Joseph J. Walker

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER M-43-1
Relating to Certification of New Motorcycles

APRILIA S.p.A.

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 Aprilia S.p.A. exhaust emission control systems are certified as described below for four-stroke gasoline-powered motorcycles:

Engine Family	Displacement Cubic Centimeters	Class	Exhaust Emission Control Systems & Special Features
YASPC0.65MLA	652	III	Dual 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 certification emission values for this engine family:

Hydrocarbons (Standard) Grams per Kilometer	Hydrocarbons (Certification) Grams per Kilometer	Carbon Monoxide (Standard) Grams per Kilometer	Carbon Monoxide (Certification) Grams per Kilometer
1.0	0.3	12	4

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 17th day of December 1999.

Raphael Susnowitz

for R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Family: YASPC0.65MLA

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)
Pegaso 650	**N/A**	**651.88**	**100 / 83**	**10° ± 2°**	**35**	**6.250**	**56.0**	**5.000**
				at 3000 rpm				

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
Pegaso 650	**280**	**276 - 285**	**131.4**	**200**	**218**	**M-5**	**43.1**

Motorcycle Engine Family Information Form

0.3

1. Manufacturer: **Aprilia S.p.a.**

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

Kathleen H. Wolf Harrison / Wolf 1275 N. Indian Hill Blvd. Claremont. CA 91711	tel: 909-626-1395 fax: 909-626-2906

3. Model Year: **2000**

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

5. Engine Family: **YASPC0.65MLA**
50s Engine Code: _____
49s Engine Code: _____
Calif. Engine Code: _____

6. Emission Control System: ~~catalyst~~ 2 OC

7. Calif. Designated Standard: **N/A**

8. Projected Annual Sales:
CONFIDENTIAL

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

10. Displacement: **651.88 cc**

11. Number of Cylinders: **1**

12. Cylinder Arrangement: **15° referring to the vertical axis**

13. Cylinder Head Configuration: **single - cylinder**

14. Type of Cooling: **liquid cooled**

15. Combustion Cycle: **4 stroke**

16. Method of Aspiration: **natural**

17. Fuel System: **carburetor**

18. Number of Catalytic Converters: **2**

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:

Exhaust System	Evaporative System
AECDs In System:	AECDs In System:

Application Processed by: Joseph Jegede Date: 12/15/99
Reviewed by: [illegible] Date: 12/15/99

Engine Family: YASPC0.65MLA

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: **Pegaso 650**

29. Test Information Number: **2129**

30. Vehicle ID: **ZD4ML0000WS103510**

31. Service Accumulation Duration: **15,000** km

32. Maximum Rated Power: **35** kW @ **6,250** RPM

33. Displacement: **651.88** cc

34. Certification Fuel: Indolene

35. Test Data Set: 1

36. Road Load: 131.4

37. Inertia Mass: **280 kg**

38. N/V: **43.1**

39. EVAP. Bench Test Method Approved:
    Date: _____
    Reference: _____

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	**3480**	**0.538**	**9.936**
2	**7992**	**0.488**	**6.389**
3	**8808**	**0.502**	**7.279**
4	**14880**	**0.275**	**4.463**
5			
6			
7			
Interpolated Values at 15,000 km:		**HC = 0.296**	**CO = 4.046**
Extrapolated Values at 30,000 km:		**HC = 0.066**	**CO = 2.904**

Check one:	
Regular DF	**1.000**
Modified DF	
If different vehicle specify vehicle ID	

43. Emission Test Results:

Official Test Results		Test 1	Test 2	Test 3	Test 4		Deterioration Factors
g/km	CO	**4.463**				**(X)**	**1.0**
g/km	CO^2	**0.121**					----------
g/km	HC	**0.275**				**(X)**	**1.0**
g/test	Evap.	**0.545**				**(+)**	**1.7**

44. Certification Levels:

g/km	CO	**4.463**			
g/km	HC	**0.275**			
g/test	Evap.	**0.927**			

Engine Family: YASPC0.65MLA

Evaporative Emission Information

45. Evaporative Family: **YASPE0024MLA**
46. Number of Evap. Canisters: **1**
47. Design Working Capacity: **0.24 l**
48. Configuration: _____
49. Number of Storage Areas: _____
50. Fuel Reservoir Volume: **22 l**
51. Vent System Configuration: **N/A**
52. Nominal Tank Capacity: **22 l**
53. Engine Displacement Class: **III**
54. Storage Medium Composition: **Active Carbon**
55. Evap. Canister Medium Volume:
56. Evap. Family Sales:
57. Engine Code: **R0471495**
58. Evap. Emission Family Code: **N./A**
59. Evap. Emission Family Group: **N/A**
60. **Overall Evap D.F. = 0.5**

Bench DF

61. Test Vehicle ID:
62. Test Results:

Test Number	System Kilometers	Evap. Emission Values (g/test)
1		
2		
3		
4		
5		
6		
7		
Interpolated Values at _____ km: = _____		
Extrapolated Values at _____ km: = _____		
Bench Test D.F. = _____		

Check One:	
Regular DF:	
Modified DF:	
If different vehicle specify the vehicle ID	

Vehicle DF

63. Test Vehicle ID: **ZD4ML0000WS103510**
64. Test Results.

Test Number	System Kilometers	Evap. Emission Values (g/test)
1	**3480**	**0.287**
2	**7992**	**0.149**
3	**8008**	**0.457**
4	**14880**	**0.545**
5		
6		
7		
Interpolated Values at 15,000 km: = 0.515		
Extrapolated Values at 30,000 km: = 0.878		
Vehicle Test D.F. = 1.706		