

## VALVE

**SE033052003**

ONE REFERENCE FOR ALL BOSCH® PIEZOELECTRIC INJECTORS  
APPLICABLE TO THE FOLLOWING INJECTORS "GROUPS"

0 445 115 ---

0 445 116 ---

0 445 117 ---

PRICE UPON REQUEST



## TOOL FOR REFILLING/CALIBRATING THE HYDRAULIC AMPLIFIER



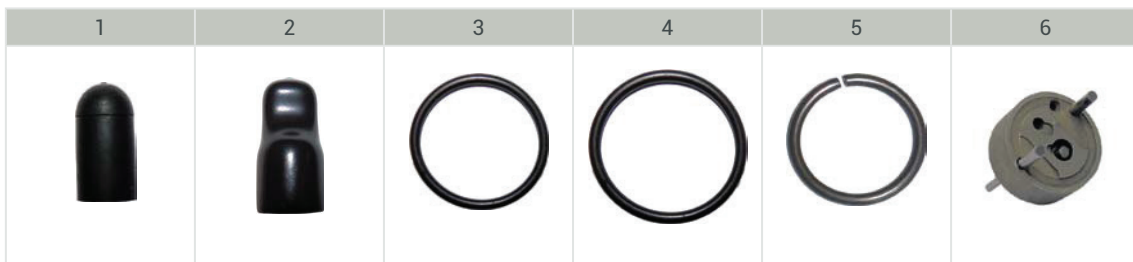
When the Piezoelectric injector is completely dismantled, cleaned and then is mounted back on, the hydraulic amplifier needs to be charged (refilled) and seated to a specific position (calibrated), otherwise the injector will not work.

**SE1300852CR**

It is a very simple device to charge\calibrate the hydraulic amplifier, that helps reduce the time for the process of charging



Our Reference	Description	Equivalent to	Application	Image N.
SE042024234	Cap			1
SE042024231	Cap with Handle			2
SE042030441	O - Ring	F00VC38045		3
SE042030240	O - Ring	2410210004 - F00VC38042		4
SE0420101851	Elastic Ring			5
SE033052003	Valve C.R. Piezo			6
SE006008651	Nut		0445115037 - 0445115067 - 0445115070	7
SE006008777	Nut		0445115001 - 0445115024	8
SE006008780	Nut		0445115029 - 0445115030	9
SE006008789	Nut			10
SE006008792	Nut		0445110368 - 0445110369 - 0445110646 - 0986435166	11
SE042010687	Heatshield	F00VC17503		12
SE042010252	Heatshield	F00VP01008		13
SE0420101965	Heatshield	F00VP01009		14



1. Fix the injector in a device to disassemble it.
2. Remove the nozzle nut and also the nozzle; continue dismantling the injector till removing the spacer with calibrated holes .
3. Remove the valve-holder with its spring and valve (Piezo Valve).
4. Go on and take away the amplifying part and its washer.
5. Disassemble the little parts inside the nozzle holder.
6. Work now on the valve-holder and remove the Piezo Valve.
7. All components inside the nozzle holder have been removed. Inside there will be only the Piezo Actuator that can not be disassembled.
8. Work now on the amplifying part and dismantle it in each single part.



## RECHARGE OF THE AMPLIFYING PART

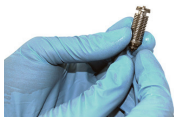
If you disassemble the amplifying-part of Bosch Piezo common rail injector, to reassemble it you need a prior recharge with test oil (ISO oil) inside the piston-room of the amplifying-part so that it can work properly when the injector is mounted again on the car. To put back together the amplifying-part we suggest our tool, code: **SE1300852CR**



1. Hold the amplifying-part in vertical position with the command-piston (big one) looking down.

2. Extract the piston with its spring from its seat inside the amplifying-part.

3. Pour with the syringe, delivered with SE1300852CR, few drops of oil to fill up the body of amplifying part.



4. Insert gently, rotating with your hand, the little piston with its spring into its seat.

5. Overturn the amplifying-part with the command-piston (little one) looking down and fix it on the tool SE1300852CR to close it.  
Take care to fix it properly on the tool.



6. Overturn the amplifying-part with the command-piston (little one) looking down and fix it on the tool SE1300852CR to close it. Take care to fix it properly on the tool.

N.B. Pay attention not to use too much power, to avoid to warp the amplifying-part. It is enough when the big piston is completely inserted inside its seat.



## FUNCTIONAL TEST OF THE CORRECT ASSEMBLY OF THE AMPLIFYING-PART

If the procedure has been done properly you will not have any air bubble in the area between the two pistons of the amplifying-part, but only few drops of oil that work as hydraulic transmission.

Keeping in your hand the amplifying-part, press with a finger the piston with the spring; the opposite piston must lift up from its seat.



**The Piston must lift up!**

Our Reference	Description	Image N.
SE1300852CR	Tools to close amplifying-part of Piezo injectors	1
SE033052003	Piezo Valve	2
SE0400030078	Adaptor for back-leak pipe of Piezo injector. Connection 14x1,5 for hand test injector Quick connection for pipes with valve for Piezo injector.	3
SE0400030080	Adaptor female 14x1,5 – male 12x1,5 (Long version)	4
SE1201518032	Wrench to open the nut of common rail injectors Octagonal: 16mm	5
SE1201518002	Wrench to open the nut of common rail injectors Piezo Bosch injectors on BMW Octagonal: 15mm	6
SE04001081844CR	Pipe with valve for Piezo injector.	7
SE1680712315	Pipe 1.680.712.315	8
SE1687412004	Pipe 1.687.412.004	9

