

# INSTALLATION MANUAL

60704

## Level of Difficulty

Difficult

Installation difficulty levels are based on time and effort involved and may vary depending on the installer level of expertise, condition of the vehicle and proper tools and equipment.

## Hardware List

Item	Qty	Description
1	6	Hex bolt, 5/8"-11 x 1-3/4"
2	6	Carriage bolt, 5/8"-11 x 1-3/4"
3	4	Carriage bolt, 1/2"-13 x 4-1/2"
4	1	Carriage bolt, 1/2"-13 x 5"
5	8	Carriage bolt, 5/8"-11 x 1-1/2"
6	2	Fishwire, 5/8"
7	14	Serrated-flange nut, 5/8" - 11
8	5	Serrated-flange nut, 1/2" - 13
9	4	Center lock nut, 5/8"-18
10	1	Nylon lock nut, #10-24
11	1	Hex flange bolt, #10-24 x 1-1/4"
12	2	Square-hole spacer, 3/8" x 1-1/4" x 2"
13	2	Square u-bolt, 5/8"
14	4	U-bolt spring
15	1	U-shaped edging
16	6	Lock washer, 5/8"
17	2	Flat washer, 3/8"
18	14	Flat washer, 5/8"
19	4	Tube spacer 1
20	1	Tube spacer 2
21	2	Spacer
22	1	Compression spring, 7.5lb

## Tools Required

Ratchet	Wrench, 8mm
Torque Wrench	Cutting fluid
Drill	Socket, 3/4" and 5/16"
Drill bit, 3/16", 5/8" and 11/16"	Socket, 8, 10 and 13mm
Hole saw, 4"	Rust inhibitor
Ear protection	Safety glasses

## WARNING

Never exceed the vehicle manufacturer's recommended towing capacity.

Vehicle performance (braking, handling, acceleration, turning radius) can be drastically affected by the trailer. Allow additional time and space for stopping, changing lanes, passing, and turning.

Severe bumps can damage your towing system. Avoid or drive slowly over rough terrain.

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.

## Product Photo



## NOTICE

Visit [www.curtmfg.com](http://www.curtmfg.com) for a full-color copy of this instruction manual, as well as helpful videos, guides and much more!

Before you begin installation, read all instructions thoroughly.

Proper tools will improve the quality of installation and reduce the time required.

This installation requires:

- Fishwiring to install hardware
- Drilling and hole enlargement

Periodic inspection of the trailer hitch should be performed to ensure all mounting hardware remains tight and structural components are secure.

To help prevent damage to the product or vehicle, refer to the specified torque specifications when securing hardware during the installation process.

## Maintenance

Keep gooseneck ball, receiver, and trailer coupler lubricated regularly. Use silicone spray or equivalent to prevent wear / rust.

Keep gooseneck ball, receiver, and trailer coupler free of dirt and other foreign debris.

Failure to maintain your towing system could result in poor performance and/or catastrophic failure.

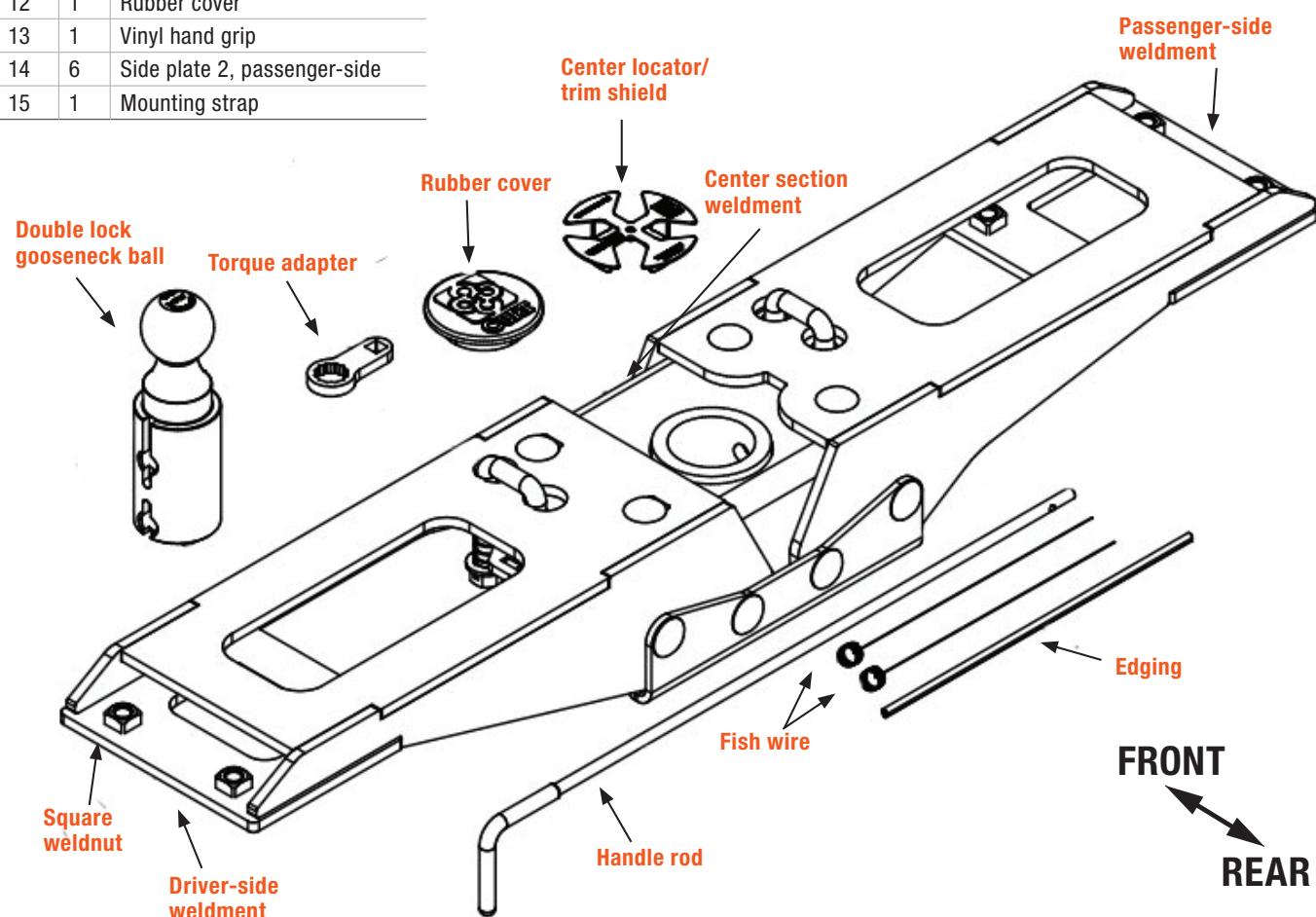
## Product Registration and Warranty

CURT stands behind our products with industry-leading warranties. To get copies of the product warranties, register your purchase or provide feedback, visit: [warranty.curtpgroup.com/surveys](http://warranty.curtpgroup.com/surveys)

# ASSEMBLY

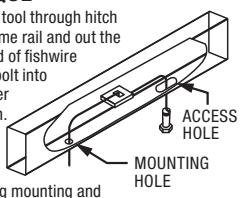
## Parts List

Item	Qty	Description
1	1	Side plate, passenger-side
2	1	Side plate, driver-side
3	1	Weldment, passenger-side
4	1	Weldment, driver-side
5	1	Weldment, center section
6	1	DBL lock gooseneck ball, 38k, 2-5/16"
7	1	Handle rod, 3/8"
8	1	Latch plate
9	1	Trim shield, center locator
10	1	Torque adapter, 7/8"
11	1	Cast lock pin
12	1	Rubber cover
13	1	Vinyl hand grip
14	6	Side plate 2, passenger-side
15	1	Mounting strap



## FISHWIRE TECHNIQUE

Insert coiled end of fishwire tool through hitch mounting hole in vehicle frame rail and out the access hole. Pass coiled end of fishwire through spacer and thread bolt into coil. Kink wire to keep spacer separate from bolt as shown. Pull fishwire, spacer and bolt through frame and out mounting hole. Use fishwire to guide hitch during mounting and prevent loss of bolt or spacer inside frame rail.



# CAB TO TRAILER CLEARANCE

## Cab to Trailer Clearance

### ⚠ WARNING

Do not exceed vehicle manufacturer's recommended towing capacity.

If (Z) is positive, trailer will not interfere with cab of truck.

If (Z) is negative, trailer will interfere with cab of truck.

### Example (without overhang from the coupler):

Cab to Ball Center	-	1/2 Trailer Width	=	Minimum Clearance
(X)	-	(Y)	=	(Z)
35	-	36	=	-1

Trailer will interfere with cab because (Z) is negative.

### Clearance Calculation (without overhang from coupler)

Cab to Ball Center	-	1/2 Trailer Width	=	Minimum Clearance
(X)	-	(Y)	=	(Z)

### Record Results Here

_____	-	_____	=	_____
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### Example (if there is overhang from the coupler):

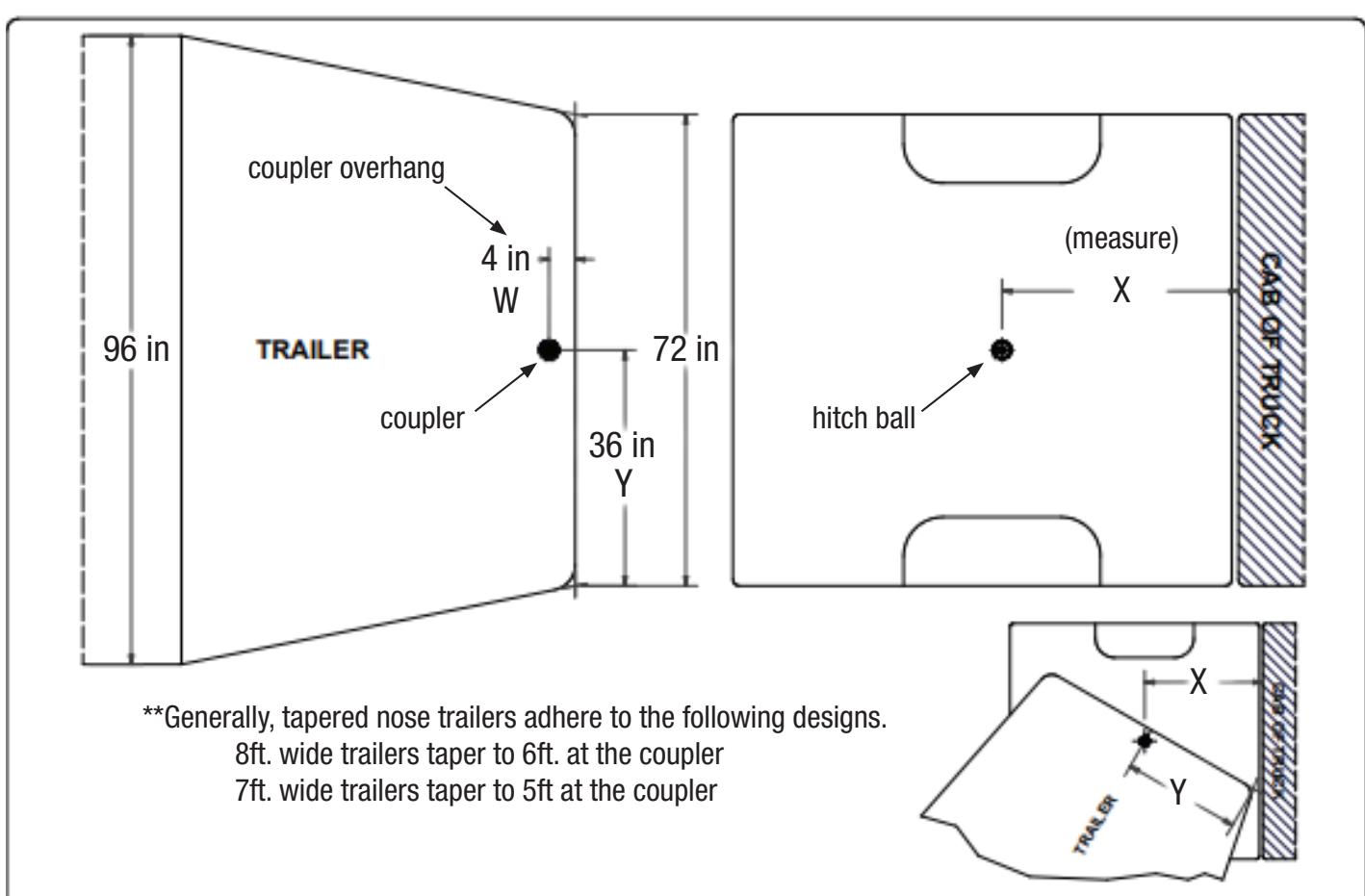
Cab to Ball Center	-	1/2 Trailer Width	=	Minimum Clearance
[(x)-(w)]	-	(Y)	=	(Z)
[35-4]	-	36	=	-5

### Clearance Calculation (if there is overhang from the coupler)

Cab to Ball Center	-	1/2 Trailer Width	=	Minimum Clearance
[(X)-(W)]	-	(Y)	=	(Z)

### Record Results Here

_____	-	_____	=	_____
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# INSTALLATION

## Step 1

Removing the spare tire may aid in installation but is not required. Lowering the exhaust on some models may be required to allow room for the center section and attachment plates.

## Step 2

Using a 10mm socket, remove the two (2) screws that attach the wire harness bracket to the steel cross member to prevent damage when raising the center section into position. Save for later re-installation.

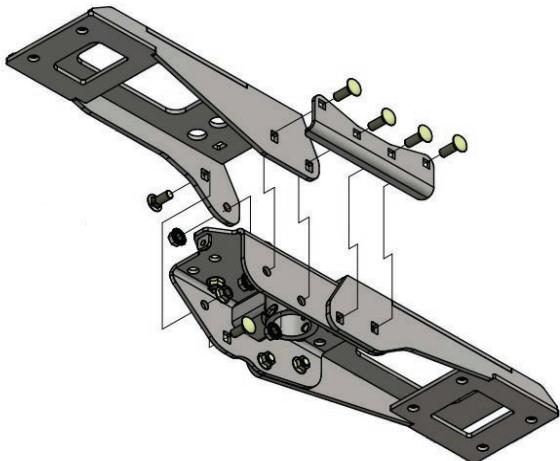
## Step 3

Using a 13mm socket, remove the four (4) screws attaching the heat shield above the rear axle and return to vehicle owner.

## Step 4

Place two (2) 5/8" x 1 1/2" carriage bolts into the top mounting holes of both center attachment plates. Place the center attachment plates into position starting with the driver-side weldment. Next raise the passenger side weldment into position adjacent to the driver-side weldment. Refer to the assembly on page 2 for part identification.

**Note:** The center locator / trim shield must be in the top of the center section cylinder prior to center section installation.



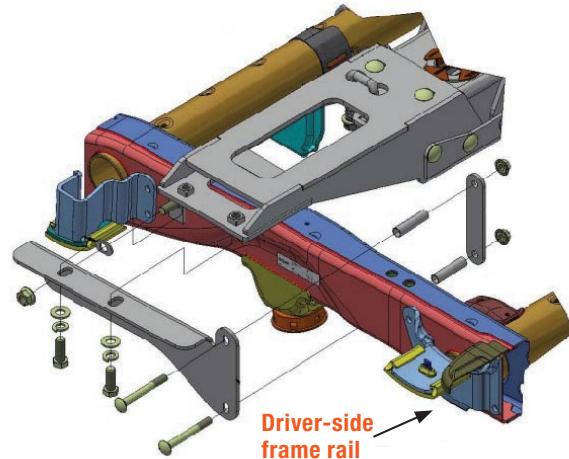
## Step 5

Raise the center section into position over the rear differential. Slide the center section into the center attachment plates to allow the vertical 5/8" carriage bolts to align properly with the center section holes. Once aligned, slide both the plate and center section together and loosely install the four (4) 5/8" hex flange nuts. Place the latch plate against the rear of the center attachment plates as shown in the assembly on page 2.

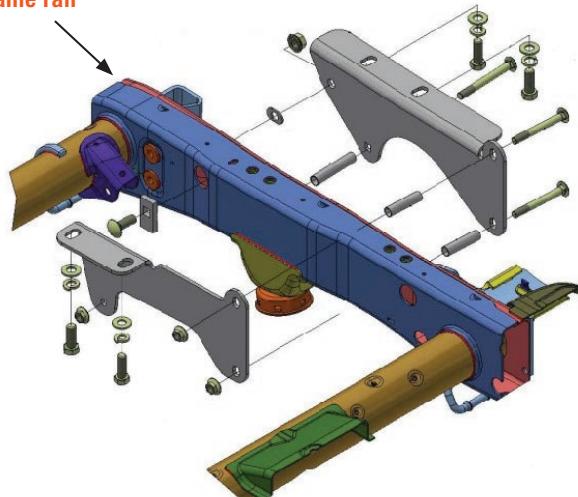
Loosely install the four (4) 5/8" x 1 3/4" carriage bolts into the rearward side of the center and three (3) 1 1/2" bolts into the forward holes. Loosely install the seven (7) 5/8" hex flange nuts.

## Step 6

From under the truck loosely install the frame attachment plates to the frame as shown in the images from step 4 and as shown below.



Driver-side frame rail



Passenger-side frame rail

## Step 7

Loosely install the six (6) 5/8" hex bolts, lock washers and flat washers attaching the frame attachment plates to the center attachment plates.

## Step 8

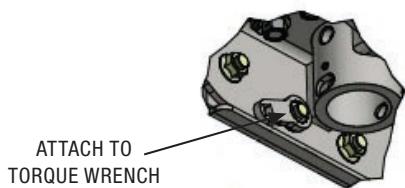
Tighten the fasteners in the following order: four (4) 5/8" vertical center section fasteners, seven (7) 5/8" horizontal center section fasteners, six (6) 5/8" hex bolts, two (2) 5/8" frame attachment plate fasteners, and then the remaining 1/2" fasteners.

## Step 9

Torque all 1/2" fasteners to 110 ft-lb.

Torque all 5/8" fasteners to 150 ft-lb.

**Note:** Use the supplied 7/8" torque adaptor for hard to reach 5/8" fasteners. See image below.

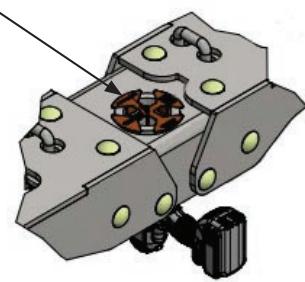


## Step 10

Check the area above the bed for any obstructions before drilling the 3/16" guide hole for the ball. Drill a pilot hole from underneath the truck bed through the hole in the center locator / trim shield using a 3/16" drill bit. Move to above the truck, drill a 4" hole through the bed of the truck using a hole saw with the 3/16" pilot hole as a guide.

Install the CM-UE1 rubber edge trim around the edge of the cut hole and trim to length.

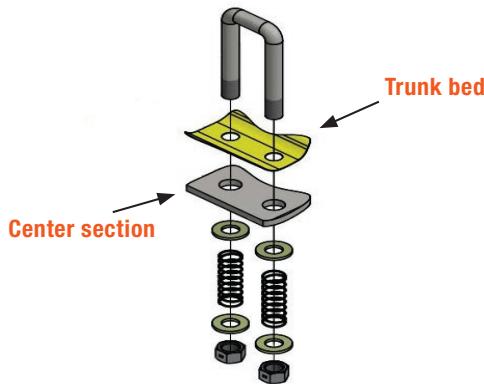
**3/16" Drill bit**



## Step 11

Using the center section as a template, drill four (4) holes through the truck bed for the safety chains using a 3/16" drill bit.

**Note:** Drilling a small pilot hole prior to the 3/16" hole will ease this process. Center punching the bed from below and drilling from above may be preferred.



## Step 12

Install the safety chain u-bolt assemblies as shown in step 11, ensure they sit flat when in the lower position and slide easily without binding. Enlarge holes as needed for proper operation. Deburr holes and spray exposed metal with rust inhibitor. The nuts should be tightened until flush with the bottom of the u-bolt.

## Step 13

Insert cast lock pin into the ball cylinder with handle hole located on top.

## Step 14

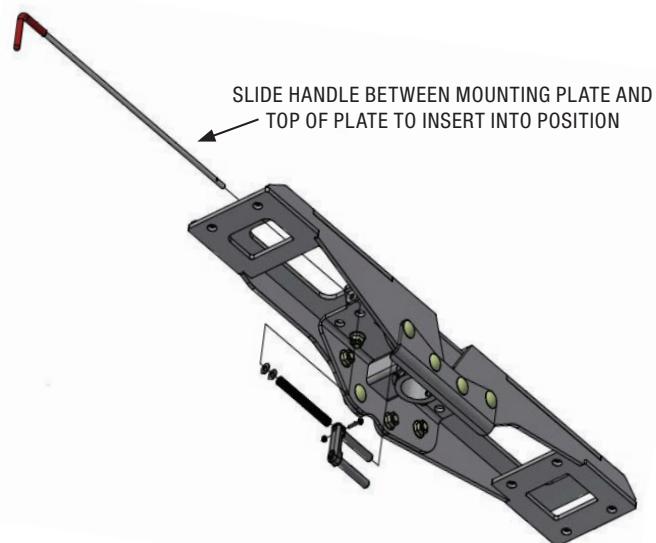
Insert handle from outside of the vehicle on driver side with the handle pointing up through the hole in the center section.

**Note:** Some models may require use of pliers to bend the metal flange below the bed outward to allow the handle room to move without interference.

## Step 15

Slide one 3/8" washer and the compression spring over the handle before inserting the handle rod into the lock pin. Insert handle into lock pin and secure with hex head flange screw and nylock nut.

**Note:** If needed, add or remove a 3/8" washer to ensure proper pull strength of lock pin.



## Step 16

Reinstall the spare tire if removed in step 1 and wire harness bracket removed in step 2.

## Before Towing the First Time

When the ball is in "stored" position, verify the inverted ball will not interfere with the top of the differential when hauling heavy loads. This is especially important on 2 wheel drive models.

Verify adequate turning clearance between the truck cab / box corners and trailer(s).

Check truck box clearance. There should be a minimum clearance of 6" between the bottom of the trailer(s) overhang and the top of the box sides.

Verify all hardware is torqued to the proper specification.

Verify the trailer safety chain length. Too much slack in the chain may interfere with maintaining control in the event of separation. Leave only enough slack to allow full turning without interference.

Verify the trailer attachments to the safety chain loops are secure (cannot be shaken free during towing).

# OPERATION

## Step 1

Place handle in the unlocked position by pulling it out as far as possible and rotating it clockwise.

**Note:** Never operate vehicle with handle in the unlocked position.

## Step 2

Insert the ball into the desired position in the cylinder by aligning the ball groove with the cylinder pin. If the ball and pin are not aligned simply rotate the ball until it drops into place.

## Step 3

Place the handle into the locked position by rotating it counter clockwise until the locking pin snaps back into position.

## TOWING BASICS & SAFETY INFORMATION

For information on safely towing your trailer, visit [curtmfg.com/understanding-towing](http://curtmfg.com/understanding-towing).