



BMW M235I (F22 CHASSIS) ATMOSPHERIC AND RECIRCULATING DUMP VALVE FITTING INSTRUCTIONS



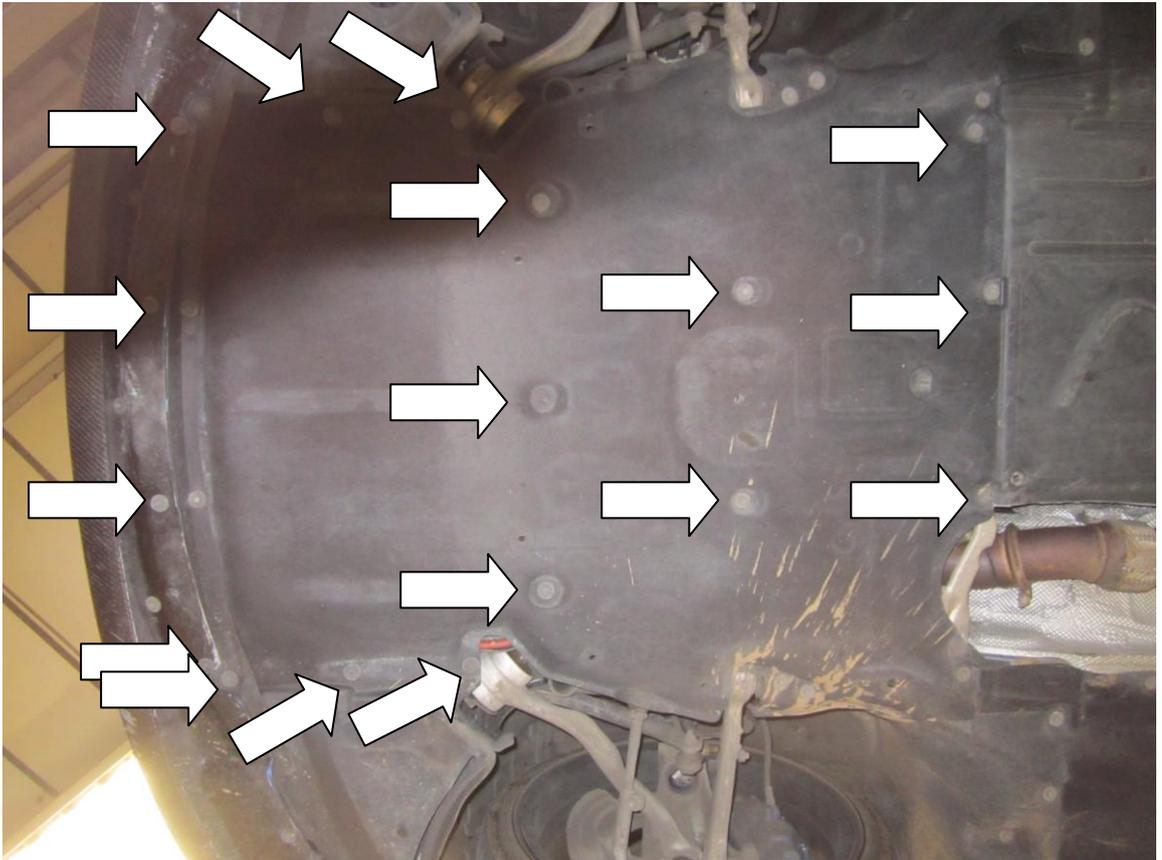
TOOLS NEEDED:

¼" Ratchet with extensions, and 8mm bit

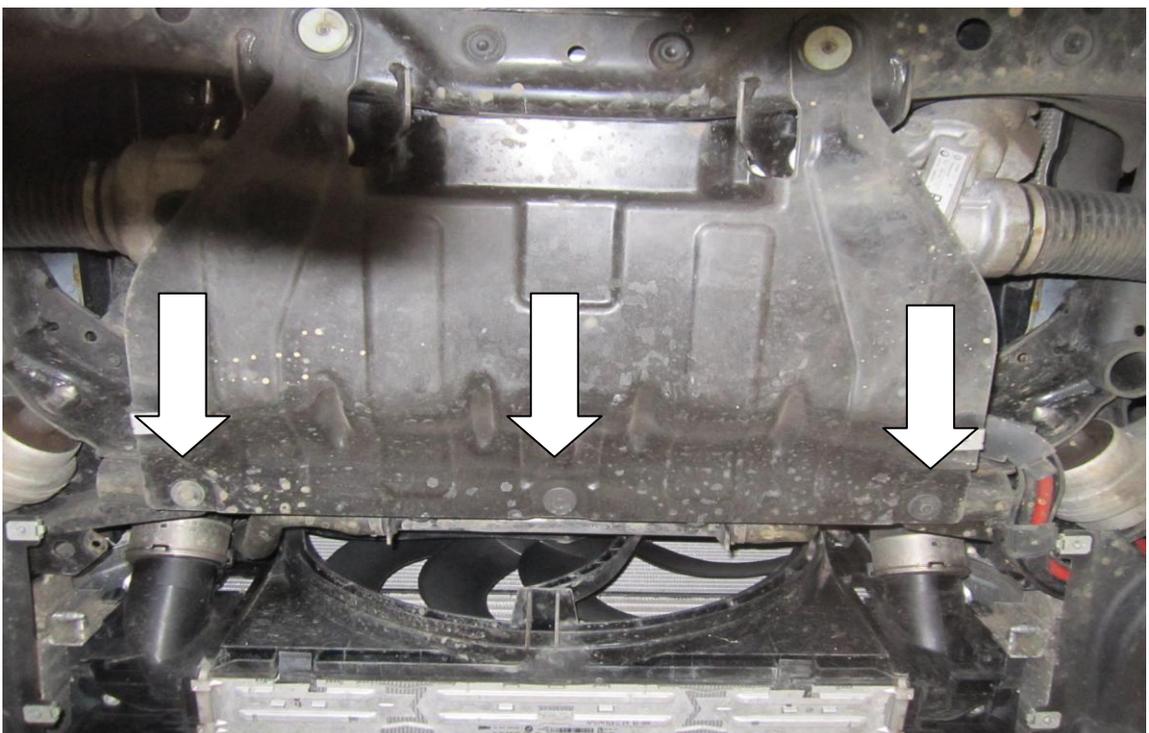
M6 Allen key with suitable extensions

E14 socket

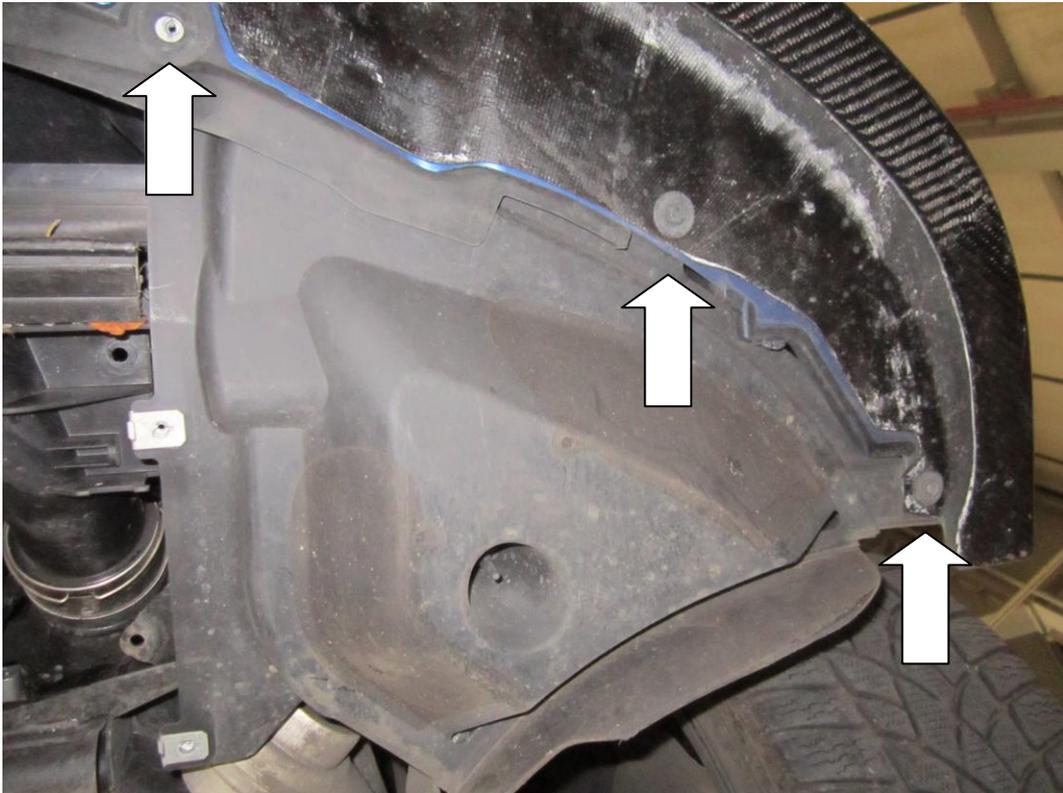
1. Raise the vehicle on a ramp or suitable axle stands. To remove the under tray use your ratchet with an 8mm socket.



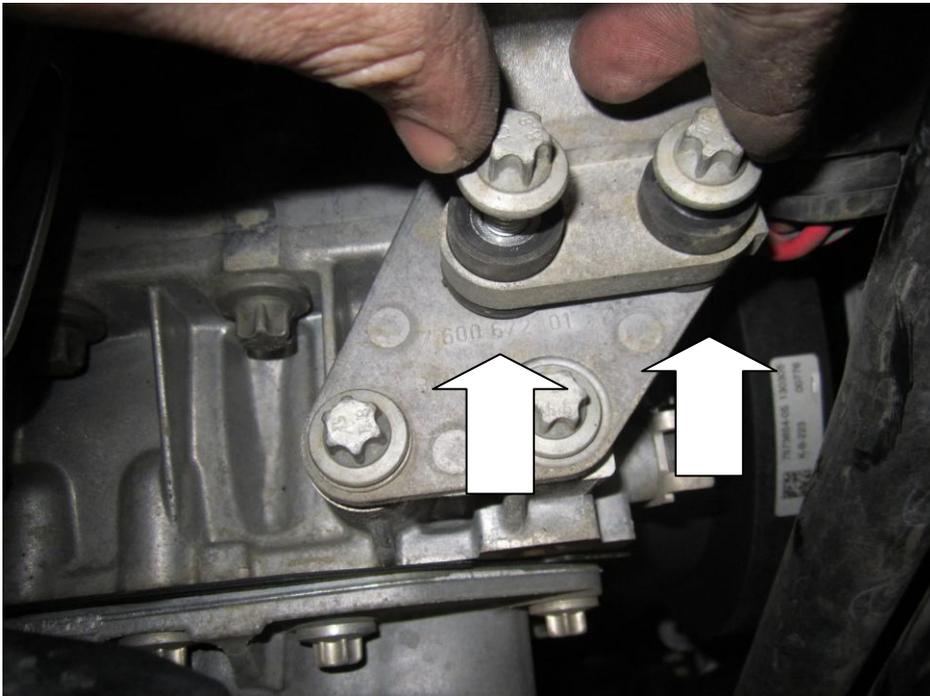
2. Now remove the second undertray again using your 8mm socket.



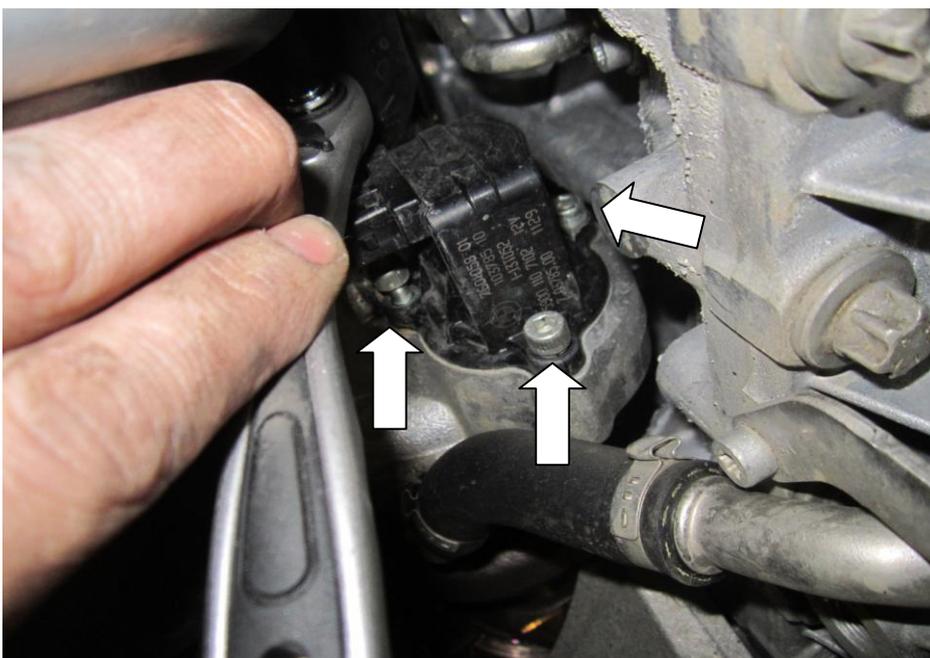
3. Remove the side undertrays in front of each wheel with your 8mm socket.



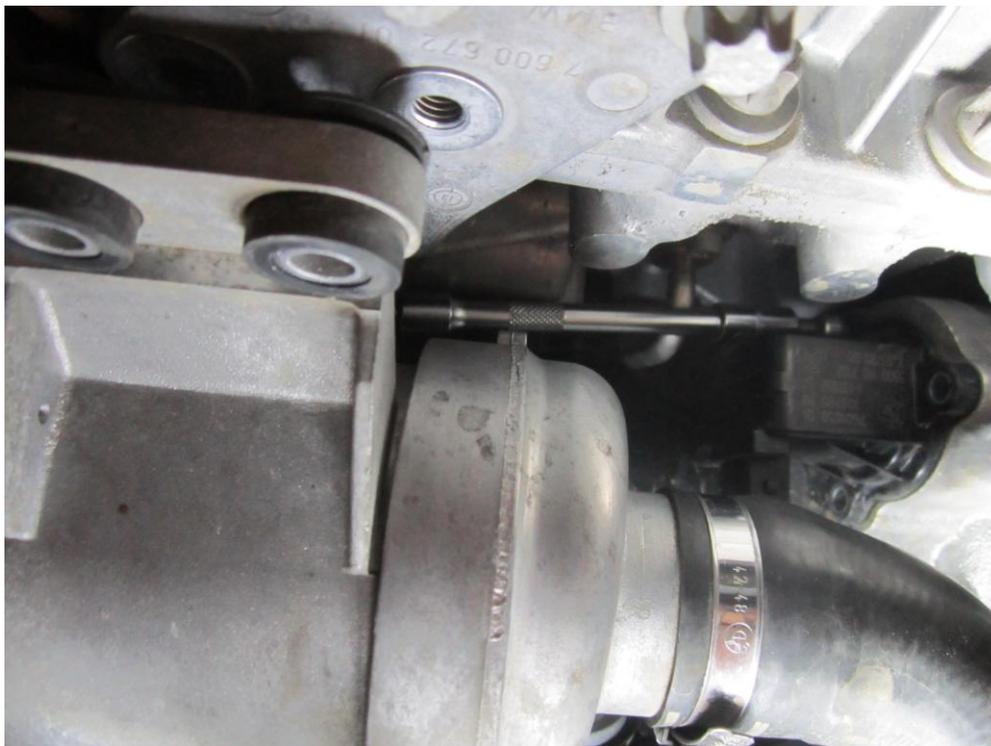
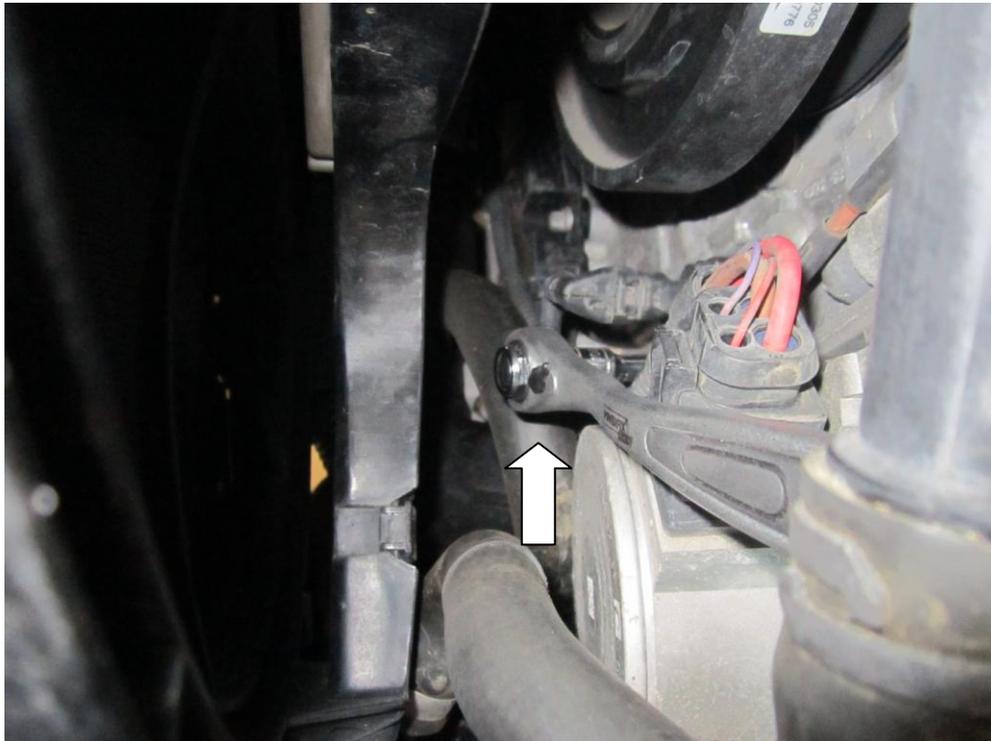
4. In order to remove your original equipment valve it is best to move your water pump to one side this makes accessing the fasteners that hold the valve in place alot easier to remove. The water pump is located below the valve housing. Use your E14 socket to remove the fasteners that hold your water pump in place .



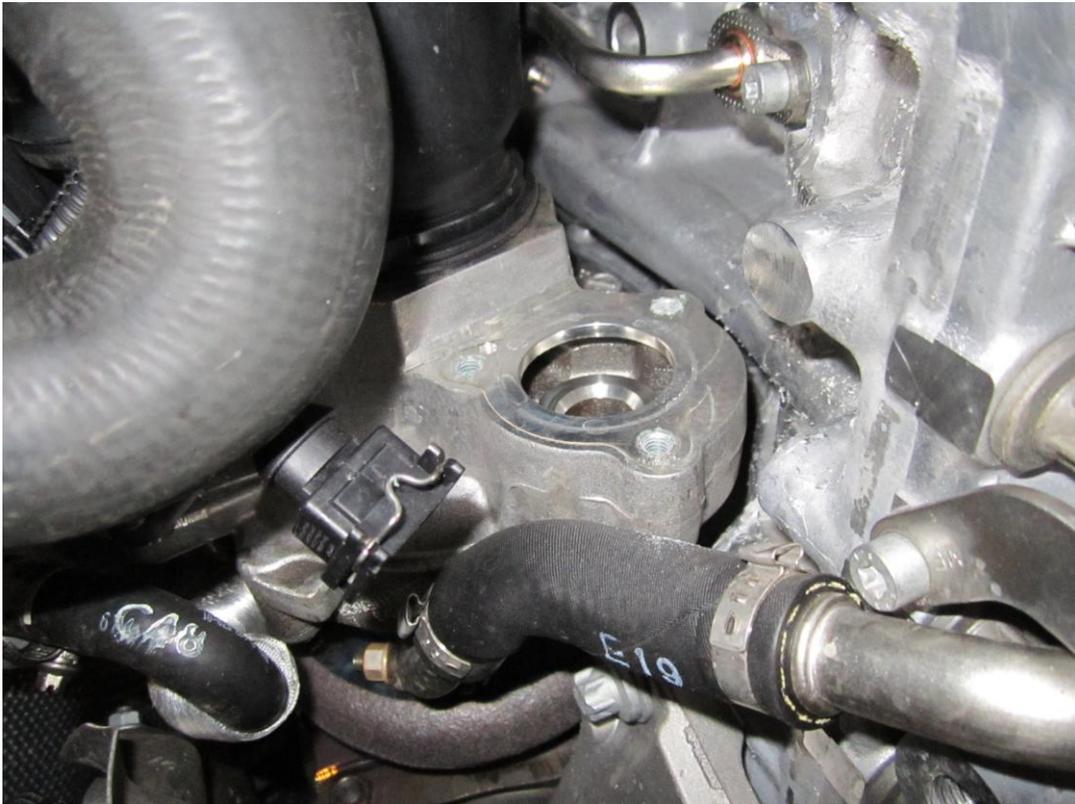
5. Remove the loom that connects to the top of the OE valve. Using your 6mm allen key undo the fasteners that hold it in place, this removal is very tricky we used various extensions to gain access to the fasteners .



6. This next picture shows you the angle and position we took when undoing the fastener at the top of the valve. We placed our ratchet next to the rear of the radiator cowling and used two extensions to go inbetween the top of the water pump and pump housing, one extension was 150mm long the other was 100mm long.



7. Now disconnect the wiring loom by pushing down on the clip and pulling away from your oem valve .



8. When fitting your forge motorsport valve you will need to remove the top section of the valve as this makes it easier to install. Rotate the top anti clockwise to remove.





- 9.** Before installing your forge motorsport dump valve make sure the orings are in place on the lower face as shown below.



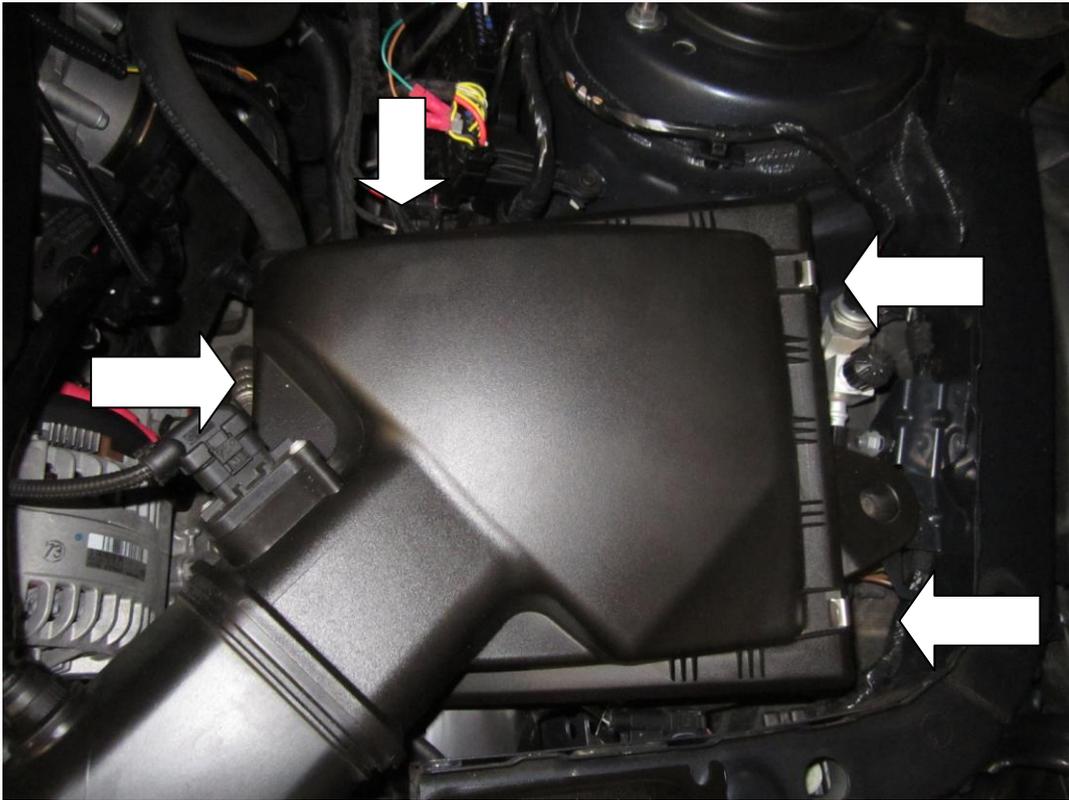
- 10.** Fit your new dump valve into the original valves location. Once the fasteners have been tightened, replace the top on your forge valve making sure you put the spring in place.
- 11.** The loom to the OE valve must now be relocated to the top of the engine rather than below. To find which wire this is you must remove the intake pipe that runs across the front of the engine bay.



12. With your hose clamp driver, undo the jubilee clip pictured.

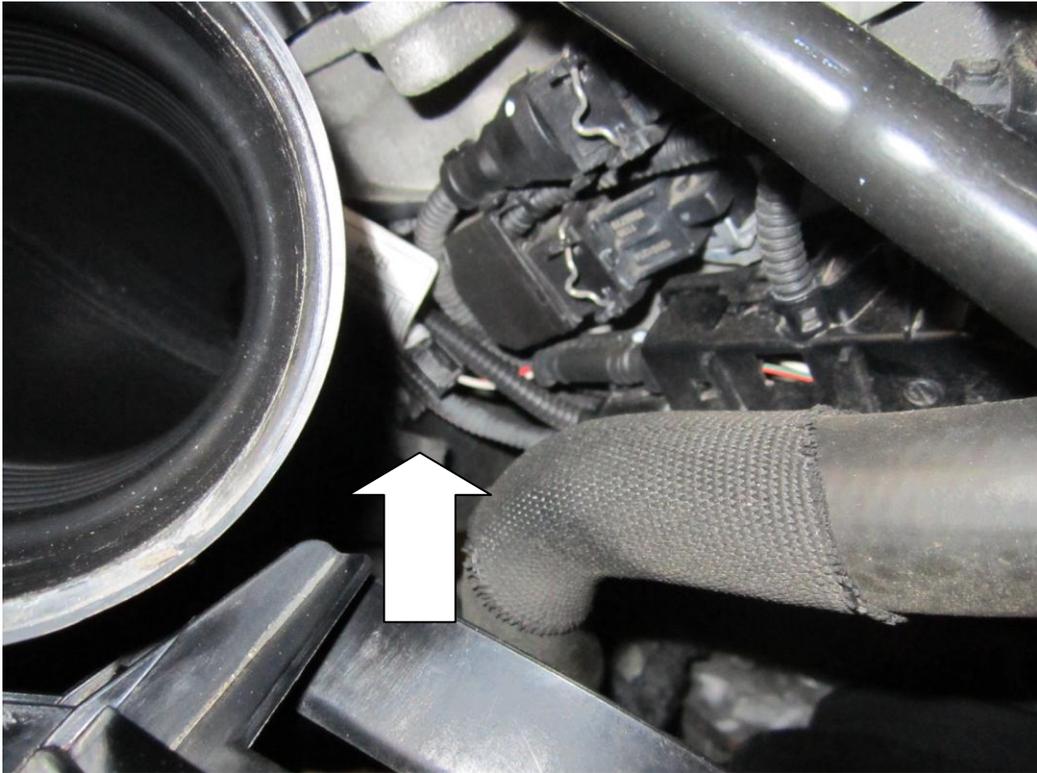


13.Undo the clips that hold your air box lid in place.

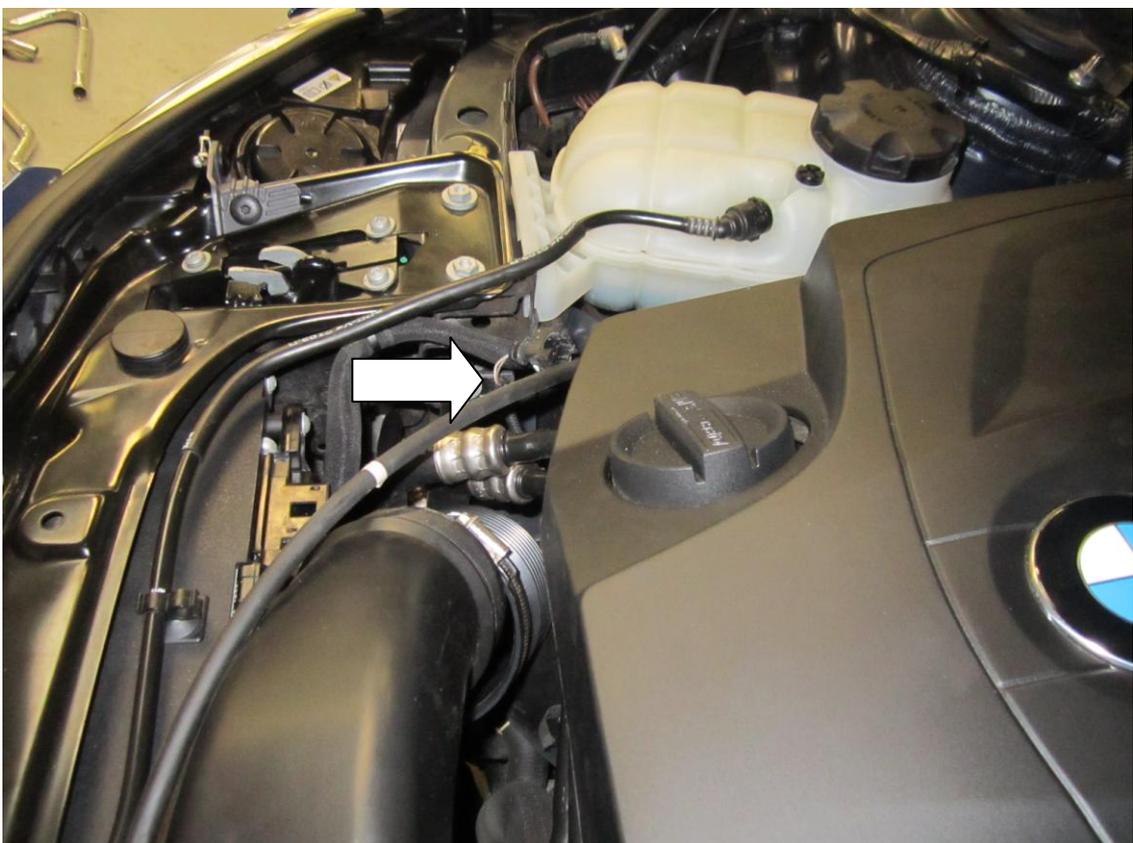


14. All that holds the induction pipe in place now is the rubber grommet in the center of the pipe. Simply pull the pipe towards you to release it, then place the pipe away from you on the engine so you can clearly see the wiring loom that enters near the front of the engine.

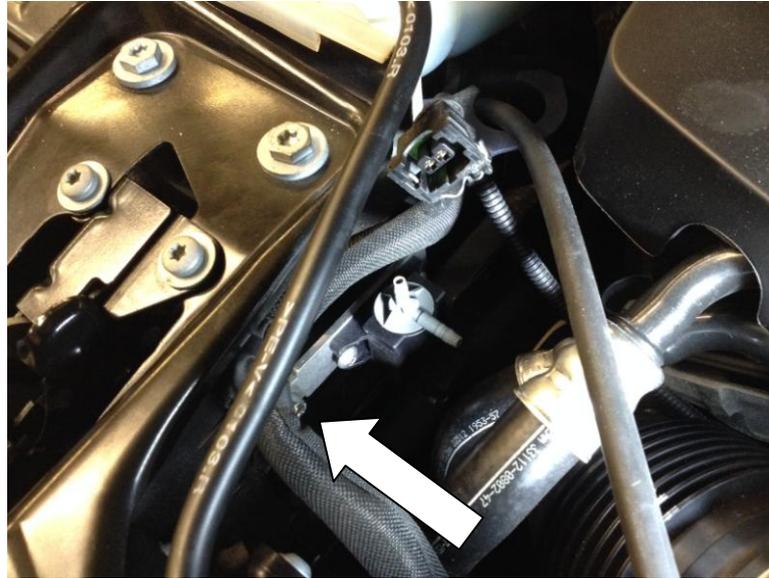




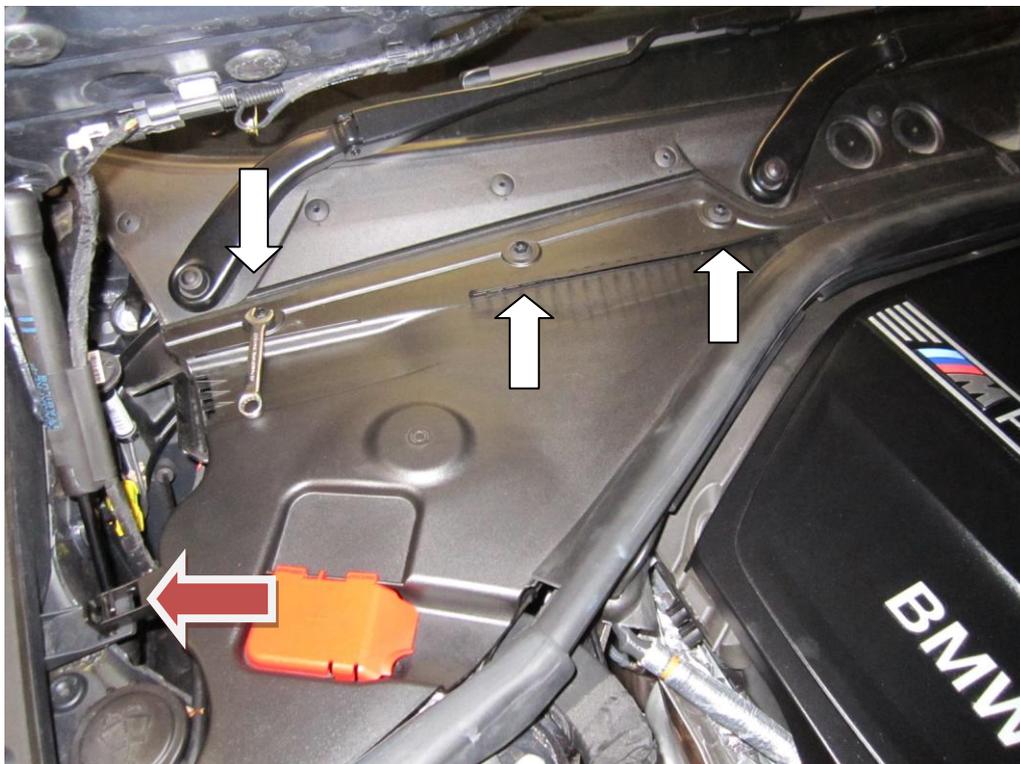
- 15.** Once the loom has been identified simply pull it up from below the engine and re-locate towards the back of the drivers side front light (on a RHD vehicle)

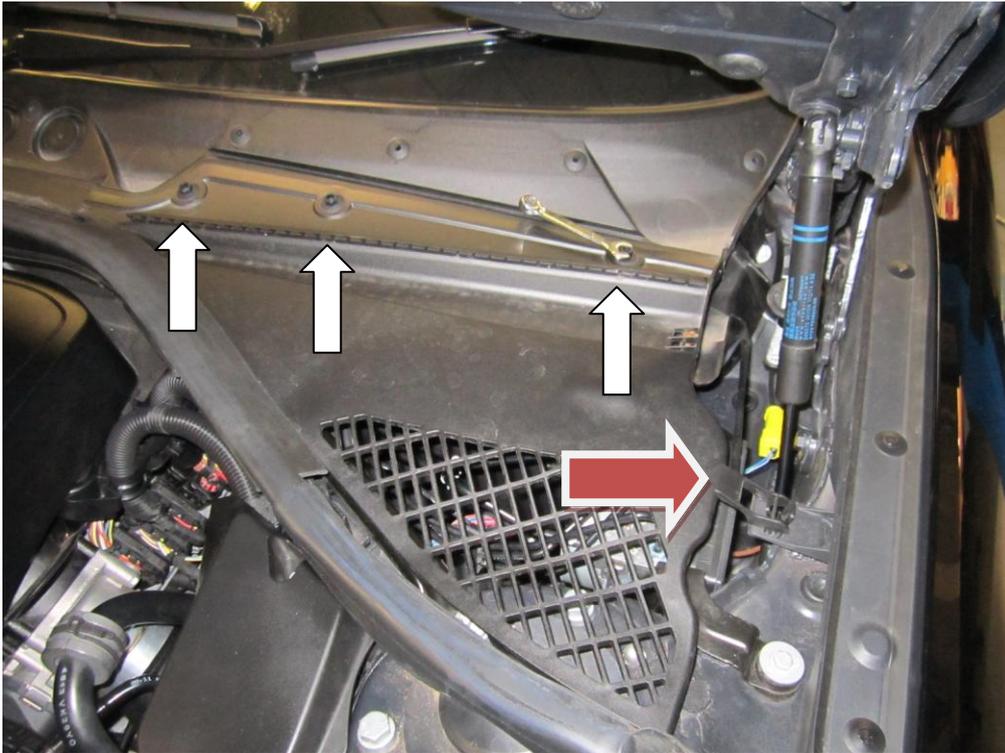


- 16.** You now need to mount the solenoid provided with your new forge motorsport dump valve, we mounted it just behind the drivers light (RHD vehicle) where there is a spare hole available.



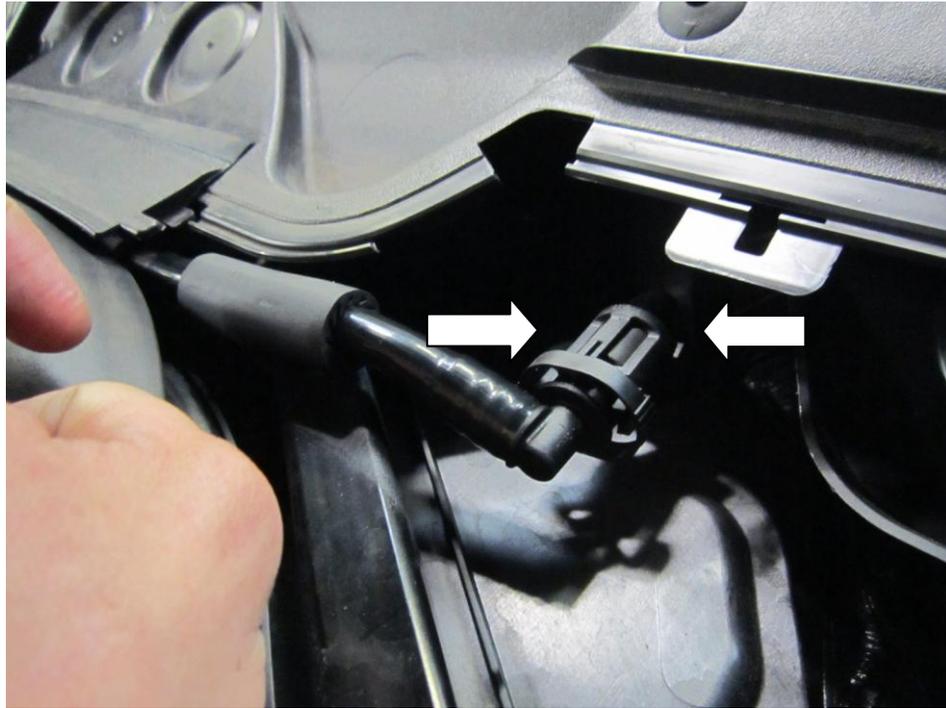
- 17.** Next you must locate your vacuum source to make the valve work. Remove the plastic covers over your scuttle panel using a 10mm spanner, you must squeeze the tab arrowed red to remove.



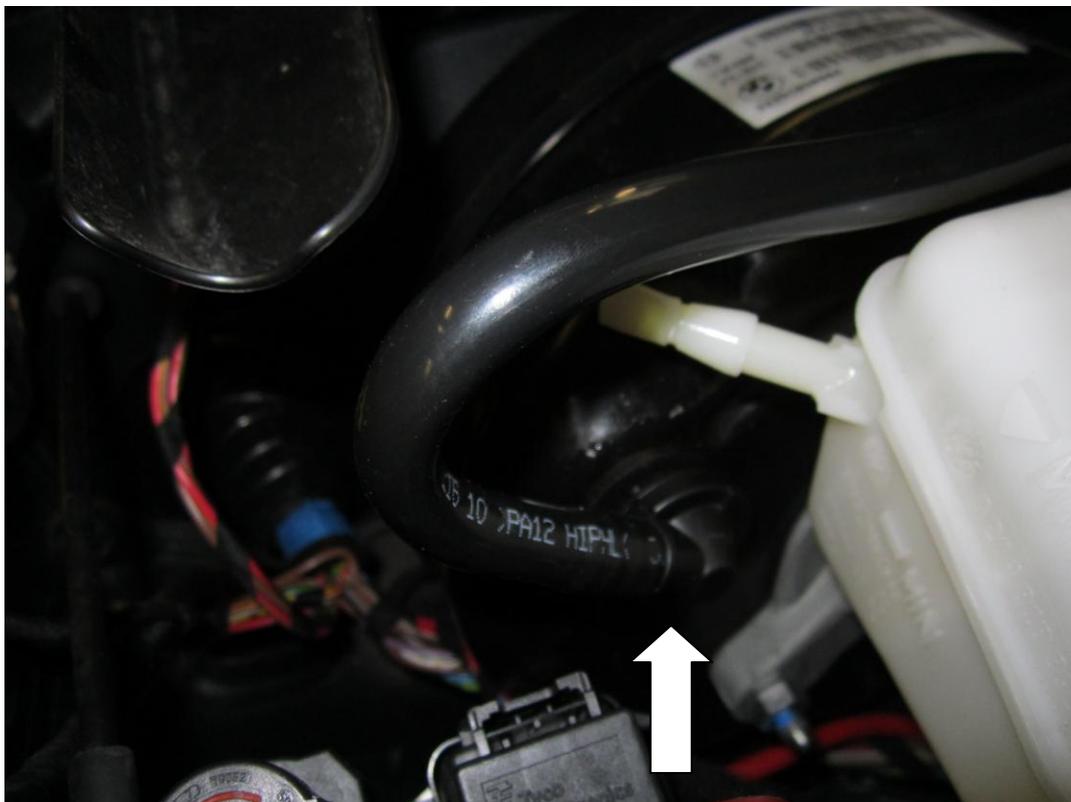


18.With both panels removed locate the pipe that leads to the brake servo from the vacuum pump and remove from the vehicle to cut the pipe, this can be done in situ if you would rather but we found it easier to cut the pipe and install the t-piece off the vehicle .To remove the pipe squeeze the clip together while pulling gently .

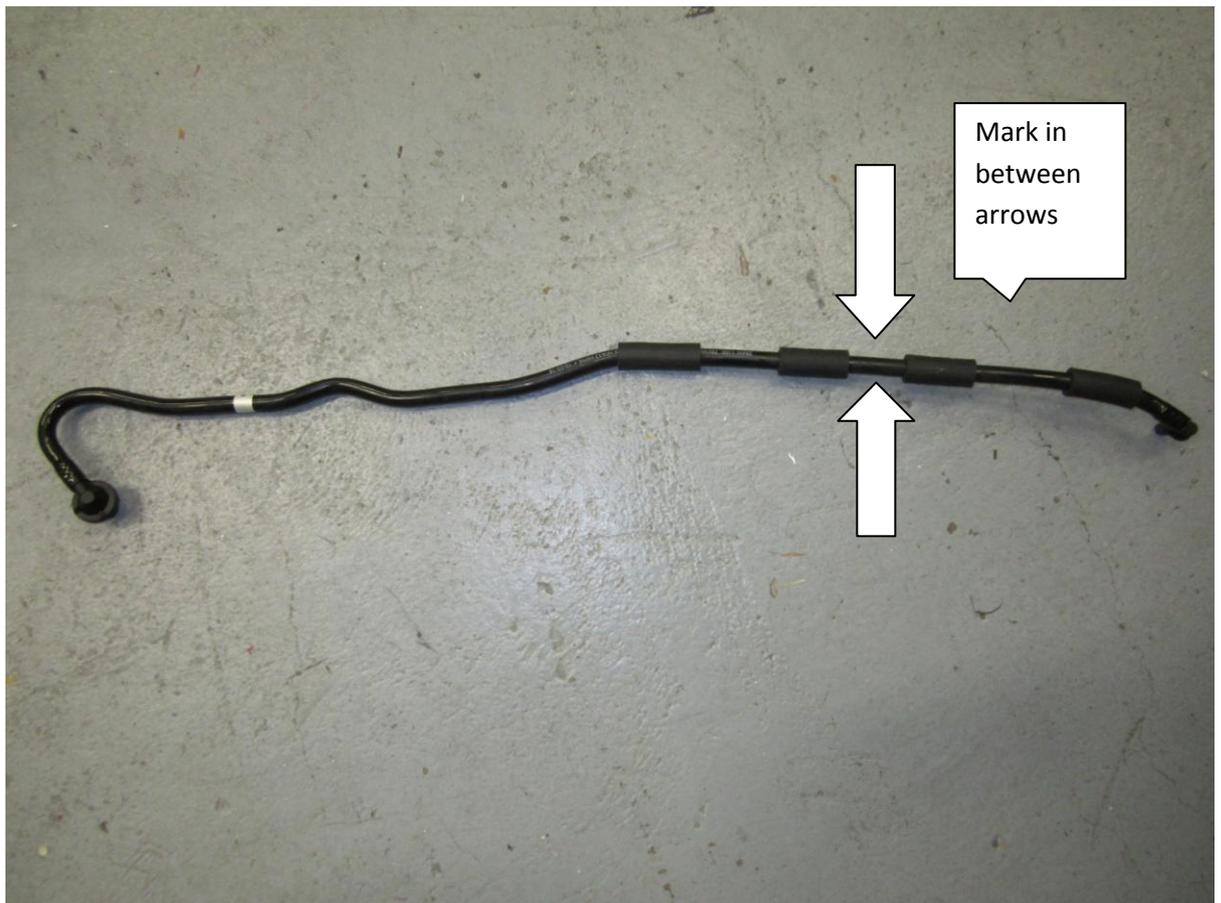




19.To remove the other end that fixes to the brake servo ,use a trim clip remover or similar to pry out of the brake servo .Take care not to damage the rubber grommet this pipe sits in .



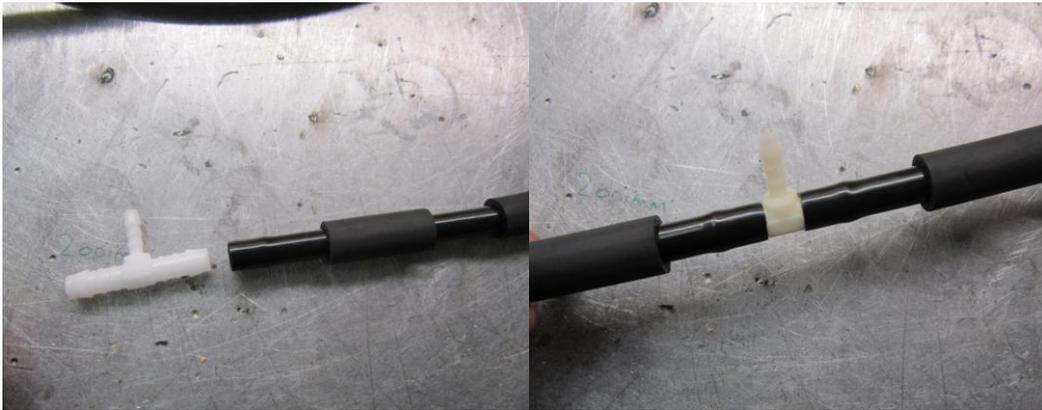
20. Once removed, place on a table and mark pipe as pictured .



21. With the pipe marked cut the pipe in half.



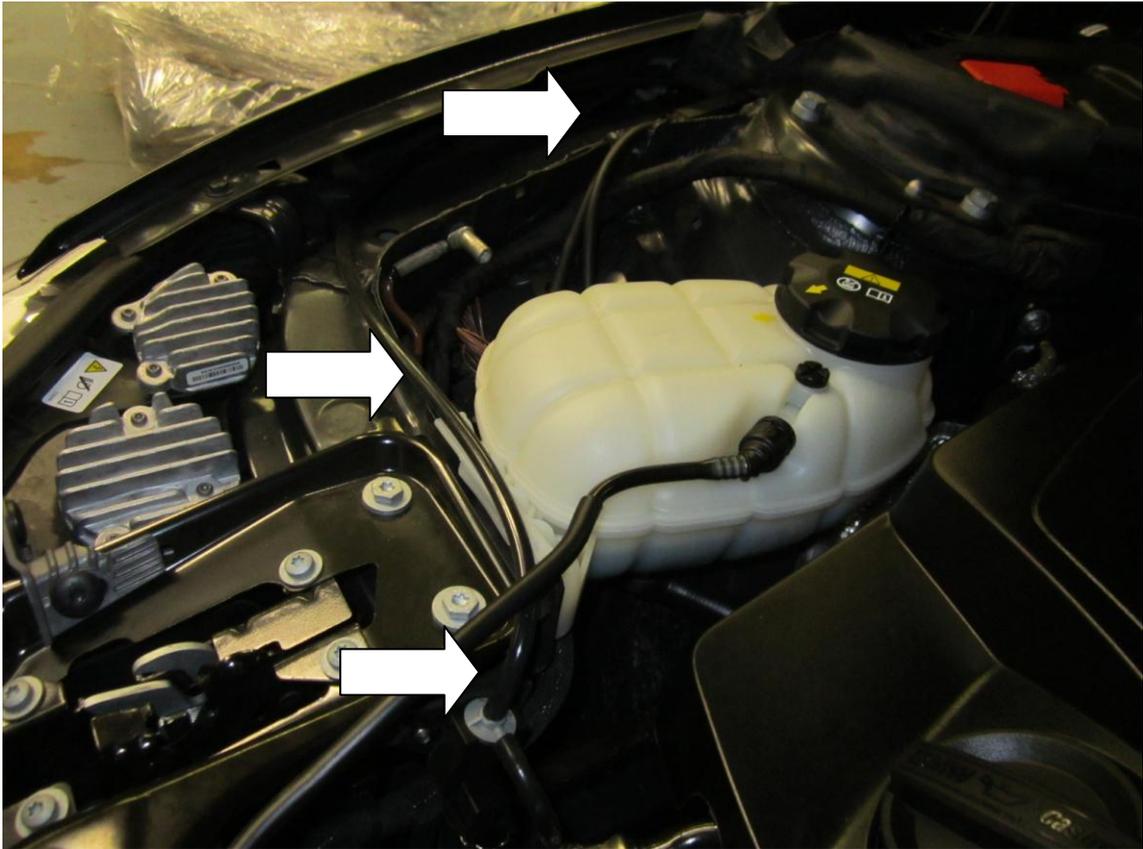
22. Insert the 12-6-12 T-piece provided fully into each ends of the pipes .



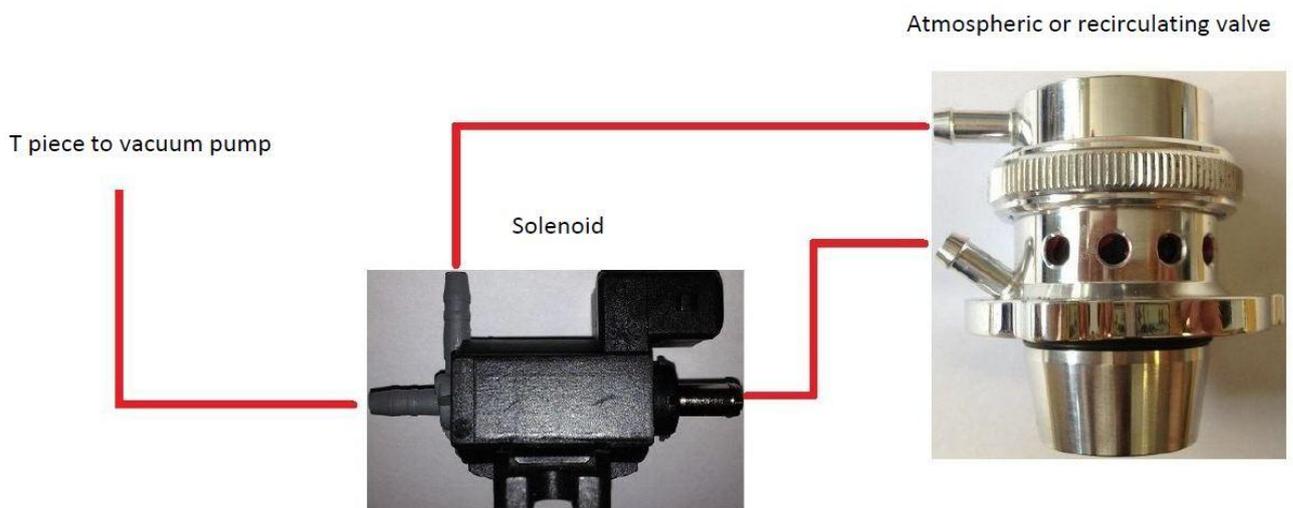
23. Now refit your pipe making sure it is pushed fully back into the brake servo and the push fitting on the other end is clipped into position. This will click when secure.

24. Using the vacCum hose provided connect it to the t- piece. Run the vacuum pipe along the rubber bonnet seal to the solenoid behind the head light and then cut to length .





25. Cut the remaining vacuum pipe in half, This will be used to connect the valve to the solenoid. Here is a diagram of the correct fitting configuration .



26. Make sure your valve is correctly installed or it will not work and could possibly trigger an engine malfunction light to appear on the vehicles dash .

27. Follow steps 1-19 in reverse order to reassemble your vehicle .Now you are ready to enjoy your new Forge Motorsport product .

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