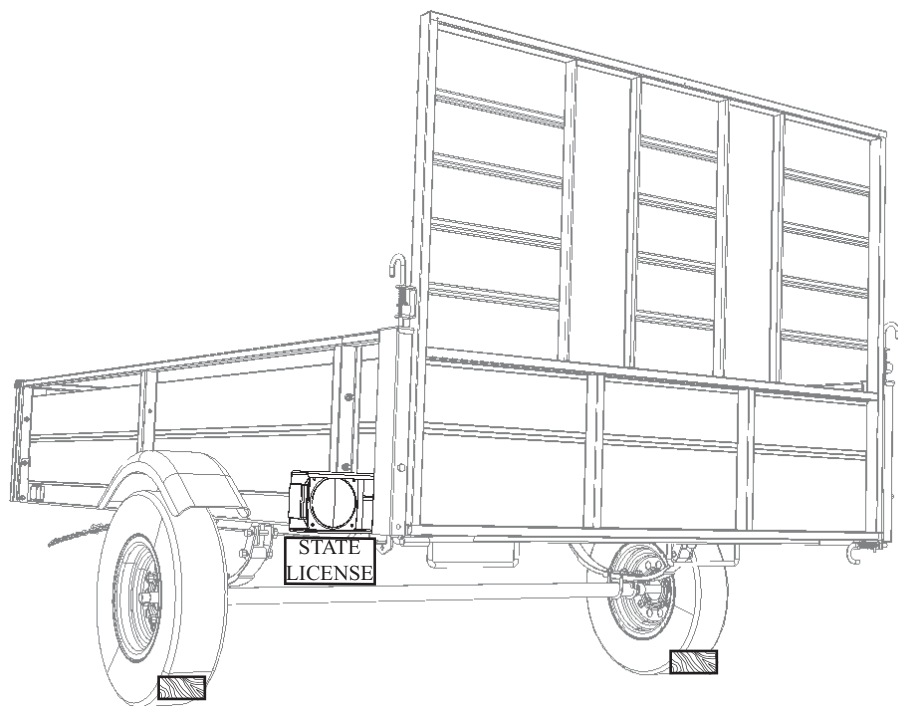


4.7.4 Rotate the **Tailgate** upwards to a vertical position and secure in place with the two **Pins** as shown.



4.8 Attach State License Plate

4.8.1 If your state requires a license plate on your trailer, bolt the license plate to the license plate holder located below the left blinker.



Note: For all inquiries regarding trailer title and registration, please contact your local Department of Motor Vehicles (DMV) or your local county tax assessor's office.



WARNING



Do NOT use the Gate for tie-down locations. All articles being towed must be tied to the side walls of the Trailer. Gate can dislodge causing property damage and possible injury or death to other motorists and pedestrians.

Follow local and state speed limit laws, but do **not** exceed 65 mph.



WARNING



Do not transport people in the trailer. Failure to heed this warning could result in serious injury such as broken bones, brain damage, paralysis or death.

SECTION 5: TRAILER FEATURES

USING TWO-WAY TAILGATE



WARNING



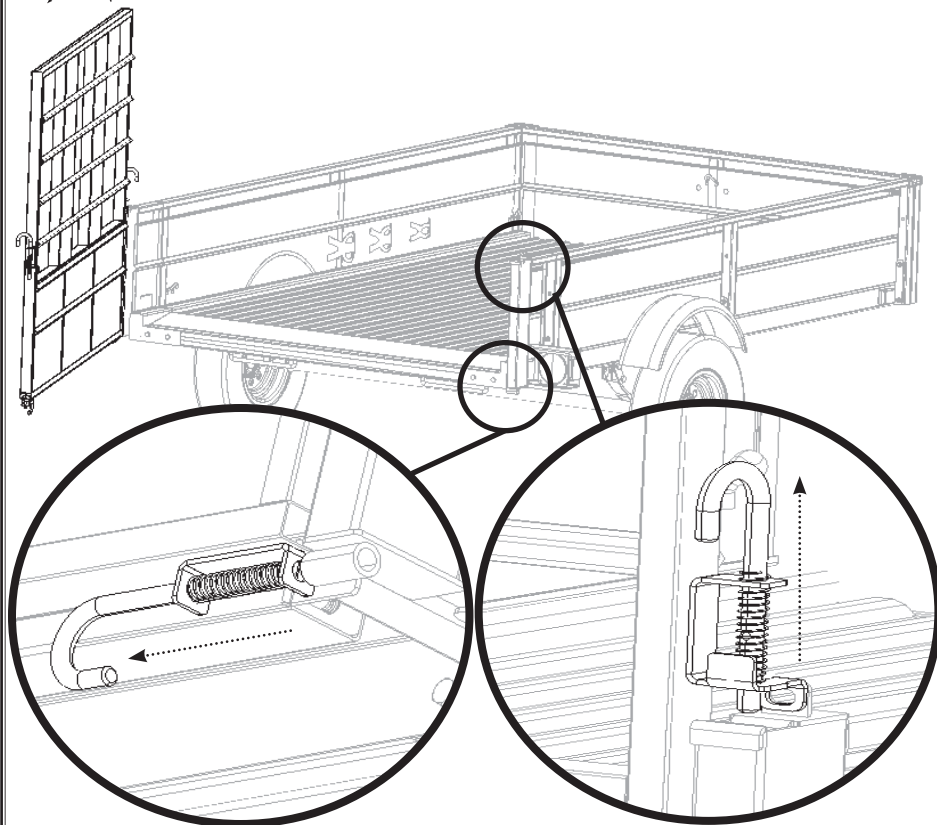
The trailer gate must be locked down during use and during storage. Failure to lock gate securely could allow gate to open unexpectedly resulting in serious property damage, personal injury and death.

5.1 Using Two-Way Tailgate

5.1.1 To open the Tailgate like a door, pull back on the **Pins** located on the right side of the gate and swing the door open.



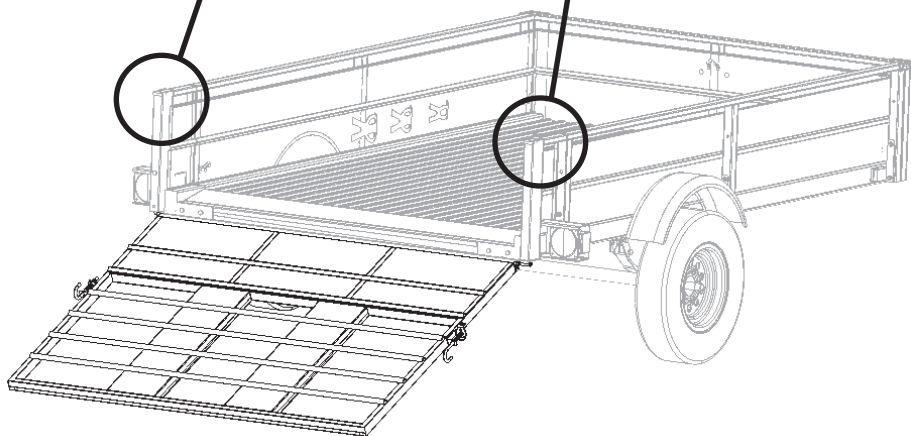
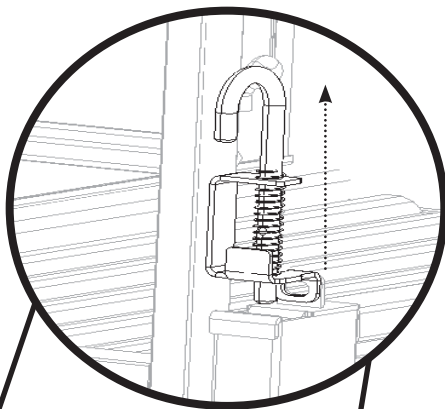
WARNING: Watch for pinch points as serious injury could occur.



5.2 To lower the tailgate to a ramp position, pull up on the upper **Pins** located on both the left and right-hand sides of the tailgate.



 **WARNING:** Watch for pinch points as serious injury could occur.



WARNING



Do not play or hang on tailgate. If not secured properly, tailgate could open suddenly or fall. Failure to comply with this warning could result in property damage, serious injury or death.



WARNING

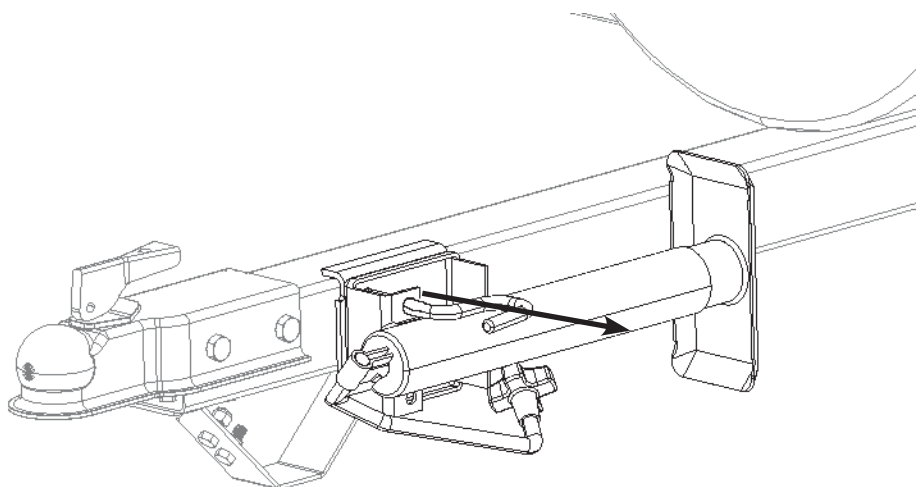


Do NOT use the Gate for tie-down locations. All articles being towed must be tied to the side walls of the Trailer. Gate can dislodge causing property damage and possible injury or death to other motorists and pedestrians.

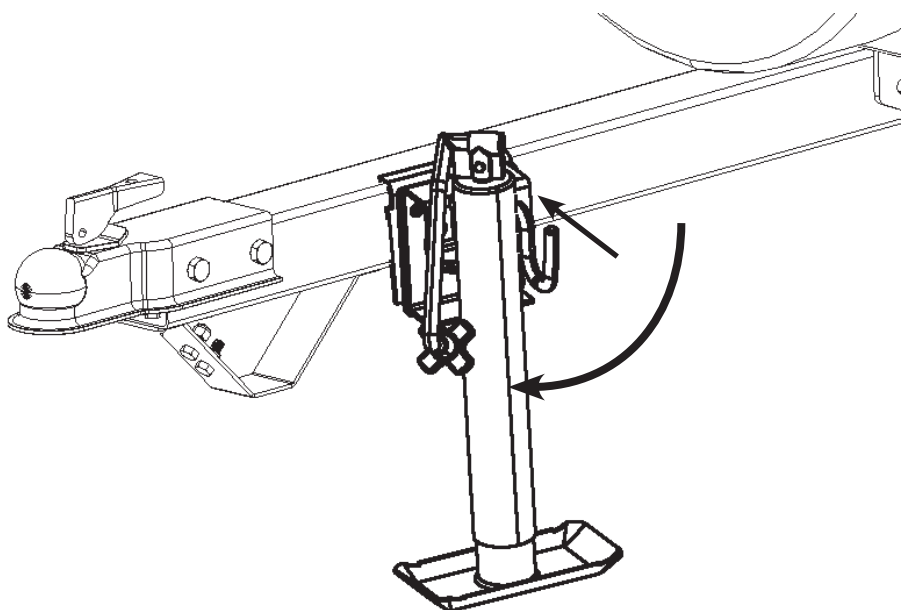
USING THE TONGUE JACK

5.3 USING THE TONGUE JACK

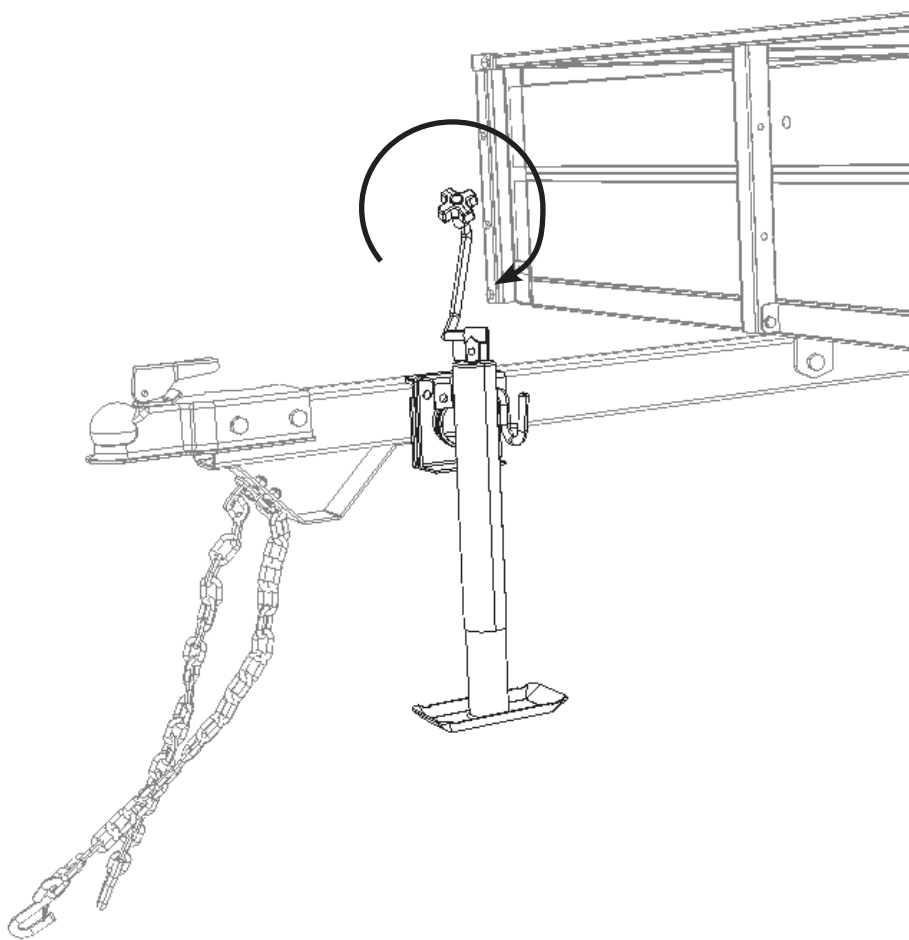
5.3.1 Pull the **Locking Pin** out to release the Tongue Jack.



5.3.2 Rotate **Tongue Jack** down to a vertical position and lock into place with **Locking Pin**.



5.3.3 Rotate **Jack Handle** clockwise to lift Tongue, counter-clockwise to lower the Tongue.



WARNING



Before towing, always rotate Tongue Jack to upward (horizontal) position and secure with Locking Pin. Failure to do so could damage Tongue Jack while towing rendering Tongue Jack inoperable.

SECTION 6: COUPLING TO THE TOW VEHICLE

ATTACHING THE TRAILER TO YOUR VEHICLE

You must follow all of the safety precautions and instructions in this manual to ensure safety of persons, cargo, and satisfactory life of the trailer.

6.1 **Warning: Using an Adequate Tow Vehicle and Hitch**

If the vehicle or hitch is not properly selected and matched to the Gross Vehicle Weight Rating (GVWR) of your trailer, you can cause an accident that could lead to death or serious injury. If you already have a tow vehicle, know your vehicle tow rating and make certain the trailer's rated capacity is less than or equal to the tow vehicle's rated towing capacity. If you already have (or plan to buy) a trailer, make certain that the tow rating of the tow vehicle is equal to or greater than that of the trailer.

6.2 **Warning: Coupling and Uncoupling the Trailer**

A secure coupling (or fastening) of the trailer to the tow vehicle is essential. A loss of coupling may result in death or serious injury. Therefore, you must understand and follow all of the instructions for coupling your trailer to your tow vehicle.

The following parts are involved in ensuring a secure coupling between the trailer and tow vehicle:

Coupler: A device on the tongue of the trailer that connects to the hitch on the tow vehicle.

Hitch: A device on the tow vehicle that supports the weight of the trailer tongue and pulls the trailer. The coupler attaches to the hitch.

Safety chains: If the coupler connection comes loose, the safety chains can keep the trailer attached to the tow vehicle. With properly rigged safety chains, it is possible to keep the tongue of the trailer from digging into the road pavement, even if the coupler-to-hitch connection comes apart.

Trailer lighting (and braking) connector: A device that connects electrical power from the tow vehicle to the trailer. Electricity is used to turn on brake lights, running lights, and turn signals as required.

6.2.1 **Trailer with Ball-Hitch Coupler**

A ball hitch coupler connects to a ball that is located on or under the rear bumper of the tow vehicle. This system of coupling a trailer to a tow vehicle is sometimes referred to as "bumper pull."

We have utilized a 2-inch Ball Hitch coupler that is suitable for the size and weight of the trailer. You must provide a hitch and 2-inch ball for your tow vehicle, where the load rating of the hitch and ball is equal to or greater than that of your trailer.

Also, the ball size must be the same as the coupler size. If the hitch ball is too small, too large, is underrated, is loose or is worn, the trailer can come loose from the tow vehicle, and may cause death or serious injury.

THE TOW VEHICLE, HITCH AND BALL MUST HAVE A RATED TOWING CAPACITY EQUAL TO OR GREATER THAN THE TRAILER Gross Vehicle Weight Rating (GVWR).

IT IS ESSENTIAL THAT THE HITCH BALL BE OF THE SAME SIZE AS THE COUPLER (2 INCHES).

The ball size and load rating (capacity) are marked on the ball; hitch capacity is marked on the hitch.

6.2.1.1 Before coupling the trailer to the tow vehicle

- Ensure the size and rating of hitch ball match the 2-inch coupler on your trailer. Hitch balls and couplers are marked with their size and rating.
- Wipe the hitch ball clean, inspect it visually and feel for flat spots, cracks and pits.
- Rock the ball to make sure it is tight to the hitch, and visually check that the hitch ball nut is solid against the lock washer and hitch frame.
- Wipe the inside and outside of the coupler clean and inspect it visually for cracks and deformations; feel the inside of the coupler for worn spots and pits.
- Be sure the coupler is tight to the tongue of the trailer. All coupler fasteners must be visibly solid against the trailer frame.
- Raise the bottom surface of the coupler above the top of the hitch ball. Use wood or concrete blocks to support the trailer tongue.

6.2.1.2 Preparing the coupler and hitch

- Lubricate the hitch ball and the inside of the coupler with a thin layer of automotive bearing grease.
- Open the coupler locking mechanism. Ball couplers have a locking mechanism with an internal moving piece and an outside handle.
In the open position, the coupler is able to drop fully onto the hitch ball.
See the coupler instructions for details of placing the coupler in the “open” position.
- Slowly back up the tow vehicle so that the hitch ball is near or aligned under the coupler.

6.2.1.3 Coupling the trailer to the tow vehicle

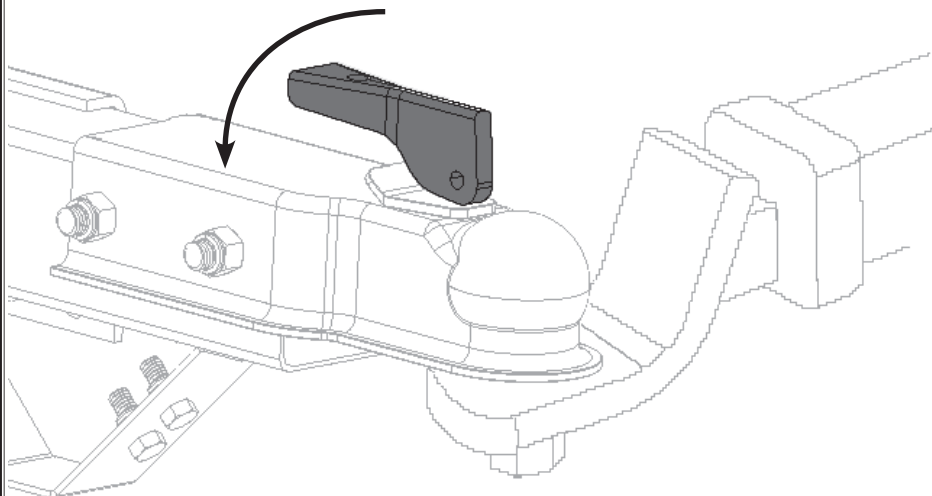
Lift the coupler and place it over the ball.

- Lower the trailer until the coupler fully engages the hitch ball. If the coupler does not line up with the hitch ball, adjust the position of the tow vehicle.
- Engage the coupler locking mechanism. In the engaged position, the locking mechanism securely holds the coupler to the hitch ball.

- Insert a pin or lock through the hole in the locking mechanism.
- Be sure the coupler is all the way on the hitch ball and the locking mechanism is engaged.

If the coupler cannot be secured to the hitch ball, do not tow the trailer. Call your dealer for assistance.

- Lower the trailer so that its entire tongue weight is held by the hitch. Push the safety latch downward to a horizontal position to lock it in place.



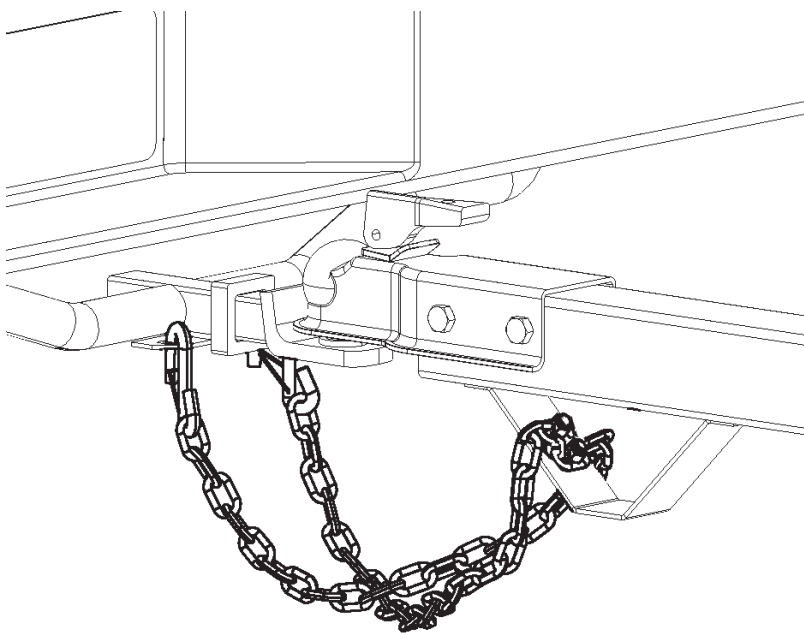
WARNING



Use 30W Motor Oil to lubricate the ball and inside of coupler. Always check ball and coupler before each tow for damaged or worn edges. Damaged balls and couplers should be replaced immediately. Failure to follow this warning could result in property damage, personal injury and death.

6.2.1.4 Rigging the safety chains

- Visually inspect the safety chains and hooks for wear or damage. Replace worn or damaged safety chains and hooks before towing.
- Rig the safety chains so that they:
 1. cross underneath the coupler;
 2. loop around a frame member of the tow vehicle or to holes provided in the hitch system (but, do not attach them to an interchangeable part of the hitch assembly); and
 3. have enough slack to permit tight turns, but not be close to the road surface, so if the trailer uncouples, the safety chains can hold the tongue up above the road.



WARNING



Improper rigging of the safety chains can result in loss of control of the trailer and the tow vehicle, leading to death or serious injury, if the trailer uncouples from the tow vehicle.

- Fasten chains to frame of tow vehicle. Do not fasten chains to any part of the hitch unless the hitch has holes or loops specifically for that purpose.
- Cross chains underneath hitch and coupler with enough slack to permit turning, and to hold tongue up, if the trailer comes loose.

6.2.1.5 Connecting the electrical cables

Connect the trailer lights to the tow vehicle's electrical system using the electrical connectors.

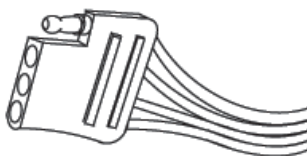
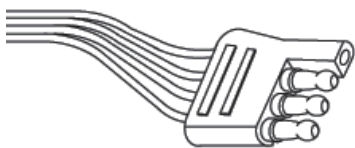
- Check all lights for proper operation.
 1. Clearance and Running Lights (Turn on tow vehicle headlights).
 2. Brake Lights (Step on tow vehicle brake pedal).
 3. Turn Signals (Operate tow vehicle directional signal lever).
 4. Backup Lights (Put tow vehicle gear shift into reverse).



Warning: To ensure your trailer lights function properly, firmly insert the **Male Plug (Trailer)** into the **Female Receptor (Tow Vehicle)**.

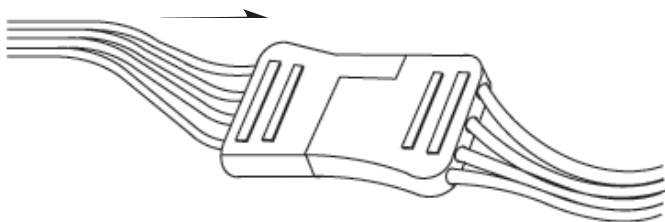
From Trailer

From Tow Vehicle



From Trailer

From Tow Vehicle



WARNING

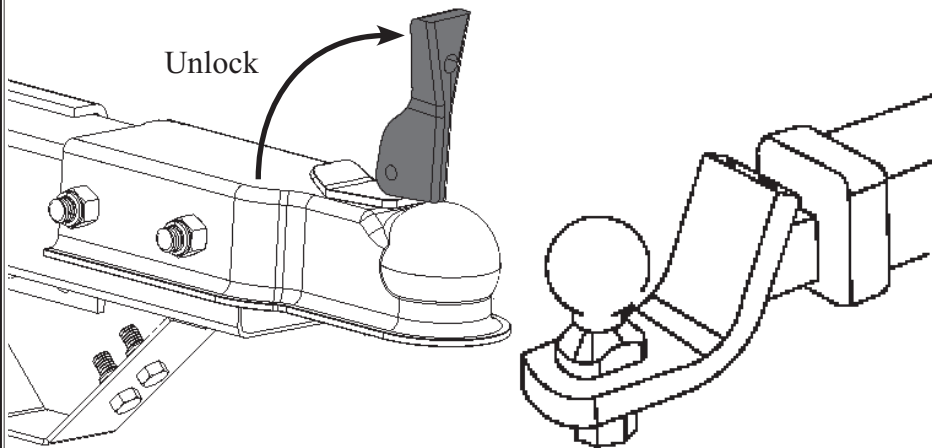


Check the connection periodically to ensure tail and break lights function properly. Failure to follow this warning could result in property damage, personal injury and death.

6.2.1.6 Uncoupling the Trailer

Follow these steps to uncouple your ball hitch trailer from the tow vehicle:

1. Block trailer tires to prevent the trailer from rolling.
2. Place wood or concrete blocks under the coupler for support.
3. Disconnect the electrical connector.
4. Disconnect the safety chains from the tow vehicle.
5. Unlock the coupler and pull the safety latch upward to a vertical position and use a jack to lift the trailer off the ball.



SECTION 7: TIRE & SAFETY INFORMATION

CHECKING & CHANGING TIRES

7.1 Determining Correct Load Limit – Trailer

7.1.1 Trailers 10,000 Pounds GVWR or Less

1. Locate the statement, “The weight of cargo should never exceed XXX kg or XXX lb.,” on your vehicle’s placard.
2. This 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.

The trailer’s placard refers to the Tire Information Placard attached adjacent to or near the trailer’s VIN (Certification) label at the left front of the trailer.

7.2 Determining Correct Load Limit – Tow Vehicle

1. Locate the statement, “The combined weight of occupants and cargo should never exceed XXX lb.,” on your vehicle’s placard.
2. Determine the combined weight of the driver and passengers who will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.
4. The resulting figure equals the available amount of cargo and luggage capacity. For example, if the “XXX” amount equals 1400 lb. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage capacity is 650 lb. $(1400 - 750 (5 \times 150) = 650 \text{ lb.})$.
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage capacity calculated in Step # 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult the tow vehicle’s manual to determine how this weight transfer reduces the available cargo and luggage capacity of your vehicle.

7.3 Glossary of Tire Terminology

Accessory weight: The combined weight (in excess of those standard items which may be replaced) 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 (whether installed or not).

Bead: The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim.

Bead separation: This is the breakdown of the bond between components in the bead.

Bias ply tire: A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the center line of the tread.

Carcass: The tire structure, except tread and sidewall rubber which, when inflated, bears the load.

Chunking: The breaking away of pieces of the tread or sidewall.

Cold inflation pressure: The pressure in the tire before you drive.

Cord: The strands forming the plies in the tire.

Cord separation: The parting of cords from adjacent rubber compounds.

Cracking: Any parting within the tread, sidewall, or inner liner of the tire extending to cord material.

CT: A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire.

Curb weight: 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.

Extra load tire: A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

Groove: The space between two adjacent tread ribs.

Inner liner: The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.

Inner-liner separation: The parting of the inner liner from cord material in the carcass.

Intended outboard sidewall The sidewall that contains a white-wall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire or the outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle.

Light truck (LT) tire: A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

Load rating: The maximum load that a tire is rated to carry for a given inflation pressure.

Maximum load rating: The load rating for a tire at the maximum permissible inflation pressure for that tire.

Maximum permissible inflation pressure: The maximum cold inflation pressure to which a tire may be inflated.

Maximum loaded vehicle weight: The sum of curb weight, accessory weight, vehicle capacity weight, and production options weight.

Measuring rim: The rim on which a tire is fitted for physical dimension requirements.

Non-pneumatic rim: A mechanical device which, when a non-pneumatic tire assembly incorporates a wheel, supports the tire, and attaches, either integrally or separately, to the wheel center member and upon which the tire is attached.

Non-pneumatic spare tire assembly: A non-pneumatic tire assembly intended for temporary use in place of one of the pneumatic tires and rims that are fitted to a passenger car in compliance with the requirements of this standard.

Non-pneumatic tire: A mechanical device which transmits, either directly or through a wheel or wheel center member, the vertical load and tractive forces from

the roadway to the vehicle, generates the tractive forces that provide the directional control of the vehicle and does not rely on the containment of any gas or fluid for providing those functions.

Non-pneumatic tire assembly: A non-pneumatic tire, alone or in combination with a wheel or wheel center member, which can be mounted on a vehicle.

Normal occupant weight: This means 68 kilograms (150 lb.) times the number of occupants specified in the second column of Table I of 49 CFR 571.110.

Occupant distribution: The distribution of occupants in a vehicle as specified in the third column of Table I of 49 CFR 571.110.

Open splice: Any parting at any junction of tread, sidewall, or inner liner that extends to cord material.

Outer diameter: The overall diameter of an inflated new tire.

Overall width: The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs.

Ply: A layer of rubber-coated parallel cords.

Ply separation: A parting of rubber compound between adjacent plies.

Pneumatic tire: A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

Production options weight: The combined weight of those installed regular production options weighing over 2.3 kilograms (5 lb.) 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.

Radial ply tire: A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the center line of the tread.

Recommended inflation pressure: This is the inflation pressure provided by the vehicle manufacturer on the Tire Information label and on the Certification / VIN tag.

Reinforced tire: A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

Rim: A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

Rim diameter: This means the nominal diameter of the bead seat.

Rim size designation: This means the rim diameter and width.

Rim type designation: This means the industry of manufacturer's designation for a rim by style or code.

Rim width: This means the nominal distance between rim flanges.

Section width: The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands.

Sidewall: That portion of a tire between the tread and bead.

Sidewall separation: The parting of the rubber compound from the cord material in the sidewall.

Special Trailer (ST) tire: The "ST" is an indication the tire is for trailer use only.

Test rim: The rim on which a tire is fitted for testing, and may be any rim listed as

appropriate for use with that tire.

Tread: That portion of a tire that comes into contact with the road.

Tread rib: A tread section running circumferentially around a tire.

Tread separation: Pulling away of the tread from the tire carcass.

Tread-wear indicators (TWI): The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread.

Vehicle capacity weight: The rated cargo and luggage load plus 68 kilograms (150 lb.) times the vehicle's designated seating capacity.

Vehicle maximum load on the tire: The 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: The 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 (distributed in accordance with Table I of CRF 49 571.110) and dividing by 2.

Weather side: The surface area of the rim not covered by the inflated tire.

Wheel center member: In the case of a non-pneumatic tire assembly incorporating a wheel, a mechanical device which attaches, either integrally or separably, to the non-pneumatic rim and provides the connection between the non-pneumatic rim and the vehicle; or, in the case of a non-pneumatic tire assembly not incorporating a wheel, a mechanical device which attaches, either integrally or separably, to the non-pneumatic tire and provides the connection between tire and the vehicle.

Wheel-holding fixture: The fixture used to hold the wheel and tire assembly securely during testing.

7.4 Tire Safety - Everything Rides on It

The National Traffic Safety Administration (NHTSA) has published a brochure (DOT HS 809 361) that discusses all aspects of Tire Safety, as required by CFR 575.6.

This brochure is reproduced in part below. It can be obtained and downloaded from NHTSA, free of charge, from the following web site:

http://www.nhtsa.dot.gov/cars/rules/TireSafety/ridesonit/tires_index.html

Studies of tire safety show that maintaining proper tire pressure, observing tire and vehicle load limits (not carrying more weight in your vehicle than your tires or vehicle can safely handle), avoiding road hazards, and inspecting tires for cuts, slashes, and other irregularities are the most important things you can do to avoid tire failure, such as tread separation or blowout and flat tires. These actions, along with other care and maintenance activities, can also:

- Improve vehicle handling
- Help protect you and others from avoidable breakdowns and accidents
- Improve fuel economy
- Increase the life of your tires.

This booklet presents a comprehensive overview of tire safety, including information on the following topics:

- Basic tire maintenance

- Uniform Tire Quality Grading System
- Fundamental characteristics of tires
- Tire safety tips.

Use this information to make tire safety a regular part of your vehicle maintenance routine. Recognize that the time you spend is minimal compared with the inconvenience and safety consequences of a flat tire or other tire failure.

7.4.1 Safety first—Basic tire maintenance

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Under-inflated tires and overloaded vehicles are a major cause of tire failure. Therefore, as mentioned above, to avoid flat tires and other types of tire failure, you should maintain proper tire pressure, observe tire and vehicle load limits, avoid road hazards, and regularly inspect your tires.

7.4.2 Finding your vehicle's recommended tire pressure and load limits

Tire information placards and vehicle certification labels contain information on tires and load limits. These labels indicate the vehicle manufacturer's information including:

- Recommended tire size
- Recommended tire inflation pressure
- Vehicle capacity weight (VCW—the maximum occupant and cargo weight a vehicle is designed to carry)
- Front and rear gross axle weight ratings (GAWR—the maximum weight the axle systems are designed to carry).

Both placards and certification labels are permanently attached to the trailer near the left front.

7.4.3 Understanding tire pressure and load limits

Tire inflation pressure is the level of air in the tire that provides it with load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure—measured in pounds per square inch (psi)—a tire requires to be properly inflated. (You will also find this number on the vehicle information placard expressed in kilopascals (kPa), which is the metric measure used internationally.)

Manufacturers of passenger vehicles and light trucks determine this number based on the vehicle's design load limit, that is, the greatest amount of weight a vehicle can safely carry and the vehicle's tire size. The proper tire pressure for your vehicle is referred to as the "recommended cold inflation pressure." (As you will read below, it is difficult to obtain the recommended tire pressure if your tires are not cold.)

Because tires are designed to be used on more than one type of vehicle, tire manufacturers list the "maximum permissible inflation pressure" on the tire sidewall. This number is the greatest amount of air pressure that should ever be

put in the tire under normal driving conditions.

7.4.4 Checking tire pressure

It is important to check your vehicle's tire pressure at least once a month for the following reasons:

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a pothole or other object or if you strike the curb when parking.
- With radial tires, it is usually not possible to determine under-inflation by visual inspection.

For convenience, purchase a tire pressure gauge to keep in your vehicle. Gauges can be purchased at tire dealerships, auto supply stores, and other retail outlets. The recommended tire inflation pressure that vehicle manufacturers provide reflects the proper psi when a tire is cold. The term cold does not relate to the outside temperature. Rather, a cold tire is one that has not been driven on for at least three hours. When you drive, your tires get warmer, causing the air pressure within them to increase. Therefore, to get an accurate tire pressure reading, you must measure tire pressure when the tires are cold or compensate for the extra pressure in warm tires.

7.4.5 Steps for maintaining proper tire pressure

- Step 1: Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the owner's manual.
- Step 2: Record the tire pressure of all tires.
- Step 3: If the tire pressure is too high in any of the tires, 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.
- Step 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.
- Step 5: At a service station, add the missing pounds of air pressure to each tire that is under-inflated.
- Step 6: Check all the tires to make sure they have the same air pressure (except in cases in which the front and rear tires are supposed to have different amounts of pressure).

If you have been driving your vehicle and think that a tire is under-inflated, fill it to the recommended cold inflation pressure indicated on your vehicle's tire information placard or certification label. While your tire may still be slightly under-inflated due to the extra pounds of pressure in the warm tire, it is safer to drive with air pressure that is slightly lower than the vehicle manufacturer's recommended cold inflation pressure than to drive with a significantly under-inflated tire. Since this is a temporary fix, don't forget to recheck and adjust the tire's pressure when you can obtain a cold reading.

7.4.6 Tire size

To maintain tire safety, purchase new tires that are the same size as the vehicle's

original tires or another size recommended by the manufacturer. Look at the tire information placard, the owner's manual, or the sidewall of the tire you are replacing to find this information. If you have any doubt about the correct size to choose, consult with the tire dealer.

7.4.7 Tire tread

The tire tread provides the gripping action and traction that prevent your vehicle from slipping or sliding, especially when the road is wet or icy. In general, tires are not safe and should be replaced when the tread is worn down to 1/16 of an inch. Tires have built-in tread-wear indicators that let you know when it is time to replace your tires. These indicators are raised sections spaced intermittently in the bottom of the tread grooves. When they appear "even" with the outside of the tread, it is time to replace your tires. Another method for checking tread depth is to place a penny in the tread with Lincoln's head upside down and facing you. If you can see the top of Lincoln's head, you are ready for new tires.

7.4.8 Tire balance and wheel alignment

To avoid vibration or shaking of the vehicle when a tire rotates, the tire must be properly balanced. This balance is achieved by positioning weights on the wheel to counterbalance heavy spots on the wheel-and-tire assembly. A wheel alignment adjusts the angles of the wheels so that they are positioned correctly relative to the vehicle's frame. This adjustment maximizes the life of your tires. These adjustments require special equipment and should be performed by a qualified technician.

7.4.9 Tire repair

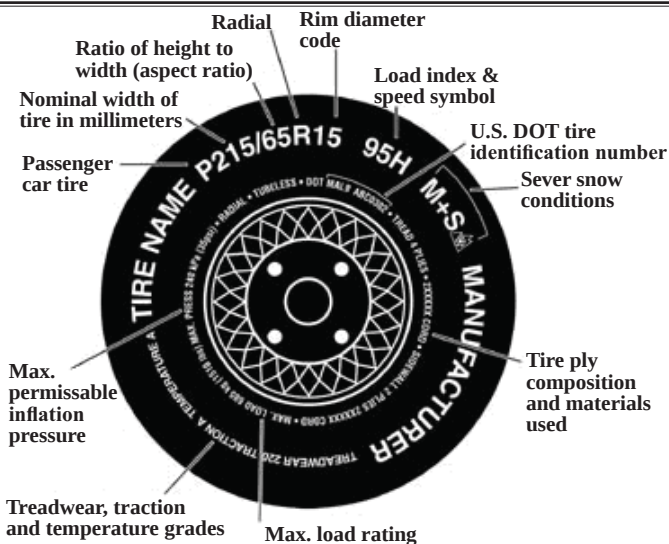
The proper repair of a punctured tire requires a plug for the hole and a patch for the area inside the tire that surrounds the puncture hole. Punctures through the tread can be repaired if they are not too large, but punctures to the sidewall should not be repaired. Tires must be removed from the rim to be properly inspected before being plugged and patched.

7.4.10 Tire Fundamentals

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a tire identification number for safety standard certification and in case of a recall.

7.4.10.1 Information on Passenger Vehicle Tires

Please refer to the diagram on the next page.



P: The “P” indicates the tire is for passenger vehicles.

Next number: This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

Next number: This two-digit number, known as the aspect ratio, gives the tire’s ratio of height to width. Numbers of 70 or lower indicate a short sidewall for improved steering response and better overall handling on dry pavement.

R: The “R” stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

Next number: This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

Next number: This two- or three-digit number is the tire’s load index. It is a measurement of how much weight each tire can support. You may find this information in your owner’s manual. If not, contact a local tire dealer. Note: You may not find this information on all tires because it is not required by law.

M+S: The “M+S” or “M/S” indicates that the tire has some mud and snow capability. Most radial tires have these markings; hence, they have some mud and snow capability.

Speed Rating: The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. The ratings range from 99 miles per hour (mph) to 186 mph. These ratings are listed below. Note: You may not find this information on all tires because it is not required by law.

* For tires with a maximum speed capability over 149 mph, tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph, tire manufacturers always use the letters ZR.

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 the tire was built. For example, the numbers 3197 means the 31st week of 1997. The other numbers are marketing codes used at the manufacturer's discretion. This information is used to contact consumers if a tire defect requires a recall.

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 Load Rating: This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

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.

7.4.10.2 UTQGS Information

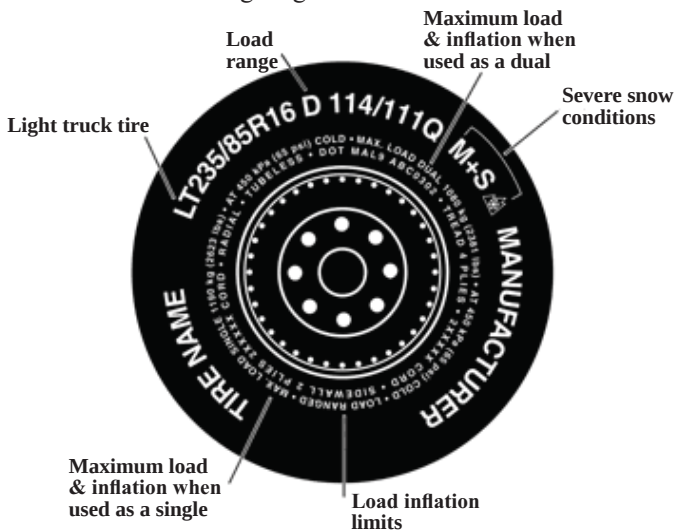
Tread-wear Number: This number indicates the tire's wear rate. The higher the tread-wear number is, the longer it should take for the tread to wear down. For example, a tire graded 400 should last twice as long as a tire graded 200.

Traction Letter: This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

Temperature Letter: This letter indicates a tire's resistance to heat. The temperature grade is for a tire that is inflated properly and not overloaded. Excessive speed, under inflation or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or "C".

7.4.10.3. Additional Information on Light Truck Tires

Please refer to the following diagram:



Tires for light trucks have other markings besides those found on the sidewalls of passenger tires.

LT: The “LT” indicates the tire is for light trucks or trailers.

ST: An “ST” is an indication the tire is for trailer use only.

Max. Load Dual kg (lb) at kPa (psi) Cold: This information indicates the maximum load and tire pressure when the tire is used as a dual, that is, when four tires are put on each rear axle (a total of six or more tires on the vehicle).

Max. Load Single kg (lb) at kPa (psi) Cold: This information indicates the maximum load and tire pressure when the tire is used as a single.

Load Range: This information identifies the tire’s load-carrying capabilities and its inflation limits.

7.4.11 Tire Safety Tips

7.4.11.1 Preventing Tire Damage

- Slow down if you have to go over a pothole or other object in the road.
- Do not run over curbs or other foreign objects in the roadway, and try not to strike the curb when parking.

7.4.11.2 Tire Safety Checklist

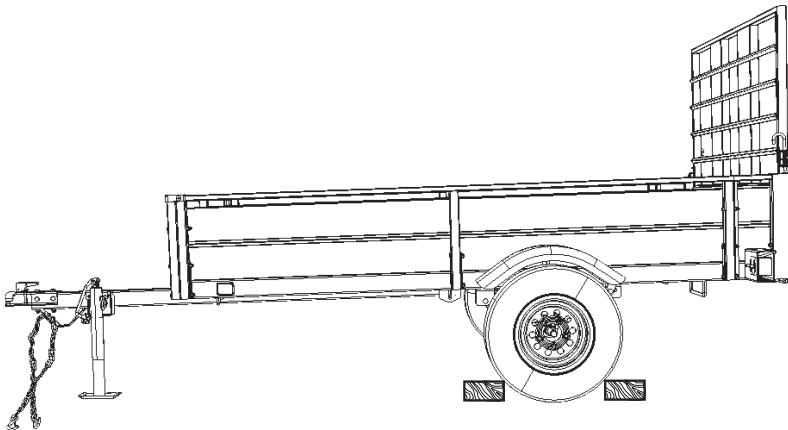
- Check tire pressure regularly (at least once a month), including the spare.
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma.
- Remove bits of glass and foreign objects wedged in the tread.
- Make sure your tire valves have valve caps.
- Check tire pressure before going on a long trip.
- Do not overload your vehicle.

7.5 Changing a Flat Tire

7.5.1 If possible, get the Trailer on level ground.

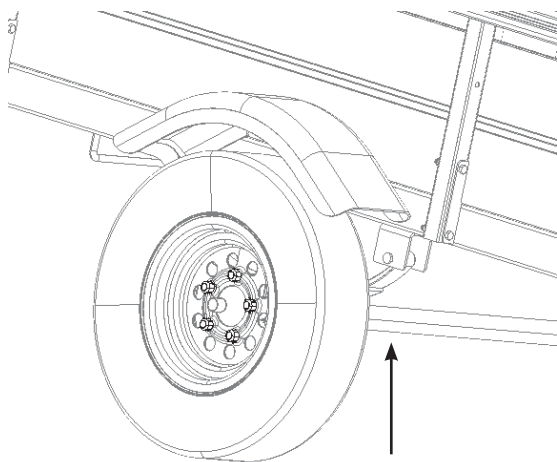
7.5.2 If possible, keep the Trailer coupled to the Tow Vehicle and engage the Tow Vehicle’s emergency brake. If Tow Vehicle is not coupled to the Trailer, lower the **Tongue Jack** and secure in place with **Locking Pin**. See the section “Trailer Features” for instructions on using the Tongue Jack.

7.5.3 Chock the Wheel you are **not** changing with bricks or wooden blocks.



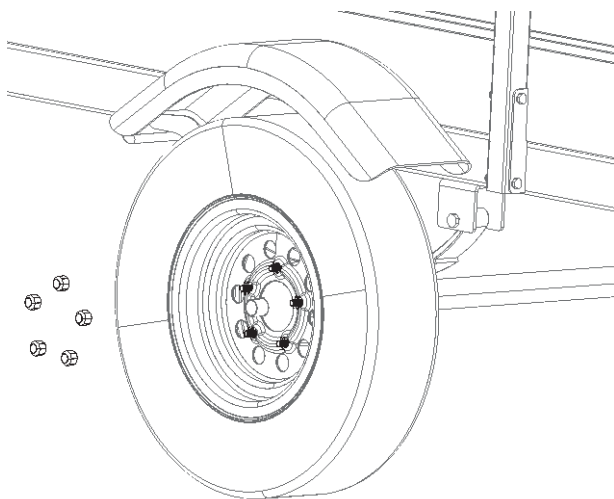
7.5.4 Place a **Tire Jack** under the part of the axel near the flat tire.

7.5.5 Jack up the axle to lift the wheel a few inches off the ground.



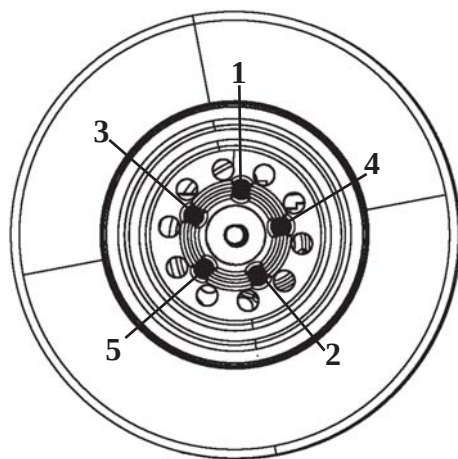
Place a Tire Jack here.

7.5.6 Remove the Lug Nuts and Wheel.



7.5.7 Place **Spare Tire** on the axle and tighten **Lug Nuts** between 95 - 120 ft/lb. Do not exceed 120 ft./lb.

7.5.8 Tighten **Lug Nuts** in the following sequence:



7.5.9 Lower **Tire Jack** and remove from under **Trailer**.

7.5.10 Raise the **Tongue Jack** and secure in place with **Locking Pin**. See the section “Trailer Features” for instructions on using the Tongue Jack.



WARNING



Never crawl under a trailer on jacks. The trailer could slip off the jack or the jack could fail resulting in serious injury or death.



WARNING



Lug nuts are prone to loosen after initial installation, which can lead to death or serious injury.

Check lug nuts for tightness on a new trailer or when wheel(s) have been remounted after the first 10, 25 and 50 miles of driving and after any impact.

Lug nuts for the tires must be tightened by the user before each use. Lifetime Products cannot be held responsible for damages caused by loosened lug nuts.

7.6 Checking the Tire Pressure

Always check the tire pressure before each tow. Use a pressure gauge to ensure proper tire pressure. The tires provided with your Trailer should be filled to **80 psi**. Tire pressure must be checked when the tire is cold. If the trailer has been towed for at least one mile, allow at least three hours after a tow for the tire to cool before checking the pressure.



WARNING



To help ensure long tread life and your safety. Always check tire pressure to ensure optimum life and performance from your tires. The tires that came with your trailer should have a tire pressure of 80 psi. Lifetime Products cannot be held responsible for damages caused by uneven tread wear and blow outs from an under-inflated or over-inflated tire.”

SECTION 8: LOADING THE TRAILER

LOADING THE CARGO

Improper trailer loading causes many accidents and deaths. To safely load a trailer, you must consider:

- Overall load weight;
- Load weight distribution;
- Proper tongue weight; and
- Securing the load properly.

To determine that you have loaded the trailer within its rating, you must consider the distribution of weight, as well as the total weight of the trailer and its contents. The trailer axles carry most of the total weight of the trailer and its contents (Gross Vehicle Weight, or “GVW”). The remainder of the total weight is carried by the tow vehicle hitch. For safe towing, it is essential that the trailer tongue and tow vehicle hitch carry the proper amount of the loaded trailer weight, otherwise the trailer can suddenly sway wildly at towing speed. Read the “Tongue Weight” section below.

The load distribution must be such that no component part of the trailer is loaded beyond its rating. This means that you must consider the rating of the tires, wheels and axles. For tandem and triple axle trailers, you must make sure that the front-to-rear load distribution does not result in overloading any axle.

Towing stability also depends on keeping the center of gravity as low as possible. Load heavy items on the floor and over the axles. When loading additional items, be sure to maintain even side-to-side weight distribution and proper tongue weight. The total weight of the trailer and its contents must never exceed the total weight rating of the trailer (Gross Vehicle Weight Rating, or “GVWR”).



WARNING



An overloaded trailer can result in loss of control of the trailer, leading to death or serious injury.

Do not load a trailer so that the weight on any tire exceeds its rating.

Do not exceed the trailer Gross Vehicle Weight Rating (GVWR) or an axle Gross Axle Weight Rating (GAWR).

Tongue Weight

It is critical to have a portion of the trailer load carried by the tow vehicle. That is, the trailer tongue must exert a downward force on the hitch. This is necessary for two reasons. First, the proper amount of tongue weight is necessary for the tow vehicle to be able to maintain control of the tow vehicle/trailer system. If, for example, the

tongue exerts an upward pull on the hitch, instead of pushing down on it (because the trailer is overloaded behind its axle(s)), the rear wheel of the tow vehicle can lose traction or grip and cause loss of control. Also, even if there is some weight on the tongue, but not enough weight on the tongue, the trailer can suddenly become unstable at high speeds.

If, on the other hand, there is too much tongue weight, the front wheels of the tow vehicle can be too lightly loaded and cause loss of steering control and traction, as well, if the front wheels are driving.

In addition to tow vehicle control, tongue weight is necessary to insure that the trailer axle(s) do not exceed their Gross Axle Weight Rating (GAWR).

The table below has “rules of thumb” for proper tongue weight.

In the table below, the second column notes the rule of thumb percentage of total weight of the trailer plus its cargo (Gross Vehicle Weight, or “GVW”) that should appear on the tongue of the trailer. For example, a trailer with a ball hitch and a loaded weight of 1,000 pounds, should have 10-15% of 1,000 pounds on the tongue. That is, the example trailer would have no more than 100 to 150 pounds on its tongue.

Tongue Weight as a Percentage of Loaded Trailer Weight	
Type of Hitch	Percentage
Ball Hitch (or Bumper Hitch)	10–15%

**WARNING**

Never go under the trailer unless it has been properly supported with jack stands that have been rated for the load. Without being properly supported, the trailer may fall suddenly which may result in serious injury or death.”

**WARNING**

Improper tongue weight (load distribution) can result in loss of control of the trailer, leading to death or serious injury. Make certain that tongue weight is within the allowable range. Be sure to:

- Distribute the load front-to-rear to provide proper tongue weight (see chart);
- Distribute the load evenly, right and left, to avoid tire overload; and
- Keep the center of gravity low.

8.1. Checking the Tongue Weight

To check the tongue weight, the tow vehicle and trailer must be on level ground, as they will be when the trailer is being towed.

If you know the weight on your tow vehicle axles when you are not towing a trailer, trailer tongue weight can be determined with the use of a truck axle scale.

The recommended method of checking tongue weight is to use an accessory called a “tongue weight scale.” If a tongue weight scale is not available, you can check the tongue weight using a bathroom scale.

Using a bathroom scale to check tongue weight: The loaded trailer must be on a smooth and level surface, and you must block the trailer wheels, front and rear.

8.1.1 Checking Tongue Weight — Using a lever and bathroom scale



WARNING



An unrestrained trailer can fall off its support, resulting in serious injury or death.

Before checking tongue weight, block trailer wheels, front and rear.

- Raise the tongue of the trailer with the tongue jack.
- Place a bathroom scale on the ground, directly below the coupler.
- Place a strong block support (such as a cement block) on the scale – note the scale reading for the weight of the block support.
- Lower the tongue until the coupler rests on the block support and the jack is $\frac{1}{2}$ inch above the ground.
- The scale reading, minus the weight of the block support is the tongue weight.

8.2 Securing the Cargo

Since the trailer “ride” can be bumpy and rough, you must secure your cargo so that it does not shift while the trailer is being towed.



WARNING



Shifting cargo can result in loss of control of the trailer, and can lead to death or serious injury.

Tie down all loads with proper sized fasteners, ropes, straps, etc.

8.2.1 Loading Cargo

Couple the trailer to the tow vehicle before loading. This is essential because the tongue can rise during loading, before the cargo is properly distributed. To measure the tongue weight, you will have to uncouple the trailer after it is loaded.

Do not transport people in the trailer. Do not transport containers of hazardous substances, cans or containers of flammable substances, such as gasoline,

kerosene, paint, etc. However, fuel in the tank of an off-road vehicle, or a car or motorcycle, etc. may be carried on your open trailer.



WARNING



Do not transport flammable, explosive, poisonous or other dangerous materials in your trailer. Failure to heed this warning could result in property damage, serious injury and death.

Exceptions:

- Fuel in the tanks of vehicles that are being towed
- Fuel stored in proper containers used in trailer living quarters for cooking
- Fuel stored in the tank of an on-board generator

8.2.1.1 Preparing the Trailer for Loading

Before loading cargo onto the trailer:

- inspect the deck of the trailer for corrosion or damage; and
- inspect the hold down openings and/or “D”-rings. Hold down openings must be sturdy with no visible cracks or kinks. D-rings must be tight to the deck and must not be bent.

If the deck or any required hold-down is damaged, do not load the cargo. Bring the trailer to your dealer or a competent repair service before using it to carry cargo.



WARNING



Damaged or loose “D”-rings can break, allowing cargo to become loose inside the trailer. Loose cargo can shift the center of gravity, and result in loss of control of the trailer.

Inspect “D”-rings, and test them for looseness before loading cargo.

Do not use a damaged or loose “D”-ring to secure cargo.

Failure to heed this warning could result in property damage, serious injury and death.

8.2.1.2 Loading the Trailer

Before loading the trailer, couple the trailer to the tow vehicle and ensure the deck is level. Do not load or unload the trailer when the deck is not level.

1. Ensure the top of the ramp (or ramps) is secure to the trailer, and the bottom is resting on firm ground. Pockets may be provided to hold the ramp to the frame of the trailer.
2. Load the cargo onto the trailer.
3. Secure the cargo to the trailer using appropriate straps, chains and tensioning devices.

Since the trailer “ride” can be bumpy and rough, you must secure your cargo so

that it does not shift while the trailer is being towed.



WARNING



Load can suddenly move or topple, which can result in death or serious injury.

Do not load or unload your open trailer unless it is prevented from tipping and is on firm and level ground.

4. Return the ramp(s) to their stowed position(s), and secure them so that they will not move during transit.



WARNING



Shifting cargo can result in loss of control of the trailer, and can lead to death or serious injury.

Tie down all loads with proper sized fasteners, ropes, straps, etc.



WARNING



Do NOT use the Gate for tie-down locations. All articles being towed must be tied to the side walls of the Trailer. Gate can dislodge causing property damage and possible injury or death to other motorists and pedestrians.



WARNING



Do not transport people in the trailer. Failure to heed this warning could result in serious injury such as broken bones, brain damage, paralysis or death.

SECTION 9: CHECK TRAILER BEFORE & DURING TOWING

PRE-TOW CHECKLIST

9.1 Before Towing, Double Check All These Items:

- Tires, wheels and lug nuts (see the section “Breaking in New Trailer” and the section “Tire & Safety Information”).
- Coupler secured and locked (see the section “Coupling to the Tow Vehicle”)
- Safety chains properly rigged to tow vehicle, not to hitch or ball (see the section “Coupling to the Tow Vehicle” of this manual)
- Test of lights: Tail, Stop, Turn and Backup
- Cargo properly loaded, balanced and tied down (see the section “Loading the Trailer” of this manual)
- Tongue weight
- Doors and gates latched and secured
- Flares and reflectors



WARNING



An improperly coupled trailer can result in death or serious injury.

Do not move the trailer until:

- The coupler is secured and locked to hitch;
- The safety chains are secured to the tow vehicle; and
- The trailer jack(s) are fully retracted.

Do not tow the trailer on the road until:

- Tires and wheels are checked;
- The load is secured to the trailer; and
- The trailer lights are connected and checked.

MAKE REGULAR STOPS

9.2 After Each 50 Miles, or One Hour of Towing, Stop and Check the Following Items:

- Coupler secured
- Safety chains are fastened and not dragging
- Cargo secured
- Cargo door latched and secured



WARNING



Since roads can be bumpy and rough, lug nuts can loosen over time and even separate from the wheel and possibly causing the separation of the wheel from the trailer. The lug nuts must be tightened by the user before each use.

The tires must be maintained at the proper tire pressure before each use. Lifetime cannot be held responsible for damages caused by loosened lugnuts, or uneven tread wear and blow outs from an under inflated or over inflated tire.

Failure to heed these warnings could result in personal injury, property damage and death.



WARNING



Do NOT use the Gate for tie-down locations. All articles being towed must be tied to the side walls of the Trailer. Gate can dislodge causing property damage and possible injury or death to other motorists and pedestrians.

Follow local and state speed limit laws, but do **not** exceed 65 mph.



WARNING



Do not transport people in the trailer. Failure to heed this warning could result in serious injury such as broken bones, brain damage, paralysis or death.

SECTION 10: BREAKING IN A NEW TRAILER

LUG NUTS & TIRE PRESSURE

10.1 Retightening Lug Nuts at First 10, 25 & 50 Miles

Wheel lugs can shift and settle quickly after being first assembled, and must be checked after the first 10, 25 and 50 miles of driving and after any impact. Failure to perform this check may result in a wheel coming loose from the trailer, causing a crash leading to death or serious injury.



WARNING



Lug nuts are prone to loosen after initial installation, which can lead to death or serious injury.

Check lug nuts for tightness on a new trailer or when wheel(s) have been remounted after the first 10, 25 and 50 miles of driving and after any impact.



WARNING



The lug nuts for the tires must be tightened by the user before each use. The tires must be maintained at the proper tire pressure before each use. Lifetime cannot be held responsible for damages caused by loosened lugnuts, or uneven tread wear and blow outs from an under-inflated or over-inflated tire.

Failure to heed this warning could result in property damage, serious injury and death.



WARNING



If tow vehicle brakes do not work properly, death or serious injury can occur.

Road test your tow vehicle's brakes in a safe area at no more than 30 mph before each tow.

10.2 Tire Pressure

Check the pressure in each tire to ensure tire is set to the tire manufacturers recommended pressure. The tires that came with your trailer should be filled to 80 psi. Use a tire gauge to get an accurate reading. You should check the pressure before each tow.

SECTION 11: MAINTENANCE

INSPECTION, SERVICE & MAINTENANCE

11.1 Inspection, Service & Maintenance Summary Charts

You must inspect, maintain and service your trailer regularly to insure safe and reliable operation. If you cannot or are unsure how to perform the items listed here, have your dealer do them.

Note: In addition to this manual, also check the relevant component manufacturer's manual.

Inspection and Service before Each Use

Item	Inspection/Service	Manual Section Reference
Coupler and Hitch Ball	Check for cracks, pits, and flats. Replace w/ball & coupler having trailer GVW Rating Grease Check locking device & replace	Section 11.2.3.1
Safety Chain(s) & Hooks	Check for wear and damage	Sections 9.1 & 9.2
Tires • Air Pressure	Check tire pressure when cold Inflate tires to 80 psi	Sections 7.6, 10.2 & 11.2.6
Wheels • Lug Nuts (Bolts) & Hub	Check for tightness Tighten to 95 - 120 ft/lb. Do not exceed 120 ft./lb. For new and remounted wheels, check torque after first 10, 25 & 50 miles of driving and after any impact	Section 7.5.7 & 10.1 Sections 11.2.8, 11.2.8.1 & 11.2.9

Inspection and Service each 3 Months or 3,000 Miles

Item	Inspection/Service	Manual Section Reference
Structure • Hinges, Doors	Inspect. Repair or replace damaged, worn or broken parts	Section 11.2.3.1, 11.2.4 & 11.2.2.1
Wheels • Rims	Inspect for dents, damage or out of round	11.2.7
Tires	Inspect for cuts wear and bulging Basic tire maintenance	Sections 7.4, 7.4.1, 7.4.2, 7.4.3, 7.4.4, 7.4.5, 7.4.6, 7.4.7, 7.4.8, 7.4.9, 7.4.10, 7.4.11, 7.6 & 11.2.6

Inspection and Service each 6 Months or 6,000 Miles

Item	Inspection/Service	Manual Section Reference
Tires	Rotate @ 5,000 miles	Section 11.2.6

Wheels • UNSEALED Bearings (Hubs)	Check and confirm free running. Replace if not. Disassemble / inspect / assemble and repack. Replace promptly if immersed in water	Section 11.2.7 & 11.2.8 Section 11.2.8.1 See Axle Mfr's Manual
Inspection and Service each 6 Months or 6,000 Miles		
Suspension	Inspect for bending loose fasteners, wear	See Suspension Manufacturer's Manual

Inspection and Service Each Year or 12,000 Miles		
Item	Inspection/Service	Manual Section Reference
Structure • Frame members • Welds • Slide-out	Inspect all frame members, bolts & rivets. Repair or replace damaged, worn or broken parts. Inspect all welds. Repair as needed Clean dirt build-up. Lubricate slides, shafts and gears	Section 11.2.2 Section 11.2.2.1 Section 11.2.2.2
Structure • Axle Attachment Bolts	Check BY DEALER	Section 11.2.1 See Axle Manufacturer's Manual

11.2 Inspection and Service Instructions

11.2.1 Axle Bolts, Frame, Suspension, & Structure



WARNING



Worn or broken suspension parts can cause loss of control and property damage, serious injury and death may result. Have trailer professionally inspected annually and after any impact.

To perform many of the inspection and maintenance activities, you must jack up the trailer.

When jacking and using jack stands, place them so as to clear wiring and suspension parts (springs, torsion bars, etc.). Place jacks and jack stands inside of the perimeter strip on the supporting structure to which the axles are attached.



WARNING



Never crawl under your trailer unless it is on firm and level ground and resting on properly placed and secured jack stands.
Failure to heed this warning could result in property damage, serious injury and death.

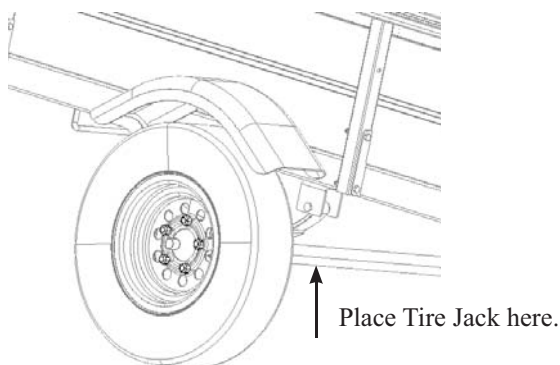


Figure 11 - 1: Jacking Points

11.2.2 Trailer Structure

Because the trailer floor receives the most abuse, it will most likely corrode before any other part of the structure. Using a power washer, wash the floor and walls of the trailer after each use.

11.2.2.1 Fasteners and Frame Members

Inspect all of the fasteners and structural frame members for bending and other damage, cracks, or failure. Repair or replace any damaged fastener and repair the frame member. If you have any questions about the condition or method of repair of fasteners or frame members, get the recommendation of, or have the repair done by, your dealer.

The various fastener types used on your trailer are:

- Bolts, which are used mainly for attaching door and gate hinges to the trailer body;
- Buck Rivets, which are used to attach the sides and roof panels of the body to each other, and to the frame of the trailer; and
- Huck Bolts may be at various locations on the sub-frame. Huck bolts are not user serviceable. If you detect a loose huck bolt fastener, do not tow the trailer. Call your dealer for instructions.



WARNING



Broken or damaged fasteners or welds can cause serious injury, damage to trailer and contents and death. Inspect for, and repair all damaged parts at least once a year.

11.2.2.2 Welds

All welds can crack or fail when subjected to heavy loads or movement of cargo that was not properly tied to prevent movement. Any time you know or suspect the trailer has been subjected to heavy loads or movement of cargo, immediately

inspect the welds and fasteners for damage. To prevent severe damage to your trailer, inspect all of the welds for cracks or failure at least once a year.



WARNING



Improper weld repair will lead to early failure of the trailer structure and can cause serious injury or death. Do not repair cracked or broken welds unless you have the skills and equipment to make a proper repair. If not, have the welds repaired by a certified welder

11.2.3 Trailer Connection to Tow Vehicle

11.2.3.1 Coupler and Ball

The coupler on the trailer connects to the ball attached to the hitch on the tow vehicle. The coupler, ball and hitch transfer the towing forces between the tow vehicle and the trailer. Before each tow, coat the ball with a thin layer of automotive bearing grease to reduce wear and ensure proper operation; and check the locking device that secures the coupler to the ball for proper operation.

If you see or feel evidence of wear, such as flat spots, deformations, pitting or corrosion, on the ball or coupler, immediately have your dealer inspect them to determine the proper action to prevent possible failure of the ball and coupler system. All bent or broken coupler parts must be replaced before towing the trailer.

The coupler handle lever must be able to rotate freely and automatically snap into the latched position. Oil the pivot points, sliding surfaces, and spring ends with SAE 30W motor oil. Keep the ball pocket and latch mechanism clean. Dirt or contamination can prevent proper operation of the latching mechanism.

When replacing a ball, the load rating must match or exceed the GVWR of the trailer.

11.2.4 Landing Leg or Jack

If a grease fitting is present, you must use a grease gun to lubricate the jack mechanism. Grease the gears in the top of hand-cranked jacks once a year, by removing the top of the jack and pumping or hand packing grease into the gears.

11.2.5 Lights and Signals

Before each tow, check the trailer taillights, stoplights, turn signals and any clearance lights for proper operation.



WARNING



Improper operating taillights, stoplights and turn signals can cause collisions. Check all lights before each tow. Failure to heed this warning could result in property damage, serious injury and death.

11.2.6 Tires

Before each tow, be sure the tire pressure is at the value indicated on the sidewall. Tire pressure must be checked while the tire is cold. Do not check the tire pressure immediately after towing the trailer. Allow at least three hours for a tire to cool, if the trailer has been towed for as much as one mile. Replace the tire before towing the trailer if the tire treads have less than 1/16 inch depth or the telltale bands are visible.

A bubble, cut or bulge in a side wall can result in a tire blowout. Inspect both side walls of each tire for any bubble, cut or bulge; and replace a damaged tire before towing the trailer.

Tires do not wear evenly. Depending on the load balance, some will wear faster than others. To help increase the life of your tires, rotate tires every 5000 miles.



WARNING



Worn, damaged or under-inflated tires can cause loss of control, resulting in damage, serious injury and possibly death. Inspect tires before each tow.

11.2.7 Wheel Rims

If the trailer has been struck, or impacted, on or near the wheels, or if the trailer has struck a curb, inspect the rims for damage (e.g., being out of round); and replace any damaged wheel. Inspect the wheels for damage every year, even if no obvious impact has occurred. Also check the tires to ensure they're at the recommended pressure.

11.2.8 Wheels, Bearings and Lug Nuts

To check your bearings, jack trailer and check wheels for side-to-side looseness. If the wheels are loose, or spin with a wobble, the bearings must be serviced or replaced.

Most trailer axles are built with sealed bearings that are not serviceable. Sealed bearings must be replaced as complete units.

11.2.8.1 Unsealed Bearings (Hubs)

You must inspect and lubricate the bearings once a year or every 12,000 miles to insure safe operation of your trailer.

If a trailer wheel bearing is immersed in water, it must be replaced.

If your trailer has not been used for an extended amount of time, have the bearings inspected and packed more frequently, at least every six months and prior to use.

Follow the steps below to disassemble and service the UNSEALED wheel

bearings.

- After removing the grease cap, cotter pin, spindle nut and spindle washer, remove the hub and drum to inspect the bearings for wear and damage.
- Replace bearings that have flat spots on rollers, broken roller cages, rust or pitting. Always replace bearings and cups in sets. The inner and outer bearings are to be replaced at the same time.
- Replace seals that have nicks, tears or wear.
- Lubricate the bearings with a high quality EP-2 automotive wheel bearing grease.

Every time the wheel hub is removed and the bearings are reassembled, follow the steps below to check the wheel bearings for free running and adjust.

- Turn the hub slowly, by hand, while tightening the spindle nut, until you can no longer turn the hub by hand.
- Loosen the spindle nut just until you are able to turn it (the spindle nut) by hand. Do not turn the hub while the spindle nut is loose.
- Put a new cotter pin through the spindle nut and axle.
- Check the adjustments. Both the hub and the spindle nut should be able to move freely (the spindle nut motion will be limited by the cotter pin).

11.2.9 Lug Nuts (Bolts)

Lug nuts are prone to loosen right after a wheel is mounted to a hub. When driving on a remounted wheel, check to see if the lug nuts are tight after the first 10, 25 and 50 miles of driving and before each tow thereafter.



WARNING



Lug nuts are prone to loosen after initial installation, which can lead to death or serious injury.

Check lug nuts for tightness on a new trailer or when wheel(s) have been remounted after the first 10, 25 and 50 miles of driving.



WARNING



Metal creep between the wheel rim and lug nuts will cause rim to loosen and could result in a wheel coming off, leading to death or serious injury. Tighten lug nuts before each tow.

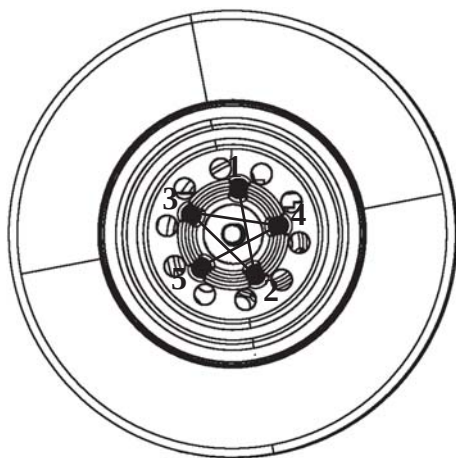


Figure 11 - 2: Lug nut sequence of tightening

Tighten the lug nuts to the proper torque for the axle size on your trailer, to prevent wheels from coming loose. Use a torque wrench to tighten the fasteners. If you do not have a torque wrench, tighten the fasteners with a lug wrench as much as you can, then have a service garage or dealer tighten the lug nuts to the proper torque. Over-tightening will result in breaking the studs or permanently deforming the mounting stud holes in the wheels. Do **not** exceed 120 ft./lb.