



**Performer/RPM/Air-Gap Intake Manifolds
For 390-428 c.i.d. FE Ford Engines
Catalog #2105, 21053, 7105, 71053, 71054, 7505, 75054
INSTALLATION INSTRUCTIONS**

- **DESCRIPTION:** Edelbrock Performer series intake manifolds are designed for engines operating in the idle to 5500 rpm range. Performer RPM and RPM Air-Gap series intake manifolds are designed for engines operating in the 1500-6500 rpm range. Match Performer or Performer RPM intake manifolds with recommended carburetors and additional equipment for even greater performance increases.

APPLICATIONS:

INTAKE MANIFOLD	REFERENCE	APPLICATION
2105, 21053	B, C, D	Performer 390: Designed for street 332-352-360-390-406-410-427-428 c.i.d. Ford V8s with medium or low-rise cylinder heads. Will not accept stock Motorcraft spread-bore carburetor or fit heavy-duty 361 & 391 c.i.d. Ford truck V8s. Not equipped with EGR
7105, 71053, 71054	A, C, D	Performer RPM FE: Designed for high-performance 390-406-410-427-428 c.i.d. Ford FE V8s with standard 390-428 c.i.d. low/medium-rise cylinder heads, or Edelbrock Performer RPM FE cylinder heads. Has provision for adding PCV or breather flange at rear. No exhaust crossover passage. Will not fit High-Riser or Tunnel Port engines.
7505, 75054	A, C, D	RPM Air-Gap Dual-Quad FE: Designed for 1960-later high-performance street 390-406-410-427-428 c.i.d. Ford FE engines with low/medium rise or Edelbrock Performer RPM FE heads #60059 or 60069.

- 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** - Available in additional finishes, such as polished, PermaStar, or EnduraShine. See Catalog for details.
- D** - Aftermarket 4-bbl carburetors are not compatible with Ford AOD. Performer Series and Thunder Series AVS carbs will work with Ford AOD

- **EGR SYSTEMS:** Edelbrock EGR-equipped Performer manifolds are intended as a direct functionally identical replacement for their O.E.M. counterparts. All exhaust emissions or emissions related stock components are intended to be retained and functional. Non-EGR equipped 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.

• **CARBURETOR RECOMMENDATIONS:**

Manifold 2105 and 21053 (Emissions Controlled Applications):

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
OEM	B, H, N	

Manifold 2105 and 21053 (Non-Emissions):

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
Performer #1405 (600 cfm)	A, I, K, N, O	#1483 or 1844 throttle lever adapter
Performer #1406 (600 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Thunder Series #1805, (650 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Thunder Series #1806 (650 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter

Manifold 2105 and 21053 (Non-Emissions) Continued:

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
Thunder Series #1825 (650 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Thunder Series #1826 (650 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Performer #1407 (750 cfm)	A, I, K, N, O	#1483 or 1844 throttle lever adapter
Performer #1411 (750 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Performer #1412 (800 cfm)	A, I, K, N, O	#1483 or 1844 throttle lever adapter
Performer #1413 (800 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Thunder Series #1812 (800 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Thunder Series #1813 (800 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter

Manifold 7105, 71053, 71054, 7505, 75054 (Non-Emissions):

CARBURETOR	REFERENCE	PARTS REQUIRED FOR INSTALLATION
Performer #1407 (750 cfm)	A, I, K, N, O	#1483 or 1844 throttle lever adapter
Performer #1411 (750 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Performer #1412 (800 cfm)	A, I, K, N, O	#1483 or 1844 throttle lever adapter
Performer #1413 (800 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Thunder Series #1812 (800 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter
Thunder Series #1813 (800 cfm)	A, I, K, N	#1483 or 1844 throttle lever adapter

A - Carburetor will work with non-EGR or pre-emission control systems.

B - Carburetor will work with EGR system.

H - Carburetor has provision for evaporative canister.

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.

N - Carburetor accepts factory cruise control

O - Carburetor comes with manual choke. It can be converted to electric choke using kit #1478.

- **THROTTLE BRACKETS:** Due to the design of Performer manifolds, the throttle and kickdown bracket on some vehicles may require modification to fit.
- **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
2105, 21053, 7105, 71053, 7505, 75054	B, C, D	Edelbrock #7224 Port: 1.20" x 2.10", .060" Thickness EGR

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.

- **BEFORE INSTALLING THE INTAKE MANIFOLD:** Using a 3/8" Hex (Allen) wrench, install the supplied threaded water bypass tube into the front of the manifold. Make sure to use thread sealant on the threads of the water tube to prevent leaks. Test fit the intake manifold with the bypass tube installed to make sure the bypass tube and water pump are aligned properly and have proper clearance between them. See "Intake Manifold Test Fit Procedure" listed below for instructions.
- **DISTRIBUTOR AND PUSHROD INSTALLATION:** Due to the close tolerance of the distributor and pushrod fit, test fit the intake manifold to check for proper clearance. See "Intake Manifold Test Fit Procedure" listed below for instructions.

- **INTAKE MANIFOLD TEST FIT PROCEDURE:** Use the following test fit procedure to ease manifold installation.

NOTE: *On some models, there are dowel pins in the front valley gasket surface of the engine block. Remove any dowel pins before test fitting or installing the intake manifold.*

1. Position gaskets on cylinder heads. Do not use any sealant or adhesive at this time.
2. Position intake manifold and start all bolts by hand.
3. Install the distributor with the intake manifold still loose.
4. Make sure the distributor seats all the way down.
5. Install pushrods and rocker arms.
6. Check pushrods for alignment and clearance through the intake manifold.
7. Pushrod clearance to the intake manifold may be increased by backing of the rocker arm support stand bolts and pushing the stand towards the rocker arm and pushrod that is interfering with the intake manifold.
8. Grind manifold for clearance if necessary.

NOTE: *If other than stock pushrods are used, you may have a clearance problem that will require grinding or shimming of the rocker arms for alignment and clearance.*

- **WATER HEATER SPACER BLOCK:** Due to the possible lack of hood clearance, you may not be able to use the OEM water heater spacer block between the intake manifold and carburetor. If necessary, use approximately two feet of 5/8" heater hose and make a direct connection to bypass the spacer block.

- **PREP AND TUNING FOR POWER:**

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

Performer Series Intake Manifolds

1. The long equal length runners in the Performer manifold create a very strong signal to the carburetor. In some applications, the stock rods or jets may need changing for best overall performance. Refer to your carburetor owner's manual for details.
- 2) Performer manifolds deliver excellent driveability and power utilizing stock distributor settings. Some applications may benefit from resetting the initial advance $\pm 2^\circ$ from the factory specification.
- 3) Aftermarket ignitions and more aggressive advance curves may be used with Performer packages.
- 4) Installation of aftermarket headers or camshafts may lean the carburetor calibration. Should this occur recalibrate with a richer jet.

Performer RPM / RPM Air-Gap Series Intake Manifolds

1. Due to design, the fuel / air mixture and cylinder charging are very efficient with Performer RPM or RPM Air-Gap manifolds. Generally speaking, the stock jetting for a Performer Series or Thunder Series carburetor will not need changing. Specific applications may show an increase in power by tuning the fuel mixture.
2. Aftermarket distributor curve kits may be used with Performer RPM series manifolds.
3. Use modified or high performance cylinder heads such as our Performer RPM, and port-match the manifold to the heads.
4. The compression ratio should be at least 9.5 to 1 to work properly with Performer RPM camshafts.
5. Installation of aftermarket headers, camshafts or both with an Edelbrock Performer RPM series manifold may lean carburetor calibration. Should this condition occur, recalibrate with a richer jet.

- **CAMSHAFT AND HEADERS:** The Performer Series manifolds are compatible with aftermarket camshafts and headers designed to work in the idle-5500 rpm range. Edelbrock has developed a dyno-matched, street proven camshaft (#2106 for 352-428 c.i.d. engines) for use with Performer Series intake manifolds. Header primary tube diameter should be 1-5/8" - 1-3/4" (depending on engine displacement). Performer RPM Series manifolds are compatible with aftermarket camshafts and headers designed to work in the 1500-6500 rpm range. Edelbrock has developed a dyno-matched, street proven camshaft (#7106 for 390-428 c.i.d. engines) for use with Performer RPM series manifolds (see catalog for details). Header primary tube diameter should be 1-7/8" - 2" (depending on engine displacement).