

60604

CHEVY-GMC 2500 / 3500 SHORT AND LONG BED

7/13/2012

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

**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. ON SHORT BED MODELS, CHECK FOR ADEQUATE TURNING CLEARANCE BETWEEN THE FRONT OF ALL TRAILERS AND THE TRUCK CAB.

**WARNING!!** 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

**INSTALLATION STEPS**

**\*\*REMOVE ALL REAR WINDOW ACCESSORIES BEFORE TOWING\*\***

**BEFORE INSTALLING**

An overhead lifting device, such as chain falls, engine hoist, or cable come-a-long, can be used to lift the center section of the hitch in place. Lower a loop of rope or chain through the hole in the truck bed floor and attach it to the round hitch receiver tube in the center section. Use the lifting device to raise the center section until the round hitch receiver tube that protrudes from the center section fits in the hole in the truck bed floor. Maintaining upward pressure may facilitate fastening the crossmember to the center section, especially if the truck bed floor has been distorted downward from heavy use.

1. Remove spare tire and heat shield. The heat shield under the bed floor needs to be removed or a section cut out for the hitch assembly to be installed. First, remove the heat shield from in front of the rear crossmember. Next, remove the heat shield from the back of the crossmember located near the front of the wheel well. Remove plastic wheel well covers if vehicle is equipped with them.

**\*\*NOTE: Before installing crossarms, run a 1/2-13 bolt or 1/2"-13 tap through crossarm holes to remove any powder coating or debris.\*\***

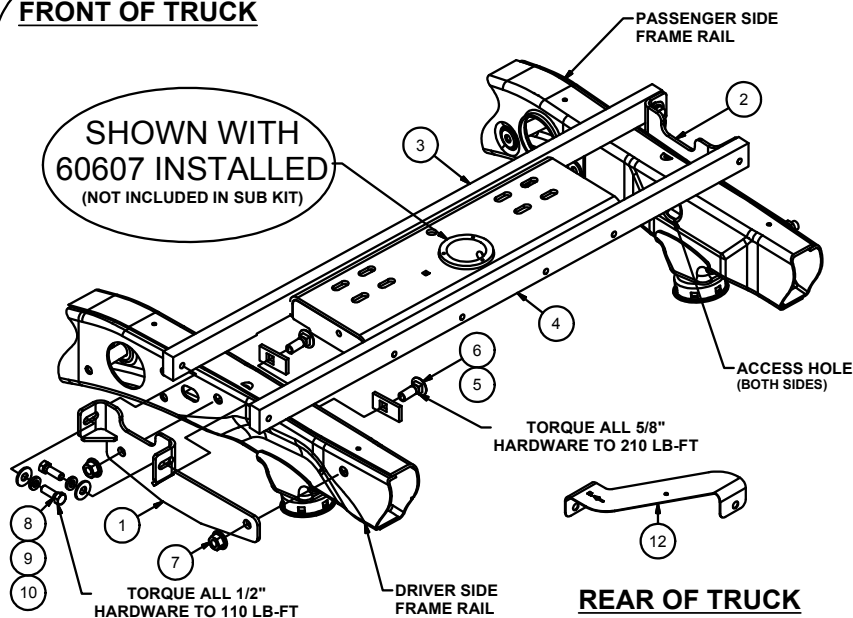
2. Install the rear crossarm by sliding it between the frame and the floor of the truck bed above the passenger side rear tire. After spanning the frame rails, rotate the cross arm vertically with the holes towards the bottom.
3. Install the front crossarm by sliding it between the truck frame and the floor of the truck bed above the passenger side rear tire (**SEE FIGURE 1**). With the crossarm spanning the truck frame rails, rotate it vertically with the holes towards the bottom.
4. Install the sideplates (flanges toward the front of the vehicle), aligning the holes in the side plates with the existing holes in the frame as shown.

**QUICK HOLE DIMENSIONS**

**SHORT BED INSTALLATION 44"**  
**LONG BED INSTALLATION 48 7/8"**

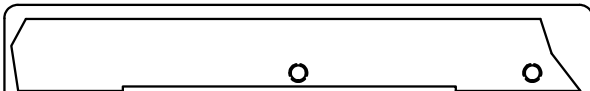
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	CM-60604-DSW	WELDMENT ASSEMBLY
2	1	CM-60604-PSW	WELDMENT ASSEMBLY
3	1	CM-60604-FCA	1" x 2" FRONT CROSS ARM
4	1	CM-60604-RCA	1" x 2" REAR CROSS ARM
5	4	CM-SP9	.250 x 1.25 x 2.50" SQUARE HOLE SPACER
6	4	5/8-11 x 1 3/4	CARRIAGE BOLT
7	4	5/8-11	HEX FLANGE NUT
8	12	1/2 - 13 x 1 1/2	HEX BOLT
9	12	1/2"	LOCK WASHER
10	12	FW12	FW, 12, ZP
11	2	5_8 FISHWIRE	5/8" FISHWIRE
12	1	CM-60604-T	16GA. TEMPLATE

**FRONT OF TRUCK**



**\*\*FISHWIRES NOT SHOWN\*\***

**FIGURE 2**



**\*\*CRITICAL\*\***

THE FRONT CROSSARM (CM-60604-FCA) IS IDENTIFIED BY A NOTCH AS SHOWN ABOVE

**FIGURE 1**

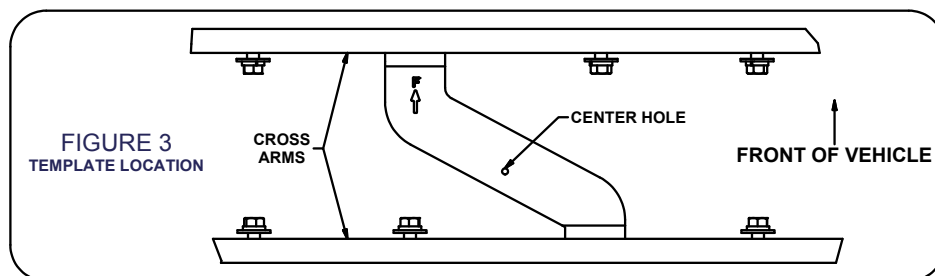
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**\*\*REMOVE ALL REAR WINDOW ACCESSORIES BEFORE TOWING\*\***

### INSTALLATION STEPS CONTINUED

5. Attach the sideplate flanges to the cross arms using (2) 1/2" x 1 1/2" hex bolts with 1/2" washers and 1/2" lock washers. Thread them through the inside of the sideplate flanges into the crossarms. **(Finger tight only!)**
6. Fishwire the 5/8" bolts and spacers into position through the access holes and attach the sideplates to the frame using (2) 5/8" flange nuts on each side. **(Finger tight only). See Figure 2.**
7. Using the 1/2" hardware supplied install the (CM-60604-T) template between the cross arms with the arrow pointing to the front of the vehicle as shown in figure 3. Using the template, drill through the center hole with a 1/4" drill bit into the bed of the vehicle.



8. After drilling the pilot hole, remove the template. Using a 4" hole saw or saber saw (with metal cutting blade), enlarge the hole for the center section to pass through.
9. Install the center section by carefully raising it above the fuel tank from beneath the truck. Insert (4) 1/2" x 1 1/2" hex bolts with a washer and lock washer through each of the slots on the inside of the center section, and thread them finger tight into the rear crossarm. Repeat that process for the front crossarm. While installing the center section, be sure the round hitch cylinder that protrudes from the top of the center section is **positioned towards the rear of the truck** and is centered in the hole in the bed of the truck.
10. Disconnect lifting device if used and square center section to frame rails.
11. Torque all 1/2" fasteners to 110 ft-lbs, and all 5/8" fasteners to 210 ft-lbs in the following order:
  - First:** Torque the center section to the front and rear crossarms.
  - Second:** Torque the sideplates to the truck frame on both sides.
  - Third:** Torque the sideplate flanges to the front and rear crossarms.

#### **WARNING!**

#### **INCORRECT INSTALLATION OF 60607 SAFETY CHAIN U-BOLTS MAY RESULT IN VEHICLE DAMAGE**

60607 safety chain u-bolts, be sure to use the u-bolt slots nearest the 60607 cylinder. This will prevent contact of the safety chain u-bolts with the vehicle fuel tank. Installation of u-bolts in outside slots may result in puncturing of the vehicle fuel tank.

Refer to the 60607 installation instructions for full installation of safety chain u-bolts.

#### **(REFER TO GOOSENECK HITCH INSTRUCTIONS FOR INSTALLATION AND OPERATION PROCEDURES)**

##### **Maintenance (Required every 30 days or prior to use)**

1. Keep hitch ball lubricated regularly. Use silicone spray or equivalent to prevent wear and rust.
2. Keep hitch assembly free of dirt and other foreign debris.
3. Check for proper torque on all nuts and bolts before each use. Also check for excessive wear.
4. Check ball wear before each use. **(Note: Do not tow trailer with worn or damaged parts.)**

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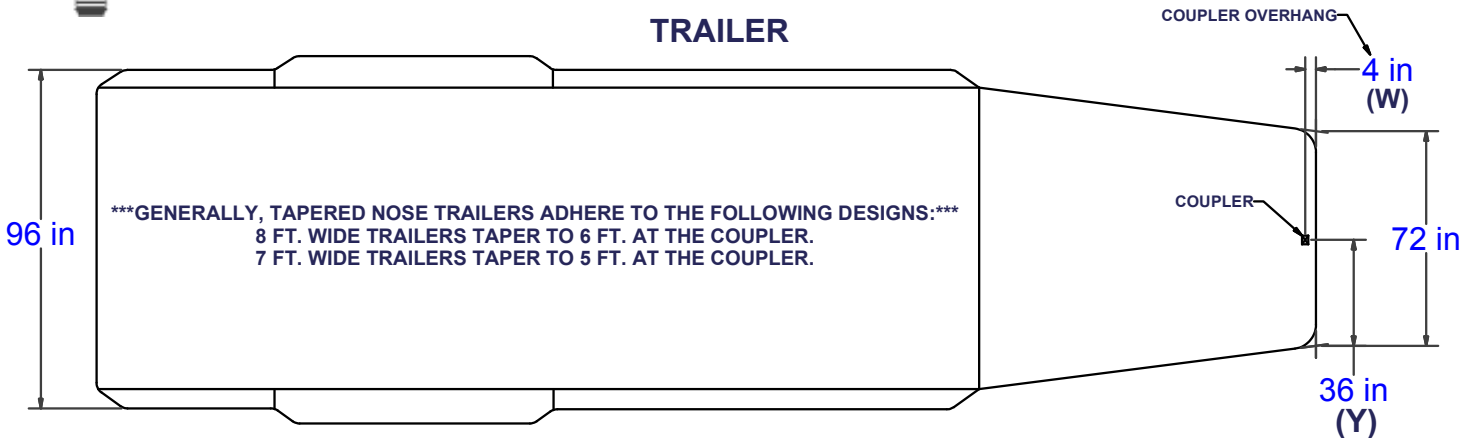


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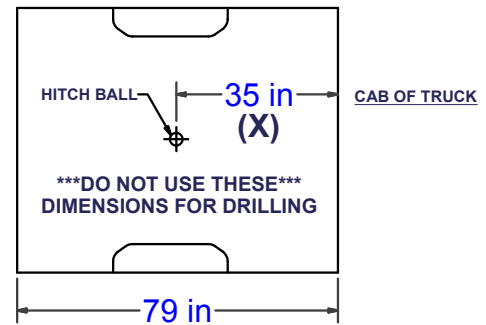
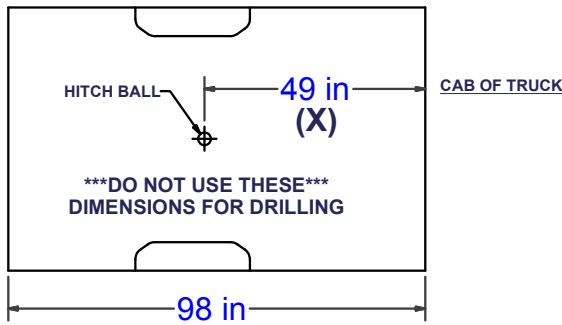
# CAB TO TRAILER CLEARANCE

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

## TRAILER



## LONG & SHORT TRUCK BEDS



## CLEARANCE CALCULATION

$$(CAB TO BALL CENTER) - \frac{1}{2} (TRAILER WIDTH) = (MINIMUM CLEARANCE)$$

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

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) = \_\_\_\_\_

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**CURT**<sup>TM</sup>

The **FIRST** Name  
in Towing Products<sup>TM</sup>

# DOUBLE LOCK GOOSENECK

## INSTRUCTION MANUAL



Installer: Read and understand this manual. Fully instruct and demonstrate the operation of this gooseneck hitch to the end user. Include the importance of observing all warnings. Provide this manual in its entirety to the end-user.

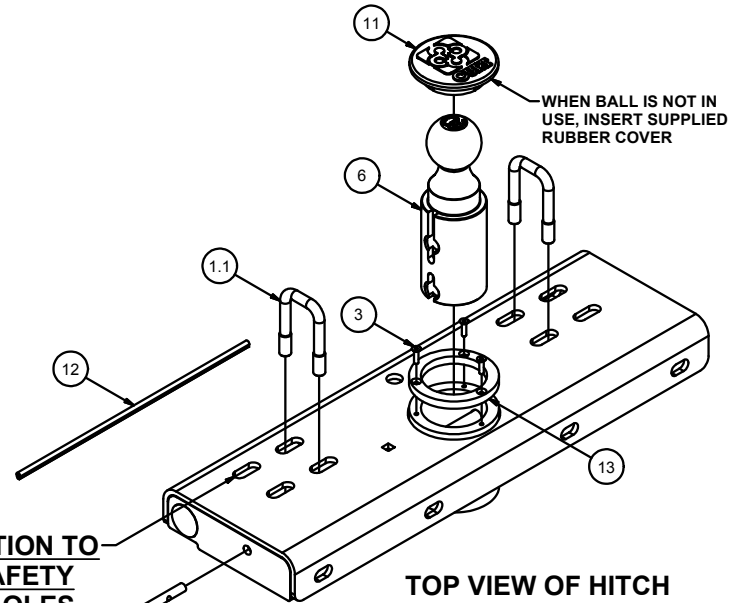
# 60607

# GOOSENECK HITCH

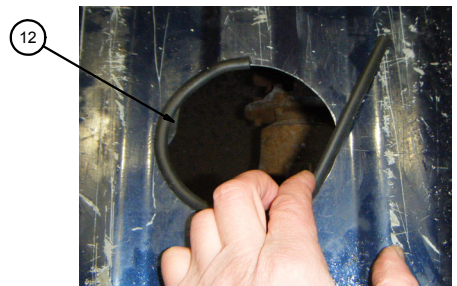
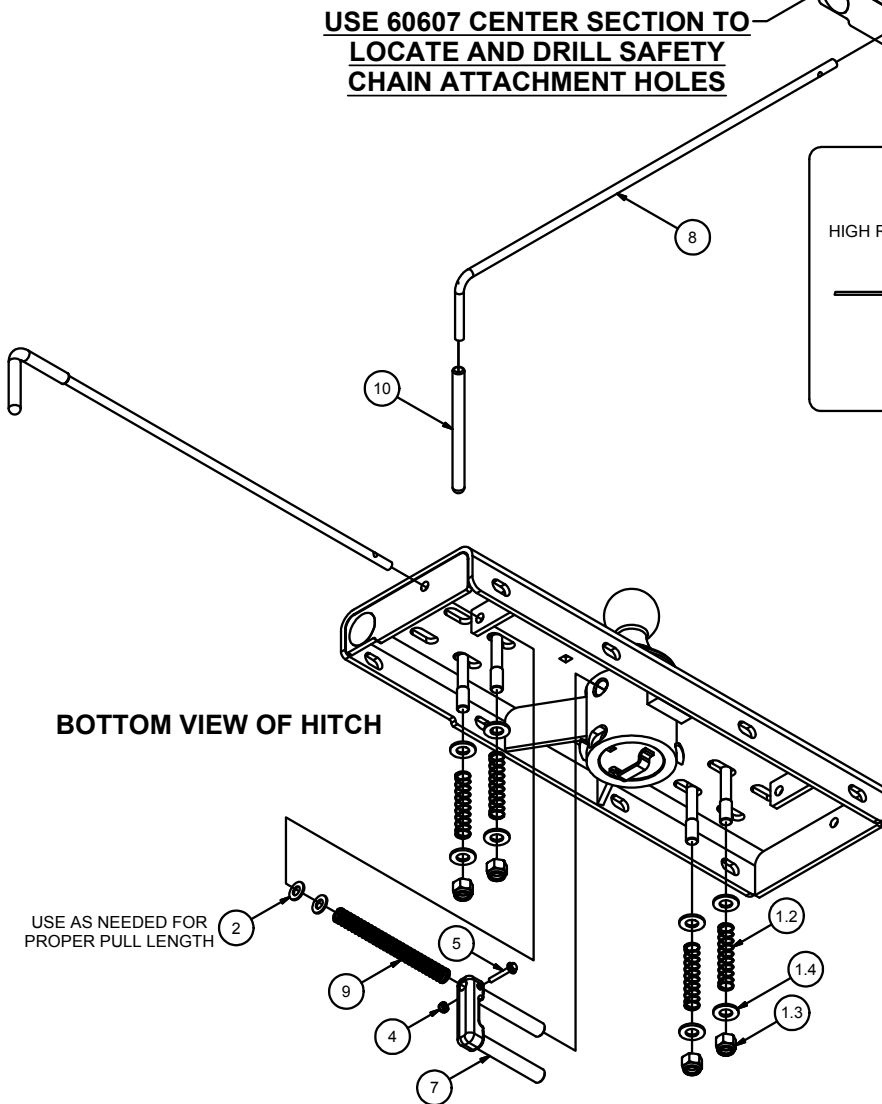
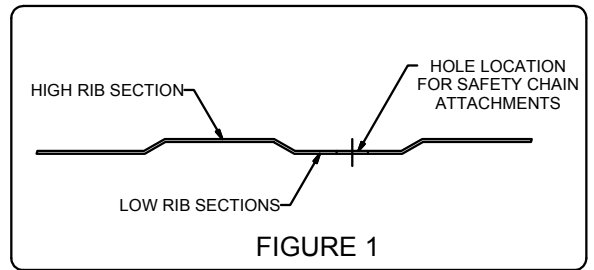
2/26/2013

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	CM-C60-CLA	SAFETY CHAIN LOOP ASSEMBLY
1.1	1	CM-C60-CL	2" x 3" SAFETY CHAIN LOOP
1.2	2	CM-C60-S	U-BOLT SPRING
1.3	2	1_2 - 13	NYLOCK HEX NUT
1.4	4	FW12SAE	FW, 1/2 SAE, ZP
2	2	3/8"	WASHER
3	3	#10-32 x 3/4	FLAT HEAD C'SUNK CAP SCREW
4	1	#10-24 NYLOCK HEX NUT	NYLOCK HEX NUT
5	1	#10-24 x 1.25 HHFS	HEX HEAD FLANGE SCREW
6	1	CM-C60-B	TURNOVER BALL COMPLETE
7	1	CM-C600-CLP	CAST LOCK PIN
8	1	CM-C60-R	.375" HANDLE ROD
9	1	CM-C60-CS	7.5 LB COMPRESSION SPRING
10	1	CM-C60-H	VINYL HANDLE GRIP
11	1	CM-C60-RC	RUBBER COVER
12	1	CM-UE1	.300" U-SHAPED EDGING
13	1	CM-C600-CR	3.75 DIA. x .375" CHROME RING

**WARNING DO NOT** invert ball when carrying heavy loads on 2 wheel drive trucks. The ball may hit the top of the differential, brake lines, or sensors.  
**(NOTE: Do not invert ball on any Toyota Tundra Models)**



**USE 60607 CENTER SECTION TO LOCATE AND DRILL SAFETY CHAIN ATTACHMENT HOLES**



**U-EDGING INSTALLED AROUND EDGE OF 4" HOLE IN TRUCK BED**

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**Warning!!** Carefully examine the location of fuel lines, brake lines, and electrical wires BEFORE INSTALLATION. Brake, fuel, and electrical lines may need to be loosened or repositioned to provide clearance for new hardware. The installation of this hitch may require modification or removal of heat shields. The use of overload springs, air bags, etc. may be required when towing heavy loads.

### **Installing 60607 Turnover Gooseneck After Cross Arm Sub-kit Installation**

- 1) Install rubber edging (CM-UE1) on cut edge for 60607 cylinder, trim excess.
- 2) Position the 60607 over the rear axle and up to the rear cross arm with the cylinder facing the correct direction for the application. Install four 1/2" x 1 3/4" carriage bolts into the 60607 first, then through the rear cross arm and secure with 1/2" flange nuts, finger tighten.
- 3) Move the front cross arm to the 60607 and install the 1/2" x 1 3/4" carriage bolts into the cross arm then through the 60607 and secure with 1/2" flange nuts.
- 4) Torque all 1/2" hardware to 110 ft-lbs.

### **Installing Safety Chain Attachments**

- 1) From under the truck use the 60607 gooseneck as a template to drill four 1/2" holes for the safety chain attachments.
- 2) Using a 1/2" drill bit, drill the center of each slotted hole in the gooseneck. (**Note: Be sure the holes are drilled in the lower rib section of the truck bed as shown in FIGURE 1.**)
- 3) From inside the truck box place the two U-bolts (1.1) through the predrilled holes in the bed of the truck.
- 4) From beneath the truck place a washer (1.4), a spring (1.2), a washer (1.4) and a nylock nut (1.3) on each of the four U-bolt legs. Tighten the nylock nuts until flush with the bottom of the U-bolt.

### **Installing handle / lock**

- 1) Insert Locking Pin (7) into the ball cylinder with handle rod hole located on top.
- 2) Slide rubber grip (10) onto handle rod.
- 3) Insert handle rod from outside vehicle, through the hole in the 60607 endplate, and through the rod guide as shown. (Handle rod may be installed on driver side or passenger side, depending on preference).
- 4) Slide the compression spring (9) over handle rod before inserting the handle rod into the locking pin. Insert handle rod into locking pin and secure with #10 screw (5) and nylock nut (4) as shown.  
(**Note: Use 1-2 additional 3/8" washers (2) as needed to ensure proper pull length of locking pin.**)

### **Caution!!!**

1. Check that all 1/2" hardware has been torqued to 110 ft-lbs.
2. Check that all side plate hardware has been torqued. Some hardware listed will not apply to your application.
  - 3/8" to 45 ft-lbs.
  - 1/2" to 110 ft-lbs.
  - 9/16" to 150 ft-lbs.
  - 5/8" to 210 ft-lbs.
  - 3/4" to 380 ft-lbs.
3. Re-attach Brake, Fuel, and Electrical lines so they do not contact any of the added fasteners.

### **60607 Operation**

1. Pull the handle out as far as possible and rotate clockwise until the locking pin is disengaged and locked out.
2. Insert ball in the tow position into the cylinder by aligning the ball groove with the cylinder pin. If the groove and pin are not aligned simply rotate ball until the ball drops into place.
3. Rotate handle counter clockwise until locking pin snaps back into position. (Note: Be certain the locking pin passes completely through the ball and securely into the cylinder.)

### **60607 Installation check**

1. Set ball in towing position and handle in locked position.
2. Connect the trailer to the hitch ball.
3. Check truck box clearance, there should be a minimum clearance of 6" between the bottom of the trailer overhang and the top of the box sides. Verify clearance between the truck and trailer at cab and box corners.

### **Maintenance (Required every 30 days or prior to use)**

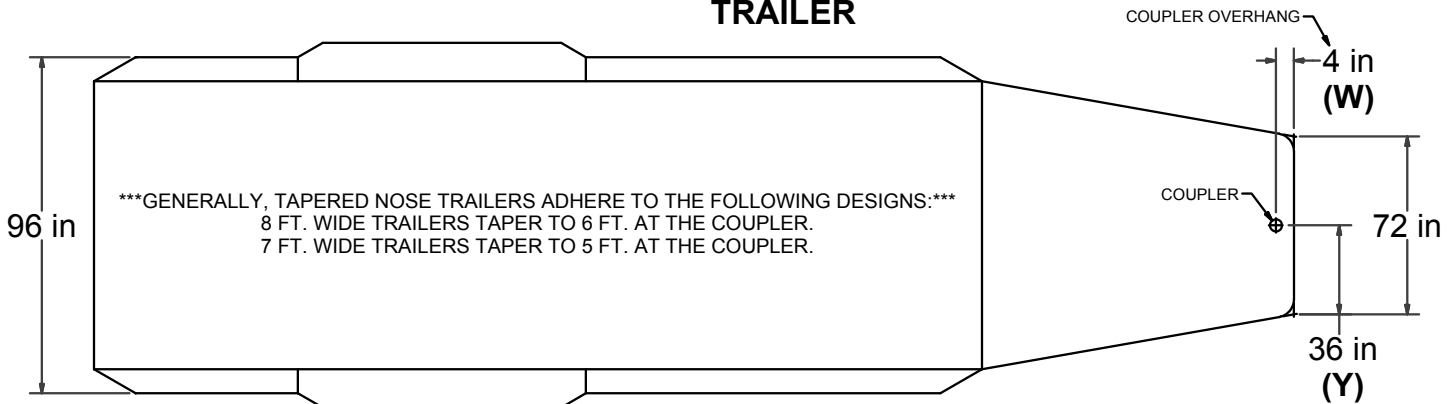
1. Keep hitch ball lubricated regularly. Use silicone spray or equivalent to prevent wear and rust.
2. Keep hitch assembly free of dirt and other foreign debris.
3. Check for proper torque on all nuts and bolts before each use. Also check for excessive wear.
4. Check for ball wear before each use. (**Note: Do not tow trailer with worn or damaged parts.**)

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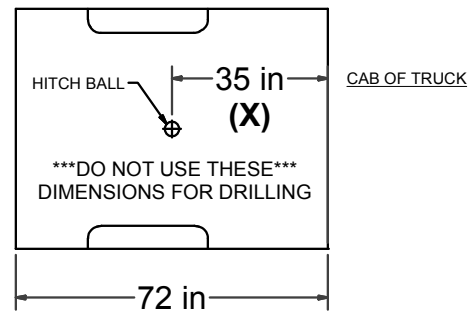
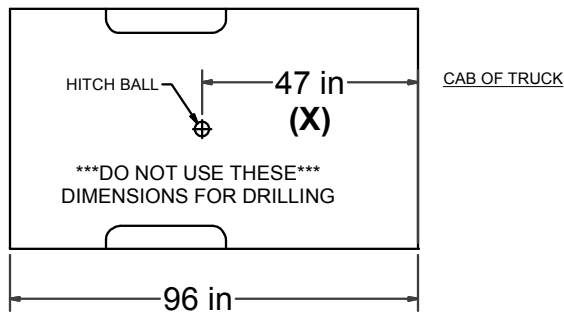
## CAB TO TRAILER CLEARANCE

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### 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:

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

\*\*\*IF (Z) IS POSITIVE, TRAILER **WILL NOT** INTERFERE WITH CAB OF TRUCK.\*\*\*  
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$$X - Y = Z$$

$$35 - 36 = -1$$

(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) \_\_\_\_\_

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