

INSTALLATION INSTRUCTIONS



READ & UNDERSTAND ALL STEPS OF THESE INSTRUCTIONS BEFORE BEGINNING THIS INSTALLATION. AFTER UNPACKING, EXAMINE THE CARBURETOR AND OTHER COMPONENTS FOR SHIPPING DAMAGE.

NOTE: THESE INSTRUCTIONS SHOULD BE RETAINED WITH VEHICLE RECORDS AFTER INSTALLATION OF THIS KIT FOR SMOG INSPECTION PURPOSES.

BMW 2002 **1972 to 1976** **For Kit Nos. K8205 and 52-52303** **Using Weber 32/36 DGAV-33B1**

TOOLS AND EQUIPMENT NEEDED:

Combination, box or open-end wrenches (metric)
Socket Set (Metric)
Screwdrivers (regular and Phillips)
Pliers
Wiping Rags
Knife
Gasket Scraper
Cleaning Solvent
Gasket Sealer

PARTS SUPPLIED WITH INSTALLATION KIT

1 — Weber Carb., 32/36 DGAV-33B
1 — Air Filter Adaptor
1 — Water Choke Line
1 — Hardware Kit

**NOTE: A NEW FUEL FILTER SHOULD BE
INSTALLED WITH THIS KIT.**

TUNE-UP SPECIFICATIONS

All tune-up specifications for the Weber Carburetor remain the same as those specified by the Factory for the original unit. Emissions tune-up should be carried out by a suitably qualified Dealer or Independent garage, using infrared gas analyzing equipment.

NOTE: Late model vehicles fitted with Emission Control Systems have many vacuum lines and electrical connections in their fuel systems. It is essential when dismantling, that disconnected lines be identified with a corresponding number tag or label system. To establish function, locate and identify the source of each line. Use the factory service manual, or the under hood emissions system diagram for reference when identifying hoses. (MODIFIED VACUUM DISGRAMS SHOWING THE WEBER INSTALLATION ARE PROVIDED IN THESE INSTRUCTIONS.)

1. Remove the vehicle's gas cap.
2. Disconnect the battery.
3. Remove the air filter assembly and attached components. Identify all lines for proper reassembly.
4. Drain the coolant from the radiator and remove the water choke lines from the carburetor and engine block. (New hoses will be installed later.) **CAUTION: Be sure engine is cold when performing this step to avoid injury from hot coolant.**
5. Disconnect the vacuum hoses and electrical wires from the stock carburetor. Use your under-hood emissions system diagram or a factory service manual to identify and label the carburetor vacuum hoses for proper reassembly.
6. Remove the fuel line from the carburetor. Plug the end of the fuel line to prevent leakage.
7. Disconnect the throttle linkage from the carburetor. Retain any clips or springs for use later.
8. Remove the carburetor mounting nuts and lift off carburetor. Remove the throttle shaft nut from the original carburetor and retain for use later. Insert a clean rag in the intake ports and thoroughly clean the carburetor mounting surface.
9. Remove the stock throttle positioner (dashpot) and bracket from the intake manifold. The vacuum hose for this device should be removed and the vacuum source should be capped-off, using the rubber plug provided in the kit. (This part will not be used on the Weber carburetor.) Remove the throttle shaft nut from the Weber carburetor and replace it with the original throttle shaft nut removed in step # 8. **CAUTION: Do not over-tighten the nut.** Proper tightness can be achieved by installing the nut just slightly more than finger tight. After tightening, open the choke by hand and check for full throttle operation from the idle position to wide open throttle. If any sticking or binding occurs, loosen the nut and retighten with reduced torque. Recheck throttle operation. When proper tightness has been achieved, secure the nut by bending the tab on the lock washer.

This kit is sold under the provisions of California Air Resources Board Executive Order No. D-133-6 (C.A.R.B.E.O. No. D-133-6) Products with C.A.R.B.E.O. numbers are exempt from the prohibitions of Section 27156 of the California Vehicle Code. Performance kits so noted are legal for use on public highways in California.

SIDE VIEW

Not Used

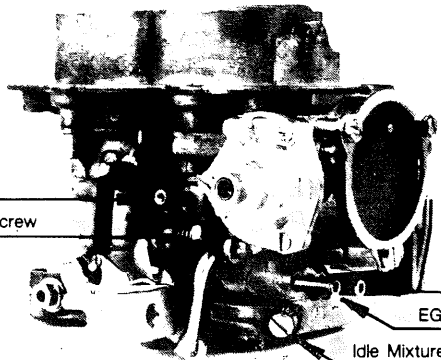
Idle Speed Screw

Not Used

EGR Port

Idle Mixture Screw

FIG.A



1972-73 50 STATES

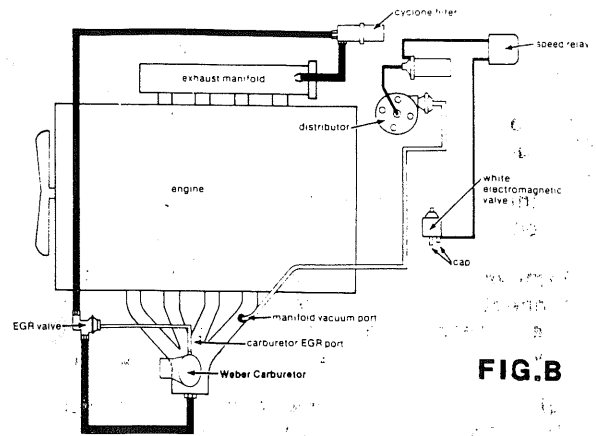


FIG.B

1974 50 STATES

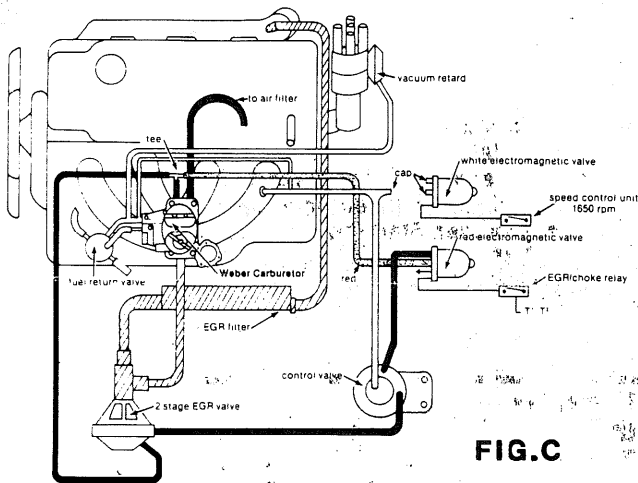


FIG.C

1975 50 STATES 1976 CAL. ONLY

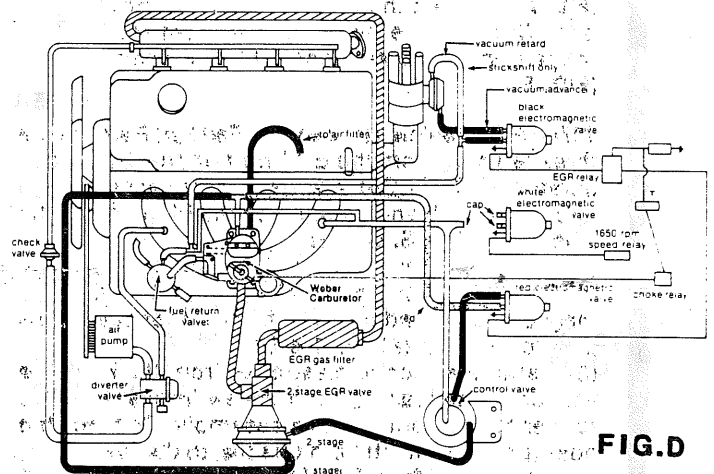


FIG.D

1976 49 STATES

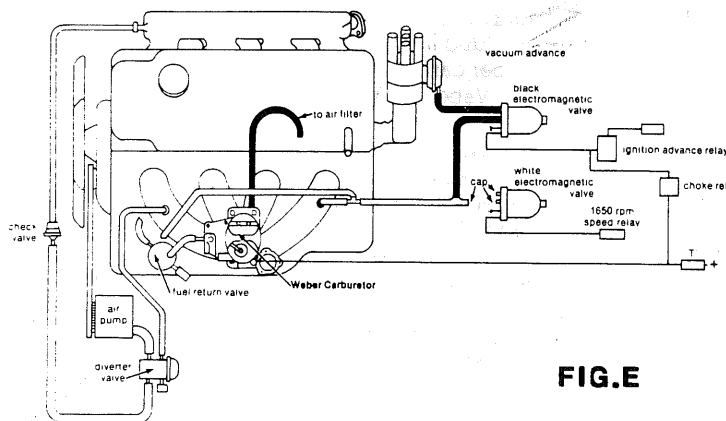


FIG.E

TOP VIEW

Fast Idle Screw

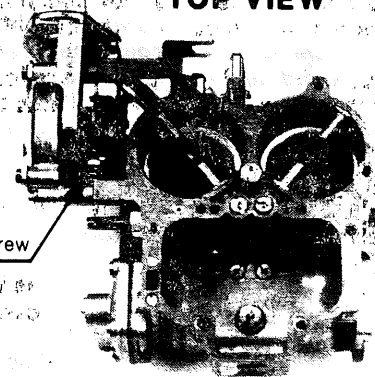


FIG.F

(CARB.TOP COVER REMOVED)

10. Remove the rags from the intake ports and install the new flange gasket and Weber carburetor. (Linkage facing the firewall). Install the mounting nuts and tighten them down in a diagonal pattern. **CAUTION: Do not over-tighten carburetor mounting nuts. Max. torque should not exceed 7 ft. lbs.**
11. Connect the original idle cut-off solenoid wire to the Weber idle cut-off solenoid.
12. Remove the plug from the end of the fuel line and connect it to the Weber carburetor. A new in-line filter is recommended to be installed with this kit. New fuel hose and clamps are provided in the kit.
13. Using the new water hose and clamps supplied in kit, reconnect the choke hoses to the engine block.
14. Electric assist choke will not be used with this conversion. If the vehicle was equipped with electric assist choke (EAC) the wire that provided power to the EAC must be insulated to prevent a short circuit.
15. **1972-73 Vehicles (50 States):** Remove the threaded plug from the EGR port on the Weber carburetor. (FIG. A) Connect the EGR valve vacuum hose to this port. Connect the distributor vacuum retard hose to the port on the #4 runner of the intake manifold. (FIG. B)
16. **1974-76 All Vehicles (except '76 Fed.) (A)** Remove the threaded plug from the EGR port on the Weber carburetor. (FIG. A) Cut a 2" length of vacuum hose (provided in kit) and install it on the EGR port of the carburetor. (FIGS. C & D)
(B) Install the plastic tee from the kit into the hose. Connect the vacuum hose from the RED electromagnetic valve and the hose from the 1st stage EGR port to this tee. (FIGS. C & D)
(C) Install the second plastic tee from the kit in the vacuum hose leading from the #4 intake manifold runner to the control valve assembly. Connect the hose (provided in kit) from this tee, to the fuel return valve tee. (NOTE: THE FUEL CONTROL VALVE TEE WAS ORIGINALLY CONNECTED TO THE STOCK CARBURETOR.) (FIGS. C & D)
17. **1976 Fed. Vehicles, Only:** Do not remove the threaded plug from the EGR port. (This vacuum connection is not required.) Install the plastic tee from the kit in the vacuum hose leading from the #4 intake manifold runner. Use the hose provided in the kit to connect the fuel return valve to the tee. (FIG. E)
18. **ALL VEHICLES:** Using the rubber cap plugs supplied in the kit cap off the two ports on the white electromagnetic valve. (FIGS. B-E)
1974-76 VEHICLES: Cap the unused port of the vacuum tee leading to the #4 runner & the control valve assembly. (FIGS. C-E)
19. Install the air filter adapter on the Weber carburetor using the four long bolts and lock-washers supplied in the kit.
20. Reconnect the throttle linkage to the carburetor using the original clips and springs removed in step 7. Check throttle operation for free movement. If there is any indication of binding or sticking, correct as necessary **BEFORE** proceeding.
21. Remove the carburetor air horn flange from the bottom of the air filter assembly by separating the spot welds.
22. Install the air filter assembly on the carburetor using the original mounting hardware.
23. Replace the engine coolant.
24. Reconnect the battery and replace the gas cap. To activate the choke mechanism of the Weber carburetor, the throttle must be depressed slowly 2 times. Remove foot from accelerator pedal.
25. Start the engine and check for any fuel or vacuum leaks. Correct as necessary, **BEFORE** proceeding.
26. Adjust idle speed and idle mixture using factory idle mixture setting procedure.
27. Adjust the fast idle speed on the Weber carburetor to the factory specifications. (NOTE: Refer to FIG. F for location of the fast idle screw.)
28. Check for adequate hood clearance **BEFORE** closing hood.

FAST IDLE ADJUSTMENT

With the engine warmed-up and OFF, open the throttle and manual engage the choke by closing the choke plates (butterflies). Release the throttle and choke plates. The fast idle cam should be activated and the fast idle screw should be positioned on the cam shoulder. Start the engine. (DO NOT DEPRESS THE THROTTLE PEDAL OR CHOKE WILL BECOME INACTIVE). Adjust the fast idle speed by turning in (clockwise) the screw to increase speed and turning out (counter clockwise) to decrease speed.

If you should have any questions after reading these instructions, please contact the Weber Technical Service Department during normal business hours at the number listed below.

(213) 604-0275

WHEN CALLING OUR TECH HELP LINE,
PLEASE USE THIS REFERENCE NUMBER.

