

KAWASAKI HEAVY INDUSTRIES, LTD.

EXECUTIVE ORDER M-1-317 New On-Road Motorcycles

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 2001 model-year engine and emission control systems (ECS) produced by the manufacturer are certified as described below for four-stroke gasoline-powered motorcycles:

Engine Family

Evaporative Family

Displacement (cm³)

Class

ECS & Special Features 1KAXC1.05AAA 1KAXE17.0A03 1052 PAIR

Vehicle Models (Equivalent Inertia Mass): ZX1100-D9 (380 kg), ZX1100-F6 (380 kg)

Production motorcycles shall be in all material respects the same as those for which certification is granted.

The exhaust emission standards and certification values in grams per kilometer for hydrocarbons (HC) and carbon monoxide (CO), and the HC evaporative (Evap) standard and certification value in grams per test for this engine/evaporative family are as follows. The designated HC standard shall be listed on the permanent tune-up label:

	HC	CO	Evap HC
Standard: (Effective Standard)	1.4	12	2.0 (1.8)
Designated Standard:	1.5	n/a	n/a
Certification:	1.2	8	1.1

BE IT FURTHER RESOLVED: That the designated HC standard shall be the exhaust limit for this engine family and cannot be changed during the model-year. It represents the HC exhaust emission 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 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 because the listed motorcycles are certified to 0.2 grams per test or more below the applicable evaporative emission 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.

Executed at El Monte, California this _____ day of September 2000.

R. B. Summerfield, Chief Mobile Source Operations Division

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Issued: AUG 0 8 2000
Revised:

Motorcycle Engine Family Information Form

1.	Manufacturer: KA	WASAKI HEAVY IND	USTRIE	ES, LTD.		
2.	Certification Contact Person, address, phone, and fax: Jeffrey D. Shetler / David Corey					
	Kawasaki Motors 9950 Jeronimo R Tel: 949-770-04	oad, Irvine, CA 92618-	2084 949-460-	5602		
			.,			
3.	Model Year: 20	01		10. Displacement:	1052cm ³	
4.	4. Process Code: New (new, correction, revision, r/c, f/f. etc.)			11. Number of Cylinders: 4		
_				12. Cylinder Arranger	ment: <u>Inline-4</u>	
5.	Engine Family:	ode:	1	3. Cylinder Head C	Configuration: <u>DOHC</u>	
	Calif. Engine		1	14. Type of Cooling: <u>Liquid</u>		
6.	Emission Control System: PAIR		1	5. Combustion Cycle: 4		
7.	7. Calif. Designated Standard: 1.5 gm/km			16. Method of Aspiration: Natural		
8.				17. Fuel System: <u>Carburetor</u>		
9.	New Technology	DENTIAL Yes X No	1	8. Number of Cataly	tic Converters: NA	
	If yes, cite the cor submittal docu	respondence or reference iment:	the			
19.	Adjustable Paramet	ers:				
	Parameter(s)	Adjustable Range (or NA)	Tamper Resistance Method (or NA)		Method Approved	
carb	adjust on ouretor /Fuel Ratio)	NA	A tamper proof cap is placed over the adjusting screw		Carry over	
20.	AECDs In the Emis	sion Control Systems:			graph and a second	
Exh	aust System		E	vaporative System		
AECDs In System: PAIR		$ ^{A}$	ECDs In System:	Sealed loop with Canister		

E.O.#: M-1-317

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Revised:

Engine Family: 1KAXC1.05AAA

Motorcycle Test Information Form

0.05

27. Are you carrying over test results from a previously certified family? X Yes No

a) If yes, indicate family name: <u>LKA105244A7</u>

- 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: ZX1100-C1
- 29. Test Information Number: 90-1
- 30. Vehicle ID: JKAZXBC10LA000012
- 31. Service Accumulation Duration: 15000 (km)
- 32. Maximum Rated Power: 107 kW @ 10500 RPM
- 33. Displacement: 1052 cc
- 34. Certification Fuel: <u>Indolene: 91-95 RON</u>
- 35. Test Data Set: Test 1

- 36. Road Load: 151.7 nt at 65 kph
- 37. Inertia Mass: 380 kg
- 38. N/V: 38.53
- EVAP. Bench Test Method Approved
 Date: <u>2/23/1983</u>

Reference: 84ARB-03

- 40. Unscheduled Maintenance: ___ Yes _X No
- 41. If yes, Vehicle Log provided:

42. Exhaust Emission Deterioration Factors:

		Emission Values		
Test Number	System Kilometers	HC	CO	
1	3544	1.19	8.0	
2	5114	1.35	9.2 8.1	
3	5144			
4	4 10134 1.	1.05	7.6	
5	10164	10164 1.16	7.8	
6	15017	1.21	8.0	
7				
Internolated V	alues at 15000 km	HC - 11450	CO - 77446	

Interpolated Values at <u>15000</u> km: HC = <u>1.1459</u> CO = <u>7.7446</u>

Extrapolated Values at 30000 km: HC = 1.0707 CO = 6.9257

Regular DF	X
Modified DF	
If different vehic	le
specify vehicle II	D

43. Emission Test Results:

Official Test Results		Test 1	Test 2	Test 3	Test 4
g/km	со	8.0			/
g/km	CO ₂	128.9			
g/km	HC	1.21			
g/test	Evap:	0.991			

(X)

(X)

-	erioration Factors
10	1.000
	1.000
	0.005

Deterioration

44. Certification Levels:

g/km	CO	(8)	
g/km	HC	(1.2)	
g/test	Evap.	1.086	

Application Processed by: Joseph Jegede Date: 9/7/2000 Reviewed by:

Date: 9/1/2000