

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER M-2-356  
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>
YHXC01.5ABA	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) 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	1.3	1.0	12	8

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.

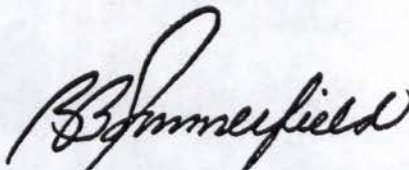
BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2035 et seq.).

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 16<sup>th</sup> day of June 1999.



R. B. Summerfield, Chief  
Mobile Source Operations Division



### Motorcycle Engine Family Information Form

0.35

- 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: YHNXC01.5ABA  
 50s Eng. Code: N/A  
 49s Eng. Code: YDA1  
 Calif. Eng. Code: YDA2
- 6. Emission Control System: PAIR
- 7. Calif. Designated Standard(g/km): 1.3
- 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): 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
- 19. Adjustable Parameters:

Parameters(s)	Adjustable Range (or N/A)	Tamper Resistance Method (or N/A)	Method Approved
Carburetor Pilot Screw	Not Limited	Recess "D" shaped head that requires a special tool	Approved by EPA on 11/22/88

- 20. AECDs in the Emission Control System:

Exhaust System	Evaporative System
AECDs In System: <u>PAIR Check Valve</u> <u>PAIR Control Valve</u> <u>IAT Check Valve</u> <u>IAT Valve</u> <u>IAT Thermal Vacuum Valve</u> <u>IASA Valve</u> <u>Carburetor Coolant Thermal Valve</u> <u>Gear Position Switch</u> <u>ECM</u> <u>ECT Sensor</u> <u>IAT Sensor</u> <u>PAIR Solenoid Valve</u> <u>CAJ Solenoid Valve</u>	AECDs In System: <u>Evap CAV Control Valve</u> _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Application Processed by: Joseph Jegede Date: 6/10/99 Reviewed by: L. Haddz Date: 6/10/99

Engine Family: YHNXC01.5ABA

## Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family?  Yes  No  
 a) If yes, indicate family name: MHN152042A7  
 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: GL1500A
29. Test Information Number: M03
30. Vehicle ID: 91DA-01
31. Service Accumulation Duration(km): 15015
32. Maximum Rated Power(kW @ RPM): 71.6 @ 5000
33. Displacement(cc): 1520
34. Certification Fuel: Indolene
35. Test Data Set: 1
36. Road Load(nt): 170.5
37. Inertia Mass(kg): 500
38. N/V: 28.2
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
42. Exhaust Emission Deterioration Factor

Test Number	System Kilometers	Emission Values	
		HC	CO
1	3593	0.91	9.2
2	6514	1.21	7.5
3	6544	0.92	7.4
4	9693	0.88	8.4
5	12688	0.93	9.2
6	12719	0.94	8.8
7	15015	1.02	7.7
Interpolated Values at <u>15,000</u> km:		HC = <u>0.9633</u>	CO = <u>8.3627</u>
Extrapolated Values at <u>30,000</u> km:		HC = <u>0.9371</u>	CO = <u>8.4958</u>

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

43. Emission Test Results:

Official Test Results		Test 1	Test 2	Test 3	Test 4
g/km	CO	7.7			
g/km	CO <sub>2</sub>	127.6			
g/km	HC	1.02			
g/km	Evap.	0.80			

	Deterioration Factors
(X)	1.016
(X)	1.000 (0.973)
(+)	0.0

44. Certification Levels:

g/km	CO	8			
g/km	HC	1.0			
g/test	Evap.	0.8			

( ): Calculated Value

Engine Family: YHNXC01.5ABA

## Evaporative Emission Information

- 45. Evaporative Family: YHNXE0025EZA
- 46. Number of Evap. Canisters: 1
- 47. Design Working Capacity(g): 25.0  
2.0(ACL Element)
- 48. Configuration: Open Bottom  
Refer to Section 17.02.02-2(ACL Element)\*
- 49. Number of storage Areas: 2  
(Evap. canister & ACL Element)
- 50. Fuel Reservoir Volume(cc): 154
- 51. Vent System Configuration: Internal
- 52. Nominal Tank Capacity(liter): 24.0  
\* : In our 1999 application certification

- 53. Engine Displacement Class: III
- 54. Storage Medium Composition: Charcoal  
Cellulose Charcoal (ACL Element)
- 55. Evap. Canister Medium Volume(cc): 680 +/- 12.7  
Evap. Storage Element(g)\*\* 2.0 +/- 0.5
- 56. Evap. Family Sales: **CONFIDENTIAL**
- 57. Engine Code: YDA2
- 58. Evap. Emission Family Code: 00ZA
- 59. Evap. Emission Family Group: E
- 60. Overall Evap D.F.= 0.0  
\*\* : Design Working Capacity

**Bench DF**

61. Test Vehicle ID: 88DA-01

62. Test Results:

Test Number	System Kilometers	Evap. Emission Values (g/test)
1	3500	0.67
2	3500	0.79
3	3500	0.86
4	15000	0.68
5	15000	0.64
6	15000	0.64
7		
Interpolated Values at <u>15,000</u> km: = <u>0.653</u>		
Extrapolated Values at <u>30,000</u> km: = <u>0.497</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: 88DA-01

64. Test Results:

Test Number	System Kilometers	Evap. Emission Values (g/test)
1	3627	0.70
2	6494	0.70
3	6524	0.71
4	9665	0.69
5	12903	0.76
6	12933	0.66
7	15012	0.80
Interpolated Values at <u>15,000</u> km: = <u>0.746</u>		
Extrapolated Values at <u>30,000</u> km: = <u>0.828</u>		
Vehicle Test D.F. = <u>0.08</u>		