

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-157-3  
Relating to Exemptions under Section 27156  
of the Vehicle Code

JAM ENGINEERING CORPORATION

JAM CARBURETOR CONVERSION KIT USING WEBER MODEL  
32/36 DGAV 038 OR  
32/36 DGAV 44K1 CARBURETORS

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 Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the JAM Carburetor Conversion Kit No. C-101 manufactured by JAM Engineering Corporation has been found not to reduce the effectiveness of required motor vehicle pollution control devices and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the vehicles listed below:

| <u>Year</u> | <u>Make</u> | <u>Model</u> | <u>Engine (CID)</u> | <u>JAM<br/>Kit No.</u> | <u>Weber<br/>Carburetor</u>          |
|-------------|-------------|--------------|---------------------|------------------------|--------------------------------------|
| 1972-1976   | BMW         | 2002         | 2.0L (121)          | C-101                  | 32/36 DGAV 038 or<br>32/36 DGAV 44K1 |

This Executive Order is valid provided that installation instructions for this device will not recommend tuning the vehicle to specifications different from those submitted by the device manufacturer.

Changes made to the design or operating conditions of the device, as exempted by the Air Resources Board, that adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of this device using an identification other than that shown in this Executive Order or marketing of this device 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 a kit shall not be construed as an exemption to sell, offer for sale, or advertise any component of a kit as an individual device.

This Executive Order does not constitute any opinion as to the effect that the use of this device 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 THE JAM ENGINEERING CORPORATION KIT NO. C-101.

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

Section 17500 of the Business and Professions Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

Section 43644 of the Health and Safety Code provides as follows:

"43644. (a) No person shall install, sell, offer for sale, or advertise, or, except in an application to the state board for certification of a device, represent, any device as a motor vehicle pollution control device for use on any used motor vehicle unless that device has been certified by the state board. No person shall sell, offer for sale, advertise, or represent any motor vehicle pollution control device as a certified device which, in fact, is not a certified device. Any violation of this subdivision is a misdemeanor."

Any apparent violation of the conditions of this Executive Order will be submitted to the Attorney General of California for such action as he deems advisable.

Executive Order D-157, dated August 20, 1985, is superseded and of no further force and effect.

Executed at El Monte, California, this 11th day of August, 1986.

*Bob Cross for*

K. D. Drachand, Chief  
Mobile Source Division

State of California  
AIR RESOURCES BOARD

EVALUATION OF THE JAM ENGINEERING CORPORATION  
CARBURETOR CONVERSION KIT NO. C-101  
USING WEBER CARBURETORS FOR EXEMPTION FROM  
THE PROHIBITIONS OF VEHICLE CODE SECTION 27156  
IN ACCORDANCE WITH SECTION 2222, TITLE 13  
OF THE CALIFORNIA ADMINISTRATIVE CODE

AUGUST, 1986

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OF THE CALIFORNIA ADMINISTRATIVE CODE

by

Mobile Source Division  
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AIR RESOURCES BOARD  
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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

JAM Engineering Corporation (JAM) has requested an update to their exemption from the prohibitions of Vehicle Code Section 27156 for the JAM Carburetor Conversion Kit No. C-101. The JAM Carburetor Conversion Kit replaces the original equipment Solex 32/35 DIDTA carburetors on 1972-1976 model-year BMW 2002 model vehicles. The request is to include an additional model of Weber carburetor on the exemption. The original exemption allowed the use of the Weber model 32/36 DGAV 03B carburetor. JAM requests that the Weber model 32/36 DGAV 44K1 carburetor be included on the exemption because the 32/36 DGAV 03B is not available to them anymore and the 32/36 DGAV 44K1 is functionally identical to the 32/36 DGAV 03B.

Based on an examination of the 32/36 DGAV 44K1 and a comparison of it to the 32/36 DGAV 03B, the staff concludes that the 32/36 DGAV 44K1 should have the same degree of performance/emissions impact as the 32/36 DGAV 03B when used in the JAM C-101 carburetor conversion kit. The staff recommends that the update be granted as requested and that Executive Order D-157-3 be issued.

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EVALUATION OF THE JAM ENGINEERING CORPORATION CARBURETOR CONVERSION KIT NO. C-101 USING WEBER CARBURETORS FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13 OF THE CALIFORNIA ADMINISTRATIVE CODE

I. INTRODUCTION

JAM Engineering Corporation (JAM) of Monterey, California, received an exemption from the prohibitions of Vehicle Code Section 27156 for their carburetor conversion kit No. C-101 under Executive Order (E.O.) D-157 on August 20, 1985. The E.O. allowed the use of the Weber model 32/36 DGAV 03B carburetor to replace the original equipment manufacturer (OEM) Solex 32/35 DIDTA carburetors as found on 1972-1976 BMW 2002 vehicles.

Recently, the supply of Weber 32/36 DGAV 03B (03B) carburetors has been replaced with the model 32/36 DGAV 44K1 (44K1). JAM has requested that their exemption be updated to include the Weber 32/36 DGAV 44K1 carburetor.

II. CONCLUSIONS

Based on the examination of the 44K1 carburetor submitted by JAM, the staff has determined that the 44K1 carburetor would have the same degree of performance/emissions impact as the 03B carburetor when used in the JAM C-101 kit on 1972-1976 BMW 2002 vehicles.

III. RECOMMENDATIONS

The staff recommends that JAM be granted the update to the exemption and that Executive Order D-157-3 be issued for the JAM carburetor conversion kit C-101 using the model 32/36 DGAV 03B or model 32/36 DGAV 44K1 Weber carburetors for the years, make, and model of vehicles listed below:

| <u>Years</u> | <u>Make</u> | <u>Model</u> | <u>Engine Description</u> |
|--------------|-------------|--------------|---------------------------|
| 1972-1976    | BMW         | 2002         | 121 CID (2.0L)            |

#### IV. EVALUATION AND DISCUSSION

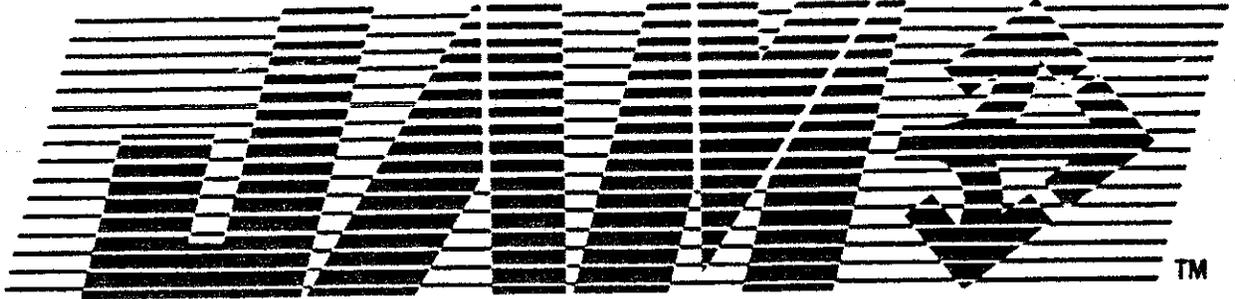
The evaluation of JAM's request consisted of an examination of the 44K1 carburetor and a comparison of it to the 03B carburetor to determine if it would have the same degree of performance/emissions impact as the 03B carburetor.

The 44K1 is an updated version of the 03B with some additional features. These features are (1) a reversible fuel inlet and (2) an exhaust gas recirculation (EGR) port. The reversible fuel inlet does not affect the performance of the carburetor in any way and the EGR port is not required for the C-101 kit and it can be plugged. The jetting of the 44K1 was examined and found to be identical to the 03B carburetor.

Based on the examination, the staff has determined that the 44K1 carburetor is equivalent to the 03B carburetor with respect to emissions. Therefore, the staff recommends that the Weber 32/36 DGAV 44K1 be included in the exemption of the JAM C-101 kit and that Executive Order D-157-3 be issued.

C-101

“THE BEST BY DESIGN”



TM

**ENGINEERING CORPORATION**

# Instruction manual

A large rectangular area with rounded corners, containing numerous horizontal lines for writing. Two black circular punch holes are visible on the left side of the page.

**CONVERSIONS**PLEASE READ INSTRUCTIONS PRIOR TO CONVERSION

## INSTALLATION INSTRUCTIONS C-101 CONVERSION

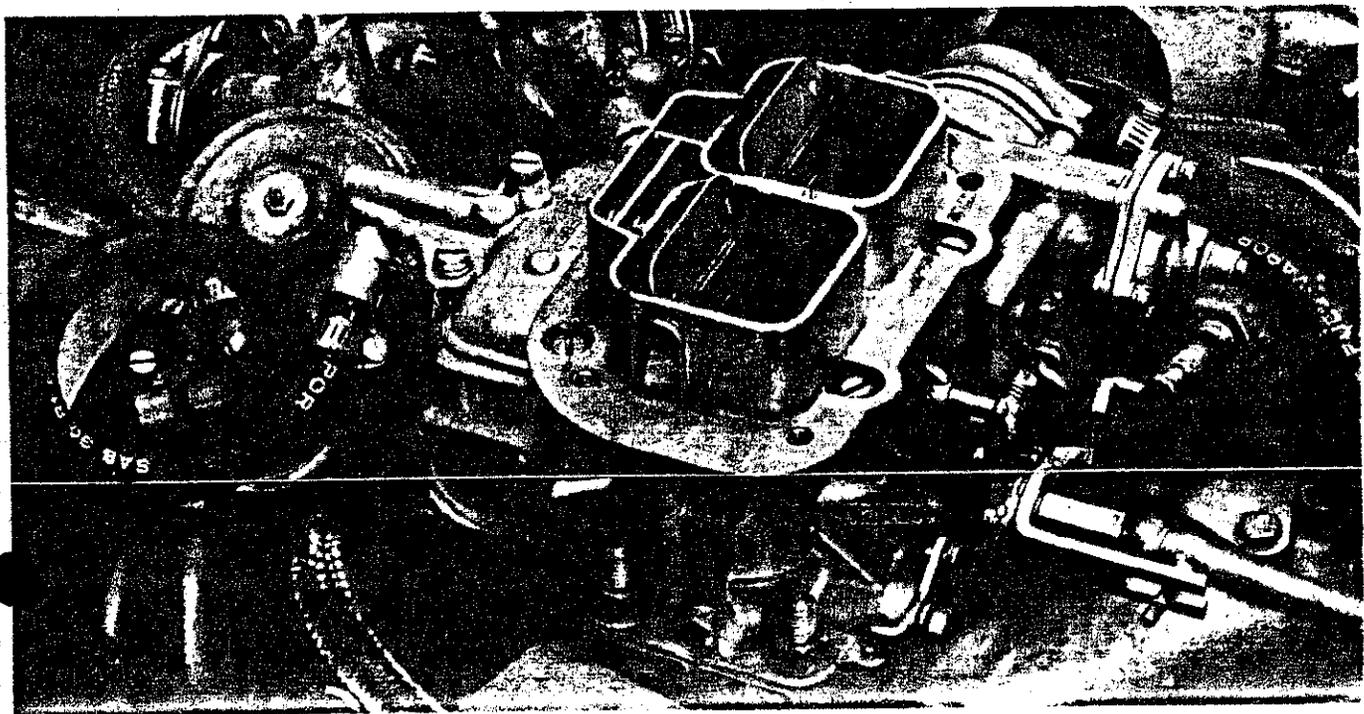
## BMW 4 CYLINDER 2002, MODELS 1972-76

1. REMOVE THE BATTERY GROUND TO AVOID FIRES.
2. DRAIN ABOUT ONE GALLON OF COOLANT.
3. REMOVE AND RETAIN THE STOCK AIR CLEANER - INSTRUCTIONS FOR ITS MODIFICATION WILL BE FOUND BELOW. REMOVE BOTH AIR CLEANER BRACKETS AND REPLACE THE BOLTS AND NUTS. (LABEL VACUUM HOSES "PORTED" FOR THOSE ABOVE THROTTLE PLATES AND "MANIFOLD" FOR THOSE THAT ATTACH BELOW THE THROTTLE PLATES.)
4. REMOVE THE STOCK CARBURETOR INCLUDING THE WATER CHOKE HOSES AND FUEL LINE TO THE PRESSURE REGULATOR. REMOVE THE THROTTLE LINKAGE BY FIRST WITHDRAWING THE WIRE CLIP WHICH RETAINS THE BALL SOCKET ENABLING THE BALL TO BE EASILY WITHDRAWN.
5. REMOVE THE LONG NUT WITH BALL-JOINT END FROM THE STOCK CARBURETOR.
6. REMOVE THE CARBURETOR ARM FROM THE WEBER CARBURETOR AND INSTALL THE NEW ARM PROVIDED SO THAT THE LONG ARM EXTENDS TOWARD YOU AND IS TO THE LEFT OF THE CARBURETOR SHAFT AS YOU FACE IT. SECURE THE ARM USING THE LOCKING WASHER FROM THE WEBER CARBURETOR AND THE BALL-JOINT NUT REMOVED FROM THE STOCK CARBURETOR. Do NOT OVERTIGHTEN - TO DO SO WILL LEAD TO "STICKY" THROTTLE ACTION. (SEE PHOTO)
7. REMOVE THE ORIGINAL WEBER WATER CHOKE HOUSING AND REPLACE IT WITH THE 5/16 WATER CHOKE HOUSING SUPPLIED IN THE KIT. ORIENT THE

OUTLETS SO THAT THEY POINT TOWARDS THE BACK OF THE CAR AND DOWN-  
ARD AT A 45° ANGLE WHEN INSTALLED.

8. MOUNT THE CARBURETOR USING THE TWO GASKETS AND INSULATOR SUPPLIED IN THE CONVERSION, GASKET-INSULATOR-GASKET. NOTE: THE GASKETS AND INSULATOR ARE NOT SYMMETRICAL AND MUST BE INSTALLED TO MATCH THE CARBURETOR BASE.
9. INSTALL THE CARBURETOR LINKAGE, AS SHOWN IN PHOTO, REPLACING THE WIRE CLIP REMOVED IN STEP 4.
10. LOOSEN THE FUEL PRESSURE REGULATOR BRACKET BOLTS AND REORIENT THE FUEL REGULATOR TO CLEAR THE WEBER CARBURETOR, BENDING THE BRACKET SLIGHTLY IF NECESSARY. RETIGHTEN THE BRACKET BOLTS.
11. INSTALL THE 9 INCH LENGTH OF 5/16" FUEL LINE SUPPLIED, WITH THE HOSE CLAMPS SUPPLIED.
12. INSTALL THE CHOKE WATER LINES USING THE TWO 14 INCH HOSES AND HOSE CLAMPS SUPPLIED. THE LOWER CHOKE HOUSING OUTLET SHOULD BE CONNECTED TO THE BLOCK FITTING AND THE UPPER CHOKE HOUSING OUTLET TO THE MANIFOLD FITTING.
13. RECONNECT THE VACUUM LINES USING THE "TEE" OR "CROSS" AND 2 INCH VACUUM HOSE SUPPLIED AS NECESSARY TO SUPPLY "PORTED" AND/OR "MANIFOLD" CONNECTIONS. NOTE: FOR CONVERSIONS SUPPLIED WITH IDLE CIRCUIT SOLENOID ONLY: INSTALL THE JAM IDLE CIRCUIT SOLENOID KIT FOLLOWING THE INSTRUCTIONS SUPPLIED WITH THAT CONVERSION AND CONNECT THE STOCK ELECTRIC SOLENOID LEAD TO THE JAM SOLENOID.
14. NEXT, MODIFY THE AIR CLEANER. INVERT THE STOCK AIR CLEANER AND REMOVE THE RUBBER GASKET FROM THE DOWNSPOUT.
15. LOCATE THE JAM AIRCLEANER ADAPTOR ON THE BOTTOM OF THE AIRCLEANER HOUSING AND SPOT THE THREE 17/64 HOLES. DRILL THRU THE AIR CLEANER HOUSING USING THE ADAPTOR AS A GUIDE.
16. CUT 3/8 INCH FROM THE BOTTOM OF THE AIR CLEANER DOWNSPOUT.

17. REMOVE THE AIRCLEANER HOLDOWN STUD FROM THE WEBER ON THE PRIMARY SIDE TO THE REAR OF THE CAR. NOTE: MANUAL CHOKE CARBURETORS ALSO REQUIRE REPLACEMENT OF THE STOCK SHORT 5MM STUDS WITH LONG 5MM ALLEN SCREWS SUPPLIED IN THE CONVERSION.
18. ASSEMBLE THE JAM ADAPTER AND AIRCLEANER HOUSING TO THE WEBER CARBURETOR USING THE GASKETS SUPPLIED BETWEEN THE ADAPTER AND THE CARBURETOR AND THE ADAPTER AND THE AIRCLEANER HOUSING. THREE 6MM NYLOCK NUTS AND FENDER WASHERS (AUTOMATIC CHOKE CARBURETORS) ARE INCLUDED, TO SECURE THE AIRCLEANER ASSEMBLY TO THE WEBER CARBURETOR.
19. REFILL THE COOLING SYSTEM AND CHECK FOR LEAKS.
20. START ENGINE AND BRING TO OPERATING TEMPERATURE.
21. ADJUST IDLE SPEED AND IDLE MIXTURE FOR OPTIMUM PERFORMANCE. ADJUST THE AUTOMATIC CHOKE ONLY IF NECESSARY. IN GENERAL, THE WEBER CARBURETORS ARE IN EXCELLENT ADJUSTMENT AS THEY COME FROM THE BOX AND REQUIRE LITTLE OR NO FINE TUNING. INSTALLATION IS NOW COMPLETE.



## NOTICE

ALTERATION OF INDUCTION SYSTEMS OF VEHICLES USED ON THE STREETS MAY BE CONTRARY TO LOCAL OR FEDERAL LAW. CONSULT APPROPRIATE LEGAL AUTHORITIES PRIOR TO MODIFYING ANY VEHICLE DRIVEN ON PUBLIC STREETS. JAM ENGINEERING ASSUMES NO LIABILITY FOR CONSEQUENTIAL DAMAGES RESULTING FROM THE INSTALLATION OF ANY PRODUCT OR PART PROVIDED.

## JAM ENGINEERING WARRANTY

IT IS JAM ENGINEERING'S GOAL TO PROVIDE OUR CUSTOMERS WITH THE HIGHEST QUALITY PRODUCTS AVAILABLE. JAM WARRANTS EACH NEW PRODUCT TO BE FREE FROM DEFECTS IN BOTH WORKMANSHIP AND MATERIAL TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE, PROVIDED THAT THE PRODUCT IS PROPERLY INSTALLED AND SUBJECTED TO NORMAL USE AND SERVICE AND THAT THE PRODUCT IS NOT MODIFIED OR CHANGED IN ANY WAY.

CUSTOMERS REQUIRING WARRANTY SERVICE SHOULD CONTACT THE DEALER FROM WHOM THEY PURCHASED THE PRODUCT. IN TURN THE DEALER WILL CONTACT JAM ENGINEERING, AND WE WILL DETERMINE THE METHOD OF SATISFYING THE WARRANTY. THIS WARRANTY COVERS ONLY THE PRODUCT ITSELF AND NOT THE COST OF INSTALLATION OR REMOVAL.

## DISCLAIMER OF WARRANTIES

JAM ENGINEERING EXPRESSLY DISCLAIMS LIABILITY FOR ANY AND ALL CONSEQUENTIAL DAMAGES OCCASIONED BY THE BREACH OF ANY WRITTEN OR IMPLIED WARRANTY PERTAINING TO THIS SALE, IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT SOLD. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.