



CURTTM

The **FIRST** Name
in Towing ProductsTM

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.

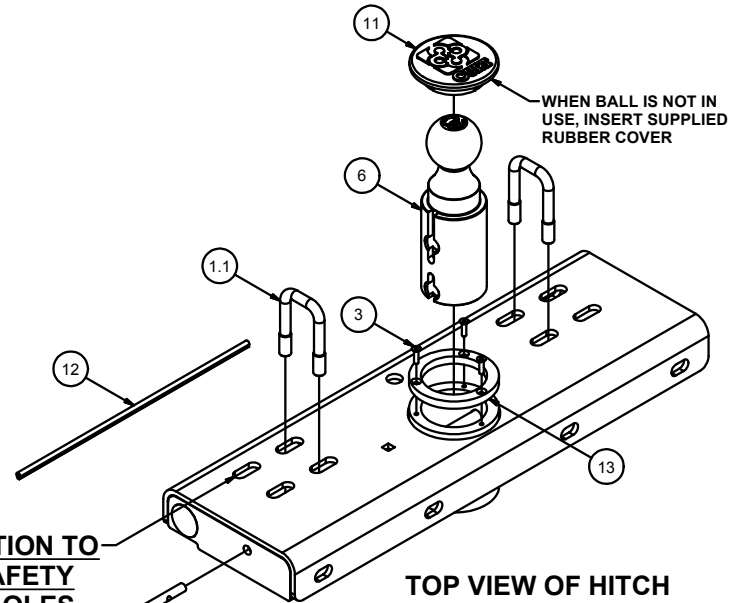
60607

GOOSENECK HITCH

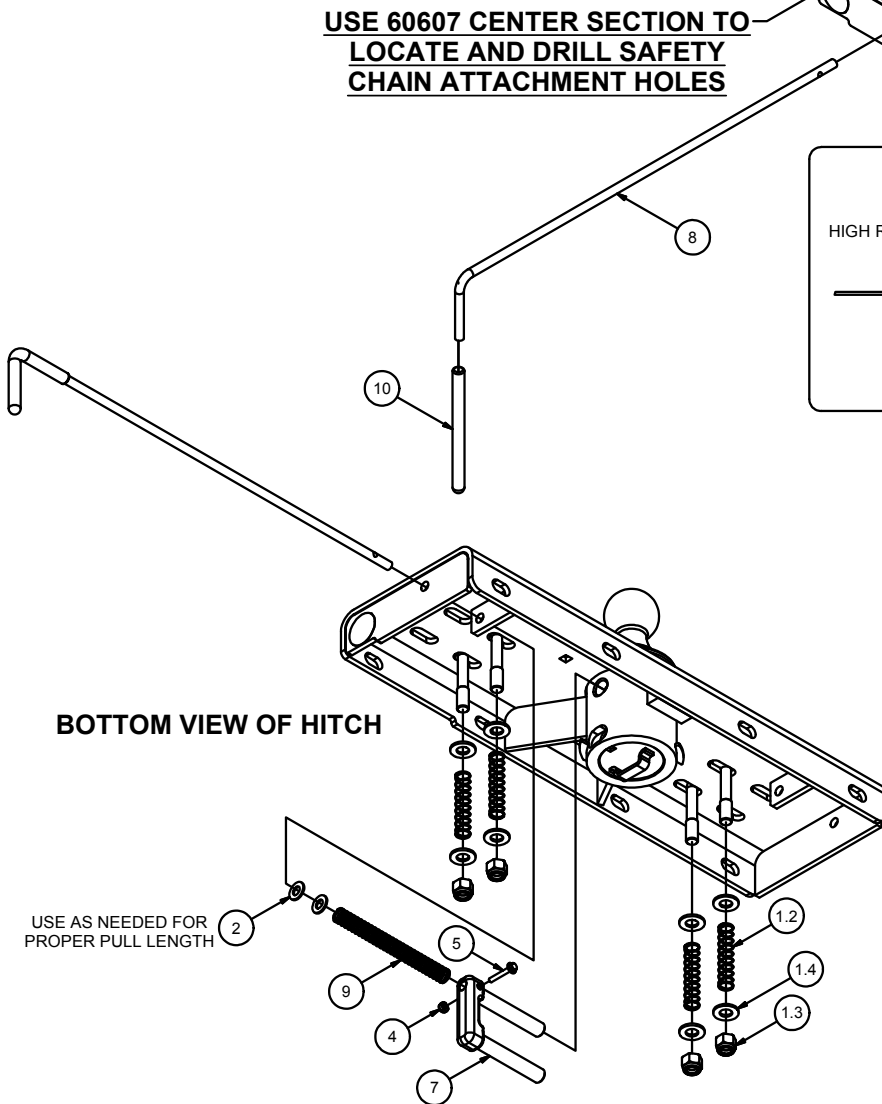
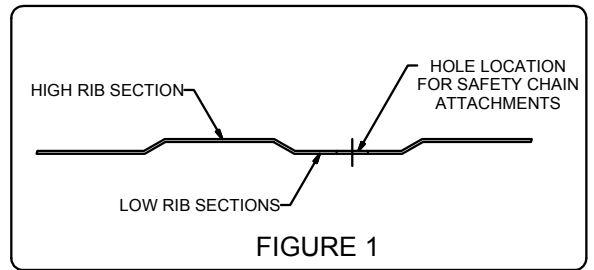
2/26/2013

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)

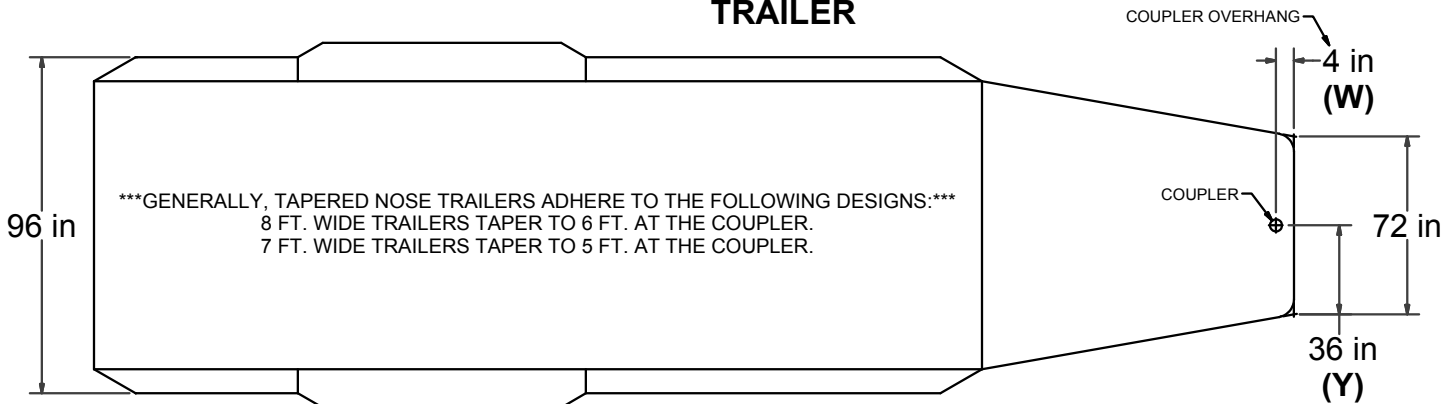
1. Keep hitch ball lubricated regularly. Use silicone spray or equivalent to prevent wear and rust.
2. Keep hitch assembly free of dirt and other foreign debris.
3. Check for proper torque on all nuts and bolts before each use. Also check for excessive wear.
4. Check for ball wear before each use. (**Note: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

DO NOT EXCEED VEHICLE MANUFACTURER'S RECOMMENDED TOWING CAPACITY.

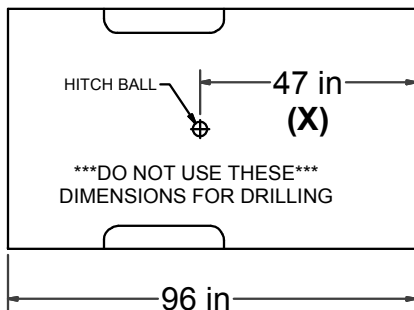
CAB TO TRAILER CLEARANCE

REMOVAL OF REAR WINDOW ACCESSORIES MAY BE REQUIRED.

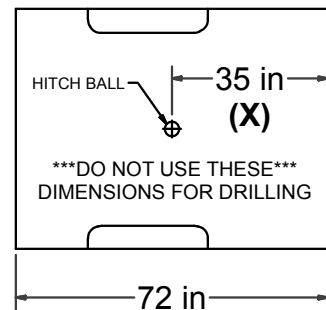
TRAILER



LONG & SHORT TRUCK BEDS



CAB OF TRUCK



CAB OF TRUCK

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) _____

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60641**2004 - CURRENT FORD 1/2 TON TRUCKS******NEW BODY STYLE ONLY, LONG AND SHORT BEDS****

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

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 cross-member to the center section, especially if the truck bed floor has been distorted downward from heavy use. If you use an overhead-lifting device, it should be disconnected before squaring the center section across the frame, installing the sideplates and torquing fasteners.

1. Lower and remove spare tire.
2. Mark the location for the hole in the truck bed. Measure from the tail gate end of the truck bed, by hooking a tape measure over the **back of the truck box** and marking the correct location. **(NOTE: DO NOT MEASURE FROM EDGE OF TAILGATE)** Next, mark the center between the wheel wells. This marks the center point for the drill hole. This hole location is critical for the correct installation of this hitch. Measure, mark, and saw carefully. This location will put the ball 4"-6" in front of the axle.

Short Bed Installation	45 3/8"
Long Bed Installation	45 3/8"

NOTE: If truck has a plastic bed liner, you may drill through both, but it is more difficult to accurately locate the midpoint between the wheel wells, and to keep the bed liner from moving while cutting the hole. Make a 4" (3 5/8" for C-630/C-640) hole at this location using a 4" (or 3 5/8") hole saw, or by making a 4" (or 3 5/8") circle and cutting it out with a saber saw equipped with a metal cutting blade.

3. Install the front cross arm by sliding it between the truck bed and truck frame on the passenger side. Slide through in an inverted V position with the holes of the arm towards the rear of the truck. Slide through until the cross arm spans the truck frame. Push the cross arm towards the front of truck.

U-BOLT INSTALLATION PROCEDURE

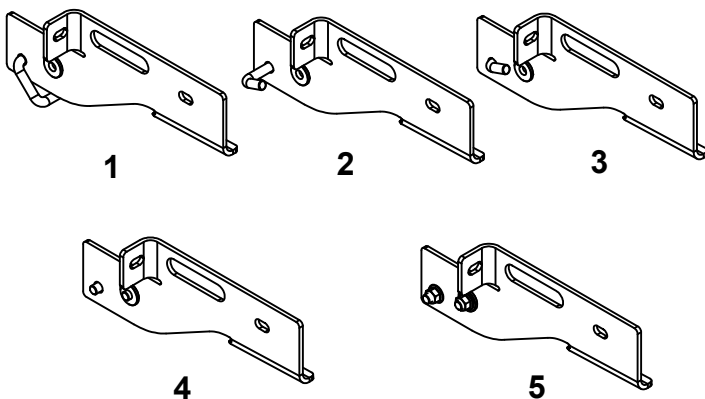


FIGURE 1

FRONT OF TRUCK

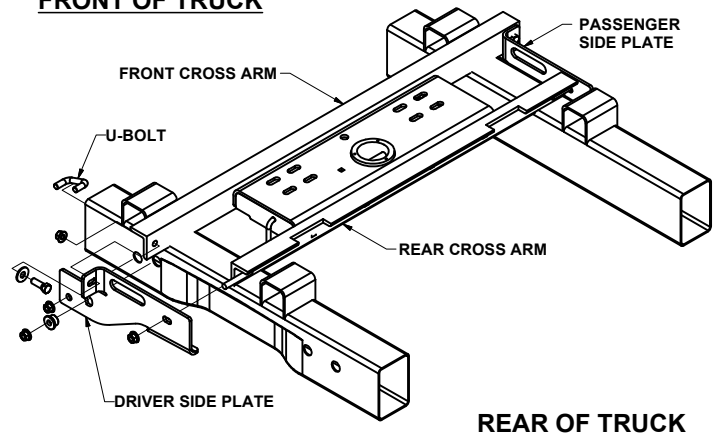


FIGURE 2

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

C-641 SUBKIT

2004 - CURRENT FORD 1/2 TON TRUCKS

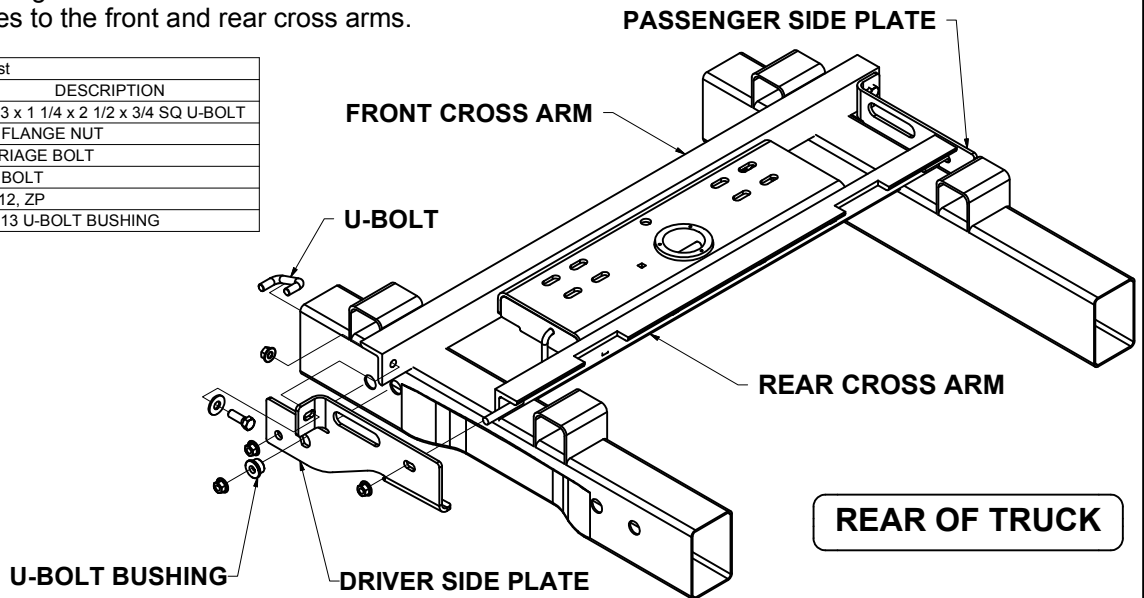
****NEW BODY STYLE ONLY, LONG AND SHORT BEDS****

Installation Steps Continued

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- Repeat the cross arm installation procedure for the rear cross arm making sure to position the holes in the angle iron towards the front of the truck. After spanning the frame, slide the cross arm towards the rear of the truck.
- Raise the center section in position between the cross arms with the **ball cylinder towards the rear of the truck**. The round hitch receiver that protrudes from the top of the center section must fit through the hole in the truck bed. Using (8) 1/2" carriage bolts and flange nuts, attach the center section to the square holes in both cross arms. **(Finger tight only.)**
- Square the center section and cross arms across the frame. Hang the side plates from the 1/2" studs extending from the rear cross arm. Fasten them with 1/2" flange nuts **finger tight only**. Next, bolt the front flange of the sideplate to the front cross arm using a 1/2" x 1 1/2" hex bolt, 1/2" washer, and 1/2" flange nut as shown in **Figure 2**. The two holes at the front of the sideplates should now be aligned with two holes in the frame behind the shock and shock mount. Use the 2" U-bolt with one flange nut placed loosely to one end of the U-bolt and place the opposite end into the smaller hole at the front of the sideplate and twist through the frame until the threaded end is protruding out the other hole of the sideplate as shown in **Figure 1**. Place the U-bolt bushing over the U-bolt and into the hole of the sideplate and frame. Make sure to penetrate the frame with the bushing in order for the sideplate to rest flat against the frame. Now attach a 1/2" flange nut and **finger tight only**.
- With the sideplates installed on both sides, torque the U-bolt flange nuts to 110 ft.-lbs. and all other 1/2" fasteners to 110 ft.-lbs in the following order:
First: Torque the U-bolts to the sideplates and frame.
Second: Torque the (8) carriage bolts from the cross arms to the center section.
Third: Torque the side plates to the front and rear cross arms.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	CM-1203-UBS	1/2-13 x 1 1/4 x 2 1/2 x 3/4 SQ U-BOLT
2	16	HFN 1213	HEX FLANGE NUT
3	8	1/2-13 x 1 1/2	CARRIAGE BOLT
4	2	1/2 - 13 x 1 1/2	HEX BOLT
5	2	FW12	FW, 12, ZP
6	2	CM-C641-UB	1/2 - 13 U-BOLT BUSHING



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

Maintenance (Required every 30 days or prior to use)

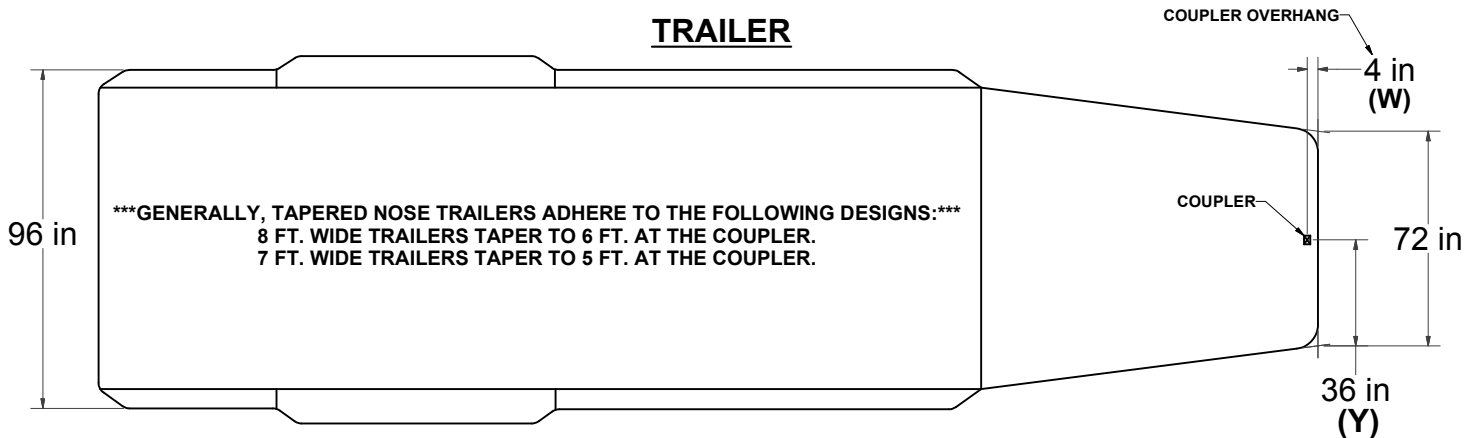
- Keep hitch ball lubricated regularly. Use silicone spray or equivalent to prevent wear and rust.
- Keep hitch assembly free of dirt and other foreign debris.
- Check for proper torque on all nuts and bolts before each use. Also check for excessive wear.
- Check for ball wear before each use. **(Note: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

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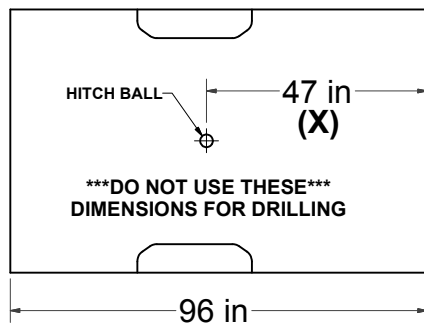
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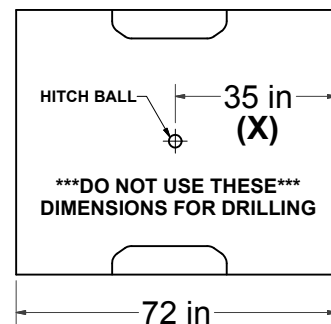
TRAILER



LONG & SHORT TRUCK BEDS



CAB OF TRUCK



CAB OF TRUCK

CLEARANCE CALCULATION

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(CAB TO BALL CENTER) _____

(COUPLER OVERHANG) - _____

1/2 (TRAILER WIDTH) - _____

(MINIMUM CLEARANCE) = _____

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