

Fed. Std. No. 308B

August 1, 1977

~~SUPERSEDING~~

Fed. Std. No. 308A

May 9, 1972

## FEDERAL STANDARD

## INNER TUBE , PNEUMATIC TIRE

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

S1. PURPOSE AND SCOPE. This standard establishes the inner tube and valve combinations and adopts them as standard items for use in pneumatic tires used on ground vehicles in applications, as specified. Its purpose is to achieve greater economy through the reduction of the variety of tube and valve combinations and the identification of applications in which these combinations are used.

S1.1 Tables of standard tube and valve combinations:

Table I. Tubes for passenger car and motorcycle tires.

Table II. Tubes for tires used on trucks, trailers, earth-moving, agricultural and industrial vehicles and on motor scooters.

S2. APPLICATION. Purchases of inner tubes from commercial sources under Federal Specification ZZ-I-550, Inner Tube, Pneumatic Tire, of the issue in effect on date of invitation for bids shall be limited to items which conform to the characteristics specified in tables I and II for the application shown.

(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, DC 20402.

(Single copies of this standard and other Federal Standards 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, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, Seattle, WA, Philadelphia, PA, and Houston, TX.

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

S3. OTHER PUBLICATION. The following documents form a part of this standard 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.

The Tire and Rim Association, Inc. Yearbook

(Copies may be obtained from the Tire and Rim Association, Inc., 3200 W. Market Street, Akron, Ohio 44313.)

S4. STANDARD CHARACTERISTICS AND ITEM IDENTIFICATION. The standard items with their applicable Federal Stock Numbers shall conform to the characteristics as listed in tables I and II.

S5. CHANGES. When a Federal agency considers that this standard does not provide for its essential needs, written request for changing or adding to the standard justification shall be submitted in duplicate to the National Automotive Center, Federal Supply Service, General Services Administration, Washington, DC 20406. This justification shall explain wherein the standard does not provide for essential needs. The General Services Administration will determine the appropriate action to be taken and will notify the agency.

S6. CONFLICT WITH REFERENCED SPECIFICATION. Where the requirements stated in this standard conflict with any requirement in the referenced specification, the requirements of the standard shall apply.

FSC 2610

Fed. Std. nO. 308B

S7. notes

S7.1 Code to applications column. The tube and valve combination listed in tables I and II are coded to show the application in which they are normally used. The application codes are identified below:

Code	Identification
AA	Agricultural implements
AB	Agricultural and light industrial tractor, steering wheels
AD	Recreational, boat, baggage and special type trailers
AF	Earthmover
AG	Garden tractor
AH	Agricultural and light industrial tractor, drive wheels
AJ	Industrial utility Industrial fork Lift truck slow speed industrial
AL	Light truck, trailer and multipurpose passenger vehicle
AP	Motorcycl e
AQ	Motor scooter
AR	Passenger car
AT	Road grader (DC rim)
AU	Road grader (FB rim)
AW	Heavy Industrial equipment Fork lift truck Mobil crane Loader Dozer Mining car
Ax	Truck-Bus, Trailer Truck-Bus Low platform trailer Straddle truck Mining and logging

### S7.2 Valve practice.

S7.2.1 Valve identification. The effective dimensions of valves and valve spuds in finished tubes, as identified to Tire and Rim Association standard designations, are shown in figures 1 to 12.

S7.2.1.1 Other valves. Rim valves used with tubeless tires; valve stems for use with SP-100 and SP-4000 valve spuds; and repair valves; are covered in Federal Specification 22-V-25.

S7.2.1.2 Special valve characteristics. A comparison of special characteristics for valves used on passenger car, light truck, agricultural and industrial tubes is shown below.

Tr. No.	Valve stem material	Type	Max. inflation pressure
13 1 *	Rubber	Air	60 p.S. i.
13CW** 1	Rubber	Air-water	100 p.s. i.
15	Rubber	Air	60 p.S. i.
15CW	Rubber	Air-water	100 p.s. i.
87 1 *	Metal	Air	100 p.s. i.
1 87A**	Rubber	Air	60 p.s. i.
87 S'''	Metal	Air	100 p.s. i.
1 135	Rubber	Air	100 p.s.i.
1 150	Rubber	Air	60 p.s. i.
1 150CW	Rubber	Air-water	100 p.s.i.
218A	Metal	Air-water	
2 20A	Metal	Air-water	

1 Hand bendable.

\*\* Use TR B-6 Bushing (figure No. 6) in rims with .625 diameter valve hole.

### S7.2.2 Industry standard

S7.2.2.1 Tractor and implement tubes. The industry has adopted standard valves for tractor and implement tubes. These are the TR 218A valves for rear tractor and large implement tubes; the TR 150CW

valves for front tractor and implement tubes; the TR 13CW for sizes where the valve hole in the rim is small; the TR 135, TR 150, and TR 150CW valves where a bent valve is required in small rim diameters; and the TR 87 (bent), TR 87S (straight), and TR 87A (hand bendable), where a valve stem is desired to fit through a small valve hole in small diameter rims. The TR 220A is longer than the TR 218A and is used on selected tube sizes.

All of the above valves except TR 87, TR 87A, TR 87S, TR 135, and TR 150 are of the air-water type design for use with calcium chloride solution or water at the option of the user.

S7.2.2.2 Industrial tire tubes. The CW valve is also fitted to tubes used in industrial applications where added weight (liquid in tube) or higher inflation pressures (60-100 p.s.i.) are required

S7.3 Valve designation. Valves with air-water and higher inflation pressure capabilities have been specified in this standard where appropriate in order to reduce inventory complexities, as these valves are also appropriate for any use application where less than 60 p.s.i. is required.

S7.4 Tube size designation. Because manufacturing practices vary and individual manufacturers vary their marking pattern as dictated by their market, tubes in tables I and II may not be size marked exactly as shown in column 1 of the table or they may be marked to fit more than one tire size. Where a tube size is listed and column 3 shows that this same tube can also fit another size tire, the size designation as shown in column 1 is the designation used by most manufacturers.

Example No. 1. PASSENGER TIRE TUBES, TABLE 1. Tubes for passenger car tires are size marked by tube group size (see note (1) page 6). Tube group size is designated alphanumerically by most manufacturers as shown in Table I. A numerical designation has recently been developed using four numerals. When tube group size is designated numerically, the first two numerals represent the nominal rim diameter followed by two numerals representing sectional diameter as follows: The tube group size shown as F-13 would be size marked 1305, the G-13 would be size marked 1307, etc. The tube supplied with a numerical designation is designed to fit, as a minimum, each of the tire sizes shown in the column titled "Fits tire sizes" on the appropriate line.

Example No. 2. On Line 1, page 11, the tube size is shown as 6.90/6.00-9. In column 3, the table shows that this tube will fit tire sizes 6.00-9 and 6.90-9. The industry trend is to size mark the tire 6.90-9 dropping the old 6.00 size designation; however, tires with the 6.90/6.00-9 designation are still in service. The tube marked as shown in column 1 will fit a 6.00-9, 6.90-9, or a 6.90/6.00-9 size marked tire.

Example No. 3. On line 13, page 11, the tube size is shown as 7/8-17.5. In column 3, the table shows that this tube will fit a 7-17.5 or an 8-17.5 size tire. This is industry practice. The 7-17.5 and 8-17.5 tires are separate sizes but the tube marked as shown in column 1 will fit either size tire.

Example No. 4. On line 14, page 19, the tube size is shown as 12.4-38. In column 3, the table shows that this tube will also fit an 11-38 size tire. In actual practice the tube may be marked 12.4-38 (11-38), 12.4/11-38, or 12.4-38. The industry trend is to size mark the tire 12.4-38 and a tube marked as shown in column 1 will fit a 12.4-38 or an 11-38 size tire.

Example No. 5. On line 19, page 25, the tube size is shown as 29.5-35. In column 3, the table shows that this tube will also fit a 33.25-35 size tire. This is industry practice. The 29.5-35 and 33.25-35 tires are separate sizes but the tube marked as shown in column 1 will fit either size tire.

S7.5 Numerical index of National stock numbers. A numerical listing of National stock numbers identified to tube size and valve combinations listed in this standard is shown in Appendix A (see page 29).

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Fed. Std. No. 308B

Table I. Tubes for passenger car and motorcycle tires  
(passenger car tires) AR

(1) Tube group size	(3) IR valve	Fits tire sizes	NSN 2610-00-	Other applications (see S7.1)	Replaces NSN's-2610-00-
F-13	13	5.20-13, 5.60-13, 6.00-13	729-4583		
G-13	13	5.90-13, 6.40-13, 6.50-13	729-4589	AD	
K-13	13	6.70-13, 7.00-13	088-9292	AL	
F-14	13	5.00-14, 5.20-14, 5.60-14 5.90-14, 6.00-14, 6.45-14	177-6891		
G-14	13	6.40-14, 6.50-14, 6.95-14	177-6892		
K-14	13	7.00-14, 7.34-14, 7.50-14 7.75-14	061-0501	AD, AL	729-4590, 889-9110
M-14	13	8.00-14, 8.25-14, 8.50-14, 8.55-14	729-4575		729-4574
P-14	13	8.85-14, 9.00-14, 9.50-14	729-4572		
G-15	13	5.50-15, 5.90-15, 6.00-15, 6.40-15, 6.50-15, 6.85-15, 7.35-15	051-9182		051-9196, 051-9198
K-15	13	6.70-15, 7.10-15, 7.75-15, 8.15-15, 8.25-15	294-4325	AD	051-9184, 051-9190, 555-6617
M-15	13	7.00-15, 7.50-15, 7.60-15 8.00-15, 8.20-15, 8.45-15, 8.55-15, 8.85-15, 9.00-15, 9.15-15	591-2865		051-9202, 275-7912, 275-7915, 826-2920

Table I. Tubes for passenger car and motorcycle tires  
(passenger car tires) (continued) AR

(1) Tube group size	(3) TR valve	Fits tire sizes	NSN 2610-00-	Other applications (see 57.1)	Replaces NSN's-2610-00-
8.90-15	13	8.90-15	266-6650		204-4903
G-16	15	5.50-16, 6.00-16	555-6615		275-7913, 528-7778, 528-7779, 554-1259
K-16	15	6.50-16, 6.70-16, 7.00-16, 7.60-16	555-6614		172-9832, 889-9111, 554-1265, 275-7911, 294-4316
M-16	15	7.50-16, 8.20-16, 8.25-16	555-6611		051-9258
(2)					
(Motorcycle tires) AP					
(1) Tube group size	(3) TR valve	Fits tire sizes	Valve Location Off On	NSN	Replaces NSN's-2610-00
V18-19	4 13	3.25-18, 3.50-18, 3.25-19, 3.50-19, 3.75-19, M90-19	X X	2610-00- 294-4321 051-9330	540-5871
W18-19	13	4.00-18, 4.25-18, 4.50-18, 4.00-19	X	051-9334	294-4300, 275-7917
5.10-16	13 15	5.00-16, 5.10-16	X X	051-9234 424-9920	

(1) Tube group size designation is the designation of an individual tube. The tube is designed to properly fit each of the tire sizes shown in the column titled "Fits tire sizes" (see 57.4).

(2) Motor scooter tires use tubes as listed in table II.

(3) Valve location off centerline of tube.

(4) Valve location related to centerline of tube.

Fed. Std. No. 308B

Table II  
Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube size	TR valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
2.50-4					Use 2.80/2.50-4		
2.80/2.50-4	87	2.50-4		X	764-4421	AJ	
	87A	2.80-4		X	051-9100	AJ	
	87S			X	424-9874	AJ	
3.00-5					Use 3.40/3.00-5		
3.00-7					Use 3.40/3.00-7		
3.00-12					Use 3.50-12		
3.40/3.00-5	87	3.00-5	X		051-9110	AJ	
	87A	3.40-5	X		424-9875	AJ	
	87S		X		424-9876	AJ	
3.40/3.00-7	87	3.00-7 3.40-7		X	051-9120		204-3132, 265-7751
3.50-4					Use 4.10/3.50-4		
3.50-5					Use 4.10/3.50-5		
3.50-6					Use 4.10/3.50-6		
3.50-12	15CW	3.00-12	X		528-7771	AA	528-7726
4-19	15CW				Use 4.00-19		

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube size	TR valve	(1) Also fits tire sizes	(2) Valve location		NSN 2610-00-	Normal applications (see S7.1)	Replaces USN's-2610-00-
			Off	On			
4.00-7					Use 4.80/4.00-7		
4.00-8					Use 4.80/4.00-8		
4.00-9	13			X	269-7364	AA	
4.00-12	15CW			X	528-7772	AA, AB	260-7337, 269-7355
4.00-15	15CW			X	260-7338	AA, AB	269-7403
4.00-18	15CW			X	528-7774	AA	269-7759
4.00-19	15CW	4-19		X	269-7758	AB	
4.00-36	15CW			X	528-7775	AA	554-4389
4.10/3.50-4	87	3.50-4		X	061-0500	AG	
	87A	4.10-4		X	721-7279	AJ, AQ	
	87S			X	155-3905	AJ, AQ	
4.10/3.50-5	13	3.50-5		X	529-8660	AQ	
	87	4.10-5		X	269-7353	AJ, AQ	
	87A			X	721-9293	AJ, AQ	
	87S			X	721-9294	AJ, AQ	
4.10/3.50-6	13	3.50-6		X	889-9831	AQ	260-7334
	87	4.10-6		X	051-9114	AG	
	87A			X	424-9877	AD, AJ, AQ	
	87S			X	424-9878	AD, AJ, AQ	

Fed. Std. No. 309B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
4.30-8					2610-00-		
Use 4.80/4.00-8							
4.50-6							
Use 5.30/4.50-6							
4.50-7							
Use 5.30/4.50-7							
4.50-12							
Use 5.30/4.50-12							
4.80/4.00-7	87	4.00-7 4.80-7	X		051-9126		
4.80/4.00-8	13CW 13 87 87A 87S	4.00-8 4.30-8 4.80-8	X X X X X		528-7709 889-9174 104-1778 104-1779	4D, 4G, AJ, AQ 4D, 4G, AJ AD, 4G, AJ, AQ AD, AJ, AQ AD, 4G, AJ, AQ	898-9754, 051-9138, 500-5884, 604-3306, 528-7764
4.80/4.00-9	13CW 13 87A 87S	4.00-9 4.80-9	X X X X		051-9148 424-9879 424-9880	AD, AJ AD, AJ AD, AJ AD, AJ	
4.80/4.00-12	13CW 87A 87S	4.00-12 4.80-12	X X X		269-7336 424-9881 424-9882	AD, AJ AD, AJ AD, AJ	
5-8	13CW		X		684-1899	AG	
5-12	15CW		X		528-7702	AG	
5.00-8							

Use 5.70/5.00-8



Table II (cont.)

Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

Fed. Std. No. 308B

(1) Tube size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
5.00-15	15CW		X		260-7333	AA, AB	269-7757
5.00-16	15CW		X		294-7640	AA	
5.30/4.50-6	13	4.50-6	X		528-7828	AQ	051-9106
	87	5.30-6	X		089-5995	AG	
	87A		X		721-9301	AD, AJ, AQ	
	87S		X		721-9304	AD, AJ, AQ	
5.30/4.50-7	87	4.50-7	X		051-9130	AA	
		5.30-7					
5.30/4.50-12	13CW	4.50-12	X		269-7356	AD, AJ, AQ	528-7796
	13		X		405-4371	AD, AJ	
	87A	5.30-12	X		721-9305	AD, AJ, AQ	
	87S		X				
5.50-16	15CW		X		528-7757	AA, AB	269-7341, 825-6297
5.70/5.00-8	13CW	5.00-8	X		528-7798	AD, AG, AJ	849-0570, 915-1218
		13	X		405-4372	AD, AG, AJ	
		87A	5.70-8	X		405-4369	
	87S		X			AD, AG, AJ	
5.90-15	15CW		X		Use 5.90/6.40-15		
5.90/6.40-15	15CW	5.90-15	X		528-7760	AA	528-7758
		6.40-15	X			AA	
6-12	13CW		X		528-7703	AG	

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal Applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
6-16	15CW		X		684-1900	AG	
6-30					Use 6.2-30		
6.00-6					Use 6.90/6.00-6		
6.00-9					Use 6.90/6.00-9		
6.00-12					Use 6.90/6.00-12		
6.00-14	13CW		X		061-0498	AB	
6.00-16	15 15CW 135 150		X X X X		350-9975 528-7759 497-6928 900-8636	AJ, AL AA, AB, AJ AL	554-1631, 269-7339
6.00-20	15CW				Use 6.00-21		
6.00-21	15CW	6.00-20	X		528-7802	AA	269-7381, 826-2805
6.2-30	218A	6-30	X		528-7641	AA	
6.40-15	15CW				Use 5.90/6.40-15		
6.50-10	15CW		X		528-7783	AD, AJ	350-9974, 526-7803,
6.50-10	15		X		489-2554	AD, AJ	555-6192
	135		X			AD, AJ	

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
6.50-13	13				2610-00-		Use 6.50-13, Table I
6.50-16	15		X		269-7373	AL	269-7407
	15CW		X		269-7340	AA, AB	
	135		X		405-4364	AL	
	150		X		269-7377	AL	
6.50-20	460			X	350-1964	AX	260-7352, 528-7634, 269-7380
	75A			X		AX	
6.50-36	15CW		X		528-7762	AA	554-1270
6.70/7.10-15	15	6.70-15 7.10-15	X		585-0831	AL	
	13CW		X		555-5676	AA	
6.90/6.00-6	87A	6.00-6	X		721-9311	AJ, AQ	260-7340
	87S	6.90-6	X		721-9312	AJ, AQ	
6.90/6.00-9	13CW	6.00-9	X		528-7789	AD, AJ, AQ	269-7354, 269-7365, 269-7367, 585-1175, 528-7766
	87A	6.90-9	X		889-9158	AD, AJ, AQ	
	87S		X		497-6930	AD, AJ, AQ	
	135		X		089-5997	AJ	
6.90/6.00-12	13CW	6.00-12	X		269-7402	AD, AJ	AD, AJ
	87A	6.90-12	X		721-9313	AD, AJ	
	87S		X		721-9314	AD, AJ	

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
7-14.5					Use 7/8-14.5		
7/8-14.5	300	7-14.5 8-14.5	X		424-9883	AL	
7-16	13CW		X		528-7705	AA	
7-17.5					Use 7/8-17.5		
7/8-17.5	300	7-17.5 8-17.5	X		729-4570	AL	729-4580, 826-0108
7-22.5	300		X		826-0111		729-4579
7-24	218A				Use 7.2-24		
7.00-10	135		X		424-9884	AD	
7.00-12	75A			X	204-3016	AJ	528-7762, 826-2819, 889-9107
7.00-13	13				Use 7.00-13, Table I		
7.00-14	13 13CW		X		Use K-14, Table I 424-9885	AL (Load Range E)	
7.00-15 DC or SDC	15 15CW 135 150		X X X X		051-9204 405-4375 165-3904 051-9224	AL AB AL AL	528-7731

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve location		NSN 2610-00-	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
7.00-15 FB	75A			X	405-4374	AJ, AX	528-7835, 849-4011,
	177A			X	555-5666	AW	881-3324
7.00-16	15		X		269-7332	AL	
	135		X		528-7732	AL	
	150		X		269-7378	AL	
7.00-17	75A			X	051-9306	AX	260-7348, 528-7733, 554-0413, 554-1637
7.00-18	75A			X	269-7343	AX	
7.00-20	75A			X	269-7346	AU, AW, AX	260-7349, 269-7333, 554-1630
7.00-24	75A			X	051-9552	AU	269-7387, 825-7017, 554-1266
7.10-15	15				Use 6.70/7.10-15		
7.2-24	218A	7-24		X	528-7643	AB	
7.5L-15	15CW	7.50L-15		X	424-9886	AB	
7.50-10	75A			X	591-2859	AJ	269-7331, 269-7404, 535-6496,
	15CW		X		569-0817	AB, AD, AJ, AW	702-2862, 882-8666, 889-9828,
	135		X		405-4365	AB, AD, AJ, AW	528-7767
	150CW		X		262-1948	AB, AD, AJ, AW	
7.50-15 DC or SDC	15CW			X	975-4826	AL	889-9827, 702-2858,
	135		X		051-9210	AL	889-9108
	150		X		288-3927	AL	

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN	Normal applications (see S7.1)	Replaces NSNs-2610-00-
			Off	On			
7.50-15 FB	75A			X	528-7712	AJ, AW, AX	725-1293, 889-9827
	177A			X	269-7329	AJ, AW, AX	
7.50-16	15CW		X		269-7760	AA, AB, AL	051-9260, 277-2915, 640-3708
	135		X		204-2074	AL	
	150		X		173-5230	AL	
7.50-17	460			X	260-7346	AX	528-7841
	75A			X		AX	
7.50-18	15CW		X		266-6663	AA, AB	269-7350, 266-6662, 554-1639, 544-1261
	177A			X	269-7344	AW, AX	
	461			X		AW, AX	
7.50-20	15CW		X		227-0354	AA, AB	269-7376, 536-3860, 061-0495, 900-8635
	177A			X	269-7347	AU, AW, AX	
	461			X		AU, AW, AX	
7.50-24	461			X	260-7364	AU	051-9558, 269-7388, 889-9109
	177A			X		AU	
	218A			X	Use 9.5-24		
7.50-36	15CW				Use 9.5-36		
7.60-15	13CW		X		528-7806	AA	
7.75-14	13				Use K-14, Table I		
7.75-15	13				Use K-15, Table I		

Table II (cont.)

Tubes for tires used on trucks, trailers, earthmoving, agricultural  
and industrial vehicles and on motor scooters

Fed. Std. No. 308B

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
8-14.5					Use 7/8-14.5		
8-17.5					Use 7/8-17.5		
8-19.5					Use 8/9-19.5		
8/9-19.5	300	8-19.5 9-19.5	X		729-4581	AX	
8-22.5					Use 8/9-22.5		
8/9-22.5	300	8-22.5 9-22.5	X		826-0112	AX	729-4576, 729-4577, 826-0113
8-24					Use 8.3-24		
8.00-16.5	15CW 150CW		X X		424-9887 424-9888	AL AL	
8.15-15	77A 462				Use 8.25-15		
8.25-15	77A 462			X X	260-7347	AJ, AW, AX AJ, AW, AX	051-9214
8.25-16	150 461 177A		X	X X	528-7847 405-4367	AL AL AL	554-0404
8.25-17	77A 462			X X	528-7849 15	AX AX	

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
8-25-18	77A 462			X	405-4376	AW, AX AW, AX	051-9354
8-25-20	77A 462			X	528-7650	AW, AX AW, AX	051-9440, 528-1139, 528-7711, 051-9442, 085-7135
8-25-24	77A 462			X	260-7335	AU	AU
8-3-24	218A	8-24	X		260-7361	AW	269-7359, 528-7768
8-5L-14	13CW		X		424-9889	AA	
8-75-16.5	15CW 150CW		X X		424-9890 424-9891	AL AL	
9-16					Use 9.5-16		
9-19.5					Use 6/9-19.5		
9-22.5					Use 8/9-22.5		
9-24					Use 9.5-24		
9-32					Use 9.5-32		
9-36					Use 9.5-36		



Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
9.00-10	15CW		X		405-4373	AB, AD, AJ, AW	262-1949, 269-7335,
	13S		X		405-4366	AB, AD, AJ, AW	815-0793, 973-7059
	150CW		X		528-7794	AB, AD, AJ, AW	
9.00-15	175A			X	051-9216	AW, AX	269-7370
	463			X		AW, AX	528-7855
9.00-16	15CW		X		266-6659	AA, AB	051-9268, 894-0366,
	177A			X	051-9266	AL	528-7856, 269-7368,
	461			X		AL	350-1963, 901-9665
9.00-18	175A			X	051-9356	AX	555-6389
	463			X		AX	
9.00-20	175A			X	269-7383	AW, AX	061-0497, 266-6657,
	463			X		AW, AX	350-9976, 900-8637
9.00-24	463			X		AU	
	175A			X	051-9560	AU	051-9566, 052-0002,
	218A		X		555-5669	AA	141-8602, 554-4163
	75A			X		AU	
	460			X		AU	
9.5-16	15CW	9-16	X		528-7644	AA	
	218A		X		424-9892	AH	
9.5-24	218A	7.50-24	X		260-7353	AH	260-7358, 269-7382
		9-24					
9.5-32	218A	9-32	X		269-7397	AH	528-7645

Fed. Std. No. 308B

Table II (cont.) Tires for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
9.5-36	15CW 218A	7.50-36 9-36	X	X	818-3621 528-7652	AA AH	
9.5L-14	13CW	9.50L-14	X		424-9893	AA	
9.5L-15	15CW	9.50L-15	X		424-9894	AA, AB	
9.50-16.5	15CW 150CW		X X		424-9895 424-9896	AL AL	
9.50-20	15CW		X		269-7357	AB	
10-16.5	15CW		X		424-9898	AL	
10-17.5	15CW				Use 10-16.5		
10-22.5	300	10-22.5 10.3-22.5	X		826-0114	AX	729-4578, 826-0115
10-24	218A				Use 11.2-24		
10-28	218A				Use 11.2-28		
10-34	218A				Use 11.2-34		
10-36	218A				Use 11.2-36		
10-38	218A				Use 11.2-38		

Table II (cont.)

Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

Fed. Std. No. 308B

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
10.3-20	464 78A			X	529-5739	AX AX	
10.3-22.5	300				Use 10-22.5		
10.00-15	15CW 78A		X	X	142-5139 260-7354	AA AW, AX	269-7330, 528-7734, 051-9218, 293-4860
10.00-16	15CW		X		424-9899	AB	
10.00-18	464 78A			X	529-5731	AX AX	
10.00-20	464 78A 218A		X	X	260-7345 528-7741	AW, AX AW, AX AT	269-7384
10.00-22	78A			X	260-7342	AX	
10.00-24	464 78A 218A		X	X	260-7341 051-9574	AU, AX AU, AX AT	051-9576, 269-7389, 529-5738, 555-5681
10.50-18					Use 10.50/11.00-18		
10.50/11.00-18	78A 464	10.50-18 11.00-18	X X	X X	051-9362	AX AX	051-9360

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve location		NSN	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
11x4.00-5	13 87S		X		165-3902 424-9901	AG AG	
11-16	15CW				Use 12.4-16		
11-22.5	300				Use 11/12-22.5		
11/12-22.5	300	11-22.5 12-22.5	X		826-0116	AX	729-4585, 729-4586, 826-0117
11-24	218A				Use 12.4-24		
11-24.5	300				Use 11/12-24.5		
11/12-24.5	300	11-24.5 12-24.5	X		826-0119	AX	729-4587, 826-0118, 729-4588
11-26	218A				Use 12.4-26		
11-28	218A				Use 12.4-28		
11-36	218A				Use 12.4-36		
11-38	218A				Use 12.4-38		
11L-14	13CW	11.00L-14	X		424-9902	AA	
11L-15	15CW	11.00L-15	X		424-9903	AA, AB	

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
11L-16	15CW	11.00L-16	X		424-9904	AA	168-9893
11.00-15	464			X	555-5678	AX	
	78A			X		AX	
11.00-16*	15CW		X		528-7815 165-3901	AE	
	150CW		X			AB	
11.00-18					Use 10.50/11.00-18		
11.00-20	464			X	051-9450	AW, AX	266-6649, 540-8847
	78A			X		AW, AX	
11.00-22	464			X	266-6665	AX	269-7386, 529-5745
	78A			X		AX	
11.00-24	464			X	051-9578 Use 11.00/12.00-24 Use 11.00/12.00-24	AX	554-1282
	78A			X		AX	
	220A						
11.00/12.00-24	218A	11.00-24	X		051-9588 260-7363	AT	051-9580
	220A	12.00-24	X			AW	
11.2-24	218A	10-24	X		051-9572	AH	555-6194
11.2-28	218A	10-28	X		260-7359	AH	269-7337

\*This tube used when tire is mounted on 6.50H rim. When 11.00-16 tire is mounted on W8 or W10 rims, use 12.4-16 tube.

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
11.2-34	218A	10-34	X		528-7057	AH	
11.2-36	218A	10-36	X		528-7665	AH	
11.2-38	218A	10-38	X		528-7666	AH	
11.25-24	218A		X		528-7755	AA	
11.25-28	218A		X		424-9906	AA	
12-16.5	15CW		X		424-9907	AL	
12-22.5	300				Use 11/12-22.5		
12-24	218A				Use 13.6-24		
12-24.5	300				Use 11/12-24.5		
12-26	218A				Use 13.6-26		
12-28	218A				Use 13.6-28		
12-36	218A				Use 13.6-36		
12-38	218A				Use 13.6-38		

Table II (cont.)

Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

Fed. Std. No. 308B

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve location		NSN 2610-00-	Normal applications (See 57.1)	Replaces NSN-2610-00-
			Off	On			
12.00/20/21	464			X	051-9454	AF, AW, AX AF, AW, AX	
	78A			X			
12.00-24/25	464			X	269-7390 Use 11.00/12.00-24 Use 11.00/12.00-24	AF, AX AF, AX	
	78A			X			
	218A						
	220A						
12.00-28	218A				Use 13.6-28		
12.4-16	15CW	11-16, 11.00-16	X		774-9081	AH	
12.4-24	218A	11-24	X		975-4825	AH	555-5674
12.4-26	218A	11-26	X		528-7671	AH	
12.4-28	218A	11-28	X		528-7676	AH	269-7338
12.4-36	218A	11-36	X		555-5673	AH	269-7413
12.4-38	218A	11-38	X		528-7678	AH	204-3195
12.5L-15	15CW	11.00-15	X		424-9908	AA	
12.5L-16	15CW	11.00-16	X		424-9909	AA	
13-24	218A				Use 14.9-24		
13-26	218A				Use 14.9-26		

Fed. Std. No. 308B

Table II (cont.)

Tires for tires used on trucks, trailers, earthmoving, agricultural  
and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
13-28	218A				Use 14.9-28		
13-30	218A				Use 14.9-30		
13-38	218A				Use 14.9-38		
13.00-20	465 179A 220A			X X	051-9460 Use 13.00/14.00-20	AF, AX AF, AX	529-5753
13.00/14.00-20	220A	13.00-20 14.00-20	X		051-9462	AT	051-9458, 051-9482
13.00-24/25	465 179A 220A			X X	051-9594 Use 13.00/14.00-24	AF, AX AF, AX	529-5755, 289-7422, 529-5756
13.00/14.00-24	220A	13.00-24 14.00-24	X		555-6613	AT, AW	051-9596, 528-7715, 726-2564, 825-7021
13.50-16.1	15CW 218A		X X		424-9910 424-9911	AA AA	
13.6-24	218A	12-24	X		528-7816	AH	528-7817
13.6-26	218A	12-26	X		528-7681	AH	051-9634
13.6-28	218A	12-28 12.00-28	X		528-7682	AH, AT	



Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	NR Valve	(1) Also fits tire sizes	(2) Valve location		NSN 2610-00-	Normal applications (see 5.7.1)	Replaces NSN's-2610-00-
			Off	On			
13.6-36	218A	12-36	X		528-7683	AH	
13.6-38	218A	12-38	X		294-7639	AH	260-7369
13.9-36	218A		X		424-9912	AH	
14L-16A	15CW				Use 14L-16.1		
14L-16.1	15CW	14L-16A	X		476-6461	AA, AB	
14L-16.1	15		X			AA, AB	
14-17.5	15CW		X		424-9913	AL	
14-24	218A				Use 16.9-24		
14-26	218A				Use 16.9-26		
14-28	218A				Use 16.9-28		
14-30	218A				Use 16.9-30		
14-34	218A				Use 16.9-34		
14-38	218A				Use 16.9-38		
14.00-20/21	465 179A 220A			X X	051-9464 Use 13.00/14.00-20	AF, AM, AX AF, AW, AX	051-9466, 051-9468, 900-8639, 591-2842, 889-9285, 528-7795

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
14.00-24/25	465			X	051-9602	AF, AW, AX	528-7791, 554-1632, 260-7351
	179A 220A			X	Use 13.00/14.00-24	AF, AW, AX	
14.9-24	218A	13-24	X		528-7685	AH	051-9584, 051-9600, 825-7021
14.9-26	218A	13-26	X		528-7687	AH	051-9636
14.9-28	218A	13-28	X		269-7342	AH	269-7394
14.9-30	218A	13-30	X		227-0356	AH	
14.9-36	218A	13-36	X		528-7691	AH	
15-16A	220A				Use 18.4-16.1		
15-19.5	70	16.5-19.5	X		403-5740	AX	
15-22.5	70	16.5-22.5	X		424-9914	AX	
15-24	218A				Use 18.4-24		
15-26	218A				Use 18.4-26		
15-28	218A				Use 18.4-28		
15-30	218A				Use 18.4-30		
15-34	218A				Use 18.4-34		

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve location		NSN 2610-00-	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
15.5-25	SP-4000			X	476-6463	AF	
15.5-38	218A		X		528-7831	AH	
16x6-50-8	13		X		499-8025	AG	
	87S		X		424-9915	AG	
16.00-16	218A		X		528-7832		
16.00-20	220A		X		405-4368	AT	528-7717
	SP-4000				Use 16.00-20/21		
16.00-20/21	SP-4000	16.00-20 16.00-21		X	278-0889	AF	051-9472, 051-9474
16.00-21	SP-4000				Use 16.00-20/21		
16.00-24	220A		X		476-6462	AT, AW	
	SP-4000				Use 16.00-24/25		
16.00-24/25	SP-4000	16.00-24 16.00-25		X	051-9610	AF, AW	051-9618, 051-9626, 288-1691, 591-2844
16.00-25	SP-4000				Use 16.00-24/25		
16.5L-16.1	15CW		X		476-6464	AA	
	218A		X		476-6465	AA	
16.5-19.5	70		X		Use 15-19.5	AX	

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
16.5-22.5	70		X		Use 15-22.5	AX	
16.9-24	218A	14-24	X		528-7829	AH	051-9608, 528-7830
16.9-26	218A	14-26	X		528-7692	AH	
16.9-28	218A	14-28	X		269-7408	AH	260-7366, 269-7398, 528-7693
16.9-30	218A	14-30	X		051-9676	AH	
16.9-34	218A	14-34	X		528-7696	AH	
16.9-38	218A	14-38	X		476-6466	AH	
17.5-25	SP-4000			X	476-6467	AF	
18x9.50-8	13CW		X		424-9916	AG	
	87S		X		424-9917	AG	
18-19.5	70		X		476-6468	AX	
18-22.5	70		X		451-1039	AX	
18-26	218A				Use 23.1-26		
18-30	218A				Use 23.1-30		
18-34	218A				Use 23.1-34		

Table II (cont.)

Tubes for tires used on trucks, trailers, earthmoving, agricultural  
and industrial vehicles and on motor scooters

Fed. Std. No. 308B

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
18.00-24	SP-4000				Use 18.00-24/25		
18.00-24/25	SP-4000	18.00-24 18.00-25		X	051-9628	AF, AW	051-9612, 051-9620, 261-8390
18.00-25	SP-4000				Use 18.00-24/25		
18.00-26	218A		X		409-7790	AT	
18.00-32	SP-4000				Use 18.00-32/33		
18.00-32/33	SP-4000	18.00-32 18.00-33		X	529-5759	AF	
18.00-33	SP-4000				Use 18.00-32/33		
18.00-49	SP-4000			X	476-6471	AF	
18.4-16.1	220A	15-16A	X		529-1699	AH	
18.4-16.1	218A		X			AH	
18.4-24	218A	15-24	X		269-7392	AH	061-0499
18.4-26	218A	15-26	X		528-7697	AH	
18.4-28	218A	15-28	X		269-7395	AH	
18.4-30	218A	15-30	X		528-7698	AH	

Fed. Std. No. 308B

Table II (cont.)

Tubes for tires used on trucks, trailers, earthmoving, agricultural  
and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
18.4-34	218A	15-34	X		528-7700	AF	
18.4-38	218A		X		476-6472	AF AF	
18.4-42	SP-800						
19.5-19.5	70		X		476-6473	AF	
20.5-25	SP-4000			X	476-6474	AF	
20.8-38	218A		X		476-6475	AF	
21.00-24	SP-4000				Use 21.00-24/25		
21.00-24/25	SP-4000	21.00-24 21.00-25		X	204-3617	AF, AW	051-9614, 051-9622, 269-7733, 446-2489
21.00-25	SP-4000				Use 21.00-24/25		
21.00-29	SP-4000			X	828-9403	AF	269-7528, 591-2848
21.00-35	SP-4000			X	476-6476	AF	
21.00-49	SP-4000			X	476-6477	AF	
23x8.50-12	13CW		X		177-7096	AG	
23x8.50-12	13		X			AG	
	875		X		177-7097	AG	

Table II (cont.)

Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

Fed. Std. No. 308B

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
23.1-26	218A	18-26 18.00-26	X		528-7701	AH	
23.1-30	218A	18-30	X		476-6480	AH	
23.1-34	218A	18-34	X		431-8346	AH	
23.5-25	SP-4000		X		529-5760	AF	
24.00-25	SP-4000		X		828-9402	AF, AW	204-0326, 591-2862
24.00-29	SP-4000		X		828-9404	AF, AW	
24.00-32	SP-4000				Use 24.00-32/33		
24.00-32/33	SP-4000	24.00-32 24.00-33	X		828-9405	AF	591-2858, 051-9692, 051-9698
24.00-33	SP-4000				Use 24.00-32-33		
24.00-35	SP-4000		X		476-6481	AF	
24.00-49	SP-4000		X		476-6482	AF	
24.5-32	218A		X		476-6483	AH	
26.5-25	SP-4000		X		529-5761	AF	

Fed. Std. No. 308B

Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see S7.1)	Replaces NSN's-2610-00-
			Off	On			
26.5-29	SP-4000			X	476-6484	AF	
27x8.50-15	13CW		X		424-9919	AG	
27.00-33	SP-4000			X	828-9406		529-5762, 591-2852
27.00-49	SP-4000			X	476-6485	AF	
28.1-26	218A		X		165-3906	AH	
29.5-25	SP-4000			X	529-5763	AF	
29.5-29	SP-4000			X	585-4791	AF	529-5764, 147-5328
29.5-35	SP-4000	33.25-35		X	140-1160	AF	
30.00-33	SP-4000			X	828-8243	AF	
33.25-35	SP-4000				Use 29.5-35		
33.5-33	SP-4000	37.5-33		X	529-5765	AF	
33.5-39	SP-4000	37.5-39		X	476-6487	AF	
36.00-41	SP-4000			X	828-9408	AF, AW	591-2855
36.00-51	SP-4000	37.5-51		X	476-6488	AF, AW	



Table II (cont.) Tubes for tires used on trucks, trailers, earthmoving, agricultural and industrial vehicles and on motor scooters

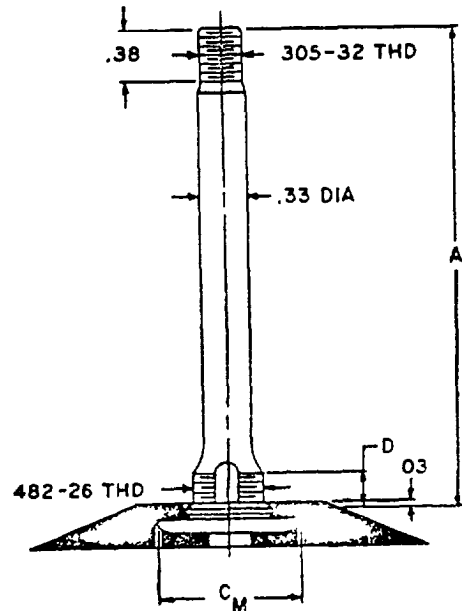
(1) Tube Size	TR Valve	(1) Also fits tire sizes	(2) Valve Location		NSN 2610-00-	Normal applications (see 57.1)	Replaces NSN's-2610-00-
			Off	On			
37.5-33	SP-4000				Use 33.5-33		
37.5-39	SP-4000				Use 33.5-39		
37.5-51	SP-4000				Use 36.00-51		

(1) Tire size designation is same as tube size designation excepting tire sizes shown in column titled "Also fits tire sizes."  
 (2) Valve location related to center line of tube.

Fed. Std. No. 308B

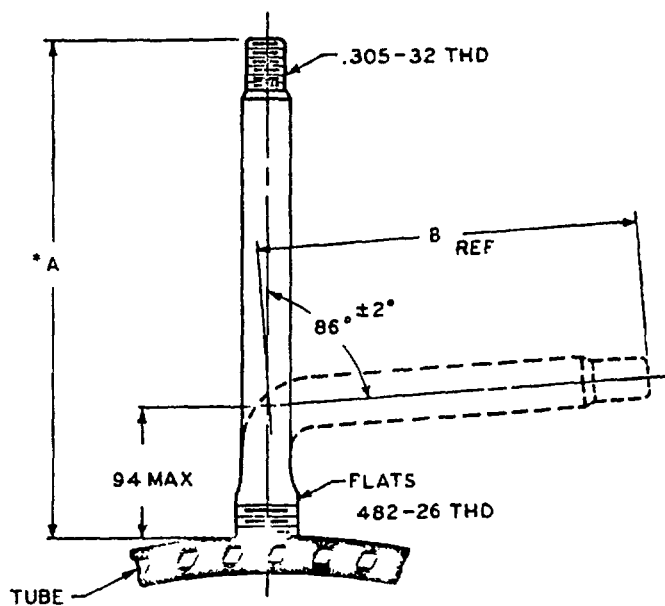
EFFECTIVE DIMENSIONS OF  
CONVERTIBLE VALVES BEFORE BENDING

TR VALVE NO.	A	C M	D <sup>+0.03</sup>
75A	3.78	1.06	.25
76A	4.16	1.06	.25
177A	4.53	1.06	.25
77A	4.91	1.06	.25
175A	5.28	1.06	.25
78A	5.78	1.06	.25
179A	6.34	1.06	.25
460	3.78	1.06	.25
461	4.53	1.06	.25
462	4.91	1.06	.25
463	5.28	1.06	.25
464	5.78	1.06	.25
465	6.34	1.06	.25



NOTE: Valves are also made in two-piece, or interchangeable type. Two-piece valves complete with the base or spud, have the same effective dimensions and carry the same tire and rim association (TR) numbers as the corresponding one-piece valves.

EFFECTIVE DIMENSIONS OF  
 CONVERTIBLE VALVES IN FINISHED TRUCK-BUS TUBES

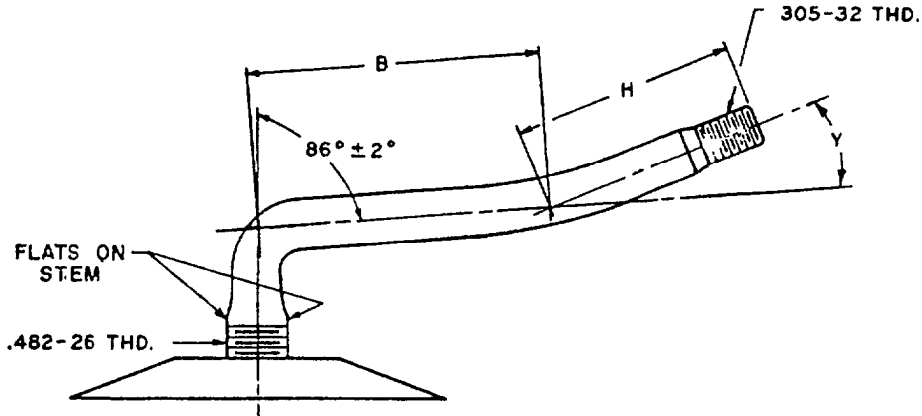


\*Refer to Page B-07 for "A" dimension

TR VALVE NO	B (Ref.)
75A	3.00
76A	3.38
177A	3.75
77A	4.13
175A	4.50
78A	5.00
179A	5.56

NOTE: Valves are also made in two piece, or interchangeable type. Two piece valves, complete with the base or spud, have the same effective dimensions and carry the same Tire and Rim Association (IR) numbers as the corresponding one-piece valves.

**CONVERTIBLE VALVE DIMENSION CHART**  
 For Use in Converting Single Bend Valves Into Other Shapes



TOOL SETTING TO PRODUCE ANGLE "Y"

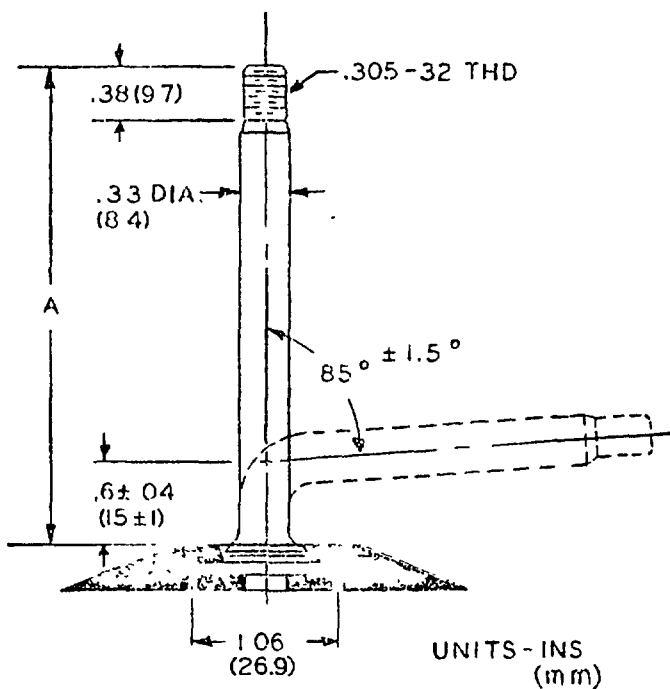
Tool Setting Angle—Y	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	4°	11°	16°	21°	26°	31°	36°	41°	46°	51°	56°	61°	66°	71°	76°	81°	86°

TOOL SETTING TO PRODUCE LENGTHS "H" AND "B"

Tool Setting	Length "H"	LENGTH "B" + .13 — 0							
		TR75A	TR76A	TR177A	TR77A	TR175A	TR78A	TR179A	
12	1.50	1.50	1.88		2.25	2.63	3.00	3.50	4.06
13	1.63	1.38	1.75		2.13	2.50	2.88	3.38	3.94
14	1.75	1.25	1.63		2.00	2.38	2.75	3.25	3.81
15	1.88	1.13	1.50		1.88	2.25	2.63	3.13	3.69
16	2.00		1.38		1.75	2.13	2.50	3.00	3.55
17	2.13		1.25		1.63	2.00	2.38	2.88	3.44
18	2.25		1.13		1.50	1.88	2.25	2.75	3.31
19	2.38				1.38	1.75	2.13	2.63	3.19
20	2.50				1.25	1.63	2.00	2.50	3.06
21	2.63				1.13	1.50	1.88	2.38	2.94
22	2.75					1.38	1.75	2.25	2.81
23	2.88					1.25	1.63	2.13	2.69
24	3.00					1.13	1.50	2.00	2.56
25	3.13						1.38	1.88	2.44
26	3.25						1.25	1.75	2.31
27	3.38						1.13	1.63	2.19
28	3.50							1.50	2.06
29	3.63							1.38	1.94
30	3.75							1.25	1.81
31	3.88							1.13	1.69
32	4.00								1.56
33	4.13								1.44
34	4.25								1.31
35	4.38								1.19
36	4.50								1.06

VALVE CONVERTING TOOL WILL NOT PRODUCE LENGTH "B" LESS THAN 1.13"

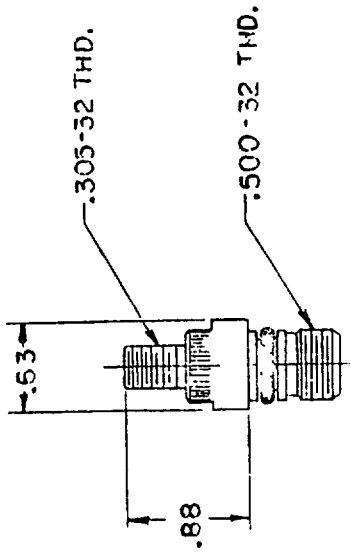
TR 460 SERIES  
EFFECTIVE DIMENSIONS OF CONVERTIBLE VALVES  
IN FINISHED TRUCK-BUS TUBES



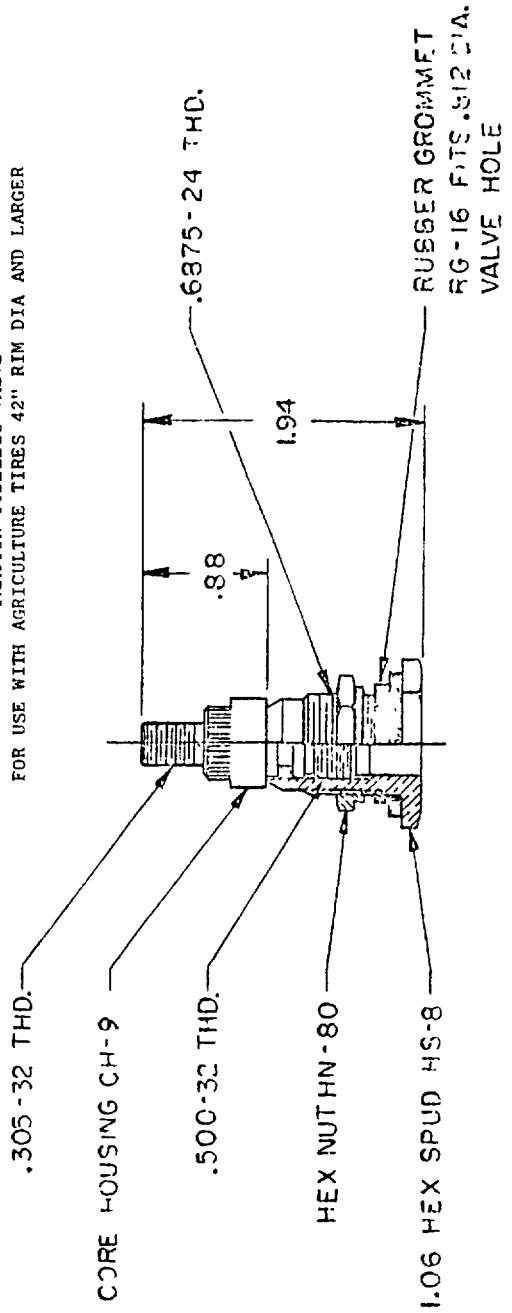
TR VALVE NO	A	FOR EQUIV SERVICE TO TR VALVE NO
460	3.54 (90)	75A
461	4.13 (105)	177A
462	4.53 (115)	77A
463	4.92 (125)	175A
464	5.51 (140)	78A
465	6.10 (155)	179A

NOTE Valves are also made in two-piece, or interchangeable type Two-piece valves, complete with the base or spud, have the same effective dimensions and carry the same tire and rim association (TR) numbers as the corresponding one-piece valves.

TR-CH-9 SUPER LARGE BORE  
TRACTOR TIRE AND TUBE CORE HOUSING  
FOR USE WITH F-900 AND F-910 SUPER LARGE BORE VALVES

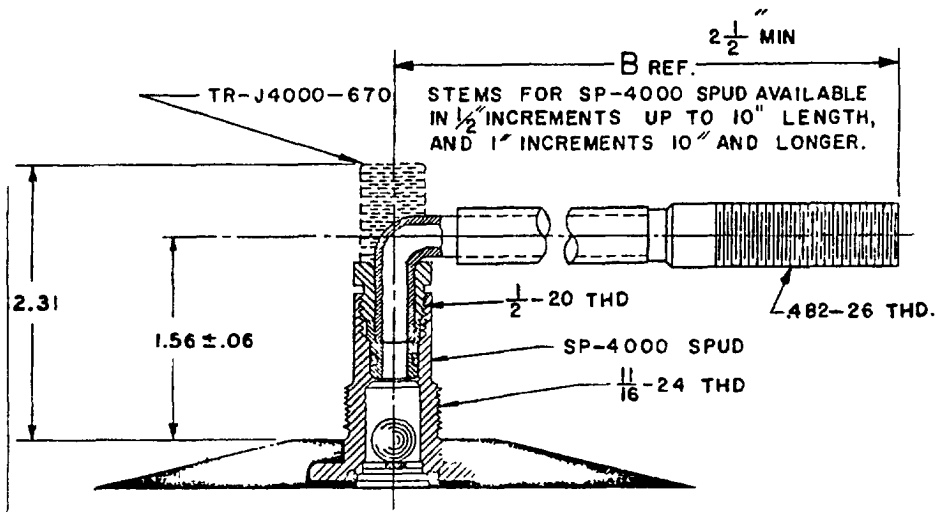
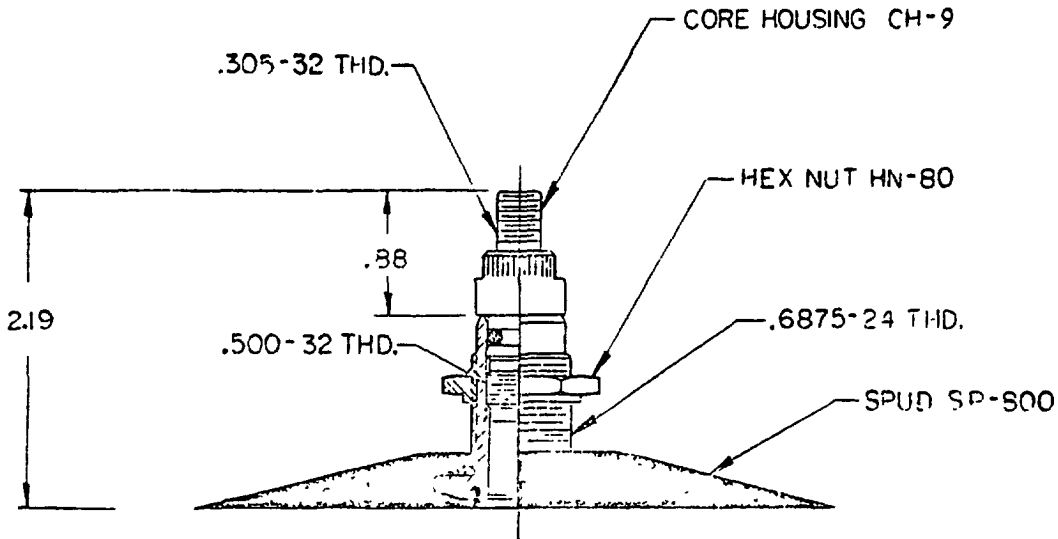


TR-F910 SUPER LARGE BORE  
TRACTOR TUBELESS VALVE  
FOR USE WITH AGRICULTURE TIRES 42" RIM DIA AND LARGER



CDI IN ASSEMBLY CD-0

TR-F900 SUPER LARGE BORE  
TRACTOR VALVE  
FOR USE WITH AGRICULTURE TIRE 42" RIM DIA AND LARGER



NOTE: Stems for TR-J650 and TR-J670 Rim Valves can be used interchangeably with SP-4000 and HS-2 Spunds.

Stems for use with SP-4000 Spunds are specified as TR-J4000 (Horizontal length B Ref.)

Example: For a dimension (BRef.) of 9 1/2", the stem number is TR-J4000-9 1/2".

Numerical index of Federal stock numbers class 2610, identified to tube size and valve combinations used in this standard.

FSN 2610	Tube size	TR valve	FSN 2610	Tube size	TR valve	FSN 2610	Tube size	TR valve
051-9100	2.80/ 2.50-4	87A	204-2074	7.50-16	135	350-1964	6.50-20	75A
9110	3.40/ 3.00-5	87	3016	7.00-12	75A		6.50-20	460
9114	4.10/ 3.50-6	87		7.00-12	460	9915	6.00-16	15
9120	3.40/ 3.00-7	87	3517	21.00-24/25	SP4000	403-5740	15-19.5	70
9126	4.80/ 4.00-7	87	227-0354	7.50-20	15CW	405-4364	6.50-16	135
9130	5.30/ 4.50-7	87	0356	14.9 -30	218A	4365	7.50-10	135
9148	4.80/ 4.00-9	13CW	260-7333	5.00-15	15CW	4366	9.00-10	135
9182	GS-15	13	7335	8.25-24	77A	4367	8.25-16	177A
9204	7.00-15	15		8.25-24	462		8.25-16	461
9210	7.50-15	135	7338	4.00-15	15CW	4368	16.00-20	461
9216	9.00-15	175A	7341	10.00-24	78A	4369	5.70/5.00-8	220A
	9.00-15	463		10.00-24	464	4371	5.30/4.50-12	87S
9224	7.00-15	150	7342	10.00-22	78A	4372	5.70/5.00-8	87A
9234	5.10-16	13		10.00-22	464	4373	9.00-10	15CW
9266	9.00-16	177A	7345	10.00-20	76A	4374	7.00-15	75A
	9.00-16	461		10.00-20	464		7.00-15	460
9306	7.00-17	75A	7346	7.50-17	75A	4375	7.00-15	15CW
	7.00-17	460		7.50-17	460	4376	7.00-15	77A
9330	W18-19	13	7347	8.25-15	77A		8.25-18	77A
9334	18/19	13		8.25-15	462	409-7790	8.25-18	462
9356	9.00-18	175A	7353	9.5 -24	218A	424-9874	18.00-26	218A
	9.00-18	463	7354	10.00-15	78A	9875	2.80/2.50-4	87S
9362	10.50/11.00-18	78A		10.00-15	464	9876	3.40/3.00-5	87A
	10.50/11.00-18	464	7359	11.2 -28	218A	9877	3.40/3.00-5	87S
9450	11.00-20	78A	7361	8.3 -24	218A	9878	4.10/3.50-6	87A
	11.00-20	464	7363	11.00/12.00-24	220A	9879	4.10/3.50-6	87S
9454	12.00-20	78A	7364	7.50-24	177A	9880	4.80/4.00-9	87A
	12.00-20	464		7.50-24	461	9881	4.80/4.00-9	87S
9460	13.00-20	179A	262-1948	7.50-10	150CW	9882	4.80/4.00-12	87A
	13.00-20	465	266-6650	8.90-15	13	9883	4.80/4.00-12	87S
9462	14.00-20	220A	6659	9.00-16	15CW	9884	7.8-14.5	300
9464	14.00-20	179A	6653	7.50-18	15CW	9885	7.00-10	135
	14.00-20	465	6665	11.00-22	78A	9886	7.00-14	13CW
9552	7.00-24	75A		11.00-22	464	9887	7.5L-15	15CW
	7.00-24	460	269-7329	7.50-15	177A	9888	8.00-16.5	15CW
				7.50-15	461	9889	8.00-16.5	15CW
				7.50-15			8.5L-14	15CW



## APPENDIX A

Fed. Std. No. 308B

Numerical Index of Federal Stock Numbers Class 2610, Identified to Tube Size and Valve Combinations used in this standard.

F2610		F2610		F2610		F2610	
F2610	Tube size	TR Valve	F2610	Tube size	TR Valve	F2610	Tube size
051-9560	9.00-24	175A	269-7332	7.00-16	15	424-5890	8.75-16.5
9570	9.00-24	463	7336	4.80/ 4.00-12	13CW	9891	8.75-16.5
9574	11.2-24	218A	7340	6.50-16	15CW	9892	9.5-16
9578	10.00-24	218A	7342	14.9-26	218A	9893	9.5L-14
	11.00-24	78A	7343	7.00-18	75A	9894	9.5L-15
	11.00-24	464		7.00-18	460	9895	9.50-16.5
9588	11.00/12.00-24	218A	7344	7.50-18	177A	9896	9.50-16.5
9594	13.00-24	179A		7.50-18	461	9898	10-16.5
	13.00-24	465	7346	7.00-20	75A	9899	10.00-16
9602	13.00-24	179A		7.00-20	460	9901	11x4.00-5
	14.00-24	465	7347	7.50-20	177A	9902	11L-14
	14.00-24	179A		7.50-20	461	9903	11L-15
9610	16.00-24/25	SP4000		4.10/ 3.50-5	87	9904	11L-16
9628	18.00-24/25	SP4000	7353	5.30/ 4.50-12	13CW	9906	11.25-28
	16.9-30	218A	7356	9.00-20	15CW	9907	11.25-28
061-0498	6.00-14	13CW	7357	4.00-9	13	9908	12-16.5
0500	4.10/ 3.50-4	87	7364	6.50-16	15	9909	12.5L-15
0501	K-14	13	7373	6.50-16	150	9910	12.5L-16
088-9292	K-13	13	7378	7.00-16	150	9911	13.50-16.1
089-5996	5.30/ 4.50-6	87	7383	9.00-20	175A	9912	13.9-36
5997	5.90/ 6.00-9	135		9.00-20	463	9913	14-17.5
104-1778	4.80/ 4.00-8	135	7390	12.00-24	78A	9914	15-22.5
1779	4.80/ 4.00-8	87A		12.00-24	464	9915	16x6.50-8
140-1160	29.5-35	87S		18.4-24	218A	9916	18x9.50-6
142-5139	10.00-15	SP4000	7392	18.4-28	218A	9917	18x9.50-8
165-3901	11.00-16	15CW	7395	9.5-32	218A		
3902	11x4.00-5	13	7397	6.90/ 6.00-12	218A	9919	27x8.50-15
3904	7.00-15	135	7402	16.9-28	13CW	9920	5.10-16
3905	4.10/ 3.50-4	87S	7408	4.00-19	218A		
3906	28.1-26	218A	7758	7.50-16	15CW		
173-5230	7.50-16	150	7760	16.00-20/21	SP4000		
177-6891	F-14	13		7.50-15	150		
6892	G-14	13	278-0889	V18-19	4		
7096	23x8.50-12	13CW	288-3927	K-15	13		
7097	23x8.50-12	87S	294-4321	13.6-38	218A		
			4325	5.00-16	15CW		
			7639				
			7640				

FSN	Tube size	TR valve	FSN	Tube size	TR valve	FSN	Tube size	TR valve
431-934F	23.1-34	218A	528-7732	7.00-16	135	721-9305	5.30/4.50-12	87S
451-1039	1R 22.5	70	7741	10.00-20	218A	9311	6.90/6.00-6	87A
476-6461	14L-16.1	15CW	7755	11.25-24	218A	9312	6.90/6.00-6	87S
6462	16.00-24	220A	7757	5.50-16	15CW	9313	6.90/6.00-12	87A
6463	15.5-25	SP4000	7759	6.00-16	15CW	9314	6.90/6.00-12	87S
6464	16.5L-16.1	15CW	7760	5.90/6.40-15	15CW	729-4570	7/8-17.5	300
6465	16.9-38	218A	7762	6.50-36	15CW	4572	P-14	13
6467	17.5-25	218A	7771	3.50-12	15CW	4575	M-14	13
6468	18-19.5	SP4000	7772	4.00-12	15CW	4581	8/9-19.5	300
6469	18.00-49	70	7774	4.00-18	15CW	4583	F-13	13
6471	18.4-38	218A	7775	4.00-36	15CW	4589	G-13	13
6472	19.5-19.5	70	7783	6.50-10	15CW	764-4421	2.80/2.50-4	87
6473	20.5-25	SP4000	7789	6.90/6.00-9	13CW	774-9081	12.4-16	15CW
6474	20.8-38	218A	7794	9.00-10	15CW	818-3621	9.5-36	15CW
6475	21.00-35	SP4000	7798	5.70/5.00-8	13CW	826-0111	7-22.5	300
6476	21.00-49	218A	7802	6.00-21	15CW	0112	8/9-22.5	300
6477	23.1-30	218A	7806	7.60-15	15CW	0114	10-22.5	300
6480	24.00-35	SP4000	7815	11.00-16	15CW	0116	11/12-22.5	300
6481	24.00-49	SP4000	7816	13.6-24	218A	0119	11/12-24.5	300
6482	24.5-32	218A	7829	5.30/4.50-6	13	828-8243	30.00-33	SP4000
6483	26.5-29	SP4000	7829	16.9-24	218A	9402	24.00-25	SP4000
6484	27.00-49	SP4000	7831	15.5-38	218A	9403	21.00-29	SP4000
6485	33.5-39	SP4000	7832	16.00-16	218A	9404	24.00-29	SP4000
6487	36.00-51	SP4000	7847	8.25-16	150	9405	24.00-32/33	SP4000
6488	6.00-16	135	7849	8.25-17	77A	9406	27.00-33	SP4000
497-6928	6.90/6.00-9	87S	7850	8.25-20	462	9408	36.00-41	SP4000
6930	16x6.50-8	13	529-1699	8.25-20	462	889-9158	6.90/6.00-9	87A
499-8025	11.2-34	218A	5729	15-16A	220A	9174	4.80/4.00-8	87
528-7057	6.2-30	218A	5731	9.4-20	175A	9831	4.10/3.50-6	13
7641	7.2-24	218A	5739	10.00-18	463	975-4825	12.4-24	218A
7643	9.5-16	15CW	5759	10.00-18	464	4826	7.50-15	15CW
7644	9.5-36	218A	5760	10.3-20	78A			
7665	11.2-36	218A	5761	18.00-32/33	464			
7666	12.4-26	218A	5763	23.5-25	SP4000			
7671	12.4-28	218A	5765	26.5-25	SP4000			
7676	12.4-38	218A	8660	29.5-25	SP4000			
7678	13.6-26	218A		33.5-33	SP4000			
7681	13.6-28	218A		4.10/3.50-5	13			
7682								

## APPENDIX A

Fed. Std. No. 309F  
APPENDIX A Continued

FSN 2610	Tube size	TR valve	FSN 2610	Tube size	TR valve
528-7683	13.6-36	218A	555-5666	7.00-15	177A
7685	14.9-24	218A		7.00-15	461
7687	14.9-26	218A	5669	9.00-24	218A
7691	14.9-38	218A	5673	12.4-36	218A
7692	16.9-36	218A	5676	6.70-15	15CV
7696	16.9-34	218A	5678	11.00-15	78A
7697	18.4-26	218A		11.00-15	464
7698	18.4-30	218A	6611	M-16	15
7700	18.4-34	218A	6613	13.00/14.00-24	220A
7701	23.1-26	218A	6614	K-16	15
7702	5-12	15CV	6615	G-16	15
7703	6-12	15CV	569-0817	7.50-10	15CV
7705	7-16	15CV	585-0831	6.70/7.10-15	15
7709	4.80/4.00-8	13CV	4791	29.5-29	SP4000
7712	7.50-15	75A	591-2859	7.50-10	75A
	7.50-15	460	2865	7.50-10	460
			684-1899	M-15	13
			1900	5-8	13CV
			721-7279	6-16	15
			9293	4.10/3.50-4	87A
			9294	4.10/3.50-5	87A
			9301	4.10/3.50-5	87S
			9304	5.30/4.50-6	87A
				5.30/4.50-6	87S

**GENERAL SERVICES ADMINISTRATION - FEDERAL SUPPLY SERVICE  
SPECIFICATION COMMENT SHEET**

BUDGET BUREAU NO.  
**29-R0175**

**INSTRUCTIONS**

This form provides a way for users of this specification to inform the originator of problems encountered in its use. It is not to be used to request changes to accommodate proprietary features. All comments will be considered and appreciated, but please do not expect a reply. To comment detach, complete, fold, staple, and mail. to: Gen Svcs Admin, FSS (FYS), Washington, DC 2040  
NOTE Comments on this form do not constitute or imply authorization to waive any part of the document or serve to amend contractual requirements.

**1. SPECIFICATION**

**Fed. Std. 308B - Inner Tube, Pneumatic Tire**

**2. CONTRACT NO. (If any)**

**3. QUANTITY ON CONTRACT (Optional)**

**4 DOLLAR VALUE (Optional)**

**5. GENERAL NATURE OF PROBLEM (e.g., inspection difficulties, manufacturers unable to meet tolerances, containers collapse under normal warehousing conditions, etc )**

**6. SPECIFIC REQUIREMENTS AFFECTED (Include paragraph number and lines of wording)**

**7. SPECIFIC PROBLEMS (e.g. tests in 4.2.2 will not assure that the battery will last required time, temperature ranges in table 2 do not conform to commercially available items )**

**8. RECOMMENDATIONS**

**9. NAME OF MANUFACTURER, ASSOCIATION, GOVT., AGENCY, ETC.**

**10 ADDRESS (Number, Street, City, State and Zip Code)**

**11. NAME AND TITLE OF SUBMITTER**

**12 DATE**