


Joseph J.

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|  AIR RESOURCES BOARD | KAWASAKI HEAVY INDUSTRIES, LTD. | EXECUTIVE ORDER M-1-318 New On-Road Motorcycles |
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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:

| <u>Engine Family</u> | <u>Evaporative Family</u> | <u>Displacement (cm³)</u> | <u>Class</u> | <u>ECS & Special Features</u> |
|----------------------|---------------------------|--------------------------------------|--------------|-----------------------------------|
| 1KAXC.899AAB | 1KAXE17.0A04 | 899 | III | PAIR, OC(2) |

Vehicle Models (Equivalent Inertia Mass): ZX900-E2 (340 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:

| | <u>HC</u> | <u>CO</u> | <u>Evap HC</u> |
|---------------------------------------|-----------|-----------|----------------|
| <u>Standard: (Effective Standard)</u> | 1.4 | 12 | 2.0 (1.8) |
| <u>Designated Standard:</u> | 0.7 | n/a | n/a |
| <u>Certification:</u> | 0.4 | 2 | 0.8 |

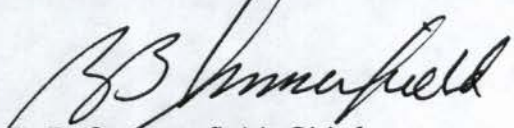
BE IT FURTHER RESOLVED: That the designated HC standard shall be the exhaust limit for this engine family and cannot be changed during the model-year. It represents the HC exhaust emission standard applicable to this engine family for determining compliance with Title 13, California Code of Regulations, 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 18th day of October 2000.


 R. B. Summerfield, Chief
 Mobile Source Operations Division

Motorcycle Engine Family Information Form

1. Manufacturer: KAWASAKI HEAVY INDUSTRIES, LTD.

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

| |
|---|
| Jeffrey D. Shetler / David Corey Kawasaki Motors Corp., U.S.A. 9950 Jeronimo Road, Irvine, CA 92618-2084 Tel : 949-770-0400 Fax : 949-460-5602 |
|---|

3. Model Year: 2001

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

5. Engine Family: 1KAXC.899AAB
50s Engine Code: -
49s Engine Code: -
Calif. Engine Code: ZX900E-AC1

6. Emission Control System: PAIR, OC (2)

7. Calif. Designated Standard: 0.7gm/km

8. Projected Annual Sales:
CONFIDENTIAL

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

10. Displacement: 899 cm³

11. Number of Cylinders: 4

12. Cylinder Arrangement: Inline-4

13. Cylinder Head Configuration: DOHC

14. Type of Cooling: Liquid

15. Combustion Cycle: 4

16. Method of Aspiration: Natural

17. Fuel System: Carburetor

18. Number of Catalytic Converters: 2

19. Adjustable Parameters:

| Parameter(s) | Adjustable Range (or NA) | Tamper Resistance Method (or NA) | Method Approved |
|---|-----------------------------|---|-----------------|
| Air adjuster on carburetor (Air/Fuel Ratio) | NA | a tamper proof cap is placed over the adjusting screw. | Carry over |

20. AECDs In the Emission Control Systems:

| Exhaust System | Evaporative System |
|---|--|
| AECDs In System: <u>PAIR, OC (2)</u> | AECDs In System: <u>Sealed loop with canister</u> |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

Engine Family: 1KAXC.899AAB

Motorcycle Test Information Form

0.35

27. Are you carrying over test results from a previously certified family? Yes No
 a) If yes, indicate family name: WKAXC.899AAB
 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: ZX900-C1
29. Test Information Number: 98-1
30. Vehicle ID: JKAZX2C1XWA000006
31. Service Accumulation Duration: 15000 (km)
32. Maximum Rated Power: 104 kW @ 11000 RPM
33. Displacement: 899 cc
34. Certification Fuel: Indolene: 91-95 RON
35. Test Data Set: Test 1
36. Road Load: 143.6 nt at 65 kph
37. Inertia Mass: 340 kg
38. N/V: 41.09
39. EVAP. Bench Test Method Approved:
Date: 6/21/1985
Reference: EO M-1-61
40. Unscheduled Maintenance: Yes No
41. If yes, Vehicle Log provided: _____

42. Exhaust Emission Deterioration Factors:

| Test Number | System Kilometers | Emission Values | |
|---|-------------------|--------------------|--------------------|
| | | HC | CO |
| 1 | 3512 | 0.51 | 1.3 |
| 2 | 6012 | 0.47 | 1.9 |
| 3 | 6101 | 0.42 | 1.0 |
| 4 | 12012 | 0.45 | 1.1 |
| 5 | 12101 | 0.45 | 0.9 |
| 6 | 15012 | 0.39 | 1.7 |
| 7 *1 | 15084 | 0.57 | 1.6 |
| 8 *2 | 15114 | 0.59 | 1.6 |
| Interpolated Values at <u>15000</u> km: | | HC = <u>0.4103</u> | CO = <u>1.2592</u> |
| Extrapolated Values at <u>30000</u> km: | | HC = <u>0.3132</u> | CO = <u>1.2404</u> |

| | |
|---|-------------------------------------|
| Check one: | |
| Regular DF | <input checked="" type="checkbox"/> |
| Modified DF | <input type="checkbox"/> |
| If different vehicle specify vehicle ID | |
| | |

*1 This emission test was performed in order to confirm the previous EPA's approval test data which was submitted in 1998 model year certification.

*2 This emission test was performed with new parts(Air cleaner, Cab, ICM) and using fuel of 95-99 RON.

43. Emission Test Results:

| Official Test Results | | Test 1 | Test 2 | Test 3 | Test 4 |
|-----------------------|-----------------|--------|--------|--------|--------|
| g/km | CO | 1.7 | | | |
| g/km | CO ₂ | 157.1 | | | |
| g/km | HC | 0.39 | | | |
| g/test | Evap. | 0.721 | | | |

| Deterioration Factors |
|-----------------------|
| (X) 1.000 |
| ----- |
| (X) 1.000 |
| (+) 0.095 |

44. Certification Levels:

| | | | | | |
|--------|-------|--------------|--|--|--|
| g/km | CO | <u>2</u> | | | |
| g/km | HC | <u>0.4</u> | | | |
| g/test | Evap. | <u>0.816</u> | | | |

Application Processed by: Joseph Tegede Date: 10/13/2000 Reviewed by: [Signature] Date: 10/13/00