

Joseph J.

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER M-2-370
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 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: 2000

<u>Engine Family</u>	<u>Displacement Cubic Centimeters</u>	<u>Class</u>	<u>Exhaust Emission Control Systems & Special Features</u>
YHNXC01.0AEA	999	III	Pulsed Secondary Air Injection Sequential Multiport Fuel Injection

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

<u>Hydrocarbon Standards (Corporate Average) Grams per Kilometer</u>	<u>Hydrocarbons (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	1.4	0.6	12	11

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.

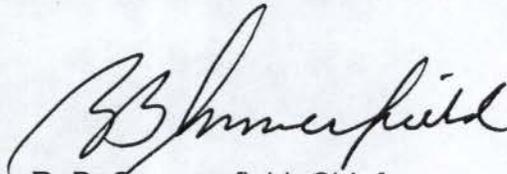
BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 through 2000 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 29th day of March 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division

ATTACHMENT

2000 HONDA Motorcycle

E.O.#: M-2-370
Section: 7 Page: 6
Issued: 2000/02/25
Revised:

Engine Family: YHNXC01.0AEA

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)
RVT1000R	X	999	100.0 / 63.6	15 (BTDC)	94	9000	103	8000
VIR1000SP		999	100.0 / 63.6	15 (BTDC)	94	9000	103	8000

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
RVT1000R	310	306 - 315	137.5	315	315	M6	35.9
VIR1000SP	310	306 - 315	137.5	315	315	M6	35.9

Motorcycle Engine Family Information Form

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

Julie Barkow-Peck, 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_Peck@ahm.honda.com

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|---|---|
| <ol style="list-style-type: none"> 3. Model Year: 2000 4. Process Code: New
(new, correction, revised, r/c, f/f, etc.) 5. Engine Family: <u>YHNXC01.OAEA</u>
 50s Eng. Code: N/A
 49s Eng. Code: YEJ1
 Calif. Eng. Code: YEJ2 6. Emission Control System: PAIR/SFI 7. Calif. Designated Standard(g/km): <input type="checkbox"/> N/A
 <input checked="" type="checkbox"/> HC - 1.4
 <input type="checkbox"/> HC+NOx 8. Project Annual Sales: CONFIDENTIAL 9. New Technology: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
 If yes, cite the correspondence or reference
 the submittal document: See page Section 4 page 1 | <ol style="list-style-type: none"> 10. Displacement(cc): 999 11. Number of Cylinder: 2 12. Cylinder Arrangement: 90 Degrees V-2 13. Cylinder Head Configuration: OHV/DOHC 14. Type of Cooling: Liquid Cooled 15. Combustion Cycle: Otto 16. Method of Aspiration: Natural 17. Fuel System: Fuel Injection(SFI) 18. Number of Catalytic Converters: N/A |
|---|---|

19. Adjustable Parameters:

Parameters (s)	Adjustable Range (or N/A)	Tamper Resistance Method (or N/A)	Method Approved
None			

20. AECDS in the Emission Control System:

Exhaust System	Evaporative System
AECDS In System: <u>PAIR Solenoid Valve</u> <u>ECM</u> <u>Throttle Position Sensor</u> <u>ECT Sensor</u> <u>IAT Sensor</u> <u>MAP Sensor</u> <u>BARO Sensor</u> <u>Ignition Pulse Generator</u> <u>Cam Position Sensor</u> 	AECDS In System: <u>ECM</u> <u>Throttle Position Sensor</u> <u>ECT Sensor</u> <u>IAT Sensor</u> <u>Vehicle Speed Sensor</u>

Engine Family: YHNXC01.0AEA

Motorcycle Test Information Form

0.248

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

28. Model Designation of Test Vehicle: RVT1000R
 29. Test Information Number: Y04
 30. Vehicle ID: 00EJ-01
 31. Service Accumulation Duration(km): 15012
 32. Maximum Rated Power(kW @ RPM): 94 @ 9000
 33. Displacement(cc): 999
 34. Certification Fuel: Indolene
 35. Test Data Set: 1
 42. Exhaust Emission Deterioration Factor

36. Road Load(nt): 137.5
 37. Inertia Mass(kg): 310
 38. N/V: 35.9
 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:

Test Number	System Kilometers	Emission Values			
		HC	CO	NOx	HC+NOx
1	3652	0.63	8.1		
2	6537	0.57	8.9		
3	6566	0.54	8.6		
4	9754	0.59	9.3		
5	12956	0.60	9.3		
6	12986	0.58	9.0		
7	15012	0.57	9.4		
Interpolated Values at <u>15,000</u> km:		HC = <u>0.5762</u>	CO = <u>9.4541</u>		
Extrapolated Values at <u>30,000</u> km:		HC = <u>0.5576</u>	CO = <u>10.8842</u>		

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	9.4			
g/km	CO ₂	126.5			
g/km	HC	0.57			
g/km	NOx				
g/km	HC+NOx				
g/km	Evap.	0.28			

(X)
(X)
(X)
(+)

Deterioration Factors
1.151

1.000 (0.968)

0.1

(): Calculated Value

44. Certification Levels:

g/km	CO	11			
g/km	HC	0.6			
g/km	HC+NOx				
g/test	Evap.	0.4			

Application Processed by: Joseph Jegede
 Reviewed by:

Date: 3/22/2000
 Date:

Engine Family: YHNXC01.0AEA

Evaporative Emission Information

- | | |
|--|--|
| <p>45. Evaporative Family: YHNXE0028UZZP</p> <p>46. Number of Evap. Canisters: 1</p> <p>47. Design Working Capacity(g): 28.0</p> <p>48. Configuration: Open Bottom</p> <p>49. Number of storage Areas: 1</p> <p>50. Fuel Reservoir Volume(cc): N/A</p> <p>51. Vent System Configuration: N/A</p> <p>52. Nominal Tank Capacity(liter): 18.0</p> | <p>53. Engine Displacement Class: III</p> <p>54. Storage Medium Composition: Charcoal</p> <p>55. Evap. Canister Medium Volume(cc): 680 +/- 10</p> <p>56. Evap. Family Sales: CONFIDENTIAL</p> <p>57. Engine Code: YEJ2</p> <p>58. Evap. Emission Family Code: 00ZP</p> <p>59. Evap. Emission Family Group: U</p> <p>60. Overall Evap D.F. = 0.1</p> |
|--|--|

Bench DF

61. Test Vehicle ID: 99EB-01

62. Test Results:

Test Number	System Kilometers	Evap. Emission Values (g/test)
1	3500	0.20
2	3500	0.14
3	3500	0.18
4	15000	0.23
5	15000	0.20
6	15000	0.22
7		
Interpolated Values at <u>15,000</u> km: = <u>0.217</u>		
Extrapolated Values at <u>30,000</u> km: = <u>0.273</u>		
Bench Test D.F. = <u>0.06</u>		

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

Vehicle DF

63. Test Vehicle ID: 99EB-01

64. Test Results:

Test Number	System Kilometers	Evap. Emission Values (g/test)
1	3390	0.24
2	6491	0.18
3	6521	0.18
4	9728	0.22
5	12904	0.31
6	12934	0.23
7	15014	0.28
Interpolated Values at <u>15,000</u> km: = <u>0.273</u>		
Extrapolated Values at <u>30,000</u> km: = <u>0.381</u>		
Vehicle Test D.F. = <u>0.11</u>		