

DO NOT EXCEED THE TOWING VEHICLE MANUFACTURERS RECOMMENDED VEHICLE TOWING CAPACITY!

7/16/2010

C-225 KIT

2007 TOYOTA TUNDRA

****MAX. TONGUE WEIGHT - 4500 lb (2043 kg)****

20,000 LBS 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

****FOR USE WITH EITHER THE C-52 OR C-10 GOOSENECKS.****

****AN AIR BAG SUSPENSION IS RECOMMENDED TO BE INSTALLED TO PREVENT DOWNWARD TRAVEL OF BED AND THE CUTTING OR PINCHING OF BRAKE LINES, OR DAMAGE TO THE REAR AXLE WHEN USING THE C-52 AND THE TRUCK IS LOADED!****

****WHEN USING THE C-52, THE BALL CAN NOT BE COMPLETELY ROTATED UNDER THE TRUCK. BALL WILL INTERFERE WITH REAR AXLE IF TURNED OVER AND HEAVY LOAD IS APPLIED.****

****CURT MFG. IS NOT RESPONSIBLE FOR ANY DAMAGE TO THE BRAKE LINES OR REAR AXLE WHEN THESE GUIDELINES ARE IGNORED!****

INSTALLATION STEPS

****REMOVE SPARE TIRE FOR EASE OF INSTALLATION****

- 1) Remove the heat shield located above the exhaust pipe.
- 2) Remove the Fuel Pump Control box located on the inside of the frame rail on the driver side. At this time, remove the rearmost exhaust hanger from the exhaust. These will be re-attached later.
- 3) Install the rear cross arm at this time by swinging it into position as shown in **Figure 1**. The rear cross arm has a third cut-out on it to provide clearance from the exhaust pipe. From underneath the truck, first guide the arm between the frame and the truck bed on the passenger side and swing the driver side in between the the C-channel frame. Now, again guide the passenger side in between the frame and truck bed on the passenger side, but towards the rear bed frame rail and swing the driver side up over the frame. When the cross arm is in position, pull it back towards the rearmost bed frame rail.
- 4) Install the front cross arm at this time by repeating the process used for the rear cross arm. When the cross arm spans the frame rails, push it as far forward to the front most bed frame rail as possible. At this time rotate both cross arms so the side with the three slotted holes are tight against the truck bed. Check to make sure the vertical sides of the arms are facing each other as shown in **Figure 2**.
- 5) Install the mounting plates at this time to the inside of the frame rails. First you must slide the angles up between the cross arms with the slotted holes toward the top. Then push them towards the frame of the truck. When properly fit, the two flanges of the sideplates will fit in between the C-channel of the frame. At this time, the loose exhaust is able to be pushed aside for ease of installation of the passenger sideplate. When the plates are in position, attach them to the cross arms using 5/8-11 x 1 3/4" hex bolts, 5/8" washers and 5/8-11 flange nuts as shown in **Figure 2**. When finished, attach the plates to the frame using 5/8-11 x 1 1/2" carriage bolts and flange nuts as shown in **Figure 2**.
- 6) Drill 1/8" pilot holes through the center of each of the six holes in the cross members up through the pickup bed. From inside the pickup bed, center the six pilot holes with the letter "A" on the cutting template and fasten the template to the bed floor with tape. Once fastened, drill four 1/8" pilot holes through section lettered "B". (Note: Be sure to check for brake and fuel lines before drilling. Also, be sure the holes are drilled in the lower rib sections of the truck bed as shown in Figure 4.)
- 7) With the pilot holes drilled, use a sabre saw to cut out section "C".

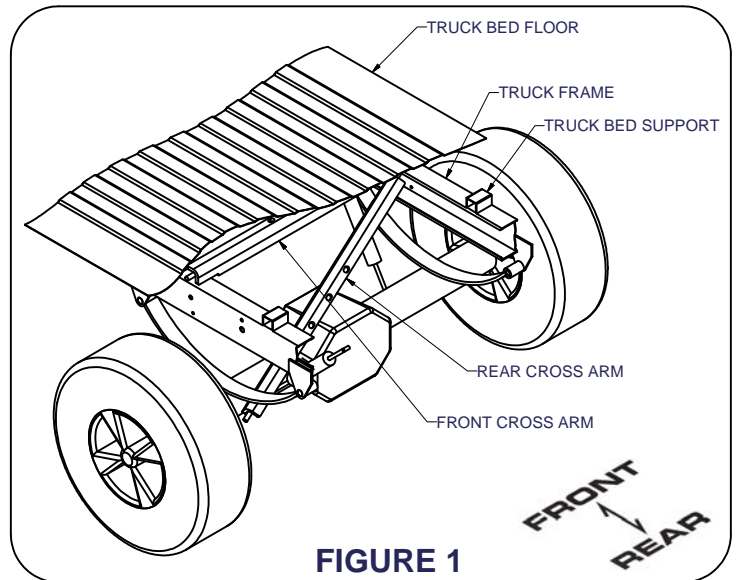


FIGURE 1

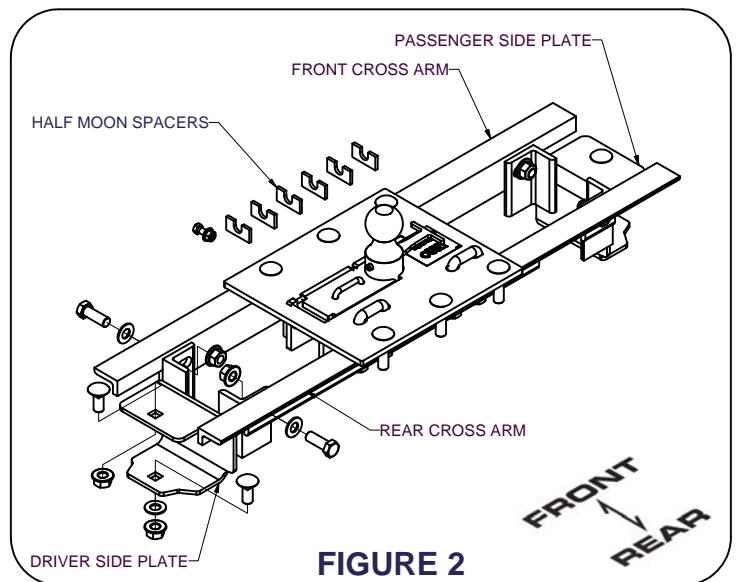


FIGURE 2

Curt Manufacturing Inc., warrants this product to be free of defects in material and/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 warranty. 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.

INSTALLATION STEPS CONT.

20,000 LBS GTW GOOSENECK KIT

- 8) Remove the template and set your C-52 folding hithball into place. Center the C-52 using the six pilot holes as a guide. Using a 21/32" drill bit, drill out all six holes in the pick up bed floor.
- 9) Attach the folding hitchball to the crossarms using the six 5/8" grade 5 carriage bolts and flange nuts provided. Torque bolts to 140 lb-ft.
Note: Shims must be placed under each bolt between crossarms and folding hitch to prevent bed floor from collapsing.
- 10) After the C-52 has been fastened to the crossarms, the remaining fasteners on the subkit must be torqued. First, torque 5/8" flange nuts on crossarms to the side plates to 140 lb-ft. Second, torque the 5/8" bolts and nuts securing the side plates to the frame to 140 lb-ft.
- 11) Reattach the Fuel Pump Control box to the driver side frame using existing holes and hardware. Also, reattach the exhaust pipe to the rearmost exhaust hanger at this time.
- 12) If using the C-52 hitch with this kit, install the 3/8" bolt and flange nut to the C-52 as shown in **Figure 4** to prevent the ball from folding completely down. Failure to do so could result in rear axle damage.

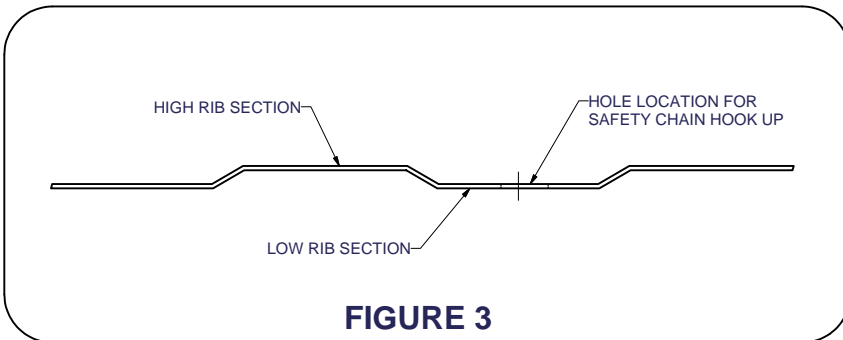


FIGURE 3

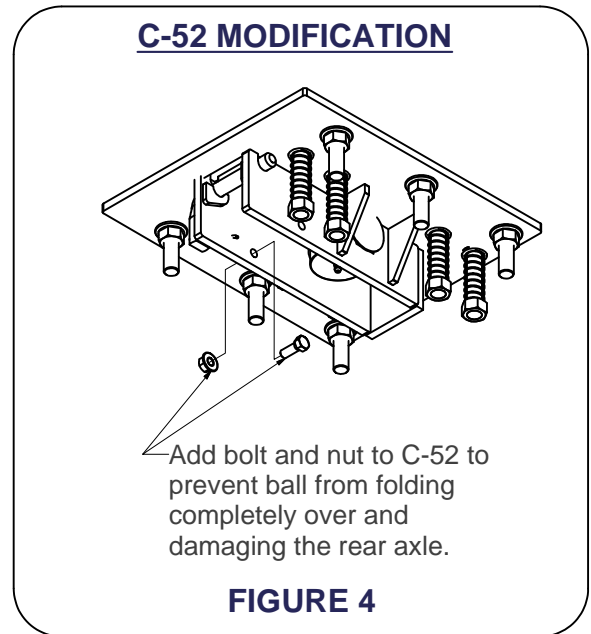
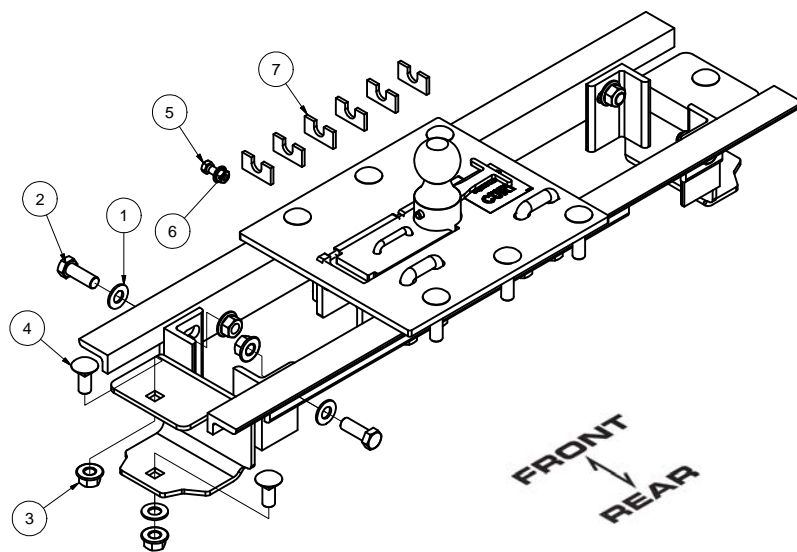


FIGURE 4

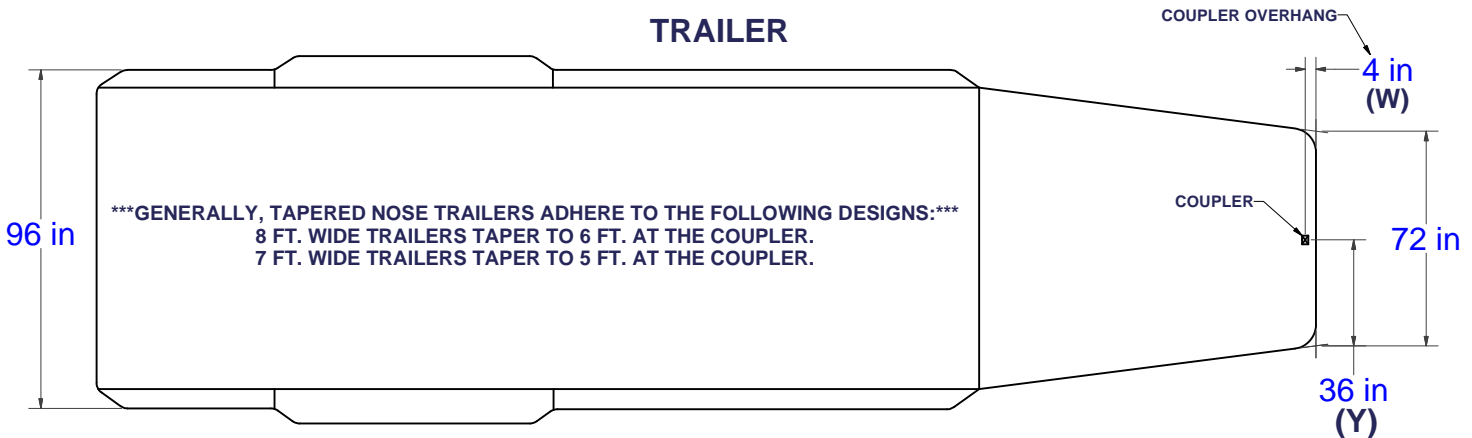
Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	6	5/8	WASHER	
2	4	5_8 - 11 x 1 3_4 HEX	HEX BOLT	
3	8	5/8-11	HEX FLANGE NUT	
4	4	5/8-11 x 1 1/2 CARRIAGE	CARRIAGE BOLT	
5	1	3_8 - 16 x 1	HEX BOLT	
6	1	HFN3816	HEX FLANGE NUT	
7	6	CM-SP27	.188 x 1.00 x 2.00" U-SHAPE SPACER	

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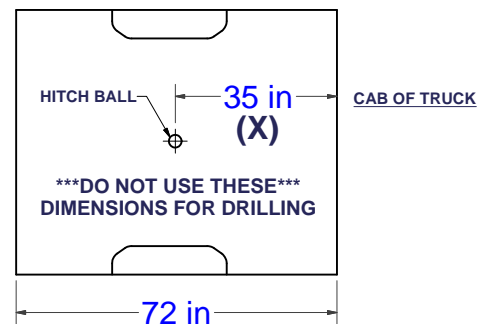
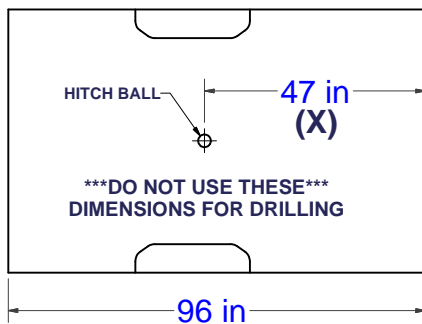
CAB TO TRAILER CLEARANCE

REMOVAL OF REAR WINDOW ACCESSORIES MAY BE REQUIRED.

TRAILER



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:

$$\begin{matrix} \text{[(X) - (W)]} & - & \text{(Y)} & = & \text{(Z)} \end{matrix}$$

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

$$\begin{matrix} X - Y = Z \\ 35 - 36 = -1 \\ \text{(TRAILER **WILL INTERFERE** WITH CAB)} \end{matrix}$$

TRAILER WITH OVERHANG

$$\begin{matrix} \text{[(X) - (W)]} - Y = Z \\ \text{[35 - 4]} - 36 = -5 \\ \text{(TRAILER **WILL INTERFERE** WITH CAB)} \end{matrix}$$

YOUR CALCULATION:

$$\begin{matrix} \text{(CAB TO BALL CENTER)} & \underline{\hspace{2cm}} \\ \text{(COUPLER OVERHANG)} & - \underline{\hspace{2cm}} \\ 1/2 \text{ (TRAILER WIDTH)} & - \underline{\hspace{2cm}} \\ \text{(MINIMUM CLEARANCE)} & = \underline{\hspace{2cm}} \end{matrix}$$