# **Installation Instructions**

# Model RV1, RV2 and RV3

# Fifth Wheel Adapter for Gooseneck Ball

Fits Standard Trailer King Pin Box and 2-5/16" Gooseneck Ball





## RV1 / RV2 / RV3 7/10

#### **SAFETY CHAIN REQUIREMENT**

CAUTION: DO NOT TOW A TRAILER USING THE Fifth Wheel Adapter WITHOUT ADEQUATE SAFETY CHAINS.

All states require **safety chains** for trailers used on public roads, and commercial vehicles are required by federal law to have safety chains. Safety chains are intended to keep the trailer under control in the event hitch connections fail. Safety chains must be attached to the trailer at a point at least as strong as the chain. Do not attach chains to the adapter. Attachment point must be above the King Pin.Do not weld safety chains to the trailer because welding will weaken the welded chain link and the link or weld may fail in an accident. Your PopUp Fifth Wheel Adapter installer or local trailer dealer can supply suitable safety chains.

#### **INSTALLATION PROCEDURE**

CAUTION: Verify the quality of all existing welds in the king pin box assembly.

CAUTION: Verify adequate trailer swing clearance between trailer nose and cab of truck, and trailer and rear of truck.

#### Use of Adapters is NOT RECOMMENDED on cushioned king pin boxes.

- 1. Remove lube plate if so equipped and thoroughly de-grease the king pin and the bottom of the king pin plate before proceeding. Position the large hole Top Adapter Box over your king pin and against your king pin box with a plain side of the Top Adapter Box facing forward. Square the Top Adapter Box to your king pin box and secure in this position with vise clamps.
- 2. Position the King Pin Clamp on the king pin with the two 3/4" holes accessible through the large holes in the side of the Top Adapter Box. Insert two 3/4" bolts and snug. Square the King Pin Clamp to the adapter and torque bolts to 240 ft. lbs. using 1 1/8" socket. See Fig. A and Fig. B. Snap the Hole Plugs into the access holes.
- 3. Tighten the four Cup Point Set Bolts in the King Pin Clamp. Torque to 85 ft. lbs. using 3/8" Allen wrench. Torque one time only.
- 4. It is necessary to bolt the Top Adapter Box to your king pin plate using the 3/8" bolts.

**Bolting to a 10" X 10 or larger king pin plate.** Install the eight 3/8" bolts from above in the four holes closest to the corners of the king pin plate. Bolts should also be installed in the four center holes on all four sides of the king pin plate if fitting them is possible.

If you have access inside the king pin box, drill 3/8" holes and use washers and nuts to fit the 3/8" bolts. Torque to 28 ft.lbs. If the king pin box is sealed, mark the hole centers, drill 5/16" holes and tap to 3/8"-16. Fit the 3/8" bolts. Torque to 20 ft. lbs.

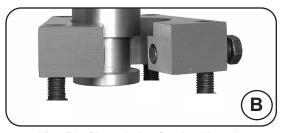
**Under-Size King Pin Plate (less than 10" x 10"):** If the 3/8" perimeter mounting holes in the <u>Top Adapter Box</u> do not line up close to the corners of your king pin plate, drill a new hole thru the Adapter at a location close to the corners of your <u>king pin plate</u>. Welding the <u>Top Adapter Box</u> to your king pin plate is an option.

**Light Gauge King Pin Plate:** A king pin plate less than 1/4" thick should not be drilled and tapped for installing the 3/8" perimeter mounting bolts. For these installations bolt through your king pin plate and Top Adapter Box with a washer under the head of your bolt and on top of your king pin plate and a nut on the bottom of the Top Adapter Box. If there is no area for a through bolt using the holes in the Top Adapter Box, you can drill a new 3/8" hole through both the Top Adapter Box & your king pin plate. bolt close to the corners of your King Pin plate and in the middle between all corners. Welding the Top Adapter Box to your king pin plate is an option.

- **5.** Insert the Bottom Adapter Box into the Top Adapter Box with the gooseneck coupler pointing forward. Secure using eight 5/8" flange head bolts. The length of adapter can be set in 1" increments between 12 1/2" and 16 1/2" measured from the top of the ball to the king pin plate. Torque to 150 ft. lbs. using 15/16" socket
- **6.** Attach the coupler release cable to the coupler lever with a cable clamp. Route the cable up and rearward through eye-bolts to near the trailer jack switch or handle. Secure the cable to an eyebolt near the trailer jack switch or handle with a cable clamp in such a way that the coupler can be un-latched by pulling on the cable while standing at the trailer jack switch or handle. Coupler will self latch when lowered onto gooseneck ball. Lubricate the inside of the coupler with a thin film of lithium grease.



Cutaway view showing King Pin Clamp installed.



King Pin Clamp being fitted to king pin.

Use 1 1/8" Socket on Main Bolts 3/8" Allen Wrench is used on the four cup point bolts

## Hardware Provided

- 1 King pin clamp with four pusher bolts and two clamp bolts installed
- 8 3/8" Grade 8 bolts
- 8 3/8" Locknuts
- 16 3/8" Washers
- 8 5/8" Flange Head Bolts
- 2 Plastic Caps
- 15' Cable
  - 3 Eye Bolts
  - 2 Cable Clamps

