

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-193-88  
Relating to Exemptions under Sections 27156 and 38391  
of the Vehicle Code

Car Sound Exhaust Systems, Inc. (d.b.a. Magnaflow)  
"Series 47100 and 47200 Three-Way Catalytic Converters"

WHEREAS, Vehicle Code Sections 27156 and 38395 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 Sections 27156 and 38391.

WHEREAS, Car Sound Exhaust Systems, Inc. of 22961 Arroyo Vista, Rancho Santa Margarita, California 92688 has applied to the Air Resources Board for exemption from the prohibitions in Vehicle Code Sections 27156 and 38391 to market its new aftermarket Series 47100 and 47200 three-way catalytic converters (TWC) on select 1996 through 2005 model-year Ford light-duty trucks (LDT2) and medium-duty vehicles equipped with on-board diagnostic II (OBD II) systems as specified in Appendix D-193-88 and incorporated herein. Series 47100 and 47200 TWCs will be used for multiple catalytic converter applications and may be sold as universal or direct fit systems.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief of the 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 Sections 27156 and 38395 and Title 13, California Code of Regulations Section 2222(h). Emission performance of the catalytic converters was based on durability bench-aging by Johnson Matthey Catalysts using the Air Resources Board-modified RAT-A bench-aging cycle for 100 hours as specified in Appendix A to the "California Evaluation Procedures for New Aftermarket Catalytic Converters," adopted on October 25, 2007.

WHEREAS, emissions and OBD II compatibility tests conducted by Car Sound Exhaust Systems, Inc. using a 2000 model-year 5.0 liter Ford Explorer certified to low-emission vehicle (LEV) emission standards and LDT2 weight classification showed that the vehicle met the applicable emission standards with Series 47100 and 47200 converters installed (4 converters total). OBD II compatibility tests performed on the same test vehicle showed that Series 47100 and 47200 TWCs did not falsely cause the malfunction indicator light to illuminate. Federal test procedure emission standards and test results in grams per mile are shown below:

	NMOG	CO	NOx
100K Standard	0.130	5.5	0.5
Test 1	0.119	1.7	0.1
Test 2	0.102	1.6	0.1

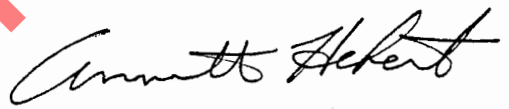
THEREFORE, IT IS HEREBY RESOLVED that Car Sound Exhaust Systems, Inc.'s Series 47100 and 47200 TWCs are exempted from the prohibitions in Vehicle Code Sections 27156 and 38391 for installation on the approved vehicle applications specified in Appendix D-193-88 subject to the following conditions:

1. No changes are permitted to the catalytic converters as described in the application for exemption. Any changes to the catalytic converters or any of their components and other factors addressed in this Executive Order must be evaluated and approved by the Air Resources Board prior to marketing in California.
2. Marketing of the catalytic converters using identifications other than those shown in the exemption application, and in this Executive Order, or marketing of the catalytic converters for applications 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 converters as individual devices.
3. Any oral or written references to this Executive Order or its content by Car Sound Exhaust Systems, 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 converters and is only a finding that the catalytic converters are exempt from the prohibitions in Vehicle Code Sections 27156 and 38391.
4. Car Sound Exhaust Systems, Inc.'s installation instructions for the new catalytic converters must conform to requirements in Section (h) of the "California Evaluation Procedures for New Aftermarket Catalytic Converters," adopted on October 25, 2007.
5. Installation of the catalytic converters shall not cause the relocation of any oxygen sensors. Oxygen sensors must be installed in the same location, position and orientation as prescribed in the original equipment manufacturer's configurations.
6. Upon installation, the catalytic converters must carry a manufacturer's warranty for five (5) years or 50,000 miles as prescribed in Section (f)(2) of the "California Evaluation Procedures for New Aftermarket Catalytic Converters," adopted on October 25, 2007.
7. Car Sound Exhaust Systems, Inc. and its vendors may not advertise the new aftermarket catalytic converters as "high flow" or "easy flow" catalytic converters or use any phrase that could make them appear to perform better than the original equipment manufacturer catalytic converters.
8. Any marketing arrangement of the new aftermarket catalytic converters 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 Exhaust Systems, Inc., its associates, vendors, other businesses and individuals associated with Car Sound Exhaust Systems, Inc. may not sell or supply new aftermarket catalytic converter substrates to a third party to be assembled in a different facility and marketed under this Executive Order without approval from the Air Resources Board.
10. Car Sound Exhaust Systems, Inc. shall comply with the quality control procedures and reporting requirements in Section (f)(5) of the "California Evaluation Procedures for New Aftermarket Catalytic Converters," adopted on October 25, 2007.
11. Quality control reports must be submitted on a quarterly basis and warranty information reports on a semi-annual basis.
12. Car Sound Exhaust Systems, Inc. must provide a permanent label or stamp as specified under Section (f)(1) of the "California Evaluation Procedures for New Aftermarket Catalytic Converters," adopted on October 25, 2007.
13. Car Sound Exhaust Systems, Inc.'s vehicle application catalog must conform to the requirements specified under Section (f)(4) of the "California Evaluation Procedures for New Aftermarket Catalytic Converters," adopted on October 25, 2007.
14. This exemption is conditional upon Car Sound Exhaust Systems, Inc. completing the "Proper MIL Illumination Demonstration" within two years of issuance of this exemption and will otherwise expire two years from the date of signature.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a 30-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 30 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 15 day of September 2009.

  
Annette Hebert, Chief  
Mobile Source Operations Division



**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
1	1996	FORD TRUCK	FORD EXPLORER	5	TFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
2	1996	FORD TRUCK	FORD EXPLORER	5	TFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
3	1996	FORD TRUCK	FORD EXPLORER	5	TFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	U	DIRECT FIT	47201	ALL
4	1996	FORD TRUCK	FORD EXPLORER	5	TFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	UL	DIRECT FIT	47101	ALL
5	1996	FORD TRUCK	FORD EXPLORER	5	TFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47102	ALL
6	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
7	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
8	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
9	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
10	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
11	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
12	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
13	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
14	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
15	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	FR	DIRECT FIT	47110	ALL
16	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
17	1997	FORD TRUCK	ORD E-150 ECONOLIN	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47183	ALL
18	1997	FORD TRUCK	ORD E-250 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
19	1997	FORD TRUCK	ORD E-250 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
20	1997	FORD TRUCK	ORD E-250 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
21	1997	FORD TRUCK	ORD E-250 ECONOLIN	4.2	VFM4.2J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
22	1997	FORD TRUCK	FORD EXPEDITION	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
23	1997	FORD TRUCK	FORD EXPEDITION	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
24	1997	FORD TRUCK	FORD EXPEDITION	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47149	4WD
25	1997	FORD TRUCK	FORD EXPEDITION	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
26	1997	FORD TRUCK	FORD EXPEDITION	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47150	4WD
27	1997	FORD TRUCK	FORD EXPEDITION	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
28	1997	FORD TRUCK	FORD EXPEDITION	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
29	1997	FORD TRUCK	FORD EXPEDITION	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
30	1997	FORD TRUCK	FORD EXPEDITION	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47129	4WD
31	1997	FORD TRUCK	FORD EXPEDITION	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD
32	1997	FORD TRUCK	FORD EXPEDITION	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47130	4WD
33	1997	FORD TRUCK	FORD EXPEDITION	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
34	1997	FORD TRUCK	FORD EXPLORER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
35	1997	FORD TRUCK	FORD EXPLORER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
36	1997	FORD TRUCK	FORD EXPLORER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	U	DIRECT FIT	47201	ALL
37	1997	FORD TRUCK	FORD EXPLORER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	UL	DIRECT FIT	47101	ALL
38	1997	FORD TRUCK	FORD EXPLORER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47102	ALL
39	1997	FORD TRUCK	FORD F-150 PICKUP	4.2	VFM4.228G1EK	TIER1	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
40	1997	FORD TRUCK	FORD F-150 PICKUP	4.2	VFM4.228G1EK	TIER1	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
41	1997	FORD TRUCK	FORD F-150 PICKUP	4.2	VFM4.228G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47131	2WD
42	1997	FORD TRUCK	FORD F-150 PICKUP	4.2	VFM4.228G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47139	4WD
43	1997	FORD TRUCK	FORD F-150 PICKUP	4.2	VFM4.228G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47132	2WD
44	1997	FORD TRUCK	FORD F-150 PICKUP	4.2	VFM4.228G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47140	4WD

**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
45	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.628G1EK	TIER1	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
46	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.6H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
47	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.6H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
48	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.628G1EK	TIER1	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
49	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.628G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47133	4WD
50	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.6H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47133	4WD
51	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.628G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
52	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.6H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
53	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.628G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47134	4WD
54	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.6H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47134	4WD
55	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.628G1EK	TIER1	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
56	1997	FORD TRUCK	FORD F-150 PICKUP	4.6	VFM4.6H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
57	1997	FORD TRUCK	FORD F-150 PICKUP	5.4	VFM5.4H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
58	1997	FORD TRUCK	FORD F-150 PICKUP	5.4	VFM5.4H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
59	1997	FORD TRUCK	FORD F-150 PICKUP	5.4	VFM5.4H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47127	4WD
60	1997	FORD TRUCK	FORD F-150 PICKUP	5.4	VFM5.4H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD
61	1997	FORD TRUCK	FORD F-150 PICKUP	5.4	VFM5.4H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47128	4WD
62	1997	FORD TRUCK	FORD F-150 PICKUP	5.4	VFM5.4H8G1EK	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
63	1997	FORD TRUCK	FORD F-250 PICKUP	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
64	1997	FORD TRUCK	FORD F-250 PICKUP	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
65	1997	FORD TRUCK	FORD F-250 PICKUP	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47133	4WD
66	1997	FORD TRUCK	FORD F-250 PICKUP	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
67	1997	FORD TRUCK	FORD F-250 PICKUP	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47134	4WD
68	1997	FORD TRUCK	FORD F-250 PICKUP	4.6	VFM4.6J8G1EK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
69	1997	FORD TRUCK	FORD F-250 PICKUP	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
70	1997	FORD TRUCK	FORD F-250 PICKUP	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
71	1997	FORD TRUCK	FORD F-250 PICKUP	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD
72	1997	FORD TRUCK	FORD F-250 PICKUP	5.4	VFM5.4J8G1FK	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
73	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
74	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
75	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
76	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
77	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
78	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
79	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
80	1998	FORD TRUCK	ORD E-150 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
81	1998	FORD TRUCK	ORD E-250 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
82	1998	FORD TRUCK	ORD E-250 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
83	1998	FORD TRUCK	ORD E-250 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
84	1998	FORD TRUCK	ORD E-250 ECONOLIN	4.2	WFMXA04.2ABA	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
85	1998	FORD TRUCK	FORD EXPEDITION	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
86	1998	FORD TRUCK	FORD EXPEDITION	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
87	1998	FORD TRUCK	FORD EXPEDITION	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47129	4WD
88	1998	FORD TRUCK	FORD EXPEDITION	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD

**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
89	1998	FORD TRUCK	FORD EXPEDITION	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47130	4WD
90	1998	FORD TRUCK	FORD EXPEDITION	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
91	1998	FORD TRUCK	FORD EXPLORER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
92	1998	FORD TRUCK	FORD EXPLORER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
93	1998	FORD TRUCK	FORD EXPLORER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	U	DIRECT FIT	47201	ALL
94	1998	FORD TRUCK	FORD EXPLORER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	UL	DIRECT FIT	47101	ALL
95	1998	FORD TRUCK	FORD EXPLORER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47102	ALL
96	1998	FORD TRUCK	FORD F-150 PICKUP	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
97	1998	FORD TRUCK	FORD F-150 PICKUP	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
98	1998	FORD TRUCK	FORD F-150 PICKUP	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47131	2WD
99	1998	FORD TRUCK	FORD F-150 PICKUP	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47139	4WD
100	1998	FORD TRUCK	FORD F-150 PICKUP	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47132	2WD
101	1998	FORD TRUCK	FORD F-150 PICKUP	4.2	WFMXA04.2AAA	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47140	4WD
102	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6AAA	TIER1	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
103	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
104	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXT04.6AAA	TIER1	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
105	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXT04.6AAA	TIER1	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
106	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
107	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6AAA	TIER1	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
108	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6AAA	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47133	4WD
109	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47133	4WD
110	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXT04.6AAA	TIER1	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47133	4WD
111	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6AAA	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
112	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
113	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXT04.6AAA	TIER1	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
114	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6AAA	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47134	4WD
115	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47134	4WD
116	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXT04.6AAA	TIER1	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47134	4WD
117	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6AAA	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
118	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
119	1998	FORD TRUCK	FORD F-150 PICKUP	4.6	WFMXT04.6AAA	TIER1	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
120	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4HBC	TIER1	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
121	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4JBN	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
122	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4HBC	TIER1	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
123	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4JBN	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
124	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4HBC	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47129	4WD
125	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4JBN	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47129	4WD
126	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4JBN	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD
127	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4HBC	TIER1	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD
128	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4HBC	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47130	4WD
129	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4JBN	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47130	4WD
130	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4HBC	TIER1	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
131	1998	FORD TRUCK	FORD F-150 PICKUP	5.4	WFMXA05.4JBN	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
132	1998	FORD TRUCK	FORD F-250 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD

**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
133	1998	FORD TRUCK	FORD F-250 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
134	1998	FORD TRUCK	FORD F-250 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47133	4WD
135	1998	FORD TRUCK	FORD F-250 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47177	2WD
136	1998	FORD TRUCK	FORD F-250 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47134	4WD
137	1998	FORD TRUCK	FORD F-250 PICKUP	4.6	WFMXA04.6BAA	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47178	2WD
138	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
139	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
140	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
141	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
142	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
143	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
144	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
145	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
146	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.6	XFMXA04.6JBC	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
147	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.6	XFMXA04.6JBC	TIER1	MDV3	D	2TWC(2)	4	4	FR	DIRECT FIT	47110	ALL
148	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.6	XFMXA04.6JBC	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
149	1999	FORD TRUCK	ORD E-150 ECONOLIN	4.6	XFMXA04.6JBC	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47183	ALL
150	1999	FORD TRUCK	ORD E-250 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
151	1999	FORD TRUCK	ORD E-250 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
152	1999	FORD TRUCK	ORD E-250 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47179	ALL
153	1999	FORD TRUCK	ORD E-250 ECONOLIN	4.2	XFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47180	ALL
154	1999	FORD TRUCK	FORD EXPEDITION	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
155	1999	FORD TRUCK	FORD EXPEDITION	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
156	1999	FORD TRUCK	FORD EXPEDITION	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47111	2WD
157	1999	FORD TRUCK	FORD EXPEDITION	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47113	4WD
158	1999	FORD TRUCK	FORD EXPEDITION	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47112	2WD
159	1999	FORD TRUCK	FORD EXPEDITION	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47114	4WD
160	1999	FORD TRUCK	FORD EXPEDITION	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
161	1999	FORD TRUCK	FORD EXPEDITION	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
162	1999	FORD TRUCK	FORD EXPEDITION	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
163	1999	FORD TRUCK	FORD EXPEDITION	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
164	1999	FORD TRUCK	FORD EXPEDITION	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
165	1999	FORD TRUCK	FORD EXPEDITION	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
166	1999	FORD TRUCK	FORD EXPLORER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
167	1999	FORD TRUCK	FORD EXPLORER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
168	1999	FORD TRUCK	FORD EXPLORER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UL	UNIVERSAL	47119	ALL
169	1999	FORD TRUCK	FORD EXPLORER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47120	ALL
170	1999	FORD TRUCK	FORD F-150 PICKUP	4.2	XFMXT04.22GC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
171	1999	FORD TRUCK	FORD F-150 PICKUP	4.2	XFMXT04.22GC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
172	1999	FORD TRUCK	FORD F-150 PICKUP	4.2	XFMXT04.22GC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47141	2WD
173	1999	FORD TRUCK	FORD F-150 PICKUP	4.2	XFMXT04.22GC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47143	4WD
174	1999	FORD TRUCK	FORD F-150 PICKUP	4.2	XFMXT04.22GC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47142	2WD
175	1999	FORD TRUCK	FORD F-150 PICKUP	4.2	XFMXT04.22GC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47144	4WD
176	1999	FORD TRUCK	FORD F-150 PICKUP	4.6	XFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD



**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
177	1999	FORD TRUCK	FORD F-150 PICKUP	4.6	XFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
178	1999	FORD TRUCK	FORD F-150 PICKUP	4.6	XFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47135	2WD
179	1999	FORD TRUCK	FORD F-150 PICKUP	4.6	XFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47137	4WD
180	1999	FORD TRUCK	FORD F-150 PICKUP	4.6	XFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47136	2WD
181	1999	FORD TRUCK	FORD F-150 PICKUP	4.6	XFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47138	4WD
182	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
183	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
184	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXT05.42BF	TIER1	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
185	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
186	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
187	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
188	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
189	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
190	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
191	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXT05.42BF	TIER1	LDT2	D	2TWC(2)	4	4	UL	UNIVERSAL	47206	ALL
192	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
193	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
194	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
195	1999	FORD TRUCK	FORD F-150 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
196	1999	FORD TRUCK	FORD F-250 PICKUP	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
197	1999	FORD TRUCK	FORD F-250 PICKUP	4.6	XFMXA04.6JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
198	1999	FORD TRUCK	FORD F-250 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
199	1999	FORD TRUCK	FORD F-250 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
200	1999	FORD TRUCK	FORD F-250 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
201	1999	FORD TRUCK	FORD F-250 PICKUP	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
202	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
203	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXT04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
204	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXT04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
205	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
206	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXT04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
207	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
208	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXT04.2HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
209	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
210	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
211	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
212	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47156	ALL
213	2000	FORD TRUCK	ORD E-150 ECONOLIN	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47157	ALL
214	2000	FORD TRUCK	ORD E-150 ECONOLIN	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
215	2000	FORD TRUCK	ORD E-150 ECONOLIN	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47256	ALL
216	2000	FORD TRUCK	ORD E-250 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
217	2000	FORD TRUCK	ORD E-250 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
218	2000	FORD TRUCK	ORD E-250 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
219	2000	FORD TRUCK	ORD E-250 ECONOLIN	4.2	YFMXA04.2JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
220	2000	FORD TRUCK	ORD E-250 ECONOLIN	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL



**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
221	2000	FORD TRUCK	ORD E-250 ECONOLIN	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
222	2000	FORD TRUCK	ORD E-350 ECONOLIN	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
223	2000	FORD TRUCK	ORD E-350 ECONOLIN	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
224	2000	FORD TRUCK	ORD E-350 ECONOLIN	6.8	YFMXA06.8JGC	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
225	2000	FORD TRUCK	ORD E-350 ECONOLIN	6.8	YFMXA06.8JGC	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
226	2000	FORD TRUCK	FORD EXPEDITION	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
227	2000	FORD TRUCK	FORD EXPEDITION	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
228	2000	FORD TRUCK	FORD EXPEDITION	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47111	2WD
229	2000	FORD TRUCK	FORD EXPEDITION	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47113	4WD
230	2000	FORD TRUCK	FORD EXPEDITION	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47112	2WD
231	2000	FORD TRUCK	FORD EXPEDITION	4.6	YFMXA04.66FF	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47114	4WD
232	2000	FORD TRUCK	FORD EXPEDITION	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
233	2000	FORD TRUCK	FORD EXPEDITION	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
234	2000	FORD TRUCK	FORD EXPEDITION	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
235	2000	FORD TRUCK	FORD EXPEDITION	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
236	2000	FORD TRUCK	FORD EXPEDITION	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
237	2000	FORD TRUCK	FORD EXPEDITION	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
238	2000	FORD TRUCK	FORD EXPLORER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
239	2000	FORD TRUCK	FORD EXPLORER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
240	2000	FORD TRUCK	FORD EXPLORER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UL	UNIVERSAL	47119	ALL
241	2000	FORD TRUCK	FORD EXPLORER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47120	ALL
242	2000	FORD TRUCK	FORD F-150 PICKUP	4.2	YFMXT04.22FC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
243	2000	FORD TRUCK	FORD F-150 PICKUP	4.2	YFMXT04.22FC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
244	2000	FORD TRUCK	FORD F-150 PICKUP	4.2	YFMXT04.22FC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47141	2WD
245	2000	FORD TRUCK	FORD F-150 PICKUP	4.2	YFMXT04.22FC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47143	4WD
246	2000	FORD TRUCK	FORD F-150 PICKUP	4.2	YFMXT04.22FC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47142	2WD
247	2000	FORD TRUCK	FORD F-150 PICKUP	4.2	YFMXT04.22FC	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47144	4WD
248	2000	FORD TRUCK	FORD F-150 PICKUP	4.6	YFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
249	2000	FORD TRUCK	FORD F-150 PICKUP	4.6	YFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
250	2000	FORD TRUCK	FORD F-150 PICKUP	4.6	YFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47135	2WD
251	2000	FORD TRUCK	FORD F-150 PICKUP	4.6	YFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47137	4WD
252	2000	FORD TRUCK	FORD F-150 PICKUP	4.6	YFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47136	2WD
253	2000	FORD TRUCK	FORD F-150 PICKUP	4.6	YFMXA04.6HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47138	4WD
254	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
255	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
256	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
257	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.42BF	TIER1	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
258	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
259	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
260	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
261	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.42BF	TIER1	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
262	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
263	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
264	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD

**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
265	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
266	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
267	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
268	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
269	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
270	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
271	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4HGC	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
272	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
273	2000	FORD TRUCK	FORD F-150 PICKUP	5.4	YFMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
274	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.2	1FMXT04.2HG5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
275	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.2	1FMXT04.2JG5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
276	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.2	1FMXT04.2HG5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
277	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.2	1FMXT04.2HG5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
278	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.2	1FMXT04.2JG5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
279	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.2	1FMXT04.2HG5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
280	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.2	1FMXT04.2JG5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
281	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.6	1FMXT04.6JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
282	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.6	1FMXT04.6JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47156	ALL
283	2001	FORD TRUCK	ORD E-150 ECONOLIN	4.6	1FMXT04.6JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47157	ALL
284	2001	FORD TRUCK	ORD E-150 ECONOLIN	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
285	2001	FORD TRUCK	ORD E-150 ECONOLIN	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47256	ALL
286	2001	FORD TRUCK	ORD E-250 ECONOLIN	4.2	1FMXT04.2JG5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
287	2001	FORD TRUCK	ORD E-250 ECONOLIN	4.2	1FMXT04.2JG5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
288	2001	FORD TRUCK	ORD E-250 ECONOLIN	4.2	1FMXT04.2JG5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
289	2001	FORD TRUCK	ORD E-250 ECONOLIN	4.2	1FMXT04.2JG5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
290	2001	FORD TRUCK	ORD E-250 ECONOLIN	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
291	2001	FORD TRUCK	ORD E-250 ECONOLIN	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
292	2001	FORD TRUCK	ORD E-350 ECONOLIN	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
293	2001	FORD TRUCK	ORD E-350 ECONOLIN	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
294	2001	FORD TRUCK	ORD E-350 ECONOLIN	6.8	1FMXA06.8JFC	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
295	2001	FORD TRUCK	ORD E-350 ECONOLIN	6.8	1FMXA06.8JFC	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
296	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
297	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
298	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
299	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
300	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47121	2WD
301	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47121	2WD
302	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47123	4WD
303	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47123	4WD
304	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47122	2WD
305	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47122	2WD
306	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47124	4WD
307	2001	FORD TRUCK	FORD EXPEDITION	4.6	1FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47124	4WD
308	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD

**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
309	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
310	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
311	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
312	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47125	4WD
313	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47125	4WD
314	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47153	2WD
315	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47153	2WD
316	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
317	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
318	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47126	4WD
319	2001	FORD TRUCK	FORD EXPEDITION	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47126	4WD
320	2001	FORD TRUCK	FORD EXPLORER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
321	2001	FORD TRUCK	FORD EXPLORER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
322	2001	FORD TRUCK	FORD EXPLORER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UL	UNIVERSAL	47119	ALL
323	2001	FORD TRUCK	FORD EXPLORER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47120	ALL
324	2001	FORD TRUCK	FORD F-150 PICKUP	4.2	1FMXT04.22F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
325	2001	FORD TRUCK	FORD F-150 PICKUP	4.2	1FMXT04.22F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
326	2001	FORD TRUCK	FORD F-150 PICKUP	4.2	1FMXT04.22F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47145	2WD
327	2001	FORD TRUCK	FORD F-150 PICKUP	4.2	1FMXT04.22F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UL	DIRECT FIT	47147	4WD
328	2001	FORD TRUCK	FORD F-150 PICKUP	4.2	1FMXT04.22F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47146	2WD
329	2001	FORD TRUCK	FORD F-150 PICKUP	4.2	1FMXT04.22F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47148	4WD
330	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
331	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
332	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
333	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	2WD
334	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47121	2WD
335	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47121	2WD
336	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47123	4WD
337	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47123	4WD
338	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47122	2WD
339	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47122	2WD
340	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47124	4WD
341	2001	FORD TRUCK	FORD F-150 PICKUP	4.6	1FMXT04.6PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47124	4WD
342	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.42F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
343	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF4	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
344	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
345	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
346	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
347	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.42F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
348	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.42F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
349	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF4	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
350	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
351	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
352	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD



**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
353	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.42F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
354	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47125	4WD
355	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47125	4WD
356	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47125	4WD
357	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF4	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47151	ALL
358	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47153	2WD
359	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47153	2WD
360	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47153	2WD
361	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
362	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
363	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
364	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47126	4WD
365	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47126	4WD
366	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47126	4WD
367	2001	FORD TRUCK	FORD F-150 PICKUP	5.4	1FMXT05.42F5	LEV1 LEV	LDT2	D	2TWC(2)	4	4	UR	DIRECT FIT	47152	ALL
368	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
369	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
370	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
371	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
372	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
373	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
374	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
375	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.2	2FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
376	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.6	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
377	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.6	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
378	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.6	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47156	ALL
379	2002	FORD TRUCK	ORD E-150 ECONOLIN	4.6	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47157	ALL
380	2002	FORD TRUCK	ORD E-150 ECONOLIN	5.4	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
381	2002	FORD TRUCK	ORD E-150 ECONOLIN	5.4	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
382	2002	FORD TRUCK	ORD E-250 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
383	2002	FORD TRUCK	ORD E-250 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
384	2002	FORD TRUCK	ORD E-250 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
385	2002	FORD TRUCK	ORD E-250 ECONOLIN	4.2	2FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
386	2002	FORD TRUCK	ORD E-250 ECONOLIN	5.4	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
387	2002	FORD TRUCK	ORD E-250 ECONOLIN	5.4	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
388	2002	FORD TRUCK	ORD E-350 ECONOLIN	5.4	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
389	2002	FORD TRUCK	ORD E-350 ECONOLIN	5.4	2FMXT05.4RF9	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
390	2002	FORD TRUCK	ORD E-350 ECONOLIN	6.8	2FMXA06.8JFN	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
391	2002	FORD TRUCK	ORD E-350 ECONOLIN	6.8	2FMXA06.8JFN	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
392	2002	FORD TRUCK	FORD EXPEDITION	4.6	2FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
393	2002	FORD TRUCK	FORD EXPEDITION	4.6	2FMXT04.66F7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
394	2002	FORD TRUCK	FORD EXPEDITION	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
395	2002	FORD TRUCK	FORD EXPEDITION	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
396	2002	FORD TRUCK	FORD F-150 PICKUP	4.6	2FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL

**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
397	2002	FORD TRUCK	FORD F-150 PICKUP	4.6	2FMXT05.4PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
398	2002	FORD TRUCK	FORD F-150 PICKUP	4.6	2FMXT05.4RF6	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
399	2002	FORD TRUCK	FORD F-150 PICKUP	4.6	2FMXT05.4RF6	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
400	2002	FORD TRUCK	FORD F-150 PICKUP	4.6	2FMXT05.4PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
401	2002	FORD TRUCK	FORD F-150 PICKUP	4.6	2FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
402	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
403	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
404	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4RF6	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
405	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
406	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.42F5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
407	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4PF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
408	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4PF6	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
409	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4RF6	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
410	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
411	2002	FORD TRUCK	FORD F-150 PICKUP	5.4	2FMXT05.42F5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
412	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
413	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
414	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
415	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
416	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
417	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
418	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2HF5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
419	2003	FORD TRUCK	ORD E-150 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
420	2003	FORD TRUCK	ORD E-250 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
421	2003	FORD TRUCK	ORD E-250 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
422	2003	FORD TRUCK	ORD E-250 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47158	ALL
423	2003	FORD TRUCK	ORD E-250 ECONOLIN	4.2	3FMXT04.2JF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47159	ALL
424	2003	FORD TRUCK	ORD E-350 ECONOLIN	6.8	3FMXA06.8JFN	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
425	2003	FORD TRUCK	ORD E-350 ECONOLIN	6.8	3FMXA06.8JFN	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
426	2003	FORD TRUCK	FORD F-150 PICKUP	4.6	3FMXT05.4PFB	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
427	2003	FORD TRUCK	FORD F-150 PICKUP	4.6	3FMXT05.4PFB	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
428	2003	FORD TRUCK	FORD F-150 PICKUP	5.4	3FMXT05.42F5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
429	2003	FORD TRUCK	FORD F-150 PICKUP	5.4	3FMXT05.4PFB	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
430	2003	FORD TRUCK	FORD F-150 PICKUP	5.4	3FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
431	2003	FORD TRUCK	FORD F-150 PICKUP	5.4	3FMXT05.42F5	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
432	2003	FORD TRUCK	FORD F-150 PICKUP	5.4	3FMXT05.4PFB	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
433	2003	FORD TRUCK	FORD F-150 PICKUP	5.4	3FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
434	2004	FORD TRUCK	FORD F-150 PICKUP	4.6	4FMXT04.6PNB	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
435	2004	FORD TRUCK	FORD F-150 PICKUP	4.6	4FMXT04.6PNB	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47256	ALL
436	2004	FORD TRUCK	FORD F-150 PICKUP	5.4	4FMXT05.4PP7	LEV1 LEV	MDV2	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
437	2004	FORD TRUCK	FORD F-150 PICKUP	5.4	4FMXT05.4PP7	LEV1 LEV	MDV2	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
438	2005	FORD TRUCK	ORD E-350 ECONOLIN	5.4	5FMXK05.4TF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	ALL
439	2005	FORD TRUCK	ORD E-350 ECONOLIN	5.4	5FMXK05.4TF5	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	ALL
440	2005	FORD TRUCK	ORD F-350 SUPER DU	5.4	5FMXK05.4WFD	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47106	ALL

**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
441	2005	FORD TRUCK	DRD F-350 SUPER DUTY	5.4	5FMXK05.4TF9	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	F	UNIVERSAL	47106	ALL
442	2005	FORD TRUCK	DRD F-350 SUPER DUTY	5.4	5FMXK05.4WFD	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
443	2005	FORD TRUCK	DRD F-350 SUPER DUTY	5.4	5FMXK05.4TF9	LEV1 LEV	MDV3	DS	2TWC,TWC	3	2	R	UNIVERSAL	47206	ALL
444	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JBC	TIER1	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
445	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
446	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JBC	TIER1	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
447	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
448	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JBC	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47129	4WD
449	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47129	4WD
450	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JBC	TIER1	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD
451	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47181	2WD
452	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JBC	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47130	4WD
453	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47130	4WD
454	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JBC	TIER1	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
455	1998	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	WFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47182	2WD
456	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
457	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGN	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
458	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
459	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGN	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
460	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGN	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
461	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
462	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGN	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
463	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
464	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
465	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGN	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
466	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGC	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
467	1999	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	XFMXA05.4JGN	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
468	2000	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
469	2000	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
470	2000	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47115	2WD
471	2000	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47117	4WD
472	2000	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
473	2000	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	YFMXA05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47118	4WD
474	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
475	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
476	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
477	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
478	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47125	4WD
479	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47125	4WD
480	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47153	2WD
481	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UL	DIRECT FIT	47153	2WD
482	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
483	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47116	2WD
484	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF7	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47126	4WD



**Appendix D-193-88**  
**Car Sound 47100 / 47200**

No.	Model Year	Make	Model	Engine Size (liters)	Test Group Name	Certification Level	Weight Class	Exhaust Type	Converter Type	Total Converter	Monitored Converter	Conv. Location	Converter Part Type	MFR Part Number	Application Type
485	2001	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	1FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	UR	DIRECT FIT	47126	4WD
486	2002	LINCOLN TRUCK	LINCOLN BLACKWOOD	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
487	2002	LINCOLN TRUCK	LINCOLN BLACKWOOD	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
488	2002	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	F	UNIVERSAL	47176	2WD
489	2002	LINCOLN TRUCK	LINCOLN NAVIGATOR	5.4	2FMXT05.4RF8	LEV1 LEV	MDV3	D	2TWC(2)	4	4	R	UNIVERSAL	47206	2WD
490	2003	LINCOLN TRUCK	LINCOLN AVIATOR	4.6	3FMXT04.62F9	LEV1 LEV	MDV2	DS	2TWC,TWC	3	2	F	UNIVERSAL	47176	ALL
491	1997	MERCURY TRUCK	MERCURY MOUNTAINEER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
492	1997	MERCURY TRUCK	MERCURY MOUNTAINEER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
493	1997	MERCURY TRUCK	MERCURY MOUNTAINEER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	U	DIRECT FIT	47201	ALL
494	1997	MERCURY TRUCK	MERCURY MOUNTAINEER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	UL	DIRECT FIT	47101	ALL
495	1997	MERCURY TRUCK	MERCURY MOUNTAINEER	5	VFM5.028GFEK	TIER1	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47102	ALL
496	1998	MERCURY TRUCK	MERCURY MOUNTAINEER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
497	1998	MERCURY TRUCK	MERCURY MOUNTAINEER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
498	1998	MERCURY TRUCK	MERCURY MOUNTAINEER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	U	DIRECT FIT	47201	ALL
499	1998	MERCURY TRUCK	MERCURY MOUNTAINEER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	UL	DIRECT FIT	47101	ALL
500	1998	MERCURY TRUCK	MERCURY MOUNTAINEER	5	WFMXT05.02DC	TLEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47102	ALL
501	1999	MERCURY TRUCK	MERCURY MOUNTAINEER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
502	1999	MERCURY TRUCK	MERCURY MOUNTAINEER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
503	1999	MERCURY TRUCK	MERCURY MOUNTAINEER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UL	UNIVERSAL	47119	ALL
504	1999	MERCURY TRUCK	MERCURY MOUNTAINEER	5	XFMXT05.02GF	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47120	ALL
505	2000	MERCURY TRUCK	MERCURY MOUNTAINEER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
506	2000	MERCURY TRUCK	MERCURY MOUNTAINEER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
507	2000	MERCURY TRUCK	MERCURY MOUNTAINEER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UL	UNIVERSAL	47119	ALL
508	2000	MERCURY TRUCK	MERCURY MOUNTAINEER	5	YFMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47120	ALL
509	2001	MERCURY TRUCK	MERCURY MOUNTAINEER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	F	UNIVERSAL	47175	ALL
510	2001	MERCURY TRUCK	MERCURY MOUNTAINEER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	R	UNIVERSAL	47205	ALL
511	2001	MERCURY TRUCK	MERCURY MOUNTAINEER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UL	UNIVERSAL	47119	ALL
512	2001	MERCURY TRUCK	MERCURY MOUNTAINEER	5	1FMXT05.02F5	LEV1 LEV	LDT2	D	2TWC(2)	4	2	UR	DIRECT FIT	47120	ALL