



September 5, 2008

Mr. David Kelly Acting Administrator National Highway Traffic Safety Administration (NHTSA) 1200 New Jersey Ave., SE Department of Transportation, West Building Washington, DC 20590

## Comments on Federal Motor Vehicle Safety Standards; Windshield Zone Intrusion, 73 FR 38372, July 7, 2008, Docket No. NHTSA-2008-0124

Dear Mr. Kelly:

Public Citizen and the Center for Auto Safety respectfully submit the following comments on the National Highway Traffic Safety Administration's (NHTSA) proposal to rescind Federal Motor Vehicle Safety Standard (FMVSS) No. 219, regarding windshield zone intrusion. We acknowledge the importance of periodic review of federal regulations. However, we are concerned that NHTSA has not provided supporting data or analysis to justify its assertion that compliance with FMVSS 219 is redundant with FMVSS 208 and 113.

We will identify three concerns about NHTSA's logic in recommending rescission:

- FMVSS 208 measures head and chest injury in a frontal impact crash, and is not designed to measure the windshield zone intrusion.
- FMVSS 113 only requires that vehicles have an effective hood latch system, it is not a crash test and it does not measure injury potential.
- FMVSS 219 is meant to ensure that occupants are not injured by intruding vehicle components, especially the vehicle's hood, but it is not limited to the scope of frontal impact crashes of the type tested in FMVSS 208.

Before the agency rescinds a regulation, it must complete an analysis of the effectiveness of the rule, the history of that regulation, and the potential consequences of rescinding that regulation. NHTSA has taken none of these steps in its notice. The public cannot effectively comment on the potential consequences of rescinding FMVSS 219, because the agency has provided insufficient information about its review of the regulation. At a minimum, NHTSA must present an analysis showing how FMVSS 208 testing covers the requirements of FMVSS 219, and provide the public with a basis for review of the agency's decision.

NHTSA states that compliance with FMVSS 219 has not been an issue since shortly after its inception.<sup>1</sup> However, since companies complied with the standard, which corrected the intrusion problem this is to be expected. The mere fact that there are complaints about the effectiveness of the standard alone does not support its rescission. Unlike many other safety standards required by NHTSA, the effectiveness of FMVSS 219 does not depend on a piece of equipment like a seat belt or air bag, but instead provides a guideline for how the vehicle structure will perform in a crash. Vehicle performance encompasses the requirements of the full spectrum of FMVSS standards. Therefore, NHTSA must show that rescinding one of these requirements would not have unintended consequences.

We challenge NHTSA's claim that FMVSS 219 is redundant, particularly in the absence of any data or analysis to support this notice. NHTSA states: "We tentatively conclude that the FMVSS No. 208 frontal crash tests will reflect any blunt impact injuries due to zone intrusion at the windshield." The agency based on speculation is making a recommendation to rescind a safety standard that places a minimal burden on the industry. The effectiveness of FMVSS 208 at achieving the same level of protection as FMVSS 219 is untested. NHTSA has not provided any concrete data or observations about windshield zone intrusion in the FMVSS 208 testing program, or real-world crash observations. The purpose of FMVSS 219 is to require manufacturers to design vehicles in such a way that the windshield zone is not compromised, whereas the purpose of FMVSS 208 is to promote occupant protection in frontal-impact crashes. Even if FMVSS 208 testing could potentially expose windshield zone intrusion, it does not necessarily provide the same occupant protection as FMVSS 219.

The windshield zone intrusion standard protects occupants from vehicle components that may enter the protected zone in crashes that do not resemble the FMVSS 208 frontal crash test. An offset frontal crash may result in hood deformation and unlatching that is not predicted by the FMVSS 208 test, but may still injure occupants in such crashes. The Insurance Institute for Highway Safety (IIHS) reviewed cases in the National Accident Sampling System Crashworthiness Data System (NASS CDS) for intrusion into the protected windshield zone, and discovered that "[w]indshield intrusion occurred in a small number of offset crashes, pole impacts, and severe underride collisions with large trucks or tractor trailers."<sup>2</sup> Windshield zone intrusion in these cases would not be redundant with intrusion observed in FMVSS 208 testing. This argues for retaining FMVSS 219 and adding an offset frontal crash test.

NHTSA further states that FMVSS 219 is unnecessary because FMVSS 113 requires that vehicle hoods have a latch system and that the latch system has a second position to prevent inadvertent opening of the hood, "limiting displacement into the windshield area of motor vehicle components during a crash."<sup>3</sup> As with the relationship between FMVSS 208, the purpose of the hood latch requirement is not primarily to prevent windshield zone intrusion, and so design choices made by manufacturers about how the vehicle hood is designed that prevent windshield zone intrusion may still be relevant, even in the presence of a latch system that is meant to keep the hood from opening. The simple presence of the hood latch standard, which

<sup>&</sup>lt;sup>1</sup> 73 FR 38372, 38375. (Jul. 7, 2008) at 38373.

<sup>&</sup>lt;sup>2</sup> See Comments of Insurance Institute for Highway Safety to NHTSA Docket No. NHTSA-2008-0124 at 2 (Aug. 29, 2008). <sup>3</sup> 73 FR 38373.

may or may not protect against windshield zone intrusion does not imply directly that FMVSS 219 is no longer necessary. In a crash, the hood may remain latched, but still be pushed back into the windshield.

The Center for Auto Safety has compiled a list of 40 recalls from model years 1980 through 2007 affecting 5,858,852 vehicles related to defective hood latch equipment. The presence of FMVSS 113 does not protect occupants in the face of these defects; therefore, the protection provided by FMVSS 219 ensures that occupants are not injured by an intruding roof in the event of a latch failure. NHTSA has provided no analysis of the potential risk to occupants as a result of rescinding FMVSS 219, or how FMVSS 208 and 113 protect occupants against intrusion of vehicle components into the protected zone.

Before NHTSA rescinds any standard, it must assure the public that its rescission will not result in a degradation of safety; however, the agency has made no attempt to provided the public with enough information to know whether FMVSS 219 is redundant. It has not made use of its own resources to make an estimate of the benefit of rescinding FMVSS 219 or the potential cost as a result of increased injuries due to intrusion of motor vehicle components into the protected windshield zone. NHTSA keeps records of motor vehicle crashes through NASS CDS. The agency should provide an analysis of NASS CDS cases to establish whether there is sufficient protection to occupants from windshield zone intrusion.

In coming years, there will be an influx of new small cars from Europe and Asia, which will not necessarily be designed with consideration of FMVSS 219 if it is rescinded. NHTSA noted that compliance with FMVSS 219 hasn't been a problem since shortly after the establishment of the standard.<sup>4</sup> The purpose of the standard is to prevent a problem by assuring a minimum standard of safety. Vehicles built for sale in the United States must comply with all of the motor vehicle safety standards administered by NHTSA, and the protection that occurs as a result of vehicle design that is created for compliance with the standards does not apply in the same way to vehicles that are designed and developed abroad. The advantage of having a standard is to ensure a minimum level of safety is maintained.

We are concerned that NHTSA has not completed a through review of FMVSS 219 before publishing a notice suggesting it be rescinded. We assert that widespread compliance with motor vehicle safety standards does not argue for their recission. Motor vehicle safety standards are meant to assure a minimum level of safety. For a vehicle to be legally sold in the United States, it must comply with each of these safety standards, and the industry uses these standards as mandates in designing vehicles.

Entrusting the industry to meet these minimum guidelines voluntarily is exactly contrary to the mission of NHTSA. Congress rejected voluntary action by the industry three decades ago when it passed the National Traffic and Motor Vehicle Safety Act in 1966. The Senate Committee Report stated: "The promotion of motor vehicle safety through voluntary standards has largely failed. The unconditional imposition of mandatory standards at the earliest practicable date is the only course commensurate with the highway death and injury toll."<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> 73 FR 38373.

<sup>&</sup>lt;sup>5</sup> Committee Report on S. 3005, The Traffic Safety Act of 1966, June 23, 1966, at 271, 273, 274.

NHTSA is entrusted to ensure that mandatory minimum standards exist to protect people on the highways.

Since NHTSA has not provided sufficient information for the public to make a determination about the potential consequences of rescinding FMVSS 219, Public Citizen and the Center for Auto Safety support its retention. The widespread compliance by industry with this standard cannot be ensured if it is rescinded, and the burden to industry and NHTSA in maintaining the standard is minimal. NHTSA should be responsible about the regulatory review process, and provide data and analysis to support its claim that the standard is redundant and the same level of occupant protection is afforded by FMVSS 208 and 113.

### HOOD RECALLS ARRANGED BY MANUFACTURER (1980 through 2007)

NHTSA Identification #	Date of Company Notification	Make	Model	Model Year	Number of Vehicles
		CHRY	SLER		
80V-138	10-13-80	Dodge Plymouth	Omni Horizon	1980	235,000
to variations in catch a	b. 283. Hood secondary and its mounting base as position, resulting in inop	sembly. Inadequ	ate catch to mour	nting base pivot surface	clearance may cause
84V-008	1-19-84	Chrysler Dodge	Laser Daytona	1984	2,500
latch system attachme	o. 352—Hood Latch/Pan nt to hood panel. This co acing hood panels exhib	nel. DOM—7/83 ould result in sep	-12/83. Cars may paration of hood p	y have inadequate struct panel from latch system	ural integrity of hood mechanism. (Correct
latch may be prevente secondary hood latch of	5-5-92 b. 548. DOM- 8/91-2/92 d from engaging when h could cause hood to oper cle accident. (Correct by	ood is closed. I while vehicle is	f primary hood la in motion, reduc	tch engagement fails, la ing operator's ability to	nck of engagement by see road & oncoming
95V-056 DOM - 1/94-12/9 can cause hood to fly u	3-20-95 4. Secondary hood latch 1p & obstruct driver's vis	Dodge rod can bind on ion, resulting in	Ram guide bracket & j accident. (Correc	1994-95 prevent engagement of s t by replacing secondar	175,000 secondary latch. This y hood latch bracket.)
is slammed shut. If pri	8-7-97 b. 734Hood. DOM - 03/ imary latch does not enga spring with longer end h	age, hood would	Breeze Stratus Cirrus dary hood latch sp I not be restrained	1996-97 oring can disengage from & vehicle could crash.	219,000 retention hole if hood (Correct by replacing
to bind in "release pos hood latch in salt belt	2-7-01 o. 973. DOM: 7/93-3/99 ition." If primary latch i states (Maine, New Han Delaware, Maryland, Dis Iissouri).	s not engaged, h npshire, Vermor	ood could open un nt, Massachusetts,	nexpectedly. Correct by Rhode Island, Connect	y replacing secondary icut, New York, New
	11-08-06 o. F45 - Hood. DOM: 8 out prior warning. (Cor				2,258 to open while driving
		FO	RD		
retain hood if primary	9-20-84 ont end was assembled v latch were inadvertently by inspecting and adjust	Ford with radiator sup released or faile	Ranger port in out of toler d to catch. Hood co	ould fly up and block dri	460,918 ry hood catch may no iver's view while truck
91V-147	9_4_91	Lincoln	Town Car	1991	72.000

91V-1479-4-91LincolnTown Car199172,000Mfg. Campaign No. 91S40. DOM- 8/90-4/91. Secondary hood latch may not engage when hood is closed. In event primary<br/>hood latch releases when vehicle is in motion, hood could fly up, obstruct driver's vision, & cause vehicle accident. (Correct<br/>by installing new hood latch assembly.)

NHTSA Identification #	Date of Company Notification	/ Make	Model	Model Year	Number of Vehicles
unexpected opening	5-10-95 1. Corrosion of hood la of hood while vehicle is prrect by installing new h	driven. If this	occurs, driver's view o	of road will be reduce	ed & could result in
	8-07-95 91. Secondary hood late n vehicle is in motion, ho assembly.)				
condition can result ir	1-29-97 No. 97S63. DOM - 03/9 I hood opening without w striker on 1992 model ho	varning while car	is in motion impairing	driver's visibility.	(Correct by installing

97V-180	10-17-97	Ford	Windstar	1995-96	769,000
			Mustang	1994-96	

Mfg. Campaign No. 97S88. DOM - 01/94-12/95. Tearing of bond between inner & outer hood panels during minor front end collisions can result in gap at leading edge of hood. Air forced between inner & outer panels can produce enough pressure to force outer panel upward, resulting in total separation of outer hood panel. (Correct by inspecting hood area for any damage along leading edge of hood. If there is any evidence of bond separation, hood will be replaced. If there is no evidence of bond separation, additional adhesive will be applied between inner & outer hood panels.)

99V-164	6-24-99	Ford	Explorer	1998-99	845,000
		Mercury	Mountaineer		

Mfg. Campaign No. 99S18. DOM: 4/97- 5/99. Secondary hood latch can corrode at latch pivot & stick in open position. When primary hood latch is released or not engaged, hood fly-up could occur. (Correct by installing secondary hood latch with components that are coated prior to assembly to protect against corrosion.)

00V-394	11-16-00	Ford	Explorer Sport	2000-01	137,813
			Explorer Sport Trac		
			Ranger Edge 4x2	2001	
			Ranger Edge 4x4		
			Ranger XLT 4x4		
Mfa Compoint	No 00845 DOM-0/00-1	0/00 On SLIVe	with steel hoods & nickup	with sheet moldi	ng compound hood

Mfg. Campaign No. 00S45. DOM: 9/99-10/00. On SUVs with steel hoods & pickups with sheet molding compound hoods, wire-formed hood strikers are susceptible to fatigue fractures. If hood striker fractures, hood can fly open while driving & result in crash. (Correct by replacing hood striker.)

# GENERAL MOTORS 83V-049 4-28-83 Chevrolet Z-28 Camaro 1983 4,393 DOM---1/4/83-1/26/83. Cars with fiberglass hoods are subject to hood inner and outer panel separation. If separation occurs while car is in motion, hood outer panel could fold back and block driver's view. This could result in vehicle crash without prior warning. (Correct by inspecting and, if required, installing new hood.)

86V-1218-26-86OldsmobileCalais1985-86206,651DOM—7/84-4/86. Secondary hood latch may be incorrectly aligned or exhibit binding of latch pivot which could result in<br/>primary hood latch not being completely engaged. Hood could unexpectedly open while vehicle is in motion, reducing forward<br/>vision of driver and cause crash. (Correct by replacing secondary hood latch and inspecting primary hood latch pop-up lever.)206,651

86V-165	12-11-86	Chevrolet	Corsica	1987			4,884
			Beretta				

DOM- 8/86-11/86. Secondary hood latch may not properly engage due to contact with support bracket and or primary latch return spring. Hood could open and contact windshield, reducing driver's vision, & causing crash. (Correct by installing secondary latch skid plate on Corsica and Beretta. Install revised secondary latch on Beretta.)

NHTSA Identification #	Date of Company Notification	Make	Model	Model Year	Number of Vehicles
		en de management de la companya de l			
87V- 062 DOM- 11/86-12/86. open unexpectedly, com plate and/or secondary	0	ucing driver's visi			
88V-039 DOM- 11/86-11/89 Bent secondary hood la motion. Reduction of f secondary hood latch as	orward visibility could	ry latch to malfu	nction and allow ho	ood to unexpectedly o	pen while vehicle in
DOM- 11/86-11/89 Bent secondary hood la motion. Reduction of f	. Secondary hood latch ttch could cause primatorward visibility could	assembly may no ry latch to malfur	Beretta at have been properly action and allow ho ash without prior wa Grand Prix	y adjusted resulting in bod to unexpectedly o	latch becoming bent. pen while vehicle in
DOM- 11/86-11/89 Bent secondary hood la motion. Reduction of f secondary hood latch as 88V-065	. Secondary hood latch atch could cause primatorward visibility could ssemblies.) 4-11-88 Secondary hood latch n ion, hood could contact	assembly may no ry latch to malfur cause vehicle cra Pontiac Buick nay not properly e	Beretta ot have been properly nction and allow ho ish without prior wa Grand Prix Regal engage. If primary	y adjusted resulting in bod to unexpectedly o arning. (Correct by in 1988 latch disengages, hood	latch becoming bent. pen while vehicle in specting & replacing 12,457 l could unexpectedly

latch could lead to primary latch not being fully engaged, allowing hood to unexpectedly open. Hood may contact windshield, reducing forward vision area of driver & vehicle crash could occur. (Correct by replacing primary hood latch assembly, secondary hood latch assembly, & support bracket.)

91V-166	9-17-91	Chevrolet	Cavalier	1992	3,212
		Pontiac	Sunbird		

DOM- 8/91. Secondary hood latch spring is improperly installed or missing, leading to condition where secondary hood latch does not engage secondary striker. If secondary hood latch is not engaged, & primary hood latch was also not engaged, hood could open unexpectedly. If this occurs while vehicle is in motion, hood may contact windshield, reducing forward vision area of driver & vehicle crash could occur. (Correct by inspecting hood latch assemblies & where necessary, installing new secondary hood latch spring.)

91V-186	10-21-91	Chevrolet	Caprice	1991-92	224,588
		Buick	Roadmaster		
		Oldsmobile	Custom Cruiser		

DOM-10/89-8/91. Secondary hood latch assemblies can corrode, causing high latch release effort & possible preventing hood from latching properly when it is closed. If secondary hood latch is not properly engaged, hood could open & contact windshield while vehicle is in motion, reducing forward vision area of driver, resulting in vehicle accident. (Correct by installing new secondary hood latch assembly.)

93V-189-00111-23-93GeoMetro1989-93356,097Mislocated spot welds of hood striker assembly cause cracks to start on hood inner panel. If cracks occur, hood strikerassembly may not properly engage hood latch when hood is closed. improperly engaged hood latch may allow hood to fly upwhile vehicle is in motion, obstructing driver's view & causing accident. (Correct by installing two bolts & nuts to secure strikerassembly to hood inner panel, plus ensure that hood latch assembly fasteners are properly tightened.)

95V-229	12-01-95	Cadillac	Concours	1996	12,783
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Deville

DOM - 7/95-9/95. Cars may have improperly adjusted secondary hood latch which does not conform to FMVSS 113. If secondary hood latch is not properly engaged & primary hood latch is also not engaged, hood could open unexpectedly. If occurs while car is in motion, hood can contact windshield, reduce vision of driver & result in vehicle accident. (Correct by adjusting secondary hood latch.)

NHTSA Identification #	Date of Company Notification	Make	Model	Model Year	Number of Vehicles
97V-232	12-10-97	Cadillac	Deville	1998	14,423
Broken bolt can cause	b. 97070. DOM - 08/97-1 either corner of hood ner rements of FMVSS 219.	ar windshield to i	ise, or one side of	hood to be unstable wh	en opened. This does

vehicle occupants. (Correct by replacing hood hinge pivot bolts.)

HONDA83V-13112-6-83HondaCivic198410,421DOM---8/83-11/83.Tolerance errors of hood safety catch could allow accidental hood opening. If hood is not securely latchedin full lock position, driving at high speeds or hitting large bump could cause hood to open suddenly. This would block driver'svision, causing driver to lose control and crash.(Correct by inspecting and replacing safety latch with proper part.)

 HYUNDAI

 90V-038
 2-13-90
 Hyundai
 Sonata
 1989-90
 39,361

 DOM-28/89-10/89.
 Insufficient clearance could cause safety catch on secondary hood latch striker to bind.
 If primary latch

 is released or if hood is not completely closed, hood could fly open while vehicle is in motion.
 This would block driver's vision

 & could result in accident.
 (Correct by replacing hood latch striker assembly.)

MAZDA							
00E-069	11-6-00	Mazda	RX7	1992-95	12		
				designed & sold as accessory parts			
1992-1995 RX7, h	look on hood striker could s	eparate from ba	se plate at we	lded portion due to insufficient wel	ding strength.		
Hood may sudden	Hood may suddenly open during operation, losing front visibility & resulting in crash. Correct by replacing hood striker.						

MERCEDES							
96V-010	2-01-96	Merced	les C220	1994-95	44,114		
			C280				
			C360	1995			
MG Commission No.	0( 0112 DOM	01/02 05/05	In minor front imposts	hood latch hook may	he demaged & not		

Mfg. Campaign No.—96-0113. DOM - 01/93-05/95. In minor front impacts, hood latch hook may be damaged & not function properly as secondary safety catch as required by FMVSS 113. If hood is damaged & not fully latched, hood could fly up suddenly while car is driven, & result in accident. (Correct by replacing hood latch secondary hook.)

NISSAN83V-12511-22-83Nissan300ZX19849,858DOM---8/83-11/15/83. Inner panel of hood may be deformed causing misalignment of secondary hood latch. If when closinghood, primary latch is not properly engaged, misaligned secondary latch might allow hood to open during high speed driving.(Correct by inspecting and replacing secondary hood latches with improved latch.)

84V-13911-2-84NissanPulsar1983-8486,000DOM—(N/A). Hood latch assembly lever is designed to be pushed to right to disengage secondary hood latch. In event thatsomeone was to mistakenly operate lever in incorrect direction with extremely strong force or by using a tool, hood latchassembly may be damaged and result in separation of secondary hood latch. If primary latch is not fully engaged or is releasedwhile driving, hood may open, obstructing frontal vision and cause accident. (Correct by inspecting and replacing with newredesigned hood latch assembly.)

		PORS	SCHE		
91V-012	1-15-91	Porsche	Carrera 4, 911 Coupe	1989-90 1990	2,451
			Targa		
			Cabrio		
			Carrera 2		
			• • • •	1. 6 . 1 . 1	1

DOM-4/88-12/89. Luggage in luggage compartment and/ or plastic trim surrounding safety latch may prevent latch on front hood from properly locking. Latch failure could cause hood to open & obstruct driver's front view. (Correct by replacing plastic trim piece & installing bracket behind safety latch to prevent interference.)

NHTSA	Date of Company			Model	Number of
Identification #	Notification	Make	Model	Year	Vehicles

#### SALEEN

05V-41309-16-05SaleenS281 Supercharged2005339Mfg. Campaign No. STSB 06-05-01. DOM: 3/05-8/05.Bolts used to fasten hood latch and hinges to fiberglas body of hoodcan become loose. Hood may become loose and/or separate from its latch and/or hinge(s) resulting in crash. Correct by replacinghood bolts.

 SUZUKI

 93V-189
 11-30-93
 Suzuki
 Swift
 1989-93
 38,229

 Mislocated spot welds of hood striker assembly cause cracks to start on hood inner panel. If cracks occur, hood striker assembly may not properly engage hood latch when hood is closed. improperly engaged hood latch could allow hood to fly up while vehicle is in motion, obstructing driver's view & causing accident. (Correct by installing two bolts & nuts to secure striker assembly to hood inner panel plus ensuring that hood latch assembly fasteners are properly tightened.)

 TOYOTA

 94V-039
 2-22-94
 Lexus
 ES300
 1992
 16,036

 DOM- 7/91-1/92.
 Secondary hood latch mechanism has narrow clearance between internal parts which, over time, accumulate dust or other foreign matter & cause latch to not engage properly. If this occurs & primary latch is not properly engaged, hood could open suddenly without warning, blocking vision of driver, which could cause accident. (Correct by replacing secondary hood latch.)

### UTILIMASTER

91V-073 4-26-91 Utilimaster Aeromate 1990-91 541 DOM: 6/90-4/91. Primary hood latch can release when vehicle is driven in high wind gusts. Primary hood latch failure will also cause secondary hood latch to fail simultaneously. If primary and secondary hood latch failure occurs, hood can fly open and break one or both front windshields, blocking driver's vision, which could result in occupant injury and/or vehicle accident. (Correct by replacing defective primary and secondary latch mechanisms with a larger spring on primary latch, and a redesigned catch on secondary latch.)

97V-0272-21-97UtilimasterWalk-in Van1996-97656DOM - 01/96-10/96.When vehicle is being driven, force of wind against hood can force hood behind hood bumper,<br/>allowing hood to drop. This reduces tension on two rubber hold-downs which become loose. If both tie downs come loose,<br/>hood can separate during vehicle operation. This can lead to broken windshield and/or blocking of driver's vision & vehicle<br/>crash. (Correct by adding metal bracket & second hood bumper above & behind original bumper so that hood cannot be pushed<br/>or slip behind original, bottom, hood bumper.)

		VOLK	SWAGEN		
98V-160	7-13-98	VW	Jetta	1993-96	238,000
			Golf		
			GTI		
		- 10 C			• • • •

Mfg. Campaign No. UC. DOM: 8/92 - 2/96. Bolts securing front hood latch can loosen over time. Latch would move causing disengagement of hood striker from latch. Unexpected opening of hood could occur, obstructing driver's view & increasing risk of crash. (Correct by inspecting hood latch & securing bolts & replace them if necessary.)

TOTAL: 40 Recalls of 5,858,852 Vehicles

Center for Auto Safety December 2007