

**\*\*DO NOT EXCEED RECOMMENDED VEHICLE TOWING WEIGHT!\*\***

# 60660 SUBKIT

# DODGE 2500 / 3500 SHORT AND LONG BED

10/3/2017

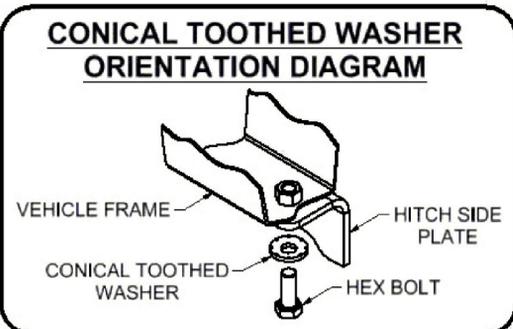
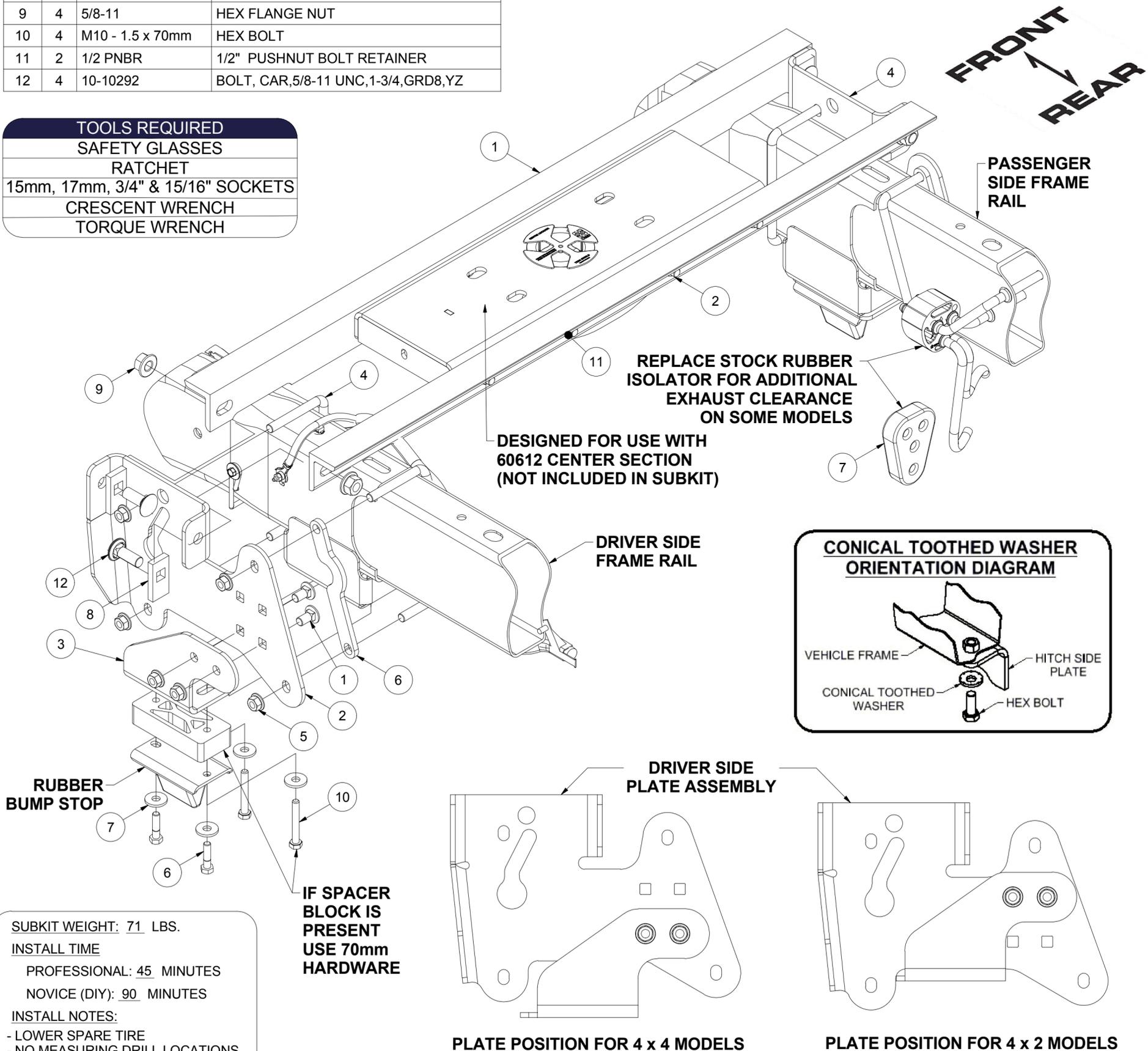
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**WARNING!!** BRAKE, FUEL, AND ELECTRICAL LINES MAY NEED TO BE LOOSENED OR REPOSITIONED TO PROVIDE CLEARANCE FOR NEW HARDWARE. SOME MODELS MAY REQUIRE MODIFICATION OR REMOVAL OF HEAT SHIELDS. ON SHORT BED MODELS, CHECK FOR ADEQUATE TURNING CLEARANCE BETWEEN THE FRONT OF ALL TRAILERS AND THE TRUCK CAB. ON TWO WHEEL DRIVE TRUCKS A CLEARANCE CHECK MUST BE PERFORMED WHEN TRUCK IS LOADED AND UNLOADED TO VERIFY THE INVERTED BALL WILL NOT INTERFERE WITH THE TOP OF THE DIFFERENTIAL

Hardware			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	1/2-13 x 1, GR8	CARRIAGE BOLT
2	8	1/2-13 x 1 1/2, GR8	CARRIAGE BOLT
3	4	CM-SP12	.250 x 1.00 x 2.00" SQUARE HOLE SPACER
4	4	CM-1209-UBS	1/2-13 x 4 x 7.25 x 1 3/4 SQ U-BOLT
5	20	HFN 1213, GR8	HEX FLANGE NUT
6	4	M10 - 1.5 x 40mm	HEX BOLT
7	4	7/16"	CONICAL TOOTHED WASHER
8	4	CM-SP9	.375 x 1.25 x 2.50" SQUARE HOLE SPACER
9	4	5/8-11	HEX FLANGE NUT
10	4	M10 - 1.5 x 70mm	HEX BOLT
11	2	1/2 PNBR	1/2" PUSHNUT BOLT RETAINER
12	4	10-10292	BOLT, CAR,5/8-11 UNC,1-3/4,GRD8,YZ

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	60660-CA	2.50 x 2.00 x .375" CROSS ARM
2	1	60660-DSWA	.250" DRIVER SIDE PLATE
3	1	60660-DSB	.250" DRIVER SIDE BRACKET
4	1	60660-PSWA	.250" PASSENGER SIDE PLATE
5	1	60660-PSB	.250" PASSENGER SIDE BRACKET
6	2	60660-SP	.313" SPACER PLATE
7	1	CM-C655-EH	EXHAUST HANGER

**TOOLS REQUIRED**  
 SAFETY GLASSES  
 RATCHET  
 15mm, 17mm, 3/4" & 15/16" SOCKETS  
 CRESCENT WRENCH  
 TORQUE WRENCH



SUBKIT WEIGHT: 71 LBS.  
 INSTALL TIME  
 PROFESSIONAL: 45 MINUTES  
 NOVICE (DIY): 90 MINUTES  
 INSTALL NOTES:  
 - LOWER SPARE TIRE  
 - NO MEASURING DRILL LOCATIONS  
 - NO DRILLING INTO FRAME

IF SPACER BLOCK IS PRESENT USE 70mm HARDWARE

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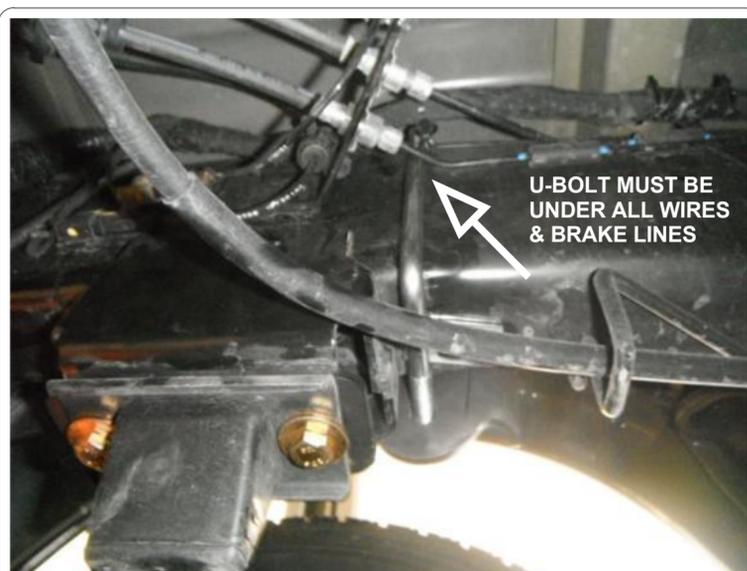
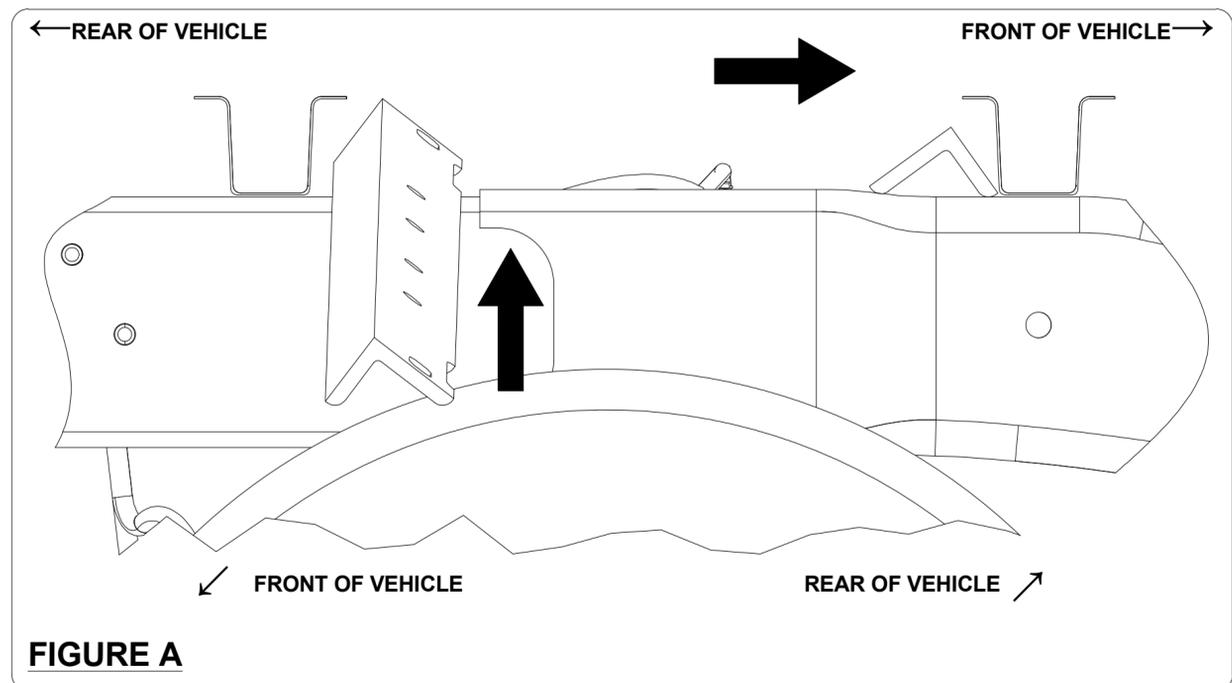
**DODGE 2500 / 3500 SHORT AND LONG BED**

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**INSTALLATION STEPS:**

1. Temporarily remove spare tire and temporarily remove plastic wheel well covers (if vehicle is equipped with them and if they are a style which prevents hitch installation).
2. Insert cross arm (A) by sliding it between the frame and the bottom of the truck bed. It needs to be inserted so the leg without the holes will be against the bottom of the bed and the leg with the holes will face the rear of the vehicle, see **FIGURE A**. **NOTE:** Use a crescent wrench to bend the metal flange below the bed outward to allow the cross arms to be slid into position. The cross arm can be used as a lever to add additional bend to the flange, if needed. Insert the cross arm in the location shown in **FIGURE A** until it spans the frame rails. Slide the cross arm forward so that it is next to the forward bed support.
3. Insert the rearmost cross arm (A) in the same location that the first cross arm was inserted. Slide it in until it spans the frame rails. This needs to be inserted so the leg without the holes will be against the bottom of the bed and the leg with the holes will face the front of the vehicle, see **FIGURE A**.
4. Place the forward U-bolt (4) into position on the inside of the driver side frame rail. See **FIGURE B** for approximate location of the U-bolt. One or two of the wire harness clips may need to be unfastened from the inside of the driver side frame rail on some models for the U-bolt to be put into position. **NOTE: The U-bolts must be positioned under all the brake lines and wires, see FIGURE B.**
5. The rearmost rubber exhaust isolator may need to be replaced with the included isolator (G) on some models. Replace if needed for additional clearance between the exhaust and the hitch, see **PAGE 1**. This will only be needed on models with exhaust styles shown in **FIGURE C**.



**FIGURE B**



**FIGURE C**

**PERIODICALLY CHECK THIS GOOSENECK HITCH TO ENSURE THAT ALL FASTENERS ARE TIGHT AND THAT ALL STRUCTURAL COMPONENTS ARE SOUND.**

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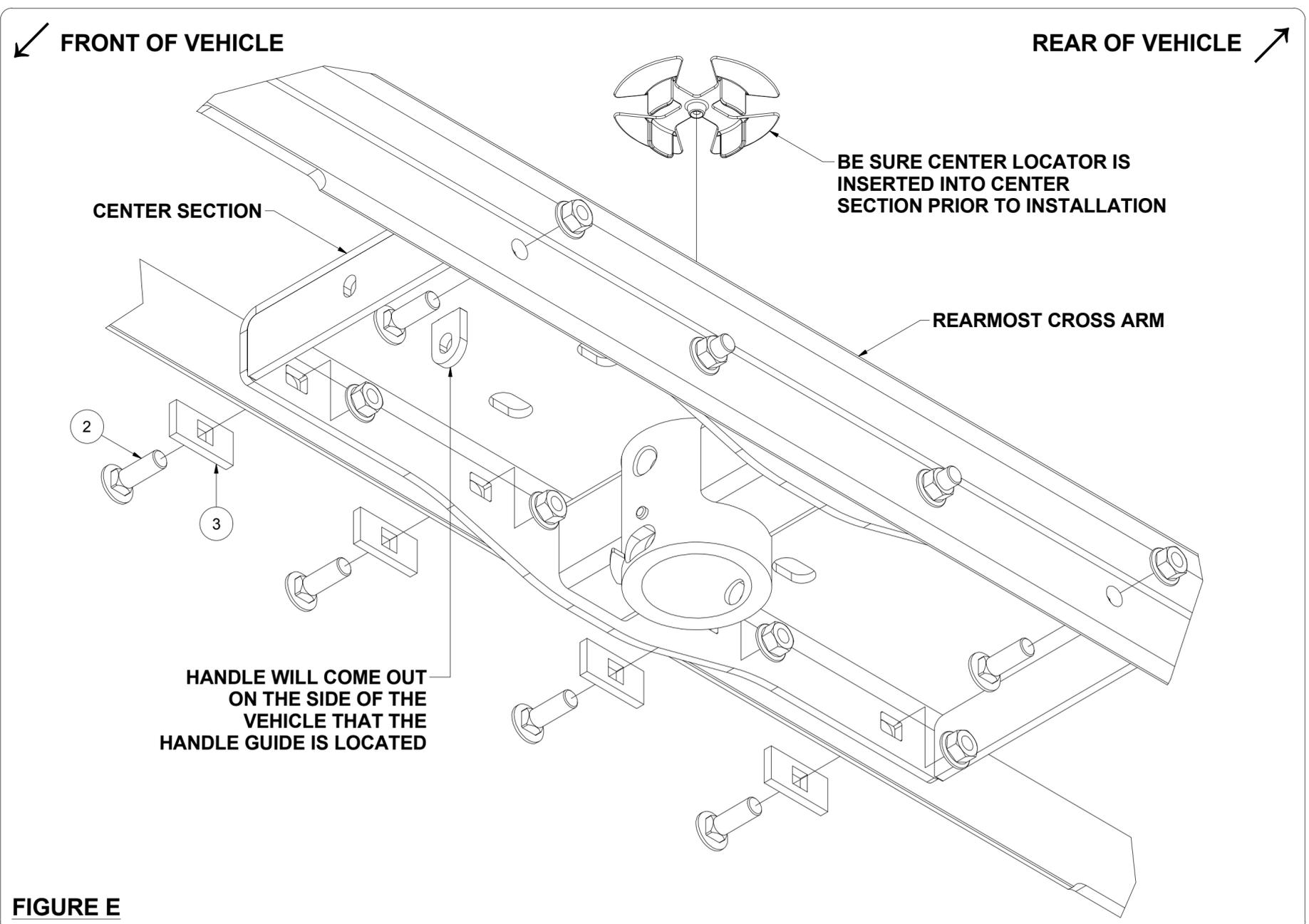
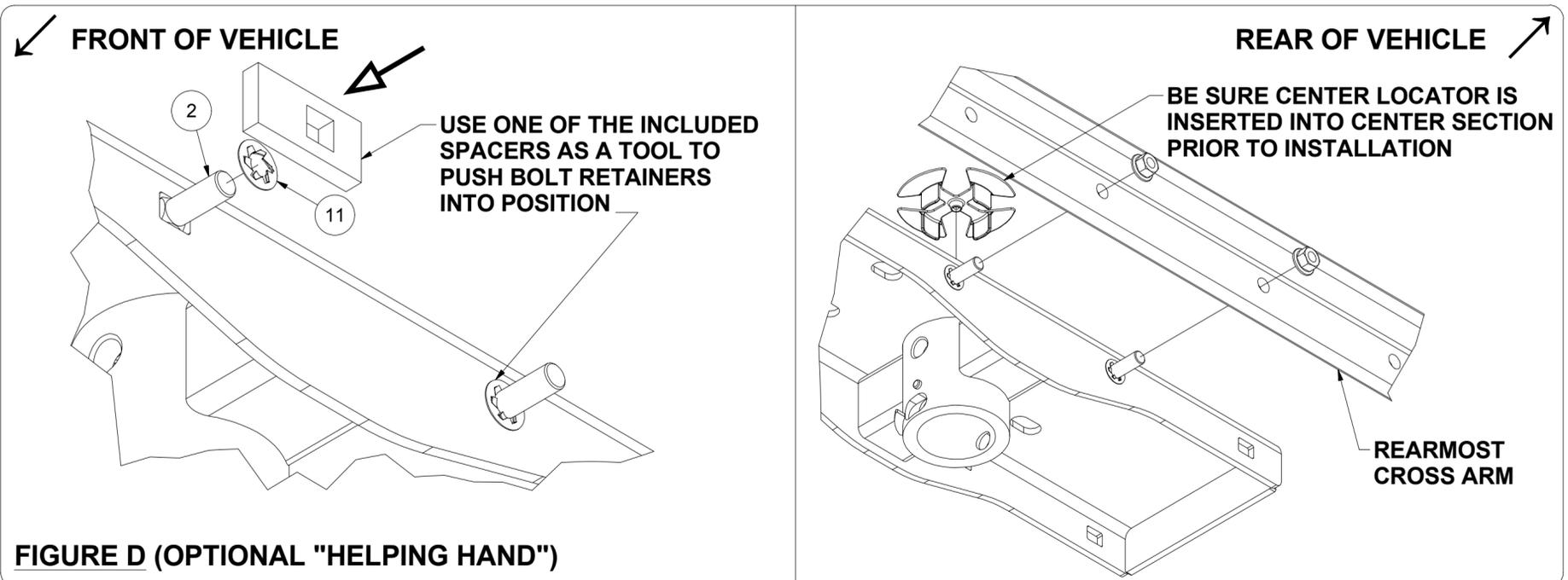
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**INSTALLATION STEPS CONTINUED:**

6. Raise the center section into position. **OPTIONAL:** Two pushnut bolt retainers (11) are included to give a "helping hand" to the installation process. If desired, put two 1/2" x 1 1/2" carriage bolts (2) in through the centermost slots on the side of the center section that will fasten to rear cross arm. Be sure the serrations in the bolt retainers are angled away from the center section and push a bolt retainer onto the two carriage bolts. Use one of the included spacers as a tool to push the bolt retainers into position, see **FIGURE D**. **NOTE:** The gooseneck handle will come out on the side of the vehicle that the handle guide is located. Be sure center locator is inserted into the center section cylinder prior to installing. Loosely attach to the front cross arm by placing four 1/2" x 1 1/2" carriage bolts (2) with four CM-SP12 spacers (3) in through the forward cross arm and attach center section with four 1/2" hex flange nuts (5), see **FIGURE E**.
7. Slide the rearmost cross arm forward and loosely attach to the center section by inserting four 1/2" x 1 1/2" carriage bolts (2) in through the center and out the rearmost cross arm. Attach with four 1/2" hex flange nuts (5), see **FIGURE E**.
8. Loosely assemble the side plates with brackets (B & C) and (D & E) using 1/2" x 1" carriage bolts (1) and 1/2" hex flange nuts (5). The brackets will attach to the top set of holes on the side plates for two wheel drive models and the bottom set of holes for four wheel drive models, see **PAGE 1**.
9. Remove the the rubber bump stop from underneath each frame rail by removing two M10 bolts from each. Save the rubber bump stops for reinstallation but the hardware removed will not be reinstalled, see **PAGE 1**.
10. Place driver side plate assembly over the U-bolt (4) which was positioned in step 4. Attach to the U-bolt with two 1/2" hex flange nuts (5). **NOTE:** The ground wire on the outside of the driver side frame rail on 2012 and earlier models must not be pinched between the driver side plate (B) and frame. This ground wire may need to be loosened, rotated slightly and retightened for the plate to be put into position.
11. Insert the rearward U-bolt (4) over the inside of the driver side frame rail and position the spacer (F) between the plate and frame rail in the orientation shown on **PAGE 1**. Loosely attach to the driver side plate assembly using two 1/2" hex flange nuts (5). One of the wire harness clips may need to be unfastened from the inside of the driver side frame rail on some models for the U-bolt to be placed into position.
12. Clamp the driver side plate assembly between the rubber bump stop and frame rail using the supplied 7/16" conical toothed washers (7) and M10 x 40mm hex bolts (6). Use the M10 x 70mm hex bolts (11) if spacer block is present.
13. Attach driver side plate assembly to the cross arms by inserting 5/8" x 1 3/4" carriage bolts (8) with CM-SP9 spacers (9) in through the driver side plate (B) and out the cross arms (A). Attach with 5/8" hex flange nuts (10), see **PAGE 1**.
14. Insert the forward U-bolt (4) into position on the inside of the passenger side frame rail and loosely attach the passenger side plate assembly using two 1/2" hex flange nuts (5). Repeat steps 11 -13 on the passenger side with this plate assembly.
15. Verify the center section is centered on the vehicle by checking that the sides of the center section are in the same location on bed ribs.
16. Torque all fasteners in the following order: **First:** Torque the center section to the cross arms. **Second:** Torque the side plate brackets to the truck frame. **Third:** Torque side plate assemblies and the U-bolts to the side plates. (When torquing the U-bolts, make sure to tighten them slowly alternating between the top and bottom of the U-bolt until equally tightened to maximum of 40 ft-lbs.) **Forth:** Torque the side plates to the cross arms. Torque all 5/8" fasteners to 210 ft-lbs, 1/2" fasteners to 110 ft-lbs and M10 hardware to 45 ft-lbs.

**(REFER TO 60612 GOOSENECK HITCH INSTRUCTIONS FOR INSTALLATION COMPLETION AND OPERATING PROCEDURES)**

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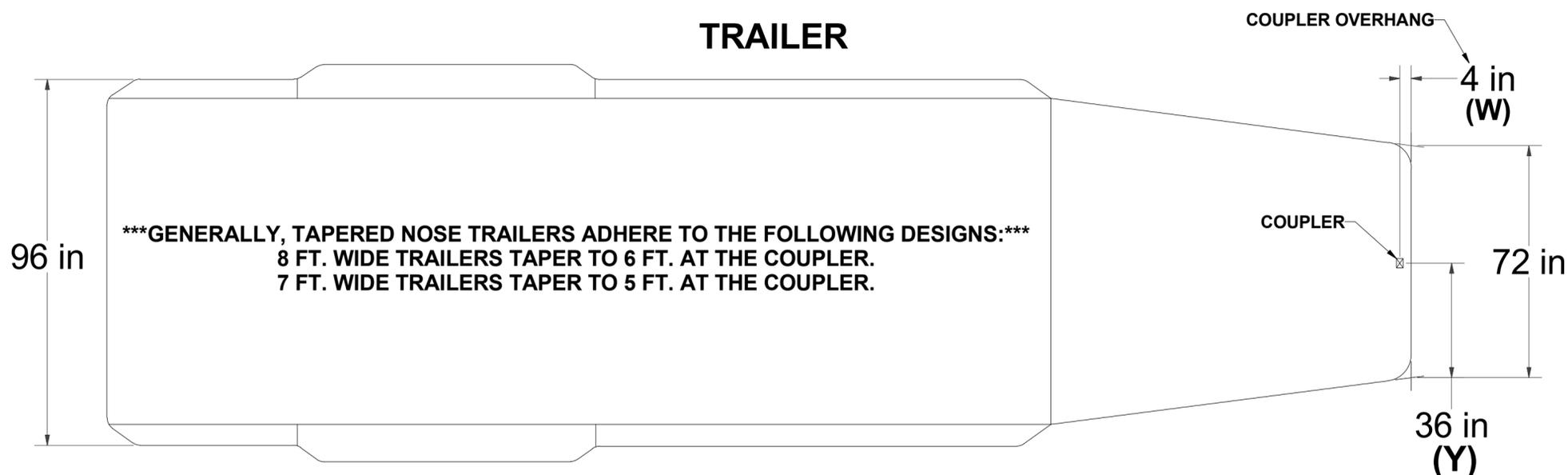
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# CAB TO TRAILER CLEARANCE

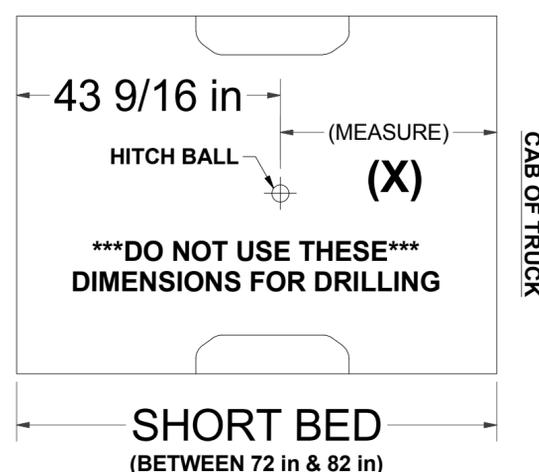
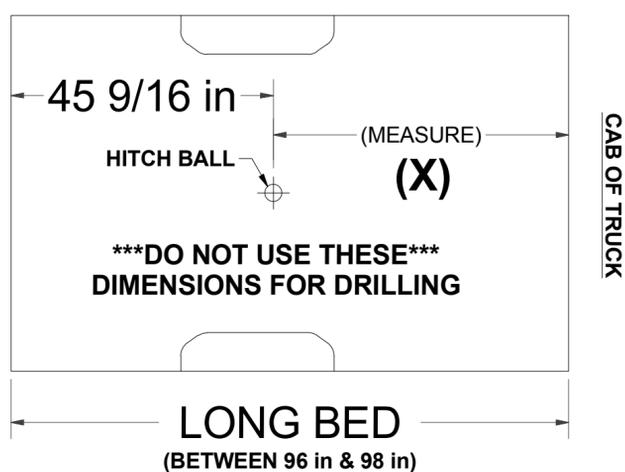
**\*\*REMOVAL OF REAR WINDOW ACCESSORIES MAY BE REQUIRED.\*\***

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## TRAILER



## LONG & SHORT TRUCK BEDS



## CLEARANCE CALCULATION

$$(CAB TO BALL CENTER) - 1/2 (TRAILER WIDTH) = (MINIMUM CLEARANCE)$$

$$(X) - (Y) = (Z)$$

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) \_\_\_\_\_