

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER M-2-350  
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 Cubic Centimeters</u>	<u>Class</u>	<u>Exhaust Emission Control Systems &amp; Special Features</u>
YHXC01.5CBB	1520	III	Pulsed Secondary Air 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 emission certification values for this engine family. The designated hydrocarbons standard shall be listed on the permanent tune-up label:

<u>Hydrocarbon Standards (Corporate Average)</u>	<u>Hydrocarbons (Designated)</u>	<u>Hydrocarbons (Certification)</u>	<u>Carbon Monoxide (Standard)</u>	<u>Carbon Monoxide (Certification)</u>
<u>Grams per Kilometer</u>	<u>Grams per Kilometer</u>	<u>Grams per Kilometer</u>	<u>Grams per Kilometer</u>	<u>Grams per Kilometer</u>
1.4	1.4	1.0	12	9

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.

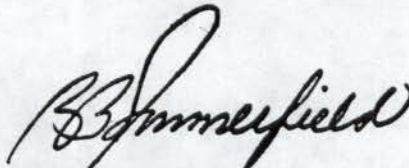
BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 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 19<sup>th</sup> day of May 1999.



R. B. Summerfield, Chief  
Mobile Source Operations Division



Motorcycle Engine Family Information Form

0.6

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

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@ahm.honda.com

3. Model Year: 2000
4. Process Code: New  
(new, correction, revised, r/c, f/f, etc.)
5. Engine Family: YHNXC01.5CBB  
 50s Eng. Code: N/A  
 49s Eng. Code: N/A  
 Calif. Eng. Code: YED1
6. Emission Control System: PAIR
7. Calif. Designated Standard(g/km): 1.4
8. Project Annual Sales: **CONFIDENTIAL**
9. New Technology:  Yes  No  
 If yes, cite the correspondence or reference  
 the submittal document: N/A
19. Adjustable Parameters:

10. Displacement(cc): 1520
11. Number of Cylinder: 6
12. Cylinder Arrangement: Flat-6/Opposed
13. Cylinder Head Configuration: OHV/OHC
14. Type of Cooling: Liquid Cooled
15. Combustion Cycle: Otto
16. Method of Aspiration: Natural
17. Fuel System: Carburetors
18. Number of Catalytic Converters: N/A

Parameters(s)	Adjustable Range (or N/A)	Tamper Resistance Method (or N/A)	Method Approved
Carburetor Pilot Screw	N/A	Not limited	Approved by EPA on 09/03/91

20. AECDs in the Emission Control System:

Exhaust System	Evaporative System
AECDs In System:	AECDs In System:
<u>PAIR Check Valve</u>	<u>Evap CAV Control Valve</u>
<u>PAIR Control Valve</u>	_____
<u>ECT Sensor</u>	_____
_____	_____
_____	_____
_____	_____

Application Processed by: Joseph Jegede Date: 5/18/99 Reviewed by: Steve Hads Date: 5/18/99

Engine Family: YHNXC01.5CBB

## Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family?  Yes  No  
 a) If yes, indicate family name: VHN1.5POGORA  
 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: GL1500CT  
 29. Test Information Number: V02  
 30. Vehicle ID: 97ED-01  
 31. Service Accumulation Duration(km): 15013  
 32. Maximum Rated Power(kW @ RPM): 74.6 @ 6000  
 33. Displacement(cc): 1520  
 34. Certification Fuel: Indolene  
 35. Test Data Set: 1  
 42. Exhaust Emission Deterioration Factor
36. Road Load(nt): 163.7  
 37. Inertia Mass(kg): 440  
 38. N/V: 30.1  
 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	3528	0.94	8.5
2	6379	1.01	8.3
3	6409	0.90	8.6
4	9755	0.95	8.4
5	12800	1.09	8.9
6	12830	0.91	8.4
7	15013	0.93	8.7
Interpolated Values at <u>15,000</u> km:		HC = <u>0.9738</u>	CO = <u>8.6636</u>
Extrapolated Values at <u>30,000</u> km:		HC = <u>1.0078</u>	CO = <u>8.9946</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	8.7			
g/km	CO <sub>2</sub>	140.3			
g/km	HC	0.93			
g/km	Evap.	0.71			

Deterioration Factors	
(X)	1.038
(X)	1.035
(+)	0.2

44. Certification Levels:

g/km	CO	9			
g/km	HC	1.0			
g/test	Evap.	0.9			

Engine Family: YHNXC01.5CBB

## Evaporative Emission Information

- |  |   |
|--|---|
| <p>45. Evaporative Family: YHNXE0025MZU</p> <p>46. Number of Evap. Canisters: 1</p> <p>47. Design Working Capacity(g): 25.0</p> <p>48. Configuration: Open Bottom</p> <p>49. Number of storage Areas: 1</p> <p>50. Fuel Reservoir Volume(cc): 478</p> <p>51. Vent System Configuration: Internal</p> <p>52. Nominal Tank Capacity(liter): 20.0</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: <b>CONFIDENTIAL</b></p> <p>57. Engine Code: YED1</p> <p>58. Evap. Emission Family Code: 00ZU</p> <p>59. Evap. Emission Family Group: M</p> <p>60. Overall Evap D.F.= 0.2</p> |
|--|---|

### Bench DF

61. Test Vehicle ID: 97ED-01

62. Test Results:

Test Number	System Kilometers	Evap. Emission Values (g/test)
1	3500	0.52
2	3500	0.37
3	3500	0.36
4	15000	0.53
5	15000	0.37
6	15000	0.34
7		
<b>Interpolated Values at 15,000 km: = 0.413</b>		
<b>Extrapolated Values at 30,000 km: = 0.409</b>		
<b>Bench Test D.F. = 0.00 (calculated value = 0.00 )</b>		

<b>Check One:</b>	
Regular DF	X
Modified DF	
If Different Vehicle Specify Vehicle ID	

### Vehicle DF

63. Test Vehicle ID: 97ED-01

64. Test Results:

Test Number	System Kilometers	Evap. Emission Values (g/test)
1	3528	0.38
2	6379	0.68
3	6409	0.42
4	9755	0.81
5	12800	0.69
6	12830	0.50
7	15013	0.71
<b>Interpolated Values at 15,000 km: = 0.713</b>		
<b>Extrapolated Values at 30,000 km: = 1.026</b>		
<b>Vehicle Test D.F. = 0.31</b>		