



## Installation Instructions for Air Ride Pin Box 10000 Series Telescoping Style.

Pin box rating: 22,000# tow, 1200# - 5200# pin weight

**READ ENTIRE INSTRUCTION SHEET TO ENSURE A PROPER FIT BEFORE STARTING**

PLEASE CALL TRAILAIR WITH ANY QUESTIONS OR COMMENTS AT **800-998-4238**.

### STEP ONE:

The Trailair pin box is installed in two main sections, upper bracket then lower jaw. Level trailer front to back. Remove old pin box. **Care should be taken not to drop old pin box; this could cause injury.** You should now have the outer sleeve remaining on your coach. The Trailair telescoping style pin box will fit over the outer sleeve on the coach.

### STEP TWO:

There are 3 positions that your pin box can be installed in, top, middle and bottom. The bolt holes on the top section of the Trailair top section should closely match corresponding holes on the outer sleeve on the coach. Put the Trailair upper bracket in the same position as the old pin box.

If the pin box you removed was retracted, put the Trailair in the top spot, etc.... Hold securely in place with a bolt on each side. Adjust to make sure the top of new pin box is level with trailer by putting a level on top and to the front of the new pin box. **Care should be taken not to drop new pin box; this could cause injury.**

Install all bolts, washers and nuts in same location as old pin box. We recommend using the nuts, bolts and washers that came on the coach unless they are in bad condition. Make sure replacement fasteners are corresponding the same grade and diameter as those removed. For torque specifications on pin box bolts refer to manufacturer's specifications.

If no torque requirements exist, torque 1/2" bolts a minimum of 110 ft./lbs , 5/8" bolts a minimum of 160 ft./lbs and 3/4" bolts a minimum of 210 ft./lbs.



### STEP THREE:

Slide the lower jaw assembly into position with the upper position. Put the stops on the lower jaw on top of the stops on the Trailair upper bracket and line up the holes in the lower jaw side plates with the main tube in the bracket.



Position the large spacer washers over the outside of the bearing shaft lip on each side of the inner cross tube. A petroleum based lubricant to be applied on each side of the washer is suggested and is not required in the future as on going maintenance as it is only needed while the pin box is new.

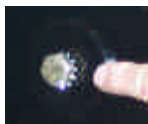


### STEP THREE (continued):

Slide the lower pin box assembly into position with the upper assembly. Make sure the stop pin in each side plate of the lower assembly slides on top of the stop block attached to the side plate in the middle of upper assembly.



These pins and stops will help hold both assemblies together as you begin to insert the pivot pin. Carefully insert the large pivot shaft through both upper and lower assemblies.



Secure the large shaft in place, on both sides, in this order: the medium washer, a star washer and then bolt in place.



Torque bolts on each side to 100 ft./lbs. Use a back-up wrench to hold the bolt on each opposing end.

**IMPORTANT: Make sure both ends are tightened.**



### STEP FOUR

Rotate the lower jaw into a collapsed position up against the top section. Install the stop pins on each side of the lower jaw and fasten them with the lock pin. This will insure the scissor action does not over-travel and pull the air bag apart.

Note: Newer versions may have the stop pins already welded in place.

### STEP FIVE



Install the air bag with the air fill fitting in the up position.

Secure with 2 bolts and lock washers, not exceeding 20 ft./lbs. torque on the top plate of the air bag. The bag is not fastened at the bottom. Install the air fitting using Teflon tape or pipe dope and do not exceed 20 ft./lbs torque.



Install the long threaded rod in the top bracket and the lower jaw. Place a shock absorber on both ends. On the top use a washer, spacer, washer, shock, washer and nylock nut, in that order. On the bottom use a washer, shock, washer and nylock nut in that order. Tighten the nuts on each end to 40 ft./lbs of torque. You may need to grab each of the rod with a vise grip to properly tighten the nuts on each end.



## STEP SIX:

Insure that the fifth wheel coupler located in your truck is properly mounted according the proper instructions of the fifth wheel manufacturer. In addition, make sure that it is in good working condition as this could effect the performance of the Trailair air ride pin box and could result in unsafe towing. As a reminder, your fifth wheel connection should never be located behind the center of the drive axle.

## STEP SEVEN:

After all nuts, and bolts are tightened, attach trailer to tow vehicle and apply air to nozzle fitting at top of pin box. Inflate the air bag with only enough air to raise pin box to the ride height mark on the front of the shock absorber with the truck and trailer at rest.

**WARNING: DO NOT inflate air spring unless fully secured by the pin box structure, otherwise bodily injury could result.**



Finish by installing the supplied air cap. The air spring is like a tire in that it can lose air pressure over time. Before starting on any trip you should check ride height mark front of shock absorber with the truck and trailer at rest.

Some adjustment to the level may be needed after a short period of use in the beginning. Also, certain circumstances such as a dramatic change in weight (500 lbs or more), temperature (50 to 70 degrees F or more) or altitude (5000 feet or more) may change the ride height and require some adjustment.

## Illustration of Air Ride Pin Box 10000 Series Telescoping Style

**SECTION A-A**

ITEM NO.	QTY	PART NO.	DESCRIPTION
24	2	3948184	WASHER LOCK SEER 1/2 ZP
23	2	3948139	WASHER STD. 1/2 ZP
22	2	3948027	WASHER LOCK SPLIT 3/8 ZP
21	1	3268057	SCREW SET SOC. CP FT 3/8"-1.6 x 1
20	2	388354	SCREW HHC 1/2-20 x 1 GRD 8
19	4	2688139	NUT HEX 1/2"-13 W/ NYL INS.
18	1	1508116	CABLE TIE-11"
17	1	90603460	AIR SPRING W/OUT BUMPER
16	2	90603280	SHOCK SACHS S4
15	2	90603270	BEARING W/ FLANGE
14	2	90601548	ROL. 1/2 THREADED 19 ZS
13	1	90600780	TRAILAIR STICKER LH
12	1	90600770	TRAILAIR STICKER RH
11	1	90600760	IMPORTANT STICKER 3 x 4
10	1	90600750	GROSS WT STICKER 3400
9	1	90600730	IMPORTANT STICKER 2 x 3
8	1	90600720	INFLATE STICKER
7	1	90600430	TANK VALVE
6	1	90600220	PIN BOX SHAFT
5	1	90600215	SMALL WASHER 17/32
4	2	90600175	1/2" TUBE SPACER
3	1	90400035	BODY WLDMT 45 DEG 1 1/16 HOLES
2	1	90400015	NARROW JAW WLDMT TEL.
1	1	90391070	BUSHING PACKAGE

**NOTE:**  
 Use nylon bushings when original pin box utilizes 1/2" mount bolts. Bushings are to be placed in between outer washer and body.

**TRAILAIR, INC.**  
 TITLE: 10004 ASSEMBLY 45 DEG  
 DRAWN BY: [Blank]  
 DATE: 06/01/00  
 SCALE: 1:4  
 SHEET 1 OF 2

## DISCLAIMER

Altering the pin box in any manner not prescribed by Trailair may adversely impact the product performance and or void the warranty. The Trailair air ride pin box is designed for trailers with pin weights that are 15% or more than the overall weight of the trailer and pin weights within a range of 1200# to 5200#. If your trailer falls outside of this category, the Trailair pin box may not function properly. Trailair can accommodate for pin weights less than 1200# and more than 5200# on a special ordered basis as long as the pin weight exceeds 15% of the overall coach weight.. In addition, the fifth wheel coupler must be mounted in your truck in accordance with the proper instructions of the fifth wheel manufacturer and failure to do so can hinder the performance of your Trailair air ride pin box. If your tow equation does not or cannot meet these requirements, and you are not satisfied with the performance of the air ride pin box, you may be eligible for a refund less a nominal restocking fee, freight and damage fees.

**If you have any questions regarding this or any other issue, please call us at 1-800-998-4238.**



## Trailair Air Ride Pin Box Installation Updates

### 10000 Series Telescoping

Please be aware of the following running changes made to the Air Ride pin boxes in this supplement as you install your Trailair product.

Step 2; This kit comes with a package of plastic spacer bushings and steel washers. These are to be used if your using the 10034 Trailair part and the pin box originally used ½” bolts. The Trailair upper brackets in this series are sized for 5/8” bolts however, since the pattern is the same for the ½” bolt version, a spacer bushing is used. Place the steel washer over the bolt and then the plastic bushing before inserting the ½” mounting bolts outside the bracket, then use a steel washer and a nut on the inside. Also in Step 2; Be very careful to avoid damaging any electrical wires or junction boxes in this step. It is common for wires to be cut or damaged when the new upper bracket is installed. Move these items as needed.

Step 3; An upgrade to the bearing eliminated the large spacer washers. The bearing now has the flange built into it's design. In addition, a lubricant is no longer needed because the bearing is a Bronze and Teflon combination that is oil impregnated. It is designed to be a dry system.

Step 7; The air spring has a threaded alignment pin protruding through the bottom plate. It is important that the pin aligns with the corresponding hole in the plate of the lower jaw before the air spring is inflated. If the pin is not aligned in the hole, the pressure can break the bottom plate of the air spring, which will ruin the air spring. In addition, an air spring can be filled with Nitrogen instead of air and will not be effect by changes in temperature and altitude. If you would like to try this, run the system for a short period of time with air to make sure any leaks are resolved before adding Nitrogen to save cost.

11-03-03

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