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State of California AIR RESOURCES BOARD

EXECUTIVE ORDER M-3-309 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:

Displacement <u>Engine Family Cubic Centimeters</u>		Class	Exhaust Emission Control Systems & Special Features			
YYMXC.249GCA	249	II	Pulsed Secondary Air Injection			

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:

Hydrocarbons (Standard)	Hydrocarbons (Certification)	Carbon Monoxide (Standard)	Carbon Monoxide (Certification)
Grams per Kilometer	Grams per Kilometer	Grams per Kilometer	Grams per Kilometer
1.0	0.6	12	7

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 ______day of November 1999.

R. B. Summerfield, Chief

Mobile Source Operations Division

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Engine Family: YYMXC.249GCA

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)
XV250C	V	249	49.0 / 66.0	8	16.4	7500	20.6	6000

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
XV250C	240		123. 2	148	156.05	MT-5	65.8

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Revised:

0.05

Motorcycle Engine Family Information Form

	Michael J. Schmitt Division Manager Government Relations Yamaha Motor Corporati 6555 Katella Avenue Cypress, California 9 (714) 761-7710 (714) 761-7303	Engineer Engineering on, U.S.A. Motorcycle Yamaha Moto 2500 Shinga Shizuoka Pr	Engineering Administration Divisio		
50s Engine 49s Engine Calif.Engi Emission Contr Calif.Designat Projected Annu New Technology If yes, cite the submittal	Carry-over YYMXC. 249GCA Code: Code: ne Code: vol System: PAIR ed Standard: N/A al Sales: Yes v No the correspondence or re document:	13. Cylinder He 14. Type of Coo 15. Combustion 16. Method of A 17. Fuel System 18. Number of C	Cylinders: <u>2</u> rrangement: <u>V-2 (60°)</u> ead Configuration: <u>OHC</u> oling: <u>Air</u> Cycle: <u>4</u> Aspiration: <u>Natural</u>		
Adjustable Par Parameter(Tamper Resistance Method (or NA)	Method Approved		
AECDs In the E Exhaust System AECDs In System		: N/A Evaporative System AECDs In System:			

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Engine Family: YYMXC.249GCA

Motorcycle Test Information Form

- 27. Are you carrying over test results from a previously certified family? v Yes No a) If yes, indicate family name: JYA024941S9
 - 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: XV250C
- 29. Test Information Number: 3BG
- 30. Vehicle ID: JYA3BGC06JA000099
- 31. Service Accumulation Duration: 3 months
- 32. Maximum Rated Power: 16.4 kW @ 7500 RPM
- 33. Displacement: 249 cc
- 34. Certification Fuel: Unleaded Gasoline
- 35. Test Data Set: 4

- 36. Road Load: 123.2 NT at 65km/h
- 37. Inertia Mass: 240 kg
- 38. N/V: 65.8
- 39. EVAP. Bench Test Method Approved:

Date: January 12, 1982

Reference:

40. Unscheduled Maintenance: Yes v No

41. If yes, Vehicle Log provided:

42. Exhaust Emission Deterioration Factors:

						Emiss	ion V	Values
Test Number	System	Ki	lomet	ers		HC		CO
1		26	02			0.65		6.6
2		62	02			0.64		6.1
3		62	32			0.62		6.0
4		90	21			0.62		6.8
5			-					
6		-				THE .		200
7			-					
Interpolated	Values	at	9000	km:	HC=	<u>0.6183</u>	C0=	6.4292
Extrapolated	Values	at	18000	km:	HC=	0.5756	C0=	6.5925

egular	
odified	DF
f diffe	rent vehicle
pecify	vehicle ID

43. Emission Test Results:

Official Test Results		Test 1	Test 2	Test 3	Test 4
g/km	СО	6.8			
g/km	CO2	50.9			
g/km	HC	0.62			
g/km	Evap.	0.28			

	Deterioration Factors
(X)	1.0254
(X)	0.9309
(+)	-0.1429

44. Certification Levels:

g/km	CO (1)	
g/km	HC 0.6	
g/km	Evap. 0.3	