



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-02-003;

**IT IS ORDERED AND RESOLVED:** That the engine and emission control systems produced by the manufacturer are certified as described below for four-stroke gasoline-powered motorcycles. Production vehicles shall be in all material respects the same as those for which certification is granted. **The manufacturer shall ensure that character "C" or "3" is not used in the eighth (8<sup>th</sup>) position of the vehicle identification number (VIN) of all vehicles in the engine family listed below. Violation of this VIN provision may result in incorrect registration of the vehicles.**

MODEL YEAR	ENGINE FAMILY	EVAPORATIVE FAMILY	ENGINE DISPLACEMENT (cc)	CLASS
2007	7HNXC0.08AAA	7HNXE0008BXB	80	I
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		VEHICLE MODELS (equivalent inertia mass in kilograms, kg)		* = not applicable
EM		CH80 (170 kg)		
<b>ABBREVIATIONS:</b> EM=engine modification TWC=three-way catalyst OC=oxidizing catalyst WUTWC/WUOC=warm-up TWC/OC O2S=oxyen sensor HO2S=heated O2S EGR=exhaust gas recirculation AIR=secondary air injection PAIR=pulsed AIR MFI=multi port fuel injection SFI=sequential MFI TBI=throttle body fuel injection DFI=direct fuel injection TC/SC=turbo/super charger CAC=charge air cooler 2 (prefix)=parallel (2) (suffix)=in series				

The following are the exhaust hydrocarbons (HC) and carbon monoxide (CO) standards, or designated HC standard as applicable, and certification levels in grams per kilometer (g/km), and evaporative standard and certification level in grams per test (g/test) for this engine/evaporative family. The designated HC standard, as applicable, shall be listed on the permanent tune-up label.

CORPORATE AVERAGE STANDARD	HC (g/km)			CO (g/km)		EVAPORATIVE (g/test)	
	DESIGNATED STANDARD	(DIRECT) STANDARD	CERTIFICATION LEVEL	STANDARD	CERTIFICATION LEVEL	STANDARD	CERTIFICATION LEVEL
*	*	1.0	0.7	12	7	2.0	1.1

**BE IT FURTHER RESOLVED:** That certification to the designated HC standard listed above, as applicable, is subject to the following terms, limitations and conditions:

The designated HC standard shall be the exhaust emission limit for this engine family and cannot be changed during the model year. It serves as the HC exhaust standard applicable to this engine family for determining compliance with Title 13, California Code of Regulations, Sections 1958(b) and 2101.


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

**BE IT FURTHER RESOLVED:** That because the listed motorcycles are certified to 0.2 grams per test or more below the applicable evaporative standard, the vehicles are exempt from complying 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.

This Executive Order is only granted to the engine family and model-year listed above. Vehicles in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 1<sup>st</sup> day of June 2006.

  
Allen Lyons, Chief  
Mobile Source Operations Division



Engine Family: 7HNXC0.08AAA

## Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family?  Yes  No  
 a) If yes, indicate family name: 6HNXC0.08AAA  
 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: No

41. If yes Vehicle Log Provided: N/A

Test Number	System Kilometers	Emission Values			
		HC	CO	NOx	HC+NOx
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 km:</u>		HC = <u>0.6981</u>	CO = <u>7.1970</u>		
		HC+NOx =			
Extrapolated Values at <u>12,000 km:</u>		HC = <u>0.5502</u>	CO = <u>5.0207</u>		
		HC+NOx =			

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	7.0			
g/km	CO <sub>2</sub>	32.2			
g/km	HC	0.72			
g/km	NOx				
g/km	HC+NOx				
g/test	Evap.	1.13			

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

44. Certification Levels:

g/km	CO (EPA)	7.0			
g/km	CO (ARB)	7			
g/km	HC	0.7			
g/test	Evap.	1.1			

( ): Calculated Value

Engine Family: 7HNXC0.0BAAA

## Evaporative Emission Information

- |   |   |
|---|---|
| <p>45. Evaporative Family: 7HNXE0008EXB</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:</p> <p>57. Engine Code: 7AB2</p> <p>58. Evap. Emission Family Code: 07XB</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		
<b>Interpolated Values at 9,000 km: =</b>		<b>0.683</b>
<b>Extrapolated Values at 18,000 km: =</b>		<b>0.522</b>
<b>Bench Test D.F. = 0.00 (calculated value = -0.16)</b>		

<b>Check One:</b>	
Regular DF	<input checked="" type="checkbox"/>
Modified DF	<input type="checkbox"/>
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		
<b>Interpolated Values at 6,000 km: =</b>		<b>1.014</b>
<b>Extrapolated Values at 12,000 km: =</b>		<b>-0.132</b>
<b>Vehicle Test D.F. = 0.00 (calculated value = -1.15)</b>		

Engine Family: 7HNXC0.0BAAA

**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)
CH80	X	80	49.5 / 41.4	18 (BTDC)	3.7	7500	5.9	5000

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
CH80	170	166 - 175	109.0	175	175	AV	118.9

Item 78:  
Curb weight, Rider weight, Production tolerance & Weight of optional accessories