

ZZ-T-1619C
May 30, 1991
SUPERSEDING
ZZ-T-1619B
July 15, 1977

FEDERAL SPECIFICATION

TIRE, PNEUMATIC, AGRICULTURAL

This specification was approved by the Commissioner,
Federal Supply Service, General Service Administration
for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 SCOPE. This specification covers new and retreaded
pneumatic tires, both tube and tubeless type for use on
agricultural type vehicles.

1.2 CLASSIFICATION.

1.2.1 STYLES, GROUPS TYPES AND CLASSES. Tires shall be of the
following styles, groups, types, and classes.

Style X - New

Style Y - Retreaded

Group 1 - Drive Wheel Tires

Class R-1 Regular Tread

Class R-2 Cane and Rice Deep Tread

Class R-3 Shallow Tread

Class R-4 Industrial, Intermediate Tread

Group 2 - Front Tires

Class F-1 Single Rib

Class F-2 Multiple Rib

Class F-3 Industrial, Multiple Rib

Group 3 - Implement Tires

Class I-1 Rib Tread

Class I-2 Moderate Traction

Class I-3 Traction Tread

Class I-6 Smooth Tread

Type BA - Bias, tubeless

Type RA - Radial, tubeless

Type BB - Bias, tube-type

Type RB - Radial, tube-type

1.2.2 SIZES AND LOAD DESIGNATION. Tires shall be of the sizes and load designations listed in publications of the recognized standardizing bodies (see 2.2).

2. APPLICABLE DOCUMENTS

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

FEDERAL SPECIFICATION:

ZZ-I-550 - Inner Tube, Pneumatic Tire
ZZ-T-441 - Tire, Pneumatic: Retreaded and Repaired

FEDERAL STANDARDS:

Fed. Std. No. 123 - Marking For Domestic Shipment (Civil Agencies).

Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards at the prices indicated in the Index. The Index which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

(Single copies of this Specification and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General Services Administration Regional Offices in Boston; New York; Washington, D.C.; Atlanta; Chicago; Kansas City, MO; Fort Worth; Denver; San Francisco; Los Angeles; and Seattle, WA, Philadelphia, PA, and Houston TX.

(Federal Government activities may obtain copies of Federal Specifications, Standards, Handbooks, and the Index of Federal Specifications and Standards from established distribution points in their agencies.

MILITARY SPECIFICATION:

MIL-T-4 -Tire, Pneumatic, and Inner Tube, Pneumatic
Tire: Tire with Flap; Packaging and Packing Of.

MIL-T-12459-Tire, Pneumatic: for Military Ground Vehicles.

Military Standards:

MIL-STD-105-Sampling Procedures and Tables for Inspection by Attributes.

MIL-STD-129-Marking for Shipment and Storage.

MIL-STD-1224 Visual Inspection Guide for Pneumatic Tires (Nonaircraft).

MIL-STD-45662 Calibration Systems Requirements.

(Copies of Military 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 a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

ASTM D412 Standard Test Method For Rubber Properties in Tension

ASTM D885 Testing of Tire Cords-Tire Cord Fabrics and Industrial Filament Yarns Made From Organic Based Fibers

ASTM D76 Specification for Tensile Testing Machines For Textiles

ASTM E4 Load Verification of Testing Machines

ASTM E74 Calibration of Force Measuring Instruments for Verifying the Load Indication of Testing Machines

THE TIRE AND RIM ASSOCIATION, INC. YEARBOOK. (Copies may be obtained from the Tire and Rim Association, Inc., Crown Point, Suite 150, 175 Montrose W. Ave., Copley, OH 44321.

THE EUROPEAN TYRE AND RIM TECHNICAL ORGANIZATION YEARBOOK: (Copies may be obtained from the European Tyre & Rim Technical Organization, The General Secretary, ETRTO, Avenue Brugmann 32, Boite 2, B-1060, Brussels, Belgium).

JAPAN AUTOMOBILE TIRE MANUFACTURERS' ASSOCIATION, INC.: (Copies may be obtained from the Japan Automobile Manufacturers' Association, Inc., 9th Floor, Toronomon Bld., No 1-12, 1-Chome Toronomon, Mina To-ku, Tokyo, Japan.

3. REQUIREMENTS

3.1 QUALIFICATION. Tires furnished under this specification shall be tires which have been qualified and listed on, or approved in writing by the qualifying activity for listing on the applicable Federal Qualified Products List. Retreaded tires are casings from previously qualified tires to which tread rubber has been affixed. Qualification and listing of tires on the Qualified Products List does not guarantee the acceptance of the tires in any future procurement nor constitute waiver of the requirements of the specification. The cost for performing qualifications or REQUALIFICATION tests shall be wholly borne by the applicant. Tires, tubes, and flaps shall be supplied for testing at no cost to the Government.

For Style X Tires, Group 1, Group 2 and Group 3 will be tested. Qualification will be extended to other classes of tires in the same group which are of equal or higher quality level as certified by the manufacturer and provided they have the same construction and materials.

For Style Y Tires, qualification of a particular retreader's process which the retreaders quality is clearly established will be extended to other tire models retreaded by the same process, having equal or better compound as certified by the retreader.

For both Style tires, qualification may be extended to a tube-type tire brand or model, provided it is of equivalent construction (design and materials), with the exception of the bead, to the tubeless model qualified. Using this same provision, the tube-type shall also qualify the tubeless model or brand.

For Style X qualification may be extended to other manufacturer's production points of a particular group provided the standards and methods of quality control are equivalent at each point of manufacture. The brand or model must be of equivalent compounds and construction from both locations.

For Style Y, qualification may be extended to other retreading facility/s for a particular manufacturers process provided the manufacturer certifies that the process provided the manufacturer certifies that the process and quality control procedures are identical at the additional facility/s.

For Style X tires, prospective suppliers shall submit a list of their tire sizes, brands/models, group and type (see 1.2.1) and fabric materials of the body plies and belts or breakers of each group the manufacturer intends to furnish under this specification. A Government representative shall select the tires for laboratory tests when specified.

For Style Y tires, prospective suppliers shall submit a list of their retreading processes, as defined in Section 3.4 of Federal Specification ZZ-T-441H, tires sizes, models, group, type and class (see 1.2.1) of each group the manufacturer intends to furnish under this specification. A government representative will select the tires for laboratory tests when specified.

The Government representative shall inform the respective suppliers which tire sizes have been selected for the tests. The manufacturers shall arrange to supply test tire sizes selected they propose to qualify to the Federal Qualified Products List. The tire samples shall be selected by a Government representative from the manufacturer's production line, after passing their final finish inspection or when tires to be selected are stored in a warehouse, the tire sample shall be selected, at random, from a batch of not less than 10 tires for Style X and 10 for Style Y. All tires selected for qualification tests shall be identified with a tamperproof seal.

When the sample tires are selected from the manufacturer's production line, the Government representative shall select the tire samples needed from a normal production run. These tires shall not represent special run tires. Special run tires are those tires which are given extra attention other than that given to normal production tires by the manufacturer's quality control procedures. The Government representative shall require the manufacturer to certify in writing that the tires selected are not special run tires.

3.1.1 RETESTS. In the event of failure to pass the laboratory tests required in paragraph 4.3.1, the manufacturer shall be allowed a maximum of one retest. Retest tires shall be selected at the same time as the initial test tires. The acceptance and rejection criteria is shown in Table II.

3.1.2 REQUALIFICATION. Once a tire manufacturers particular model/retreading process of tire has been qualified, it shall remain qualified and be listed on the QPL for a period of 10 years for Group 1, 15 years for Group 2, and 15 years for Group 3. At the end of the appropriate time period, the manufacturer must requalify the original tire model/retreading process which was submitted for qualification or any other tire model for Style X to which qualification was extended based on the qualification of the original model. For Style Y, the retreader must recertify additional retreading facilities as specified in 3.1, paragraph 6.

The government shall require supplier listed on the Qualified Products List to show cause why his tires/retreading process should remain on the Qualified Products List if he has modified his product or processing sufficiently that the validity of the previous qualification is questionable, or when deemed that the quality of the product is not being maintained. When it is determined that the product delivered does not meet the specification or that the product delivered differs from that originally qualified, the government shall give that manufacturer thirty days notice of the intent to remove the product from the qualified products thereof. If the manufacturer does not make satisfactory response within thirty days, the product shall be removed from the qualified products list.

When a tire model or retreading process is determined to be hazardous in use, the government shall immediately notify the manufacturer and the tire model or retreading process shall be removed from the qualified products list. The tire model or retreading process shall not be reinstated until the manufacturer satisfies the government that the hazardous condition has been corrected.

3.1.2.1 REQUALIFICATION LABORATORY TESTS. Requalification laboratory test shall be conducted in accordance with paragraph 4.3.

3.2 MATERIALS

REGULATORY REQUIREMENTS. In accordance with the section 23.403 of the Federal Acquisition Regulations, the Government's policy is to acquire items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing suppliers' employees to undue hazards from the recovered materials.

3.2.1 COMPOUNDS. The basic compound used in the tire construction shall be of natural rubber, synthetic rubber, or a combination thereof. Reclaimed rubber may be used in basic compounds.

3.3 PERFORMANCE.

3.3.1 CARCASS STRENGTH INDEX MEASUREMENT. When determined in accordance with 4.3.2.1 the minimum carcass strength index shall exceed the minimum values specified in 4.3.2. The minimum carcass strength index values shall be identical for all types of fabric materials.

3.3.2 OZONE RESISTANCE. All tires and flaps, as part of production, shall contain anti-oxidants and anti-ozonants to provide standard commercial resistance to weathering.

3.3.3 TEMPERATURE ABILITY. All tires supplied shall have an inherent capability of both storage and acceptable performance in ambient air temperature ranging from plus 120.0 degrees F (49.0 degrees C) to minus 40 degrees F (-40 degrees C).

3.3.4 PHYSICAL REQUIREMENTS

3.3.4.1 TENSILE STRENGTH. The tensile strength of tire tread compounds shall be not less than 1,300 pounds per square inch (p.s.i.), and for sidewalls not less than 900 p.s.i. when tested as specified in 4.3.4.

3.3.4.2 ULTIMATE ELONGATION. The ultimate elongation of treads shall be not less than 400 percent, and for sidewalls not less than 300 percent when tested as specified in 4.3.4.

3.4 DIMENSIONS.

3.4.1 TIRE OVERALL DIAMETER AND OVERALL WIDTH. When tested in accordance with 4.3.1.1.2, 4.3.1.1.3 tire overall diameter and overall width shall meet the requirements of the appropriate standardizing body.

3.4.2 SKID DEPTH. When tested in accordance with 4.3.1.1.4 skid depth shall meet the minimum requirements as shown in Table I.

TABLE I
DRIVE WHEEL TIRES

Tire Section		Skid Depth			
Bias	Radial	R-1	R-2	R-3	R-4
8.3		1.09			
9.5		1.17	2.14	.54	
11.2		1.23	2.25	.63	
13.6	13.6R	1.33	2.47	.68	
13.9		1.29			
14.9	14.9R	1.37	2.59	.73	.94
15.5	15.5R	1.33	2.47		
16.9	16.9R	1.40	2.70	.76	.97
18.4	18.4R	1.45	2.87	.85	1.02
18.4-16.1		1.45		.85	
20.8	20.8R	1.48	3.01		
23.1	23.1R	1.51	3.15	.90	1.08
24.5	24.5R	1.54	3.24	1.02	

Low Section

17.5L		1.37	2.59	.73	.94
19.5L		1.40	2.70	.76	.97
21L		1.45	2.87	.85	1.02
28L		1.62	3.15	.99	
30.51	30.5LR	1.57	3.28	1.06	

STEERING AND IMPLEMENTING TIRES

Tire Section	Skid Depth					
	F-1	F-2	F-3	I-1	I-2	I-3
4.00 (SL)	.61	.40	.16	.16	.08	.40
5.00 (SL)	.67	.47	.20	.20		.42
5.50 (SL)	.75	.54	.22	.22		.44
5.90 (SL)				.22		.44
6.00 (SL)	.77	.57	.23	.23		.46
6.40 (SL)	.22					
6.50 (SL)	.63	.63	.24			
6.70 (SL)				.23		.46
7.50 (SL)	.94	.73	.27	.27		.49
7.60 (SL)				.24		.48
9.00 (SL)		.83	.30	.30		
9.50 (SL)	1.10	.88				
10.00 (SL)	1.14	.94		.31		
11.00 (SL)	1.23	1.03	.45			
11.25 (SL)				.33		
13.50 (SL)				.36		.67

Low Section

7.5L (SL)	.73	.58				
8.5L (SL)			.31			.51
9.5L (SL)	.85	.67		.31		.51
11L (SL)	.98	.78	.45	.32		.58
12.5L (SL)				.32		.63
14L (SL)	1.17	.94	.54	.36		
14.5/75 (SL)	1.17		.54			
16.5L (SL)	1.30	1.04	.58	.40	.58	.72
19L (SL)				.45		
21.5L (SL)				.45	.67	.94

3.6 AGE OF TIRES. Tires furnished under this specification shall not be more than twenty four (24) months old from the date of manufacture for Style X tires, or twenty four (24) months old from the date of retreading on the date the tires are delivered.

3.7 IDENTIFICATION MARKING. Each tire shall be branded, molded, or have permanently affixed in an unobstructed location on the sidewall, shall include the following information:

- A. Manufacturer's name, brand name, or trade mark.
- B. Style X and Retreaders Identification Code Style Y.
- C. Nominal size.
- D. Load designation (Ply rating or symbol mark).
- E. Serial Number. (Style X tires only)
- F. Tubeless, when applicable.
- G. Date of Retreading.
- H. Radial when applicable.

3.8 SPECIAL LABELING (see 5.2). When specified, each tire shall have a special label on the face of the tread. This label shall supplement the manufacturers' commercial label, so when combined they show the tire size, Style, Group, Type, Class, and load designation or ply rating whether tube type or tubeless, tread type, the National Stock Number, Contract Number, Purchase Order Number, the month and year of manufacture, and the average weight. The label shall have a pressure sensitive adhesive backing which will not allow accidental loss and will not cause deterioration of the tread compound. All printing shall be clear and readable and shall boldly contrast with the label's background. The National Stock Number shall be in letters and numbers not less than 1/4 inch high. The special label and the manufacturers commercial label shall be placed on the tread face so that both may be read at the same time by one individual without having to rotate the tread.

3.9 PROCESS QUALITY. Tires shall show no evidence of defects. All plies, including breakers and belts shall be smooth and evenly laid and shall be free of buckles, wavy cords, air pockets, depressions, and any other defects or imperfections, which may impair serviceability.

4. QUALITY ASSURANCE PROVISIONS AND TEST PROCEDURES

4.1 RESPONSIBILITY FOR INSPECTION. The supplier is responsible for the performance of all inspection and test requirements as specified herein. Except as otherwise specified, the contractor may utilize his own or any other inspection facilities and services acceptable to the Government. Records of the examination and test shall be kept complete and provided to the Government upon request. The Government reserves the right to perform any of the inspections and tests set forth in the specification where such inspections and tests are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.1.1 INSPECTION OF COMPONENT AND MATERIAL. In accordance with 4.1, the supplier is responsible for insuring that components and materials used are manufactured, sampled and examined and tested in accordance with the requirements of this specification.

4.1.2 MATERIAL FURNISHED FOR TESTS. Tires, flaps, valves, and inner tubes used for or in tests shall be furnished by the contractor without cost to the Government.

4.2 QUALIFICATION TESTS, INSPECTIONS, AND EXAMINATIONS.

4.2.1 QUALIFICATION. Qualification shall be performed under the supervision of the Government at the prospective supplier's or other commercial laboratory acceptable to the Government, or at a Government laboratory, if specified. The costs incurred for the qualification shall be borne by the prospective supplier.

4.2.1.1 REQUIREMENTS FOR STYLE X (NEW) TIRES. The qualification shall consist of: carcass strength (see 4.3.2), visual examination (see 4.4.3), hidden defects (see 4.3.3), tire overall diameter (see 4.3.1.1.2), tire overall width (see 4.3.1.1.3), skid depth (see 4.3.1.1.4), tensile strength and ultimate elongation (see 4.3.4), in accordance with Table I.

4.2.1.2 REQUIREMENTS FOR STYLE Y (RETREADED) TIRES. The qualification shall consist of visual examination (4.4.3), hidden defects (see 4.3.3) tire overall diameter (see 4.3.1.1.2), tire overall width (see 4.3.1.1.3), skid depth (see 4.3.1.1.4), tensile strength and ultimate elongation (see 4.3.4) of the tread compound only in accordance with Table I.

Table I. EXAMINATIONS AND TESTS

<u>Characteristics</u>	<u>Number of New Tires to be examined</u>	<u>Retread Tires</u>	<u>Number Of Defects Observed</u>			
			<u>Test Acc.</u>	<u>Rej.</u>	<u>Retest Acc.</u>	<u>Rej.</u>
Visual examination, major defects (all groups)	3	3	0	1	0	1
Visual examination, minor defects (all groups)	3	3	1	2	0	1
Tire overall diameter (all groups)	3	3	0	1	0	1
Skid depth	3	3	0	1	0	1
Tire overall width (all groups)	3	3	0	1	0	1
<u>Total examinations</u>	<u>15</u>	<u>15</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>
Carcass Strength Index (all groups)	1	*	1	2	0	1
Hidden defects (all groups)	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>
<u>Total examinations</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>
Tensile strength	3	3	0	1	0	1
Ultimate elongation	<u>3</u>	<u>3</u>				
<u>Total tests</u>	<u>6</u>	<u>6</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>

*Does not apply to style Y

4.2.2 RETESTS. In the event of failure to pass the laboratory test listed in Table I, the contractor shall be allowed a maximum of one retest each for groups 1, 2 and 3 tires. Each retest shall consist of all the test characteristics listed in Table I for retest groups 1, 2 and 3 tires. The acceptance and rejection criteria are listed in Table I.

4.3 EXAMINATIONS, TESTS, AND INSPECTION.

4.3.1 DIMENSIONAL EXAMINATIONS.

4.3.1.1 TIRE OVERALL DIAMETER, TIRE OVERALL WIDTH, AND SKID DEPTH TESTS.

4.3.1.1.1 PREPARATION OF TIRE.

The tire shall be mounted on the designed rim specified by the appropriate and standardizing body (see 2.2) and inflated to the specified pressure corresponding to the maximum load for its ply rating or symbol. The tire shall stand for a minimum of 24 hours at room temperature and the pressure adjusted to the specified pressure.

4.3.1.1.2 OVERALL TIRE DIAMETER. The overall tire diameter shall be determined to the nearest 0.01-inch by measuring the outside circumference of the inflated tire with a steel tape and dividing by pi, (3.1416), or by means of a tape calibrated to directly show tire diameter.

4.3.1.1.3 OVERALL TIRE WIDTH. The overall tire width is the average maximum width of the inflated tire including the sidewalls, side ribs, bars, decorations, letters, or numerals. The width shall be measured to the nearest 0.01-inch at six different points equally spaced around the tire and the results averaged.

4.3.1.1.4 SKID DEPTH. The deepest point of the tread groove nearest to or on the tread centerline of the tire shall be measured to the nearest 0.01 inch at six points equally spaced around the inflated tire and the results shall be averaged. The skid depth shall meet the minimum requirements shown in Table I.

4.3.2 CARCASS STRENGTH INDEX MEASUREMENT. Groups 1, 2 and 3 tires shall meet the requirements shown in Table III.

TABLE III

Ply Rating:Symbol Marked:

4 ply rated tires - 1600 pounds

* (one symbol) - 1700 pounds

6 ply rated tires - 2400 pounds

** (2 symbols) - 2500 pounds

8 ply rated tires - 3200 pounds

*** (3 symbols) - 3300 pounds

10 ply rated tires - 4000 pounds

12 ply rated tires - 4800 pounds

14 ply rated tires - 5600 pounds

16 ply rated tires - 6400 pounds

Note: Not less than 50 percent for bias tires and 25% for radial tires of the minimum carcass strength index values shown for particular load designations, as shown above, must be from plies that extend from around the bead(s) of the tire to and around the other bead(s) of the tire.

Testing shall be in accordance with ASTM methods D885 D76, E4 and E74.

4.3.2.1 THE DETERMINATION OF THE NUMBER OF CORDS PER INCH. Determine the number of cords per inch (ends per inch) normal to the cord path for each ply or breaker at the centerline in the crown area. The ends per inch (EPI) can be determined by buffing the tire, or any suitable commercial practice.

The carcass strength index is determined by the following equation:

$$S = P_1 + P_2 + P_3$$

$$P = S_c \times n$$

Where: S = Carcass strength index.

P = Ply strength.

S_c = Individual cord tensile strength in each ply, belt or breaker.

n = Cord count at the centerline of the tire (ends per inch) normal to the cord patch in each ply.

4.3.3 HIDDEN DEFECTS INSPECTION . A visual inspection of two tires shall be made for evidence of hidden defects. The tire shall be cut into not less than eight equal cross sections, with each section being cut circumferentially in midcrown and on each side of the crown at the point of maximum shoulder thickness; any additional cuts deemed necessary for complete inspection of the tire shall be made. The cut sections shall then be inspected for evidence of hidden defects such as separation of tread, ply, or bead in accordance with MIL-STD-1224.

4.3.4 TENSILE STRENGTH AND ELONGATION TESTS. After being checked for hidden defects, the tire shall be subjected to tests for tensile strength and ultimate elongation of tread and sidewall to determine conformance to 3.3.4.1 and 3.3.4.2, respectively.

4.3.4.1 PREPARATION OF TESTS SAMPLES. Test samples shall be cut (longitudinally at center of tread or sidewall) in accordance with ASTM D412. On tread samples, the nonskid portion shall be spliced off with a knife, after which the central portion shall be buffed on each side over a length of 2-1/2 inches until free from friction compound, fabric impressions, or irregularities of surface. On sidewall samples rubber solvent shall be used if necessary to separate rubber and fabric and one or both sides shall be buffed as necessary.

4.3.4.2 PROCEDURE. The samples, prepared as specified in 4.3.4.1 shall be tested for tensile strength and ultimate elongation in accordance with ASTM D412.

4.3.5 INSPECTION OF PREPARATION FOR DELIVERY. The preservation, packaging, packing, and marking of the tires shall be inspected to determine conformance to the applicable requirements of section 5.

4.4 QUALITY CONFORMANCE INSPECTION

4.4.1 SAMPLING FOR INSPECTION AND ACCEPTANCE. Sampling for inspection and acceptance shall be performed in accordance with the provisions set forth in MIL-STD-105. Testing, if specified, shall be performed at the contractor's or other commercial laboratory acceptable to the Government.

4.4.2 INSPECTION LOT. The inspection lot shall consist of all tires of one style, group, size, and ply type, from an identifiable production period, and submitted for acceptance at one time.

4.4.3 VISUAL EXAMINATION. The sample unit shall be one completely fabricated tire. Visual examination of the external and internal surfaces of each sample tire shall be in accordance with MIL-STD-1224. The AQL for major defects shall be 4.0 percent defective and for minor defects, 6.5 percent defective. The inspection level shall be S-4.

4.4.4 DIMENSIONAL EXAMINATION. The sample unit shall be one completely fabricated tire. Each sample shall be inspected for:

Tire overall diameter (see 4.3.1.1.2)

Tire overall width (see 4.3.1.1.3)

Skid depth (see 4.3.1.1.4)

A tire failing to pass one or more of the above characteristics shall be considered a defective tire. The acceptance shall be in accordance with Table IV. Use any of the three tires selected for visual examination.

4.4.5 MATERIAL FURNISHED FOR TESTS. Tires, flaps, valves, and inner tubes used for or in tests shall be furnished by the contractor without cost to the Government.

TABLE IV

<u>Number of tires for examination</u>	<u>Characteristics</u>	<u>Number of tires to be examined</u>	<u>Test</u>	
			<u>Acc.</u>	<u>Rej.</u>
	Tire overall diameter (all groups)	3		
	Skid depth (all groups)	3		
	Tire overall width	3		
<u>Total tires - 3</u>	<u>Total examinations</u>	9	1	2

5. PREPARATION FOR DELIVERY

5.1 PACKAGING. Packaging shall be level A or C, as specified (see 6.2). If level B packaging is specified for civil agency procurement, the requirements of Level A packaging apply.

5.1.1 LEVEL A. The tires shall be packaged in accordance with Level A requirements of MIL-T-4.

5.1.2 LEVEL C. The tires shall be packaged in accordance with the contractor's commercial practice.

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

5.2.1 LEVEL A. The tire shall be packed in accordance with the level A requirements of MIL-T-4.

5.2.2 LEVEL B. The tire shall be packed in accordance with the level B requirements of MIL-T-4.

5.2.3 LEVEL C. The tires shall be packed to insure carrier acceptance and safe delivery to destination in containers complying with the rules and regulations applicable to the mode of transportation.

5.3 . MARKING

5.3.1 CIVIL AGENCIES. In addition to markings required by the contract order, the tires and shipping containers shall be marked in accordance with Fed. Std. No. 123.

5.3.2 MILITARY AGENCIES. In addition to markings required by the contract or order, the tires and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

6.1 INTENDED USE. Tires covered by this specification are primarily intended for mounting on agricultural tractors, agricultural implements, and garden tractors.

6.2 ORDERING DATA. Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

- (A) Title, number, and date of this specification.
- (B) Size and load designation (see 1.2.2).
- (C) Tread design (group, type, class) (see 1.2.1).
- (D) Temperature requirements (see 3.3.3).
- (E) Special labeling when required (see 3.7)
- (F) Inspection and testing responsibility (see 4.1, 4.3 through 4.3.5).
- (G) Selection of applicable level of packaging and packing (see 5.1 and 5.2).

- 6.3 **QUALIFICATION**. In procurement of products requiring that qualification, awards will be made only for such products as have been approved in writing for inclusion in the applicable Qualified Products List prior to the time of award, whether or not such products have actually been so listed by that date. Manufacturers are urged to contact the manager, Federal Tire Program, General Services tire brand designations.
- 6.4 **SUPERSESSION DATA**. This specification supersedes the group 2 agricultural tractor tires covered in ZZ-T-001083, December 30, 1966.