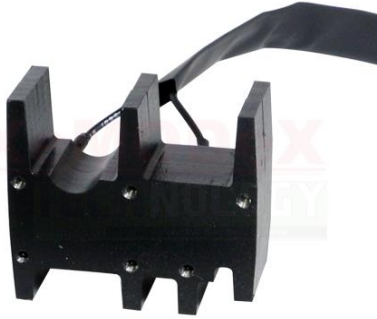


# SCR Tank Diagnostic Flow Chart

## BMW 3 Series and X5 Diesel

### Overview

There are 3 main electrical components inside the active urea container: The heating element, the level sensor and the temperature sensor. This diagnostic flow chart is designed to assist you in testing each one of these parts.



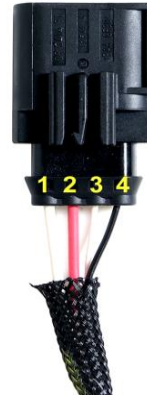
Heating Element  
 Made by XeMODeX  
 Available at www.xemodex.com

**Test 1**

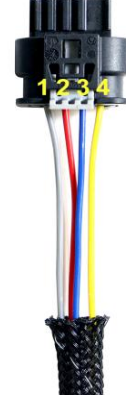
Heating Element Test	
Associated Diagnostic Trouble Codes: <b>P209F, P20BA, P202A</b> "Reductant Tank Heater Control Circuit Performance"	
On the connector "A" Connect the ohmmeter between terminal 1 (White) and 2 (Red)	
<b>Expected Value: 2.2Ω</b>	
Tip: Most faulty heating elements will have resistance of 4Ω or more.	

**BMW**

Connector "A"



Connector "B"



**End of test 1**

**Test 2**

Temperature Sensor Test	
The temperature sensor is molded in to the base of the level sensor stack.	
Associated Diagnostic Trouble Codes: <b>4D32, 46F4, 46F9, P205B, P205C</b> "Active Tank Temperature Sensor Plausibility".	
On the connector "A" Connect the ohmmeter between terminal 3 (White) and 4 (Black)	
<b>Expected Value: 10KΩ @ Room Temperature</b>	
Tip: Use a hair dryer and warm up the bottom portion of the level sensor. The resistance will start to drop. Observe the ohmmeter, most faulty temp sensors will drop to open circuit as soon as they are warm.	

**End of test 2**

**BMW**

Connector "A"



Connector "B"



Level sensor with integrated temperature sensor  
 Made by XeMODeX  
 Available at www.xemodex.com

**Test 3**

Level Sensor Test	
Associated Diagnostic Trouble Codes: <b>4BAC, P203A</b> "Reducing Agent Active Tank Fill Level Sensor Signal"	
Part 1 Low- Level Sensor Test	
On the connector "B" Connect the ohmmeter between terminal 1 (Grey) and 2 (Red)	
<b>Expected Value: 10KΩ</b>	
Part 2 Mid - Level Sensor Test	
On the connector "B" Connect the ohmmeter between terminal 1 (Grey) and 3 (Blue)	
<b>Expected Value: 10KΩ</b>	
Part 3 High - Level Sensor Test	
On the connector "B" Connect the ohmmeter between terminal 1 (Grey) and 4 (Yellow)	
<b>Expected Value: 10KΩ</b>	
Tip: Failed level sensor will have an open-circuit or very high and difficult to read resistance reading.	

**End of test 3**