Standard No. 208 *Occupant Crash Protection:* (a) installation of a U.S.-model seat belt in the driver's position, or a belt webbing actuated microswitch inside the driver's seat belt retractor; (b) installation of an ignition switch actuated seat belt warning lamp and buzzer. The petitioner states that the vehicle is equipped with combination lap and shoulder restraints that adjust by means of an automatic retractor and release by means of a single push button at both front designated seating positions, and with combination lap and shoulder restraints that release by means of a single push button at both rear designated seating positions.

Standard No. 214 *Side Impact Protection:* installation of reinforcing beams.

Standard No. 301 *Fuel System Integrity:* installation of a rollover valve in the fuel tank vent line between the fuel tank and the evaporative emissions collection canister.

Additionally, the petitioner states that the bumpers on the non-U.S. certified 1974 Alfa Romeo GTV must be reinforced or replaced with U.S.-model components to comply with the Bumper Standard found in 49 CFR Part 581.

The petitioner also states that a vehicle identification number plate must be affixed to the vehicle to meet the requirements of 49 CFR Part 565.

Interested persons are invited to submit comments on the petition described above. Comments should refer to the docket number and be submitted to: Docket Management, Room PL–401, 400 Seventh St., SW, Washington, DC 20590. It is requested but not required that 10 copies be submitted.

All comments received before the close of business on the closing date indicated above will be considered, and will be available for examination in the docket at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. Notice of final action on the petition will be published in the **Federal Register** pursuant to the authority indicated below.

Authority: 49 U.S.C. 30141(a)(1)(A) and (b)(1); 49 CFR 593.8; delegations of authority at 49 CFR 1.50 and 501.8.

Issued on November 21, 1997.

Marilynne Jacobs,

Director, Office of Vehicle Safety Compliance.

[FR Doc. 97–31172 Filed 11–26–97; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA–97–3150]

General Motors Corporation; Denial of Application for Decision of Inconsequential Noncompliance

General Motors Corporation (GM) determined that certain of its 1996 J/L/N model cars fail to comply with the requirements of 49 CFR 571.101, Federal Motor Vehicle Safety Standard (FMVSS) No. 101, ''Controls and Displays,'' and filed an appropriate report pursuant to 49 CFR Part 573 ''Defect and Noncompliance Information Reports.'' GM also applied to be exempted from the notification and remedy requirements of 49 U.S.C. Chapter 301—''Motor Vehicle Safety'' on the basis that the noncompliance is inconsequential to motor vehicle safety.

Notice of receipt of the application was published on March 7, 1997, and an opportunity afforded for comment (62 FR 10618). This document denies the application.

The report submitted by GM states that the company has built cars in which some interior lights may come on while the car is moving, for a period that may last as long as half an hour. The only way the driver can turn them off is to remove the fuse because the light switch will not extinguish them. This is a noncompliance with S5.3.5 of FMVSS No. 101, which requires that sources of illumination forward of a transverse vertical plane 4.35 inches rearward of the manikin ''H'' point, with the driver's seat in its rearmost driving position, that are not used for controls and displays, are not a telltale, and are capable of being illuminated while a vehicle is in motion, have either (1) light intensity which is manually or automatically adjustable to provide at least two levels of brightness, (2) a single intensity that is barely discernible to a driver who has adapted to dark ambient roadway conditions, or (3) a means of being turned off.

GM's description of the non-compliance follows

''*Vehicles involved:* Certain of these 1996 makes and models (with estimated number of cars): Chevrolet Cavalier and Pontiac Sunfire (J cars) coupes and convertibles from start of production to January 16, 1996 (115,351 cars); Pontiac Grand Am, Oldsmobile Achieva, and Buick Skylark (N cars) from start of production to October 31, 1995 (74,902 cars); and Chevrolet Corsica and Chevrolet Beretta (L cars) from start of production to November 13, 1995 (61,738 cars).

Noncompliance: ''These vehicles are equipped with interior lights that illuminate when a door is opened or when the driver activates a switch. Power to the lights is turned on and off by a control module, rather than by direct action of the door or light switches. One of the parts in the control module is a field effect transistor (FET).

Because of manufacturing variances in the FETs, the condition of the FET in some modules, in combination with the programming of the module, can cause a situation where the module will not turn on the lights when the door is opened. Five minutes later, there is a fifty percent chance that the lights will turn on. If that does not happen, there is an increasing chance at ten, fifteen, twenty, twenty-five, and thirty minutes that the lights will turn on. If the lights are turned on at one of those five minute increments, they will then remain on for up to thirty minutes, unless the fuse is removed to cut power to the module. Moving the light switch or ignition to ''off'' will not cause the module to turn off the lights.

In August 1995, GM found a 1996 N car in which the interior lights failed to turn on when a door was opened. In September, GM determined the cause of the problem and its supplier of FETs began inspecting 10% of them. In October, GM started its own screening of all incoming FETs. In January 1996, GM learned of and began investigating the potential for the lights to come on and stay on.

Even in the affected cars, this condition is intermittent. The incidence is higher during cold weather and in vehicles with interior light configurations that place a higher load on the circuit.

This table identifies the lights in these vehicles that are forward of a transverse vertical plane 4.35 inches rearward of the mannequin ''H'' point with the driver's seat in its rearmost driving position:

Chassis	Body type and options	Dome lamp	Map lights in rearview mirror	Footwell lamps
J	Coupe	X		
	Coupe and GT w/sunroof		X	
N	Convertible		X	
Base trim			X	

Chassis	Body type and options	Dome lamp	Map lights in rearview mirror	Footwell lamps
Uplevel trim	X		X	
With sunroof		X	X	
L	All			X

Based on GM's examination of cars and modules, no more than 9.5% of the vehicles with modules built before 100% inspection of FETs began have a FET that could lead to this problem.

Field experience indicates the actual incidence is much lower. Within the total estimated population of 251,991 cars that are potentially affected, GM has paid for replacement of the modules in just under one percent (2,464) under warranty (through October 31, 1996). For cars with modules made after the 100% inspection of FETs began, the rate is about 0.5%. Because the module performs several functions, there are other unrelated malfunctions that could lead to replacement of the module and, absent the FET problem, the rate of warranty replacements for cars of comparable age is 0.3%. Therefore the rates attributable to the FET estimated to be approximately 0.7 and 0.2% respectively.

GM has received no reports of accidents or injuries related to this condition.

To help assess the magnitude of the interior light during nighttime driving, GM measured the luminance values (light on windshield surface) from the driver's eye position in representative vehicles, with the exterior lights on (low beam) and with the interior lights both off and on. The test setup is shown in Attachment B.

The measurements were made in a darkened laboratory with a flat black surface ten feet ahead of the cars. A white paper target was placed on the windshield, so that the total light impinging on the windshield was measured, not just what was reflected from the glass surface. The instrument panel illumination was at the maximum setting. A Minolta Luminance Meter, Model LS–1200 (range: 0.001 to 299900 cd/m(2), was used.

These values are in foot-lamberts and are the average of two readings for each car:

Car	Interior lights off	Interior lights on
J coupe with sunroof	.03	.16
N coupe with sunroof	.03	.16
J convertible	.05	.12
N with base trim	.05	.23
J coupe	.03	.21
N with uplevel trim	.04	.38
L	.07	.14
Average	.04	.20

Attachment C shows the range of luminance levels for human vision and the zones of photopic, mesopic, and scotopic vision. Adaptation occurs when the luminance changes from one zone to another. The levels with the interior lights both off and on within the mesopic (''rod and cone'') zone.'' [Attachments B and C are on file with the application in NHTSA's Docket Room.]

GM supported its application for inconsequential noncompliance with the following.

''1. Driving in total darkness, with no lights from other vehicles, no street lighting, and no light from buildings is the worst case, but it is also infrequent. Daylight is half of the day, but only 18.3% of vehicle trips and 20.2% of vehicle miles occur from 7:00 p.m. through 6:00 a.m. (From 1990 NPTS Databook, Nationwide Personal Transportation Survey, vol. II, figure 5.27). Based on 1993 data from the Federal Highway Administration, 1.045 billion of the annual 1.623 billion passenger car miles traveled were on ''urban'' roads, streets, and highways (from Highway Statistics 1993, Table VM–1).

2. As measured in GM's test, the change in luminance level that a driver would experience is small and, significantly, does not cross one of the adaptation boundaries.

3. Glare is an undesirable, but inevitable feature of night-time driving and drivers can successfully adapt to it. A recent report for NHTSA by Jan Theeuwes and John Alferdinck, *The Relationship Between Discomfort Glare and Driving Behavior,* DOT HS 808 452 (1996), shows that adaptation includes driving more slowly and investing more effort. Major sources of glare include the lights of other vehicles, street lights, and lights on building, parking lots, signs, and billboards adjoining streets and highways. The headlights of a nearby vehicle can easily be many times brighter than any of these interior lights.

4. On some of these cars, the only affected lights are in the footwells, below the instrument panel. While they are in the area covered by the standard, they are not in the driver's forward field of view and, as a matter of common sense, are less likely to be a source of troublesome glare. On other cars, map lights mounted in the rearview mirror assembly are involved. These lights point downward and are also much less likely to be a source of troublesome glare.

5. This condition cannot occur in 90.5% of the cars. Field data shows that the actual incidence is much lower.

6. Many drivers will be alerted to the presence of a problem because they will notice that the interior lights are not on when they enter their cars. Because the absence of interior lights when entering the cars at night is an inconvenience, drivers will be likely to return the cars to dealers for repair. Many cars are likely to be repaired before the driver experiences illumination of the interior lights during night-time driving.

7. GM has received no reports associating this condition with any kind of an accident or injury.

To reach the worst case condition, several low probability events have to coincide—the car has to be one of the 9.5% potentially affected, the car has to be driven at night, the illumination from external sources must be unusually low, and the condition must manifest itself. Further, even if this series of unlikely events occurs, data indicate the driver should be able to successfully adapt to the increased light, as he/she does on a regular basis to other sources of light. Therefore, because the expected coincidence of these events is extremely low and the effects on the driver are minimal; this condition is inconsequential to motor vehicle safety.''

No comments were received on the application.

The purpose of S5.3.5 is to ensure the accessibility and visibility of motor vehicle controls and displays and to facilitate their selection under daylight and nighttime conditions, in order to reduce the safety hazards caused by the diversion of the driver's attention from the driving task, and by mistakes in selecting controls. The operator of a GM vehicle that is noncompliant with FMVSS No. 101 in the manner described is likely to be confronted

unexpectedly with activation of the interior lamps while the vehicle is in motion. This would be likely to divert the driver's attention from the driving task. It would also create a level of interior glare for up to 30 minutes that would not otherwise occur. Compliance with S5.3.5 should remove interior glare from the driver's forward field of view.

GM conducted tests to compare the light on the windshield surface with the interior lights on and off. These tests were performed in a darkened laboratory with a black surface 10 feet ahead of the test vehicle. This is a simulation of the worst-case scenario for the increased glare, as there would be no other light sources from buildings, other cars, or street lamps. The contrast between the relatively dark surroundings and the interior lights would provide the most glare discomfort. GM found that when the interior lights were turned on, the luminance values ranged from two to over nine times greater (an average of five times greater) than when the interior lights were turned off. In the agency's opinion, this is excessive glare for many low-light driving scenarios and is the type of situation NHTSA sought to preclude with S5.3.5.

To justify granting its application, GM sought to persuade the agency that the likelihood of the noncompliance occurring is, in fact, small. For the noncompliance to happen, it argued that the vehicle must be one of the 9.5 percent that is affected, that it must be driven at night, that the light from external sources must be ''unusually low,'' and that the condition must manifest itself. In GM's view, the probability of this series of events occurring is low.

NHTSA disagrees with this rationale, in part because it does not believe that the light from external sources must be ''unusually low'' for there to be an effect. NHTSA staff conducted a few informal tests using their own vehicles. Uniformly, when these individuals turned on the interior dome and map lights during night time driving, they found the light to be an impairment to their vision. These tests were conducted in relatively unlit areas as well as areas with some ambient light from street lamps and buildings. In all cases, the impediment to vision was significant. Further, to determine whether the conclusions made performing the informal tests would also be reached with the subject vehicles, agency staff examined a 1996 Chevrolet Cavalier. The vehicle was examined in a garage with moderate ambient light. This examination reinforced the agency's view that the noncompliance is detrimental to safety. The dome light and the two map lights (integrated with the dome light) not only created distracting reflections in the windshield, but also on the side windows and the interior rear view mirror. The tests that GM conducted only considered the light on a piece of paper attached to the windshield. This measurement does not consider these other reflections, which are distracting in nature. Based on NHTSA's judgment, the noncompliance could hinder vision in areas with ambient light that is more than ''unusually low.'' NHTSA has concluded that a safety problem could occur as a result of the noncompliance in areas with higher glare from exterior light sources.

GM also believes that even if the interior lights turn on, the driver will be able to adapt successfully to the glare created, specifically arguing that the change in luminance level is small and does not cross one of the ''adaptation boundaries.'' Attachment C of GM's petition contains a table showing three consecutive ranges of luminance values: photopic, mesopic, and scotopic. GM states that visual adaptation must occur when the luminance values go from one level to the next. It therefore asserts that, because the luminance values attained in its tests are all within the mesopic level, there will be an insignificant effect on the driver's vision.

NHTSA disagrees with this rationale as well. When comparing the luminance values a driver would experience with the interior lights both off and on, GM found a maximum increase of 900 percent with the lights on, with an average increase of 500 percent. While the range of the luminance values may remain within one of the adaptation levels, it is NHTSA's judgment that increasing the interior light in a vehicle by nine times will have a significant effect on the driver's vision. With such a large increase in glare, it could be difficult to operate a vehicle at night. This situation could be further exacerbated if an inexperienced or elderly driver were operating the vehicle. Inexperienced drivers may not yet be familiar with adapting to commonly-encountered glare, and the elderly may have lost their ability to cope with it effectively.

Finally, GM states that glare, although undesirable, is inevitable and drivers can successfully adapt to it. It cites in support a study by Jan Theeuwes and John Alferdinck, The Relationship Between Discomfort Glare and Driving Behavior, DOT HS 808 452 (1996). However, the authors of the study analyzed the effects of glare from sources such as other vehicles, building, signs, et al, on driving habits, and concluded that, to adapt to glare, drivers went more slowly and invested more effort. A study which is more on point was conducted by the University of Michigan Transportation Research Institute (UMTRI) in 1985 (UMTRI-85–31). This study measured the effects of various vehicle interior lighting systems on driver sight distance at night, and found that turning on the interior lighting systems of a vehicle could reduce forward sight distance by as much as 20 percent. Further, the effect was much more pronounced for rearward visibility, though the test data obtained couldn't be translated into rearward visibility distance. UMTRI did conclude that objects behind the test subjects, when viewed in the rearview mirror, are much more likely not to be visible when the interior lights are illuminated. This study shows that drivers will not completely adapt to the increased light created by interior lights during nighttime driving.

GM also stated that oncoming headlamps can be ''many times brighter than any of these interior lights.'' NHTSA agrees that, to adapt to the glare, the drivers would naturally go more slowly and invest more effort in the task of driving because their vision is impaired. However, the agency sees inconsistencies when comparing the adaptation to the interior lights of the subject vehicles and to the external light sources mentioned in the study. The external light sources such as those from oncoming cars and street lights are inevitable because they provide necessary illumination of surroundings. A driver must learn to adapt to these forms of glare because they are very common. Conversely, the interior light illumination during night driving is not common. Since it is not the practice of drivers to drive at night with their interior lights on, it is unlikely that the driver of one of GM's noncompliant vehicles has ever had to cope with such a situation. Further, the nature of external light sources is that they are fairly transient. Because a vehicle is moving, the external glare is usually not constant, but a light source within the vehicle would provide constant internal glare, and up to 30 minutes of it.

In summary, NHTSA does not agree with GM's argument that the noncompliance reflects a rare problem that will create insignificant problems should it arise. Of the approximately 20,000 vehicles that have not yet been repaired, some will inevitably suffer this noncompliance at night. Moreover, NHTSA believes that this noncompliance has the potential to create an unsafe situation which is

consequential to motor vehicle safety even in conditions where there are external light sources.

Accordingly, for the reasons stated above, GM has not met its burden of persuasion that the noncompliance herein described is inconsequential to safety and its application is denied.

(49 U.S.C. 30118, 30120; delegation of authority at 49 CFR 1.50 and 501.8)

Issued on: November 21, 1997.

L. Robert Shelton,

Associate Administrator for Safety Performance Standards.

[FR Doc. 97–31266 Filed 11–26–97; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA–97–3149]

Nissan Motor Corporation, U.S.A.; Denial of Application for Decision of Inconsequential Noncompliance

Nissan Motor Manufacturing Corporation USA, (Nissan) determined that certain Nissan Sentra 4-door sedans fail to comply with the requirements of 49 CFR 571.108, Federal Motor Vehicle Safety Standard No. 108, ''Lamps, Reflective Devices and Associated Equipment,'' and filed an appropriate report pursuant to 49 CFR Part 573 ''Defect and Noncompliance Information Report.'' Nissan also applied to be exempted from the notification and remedy requirements of 49 U.S.C. 30118(d) and 30120(h) on the basis that the noncompliance is inconsequential to motor vehicle safety.

Notice of receipt of an application was published on December 18, 1996, and an opportunity afforded for comment (61 FR 66744). This notice denies the application.

Paragraph S5.1.1 of Standard No. 108 requires that each motor vehicle shall be equipped with certain lamps and reflective devices designed to conform to applicable SAE Standards or Recommended Practices referenced in the Standard. The stop lamp function of a rear combination lamp assembly must meet the photometric performance requirements of SAE J586 FEB84. To determine photometric performance, measurements of light intensity are taken at 19 test points in a geometric grid. The grid is further broken down into five separate zones. The measured test point values that are located within a zone are added together to provide a zone total which must meet a minimum value.

Based on its tests, Nissan believes that the taillamp function of the combination lamps in certain Nissan Sentra 4-door sedans meet or exceed all test criteria and is in compliance with Standard No. 108. Further, the stop lamp function of certain rear combination lamp assemblies in those vehicles meet the requirements in Zones 1, 2, 4, and 5.

However, in certain lamps, the minimum requirements in Zone 3 for the stop lamp function were not met. The photometric results for the tested lamps of the Sentra 4-door sedan stop lamp function in Zone 3 are discussed in the decision portion of this notice, and are set forth in Nissan's application, which has been filed in the National Highway Traffic Safety Administration Docket Section.

According to Nissan, from December 11, 1995, through September 1996, the company manufactured approximately 65,000 1996 and 1997 model year Nissan Sentra 4-door sedans with combination tail/stop lamp assemblies that it determined did not comply with the stop lamp photometric requirements of SAE J586 FEB84 as incorporated by reference in Standard No. 108. J586 FEB84 defines 19 test points for stop lamps that must emit a specified range of light intensity. These test points are grouped into five zones and their intensities are summed to arrive at a total within each zone. Each zone's total has a required value, measured in candela, that must be met, with none of the test points falling below 60 per cent of its specified value.

Nissan stated that it discovered that the total candela of the five test points measured across Zone 3 in some lamps that it tested did not meet the required minimum of 380 candela for Zone 3. All other zone totals were within Standard No. 108's specifications for the stop lamp function, and all the Standard's criteria were met for the taillamp function.

Nissan supported its application for inconsequential noncompliance with the following:

> Nissan [we] believe the failure of the stop lamp portion of the rear combination lamp assembly to meet photometric requirements in one of five zones is inconsequential to motor vehicle safety for the following reasons:
>
> A NHTSA sponsored study titled ''Driver Perception of Just Noticeable Difference[s] in [of Automotive] Signal Lamp Intensities'' [DOT HS 808 209, September 1994] demonstrated a change in luminous intensity of 25 percent or less is not noticeable by most drivers. Since all of the stop lamps Nissan tested, except one, were closer to the standard than 25 percent, the noncompliance is likely undetectable to the human eye. The single worst case sample was 25.5 percent below the standard in zone 3 but exceeds the photometric requirements of zones one, two, four, and five and meets or exceeds all other FMVSS and SAE requirements.
>
> The stop lamp is more than five times brighter than the tail lamp. A following driver will have no problem detecting the moment of brake application.
>
> The two combination lamp assemblies are supplemented by a Center High Mounted Stop Lamp (CHMSL). The Sentra's CHMSL illuminates at over two times the minimum standard to provide not only strong warning of brake application to the following driver, but also vehicles further back in the traffic flow. Nissan believes the supplementary benefit of the bright CHMSL helps to compensate for any diminished stop lamp performance.
>
> The combination tail/stop lamp assemblies are mounted high in the vehicle's body near the beltline. This mounting location provides excellent line of sight visibility to a following driver.
>
> Nissan is not aware of any accidents, injuries, owner complaints or field reports related to this condition.
>
> In similar situations NHTSA has granted the applications of various other petitioners. See, for example, 61 **Federal Register**, January 22, 1996 (petition by General Motors); 56 **Federal Register** 59971, November 26, 1991 (petition by Subaru of America); and 55 **Federal Register** 37601, September 12, 1990 (petition by Hella Inc).

No comments were received on the application.

NHTSA has carefully considered Nissan's arguments and the facts in this case. It is reassuring to have Nissan affirm that, in spite of the photometric failures, the stop lamp ''is more than five times brighter than the tail lamp,'' as is the Sentra's mandated center highmounted stop lamp. However, this is no less than what Standard No. 108 already requires for the pair of stop lamps. Because the pair of stop lamps are mounted within the range of height from the road specified by Standard No. 108, the fact that they may be mounted near the beltline is regarded as a neutral safety factor for purposes of this discussion. In the final analysis, it appears to NHTSA that the company has understated the magnitude of the noncompliance in comparison with the data it has submitted, and that the severity of the noncompliance reflects flaws in Nissan's design and manufacturing process that cannot be overlooked regardless of compensating factors such as the location of other stop lamps and the conformance of the stop lamps in question with the other four zonal requirements.

The agency deems it relevant to its decision to deny Nissan's application to discuss briefly the accommodation that Standard No. 108 already makes for manufacturers by imposing less than the absolute performance requirements