

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-278-1  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

GM MOTORSPORTS  
5.7L H.O. Performance Package

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the 5.7L H.O. Performance Package manufactured by GM Motorsports of 30007 Van Dyke Ave. Warren, Michigan 48090-9065, has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for 1982-87 Camaros/Firebirds originally equipped with a 5.0 or 5.7L engine.

The 5.7L H.O. Performance Package includes the following main components: ZZ4 5.7L engine (part no. 24502609) which includes a new camshaft, pistons, cylinder heads, intake and exhaust manifolds, an electronic control unit, new dual catalyst exhaust system, and transmission shift kit. The Performance Package does not utilize the use of an EGR valve or the carburetor heat stove. Exhibit A list additional parts included with the kit.

This Executive Order is valid provided that installation instructions for this kit will not recommend tuning the vehicles to specifications different from those of GM Motorsports.

Changes made to the design or operating conditions of the devices, as exempt by the Air Resources Board, which adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of this device using any identification other than that shown in this Executive Order or marketing of this device for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

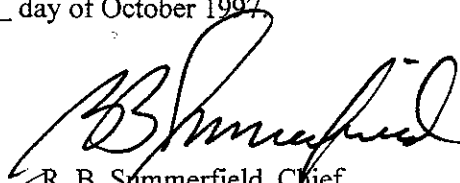
This Executive Order does not constitute any opinion as to the effect the use of the device may have on any warranty either expressed or implied by the vehicle's manufacturer.

**THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF GM MOTORSPORTS' 5.7L H.O. PERFORMANCE PACKAGE.**

No claim of any kind, such as "Approved by the Air Resources Board," may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after ten days written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it will be held within ten days of receipt of the request and the order may not be revoked until a determination after hearing that grounds for revocation exist.

Executed at El Monte, California, this 29<sup>th</sup> day of October 1997.

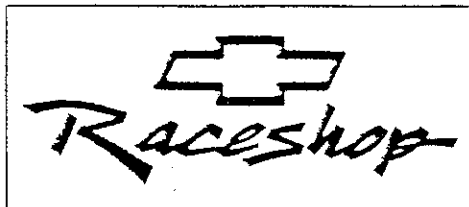
  
R. B. Summerfield, Chief  
Mobile Source Operations Division

PARTS LIST			1983-86 L69 (VIN "G")	1982-84 LG4 (VIN "H")	1985-87 LG4 (VIN "H")
QTY	PART NAME	P/N			
1	5.7L HO ENGINE		X	X	X
1	INSTRUCTION MANUAL	24502463	X	X	X
<b>INDUCTION SYSTEM</b>					
1	LH DUCT	14070917		X	X
1	RH DUCT	14070918		X	X
4	SCREW	11513801		X	X
1	LH HOSE	14073299		X	X
1	RH HOSE	14083990		X	X
1	AIR CLEANER ASSY.	25043641		X	X
1	STUD	14048874		X	X
1	NUT, WING	25512090		X	X
1	HOT AIR TUBE	469506		X	X
1	FRESH AIR ELBOW	3970070	X	X	X
<b>FUEL SYSTEM</b>					
1	IN-TANK FUEL PUMP KIT	14085385		X	X
1	FUEL PUMP, IN-TANK	25116279	X	X	X
1	STRAINER	25055458	X	X	X
1	PRESSURE REGULATOR	10185094	X	X	X
1	BRACKET, PRESSURE REGULATOR	10185069	X	X	X
1	OUTLET FITTING 3/8 PIPE TO 3/8 INVERTED FLARE	9432267	X	X	X
1	RETURN FITTING	10185093	X	X	X
1	3/8 PIPE TO 3/8 HOSE FITTING	10185096	X	X	X
<b>CALIBRATION</b>					
1	CONTROLLER, ECM	1228079	X	X	X
1	CALIBRATOR, PRGM 1982-84 LG4	24502457		X	
1	CALIBRATOR, PRGM 1985-87 LG4, 83-86 L69	24502456	X		X
1	SENSOR, KNOCK	10456018	X		X
1	MODULE, ELEC. SPARK CONTROL	16128261	X		X
2	METERING RODS, SECONDARY (AH)	7033812	X	X	X

X= PART USED IN CONVERSION

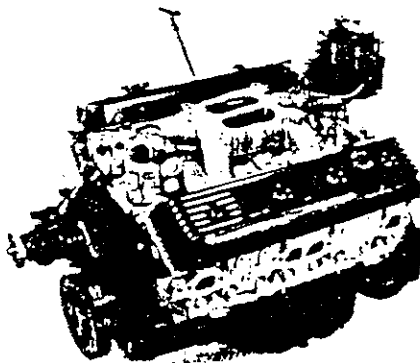
PARTS LIST			1983-86 L69 (VIN "G")	1982-84 LG4 (VIN "H")	1985-87 LG4 (VIN "H")
QTY	PART NAME	P/N			
<b>CALIBRATION CONT'D</b>					
1	COOLING FAN SWITCH (95C)	3053190	X		X
<b>EXHAUST SYSTEM</b>					
1	LH MANIFOLD	14094063	X	X	X
1	RH MANIFOLD	14094064	X	X	X
1	HEAT STOVE, PLATE	14101063	X	X	X
1	HEAT STOVE, COVER	14101064	X	X	X
2	STUD	14042051	X	X	X
2	STUD	12338075	X	X	X
4	NUT	14019305	X	X	X
1	SEAL, EXHAUST	10136863	X	X	X
1	TAKEDOWN, DUAL CAT	10185070	X	X	X
1	HEAT SHIELD, CATALYST	10164153	X	X	X
4	SCREW, M6.3-1.8x20	12337828	X	X	X
1	PIPE, AIR TO CONVERTER	10077542	X	X	X
1	CLAMP, AIR PIPE	22505116	X	X	X
1	BRACKET, CONVERTER HANGER	10081609	X	X	X
2	BOLT, CONVERTER TO BRACKET	11504596	X	X	X
1	INTERMEDIATE PIPE, MUFFLER, TAILPIPES*	24502461	X	X	X
<b>TRANSMISSION</b>					
1	SPRING, PRESSURE REGULATOR	8639164	X	X	X
1	VALVE, TV BOOST	8634940	X	X	X
1	SERVO, PISTON	8642079	X	X	X
1	SERVO, HOUSING	8642110	X	X	X
<b>REAR SUSPENSION</b>					
2	LOWER CONTROL ARM	10164151	X	X	X
<b>DECALS</b>					
1	DECAL, UNDERHOOD TUNE UP LABEL	24502462	X	X	X
1	"PREMIUM FUEL ONLY" DECAL	25602518	X	X	X

\* For replacement exhaust system components, contact: Flowmaster Inc., 2975 Dutton Ave., Unit 3, Santa Rosa, CA 95407, 707-544-4761.



**H.O. 350 ENGINE SPECIFICATIONS**

Displacement: 5.7-liter (350ci)  
 Bore and Stroke: 4.00" x 3.48"  
 Compression Ratio: 9.8:1  
 Piston Material: Cast hypereutectic aluminum  
 Connecting Rod Material: 1053 forged steel  
 Crankshaft: Hydraulic roller tappet (#10185071)  
 Valve Lift (Intake/Exhaust): .474"/.510"  
 Duration (Intake/Exhaust): 208/221 degrees @ .050" tappet lift  
 Valve Lash (Intake/Exhaust): Zero/zero  
 Cylinder Head Material: Cast aluminum  
 Valve Diameter (Intake/Exhaust): 1.94"/1.50"



Rocker Arm Ratio: 1.5:1  
 Oil Pressure (Normal): 40 psi @ 2000 rpm  
 Spark Plugs: AC FR5LS, 904 or MR43LTS  
 Maximum Recommended Engine Speed: 5800 rpm  
 Fuel Requirement: Unleaded premium 92 octane (R+M/2)

**VEHICLE IDENTIFICATION**

The H.O. 350 conversion kit is designed for installation in 1982-87 Camaros originally equipped with LG4 or L69 engines. Due to differences in original equipment in these vehicles some of the components included in this conversion kit are not used with all year models and engines. The parts required to install the H.O. 350 conversion package on a specific model year and engine are noted in the chart above.

The factory-installed engine is identified by a letter code that appears in the eighth place of the Vehicle Identification Number (VIN). In the following example of a Vehicle Identification Number, the letter "H" is the engine code:

IG1FP3H0LL10001

The following are VIN engine codes for 1982-87 Camaros with LG4 and L69 engines:

Year	VIN	Engine
1983-86	"G"	L69
1982-87	"H"	LG4