



Mercedes-Benz

Mercedes-Benz USA, Inc.

DaimlerChrysler Company

OFFICE
GENERAL INVESTIGATIVE
DIVISION

July 30, 2001

BY FAX 202-366-8065

00V-247 ①

Kenneth N. Weinstein
National Highway Traffic Safety Administration
400 Seventh Street, S.W. (NSA-01)
Washington, D.C. 20590

**Re: Update of Part 573 Noncompliance Information Report following
denial of Petition of Inconsequential Non-Compliance**

Dear Mr. Weinstein:

Pursuant to the requirements of 49 C.F.R. Part 573, and on behalf of our parent company, DaimlerChrysler AG (DCAG), this letter supplements our August 23, 2000 Part 573 submission advising you of a noncompliance of Federal Motor Vehicle Safety Standard (FMVSS) 108 (lamps, reflective devices and associated equipment) in certain Mercedes-Benz vehicles. The August 23, 2000 Part 573 submission was filed concurrent with a petition for determination of inconsequential noncompliance, 49 C.F.R. Part 556. On July 29, 2001, the Agency denied our petition for inconsequential non-compliance. As a result of this denial, MBUSA plans to conduct a Recall of the subject vehicles to modify the light output to bring them into photometric compliance. The details of this situation and the vehicles affected are set forth in the original Part 573 submission. MBUSA will notify the owners by first class mail of this campaign. A copy of the owner letter and dealer bulletin will be provided in the near future. In view of the small vehicle population involved, MBUSA does not believe it efficient or necessary to issue a press release on this matter.

If you or your staff have any questions, please feel free contact me at (201) 573-2638 or Mr. Stephen Kraitz, of my staff, at (201) 673-4118.

Sincerely,

William Kurtz
Department Manager
Environmental and Safety Engineering

cc/ encl.: Jonathan White, Recall Analysis Division, NHTSA



JUL 17 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

00V-243/
01V-247

Williams Kurtz, Manager
Environmental and Safety Engineering
Mercedes-Benz USA
One Mercedes Drive
PO Box 350
Montvale, NJ 07645-0350

Dear Mr. Kurtz:

The purpose of this letter is to notify you that the National Highway Traffic Safety Administration has made a determination to deny your petition dated August 23, 2000, submitted on behalf of Mercedes-Benz USA. Your petition requested an exemption from the notification and remedy provisions of 49 U.S.C. Chapter 301 on the basis that the noncompliance of certain vehicles produced with high beam headlamps that exceed the photometric limits, therefore, not meeting the requirements in FMVSS No. 108 is inconsequential to motor vehicle safety.

Since this petition has been denied, pursuant to 49 CFR 573.5(c)(8)(iii), you must submit an amended Noncompliance Information Report no later than five (5) working days from your receipt of this letter. That Report shall include the following information: recall population, problem description, remedy, and recall schedule. If a portion of the information which is required to fully describe the recall is unknown, the Report must still be submitted on time. The remaining information is to be provided as it becomes available. Please submit the information to :

Mr. Kenneth N. Weinstein
Associate Administrator for Safety Assurance
National Highway Traffic Safety Administration
NSA-01
Washington, DC 20590
FAX 202-366-8065

If you have any questions regarding your recall obligations, you may call Jonathan White at 202-366-5226.

A copy of the Federal Register notice, providing the rationale for this determination, is enclosed for your information.

Sincerely,



Stephen R. Kratzke
Associate Administrator
for Safety Performance Standards

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Docket No. NHTSA-2000-8014; Notice 2

**Mercedes-Benz, U.S.A., L.L.C.;
Denial of Application for Decision of Inconsequential Noncompliance**

Mercedes-Benz, U.S.A., L.L.C., (MBUSA) of Montvale, New Jersey, determined that a number of Mercedes-Benz CL500 vehicles were produced with upper beam headlamps that exceed the photometric limits of FMVSS No. 108, "Lamps, Reflective Devices, and Associated Equipment." MBUSA has 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 in the Federal Register (65 FR 59247) on October 4, 2000. Opportunity was afforded for public comment until November 3, 2000. No public comments were received.

Mercedes-Benz CL500 vehicles are equipped with high intensity discharge headlamps (HIDs). When the HIDs are activated, a mechanical flap directs their light at an angle that optimizes illumination of the road surface in front of the vehicle. When the upper beam mode is activated, the flap alters the angle of the HID light to provide a higher angle of illumination. In 613 model year 2000 CL500 vehicles, a separate H7 lamp was improperly wired to illuminate at the same time the mechanical flap was activated to increase the HID light angle. In the upper beam mode, the HID and H7 lamp combination produce 89,000 candela (cd) at test point H-V and 12,731 cd at test point 4D-V. FMVSS No. 108 establishes maximums of 75,000 cd at H-V and 12,000 cd at 4D-V. When they are in the lower beam mode, these headlamps meet all

photometric requirements of FMVSS No. 108.

MBUSA supports its application for inconsequential noncompliance with the following statements:

(1) Only a very limited number of Mercedes-Benz CL500 vehicles were produced containing the foregoing noncompliance (613 units). This number represents only minimal percentage of all vehicles operating in the United States.

(2) Upper beam headlamps are not legal in states for operation in the presence of oncoming traffic. Therefore, the higher output upper beam headlamps will likely not even be noticed by other drivers or vehicle occupants. Moreover, MBUSA believes that the approximately 20% increase in upper beam headlamp output in affected CL500's is indistinguishable to occupants of oncoming vehicles.

(3) With regards to the driver of the affected vehicles, MBUSA believes that the increase in output for upper beam headlamps may actually enhance vehicle safety in that drivers will have a greater view down the road thereby providing earlier warning of obstacles in the vehicle's intended path of travel.

(4) MBUSA has not received, nor is the Company aware of any complaints, accidents or injuries caused by the higher output upper beam headlamps.

The agency has reviewed the application and has decided that the noncompliance is not inconsequential to motor vehicle safety. The noncompliant vehicles' headlamps, in their upper beam mode, produce 18.6 percent more light at H-V and 6.1 percent more light at 4D-V than the standard allows. The noncompliance at H-V is particularly troubling in that it could be further exacerbated by factors such as poor aiming and increased voltage. This could increase the light intensity significantly and, thus, contribute more problematic glare at the distances prescribed by the various states for dimming headlamps in the presence of oncoming vehicles.

We are aware of a University of Michigan Transportation Research Institute (UMTRI) report titled "Just Noticeable Differences for Low-Beam Headlamp Intensities" (UMTRI-97-4, February 1997). This report concludes that drivers in oncoming vehicles will not notice

differences in the intensity of headlamps that are less than 25 percent.

We believe, however, that it would not be appropriate to use this study to judge the merits of MBUSA's application. This is based on two factors. First, the study focuses only on the lower beam mode in headlamp systems. The MBUSA vehicles do not comply when the upper beam mode is activated. We cannot presume that a study which examines light intensity associated with the lower beam mode would also apply to the light intensity of the upper beam mode. The upper beam mode produces substantially more intensity down the road. UMTRI does not mention any correlations between upper and lower beam modes in its study.

Second, the research finds that the just noticeable differences, under controlled conditions, are between 11 and 19 percent. UMTRI concludes that, in real world conditions, the just noticeable differences would be somewhat larger due to the rather simple and uncluttered environment of a controlled study. In a controlled study, observers can devote much more attention to small differences due the lack of other distractions that are common during driving. This leads UMTRI to conclude that 25 percent is a reasonable value upon which to judge inconsequential noncompliance applications. However, we have noticed in the many complaints received that consumers are very aware of and sensitive to the glare produced by oncoming drivers' headlamps. This public sensitivity leads us to believe that glare in the "real-world" is not necessarily like that in laboratory studies. Many of these complaints can be found on the Department of Transportation's Docket Management System website, <http://dms.dot.gov> docket NHTSA-98-4820. This demonstrates that glare is of significant concern to the public.

MBUSA attempts to support its rationale for granting the application by pointing out that there is a limited number of noncompliant vehicles (613). In order for the agency to grant an

inconsequentiality application, it is necessary to determine whether the particular noncompliance is likely to increase the risk that the requirement is intended to prevent. Arguments that only a small number of vehicles or pieces of motor vehicle equipment are affected generally will not justify granting a petition. But, more importantly, the key issue is whether the noncompliance is likely to increase the safety risk.

MBUSA states that there are State laws prohibiting the operation of upper beam headlamps in the presence of oncoming traffic. For this reason, it believes that the increased output of the subject lamps will not be noticed by other drivers. The agency does not concur with this rationale. State laws generally require drivers to dim their headlamps at a prescribed distance from oncoming traffic. This distance is based on the intensity of available upper beams. Therefore, if the intensity of upper beams is increased, this distance may not be effective in reducing glare for oncoming drivers. Glare distracts drivers and is therefore likely to increase the safety risk.

Finally, MBUSA states that the increase in output from the subject lamps may actually enhance vehicle safety as drivers will have greater visibility. We agree with MBUSA that the increased output of the subject lamps will increase drivers' views down the road. However, the purpose of the maximum light intensity limitations for upper beam headlamps is to protect oncoming drivers from glare. There must be a balance between the need of drivers to have a clear view of the roadway and the need to reduce glare for oncoming drivers. While MBUSA may be correct in assuming that the extra light provided by the subject lamps would be advantageous to drivers of the vehicle, it does not consider the obvious ill effects it would have on oncoming drivers. For this reason, we do not accept MBUSA's rationale.

In consideration of the foregoing, NHTSA has decided that the applicant has not met its burden of persuasion that the noncompliance it describes is inconsequential to motor vehicle

safety, and it should not be exempted from the notification and remedy requirements of the statute. Accordingly, its application is hereby denied.

(49 U.S.C. 30118(d) and 30120(h); delegations of authority at 49 CFR 1.50 and 501.8)

Issued on: JUL 17 2001



Stephen R. Kratzke
Associate Administrator for
Safety Performance Standards

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