

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-389  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

MIKUNI AMERICAN CORPORATION  
HSR42-4-K 42 MM CARBURETOR

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the HSR42-4-K Carburetor manufactured by Mikuni American Corporation, 8910 Mikuni Ave., Northridge, California, 91324 has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for 1990 to 1994 Harley-Davidson motorcycles equipped with a carbureted 1340 Evolution engine.

The Mikuni 42 mm carburetor is designed to replace the stock 40 mm carburetor, the carburetor's fuel jet is part no. N100.604-160, and the A/F ratio is factory set at 1 1/4 turns outward and sealed with a tamper proof cap.

This Executive Order is valid provided that the installation instructions for the HSR42-4-K Carburetor will not recommend tuning the motorcycle to specifications different from those of the motorcycle manufacturer.

Changes made to the design or operating conditions of the HSR42-4-K Carburetor, as exempt by the Air Resources Board, which adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the HSR42-4-K Carburetor using any identification other than that shown in this Executive Order or marketing of the HSR42-4-K Carburetor for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the HSR42-4-K Carburetor shall not be construed as an exemption to sell, offer for sale, or advertise any component of the kit as an individual device.


This Executive Order does not constitute any opinion as to the effect that the use of the HSR42-4-K Carburetor may have on any warranty either expressed or implied by the vehicle manufacturer.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF MIKUNI AMERICAN CORPORATION'S HSR42-4-K CARBURETOR.

No claim of any kind, such as "Approved by the Air Resources Board" may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after ten day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination after hearing that grounds for revocation exist.

Executed at El Monte, California, this 12<sup>th</sup> day of December 1995.

  
R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

State of California  
AIR RESOURCES BOARD

EVALUATION OF MIKUNI AMERICAN CORPORATION'S HSR42-4-K CARBURETOR  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE  
SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE  
CALIFORNIA CODE OF REGULATIONS

December 1995

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AIR RESOURCES BOARD

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by

Mobile Source Division  
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(This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.)

SUMMARY

Mikuni American Corporation of 8910 Mikuni Ave., Northridge, California, 91324 has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for the HSR42-4-K Carburetor designed for 1990 to 1994 Harley-Davidson motorcycles equipped with a carbureted 1340 Evolution engine.

Based on comparative emissions testing of the 42 mm carburetor on a 1994 Harley-Davidson 1340 Evolution, the staff concludes that the HSR42-4-K Carburetor will not adversely affect exhaust emission from Harley-Davidson motorcycles for which the exemption is requested.

The staff recommends that Mikuni American Corporation be granted an exemption as requested and that Executive Order D-389 be issued.

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I. INTRODUCTION

Mikuni American Corporation of 8910 Mikuni Ave., Northridge, California, 91324 has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for the HSR42-4-K Carburetor designed for 1990 to 1994 Harley-Davidson motorcycles equipped with a carbureted 1340 Evolution engine.

II. CONCLUSIONS

Based on comparative emissions testing of the 42 mm carburetor on a 1994 Harley-Davidson 1340 Evolution, the staff concludes that the HSR42-4-K Carburetor will not adversely affect exhaust emission from Harley-Davidson motorcycles for which the exemption is requested.

III. RECOMMENDATION

The staff recommends that Mikuni American Corporation be granted an exemption for their HSR42-4-K Carburetor for installation on 1990 to 1994 Harley-Davidson motorcycles equipped with a carbureted 1340 Evolution engine. The staff also recommends that Executive Order D-389 be issued.

IV. CARBURETOR DESCRIPTION

The HSR42-4-K Carburetor are specifically designed for installation on 1990 to 1994 Harley-Davidson motorcycles equipped with a carbureted 1340 Evolution engine. The function of the Mikuni HSR42-4-K 42 mm carburetor is to replace the existing carburetor without any modifications to the OEM air cleaner or intake manifold. A replacement chrome air cleaner cover is included with the carburetor kit.

The Mikuni carburetor is a slide type carburetor. The air fuel mixture

is preset at the factory to 1 1/4 turns outward and sealed with a tamper proof cap. The only adjustment which can be performed without dismantling of carburetor is idle speed, which must be adjusted to manufacturers specifications.

The HSR42-4-K Carburetor is delivered from the factory with the N100.604-160 fuel jet and pre-set to certified configuration. According to the manufacturer, the carburetor does not require maintenance to maintain the air/fuel mixture at the certified setting. No other emission control components are modified or removed.

V. DISCUSSION OF THE CARBURETOR

A 1994 Harley-Davidson equipped with a 1388 cc engine was used for the evaluation of the HSR42-4-K Carburetor. The emission tests conducted by California Environmental Engineering in Santa Ana, California, for Mikuni American Corporation, consisted of one Cold Start CVS-75 emission test in the baseline configuration followed by one Cold Start CVS-75 emission test in the modified configuration (42 mm carburetor installed). The ARB did not perform emissions testing to confirm the test results submitted by the applicant. A summary of the test results is shown below:

Test	Exhaust Emission Test Results	
	Exhaust Emissions (gm/km)	
<u>Mode</u>	<u>HC</u>	<u>CO</u>
Baseline	0.97	15.03
Device	0.51	5.21
Difference	- 0.46	- 9.82

The comparative CVS-75 emission test results at California Environmental



Engineering indicates the motorcycle is within the allowable increases of 0.1 gm/mi or 10% for HC and 1.0 gm/mi or 15% for CO when results are converted to gm/km. Therefore, based on the test results, the staff concludes that the installation of the HSR42-4-K Carburetor will not have an adverse effect on exhaust emissions of the affected motorcycles.

Mikuni American Corporation has submitted all the required information and fulfilled the requirements for an exemption.