

# 2008 Annual Summary of Emission-Related Recall and Voluntary Service Campaigns Performed on Light-Duty Vehicles and Light-Duty Trucks



**EPA**

United States  
Environmental Protection  
Agency

# 2008 Annual Summary of Emission-Related Recall and Voluntary Service Campaigns Performed on Light- Duty Vehicles and Light-Duty Trucks

Compliance and Innovative Strategies Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency



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## INTRODUCTION

Federal regulations require motor vehicle manufacturers to report to EPA all recalls that affect emission-related components or systems. The following report briefly describes light-duty vehicle recalls reported to EPA that affect emission-related components or systems. Note that some of the recalls listed in this report fix problems that do not impact emission control performance even though they involve the repair or replacement of emission-related parts. Manufacturers voluntarily recall vehicles for various reasons, such as safety or customer satisfaction, but if they affect emission-related parts, they still must be reported to EPA. They are all considered “emission-related” for the purposes of this report.

This report is divided into two sections. The first section is titled, “Emission-Related Recalls”. These are the typical recalls where the manufacturer recommends that the owner bring the car in for repair under the recall. In this case, the owner should not wait until the problem is apparent before getting the vehicle fixed. The second section titled, “Emission-Related Voluntary Service Campaigns”. Under EPA rules, these are still considered recalls, but are listed separately because the manufacturer is telling the owner to bring the car in for repair only if the problem is apparent (such as a warning light, noise, drive problem, etc.). There is usually a warranty extension associated with these types of recalls. Note that the manufacturer might not call a voluntary service campaign a “recall” in the owner or dealer notifications.

Recalls can be initiated voluntarily by the manufacturer or can be ordered by EPA. Voluntary recalls could also be directly influenced by EPA. Influenced recalls are those where EPA has had a direct role in convincing the manufacturer to voluntarily recall the vehicles. Because EPA is fairly successful at influencing recalls, ordered recalls are extremely rare. This report indicates these categories in the “Type” column. A “V” designation is a voluntary recall without direct EPA influence, an “I” designation is a voluntary recall that was directly influenced by EPA, a “VSC” designation is a voluntary service campaign not directly influenced by EPA, and an “I-VSC” designation is a voluntary service campaign directly influenced by EPA. If there is an ordered recall, the type will be designated with an “O”.

It should also be noted that recalls may not include all of the vehicles in the described year, model, and engine family. Some recalls are specific to subsets of these categories because the problem or defect only affects part of a production run. The specific vehicles subject to a recall are identified by the manufacturer in the technical service bulletins provided to the repair facilities. These are usually listings based on the Vehicle Identification Number, or VIN, that is stamped on each vehicle. You should direct any questions regarding your vehicle’s inclusion in a recall to the dealer repair facility. If there are still issues or problems, direct these to EPA at the e-mail address: [vehicle-recalls@epa](mailto:vehicle-recalls@epa).

## Abbreviations and Acronyms

<b>Acronym/Term:</b>	<b>Definition:</b>
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CARB	California Air Resources Board
CFV	Clean Fuel Vehicle
DTC	Diagnostic Trouble Code
ECU	Engine Control Unit
ECM	Engine Control Module
EGR	Exhaust Gas Recirculation
MIL	Malfunction Indicator Light
MY	Model Year
NHTSA	National Highway Traffic Safety Administration
NLEV	National Low Emission Vehicle
OBD	On-Board Diagnostics
PCM	Powertrain Control Module
TCM	Transmission Control Module
TSB	Technical Service Bulletin
VECI	Vehicle Emission Control Information
VERR	Voluntary Emissions Recall Report

<b>Recall Type:</b>	<b>Definition:</b>
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O	Ordered by EPA
V	Voluntary Recall by Manufacturer
VSC	Voluntary Service Campaign by Manufacturer
I	Manufacturer voluntary action with EPA Influence

## **Section 1: 2008 Emission-Related Recall Campaigns**

## 2008 Emission-Related Recall Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled	
Aston Martin	FSA163	3365	V	4/2/2008	2006 2007 2008	Vantage DB9 Vantage DB9 Vantage	6ASXV04.3305 7ASXV05.9803 7ASXV04.3305 8ASXV05.9803 8ASXV04.3305	A valve inside the fuel cap may stick open and stay open allowing fuel vapors into the atmosphere. This will cause the Malfunction Indicator Light (MIL) to illuminate. <b>Remedy:</b> Dealers will replace the fuel cap internal valve.	476 688 1,474 283 911	3,832	
BMW	07E-A02	2954	V	3/13/2008	2004 2005 2006 2007	525i, 530i 545i, 645Ci 530i 545i, 645Ci 530i 550i, 650i 530i 550i, 650i	4BMXV03.0SMG 4BMXV04.4LEV 5BMXV03.0SMG 5BMXV04.4LEV 6BMXV03.0N52 6BMXV04.8UL2 7BMXV03.0N52 7BMXV04.8UL2	Vehicles have a software error that causes the communication between the Transmission Control Module (TCM) and certain scan tool equipment to be interrupted. This makes it difficult for technicians to properly diagnose potential emissions problems, and may cause some vehicles to fail State inspection/maintenance tests. <b>Remedy:</b> BMW Service Centers will reprogram the TCM with an improved version of the software.	178 1,101 48 878 74 388 130 460	3,257	
BMW	07E-A04	3312	V	1/28/2008	2007	ALPINA B7	7ABBV04.4H10	Certain 2007 model year vehicles have a software error that causes certain diagnostics within the On-Board Diagnostic (OBD) system to function improperly. The diagnostics of the thermostat, the Mass Air Flow (MAF) sensor, the radiator outlet temperature sensor, and the inlet air temperature sensor do not work correctly. Consequently, malfunctions of these components are not detected as required. <b>Remedy:</b> BMW service centers will reprogram the Engine Control Module (ECM) in these vehicles with an improved version of the software.	450	450	
BMW	07E-A03	3314	V	1/16/2008	2005 2006	325CiA 325CiA	5BMXV02.5M56 6BMXV02.5M56	Certain 2005 and 2006 model year 325CiA vehicles have a potential problem relating to their engine secondary air systems. Due to premature material wear of the secondary air system valve and associated vacuum control lines, the system may fail to operate during cold starts, causing a Service Engine Soon light to illuminate. <b>Remedy:</b> BMW service centers will replace the secondary air system valves, and their associated vacuum control lines, and eliminate a vacuum check valve in the affected vehicles.	205 628	833	
BMW	08E-A01	3513	V	5/19/2008	2004	X5	4BMXT03.0E53	BMW has determined that certain X5 3.0i A vehicles may not meet emission control requirements. <b>Remedy:</b> A voluntary emission recall has been issued to reprogram the (ECM) on 2004 model year vehicles to ensure that the vehicles meet mandated emissions standards.	23,689	23,689	
BMW	08E-A02	3425		7/1/2008	2007	M5, M6	7BMXV05.0S85	Certain vehicles have a software error such that communication between the Engine Control Module (ECM) and certain generic scan tool equipment is not possible. <b>Remedy:</b> BMW dealers will reprogram the ECM with an improved version of the software.	870	870	
Chrysler	2008-14-E H06	3458	V	4/1/2008	2008 2008	Jeep Wrangler Chrysler Town & Country	8CRXT03.8NE1 8CRXT0231N81 8CRXT0231N80 8CRXT03.8NE0	Some vehicles equipped with 3.8L engines may have had incorrect spark plugs installed in three of the six cylinders. These incorrect spark plugs will wear out sooner than the specified plugs and could cause damage to the engine under certain extreme driving conditions. <b>Remedy:</b> Chrysler dealers will inspect the plugs in the affected vehicles and replace them if necessary.	34 23 68 320	445	
Chrysler	2008-16-E H19	3485	V	5/1/2008	2006	Jeep Commander	6CRXT04.75J0	The Powertrain Control Module (PCM) on these vehicles was programmed with software that may cause the engine to stall under certain operating conditions. <b>Remedy:</b> Chrysler dealers will reprogram the vehicle's PCM.	24,535	24,535	
Chrysler	2008-25-E H21	3512	V	6/1/2008	2009	Dodge Journey	9CRXJ04.0TNO 9CRXJ04.0CRO	The engine wiring harness on vehicles equipped with 3.5L engines may contact and chafe on the left transaxle mount. If sufficient chafing occurs one or more of the wires in the harness may short-circuit to ground. This could result in an engine compartment fire. <b>Remedy:</b> The dealer will inspect the engine wiring harness for damage, repair if necessary, and reroute the wiring harness away from the left transaxle mount.	4,372 1,675	6,047	

## 2008 Emission-Related Recall Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled	
Chrysler	2008-37-E H32	3614	V	10/27/2008	2008	Dodge Caliber SRT4	8CRXV02.4ME2	The Powertrain Control Module (PCM) may have been inadvertently programmed with software that disabled three engine diagnostic monitors. Without these monitors, an improperly operating component may go undetected and result in excessive exhaust emissions. <b>Remedy:</b> Chrysler dealers will reprogram the vehicle's PCM.	2,001	2,001	
Chrysler	2008-38-E H33	3615	V	11/13/2008	2009	Dodge Caliber, Jeep Compass/Patriot Jeep Compass/Patriot Chrysler Sebring, Dodge Avenger Dodge Caliber, Jeep Compass/Patriot Dodge Caliber Chrysler Sebring, Dodge Avenger/Journey	9CRXJ02.43P0 9CRXJ02.43P1 9CRXJ02.4FR0 9CRXJ02.4UP0 9CRXV01.81P0 9CRXV02.4UP0	The Powertrain Control Module (PCM) on these vehicles may have been manufactured with an adhesive that could cause the printed circuit board to break. This can cause the engine to stall and result in a crash without warning. <b>Remedy:</b> Chrysler dealers will replace the PCM and install new software.	301 16 54 68 14 231	684	
Ford	08S02	3366	V	2/29/2008	2006  2007  2007	E-Series  E-Series  Expedition/Navigator	6FMXT05.4TF5 6FMXT05.4RM6 6FMXT05.4SP6 6FMXT05.4AS6 6FMXT05.4AM3 6FMXT05.46R3 6FMXT05.4ST2 6FMXT05.45HT 7FMXT05.4AS6 7FMXT05.46R3 7FMXT05.45H2 7FMXT05.44E6	Some 2006 and 2007 model year vehicles may have been produced with a Fuel Rail Assembly that contains weak areas in the cross over hose. As a result, the hose may crack. This in turn may result in a fuel odor caused by leaking fuel vapors, and possibly a liquid fuel leak as well. A fuel leak in the presence of an ignition source could result in a fire. <b>Remedy:</b> Ford initiated a recall campaign to replace the fuel rail assemblies on the affected vehicles. This is both a safety-related and emission-related recall.	3,085 175 59 1 3,539 59 1,086 3 824 1,927 2,592 43,849	57,199	
General Motors	08136 ML-MW287	2724	V	4/1/2008	2004  2005  2006	GMC Yukon, Chevy Suburban GMC Yukon, Chevy Suburban/Avalanche GMC Yukon, Chevy Suburban GMC Yukon, Chevy Suburban/Avalanche GMC Yukon, Chevy Suburban GMC Yukon, Chevy Suburban/Avalanche	4GMXT06.0188 4GMXT08.1201 5GMXT06.0188 5GMXT08.1201 6GMXT06.0394 6GMXT08.1201	Certain vehicles equipped with dual fuel tanks were built with a condition in which the On-Board Diagnostic (OBD) evaporative emission system leak check can become disabled in the presence of a primary fuel tank level sender that is stuck in the 'full' position.. <b>Remedy:</b> GM has initiated a recall to reprogram the Engine Control Module (ECM) with corrected calibrations.	6,042 4,743 4,650 4,173 803 896	21,307	
General Motors	07027 ML-MW288	3303	V	5/12/2008	2004	Cadillac SRX	4GMXT03.6144	Certain 2004 vehicles equipped with 3.6L V6 engines may experience a failure of the left or right catalytic converter. <b>Remedy:</b> The dealer will inspect and, if necessary, replace the catalytic converter with newly manufactured converters.	17,452	17,452	

## 2008 Emission-Related Recall Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled	
General Motors	07251 ML-MW273	3390	V	3/20/2008	2002	SATURN VUE	2GMXT02.2123	Some 2002 model year Saturn VUE vehicles equipped with 2.2L 4-cylinder engines have electrical stresses in their Ignition Control Modules (ICM's). These electrical stresses may cause the ICM's to fail, resulting in deterioration of idle quality and greatly reduced engine power. Also, the vehicle may be hard to start. The service engine soon light will illuminate and will be flashing. Catalytic converter failure could result from engine misfire if not repaired immediately. <b>Remedy:</b> GM will conduct a Voluntary Emissions Recall to install new ICM's on the affected vehicles. The service modules have an improved design which makes them more resistant to the potentially damaging effects of electrical stress.	13,055	13,055	
General Motors	07318 ML-MW271	3392	V	2/18/2008	2007 2008	SATURN AURA HYBRID SATURN VUE HYBRID SATURN AURA HYBRID	7GMXV02.4040 7GMXV02.4130 8GMXV02.4040	There is a voltage imbalance within the hybrid batteries of some 2007 VUE Hybrid and 2007-2008 Aura Green Line Hybrid vehicles. When the imbalance exceeds 0.6 volts the check engine light illuminates and the hybrid function is disabled. <b>Remedy:</b> The battery module and cassette manufacturing processes have been revised to reduce the potential for inducing stress into the parts. Additionally, GM is conducting a Voluntary Emissions Related Recall (VERR) to replace the three hybrid cassettes within the battery assembly.	814 7,487 26	8,327	
General Motors	07290 ML-MW262	3418	V	1/25/2008	2008	Chevy Equinox, Pontiac Torrent Chevy Equinox, Pontiac Torrent	8GMXB03.6148 8GMXB03.6146	There are two unused pin cavities within the fuel sender wiring harness connector in each of these vehicles. To prevent moisture from entering the wiring harnesses, these cavities were filled with plugs. Some of the plugs used in these cavities are too small, and have consequently allowed moisture to enter into some of the wiring harnesses. Subsequent corrosion in the 12-way connector could result in failure of the evaporative canister vent solenoid control circuit. <b>Remedy:</b> To correct the problem GM will inspect and, if necessary, install new fuel sender wiring harness connector plugs.	3,895 21,208	25,103	
Suzuki	SC45	3418	V	1/25/2008	2008	Suzuki XL7	8GMXT03.6150	There are two unused pin cavities within the fuel sender wiring harness connector in each of these vehicles. To prevent moisture from entering the wiring harnesses, these cavities were filled with plugs. Some of the plugs used in these cavities are too small, and have consequently allowed moisture to enter into some of the wiring harnesses. Subsequent corrosion in the 12-way connector could result in failure of the evaporative canister vent solenoid control circuit. <b>Remedy:</b> To correct the problem Suzuki will replace the fuel sender wiring harness connector plugs.	7,974	7,974	
General Motors	08285	3624	V	9/29/2008	2009	Saturn Outlook, Buick Enclave, GMC Acadia	9GMXT03.6151	Some vehicles may have been built with a section of the fuel tank seam that was not formed in accordance with the manufacturing specifications. <b>Remedy:</b> GM dealers will inspect, and if necessary, replace the fuel tank.	884	884	
General Motors	08206 ML-MW317	3625	V	11/19/2008	2004 2005	Cadillac Deville/Seville, Pontiac Bonneville Cadillac Deville/Seville, Pontiac Bonneville	4GMXV04.6065 5GMXV04.6065	Vehicles equipped with a 4.6L V8 engine may have had the secondary Air Injection System (AIR) disabled as the result of a previous service procedure that included a Powertrain Control Module (PCM) reprogramming or replacement. These vehicles may be releasing air pollutants which exceed California and Federal emission standards if the AIR system has been disabled. <b>Remedy:</b> GM dealers will reprogram the PCM and verify proper AIR pump system operation.	6,783 1,314	8,097	
Honda/Acura	PUDR-08-007-00	3495	V	5/19/2008	2008	Civic Si	8HNXV02.4FKC	During engine assembly, an incorrect rocker arm shaft may have been installed. The incorrect shaft does not allow the proper lubrication to the camshafts, which results in excessive heat buildup. In some cases the camshaft holder bolts loosen allowing the rocker arm shaft to move causing a clicking or tapping noise. <b>Remedy:</b> The repair is to inspect the rocker arm shaft and, if the rocker arm shaft is incorrect, replace the complete cylinder head assembly.	30	30	
Hyundai	086	3591	V	9/1/2008	2008	Elantra	8HYXV02.0HW5 8HYXV02.0HPC	The fuel pump motor may not have the proper uniform internal electrical surface contact. This may cause the fuel pump to produce less pumping pressure that required to supply the fuel injection system. Poor engine starting and hesitation may result. <b>Remedy:</b> Hyundai dealers will replace the vehicle's fuel pump subassembly.	40,519 25,095	65,000	



## 2008 Emission-Related Recall Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled	
Hyundai	087	3568	V	10/17/2008	2007 2008	Veracruz 3.8L	7HYXT03.8EM5 8HYXT03.8EM5	Hyundai has determined that certain 4WD vehicles emission control systems that can be diagnosed with a Hyundai electronic diagnostic scan tool but may not be properly diagnosed with generic scan tools. This inability to diagnose the emission control system may cause the vehicle to fail an emission or smog test. <b>Remedy:</b> Hyundai dealers will reprogram the vehicles 4WD-ECU to allow proper communications with non-proprietary scan tools.	3,690 6,812	10,502	
Jaguar	K014	3475	V	1/30/2008	2008	X-Type	8JCXV03.0DNH	Some vehicles have been manufactured with incorrect software for the engine management system which under certain driving conditions permits the setting of computer fault codes and the unwarranted illumination of the Engine Malfunction light. <b>Remedy:</b> Jaguar dealers will enter the correct level of software required for the vehicle so that the fault codes will not be set.	711	711	
Kia	SC074	3592	V	9/16/2008	2008 2009	Rondo	8KMXV02.4UW5 9KMXV02.4UW5	Some of these vehicles have experienced Malfunction Indicator Light (MIL) illumination with a Diagnostic Trouble Code (DTC) indicating an abnormal fuel trim caused by a fuel pump malfunction. The cause was traced to the supplier's upper fuel pump body components having incorrect dimensional characteristics. <b>Remedy:</b> Kia dealers will replace the fuel pump assembly with one that has a dimensionally correct upper body.	2,915 3,765	6,680	
Land Rover	P010	3522	V	7/1/2008	2008	Freelander LR2	8LRXT03.2001	Emission control calibration was found to be inadequate to assure compliance with emission standards. <b>Remedy:</b> Land Rover Dealers will reprogram the Engine Control Module (ECM) to correct this condition.	14,637	14,637	
Mazda	5008H	3596	V	8/28/2008	2007  2008	MAZDA6	7TKXV02.35CB 7TKXV02.3NH1 7TKXV03.05FA 8TKXV02.35DB 8TKXV02.3NH2 8TKXV03.05FA	Certain Mazda6 vehicles built with metal fuel tanks may have had the PVC (Poly Vinyl Chloride) protective coating on the outside of the fuel tank damaged during the assembly process which may result in reduced corrosion resistance during the life of the vehicle. <b>Remedy:</b> Mazda dealers will inspect the bottom of the fuel tank for damage, and if necessary, repair the coating or replace the fuel tank.	50 930 30 260 5,700 250	7,220	
Mercedes-Benz	2008020001 2008-03 06	3389	V	3/1/2008	2003 2004 2005 2006	E55, AMG E55, AMG E55, AMG E55, AMG, CLS	3MBXV05.5LBI 4MBXV05.5LBX 5MBXV05.5LBI 6MBXV05.5LBI	Certain 2003-2006 vehicles, when exposed to high ambient temperatures in combination with frequent stop and go driving, may develop cracks in their fuel filter modules due to mechanical stress. These cracks may lead to the escape of fuel vapors. <b>Remedy:</b> Mercedes dealers will check the fuel filter modules in the affected vehicles and repair them or, if necessary, replace them with improved fuel filter modules.	1567 2745 2186 4182	10,680	
Mercedes-Benz	2008070001	3537	V	8/1/2008	2003  2004 2005  2006	G 55 AMG E 320 CLK 500 & SL500 ALL 500 Series SLK 350 E 500 C 55 AMG ML 350 & R 350 ML 500 C 230 C280, C, SLK, E 350 C, SLK & E 500 C55 AMG, SLK 55 AMG	3MBXT05.51BI 3MBXV03.2UBX 3MBXV05.0UBI 4MBXV05.0L2A 5MBXV03.5LTR 5MBXV05.0U2A 5MBXV05.5LBI 6MBXT03.5LTR 6MBXT05.0LBI 6MBXV02.5U2A 6MBXV03.5U2A 6MBXV05.0U2A 6MBXV05.5LBI	Some vehicles received incorrect software changes at repair facilities. Depending on the model and model year affected, this can cause one of the following errors: The fuel gauge readings may be incorrect, a stuck fuel-level sensor may not be displayed in the instrument cluster, the On-Board Diagnostic (OBD) system may cause the check engine light to illuminate incorrectly, the speedometer may be out of tolerance, or in the event of a crash the electrical fuel pump may not receive a crash signal that is required for the fuel pump to disconnect. <b>Remedy:</b> Mercedes-Benz has initiated a recall to correct the software.	1 5 2 6 16 1 1 50 2 23 63 4 3	404	

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Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled	
					2007	E 350, CLK 350 ML & R350 GL 450 CLK 63 AMG C & SLK 280 E 350 & C 280	7MBXB03.5BN4 7MBXB03.5U2A 7MBXB04.6L2A 7MBXB06.3L2A 7MBXV03.0U2A 7MBXV03.5U2A		15 12 18 1 2 13		
					2008	E 550 S 550 S 600 & S 65 AMG C 300 C 300 GL450, 550, ML, S 550 C, ML, CL & S 63 GL, ML & R 320 C 300, C, E, CLK, SLK 350 & SLK 280	7MBXV05.5BN4 7MBXV05.5U2A 7MBXV06.0BN8 8MBXB03.0U2A 8MBXB03.5U2A 8MBXB05.5U2A 8MBXB06.3L2A 8MBXT03.0B10 8MBXV03.5BN4		2 5 17 23 25 18 10 13 19		
					2009	E 350 CLK, & CLS 550 CL 600 SL 550 SLK 300 & 350	8MBXV03.5U2A 8MBXV05.5BN4 8MBXV06.0L2A 9MBXJ05.5U2A 9MBXJ03.5BN4		3 4 1 23 3		
Nissan/Infiniti	NE-2-25-8	3348	V	2/25/2008	2003 2004 2005 2006	Sentra Sentra Altima Altima Frontier Sentra Altima Frontier	3NSXV01.863A 4NSXV01.883A 4NSXV02.585A 5NSXV02.585A 5NSXV02.5G5A 5NSXT02.5G5A 5NSXV01.883A 6NSXV02.585A 6NSXT02.5G5A	On some 2003-2006 vehicles, there is a possibility that the program in the Engine Control Module (ECM) may cause improper operation of the evaporative emission control system. <b>Remedy:</b> Nissan will conduct a voluntary emissions recall to reprogram the ECM's in the affected vehicles.	8,334 12,126 14,978 49,013 587 1,552 27,957 21,318 3,576	139,441	
Nissan/Infiniti	R0714	3387	V	1/30/2008	2008	Pathfinder	8NSXV05.6G9A	Some 2008 V8 vehicles were manufactured with an incorrect under-hood Vehicle Emission Control Information (VECI) label. The label contains an incorrect letter in the emission test group code. The incorrect code can mislead testing facilities concerning the test parameters to use in performing emissions tests which can result in the vehicles being tested using incorrect parameters and false failures of the emissions test. <b>Remedy:</b> Nissan will provide replacement VECI labels to their dealers. These labels will contain the correct emission test group code. Nissan has also issued a Technical Service Bulletin (TSB) containing instructions for the installation of the replacement labels.	4,775	4,775	
Nissan/Infiniti	NE-2-19-8	3397	V	2/19/2008	2007 2008	Altima	7NSXV02.585A 8NSXV02.585A	Some 2007 and 2008 Altimas are equipped with an improperly functioning emission-related On-Board Diagnostic (OBD) system. The problem is caused by faulty OBD software. The faulty software may result in failure of the OBD system to warn owners of catalytic converter malfunctions. <b>Remedy:</b> Nissan will conduct a voluntary emissions related recall to reprogram the Engine Control Modules (ECM's) in the affected vehicles.	41,906 19,049	60,955	
Nissan/Infiniti	NE-9-22-08R	3602		10/6/2008	2009	Murano	9NSXT03.5G7B	Nissan has discovered that these vehicles are equipped with improperly functioning Transmission Controllers. <b>Remedy:</b> Nissan dealers will reprogram the Transmission Controller.	15,800	15,800	
Nissan/Infiniti	NE-9-29-8	3606		10/13/2008	2009	GT-R	9NSXV03.8GBA	Nissan has discovered that these vehicles are equipped with an improperly functioning evaporative control monitor in the On-Board Diagnostics (OBD) system <b>Remedy:</b> Nissan dealers will reprogram the Engine Control Module (ECM).	764	764	

## 2008 Emission-Related Recall Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled	
Porsche	A803	3433	V	2/15/2008	2008	Cayenne	8PRX803.66E1	A fuel line may contact the engine compartment cover and, over time, result in a knocking noise and chafing of the fuel line. Excessive chafing may reduce the thickness of the fuel line wall to the point of causing a leak. <b>Remedy:</b> Porsche is conducting a recall to inspect, reroute, and replace the fuel lines as needed. Customers will be notified by letter to return their vehicles for repairs free of charge. This is both a safety-related and emission-related recall.	5,573	5,573	
Roush	08V-523	3636	V	10/21/2008	2008	Roush F150 Roush F150 Roush F150 Roush F150 Roush F150 Liquid Propane Injection	8RIIT05.44D7 8RIIT05.4LPG 8RIIT05.44E2 8RIIT05.44HF 8RIIT05.44HA	Roush has determined that the hydrocarbon paper may become dislodged from the air box lid during operation. This may result in a loss of performance, illumination of the Malfunction Indicator Light (MIL) and, in extreme cases, a stalling of the vehicle during operation without notice. This could result in an accident. <b>Remedy:</b> The remedy for this condition will consist of removing the existing air box lid and replacing it with a lid on which the hydrocarbon paper has been affixed using an adhesion promoter and by applying 20 psi of force.	Affected vehicle totals are shared	191	
Subaru	WVE-15	3567	V	8/15/2008	2008	IMPREZA WRX STI 2.5L TURBO	8FJXB02.5PYH	For vehicles that are repeatedly or continuously operated with the engine at over-revving speed, abnormal combustion could result in severe engine damage. <b>Remedy:</b> Subaru dealers will reprogram the Engine Control Module (ECM) to help maintain optimum performance and prevent possible engine damage.	2,053	2,053	
Toyota/Lexus	7LC	3385	V	1/11/2008	2006	Lexus IS250 Lexus GS300 Lexus IS250	6TYXV02.5PEA 6TYXV03.0WMB 6TYXV03.5PEB	High stress areas may have been created in fuel line tubing within the engine compartments of these vehicles. These stresses, combined with other factors such as corrosive agents in the fuel, may cause cracks, and consequent fuel leaks. <b>Remedy:</b> Lexus dealers will replace the two affected fuel line tubes with newly designed tubes.	2,100 24,000 1,000	27,100	
Volkswagen/Audi	26E5/R5	3503	V	6/13/2008	2000 2001 2002  2003  2004  2005	VW Passat	YADXV02.8334 1ADXV03.8334 2ADXV02.8334 2ADXV04.0229 3ADXV02.8334 3ADXV04.0229 4ADXV01.8342 4ADXV02.8334 4ADXV04.0229 5ADXV01.8342 5ADXV02.8334	The affected vehicles with automatic transmission may have an underbody heat shield that can become damaged. If a damaged heat shield contacts the exhaust system there is a risk of fire. Also, some 4Motion all-wheel drive vehicles may have a fuel tank ventilation valve than can leak due to fracture. <b>Remedy:</b> Dealers will install additional underbody heat shields to cover the damaged areas and flash the 1.8T engines with a precautionary software update. Additionally, dealers will inspect the fuel tank ventilation line and valve on 4Motion all-wheel drive vehicles to verify that the line is free of tension. Components will be replaced if necessary.	6,944 13,086 13,458 1,420 11,360 3,045 7,566 5,315 478 3,253 1,945	67,870	
Volkswagen/Audi	20L8/JY	3503	V	6/27/2008	2001  2002  2003  2004  2005	Audi A6	1ADXV02.8334 1ADXV02.7333 2ADXV02.7333 2ADXV03.0344 3ADXV02.7343 3ADXV03.0344 4ADXV02.7343 4ADXV03.0344 4ADXV04.2345 5ADXV02.7343 5ADXV04.2345	On some vehicles the aging of the plastic material in the fuel tank rollover valve - combined with bending stress from the aluminum ventilation line to the rollover valve nipple - may lead to cracking of the nipple. If this happens, a fuel leak may result. A fuel leak in the presence of an ignition source could lead to a vehicle fire. <b>Remedy:</b> To prevent or repair cracking at the valve nipple, Audi dealers will reinforce the nipple on the rollover valve.	3,220 10,260 11,270 9,722 9,131 12,618 6,385 779 2,889 531	66,805	
Volkswagen/Audi	26E5/R5	3521	V	6/13/2008	2001 2002 2003 2004 2005	VW Passat	1ADXV01.8342 2ADXV01.8342 3ADXV01.8342 4ADXV01.8342 5ADXV01.8342	An improperly routed fuel line could be the cause of a fuel leak. <b>Remedy:</b> A recall is being implemented on this vehicle to inspect the fuel line routing and reroute or replace it as needed.	41,727 57,898 67,593 51,677 20,765	239,660	

## 2008 Emission-Related Recall Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled	
Volvo	190	3440	V	2/22/2008	2004 2005 2006	S40 S40, V50 S40, V50 S40, V50 S40, V50 S40, V50 S40, V50	4VVXV2.43U2N 4VVXX2.52U2T 5VVXX02.5U2T 5VVXX02.4S2N 5VVXV02.4U2N 6VVXV02.4U2N 6VVXV02.4S2N 6VVXB02.5U2T	On certain 2004.5 (mid-year production), 2005, and 2006 model year S40 and V50 vehicles, long-term exposure to climatic conditions may cause excessive internal corrosion of the Pump Electronic Module (PEM). This can result in a faulty signal to the fuel pump, which in turn can cause low, or no, fuel pressure. <b>Remedy:</b> The PEM's will be replaced and relocated to the inside of the vehicle (under left rear seat cushion) to prevent exposure to the elements and their consequent excessive internal corrosion.	3,679 1,158 5,763 2,068 6,999 2,082 637 1,254	23,640	
Volvo	188	3441	V	2/26/2008	2008	S40 and V50	8VVXV02.4S2N	On certain 2008 S40 and V50 vehicles the crankcase ventilation hose may disconnect. The resultant increase in air flow may cause a whistling noise. In addition, the check engine light may illuminate and/or a slight oil leakage may result. In some cases, this condition may cause the vehicle to fail a state emissions test. <b>Remedy:</b> Volvo dealers will secure the crankcase ventilation hoses with an additional clamp.	535	535	
Volvo	202	3627	V	10/21/2008	2005 2006 2007 2008	S40, V50 S40, V50 S40, V50 S40, V50	5VVXV02.4S2N 6VVXV02.4S2N 7VVXV02.4S2N 8VVXV02.4S2N	Volvo has decided that in certain vehicles the material in the Positive Crankcase Ventilation (PCV) oil trap pressure control diaphragm and the crankcase ventilation hose may become cracked due to exposure to the crankcase environment. As a result these vehicles may not fully meet the CARB and EPA emission control durability requirements. <b>Remedy:</b> The corrective action will be to replace the PCV oil trap and ventilation hose with improved materials.	4,745 5,623 4,796 1,907	17,071	

**Total number of Vehicles affected by Recall Campaigns: 1,014,138**

## **Section 2: 2008 Emission-Related Voluntary Service Campaigns**

## 2008 Emissions-Related Voluntary Service Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled
Ford	08N01	2482	VSC	3/1/2008	2003 2004 2005	LS	3FMXV03.0VF2 4FMXV03.01H2 5FMXV03.01H2	Positive Crankcase Ventilation (PCV) hoses may become loose and disconnect. If a vacuum leak occurs, the Powertrain Control Module (PCM) will detect it and illuminate the Malfunction Indicator Light (MIL). Stalling may also occur due to the defect. <b>Remedy:</b> Ford Motor Company is extending the warranty on the PCV hose assembly to 10 years or 100,000 miles, whichever occurs first.	9,400 14,300 7,400	31,100
Ford	07M08	2558	VSC	12/1/2007 (EPA notified on 1/8/2008)	2005	Expedition, Navigator, F150 F150 F250, F350 F350 F350 Expedition, Navigator, F150	5FMXT05.4R17  5FMXT05.4R4P 5FMXT05.4LFD 5FMXT05.4SF5 5FMXT05.4TF9 5FMXT05.4WFD	Fuel injectors stick in the open position due to contamination during the manufacturing process. Rough idle, hard starting, and rough running may occur. MIL illumination will occur, and owner will obtain service at dealership. New injectors are available for production vehicles. <b>Remedy:</b> Improvements in the manufacture of the fuel injector to reduce contamination were implemented by the supplier and an improved fuel injector was implemented into production in June 2005. In December 2007 a Customer satisfaction Program was initiated to extended the warranty of affected components to a total of 11 years and 120,000 miles.	326,400  48,600 3,900 56,300 1,000 5,000	441,200
General Motors	07053 ML-MW295	2776	VSC	6/19/2008	2005  2006	Saab 9-3  Pontiac GTO, Corvette Saab 9-3	5GMXV02.0003 5GMXV02.0002  5GMXV06.0081 6GMXV02.0003 6GMXV02.8004	Some vehicles may experience a condition where the fuel tank gas cap won't tighten properly or the fuel cap won't come off, or is broken. <b>Remedy:</b> General Motors has extended the fuel cap warranty coverage to 10 years or 120,000 miles whichever occurs first.	12,143 8,588  44,879 20,443 6,378	92,431
General Motors	08241 ML-MW315	3593	VSC	10/21/2008	2005	Aveo	5GD XV01.6D02	Some vehicles, equipped with a 1.6L 4-cylinder engine, may experience a condition where the fuel tank filler cap won't tighten properly or the cap won't come off or is broken. These conditions may also cause the Malfunction Indicator Light (MIL) to illuminate. <b>Remedy:</b> GM will repair this condition if it occurs within 10 years of the date the vehicle was placed into service or 120,000 miles, whichever occurs first.	64,250	64,250
Kia	SC073	3478	VSC	4/1/2008	2003 2004 2005	Sorento 3.5	3KMXT03.5G01 4KMXT03.5G02 GKMXT03.5CM5	A metal clip which is part of the induction control valve in the intake manifold may break off. If this occurs, abnormal engine noise and vibration may occur along with impaired engine functioning and some loss of power. The problem may illuminate the "check engine" light. However, the problem may exist and engine damage occur without "check engine" light illumination. <b>Remedy:</b> Hyundai dealers will remove the original induction control valve and replace it with an improved design.	42,722 47,378 57,493	147,593
Volkswagen/Audi	2008/02/20 YY	2011  2629    2774 2840	VSC	2/15/2008	2001  2001  2002  2003  2004 2004 2002	Golf/Jetta/Audi TT Audi A4/Passat Audi A6/A8 Audi S8 Audi A4 & Volkswagen Passat Audi S4/A6/allroad Audi A4 & Volkswagen Passat Audi Allroad /A6 Jetta GTI Audi A4, A6 Quattro	1AD XV01.8346 1AD XV01.8342 1AD XV04.2345 1AD XV04.2335 2AD XV01.8342  3AD XV02.7343 3AD XV01.8342  4AD XV02.7343 4VW XV02.8228 2AD XV03.0344	Faulty internal soldering to pins that mate with an external terminal may cause Engine Coolant Temperature (ECT) sensor failure. <b>Remedy:</b> Additional heat is now being applied during production of the solder joints, and improved parts are now available for use in the field. Volkswagen has also extended the warranty on the ECT sensor, on selected models and model year VW/Audi's, to 10 years or 100,000 miles.	53,921 66,342 5,896 816 82,510  9,763 100,545  12,688 3,226 26,359	362,066
Volvo	192	3426	VSC	4/11/2008	2000 2001	S40 & V40	YVVXV1.95MJ1 1VVXV1.95L4T	Volvo determined that the Under Floor Catalyst may possess the inability to meet its emission-control durability requirements for the certified useful life of the vehicle. <b>Remedy:</b> Volvo is voluntarily initiating an extended warranty program on the Catalytic Converter Pipe, extending the warranty period up to 10 years or 100,000 miles whichever comes first.	36,120 21,364	57,484

## 2008 Emissions-Related Voluntary Service Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled
Volvo	198	3515	VSC	6/26/2008	2001	V70 AWD V70AWD, V60	1VVXT2.43L5T 1VVXV2.43L5T 1VVXV2.43U5N S80 T6, S80 Exec	Due to fuel quality and climate conditions the fuel pump may degrade to the point of emitting fuel vapors and may leak raw fuel. Conditions of long crank time and/or reduced engine performance may also be associated with this problem. It has been determined that the states of Arizona and Nevada have the largest number of problems. <b>Remedy:</b> In cooperation with the National Highway Traffic Safety Administration (NHTSA) a Safety Recall was issued for the vehicles in those states. For vehicles in other states the warranty was extended to 10 years or 150,000 miles, whichever comes first. The fuel pumps will be replaced at no cost with a valid customer complaint. Owners who have paid for a replacement fuel pump may be eligible for a refund.	27,842	199,994
					2002	V70 AWD V70AWD, V60	1VVXT2.43L5T 1VVXV2.43L5T 1VVXV2.43U5N S80 T6, S80 Exec		32,334	
									25,131	
									8,328	
									17,416	
									20,635	
									24,865	
									27,652	
									10,753	
									5,038	
Volvo	200 P46	3516	VSC	8/1/2008	2003	S60, S70	3VVXV2.43S2N 3VVXV2.43U1N	Some functions controlled by the engine management system software may cause the Check Engine light to illuminate. <b>Remedy:</b> Volvo is extending the warranty of the engine management system software to 10 years or 120,000 miles whichever comes first. The warranty extension covers engine management software regarding the evaporative emissions system, the oxygen sensor and the Mass Air Flow (MAF) sensor.	1,579	24,487
					2004	S60, S70	4VVXV2.43S2N 4VVXV2.43U2N		13,573	
									2,964	
									6,371	
Volvo	200 P45	3517	VSC	8/1/2008	2003	XC90 AWD C70, S60 & V70 S60 & V70 S60 & V70 S80 & S80 Exec S80 & S80 Exec S60, V70, V70XC, XC90 AWD'S	3VVXT2.92U1T 3VVXV2.43L1T 3VVXV2.43S2N 3VVXV2.43U1N 3VVXV2.92U1N 3VVXV2.92U1T 3VVXX2.52U2T	The vehicle performs a test, controlled by the engine management system, to determine if fuel tank vapors are escaping into the air. Under certain conditions the test may falsely set the Check Engine light and store a Diagnostic Trouble Code (DTC) <b>Remedy:</b> Volvo is extending the warranty of the engine management system software to 10 years or 120,000 miles whichever comes first.	8,684	651,023
									8,870	
									1,576	
									13,200	
									5,802	
									2,147	
									16,621	
					2004	XC90 AWD S60 & V70	4VVXT2.92U1T 4VVXV2.43S2N		25,984	
						S40, S60 & V70	4VVXV2.43U2N		8,147	
						C70, S60 & V70	4VVXV2.52L1T		24,774	
						S80	4VVXV2.92U1N		14,628	
						S80 & Exec.S60,	4VVXV2.92U1T		6,829	
						V70, V70XC, XC90	4VVXX2.52U2T		4,005	
									89,921	
					2005	XC90 AWD XC90	5VVXT02.9U1T 5VVXT04.4U2N		9,271	
						S40, V50, S60, V70	5VVXV02.4S2N		7,360	
						S40, V50, S60, V70	5VVXV02.4U2N		7,160	
						S60 & V70	5VVXV02.5L2T		22,871	
						S80 & Exec	5VVXV02.9U1T		4,033	
						S40, V50, S60, V70,	5VVXX02.5U2T		1,221	
						V70XC, XC90 AWD'S			73,579	
					2006	S40, V50, S60, V70,	6VVXB02.5U2T		80,971	
						V70XC, XC90 AWD'S				
						XC90	6VVXT04.4U2N		7,635	
						S40, V50, S60, V70	6VVXV02.4S2N		6,838	
						S40, V50, S60, V70	6VVXV02.4U2N		18,405	
						S60 & V70	6VVXV02.5L2T		4,217	

## 2008 Emissions-Related Voluntary Service Campaigns

Mfr.	Mfr. Recall Number	EPA#	Type	Owner Notification	MY	Vehicle or Engine Class	Engine Family	Problem Description	Affected Vehicles	Total Number of Vehicles Recalled
					2007	S80, XC90 S40, V50, S60, V70, V70XC, XC90 AWD'S	7VVXB03.2U2N 7VVXB02.5U2T		33,321 42,563	
						S80, XC90 S40, V50 C30, S40, V50 S60 & V70	7VVXB04.4U2N 7VVXV02.4S2N 7VVXV02.4U2N 7VVXV02.5L2T		8,703 4,319 16,727 2,261	
					2008	XC70, S80, XC90 S60 S40, V50 S40, V50, C30 S40, V50, S60, V70, V70XC, XC90 AWD'S S80	8VVXB03.2U2N 8VVXV02.4L2T 8VVXV02.4S2N 8VVXV02.4U2N 8VVXV02.5U2T 8VVXV03.0U2T		40,931 227 3,342 3,691 17,761 2,428	
Volvo	200 P55	3518	VSC	8/1/2008	2004 2005 2006	S40 2.4i	4VVXV2.43U2N 5VVXV02.4S2N 5VVXV02.4U2N 6VVXV02.4S2N 6VVXV02.4U2N	Some functions controlled by the engine management system software may cause the Check Engine light to illuminate. <b>Remedy:</b> Volvo is extending the warranty of the engine management system software to 10 years or 120,000 miles whichever comes first. The warranty extension covers engine management software regarding the evaporative emissions system and the Mass Air Flow (MAF) sensor.	7,415 4,750 16,025 5,635 16,633	50,458
Volvo	200 P54	3519	VSC	8/1/2008	2004 2005 2006 2007 2008	S40 T5 S40 T5 & V50 T5 S40 T5, V50 T5 & C70 S40 T5, V50 T5 & C70 S40 T5, V50 T5 & C70	4VVXX2.52U2T 5VVXX2.52U2T 6VVXB02.5U2T 7VVXB02.5U2T 8VVXB02.5U2T	Some functions controlled by the engine management system software may cause the Check Engine light to illuminate. <b>Remedy:</b> Volvo is extending the warranty of the engine management system software to 10 years or 120,000 miles whichever comes first. The warranty extension covers engine management software regarding the evaporative emissions system and the fuel system misfire detection system.	3,698 11,470 9,288 9,115 4,452	38,023

**Total number of Vehicles affected by Voluntary Service Campaigns: 2,160,109**

<b>SUMMARY</b>	
<b>Total number of Vehicles affected by Recalls and Voluntary Service Campaigns:</b>	<b>3,174,247</b>
<b>Total number of Voluntary Recalls:</b>	<b>44</b>
<b>Total number of Voluntary Service Campaigns:</b>	<b>12</b>
<b>Total number of Recalls and Voluntary Service Campaigns:</b>	<b>56</b>