

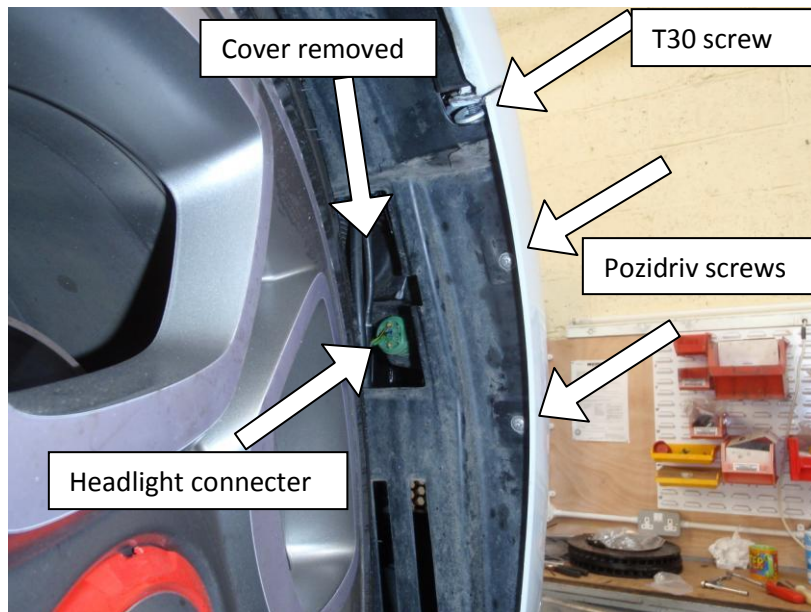


## FIAT 500 ABARTH FRONT MOUNTED INTERCOOLER INSTALLATION

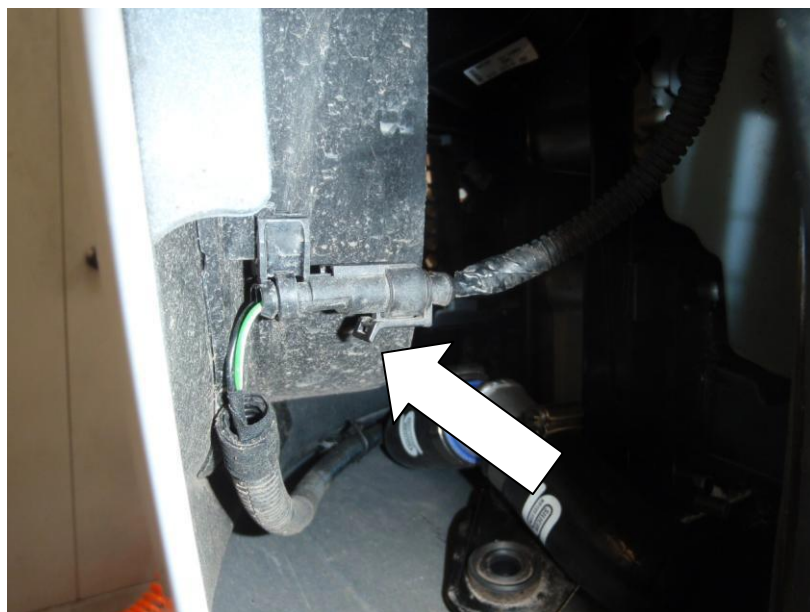


### **Tools needed:**

- T30 screwdriver/bit
- 10mm socket, suitable extension and ratchet
- 17mm socket, suitable extension and ratchet
- 10mm ratchet spanner
- Pozidriv/Phillips screwdriver
- Flat bladed screwdriver
- 7mm clamp drive



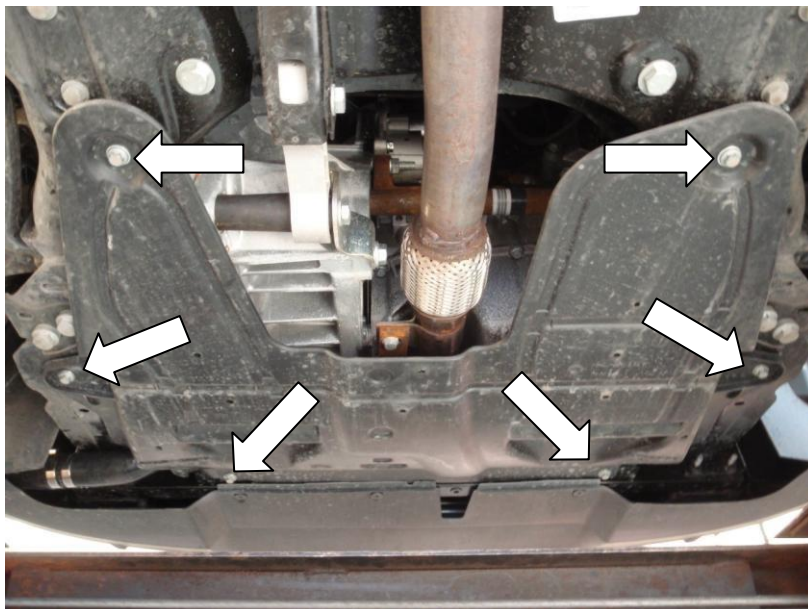
1. Park the vehicle securely, then raise /jack the front of the car and support with axle stands so that the front wheels are clear of the ground. Now open the bonnet/hood and start on the right hand side, after turning the steering wheel, so the wheels are on full lock allowing access to the plastic cover (see photo above). Take the cover off, you will now see the connector for the lights. To remove, push down on the small clip and pull backwards. Undo the T30 screw and the two Pozidriv/Phillips screws; repeat this operation on the left hand side.



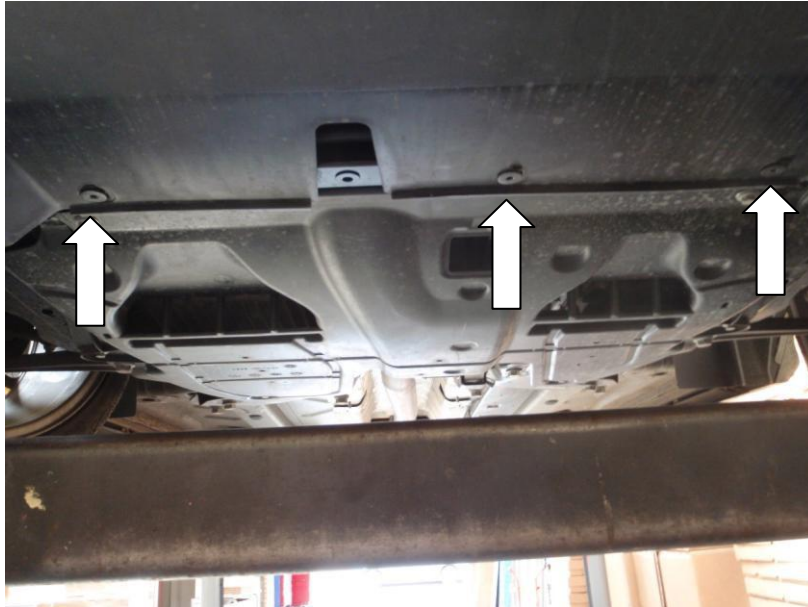
2. Additionally on the left hand side you will need to pull back the arch liner. You should see another connector (see above). Pull the clip down and pull away to disconnect.



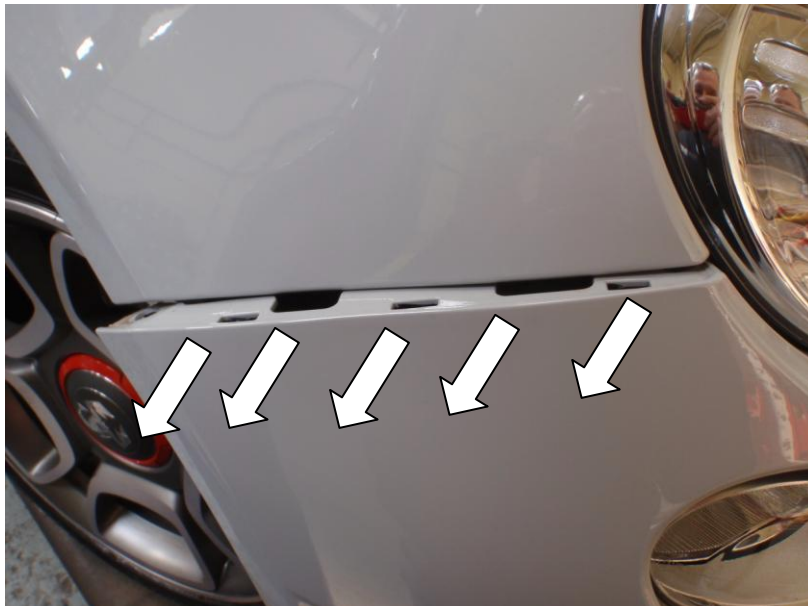
3. Looking under the car up at the arch liner there is a pozidriv/Phillips screw, undo this on both sides of the vehicle.



4. Undo the six 10mm bolts on the under tray using a 10mm socket and ratchet and remove.



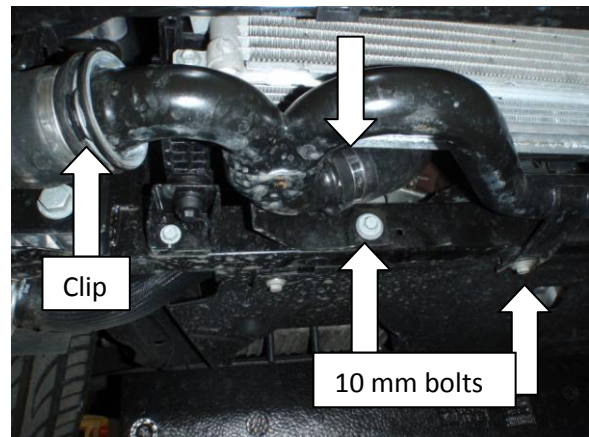
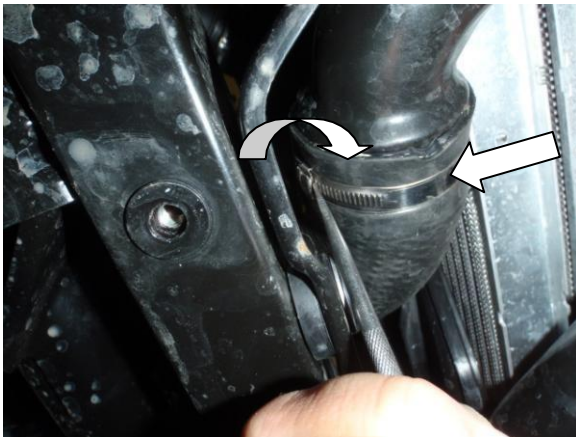
5. Undo the three T30 screws holding the bumper to the chassis.



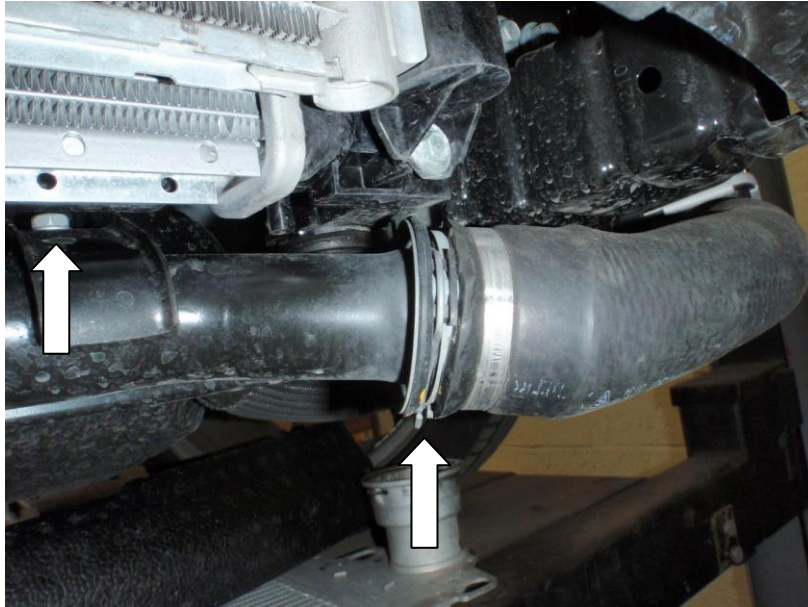
6. Pull the bumper away from the wing in the direction of the arrows with a firm but even pressure, taking care not to bend the bumper too much as this may crack the top edge.



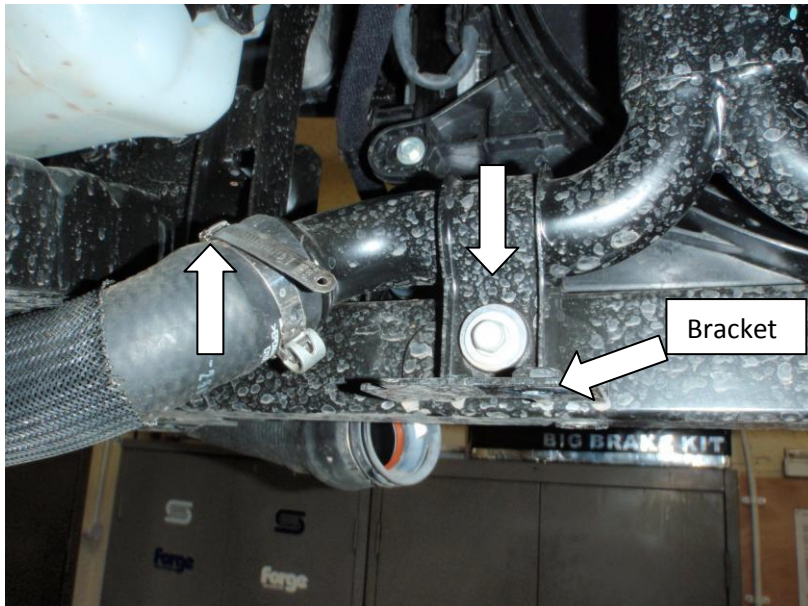
7. Undo the last four T30 screws taking care as there will be nothing holding the bumper on, once the screws are removed gently pull the bumper away from the car and place to one side.



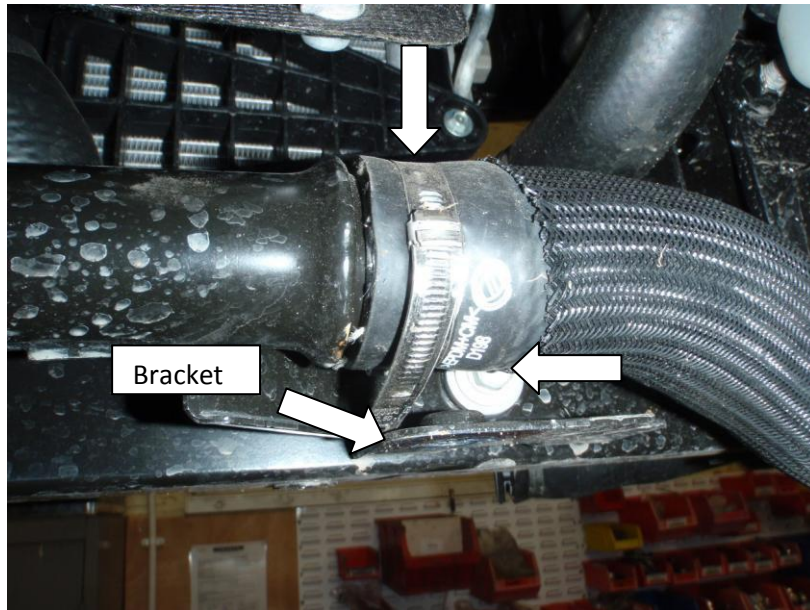
8. Now the bumper is off you will see a large black pipe which is connected to a rubber hose from the turbo, it has a 'use once' only clip this must be broken to remove. Undo the two 10mm bolts holding the pipe to the chassis and pull the clip out which is holding the hose to the pipe.



9. At the other end of the pipe, undo the last 10mm bolt, which secures the pipe to the chassis, using the 10mm ratchet spanner, and pull the clip out which is holding the hose to the pipe. This pipe is now free and can be taken off the car.



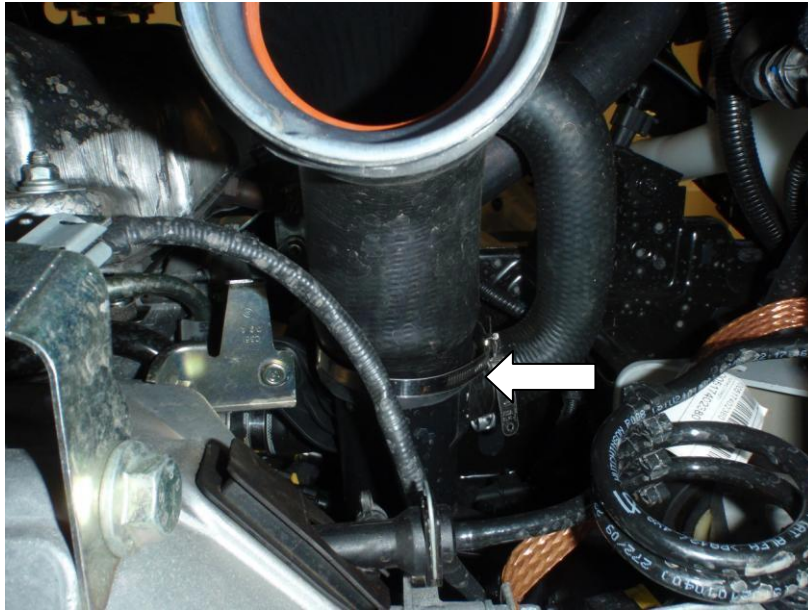
10. Looking at the back of the radiator you will see a large black pipe which is connected to a rubber hose from the passenger side intercooler, it has a 'use once' only clip this must be broken to remove. Undo the 10mm bolt shown, to remove the bracket keep to one side as this will need to be replaced once the pipe is removed.



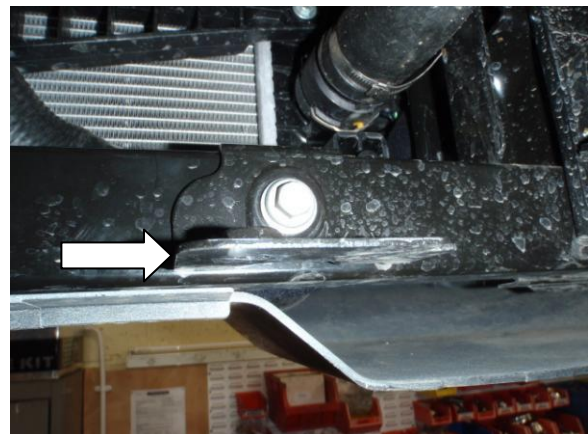
**11.** Looking at the driver's side of the pipe again the use 'once only' clip must be broken, remove the 10mm bolt and keep bracket to one side to be replaced after pipe is removed



**12.** Looking up you will see where the pipe joins in the middle going up to the rubber hose joining it to the inlet manifold pull this clip off, now the pipe is free to be removed completely.

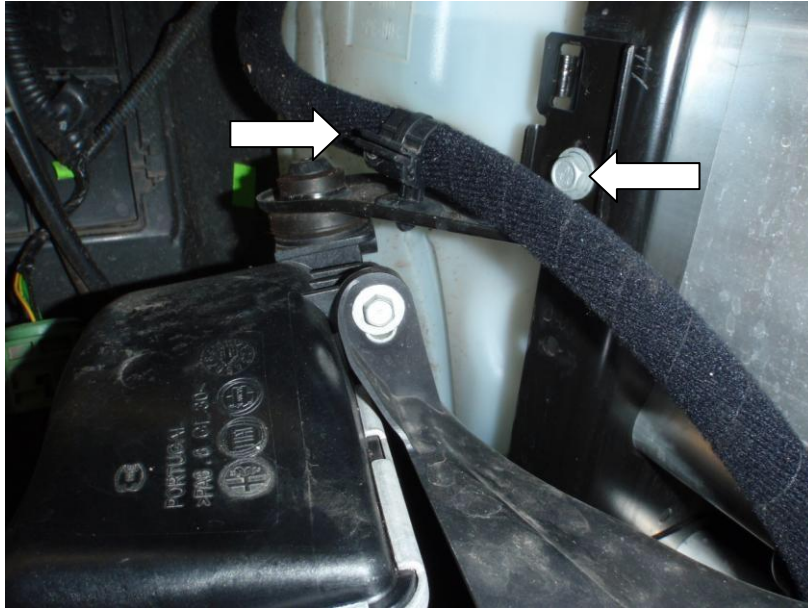


**13.** From under the car looking up again you will see the rubber hose you have just disconnected from the metal pipe, again the 'use once' clip must be broken and then remove rubber hose.



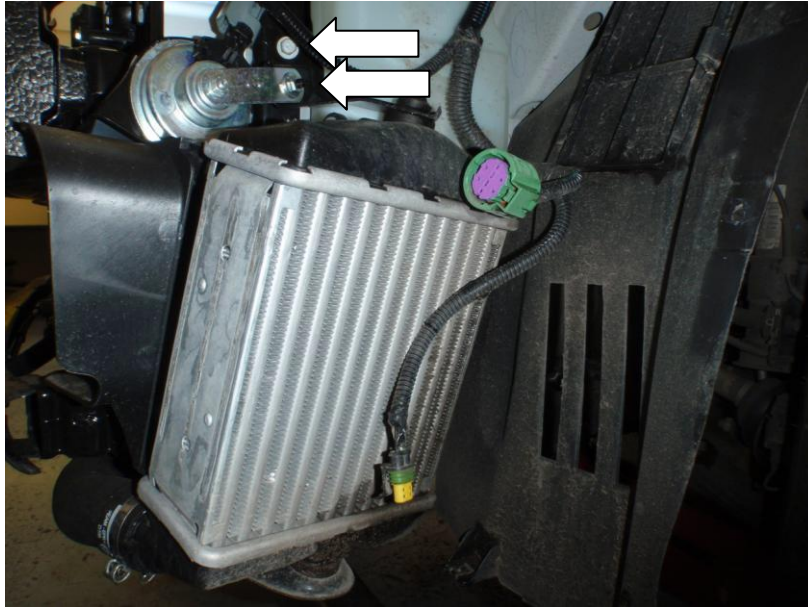
**14.** The brackets that were taken off with the metal pipe in steps 10 + 11 need to be replaced with the original bolts.



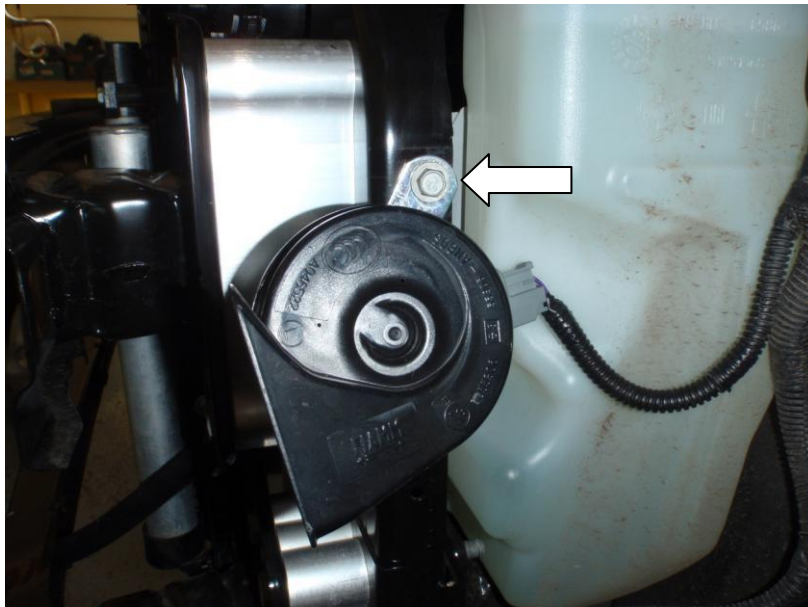


- 15.** Undo the clip holding the washer bottle pipe and undo the 10mm bolt on the driver's side, you will now be able to remove the complete intercooler unit by pulling upwards with an even force to release the bottom pegs from the rubber grommets.

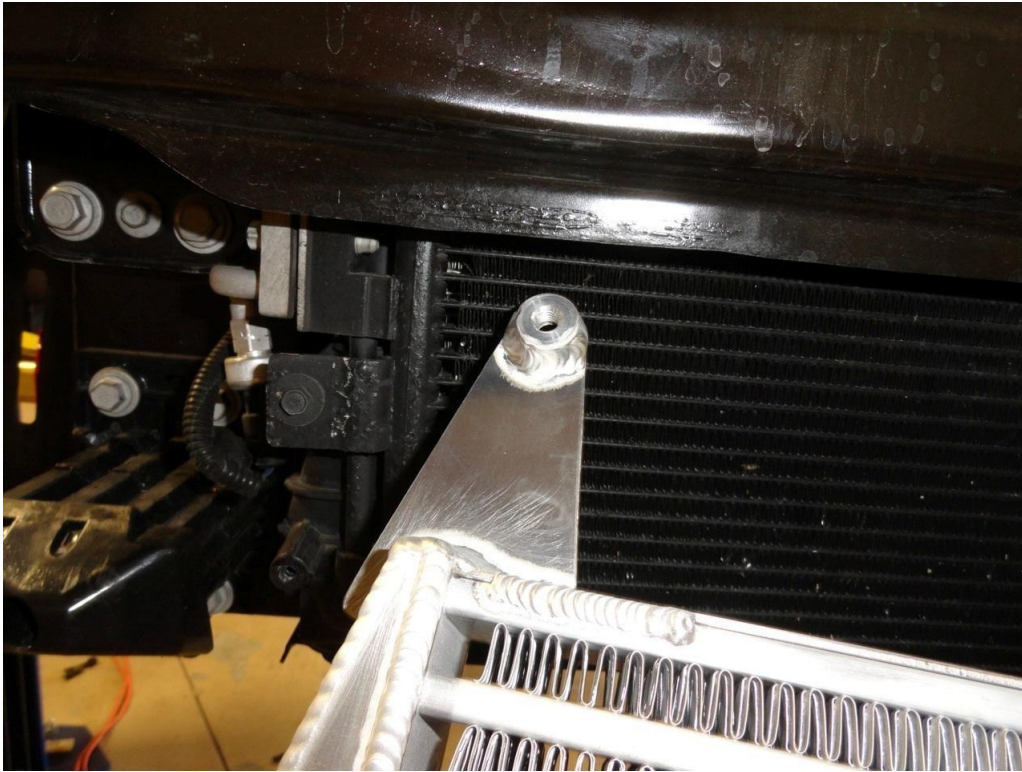




**16.** Undo the 10mm bolt and the 10mm nut holding the horn and intercooler on the passenger side, you will now be able to remove the complete intercooler unit by pulling upwards, with an even force to release the bottom pegs from the rubber grommets.



**17.** Using the bolt that was holding the intercooler move the horn up to the existing threaded hole and replace the bolt relocating the horn in a new position.

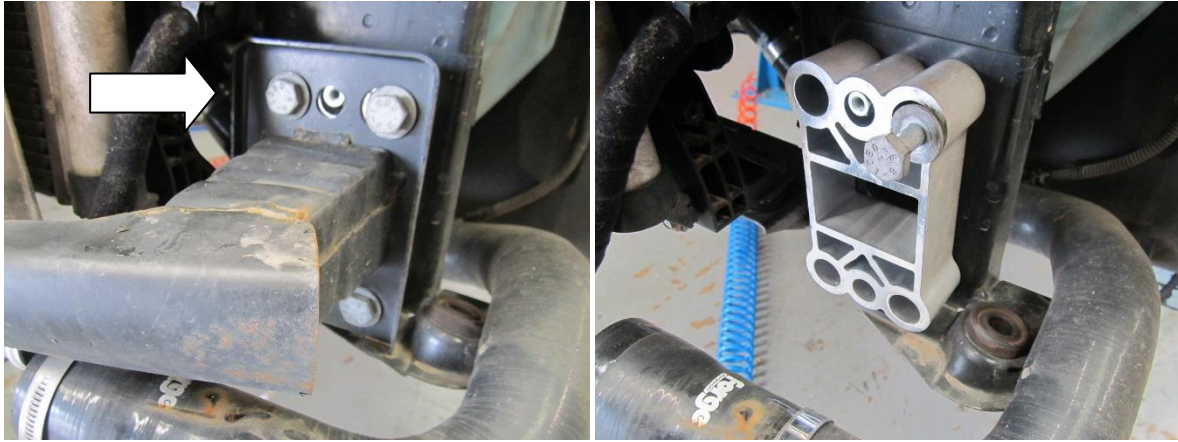


**18. FOR U.S. CUSTOMERS AND INTERCOOLERS SUPPLIED WITHOUT A LOWER CRASH BAR:** Push the mounting tabs on the intercooler up behind the crash bar so that the bosses on the ends line up with the holes already in the crash bar.

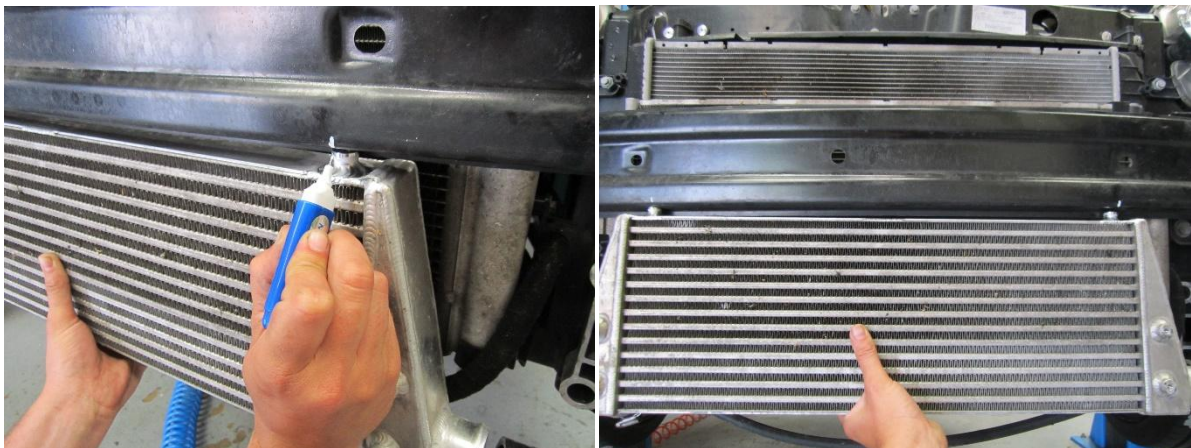


Using the long bolts and penny washers provided, bolt the intercooler to the crash bar as shown

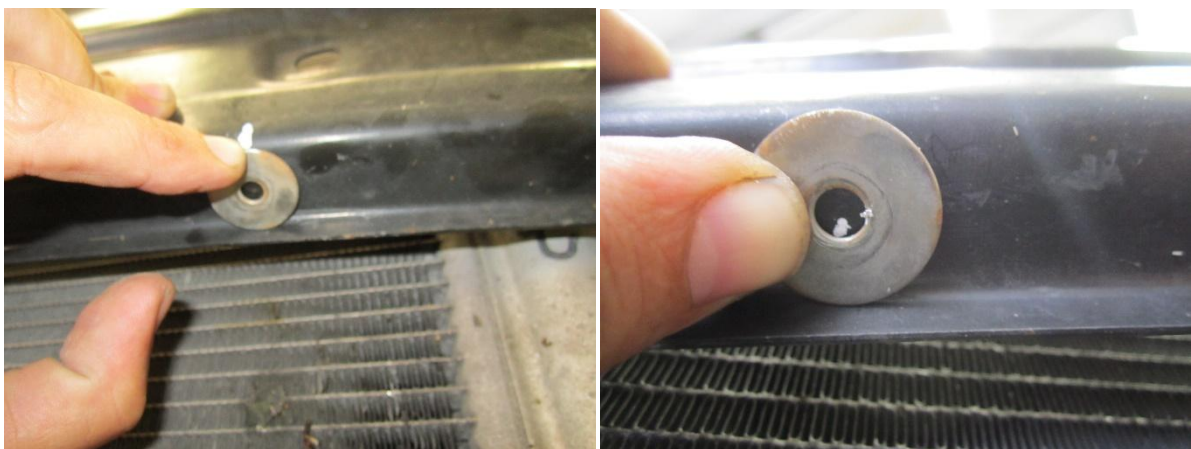
**19. FOR REST OF WORLD CUSTOMERS OR INTERCOOLERS SUPPLIED WITH A LOWER CRASH BAR:** Remove the original Fiat crash bar from your car by undoing all the bolts. Take care not to lose the aluminum spacer (if fitted) behind the crash bar.



**20.** Hold your new forge motorsport intercooler up to the center of the middle crash bar and mark the boss locations with a paint marker.



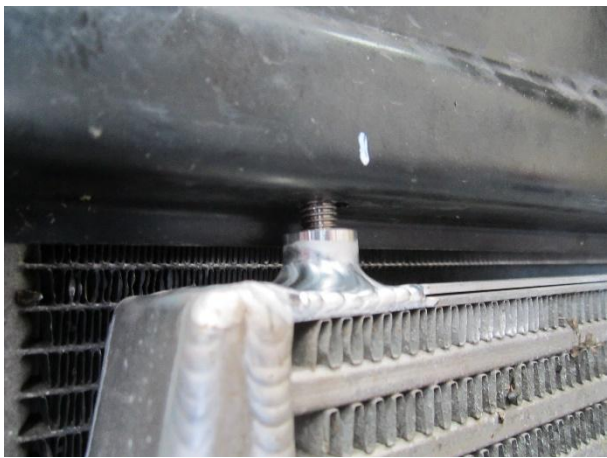
**21.** Using one of the M8 penny washers provided mark in the center of the washer inline with your previous marks on the underside of the crash bar as shown below.



**22.** Drill two holes with a pilot drill as pictured below then enlarge the holes to 9mm with a larger drill bit.



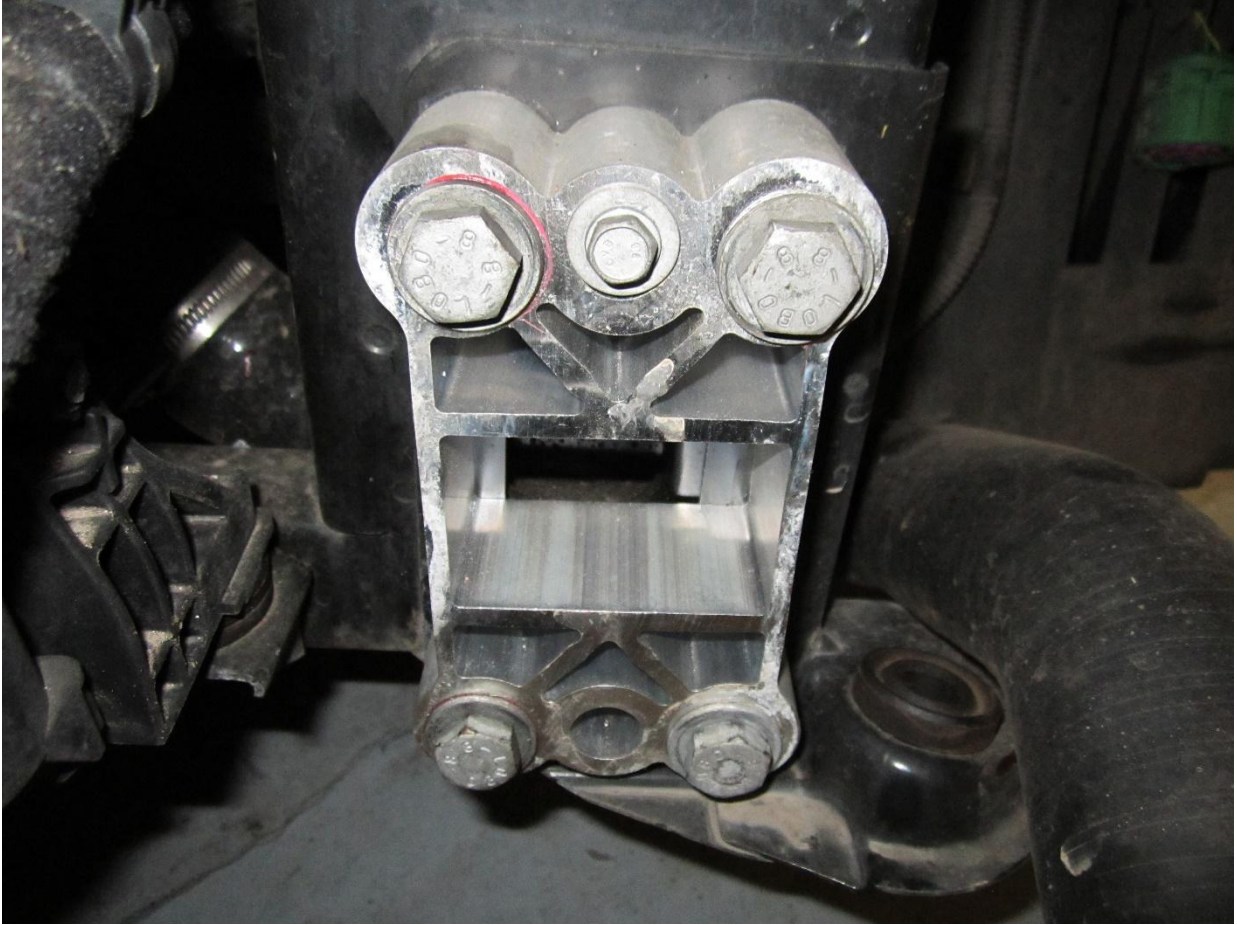
**23.** Fix the intercooler into position using the two M8 x 16 hex heads provided ensuring the penny washers and sprung washers are also used as pictured below.



**24.** Tighten the fasteners fully using a 13mm ratchet and extension.



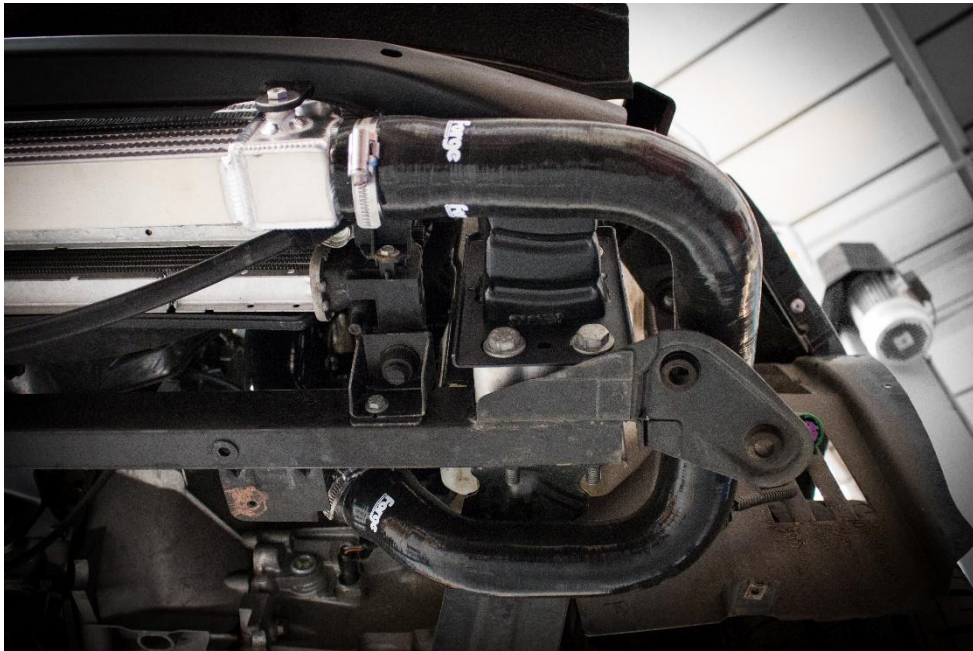
**25.** refit the bolts to the bumper spacers.



**26.** Push the coupler in to the stock rubber hose and tighten with a 50mm jubilee clip around the rubber hose. Put the two remaining 50mm jubilee clips loosely on the 90 degree silicon hose before installing, and then push the short leg of the 90 degree silicon coupler onto the intercooler and the long leg onto the coupler. Now tighten the clips on the silicon hose.



**27.** Push the long silicon hose onto the intercooler with a 55mm jubilee clip and do up in such a way that the bulky part of the clip is not on the bottom of the pipe because the intercooler sits slightly lower than stock. Place the 45mm hose joiner supplied in the open end of the hose and secure with a jubilee clip.



**28.** On the remaining silicon hose, loosely fit the 70 and 55mm jubilee clips. Push the large end of the hose onto the existing plastic pipe in the engine bay, and connect the other end to the joiner fitted in the last step. Tighten the jubilee clips. Now follow points 1-7 in reverse order and the installation is complete.





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