



**Carbureted Performer RPM LS Intake Manifold
for GM 5.7L LS1 or Gen IV L76/L92/LS3 V8 Engines
Part #7118, #71187, #71196 & #71197
Danchuk # 18136 Instructions **INSTALLATION INSTRUCTIONS****

PLEASE study these instructions carefully before installing your new Intake Manifold. If you have any questions, do not hesitate to contact our **Technical Hotline at: 1-800-416-8628**, from 7am-5pm, Pacific Standard Time, Monday through Friday.

- **MANIFOLD:** These Performer RPM Intake Manifolds allow the user to retrofit any GEN III/IV-based longblock into an early, non-emissions controlled or custom vehicle using a carburetor. PN 7118 & 71187 are for LS1/LS2 style cathedral port engines. Manifold kit #7118 includes an electronic Timing Control Module, which picks up MAP, Crank Position, Cam Position sensor outputs, ECT and drives the stock Coil-On-Plug ignition system. Included are several timing curves that are each tailored for different applications (*See timing module instructions for details*). Part #71187 is the same intake manifold as #7118, but does not include the Timing Control Module. Performer RPM manifold #71197 is intended for use on Gen III or IV blocks equipped with L76/L92/LS3 cylinder heads. Performer RPM manifold #71196 is the same as #71197 but includes the required timing control module (MSD 6014). MSD ignition controller #6014 fits both Gen III & Gen IV engines equipped with either a 24x reluctor wheel or 58x reluctor wheel.

KIT CONTENTS:

Qty.	Description	Included in Manifolds:
1	Intake Manifold	All
2	6mm x 65mm Hex Head Capscrew	71196, 71197
10	6mm x 45mm Hex Flange Bolt	All
1	GEN III Throttle Bracket Base	All
2	Cable Bracket (Small Opening)	All
2	Cable Bracket (Large Opening)	All
4	6mm x 1.0 Serrated Flange Hex Nut	All
4	6mm x 1.0 x 12mm Serrated Flange Hex Bolt	All
.75'	¼" I.D. Vacuum Hose (For MAP)	7118, 71196
1	Timing Control Module & Hardware	7118, 71196
2	Aluminum Spacer (.56")	71196, 71197
1	1/8"NPT to ¼" Hose Fitting (For MAP)	All

- **EGR SYSTEM:** These manifolds will not accept EGR (exhaust gas recirculation) equipment. EGR systems are used on most 1972 and later model vehicles, up to certain GVWs. Check local laws for requirements. These manifolds are not legal for use in California on pollution-controlled motor vehicles.
- **ACCESSORIES & INSTALLATION ITEMS:** Major recommendations are listed below. However, because these manifold systems are intended for engine swaps into a variety of vehicles, some customization may be required.
- **POWER PACKAGE:** Edelbrock Performer RPM manifolds are part of a Total Power Package System that can be completed with the use of dyno-matched Performer RPM Hydraulic Roller camshaft Part #2215 or #2216, and related parts specifically designed to give you maximum results. 1-3/4" Headers are recommended.
- **CARBURETOR RECOMMENDATIONS:** If parts required for installation are unavailable locally, contact Edelbrock directly. Please note that the Edelbrock carburetors recommended below are designed for use with non-EGR applications and do not have any provision for an evaporative canister. Thunder series carburetors include an additional secondary air door and are recommended to achieve the best possible performance.

CARBURETOR	NOTES
Thunder Series P/N 1805 (650 cfm, manual choke) Thunder Series P/N 1806 (650 cfm, electric choke)	Ideal for street driven and/or smaller displacement applications (4.8L & 5.3L)
Performer Series P/N 1407 (750 cfm, manual choke) Performer Series P/N 1411 (750 cfm, electric choke)	Works well with a larger displacement (6.0L) street driven application.
Performer Series P/N 1412 (800 cfm, manual choke) Performer Series P/N 1413 (800 cfm, electric choke)	Recommended for displacements greater than 6.0L and/or vehicles that will see frequent track or strip time.
Thunder Series P/N 1813 (800 cfm, electric choke) Thunder Series P/N 1813 (800 cfm, electric choke)	Recommended for displacements greater than 6.0L and/or vehicles that will see frequent track or strip time.

- **CAMSHAFT:** For “RPM” style performance up to 6500 rpm, we recommend using either our PN 2216 or our PN 2219 Rollin’ Thunder camshafts. For ultimate power, our PN 2219 cam made 519HP on a 6.0L block using stock LS3 heads.

CAUTION: Make sure the vehicle’s battery has been disconnected and that the vehicle is supported on a level surface to prevent any possibility of the vehicle moving during the installation procedure.

NOTE: (7118 & 71187 Only) In some applications, the intake manifold may rest on the valley coolant tubes. You will need to use coolant tubes from a different year/model of engine. LS6 engines do not need coolant tube replacement. It is suggested to use the LS6 parts with this intake manifold if the intake manifold contacts the valley coolant tubes in your application. Use the GM LS6 front water crossover, GM #12578838 and plug the rear coolant ports with GM “LS6 Head Water Covers”, GM #12563325 (Quantity 2).

INSTALLATION PROCEDURE:

1. **(NOTE:** Use only original equipment (Edelbrock P/N 7386 for LS1; GM P/N 12590125 for L92/LS3) O-Ring type gaskets when installing these manifolds. No gasket sealer is required when using the OEM type gaskets. Use the supplied 6mm hex flange head bolts to mount the manifold to the cylinder heads.

(71196, 71197 only) If you are using the supplied throttle bracket, attach it to the two rear driver’s side manifold bolt holes using the two (2) 65mm flange-head bolts (hand tighten only). 71196 & 71197 use the provided aluminum spacers between the throttle bracket and manifold for clearance.

2. Select the appropriate cable brackets for your application (large or small opening brackets) and attach them to the GEN III throttle bracket base with the appropriate number of 6mm x 1.0 x 12mm serrated flange hex bolts. (Note: In our retrofit of the LS1 into a 1974 Camaro, using a TH400R automatic transmission, we only needed one of the small opening cable brackets for the throttle cable, since a kick down cable is not used. See **Figure 2** for example.)

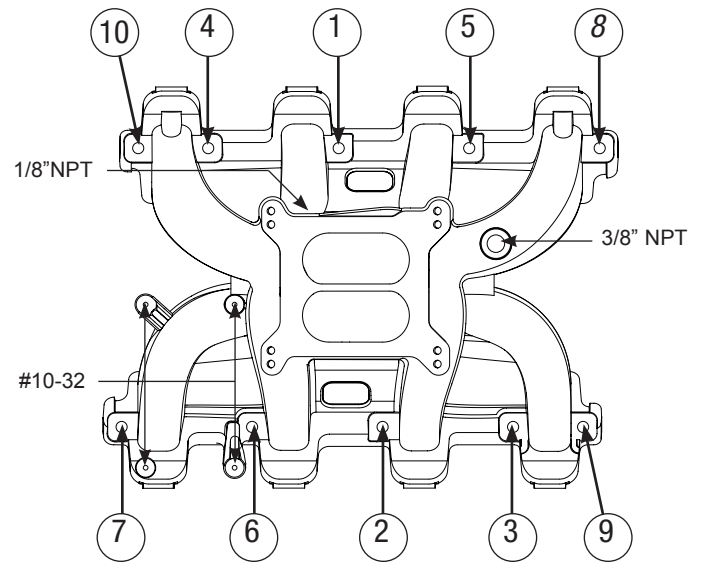


Figure 1 - Intake Manifold Tightening Sequence

3. Following the torque sequence in **Figure 1**, torque all manifold bolts to 11 ft/lbs.
5. (#7118 & 71196 Only) Apply a bit of liquid Teflon thread sealant to the threads of the supplied 1/8” NPT to 1/4” hose fitting and install the fitting into the 1/8” NPT hole in the passenger side of the plenum (**See Figure 1**).

TIMING CONTROL MODULE INSTALLATION (#7118/71196 ONLY):

NOTE: In addition to the instructions below, please refer to MSD 6014 instruction manual included with the timing control module.

- Using the supplied rubber isolators included with the Timing Control Module, plus the four locknuts, attach the module to the manifold. Mount the module so that the main harness will face the passenger side (See Figure 2).

NOTE: If you choose to mount the Timing Control Module in another location, you will need to plug the #10-32 mounting hole nearest to the carburetor pad on the #1 runner (See Figure 1). The drilled hole breaks thru into the runner therefore a vacuum leak will occur if it's not used.

- Locate the Crankshaft Position Sensor connector. Route this line down the passenger side rear of the engine and connect it to the Crankshaft Position Sensor. The Crankshaft Position Sensor is located on the rear of the passenger side of the engine, just above the oil pan rail (See Figure 4).
- Locate the MAP port on the timing module. Connect the included 1/4" hose to the MAP port on the Timing Control Module. Route the other end to the previously installed vacuum fitting on the manifold.
- Locate the Camshaft Position Sensor connector. On LS1/LS2 engines, connect this to the Camshaft Position Sensor located at the rear/top of the block. This is where the distributor would be mounted on an early small block Chevrolet engine (See Figure 5). L92/LS3 Engines route this line to the driver side front of the engine and connect to the Camshaft Position Sensor.
- Connect the two coil connectors to the factory coil harnesses. Refer to MSD 6014 instruction (included) for proper coil connections.
- Locate the portion of the harness with the five non-terminated wires (Red, Black, Blue, Gray & Pink). These will be connected to the following sources:

Red	Main power. Connect to a SWITCHED ignition power source. 12v should be measured only with ignition key in the "START" and "ON" positions.
Black	Chassis ground.
Blue	Two-Step Launch Control. When 12-volts are applied, the Launch Rev Limiter is active.
Gray	Standard V8 tachometer output signal. If not in use, secure out of the way and cover end with electrical tape to prevent accidental connection.
Pink	Step Retard. When 12-volts are supplied, the Step Retard is activated.

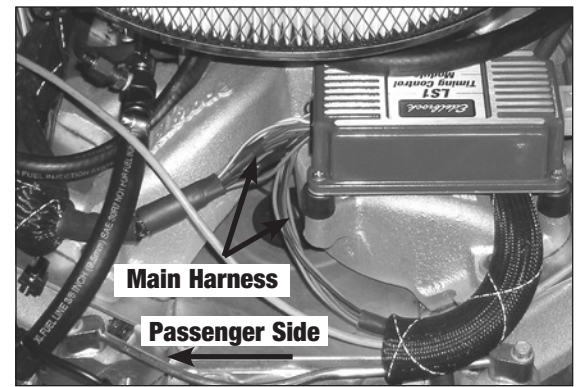


Figure 2 - Timing Control Module Mounting

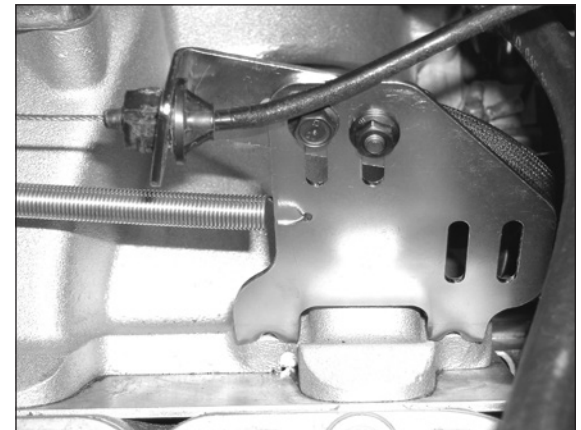


Figure 3 - Throttle Cable Bracket

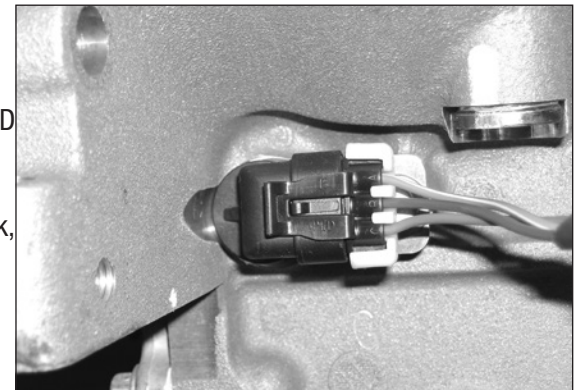


Figure 4 - Crankshaft Position Sensor



Figure 5 - LS1 Camshaft Position Sensor

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FINAL TUNING FOR OPTIMUM PERFORMANCE (#7118 & 71196 ONLY):

1. Generally speaking, the stock jetting for the carburetors listed previously in the “Carburetor Recommendations” section will not need changing. Some applications may show a performance increase by recalibrating the fuel metering circuits using jets, rods, and other parts available from Edelbrock.
2. The included timing control module has six (6) built in timing curves and four (4) custom slots. Refer to MSD 6014 instructions for ideal timing curve for your application. In our engine dyno testing with a PN 2219 camshaft, we made the best gains with the following custom tune using the Pro-Data software.

RPM	0	1000	2000	3000	3800	4700	5000	5500	6000	6600
TIMING	4°	8°	24°	28°	27°	22°	23°	25°	26°	27°