



# BMW 135i (F20 CHASSIS) DUMP VALVE FITTING INSTRUCTIONS



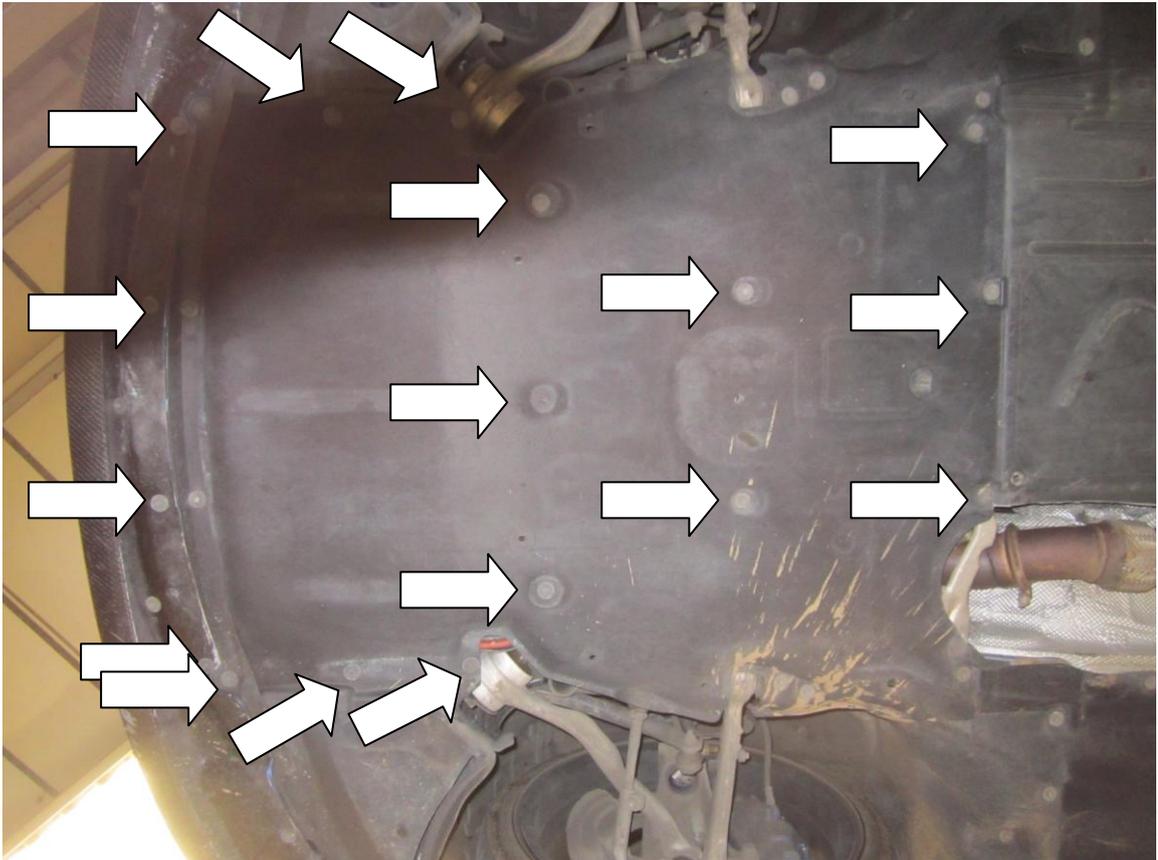
## **TOOLS NEEDED:**

¼" Ratchet with extensions, and 8mm bit

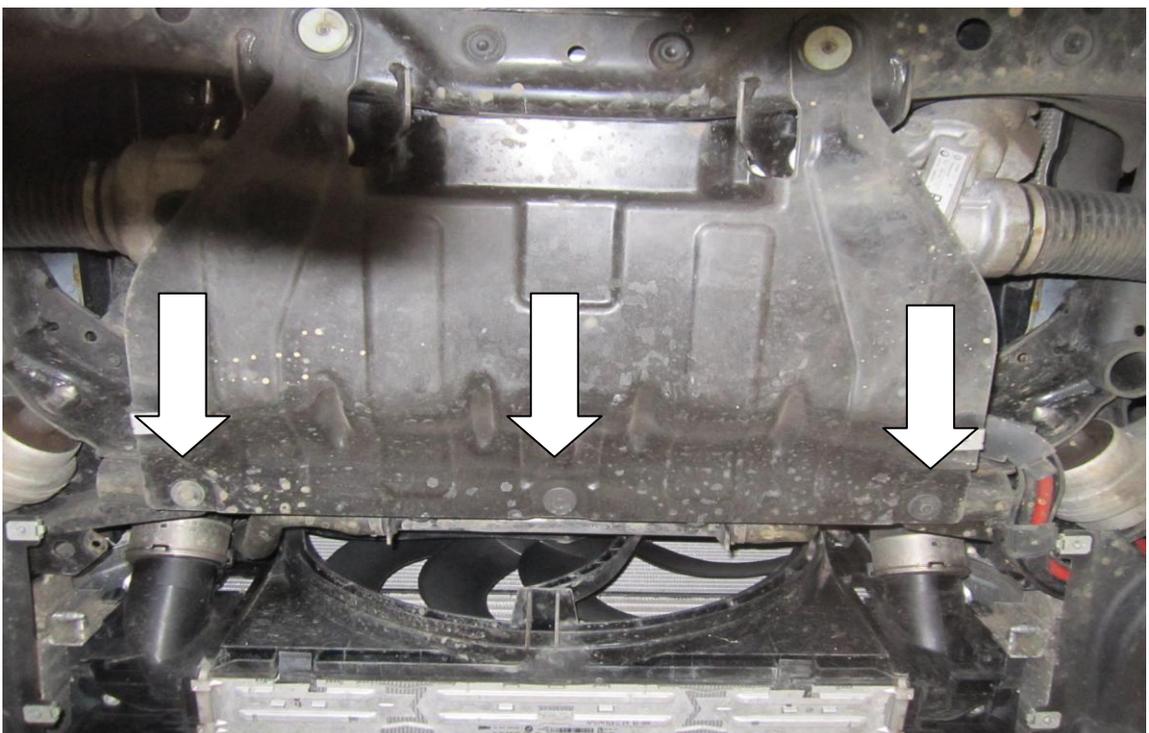
M6 Allen key with suitable extensions

E14 socket

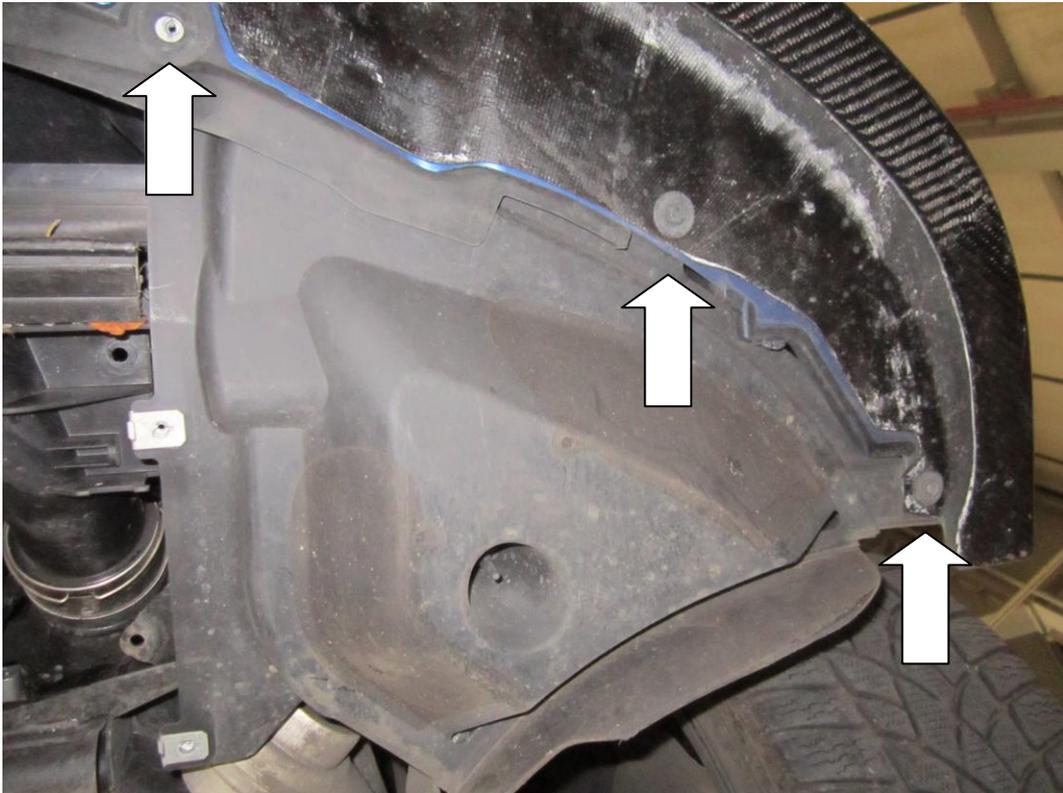
1. Raise the vehicle on a ramp or suitable axle stands. To remove the under tray use your ratchet with an 8mm socket.



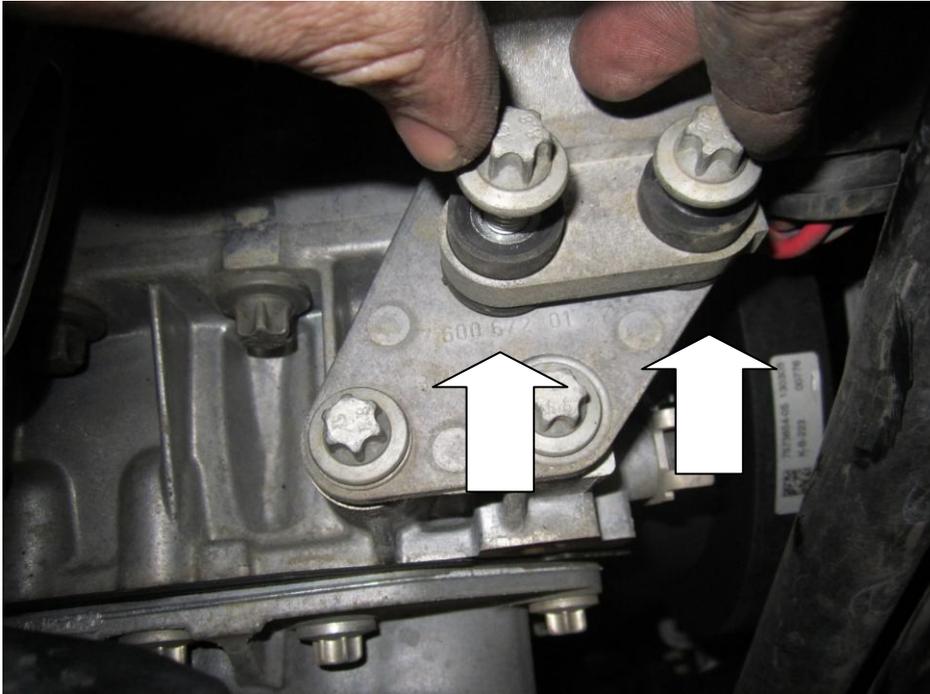
2. Now remove the second undertray again using your 8mm socket.



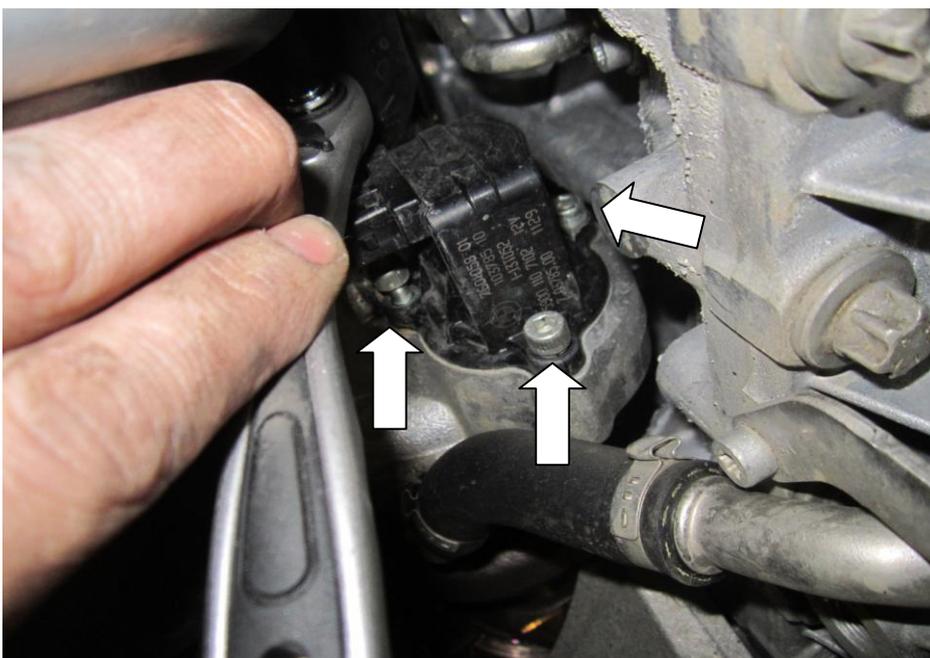
3. Remove the side undertrays in front of each wheel with your 8mm socket.



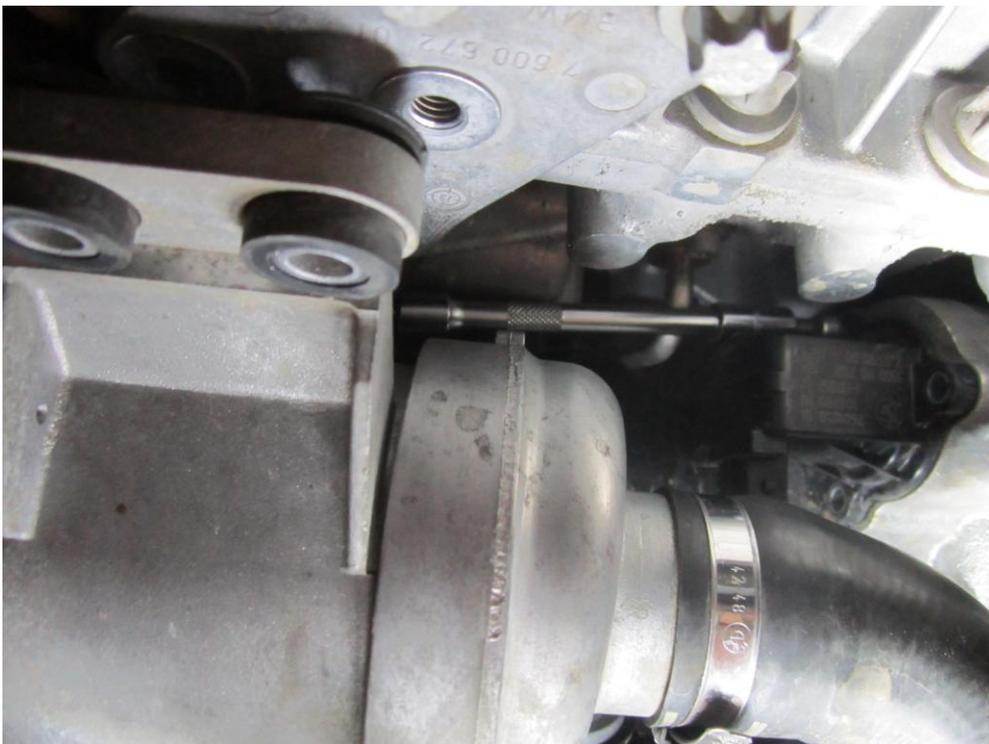
4. In order to remove your original equipment valve it is best to move your water pump to one side this makes accessing the fasteners that hold it in place alot easier to remove. The water pump is located below where the valve is housed. Use your E14 socket to remove the fasteners that hold your water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



8. Before installing your forge motorsport dump valve make sure the orings are in place on the lower face as shown on the next page.



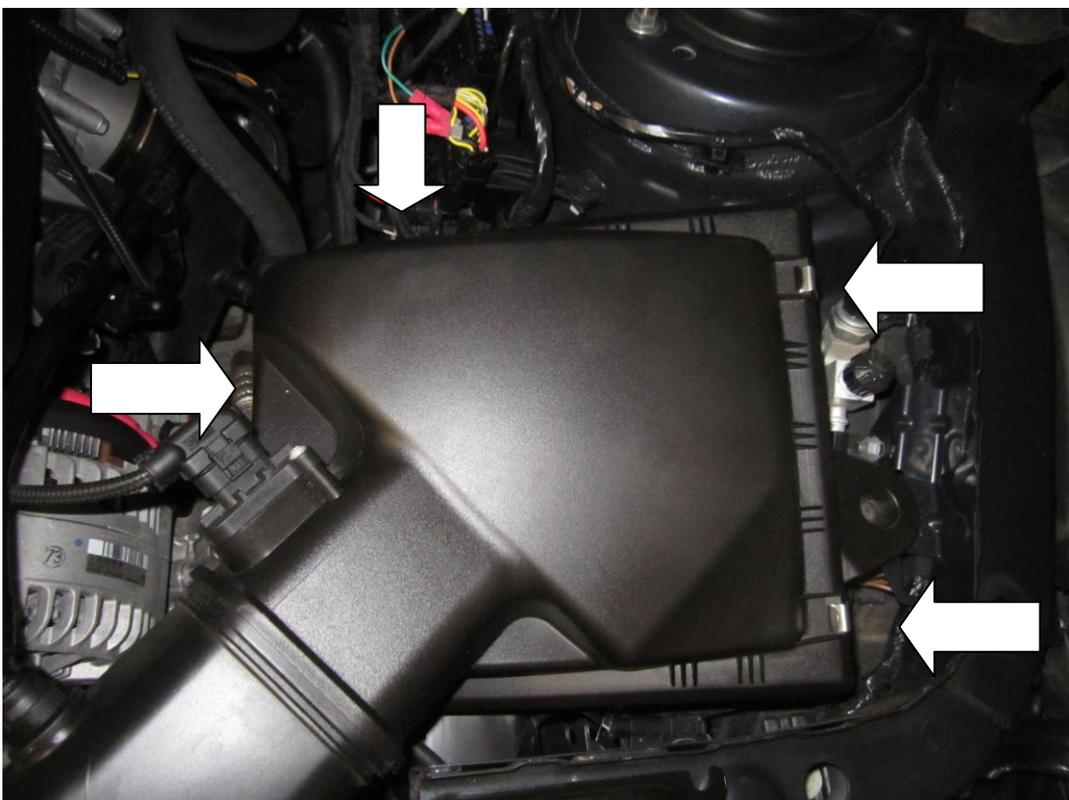
9. Fit your new dump valve into the original valves location. Once the fasteners have been tightened, replace the top on your forge valve making sure you put the spring in place.
10. The loom to the OE valve must now be relocated to the top of the engine rather than below. To find which wire this is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



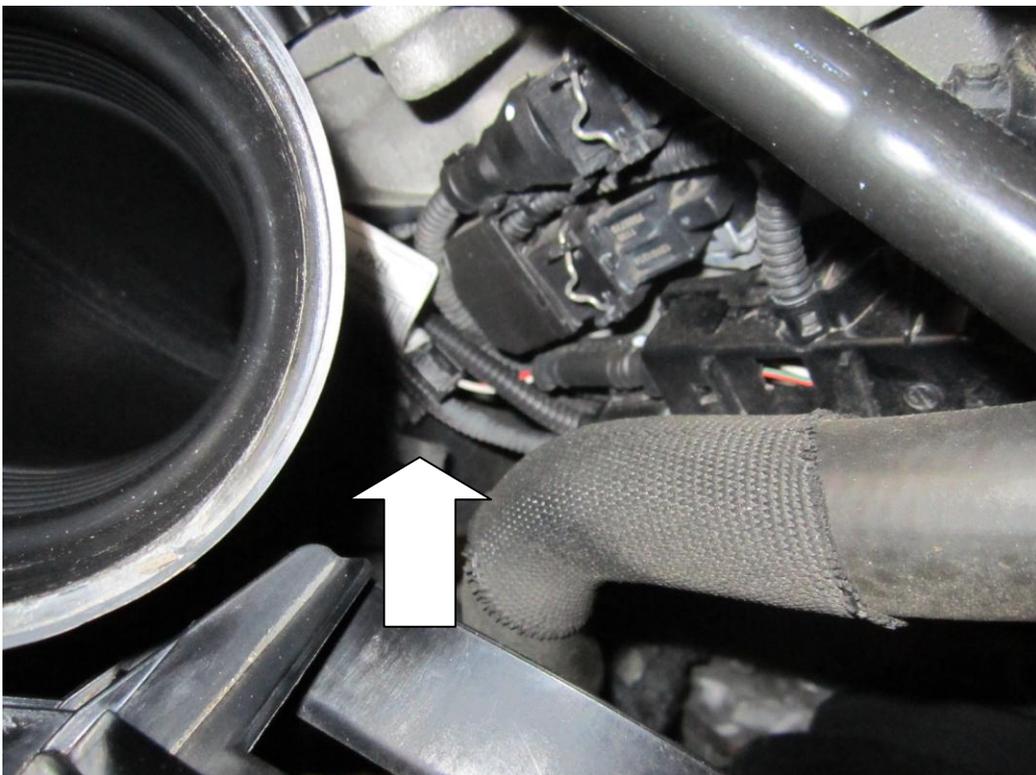
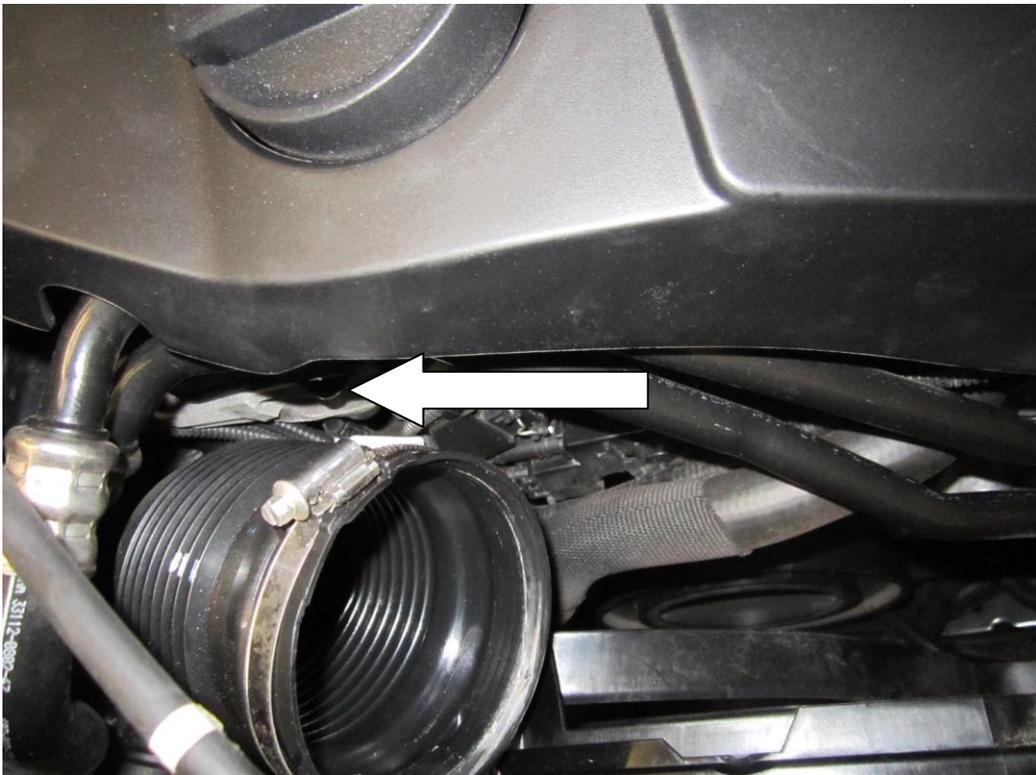
11. With your hose clamp driver, undo the jubilee clip pictured.



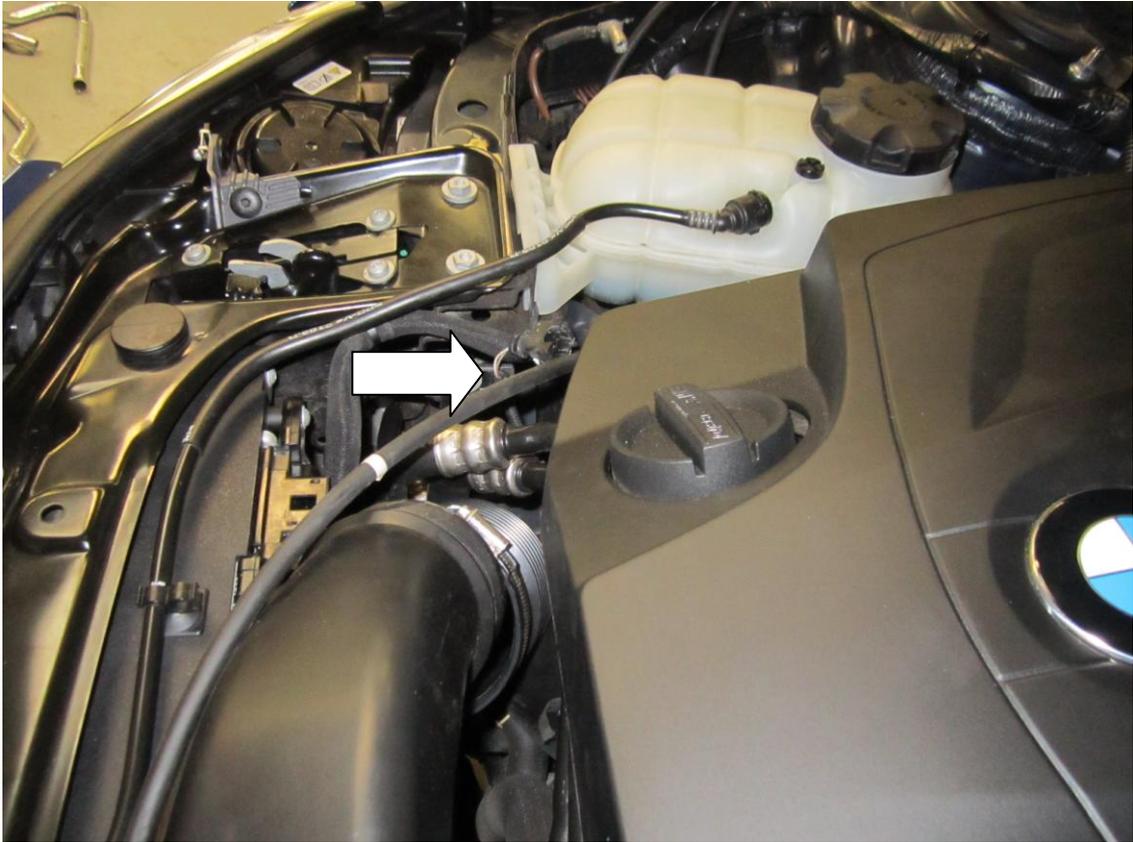
12. Undo the clips that hold your air box lid in place.



- 13.** 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.



- 14.** 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)



- 15.** 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.



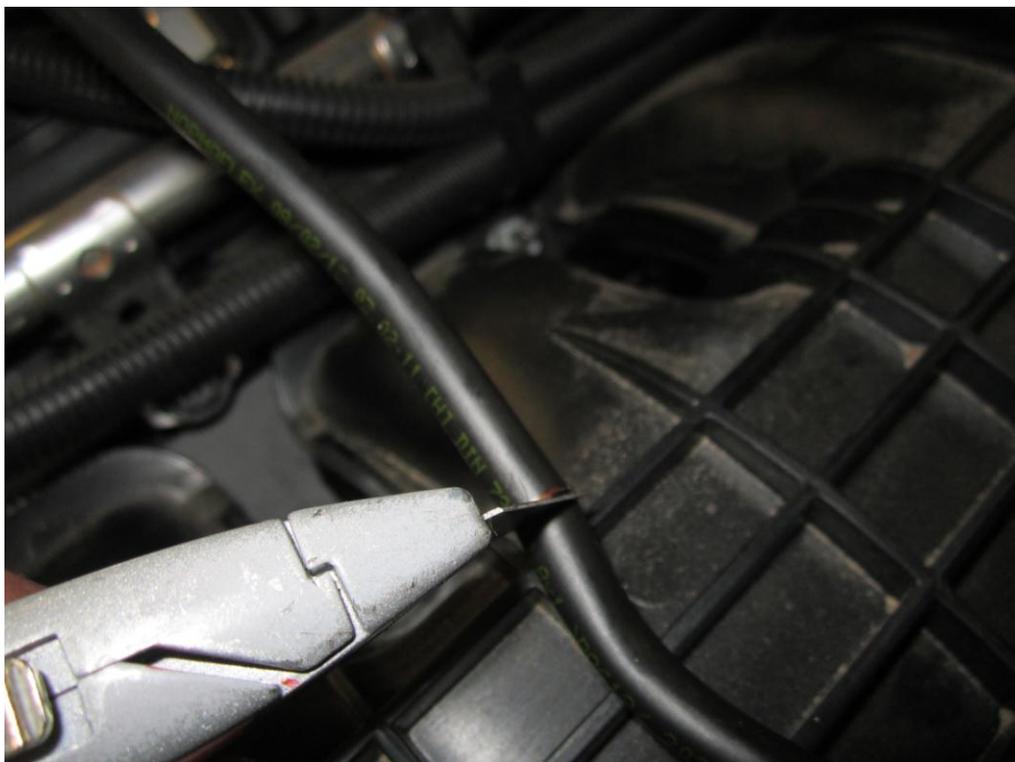
- 16.** Next you must locate your vacuum source to make the valve work. Remove your engine cover by pulling it upwards, your vacuum will be taken from the pipe arrowed in the picture follow this down through the inlet manifold to where it connects to the vacuum pump.



- 17.** Pull the pipe away from where it meets the vacuum pump.



- 18.** This pipe now needs to be cut down in order for it to still fit beneath the engine cover once the vacuum T piece has been installed. Pull the pipe up through the inlet manifold to make it easy for you to cut it, mark the pipe at 110mm from the end and with a sharp knife cut the pipe.



- 19.** Take the two pieces of 6mm vacuum hose and plastic T piece provided and join together like this.



- 20.** Now attach the longer end to the pipe you have just cut making sure the vacuum hose slides over the existing plastic tube by at least 20mm.



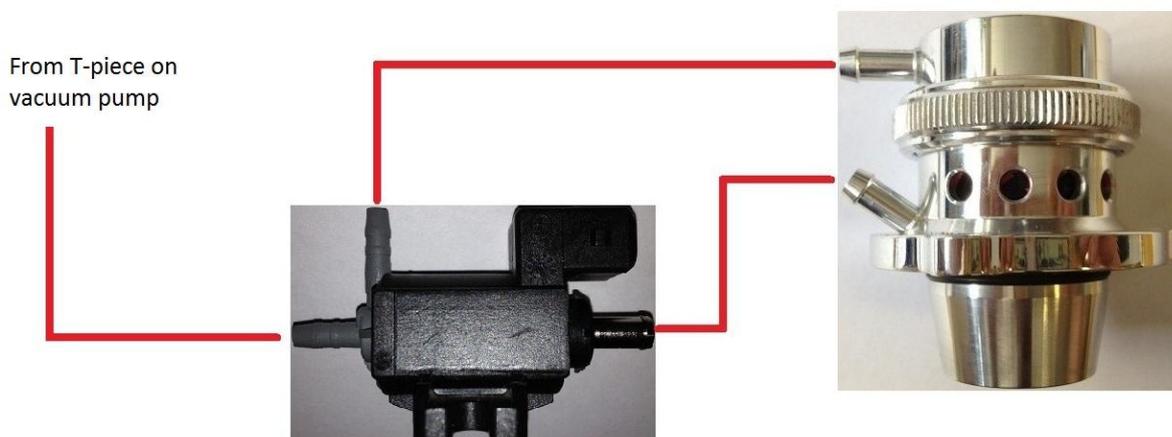
- 21.** Now attach the smaller 3mm vacuum hose provided to the smaller outlet on the T piece then, attach the shorter 6mm vacuum hose to the vacuum pump.



- 22.** Route the smaller vacuum line across your engine next to the induction pipe you removed earlier, to the boost solenoid provided.



23. Connect this vacuum line to the solenoid on the port shown below



24. With the remaining vacuum line supplied, connect the upper and lower ports of the dump valve to the correct ports on the solenoid as shown. Double and triple check this as the valve will not function correctly if these are fitted the wrong way.



25. Reassemble your car now following steps 14-1 in reverse and take your car for a test drive.

**Forge**  
MOTORSPORT

**ENGINEERED FOR PERFORMANCE**