

# INSTALLATION MANUAL

70148

## 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.

## Installed Attachment Tabs

Height	16"
Width	23"

## Parts List

Item	Qty	Description
1	1	Tow bar base plate
2	2	Tow bar mounting tab
3	2	Safety cable, 3,500 lbs.
4	10	Hex bolt, 3/8"-16 x 1-1/4", grade 8
5	10	Nylock nut, 3/8"-16, grade 8
6	1	Flat washer, 1/4"
7	1	Hex bolt, M6-1 x 30mm, CL8.8
8	2	Drilling screw, 12"-14 x 1"
9	2	Quick link, 1/2"
10	1	Hex bolt, 1/4"-20 x 3/4", grade 5
11	1	Nylock nut, 1/4"-20, grade 5
12	2	Socket plug
13	1	Electrical flat bracket

## Tools Required

Torque wrench	Drill
Socket, 9/16"	Drill bit, 3/8"
Socket, 7/16"	T15 Torx bit
Socket, 7mm	Utility knife
Socket, 10mm	Large vise grip
Wrench, 7/16"	Nut driver, 5/16"
Wrench, 9/16"	Loctite® RED

## 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.curtgroup.com/surveys](http://warranty.curtgroup.com/surveys)

## WARNING

Never exceed the vehicle manufacturer's recommended gross vehicle weight rating (GVWR).

## Product Photo



Not pictured: Safety cables, quick links and socket plugs

## CAUTION

Take care when cutting any plastic or metal as injury may occur if done improperly.

## 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 front fascia panels, headlight and windshield washer components to be temporarily removed and reinstalled. Some drilling and trimming are required.

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

If equipped, we recommend removing the base plate attachment tabs when not in use.

## SAFETY INSTRUCTIONS

Safety glasses should be worn at all times while installing this product.

## Maintenance

To protect the product, wax after installing. Regular waxing is recommended to add a protective layer over the finish. Do not use any type of polish or wax that may contain abrasives that could damage the finish.

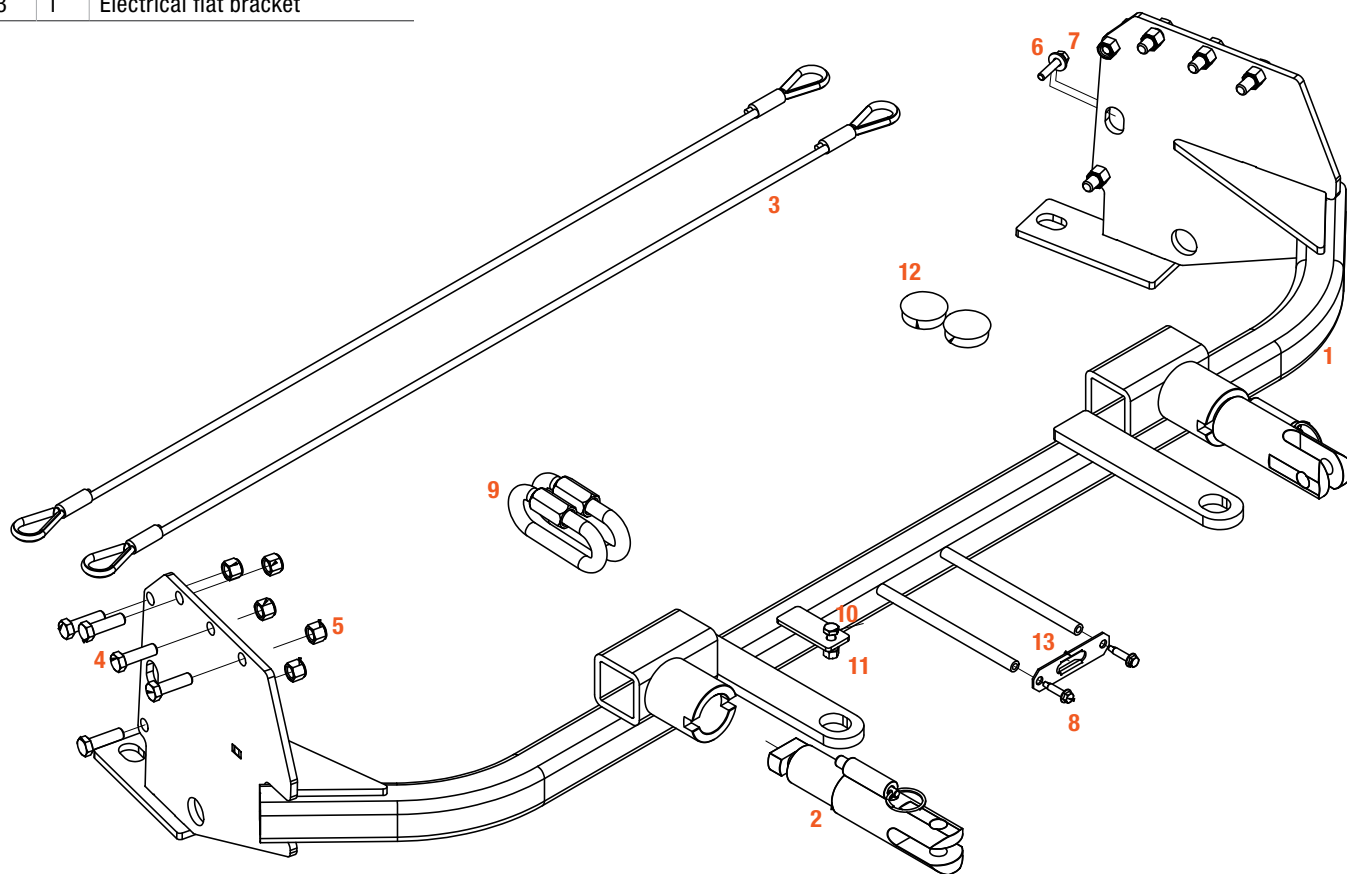
For polished, gloss and other smooth finishes, polish may be used to clear small scratches and scuffs on the finish.

Mild automotive detergent may be used to clean the product. Do not use dish detergent, abrasive cleaners, abrasive pads, wire brushes or other similar products that may damage the finish.

# ASSEMBLY

## Parts List

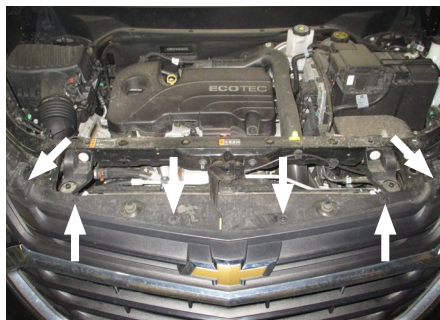
Item	Qty	Description
1	1	Tow bar base plate
2	2	Baseplate T-Bolt
3	2	Safety cable, 3,500 lbs.
4	10	Hex bolt, 3/8"-16 x 1-1/4", grade 8
5	10	Nylock nut, 3/8"-16, grade 8
6	1	Flat washer, 1/4"
7	1	Hex bolt, M6-1 x 30mm, CL8.8
8	2	Drilling screw, 12"-14 x 1"
9	2	Quick link, 1/2"
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11	1	Nylock nut, 1/4"-20, grade 5
12	2	Socket plug
13	1	Electrical flat bracket



# FASCIA REMOVAL

## Step 1

Open the hood and use a T15 Torx bit to remove the six screws along the top edge of the front grill panel.



## Step 2

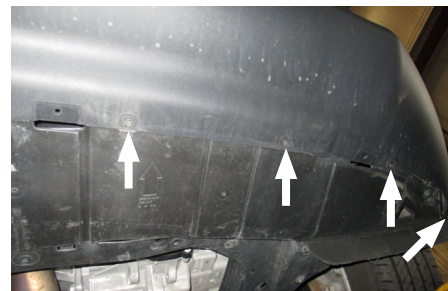
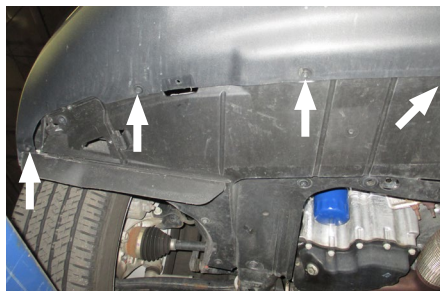
Use a T15 Torx bit to remove the five bolts along the inside edge of the wheel well liner. Then, pull the liner back, and use a 7mm socket to remove the bolt behind the liner.

Repeat on the other side of the vehicle.



## Step 3

Use a 7mm socket to remove the four underside fascia bolts on each side of the vehicle. There should be eight total.





#### Step 4

Starting on the outer edges, pull the fascia panel out while using a non-marring pry tool to release the four clips from each fender.

Work your way toward the center of the vehicle, unclipping the bumper cover from under the headlights. Make sure to unplug any wiring harnesses attached to the bumper cover as well.

Carefully remove the bumper cover and set it aside so it will not be damaged during the rest of the installation.



#### Step 5

Use a 7mm socket to remove the four bolts holding the driver-side headlight in place.

Carefully remove the headlight and set it aside.

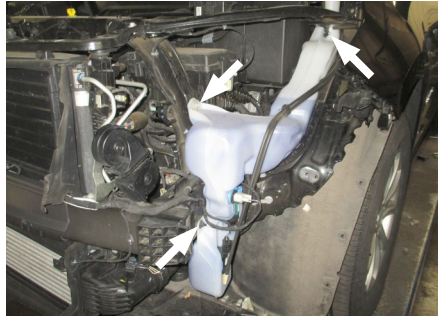


## Step 6

Use a 10mm socket to remove the three bolts and one nut securing the windshield washer reservoir in place.

Disconnect the fluid lines and set the reservoir aside.

**Note:** Be sure to have a clean container ready to catch the washer fluid when the lines are disconnected from both ports. Set the fluid aside to refill after the installation.

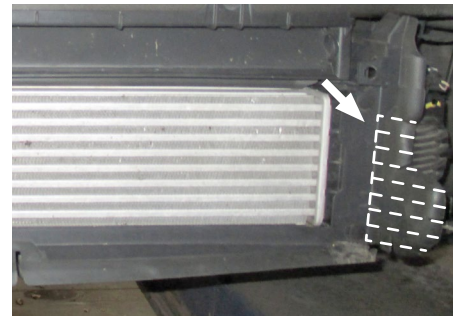


## Step 7

Remove the temperature sensor.

Mark the areas on each side of the front plastic trim piece that need to be trimmed.

Use a utility knife to trim off the marked areas as needed.





### Step 8

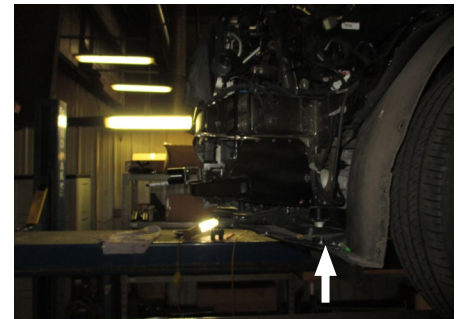
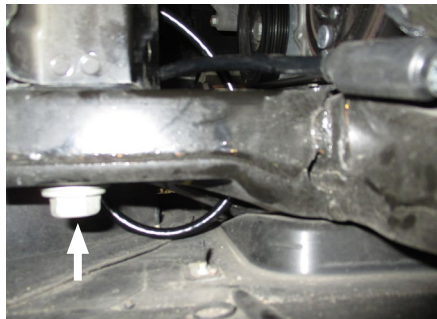
If needed, use a hammer to carefully bend the metal frame components inward about 1/8" as shown.

Repeat on the other side of the vehicle.



### Step 9

Remove 14mm bolt from sub-frame on both sides of the vehicle.

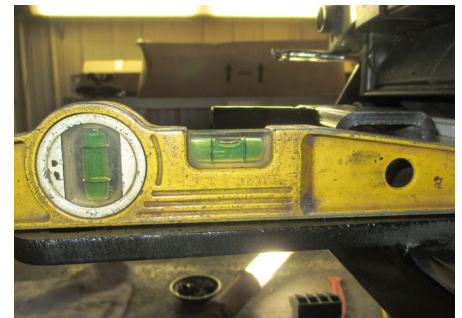


## TOW BAR BASE PLATE INSTALLATION

### Step 10

Position the plate on the vehicle frame and use clamps to hold it in place.

Make sure the base plate is level and loosely reinstall the 14mm bolts into the sub frame.

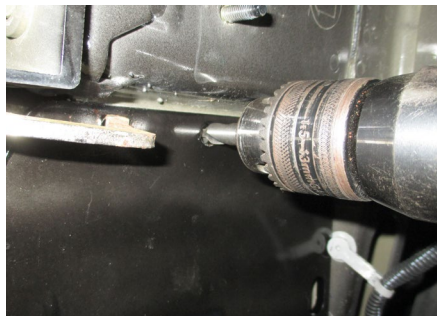


### Step 11

Using the top, center hole in the base plate side panel as a guide, drill a 3/8" hole in the vehicle frame. Then, install a 3/8" hex bolt (#4) and secure it with a nylock nut (#5).

Repeat on the other side of the vehicle.

Make sure the base plate (#1) is level, and torque the hardware to 37 lb-ft.

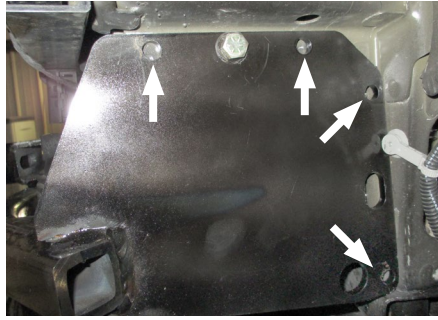


### Step 12

Using the side panel as a guide, drill out the four remaining holes with a 3/8" drill bit. Then, install a 3/8" hex bolt (#4) into each hole and secure them with nylock nuts (#5).

Repeat on the other side of the vehicle.

Torque the hardware to 37 lb-ft.



### Step 13

Once all 3/8" bolts are installed and torqued properly, reinstall the existing 14mm bolt to the proper torque rating.

**Note:** Make sure there is no gap between baseplate and subframe.

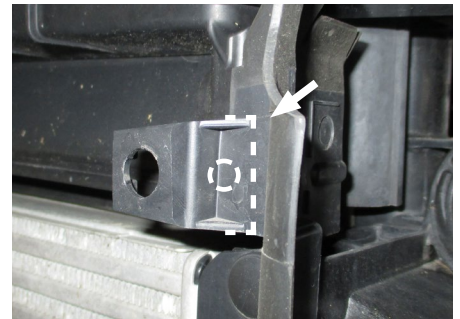


### Step 14

Use a utility knife to cut off the driver-side temperature sensor bracket from the front plastic trim piece.

Drill a 1/4" hole in the bracket and reinstall the bracket on the upper mounting hole on the driver side of the plastic trim piece so the sensor will point forward.

Attach the sensor clip and plastic trim piece with the factory push pin for this location and reinstall the front plastic trim piece on the grille, using the remaining factory push pins.



### Step 15

Reinstall the windshield washer reservoir, using the previously removed hardware.

For the bottom-most rearward bolt, use the supplied M6 hex bolt (#7) and M6 flat washer (#6) to attach the fluid reservoir through the base plate to the frame (the fastener clamps the baseplate between the reservoir and the frame).

Reconnect the reservoir fluid hoses and electrical connectors and refill with windshield washer fluid.



### Step 16

Reinstall the driver-side headlight.





### Step 17

Install the permanent safety cables (#3) and quick links (#9), looping them around the vehicle frame and linking them to the tow bar base plate (#1). There must be one cable on each side of the vehicle.

Make sure the cables do not pinch or interfere with any hoses, wiring or other components.

See 'Installing the Permanent Base Plate Safety Cables' for additional information.



### Step 18

Hold up the bumper cover in its original position and mark where it may need to be trimmed to make space for the safety cable loops and attachment tabs. Trim off the marked area.

Reinstall the panel and wiring harnesses.

When ready to tow, install the tow bar mounting tabs (#2). When not towing, insert the socket plugs (#12) into the ends of the tow bar base plate (#1).



### Final Installed Image



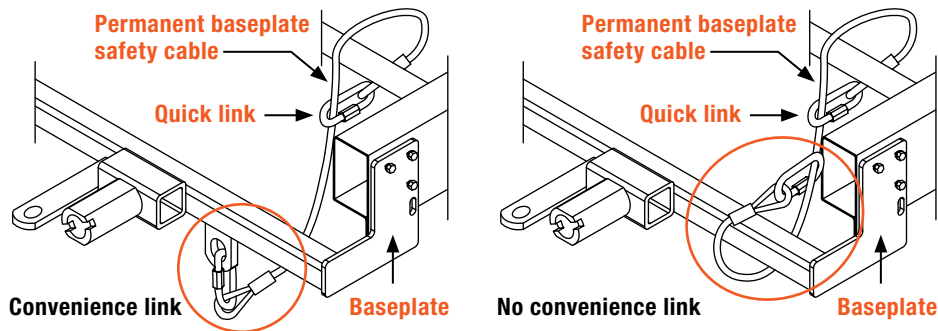
# SAFETY CABLE INSTALLATION

## Installing the Permanent Base Plate Safety Cables

When dinghy towing a vehicle with a tow bar, base plate safety cables should be used at all times. In the event of a disconnect, the safety cables are designed to help prevent complete vehicle separation. When installing the safety cables, use the illustrations below as a guide.

### Installation guidelines

- 1. The cables must be connected to the base plate and the vehicle frame.
- 2. Two cables must be installed.
- 3. Each cable must meet or exceed the gross weight of the towed vehicle.
- 4. Make sure cables do not pinch or interfere with hoses, wiring or other components.



**Note:** Base plate safety cables are not a replacement for safety chains connecting the tow vehicle to the towed vehicle.

# ADDITIONAL INFORMATION

## Towing Tips

### Check your equipment

Periodically check the condition of all towing equipment. Ensure all fasteners are tight and that all structural components are sound. Do not tow with worn or damaged parts.

### Vehicle manufacturer's recommendations

Review the owner's manual for your towed vehicle and towing vehicle for specific recommendations, capacities and requirements.