

INSTALLATION MANUAL

70150

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	16.5"
Width	34"

Parts List

1	70150-DSWA
1	70150-PSWA
2	Base Plate T-Bolt
4	NUT, HANDLE, 1/2-13 UNC, GRD8, CZ
8	HEX HEAD BOLT, 1/2-13 UNC, 1-3/4, GRD8, YZ
4	NUT, NYL LOCK, 1/2-13 UNC, GRD8, YZ
8	Lock Washer, 1/2, YZ
4	Flat Washer, 7/16, YZ
4	.500" Quick Link
2	CAPPLUGS
4	HEX HEAD BOLT, FLANGE, M10X1.5, 20, CL8.8, YZ
2	Safety Cable, 7500 LBS

Tools Required

Drill	Torque wrench
Loctite®, red	Nut driver, 5/16"
Phillips screwdriver	Socket, 7mm
Socket, 8mm	Socket, 10mm
Socket, 15mm	Socket, 21mm
Socket, 7/16"	Socket, 9/16"
Socket, 3/4"	Wrench, 7/16"
Wrench, 9/16"	Wrench, 3/4"
Drill bit, 1/2"	Trim panel pry tool
Ratchet, 3/8"	Ratchet, 1/2"

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

⚠ WARNING

Never exceed the vehicle manufacturer's recommended towing capacity.

Product Photo



NOTICE

Visit 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:

- Removal of recovery loops / D-rings (permanent)
- Removal of bumper (temporarily)
- Removal of skid shield (temporarily)
- Possible trimming (permanent)
- No fishwiring required

Periodic inspection of your product should be performed to ensure all hardware and / or components remain secure.

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

SAFETY INSTRUCTIONS

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

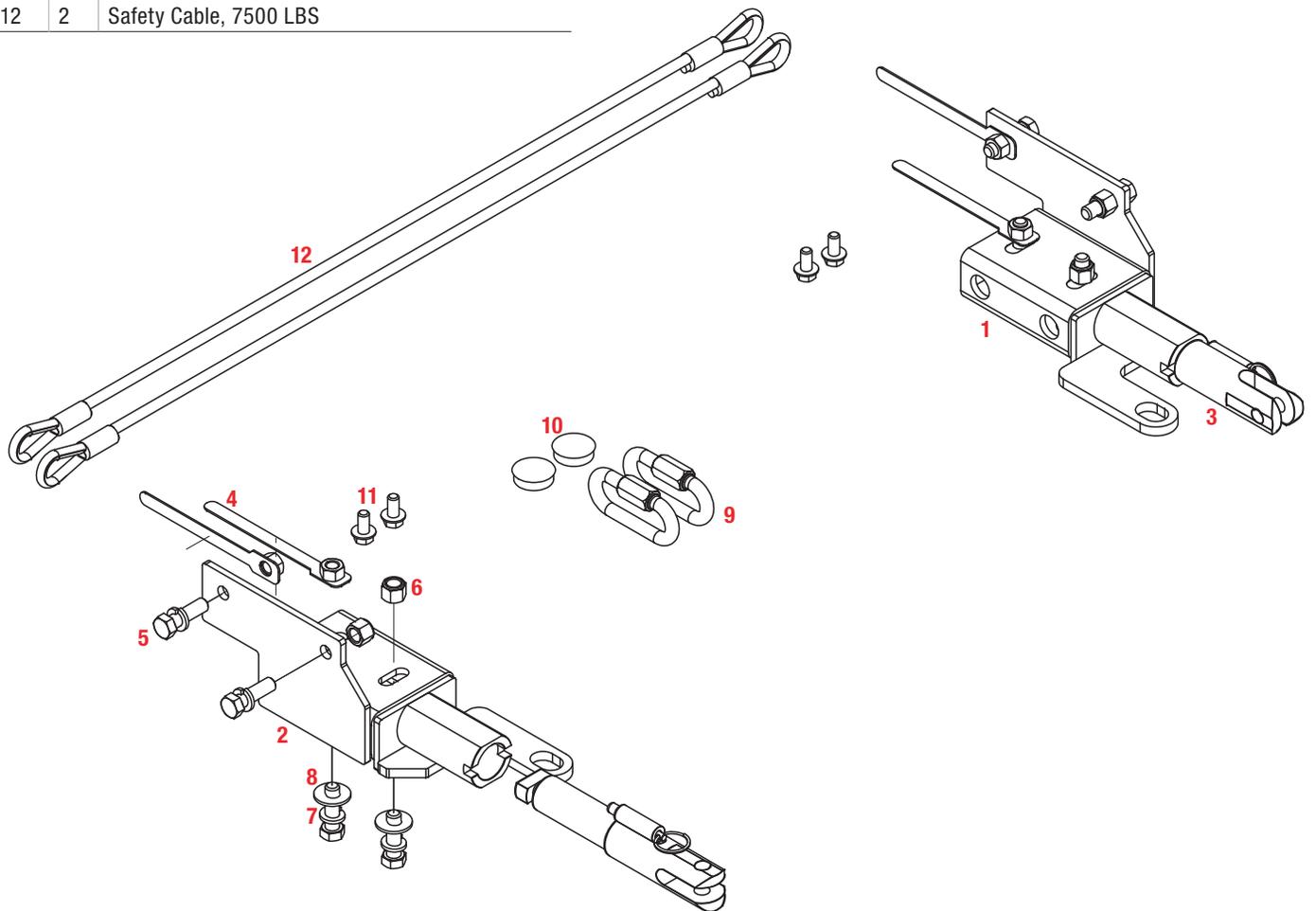
Maintenance

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	70150-DSWA
2	1	70150-PSWA
3	2	Base Plate T-Bolt
4	4	NUT, HANDLE, 1/2-13 UNC, GRD8, CZ
5	8	HEX HEAD BOLT, 1/2-13 UNC, 1-3/4, GRD8, YZ
6	4	NUT, NYL LOCK, 1/2-13 UNC, GRD8, YZ
7	8	Lock Washer, 1/2, YZ
8	4	Flat Washer, 7/16, YZ
9	4	.500" Quick Link
10	2	CAPPLUGS
11	4	HEX HEAD BOLT, FLANGE, M10X1.5, 20, CL8.8, YZ
12	2	Safety Cable, 7500 LBS



STANDARD MODEL BUMPER REMOVAL:

Step 1

Using a 21mm socket, remove the three (3) highlighted nuts from behind the bumper.

Do this on both sides of the vehicle.



Step 2

Start to remove the bumper. As the bumper is partially removed unplug the main electrical and active shutters, if applied from passenger side of the vehicle.

Then unplug electrical on top of the shutter housing on the driver side of the vehicle.

Once all electrical connections are unplugged, remove the (3) three plastic clips on the top of the shutter housing.

Set bumper aside to be reinstalled later.



RAPTOR & TREMOR 402A BUMPER REMOVAL:

Step 1

Using a 15mm socket, remove the two (2) hex head bolts for the back of the skid plate.



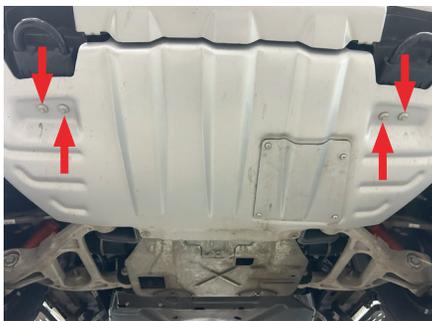
Step 2

Using a 13mm socket, remove the four (4) hex head bolts, two (2) from each side, under the tow hooks shown in picture above.

Remove skid plate and set aside to be reinstalled later.

CAUTION

Once these bolts are removed the skid plate is not connected and could fall.



Step 3

Using a 13mm socket, remove the one (1) hex head bolt from the skid plate bracket.

Remove the bracket and set it aside to be reinstalled later.

Do this on both sides of the vehicle.



Step 4

Using a 21mm socket, remove the three (3) highlighted nuts from behind the bumper.

Do this on both sides of the vehicle.



Step 5

Using an 8mm socket, remove one (1) hex head bolt from the inner bumper support bracket.

Set inner brackets aside to be reinstalled later.

Do this on both sides of the vehicle.



Step 6

Start to remove the bumper. As the bumper is partially removed unplug the main electrical and active shutters, if applied from passenger side of the vehicle.

Then unplug electrical on top of the shutter housing on the driver side of the vehicle.

Once all electrical connections are unplugged, remove the (3) three plastic clips on the top of the shutter housing.

Set bumper aside to be reinstalled later.



HYBRID MODELS FASCIA/BUMPER REMOVAL:

Step 1

Remove nine (9) push pins from the fascia cover.

Next remove one (1) push pin from the upper grill support.

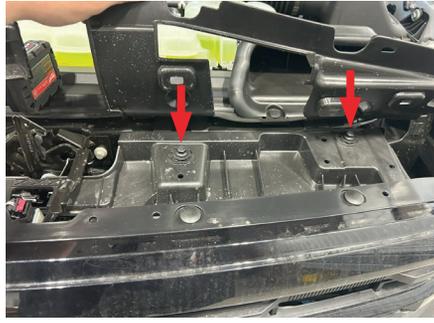
Do this on both sides of vehicle.



Step 2

Lift the fascia cover. Then, using a 10mm socket, remove the two (2) hex head bolts from the top of the fascia.

Do this on both sides of the vehicle.



Step 3

Using a 7mm socket, or phillips screwdriver, remove the two (2) bolts from along the edge of the wheel well.

Do this on both sides of the vehicle.



Step 4

Once the four (4) bolts are removed, then remove the fascia by pulling outward on the edge.

Set the fascia aside to be reinstalled later.



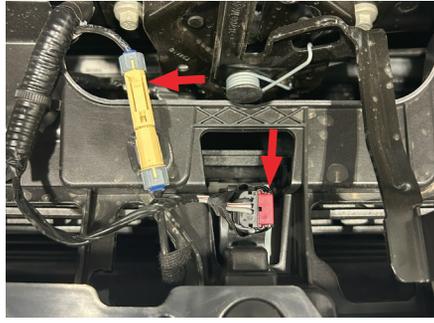
Step 5

Using an 10mm socket, remove the two (2) inside hex head bolts, one (1) on each side of the vehicle.



Step 6

Lift the fascia cover, unplug the electrical connections. Remove plastic clip holding the wire loom to the grille.



Step 7

Once all the electrical is removed, begin to remove the grille by pulling outward on the end of the grille and set it aside to be reinstalled later.



Step 8

Coming from above the bumper, use a 21mm socket to remove the three (3) inside hex nut from behind the bumper.

Do this on both sides of the vehicle.

CAUTION

Use caution when all six (6) of the nuts are removed the bumper is free and could fall.

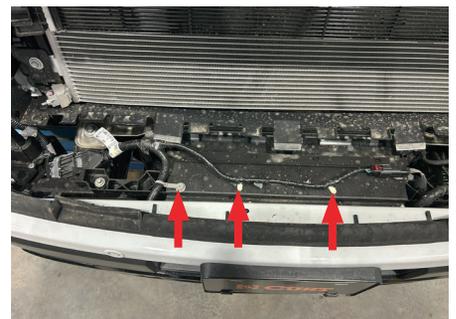


Step 9

Unplug all three (3) of the electrical connections.

Then remove the three (3) plastic clips holding the wire loom on the top of the shutter housing.

Remove the bumper and set it aside to be reinstalled later.



BASEPLATE INSTALLATION:

Step 1

Remove two (2) rubber covers, one (1) from each side.

Do this on both sides of the vehicle.



Step 2

Using a 15mm socket, remove the two (2) bottom hex head bolts from the tow hook.

Remove tow hook and set it aside. These will NOT be reinstalled.

Do this on both sides of the vehicle.

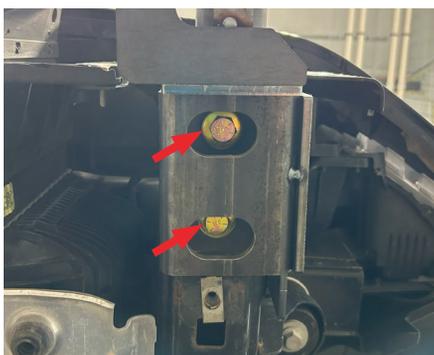


Step 3

Slide baseplate onto tow hook housing and install two (2) 1/2" hex head bolts with flat washer and locking washer into the bottom holes. Torque to 110 ft-lb.

Do this on both sides of the vehicle.

** Use Loctite® Red on all bolt threads and tighten all bolts to the appropriate torque. **



Step 4

Using the baseplate as a template, use a 1/2" drill bit to drill two (2) holes through the frame of the vehicle. Install two (2) 1/2" bolts with one lock washer on each bolt and torque to 110 ft-lb.

Do this on both sides of the vehicle.

NOTE: Make sure there is not a gap between the baseplate and outer frame rail. Ream drill holes as needed to fit hardware.

** Use Loctite® Red on all bolt threads and tighten all bolts to the appropriate torque. **



Step 5 - Raptor & Tremor 402A Models

Make sure to reinstall the skid plate bracket before installing the baseplate safety cables.

Do this on both sides.



Step 6a - Raptor & Tremor 402A Models

Attach the permanent baseplate safety cables to the provided hole with the provided .500" Quick Link on the baseplate. Install the cables to the frame of the vehicle.

Additional options may interfere with the suggested mounting locations. For this mounting make sure the cable is secured around a solid piece of frame.

⚠ CAUTION

Be sure the safety cables do not rub against any hoses or moving parts, if cables are rubbing against any hoses or moving parts this could cause severe damage to the vehicle.

Do this on both sides of the vehicle.



Step 6b - All Other Models

Attach the permanent baseplate safety cables to the provided hole with the provided .500" Quick Link on the baseplate. Install the cables to the frame of the vehicle.

Additional options may interfere with the suggested mounting locations. For this mounting make sure the cable is secured around a solid piece of frame.

⚠ CAUTION

Be sure the safety cables do not rub against any hoses or moving parts, if cables are rubbing against any hoses or moving parts this could cause severe damage to the vehicle.

Do this on both sides of the vehicle.



Step 7 - Hybrid Models

On the backside of the lower valance/air dam, trim the plastic behind the tow hook opening as needed to allow proper clearance for the baseplate.

Do this on BOTH sides of the vehicle.



Step 8a - Standard Models

Reinstall the bumper and make sure all electrical plugs are connected in the proper spot.



Step 8b - Hybrid Models

Reinstall the bumper and fascia, make sure all electrical plugs are connected in the proper spot.



Step 8c - Raptor & Tremor 402A Models

Use the four (4) shorter provided M10 bolts to reinstall skid plate.

Reinstall the bumper and reconnect all electrical connections.



Electrical Bracket

If electrical bracket is wanted, purchase Curt PN #58300 and mount the bracket as desired.



TOWING BASICS & SAFETY INFORMATION

For information on safely towing your trailer, visit curtmfg.com/understanding-towing.

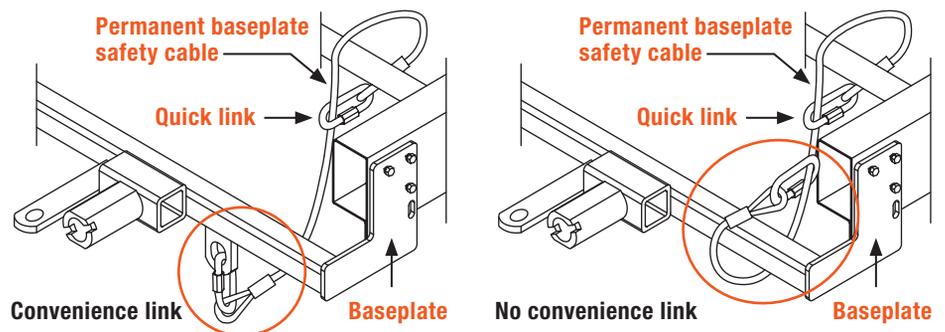
SAFETY CABLE INSTALLATION

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.