



School Bus Crankcase and Tailpipe Emission Retrofit Kits*



Reducing diesel emissions from school buses provides significant benefits. Low to high efficiency emission reduction technology options exist, depending on the program goals and budgets.

All kits contain CARB or EPA verified technologies, along with applicable mounting hardware required for the installation.

Kits are available for popular school bus makes and models, including:

AmTran	Ford
Bluebird	GMC
Carpenter	International
Chevrolet	Thomas Built/Freightliner

* Patented and Pat. Pending

Acronym Translation

DOC = Diesel Oxidation Catalyst
DMF = Diesel Multi-stage Filter

LNF = Low NO₂ Filter
CFS = Crankcase Filtration System

Retrofit Kits

Column order (from left to right) is lowest to highest emissions reduction.

Bus Make Model Yr/Style Engine		Spiracle CFS Kit	DOC Muffler		DMF Muffler		LNF Muffler
			Alone	+Spiracle CFS	Alone	+Spiracle CFS	Alone
Am Tran							
Conventional							
1991-2005	International DT360	X007918	X008045	X007897	X009225	X009781	X009843
1991-2005	International T444E	X009871	X008045	X009874	X009225	X009875	X009843
1991-2004	International DT466	X007917	X008045	X007898	X009225	X009415	X009843
2005-2006	International DT466	X009224	(1)	(1)	X009225	X009784	X009843
2002-2005	International VT365	N/A	(1)	(1)	X009225	N/A	X009843
Front Engine/Forward Control							
1991-2004	International DT466	X007919	X008045	X007899	X009225	X009782	X009843
Rear Engine							
1991-2004	International T444E	X009872	X008046	X009877	X009270	X009876	X009844
1991-2004	International DT466, DT530	X007922	X008046	X007913	X009270	X009422	X009844
Bluebird							
Conventional							
1991-2005	International DT360	X007918	X008045	X007897	X009225	X009781	X009843
1991-2005	International T444E	X009871	X008045	X009874	X009225	X009875	X009843
1991-2004	International DT466	X007917	X008045	X007898	X009225	X009415	X009843
2005-2006	International DT466	X009224	X008045	(4)	X009225	X009784	(4)
1997-2004	Cummins ISB	(4)	X008098	(4)	X009256	(4)	X009858
1997-2000	Cat 3116,3126	X007925	X008060	X007959	X009257	X009419	X009851
2001-2003	Cat 3116,3126	X007925	(1)	(1)	X009257	X009419	X009851
2004-2006	Cat C7 / Vision	X009124	(1)	(1)	X009258	X009418	X009857
Front Engine/Forward Control							
1991-2004	Cummins ISB w/ TC2000 chassis	X007915	X008048	X007909	X009259	X009420	X009846
1991-2004	Cummins ISB w/ All American chassis	X009049	X008048	X009048	X009259	X009783	X009846
1991-2000	Cat 3126	X009126	(4)	(4)	(4)	(4)	(4)
2001-2004	Cat 3126 w/ All American chassis	X009126	(1)	(1)	X009258	(4)	X009857
1992-1997	Cummins ISC	X009049	X009021	(4)	X009260	X009433	X009862
1998-2005	Cummins ISC	X009049	(4)	(4)	X009261	X009434	X009863
2002-2004	Cat C7	X009126	(1) / X009377	(1)	X009258	(4)	X009857
Rear Engine							
1991-2004	Cummins ISB	X007923	X008047	X007911	X009263	X009421	X009845
1991-2004	Cummins ISC	X007923	X008061	X008059	X009248	X009417	X009853
1994-2001	Cat 3116,3126 with TC2000 chassis not bi-flow	X009043	X008097	X007958	X009247	X009416	X009856
1999-2003	Cat 3126 with All-American chassis	X009043	X008047	X009050	X009248	X009432	X009853
2002-2004	Cat C7	X009043	(1)	(1)	X009264	(4)	X009860
Carpenter							
Conventional							
1991-2005	International DT360	X007918	X008045	X007897	X009225	X009781	X009843
1991-2005	International T444E	X009871	X008045	X009874	X009225	X009875	X009843
1991-2004	International DT466	X007917	X008045	X007898	X009225	X009415	X009843
2005-2006	International DT466	X009224	X008045	(4)	X009225	X009784	(4)
Front Engine/Forward Control							
1991-2004	International DT466	X007919	X008045	X007899	X009225	X009782	X009843
Rear Engine							
1991-2004	International T444E	X009872	X008046	X009877	X009270	X009876	X009844
1991-2004	International DT466, DT530	X007922	X008046	X007913	X009270	X009422	X009844
Chevrolet							
Conventional							
	6.5 Duramax	N/A	X009378	N/A	N/A	N/A	N/A

Retrofit Kits Column order (from left to right) is lowest to highest emissions reduction.

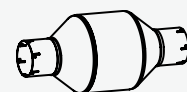
Bus Make Model Yr/Style Engine	Spiracle CFS Kit	DOC Muffler		DMF Muffler		LNF Muffler
		Alone	+Spiracle CFS	Alone	+Spiracle CFS	Alone
Ford						
Conventional						
6.0L, 7.3L	N/A	X009375	N/A	N/A	N/A	N/A
GMC						
Conventional						
1999-2002 Cat 3126	X009125	(1)	(1)	(4)	(4)	(4)
International						
Conventional						
1989-1994 Ford/International 7.3L (dual inlet)	X007918	X009113	X009111	N/A	N/A	N/A
1991-2005 International DT360	X007918	X008045	X007897	X009225	X009781	X009843
1991-2005 International T444E	X009871	X008045	X009874	X009225	X009875	X009843
1991-2004 International DT466	X007917	X008045	X007898	X009225	X009415	X009843
2005-2006 International DT466	X009224	(1)	(1)	X009225	X009784	(4)
2002-2005 International VT365	N/A	(1)	(1)	X009225	N/A	X009843
Front Engine/Forward Control						
1991-2004 International DT466	X007919	X008045	X007899	X009225	X009782	X009843
Thomas Built/Freightliner						
Conventional						
1991-2004 International DT360	(4)	X008045	(4)	X009225	X009781	X009843
1991-2005 International T444E	X009871	X008045	X009874	X009225	X009875	X009843
1991-2004 International DT466	X007917	X008045	X007898	X009225	X009415	X009843
2005-2006 International DT466	X009224	X008045	N/A	X009225	X009784	
1999-2002 Cummins ISB	X007982	X008042	X007910	X009271	X009423	X009850
2003-2004 Cummins ISB	X007982	(1)	(1)	X009271	X009423	X009850
1997-2000 Cat 3116,3126	X007901	X008043	X007900	X009272	X009424 (6)	X009854 (6)
2001-2002 Cat 3126, C-7	X007901	(8)	(8)	(8)	(8)	X009854 (6) X009859 (7)
2003-2006 Cat 3126, C-7	X007901	(1)	(1)	X009276 (7)	(7)	X009854 (6) X009859 (7)
2002-2003 Mercedes MBE900	X007920	X008062	X007903	X009273	X009425	X009852
2004 Mercedes MBE900	X007920	X008041	X007902	X009274	X009426	X009849
2005-2006 Mercedes MBE900	X007920	X009167	(4)	(4)	(4)	(4)
Front Engine/Forward Control						
1994-1997 Cummins ISB	X009049	X008099	(4)	X009275	X009785	X009861
1998-2004 Cummins ISB	X009049	X008100	(4)	X009276	X009786	X009859
1997-2004 Cat 3126	X009126	X008100	X009235	X009276	X009787	X009859
Rear Engine/Left Hand Exhaust						
1994-2000 Cummins ISB	X009038	X008063	X007983	X009277	X009427	X009855
1996-2004 Cat 3116, 3126	X007906	X008039	X007904	X009278	X009428	X009847
2001-2004 Cat 3126	X007906	(1)	(1)	X009278	X009428	X009847
2004 Mercedes MBE900	X007921	X008039	X007908	X009278	X009429	X009847
Rear Engine/Right Hand Exhaust						
1996-2004 Cat 3116, 3126	X007906	X008040 (2)	X007905 (2)	X009279	X009431	X009848 (2)
1996-2004 Cat 3116, 3126	X007907	X008039 (3)	X007912 (3)	X009278	X009430	X009847 (3)
2001-2004 Cat 3126	X007907	(1)	(1)	X009278	X009430	X009847

Footnotes:

- 1 Vehicle originally equipped with a DOC Muffler, purchase Spiracle CFS only or upgraded technology
- 2 End inlet/outlet, 34" x 8.5"
- 3 Side inlet, 42" x 11"
- 4 Kit currently unavailable; application has never been encountered in the field
- 6 Muffler Style 2 - 4" inlet and outlet
- 7 Muffler Style 1 - 4" inlet and outlet
- 8 Muffler Style 1 Inlet / Style 2 outlet

Need a DOC for a van-type bus?

See the back page for products.



Diesel Oxidation Catalysts (DOCs)

DOCs are designed to be installed into existing exhaust systems between the muffler and the turbocharger.

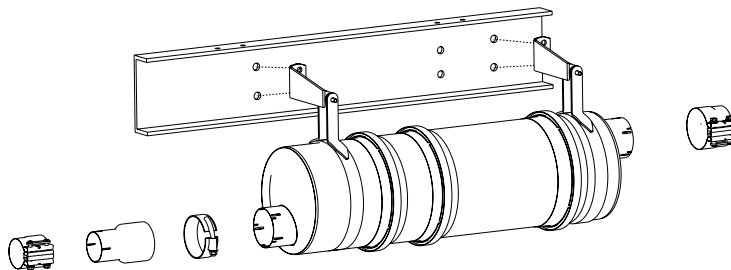
Max. H.P. Rating (9)	Dimensions (in inches)					Engine Model Year (10)
	Body Dia.	Body Length	Inlet I.D.	Outlet I.D.	Length	1960-2006 (11)
125	5.25	14.0	2.5	2.5	18.00	X009441
175	6.25	14.25	2.5	2.5	18.25	X009442
250	8.0	13.5	3.5	3.5	20.50	X009443
400	10.0	16.0	4.0	4.0	23.50	X009458
550	11.0	16.5	5.0	5.0	24.50	X009472



- 9 Higher horsepower engines (>450 hp) may need larger diameter converter mufflers or dual mufflers to accommodate the higher airflows and backpressure associated with those engines.
 10 In California, approved for 1988-2002; no limit by EPA
 11 Spiracle Crankcase Filtration System must be used with a DOC Muffler to meet CARB Level 1

Didn't Find Your Bus and Model on the List?

Call your local Donaldson certified emissions dealer. Our dealers have the training and experience to help package the existing verified product offering with new or different mounting hardware, clamps and brackets.



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