

File

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER M-1-278
Relating to Certification of New Motorcycles

KAWASAKI HEAVY INDUSTRIES, 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 1999 model-year Kawasaki Heavy Industries, 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 & Special Features</u>
XKAXC1.47AAD	1470	III	Sequential Multiport Fuel Injection Pulsed Secondary Air Injection Oxidation Catalytic Converter

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 (Certification)</u>		<u>Carbon Monoxide (Standard) (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>	<u>Grams per Kilometer</u>
1.4	0.8	0.6	12	6	

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 16th day of December 1998.



R. B. Summerfield, Chief
Mobile Source Operations Division

Motorcycle Engine Family Information Form

1. Manufacturer: KAWASAKI HEAVY INDUSTRIES, LTD.

0.5

2. Certification Contact Person, address, phone, and fax:

Jeffrey D. Shetler / Scott Patten
 Kawasaki Motors Corp., USA.
 9950 Jeronimo Road, Irvine, CA 92618-2084
 Tel : 949-770-0400 Fax : 949-460-5602

3. Model Year: 1999

10. Displacement: 1470cm³

4. Process Code: New
 (new, correction, revision, r/c, f/f. etc.)

11. Number of Cylinders: 2

5. Engine Family: XKAXC1.47AAD
 50s Engine Code: -
 49s Engine Code: -
 Calif. Engine Code: VNT50J-AC1

12. Cylinder Arrangement: Vee-Twin

13. Cylinder Head Configuration: SOHC

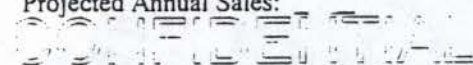
6. Emission Control System: SFI+PAIR+OC

14. Type of Cooling: Liquid

15. Combustion Cycle: 4

7. Calif. Designated Standard: 0.8 gm/km

16. Method of Aspiration: Natural

8. Projected Annual Sales:


17. Fuel System: Fuel Injected

9. New Technology Yes No
 If yes, cite the correspondence or reference the
 submittal document: Sec. 4

18. Number of Catalytic Converters: 1

19. Adjustable Parameters:

Parameter(s)	Adjustable Range (or NA)	Tamper Resistance Method (or NA)	Method Approved
Air adjuster on throttle body (Air/Fuel Ratio)	NA	an aluminum cap is placed over the adjusting screw.	Carry over

20. AECDs In the Emission Control Systems:

Exhaust System	Evaporative System
AECDs In System: <u>SFI, PAIR and OC</u> _____ _____ _____	AECDs In System: <u>Sealed loop</u> <u>with Canister</u> _____ _____

Application Processed by: Joseph Jegede Date: 12/15/98 Reviewed by: Steve [Signature] Date: 12/15/98

(Model Year) / (Manufacturer) Motorcycle

Section: 7: Page: 4

Issued: NOV 11 1998

Revised:

Engine Family: XKAXC1.47AAD

Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family? ___ Yes X 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: VN1500J
 29. Test Information Number: 99-1
 30. Vehicle ID: JKAVNAJ13XA000007
 31. Service Accumulation Duration: 15000 (km)
 32. Maximum Rated Power: 48.5 kW @ 5000 RPM
 33. Displacement: 1470 cc
 34. Certification Fuel: Indolene: 95~99 RON
 35. Test Data Set: Test 1

36. Road Load: 166.0 nt at 65 kph
 37. Inertia Mass: 460 kg
 38. N/V: 26.49
 39. EVAP. Bench Test Method Approved:
 Date: 2/17/87
 Reference: EO M-1-82
 40. Unscheduled Maintenance: ___ Yes X No
 41. If yes, Vehicle Log provided: NA

42. Exhaust Emission Deterioration Factors:

Test Number	System Kilometers	Emission Values	
		HC	CO
1	3514	0.54	5.4
2	6012	0.49	5.4
3	6102	0.51	4.8
4	12013	0.49	5.4
5	12103	0.32	4.8
6	15028	0.57	5.7
7			
Interpolated Values at <u>15000</u> km:		HC = <u>0.4652</u>	CO = <u>5.3533</u>
Extrapolated Values at <u>30000</u> km:		HC = <u>0.4102</u>	CO = <u>5.6172</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	5.7			
g/km	CO ₂	157.1			
g/km	HC	0.57			
g/test	Evap.	<u>1.104</u>			

Deterioration Factors
(X) 1.049

(X) 1.000
(+) _____

44. Certification Levels:

g/km	CO	<u>6</u>			
g/km	HC	<u>0.6</u>			
g/test	Evap.	<u>1.104</u>			