

FED. SUP. CLASS  
2640

MS PART NUMBER	FIIN	MARKING CODE ①	NUMBER OF PLIES TO EACH PATCH	TIRE TO BE REPAIRED			SIZE EACH PLY		MAXIMUM OVER-ALL PATCH DIM. (INCHES)
				INJURY SIZE MAX (INCHES)	PLY RATING	FOR UNIT NO.	PLY NUMBERS	DIMENSIONS	
MS 51312-1	684-5135	② ③ 2-0-A	2	NAIL	ALL	1	1 & 2	3/4 X 2-1/2	3
MS 51312-2	684-5136	2-1/2-4/6	2	1/2	4/6	1	1 & 2	2-1/2 X 5	6
MS 51312-3	684-5137	2-1-4/6	2	1	4/6	1	1 & 2	3 X 7	8
MS 51312-4	684-5138	2-2-4	2	2	4	1	1 & 2	4 X 8	9
MS 51312-5	684-5139	4-3-4/6	4	3	4/6	1	1 & 2 3 & 4	5 X 7 6 X 9	10
MS 51312-6	684-5140	4-4-4/6	4	4	4/6	1	1 & 2 3 & 4	6 X 8 7 X 10	11
MS 51312-7	684-5141	4-2-8/10	4	2	8/10	1	1 & 2 3 & 4	4 X 8 5 X 10	11
MS 51312-8	684-5142	6-4-8/12	6	4	8/12	1	1 & 2 3 & 4 5 & 6	6 X 10 7 X 12 8 X 14	15
MS 51312-9	684-5143	8-4-12/16	8	4	12/16	1	1 & 2 3 & 4 5 & 6 7 & 8	6 X 10 7 X 12 8 X 14 9 X 16	17
MS 51312-10	684-5144	8-6-12/14	8	6	12/14	1	1 & 2 3 & 4 5 & 6 7 & 8	8 X 12 9 X 14 10 X 16 11 X 18	19
MS 51312-11	684-5145	10-6-14/18	10	6	14/18	1	1 & 2 3 & 4 5 & 6	8 X 12 9 X 14 10 X 16	21
						2	7 & 8 9 & 10	11 X 18 13 X 20	

**NOTES:**

1. IDENTIFICATION MARKING TO BE APPLIED TO EACH PATCH. THE CODE DENOTES THE NUMBER OF PLIES IN THE PATCH, THE MAXIMUM INJURY SIZE IN INCHES AND THE PLY RATING OF THE TIRE FOR WHICH THE PATCH IS INTENDED. EXAMPLE: 4-2-8/10 INDICATES 4 PLIES TO THE PATCH, 2-INCH MAXIMUM TIRE-INJURY SIZE AND PATCH SUITABLE FOR 8 AND 10 PLY TIRES.
2. "0" INDICATES NAIL HOLE.
3. "A" INDICATES USE WITH ALL PLY RATINGS.

CUSTOMERS  
P.A.-Ord  
Navy-Docks  
AF-UBAF

OTHER INT.  
A-CE  
N-NOV, MC  
AF-

PROCUREMENT SPECIFICATION  
22-T-406

**MILITARY STANDARD**

**PATCH, PNEUMATIC TIRE REPAIR: UNCURED**

**MS 51312**

SHEET 1 OF 2

DD FORM 672-1  
1 OCT 52

THIS MILITARY STANDARD IS APPROVED BY THE DEPARTMENT OF DEFENSE AND IS MANDATORY ON ALL ACTIVITIES. SELECTION FOR ALL NEW ENGINEERING AND DESIGN APPLICATIONS AND FOR REPETITIVE USE SHALL BE MADE FROM THIS DOCUMENT.

REVISED  
APPROVED 16 JULY 1959

NOTES: When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, or may have authorized the holder of any other patent or corporation, or conveying any rights of patent or invention that may in any way be related thereto.

FED. SUP CLASS 2640									
MS PART NUMBER	FIIN	MARKING CODE ①	NUMBER OF PLYS TO EACH PATCH	TIRE TO BE REPAIRED		SIZE EACH PLY			MAX OVER- ALL PATCH DIM (INCHES)
				INJURY SIZE MAX (INCHES)	PLY RATING	FOR UNIT NO.	PLY NUMBERS	DIMENSIONS (INCHES)	
MS 51312-12	684-5146	12-7-14/20	12	7	14/20	1	1 & 2 3 & 4 5 & 6	8 X 14 10 X 16 11 X 18	25
						2	7 & 8 9 & 10 11 & 12	12 X 20 13 X 22 15 X 24	
MS 51312-13	684-5147	14-7-18/24	14	7	18/24	1	1 & 2 3 & 4 5 & 6	8 X 12-1/2 9 X 14 10 X 15-1/2	24
						2	7 & 8 9 & 10	11 X 17 13 X 18-1/2	
						3	11 & 12 13 & 14	13 X 20 15 X 21	
MS 51312-14	684-5148	14-9-20/24	14	9	20/24	1	1 & 2 3 & 4 5 & 6	10 X 15-1/2 11 X 17 12 X 18-1/2	25-1/2
						2	7 & 8 9 & 10	13 X 20 14 X 21-1/2	
						3	11 & 12 13 & 14	15 X 23 16 X 24-1/2	
MS 51312-15	684-5149	16-7-18/28	16	7	18/28	1	1 & 2 3 & 4 5 & 6	8 X 12-1/2 9 X 14 10 X 15-1/2	24
						2	7 & 8 9 & 10 11 & 12	11 X 17 12 X 18-1/2 13 X 20	
						3	13 & 14 15 & 16	15 X 21-1/2 16 X 23	
MS 51312-16	684-5150	16-12-20/24	16	12	20/24	1	1 & 2 3 & 4 5 & 6	13 X 18-1/2 14 X 20 15 X 21-1/2	30
						2	7 & 8 9 & 10 11 & 12	16 X 23 17 X 24-1/2 18 X 26	
						3	13 & 14 15 & 16	19 X 27-1/2 20 X 29	

**NOTES:**

- IDENTIFICATION MARKING TO BE APPLIED TO EACH PATCH. THE CODE DENOTES THE NUMBER OF PLYS IN THE PATCH, THE MAXIMUM INJURY SIZE IN INCHES AND THE PLY RATING OF THE TIRE FOR WHICH THE PATCH IS INTENDED. EXAMPLE: 4-2-8/10 INDICATES 4 PLYS TO THE PATCH, 2-INCH MAXIMUM TIRE-INJURY SIZE AND PATCH SUITABLE FOR 8 AND 10 PLY TIRES.

**GENERAL:**

- CORD MATERIAL FOR ALL SIZES OF PATCHES SHALL BE NYLON.
- PATCHES SHALL CONFORM TO SPECIFICATION ZZ-T-436.
- REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

APPROVED BY

PA-Cad

NAVY-Cad

AF-USAF

OTHER INST.

A-CE

U-NOI, IAC

AF-

**MILITARY STANDARD**

**PATCH, PNEUMATIC TIRE REPAIR: UNCURED**

**MS 51312**

PROCEDURE SPECIFICATIONS

ZZ-T-436

SUPERSEDED:

SHEET 2 OF 2

REVISED  
APPROVED 16 JULY 1959

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**MODES:**

1. IDENTIFICATION MARKING TO BE APPLIED TO EACH PATCH. THE CODE DENOTES THE NUMBER OF PLYS IN THE PATCH, THE MAXIMUM INJURY SIZE IN INCHES AND THE PLY RATING OF THE TIRE FOR WHICH THE PATCH IS INTENDED. EXAMPLE: 4-2-8/10 INDICATES 4 PLYS TO THE PATCH, 2-INCH MAXIMUM TIRE-INJURY SIZE AND PATCH SUITABLE FOR 8 AND 10 PLY TIRES.

**GENERAL :**

2. CORD MATERIAL FOR ALL SIZES OF PATCHES SHALL BE NYLON.
3. PATCHES SHALL CONFORM TO SPECIFICATION ZZ-T-486.
4. REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.

CUSTOMERS	STEER 1ST.
P.A.-Ord	1-CE
Navy-Bank	1-NOV, MC
AF-USA	1-

PROCUREMENT SPECIFICATIONS  
 XX-T-416

# MILITARY STANDARD

PATCH, PNEUMATIC TIRE REPAIR: UNCURED

MS 51312

SHEET 2 OF 2

DD FORM 672-1

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