



4089 – 2019-PRESENT, MERCEDES SPRINTER VS30 AIRLINE KIT

Version 1.0

General Notes

- For the most up to date and current instructions, please visit our website at www.vancompass.com
- Please read all instructions thoroughly before starting installing Van Compass products.
- This airline kit is designed to be used in conjunction with the Van Compass Air System Mount (Part number 4066). Please refer to the instructions included with that kit for installation and wiring of the Air compressor. We recommend installing the air compressor / and air system mount before installing this airline kit.

Parts List

4089 – 2019-PRESENT, MERCEDES SPRINTER VS30, AIRLINE KIT

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|--------------------|---|
| • (1) 408901 | MERCEDES SPRINTER VS30, FRONT AIRCHUCK MOUNTING TAB |
| • (1) 408902-LH | MERCEDES SPRINTER VS30, REAR AIRCHUCK MOUNTING TAB, DR SIDE |
| • (1) 408902-RH | MERCEDES SPRINTER VS30, REAR AIRCHUCK MOUNTING TAB, PASS SIDE |
| • (1) 408903-01 | 3/8" AIRLINE TUBING KIT – 43' |
| • (6) 408903-02 | 3/8" OD x 1/4" NPT PUSH TO CONNECT FITTING (PTC), 90 DEG |
| • (3) 408903-03 | 1/4" NPT FEMALE BULKHEAD FITTING, 3/4-16 UNF COUPLING |
| • (3) 408903-04 | 1/4" MNPT KWIK CHANGE AIR COUPLER |
| • (2) 408903-05 | 3/8" OD X 1/4" NPT PUSH TO CONNECT FITTING (PTC), STRAIGHT |
| • (2) 408903-06 | 3/8" OD PUSH TO CONNECT FITTING (PTC), T-FITTING |
| • (2) 408903-07 | 1/4" NPT BRASS COUPLING NUT |
| • (5) MC5-08-11 | MACHINE SCREW, 8-32 X 1-1/4" LONG |
| • (5) NNC-08-32 | NYLOCK NUT, 8-32 CLEAR ZINC |
| • (8) BHCS02-10-SS | BUTTON HEAD CAP SCREW, 1/4-20 X 1" LONG, STAINLESS STEEL |
| • (8) WF-02-SS | FLAT WASHER, 1/4" STAINLESS, STAINLESS STEEL |
| • (8) FNS-02 | FLANGE NUT, SERRATED, 1/4-20 CLEAR ZINC |
| • (20) ZT-08-BLACK | ZIP TIE, BLACK, 8.0" LONG |

Tools Needed

- Drill with 1/4" (6.5mm) and 1/2" (12.5mm) metal cutting drill bits
- Die grinder with burr bit or similar Dremel style tool to notch plastic of grill
- C-clamp / Vise grip / Quick clamp
- Simple hand tools:
 - Basic wrench and socket set:
 - 5/8", 11/16", 3/4", 1" wrench

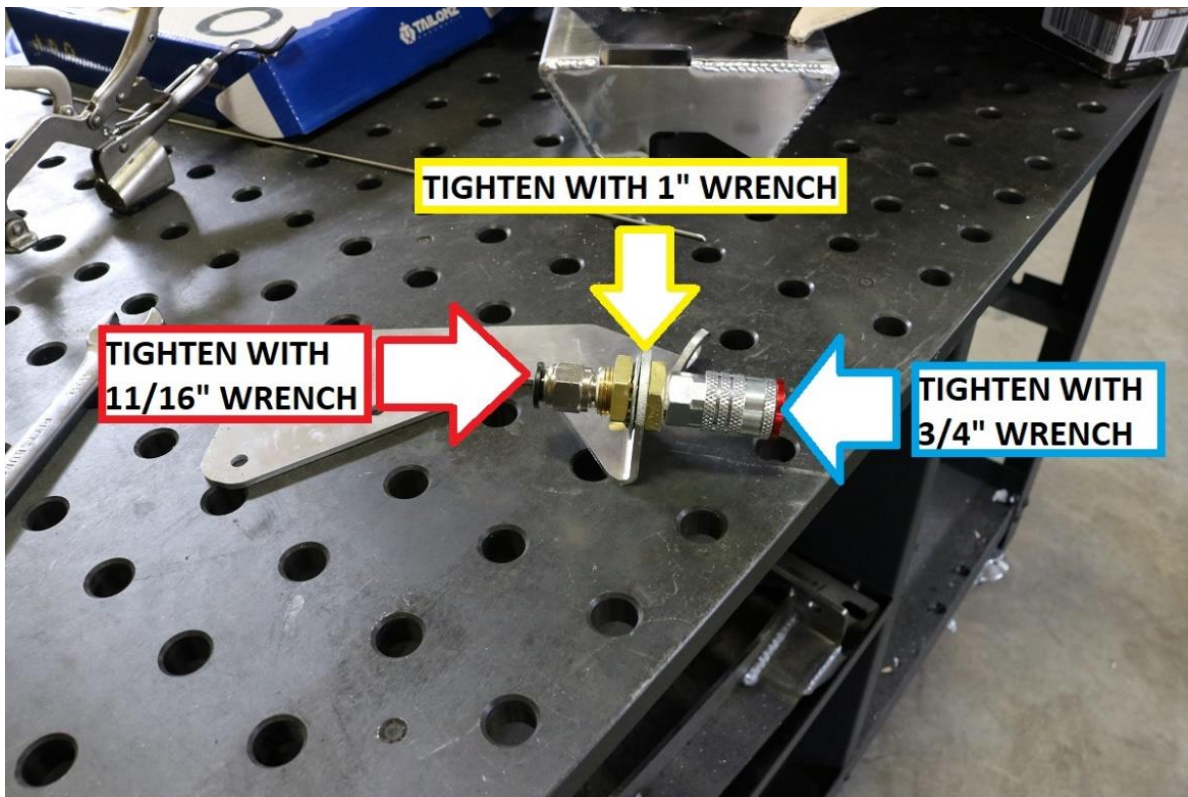
- Flat blade screwdriver / automotive trim removal tool
- T-25 torx
- 5/32" allen

Approximate Installation Time

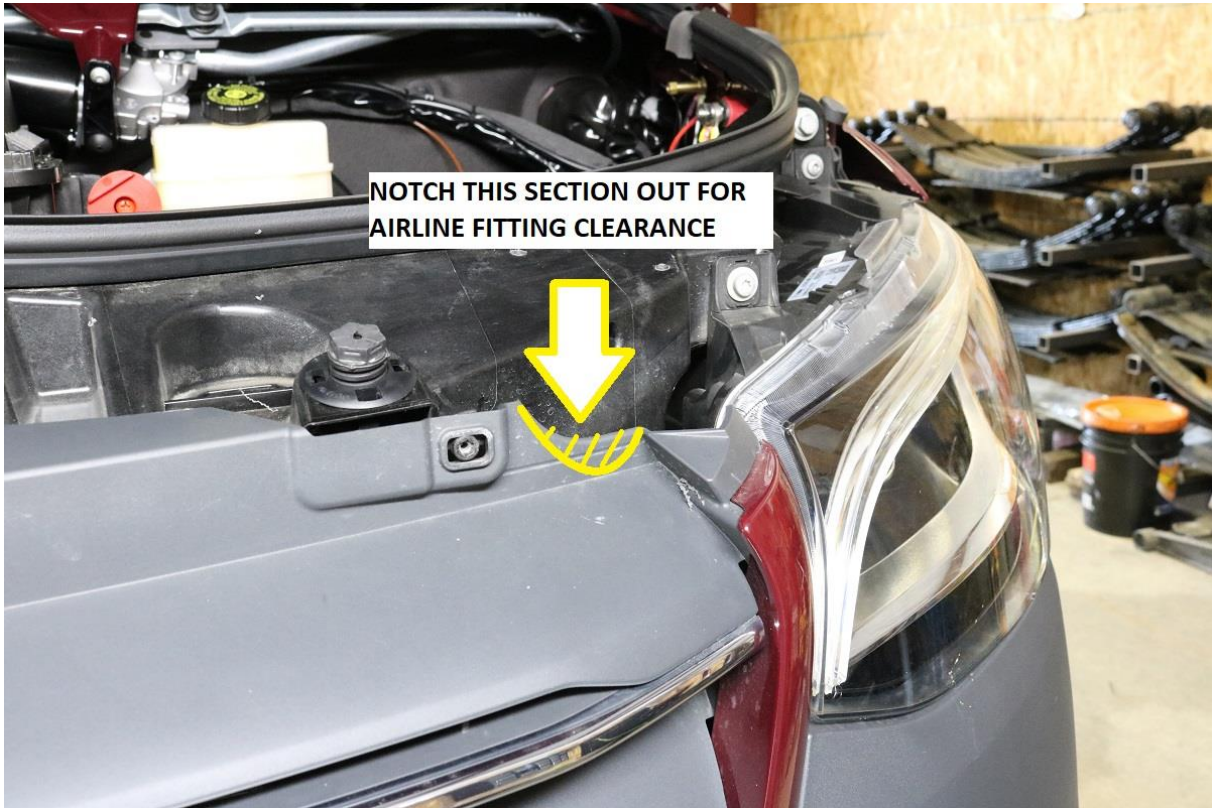
- 3-4 hours

Installation

- 1) Install the 408903-03 bulkhead fittings, air couplers and "push to connect" (PTC) fittings on the airchuck mounting tabs as shown below.
 - a. Use a 1" wrench on each end to tighten the bulkhead fittings.
 - b. Use a 3/4" wrench to tighten the air chuck.
 - c. Use a 11/16" wrench to tighten the PTC fittings.



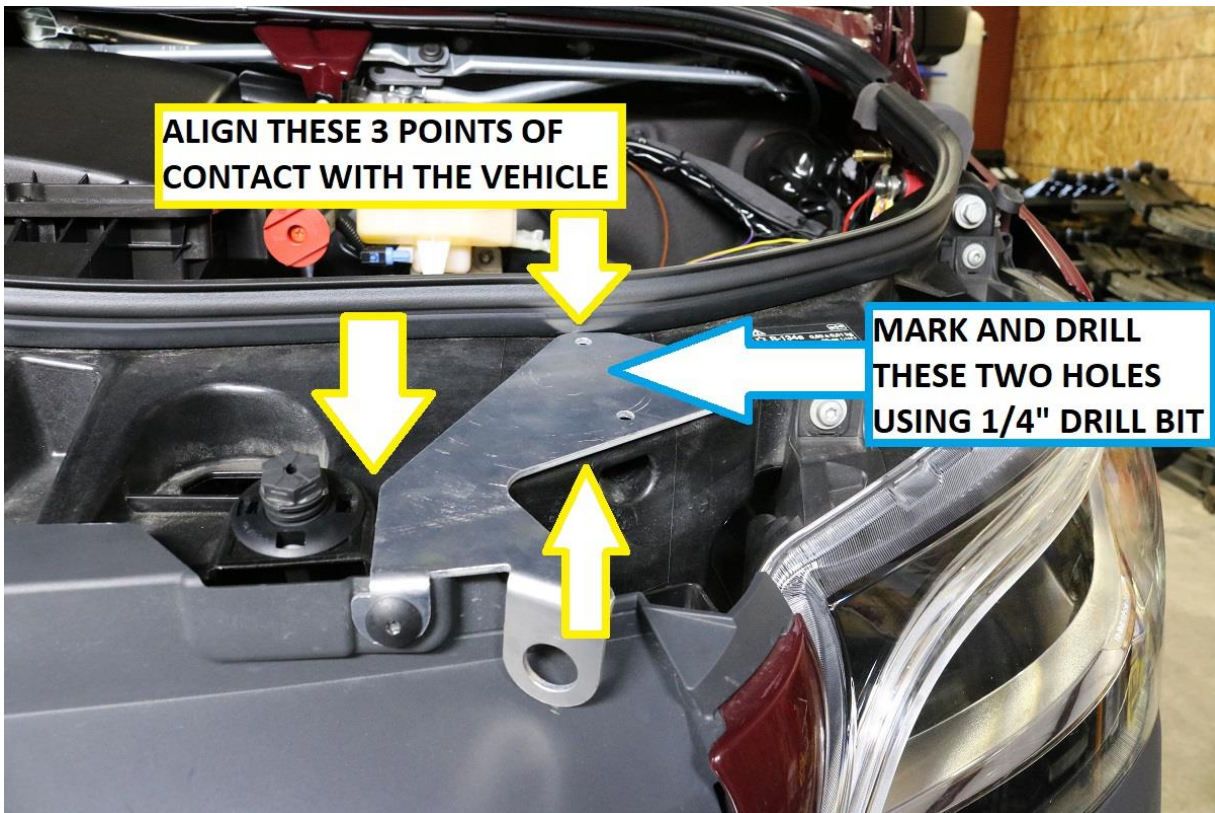
- 2) Begin at the front of the vehicle and open the hood of the vehicle. On the driver side of the grill, near the top corner of the headlight, use a die grinder or similar Dremel style tool to notch out the upper driver side of the grill for airline fitting clearance.
 - a. See image below for what material needs to be removed.



- 3) Locate the T-25 Torx screw along the top of the grill on the driver side of the vehicle. Remove this screw.



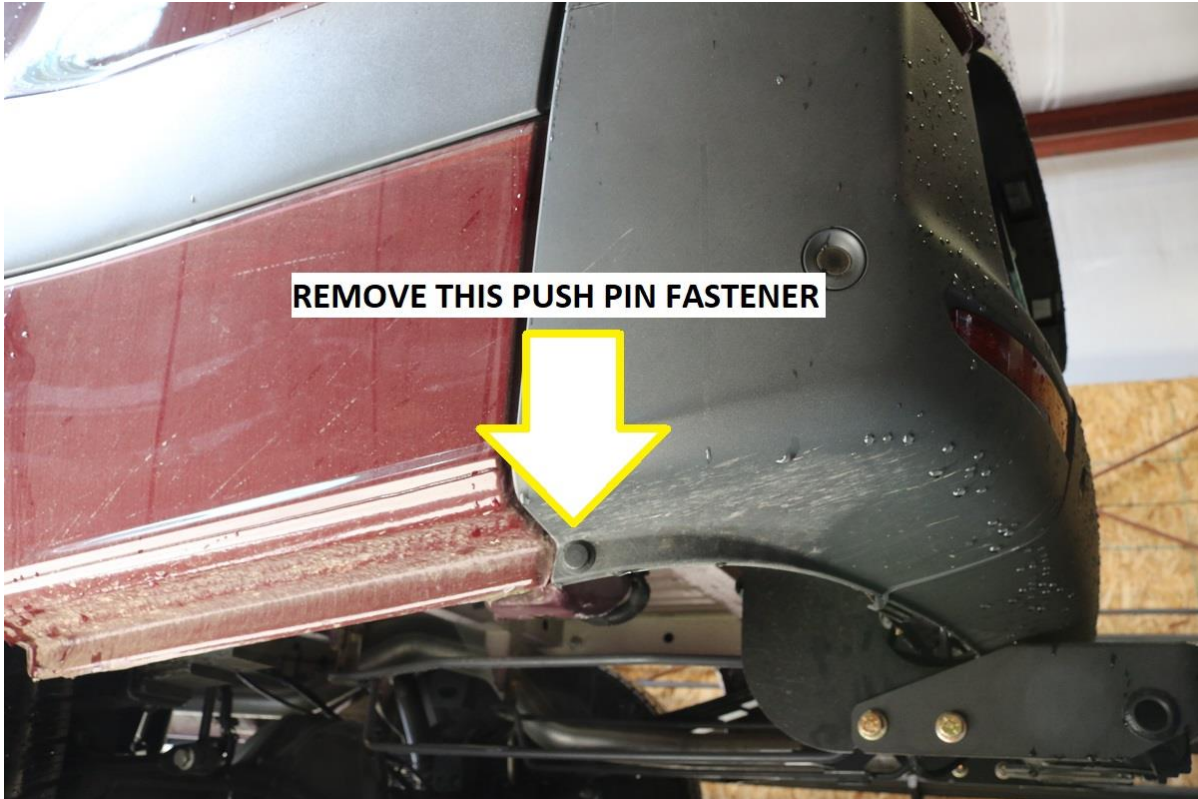
- 4) Fit the front bracket to the vehicle using the T-25 torx screw removed in the previous step. Start the screw but don't fully tighten at this time.
- a. Align bracket as shown in the image below. Mark and drill the 2 mounting holes.



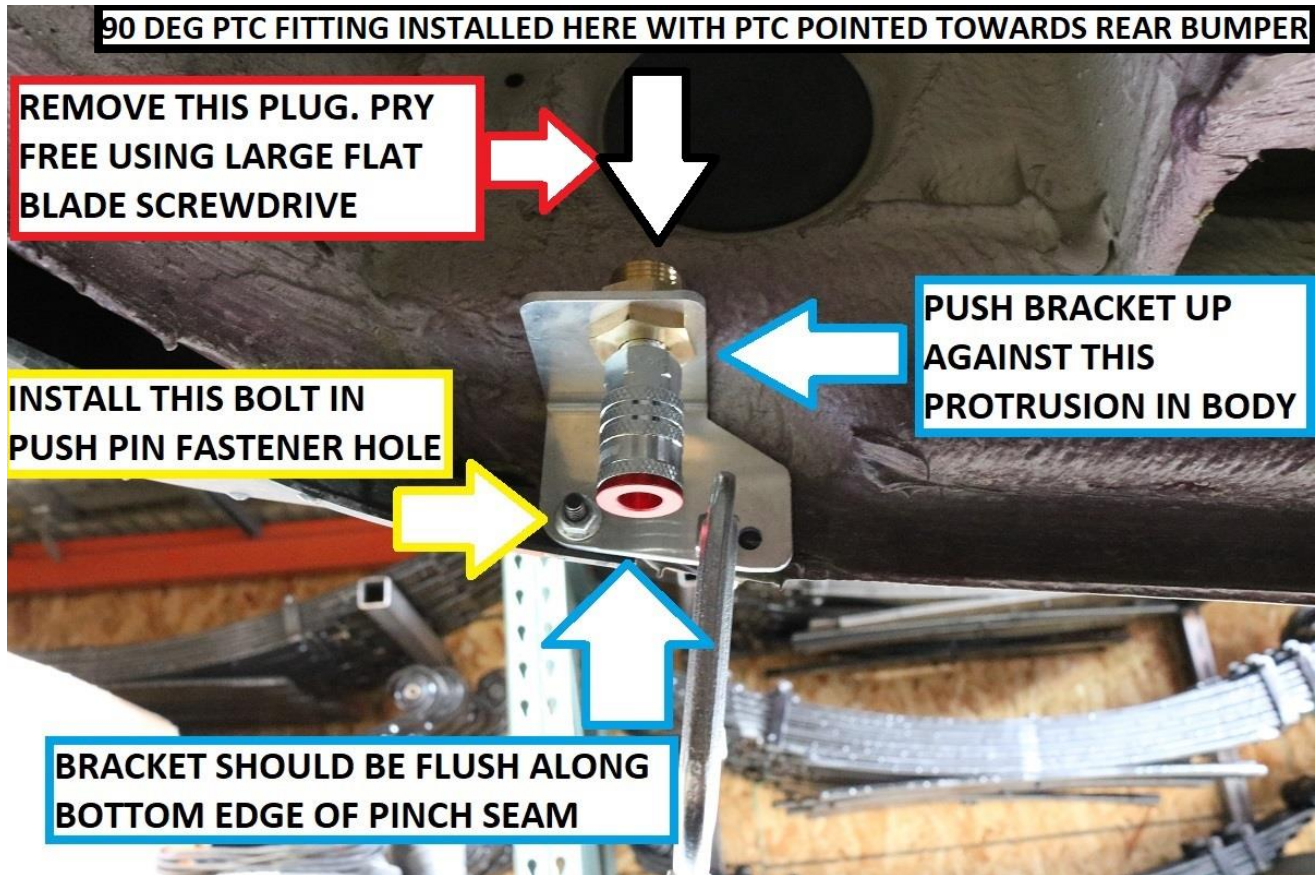
- 5) With holes drilled, install the included $\frac{1}{4}$ -20 x 1" long button head bolts with a washer under the bolt head. Install a flange nut on the underside of the core support. Snug the front Torx bolt first, then snug the button head allen bolts using a 5/32" allen. See image below of installed front bracket.



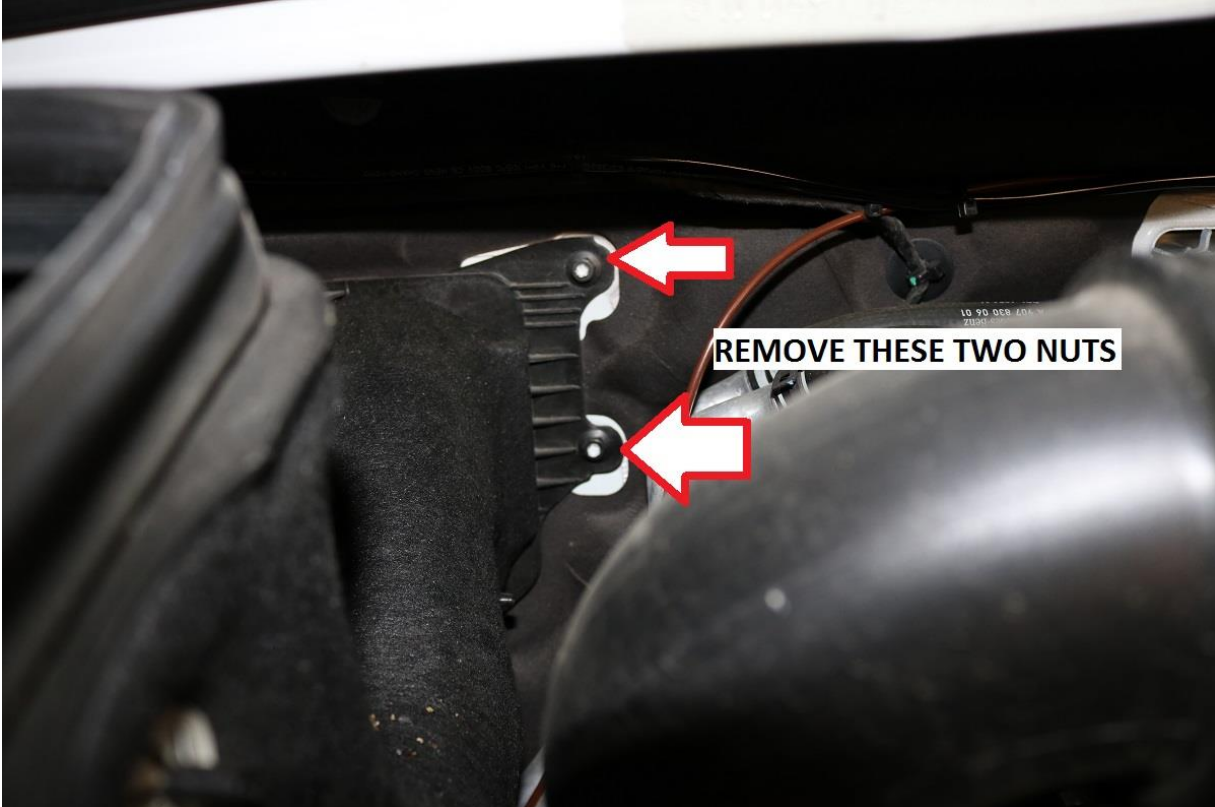
- 6) Move to the rear of the vehicle on the underside behind each of the rear tires. We'll show installation on the driver side but installation on the passenger side is the same.
- 7) Begin by locating the push-pin fastener at the rear of the vehicle where the rear bumper cover connects to the lower pinch seam. Remove this fastener with an automotive trim removal tool.
 - a. Note this is a two step fastener, pry up under the head of the push pin prior to prying under the body of the fastener to fully remove it.



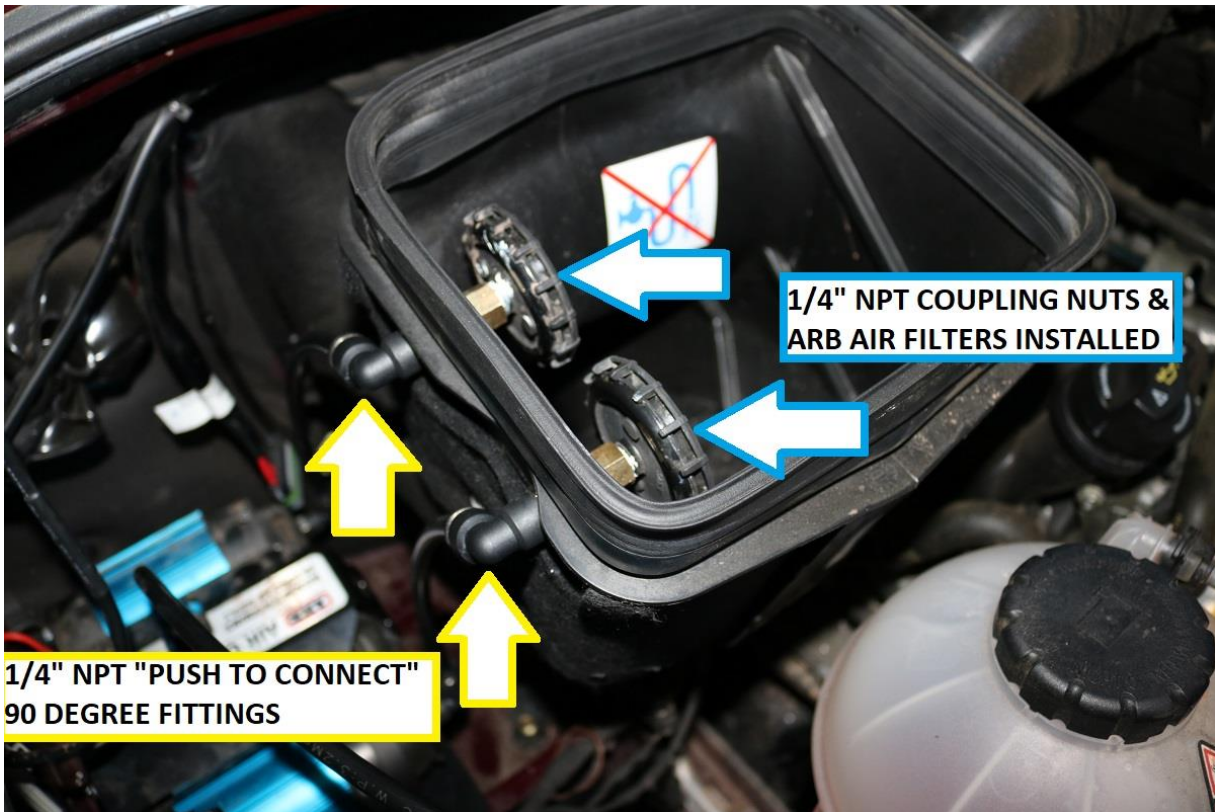
- 8) Bolt the rear bracket to the vehicle using the hole previously used for the push pin fastener. Use one of the included $\frac{1}{4}$ -20 button head bolts with a washer under the bolt head.
 - a. Note, the rear brackets are left and right specific and fit with the angled portion of the bracket facing towards the front of the vehicle.
 - b. Snug the first button head bolt with a $\frac{5}{32}$ " allen and align it. It should be pushed up against the protrusion in the body along the top of the bracket and be flush with the bottom of the pinch seam.
 - c. Clamp bracket in place as shown below.



- 9) Remove the large plastic body plug just above the rear bracket using a large flat blade screw driver to pry it free from the chassis. See image above for reference.
- 10) Use the bracket as a drill template to mark the two additional mounting holes. Remove the bracket and drill the holes using a ¼" (6.5mm) drill bit.
 - a. Touch up any exposed areas of metal with paint to prevent corrosion.
- 11) Assemble the 408903-03 bulkhead fittings, air couplers and the 90 degree PTC fittings on the airchuck mounting tab as shown above.
 - a. Use a 1" wrench on each end to tighten the bulkhead fittings.
 - b. Use a ¾" wrench to tighten the air chuck.
 - c. Use an 11/16" wrench to tighten the PTC fittings.
- 12) Bolt the bracket in place using the included ¼-20 button head bolts with a washer under the bolt head. Snug all bolts to satisfaction, do not tighten more than 80 in-lbs (9 N.m)
- 13) Remove the plastic inlet tube for the cabin air filter on the passenger side of the engine bay. Use a 10mm socket / wrench and remove all 4 nuts as shown in the images below.

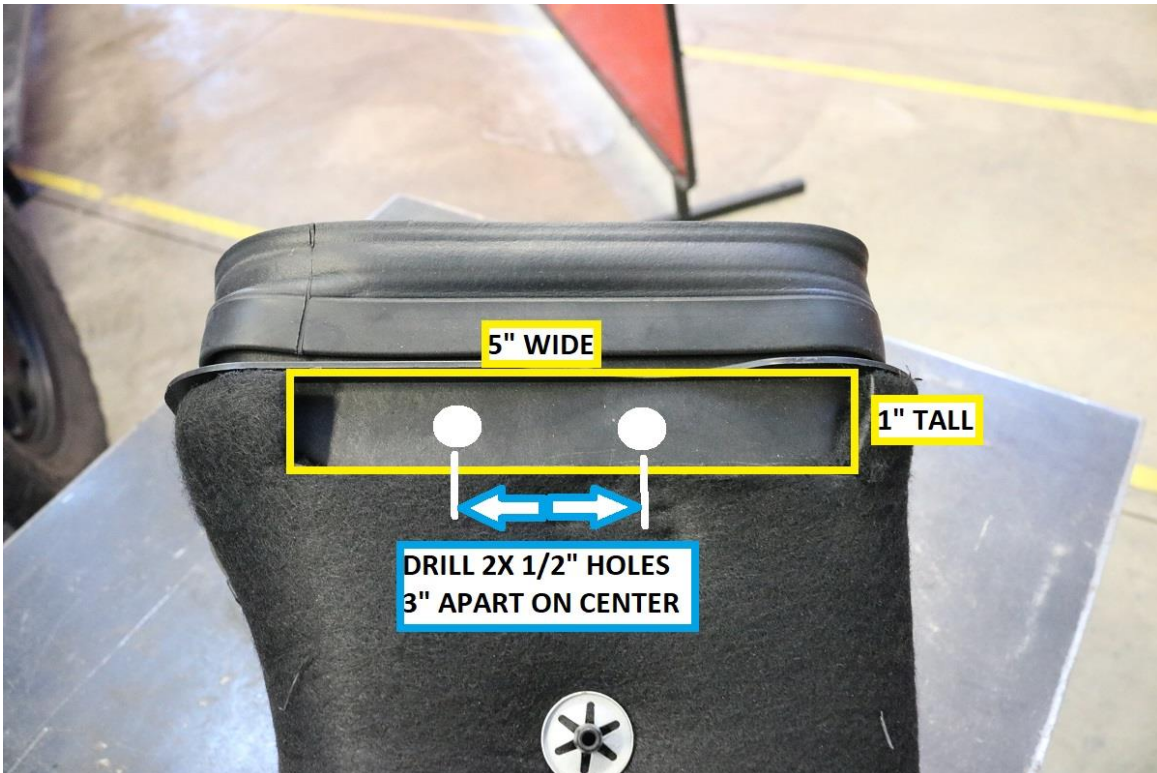


- 14) On the left side of the cabin air filter intake tube, we will be drilling two ½" holes to secure the air compressor filters to the intake tube.
- a. Below is a finished image of the completed install of the air filter setup.



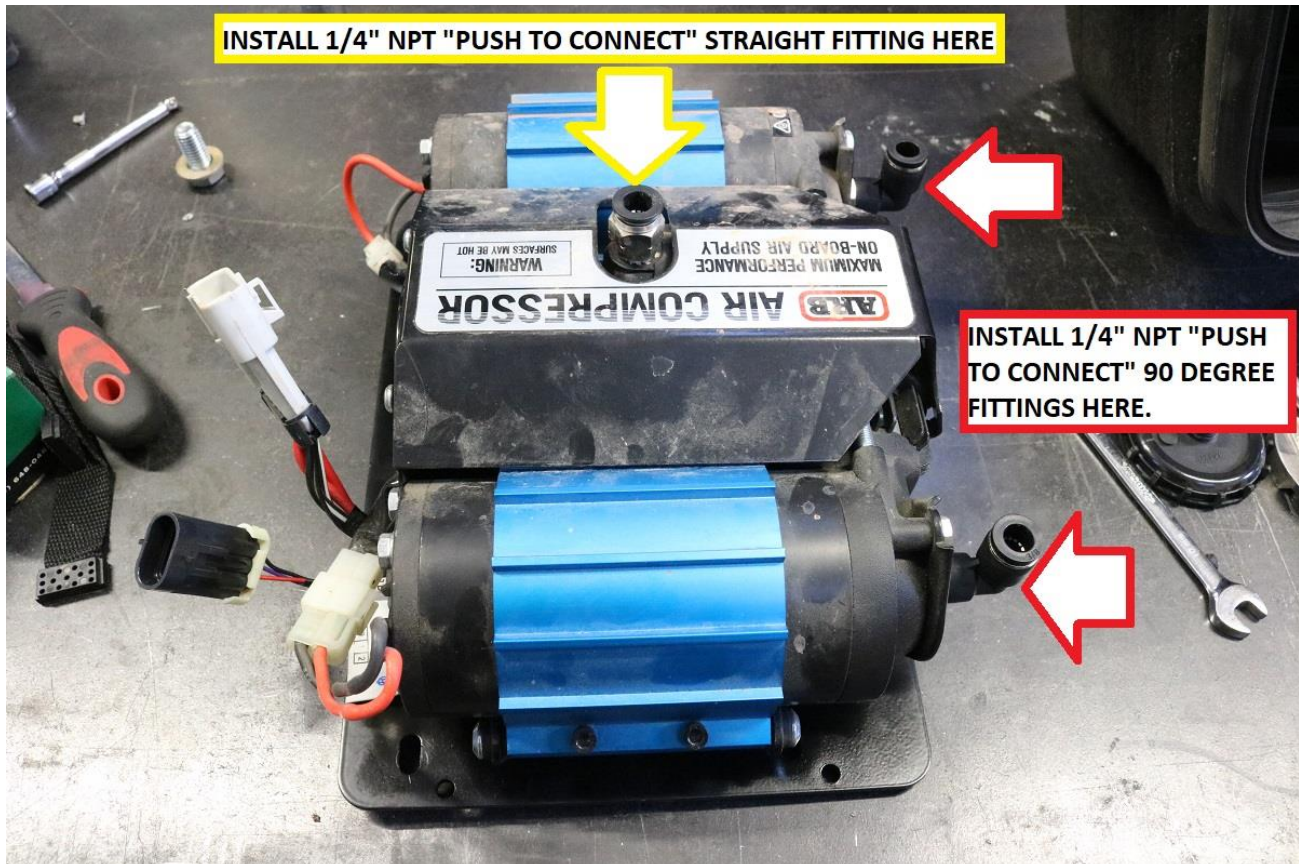
15) On the left side of the intake tube, use some quality shears or scissors to cut a 5" long x 1" tall piece of the outer insulation.

a. With the insulation removed. Mark two holes on center 3" apart and drill with a 1/2" drill bit.



16) With the holes drilled, thread in a 90 degree PTC fitting into each hole. Secure using the 1/4" NPT coupling nuts. Put a dab of thread sealant on the ARB compressor intake filters and thread them into the coupling nuts. See completed image above from Step 14 for reference.

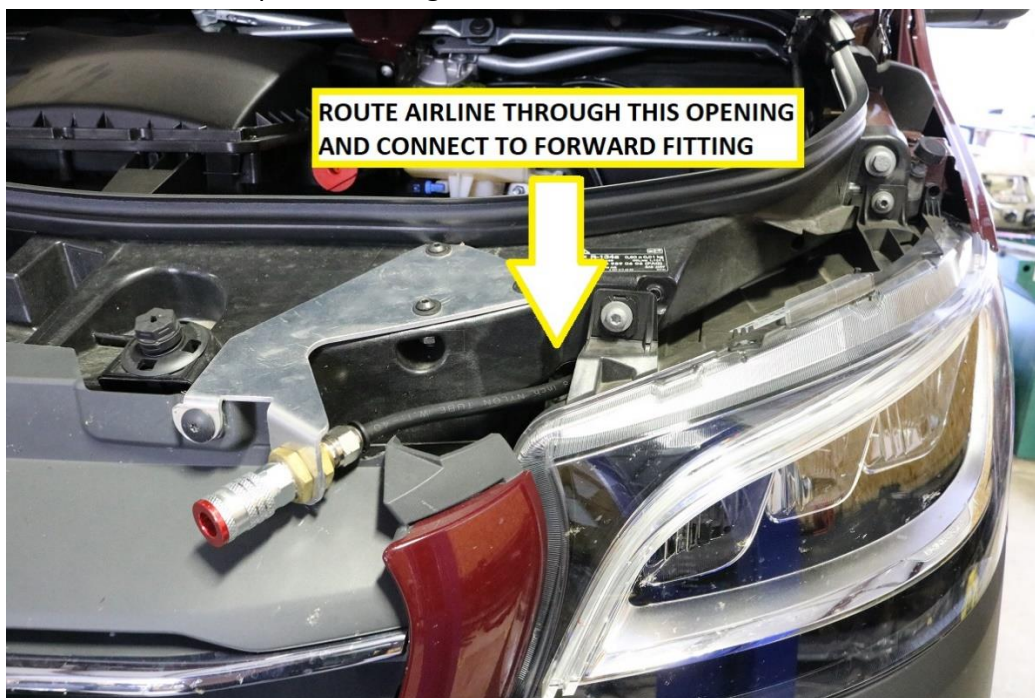
- 17) Re-install the cabin air filter intake tube back onto the vehicle. Rotate the PTC fittings on the intake tube down so they are pointed to the air compressor. Measure for airline lengths and connect the PTC fittings from the compressor to the intake filters.
- 18) Install one of the straight PTC fittings into the 1/4" NPT port on the top of the ARB twin compressor manifold. Install two of the 90-degree PTC fittings into each of the intake ports on the side of the ARB compressor.
 - a. Note, ensure the ARB compressor is installed on the 4066 Van Compass air system mount with the intake side of the compressor oriented towards the center of the vehicle.



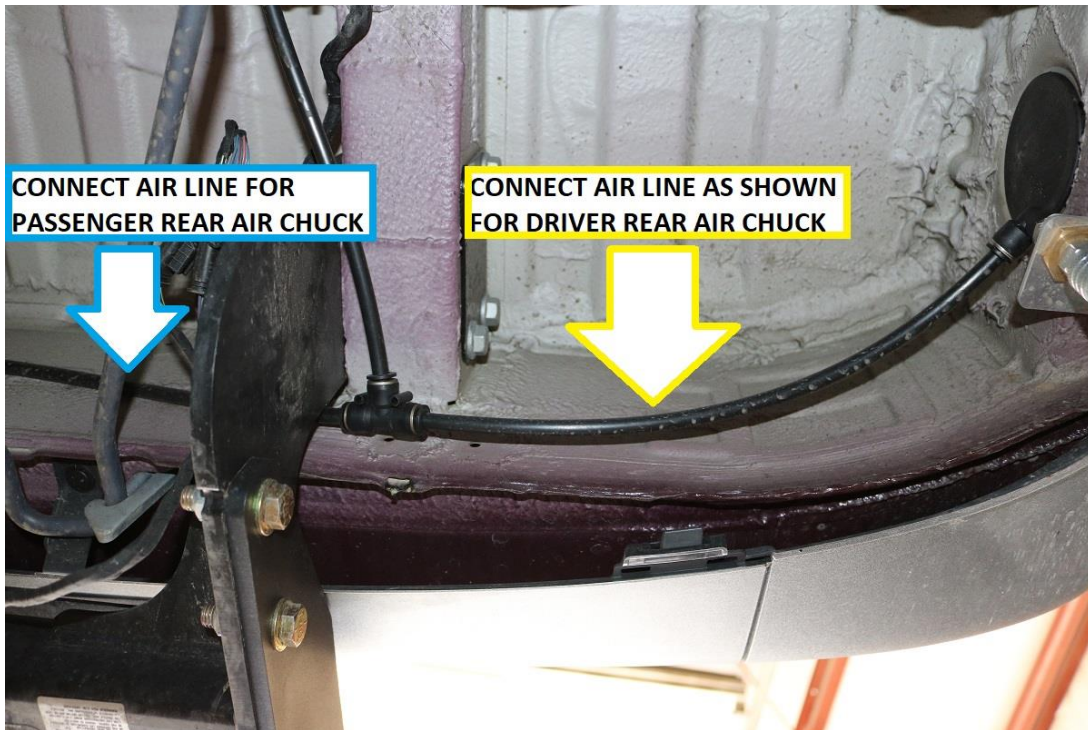
- 19) Measure the approximate length from the straight PTC fitting on the ARB compressor to the tab shown below near the backside of the driver side headlight. The airline will get routed along the backside of the core support.
 - a. Push airline in at the compressor side first.
 - b. Secure airline across backside of core support using the zipties included with the kit.
 - c. Cut airline at first thin tab where the T-fitting will be mounted. See image below for reference.



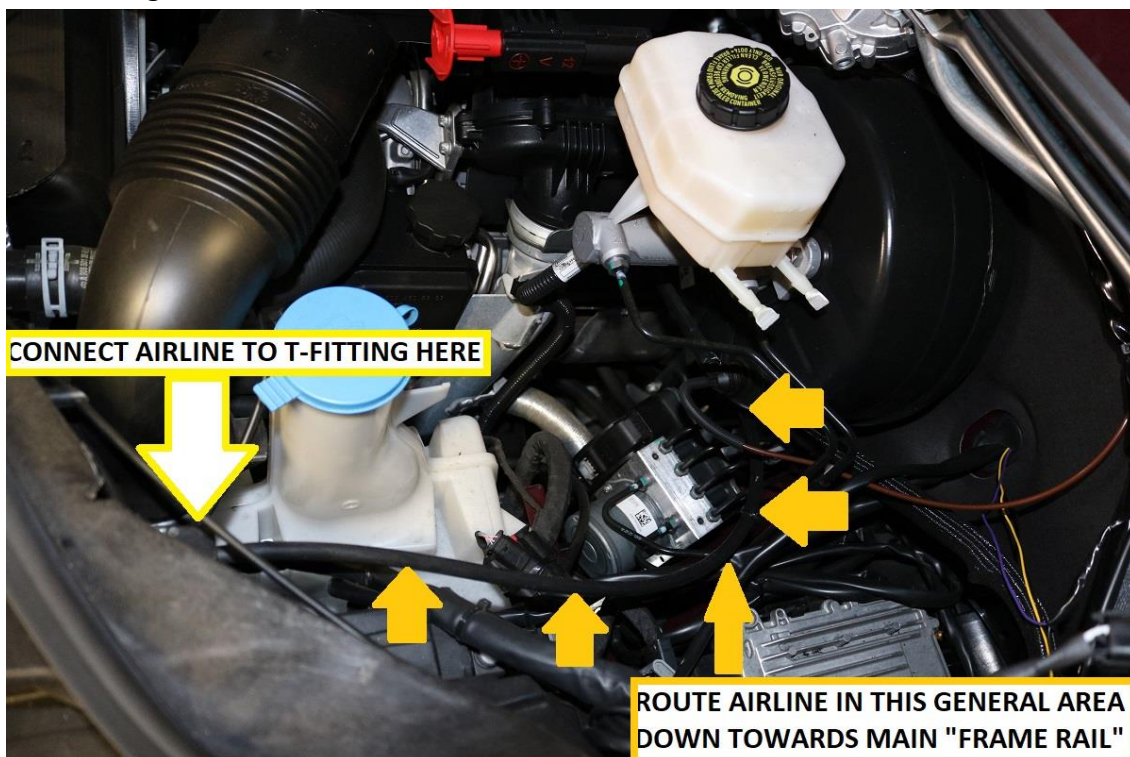
- 20) Measure the approximate length from the forward PTC fitting to the T-fitting behind the core support. Cut and fit the airline.
- Route the airline from behind through the opening between the headlight and connect it to the forward fitting. See image below for reference.
 - Connect rear section of the hose to the T-fitting positioned behind the headlight near the thin tab as shown in the previous image.



- 21) Move to the rear of the vehicle and measure the length of airline needed to connect the driver rear air chuck location to position the second T-fitting as shown underneath the driver side "frame rail"
- a. Cut and connect this airline.
 - b. Repeat this process to connect the passenger side rear air chuck location.



- 22) Route the front to rear main air line up into the engine bay as shown below to connect the airline to the T-fitting mounted behind the driver side headlight assembly.
- a. Use zipties to secure the airline away from the steering shaft and any hot components in the engine bay.
 - b. See image below for reference.



- 23) Run the airline down the drivers side frame rail to connect it to the rear T-fitting. Secure it to the chassis using zipties.
- 24) Test the system for any air leaks.
- 25) Installation is Complete.

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.