

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-353-8  
Relating to Exemptions under Section 27156  
of the Vehicle Code

Miller Catalyzer Corporation  
"Series 21000 OBD II Compliant Three-way Catalytic Converter"

WHEREAS, Vehicle Code Sections 27156 and Section 2222(h), Title 13, California Code of Regulations (hereafter "CCR"), 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, Miller Catalyzer Corporation (Miller) of 3295 Depot Road, Hayward, California 94545, has applied to the Air Resources Board for exemption from the prohibitions in Vehicle Code Section 27156 to market its new aftermarket Series 21000 three-way catalytic converter (TWC) for installation on 2001 and older model year GM trucks, and 1998 Mercedes-Benz trucks equipped with on-board diagnostic II (OBD-II) systems as specified in Appendix D-353-8 and incorporated herein. The Series 21000 TWC will be used for dual (2 units in parallel) or single (1 unit) exhaust system applications for GM trucks. The Series 21000 will also be used as front catalytic converters (2 units) and rear catalytic converters (2 units) in multiple catalytic converter systems (4 units total) for Mercedes-Benz trucks. Catalytic converters for Mercedes-Benz trucks will be sold as a complete system only, and not as individual units.

The TWC may also be installed on non-OBD II vehicles (1995 and older) similar in engine and exhaust configuration to those listed in Appendix D-353-8.

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, Air Resources Board finds that the above aftermarket catalytic converter complies with the California Vehicle Code Section 27156 and Title 13, California Code of Regulations, Section 2222(h). The emissions performance of the catalytic converter was based on durability bench-aging by Delphi Energy and Chassis Systems using Air Resources Board-modified RAT-A bench-aging cycle for 100 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 Development Services, Inc. (ATDS), Ontario, California, using a 1998 5.7L Chevrolet Tahoe with a dual (2 units in parallel) exhaust system, certified to the Low Emission Vehicle (LEV, MDV2) emission standards showed that the vehicle met the applicable emission standards with Series 21000 TWCs (2 units) installed.

OBD II compatibility tests performed on the same test vehicle showed that Series 21000 TWC do not affect the vehicle's ability to perform OBD II system monitoring. Emission test results in grams per mile are shown below.

ATDS, Ontario, California				
5.7L Chevrolet Tahoe Test				
	NMOG	CO	NOx	Remarks
120K Standard	0.230	6.4	0.6	
Test 1	0.204	3.6	0.4	Pass
Test 2	0.202	3.3	0.4	Pass
Average of Tests 1 & 2	0.203	3.4	0.4	Pass

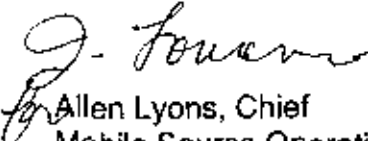
IT IS HEREBY RESOLVED that the above catalytic converter is exempt from the prohibitions in Vehicle Code Section 27156 for installation on the approved vehicle applications specified in Appendix D-353-8 subject to the following conditions:

1. No changes are permitted to the catalytic converter as described in the application for exemption. Any changes to the catalytic converter or any of their 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 using identifications other than those shown in the exemption application, and in this Executive Order, or marketing of the catalytic converter 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 these products shall not be construed as an exemption to sell, offer for sale, or advertise any components of the catalytic converter as individual devices.
3. Any oral or written references to this Executive Order or its content by Miller Catalyzer Corporation, 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 and is only a finding that the catalytic converter is exempt from the prohibitions of Vehicle Code Section 27156.
4. Miller Catalyzer Corporation's installation instructions for the new catalytic converter 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 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.

5. Miller Catalyzer Corporation and its vendors may not advertise the new aftermarket catalytic converter as a "high or easy flow" catalytic converter or use any phrase that could make them appear to perform better than an OEM catalytic converter.

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 28<sup>th</sup> day of April 2005.

  
Allen Lyons, Chief  
Mobile Source Operations Division

## Miller Catalyzer Corporation's GM &amp; Mercedes-Benz OBDII Truck, Van, &amp; SUV Applications Catalog

Year	Make	Model	Cyl	Eng	Level	Miller Replacement Catalyst	Type	No. of Cats on Car	Moni- tored Cats	Engine Family No.	Miller Direct Fit. Part No.
<b>1996</b>											
1996	GM	Chev/GMC Astro/Savana	6	4.3L	Tier 1	21000	Single Mon	1	1	TGM4.35PGFEK	21058B
1996	GM	Chev/GMC Astro/Savana	6	4.3L	Tier 1	21000	Single Mon	1	1	TGM4.35PGKEL	21058B
1996	GM	Chev/GMC PU 1500/2500	6	4.3L	Tier 1	21000	Single Mon	1	1	TGM4.38PGBEK	21058B
1996	GM	Chev/GMC PU 1500/2500 2WD	8	5.0L	Tier 1	21000	Single Mon	1	1	TGM5.0HPG1EK	21068
1996	GM	Chev/GMC PU 1500/2500 2WD/4WD	8	5.7L	Tier 1	21000	Dual Mon	2	2	TGM5.75PGFEK	21060
1996	GM	Chev/GMC PU 1500/2500 4WD	8	5.0L	Tier 1	21000	Single Mon	1	1	TGM5.0JPG1EK	21068
1996	GM	Chev/GMC PU 2500/3500 2WD/4WD	8	7.4L	Tier 1	21000	Dual Mon	2	2	TGM7.4J8G1EK	21059B
1996	GM	Chev/GMC PU 3500 2WD	8	5.7L	Tier 1	21000	Dual Mon	2	2	TGM5.76PGFEK	21060
1996	GM	Chev/GMC PU 3500 4WD	8	5.7L	Tier 1	21000	Dual Mon	2	2	TGM5.7JPG1EK	21060
1996	GM	Chev/GMC S10/S15 Pickup	6	4.3L	Tier 1	21000	Single Mon	1	1	TGM4.32PGKEK	21061
1996	GM	Chev/GMC Van G1500/G2500	8	5.0L	Tier 1	21000	Single Mon	1	1	TGM5.0HPG1EK	21071
1996	GM	Chev/GMC Van G1500/G2500/G3500	6	4.3L	Tier 1	21000	Single Mon	1	1	TGM4.38PGBEK	21058B
1996	GM	Chev/GMC Van G2500/G3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	TGM5.75PGFEK	21059B
1996	GM	Chev/GMC Van G2500/G3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	TGM7.4J8G1EK	21059B
1996	GM	Chev/GMC Van G3500	8	5.0L	Tier 1	21000	Single Mon	1	1	TGM5.0JPG1EK	21068
1996	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	Tier 1	21000	Dual Mon	2	2	TGM5.76PGFEK	21060
1996	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	7.4L	Tier 1	21000	Dual Mon	2	2	TGM7.4J8G1EK	21059B
1996	GM	Chev/GMC/Cosmobile S10 Blazer/S15 Jimmy/Bravada	6	4.3L	Tier 1	21000	Single Mon	1	1	TGM4.32PGKEK	21064
<b>1997</b>											
1997	GM	Chev/GMC Astro/Savana	6	4.3L	TLEV	21000	Single Mon	1	1	VGM4.32PG2EK	21059B
1997	GM	Chev/GMC Astro/Savana	6	4.3L	LEV	21000	Single Mon	1	1	VGM4.3HPG3EK	21058B
1997	GM	Chev/GMC PU 1500/2500	6	4.3L	Tier 1	21000	Single Mon	1	1	VGM4.3HPG1EK	21058B
1997	GM	Chev/GMC PU 1500/2500 2WD	8	5.0L	Tier 1	21000	Single Mon	1	1	VGM5.0HPG1EK	21068
1997	GM	Chev/GMC PU 1500/2500 4WD	8	5.0L	Tier 1	21000	Single Mon	1	1	VGM5.0JPG1EK	21068
1997	GM	Chev/GMC PU 1500/2500/3500 2WD/4WD	8	5.7L	Tier 1	21000	Dual Mon	2	2	VGM5.7HPG1EK	21068
1997	GM	Chev/GMC PU 2500/3500 2WD/4WD	8	7.4L	Tier 1	21000	Dual Mon	2	2	VGM7.4J8G1EK	21059B
1997	GM	Chev/GMC S10/S15 Pickup	6	4.3L	Tier 1	21000	Single Mon	1	1	VGM4.32PG1EK	21061
1997	GM	Chev/GMC Van G1500/G2500	6	4.3L	Tier 1	21000	Single Mon	1	1	VGM4.3HPG1EK	21071
1997	GM	Chev/GMC Van G1500/G2500	8	5.0L	Tier 1	21000	Single Mon	1	1	VGM5.0HPG1EK	21071
1997	GM	Chev/GMC Van G2500/G3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	VGM5.7JPG1EK	21059B
1997	GM	Chev/GMC Van G2500/G3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	VGM5.7JPG1GK	21059B
1997	GM	Chev/GMC Van G2500/G3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	VGM7.4J8G1EK	21059B
1997	GM	Chev/GMC Van G3500	6	4.3L	Tier 1	21000	Single Mon	1	1	VGM4.3JPG1EK	21058B

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Year	Make	Model	Cyl	Eng	Level	Miller Replacement Catalyst	Type	No. of Cats on Car	Monitored Cats	Engine Family No.	Miller Direct Fit Part No.
1997	GM	Chev/GMC Van G3500	8	5.0L	Tier 1	21000	Single Mon	1	1	VGM5.0JPG1EK	21068
1997	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	Tier 1	21000	Dual Mon	2	2	VGM5.7HPG1EK	21060B
1997	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	Tier 1	21000	Dual Mon	2	2	VGM5.7JPG1EK	21068
1997	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	Tier 1	21000	Dual Mon	2	2	VGM5.7JPG1GK	21068
1997	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	7.4L	Tier 1	21000	Dual Mon	2	2	VGM7.4J8G1EK	21059B
1997	GM	Chev/GMC/Oldsmobile S10 Blazer/S15 Jimmy/Bravada	6	4.3L	Tier 1	21000	Single Mon	1	1	VGM4.32PG1EK	21064
<b>1998</b>											
1998	GM	Chev/GMC Astro/Savana	6	4.3L	LEV	21000	Single Mon	1	1	WGMXAO4.3188	21066
1998	GM	Chev/GMC Astro/Savana	6	4.3L	TLEV	21000	Single Mon	1	1	WGMXTO4.3187	21067
1998	GM	Chev/GMC PU 1500/2500	6	4.3L	Tier 1	21000	Single Mon	1	1	WGMXAO4.3190	21067
1998	GM	Chev/GMC PU 1500/2500	8	5.0L	Tier 1	21000	Single Mon	1	1	WGMXAO5.0182	21059B
1998	GM	Chev/GMC PU 1500/2500	8	5.0L	Tier 1	21000	Single Mon	1	1	WGMXAO5.0184	21059B
1998	GM	Chev/GMC PU 1500/2500/3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	WGMXAO5.7182	21068
1998	GM	Chev/GMC PU 1500/2500/3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	WGMXAO5.7184	21068
1998	GM	Chev/GMC PU 1500/2500/3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	WGMXAO5.7187	21068
1998	GM	Chev/GMC PU 2500/3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	WGMXAO7.4201	21086B
1998	GM	Chev/GMC S10/S15 Pickup	6	4.3L	Tier 1	21000	Single Mon	1	1	WGMXTO4.3182	21061
1998	GM	Chev/GMC S10/S15 Pickup	6	4.3L	Tier 1	21000	Single Mon	1	1	WGMXTO4.3184	21090
1998	GM	Chev/GMC Van G1500/G2500	8	5.0L	Tier 1	21000	Single Mon	1	1	WGMXAO5.0182	21071
1998	GM	Chev/GMC Van G1500/G2500/G3500	6	4.3L	Tier 1	21000	Single Mon	1	1	WGMXTO4.3192	21058B
1998	GM	Chev/GMC Van G2500/G3500	8	5.7L	LEV	21000	Dual Mon	2	2	WGMXAO5.7186	21059B
1998	GM	Chev/GMC Van G2500/G3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	WGMXAO7.4201	21059B
1998	GM	Chev/GMC Van G3500	8	5.0L	Tier 1	21000	Single Mon	1	1	WGMXAO5.0185	21071
1998	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	LEV	21000	Dual Mon	2	2	WGMXAO5.7185	21059B
1998	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	LEV	21000	Dual Mon	2	2	WGMXAO5.7186	21059B
1998	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	7.4L	Tier 1	21000	Dual Mon	2	2	WGMXAO7.4201	21059B
1998	GM	Chev/GMC/Oldsmobile S10 Blazer/S15 Jimmy/Bravada	6	4.3L	Tier 1	21000	Single Mon	1	1	WGMXTO4.3184	21058B
<b>1999</b>											
1999	GM	Chev/GMC Astro/Savana	6	4.3L	LEV	21000	Single Mon	1	1	XGMXAO4.3188	21059B
1999	GM	Chev/GMC Astro/Savana	6	4.3L	TLEV	21000	Single Mon	1	1	XGMXTO4.3187	21058B
1999	GM	Chev/GMC PU 1500/2500	6	4.3L	LEV	21000	Dual Mon	2	2	XGMXAO4.3194	21058B
1999	GM	Chev/GMC PU 1500/2500	6	4.3L	Tier 1	21000	Dual Mon	2	2	XGMXAO4.3195	21058B
1999	GM	Chev/GMC PU 1500/2500	8	4.8L	Tier 1	21000	Dual Mon	2	2	XGMXAO4.8184	21074

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1999	GM	Chev/GMC PU 1500/2500	8	5.0L	Tier 1	21000	Single Mon	1	1	XGMXAO5.0182	21058B
1999	GM	Chev/GMC PU 1500/2500	8	5.0L	Tier 1	21000	Single Mon	1	1	XGMXAO5.0184	21058B
1999	GM	Chev/GMC PU 1500/2500	8	5.3L	LEV	21000	Dual Mon	2	2	YGMXAO5.3183	21074
1999	GM	Chev/GMC PU 1500/2500/3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	XGMXAO5.7182	21058B
1999	GM	Chev/GMC PU 1500/2500/3500	8	6.0L	Tier 1	21000	Dual Mon	2	2	XGMXAO6.0182	21058B
1999	GM	Chev/GMC PU 2500/3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	XGMXAO7.4201	21058B
1999	GM	Chev/GMC PU 3500	8	5.3L	LEV	21000	Dual Mon	2	2	YGMXAO5.3185	21074
1999	GM	Chev/GMC PU 3500	8	5.7L	Tier 1	21000	Dual Mon	2	2	XGMXAO5.7187	21060
1999	GM	Chev/GMC PU 3500	8	6.0L	Tier 1	21000	Dual Mon	2	2	XGMXAO6.0183	21058B
1999	GM	Chev/GMC Van G1500/G2500	6	4.3L	Tier 1	21000	Single Mon	1	1	XGMXAO4.3190	21058B
1999	GM	Chev/GMC Van G1500/G2500	8	5.0L	Tier 1	21000	Single Mon	1	1	XGMXAO5.0182	21069
1999	GM	Chev/GMC Van G2500/G3500	8	5.7L	LEV	21000	Dual Mon	2	2	XGMXAO5.7185	21069
1999	GM	Chev/GMC Van G2500/G3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	XGMXAO7.4201	21069
1999	GM	Chev/GMC Van G3500	6	4.3L	Tier 1	21000	Single Mon	1	1	XGMXAO4.3192	21069
1999	GM	Chev/GMC Van G3500	8	5.0L	Tier 1	21000	Single Mon	1	1	XGMXAO5.0184	21069
1999	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	LEV	21000	Dual Mon	2	2	XGMXAO5.7185	21058B
1999	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	LEV	21000	Dual Mon	2	2	XGMXAO5.7186	21058B
1999	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	Tier 1	21000	Dual Mon	2	2	XGMXAO5.7187	21058B
1999	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	7.4L	Tier 1	21000	Dual Mon	2	2	XGMXAO7.4201	21058B
<b>2000</b>											
2000	GM	Chev/GMC PU 1500/2500	6	4.3L	LEV	21000	Dual Mon	2	2	YGMXAO4.3190	21058B
2000	GM	Chev/GMC PU 1500/2500	6	4.3L	Tier 1	21000	Dual Mon	2	2	YGMXTO4.3184	21058B
2000	GM	Chev/GMC PU 1500/2500	8	5.3L	Tier 1	21000	Dual Mon	2	2	YGMXAO5.3183	21074
2000	GM	Chev/GMC PU 1500/2500	8	5.3L	LEV	21000	Dual Mon	2	2	YGMXAO5.3185	21074
2000	GM	Chev/GMC PU 1500/2500	8	5.7L	Tier 1	21000	Dual Mon	2	2	YGMXAO5.7191	21058B
2000	GM	Chev/GMC PU 1500/2500	8	6.0L	Tier 1	21000	Dual Mon	2	2	YGMXAO5.7191	21058B
2000	GM	Chev/GMC PU 2500/3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	YGMXAO7.4201	21059B
2000	GM	Chev/GMC Van G2500/G3500	8	5.7L	Tier 1	21000	Single Mon	1	1	YGMXTO5.7188	21058B
2000	GM	Chev/GMC Van G2500/G3500	8	7.4L	Tier 1	21000	Dual Mon	2	2	YGMXAO7.4201	21059B
2000	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.3L	LEV	21000	Dual Mon	2	2	YGMXAO5.3184	21074
2000	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	LEV	21000	Dual Mon	2	2	YGMXAO5.7194	21060B
2000	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	5.7L	Tier 1	21000	Single Mon	1	1	YGMXTO5.7189	21060B
2000	GM	Chev/GMC/Cad Subn/Tahoe/Escalade/Yukon	8	6.0L	Tier 1	21000	Dual Mon	2	2	YGMXTO6.0192	21058B

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<u>2001</u>											
2001	GM	Chev/GMC PU 1500/2500	6	4.3L	LEV	21000	Dual Mon	2	2	1GMXAO4.3190	21058B
2001	GM	Chev/GMC PU 1500/2500	8	5.3L	LEV	21000	Dual Mon	2	2	1GMXAO5.3184	21074
2001	GM	Chev/GMC Van G1500/G2500	6	4.3L	LEV	21000	Single Mon	1	1	1GMXAO4.3192	21058B
2001	GM	Chev/GMC Van G1500/G2500	8	5.0L	Tier 1	21000	Single Mon	1	1	1GMXAO5.0181	21058B
2001	GM	Chev/GMC Van G3500	8	5.0L	Tier 1	21000	Single Mon	1	1	1GMXAO5.0182	21058B
2001	GM	Chev/GMC/Cad Subr: Tahoe Escalade Yukon	8	5.3L	LEV	21000	Dual Mon	2	2	1GMXAO5.3184	21074
<u>1998</u>											
1998	MBZ	M Class SUV ML320, Right	6	3.2L	LEV	21000 Front, 21000 Rear	Dual Exh Multi Conv	4	Front Mon	WMBXT03.2GNB	21820
1998	MBZ	M Class SUV ML320, Left	6	3.2L	LEV	21000 Front, 21000 Rear	Dual Exh Multi Conv	4	Front Mon	WMBXT03.2GNB	21830