

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER M-3-296
Relating to Certification of New Motorcycles

YAMAHA 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 Yamaha 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 & Special Features</u> |
|----------------------|---|--------------|--|
| YYMXC.124GCA | 124 | I | Engine Modification |

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 certification emission values for this engine family:

| <u>Hydrocarbons (Standard) 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> |
|--|---|---|--|
| 1.0 | 0.6 | 12 | 8 |

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."

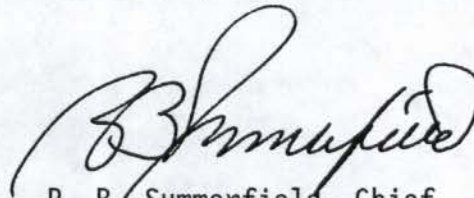
BE IT FURTHER RESOLVED: That these motorcycles are found exempt from compliance with the Air Resources Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" pursuant to Executive Order G-70-16-E.

YAMAHA MOTOR CO., LTD.

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Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 28th day of June 1999.

A handwritten signature in black ink, appearing to read "R. B. Summerfield", written in a cursive style.

R. B. Summerfield, Chief
Mobile Source Operations Division

Motorcycle Engine Family Information Form

1. Manufacturer: YAMAHA
 2. Certification Contact Person, address, phone and fax:

| | | |
|-----------|---|--|
| Name: | <u>Michael J. Schmitt</u> Division Manager Government Relations Yamaha Motor Corporation, U.S.A. | <u>Izumi Yamamoto</u> Engineer Engineering Administration Division Motorcycle Operations Group Yamaha Motor Co., Ltd. 2500 Shingai, Iwata-shi Shizuoka Pref. 438-8501, Japan (0538) 37-4148 (0538) 37-4095 |
| Address: | <u>6555 Katella Avenue</u> Cypress, California 90630 | |
| Phone No: | <u>(714) 761-7710</u> | |
| Fax. No: | <u>(714) 761-7303</u> | |

3. Model Year: 2000
 4. Process Code: Carry-over
 5. Engine Family: YYMXC.124GCA
 50s Engine Code: v
 49s Engine Code: ---
 Calif. Engine Code: ---
 6. Emission Control System: EM
 7. Calif. Designated Standard: N/A
 8. Projected Annual Sales: ---
 9. New Technology --- Yes v No
 If yes, cite the correspondence or reference the submittal document:

10. Displacement: 124cc
 11. Number of Cylinders: 1
 12. Cylinder Arrangement: N/A
 13. Cylinder Head Configuration: OHC
 14. Type of Cooling: Air
 15. Combustion Cycle: 4
 16. Method of Aspiration: Natural
 17. Fuel System: Carburetor
 18. Number of Catalytic Converters: N/A

19. Adjustable Parameters: N/A

| Parameter(s) | Adjustable Range (or NA) | Tamper Resistance Method (or NA) | Method Approved |
|--------------|--------------------------|----------------------------------|-----------------|
| | | | |
| | | | |
| | | | |
| | | | |

20. AECDS In the Emission Control Systems: N/A

| | |
|------------------------------------|--|
| Exhaust System AECDS In System: | Evaporative System AECDS In System: |
| | |

Processed by: H. Pryor Date: 6/23/99
 Reviewed by: S. Chen Date: 6/25/99

Engine Family: YYMXC.124GCA

Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family? Yes No
 a) If yes, indicate family name: FYA012441A0
 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: XC125C 36. Road Load: 115.1 NT at 65km/h
 29. Test Information Number: 50N 37. Inertia Mass: 200 kg
 30. Vehicle ID: JYA50N006FA000098 38. N/V: 87.9
 31. Service Accumulation Duration: 3 months 39. EVAP. Bench Test Method Approved:
 32. Maximum Rated Power: 8.5 kW @ 8000 RPM Date: January 12, 1982
 33. Displacement: 124 cc Reference:
 34. Certification Fuel: Unleaded Gasoline 40. Unscheduled Maintenance: Yes No
 35. Test Data Set: 9 41. If yes, Vehicle Log provided: _____

42. Exhaust Emission Deterioration Factors:

| Test Number | System Kilometers | Emission Values | |
|---|-------------------|-------------------|-------------------|
| | | HC | CO |
| 1 | 2348 | 0.46 | 9.0 |
| 2 | 3844 | 0.47 | 9.5 |
| 3 | 3870 | 0.43 | 7.8 |
| 4 | 6012 | 0.52 | 7.9 |
| 5 | 6038 | 0.49 | 7.6 |
| 6 | 6064 | 0.48 | 7.5 |
| 7 | 6089 | 0.40 | 5.2 |
| 8 | 6100 | 0.30 | 4.7 |
| 9 | 6126 | 0.30 | 5.8 |
| Interpolated Values at <u>6000</u> km: | | HC= <u>0.5056</u> | CO= <u>7.9391</u> |
| Extrapolated Values at <u>12000</u> km: | | HC= <u>0.6132</u> | CO= <u>6.0891</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 | 7.6 | | | |
| g/km | CO2 | 42.0 | | | |
| g/km | HC | 0.49 | | | |
| g/km | Evap. | 0.32 | | | |

| Deterioration Factors | |
|-----------------------|---------|
| (X) | 0.7670 |
| | --- |
| (X) | 1.2130 |
| (+) | -0.0096 |

44. Certification Levels:

| | | | | | |
|------|-------|-----|--|--|--|
| g/km | CO | 8 | | | |
| g/km | HC | 0.6 | | | |
| g/km | Evap. | 0.3 | | | |

