Joseph J.

| California Environmental Protection Agency AIR RESOURCES BOARD | CAREFREE CUSTOM CYCLES | EXECUTIVE ORDER M-47-1 New On-Road Motorcycles |
|---|---|---|

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 2000 model-year engine and emission control systems (ECS) produced by the manufacturer are certified as described below for four-stroke gasoline-powered motorcycles:

| Engine Family | Evaporative Family | Displacement ($cm^3$) | Class | ECS & Special Features |
|---|---|---|---|---|
| YCCCC01.9SRJ | YCCCE0066SRJ | 1639, 1754, 1853 | III | EM |

Vehicle Models (Equivalent Inertia Mass): Colorado (390 kg), Mojave (390 kg), Sierra (390 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:

| | HC | CO | Evap HC |
|---|---|---|---|
| Standard: (Effective Standard) | 1.4 | 12 | 2.0 (1.8) |
| Certification: | 1.0 | 8 | 0.9 |

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 21st day of September 2000.

Raphael Susnowitz

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

Issued:
Revised: E.O.#: M-47-1

# Motorcycle Engine Family Information Form

1. Manufacturer: **Carefree Custom Cycles**

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

| | |
|---|---|
| Kathleen H. Wolf<br>Harrison / Wolf<br>1275 N. Indian Hill Blvd.<br>Claremont, CA 91711 | tel. 909-626-1395<br>fax. 909-626-2906 |

3. Model Year: **2000**

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

5. Engine Family: **YCCCC01.9SRJ**
   50s Engine Code: _____
   49s Engine Code: X
   Calif. Engine Code: X

6. Emission Control System: **EM**

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: **1639, 1754, 1853 cc**

11. Number of Cylinders: **2**

12. Cylinder Arrangement: **45° V-Twin**

13. Cylinder Head Configuration: **OHV**

14. Type of Cooling: **Air**

15. Combustion Cycle: **4 stroke**

16. Method of Aspiration: **normal**

17. Fuel System: **carbureted**

18. Number of Catalytic Converters: n/a

19. Adjustable Parameters:

| 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: |

Issued:
Revised: E.O.#: M-47-1

**Engine Family: YCCCC01.9SRJ**

# Motorcycle Test Information Form

27. Are you carrying over test results from a previously certified family? ___ Yes X No 0.04
    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: **Colorado**

29. Test Information Number: **1**

30. Vehicle ID: **AZ224039**

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

32. Maximum Rated Power **102** kW @ **5500** RPM

33. Displacement **1639** cc

34. Certification Fuel: **Indolene**

35. Test Data Set: **1**

36. Road Load: **153.8**

37. Inertia Mass: **390 kg**

38. N/V: **26.4**

39. EVAP. Bench Test Method Approved:
    Date: **N/A**

    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 | **3523** | **0.8340** | **9.0340** |
| 2 | **5050** | **0.7440** | **10.1620** |
| 3 | **6457** | **0.7140** | **10.2200** |
| 4 | **8207** | **0.8860** | **8.1740** |
| 5 | **12083** | **0.8170** | **7.5120** |
| 6 | **14986** | **0.8790** | **7.6020** |
| 7 | | | |
| **Interpolated Values at 15000 km:** | | **HC = 0.865** | **CO = 7.335** |
| **Extrapolated Values at 30000 km:** | | **HC = 0.983** | **CO = 4.049** |

| Check one: | |
|---|---|
| Regular DF | X |
| 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 | **7.6020** | | | | **(X)** | **1.000** |
| g/km | $CO^2$ | **133.497** | | | | | _____ |
| g/km | HC | **0.8790** | | | | **(X)** | **1.137** |
| g/test | Evap. | **0.420** | | | | **(+)** | **0.5** |

44. Certification Levels:

| | | | | | |
|---|---|---|---|---|---|
| g/km | CO | 7.602 | | | |
| g/km | HC | 0.999 | | | |
| g/test | Evap. | 0.920 | | | |

Application Processed by: Joseph Jegede Date: 9/21/2000
Reviewed by: [illegible] Date: 9/21/2000

**Engine Family: YCCCC01.9SRJ**

# Evaporative Emission Information

45. Evaporative Family: **YCCCE0066SRJ**
46. Number of Evap. Canisters: 1
47. Design Working Capacity: _____
48. Configuration: _____
49. Number of Storage Areas: _____
50. Fuel Reservoir Volume: _____
51. Vent System Configuration: _____
52. Nominal Tank Capacity: **5 gal.**
53. Engine Displacement Class: **III**
54. Storage Medium Composition: **charcoal**
55. Evap. Canister Medium Volume:
56. Evap. Family Sales: 40
57. Engine Code: _____
58. Evap. Emission Family Code: **YCCCE0066SRJ**
59. Evap. Emission Family Group: _____
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: **AZ224039**
64. Test Results.

| Test Number | System Kilometers | Evap. Emission Values (g/test) |
|---|---|---|
| 1 | **14986** | **0.420** |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| **Interpolated Values at _____ km: = _____** | | |
| **Extrapolated Values at _____ km: = _____** | | |
| **Vehicle Test D.F. = 0.5** | | |