



C-66 DUAL QUAD INTAKE MANIFOLDS

For Big Block Chevrolet Engines
Catalog #5420 & #5421
INSTALLATION INSTRUCTIONS

PLEASE study these instructions carefully before beginning this installation. Most installations can be accomplished with common tools and procedures. However, you should be familiar with and comfortable working on your vehicle. If you do not feel comfortable performing this installation, it is recommended to have the installation completed by a mechanic. If you have any questions, please call our Technical Hotline at: 1-800-416-8628, 7:00 am - 5:00 pm, Pacific Standard Time, Monday through Friday or e-mail us at edelbrock@edelbrock.com. PLEASE complete and mail your warranty card. Be sure to write the model number of this product in the "Part #____" space. THANK YOU.

- DESCRIPTION: Edelbrock Dual-Quad intake manifolds are designed for 396-502 c.i.d. big-block Chevy engines operating in the 1500 to 6000 rpm range. They combine two small four-barrel carburetors with a dual plane layout to achieve the best balance of drivability, great looks, and outstanding performance for muscle car, street rod and marine applications. Edelbrock has developed special air filters for these manifolds. To give your engine the ultimate custom look, the polished aluminum Elite Series oval air cleaner (P/N 4235) is suggested. Chrome oval air cleaner (P/N 1235) or two 6" round, Pro-Flo air cleaners (P/N 1209) are also available. Please note "BRACKETS" section below for your particular installation. Four .065" x .047" metering rods for Edelbrock Performer Series Carburetors are supplied for carburetor calibration purposes. See "PREP AND TUNING FOR POWER" section below for details.

APPLICATIONS:

INTAKE MANIFOLD	REFERENCE	APPLICATION
5420	A, E	C-66-O: 396-502 c.i.d. big-block Chevy V8s with large oval-port cylinder heads (1975 and earlier). Not for "tall block" V8s.
5421	A, E	C-66-R: 396-502 c.i.d. Chevy V8s with rectangular-port cylinder heads. Not for "tall block" V8s. Will not fit oval port heads.

- A - Not legal for sale or use on pollution controlled motor vehicles.
- B - Stock replacement/street legal in some applications. See "Stock Replacement Parts List for Intake Manifolds" insert, or Catalog for details.
- C - Will not fit under stock Corvette hood.
- D - Will not fit under stock 1965-1967 Chevelle or 1967-1981 Camaro hood.
- E - Available in additional finishes, such as polished, PermaStar, or EnduraShine. See Catalog for details.

- EGR SYSTEMS: Intake manifolds will not accept stock EGR (Exhaust Gas Recirculation) equipment. EGR systems are used on most 1972 and later model vehicles. Check local laws for requirements.
- ACCESSORIES & INSTALLATION ITEMS: Major recommendations are listed below. See our catalog for details. To order a catalog, call (800) FUN-TEAM, or visit www.edelbrock.com.
- CARBURETOR RECOMMENDATIONS:

CARBURETOR (Qty. 2)	REFERENCE	PARTS REQUIRED FOR INSTALLATION
Performer #1405 (600 cfm)	A, I, K, O	#7094 Dual Quad Throttle Kit, #8088 Dual Quad fuel line kit

- A - Carburetor will work with non-EGR or pre-emission control systems.
- I - Carburetor has no provisions for evaporative canister.
- K - Carburetor requires #8008 or #8024 stud, washer and nut kit. Determine proper length based on gasket thickness and your accessory mounting requirements.
- O - Carburetor comes with manual choke. It can be converted to electric choke using kit #1478.

- **ELECTRIC CHOKE:** If electric choke is desired, use Electric Choke kit P/N 1478 on the rear carburetor only. Do not use an electric choke carburetor and a manual choke carburetor together, because the electric and manual choke carburetors have different calibrations and venturis. We recommend using two manual choke carburetors, wiring the front choke open, and adding electric choke to the rear carburetor.
- **BRACKETS:**
 1. Due to the design of manifolds, the throttle and kickdown bracket on some vehicles may require modification to fit (*See Figure 1*).
 2. This manifold will accept HEI distributors, most universal type transmission kick-down brackets, and most other lines and hoses.
 3. On vehicles using throttle rods instead of cables, it may be necessary to shorten the original rod and use Edelbrock throttle rod extension kit #8010 to achieve proper throttle and kickdown operation at the rear carburetor.
- **GASKETS:** Do not use competition style intake gaskets for this street manifold. Due to material deterioration over time, internal leakage of vacuum, oil, and coolant may occur.

INTAKE MANIFOLD	REFERENCE	RECOMMENDED GASKET
5420		Edelbrock #7203 Port: 1.82" x 2.05", .060" Thickness
5421		Edelbrock #7202 Port: 1.82" x 2.54", .060" Thickness

NOTE: To ensure maximum performance and a proper seal, Edelbrock gaskets which are specifically designed and manufactured for use with Edelbrock parts must be used.

- **PREP AND TUNING FOR POWER:**

NOTE: Local emission laws must be checked for legality of any carburetor or ignition changes.

1. Edelbrock has found, while dyno testing on a Performer level engine at our location, the best calibration to be: Metering Rods - .065" x .047" (provided with intake manifold), Primary Jets - .100" (stock 1405) and Secondary Jets - .095" (stock 1405). This will vary according to engine build and atmospheric conditions. Use it as a starting point. However, if used for racing or marine installation, further tuning may be necessary.
 2. Aftermarket distributor curve kits may be used with Dual-Quad intake manifolds.
 3. Use modified or high performance cylinder heads such as our Performer RPM.
 4. Installation of aftermarket headers, camshafts or both may lean carburetor calibration. Should this occur, recalibrate with a richer jet.
- **CAMSHAFT AND HEADERS:** Dual Quad manifolds are compatible with aftermarket camshafts and headers. Header primary tube diameter should be 1-3/4" to 1-7/8" or larger, depending on the specific engine combination. Edelbrock has developed two camshafts for use with Dual-Quad intake manifolds - Performer-Plus #2162 for low-end torque, or Torker-Plus #5062 for top end power. Please check the catalog or website for application guidelines.

INSTALLATION INSTRUCTIONS

1. Use only recommended intake gaskets set when installing this intake manifold.
2. Fully clean the cylinder head intake flanges and the engine block end seal surfaces.
3. Apply Edelbrock Gasgacinch sealant P/N 9300 to both cylinder head flanges and to the cylinder head side of the gaskets, allow to air dry, and attach the intake gaskets.
4. Do not use cork or rubber end seals. Use RTV silicone sealer instead. Apply a ¼" high bead across each block end seal surface, overlapping the intake gasket at the four corners. This method will eliminate end seal slippage.
5. Install the intake manifold and hold-down bolts.

WARNING! There is no gasket support for the manifold under the four bolt holes which are numbered #5, #10, #11, and #16 in Figure 2. Damage to the manifold will occur if these four bolts are over-tightened. Hand tighten these bolts with a 6" box-end wrench. DO NOT use a torque wrench. Torque all remaining manifold bolts in two steps by the sequence shown in Figure 2 to 25 ft/lbs.

STOCK THROTTLE BRACKET

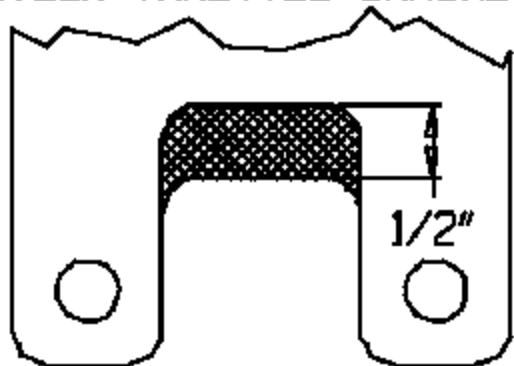


Figure 1

Throttle Bracket Modification

Remove material in the shaded area on stock throttle brackets to clear the intake manifold.

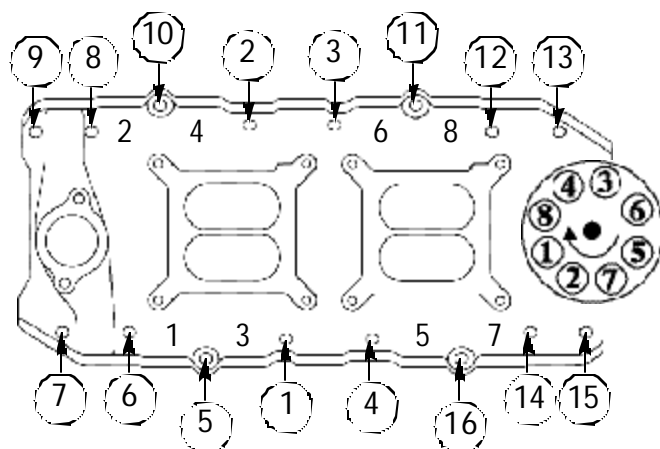


Figure 2

396-502 C.I.D. Chevrolet Bolt Torque Sequence

WARNING: DO NOT USE TORQUE WRENCH ON BOLTS 5, 10, 11, and 16. HAND TIGHTEN ONLY

Torque Remaining Bolts To 25 ft./lbs.

Firing Order: 1-8-4-3-6-5-7-2

Turn Distributor Counter-Clockwise to Advance Ignition Timing

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