A Notice of Intent to Delete for this site was published in the **Federal Register** on October 3, 2001, 66 FR 48018. The closing date for comments on the Notice of Intent to Delete was November 2, 2001. EPA received no comments during the comment period.

EPA identifies sites that appear to present a significant risk to public health, welfare, or the environment and it maintains the NPL as the list of those sites. Any site deleted from the NPL remains eligible for Fund-financed remedial actions in the unlikely event that conditions at the site warrant such action. Section 300.425(e)(3) of the NCP states that Fund-financed actions may be taken at sites deleted from the NPL. Deletion of a site from the NPL does not affect responsible party liability or impede agency efforts to recover costs associated with response efforts.

List of Subjects in 40 CFR Part 300

Environmental protection, Air pollution control, Chemicals, Hazardous waste, Hazardous substances, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

Dated: November 21, 2001.

Abraham Ferdes,

Acting Regional Administrator, Region III.

For the reasons set out in this document, 40 CFR part 300 is amended as follows:

PART 300—[AMENDED]

1. The authority citation for part 300 continues to read as follows:

Authority: 33 U.S.C. 1321(c)(2); 42 U.S.C. 9601–9657; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p.351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p.193.

Appendix B—[Amended]

2. Table 1 of appendix B to part 300 is amended under Pennsylvania (''PA'') by removing the entry for ''McAdoo Associates, McAdoo Borough''.

[FR Doc. 01–30819 Filed 12–12–01; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA–98–4662]

RIN 2127–AC19

Federal Motor Vehicle Safety Standards; School Bus Body Joint Strength

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Final rule; response to petitions for reconsideration.

SUMMARY: On November 5, 1998, NHTSA published a final rule that amended Federal Motor Vehicle Safety Standard No. 221, *School Bus Body Joint Strength,* with an effective date of May 5, 2000 for those amendments. The amendments extended the applicability of that standard to small school buses, narrowed the exclusion of maintenance access panels from the joint strength requirements, and made other changes to the standard. We delayed the effective date on two occasions, so that we would have time to analyze petitions for reconsideration. First, in a final rule published on March 6, 2000, we delayed the effective date to May 5, 2001, and corrected a typographical error. Second, in a final rule published on April 20, 2001, we delayed the effective date to June 1, 2002. We have now completed our analysis of the petitions, and are taking the following actions: making it clearer that the standard applies to small, curved and complex joints; excluding joints that are forward of the passenger component; and making various other changes to the standard. For purposes of clarity, we are withdrawing the earlier amendments, and are republishing them today as modified by the changes we decided to make in response to the petitions for reconsideration. The amendments will become effective on January 1, 2003.

DATES: The final rule published on November 5, 1998 (63 FR 59732) and amended and delayed March 6, 2000 (65 FR 11751), and delayed again on April 20, 2001 until June 1, 2002 (66 FR 20199) is withdrawn as of January 14, 2002. The amendments in this final rule are effective January 1, 2003. Any petitions for reconsideration of this final rule must be received by NHTSA not later than January 28, 2002.

ADDRESSES: Petitions for reconsideration should refer to the docket number for this action and be submitted to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590. Copies of the Final Regulatory Evaluation for this rule can be obtained from: Docket Management, Room PL–401, 400 Seventh Street, SW., Washington, DC, 20590, telephone: (202) 366–9324. Docket hours are 10 a.m. to 5 p.m., Monday through Friday. The Docket is closed on Federal holidays.

FOR FURTHER INFORMATION CONTACT: For non-legal issues, you may call Mr. Charles R. Hott, Office of Crashworthiness Standards at (202) 366–0247. His fax number is (202) 493–2739.

For legal issues, you may call Ms. Dorothy Nakama, Office of the Chief Counsel at (202) 366–2992. Her fax number is (202) 366–3820.

You may send mail to both of these officials at National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

I. Background

NHTSA is authorized by 49 U.S.C. 30101, *et seq.*, to issue Federal motor vehicle safety standards for new motor vehicles, including school buses.[1] In 1974, Congress enacted the Motor Vehicle and Schoolbus Safety Amendments (Pub. L. 93–492), which directed NHTSA to issue Federal motor vehicle safety standards for various aspects of school bus safety, including interior protection for occupants, floor strength, and crashworthiness of body and frame. One of the actions that NHTSA took in response to that Congressional mandate was to issue Standard No. 221, *School Bus Body Joint Strength*.

Standard No. 221 requires the strengthening of school bus body panel joints to prevent them from separating during a crash, thereby exposing cutting edges that could cause serious injuries or allow passenger ejection through openings created by such panel separations. The Standard currently provides that each school bus body panel joint must be capable of holding the body panel to the member to which it is joined when subjected to a force of 60 percent of the tensile strength of the weakest body panel attached to the joint.

Excluded from this requirement are doors, windows, spaces designed for ventilation or another functional purpose, and maintenance access panels (MAPs). MAPs were excluded because they involve areas on the vehicle requiring frequent maintenance and thus needing easy accessibility. Although MAPs were not defined in the Standard, it was NHTSA's intent that manufacturers would limit MAPs to panels providing access to areas requiring routine maintenance.

II. Final Rule of November 1998

On November 5, 1998, NHTSA published in the **Federal Register** a final rule (63 FR 59732) (DMS Docket No. NHTSA–98–4662) that was intended to ''enhance the applicability and objectivity of Standard No. 221's school bus joint strength requirements.'' Before issuing this final rule, NHTSA issued an advance notice of proposed rulemaking (52 FR 23314, June 19, 1987) (No DMS Docket No.) and a notice of proposed rulemaking (56 FR 11142, March 15, 1991) (No DMS Docket No.). NHTSA received 37 comments in response to the ANPRM and 18 comments in response to the NPRM. Each comment was carefully considered before the final rule was issued.

Until the November 1998 final rule takes effect, Standard No. 221 will apply to only school buses over 4536 kg (10,000 lbs) gross vehicle weight rating (GVWR). In the November 1998 final rule, NHTSA extended the applicability of Standard No. 221 to small school buses (GVWR of 4536 kg or less), narrowed the exclusion of MAPs from the joint strength requirements, and made other changes to the Standard. The following summarizes the November 1998 final rule changes to Standard No. 221.

A. Applicability to Small School Buses

In the November 1998 final rule, NHTSA extended the applicability of Standard No. 221 to small school buses (GVWR of 4536 kg or less), after concluding that there is a safety need to extend the Standard to small school buses. The National Transportation Safety Board (NTSB) was concerned that small school buses experience higher crash forces in a crash than do large school buses, since size and mass are important factors in crash severity. NTSB studies on the crashworthiness of large and small school buses found that 6 of 19 small school bus crashes resulted in body panel joint separation (32 percent of the cases studied). In contrast, joint separations in large school buses occurred in MAPs and floor joints, while body panel joints maintained structural integrity very well, even in severe crash forces. These results indicate that the requirements of Standard 221 are very effective (see NTSB Safety Study: Crashworthiness of Small Poststandard School Buses, October 11, 1989). Further, these results led NHTSA to conclude that the structural integrity of small buses would be enhanced by extending the joint strength requirement of Standard 221 to those vehicles. NHTSA concluded that small school buses should at least be subject to the same joint strength requirements as large school buses. This will better help achieve the goal of providing children with equivalent levels of protection against injuries from joint separation, regardless of the GVWR of the vehicle transporting them.

Small school buses are becoming an increasingly larger part of the school bus fleet. From 1988 to 1993, the percentage of small school buses in the total school bus sales for rose from about 13 percent to about 19 percent (an increase of almost 50 percent in market share). From 1994 to 1998, the percentage of small school bus sales held steady at about 16 percent. This rise in sales concerns us because it indicates that crashes and resultant injuries involving small school buses are likely to increase.

B. Maintenance Access Panels

In the November 1998 final rule, NHTSA defined ''maintenance access panel'' to limit a manufacturer's latitude to designate panels as MAPs and thus have them excluded from the strength requirements of the standard. NHTSA determined that there was a safety need to restrict MAPs. After reviewing NTSB studies and recent NTSB school bus crash investigation reports, NHTSA found that 7 out of 80 crashes studied involved MAP separations, causing head laceration injuries in two of the cases. In 4 of the 20 crashes involving small school buses, body joint separations occurred, resulting in one occupant with multiple leg fractures. Further, NHTSA's own tests had shown that MAP joints were not strong and could separate easily. In order to be excluded from the requirements of Standard No. 221 as a ''maintenance access panel'' under this rule, a panel must meet the definition of a MAP, and must also meet certain criteria.

1. Definition

The final rule defined ''maintenance access panel'' as ''a body panel which must be moved or removed to provide access to one or more serviceable component(s).'' The rule also defined ''serviceable component'' as a part of the bus which is identified by the body or chassis manufacturer in the owners' or service manuals as requiring routine maintenance at least once each year. The definition specifies that ''serviceable component'' includes pneumatic and hydraulic devices, wiring harnesses, and tubing only at their attachments.

2. Criteria To Be Excluded

The final rule set criteria that a MAP must meet to be excluded from the requirements of Standard No. 221. To be excluded, the MAP must either: (1) Be located forward of the passenger seating area (the MAP must not lie between a vertical transverse plane located 762 mm (30 inches) in front of the forwardmost passenger seating reference point and a vertical transverse plane

[1] 49 U.S.C. 30125(a)(1) defines a ''schoolbus'' as a passenger motor vehicle designed to carry a driver and more than ten passengers that the Secretary of Transportation determines ''is likely to be used significantly to transport preprimary, primary, and secondary school students to or from school or an event related to school.'' NHTSA further defines a school bus as a bus that is sold or introduced in interstate commerce for purposes that include carrying students to and from school and related events, but does not include a bus that is designed and sold for operation as a common carrier in urban transportation. 49 CFR 571.3.

tangent to the rear interior wall of the bus at the vehicle's centerline); or (2) be located within the passenger seating area and have an opening that does not exceed 305 mm (12 inches) when measured across any two points diametrically on opposite sides of the opening.

The 305 mm measurement is independent of the serviceable component's perimeter and location. By adopting this restriction, NHTSA sought to ensure that each MAP is no larger than needed to provide access to the serviceable component(s) covered by the MAP.

3. MAP Floor Panels

MAPs that expose the bus interior to areas below the bus floor or within the engine compartment are excluded from Standard No. 221's requirements if the MAP meets the restrictions on either MAP location or size described above. In the November 1998 final rule, NHTSA determined that there is insufficient fire-related reason to require any MAP, regardless of its location outside the bus occupant space or insignificant size, to meet the joint strength requirement if it is on the floor.

C. Engine Access Panels, Ventilation Panels, and Perforated Panels

1. Engine Panels

In the November 1998 final rule, NHTSA excluded engine access panels from the requirements of the Standard. NHTSA believed that engine covers on most front engine buses are located outside the passenger compartment area and that maintenance on rear engine buses is routinely accomplished from the outside. The agency agreed with commenters that direct and often-recurring engine maintenance should be quickly and easily accomplished. This requires easy accessibility to the engine compartment by the driver who may not have an extensive array of tools available.

2. Ventilation Panels

Ventilation panels are used for heater housings, heater air diffusers, heater ducts, heater hose covers, and air conditioning ducts and diffusers. One commenter argued that all those components serve important functional purposes, that the components enclose no occupant air space, and are typically supported by panels that must meet Standard No. 221. After being persuaded that the ventilated panel exclusion is being utilized and that ventilation panels do serve important functional purposes, in the November 1998 final rule, NHTSA determined that ventilation panels should continue to be excluded from the joint strength requirements of Standard 221. Further, due to their size and location, ventilation panels are not so likely as first thought to cause occupant injuries in an accident. NHTSA expressed its belief that extending the joint strength requirements to these panels would result in increased costs for redesign and additional fasteners, as well as decreased serviceability for the end user, without a commensurate safety benefit.

3. Perforated Panels

A commenter stated that perforated metal sheets are widely used in the interior linings of school buses to reduce interior noise, and that the perforations do not extend into the joint area, making the joints stronger than the perforated portions of the panels. NHTSA stated that it was aware that perforated material is often used in school bus ceilings for noise reduction. The agency is unaware of any problems with perforated panels, such as instances in which perforations contributed to the failure of a joint or in which panels separated due to torn perforations. In the November 1998 final rule, NHTSA stated it will monitor the use of perforated panels and their performance in school buses to determine whether there is a safety need to limit or otherwise regulate their use.

D. Test Procedures

The November 1998 final rule made a number of revisions to Standard No. 221's test procedures, including excluding curved, small and complex joints from testing; adopting a provision that support members must remain attached to the specimen during testing; and deleting the term ''approximately perpendicular'' from S6.3.2 and replacing it by a provision stating that the joint be in stress at 90 degrees plus or minus 3 degrees from the joint centerline.

1. Curved and Small Joints

The November 1998 final rule excluded from the joint tensile strength requirement joints from which a test sample cannot be obtained because of the small size of the joint or the curvature of the panels comprising the joint.

In the NPRM, NHTSA proposed a procedure for testing curved joints, such as those found in roof or ceiling joints. The procedure would have specified that the test specimen be prepared by selecting a joint segment where the radius of curvature is at least 508 mm (20 inches). One commenter, Thomas Built Buses, suggested a method of testing a curved joint, but stated that in order to prevent distortion of the test results, the gripping devices must be able to grip the sample in the same radius as the sample curvature. To avoid such complex test procedures, Thomas strongly recommended that NHTSA approve the use of surrogate joints.

NHTSA recognized that the curved shape of such joints poses difficulty in obtaining accurate test results. The application of force on a curved surface would cause the surface to flatten, thus misrepresenting the actual force loading on the panel. Although NHTSA believes that it is possible to design and fabricate test fixtures and procedures capable of testing curved joints, such fixtures would involve additional certification costs for manufacturers and additional cost for NHTSA in the agency's compliance testing. In the November 1998 final rule, NHTSA stated that since it is not aware of any data indicating that injuries have been caused disproportionately by curved joint separation, NHTSA believes that the potential costs and technical difficulty of testing curved joints more than outweigh any potential safety benefits. However, the agency stated that it will continue to monitor this issue and initiate rulemaking should curved joint separation become a safety problem.

2. Complex Joints

Two commenters addressed NHTSA's proposals to test small and complex joints such as those taken from door, window, and other small or inaccessible body panel joints. General Motors Corporation (GM) stated that NHTSA's proposals regarding the testing of these joints did not fully clarify specimen preparation procedures for such joints found in passenger vans or van cutaways. The commenters contended that many of the joints in those vehicles cannot be tested under either current or proposed testing procedures. GM suggested that NHTSA further study such types of joints and either further clarify pertinent test procedures or exclude such joints from the requirements of Standard 221 as being nontestable. Thomas Built Buses asserted that the testing of very short pieces of frame that would require fittings would violate ASTM test principles. Thomas further argued that tests need not be performed in this manner if NHTSA would approve the use of surrogate sampling.

NHTSA agreed that it would be difficult to test complex joints such as those found in body panels configured to join two or more panels in a single plane in any manner other than linear,

as well as other small joints under either current or proposed testing procedures. Therefore, in the November 1998 final rule, NHTSA decided that test specimens from joints with discrete fasteners will be taken from 305 mm (12 inch) segments (203 mm (8 inches) at the neck) of flat body panels only. Small and complex joints, as well as trim, decorative parts, floor coverings, and molding strips will not be tested. The agency stated that it has no data indicating that any injuries have been caused by failure of those small and complex joints or components. NHTSA stated further that it believed the potential cost of trying to test them would far outweigh any potential safety benefits.

While curved, small and complex joints are excluded from the tensile test requirement because they cannot be accommodated in the test apparatus, they are nevertheless subject to the requirement in S5.1.1 that no body panel, when joined to another body panel, shall have an unattached segment at the joint longer than 203 mm (8 inches). Presumably, rivets or other fasteners will be used. In the November 1998 final rule, NHTSA indicated its belief that this requirement will increase the likelihood that the joints will maintain their integrity in a crash.

3. ''Hourglass'' Shape of Specimens

NHTSA had proposed that the existing ''hourglass'' shape of test specimens be eliminated in favor of straight sides because it believed that, with a simple rectangular shape, more joints could potentially be tested. A commenter stated that use of a straight-sided test specimen was contrary to the shape principles set forth in the ASTM sample testing procedures. Those principles were designed to ''even-out'' the force distortions induced by the testing device. Another commenter stated that the proposal to eliminate the hour glass shape was unacceptable, arguing that the test specimens need to be wider at the grips than at the joint section being tested. It said that this width is needed to allow for proper attachment of the specimen to the test grips and to ensure that adequate loading can be properly applied to the joint portion of the specimen.

In the November 1998 final rule, NHTSA said that it was persuaded by the comments and decided to retain the hourglass shape of test specimens. The ASTM Standards call for the shape of the test specimen to be narrower at the sample's longitudinal centerline than at the ends of the specimen where the grips are attached. That shape concentrates the load exerted by the grips in the center of the specimen rather than at the edges as in the case of a straight-sided specimen.

4. Discontinuing Deduction of Total Area of Material Removed for Installation of Fasteners

NHTSA had proposed to discontinue deduction of the total area of material removed for installation of fasteners (i.e., holes drilled for installation of rivets or screws) in calculating the tensile strength of each joined component. In a letter to Blue Bird Body Company dated November 28, 1978, NHTSA stated that subtracting the fastener holes was the proper procedure for calculating the correct area of the sample, but did not explain the basis for that conclusion.

NHTSA carefully considered the issue in light of public comments. NHTSA determined it is easier for a sample joint to meet the standard's tensile strength requirement when the deduction is made for fastener holes. The required strength of a given joint is based on the tensile strength of the weakest body panel attached at that joint. If the area for fastener holes were deducted from the total area of the test specimen when calculating the strength of the test specimen, the tensile strength of a sample joint could appear higher than the actual tensile strength of that joint. As a result, a given joint could meet the 60 percent tensile requirement of Standard 221 using fewer fasteners than those that would be necessary if the deduction were not made. In setting the 60 percent tensile requirement, the agency determined that minimum value met the need for motor vehicle safety. Since deducting for fastener holes can result in a joint being actually weaker than 60 percent of its weakest member, NHTSA determined that safety is better served if the deduction were not made. Accordingly, in the final rule, the letter of interpretation issued by NHTSA on November 28, 1978 that provided for the deduction was rescinded.

E. Relative vs. Minimum Body Joint Strength Requirements

In response to NHTSA's ANPRM of June 19, 1987, several commenters suggested that NHTSA replace the present relative body joint strength requirement (60 percent of the tensile strength of the weakest joined body panel) with an absolute minimum strength requirement. NHTSA carefully considered the comments on this issue and was persuaded by the commenters who argued that body panel joint strength should be consistent with the bus manufacturers' choice of body panel materials. In the November 1998 final rule, NHTSA determined that specifying a minimum absolute strength requirement by specifying a minimum steel gauge would be design restrictive and require significant changes in current industry design practices and procedures. NHTSA also perceived no safety basis for changing the current relative strength standard in favor of an absolute minimum standard.

III. Petitions for Reconsideration and Changes to Final Rule

In response to the November 5, 1998 final rule, NHTSA received petitions for reconsideration from three school bus manufacturers; American Transportation Corporation (AmTran), Blue Bird Body Co., and Thomas Built Buses. Each manufacturer raised similar concerns. The following summarizes each issue raised in the petitions for reconsideration and each manufacturers' arguments on the issue, and provides NHTSA's response:

A. Exclusion of Small, Curved, and Complex Joints

As noted above, in the November 1998 final rule, NHTSA amended Standard No. 221's tensile strength requirements to exclude joints from which a test sample cannot be obtained because of the joint's small size or because curvature or complexity of the panels comprising the joint made it unable to fit into the test apparatus. All three petitioners opposed this change, saying that the effect would be to remove from Standard No. 221's coverage, many small, curved and complex joints that have been subject to Standard No. 221.

AmTran asked that S5.1.2 be amended so that small, curved and complex joints must meet previous S5.1.2 requirements. AmTran noted that each of its school buses has over 100 joints that meet the previous S5.1.2 requirements, but changes in the November 5, 1998 final rule would permit AmTran to reduce to 14, the number of joints that must meet S5.1.2. AmTran also expressed concern that in the absence of Federal requirements, each State could specify its own joint strength requirements, adding to ''product complexity.'' Thomas Built argued that exclusion of such joints from S5.1.2 ''unnecessarily weakens the current standard strength requirement at curved, small and complex joints.'' Thomas Built asked that NHTSA consider an equipment standard to require fastener spacing on curved, small and complex joints equal to that used in the adjacent straight section of the same joint or basically a ''continuation of the spacing.''

Blue Bird stated that although it agreed with the exclusion of small joints (less than 8 inches in length), it believed that curved and complex joints should be required to meet Standard No. 221 joint strength requirements. Blue Bird said that there were two separate issues in the exclusion of curved and complex joints: (1) ''Testing accommodation'' which would include the problems associated with obtaining, preparing, and tensile testing curved and complex joints; and (2) Exclusion of ''automotive'' type body joints (which are small, curved or complex) that occur in van and van cutaway buses so that manufacturers of these vehicles could continue to modify such vehicles into school buses.

Addressing the first issue, Blue Bird asserted that allowing the manufacture of school buses without subjecting the curved and complex joints to joint strength testing would be ''a serious, albeit unintended, degradation of school bus safety.'' Blue Bird noted that since most joints in the passenger compartment area of school buses are either curved or complex, exclusion of such joints from joint strength requirements would allow the manufacture of school buses with only a few flat joints in the side walls required to meet the joint strength requirement. The school bus roof and ceiling joints are curved and would therefore be excluded. All the joints at the corners and the rear of the bus body are curved and/or complex, and most floor joints are complex and would be excluded.

Blue Bird stated its belief that certification documentation for curved and complex joints can be handled by surrogate sample testing and/or design calculations and analysis. For enforcement purposes, Blue Bird suggested that NHTSA could inspect test buses, measure and inspect joints and require manufacturers to document compliance to what is found. Blue Bird further suggested that NHTSA could review surrogate sample testing data, design calculations and analysis and the results of NHTSA inspections as a means of monitoring a manufacturer's fastening methodology to determine if it constitutes the exercise of due care in complying with the joint strength requirements.

As for the second issue regarding ''automotive-type'' body joints, Blue Bird suggested that exclusion of structures forward of the passenger compartment could resolve the problems that would arise from testing of automotive-type joints. Blue Bird stated that ''no safety problems have been documented'' that would justify automotive-type joints having to meet the joint strength requirements of Standard No. 221.

The petitioners expressed concern that the application of S5.2.2 may decrease the effectiveness of the standard. In the November 1998 final rule, S5.2.2 stated:

> S5.2.2 The requirements of S5.1.2 do not apply to joints from which a test specimen of the dimensions specified in Figure 1 can not be obtained.

The petitioners interpreted this section to exclude all joints that are curved and/or complex. The petitioners are aware that this is not the intent of the agency. Nevertheless, the agency agrees to remove S5.2.2 from the standard to avoid this possibility of a manufacturer's arguing, in the event of a compliance test failure, that the standard does not apply to the joint tested. Figure 1 does not provide a side view of the test specimen, and therefore does not indicate a maximum or minimum curvature of the tested components.

B. School Bus Joints Forward of the Passenger Compartment

In the November1998 final rule, NHTSA excluded from the joint test requirements, all interior maintenance access panels which lie forward of the passenger compartment. In doing so, NHTSA addressed MAPs only, not interior school bus joints forward of the passenger compartment.

In their petitions for reconsideration, petitioners asked that joints forward of the passenger compartment be excluded from joint strength testing requirements. AmTran asked that the exclusion be extended to ''structures'' forward of the passenger compartment. AmTran did not explain what it meant by ''structures,'' but we believe that AmTran was seeking the exclusion of joints forward of the passenger compartment. AmTran recommended that S5.2 and S4 be harmonized to standardize the area of application within the school bus industry, stating that locations of the windshield in relationship to body panels or panels supplied by the chassis manufacturer vary by body style and by manufacturer.

As explained in the previous section addressing the issue of small, curved and complex joints, Blue Bird asked that all joints that lie forward of the passenger compartment be excluded from the joint strength requirement in order to solve the problem of testing procedures for ''automotive-type'' joints. Blue Bird also recommended that ''bus body'' be redefined to exclude any structure forward of the passenger compartment. Blue Bird's rationale was that the redefinition ''greatly simplifies'' the standard by excluding many ''controversial and problematic'' joints, removes the need to exclude MAPs in this area and provides the desired exclusion for all joints in a cutaway van and most joints in a van-type school bus.

NHTSA agrees with petitioners that joints forward of the passenger compartment should be excluded from Standard No. 221's joint strength requirements. Over the years, we have had no information that ''automotive-type'' or other joints forward of the passenger compartment have posed safety-related problems that would necessitate ''automotive-type'' joints having to meet joint strength testing requirements. This is despite the fact that the smaller (4536 kg or less) school buses built on van and van cutaways (on which ''automotive-type'' joints are found) were not subject to Standard No. 221 until the November 5, 1998 final rule.

C. Removing Cross-Sectional Area of Material in Tensile Strength Calculation

In the final rule, NHTSA discontinued the deduction of the total area of material removed for installation of fasteners (i.e., holes drilled for installation of rivets or screws) in calculating the tensile strength of each joined component. In discontinuing the deduction, NHTSA's rationale was that it is easier for a sample joint to meet the standard's tensile strength requirement when the deduction is made for fastener holes. In setting the 60 percent tensile requirement, the agency determined that that minimum value meet the need for motor vehicle safety. Since deducting for fastener holes can result in a joint being actually weaker than 60 percent of its weakest member, safety is better served if the deduction were not made. Therefore, a letter of interpretation issued by NHTSA on November 28, 1978 that provided for the deduction was rescinded.

All three petitioners opposed the change in the deduction for the area for fastener holes and rescission of the November 28, 1978 interpretation letter. Both AmTran and Thomas Built cited an NTSB study that found that large school buses with body panel joints that met Standard No. 221 maintained structural integrity very well, even in severe crashes, thus providing effective protection to school bus occupants. Thomas Built added that this shows that current design practices have successfully maintained the integrity of body panel joints.

Blue Bird stated that approximately half of the joint designs used in manufacturing Blue Bird school buses use discrete fasteners and the majority of these will require redesign and testing. Blue Bird estimated that the number of required fasteners will increase between 12 and 25 percent. Blue Bird cited other negative factors resulting from the change in the calculation procedure as needing to change hard tooling with long lead times, increased material and labor costs, more noise and repetitive motion injuries in production, increased repair costs and little or no value added to the product. Thomas Built described the cost burden of the new calculation procedure as ''staggering,'' providing estimates of the cost increases due to the new joint strength calculation procedure. Thomas Built estimated that the cost per new school bus of the new calculation procedure was $155 extra for labor and fasteners and $40 extra for tooling and fixtures, totaling $195 more per school bus. Thomas Built also estimated that new calculation procedure also would result in additional costs of $25,000 for plant modifications and $1,050,000 for tooling, a total of $1,075,000.

Regarding Thomas Built's arguments, NHTSA does not agree with Thomas Built that deducting for holes in the test sample is the proper procedure for calculating joint efficiency. The references provided by Thomas are for calculating the tensile strength of the test sample, not joint efficiency. NHTSA notes the tensile strength of a lap joint with discrete fasteners is a function of the shear strength of the fasteners, hole spacing and edge distance on the base plates.

Upon careful consideration of the petitioners' arguments, NHTSA agrees that the deduction for holes in the test sample should be maintained because this change in calculation procedure increases the cost of a school bus while providing little, if any, demonstrable safety benefits. The interpretation letter of November 28, 1978 is also reinstated.

D. Degrees of Tolerance in the Testing Machine Grip Adjustment

Blue Bird Body Co. argued that the plus or minus 3 degrees of tolerance in S6.3.2 testing machine grip adjustment is too great in that it allows the direction of the applied force on the ends of the specimen to be more than one and one quarter inches from the specimen centerline. Stating that such a tolerance could result in inaccurate test results, Blue Bird recommended plus or minus 1 degree as an acceptable tolerance. NHTSA does not agree with Blue Bird, and does not believe that the plus or minus 3 degrees of tolerance would result in producing inaccurate test results. Therefore, S6.3.2 of the November 1998 final rule will remain as issued.

Blue Bird argued that there is an apparent oversight in S6.2(a) where the mechanical properties of materials are known. Blue Bird stated that S6.2(a) should address the minimum material thickness as well as the minimum tensile strength for calculating tensile force. The agency does not agree. The agency believes that it is relatively simple to make a thickness measurement from the test specimen. Unlike the other mechanical properties such as tensile strength, which involves cutting and testing a specimen, a thickness measurement can easily be obtained from the test specimen.

E. Additional School Bus Issues Raised by Blue Bird Body Company

In its petition for reconsideration, Blue Bird also raised the following issues. Because none of them was raised in the notice of proposed rulemaking, NHTSA is unable to adopt them in this final rule; response to petitions for reconsideration. However, depending on whether NHTSA determines that adopting each recommendation would promote safety or would otherwise be justified, each issue may be a subject for future Standard No. 221 rulemaking.

As its first issue, Blue Bird suggested that a design solution to providing maintenance access panels to wiring and other components could be ''non-metallic, non-hostile access panels.'' Blue Bird provided as an example the use of a continuous ''plastic'' extrusion above the window to replace existing wire molding. These access panels could be designed to provide needed access to wiring or other components that may require service, and yet would be light and flexible enough to not injure occupants in the event of a crash. Blue Bird asked NHTSA to consider the advantages of such designs and amend the final rule to permit their use. On a related issue, Blue Bird stated that in order to foster improvement in design and manufacture of school buses, Standard No. 221 should permit the use of plastic, fiber enforced resin, and other construction materials as well as the use of structural adhesives.

NHTSA notes that nothing in Standard No. 221 prohibits use of plastic, fiber enforced resin or ''other construction materials'' in the manufacture of school bus joints. Standard No. 221 specifies test procedures for school bus joint strength of ''joint component material.'' (See S6.2(a).) Also, because the issue of permitting ''non-metallic, non-hostile access panels'' was not raised in the notice of proposed rulemaking, it is outside the scope of the final rule. NHTSA agrees that the idea of access panels that are non-hostile to occupants in crashes is worthy of further investigation.

Blue Bird also stated that if curved and/or complex joints are addressed in Standard No. 221, definitions must be provided, or Figure 1 must show side and end views of the specimen with tolerances on critical dimensions. NHTSA agrees that if there are any unclear or unresolved areas in Standard No. 221, they should be addressed by notice and comment rulemaking, where the public will have an opportunity to present its views.

F. Effective Date of January 1, 2003

In the November 5, 1998 final rule, NHTSA announced an effective date of May 5, 2000 for those amendments. In a final rule published on March 6, 2000, NHTSA delayed the effective date of the November 1998 final rule to May 5, 2001, and corrected a typographical error in the November 1998 final rule. In a final rule published on April 20, 2001 (66 FR 20199) (DOT DMS No. NHTSA–2001–9440), delayed again the effective date of the November 1998 final rule until June 1, 2002.

June 1, 2002 will be less than a year away when this final rule; response to petitions for reconsideration is published. NHTSA seeks to ensure that the school bus industry has adequate notice of the changes in this document, and can make the die and tooling and other manufacturing changes necessary to meet this final rule. We also note that virtually all the changes to the November 1998 final rule were made because NHTSA was petitioned by industry to make these changes. Accordingly, in this final rule, we establish an effective date of January 1, 2003 for the November 1998 final rule, as amended by the changes made in today's final rule.

As advised to do so by **Federal Register** editors, for purposes of clarity, in this document we are withdrawing the November 1998 final rule, and are republishing it today, as modified by the changes we decided to make in response to the petitions for reconsideration.

IV. Rulemaking Analyses and Notices

A. Executive Order 12866; DOT Regulatory Policies and Procedures

Executive Order 12866, ''Regulatory Planning and Review'' (58 FR 51735, October 4, 1993), provides for making

determinations whether a regulatory action is ''significant'' and therefore subject to Office of Management and Budget (OMB) review and to the requirements of the Executive Order. The Order defines a ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

NHTSA has evaluated the impacts of this final rule under Executive Order 12866 and the Department of Transportation's regulatory policies and procedures. This rule is not considered a significant regulatory action under section 3(f) of Executive Order 12866. Consequently, it was not reviewed by the Office of Management and Budget. This final rule is also not considered to be significant under the Department's Regulatory Policies and Procedures (44 FR 11034; February 26, 1979).

The agency prepared a Final Regulatory Evaluation (FRE) for the final rule that was published on November 5, 1998 (63 FR 59732) and has placed a copy of that FRE in the public docket. A copy of the FRE may be obtained by contacting the Department's Docket at the address given at the beginning of this document. For the reasons explained below, we believe this final rule will have no additional cost effects on school bus manufacturers above those resulting from the 1998 final rule.

As explained in the FRE, for the November 1998 final rule, NHTSA estimated that the average consumer cost per vehicle affected by the November 1998 final rule is approximately $221 per large school bus and $343 per small school bus. Those retail price increases include variable costs, fixed factory overhead, tooling, and manufacturers' and dealers' profit margins. The difference in cost between large and small buses arises from the fact that large school buses, which already comply with the body panel joint strength standards of Standard 221, have only to bring their MAPs into compliance. Small school buses, on the other hand, which have heretofore been excluded from the joint strength requirements of Standard 221, must bring their body panel joints and their MAPs into compliance.

Information available to NHTSA indicates that the average combined total of annual sales of large and small school buses is approximately 35,000 units. Approximately 84 percent of those are large and 16 percent are small.

In the FRE for the November 1998 final rule, the estimated costs for small school buses were derived as follows. As discussed above, 21 states and the District of Columbia currently require small school buses to comply with the joint strength requirements of Standard No. 221. Sales within those jurisdictions represent 35 percent of small school bus sales. NHTSA estimates that the average cost of bringing body panel joints on 65 percent (@($414) joint strength upgrade) of the small school buses and MAPs on 100 percent (@($74) MAP redesign) of the small school buses into compliance with Standard No. 221 will be $343 per vehicle. (0.65($414) + 1.00($74) = $343.) The total annual consumer cost for implementing the terms of this final rule for small school buses, therefore, is estimated to be $1,920,800. ($343 × 16% of 35,000 school buses.) These costs are based on optional equipment costs and may be overstated when required on all vehicles.

As noted above, the agency estimated that the average cost per large school bus resulting from the November 1998 final rule to be $222. Thus, the total annual consumer cost of limiting the MAP exclusion in large school buses would average approximately $6,526,800 ($222 × 84% of 35,000 school buses).

In the FRE for the November 1998 final rule, the total annual consumer cost to implement the amendments promulgated by this final rule for both large and small school buses is estimated to be $8,447,600.

NHTSA notes that the FRE for the November 1998 final rule did not factor into the calculation the costs (per bus or for the industry) involved in discontinuing the deduction of the total area of material removed for installation of fasteners (i.e., holes drilled for installation of rivets or screws) in calculating the tensile strength of each joined component. In this final rule, we have reinstated the deduction of the total area of material removed for installation of fasteners. Therefore, since, in this final rule, manufacturers may continue to deduct the total area of material removed, there is no change in the calculation of costs resulting from this final rule.

In the FRE for the November 1998 final rule, NHTSA stated its belief that the provisions in the November 1998 final rule will reduce 6 to 46 minor-to-serious injuries (AIS 1–3) annually. It is estimated that 5 to 33 AIS 1–3 laceration-type injuries will be reduced on large school buses due to the narrowing of the MAPs requirements. It is also estimated that the injury reduction for small school buses will be 0 to 3 AIS 1–3 laceration-type injuries and 1 to 10 AIS–3 fracture-type injuries. The methodology used to obtain these benefits can be found in the Final Regulatory Evaluation available in the docket.

This estimate of injury reduction is unchanged by the issuance of this final rule; response to petitions for reconsideration.

B. Regulatory Flexibility Act

NHTSA has also considered the impacts of this final rule under the Regulatory Flexibility Act. For the following reasons, I certify that the amendments will not have a significant economic impact on a substantial number of small entities.

The Regulatory Flexibility Act of 1980 (Pub. L. 96–354) requires each agency to evaluate the potential effects of its rules on small businesses, small organizations, and small governmental jurisdictions. The small businesses and organizations most likely to be affected by this final rule are: (1) School bus manufacturers; (2) school bus dealers and distributors; and (3) public and private school bus transportation owners and operators.

The Small Business Administration (SBA) defines a bus manufacturer with fewer than 500 employees as a small business (13 CFR part 121). Using that definition, the agency believes that many of the school bus manufacturers qualify as small businesses. As discussed above, most bus manufacturers known by NHTSA to build small school buses currently offer small school buses with complying body panel joints as an option. The manufacturers produce these vehicles to accommodate the 21 states and the District of Columbia which require that all school buses comply with Standard No. 221. NHTSA believes, therefore, that, as was the case for the November 1998 final rule, this final rule will not require new manufacturing techniques or tooling to be used by school bus manufacturers in order to build school buses that comply with the requirements of Standard No. 221. Further, costs, as a percentage of the

total school bus manufacturing cost, will not increase from the November 1998 final rule. Thus, any impact on total school bus sales will be negligible. On balance, the agency anticipates little measurable impact on school bus manufacturers' revenue levels, profitability, or employment.

The SBA defines a motor vehicle retailer with less than $11,500,000 in annual receipts as a small business. There are approximately 465 school bus dealers and distributors in the United States. From 1991 to1996, an annual average of approximately 35,000 school buses were sold, representing an average of 75 buses per dealer. In order to reach the threshold of $11,500,000 in annual sales receipts, the average dealer would have to sell a much larger number (270) of large school buses annually, assuming a cost of $45,280 per unit. Thus, most school bus dealers are probably small businesses. Because there are no cost effects on manufacturers, the agency also anticipates little measurable impact on retailers' revenue levels, profitability, or employment, as a result of this final rule.

NHTSA has no evidence that this final rule will have a ''significant economic impact'' on public and private school bus transportation owners and operators, small school districts, or other small school bus purchasers. As discussed above, this final rule will not increase manufacturing costs on school bus manufacturers. Therefore there would be no additional manufacturing costs that would be passed on to school bus purchasers.

C. Paperwork Reduction Act

In accordance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), the agency notes that there are no collection of information requirements associated with this final rule. Nothing in this final rule imposes a recordkeeping or filing requirement on any manufacturer or any other party. For this reason, we discuss neither electronic recordkeeping nor electronic filing nor do we discuss a fully electronic filing option by October 2003.

D. National Environmental Policy Act

NHTSA has analyzed this final rule for the purposes of the National Environmental Policy Act. The agency has determined that implementation of this action will not have any significant impact on the quality of the human environment.

E. Executive Order 13132, Federalism

Executive Order 13132 requires us to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, we may not issue a regulation with Federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or unless we consult with State and local officials early in the process of developing the proposed regulation. We also may not issue a regulation with Federalism implications and that preempts State law unless we consult with State and local officials early in the process of developing the proposed regulation.

This final rule; response to petitions for reconsideration would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The reason is that this final rule applies to manufacturers of motor vehicles or motor vehicle equipment, and not to the States or local governments. Thus, the requirements of Section 6 of the Executive Order would not apply.

F. Civil Justice Reform

This final rule does not have any retroactive effect. Under 49 U.S.C. 30103(b), whenever a Federal motor vehicle safety standard is in effect, a state or political subdivision may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle only if the standard is identical to the Federal standard. However, the United States Government, a state or political subdivision of a state may prescribe a standard for a motor vehicle or motor vehicle equipment obtained for its own use that imposes a higher performance requirement than that required by the Federal standard. 49 U.S.C. 30161 sets forth a procedure for judicial review of final rules establishing, amending or revoking Federal motor vehicle safety standards. A petition for reconsideration or other administrative proceedings is not required before parties may file suit in court.

G. Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 requires agencies to prepare a written assessment of the costs, benefits and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local or tribal governments, in the aggregate, or by the private sector, of more than $100 million annually (adjusted for inflation with base year of 1995). The agency has determined that this final rule will not result in the expenditure by State, local or tribal governments, or by the private sector of $100 million annually.

H. Executive Order 13045 (Economically Significant Rules Affecting Children)

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be ''economically significant'' as defined under E.O. 12866, and (2) concerns an environmental, health or safety risk that NHTSA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, we must evaluate the environmental health or safety risk that NHTSA has reason to believe may have a disproportionate effect on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by us.

Since this final rule is not ''significant'' and since it does not concern any environmental, health or safety risk with a disproportionate effect on children, E.O. 13045 does not apply.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) requires NHTSA to evaluate and use existing voluntary consensus standards [1] in its regulatory activities unless doing so would be inconsistent with applicable law (e.g., the statutory provisions regarding NHTSA's vehicle safety authority) or otherwise impractical. In meeting that requirement, we are required to consult with voluntary, private sector, consensus standards bodies. Examples

[2] Voluntary consensus standards are technical standards developed or adopted by voluntary consensus standards bodies. Technical standards are defined by the NTTAA as ''performance-based or design-specific technical specifications and related management systems practices.'' They pertain to ''products and processes, such as size, strength, or technical performance of a product, process, or material.''

of organizations generally regarded as voluntary consensus standards bodies include the American Society for Testing and Materials (ASTM), the Society of Automotive Engineers (SAE), and the American National Standards Institute (ANSI). If NHTSA does not use available and potentially applicable voluntary consensus standards, we are required by the Act to provide Congress, through OMB, an explanation of the reasons for not using the standards.

Because no voluntary consensus standards were applicable to the issues addressed in this final rule, we did not use any in the promulgation of this final rule.

J. Plain Language

Executive Order 12866 requires each agency to write all rules in plain language. Application of the principles of plain language includes consideration of the following questions:

—Have we organized the material to suit the public's needs?
—Are the requirements in the rule clearly stated?
—Does the rule contain technical language or jargon that is not clear?
—Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
—Would more (but shorter) sections be better?
—Could we improve clarity by adding tables, lists, or diagrams?
—What else could we do to make this rulemaking easier to understand?

If you have any responses to these questions, please include them in comments to the docket number specified in the heading of this notice.

K. Regulation Identifier Number (RIN)

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulation Information Service Center publishes the Unified Agenda in April and October of each year. You may use the RIN contained in the heading at the beginning of this document to find this action in the Unified Agenda.

List of Subjects in 49 CFR Part 571

Motor vehicle safety, Reporting and recordkeeping requirements, Tires.

In consideration of the foregoing, the final rule published November 5, 1998 (63 FR 59732) and amended and delayed March 6, 2000 (65 FR 11751), and delayed again April 20, 2001 until June 1, 2002 (66 FR 20199) is withdrawn, and 49 CFR part 571 is amended as follows:

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

1. The authority citation for part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegations of authority at 49 CFR 1.50.

2. Section 571.221 is amended by revising S3; revising the definitions of ''body panel joint'' and ''bus body'' in S4; adding, in alphabetical order, the definitions of ''maintenance access panel'', ''passenger compartment'' and ''serviceable component'' to S4; and revising S5 and S6 to read as follows:

§ 571.221 Standard No. 221, School Bus Body Joint Strength.

* * * * *

S3. Application. This standard applies to school buses.

S4. Definitions.

Body panel joint means the area of contact or close proximity between the edges of a body panel and another body component, including but not limited to floor panels, and body panels made of composite materials such as plastic or plywood, excluding trim and decorative parts which do not contribute to the strength of the bus body, members such as rub rails which are entirely outside of body panels, ventilation panels, components provided for functional purposes, and engine access covers.

Bus body means that portion of a bus that encloses the bus occupant space, including the floor, but excluding the bumpers and chassis frame and any structure forward of the passenger compartment.

* * * * *

Maintenance access panel means a body panel which must be moved or removed to provide access to one or more serviceable component(s).

Passenger compartment means space within the school bus interior that is between a vertical transverse plane located 762 mm in front of the forwardmost passenger seating reference point and including a vertical transverse plane tangent to the rear interior wall of the bus at the vehicle centerline.

Serviceable component means any part of the bus, of either a mechanical or electrical nature, which is explicitly identified by the bus chassis and/or body manufacturer in the owner's manual or factory service manual as requiring routine maintenance actions at intervals of one year or less. Tubing, wires and harnesses are considered to be serviceable components only at their attachments.

S5 Requirements.

S5.1 Except as provided in S5.2, each body panel joint, including small, curved, and complex joints, when tested in accordance with the procedure of S6, shall hold the body panel to the member to which it is joined when subjected to a force of 60 percent of the tensile strength of the weakest joined body panel determined pursuant to S6.2.

S5.1.1 Body panels attached to each other shall have no unattached segment at the joint longer than 203 mm.

S5.2 Exclusions

S5.2.1 The requirements of S5.1 do not apply to—

(a) Any interior maintenance access panel or joint which lies forward of the passenger compartment.

(b) Any interior maintenance access panel within the passenger compartment that does not exceed 305 mm when measured across any two points diametrically on opposite sides of the opening.

(c) Trim and decorative parts which do not contribute to the strength of the joint, support members such as rub rails which are entirely outside of body panels, doors and windows, ventilation panels, and engine access covers.

S6 Procedure

S6.1 Preparation of the test specimen.

S6.1.1 If a body panel joint is 203 mm or longer, cut a test specimen that consists of any 203 mm segment of the joint, together with a portion of the bus body whose dimensions are those specified in Figure 1, so that the specimen's centerline is perpendicular to the joint at the midpoint of the joint segment. Where the body panel joint is not fastened continuously, select the segment so that it does not bisect a spot weld or a discrete fastener. Support members which contribute to the strength of a body panel joint, such as rub rails on the outside of body panels or underlying structure attached to joint members, shall remain attached to the test specimen, except that material may be removed from the support members as necessary to clear the gripping areas of the joint members being tested.

S6.1.2 If a joint is less than 305 mm long, cut a test specimen with enough of the adjacent material to permit it to be held in the tension testing machine specified in S6.3.

S6.1.3 Prepare the test specimen in accordance with the preparation procedures specified in the 1989 edition of the Annual Book of American Society for Testing and Materials (ASTM) Standards.

S6.2 *Determination of minimum allowable strength.* For purposes of determining the minimum allowable joint strength, determine the tensile strengths of the joined body components as follows:

(a) If the mechanical properties of a joint component material are specified by the ASTM in the 1989 Annual Book of ASTM Standards, the lowest value of that material's thickness and tensile strength per unit of area shown in that source shall be used.

(b) If the mechanical properties of a material are not specified by the ASTM in the 1989 Annual Book of ASTM Standards, determine its tensile strength by cutting a sheet specimen from outside the joint region of the bus body in accordance with Figure 1 of E 8–89 Standard Test Methods of Tension Testing of Metallic Materials, in Volume 03.01 of the 1989 Annual Book of ASTM Standards, and by testing it in accordance with S6.3.

(c) The cross sectional area of material removed to facilitate the installation of fasteners shall be subtracted from the cross-sectional area of the panel in the determination of the tensile strength of the weakest joined body panel.

S6.3 Strength Test.

S6.3.1 The joint specimen is gripped on opposite sides of the joint in a tension testing machine in accordance with the 1989 Annual Book of ASTM Standards.

S6.3.2 Adjust the testing machine grips so that the applied force on the joint is at 90 degrees plus or minus 3 degrees from the joint centerline, as shown in Figure 1.

S6.3.3 A tensile force is applied to the specimen by separating the heads of the testing machine at any uniform rate not less than 3 mm and not more than 10 mm per minute until the specimen separates.

3. Figure 1 is revised to read as follows:

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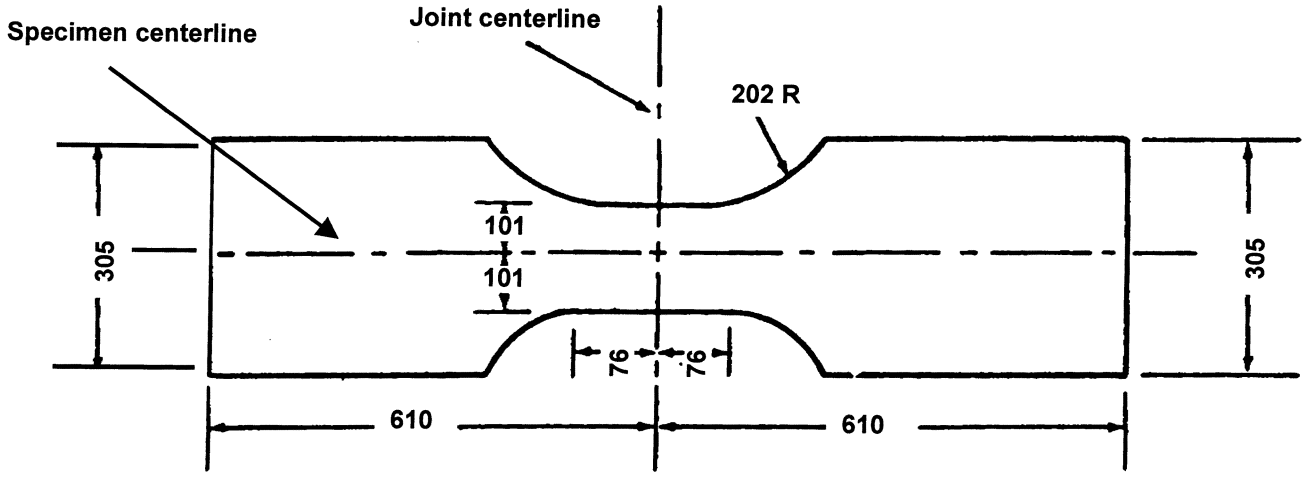
FIGURE 1



All dimensions in millimeters

Issued on: December 5, 2001.

Jeffrey W. Runge,

Administrator.

[FR Doc. 01–30496 Filed 12–12–01; 8:45 am]

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