



## **4050 – 2013-PRESENT, RAM PROMASTER, FRONT HITCH**

Version 1.0

### General Notes

- For the most up to date and current instructions, please visit our website at [www.vancompass.com](http://www.vancompass.com)
- Please read all instructions thoroughly before starting installing Van Compass products.
- This is a bolt on front hitch that can be installed with simple hand tools.
- Removal and trimming of the plastic front bumper cover is required for installation.
- This front hitch can be completely removed and the factory front bumper can be re-installed if desired.
- The front license plate is retained with this front hitch.
- This hitch is rated to hold a maximum of 300 lbs.

### Parts List

#### **4050 – 2013-PRESENT, RAM PROMASTER, FRONT HITCH**

- (1) 405001                      RAM PROMASTER, FRONT HITCH

### Tools Needed

- Simple hand tools:
  - Basic wrench and socket set:
    - T30 Torx bit
    - Metric sizes: 8mm, 10mm, 13mm, 15mm,
    - Phillips screwdriver
- Automotive trim removal tool
- Floor jack and jack stands (optional)
- Cutting tool for plastic bumper trimming.
  - 4-1/2" angle grinder or 3" pneumatic cut off tool
  - Die grinder or Dremel style tool

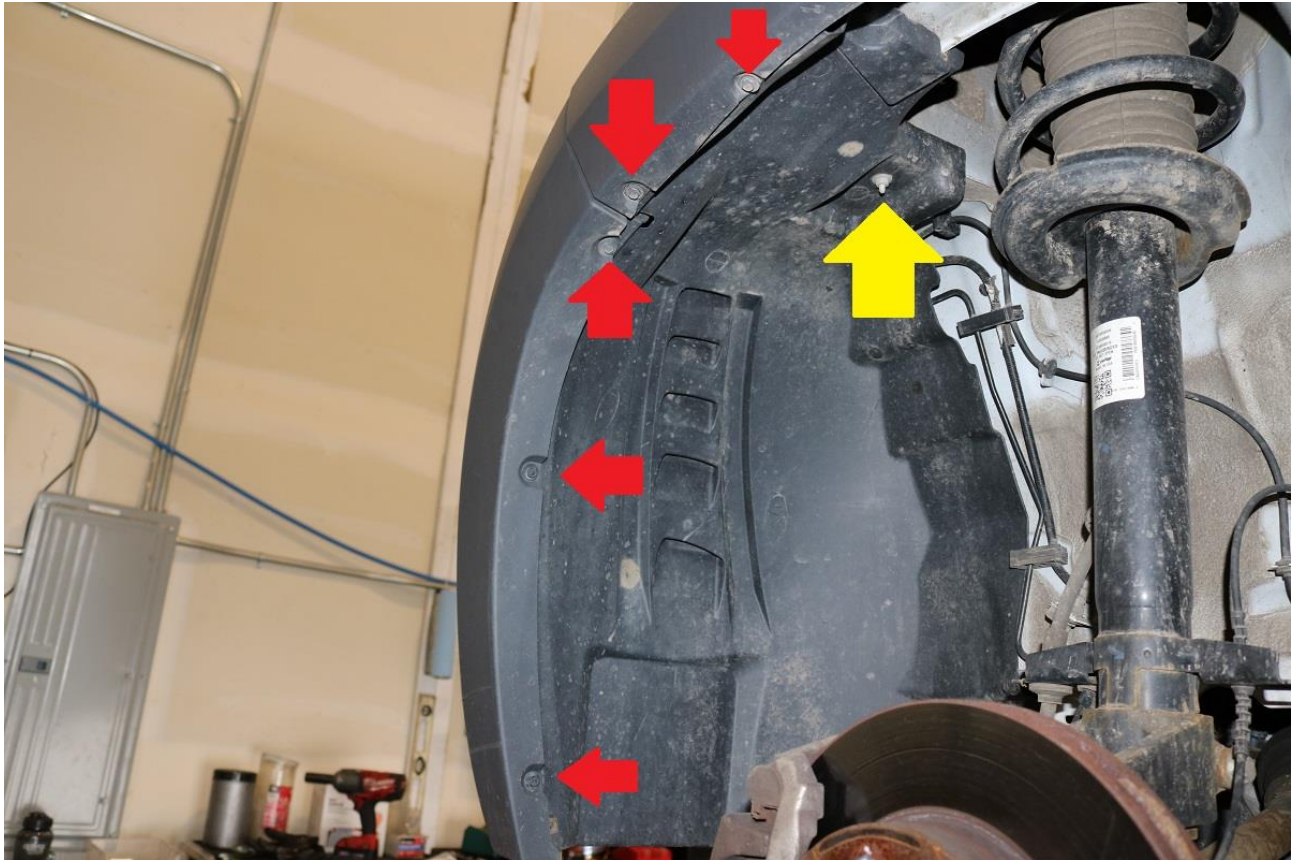
### Approximate Installation Time

- 3-4 hours

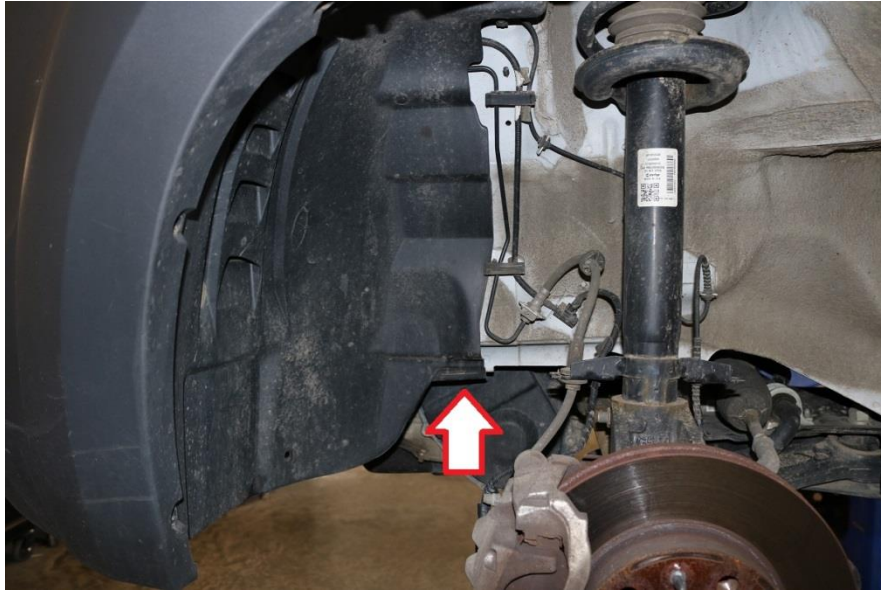
### Installation

- 1) To begin, the front inner fender liners need to be removed. While it is not necessary to remove the front wheels to do this, it does make accessing and removing the inner fender liners much easier. The front tires of the vehicle have been removed in these instructions for photographic purposes.

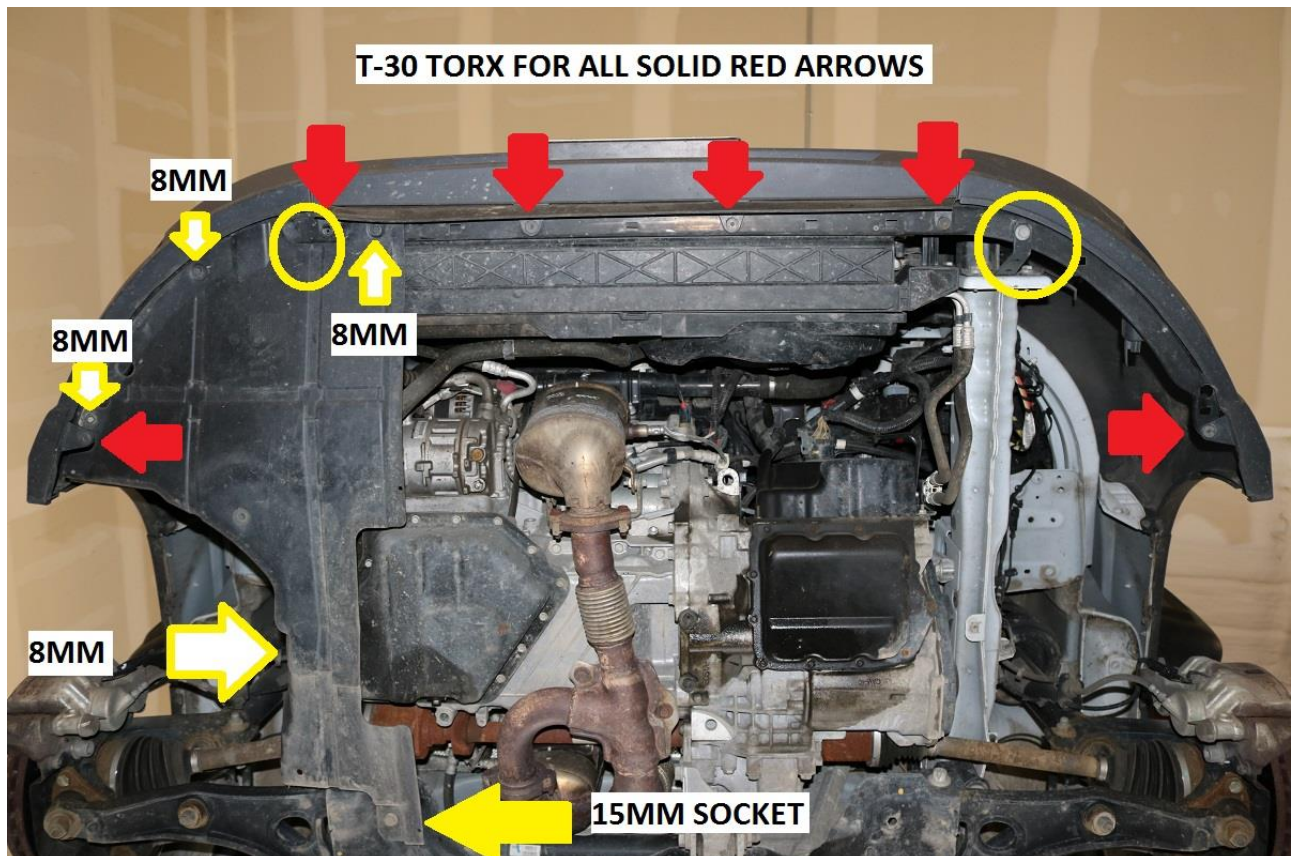
- 2) If the front wheels are removed, be sure to safely support the vehicle with a quality floor jack and jack stands.
- 3) Unless otherwise specified complete all tasks on both sides of the vehicle. The instructions will show all steps on the driver side (left hand) of the vehicle.
- 4) Use an 8mm socket / wrench to remove the 5 outer fasteners along the outside edge of the inner fender, their locations are denoted by the red arrows in the image below.
  - a. Use a 10mm socket to remove the plastic nut denoted by the yellow arrow in the image below.



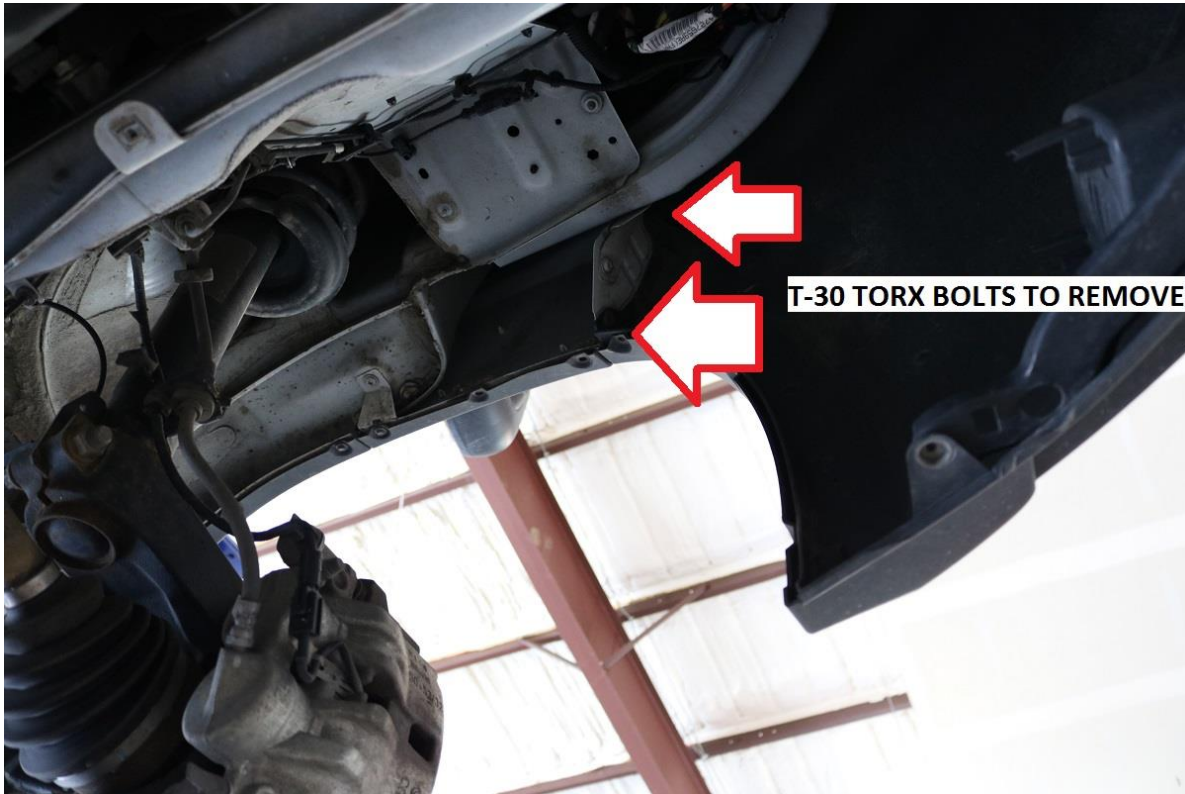
- 5) There is one remaining 8mm fastener on the driver side securing the inner fender liner to the vehicle. It is located on the bottom of the chassis shown in the image below. Remove this screw and remove the inner fender liner from the vehicle.
  - a. Note on the passenger side (right hand) of the vehicle there is one additional 8mm screw connecting the underbody plastic to the inner fender liner, locate it and remove. See image under step 5 for an approximate location of fastener.



- 6) On the underside of the front bumper, use the same 8mm socket to first remove the plastic under body guard on the passenger side. A 15mm socket / wrench is needed to remove the larger fastener towards the rear of the vehicle.
- Note, on the passenger side (right hand) of the vehicle there is one additional 8mm screw connecting the underbody plastic to the inner fender liner.
  - Remove all T-30 torx head bolts on the underside of the bumper. There are 6 bolts total.
  - Remove the two bolts securing the plastic bumper cover to the bumper itself using a 13mm socket / wrench. Their locations are circled in the image below. On the right hand side, this bolt will become visible once the plastic under body guard is removed. See image below for reference.



- 7) On the inside of the fender, where the plastic front bumper cover meets the fender, there are two additional T-30 torx bolts to remove on each side of the vehicle. See image below for reference.
- a. If the vehicle is equipped with fog lights, disconnect them from behind the bumper cover at this time.



- 8) Open the hood of the vehicle and locate the two thumb screws which secure the upper headlight trim to the vehicle. These can usually be unthreaded by hand but a Phillips screwdriver may be needed in some instances. See image below for reference.



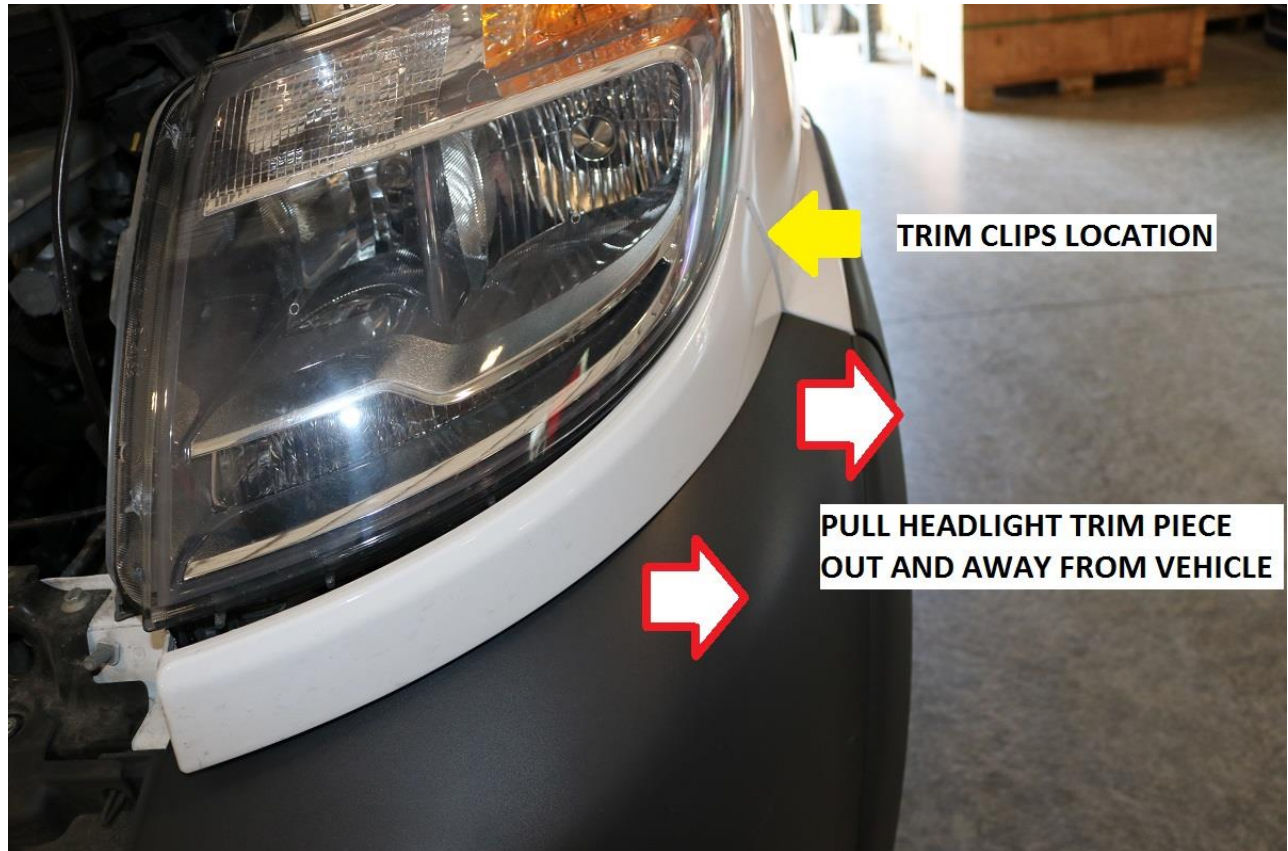
- 9) The upper headlight trim panel is held on by two barb style plastic fasteners on the underside. Lift upwards on the panel to free it from the vehicle. The image below shows the underside of the panel for reference on the location of the fasteners.



- 10) Remove the lower headlight trim panel by first locating the Phillips head screw along the inner edge of the headlight.



11) Pull the lower headlight trim away from the vehicle carefully. There are two trim clips towards the outer back edge of the head lamp. Try to support near this area as you pull away from the vehicle.



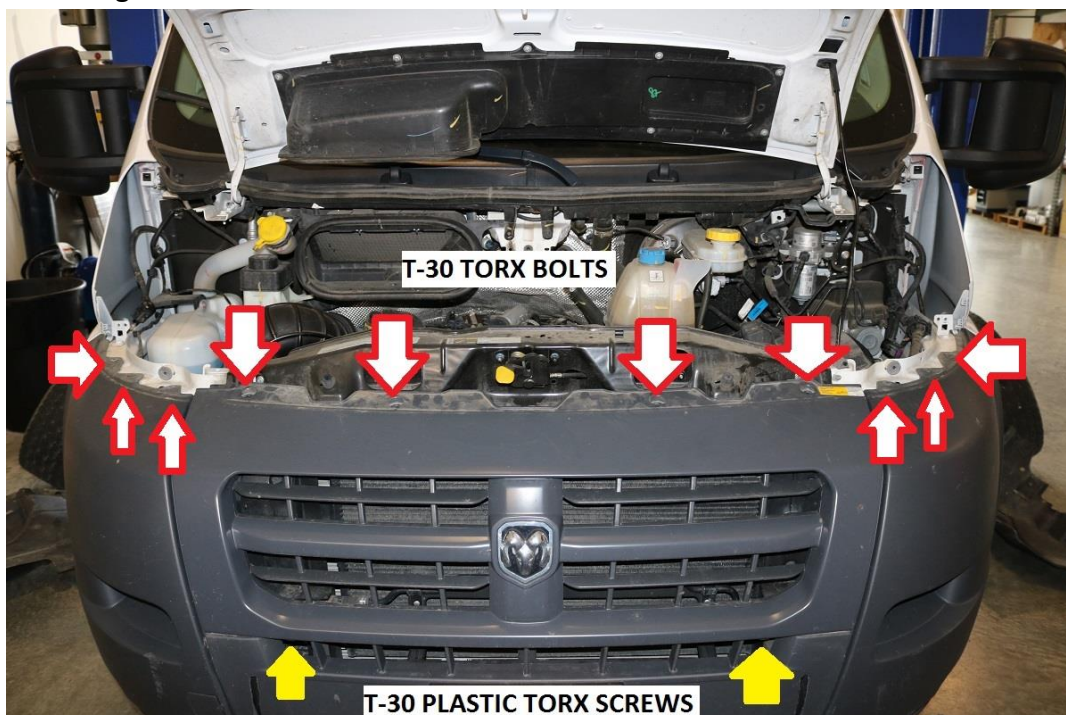
12) Use a 10mm socket / wrench to remove the three bolts securing each headlamp to the vehicle. The bolt locations are denoted by the arrows in the image below.



- 13) Once the three bolts are removed, pull the headlamp straight forward to unseat the push pin securing it to the vehicle.
- Unplug the connector at the back of the headlamp once it is accessible. Push down on the lock tab and simultaneously pull the connector free of the headlamp. See image below for reference.



- 14) Set headlamps aside in a location where they will not be damaged.
- 15) Use a T-30 torx bit to remove the 10 upper bolts across the top of the plastic bumper / grill.
- Locate the two T-30 plastic torx screws in the middle of the bumper. Remove the center screw and use an automotive trim removal tool to pull the barb fitting out of the bumper.
  - See images below for reference.





16) Remove the center grill by pulling it straight up and slightly outwards from the vehicle. There are two barb style plastic clips lightly holding it to the vehicle.

17) Once the grill is removed, remove the four remaining T-30 torx screws securing the bumper cover to the vehicle. See image below for reference.





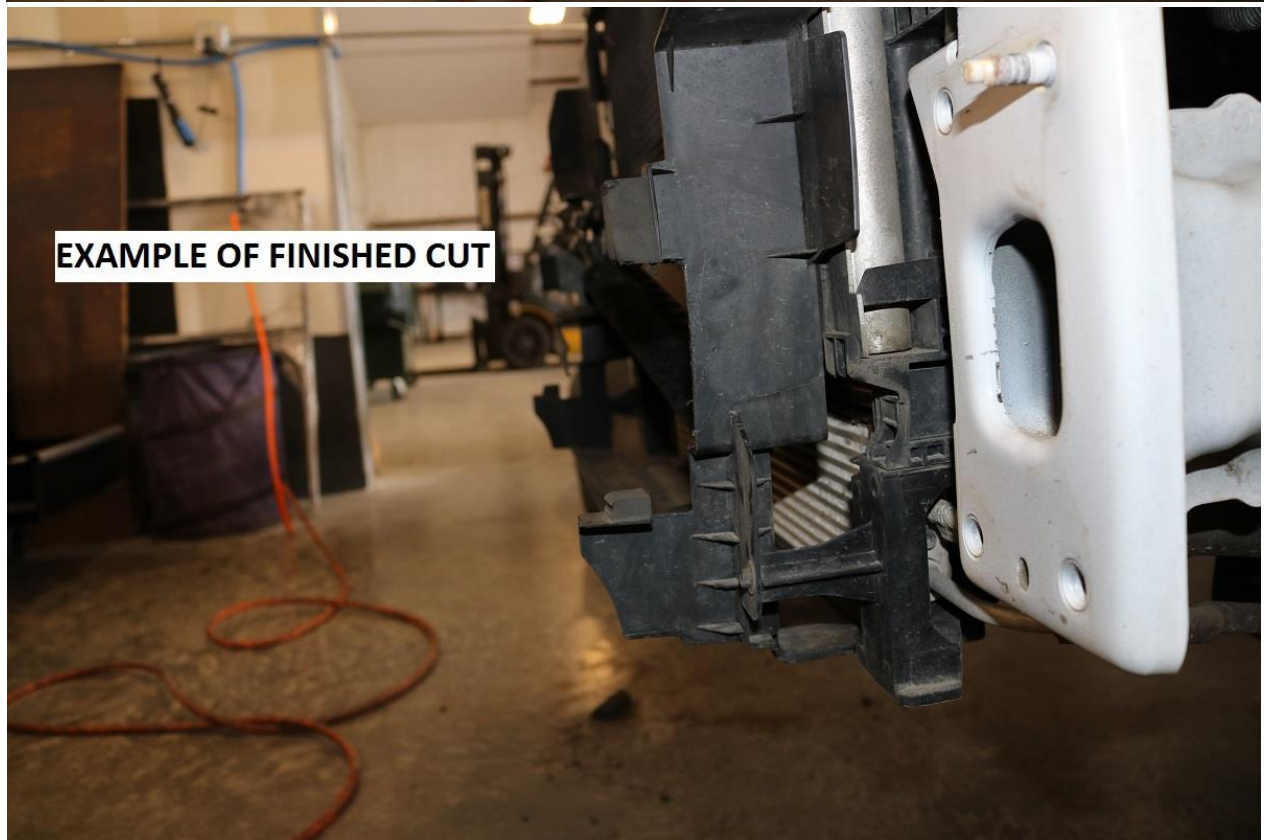
- 18) The plastic bumper cover / front fascia can now be pulled straight forward away from the vehicle.
- 19) Locate the three bolts securing the transmission cooler to the back of the steel bumper. Use a 10mm socket / wrench to remove the bolts and free the transmission cooler from the bumper.
- Let the transmission cooler hang free at this time.



- 20) Locate the 3 bolts and one nut on each side of the vehicle which secures the front bumper to the chassis. Remove all four fasteners with a 15mm socket and remove the bumper from the vehicle.



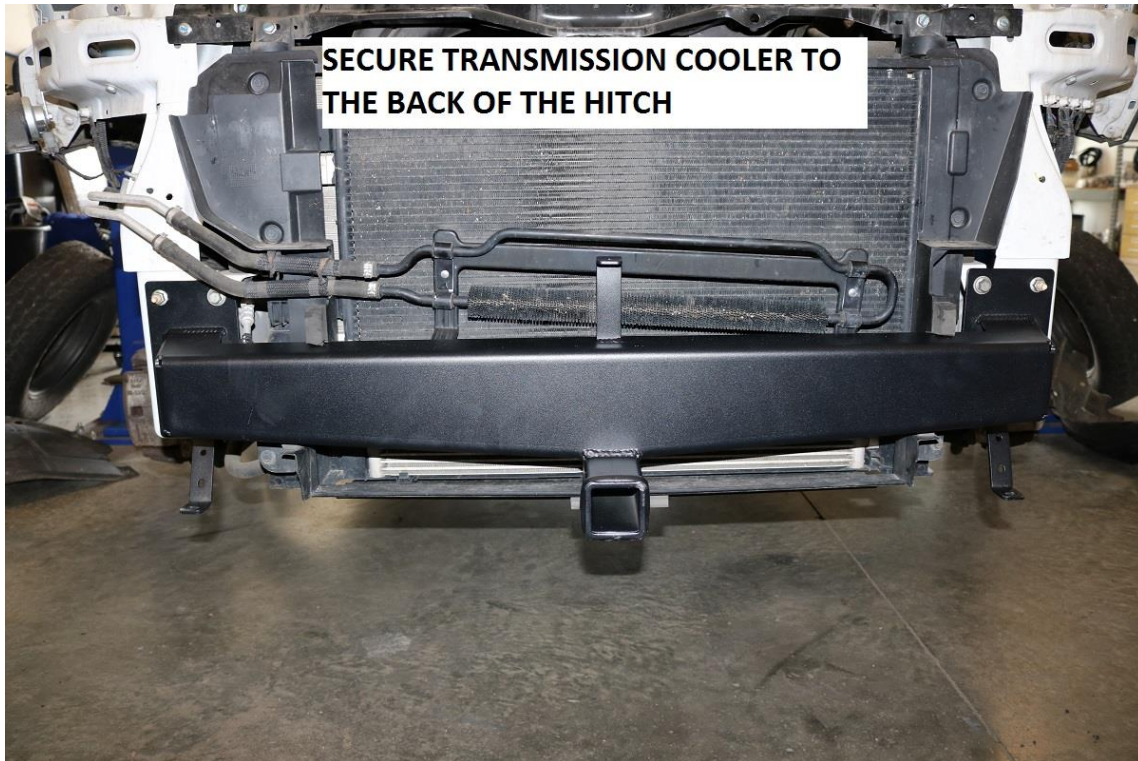
- 21) Use a small pneumatic cut off wheel, or similar tool suitable for trimming plastic to trim the inner air damn plastic to fit the front hitch.
- Cut straight up along the edge of the plastic corner gussets. Cut up to the third corner gusset from the bottom. See approximate cut lines in image below and finished cut in second image.
  - Deburr any rough plastic edges with a sanding attachment or file.



22) Fit the front hitch to the vehicle using the hardware removed in step 20. Install the nut on each side first to hang the hitch on the vehicle, then install all 3 additional bolts per side. Finger tighten bolts until all have been started.

a. Once all hardware is started, torque to 35 ft-lbs. (47.5 N.m)

23) Use a 10mm wrench and the factory M6 bolts removed in step 19 to secure the transmission cooler to the back of the hitch.



#### Bumper Cover / Front Fascia Trimming

24) Use a Phillips screw driver to remove the 4 screws securing the license plate to the license plate mount.

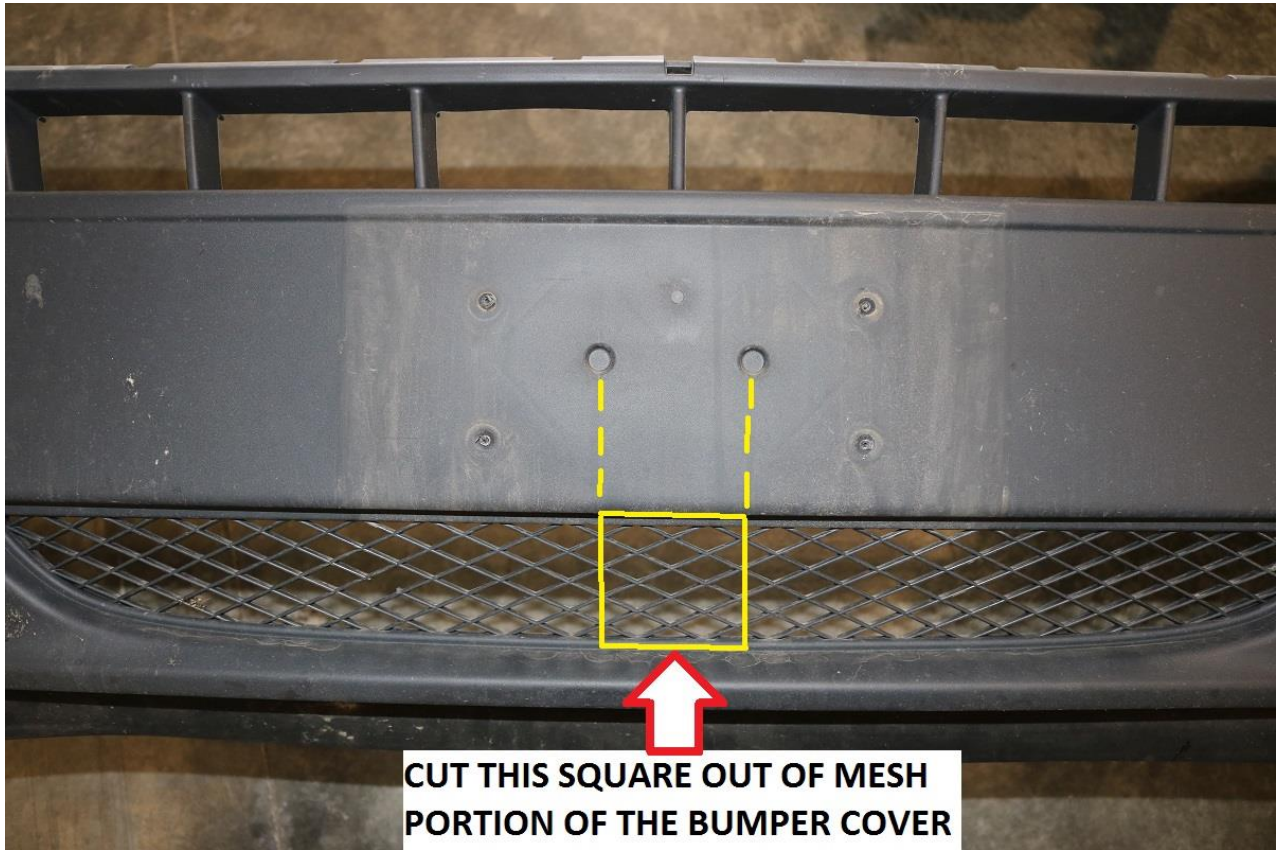
a. Use the same screwdriver to remove the 4 screws securing the license plate mount to the bumper cover.

25) Locate the two circular detents in the middle of the bumper cover. Mark a line straight down on center with these detents to the mesh part of the bumper cover. This is the approximate width of the cut needed.

a. From there connect, the vertical lines across the bumper as shown below. The cut lines are shown in the image below, with the finished cut shown in the second image for clarity.

b. Use a small pneumatic cut off wheel, dremel or small body saw to trim the mesh out.

c. Use a dremel or file to deburr any rough cut edges of plastic.



- 26) Re-install the bumper cover, grill, headlights, inner fender liners and plastic underbody guard back onto the vehicle in the reverse order of removal. Reference steps 4-17 if needed.
- 27) Re-install the license plate mount and license plate.



Installation is Complete

#### RELEASE OF LIABILITY

I, the customer, do hereby release and forever discharge Van Compass LLC, their agents, employees, successors and assigns, and their respective heirs, personal representatives, affiliates, successors and assigns, and any and all persons, firms or corporations liable or who might be claimed to be liable, whether or not herein named, from any and all claims, demands, damages, actions, causes of action or suits of any kind or nature whatsoever, whether known or unknown, fixed or contingent, which I now have or may hereafter have or claim to have, as a result of or in any way relating to the following: Parts sold & installed by Van Compass LLC or parts sold & installed by end-user; any parts sold online, any parts sold online or installed by a re-seller, any parts installed by an installation shop.

It is understood and agreed that this payment is made and received in full and complete settlement and satisfaction of the aforesaid actions, causes of action, claims and demands; that this Release contains the entire agreement between the parties; and that the terms of this Agreement are contractual and not merely a recital. Furthermore, this Release shall be binding upon the undersigned, and his respective heirs, executors, administrators, personal representatives, successors and assigns. This Release shall be subject to and governed by the laws of the State of Idaho.

PRODUCT SAFETY WARNING:

Van Compass LLC strongly recommends the installation of products be done by a certified mechanic. If this does not occur, be certain the person(s) installing the product read, understand and follow all instructions and warnings pertaining to the application before installation. Do not add, alter, or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the Van Compass LLC product purchased. Mixing component brands is not recommended.

Installation of suspension lift kits or any other lifting kits or devices will raise the center of gravity. For this reason, Van Compass LLC urges that extreme caution be used when encountering driving conditions which may cause vehicle imbalance. Furthermore, the driver's field of vision and judgment will not be as good due to the height of the vehicle. Due to the installation of larger tires, the speedometer will read slower than the actual speed being traveled and more distance will be required to stop the vehicle. It is the owner's responsibility to caution and warn any potential driver of the vehicle about these driving and handling conditions. Van Compass LLC will not be held liable or responsible for damages or personal injuries resulting from the use of lifting devices and or related products. The tires and rims should be changed to sufficiently increase the vehicle's total overall width and stability to help accommodate lifting devices.

Van Compass LLC aftermarket suspension products and accessories modify a vehicle for uses which exceed conditions anticipated by the vehicle manufacturer. The uses include the high performance demands required during off-road. These conditions vary in the degree of extremity and cannot be controlled by the vehicle or product manufacturer. If the components within the suspension system or accessories become worn due to frequent and/or extreme use, the safety and reliability of the vehicle is at risk. The maintenance of aftermarket equipment to ensure the vehicle occupants safety is entirely your responsibility. Do not purchase Van Compass LLC products unless you are willing to accept this responsibility. Do not install any Van Compass LLC suspension products or accessories unless you feel competent at installing the product without causing present or future injury to yourself or other vehicle occupants; seek an authorized installation center.

Most states have some type of law limiting vehicle height. The amount of lift allowed, and how the lift can be achieved, varies greatly. Several states offer exemptions for farm and commercial registered vehicles. It is the vehicle owner's responsibility to check state and local laws to ensure that their vehicle will be in compliance. Van Compass LLC reserves the right to make changes in design, materials and specifications as deemed necessary without prior notice and without assuming obligation to modify any product previously manufactured. Obligation or liabilities will not be assumed with respect to similar products previously advertised.

This Release of Liability and Product Safety Warning has been read and fully understood by the undersigned and has been explained to me.