

VE EDC 10mm to 11mm Conversion

READ THIS SECTION BEFORE STARTING CONVERSION

To perform this conversion you should have a good working knowledge or have done a timing belt change. This conversion requires you to pull the injection pump, when reinstalling you will need to set the valve train timing just as if you had changed the timing belt. You will need standard hand tools, a T-30 torxs bit, allen wrenches, pump locking pin, cam locking tool and Vag Com software and interface.

If you do not have access to these tools or do not feel confident that you can do the work then, STOP and get help from someone that can do it. This is not a hard task but you need to pay attention to detail.

This like any other modification, you do at your own risk, once you modify something just remember you become your own warranty repair shop. Again if you do not want to take this risk then STOP now.

We at Lubespecialist.Com and Kermatdi.com only warranty the parts to be free from manufacturer defects and will replace said items if upon our inspection that we deem it was in fact a manufacturers defect.

Lubespecialist.Com and Kermatdi.com are not liable for any damage that may be caused by the use of these parts. It is the solo responsibility of the purchaser to insure these parts are installed correctly.

Installation Procedures

Step One: Remove injection pump from the motor and clean the outside ensuring the pump is free from grease and dirt.

Step Two: Match mark the quantity adjuster to the main injection pump housing as



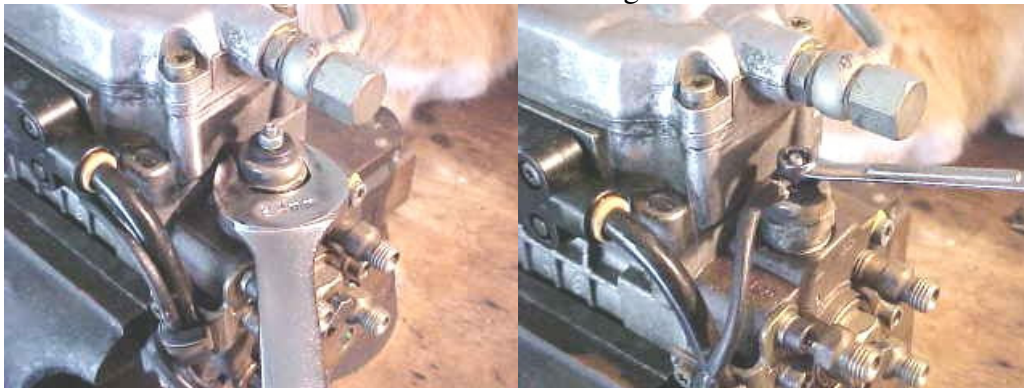
shown in picture one below.

Make sure this is done in away that allows you to align the two pieces perfectly during reassembly. If this is not done properly you may have trouble starting the motor.

Step Three: For easier handling put the pump in a vise. Use a T-30 torx bit and take the three lower screws out that hold the quantity adjuster. You need to remove the special security bolt on top as well. You can use a 6 point socket that is tapped onto the head or a special triangular socket specially made for this.



Step Four: Remove wire from top of the fuel shutoff solenoid by using an 8mm wrench to remove the nut. Remove fuel shutoff solenoid using a 24mm wrench.



Step Five: Using a 14mm wrench remove all 4 delivery valves from the head. Watch when removing that you do not lose the copper seals that are in the head, these may also come out with the valve.



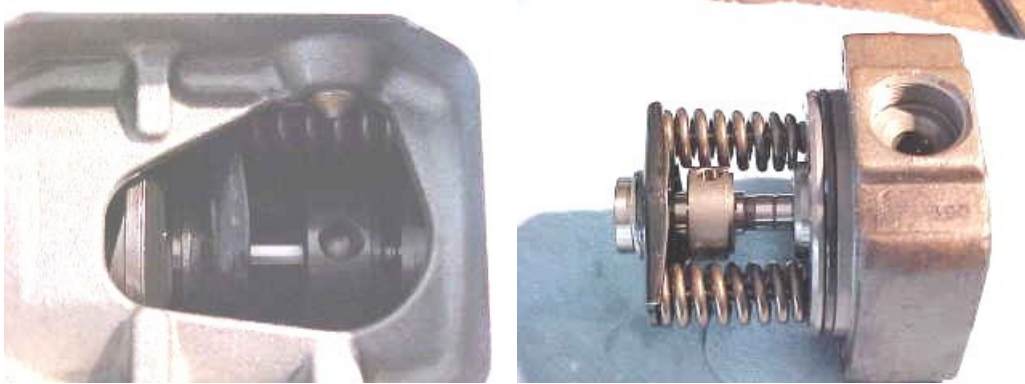
Step Six: Use a 5mm allen wrench and T-30 torx bit to remove all but 2 bolts on the head. Leave 2 bolts in place on opposite corners.



Step Seven: Remove the 2 T-30 torx screws from the cold start solenoid and remove solenoid. Use a small pipe wrench to remove the large center nut on the head.



Step Eight: Remove quantity adjuster. Now take the pump out of the vise and position it so the head is on top. Remove remaining 2 bolts and use one finger by going through the quantity adjuster area to hold the plunger and spring and carefully pull the whole head assembly from pump.



Step Nine: Carefully remove o-ring from old head and install it onto the new head.



Step Ten: Once the head is removed look on top of the cam plate and look for the shim. If its not there look on the end of the plunger. Very critical that you keep track of the shim. When installing new head assembly you need you use a spot of grease to hold the shim onto the cam plate.



Step Eleven: Look at the old head assembly that you pulled out and carefully transfer the springs, guides and thrust washers to the new head. Insure that you have everything in the proper order and that nothing binds. Never force the controller collar onto the plunger and never force the plunger into the head. All these parts are machined to a very close tolerance and perfect alignment is needed when putting them together. The trick to getting them together is rotate the collar while putting it onto the plunger, and rotate the plunger while putting it into the head. Once you have all the parts assembled onto the head you can now put the head back into the pump housing. Make sure you have the shim in place and the notch in the plunger head fits into the pin on the cam plate. Use 2 bolts in opposite corners to secure the head. Lube o-ring and pull it down evenly. Reinstall center nut and delivery valves. Make sure you put the copper seals for the delivery valves in the head first.

Step Twelve: Once the head end is back together rotate the pump in the vise so the quantity adjuster section is facing up. Center control collar on the plunger with the blind hole in the collar facing up. Carefully align quantity adjuster plate over collar so the adjuster engages into the control collar. Align the marks you made earlier and tight the bolts.



Install the pump back on the motor. Take time to bleed the pump well, its worth the extra time and will avoid excess cranking. If the pump is bled well it will start right after you get air out of a couple of injectors.

Once you are up and running check IQ adjust via Vag Com. If motor idles ruff you will have to adjust it so it will idle smooth.