



## Installation Instructions

# Flip-Over Model 220 Ford F150

Fits 2004 - 2014 (2WD & 4WD)  
Long and Short Beds



### 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 which 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. READ spray in bed liner warning on last page.**

1. Mark and center punch a location **47-1/8"** from the rear lip of the truck bed floor (tailgate end) centered between the wheel wells. Use a **3-1/2" hole saw** to cut a hole in the bed floor centered at the correct location. File or sand the edges of the hole to remove any burrs. Before proceeding, remove all saw tailings from the bed area.
2. Remove the spare tire. If using a vehicle hoist, raise the truck at this time. If using a jacking device always chock the front tires to prevent the truck from rolling. Jacking against the rear bumper or frame, lift the rear of the truck approximately 10". **It is not necessary to lift the rear tires off the ground.** Properly position jack stands under the rear frame of the truck to protect against jack failure.
3. Front and Rear Cross Members are identical. Slide the Rear Cross Member across the frame rails through the driver side wheel well behind of the rear axle with the plain side (2" leg) up and with the slotted side (2-1/2" leg) facing forward. Position the Forward Cross Member about 2" behind of the hole in the bed floor.
4. Slide the Front Cross Member across the frame rails from the driver side wheel with the plain side (2" leg) up and with the slotted side (2-1/2" leg) facing the rear of the truck. Position the Cross Member approximately square across the frame rails in front of the hole in the bed floor.
5. The Frame Plates mount to the frame rails using U-bolts and lock nuts. Identify the Driver Side Frame Plate, Position the Driver Side Frame Plate against the outside of the frame with the bent tab against the truck shock mount tube. (Be sure the Front Cross Member is ahead of the front cross member securing tab on the Frame Plate, and be sure the rear cross member is rearward of the rear cross member securing tab.)

Place a 3/8" plate washer in the bottom of a medium size U-bolt and slide this U-bolt over the shock mount tube and through the holes in the bent tab at the front of the Frame Plate. Start a 1/2" lock nut on both legs of the U-bolt. **Leave these fasteners very loose at this time.** Pass a large U-bolt over the frame from the inside and through the holes in the rear portion of the Frame Plate. Start 1/2" lock nuts on both legs of the U-bolt. **Leave these fasteners very loose at this time.**

Repeat this procedure to install the Passenger Side Frame Plate.

6. Position the Center Assembly between the Cross Members with the pin retractor facing the driver side and inserting the 3-1/2" tube in the hole cut in the bed floor. Secure it to an overhead lifting device or a saw horse in the truck bed to hold it firmly against the underside of the bed floor. Fasten the Center Assembly to the Cross Members with eight 1-1/2" X 1/2" bolts and lock nuts, placing flat washers over the slotted holes. Tighten fasteners in Front Cross Member. **Do not fully tighten fasteners in Rear Cross Member at this time.**

## INSTALLATION PROCEDURE- CONTINUED

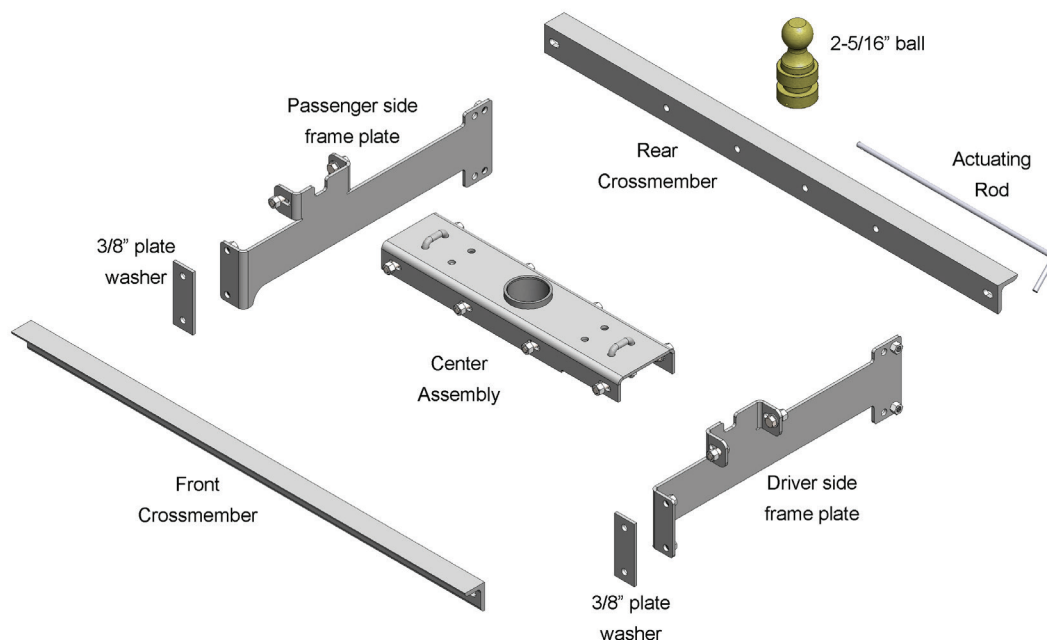
7. Square the Center Assembly and Cross Members across the frame. Fasten the Cross Members to the Frame Plates using 1/2" bolts and lock nuts with flat washers over the slotted holes. Pass the 1/2" bolts from between the cross member securing tabs. **Do not fully tighten these fasteners at this time.**
8. Torque all fasteners to **torque specifications** in following sequence: 1.) Torque the Center Assembly to both Cross Members. 2.) Torque the Rear U-bolt. 3.) Torque the Cross Members to both Frame Plates. 4.) Torque the Front U-bolt.
9. Drill four 1/2" holes for the Safety Chain Brackets from under the truck bed. Drill through the OUTER four 9/16" holes in the Ball Assembly through the truck bed floor. Note: It may be necessary to drill the forward hole on the driver side from the top side of the bed. Center punch a location 2" forward of the center of the rear hole before drilling. Remove all tailings. 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" lock nut on each U-bolt leg. **Tighten each nut until thread extends through the nut.**
10. From the driver side, pass the Actuating Rod through the 1/2" hole (Not the slotted hole) between the Frame Plate extensions and into the locking pin. Align the Actuating Rod so the set screw seats in the hole provided in the rod, and tighten to **torque specifications**. Be certain the Actuating Rod rotates freely and be certain it moves in and out freely. For adequate clearance where the rod passes, it is necessary to bend the lip formed by the inner fender and bed floor.
11. Retract the Retaining Pin by rotating the Actuating Rod 90 degrees counter clockwise. Place the Flip-Over ball in the Socket. Rotate the Actuating Rod 90 degrees clockwise to engage the Retaining Pin.
12. Keep the base of the Flip-Over ball lightly lubricated with **lithium grease**.
13. Please read the **SAFE TOWING INSTRUCTIONS** on the WARRANTY sheet.

### Torque Specifications:

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

### Hardware Provided

- 24 - 1/2" Lock Nuts
- 12 - 1/2" X 1-1/2" Bolts
- 16 - 1/2" Flat Washers
- 2 - 3/8" Plate Washers
- 2 - Safety Chain U-bolts
- 2 - Medium U-bolts
- 2 - Large U-bolts
- 2 - 9/16" springs



# Flip-Over™



Model Number 220  
Gross Trailer Weight: 30M lbs.  
Gross Trailer Tongue Weight: 7.5M lbs.

## 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.

**CAUTION:** If your truck is equipped with a spray in bed liner that covers the rear lip of the truck bed, make sure and add the thickness of the bed liner to the hole location measurement before drilling the hole.