

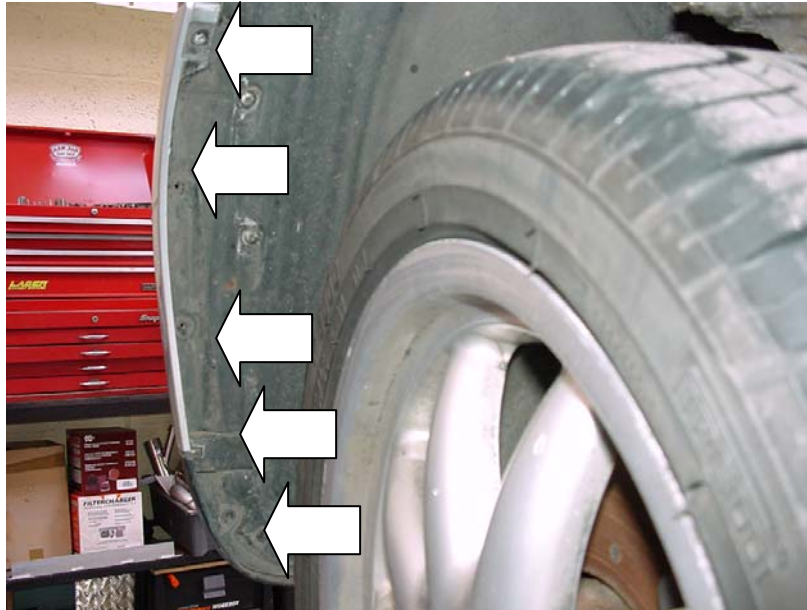


Audi A4/VW Passat (B5 chassis) 1.8T Front mounted intercooler.



Tools required :- vehicle lift or Jack and axle stands, T25 and T30 Torx drivers, 6mm Allen key or socket, 7mm spanner, 10mm spanner, flat and pozzidrive screwdrivers, hacksaw (blade for cutting aluminium), drill and 6mm drill bit. Large side cutters, craft knife Overalls, safety footwear, latex gloves and safety glasses are also recommended.

1/ Raise vehicle and remove the engine undertray. This will be fixed by up to 7 screws that are released by turning anticlockwise through 90°. Then remove the 5x T35 screws from the inner front edge of each front wheelarch as pictured below.



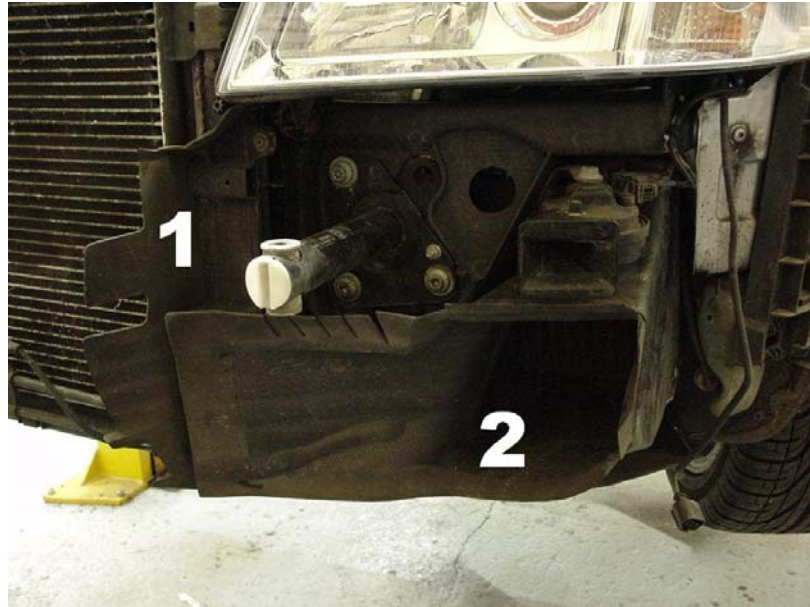
Now remove the 2 outer lower grilles from the front bumper and remove the 2 securing bolts as shown (6mm cap head bolts). *Passat will require the indicators unclipping and the t30 screw on the top edge of the bumper removing and may not have the bolts as pictured below.*



Disconnect the front fog light electrical connections and remove the whole front bumper assembly.

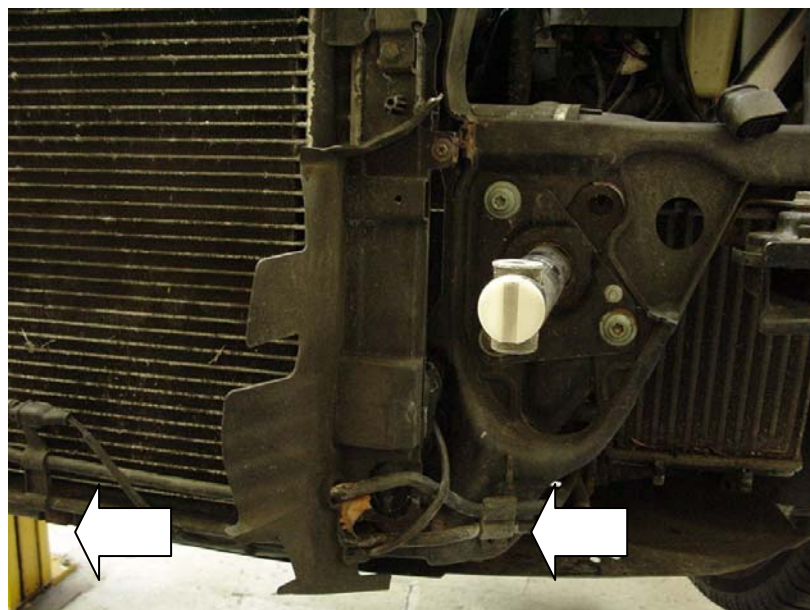
2/ Remove the 2 plastic/rubber air dividers (number 1 in picture below) that flow air to the radiator, these are fixed with a single 7mm headed screw either side. These will not be refitted once the new intercooler is

in place). Then unclip the intercooler air guide (number 2 in picture) and remove.



3/ Remove both headlight units, these are secured with 4x T30 torx screws, also disconnect the electrical connections in order to completely remove the units.

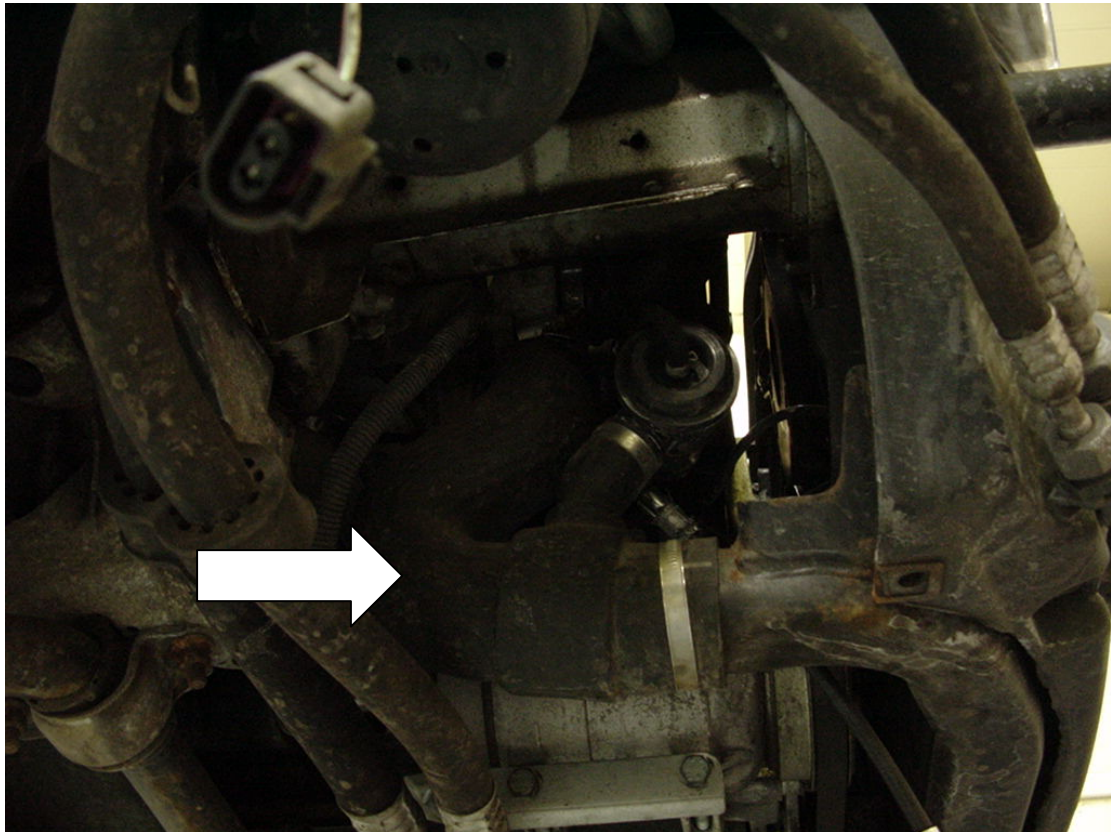
4/ Remove the 2x 10mm bolts that retain the power steering cooling pipe along the bottom edge of the front panel as indicated below, allow the steering pipe to hang loose under the vehicle for now.



5/ Remove the top and bottom intercooler hoses. (Remove the map sensor electrical connection if fitted-Drive by wire cars only)

The intercooler itself can now be lifted from its rubber mounts. It may be tight on these mounts so a small amount of force may be required, the horn may also have to be removed at this point in order to gain space for the intercooler removal.

6/ Now remove the S shaped hose between the turbo and the lower air pipe on the right hand of the engine bay. Only remove one of the pipes on the diverter valve to allow the S shaped hose to be removed (the diverter valve will be repositioned and refitted at a later stage).

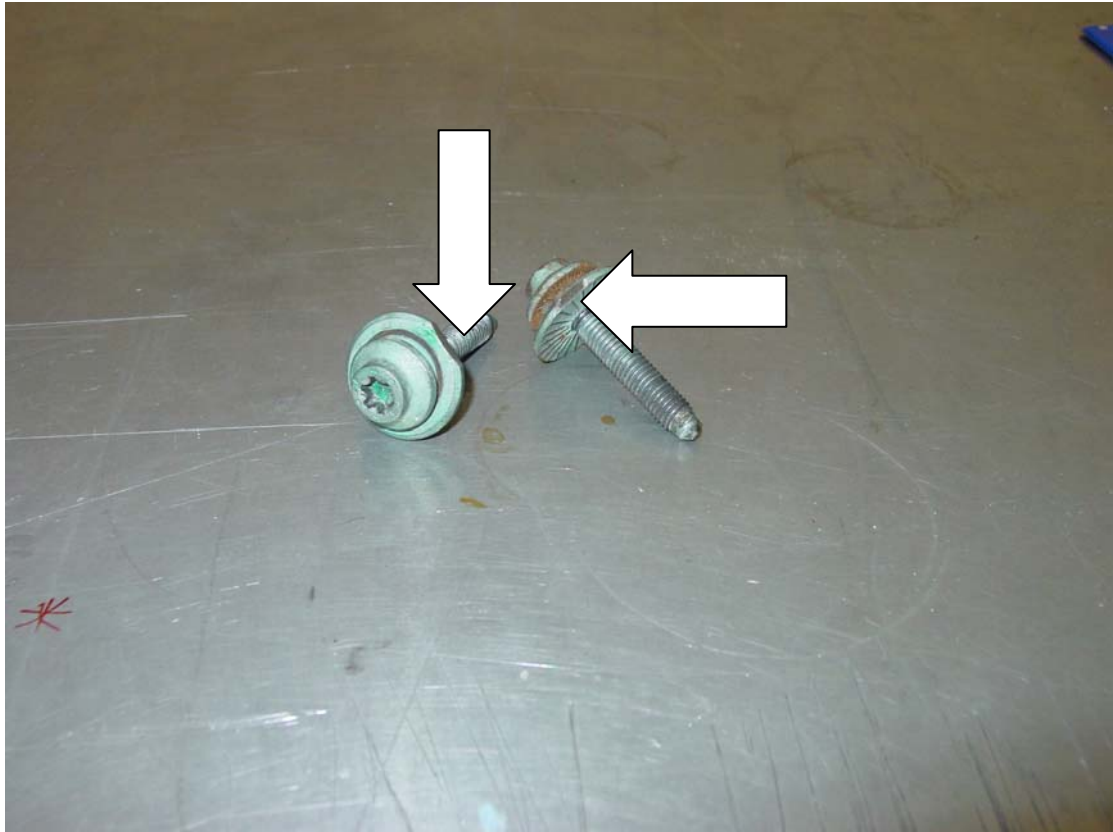


7/ Fit the 2 new intercooler brackets using the original crash bar bolts as indicated below. The washers on the bolts will require a flat edge cutting or grinding in to one side to allow the bracket fitment.

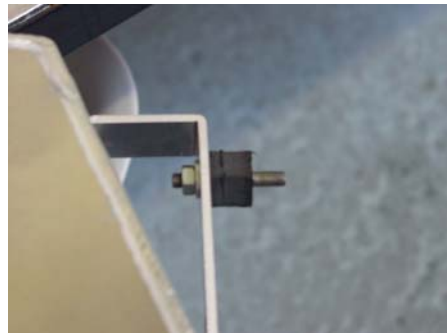


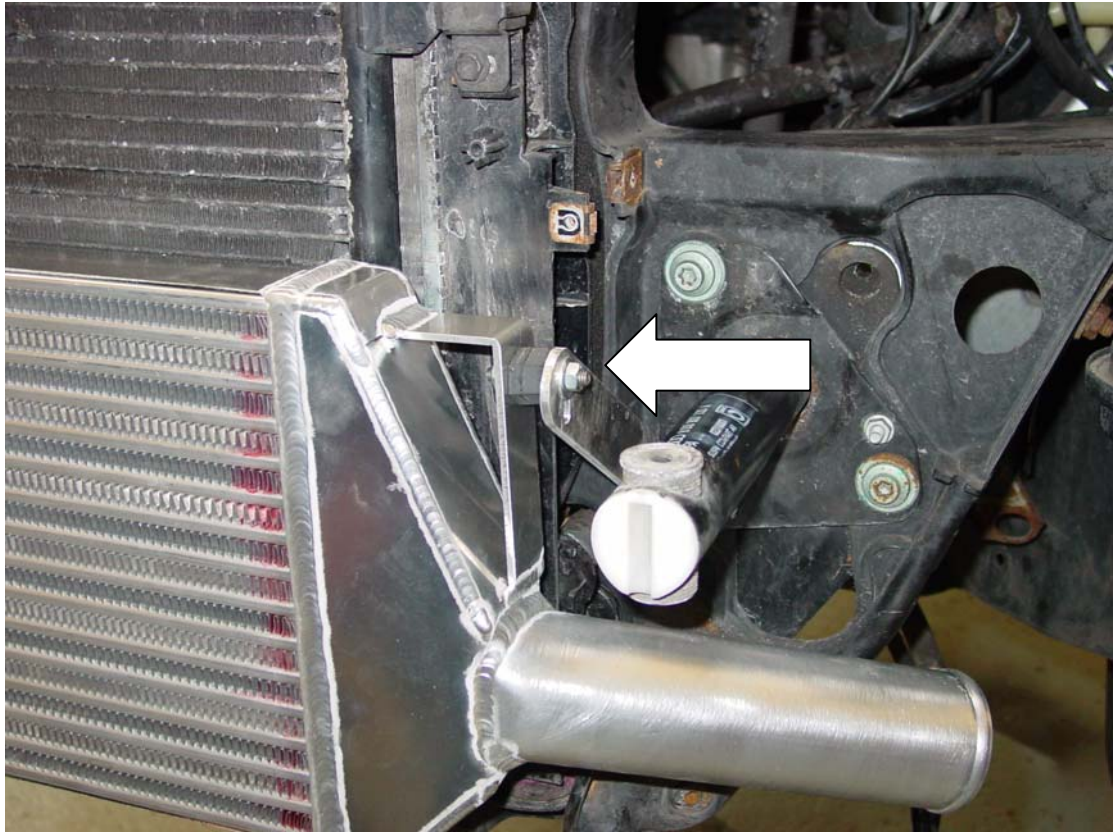
The Passat may also have a twin horn set up; the lower horn requires relocating with the bracket included in the kit. See picture below.





8/ Fit the 2 rubber mounts to the new intercooler and then fit the assembly on to the brackets and tighten the 10mm nuts so the intercooler is at the upper most stop of the adjustment slot.



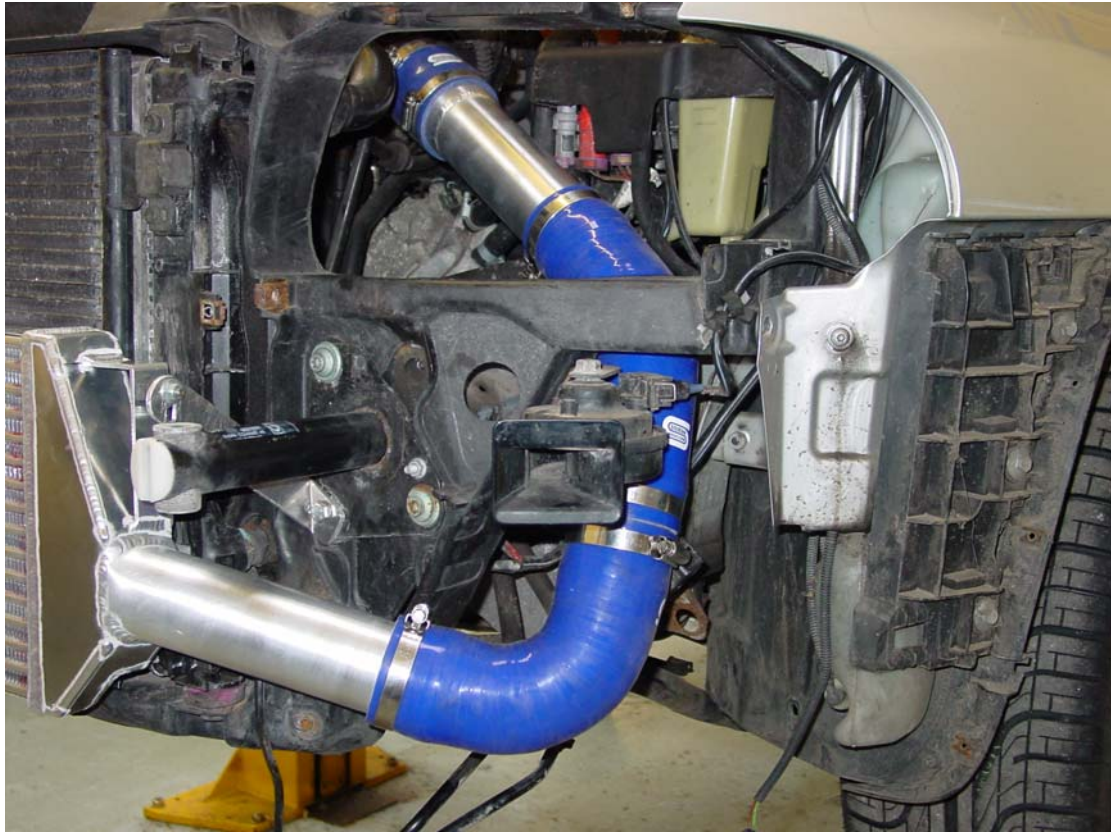


9/ Fit the red hose to the turbo so that the Diverter valve port is correctly positioned. Use the new hose clips supplied. Fit the 45° hose to the intercooler intake and then join this hose to the red turbo hose with the aluminium 68° tube. Route and position these hoses and then tighten the hose clips. Now remove the diverter valve from its retaining hose and position the unit in to the red hose so that the original diverter valve hose is not kinked or will foul on the cooling fans in any way, tighten the Diverter valve using the new hose clips provided.



10/ Remove the plastic cover from the top of the power steering reservoir. Fit the silicon 63mm hose coupling to the throttle body. Fit

the 63mm to 60mm aluminium reducer to this hose coupling (if a Map sensor was in the original intercooler as per drive by wire cars then refit this in to the boss on this aluminium pipe at this point, if not then fit the blank supplied in the kit). Fit a 45° silicon hose to this aluminium reducer. Then fit the 90° silicon hose to the intercooler outlet, lastly join the remaining hoses with the 60mm aluminium joiner, position all hoses and tighten the hose clips as per the diagram below.



11/ Cut the plastic cover as indicated below and refit to the power steering reservoir.



12/ Refit both headlights, be sure to connect the electrical connections.

13/ Remove the ambient air temp sensor from the bracket on the power steering cooling pipe (removed in step 4). Cut off both original mounting points with a hacksaw. Drill a 6mm hole in the middle of the centre bracket. Cut through the centre of the left hand bracket. Refit to the front panel with only the centre original screw; fit the new air temp sensor bracket behind this as per the pictures below. Refit the air temp sensor in to the new bracket and secure wiring with zip ties.



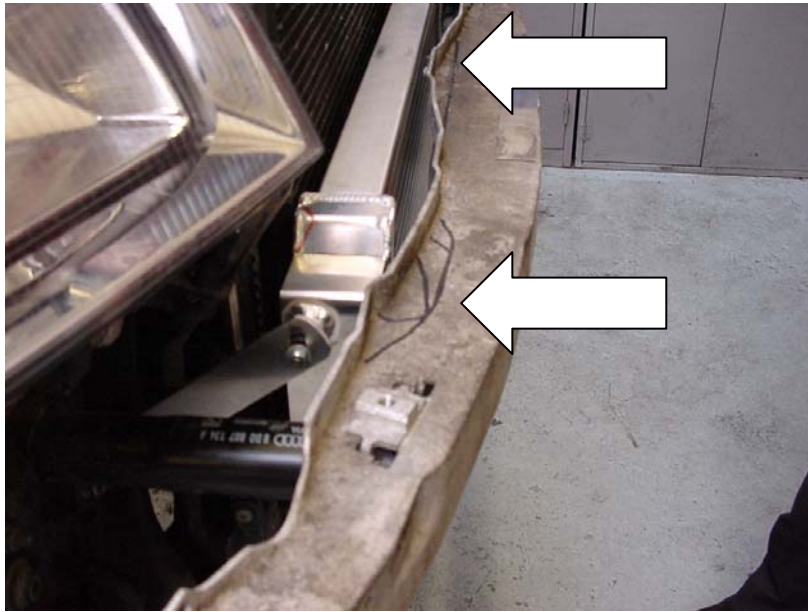


14/ Remove the aluminium crash bar from the inside of the front bumper, this will require the plastic melted fixings to be cut off with a craft knife. Then the crash bar will have to be unclipped from several plastic fixings along its centre. Once removed fit the template supplied along both edges and mark the areas to be cut as per the picture below.



A4 Only

Passat will have a separate crash bar that will not require any modification.



(A4 only)

Mark and cut these areas on the upper and lower edge of the crash bar, then refit the crash bar in to its plastic retainers inside the front bumper.

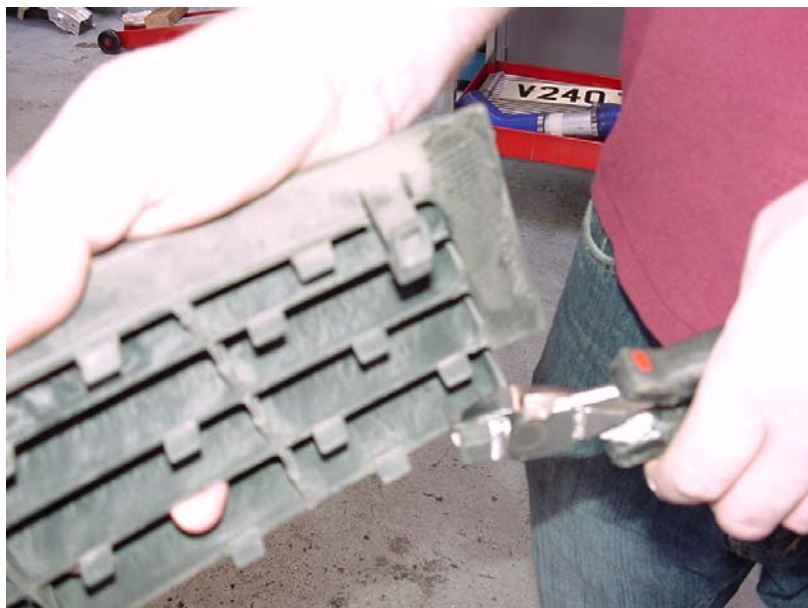
Several minor plastic parts also have to be removed/cut as per the pictures below.



(A4 only)



Refit the front bumper making sure that there is clearance all around the intercooler, if any plastic parts touch or rub the intercooler then trim as necessary. Refit the 2x bumper retaining bolts and be sure to also reconnect the fog lights. Trim and refit the right and left grilles as shown below.





15/ remove vehicle from lift or axle stands, make sure all tools are removed from the vehicle.
You are now ready to enjoy the new performance of your Audi A4/VW Passat 1.8T.

Engineered for Performance.