

# TSLB

Bolt down hitch INSTALLATION AND OPERATION GUIDE Air Ride Hitch For 5th Wheel Trailers

Read all Instructions thoroughly before installing the TSLB 5th Wheel Hitch.

## WARNING EXCEEDING MAXIMUM CAPACITY CREATES A SAFETY HAZARD

The TrailerSaver TSLB system attaches to a 5th wheel trailer and is rated for a maximum pin weight of 5,000 or 7,500 pounds and a gross trailer weight of 32,000 pounds (including the load).

Refer to the manufacturer of the vehicle for the maximum pin weight and gross weight of your towing vehicle and mounting system. Do not exceed the maximum of the towing vehicle, mounting system, or the TrailerSaver hitch.

# WARRANTY PROVISIONS

The TrailerSaver TSLB 5th Wheel Hitch comes standard with a 3-year warranty on all major components.

#### **NOTE: IMPORTANT**

Tow Safe LLC. is not responsible for and will not compensate for lost time, vacation, or wages if a hitch is inoperable or requires repair.

#### What Is Covered

- The warranty period begins on the date of purchase.
- The warranty is limited to the original purchaser of the TrailerSaver TSLB hitch and is non-transferable.
- This warranty covers repair or replacement to any TrailerSaver part that is defective in materials or workmanship under normal usage.
- Warranty items must be returned to Tow Safe LLC. for inspection.
- Customer is responsible for all freight charges associated with warranty work.

#### What Is Not Covered

- Items added, changed, or modified after the unit left the possession of Tow Safe LLC.
- Any use of the TrailerSaver for rental or other commercial purposes.
- Normal wear and usage, such as fading or discoloration of painted parts.
- Minor imperfections which do not affect the suitability of the TrailerSaver for its intended use.
- Costs incurred as a result of the consumer's request to have repairs performed, or replacement of parts supplied by other than Tow Safe LLC. without proper authorization or notification by Tow Safe LLC
- This warranty does not apply to or cover any component which has its own warranty by its manufacturer.

# WARNING: EXCEEDING MAXIMUM CAPACITY CREATES A SAFETY HAZARD.

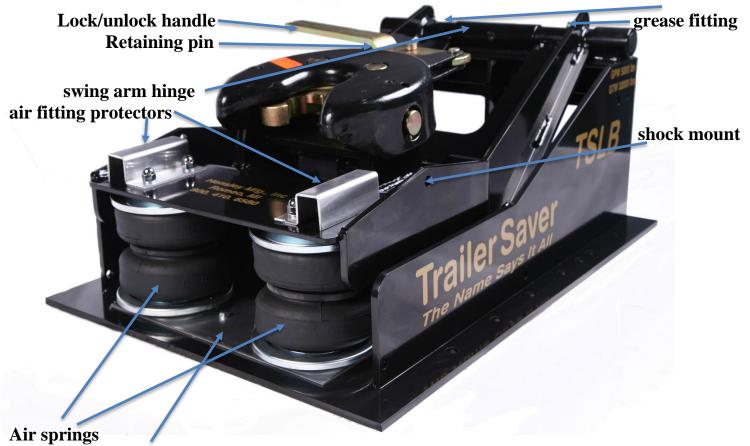
TSLB: 32,000 lb. max- Gross Trailer weight Rating and 5,000 and 7,500 lb. max pin weight.

# If you have any warranty-related questions, please contact Tow Safe LLC. at (800) 410-6580.

For warranty exchanges ship all parts with Return Authorization # to:

Tow Safe LLC. RA#\_\_\_\_\_ 151 Shafer Drive Romeo, MI 48065

# TSLB HITCH



Air spring plate

# TSLB PARTS LIST

	Chrome Nut Cover 9/16"	45033
	Grease Fitting	41024
8	Tilt Spring	44009
MAMMANA	Centering Spring	44012
	Pivot (Axis) Bolt	44031
	Air Fitting Protector	45030
	Union Tee (air fitting)	49212
	Swivel Elbow (air fitting)	49209
O	Air Tubing	45036
	Complete Head	44001
	3 <sup>rd</sup> airbag kit	45550

Air Spring	45006
Pneumatic control/gauge kit	45104
Handle Extension (TS3)	45512
Hook Extension (TS3)	45514
Shock Absorber (TS3)	45001
Air Spring Roll Plate	45009
Jaw Opening Spring	43057
Compressor	45409

7-Way Power Harness	41010
Head Cap Screw	45012
Electric Dash Control Gauge/Switch	45406
Gooseneck Adaptor	45540
 Lube Plate	46242
TSLB vinyl cover	45570
TSLB vinyl cover with Shocks	45569

	Emergency Kit	45600
ULTIMATE THE COST	Tire chocks	40050
	Compressor and dash panel control kit	45400
TS3	Compressor kit with built in switch	45401

# INSTALLATION

#### Read instructions thoroughly before starting. Do Not Exceed the vehicle manufacturer's rated towing capacity. Tow Safe. will not be responsible for damage caused by overloading of the tow vehicle.

The TSLB is designed to be bolted on a class 5-8 tractor and is usually installed somewhat differently on every truck. These trucks often have different height and space requirements, making the hitch location different. This installation manual is just a guideline and actual installation may vary slightly.



#### **Hitch Placement**

It is recommended that the hitch be installed with the kingpin centered over or just ahead of the rear axle. If this is not possible the hitch can be installed further back, often without negative results. See the enclosed hole pattern diagram on page 10.

- 1 The hitch must be bolted to the trucks frame members and may be accomplished in many different ways:
- One <sup>1</sup>/<sub>2</sub>" thick plate steel covering the entire base of the hitch and extending to both frame members
- 3  $\frac{3}{4}$  x 6" steel plates which extend to both frame members
- 4 Combination of plate steel and angle iron
- 5 When installing the cross members, be sure to fasten them to the face of the frame with vertical members. Both cross members and vertical members must be bolted together.

- 6 After the installation base is secured, use the hitch as a guide and drill 5/8" holes through the steel plate and secure with grade 5 or grade 8 bolts. Use at least 4 holes on each side of the hitch, making sure the hitch is secured at both ends. Consult with an experienced hitch installer for other methods of installing a hitch for this application.
- See parts list for optional pneumatic air control with gauge.
  Fasten pneumatic paddle control gauge/switch in the cab, preferably where it can be accessed from inside or outside the truck.
- **8** Locate a charged air supply from the truck. Cut airline and insert ¼" Tee between cut ends. Insert ¼" tubing into open port of tee and route to the gauge/switch assembly in the cab. Plug in supply port of switch
  With remaining air tube plug into delivery port of switch and route to the hitch and insert into open tee in the front of the TSLB.
- 9 Secure the air-lines so they do not come in contact with anything that may rub a hole in it. Be sure to route tubing in a fashion where it cannot become pinched, bent, or cut.

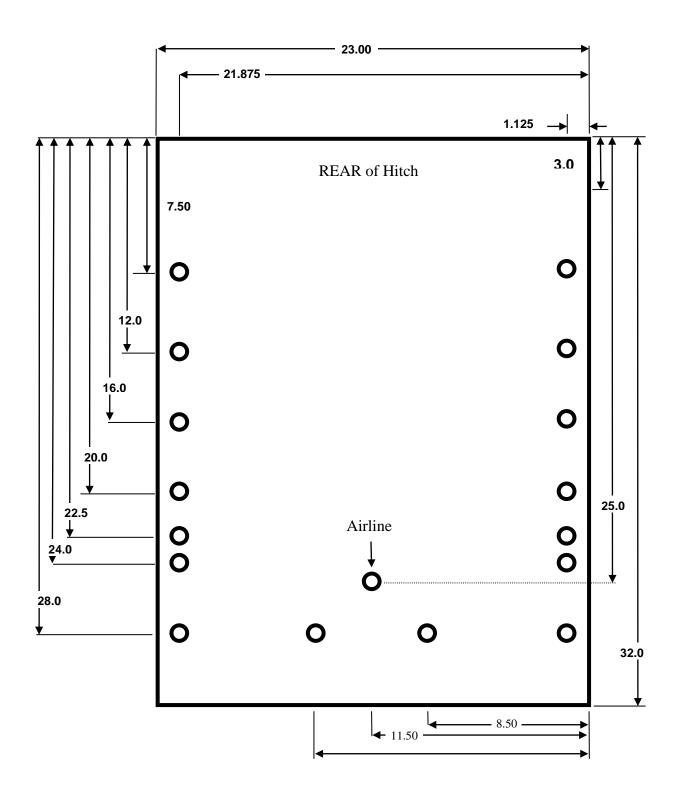


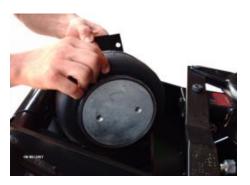
Figure 0.1 TSLB Hole Pattern

All Holes 5/8" DIA, all dimensions are in inches

## 3<sup>rd</sup> Airbag Kit Installation



TSLB 3<sup>rd</sup> Airbag (PN 45550)



Airbag placement (PN 45550)

The TSLB can be ordered with or without a 3<sup>rd</sup> airbag to increase pin weight capacity to 7,500 lbs and can be retrofitted later. To retrofit a TSLB with a 3<sup>rd</sup> airbag follow these steps:

- 1. Inflate air springs to lift the hitch and place a block of wood under the swing arm to keep the hitch open.
- 2. Place 3<sup>rd</sup> airbag, bracket down, in cavity located directly under the swing arm.
- 3. Line up the two holes on the bracket with the two pre-drilled holes on base of the hitch and thread the two 5/16" bolts through the holes.



Line up Airbag



**Airbag bolts** 

- 4. Thread the two 3/8" bolts through the swing arm and into the threads on the top of the  $3^{rd}$  airbag.
- 5. Cut the air tube any place between the two existing airbags and insert into both open ends of the tee already attached to the 3<sup>rd</sup> airbag.
- 6. Test for air leaks with soapy water.

## Important: Pin Weight Rating Changes from 5K to 7.5K with 3<sup>rd</sup> airbag kit

## **Gooseneck Adapter Installation**



Gooseneck Installation (PN 45540)

To install the gooseneck adaptor on either a TS3 or TSLB;

- 1. Unthread the nut from the pivot bolt,
- 2. Remove hitch head and replace with gooseneck adaptor.
- 3. Retighten the nut until the gooseneck adaptor is firm.

# **PROPER INFLATION/DEFLATION**

The TSLB is equipped with a Schrader valve to manually inflate and deflate the air springs to the appropriate level.

Either a hand-held air pump or small 12VDC air compressor is adequate for inflating the hitch. The TSLB is not to be inflated to a specific air pressure as long as the bags are at or above the center position. **Do Not Inflate to Greater Than 100 PSI!** 

#### **Steps for proper inflation:**

- **1** Hook up to the trailer without inflating the hitch and lift trailer stabilizer jacks allowing all of the pin weight to rest on the hitch.
- **2** Begin inflating until the white line or air inflate decal is visible above the outer frame of the hitch. It is acceptable to inflate up to  $\frac{1}{2}$  \above this mark without compromising ride quality.



# This level is just a starting point. The air pressure can be increased or decreased from this point to tailor the ride.

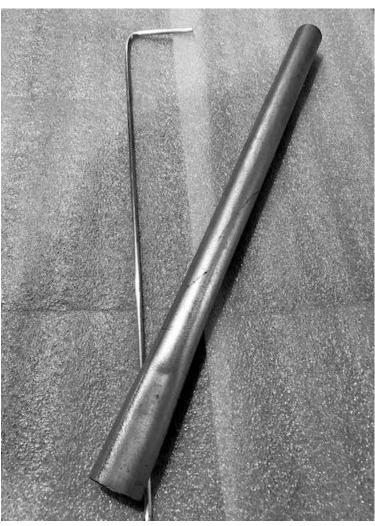
The TSLB can be deflated using the Schrader valve by depressing the stem core of the valve, allowing air to escape the air springs.



An optional pneumatic air control kit is available that comes with everything necessary to plumb into the air tank on the truck and inflate/deflate from the cab. See parts list.

4 An optional integrated compressor system is also available with either an in-cab gauge and switch control or an external push button control that is mounted on the side of the hitch. See parts list

# STANDARD HOOKING AND UNHOOKING PROCEDURES



Locate the handle/hook extension shipped with the hitch. Use this handle and hook extension to reach the hitch handle and spring-loaded retaining pin from outside the truck bed.

The hitch handle has 3 positions referred to as 8 o'clock, 9 o'clock (auto lock) and 10 o'clock as if the hitch head were the face of a clock.

# Important: The handle will move into the 8 o'clock position when the hitch is properly hooked up to a trailer and ready to tow. The hitch will be delivered in either the 10 or 9 o'clock positions.





# 8 o'clock Position

# 9 o'clock Position



## **10 o'clock Position**

# Important: Read carefully before and after hooking up.

- **1** Before hooking up, make sure the handle is at a 90-degree angle (9 o'clock) from the centerline of the hitch. This is the "auto-lock" position.
- **2** Back the truck to the trailer until the kingpin just enters the "V" opening of the hitch.
- 3 Lower the trailer until the kingpin plate just makes contact with the hitch head. Adding a small amount of air (10 lbs.) may be needed to ensure good contact.
- **4** Back into the kingpin. The handle should snap into the 8 o'clock position and the spring-loaded retainer pin should be fully engaged behind the steel block.
- **5** Note: After every hook-up inspect the retaining pin to make sure it is engaged in the proper position and push the handle toward the cab to ensure it does not move out of the 8 o'clock position.
- **6** Raise the trailer jacks and follow standard inflation procedures on Page 8.
- 7 The hitch may be further secured in the 8 o'clock position with a padlock. This is inserted through an opening in the retainer pin housing that is only visible when the hitch is locked onto the kingpin.

Important: After every hook-up inspect the retaining pin to make sure it is engaged in the proper position and push the handle toward the cab to ensure it does not move out of the 8 o'clock position.

Warning: Always inspect for proper hookup from a safe position that is not directly under the trailer.



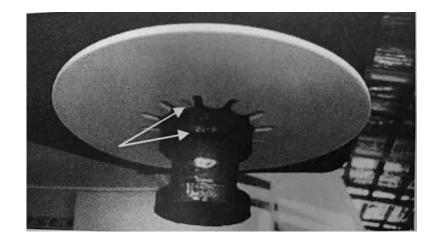
# UNHOOKING

- **1** Securely chock trailer wheels and lower trailer jacks, applying enough downward pressure to move the trailer up slightly.
- **2** Raise the trailer until the weight is no longer resting on the hitch.
- **3** Using the handle/hook extensions, pull out on the spring-loaded retainer pin and push the handle toward the cab until it locks in the 10 o'clock position. The jaws should open but if there is pressure against the jaws they will remain closed even though the hitch is unlocked. If this happens, once the vehicle or trailer is moved a fraction, the jaws will unbind and spring open.
- 4 Drive away from the trailer.

Important: In the 10 o'clock position the red mark behind the head is fully exposed.

# **NON-GREASE LUBE PLATES**

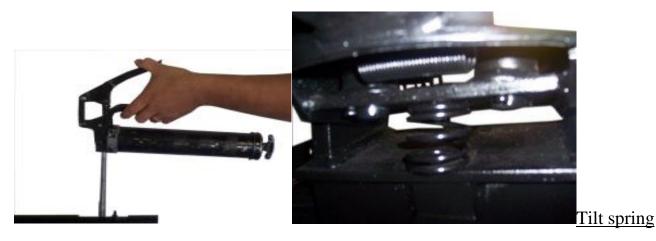
It is recommended to use a non-grease lube plate disc with the TSLB. After the lube plate is installed, measure from the bottom of the lube plate to the edge of the kingpin cutout. This distance should be from 1 to 1 1/8 inches.



## MAINTENANCE

1

The swing arm pivot should be greased regularly. Use the grease zerks on the back of the hitch and grease every 3000 towing miles or once every 6 months, whichever comes first.



- 2 Check the pivot bolt, located directly under the head to ensure the nut is tight and not worn. Inspect this bolt once a year for excessive wear. If the hitch has more than 1/8" vertical play, the bolt should be replaced. The nut should be tightened just enough to put pressure on the head so that it will not move freely side to side.
- **3** Apply a spray lubricant to the Jaw Pivot Pins, the Fore/Aft pivot Pins, the Jaw Mechanism and the Tilt Spring (front and back)



Fore/aft Pivot Pins

Jaw pivot pins

**4** Protect the air springs from UV rays. Air springs may be treated with a rubber treatment to prolong life. Cover the hitch when not in use.

# WARNING: EXCEEDING MAXIMUM CAPACITY CREATES A SAFETY HAZARD.

The TrailerSaver TSLB is rated for a maximum tongue weight of 5,000 or 7,500 lbs. and a gross weight of the trailer of 32,000 lbs. (including the load)

The Towing vehicle and the mounting system that are attached to the towing vehicle, are separately rated for maximum tongue weight and gross weight of the trailer (including the load).

Refer to the manufacturer of your vehicle for maximum tow ratings.

Do not exceed the maximum capacity of your towing vehicle or TrailerSaver TSLB hitch.

# **GUIDELINES FOR MATCHING TRUCK TO TRAILER**

- **1** Trailer and all of its contents together must not exceed the truck, hitch and/or trailer tow rating.
- **2** Towing vehicle must have a manufacturer's rated towing capacity equal to or greater than the gross trailer weight.

# Gross Trailer Weight = Trailer + Cargo + Water In Tanks

**3** Gross Trailer Weight must not exceed 32,000 lbs. (5,000 or 7,500 lb. vertical load).



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