

SUBJECT: Bosch® EPS 205 Programming Instruction for the Delphi® Bobcat® Common Rail Injectors

Prior to creating the test specification, verify that the EPS 205 firmware is up to date. Any versions prior to 1.21 may result with a testing error message. If the firmware needs updating, it can be found on the latest CD TestData disc from Bosch. Firmware can also be updated through the bench as long as the EPS 205 is connect to the internet. To do so you will need to locate *System* in the main screen. Then locate and select *software*. Once there, simply click *Firmware* (F6) to update latest version, 1.21.

1. Switch the EPS 205 to the on position.
2. Select “Common rail injector (CRI/CRIN)”.
 - a. Delphi did not release a Piezo common rail injector.
3. Locate and select “EJBRXXXXXX”, click “Continue” (F12).
4. Replace the “EJBRXXXXXX” displayed in the “Type number” with “Delphi Test”. Press “enter” and afterword’s press OK (F12).
5. Enter the values from the table below in each line. These are the base parameter and are the same for the two Delphi Bobcat common rail injectors offered by Delphi.
 - a. *Important: Save (F4) after changing each line of data into the test plan.*

Test Step Name	Actuation Time (μSEC)	Pressure (Mpa)	Measurement Time (sec)
Leak Test	0	170	120
TP1	1180	160	90
TP2	650	25	40
TP3	300	80	40

Note: Test values developed by Alliant Power for reference purposes only.

6. Additional test points are added by entering the description and values into the empty boxes below the last test point.
7. Click “Profile” (F9). A warning will appear, you may click “OK”.

8. Profiles must be filled as stated.

Voltages	
Battery	14v
Capacitor	31v

Times	
Energization Time	100 μ S
Minimum Holding Time	30 μ S

Currents	
Boost	16A
Energization	20.00 +/- 1.00A
Hold	9.00 +/- 2.50A

Turn-off Methods	
After Energization	Standard
After Hold	Standard

Deactivation Mode
Above minimum holding time

9. After completing the profile changes, click “Continue”.

10. Save the “Delphi Test” (F4) and select “Yes” afterwards.

11. See [APTB 02/23 Delphi Bobcat Common Rail Test Values for the Bosch EPS 205 Test Bench](#).

12. Test adaptor

- a. 1 687 010 399 is a supplementary equipment set from Bosch for Delphi and Denso® injectors. From this kit only 1 680 712 249 and 1 684 465 577 are needed to test the Delphi common rail injector. But if the kit is ordered, there are more accessories for other injectors to test in the future.

Description	Bosch Part Number
Hose line (return)	1 680 712 289
Hose line (for Delphi and Denso injectors)	1 680 712 249
Hose line with spring clip (for Delphi injectors)	1 680 712 250
Hose line with screw coupling (for Denso injectors)	1 680 712 253
Hose line with clamp connection	1 680 712 312
Adapter cable for Delphi injectors	1 684 465 577
Adapter cable (universal)	1 684 465 579