

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-193-56
Relating to Exemptions under Section 27156
of the Vehicle Code

Car Sound Exhaust System, Inc. (d.b.a. MagnaFlow)
"Series 41100 and 41400 OBD II Compliant Three-way Catalytic Converters"

WHEREAS, Vehicle Code Sections 27156, and Title 13, California Code of Regulations (hereafter "CCR") Section 2222(h), authorize the California Air Resources Board and its Executive Officer to exempt new aftermarket catalytic converters from the prohibitions of Vehicle Code Section 27156.

WHEREAS, Car Sound Exhaust System, Inc. (Car Sound) of 22691 Arroyo Vista, Rancho Santa Margarita, California 92688, has applied to the Air Resources Board for exemption from the prohibitions in Vehicle Code Sections 27156 to market its new aftermarket Series 41100 and 41400 three-way catalytic converters (TWC) on selected 1994 through 2004 model year Ford passenger cars (PC) and light-duty trucks 1 (LDT1) equipped with on-board diagnostic II (OBD-II) systems and multiple catalytic converters (2 to 6 units) as specified in Appendix D-193-56 and incorporated herein. The Series 41100 will be used as front catalytic converters (2 or 4 units) and Series 41400 as rear catalytic converters (1 to 3 units) for multiple catalytic converter applications. These catalytic converters may be sold as universal or direct-fit system for the vehicles listed in Appendix D-193-56. The Series 41100 and 41400 TWCs may also be installed on non-OBD II vehicles (1995 and older) similar in engine and exhaust configuration to those listed in Appendix D-193-56.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Operations Division by Health and Safety Code Section 39516 and Executive Order G-02-003, the Air Resources Board finds that the above aftermarket catalytic converters comply with the California Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h). The emissions performance of the aftermarket catalytic converters was based on durability bench-aging by Delphi Energy & Engine Management System (Delphi) using the Air Resources Board modified RAT-A bench-aging cycle for 75 hours, as specified in the "Optional Evaluation Procedures for New Aftermarket Non-original Equipment Catalytic Converters Equipped With On-Board Diagnostic II (OBD II) Systems."

WHEREAS, emissions tests conducted at the Automotive Testing and Development Services, Inc., Ontario, California, with Series 41100 (2 units front) and Series 41400 (2 units rear) TWCs installed on a 2001 4.6L Crown Victoria, test group YFMXV04.6VF5, certified to the passenger car, Low Emission Vehicle emission standards (PC, LEV), showed that the vehicle met the applicable emission standards. OBD II compatibility tests performed on the same vehicle showed that Series 41100 and 41400 TWC system does not affect the vehicle's ability to perform OBD II system monitoring. The following are the test results in grams per mile:

	<u>NMOG</u>	<u>CO</u>	<u>NOx</u>
PC 100K LEV standards	0.090	4.2	0.3
Series 41100 and 41400 Test 1	0.089	0.9	0.1
Series 41100 and 41400 Test 2	0.085	1.1	0.1

IT IS HEREBY RESOLVED that the above catalytic converter system is exempt from the prohibitions in Vehicle Code Section 27156 for installation on the approved vehicle applications specified in Appendix D-193-56 subject to the following conditions:

1. No changes are permitted to the catalytic converter system as described in the application for exemption. Any changes to the catalytic converter system or any of its components, and other factors addressed in this order must be evaluated and approved by the Air Resources Board prior to marketing in California.
2. Marketing of the catalytic converter system using identifications other than those shown in the exemption application, and in this Executive Order, or marketing of the catalytic converters for application other than the ones shown in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of this product shall not be construed as an exemption to sell, offer for sale, or advertise any components of the catalytic converter system as individual devices.
3. Any oral or written references to this Executive Order or its content by Car Sound Exhaust System, Inc., its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any emission reduction claims for the catalytic converter system and is only a finding that the catalytic converter system is exempt from the prohibitions of Vehicle Code Section 27156.
4. Car Sound Exhaust System, Inc.'s installation instructions for the new catalytic converter system must conform to requirements in Paragraphs I and X of the "Optional Evaluation Procedures for New Aftermarket Non-original Equipment Catalytic Converters Equipped with On-Board Diagnostic II (OBD II) Systems."
5. Upon installation, the catalytic converter system must carry a manufacturer's warranty for 50,000 miles on the substrates and 50,000 miles or five years on the shell and end pipes.
6. Car Sound Exhaust System, Inc. and its vendors may not advertise the new aftermarket catalytic converter system as a "high or easy flow" catalytic converter or use any phrase that could make it appear to perform better than an original equipment manufacturer (OEM) catalytic converter.

7. The new aftermarket catalytic converter substrates may not be sold or supplied to a third party by Car Sound Exhaust System, Inc., its associates, vendors, other businesses, and individuals associated with Car Sound Exhaust System, Inc., to be assembled in a different facility and marketed under this Executive Order.
8. Any marketing arrangement of the new aftermarket catalytic converter by a third party, which involves the use of packaging identification different from the ones described in this Executive Order must be approved by the Air Resources Board prior to shipment.
9. Car Sound must submit the required quality audit and production quantity reports for its aftermarket catalytic converters semi-annually, covering the periods January 1 through June 30, and July 1 through December 31.

Executive Order D-193-39 date August 24, 2006, is hereby superseded and of no further force and effect.

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

Executed at El Monte, California, this 15th day of July 2008.


Annette Hebert, Chief
Mobile Source Operations Division

APPENDIX D-193-56

Car Sound Exhaust System, Inc. Series 41100/41400 Ford PC and LDT 1

No	Model Year	Make	Vehicle Model	Eng. Size	Engine Family	Cert. Level	Weight Class	Exhaust Type	Converter Type	Total Conv.	Monitored	Universal Front/Rear	Direct Fit Left/Right
1	1994	Ford	Thunderbird	4.6L	RFM4.6V8G1EK	Tier 1	PC	D/Y	2TWC, TWC	3	2	41175/41405	41111
2	1995		Cougar		SFM4.6V8G1EK			D	2TWC(2)	4	4		41103/41104
3			Crown Victoria		SFM4.6V8G1GK			D/Y	2TWC, TWC	3	2		TBD
4			Town Car		SFM4.6VJG1EK			D	2TWC(3)	6	6		41115
5			Grand Marquis		TFM4.6V8G1EK			D/Y	2TWC, TWC	3	2		41112
6	Continental		TFM4.6VJG1FK		D			2TWC(3)	6	6	TBD		
7	1996		Continental		TFM4.6VJGFEK	D/Y		2TWC, TWC	3	2	41174/41405		
8			Continental		TFM4.6VJG1FL	D		2TWC(2)	4	4	41101/41102		
9			Continental		TFM4.6VJGFFK	D/Y		2TWC, TWC	3	2	41174/41405		
10			Crown Victoria		TFM4.6V8G2EL	D		2TWC(2)	4	4	41175/41405		
11	1997		Town Car		VFM4.6VJG1FL	D/Y		2TWC, TWC	3	2	41174/41405		
12			Grand Marquis		VFM4.6V8G1FK	D		2TWC(3)	6	6	41115		
13			Continental Mark III		VFM4.6VJGKEK	D/Y		2TWC, TWC	3	2	41112		
14			Mustang SOHC		VM4.6V8G1EK	D		2TWC(3)	6	6	41111		
15	1998		Mustang Cobra		VFM4.6V8G2EL	D		2TWC(2)	4	4	41101/41102		
16			Thunderbird	WFMXV04.6DBA	D	2TWC(3)		6	6	41115			
17			Cougar	WFMXV04.6DAA	D	2TWC(2)		4	2	41112			
18			Crown Victoria	WFMXV04.6AAA	D	2TWC(2)		4	2	41101/41102			

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Car Sound Exhaust System, Inc. Series 41100/41400 Ford PC and LDT 1

No	Model Year	Make	Vehicle Model	Eng. Size	Engine Family	Cert. Level	Weight Class	Exhaust Type	Converter Type	Total Conv.	Monitored	Universal Front/Rear	Direct Fit Left/Right
19	1999	Ford	Mustang Cobra	4.6L	XFMXV04.6VB4	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	41114
20			Mustang SOHC		XFMXV04.6VDN	TLEV		D/Y	2TWC, TWC	3		41174/41405	TBD
21			Continental		XFMXV04.6VDP								41113
22			Crown Victoria Town Car		XFMXV04.6VG5	LEV		D	2TWC(2)	4		41175/41405	41101/41102
23	2000	Ford	Grand Marquis	4.6L	YFMXV04.6VB4	Tier 1	PC	D/Y	2TWC, TWC	3	2	41174/41405	41114
23			Mustang Cobra/GT		YFMXV04.6VDN	TLEV							TBD
24			Mustang SOHC		YFMXV04.6VDP	TLEV							41113
25			Continental Crown Victoria Town Car		YFMXV04.6VFR	LEV		D	2TWC(2)	4		41175/41405	41101/41102
26	2001	Ford	Grand Marquis	4.6L	1FMXV04.6VD4	TLEV	PC	D/Y	2TWC, TWC	3		41174/41405	41114
27			Mustang GT/Cobra		1FMXV04.6VBD	TLEV							41113
28			Continental										41114
28			Crown Victoria Town Car		1FMXV04.6VF5	LEV		D	2TWC(2)	4		41175/41405	41105/41107

Additional Vehicles 1

29	1995	Ford	Ranger/B3000	3.0 L	SFM3.018G1EK	Tier 1	LDT1	S	TWC(2)	2		41105/41405	41116
30			Ranger/B4000	4.0 L	SFM4.018G1EK								
31			Ranger/B3000	3.0 L	TFM3.018G1EK			D	2TWC(2)	4		41175/41405	41101/41102
32			Ranger/B4000	4.0 L	TFM4.018G1EK			S	TWC(2)	2		41105/41405	41116
33	1996	Ford	Lincoln Town Car	4.6 L	TFM4.6V8GFEL	Tier 1	LDT1	D	2TWC(2)	4	2	41175/41405	41101/41102
34			Ranger/B3000	3.0 L	VFM3.018G1EK			D/Y	2TWC/TWC	3			TBD
35			Ranger/B4000	4.0 L	VFM4.018G1EK								
36			Town Car	4.6 L	VFM4.6V8GKEL			S	TWC(2)	2		41105/41405	41117
37	1997	Ford	Lincoln Limo	2.5 L	VFM4.6VJGFFL	Tier 1	LDT1	D/Y	2TWC/TWC	3		41174/41405	TBD
38			Mark VIII		VFM4.6VJGKFK								TBD
39			Continental		WFMXV02.5AAA			D	2TWC(2)	4		41175/41405	41101/41102
40			Ranger/B2500		WFMXV02.5BAA			D/Y	2TWC/TWC	3		41174/41405	TBD
41	1998	Ford	Ranger/B3000	3.0 L	WFMXV03.0FAA	Tier 1	PC	D	2TWC/TWC	3		41175/41405	41101/41102
42			Ranger/B4000	4.0 L	WFMXV04.0AAA			D/Y	2TWC/TWC	6	4	41174/41405	TBD
43			Lincoln Town Car	4.6 L	WFMXV04.6ABA			D	2TWC/TWC	3		41175/41405	41115
44			Continental		WFMXV04.6CAA			D/Y	2TWC(3)	3	2	41174/41405	TBD
45	1999	Ford	Mustang GT	4.6 L	WFMXV04.6DCA	Tier 1	PC	D	2TWC(3)	6		41175/41405	41115
46			Mark VII		WFMXV04.6MAA			D/Y	2TWC/TWC	3		41174/41405	TBD

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Car Sound Exhaust System, Inc. Series 41100/41400 Ford PC and LDT 1

No	Model Year	Make	Vehicle Model	Eng. Size	Engine Family	Cert. Level	Weight Class	Exhaust Type	Converter Type	Total Conv.	Monitored	Universal Front/Rear	Direct Fit Left/Right
47	1998		Mustang	3.8 L	WFMXV03.8AAA	Tier 1	PC	D	2TWC(2)	4	4	41174/41404	41344
48			Mustang Cobra	4.6 L	WFMXV03.8ACA	Tier 1	PC	D	2TWC(2)	4	4	41174/41404	41345
49			Ranger/B2500	2.5 L	WFMXV04.6SAA	TLEV	LDT1	S	TWC(2)	2	2	41175/41405	41112
50	1999		Ranger/B2500	2.5 L	XFMXT02.51DC	LEV	LDT1	D/Y	2TWC/TWC	3	3	41105/41405	41117
51			Ranger/B3000	3.0 L	XFMXT03.01DC	TLEV	LDT1	D/Y	2TWC/TWC	4	4	41174/41405	TBD
52			Ranger/B4000	4.0 L	XFMXT04.01DC	LEV	LDT1	D/Y	2TWC/TWC	3	3	41174/41405	TBD
53			Continental	4.6 L	XFMXT04.01G5	TLEV	PC	D	2TWC(2)	4	4	41175/41405	TBD
54			Saleen Mustang	4.6 L	XFMXV04.6VDP	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	TBD
55				4.6 L	XS3XV04.6AAA	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	TBD
56				4.6 L	XS3XV04.6ABA	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	TBD
57	2000	Ford	Ranger/B2500	2.5 L	YFMXT02.51D5	TLEV	LDT1	S	TWC(2)	2	2	41105/41405	TBD
58			Ranger/B2500	2.5 L	YFMXT02.51DC	LEV	LDT1	S	TWC(2)	2	2	41105/41405	TBD
59			Ranger/B3000	3.0 L	YFMXT03.01D5	TLEV	LDT1	D/Y	2TWC/TWC	3	3	41174/41405	TBD
60			Ranger/B4000	4.0 L	YFMXT04.01DC	LEV	LDT1	D/Y	2TWC/TWC	4	4	41175/41405	41101/41102
61			Crown Victoria	4.6 L	YFMXT04.01F5	LEV	PC	D	2TWC(2)	4	4	41175/41405	TBD
62			Grand Marquis	4.6 L	YFMXV04.6VB5	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	TBD
63			Lincoln Town Car	4.6 L	YS3XV04.6AAA	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	TBD
64	2001		Saleen Mustang	4.6 L	YS3XV04.6ABA	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	TBD
65			Ranger/B2300	2.3 L	1FMXT02.31F5	LEV	LDT1	S	TWC(2)	2	2	41105/41405	TBD
66			Ranger/B2500	2.5 L	1FMXT02.51D5	TLEV	LDT1	S	TWC(2)	2	2	41105/41405	TBD
67			Ranger/B3000 M/T	3.0 L	1FMXT03.01F5	LEV	LDT1	D/Y	2TWC/TWC	5	4	41104/41174/41405	TBD
68			Escape	3.0 L	1FMXT03.01F6	LEV	LDT1	D/Y	2TWC/TWC	3	3	41174/41405	TBD
69			Ranger/B4000	4.0 L	1FMXT04.01F5	LEV	LDT1	D/Y	2TWC/TWC	4	4	41174/41405	TBD
70			Crown Victoria	4.0 L	1FMXT04.01F5	LEV	LDT1	D/Y	2TWC/TWC	4	4	41174/41405	TBD
71	2002		Grand Marquis	4.6 L	1FMXV04.6VF7	Tier 1	PC	D	2TWC(2)	4	4	41175/41405	41105/41107
72			Lincoln Town Car	4.6 L	1RIIV04.6RP1	TLEV	PC	D	2TWC(2)	4	4	41175/41405	TBD
73			Roush Mustang	4.6 L	1S3XV04.6JDA	TLEV	LDT1	S	TWC(2)	2	2	41105/41405	TBD
74			Saleen Mustang	4.6 L	2FMXT02.31F5	LEV	LDT1	D/Y	2TWC/TWC	5	4	41104/41174/41405	TBD
75			Ranger/B2300	2.3 L	2FMXT03.01F5	LEV	LDT1	D/Y	2TWC/TWC	3	2	41174/41404	TBD
76			Ranger/B3000 M/T	3.0 L	2FMXT03.01F6	LEV	LDT1	D/Y	2TWC/TWC	3	2	41174/41404	TBD
77			Escape	3.0 L	2FMXT03.01F7	LEV	LDT1	D/Y	2TWC/TWC	4	4	41174/41404	TBD
78	2002		Ranger/B4000	4.0 L	2FMXT04.01F6	LEV	LDT1	D/Y	2TWC/TWC	4	4	41174/41404	TBD
79				4.0 L	2FMXT04.01F6	LEV	LDT1	D/Y	2TWC/TWC	4	4	41174/41404	TBD
80				4.0 L	2FMXT04.01F6	LEV	LDT1	D/Y	2TWC/TWC	4	4	41174/41404	TBD
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Car Sound Exhaust System, Inc. Series 41100/41400 Ford PC and LDT 1

No	Model Year	Make	Vehicle Model	Eng. Size	Engine Family	Cert. Level	Weight Class	Exhaust Type	Converter Type	Total Conv.	Monitored	Universal Front/Rear	Direct Fit Left/Right
82	2002		Mustang GT	4.6 L	2FMXV04.6VD4	TLEV	PC	D	2TWC(2)	4	4	41175/41405	41114
83			Continental		2FMXV04.6VDP			D/Y	2TWC/TWC	3	2	41174/41405	TBD
84			Crown Victoria		2FMXV04.6VF5	LEV	PC	D	2TWC(2)	4	2	41175/41405	41105/41107
85			Lincoln Town Car	4.6 L	2RIIV04.6RP1	Tier 1					4		TBD
86		Ford	Roush Mustang		2S3XV04.6JDA	TLEV							
87			Saleen Mustang										
88			Ranger/B2300	2.3 L	3FMXT02.31F5			S	TWC(2)	2	2	41105/41405	TBD
89			Ranger/B3000 M/T		3FMXT03.01F5				2TWC/TWC/TWC(2)	5	4	41104/41174/41405	41118/41410
90	2003		Escape	3.0 L	3FMXT03.01F7	LEV	LDT1	D/Y	2TWC/TWC	3			TBD
91			Ranger/B3000		3FMXT03.01FA				2TWC/TWC(2)		2	41174/41404	
92			Ranger	4.0 L	3FMXT04.01F6					4			41119/41410
93			Mustang	3.8 L	3FMXV03.8VFA	LEV						41174/41404	41345
94			Mustang Cobra		3FMXV04.6VD4		PC	D	2TWC(2)		4	41175/41405	TBD
95			Mustang Gt	4.6 L	3FMXV04.6VDN	TLEV							41114
96			Roush Mustang		3RIIV04.6RP1								TBD
97			Escape		4FMXT03.01FE	LEV	LDT1	D/Y	2TWC/TWC	3	2	41174/41404	41118/41410
98	2004		Ranger/B3000	3.0 L	4FMXT03.01JA								

AFTERMARKET PARTS SECTION
VC Section 27156 and 38391 Exemption Update Check-out List*

For each exemption update request, the project engineer is to complete this "check-out" list to make sure that there are no changes in the applicable vehicles and device design.

GENERAL INFORMATION:

1	Date application received	July 10, 2008																				
2	Name of applicant	Car Sound Exhaust System, Inc.																				
3	Address of applicant	22961 Arroyo Vista, Rancho Santa Margarita, CA 92688																				
4	Applicant's phone	(949) 858-5900																				
5	Name of manufacturer	Car Sound Exhaust System, Inc.																				
6	Manufacturer's phone	(949) 858-5900																				
7	Address of manufacturer	22961 Arroyo Vista, Rancho Santa Margarita, CA 92688																				
8	Name of device	Series 46000 OBD II compliant TWC																				
9	First E.O. and date	D-193-39/8-24-06																				
10	Device was tested by	A: <u>X</u> Applicant B: ARB																				
11	Vehicle application covered by existing E.O.	Selected 1994 – 2001 Ford passenger cars (PC).																				
12	Vehicle application now requested	Selected 1994 - 2004 Ford PC and LDT1.																				
13	Pollution control systems on previous vehicle	LEV or less stringent standards																				
14	Pollution control systems on present vehicle	No change																				
15	Is present vehicle/engine a carryover from previous vehicle/engine	NA																				
16	List design changes in device since previous E.O., if any	NA																				
17	Will changes affect emissions?	NA																				
18	Special reason to update besides inclusion of newer vehicle model	To add vehicle models similar to the vehicle tested for previous exemption.																				
19	Are legal issues involved? If so, has ARB Legal been consulted?	Legal issues are not involved																				
20	E.O. number issued	D-193-56																				
21	Bases for issuance of an E.O.	Series 41100 and 41400 meet California durability and emission requirements for the intended application, as shown below in g/mi. The test vehicle was a 2001 4.6L Ford Crown Victoria certified to PC/LEV. <table border="1"> <thead> <tr> <th></th> <th>NMOG</th> <th>CO</th> <th>NOx</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>100K Standard</td> <td>0.090</td> <td>4.2</td> <td>0.3</td> <td></td> </tr> <tr> <td>Series 41100/41400 Test 1</td> <td>0.089</td> <td>0.9</td> <td>0.1</td> <td>Pass</td> </tr> <tr> <td>Series 41100/41400 Test 2</td> <td>0.085</td> <td>1.1</td> <td>0.1</td> <td>Pass</td> </tr> </tbody> </table> Testing also found the catalytic converters to be compatible with the OBD II systems of the test vehicle.		NMOG	CO	NOx	Remarks	100K Standard	0.090	4.2	0.3		Series 41100/41400 Test 1	0.089	0.9	0.1	Pass	Series 41100/41400 Test 2	0.085	1.1	0.1	Pass
	NMOG	CO	NOx	Remarks																		
100K Standard	0.090	4.2	0.3																			
Series 41100/41400 Test 1	0.089	0.9	0.1	Pass																		
Series 41100/41400 Test 2	0.085	1.1	0.1	Pass																		

- *For internal use only*