

MIL-P-514D
15 September 1966
SUPERSEDING
MIL-P-514C
19 February 1963

MILITARY SPECIFICATION

PLATES, IDENTIFICATION, INSTRUCTION AND MARKING, BLANK

This specification is mandatory for use
by all Departments and Agencies of the
Department of Defense.

1. SCOPE

1.1 Scope. This specification covers identification plates, instruction plates, and marking plates for attachment to U.S. Military property.

1.2 Classification. Plates shall be of the following types and styles, as specified (see 6.2).

Type I - Plate, Identification

- Style 1 - Mechanical Equipment (MS90495)
- Style 2 - Electrical Equipment (MS63200)
- Style 3 - Miscellaneous Items (MS63045)
- Style 4 - End-Item Attachment (MS63201)

Type II - Plate, Instruction

- Style 1 - Engine Overhaul Data (MS63202)
- Style 2 - Modification Work Order Data (MS63203)

Type III - Plate, Marking, Blank

1.2.1 Plates shall be of the following compositions and classes, as specified (see 3.2 and 6.2).

Composition A - Nonferrous - base alloy metal

- Class 1 - Copper
- Class 2 - Aluminum
- Class 3 - Magnesium
- Class 4 - Zinc

FSC 9905

MIL-P-514D

Composition B - Unalloyed or low-alloy ferrous metal

Composition C - Photosensitive metal

Composition D - Plastic, or other material

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

SPECIFICATIONS

Federal

- GG-P-00455a(GSA-FSS) - Plate, Photographic (Photosensitive-Anodized Aluminum)
- QQ-A-250 - Aluminum Alloy Plate and Sheet, General Specification for
- QQ-A-250/1 - Aluminum Alloy 1100, Plate and Sheet
- QQ-A-250/2 - Aluminum Alloy 3003, Plate and Sheet
- QQ-B-626 - Brass, Lead and Non-Lead, Rods, Shapes, Forgings and Flat Products with Finished Edges (Bars, Flat Wire and Strips)
- QQ-B-637 - Brass, Naval, Rod, Wire, Shapes, Forgings, and Flat Products with Finished Edges (Bars, Flat Wire, and Strips)
- TT-E-489 - Enamel, Alkyd Gloss (For Exterior and Interior Surfaces)
- TT-R-230 - Remover, Paint (Alkali-Type for Hot Applications)
- TT-R-243 - Remover, Paint (Alkali-Organic Solvent Type)
- TT-R-00251 - Remover, Paint (Organic Solvent Type)
- PPP-B-576 - Box, Wood, Cleated, Veneer, Paper, Overlaid
- PPP-B-585 - Boxes, Wood, Wirebound
- PPP-B-591 - Boxes, Fiberboard, Wood-Cleated
- PPP-B-601 - Boxes, Wood, Cleated-Plywood
- PPP-B-621 - Boxes, Wood, Nailed and Lock-Corner
- PPP-B-636 - Box, Fiberboard

Military

- MIL-M-3171 - Magnesium Alloy; Processes for Pretreatment and Protection of Corrosion On
- MIL-A-8625 - Anodic Coating, for Aluminum and Aluminum Alloys

STANDARDS

Federal

Fed. Std. No. 141 - Paint, Varnish, Lacquer, and Related
Materials, Method of Inspection, Sampling and Testing
Fed. Std. No. 151 - Metals; Test Methods
Fed. Std. No. 595 - Colors

Military

MIL-STD-105 - Sampling Procedures and Tables for Inspection
by Attributes
MIL-STD-129 - Marking for Shipment and Storage
MIL-STD-130 - Identification Marking of U.S. Military Property
See supplement 1 for list of associated MS standards.

(Copies of specifications and standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials (ASTM)

D-822 - Recommended Practice for Operating Light and Water-
Exposure Apparatus (Carbon-Arc Type) for Testing
Paint, Varnish, Lacquer and Related Products

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race St., Philadelphia, Pa. 19103.)

American Trucking Associations, Inc.

National Motor Freight Classification Rules

(Application for copies should be addressed to the American Trucking Associations, Inc., 1616 P Street, N.W. Washington, D.C. 20036.)

Official Classification Committee

Uniform Freight Classification Rules

(Application for copies should be addressed to the Official Classification Committee, 1 Park Ave. at 33rd St., New York, N.Y. 10016.)

Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.

3. REQUIREMENTS

3.1 Preproduction sample. When specified (see 6.2), the contractor shall furnish, within the time limit specified in the contract or order, a preproduction sample for inspection. This inspection, which shall consist of the examination and tests specified in 4.5 and 4.6, shall be conducted prior to the submission for acceptance of the remainder of the plates being furnished under the contract. The preproduction sample may be a special preproduction plate or a standard or modified production line plate which meets the requirements of this specification. In any case, the preproduction sample shall be identical with the plates the contractor proposes to furnish in fulfillment of the contract, except that when the contract includes plates which will vary on the basis of classification or options specified herein, the preproduction sample may be designated by the contracting officer. Approval of the preproduction sample on the basis of the specified inspection shall not relieve the contractor of his obligation to meet the requirements of the specification for the remaining plates being furnished under the contract.

3.2 Material. Unless otherwise specified (see 6.2), plates procured in accordance with this specification shall be composition A, class 1 copper base alloy. When copper base alloy is poorly compatible electrochemically with equipment to which it is attached, a base material more compatible electrochemically and less subject to bimetallic corrosion shall be selected from the composition listed (see 1.2.1). First preference shall be given to base material most similar to the surface metal to which the plate will be attached (e.g. an aluminum plate for an aluminum unit).

3.2.1 Composition A, class 1. Composition A, class 1 shall be copper base alloy (brass) in accordance with QQ-B-637 or QQ-B-626.

3.2.2 Composition A, class 2. Composition A, class 2 shall be aluminum base alloy in accordance with QQ-A-250/1 or QQ-A-250/2 with temper designation H12 or H14.

3.2.3 Composition A, class 3 and class 4. Composition A, class 3 and class 4 shall be magnesium and zinc base alloys respectively, in accordance with standard manufacturing practice.

3.2.4 Composition B. Composition B shall be unalloyed or low alloy ferrous metal in accordance with standard manufacturing practice.

3.2.5 Composition C. Composition C shall be photo-sensitive aluminum in accordance with GG-P-00455. Grade and class of photo-sensitive aluminum plate shall be specified in accordance with GG-P-00455, as required.

3.2.6 Composition D. Composition D shall be plastic or other material in accordance with standard manufacturing practice.

3.3 Format.

3.3.1 Size of plates. Type I and type II plates shall conform in size to the requirements of the applicable military standards (MS), (see 1.2). Unless otherwise specified, copper base alloy plates shall be 0.032 ± 0.004 -inch thick. Unless otherwise specified (see 6.2), aluminum base alloy and photosensitive plates shall be 0.020 ± 0.002 -inch thick.

3.3.1.1 Type III plates shall be of the size specified in the contract, purchase order, or on applicable drawings (see 6.2), and shall be of such size, relative to the amount of copy, to accommodate the minimum size and style of copy as specified in 3.3.2.1.

3.3.2 Copy on plate. Copy matter inscribed on type I and II plates shall conform to the requirements of the applicable MS (see 1.2). Copy matter inscribed on type III (or left blank) shall be as specified in the contract, purchase order, or on applicable drawings (see 6.2). Copy on type III, in addition to the requirements of MIL-STD-130, shall include, as applicable, instructional information normally supplied for the equipment but not included

on the aforementioned plates (see figures 1 and 2 for illustration). Type III plate shall also be inscribed with special data as applicable; e.g.:

- a. Maximum allowable speed
 - Highway m.p.h.
 - Offroad m.p.h.
- b. Maximum equipment capacity
 - Highway lbs.
 - Offroad lbs.
- c. Tire inflation pressure
 - Highway
 - Front p.s.i.
 - Rear p.s.i.
 - Offroad
 - Front p.s.i.
 - Rear p.s.i.
- d. Prescribed by using service:
 - Motor fuel octane (or cetane) number
 - Oil, engine (CE) above 32° F. SAE grade
 - Oil, engine (CE) below 32° F. SAE grade
- e. Publications (see figure 1)
 - Operators manual TM
 - Parts List
- f. Shipping data (see figure 2)
 - Over-all size
 - Shipping cubage
 - Shipping weight
 - Shipping tonnage
 - Warning note
 - Angle of lift

3.3.2.1 Style and size of copy. Letters shall be capitals and numbers shall be Arabic, of Alternate Gothic No. 2 or equivalent type face, unless otherwise specified (see 6.2). Ownership designation and the words "SHIPPING DATA FOR", "CAUTION" and "WARNING" shall be 24-point type, and all other letters shall be not less than 12 points nor more than 14 points. (Ref. A point is 1/72 inch). There shall be about one stroke width space between numerals forming a single numerical group and not less than 1/8 inch space between lines of copy. Lettering shall be arranged to read horizontally left to right.

3.3.2.2 Application of copy. Letters, lines, and other characters shall be applied by the photosensitive, etching, engraving or casting process, combinations thereof, or other suitable processes, except that embossing or metal stamping shall be used only for forming serial numbers, registration numbers, and other designations, which differ on each plate. Individual characters shall be continuous. Border width shall be the same all around except in corners and unless otherwise specified shall be between 3/32- and 1/8-inch wide. The backside of all plates shall be smooth and solid. On all plates, except aluminum base alloy and photosensitive plates, all lines, letters, numerals, and other characters shall be depressed not less than 0.003 inch below the surface of the plate (sunken or reverse etched) or the background shall be depressed not less than 0.003 inch below the surface of the plate leaving all lines, letters, borders, numerals, and other characters in raised relief (raised or positive etched). Except for depressed backgrounds or depressed or raised copy the front of the plate shall be smooth. On aluminum-base alloy and photosensitive plates, all copy shall be applied as to produce either a smooth surface or with copy sunken, etched or in raised relief. Unless otherwise specified in the contract, purchase order, or applicable drawing (see 6.2), application of copy to such plate shall be at the option of the contractor subject to the approval of the contracting officer.

3.3.2.3 Color. Unless otherwise specified (see 6.2), the predominating color added to the metal plate shall conform to table I, except that red shall not be used on red bronze, nor yellow on yellow brass. Under no circumstances shall red or yellow be used on other than danger and caution plates. Unless otherwise specified (see 6.2), all sunken copy or depressed areas (excepting metal die stampings unique to each individual plate) shall be filled with an enamel compound conforming to TT-E-489. Unless otherwise specified (see 6.2), filled lettering shall be white or black, whichever affords the greatest contrast with the background, except on radiation warning plates, which shall have magenta copy on a yellow background.

Table I. Colors of plates

Plate	Predominating color	FED. STD. 595 Color No.
Danger	Red* (red bronze metal)	11136 or 11105
Caution, warning, and radiation**	Yellow (yellow brass metal)	13655 or 13538
Safety instructions	Green	14187

Table I. Colors of plates (Continued)

Plate	Predominating color	Fed. Std. 595 Color No.
Direction Indicators (arrows)	Black	17038
Informational notices	Blue	15102
All others	Black	17038

* Use yellow where red or low-level illumination is to be used.

** Radiation warning plates only shall show symbols and lettering in Magenta No. 17142.

3.3.2.4 Finish. Unless otherwise specified (see 6.2), the smooth surfaces of plates shall have a satin or a matte finish to minimize reflection.

3.4 Protective coating. Unless otherwise specified (see 6.2), ferrous, aluminum and magnesium alloy metal plates shall be given a protective coating. Ferrous metal plates shall be given a corrosion resistant plating. Aluminum alloy plates shall be subjected to such anodizing and sealing, as applicable, in accordance with MIL-A-8625, type II, class 2. Magnesium alloy plates shall be subjected to anodizing and sealing, as applicable, in accordance with MIL-M-3171.

3.4.1 When specified (see 6.2), copper alloy and zinc alloy plates shall be given a clear protective coating.

3.5 Attachment of plates. Unless otherwise specified (see 6.2), plates shall be drilled or punched at all four corners with holes not less than 1/8 inch or more than 3/16 inch in diameter. When ferrous metal and nonferrous metal plates are to be given a protective coating, all holes shall be made and all burrs shall be removed prior to the anodizing or plating process. The plates shall not be deformed as a result of punching or drilling operations.

3.6 Performance. Unless otherwise specified (see 6.2), all plates except photosensitive plates shall be resistant to thermal shock, corrosion, solvent, and fading from solar radiation. Photosensitive plates shall conform to the permanency requirements of GG-P-00455.

3.6.1 Resistance to thermal shock. The copy on the finished plate shall be legible and the plate material shall show no evidence of cracking, splitting, wrinkling, warping, or other injurious defects after being subjected to the test specified in 4.6.1.

3.6.2 Resistance to corrosion. Finished plates shall show no evidence of corrosion on either side after being subjected to the test specified in 4.6.2.

3.6.3 Resistance to solvent. The copy on the finished plate shall be legible after being subjected to the test specified in 4.6.3.

3.6.4 Resistance to weathering. After being subjected to accelerated aging tests (see 4.6.4), a plate shall show no appreciable change in color (see 3.3.2.3), clarity, or legibility when it is compared with an original plate. The term, "appreciable change in color" shall mean a change that is immediately noticeable when the tested specimen is again compared with the specified standard color chip.

3.7 Government-furnished blanks. Government-furnished blanks shall be stamped or embossed with the required characters in the appropriate blocks. Copy matter applied to Government-furnished blanks shall conform to the requirements specified herein in accordance with the contract, purchase order, or applicable drawing(s).

3.8 Workmanship. The quality of workmanship shall be in accordance with the requirements of this specification. Particular attention shall be given to neatness and the legibility of all markings. Plates shall have smooth edges and shall be free from burrs and sharp edges or projections.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.2 Preproduction sample. Unless otherwise specified (see 6.2), the preproduction sample shall be inspected at the place of manufacture. The preproduction sample shall be examined in accordance with 4.5, and tested in accordance with 4.6. Sampling in accordance with MIL-STD-105 shall not apply. The preproduction sample shall be as specified in 3.1.

4.3 Lot. A lot submitted for inspection shall consist of all plates of the same type, style, composition, and class offered for delivery at one time.

4.4 Sampling.

4.4.1 Sampling for examination. Sampling for examination shall be in accordance with MIL-STD-105 and 4.5.1.3.

4.4.2 Sampling for performance testing. Sample for performance testing (see 3.6), shall be selected in accordance with inspection level S-2 of MIL-STD-105. The lot size for determining the sample size shall be expressed in units of plates. The sample unit shall be one plate.

4.5 Inspection.

4.5.1 Examination. Examination shall be in accordance with the classification of defects, inspection levels, and acceptable quality levels (AQLs) set forth below. The lot size for the purpose of determining the sample size for examination in 4.5.1.1 and 4.5.1.2 shall be expressed in units of plates.

4.5.1.1 Examination for defects in material, construction, appearance and workmanship. The sample unit for this examination shall be one plate. Not more than 5 sample units shall be drawn from any one intermediate package randomly selected throughout the lot (see table II).

Table II. Classification of defects

Major

101	Material not as specified.
102	Not anodized as specified (when applicable).
103	Plate not formed with opposite sides parallel or adjacent sides at 90 degree angle.
104	Lettering not alternate Gothic No. 2 capitals.

Table II. Classification of defects (Continued)

105	Numbers not as specified.
106	Copy not formed by etching, routing, casting, photographic process, or other specified method.
107	Spacing and blocking not uniform and in true parallel with width of block.
108	More than one letter, numeral, or symbol not clearly defined or legible.
109	Hole, (other than attachment holes) inclusion of foreign matter, pit, porosity, split, pips, sliver, crack, twist, seam, scale, damaged edge, buckle, lamination, blister, or excessive variation in thickness of background where defect occurs in lettering area or at attachment hole in corner.
110	Lettering, lines, symbols, and other characters not depressed or raised (except photosensitive plates).
111	Lettering, numerals, and other characters not imbedded, treated, or filled with enamel specified.
112	Holes not drilled or punched at all 4 corners as specified.
113	Any lettering, numeral, or other character incorrect or missing.
114	Color not as specified.
Note:	In addition to the defects listed above, the following defects are applicable only to dyed anodized and photosensitive plates.
115	Lack of full density black in image.
116	Spots, fingerprints.
117	Bleaching of background or image during sealing.
Minor	
201	Any of the foregoing defects in area other than lettering or at attachment hole in corner.
202	Back of plate not smooth and solid.
203	Any letter, numeral or symbol not clearly defined or legible.
204	Any hole not uniform and properly positioned.
205	Finish and surface of plate not uniform, smooth and clean.

4.5.1.2 Examination for dimensional defects. The sample unit for this examination shall be one plate. Any dimensional nonconformance as to overall size of plate, height and depth of lettering, borders, spaces, plate thickness, size and location of holes or other dimensional requirement of specification and figures, shall constitute a defect.

4.5.1.3 Inspection levels and acceptable quality levels (AQL's) for examination. The inspection levels and acceptable quality levels (AQLs) expressed in defects per 100 units shall be as follows:

Examination paragraph	Inspection level	AQLs	
		Major	Total
4.5.1.1	S-4	1.0	4.0
4.5.1.2	S-1	---	4.0

4.6 Test procedures. Samples selected in accordance with 4.4.2 shall be subjected to the following tests. Failure of any plate to pass the tests shall be cause for rejecting the lot.

4.6.1 Thermal shock resistance test.

4.6.1.1 Apparatus. The apparatus shall consist of a cold chamber, Bunsen burner, water bath, and beaker, or equivalent equipment.

4.6.1.2 Procedure. The plates shall be placed in a hot water bath, which shall be maintained at a temperature of 175° F. for a period of 3 hours. The sample shall then be immediately transferred to a cold chamber, and maintained at a temperature of -65° F., for a period of one hour. This procedure shall be immediately repeated and the plates examined for conformance to 3.6.1.

4.6.2 Corrosion-resistance test. Plates shall be subjected to a 150-hour salt-spray test in accordance with method 811 of Fed. Std. No. 151, after which the plates shall be examined to determine conformance to 3.6.2.

4.6.3 Solvent resistance test.

4.6.3.1 Apparatus. The apparatus shall consist of beakers, soft dry cloths, and solutions of soap and water, gasoline, and trichloroethylene.

4.6.3.2 Procedure. The plates shall be immersed for a period of fifteen minutes in each of the solvent baths listed below and in the order shown:

- a. Trichloroethylene
- b. Gasoline
- c. A mixture containing equal parts of gasoline and trichloroethylene by volume.
- d. Paint remover conforming to TT-R-243.
- e. Paint remover conforming to classes 1 and 2 of TT-R-230.
- f. Paint remover conforming to type III, classes A and B, of TT-R-00251(GSA-FSS).
- g. A solution of common soap and water.

After immersion in each solvent bath, the plate shall be briskly rubbed a minimum of five times with a soft dry cloth and examined for conformance to 3.6.3.

4.6.4 Weatherometer test. Plates shall be subjected to a 150-hour weatherometer test in accordance with ASTM Test Method D-822 (using Atlas Triple-Arc, Model XW, Weatherometer with 102-18-cam mounted in cycle meter, or equal, and cabinet temperature of 120° F.) after which plates shall show no appreciable change in color, gloss, clarity, or legibility when compared with the original plates.

4.7 Inspection of preparation for delivery. The packaging, packing, and marking of the plates shall be inspected to determine conformance to the applicable requirements of section 5 of this specification. The packaging, packing, and marking requirements of section 5 identified to referenced specifications and standards shall be inspected in accordance with applicable referenced specifications and standards. The packaging requirements of section 5 not identified to referenced specifications shall be examined for the defects listed in 4.8.1 by use of the sampling procedures and inspection levels of MIL-P-116. The packing requirement of section 5 not identified to referenced specifications shall be examined for the defects listed in 4.8.1 in accordance with MIL-STD-105, using an AQL of 4.0 percent defective.

4.8 Classification of defects.

4.8.1 Packaging.

<u>Categories</u>	<u>Defects</u>
Major:	
101	Plates not of like type and description.
102	Plates not separated with noncorrosive barrier material when required.
103	Gross weight of package exceeds limit specified.
104	Package not waterproof sealed with tape as specified.

4.8.1.1 Packing.

<u>Categories</u>	<u>Defects</u>
Major:	
101	Strapping not zinc-coated when applicable.
102	Gross weight of shipping container exceeds limit specified.

5. PREPARATION FOR DELIVERY

5.1 Packaging. Packaging shall be level A or C as specified (see 6.2).

5.1.1 Level A. Plates of like type and style shall be packaged together not to exceed 20 pounds. Plates shall be separated from each other by a suitable noncorrosive barrier material and shall be packaged in a box conforming to PPP-B-636 (weather-resistant class) waterproof sealed, with tape in accordance with the appendix thereto.

5.1.2 Level C. The plates shall be packaged in accordance with the supplier's standard practice.

5.2 Packing. Packing shall be level A, B, or C as specified (see 6.2).

5.2.1 Level A. Plates shall be packed in wood-cleated fiberboard boxes, nailed wood boxes, wirebound wood boxes, paper overlaid veneer cleated wood boxes, cleated-plywood wood boxes, or fiber boxes conforming to PPP-B-591 (overseas type), PPP-B-621 (class 2,) PPP-B-585 (class 2), MIL-B-10377 (overseas type), PPP-B-601 (overseas type),

and PPP-B-636 (weather-resistant), respectively. The boxes shall be closed and strapped in accordance with the appendix of the applicable specification. Flat steel strapping for all boxes shall be type I, class B. Gross weight of the boxes shall not exceed the weight limitations of the applicable box specification and in no case shall exceed approximately 200 pounds.

5.2.2 Level B. Plates shall be packed as specified for level A except that the boxes shall be domestic type or class, as applicable, and gross weight and flat steel strapping requirements need not apply.

5.2.3 Level C. The complete equipment shall be packed in a manner which will insure arrival at destination in satisfactory condition and be acceptable to the carrier at lowest rates. Containers and packing shall comply with Uniform Freight Classification Rules or National Motor Freight Classification Rules.

5.3 Marking. In addition to any special marking required by the contract or order, packages and shipping containers shall be marked in accordance with the requirements of MIL-STD-129.

6. NOTES

6.1 Intended use. The plates are intended for attachment to mechanical and electrical equipment to supply identification, instruction, and data.

6.1.1 Type I, style 1. This plate is used for identification of applicable mechanical equipment, such as wheeled, tracked, skid or base mounted, self-propelled, towed, or powered equipment which derive power directly or indirectly from an internal combustion engine, compressed air, or electrical source.

6.1.2 Type I, style 2. This plate is used to identify electrical equipment, such as generators and convertors, and is intended for use in conjunction with type I, style 1, and type III, which may contain special identification, instruction, and designation data.

6.1.3 Type I, style 3. This plate is for general use to identify military equipment not falling into the other equipment categories and the required identification data does not conform to the outlined format of MS63200, MS63201, and MS90495.

6.1.4 Type I, style 4. This plate is for use to identify all types of end-item attachments, such as crane booms, boom extensions, backhoes, shovel front, buckets, bulldozers, angledozers, winches, power control units, etc.

6.1.5 Type II, style 1. This plate is intended for use on internal combustion engines to provide overhaul data.

6.1.6 Type II, style 2. This plate is intended for use on military equipment to show modification work order data.

6.1.7 Type III. This plate is intended for general use on military equipment to provide special identification, instruction, designation, and other miscellaneous data (see 3.3.2) that is either not provided for in the format of the referenced military standards (MS) or requires a special format due to inadequate space available for mounting and data that cannot be inscribed in legible form. Equipment includes all vehicles (both wheeled and tracked), combat vehicles, trucks, trailers, semi-trailers, dollies, personnel, utility carriers, and vehicles used in field construction and engineering work. Special data is to be furnished by the design activity of the equipment.

6.2 Ordering data. Procurement documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Type, style, and composition required (see 1.2, 1.2.1, and 3.2).
- (c) If a preproduction sample is required (see 3.1).
- (d) Special requirements, if other than as specified (see 3.3 through 3.3.2.4) such as thickness, size, copy, color and finish.
- (e) Applicable drawings required when type III is specified (see 3.3.1.1 through 3.3.2.2).
- (f) If protective coating on ferrous, aluminum and magnesium metal plates is not required (see 3.4).
- (g) If protective coating is required on copper-alloy and zinc-alloy plates (see 3.4.1).

- (h) If attachment holes are different (see 3.5).
- (i) If performance requirements are different (see 3.6 and 4.6).
- (j) If preproduction sample shall be inspected other than as specified (see 4.2).
- (k) Level of packaging and level of packing required (see 5.1 and 5.2).

6.3 Classification changes. The following plates were previously classified as indicated below:

- (a) Type I, style 1 was formerly designated type I, style 2.
- (b) Type I, style 2 was formerly designated type II.
- (c) Type I, style 3 was formerly designated type IV.
- (d) Type I, style 4 was formerly designated type III.
- (e) Type II, style 1 was formerly designated type VII.
- (f) Type II, style 2 was formerly designated type VIII.
- (g) Type III was formerly designated type I, style 3; type I, style 4; type V; type VI, and type IX.

6.4 Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.

Custodians:

Army - ME
Navy - YD
Air Force - 69

Review activities:

Army - GL, MI, ME, WC
Navy - YD
Air Force - 69

User activities:

Army - CE
Navy - MC

Preparing activity:

Navy - YD

(Project No. 9905-0090)

Code "C"

TANK, _____ CREW 5 MEN

U. S. ARMY

MFD BY _____

OPERATOR'S MANUAL TM [] PARTS LIST SNL []

MAINTENANCE MANUALS: TM [] [] []

[] [] [] [] []

OVERALL LENGTH [] LOWEST OPERABLE HT []

OVERALL WIDTH [] SHIPPING CUBAGE []

OVERALL HEIGHT [] FIGHTING WEIGHT []

MAX. VEHICLE SPEEDS

1- [] M.P.H. 2- [] M.P.H. 3- [] M.P.H. REV. []

[] ENGINE CRUISING SPEED R.P.M. []

STAMP SER.NO. SUPPLIED BY ARMY

STAMP NUMBER OF MONTH AND YEAR OF COMPLETE MANUFACTURE

TO BE FREE OF ENAMEL FOR INITIALS OF INSPECTOR

Figure 1. Example of Instruction Plate, Type III.

Note: Figure is an example only
and is not applicable to
actual drawings.

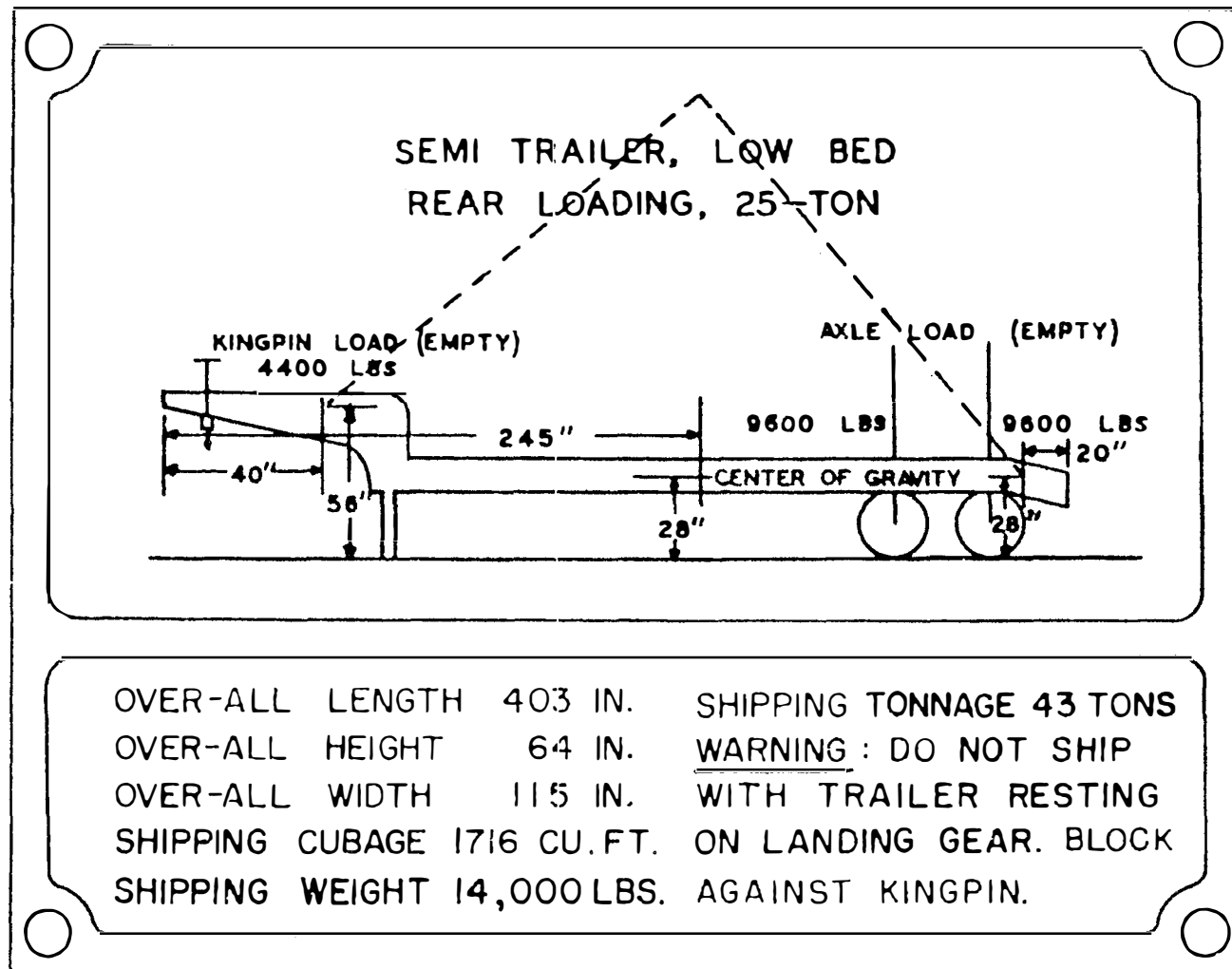


Figure 2. Example of Instruction Plate, Type III.

Note: Figure is an example only and is not applicable to actual drawings.

MIL-P-514D
~~AMENDMENT-2~~
7 July 1971
~~SUPERSEDING~~
~~AMENDMENT-1~~
31 July 1967
SUPPLEMENT 1
15 September 1966

MILITARY SPECIFICATION

PLATES, IDENTIFICATION, INSTRUCTION AND MARKING, BLANK

This amendment forms part of Military Specification MIL-P-514D, dated 15 September 1966, and is mandatory for use by all Departments and Agencies of the Department of Defense.

PAGE 1

1.2 Type I, Style 2. Delete in its entirety.

PAGE 2

2.1 Federal. Delete the following:

"PPP-B-576 - Box, Wood, Cleated, Veneer, Paper, Overlaid.
PPP-B-591 - Boxes, Fiberboard, Wood-Cleated."

Military. Add the following:

"MIL-B-46506 - Box Ammunition, Packing, Wood, Wirebound."

PAGE 3

2.1 STANDARDS, Military. Delete:

"(see Supplement 1 for list of Associated MS Standards)" and substitute:

FSC 9905

MIL-P-514D
AMENDMENT-2

- MS 63045 - Plate, Identification, Blank for Weapons Items.
- MS 63201 - Plate Identification: End Item Attachments.
- MS 63202 - Plate Identification: Internal Combustion
Engine Overhaul Data.
- MS 63203 - Plate Identification: Modification Applied.
- MS 90495 - Plate Identification, Blank, Mechanical Equipment."

PAGE 4

3.2, line 9. Add to the last sentence, "(see 6.5)".

PAGE 6

3.3.2.1, lines 5 and 6. Delete "shall be 24-point type.....not more than 14 points", and substitute, "shall be not less than 24-point type, and all other letters shall be not less than 6 points, unless otherwise specified (see 6.2)."

PAGE 8

3.5 Delete the second sentence in its entirety.

PAGE 10

Table II, following 103: Delete the sentence in its entirety and substitute. "Plate not formed with opposite sides parallel within 1/32 inch or adjacent sides at $90 \pm 1/2$ degree angle."

PAGE 11

Table II, following 107, second line: Delete period and add, "within tolerances specified on applicable standard or drawing".

PAGE 14

5.2.1 Delete and substitute:

"5.2.1 Level A. Plates shall be packed in wire bound boxes, nailed wood and cleated-plywood boxes conforming to PPP-B-585 (class 2), PPP-B-621 (class 2), PPP-B-601 (overseas type) and MIL-B-46506. Flat steel strap-ping shall be type I, class B."

PAGE 15

6.1.2 Delete in its entirety.

6.1.3, line 4. Delete "MS 63200".

PAGE 17

"6.5 Fasteners. When fasteners used for attaching the plate to the equipment are electrochemically incompatible with the base equipment and the plate, consideration should be given to the protection of the fasteners with a minimum 0.0005-inch cadmium plate in accordance with QQ-P-416, type II."

CUSTODIANS:

Army - ME

Navy - YD

Air Force - 84

Preparing activity

Navy - YD

Review activities:

Army - MI, ME, WC, AT

Air Force - 84

(Project No. 9905-0198)

User activities:

Army - GL

Navy - MC