

FED. SUP CLASS  
2620

NOTE: ALL DIMENSIONS ARE IN INCHES

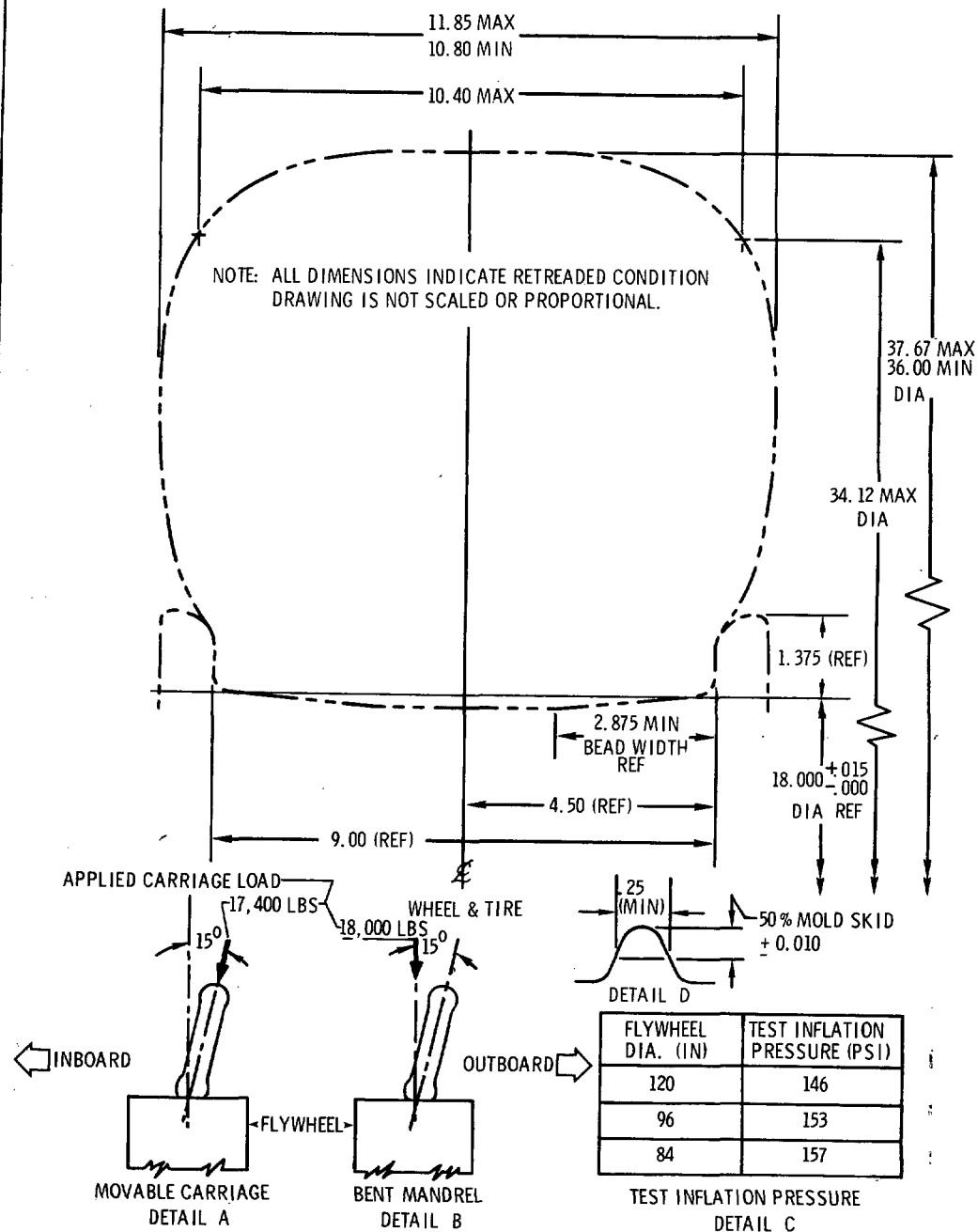


FIGURE 1 (A) FOR CHANGES SEE SHEET 1 &amp; 2

APPROVED 21 DEC 1970 REVISED (A) 1 APRIL 1978

P.A. 99 Other Cust	TITLE TIRE - PNEUMATIC RETREAD, TYPE VII 38 X 11 / 14 PR	MILITARY STANDARD MS 27818 (USAF)
PROCUREMENT SPECIFICATION MIL-R-7726	SUPERSEDES: AF DWG NO. 68D29214	SHEET 1 OF 2

DD FORM 672-1 (Limited coordination)  
1 SEP 65

EDITION OF 1 SEP 67 MAY BE USED.

This military standard is approved for use by Code 99,  
Department of the Air Force and is available for use  
by all departments and agencies of the Department of  
Defense.

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## GENERAL NOTES

1. ANY DEVIATION FROM GIVEN DIMENSIONS MUST BE AUTHORIZED BY WRITTEN APPROVAL OF THE PROCURING AGENCY. DIMENSIONS CALLED OUT ARE AFTER RETREADING.
2. REFERENCE TO ANY SPECIFICATION HEREIN SHOULD BE CONSTRUED AS REFERENCE TO THE ISSUE IN EFFECT ON THE DATE OF INVITATIONS FOR BIDS.
3. QUALITY ASSURANCE SHALL BE IN ACCORDANCE WITH MIL-R-7726.
4. WHERE CONFLICT EXISTS BETWEEN THIS STANDARD AND ANY OTHER MILITARY SPECIFICATION, THE REQUIREMENT OF THIS STANDARD SHALL APPLY.

## RETREADED TIRE NOTES

THE TUBELESS TIRE SHALL CONFORM WITH THE REQUIREMENTS LISTED.

SIZE	PLY RATING	MAX STATIC LOAD LBS	INFLATION PRESS PSI (RATED)	BEAD WIDTH (MAX) IN	WEIGHT LBS (MAX)	STATIC UNBALANCE IN OZ (MAX)	TREAD	MOLD SKID DEPTH (MIN) IN
8X11	14	15,400	130	2.20*	94.5	18	SEE NOTE 3	0.25

\*EXCLUDING MAXIMUM BEAD TOE FLASH OF  $\frac{1}{8}$  INCH.

1. THE TIRE SHALL SATISFACTORILY WITHSTAND 75 CYCLES OF TEST "A", 75 CYCLES OF TEST "B", 10 CYCLES OF TEST "C", 60 CYCLES OF TEST "D", (30 CYCLES D<sub>1</sub>, 30 CYCLES D<sub>2</sub>). TESTS "C" AND "D" SHALL BE PERFORMED LAST WITH TEST "C" PRECEDING "D". THE TESTING SEQUENCE FOR "A" AND "B" IS OPTIONAL.

A. TAXI-TAKE-OFF - THE TIRE SHALL BE LANDED AGAINST A STATIONARY FLYWHEEL AT 15,400 POUNDS. THE FLYWHEEL SHALL THEN BE ACCELERATED TO 30 MPH AND MAINTAINED AT THIS VELOCITY UNTIL A TAXI ROLL DISTANCE OF 13,500 FEET HAS BEEN COVERED. THE FLYWHEEL SHALL THEN BE DECELERATED TO ZERO MPH., AND IMMEDIATELY ACCELERATED AT 4 FT/SEC/SEC AVERAGE (SIMULATING TAKE-OFF) TO 225 MPH. DURING THE ACCELERATION THE LOAD SHALL BE MAINTAINED AT 15,400 LBS FOR THE FIRST 20 SECONDS AND THEN DECREASED LINEARLY WITH TIME TO 9,500 LBS IN 75 SECONDS AFTER ACCELERATION STARTS THEN REDUCED TO ZERO LOAD AFTER A ROLL DISTANCE OF 13,500  $\pm$  200 FEET HAS BEEN COVERED IN APPROXIMATELY 82.5 SECONDS.

B. LANDING-TAXI - THE TIRE SHALL BE LANDED AGAINST A FLYWHEEL ROTATING AT A PERIPHERAL SPEED OF 160 MPH. THE FLYWHEEL SHALL BE DECELERATED AT AN AVERAGE RATE OF 4.5 FT/SEC/SEC BETWEEN 160 AND 15 MPH IN A ROLL DISTANCE OF 6,100  $\pm$  200 FEET. THE LOAD SHALL BE INCREASED LINEARLY WITH TIME FROM ZERO TO 6,700 LBS IN 8 SEC AFTER LANDING, THEN FURTHER INCREASED LINEARLY WITH TIME TO 10,500 LBS APPROXIMATELY 47.3 SEC AFTER LANDING. THE FLYWHEEL SHALL THEN BE ACCELERATED TO 30 MPH AND THE LOAD SHALL REMAIN CONSTANT UNTIL A TAXI ROLL DISTANCE OF 13,500  $\pm$  200 FEET HAS BEEN COVERED.

C. TAXI-ROLL - THE FLYWHEEL SHALL BE ACCELERATED TO 30 MPH AND TAXIED FOR 35,000 FEET AT 15,400 LBS TIRE LOAD. THE TIRE SHALL BE ALLOWED TO COOL TO 120°  $\pm$  10°F BEFORE REPEATING THE CYCLE.

D. TAXI-TURN - CONDUCT TAXI-TURN CYCLES IN ACCORDANCE WITH THE "MOVEABLE CARRIAGE" PROCEDURE (FIGURE 1, DETAIL A). IF THIS CAPABILITY DOES NOT EXIST, AN ACCEPTABLE ALTERNATE IS THE "BENT MANDREL" PROCEDURE (DETAIL B)

D<sub>1</sub> TAXI-TURN-OUTBOARD

1. ACCELERATE THE FLYWHEEL TO 15 MPH AND MAINTAIN THIS SPEED THROUGHOUT THE ENTIRE CYCLE.
2. LAND THE TIRE ON THE FLYWHEEL IN A POSITION OF 15° CAMBER OUTBOARD.
3. INCREASE THE CARRIAGE LOAD LINEARLY WITH TIME FROM ZERO TO 17,400 LBS FOR DETAIL A OR 18,000 LBS FOR DETAIL B WITHIN 2 TO 3 SECONDS AFTER LANDING AND MAINTAIN THIS LOAD FOR THE REMAINDER OF THE CYCLE.
4. UNLAND THE TIRE WHEN A DISTANCE OF 2,300 FEET HAS BEEN COVERED.

D<sub>2</sub> TAXI-TURN-INBOARDSAME AS D<sub>1</sub> EXCEPT LAND THE TIRE IN A POSITION OF 15° CAMBER INBOARD.

2. TEST INFLATION PRESSURE - THE TEST INFLATION PRESSURE USED FOR ALL CYCLES SHALL BE IN ACCORDANCE WITH DETAIL C FOR THE RESPECTIVE DIAMETER FLYWHEEL USED TO CONDUCT THE CYCLE(S). THE TIRE OUTSIDE DIAMETER, ROLLING RADIUS, AND DEFLECTION ON THE FLYWHEEL AT RATED LOAD AND THE TEST INFLATION PRESSURE FOR THE CORRESPONDING FLYWHEEL DIAMETER SHALL BE RECORDED AND STATED IN THE QUALIFICATION TEST REPORT AFTER A MINIMUM OF 12 HOURS STATIC GROWTH AT THE RATED INFLATION PRESSURE.

3. THE TREAD PATTERN SHALL HAVE A MINIMUM OF 3 AND A MAXIMUM OF 5 GROOVES. THESE GROOVES SHALL BE CONTINUOUS, CIRCUMFERENTIAL AND HAVE AN UNINTERRUPTED MOLD-SKID DEPTH AS SPECIFIED ABOVE. A MINIMUM OF 3 GROOVES SHALL BE WITHIN THE CONTACT AREA OF THE STATIC LOAD FOOTPRINT TAKEN AT 60% OF THE MAXIMUM STATIC LOAD AT RATED INFLATION PRESSURE. THE MOLD GROOVE WIDTH SHALL BE A MINIMUM OF 0.25 INCHES MEASURED AS SHOWN IN DETAIL D. THE WIDTH SHALL BE REPORTED IN THE QUALIFICATION TEST REPORT. THE MAXIMUM CENTER RID WIDTH OF THE UNINFLATED TIRE SHALL NOT EXCEED 2.0 INCHES.

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APPROVED 21 DEC 1970

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PROCUREMENT SPECIFICATION MIL-R-7726	SUPERSEDES: AF DWG NO. 68D29214	SHEET 2 OF 2