

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER M-6-85  
Relating to Certification of New Motorcycles

BAYERISCHE MOTOREN WERKE AG

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following engine and exhaust emission control systems produced by the manufacturer are certified as described below for four-stroke gasoline-powered motorcycles:

Model Year: 2001

<u>Engine Family</u>	<u>Displacement Cubic Centimeters</u>	<u>Class</u>	<u>Exhaust Emission Control Systems &amp; Special Features</u>
1BMXC01.2R2C	1170	III	Multiport Fuel Injection Dual Three Way Catalytic Converters Heated Oxygen Sensor

Vehicle models and transmissions are listed on the attachment. Production motorcycles shall be in all material respects the same as those for which certification is granted.

The following are the exhaust emission standards and exhaust emission certification values for this engine family. The designated hydrocarbons standard shall be listed on the permanent tune-up label:

<u>Hydrocarbons Standards (Corporate Average) Grams per Kilometer</u>	<u>Hydrocarbons Standards (Designated) Grams per Kilometer</u>	<u>Hydrocarbons (Certification) Grams per Kilometer</u>	<u>Carbon Monoxide (Standard) Grams per Kilometer</u>	<u>Carbon Monoxide (Certification) Grams per Kilometer</u>
1.4	0.8	0.6	12	5

BE IT FURTHER RESOLVED: That the above-described certification is subject to the following terms, limitations and conditions:

The above designated hydrocarbons standard shall be the exhaust limit for this engine family during the model year and therefore cannot be redesignated by the manufacturer. It represents the hydrocarbons exhaust emission standard applicable to this engine family that shall be applied when determining compliance of any motorcycle within this engine family pursuant to Section 2101 of Title 13, California Code of Regulations. It will also be used to determine compliance with the above corporate average hydrocarbons standard as required per Section 1958(b), Title 13 of the California Code of Regulations.

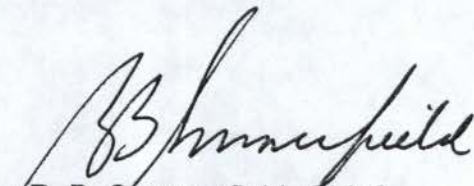
BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles," as required by Section 1976, Title 13 of the California Code of Regulations.

BE IT FURTHER RESOLVED: That these motorcycles are found exempt from compliance with the Air Resources Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" pursuant to Executive Order G-70-16-E.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 29<sup>th</sup> day of June 2000.



R. B. Summerfield, Chief  
Mobile Source Operations Division

Attachment

Engine Family: 1BMXC01.2R2C

Motorcycle Model Summary Form

65. Model Designation	66. Worst Case	67. Disp. (cc)	68. Bore / Stroke (mm)	69. Basic Ignition Timing (degrees)	70 Power (kW)	71 Rated Speed (RPM)	72 Rated Torque (Nm)	73. Rated Speed (RPM)
R1200C	X	1170	101/73	0° static	45	5000	98	3000

65. Model Designation	74. EIM (kg)	75. Loaded Vehicle Weight Range (kg)	76 Road Load (nt)	77 Total Vehicle Mass (kg)	78 Full Weight with All Factory Options (kg)	79. Trans. Type	80 N/V
R1200C	340	256	143.6	450	256	M-5	33.4

Engine Family: 1BMXC01.2R2C

## Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family?  Yes  No  
 a) If yes, indicate family name: YBMXC01.2R2C  
 b) Is the family being certified identical to the family from which the data is being carried over? Yes

28. Model Designation of Test Vehicle: R1200C  
 29. Test Information Number: R2C  
 30. Vehicle ID: V 201512  
 31. Service Accumulation Duration: 14985 (km)  
 32. Maximum Rated Power: 45 kW @ 5000 RPM  
 33. Displacement: 1170 cc  
 34. Certification Fuel: 95 RON  
 35. Test Data Set: 1

36. Road Load: 143,6 N  
 37. Inertia Mass: 340 kg  
 38. N/V: 33,4  
 39. EVAP. Bench Test Method Approved:  
 Date: 1997  
 Reference: V 201508  
 40. Unscheduled Maintenance:  Yes  No  
 41. If yes, Vehicle Log provided: \_\_\_\_\_

42. Exhaust Emission Deterioration Factors:

Test Number	System Kilometers	Emission Values	
		HC	CO
1	3487	0,281	6,235
2	10123	0,333	6,048
3	10212	0,267	5,134
4	14985	0,401	5,353
5			
6			
7			
<b>Interpolated Values at 15 000 km:</b>		<b>HC = 0,3718</b>	<b>CO = 5,2732</b>
<b>Extrapolated Values at 30 000 km:</b>		<b>HC = 0,5171</b>	<b>CO = 4,0861</b>

Check one:	
Regular DF	<input checked="" type="checkbox"/>
Modified DF	<input type="checkbox"/>
If different vehicle specify vehicle ID	

43. Emission Test Results:

Official Test Results		Test 1	Test 2	Test 3	Test 4
g/km	CO	5,353			
g/km	CO <sup>2</sup>	127,5			
g/km	HC	0,401			
g/test	Evap.	0,810			

Deterioration Factors	
(X)	1,000
	-----
(X)	1,391
(+)	0,335

44. Certification Levels:

g/km	CO	(5,353)		
g/km	HC	(0,558)		
g/test	Evap.	(1,145)		

*processed by: J. Hada Date: 6/27/00 Reviewed by: Joseph Jegede Date: 6/27/2000*

**Motorcycle Engine Family Information Form**

1. Manufacturer: BMW Bayerische Motoren Werke AG

2. Certification Contact Person, address, phone, and fax:  
Mr. Gordon B. Keil  
BMW of North America, Inc.  
Montvale, N.J. 07645  
Phone No. 201-573 2195  
Fax No. 201-930 8402

0.52

3. Model Year: 2001

4. Process Code: running change  
(new, correction, revision, r/c, f/f. etc.)

5. Engine Family: 1BMXC01.2R2C  
50s Engine Code: X  
49s Engine Code: \_\_\_\_\_  
Calif. Engine Code: \_\_\_\_\_

10. Displacement: 1170 cc

11. Number of Cylinders: 2

12. Cylinder Arrangement: opposed

13. Cylinder Head Configuration: OHC

14. Type of Cooling: Air

6. Emission Control System: <sup>2</sup>MFI, TWC, HO<sub>2</sub>S

15. Combustion Cycle: 4 stroke

7. Calif. Designated Standard: 0.8 g/km HC

16. Method of Aspiration: natural

8. Projected Annual Sales: \_\_\_\_\_ total  
\_\_\_\_\_ California

17. Fuel System: ~~FI~~ MFI

9. New Technology \_\_\_ Yes X No  
If yes, cite the correspondence or reference the  
submittal document: \_\_\_\_\_

18. Number of Catalytic Converters: 2

19. Adjustable Parameters:

Parameter(s)	Adjustable Range (or NA)	Tamper Resistance Method (or NA)	Method Approved
Ignition timing	N.A.	N.A.	
Idle speed	750 ± 50 RPM	N.A.	

20. AECDs In the Emission Control Systems:

Exhaust System	Evaporative System
AECDs In System: <u>ECM</u> <u>Fuel pressure regulator</u> <u>Engine oil temperature sensor</u> <u>Air temperature sensor</u> <u>Throttle position sensor</u> <u>Oxygen sensor</u> <u>Throttle valve actuator</u>	AECDs In System: <u>Purge valve</u> _____ _____ _____ _____