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# **Installation Instructions**

# PopUp Model 117 Dodge Ram

Fits 2013 3/4 Ton only



## www.popuphitch.com

### FOR THE SAFEST INSTALLATION

11/15

### **WARNING**

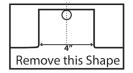
Most pick up trucks have **FUEL LINES** and/or **BRAKE LINES** and/or **ELECTRICAL WIRING** positioned along the truck framerails where your under-bed hitch will install. **BEFORE INSTALLATION** identify and examine the location of fuel lines, brake lines and electrical wires. Be sure you will not damage fuel lines, brake lines or electrical wiring when positioning the hitch components, drilling holes or tightening fasteners. **Be Certain To Avoid Fuel Tanks When Drilling Holes.** 

- Wear Safety Glasses, Gloves and Particle Mask for protection while installing a under-bed gooseneck hitch.
- ALWAYS correctly chock tires prior to raising truck with jacking device. For protection ALWAYS use jack stands when working under or around a truck that has been raised by a jacking device.
- Be certain the exhaust system is cool prior to installation to avoid possible burns from hot tail pipe and muffler.
- Torque ALL fasteners used in the under-bed gooseneck hitch installation as specified in these Installation Instructions.
- READ ALL SAFETY AND WARNINGS ON THE LAST PAGE OF THE PROVIDED INSTRUCTIONS.

### **INSTALLATION PROCEDURE**

# WARNING: Verify adequate trailer swing clearance between trailer nose and cab of truck, and trailer and rear of truck

- 1. Remove spare tire. Center the hole for **SHORT BED TRUCKS at 42 3/8**" or for **LONG BED TRUCKS 44 3/8**" from the rear lip of the truck bed floor centered between the wheel wells. (If truck is equiped with a spray-in bedliner add thickness of bedliner to the hole location.) Use a **3**" **hole saw** to cut a hole in the bed floor centered at this location. Smooth hole edges with file after sawing. Clean all saw tailings from the bed area before proceeding.
- **2.** If so equipped, cut and remove the tail pipe heat shield between the two truck bed cross members, ahead of and rearward of the axle where the hitch will install. Some models have a plastic fender liner that you may simply remove to install the hitch.
- **3**. Locate the bed sill that is behind the 3" hole for the ball. Measure forward 9 5/8" from the bottom of the bed sill and cut out a section of the bed lip that is behind the drivers side tire as shown. This will allow the angles to be passed across the top of the frame and give clearance for the actuating rod.



- **4**. Pass the Front Bar Cross Member across the frame rails of the truck from the driver side with the 1/4" spacers on the bottom. Center the Front Bar Cross Member across the frame about three inches in front of the 3" hole cut out of truck bed.
- **5.** Pass the Rear Angle Cross Member across the frame rails of the truck from the drivers side, with the plain side (2" leg) up and with the hole leg facing forward. Slide it rearward to get it out of the way for now.
- **6**. With the ball tube assembly closest to the front of the truck, raise the Center Assembly into position between the Cross Members. Using the eye bolt in the top of the ball hold the Center Assembly firmly against the underside of the bed floor using an overhead lifting device or a saw horse in the bed of the truck, secure a ratchet strap to the eyebolt and to overhead lifting device or sawhorse. Insure that the top of the Center Assembly channel is flush with the bottom of the bed floor.
- 7. Fasten the Center Assembly to the Front Cross Member with 1-1/4" bolts. Slide the Rear Cross Member forward and fasten it to the Center Assembly with 1-1/4" bolts with washers on the slotted holes and 1/2" nuts. **Do not fully tighten these fittings at this time**.
- **8.** Identify the driver side Frame Plate (pictured) and passenger side Frame Plate. Position the Frame Plate extension tabs between the Cross Members. Fasten the Front Cross Member to the Frame Plates using a flat washer and 1/2" nut on the bent tang of the Frame Plate. Fasten the Rear Cross Member by passing a 1-1/4" bolt with a flat washer from the Frame Plate and securing with a flat washer and 1/2" nut. **Do not fully tighten these fittings at this time.**
- **9.** Loosen any tension from the overhead lifting device so that the bar and angle are resting on the truck frame. Square the assembled Cross Members and Center Assembly across the frame from to back and side to side.

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### **INSTALLATION PROCEDURE- CONTINUED**

**Caution**: Avoid brake and electrical lines when positioning U-Bolt against truck frame. Note: See photo for proper placement of the U-Bolts.

**10**. First pass the 1/2"x4 1/2" bolt thru the existing 9/16" horizontal hole on the side of the frame with a 3/4" flat washer backed up with a 1/2" flat washer on the inside of the frame followed up with a 1/2" nut. Position the frame plate u-bolt around the the frame and into the frame plate. Secure with 1/2" washers and lock nuts.

Caution: Use this sequence for tightening Frame Plate fasteners: This will keep the hitch from pulling out of square).

1. Snug the center section to the cross rails. 2. Snug the Cross rails to the side plates. 3. Snug the frame plate u-bolts and the 4 1/2" bolts. Using the same sequence, torque to specifications. Use a Torque Wrench. Do not overtighten.

- **11**. Drill four 1/2" holes for the Safety Chain U-Bolts from under the truck bed. Drill through the two pairs of holes in the Center Assembly that closest to bed floor. Place a U-bolt in each pair of holes from the top side of the bed. From under the bed place a spring and 1/2" nut on each U-bolt leg. **Tighten each nut until thread extends through the nut**.
- **12**. Slide lock collar onto rod before installing. From the driver side, pass the Actuating Rod thru the hole between the Frame Plate extensions and into the slide. Align the Actuating Rod so the set screw seats in the hole provided in the rod, and tighten to **torque specifications** with a 5/32" allen wrench. Slide the actuating rod all the way out till the ball is in the locked postion, then slide lock collar forward until it rest against the frame plate and tighten with a 1/8" allen wrench. You may need to remove some of the fender lip above where the Actuating Rod installs to allow free travel.

The final step is to raise the ball and check the position of the slide from under the truck. When the ball is fully raised, the Roll Pin Stop should be against the ball tube. This allows the Detent Ball to lock the slide in place and positions the ball over the flat surface at top of the slide. In this position it is impossible for the ball to retract without manually pushing in the handle.

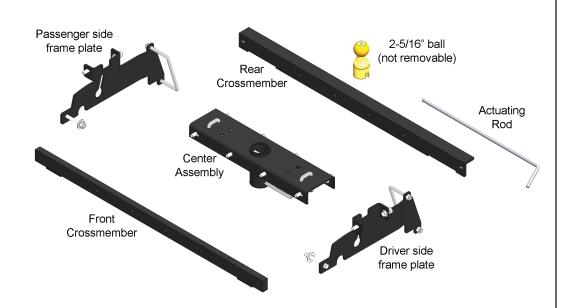
**13**. Please read the **SAFE TOWING INSTRUCTIONS** on the WARRANTY sheet. Fill out and return warranty card to us, or go online to www.popuphitch.com and fill out the online version.

### **Torque Specifications:**

1/2" grade 8 bolts - 119 ft. lbs Frame plate U-bolts - 50 ft. lbs. Actuating rod set screw - 15 ft. lbs.

### Hardware Provided

- 12 1/2" X 1-1/4" Grd. 8 Hex Bolts
- 2 1/2" X 4 1/2" Grd. 8 Hex Bolts
- 16 1/2" Hex Lock Nuts
- 22 1/2" Flat Washers
- 2 6-11/16" wide U-Bolts
- 1 5/16" Set Screw
- 2 U-Bolt Assemblies (for safety chains)
- 1 3/8" Eye Bolt
- 1 5/16" Lock Nut (use when relocating brake cable hanger)



Please call or email with questions. Call us at 800-837-8578 or email us at info@popuphitch.com

Model Number 117 Gross Trailer Weight: 30M lbs. Gross Trailer Tongue Weight: 7.5M lbs.





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### READ ALL SAFETY AND WARNINGS BEFORE STARTING THE INSTALL

### WARNING AND SAFETY INFORMATION, READ ENTIRELY BEFORE INSTALLATION.

Read all installation and operating instructions along with all labels before using this product.

PopUp Towing's under-bed hitches are standard with a 2-5/16" ball. Make sure the coupler on the trailer is designed for 2-5/16" ball. Using a larger size coupler could cause loss of attachment and cause serious injury.

Do not modify this product in any manner. Doing so could alter the integrity and proper use of the product causing serious damage or injury.

Do not exceed tow or tongue rating of coupler, tow or tongue rating of the hitch, or tow or weight ratings of the truck or trailer. See vehicle and trailer manufacturer information for proper ratings. Exceeding these ratings may cause damage to truck and/ or trailer, or possible bodily injury.

Adding components such as a PopUp Towing under-bed gooseneck hitch to the chassis of any vehicle can be hazardous. There is potential for unexpected combustion of fuel, electric shock, burns, shifting or falling of unstable vehicle, damage to vehicle, injury from tool usage and many other hazards. This installation must be completed by someone who is aware of the hazards involved.

Always be sure the ball is properly latched into place while in the up or down position. Before hauling heavy loads make sure that your hitch will clear the truck's differential before hauling a load.

Cab clearance can be an issue with short bed trucks and limits towing on certain trailers. Failure to insure that there is adequate clearance before towing, may result in property damage, or serious injury.

**IMPORTANT**: The hitch is designed to install only at the location described in the included instructions. Failure to place the ball hole precisely may result in property damage or difficulty during installation.

Failure to follow the bolt tightening sequence and torque settings listed above may result in the hitch being misaligned which could affect the performance of the hitch, or result in property or bodily damage.

PopUp Towing Products assumes no responsibility for injury to self, or damage that may occur during installation. As always its best to have this product installed by an experienced installer.