

**C-321 SUBKIT****FORD F-150****30,000 GTW GOOSENECK KIT**

**WARNING!!** BRAKE, FUEL, AND ELECTRICAL LINES MAY NEED TO BE LOOSENED OR REPOSITIONED TO PROVIDE CLEARANCE FOR NEW HARDWARE. ALL MODELS REQUIRE MODIFICATION OR REMOVAL OF HEAT SHIELDS

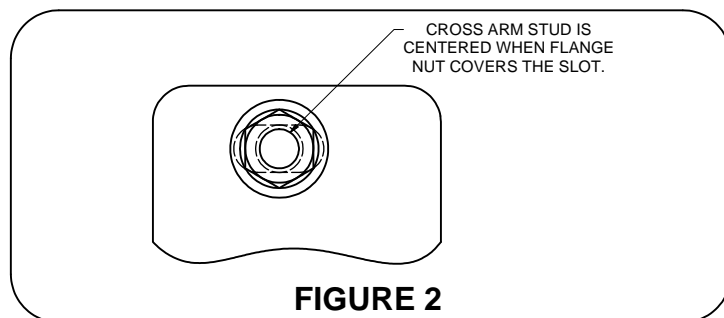
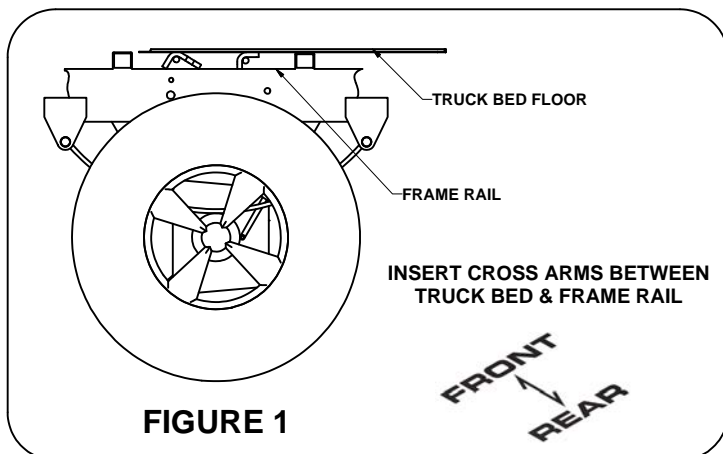
**PARTS LIST**

- (2) CM-1203-UBS (U-Bolt)
- (2) CM-C641-UB (U-BOLT BUSHING)
- (4) 1/2-13 Flange Nut
- (12) Half Moon Spacer (CM-SP27)
- (1) Tube Spacer (CM-TS)
- (4) 5/8" Flange Nuts

**INSTALLATION STEPS**

**\*\*REMOVE SPARE TIRE FOR INSTALLATION\*\***

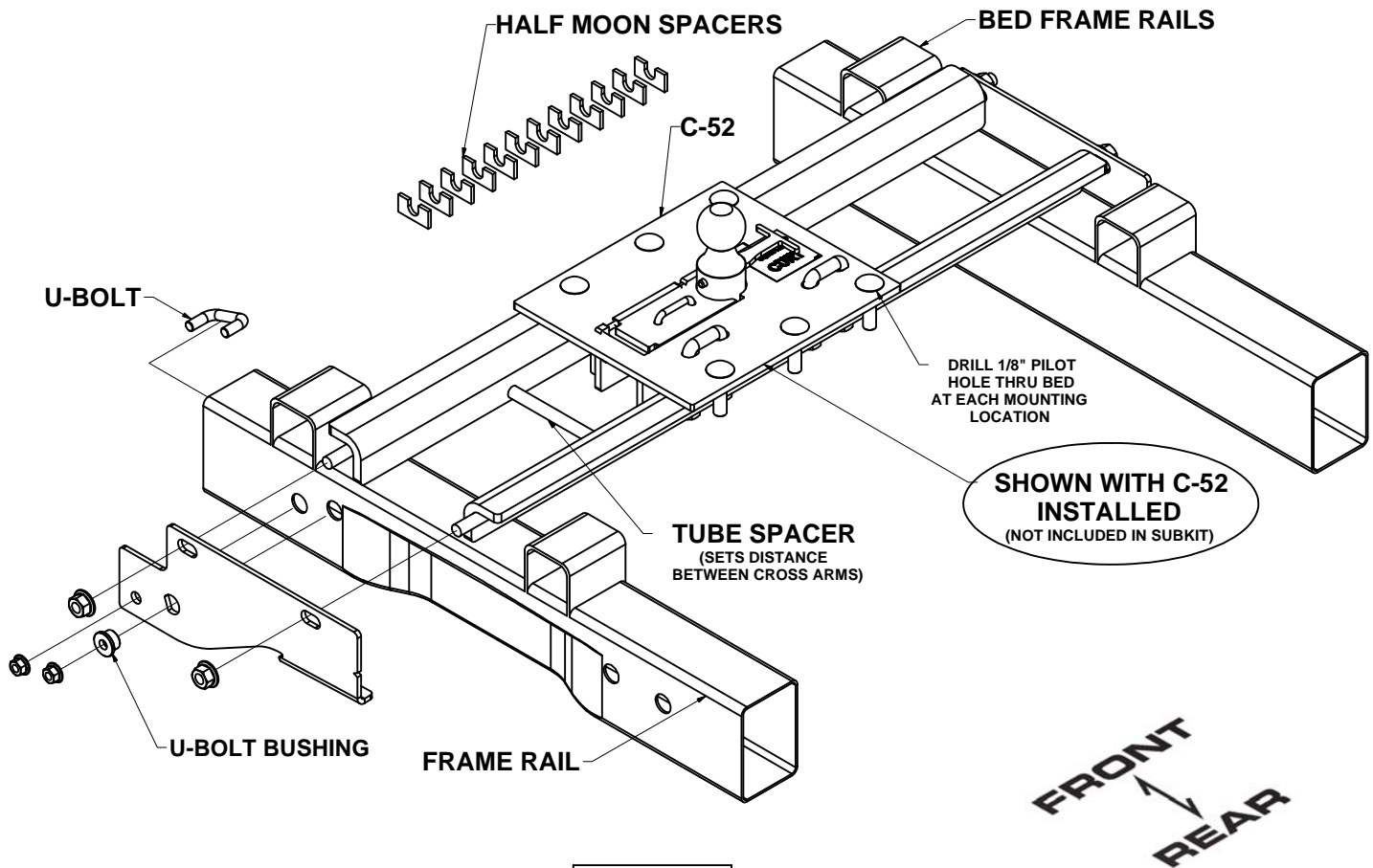
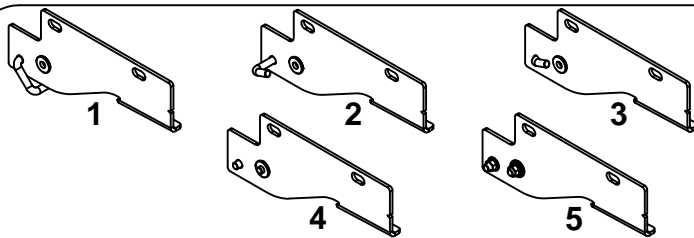
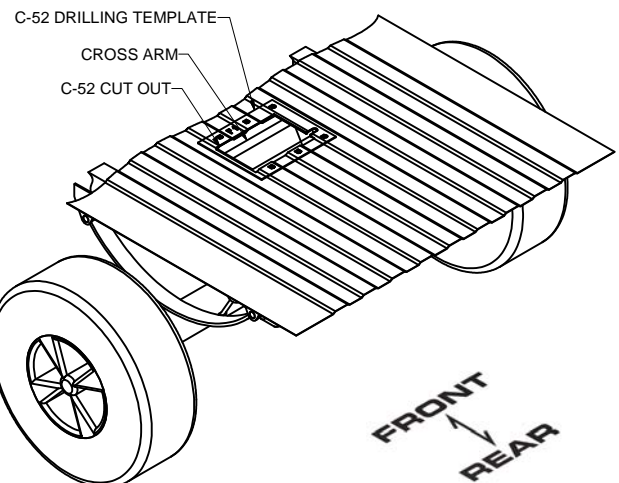
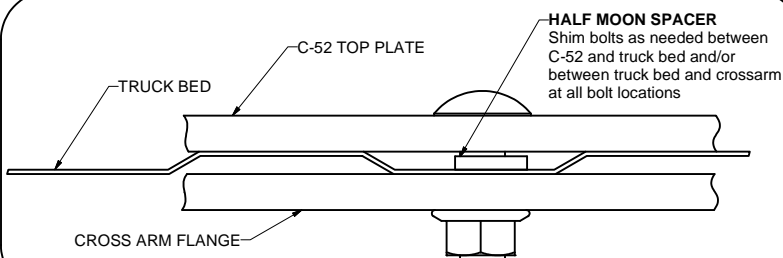
- 1) Install cross arms by sliding them into gap between the truck bed and frame from inside the wheel well. **As shown in Figure 1.**
- 2) **For all applications, the notched side plate indicates that it is for the driver side.** Hang the side plates from 5/8" studs, which extend from the cross arms. Fasten each plate with two 5/8" flange nuts provided. Finger tight only.
- 3) Using the U-Bolt and U-Bolt bushing as shown in **Figure 3** (Page 2), secure each side plate to existing holes in the frame rail. Use 1/2" flange nuts to secure in place. Finger tight only.
- 4) Rotate the cross arms until they contact the truck bed. Center the rear cross arm studs in the side plate slots as shown in **Figure 2.** Use a 15/16" wrench to tighten the 5/8" flange nuts on the rear cross arm to the side plates. Repeat for front cross arm. (Use the tube spacer for correct spacing between the cross arms.)  
**(Note: Do not tighten cross arms until center section installation is complete.)**
- 5) **Be sure the cross arms are vertical to the truck bed before drilling!** With cross arms secure and evenly spaced, drill a hole through the truck bed at the center of each cross arm mounting hole.
- 6) From inside the truck bed, center the six pilot holes with the letter "A" on the C-52 cutting template. Fasten the template to the truck bed with tape. Once fastened, drill four 1/8" pilot holes through section lettered "B".  
**(Be sure to check for brake lines and/or fuel lines before drilling.)**
- 7) With the pilot holes drilled, use a sabre saw to cut out section "C".
- 8) Remove template and drill out the six pilot holes with a 21/32" drill bit. Set your C-52 folding hitch ball into place.
- 9) Attach the C-52 to the cross arms using six 5/8" carriage bolts and flange nuts. Torque bolts to 115 lb-ft.  
**(Note: Spacers must be installed at all bolt locations to prevent truck corrugations from collapsing.)**
- 10) After the C-52 has been fastened to the cross arms. Torque all 5/8" hardware to 115 lb-ft.
- 11) Torque all 1/2" hardware to 75 lb-ft.



Curt Manufacturing Inc., warrants this product to be free of defects in material or workmanship at the time of retail purchase by the original purchaser. If the product is found to be defective, Curt Manufacturing Inc., may repair or replace the product, at their option, when the product is returned, prepaid, with proof of purchase. Alteration to, misuse of, or improper installation of this product voids the warrant. Curt Manufacturing Inc.'s liability is limited to repair or replacement of products found to be defective, and specifically excludes liability for incidental or consequential loss or damage.

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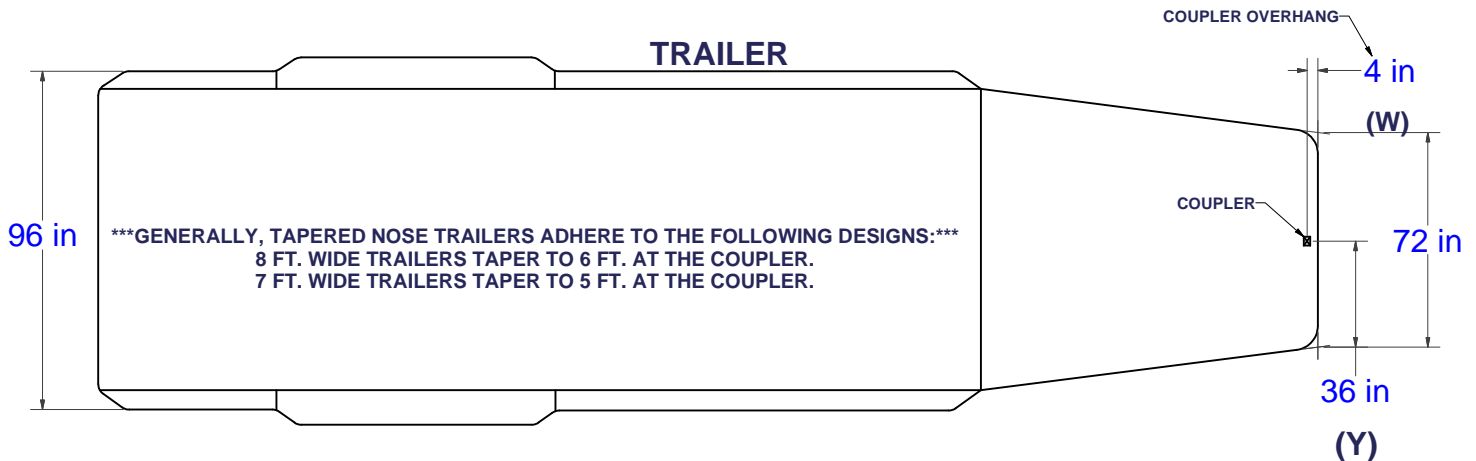
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**FIGURE 3****U-BOLT INSTALLATION STEPS**

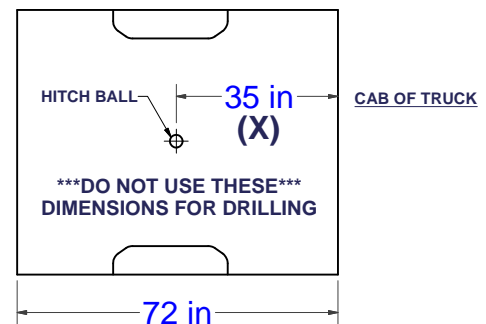
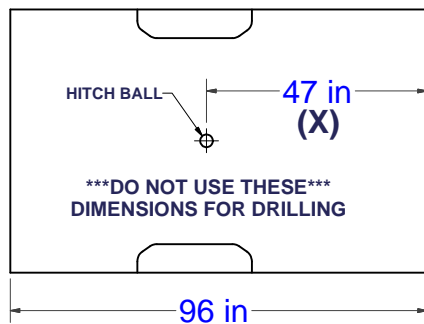
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## CAB TO TRAILER CLEARANCE

\*\*REMOVAL OF REAR WINDOW ACCESSORIES MAY BE REQUIRED.\*\*



## LONG & SHORT TRUCK BEDS



## \*\*WARNING REFERENCE CLEARANCE CALCULATOR BEFORE TOWING\*\*

### CLEARANCE CALCULATION

$$\begin{matrix} \text{(CAB TO BALL CENTER)} & - & 1/2 \text{ (TRAILER WIDTH)} & = & \text{(MINIMUM CLEARANCE)} \\ \text{(X)} & - & \text{(Y)} & = & \text{(Z)} \end{matrix}$$

IF THERE IS AN OVERHANG FROM THE COUPLER THEN THE EQUATION IS:

$$[(X) - (W)] - (Y) = (Z)$$

\*\*\*IF (Z) IS POSITIVE, TRAILER **WILL NOT** INTERFERE WITH CAB OF TRUCK.  
IF (Z) IS NEGATIVE, TRAILER **WILL** INTERFERE WITH CAB OF TRUCK!!!

### EXAMPLE:

#### STANDARD TRAILER

$$X - Y = Z$$

$$35 - 36 = -1$$

(TRAILER **WILL INTERFERE** WITH CAB)

#### TRAILER WITH OVERHANG

$$[(X) - (W)] - Y = Z$$

$$[35 - 4] - 36 = -5$$

(TRAILER **WILL INTERFERE** WITH CAB)

### YOUR CALCULATION:

(CAB TO BALL CENTER) \_\_\_\_\_

(COUPLER OVERHANG) - \_\_\_\_\_

1/2 (TRAILER WIDTH) \_\_\_\_\_

(MINIMUM CLEARANCE) = \_\_\_\_\_