



**PERFORMER 2V 60° V6 TOP ONLY**  
**Catalog #3787**  
**Chevrolet, GMC, & AMC Jeep 2.8 Litre 60° V6**  
**(longitudinal mount engines only), 1982 & later**  
**INSTRUCTIONS**

- **PLEASE** study these instructions, and the General Instructions, carefully before installing your new manifold. If you have any questions or problems, do not hesitate to call our **Technical Hotline at: 1-800-416-8628**.
- **EGR SYSTEM:** For EGR applications when using Performer top #3787, you must drill a 7/16" hole in the manifold base prior to installation (see Figure 2). Be sure to blow chips out of manifold. This procedure is not necessary for non-EGR installations.
- **MANIFOLD:** This manifold is designed as a two-piece manifold; the base, or lower part, (#3785), bolts directly to the cylinder heads. The Performer 2V top, #3787, accepts the OEM 2-bbl. carburetor and EGR system for use on the street or off-road situations. It comes with linkage, hardware, gaskets and instructions to bolt directly to base #3785. See "Carburetor Recommendations" below. **CAUTION: Performer 2V top #3787 (with stock carburetor) is 1" taller than stock.** It's installation will require hood modifications on Camaros and Firebirds, and hood shimming on AMC Jeep Cherokees.
- **ACCESSORIES & INSTALLATION ITEMS:** Major recommendations are listed below. However, due to the variety of years, makes and models to be covered, please review each part listed in the Installation Items section of the Edelbrock catalog to decide whether more items are required for your specific vehicle than are mentioned in these instructions.
- **POWER PACKAGE:** Edelbrock Performer manifolds are part of a Total Power Package System that can be completed with the use of dyno-matched *Performer-Plus* camshaft #3790 (for non-computer controlled engines only), *Tubular Exhaust Systems*, and related parts specifically designed to give you maximum results. Please refer to the Power Package Guide in the Edelbrock Catalog to select all the components that you need.
- **CARBURETOR RECOMMENDATIONS:** **CAUTION-**Use only carburetors recommended. If parts required for installation are unavailable locally, contact Edelbrock directly.

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
OEM 2-bbl.	accepts EGR	Supplied with manifold

- **REMARKS—**
- **EGR SYSTEM:**  
This manifold will accept stock EGR (exhaust gas recirculation) systems. **To accept EGR, you must drill a 7/16" hole in manifold base #3785** (see Figure 2 of instruction sheet for #3785). This step is not necessary on non-EGR installations.
- **BRACKETS:**
  1. Due to the design of the manifold, Edelbrock supplies a throttle bracket assembly with each top. See Figure 2A for proper installation of bracket.
  2. It will be necessary to modify the original bracket for cruise control cable (see Figure 2).
- **GASKETS AND SEALANT**  
**CAUTION:** Do not use high performance or competition type intake gaskets for street application. Due to material deterioration under street driving conditions, internal leakage of both vacuum and oil may occur.
  1. Use only original equipment type gasket set when installing this manifold for street applications.
  2. Apply Edelbrock *Gasgacinch* sealant #9300, to both sides of the manifold base #3785 as well as head surfaces. This procedure ensures a good seal.
  3. We advise eliminating the end seals. Use RTV silicone instead. Apply a bead of sealant approximately 1/4" high across the block end seal surface, overlapping the intake gasket at the four corners. This method eliminates end seal slippage and deterioration.
- **MANIFOLD TORQUE**
  1. **Torque all bolts to 15-18 ft/lbs.** See Figure 1 for proper sequence.

## PARTS SUPPLIED WITH MANIFOLD

1— L-Bracket; trans kickdown cable	5— Hex nuts; 1/4"-28	1— Hex cap screw; 8mmx1.25 x 3/4"
1— L-Bracket; throttle cable	4— Hex cap screws; 1/4"-28 x 5/8"	1— Hex cap screw; 8mmx1.25 x 1-1/2"
1— L-Bracket; mounting	1— Hex cap screw; 1/4"-28 x 3/4"	10— Washers; 1/4" AN
1— Flat Bracket; support	4— Studs; 8mmx1.25 x 3-3/4"	5— Washers; 1/4" star (internal)
1— 90° Fitting; 3/8" Pipe	1— Stud; 8mmx1.25 x 4"	8— Washers; 5/16" AN
1— Gasket; manifold top to manifold base	5— Hex nuts; 8mmx1.25	

### CAMSHAFT AND HEADERS

Performer manifolds are compatible with aftermarket camshafts and/or headers. Edelbrock has developed a dyno-matched, street proven camshaft, #3790 (for non-computer controlled engines only) which is ground specifically for use with the Performer 60° V6 manifold with either 2V top #3787 or 4V top #3789. Edelbrock *Tubular Exhaust Systems* are available for many applications using the 2.8 Litre V6 engine. Consult the Edelbrock catalog or your dealer for application guidance.

**NOTE:** Installation of headers, aftermarket camshafts, or both with an Edelbrock manifold may lean carburetor calibration. Should this condition occur, re-calibrate carburetor.

- **FINAL TUNING—Please Note:** Final tuning and mixture adjustment section is only applicable to computer-controlled carburetors.

### CARBURETOR PRE-SET PROCEDURE

1. Remove carburetor from engine following normal service procedures to gain access to plug covering the idle mixture needle. Remove plug (see Figure 4). Turn mixture needle in until lightly seated and back out 4 turns.
2. If the plug in air horn covering idle air bleed has been removed, replace air horn. If plug is still in place, do not remove plug (see Figure 3).
3. Remove vent stack screen assembly to gain access to lean mixture screw. Be sure to re-install vent stack screen assembly after adjustment (see Figure 3).
4. Using tool J-28696-10 or BT 7928 or equivalent (available from GM dealers or Snap-On tool dealers), turn lean mixture screw in until lightly bottomed and back out 2-1/2 turns (see Figure 5).
5. Re-install carburetor on engine:
  - a-Do not install air cleaner and gasket.
  - b-Disconnect the bowl vent line at carburetor (see Figure 3).
  - c-Disconnect the EGR valve hose and canister purge hose at the carburetor and cap the carb ports.
  - d-Refer to Vehicle Emission Control Information Label and observe hose from port D on carburetor to temperature sensor and secondary vacuum break TVS. Disconnect hose at temperature sensor on air cleaner and plug open hose.
  - e-Connect the positive lead of a dwell meter to the mixture control solenoid test lead (green connector). Connect the other meter lead to ground. Set dwell meter to 6 cylinder position. Connect a tachometer to distributor lead (brown connector). Tachometer should be connected to the distributor side of the tach filter if vehicle is equipped with a tachometer.

### f-BLOCK DRIVE WHEELS.

g-Place transmission in PARK for automatic transmissions-. Place in NEUTRAL for manual transmissions. SET THE PARKING BRAKE.

### MIXTURE ADJUSTMENT PROCEDURE

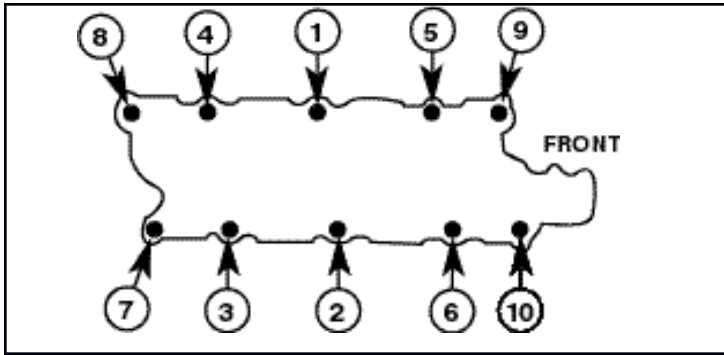
1. After completing pre-set procedure above, run engine on high step of fast idle cam until engine cooling fan starts to cycle (at least three minutes and until in closed loop).
2. Run engine at 3000 rpm and adjust the lean mixture screw slowly in small increments allowing time for dwell to stabilize after turning the screw to obtain an average dwell of 35°. If dwell is too low, back screw out; if too high, turn it in. If unable to adjust to specifications, inspect main metering circuit for leaks and restrictions (see Figure 5).

**NOTE:** The dwell reading of the solenoid is used to determine calibration and is sensitive to changes in fuel mixture caused by heat, air leaks, etc. While idling, it is normal for the dwell to increase and decrease fairly constantly over a relatively narrow range, such as 5°. However, it may occasionally vary by as much as 10-15° momentarily due to temporary mixture changes. The dwell reading specified is the average of the most consistent variation. The engine must be allowed a few moments to stabilize at idle or 3000 rpm as applicable, BEFORE taking the dwell reading.

3. Return to idle.
4. Adjust idle mixture needle to obtain an average dwell of 25° with cooling fan in "off" cycle. If reading is too low, back screw out. If too high, turn it in. Allow time for reading to stabilize after each adjustment. Adjustment is very sensitive. Make final check with adjusting tool removed.
5. Disconnect mixture control solenoid when cooling fan is in "off" cycle and check for an rpm change of at least 50 rpm. If rpm does not change enough, inspect idle air bleed circuit for restrictions, leaks, etc.
6. Run engine at 3000 rpm for a few moments and note dwell reading. Dwell should be varying with an average reading of 35°.

**NOTE:** If not at 35° average dwell, re-set lean mixture screw as per step 2. Then re-set idle mixture needle to obtain 25° dwell as per step 4. If at 35° average dwell, re-connect systems disconnected earlier (purge and vent hoses, EGR valve, etc.), re-install vent screen and set idle speed(s) per instructions on Vehicle Emission Control Information Label.

7. After all adjustments are final, plug idle needle mixture hole with Edelbrock RTV (Gasket-In-A-Tube, #9250).



*Figure 1*  
**Manifold Tightening Sequence**  
 Tighten bolts to 15-18 ft./lbs.

Replace OEM bolts 1,2,3,4, and 5, with studs and nuts supplied in kit.

1. Install four 3-3/4" long studs in bolt holes 1,2,4, and 5; install one 4" long stud in bolt hole 3. See Figure 1 for stud positioning.
2. Install manifold base with OEM bolts in position 7,8,9, and 10 and snug only.
3. Install manifold top and remaining OEM bolt 6 and **torque all bolts and nuts to 15-18 ft./lbs.** in sequence shown in Figure 1.

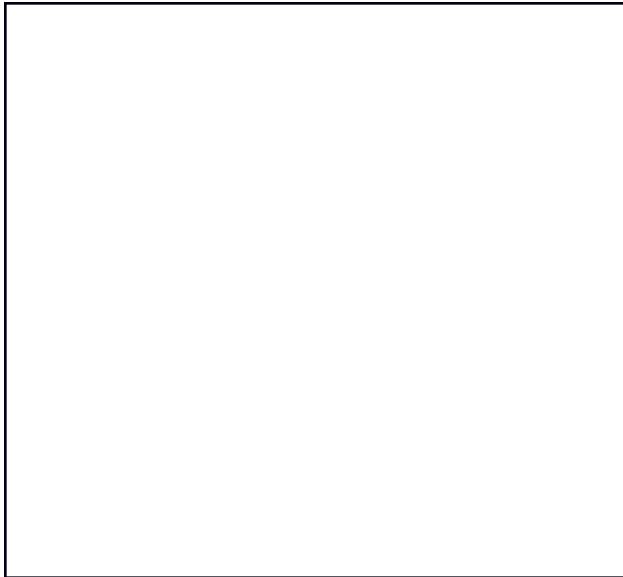


Photo #1 - BEFORE MODIFICATION

**NOTE:** Part of bracket should be removed as shown in second photo. Portion of original bracket retained is for cruise control cable.

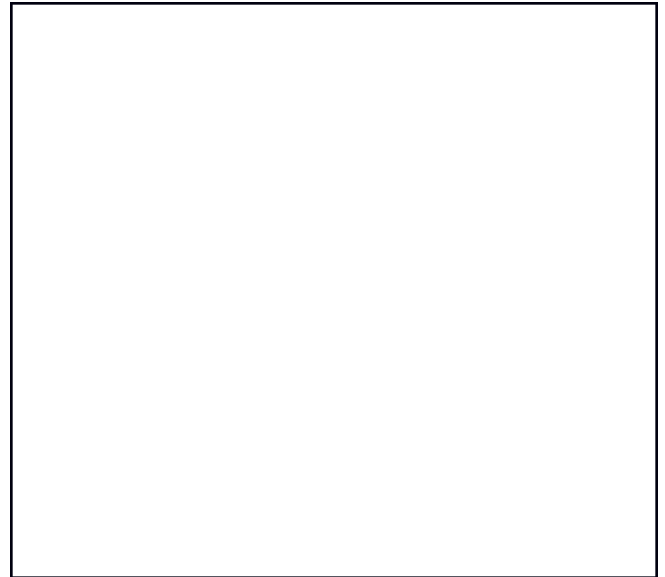


Photo #2 - AFTER MODIFICATION

*Figure 2*  
**Original Throttle Bracket Modification**

**NOTE:** All bolts provided in kit for assembling throttle bracket are S.A.E.



*Figure 2A*  
**Mounting of New Throttle Bracket Assembly**

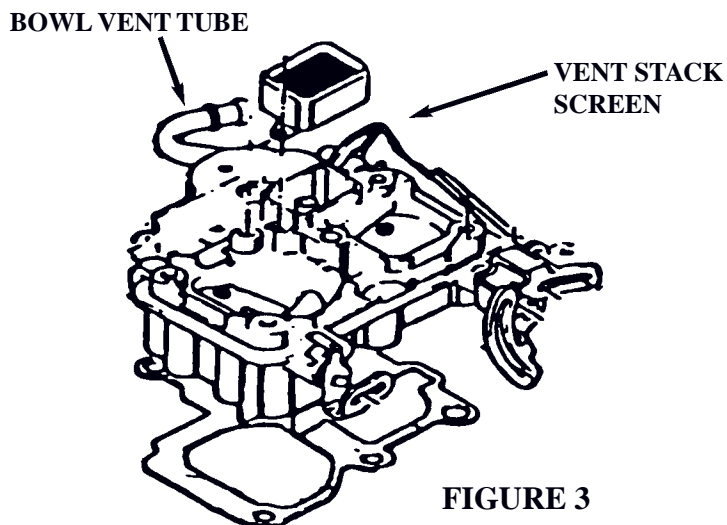


FIGURE 3

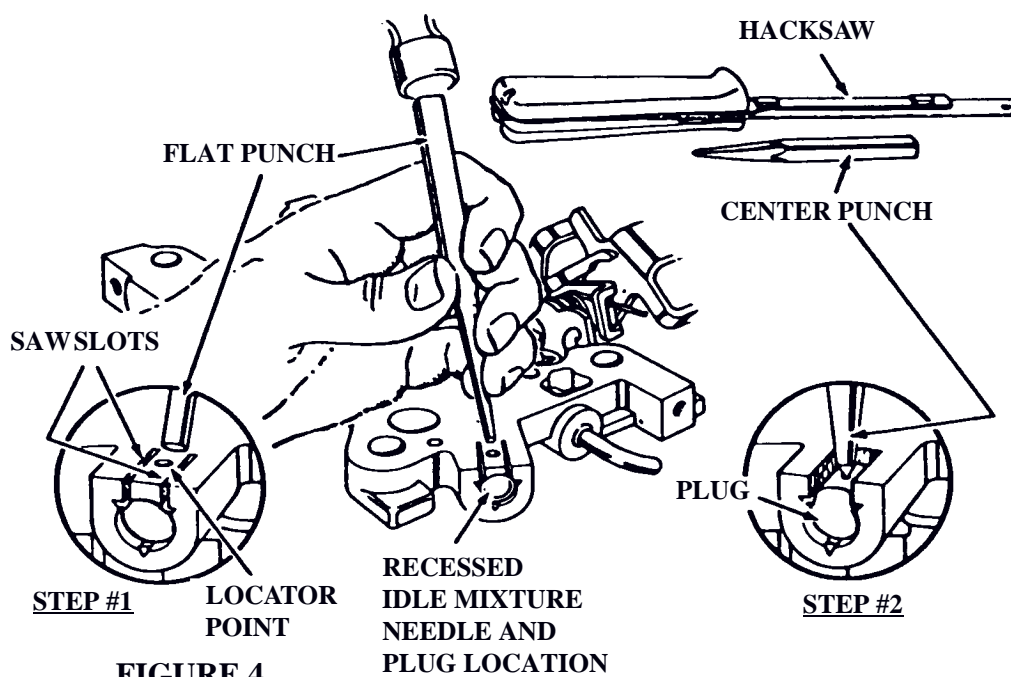


FIGURE 4

### IDLE MIXTURE NEEDLE PLUG REMOVAL

#### Mixture Screw:

1. With vent screen (or entire air horn) off, use tool J-28696-10 or BT-7928 or equivalent to lightly bottom mixture screw.
2. Back out number of turns indicated in specifications.

#### Idle Mixture Needle:

3. With idle mixture needle plug removed, use tool J-29030 or BT-7610B or equivalent to lightly bottom needle.
4. Back out number of turns indicated in specifications.

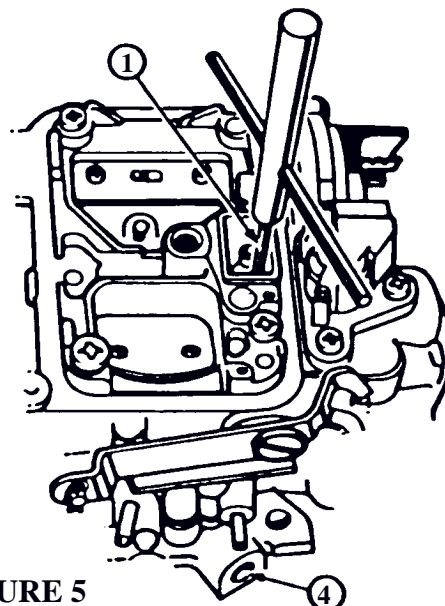


FIGURE 5