D. Size, length, shape, or other pertinent features and dimensions for providing undistorted walls for the filament capsule.

III. Bulb Base Interchangeability Dimensions and Tolerance

A. Angular locations, diameters, key/keyway sizes, and any other interchangeability dimensions for indexing the bulb base in the bulb holder.
B. Diameter, width, depth, and surface finish of seal groove, surface, or other pertinent sealing features.
C. Diameter of the bulb base at the interface of the base and its perpendicular reference surface.
D. Dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surfaces, etc.

IV. Bulb Holder Interchangeability Dimensions and Tolerance

A. Mating angular locations, diameters, key/keyway sizes, and any other interchangeability dimensions for indexing the bulb base in the bulb holder.
B. Mating diameter, width, depth, and surface finish of seal groove, surface, or other pertinent sealing features.
C. Mating diameter of the bulb holder at the interface of the bulb base aperture and its perpendicular reference surface.
D. Mating dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surfaces, etc.

V. Wiring Harness Connector to Bulb Base Interchangeability Dimensions and Tolerances

A. Maximum depth of harness connector insertion into bulb base.
B. Location of electrical pins in bulb base.
C. Dimensions of electrical pins in bulb base—length, diameter, width, thickness and etc.
D. Fit of harness connector into bulb base providing all necessary dimensions, key/keyway controls, and dimensions, tapers etc.
E. Dimensions and location of locking features for wiring harness connector to bulb base.
F. Identification of upper beam, lower beam, and common terminals.

VI. Seal Specifications (If Replaceable Light Source is Intended to Be of a Sealed Base Design)

A. Type.
B. Material.
C. Dimensions.

VII. Electrical Specifications for Each Filament at 12.8 Volts

A. Maximum power (in watts).

VIII. Bulb Markings/Designation—ANSI NUMBER, ECE IDENTIFIER, MANUFACTURER’S PART NUMBER, INDIVIDUALLY OR IN ANY COMBINATION

IX. All other information, dimensions or performance specifications necessary for interchangeability, replaceability, or system test purposes not listed in sections I through VIII.

If a ballast is required for operation, a complete listing of the requirements and parameters between the light source and ballast, and ballast and the vehicle shall also be provided.

[58 FR 3860, Jan. 12, 1993, as amended at 61 FR 20500, 20501, May 7, 1996]
3. Transverse location of the filament or discharge arc centerline or the filament or discharge arc tolerance box relative to the bulb base centerline.

4. Filament or discharge arc tolerance box dimensions, if used.

C. If the replaceable light source has both a lower beam and upper beam filament or discharge arc, the dimensional relationship between the two filament or discharge arc centerlines or the filament or discharge arc tolerance boxes may be provided instead of referencing the upper beam filament or discharge arc centerline or filament or discharge arc tolerance box to the bulb base centerline or reference plane.

D. For a light source using excited gas mixtures as a filament, necessary fiducial information and specifications including electrode position dimensions, and tolerance information that provide similar location and characteristics information required by paragraphs A, B, and C of this section I for light sources using a resistive type filament.

II. Bulb Base Interchangeability Dimensions and Tolerance.

A. Angular locations, diameters, key/keyway sizes, and any other interchangeability dimensions for indexing the bulb base in the bulb holder.

B. Diameter, width, depth, and surface finish of seal groove, surface, or other pertinent sealing features.

C. Diameter of the bulb base at the interface of the base and its perpendicular reference surface.

D. Dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surface, etc.

III. Bulb Holder Interchangeability Dimensions and Tolerances.

A. Mating angular locations, diameters, key/keyway sizes, and any other interchangeability dimensions for indexing the bulb base in the bulb holder.

B. Mating diameter, width, depth, and surface, or other pertinent sealing features.

C. Mating diameter of the bulb holder at the interface of the bulb base aperture and its perpendicular reference surface.

D. Mating dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surface, or any other characteristics necessary for mating dimensions.

IV. Electrical Specifications for Each Light Source that Operates With a Ballast and Rated Life of the Light Source/ballast combination (not less than 2,000 hours).

C. Rated laboratory life of the light source/ballast combination.

V. Applicable to Light Sources that Operate With a Source Voltage Other Than 12.8 Volts Direct Current, and When a Proprietary Ballast Must Be Used With the Light Source.

A. Manufacturer’s part number for the ballast.

B. Any other characteristics necessary for system operation.

VI. Bulb Markings/Designation— ANSI NUMBER, ECE IDENTIFIER, MANUFACTURER’S PART NUMBER, INDIVIDUAL OR IN ANY COMBINATION.

VII. All other identification, dimensions or performance specifications necessary for replaceability or systems test not listed in sections I through VI.

[61 FR 20500, May 7, 1996]

EFFECTIVE DATE NOTE: At 72 FR 68266, Dec. 4, 2007, part 564 was revised, effective Sept. 1, 2008. At 73 FR 50730, Aug. 28, 2008, the revision was delayed until Dec. 1, 2009. At 74 FR 58214, Nov. 12, 2009, the revision was further delayed until Dec. 1, 2012. For the convenience of the user, the revised text is set forth as follows:

PART 564—REPLACEABLE LIGHT SOURCE AND SEALED BEAM HEADLAMP INFORMATION (Eff. 12–01–12)

§ 564.1 Scope.

This part requires the submission of dimensional, electrical specification, and marking/designation information as specified in Appendices A and B of this part, for original equipment replaceable light sources used in motor vehicle headlighting systems. This part also serves as a repository for design information as specified in appendix C.
§ 564.2 Purposes.
The purposes of this part are achieved through its Appendices:

(a) The purposes of appendix A of this part are to ensure:

(1) The availability to replacement light source manufacturers of the manufacturing specifications of original equipment light sources so that replacement light sources are interchangeable with original equipment light sources and provide equivalent performance, and

(2) That redesigned or newly developed light sources are designated as distinct, different, and noninterchangeable with previously existing light sources.

(b) The purposes of appendix B of this part are to ensure:

(1) That original equipment light sources are replaceable and that replacement light sources provide equivalent performance, and

(2) That redesigned or newly developed light sources are designated as distinct, different, and noninterchangeable with previously existing light sources.

(c) The purpose of appendix C of this part is to ensure the availability to original equipment and replacement sealed beam headlamp manufacturers of the manufacturing specifications of standardized sealed beam headlamp units used on motor vehicles so that all sealed beam headlamp units of a specific type are interchangeable with all other units of that same type and provide equivalent performance.

§ 564.3 Applicability.

This part applies to replaceable light sources used as original equipment, and standardized sealed beam headlamp units used as original equipment and replacement equipment in motor vehicle headlighting systems.

§ 564.4 Definitions.

All terms defined in the Act and the regulations and standards issued under its authority are used as defined therein.

§ 564.5 Information filing; agency processing of filings.

(a) Each manufacturer of a motor vehicle, original equipment headlamp, or original equipment headlamp replaceable light source, which intends to manufacture a replaceable light source as original equipment or to incorporate a replaceable light source in its headlamps or motor vehicles, shall furnish the information specified in appendix A. If the rated laboratory life of the light source is not less than 2,000 hours, the manufacturer shall furnish the information specified in either appendix A or appendix B of this part. Information shall be furnished to: Associate Administrator for Rulemaking, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., West Building, Washington, DC 20590 Attention: Part 564-Replaceable Light Source Information (unless the Agency has already filed such information in Docket No. NHTSA 98-3397).

(b) The manufacturer shall submit such information not later than 60 days before it intends to begin manufacture of the replaceable light source to which the information applies, or to incorporate the light source into a headlamp, or to incorporate the light source into a motor vehicle of its manufacture. Each submission shall consist of one original set of information and ten legible reproducible copies, all on 8½ by 11-inch paper.

(c) The Associate Administrator promptly reviews each submission and informs the manufacturer not later than 30 days after its receipt whether the submission has been accepted. Upon acceptance, the Associate Administrator files the information in Docket No. NHTSA 98-3397. The Associate Administrator does not accept any submission that does not contain all the information specified in appendix A or appendix B of this part, or whose accompanying information indicates that any new light source which is the subject of a submission is interchangeable with any replaceable light source for which the agency has previously filed information in Docket No. NHTSA 98-3397.

(d) A manufacturer may request modification of a light source for which information has previously been filed in Docket No. NHTSA 98-3397, and the submission shall be processed in the manner provided by §564.5(c). A request for modification shall contain the following:

(1) All the information specified in appendix A or appendix B of this part that is relevant to the modification requested,

(2) The reason for the requested modification,

(3) A statement that the use of the light source as modified will not create a noncompliance with any requirement of Federal Motor Vehicle Safety Standard No. 108 (49 CFR 571.108) when used to replace an unmodified light source in a headlamp certified by its manufacturer as conforming to all applicable Federal motor vehicle safety standards, together with reasons in support of the statement; and

(4) Information demonstrating that the modification would not adversely affect interchangeability with the original light source.

After review of the request for modification, the Associate Administrator may seek further information either from the manufacturer or through a notice published in the Federal Register requesting comment on
whether a modified light source incorporating the changes requested will create a noncompliance with Federal Motor Vehicle Safety Standard No. 108 when substituted for an unmodified light source. If the Associate Administrator seeks public comment on a submission(s)he shall publish a notice stating whether (s)he has accepted or rejected the submission. If a submission is accepted, the Associate Administrator files the information in Docket No. NHTSA 98–3397. If a submission is rejected, a manufacturer may submit information with respect to it, as provides in paragraph 564.5(a), for consideration as a new light source after such changes as will insure that it is not interchangeable with the light source for which the modification was originally requested.

(e) Information submitted under this section is made available by NHTSA for public inspection as soon as practicable after its receipt, but not later than the date on which a vehicle equipped with a new or revised replaceable light source is offered for sale.

APPENDIX A TO PART 564—INFORMATION TO BE SUBMITTED FOR REPLACEABLE LIGHT SOURCES

I. Filament or Discharge Arc Position Dimensions and Tolerances

Using Either Direct Filament or Discharge Arc Dimensions or the Three Dimensional Filament or Discharge Arc Tolerance Box

A. Lower beam filament dimensions or filament tolerance box dimensions and relation of these to the bulb base reference plane and centerline.
   1. Axial location of the filament centerline or the filament tolerance box relative to the bulb base reference plane.
   2. Vertical location of the filament centerline or the filament tolerance box relative to the bulb base centerline.
   3. Transverse location of the filament centerline or the filament tolerance box relative to the bulb base centerline.
   4. Filament tolerance box dimensions, if used.

B. Upper beam filament dimensions or the filament tolerance box dimensions, and relation of these to the bulb base reference plane and centerline.
   1. Axial location of the filament centerline or the filament tolerance box relative to the bulb base reference plane.
   2. Vertical location of the filament centerline or the filament tolerance box relative to the bulb base centerline.
   3. Transverse location of the filament centerline or the filament tolerance box relative to the bulb base centerline.
   4. Filament tolerance box dimensions, if used.

C. If the replaceable light source has both a lower beam and an upper beam filament, the dimensional relationship between the two filament centerlines or the filament tolerance boxes may be provided instead of referencing the upper beam filament centerline or filament tolerance box to the bulb base centerline or reference plane.

D. For a light source using excited gas mixtures as a filament, necessary fiducial information and specifications including electrode position dimensions and tolerance information that provide similar location and characteristics information required by paragraphs A, B, and C of this section I for light sources using a resistive type filament.

II. Dimensions Pertaining to Filament Capsule and Capsule Supports

A. Maximum length from bulb base reference plane to tip of filament capsule.

B. Maximum radial distances from bulb base centerline to periphery of filament capsule and/or supports.

C. Location of black cap relative to low beam filament centerline, filament tolerance box or other to-be-specified reference.

D. Size, length, shape, or other pertinent features and dimensions for providing undistorted walls for the filament capsule.

III. Bulb Base Interchangeability Dimensions and Tolerance

A. Angular locations, diameters, key/keyway sizes, and any other interchangeability dimensions for indexing the bulb base in the bulb holder.

B. Diameter, width, depth, and surface finish of seal groove, surface, or other pertinent sealing features.

C. Diameter of the bulb base at the interface of the base and its perpendicular reference surface.

D. Dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surfaces, etc.

IV. Bulb Holder Interchangeability Dimensions and Tolerance

A. Mating angular locations, diameters, key/keyway sizes, and any other interchangeability dimensions for indexing the bulb base in the bulb holder.

B. Mating diameter, width, depth, and surface finish of seal groove, surface, or other pertinent sealing features.

C. Mating diameter of the bulb holder at the interface of the bulb base aperture and its perpendicular reference surface.

D. Mating dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surfaces, etc.

V. Wiring Harness Connector to Bulb Base Interchangeability Dimensions and Tolerances

A. Maximum depth of harness connector insertion into bulb base.
APPENDIX B TO PART 564—INFORMATION TO BE SUBMITTED FOR LONG LIFE REPLACEABLE LIGHT SOURCES OF LIMITED DEFINITION

I. Filament or Discharge Arc Position Dimensions and Tolerances Using Either Direct Filament or Discharge Arc Dimensions or the Three Dimensional Filament Discharge Arc Tolerance Box

A. Lower beam filament or discharge arc dimensions or filament or discharge arc tolerance box dimensions and relation of these to the bulb base reference plane and centerline.

1. Axial location of the filament or discharge arc centerline or the filament or discharge arc tolerance box relative to the bulb base reference plane.

2. Vertical location of the filament or discharge arc centerline or the filament or discharge arc tolerance box relative to the bulb base centerline.

3. Transverse location of the filament or discharge arc centerline or the filament or discharge arc tolerance box relative to the bulb base centerline.

4. Filament or discharge arc tolerance box dimensions, if used.

B. Upper beam filament or discharge arc dimensions or the filament or discharge arc tolerance box dimensions and relation of these to the bulb base reference plane and centerline.

1. Axial location of the filament or discharge arc centerline or the filament or discharge arc tolerance box relative to the bulb base reference plane.

2. Vertical location of the filament or discharge arc centerline or the filament or discharge arc tolerance box relative to the bulb base centerline.

3. Transverse location of the filament or discharge arc centerline or the filament or discharge arc tolerance box relative to the bulb base centerline.

4. Filament or discharge arc tolerance box dimensions, if used.

C. If the replaceable light source has both a lower beam and upper beam filament or discharge arc, the dimensional relationship between the two filament or discharge arc centerlines or the filament or discharge arc tolerance boxes may be provided instead of referencing the upper beam filament or discharge arc centerline or filament or discharge arc tolerance box to the bulb base centerline or reference plane.

D. For a light source using excited gas mixtures as a filament, necessary fiducial information and specifications including electrode position dimensions, and tolerance information that provide similar location and characteristics information required by paragraphs A, B, and C of this section I for light sources using a resistive type filament.
II. Bulb Base Interchangeability Dimensions and Tolerance

A. Angular locations, diameters, key/keyway sizes, and any other interchangeability dimensions for indexing the bulb base in the bulb holder.

B. Diameter, width, depth, and surface finish of seal groove, surface, or other pertinent sealing features.

C. Diameter of the bulb base at the interface of the base and its perpendicular reference surface.

D. Dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surface, etc.

III. Bulb Holder Interchangeability Dimensions and Tolerances

A. Mating angular locations, diameters, key/keyway sizes, any other interchangeability dimensions for indexing the bulb base in the bulb holder.

B. Mating diameter, width, depth, and surface, or other pertinent sealing features.

C. Mating diameter of the bulb holder at the interface of the bulb base aperture and its perpendicular reference surface.

D. Mating dimensions of features related to retention of the bulb base in the bulb holder such as tabs, keys, keyways, surface, or any other characteristics necessary for mating dimensions.

IV. Electrical Specifications for Each Light Source That Operates With a Ballast and Rated Life of the Light Source/Ballast Combination

A. Maximum power (in watts).

B. Luminous Flux (in lumens).

C. Rated laboratory life of the light source/ballast combination (not less than 2,000 hours).

V. Applicable to Light Sources That Operate With a Source Voltage Other Than 12.8 Volts Direct Current, and When a Proprietary Ballast Must Be Used With the Light Source

A. Manufacturer’s part number for the ballast.

B. Any other characteristics necessary for system operation.

VI. Bulb Markings/Designation—ANSI NUMBER, ECE IDENTIFIER, MANUFACTURER’S PART NUMBER, INDIVIDUAL OR IN ANY COMBINATION

VII. All Other Identification, Dimensions or Performance Specifications Necessary for Replaceability or Systems Test Not Listed in Sections I Through VI

APPENDIX C TO PART 564—INFORMATION APPLICABLE TO STANDARDIZED SEALED BEAM HEADLAMP UNITS

I. Dimensional Information Specific to a Type of Standardized Sealed Beam Unit

A. Dimensions marked “I”, indicating interchangeability, for which conformance is mandatory.

B. All other dimensions which are for design purposes.

II. Dimensional Information Applicable to the Use of Nonadjustable Headlamp Aiming Device Locating Plates

III. Dimensional Information Applicable to Mounting Features, Including Mounting Rings and Lamp Bodies, Specific to a Type of Standardized Sealed Beam Unit

A. Dimensions marked “I”, indicating interchangeability, for which conformance is mandatory.

B. All other dimensions which are for design purposes.

Incorporated Figures [References from 49 CFR 571.108, Oct. 1, 2006]

LF Headlamp Dimensional Information [Figure 11]

UF Headlamp Dimensional Information [Figure 12]

LF/UF Mounting Features [Figure 13]

LF/UF Mounting Ring [Figure 14]

Type G & H Headlamp Dimensional Information [Figure 18]

Type G & H Headlamp Mounting Information [Figure 21]

Type 1A1 Headlamp Dimensional Information [SAE J1383 APR85, Figure 11]

Type 2A1 Headlamp Dimensional Information [SAE J1383 APR85, Figure 10]

Type 2B1 Headlamp Dimensional Information [SAE J1383 APR85, Figure 7]

Type 1C1 Headlamp Dimensional Information [SAE J1383 APR85, Figure 8]

Type 2C1 Headlamp Dimensional Information [SAE J1383 APR85, Figure 15]

Type 2D1 Headlamp Dimensional Information [SAE J1383 APR85, Figure 5]

Type 2E1 Headlamp Dimensional Information [SAE J1383 APR85, Figure 12]

Types 1A1, 2A1, and 2E1 Headlamp Mounting Ring/Lamp Body Dimensional Information [SAE J1383 APR85, Figure 12]
§ 565.11 Applicability.

(a)(1) Except as provided in paragraph (a)(2) of this section, subpart B of this part 565 applies to passenger cars, multipurpose passenger vehicles, trucks, buses, trailers (including trailer kits), incomplete vehicles, low speed vehicles, and motorcycles manufactured on or after October 27, 2008 whose VINs have a letter “A” or “B” in the 10th position, and to passenger cars, multipurpose passenger vehicles, trucks, buses, trailers (including trailer kits), incomplete vehicles, low speed vehicles, and motorcycles manufactured on or after April 30, 2009. Vehicles imported into the United States under 49 CFR 591.5(f), other than by the corporation responsible for the assembly of that vehicle or a subsidiary of such a corporation, are excluded from requirements of §§565.13(b), 565.13(c), 565.13(g), 565.13(h), 565.14 and 565.15.

(2) All motor vehicles identified as model year 2009 or earlier vehicles by their manufacturer must comply with subpart C of this part 565.

(b) Subpart B of this part 565 applies to vehicles manufactured on or after April 30, 2008 and before April 30, 2009, whose vehicle identification number (VIN) does not have a letter “A” or “B” in the 10th position of the VIN and that are not identified as model year 2009 or earlier vehicles by their manufacturer.

[73 FR 23379, Apr. 30, 2008]