

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER M-2-359  
Relating to Certification of New Motorcycles

HONDA MOTOR CO., LTD.

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 2000 model-year Honda Motor Co., Ltd. exhaust emission control systems are certified as described below for four-stroke gasoline-powered motorcycles:

| <u>Engine Family</u> | <u>Displacement<br/>Cubic Centimeters</u> | <u>Class</u> | <u>Exhaust Emission Control Systems<br/>&amp; Special Features</u> |
|----------------------|---|--------------|--|
| YHNXC0.08AAA         | 80  | I            | Engine Modification  |

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 certification emission values for this engine family:

| <u>Hydrocarbons<br/>(Standard)<br/>Grams per<br/>Kilometer</u> | <u>Hydrocarbons<br/>(Certification)<br/>Grams per<br/>Kilometer</u> | <u>Carbon Monoxide<br/>(Standard)<br/>Grams per<br/>Kilometer</u> | <u>Carbon Monoxide<br/>(Certification)<br/>Grams per<br/>Kilometer</u> |
|--|---|---|--|
| 1.0  | 0.7   | 12  | 7  |

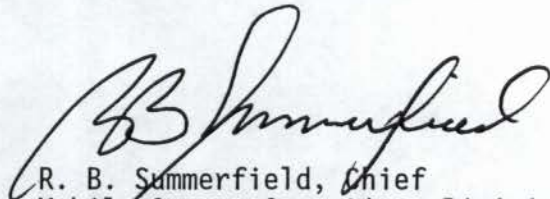
BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

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 1<sup>st</sup> day of July 1999.



R. B. Summerfield, Chief  
Mobile Source Operations Division





**Motorcycle Engine Family Information Form**

1. Manufacturer: Honda Motor Co., Ltd.  
 2. Certification contact Person, address, phone, and fax:

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Julie Barkow, Certification Assistant, Certification Department  
 American Honda Motor Co., Inc. Mail Stop 500-2C-8A  
 1919 Torrance Blvd., Torrance CA 90501-2746  
 Telephone: (310)783-3417 Fax: (310)783-3510 E-Mail: Julie\_Barkow@arm.honda.com

3. Model Year: 2000  
 4. Process Code: New  
 (new, correction, revised, r/c, f/f, etc.)  
 5. Engine Family: YHNKCO.08AAA  
 50s Eng. Code: N/A  
 49s Eng. Code: YAB1  
 Calif. Eng. Code: YAB2  
 6. Emission Control System: EM  
 7. Calif. Designated Standard(g/km): N/A  
 8. Project Annual Sales: **CONFIDENTIAL**  
 9. New Technology:  Yes  No  
 If yes, cite the correspondence or reference  
 the submittal document: N/A  
 10. Displacement(cc): 80  
 11. Number of Cylinder: 1  
 12. Cylinder Arrangement: Vertical  
 13. Cylinder Head Configuration: OHV/OHC  
 14. Type of Cooling: Air Cooled  
 15. Combustion Cycle: Otto  
 16. Method of Aspiration: Natural  
 17. Fuel System: Carburetors  
 18. Number of Catalytic Converters: N/A

19. Adjustable Parameters:

| Parameters(s)          | Adjustable Range<br>(or N/A)            | Tamper Resistance Method<br>(or N/A) | Method Approved |
|------------------------|---|--------------------------------------|-----------------|
| Carburetor Pilot Screw | Limited to 7/8 turn<br>leaner side only | Limiter cap                          | N/A             |
|                        |   |                                      |                 |
|                        |   |                                      |                 |

20. AECDS in the Emission Control System:

| Exhaust System          | Evaporative System      |
|-------------------------|-------------------------|
| AECDS In System:<br>N/A | AECDS In System:<br>N/A |
| _____                   | _____                   |
| _____                   | _____                   |
| _____                   | _____                   |
| _____                   | _____                   |

Application  
 Processed by: Joseph Jegede Date: 6/30/99 Reviewed by: Steve Vade Date: 6/30/99

Engine Family: YHNC0.08AAA

## Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family?  Yes  No  
 a) If yes, indicate family name: FHN008041DX  
 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: CH80  
 29. Test Information Number: 110  
 30. Vehicle ID: 85AD-01  
 31. Service Accumulation Duration(km): 6042  
 32. Maximum Rated Power(kW @ RPM): 3.7 @ 7500  
 33. Displacement(cc): 80  
 34. Certification Fuel: Indolene  
 35. Test Data Set: 1  
 42. Exhaust Emission Deterioration Factor

36. Road Load(nt): 109.0  
 37. Inertia Mass(kg): 170  
 38. N/V: 118.9  
 39. Evap Bench Test Method Approval:  
 Data: March 9, 1983  
 Reference: 17.01.01-1 (ARB) &  
 17.01.02-2 (ARB) thru  
 17.01.02-12 (ARB) in 1999 Model  
 Year Application  
 40. Unscheduled Maintenance:  Yes  No  
 41. If yes Vehicle Log Provided: N/A

| Test Number                              | System Kilometers | Emission Values    |                    |
|--|-------------------|--------------------|--------------------|
|  |                   | HC                 | CO                 |
| 1  | 2555              | 0.81               | 8.1                |
| 2  | 4101              | 0.73               | 7.7                |
| 3  | 4128              | 0.71               | 8.7                |
| 4  | 6015              | 0.72               | 6.9                |
| 5  | 6042              | 0.72               | 7.0                |
| 6  |                   |                    |                    |
| 7  |                   |                    |                    |
| Interpolated Values at <u>6,000</u> km:  |                   | HC = <u>0.6981</u> | CO = <u>7.1970</u> |
| Extrapolated Values at <u>12,000</u> km: |                   | HC = <u>0.5502</u> | CO = <u>5.0207</u> |

|  |   |
|--|---|
| Check One:                                 |   |
| Regular DF                                 | X |
| Modified DF                                |   |
| If Different Vehicle<br>Specify Vehicle ID |   |
|  |   |

43. Emission Test Results:

| Official Test Results |                 | Test 1 | Test 2 | Test 3 | Test 4 |
|-----------------------|-----------------|--------|--------|--------|--------|
| g/km                  | CO              | 7.0    |        |        |        |
| g/km                  | CO <sub>2</sub> | 32.2   |        |        |        |
| g/km                  | HC              | 0.72   |        |        |        |
| g/km                  | Evap.           | 1.13   |        |        |        |

|     | Deterioration Factors |
|-----|-----------------------|
| (X) | 1.000 (0.698)         |
| (X) | 1.000 (0.788)         |
| (+) | 0.0                   |

44. Certification Levels:

|        |       |     |  |  |  |
|--------|-------|-----|--|--|--|
| g/km   | CO    | 7   |  |  |  |
| g/km   | HC    | 0.7 |  |  |  |
| g/test | Evap. | 1.1 |  |  |  |

( ): Calculated Value



Engine Family: YHNXC0.08AAA

## Evaporative Emission Information

- |   |   |
|---|---|
| <p>45. Evaporative Family: YHNKE0008EXB</p> <p>46. Number of Evap. Canisters: 1</p> <p>47. Design Working Capacity(g): 8.0</p> <p>48. Configuration: Open Bottom</p> <p>49. Number of storage Areas: 1</p> <p>50. Fuel Reservoir Volume(cc): 35</p> <p>51. Vent System Configuration: External</p> <p>52. Nominal Tank Capacity(liter): 5.0</p> | <p>53. Engine Displacement Class: I</p> <p>54. Storage Medium Composition: Charcoal</p> <p>55. Evap. Canister Medium Volume(cc): 210 +/- 20/0</p> <p>56. Evap. Family Sales: <b>CONFIDENTIAL</b></p> <p>57. Engine Code: YAB2</p> <p>58. Evap. Emission Family Code: 00XB</p> <p>59. Evap. Emission Family Group: B</p> <p>60. Overall Evap D.F.= 0.0</p> |
|---|---|

### Bench DF

61. Test Vehicle ID: 86BB-21

62. Test Results:

| Test Number  | System Kilometers | Evap. Emission Values (g/test) |
|--|-------------------|--------------------------------|
| 1  | 2500              | 0.84                           |
| 2  | 2500              | 0.85                           |
| 3  | 2500              | 0.71                           |
| 4  | 9000              | 0.64                           |
| 5  | 9000              | 0.72                           |
| 6  | 9000              | 0.69                           |
| 7  |                   |                                |
| Interpolated Values at <u>9,000 km</u> : = <u>0.683</u>  |                   |                                |
| Extrapolated Values at <u>18,000 km</u> : = <u>0.522</u> |                   |                                |
| Bench Test D.F. = <u>0.00</u> (calculated value = -0.16) |                   |                                |

|   |   |
|---|---|
| Check One:                              |   |
| Regular DF                              | X |
| Modified DF                             |   |
| If Different Vehicle Specify Vehicle ID |   |
|   |   |

### Vehicle DF

63. Test Vehicle ID: 85AD-01

64. Test Results:

| Test Number  | System Kilometers | Evap. Emission Values (g/test) |
|--|-------------------|--------------------------------|
| 1  | 2555              | 1.62                           |
| 2  | 4101              | 1.52                           |
| 3  | 4128              | 1.32                           |
| 4  | 6015              | 0.97                           |
| 5  | 6042              | 1.13                           |
| 6  |                   |                                |
| 7  |                   |                                |
| Interpolated Values at <u>6,000 km</u> : = <u>1.014</u>    |                   |                                |
| Extrapolated Values at <u>12,000 km</u> : = <u>-0.132</u>  |                   |                                |
| Vehicle Test D.F. = <u>0.00</u> (calculated value = -1.15) |                   |                                |