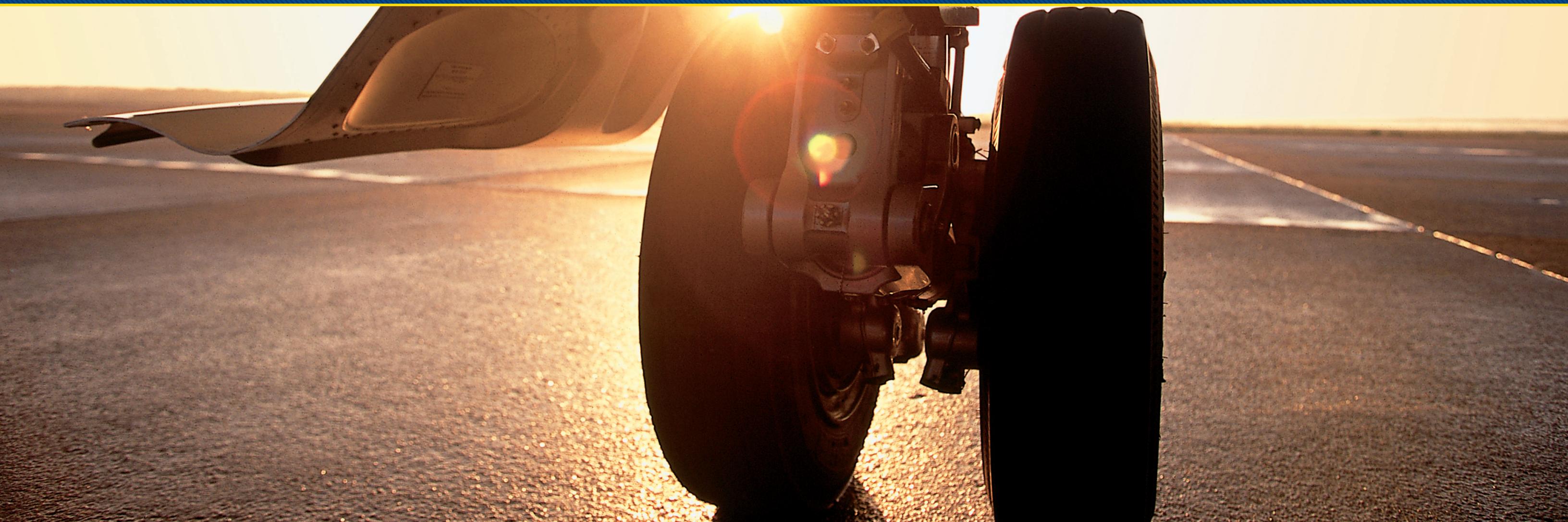


2022

# GOODYEAR AVIATION DATA BOOK



Global Aviation Tires

The Goodyear Tire & Rubber Company  
200 Innovation Way Akron Ohio 44316

**GOOD**  **YEAR**<sup>®</sup>  
AVIATION

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A V I A T I O N

BECAUSE EVERY LANDING COUNTS™



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## SECTION 1 | Introduction

The Goodyear Tire and Rubber Company, founded in 1898, has been producing aircraft tires since 1909 and retreading aircraft tires since 1927.

Goodyear manufactures new aircraft tires in the United States, Brazil, and Thailand. Retreading facilities are located in the United States, Brazil, Thailand, and the Netherlands.

Goodyear aircraft tires meet exacting specifications, are qualified to perform safely and economically, and help withstand the most stringent demands set forth by today's high performance aircraft.

Specific data on the proper tire sizes for different aircraft main and auxiliary/nose gear, speed ratings, nominal inflation pressures, dimensions, and other data needed by users to obtain the maximum service from their aircraft tires are presented in this booklet. Data are included for reference purposes for some tires that are not in the Goodyear authorized line. The data presented supersedes previously published Goodyear data.

The data and general notes for civil aircraft tires are in accordance with Tire & Rim Association Standards. The civil aircraft tire data also conform to Federal Aviation Agency (FAA) Technical Standard Order C-62e, and other applicable standards.

The data for military aircraft are based on military specification MIL-PRF-5041K, unless otherwise indicated.

Loads shown are the recommended maximum for the indicated inflation. For loads less than the maximum, the inflation pressure can be reduced proportionately.

The physical tire data and applications herein are accurate to the best of our knowledge at the time of publication. For questions regarding specific applications, please contact your Goodyear aircraft tire distributor or the aircraft manufacturer for current information.



## SECTION 2 | Tire Lines and Key Attributes



Flight Special II	Flight Custom III	Flight Eagle LT	Flight Eagle	Flight Leader	Flight Radial
Tough General Aviation Tire	Premier General Aviation Tire with the Toughness of Kevlar®	For Today's Light Jet and Very Light Jet Applications	The Industry's Preferred Business Jet Tire	The Bias-Ply Choice for Commercial Aircraft	Weight-Efficient, Cost-Effective, Higher Landings, Performance Tire
<ul style="list-style-type: none"> <li>Wide rib tread design and large footprint for enhanced traction</li> <li>Tough-wearing tread rubber with triple-tempered nylon casing cord to promote uniform wear and extended service life</li> </ul>	<ul style="list-style-type: none"> <li>Deeper tread depth which can achieve more landings</li> <li>Extra-wide Aquachannel Grooves offering superior wet traction</li> <li>Belt package with Kevlar® to enhance treadwear and help dimensional stability</li> <li>Dual polymer tread compound to enhance traction and treadwear</li> </ul>	<ul style="list-style-type: none"> <li>Robust bead area for tough tire casing</li> <li>2-Groove tread design that helps enhance wear pattern and helps wet performance</li> <li>Sidewalls with antioxidants that offers excellent resistance to the weathering effective of sunlight and ozone</li> <li>Special wear-resistant tread compounds to promote more landings per tire</li> </ul>	<ul style="list-style-type: none"> <li>Computer-aided design and wear-resistant tread compounds to promote more landings per tire</li> <li>Unique compound inner-liners to promote air retention</li> <li>Enhanced bead compounds and construction that offers great serviceability and resistance to wheel damage</li> <li>Sidewalls with antioxidants that offers excellent resistance to the weathering effective of sunlight and ozone</li> </ul>	<ul style="list-style-type: none"> <li>Bias-ply construction for high speed performance and greater load capacity</li> <li>Specialized cord body shape to reduce stress as the tire cycles from tension to compression</li> <li>Specially compounded tread design and large contact area to perform in a wide range of operating conditions</li> </ul>	<ul style="list-style-type: none"> <li>Strong, rigid tread belts with enhanced rubber for dimensional stability for longer life and increased cut resistance</li> <li>Radial construction to promote more landings</li> <li>Optimized bead design offering reduced weight</li> </ul>

## SECTION 3 | Definitions and Abbreviations

### TIRE NAME SIZE CLASSIFICATION

<b>Three Part Type</b>	All new sizes being developed are in this classification. NOTE: Some sizes have a letter such as "H" in front of the diameter. This is to identify a tire that is designed for a higher percent deflection.
<b>Radial</b>	Radial size nomenclature is the same as Three Part Type except an "R" replaces the "-" (dash) before the wheel/rim diameter.
<b>Metric Type</b>	This size designation is the same as Three Part except the diameter and section width. Dimensions are in millimeters, and the wheel/rim diameter is in inches.
<b>Type I</b>	Oldest type/description giving outside diameter only.
<b>Type III</b>	This type was one of the earliest size designations used for piston-propeller aircraft. Its characteristic is low pressure for cushioning and flotation.
<b>Type VII</b>	This type covers most of the older sizes and was designed for today's jet aircraft with higher load capacity.

Tire Name Type	Tire Size Example	Nominal Diameter (In)	Nominal Section Width (In)	Nominal Wheel/Rim Diameter (In)
Three Part	49x19.0-20	49	19.0	20
Metric	670x210-12	670 mm	210 mm	12 inches
Type I	27	27	—	—
Type III	8.50-10	—	8.50	10
Type VII	49x17	49	17	—
Radial	32x8.8R16	32	8.8	16

**Ply Rating** The term "Ply Rating" is used to identify a given tire with its maximum recommended load when used in a specific type of service. It is an index of tire strength and does not necessarily represent the number of carcass plies in the tire.

<b>TT or TL</b>	Designates whether the tire is tube-type or tubeless construction
<b>Rated Speed</b>	The maximum speed, normally in miles per hour, to which the tire is qualified.
<b>Rated Load</b>	The maximum load rating in pounds.
<b>Rated Inflation</b>	The inflation pressure required for the tire to support the rated load.
<b>Max Braking Load</b>	The maximum steady braking load which may be applied to a tire.
<b>Max Bottoming Load Part Number</b>	Approximate load required to bottom the tire on the rim at rated inflation pressure. The Goodyear part number assigned to the tire if applicable.
<b>Inflated Dimensions</b>	The dimensions of a new tire inflated to rated inflation pressure.
<b>Static Loaded Radius</b>	The distance from the center of the axle to the deflected tread surface under normal load and inflation pressure.
<b>Flat Tire Radius</b>	The distance from the center of the axle to the deflected tread surface when subjected to bottoming load.
<b>Aspect Ratio</b>	The ratio of tire section height to tire section width.
<b>Wheel</b>	The dimensions of the wheel on which the tire is to be used.
<b>LST</b>	Load, speed, and time curve.
<b>SCD</b>	Specification Control Document.
<b>T&amp;RA</b>	The Tire and Rim Association
<b>U</b>	Universal LST Curve (TSO-C62e)
<b>DT</b>	Deflector Type. (Nosewheel chine)
<b>DDT</b>	Dual Deflector Type.

## SECTION 4A | Three-Part Tire Specifications

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section							
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder							WHEEL										
										Max	Min	Max	Min	Diameter Max	Width Max				Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width								
13.5x6.0-4	14	TL	230	3450	135	5000	10000	Aircraft Rib	461B-3470-TL	13.75	13.2	6.1	5.75	12	5.4	5.35	3.60	0.800	13.5x6.0-4	4.75	4	0.55	0.94								
14.5x5.5-6	LR 2800	TL	210	2800	144	4200	13100	Flight Eagle DT	145K13-1	14.5	14	5.5	5.15	13	4.85	6.4	5.10	0.775	14.5x5.5-6	4.25	6	0.88	1.50								
14.5x5.5-6	8	TL	214	2890	123	4335	8670	Aircraft Rib	461B-3255-TL	14.2	13.7	5.5	5.15	13	4.85	6.1	5.00	0.774	14.5x5.5-6	4.25	6	0.88	1.50								
14.5x5.5-6	14	TL	120	3550	155	5330	10600	Aircraft Rib	145K41-1	14.5	14	5.5	5.15	13	4.85	6.1	5.09	0.774	14.5x5.5-6	4.25	6	0.88	1.50								
15X6.0-6	6	TT	160	1950	68	2830	5300	Flight Special II	156E61-3	15.2	14.55	6.3	5.9	13.55	5.55	6.1	4.80	0.726	6.00-6	5.00	6	0.75	0.85								
15X6.0-6	6	TT	160	1950	68	2830	5300	Flight Special II	156E66B1	15.2	14.55	6.3	5.9	13.55	5.55	6.1	4.80	0.726	6.00-6	5.00	6	0.75	0.85								
15X6.0-6	6	TL	160	1950	68	2830	5300	Flight Special II	156E66T1	15.2	14.55	6.3	5.9	13.55	5.55	6.1	4.80	0.726	6.00-6	5.00	6	0.75	0.85								
15x6.0-6	6	TT	160	1950	68	2830	5300	Flight Custom III	156E66-4	15.2	14.55	6.3	5.9	13.55	5.55	6.1	4.80	0.726	6.00-6	5.00	6	0.75	0.85								
15x6.0-6	10	TL	160	3200	112	4800	8650	Flight Custom II	156E06-1	15.2	14.55	6.55	5.9	13.55	5.75	6.1	4.80	0.727	6.00-6	5.00	6	0.75	—								
15x6.0-6	10	TL	160	3200	112	4640	8600	Flight Eagle LT DDT	156E06B1	15.2	14.55	6.3	5.9	13.55	5.55	6.1	4.90	0.732	6.00-6	5.00	6	0.75	0.90								
15X6.0-6	LR 3410	TL	210	3410	137	5115	10560	Flight Eagle LT DDT	156K23B1	15.2	14.55	6.3	5.9	13.55	5.55	6.3	4.90	0.732	6.00-6	5.00	6	0.75	1.50								
15X6.0-6	LR 3483	TL	210	3483	137	5115	10560	Flight Eagle LT DDT	156E23-1	15.2	14.55	6.3	5.9	13.55	5.55	6.3	4.90	0.732	6.00-6	5.00	6	0.75	1.50								
17.5x5.75-8	10	TL	210	3950	148	5925	11850	Flight Eagle DT	178K03-1	17.5	16.95	5.75	5.4	15.8	5.1	7.4	6.00	0.827	18x5.5	4.25	8	0.88	1.60								
17.5x5.75-8	12	TL	210	5000	180	7500	15000	Flight Eagle	178K23-5	17.5	16.95	5.75	5.4	15.8	5.1	7.4	6.10	0.827	18x5.5	4.25	8	0.88	1.40								
17.5x5.75-8	14	TL	210	6050	220	9080	18200	Flight Eagle	178K43-1	17.5	16.95	5.75	5.4	15.8	5.1	7.4	6.30	0.827	18x5.5	4.25	8	0.88	1.40								
17.5x6.25-6/6.00-6	8	TL	190	2900	70	4200	7800	Flight Special II	175K88-2	17.5	16.85	6.25	5.9	15.45	5.5	6.9	4.80	0.920	6.00-6	5.00	6	0.75	0.90								
17.5x6.25-6	8	TT	190	2350	65	3410	6300	Aircraft Rib DDT	175K88-4	17.5	16.85	6.25	5.9	15.45	5.5	6.9	4.80	0.920	6.00-6	5.00	6	0.75	0.90								
17.5x6.25-6	10	TL	160	3750	90	5650	10150	Flight Special II	175K08-1	17.5	16.85	6.25	5.9	15.45	5.5	6.9	4.80	0.920	6.00-6	5.00	6	0.75	0.65								
17.5x6.25-11	8	TL	139K	3600	167	5400	10800	Smooth	461B-2271-TL	17.7	17.3	6.1	5.7	16.5	5.45	7.95	7.60	0.550	17.5x6.25-11	5.25	11	0.81	1.25								
18x4.25-10	6	TL	210	2300	100	3450	6900	Flight Eagle DT	181K63-2	18.25	17.75	4.7	4.45	16.75	4.15	7.9	6.70	0.874	18x4.25-10	3.63	10	0.60	0.85								
18x5.7-8	18	TL	250	8600	300	12900	25800	Aircraft Rib	461B-3563-TL	17.9	17.3	5.7	5.35	16.2	5	7.55	6.10	0.869	18x5.5	4.25	8	0.88	1.50								
18x5.7-8	20	TL	250	9000	315	13500	27000	Aircraft Rib	461B-3434-TL	17.9	17.3	5.7	5.35	16.2	5	7.55	6.10	0.869	18x5.5	4.25	8	0.88	1.50								
18x5.75-8	8	TL	190	3050	105	4570	9200	Flight Eagle DDT	186K88-5	18	17.4	5.75	5.4	16.2	5.1	7.6	6.00	0.870	18x5.5	4.25	8	0.88	1.25								
18x6.5-8	12	TL	223K	5000	150	7500	15000	Aircraft Rib	461B-3325-TL	18	17.45	6.5	6.2	15.95	5.7	7.7	6.10	0.770	18x6.5-8	5.25	8	0.88	1.50								
19.5x6.75-8	8	TL	210	3300	86	4950	9900	Flight Leader DT	196K83-1	19.5	18.9	6.75	6.2	17.45	5.95	8.05	5.90	0.865	6.50-8	5.25	8	0.81	1.25								
19.5x6.75-8	10	TL	190	4270	110	6400	12800	Aircraft Rib	196K08-9	19.2	18.9	6.35	6.2	17.45	5.95	8.05	6.10	0.865	6.50-8	5.25	8	0.81	1.25								
19.5x6.75-8	10	TL	225	4270	110	6400	12800	Flight Leader DT	196K02B1	19.2	18.9	6.35	6.2	17.45	5.95	8.05	6.10	0.865	6.50-8	5.25	8	0.81	2.00								
H19.5x6.75-10	8	TL	160	4000	120	5800	10800	Flight Eagle	197K86-1	19.5	18.9	6.75	6.35	17.8	5.95	8.25	6.80	0.702	H19.5x6.75-10	4.25	10										

## SECTION 4A | Three-Part Tire Specifications (con.)

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section							
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder							WHEEL										
										Max	Min	Max	Min	Diameter Max	Width Max				Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width								
23x7.00-12	12	TL	210	7800	160	11700	23400	Flight Eagle	237K23-2	23.2	22.6	7.2	6.8	21.15	6.3	9.89	7.90	0.778	23x7.0-12	6.25	12	0.65	1.25								
24x7.25-12	12	TL	190	8150	164	12200	24500	Flight Leader	247R28-1	24.5	23.95	7.5	7	22.25	6.5	10.39	7.80	0.842	24x7.25-12	6.25	12	0.70	1.75								
24x8.0-13	18	TL	230K	12500	285	18750	37500	Aircraft Rib	461B-2506-TL	24	23.4	8	7.55	22	7.05	10.44	8.90	0.688	24x8.0-13	5.75	13	1.00	2.05								
B24x9.5-10.5	18	TL	210	12200	160	18300	32900	Red Streak 700	249K83-3	24	23.3	9.5	8.95	21.6	8.4	9.85	7.69	0.712	B24x9.5-10.5	6.00	10.5	0.88	1.90								
H25x8.0-12	16	TL	210	11300	187	16950	30515	Flight Eagle LT	258K63-2	25	24.4	8	7.55	23.7	7.2	10.5	8.30	0.814	H25x8.0-12	5.25	12	0.98	1.80								
25.5x8.0-14	16	TL	222	13939	285	20230	40455	Aircraft Rib	461B-3233-TL	25.5	24.8	8	7.55	23.14	6.84	12.6	9.40	0.717	25.5x8.0-14	5.75	14	1.00	2.10								
25.5x8.0-14	20	TL	217K	16200	310	23500	43700	Aircraft Rib	461B-3529-TL	25.5	24.8	8	7.55	23.13	6.84	10.94	9.40	0.717	25.5x8.0-14	5.75	14	1.00	2.10								
25.5x8.75-10	14	TL	190	8500	101	12750	22950	Aircraft Rib	259K48G1	25.6	24.7	8.65	8.25	22.85	7.69	10.25	7.20	0.896	24x7.7	5.50	10	0.91	1.50								
25.75x6.75-14	14	TL	210	10300	199	14930	27800	Aircraft Rib	256K43-2 256K43-3 256K43-4	25.75	25.1	6.75	6.35	23.65	5.95	11.2	8.00	0.884	26x6.6	5.00	14	1.00	1.70								
26x6.75-14	16	TL	190	11900	270	17850	35700	Flight Eagle	265K68-2	26	25.3	6.75	6.34	23.85	5.94	11.3	9.60	0.888	26x6.6	5.00	14	1.00	1.90								
26x10.0-11	12	TL	139K	9700	140	14550	30400	Aircraft Rib	461B-3251-TL	26	25.5	10	9.44	23.3	8.8	10.85	7.80	0.758	26x10.0-11	8.00	11	1.00	1.95								
26x10.5-6	6	TL	120	2765	25	4010	7465	Smooth	260K61-1	26	25.1	10.5	9.95	22.4	9.25	9.64	5.00	0.955	9.00-6	6.75	6	0.88	1.45								
H26.5X8.0-14	14	TL	210	10975	189	16475	29590	Flight Leader	269K43-2	26.5	25.9	8	7.55	25.25	7.2	11.3	9.30	0.781	H26.5x8.0-14	5.25	14	1.00	2.00								
27x7.75-15	12	TL	225	9650	200	14475	29000	Flight Leader	275K22-1 275K22T1	27	26.3	7.75	7.3	24.85	6.84	11.8	9.80	0.773	29x7.7	6.00	15	1.00	1.60								
27.75x8.75-14.5	24	TL	225K	21500	320	31175	58050	Aircraft Rib	461B-3537-TL	27.75	27.05	8.75	8.25	21.6	7.48	11.85	9.90	0.759	H27.75x8.75-14.5	6.00	14.5	1.20	2.35								
28x9.0-14	22	TL	185K	18100	280	27150	54300	Aircraft Rib	461B-3140-TL	27.85	27.3	9.1	8.6	25.25	8	12	9.60	0.767	28x9.0-14	7.25	14	1.13	2.25								
H29x9.0-15	16	TL	210	14500	196	21750	39200	Flight Leader	299K63-1	29	28.2	9	8.5	27.7	8.55	12.3	9.89	0.777	H29x9.0-15	6.00	15	0.95	2.15								
29x11.0-10	10	TL	120	7070	60	10250	19100	Aircraft Rib	110T01-3	29	28.1	11	10.4	25.6	9.35	11.4	7.30	0.867	29x11.0-10	8.50	10	1.00	1.10								
29x11.0-10	10	TL	210	7070	69	10605	21210	Aircraft Rib	110T03-1	29	28.1	11	10.4	25.6	9.35	11.39	7.30	0.867	29x11.0-10	8.50	10	1.00	1.40								
H30x9.5-16	16	TL	225	15350	202	23025	46050	Flight Leader	302K62B1	30	29.35	9.5	8.95	28.6	8.55	12.85	10.20	0.741	H30x9.5-16	6.25	16	1.10	2.20								
30x11.50-14.5	24	TL	210K	25000	243	36250	67500	Aircraft Rib	301K45G1	29.75	28.75	11.5	11	27	10.1	12.5	10.30	0.656	30x11.5-14.5	9.75	14.5	1.25	2.75								
30x11.50-14.5	24	TL	215K	25000	243	36250	67500	Aircraft Rib	461B-2573-TL 461B-3197-TL	29.75	28.75	11.5	11	27	10.1	12.5	10.30	0.656	30x11.5-14.5	9.75	14.5	1.25	2.75								
30x11.50-14.5	26	TL	215K	25000	245	36250	67500	Aircraft Rib	461B-3204-TL	29.75	28.75	11.5	11	27	10.1	12.5	10.40	0.656	30x11.5-14.5	9.75	14.5	1.25	2.75								
30x11.50-14.5	26	TL	220K	26600	265	38570	71800	Aircraft Rib	461B-3430-TL	29.75	28.75	11.5	11	27	10.1	12.5	10.40	0.656	30x11.5-14.5	9.75	14.5	1.25	2.75								
H31x9.75-13	12	TL	190	9350	90	14020	24300	Flight Leader	319K28-1	31	30.1	9.75	9.2	27.71	8.3	12.39	8.80	0.925	26.5x8.0-13	6.50	13	1.00	2.05								
31x9.75-14	12	TL	190	11100	115	16650	33300	Flight Leader	318K28-1	30.9	30.1	9.85	9.25	29.35	8.85	12.8	9.30	0.873	31x9.75-14	8.00	14	1.00	2.15								
H31x13.0-12	20	TL	225	17200	155	25800	51600	Flight Leader	313K02-1	31																					

## SECTION 4A | Three-Part Tire Specifications (con.)

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section							
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder							WHEEL										
										Max	Min	Max	Min	Diameter Max	Width Max				Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width								
36x11.0-18	30	TL	227K	35800	305	53700	85150	Aircraft Rib	461B-3477-TL	35.8	34.9	10.4	9.85	34.1	9.35	15.25	12.40	0.856	36x11.0-18	8.50	18	1.75	3.20								
H36x11.5-19	20	TL	225	24925	221	37400	67300	Flight Leader	363K02-1	36	35.25	11.5	10.9	34.3	10.35	15.3	12.40	0.740	H36x11.5-19	7.50	19	1.20	2.60								
H36x12.0-18	18	TL	225	21525	177	32300	58125	Flight Leader	362K82-1	36	35.2	12	11.35	34.2	10.8	15.2	11.80	0.753	H36x12.0-18	7.75	18	1.20	—								
37x11.75-16	12	TL	190	13000	80	18850	35100	Flight Leader	371K28G1	37	36.1	11.75	11.15	33.25	10.35	15.05	10.30	0.897	37x11.75-16	9.25	16	1.00	1.63								
37x14.0-14	24	TL	225	25000	160	37500	75000	Flight Leader	374F42-4	37	36.05	14	13.3	32.85	12.3	15.14	10.50	0.824	37x14.0-14	11.00	14	1.50	3.00								
H37x14.0-15	22	TL	235	24100	165	36150	65000	Flight Leader	375K29-1	37	36.1	14	13.3	33.04	12.3	15.25	10.40	0.788	H37x14.0-15	9.00	15	1.30	2.80								
H38x12.0-19	20	TL	210	25275	192	38000	68300	Flight Eagle	382K03-3	38	37.1	12	11.35	36.1	10.8	16	12.50	0.794	H38x12-19	7.75	19	1.30	2.73								
H38x12.0-19	20	TL	225	25275	192	38000	68300	Flight Eagle	382K02-1	38	37.1	12	11.35	36.1	10.8	16	12.50	0.794	H38x12-19	7.75	19	1.30	2.73								
H38x13.0-18	20	TL	225	25075	172	37625	67730	Flight Leader	383K02-1	38	37.15	13	12.3	36	11.7	15.8	11.80	0.770	H38x13.0-18	8.5	18	1.20	2.40								
H40x14.0-19	20	TL	225	27100	166	39295	73200	Flight Leader	409K02-2	40	39.1	14	13.2	36.25	12	16.6	12.30	0.755	H40x14.0-19	9.00	19	1.20	2.50								
H40x14.5-19	24	TL	225	33200	200	48140	89600	Flight Leader	419K42-3 419K42T1	40	39.1	14.5	13.75	36.25	12.8	16.64	12.70	0.726	H40x14.5-19	9.50	19	1.40	3.10								
H40x14.5-19	26	TL	225	36800	220	53360	99360	Flight Leader	419K62-3 419K62T1 419K62T2	40	39.1	14.5	13.75	36.25	12.8	16.64	12.89	0.726	H40x14.5-19	9.50	19	1.40	3.10								
H40x14.5-19	26	TL	235	36800	220	53360	99360	Flight Leader	419K69T1	40	39.1	14.5	13.75	36.25	12.8	16.64	12.89	0.726	H40x14.5-19	9.50	19	1.40	3.10								
40x15.5-16	28	TL	235	39500	195	57270	106600	Flight Leader	405K89-2	40	39.05	15.5	14.75	35.7	13.64	16.1	11.39	0.777	40x15.5-16	10.00	16	1.25	3.20								
41x15.0-18	24	TL	225	31400	190	47100	94200	Flight Leader	415K42G6	41	40.05	15	14.25	36.9	13.19	17.2	12.50	0.769	41x15.0-18	12.75	18	1.63	3.00								
H41x15.0-19	24	TL	225	33650	187	48800	90900	Flight Leader	416K42-1	41	40.1	15	14.25	38.79	13.5	17	12.90	0.736	H41x15.0-19	9.75	19	1.40	3.10								
H42x16.0-19	26	TL	225	37800	190	56700	102100	Flight Leader	426K62-2	42	41.1	16	15.2	37.9	14.1	17.29	12.89	0.722	H40x14.5-19	9.50	19	1.40	3.10								
43x16.0-20	28	TL	174K	38600	215	56900	115800	Aircraft Rib	461B-3517-TL	43	42.1	16	15.2	38.9	14.15	17.95	13.70	0.722	43x16.0-20	13.00	20	1.75	3.45								
H43.5x16.0-21	26	TL	225	40600	210	60900	109600	Flight Leader	431K62-1	43.5	42.55	16	15.2	41.25	14.4	18.25	14.10	0.706	H44.5x16.5-21	10.50	21	1.60	1.24								
44.5x16.5-18	30	TL	225	42500	195	63750	127500	Flight Leader	456F02-4	44.5	43.5	16.5	15.7	39.7	14.5	18.35	12.80	0.806	44x16	13.25	18	1.63	3.55								
H44.5x16.5-20	28	TL	225	42800	195	64200	115600	Flight Leader	446K82-2	44.5	43.5	16.5	15.7	40.09	14.55	18.35	13.90	0.745	H44.5x16.5-20	10.50	20	1.60	3.50								
H44.5x16.5-21	28	TL	225	44700	214	64800	121000	Flight Leader	441K82-1 441K82T1	44.5	43.5	16.5	15.7	42.2	14.8	18.5	13.50	0.714	H44.5x16.5-21	10.50	21	1.60	3.30								
H44.5x16.5-21	28	TL	235	44700	214	64800	121000	Flight Leader	441K89-1	44.5	43.5	16.5	15.7	42.2	14.8	18.5	13.50	0.714	H44.5x16.5-21	10.50	21	1.60	3.30								
H44.5x16.5-21	30	TL	235	48400	230	70180	130680	Flight Leader	441K09T1	44.5	43.5	16.5	15.7	42.2	14.8	18.5	13.50	0.714	H44.5x16.5-21	10.50	21	1.60	3.30								
B46x16.0-23.5	30	TL	240K	53800	260	80700	161400	Aircraft Rib	461B-3355-TL	46	45.1	16	15.2	42.2	14.1	19.64	15.00	0.707	B46x16.0-23.5	10.50	23.5	1.25	3.15								
H46x18.0-20	28	TL	225	44200	180	64100	119300	Flight Leader	468K82-2	46	45	18	17.15	41.29	15.85	18.85	13.60	0.725	H45x17.0-20	11.00	20	1.60	3.55								
H46x18.0-20	32	TL	235	51100	205	74100	138000	Flight Leader	468K29-2	46	45	18	17.15	41.29	15.85	18.85															

## SECTION 4B | Type I

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section							
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder							WHEEL										
										Max	Min	Max	Min	Diameter Max	Width Max				Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width								
27	10	TL	120	5500	70	7980	14800	Aircraft Rib	270A01B3	27.78	26.95	9.75	—	—	—	11.6	8.80	0.727	27	8.938	14	0.69	—	—	—						

## SECTION 4C | Type III

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section					
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder						Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width					
										Max	Min	Max	Min	Diameter Max	Width Max				Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width						
5.00-4	6	TT	120	1200	55	1740	3200	Aircraft Rib	504C61-2	13.25	12.7	5.05	4.75	11.6	4.3	5.2	3.80	0.916	5.00-4	3.50	4	0.75	0.80	—					
5.00-4	14	TL	120	2550	115	3700	6900	Aircraft Rib	504T41-2	13.25	12.7	5.05	4.75	11.6	4.3	5.2	4.00	0.916	5.00-4	3.50	4	0.75	1.10	—					
5.00-4.5	6	TL	120K	1650	78	2390	4500	Twin Contact	545M6CB1	13.45	12.95	5.3	5	13.2	3.6	5.3	4.00	0.845	5.00-4.5	4.00	4.5	0.65	0.94	—					
5.00-5	4	TT	120	800	31	1160	2200	Flight Special II	505C41-4	14.2	13.65	4.95	4.65	12.55	4.2	5.7	4.30	0.930	5.00-5	3.50	5	0.75	0.80	—					
5.00-5	4	TT	160	800	31	1160	2200	Flight Custom III	505C46-4	14.2	13.65	4.95	4.65	12.55	4.2	5.7	4.30	0.930	5.00-5	3.50	5	0.75	0.80	—					
5.00-5	6	TT	120	1285	50	1860	3500	Flight Special II	505C61-8	14.2	13.65	4.95	4.65	12.55	4.2	5.7	4.30	0.930	5.00-5	3.50	5	0.75	0.80	—					
5.00-5	6	TL	160	1285	50	1860	3500	Flight Special II	505T61-1	14.2	13.65	4.95	4.65	12.55	4.2	5.7	4.30	0.930	5.00-5	3.50	5	0.75	0.80	—					
5.00-5	6	TT	160	1285	50	1860	3500	Flight Custom III	505C66-5	14.2	13.65	4.95	4.65	12.55	4.2	5.7	4.30	0.930	5.00-5	3.50	5	0.75	0.80	—					
5.00-5	10	TT	120	2150	88	3120	5800	Flight Special II	505C01-2	14.2	13.65	4.95	4.65	12.55	4.2	5.7	4.30	0.930	5.00-5	3.50	5	0.75	0.80	—					
5.00-5	10	TL	190	2150	88	3120	5800	Flight Eagle LT	505T08-1	14.2	13.65	4.95	4.65	12.55	4.2	5.7	4.30	0.930	5.00-5	3.50	5	0.75	0.80	—					
6.00-6	4	TT	120	1150	29	1670	3100	Flight Special II	606C41-6	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.80	—					
6.00-6	4	TT	120	1150	29	1670	3100	Flight Special II	606C41B1	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.80	—					
6.00-6	4	TT	160	1150	29	1670	3100	Flight Custom III	606C46-6	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.80	—					
6.00-6	6	TT	120	1750	42	2540	4700	Flight Special II	606C61-6 606C61B1	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.85	—					
6.00-6	6	TT	160	1750	42	2540	4700	Flight Custom III	606C66-8	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.85	—					
6.00-6	8	TT	120	2350	55	3410	6300	Flight Special II	606C81B1	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.90	—					
6.00-6	8	TL	160	2350	55	3410	6300	Aircraft Rib	461B-2297-TL	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.90	—					
6.00-6	8	TT	160	2350	55	3410	6300	Flight Special II	606C86-3	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.90	—					
6.00-6	8	TT	160	2350	55	3410	6300	Flight Custom III	606C86-6 606T86-3	17.5	16.8	6.3	5.9	15.45	5.35	6.9	4.80	0.913	6.00-6	5.00	6	0.75	0.90	—					
6.00-6.5/420x150	4	TT	120	1750	45	2540	4725	Aircraft Rib	607C41-2	17.3	16.8	5.9	5.6	15.25	5	6.95	4.90	0.916	6.00-6.5	3.79	6.5	0.72	0.75	—					
6.50-8	6	TT	160	2300	51	3340	6200	Flight Custom III	658C66-2	19.85	19.15	6.9	6.35	17.7	5.85	8	5.90	0.867	6.50-8	5.25	8	0.81	0.95	—					
6.50-8	8																												

## SECTION 4C | Type III (con.)

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section							
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder							WHEEL										
										Max	Min	Max	Min	Diameter Max	Width Max				Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width								
7.00-6	6	TT	160	1900	38	2760	5100	Flight Custom III	706C66-3	18.75	18	7	6.45	16.45	5.95	7.3	4.80	0.920	6.00-6	5.00	6	0.75	0.70								
7.00-6	8	TT	160	2550	54	3700	6900	Flight Custom III	706C86-3	18.75	18	7	6.45	16.45	5.95	7.3	4.80	0.920	6.00-6	5.00	6	0.75	0.90								
7.00-6	10	TL	160	3600	73	5225	9700	Flight Custom II	706T01-1	18.75	18	7	6.45	16.45	5.95	7.3	4.80	0.920	6.00-6	5.00	6	0.75	0.90								
7.00-8	10	TL	120	4500	84	6750	12150	Rib All Weather	708C01-1	20.85	20.1	7.3	6.84	18.54	6.19	8.35	5.90	0.882	7.00-8	5.50	8	0.81	1.30								
7.00-8	16	TL	130K	6650	125	9640	18000	Aircraft Rib	461B-3294-TL	20.85	20.1	7.3	6.84	18.54	6.19	8.35	6.30	0.882	7.00-8	5.50	8	0.81	1.30								
7.50-14	12	TL	160	8700	130	12620	23500	Aircraft Rib	754C26-2	27.75	27	7.65	7.19	25.29	6.5	11.64	9.10	0.901	7.50-14	5.50	14	0.81	1.65								
8.00-4	4	TT	120	1100	24	1600	3000	Aircraft Rib	804C41-1	18	17.15	8.3	7.8	15.5	7.05	6.65	3.80	0.842	8.00-4	5.50	4	0.69	0.61								
8.00-6	6	TT	120	2050	35	2970	5500	Flight Special II	806C61-5	19.5	18.75	7.95	7.35	17.04	6.75	7.55	4.80	0.857	6.00-6	5.00	6	0.75	0.85								
8.00-6	8	TT	120	2800	48	4060	7600	Flight Special II	806C81-2	19.5	18.75	7.95	7.35	17.04	6.75	7.55	4.80	0.857	6.00-6	5.00	6	0.75	0.85								
8.50-6	6	TL	120	2275	30	3300	6100	Aircraft Rib	856T61-1	22.1	21.15	8.85	8.3	19.2	7.5	8.39	5.00	0.911	8.50-6	6.00	6	0.88	0.90								
8.50-10	8	TT	160	4400	55	6380	11900	Flight Custom III	850C86-2	25.65	24.7	8.7	8.2	22.79	7.4	10.19	6.90	0.898	8.50-10	6.25	10	0.81	1.35								
8.50-10	8	TL	160	4400	55	6380	11900	Flight Custom III	850T86-2	25.65	24.7	8.7	8.2	22.79	7.4	10.19	6.90	0.898	8.50-10	6.25	10	0.81	1.35								
8.50-10	10	Both	120	5500	70	7980	14800	Aircraft Rib	850H0A-1 461B-3332-TL	25.65	24.7	8.7	8.2	22.79	7.4	10.19	6.90	0.898	8.50-10	6.25	10	0.81	1.35								
8.50-10	10	TL	160	5500	70	7980	14800	Flight Custom III	850T06-3	25.65	24.7	8.7	8.2	22.79	7.4	10.19	6.90	0.898	8.50-10	6.25	10	0.81	1.35								
8.50-10	12	TL	139K	8000	100	11600	21600	Aircraft Rib	461B-3388-TL	25.65	24.7	8.7	8.2	22.79	7.4	10.19	7.10	0.898	8.50-10	6.25	10	0.81	1.50								
8.50-10	14	TL	120	8700	110	12600	23500	Aircraft Rib	850G4A-1	25.65	24.7	8.7	8.2	22.79	7.4	10.19	7.10	0.898	8.50-10	6.25	10	0.81	1.15								
8.50-10	16	TL	104K	9900	129	14900	26700	Flight Custom II	850G6A-1	25.65	24.7	8.7	8.2	22.79	7.4	10.19	7.59	0.898	8.50-10	6.25	10	1.13	—								
8.90-12.50	6	TL	160	4300	50	6090	11300	Rib All Weather	892C61B1	27.7	27.3	9	8.67	24.95	7.65	11.35	8.00	0.848	8.90-12.50	6.75	12.5	0.88	1.20								
8.90-12.50	6	TL	160	4300	50	6090	11300	Aircraft Rib	892C66B1	27.7	27.3	9	8.67	24.95	7.65	11.35	8.00	0.848	8.90-12.50	6.75	12.5	0.88	1.20								
9.00-6	10	TL	120	4500	58	6530	12100	Aircraft Rib	906T06-1	22.4	21.4	9.25	8.55	19.45	7.84	8.5	5.10	0.893	9.00-6	6.75	6	0.88	1.45								
9.25-12	8	TL	160	5600	60	8120	15100	Flight Leader	922C86T1	28.2	27.4	9.5	9	25.29	8.1	11.44	8.10	0.853	9.25-12	7.00	12	0.88	1.12								
9.25-12/28x9.00-12	12	TL	160	8850	100	12800	23800	Aircraft Rib	982T26G1	28.3	27.4	9.4	8.9	25.35	8	11.39	8.00	0.865	28x9.0-12	6.63	12	0.75	1.50								
11.00-12	10	TL	160	8200	60	11890	22100	Aircraft Rib	112T06-3	32.2	31	11.2	10.5	28.55	9.5	12.69	8.10	0.902	11.00-12	8.25	12	1.00	1.40								
12.50-16	10	TL	160	10600	60	15370	28600	Aircraft Rib	126G06G1	38.45	37.5	12.75	12	34.4	10.85	15.6	10.50	0.888	12.50-16	10.00	16	1.25	1.80								
12.50-16	12	TL	160	12800	75	18560	34600	Aircraft Rib	461B-1876-TL	38.45	37.5	12.75	12	34.4	10.85	15.6	10.90	0.888	12.50-16	10.00	16	1.25	1.90								
15.00-12	14	TL	160	12700	65	18410	34300	Aircraft Rib	152T46-1	36.3	35.35	14.7	13.95	31.95	12.5	14.1	8.39	0.832	15.00-12	11.00	12	1.00	2.50								
15.00-16	10	TL	160	12200	53	17690	32900	Aircraft Rib	156G06G1	42.4	41.4	15.3	14.4	37.65	13	16.8	10.60	0.871	15.00-16	11.25	16	1.19	1.75								
15.00-16	16	TL	160	19700	80	28560	53200	Aircraft Rib	156T66G1	42.4	41.4	15.3																			

**SECTION 4D | Type VII**

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section							
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder							WHEEL										
										Max	Min	Max	Min	Diameter Max	Width Max				Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width								
16x4.4	4	TL	210	1100	55	1650	3300	Flight Eagle	164F43-2	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	0.80								
16x4.4	6	TT	160	1700	85	2550	5100	Aircraft Rib	164F66-2 461B-2494	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	0.80								
16x4.4	6	TL	210	1700	85	2550	5100	Flight Eagle	164F63-1	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	0.90								
16x4.4	6	TL	210	1700	85	2550	5100	Flight Eagle DT	164F63-2	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	0.90								
16x4.4	10	TL	190	2900	155	4400	7800	Flight Eagle DDT	164F08-2	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	0.80								
16x4.4	10	TL	210	2900	155	4400	7800	Flight Eagle DT	164F03-1	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	0.90								
16x4.4	10	TL	210	2900	155	4400	7800	Flight Eagle DT	164F03-2	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	0.80								
16x4.4	12	TL	190	3475	185	5213	10425	Flight Eagle	164F28-1	16	15.5	4.45	4.15	14.55	3.9	6.9	5.90	0.901	16x4.4	3.50	8	0.81	1.20								
18x4.4	6	TL	174K	2100	100	3150	6300	Aircraft Rib	461B-2741-TL	17.9	17.4	4.45	4.15	16.5	3.9	7.9	6.90	0.889	18x4.4	3.50	10	0.81	1.05								
18x4.4	6	TL	190	2100	100	3150	6300	Aircraft Rib DDT	184F68-1	17.9	17.4	4.45	4.15	16.5	3.9	7.9	6.90	0.889	18x4.4	3.50	10	0.81	1.05								
18x4.4	10	TL	190	3550	185	5320	10600	Aircraft Rib DDT	184F08-1	17.9	17.4	4.45	4.15	16.5	3.9	7.9	7.10	0.889	18x4.4	3.50	10	0.81	1.25								
18x4.4	10	TL	210	3550	185	5320	10600	Flight Eagle DT	184F03-2	17.9	17.4	4.45	4.15	16.5	3.9	7.9	7.10	0.889	18x4.4	3.50	10	0.81	1.25								
18X4.4	10	TL	210	3550	185	5320	10600	Aircraft Rib DDT	184F10-2	17.9	17.4	4.45	4.15	16.5	3.9	7.9	7.10	0.889	18x4.4	3.50	10	0.81	1.25								
18x4.4	10	TL	210	3550	185	5320	10600	Aircraft Rib DDT	184F13-5	17.9	17.4	4.45	4.15	16.5	3.9	7.9	7.10	0.889	18x4.4	3.50	10	0.81	1.25								
18x4.4	12	TL	210	4350	225	6520	13000	Flight Eagle DT	184F23-2	17.9	17.4	4.45	4.15	16.5	3.9	7.9	7.00	0.889	18x4.4	3.50	10	0.81	1.25								
18x4.4	12	TL	210	4350	225	6520	13000	Aircraft Rib DT	184F23-4	17.9	17.4	4.45	4.15	16.5	3.9	7.9	7.00	0.889	18x4.4	3.50	10	0.81	1.25								
18x5.5	8	TT	120	3050	105	4570	9200	Flight Special II	185F81-1	17.9	17.3	5.75	5.35	16.2	5	7.5	5.90	0.869	18x5.5	4.25	8	0.88	1.25								
18x5.5	8	TL	139K	3050	105	4570	9200	Aircraft Rib	461B-3075-TL	17.9	17.3	5.75	5.35	16.2	5	7.5	5.90	0.869	18x5.5	4.25	8	0.88	1.25								
18x5.5	8	TL	190	3050	105	4570	9200	Flight Eagle	185F88-6	17.9	17.3	5.75	5.35	16.2	5	7.5	5.90	0.869	18x5.5	4.25	8	0.88	1.25								
18x5.5	8	TL	210	3050	105	4570	9200	Flight Leader	185F83G1	17.9	17.3	5.75	5.35	16.2	5	7.5	5.90	0.869	18x5.5	4.25	8	0.88	1.25								
18X5.5	10	TL	210	4000	140	6000	12000	Flight Eagle	185F03-5	17.9	17.3	5.75	5.35	16.2	5	7.5	6.10	0.869	18x5.5	4.25	8	0.88	1.25								
18x5.5	10	TL	210	4000	140	6000	12000	Flight Leader DT	185K03-1	17.9	17.3	5.75	5.35	16.2	5	7.5	6.10	0.869	18x5.5	4.25	8	0.88	1.25								
18x5.5	14	TL	239K	6200	215	9300	18600	Aircraft Rib	185P4HG1	17.9	17.3	5.75	5.35	16.2	5	7.5	6.30	0.869	18x5.5	4.25	8	0.88	1.50								
20x4.4	14	TL	255	6500	265	9750	19500	Aircraft Rib	461B-3779-TL	20	19.5	4.45	4.15	19.45	3.95	8.9	8.10	0.901	20x4.4	3.50	12	0.81	1.28								
22x5.5	12	TL	174K	7100	235	10650	21300	Rib All Weather	461B-3247-TL	22.15	21.55	5.7	5.35	21.3	4.95	9.65	8.30	0.890	22x5.5	4.25	12	0.88	1.45								
24x5.5	12	TL	139K	8070	250	12110	24200	Rib All Weather	461B-3246-TL	24.15	23.55	5.7	5.35	23.3	4.95	10.65	9.10	0.887	24x5.5	4.25	14	0.88	1.38								
24x5.5	16	TT	174K	11500	355	17250	34500	Rib All Weather	461B-2482-AS	24.15	23.55	5.7	5.35	23.3	4.95	10.65	9.50	0.887	24x5.5	4.25	14	0.88	1.38								
26x6.6	10	TL	225	6900	155	10350	20700	Flight Leader DT	266F02-6	25.75	25.05	6.65	6.25	23.55	5.85	11.2	9.30	0.884	26x6.6	5.00	14	1.00	1.40								
26x6.6	12	TL	225	8600	185	12900	25800	Flight Leader	266F22-3	25.75	25.05																				

## SECTION 4D | Type VII (con.)

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS						Static Loaded Radius (In)	Flat Tire Radius (In)	Aspect Ratio	WHEEL					Notes Section													
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter		Section Width		Shoulder																							
										Max	Min	Max	Min	Diameter Max	Width Max																						
24.5x8.5	10	TL	210	5700	85	8550	17100	Flight Leader DT	248F03T1	24.5	23.75	8.5	8	21.89	7.5	10.05	7.20	0.856	8.50-10	6.25	10	0.81	1.35														
24.5x8.5	12	TL	160	6900	90	10000	18600	Flight Leader	248P26G1	24.5	23.75	8.5	8	21.9	7.5	9.85	7.09	0.856	8.50-10	6.25	10	0.81	1.35														
30x8.8	16	TL	225	14200	199	21300	42600	Flight Leader	309F62G1	30.3	29.5	8.9	8.3	27.35	7.85	12.94	10.10	0.865	30x8.8	7.00	15	1.13	2.25														
32x8.8	14	TL	210	13000	170	19500	39000	Flight Leader	328F43G1	31	30.05	8.9	8.35	28.05	7.9	13.3	10.40	0.842	32x8.8	7.00	16	1.13	1.75														
34x11	22	TL	225	20500	185	30750	61500	Flight Leader	341F22-2	33.4	32.6	11.3	10.6	29.9	9.94	13.94	10.10	0.867	34x11	9.00	14	1.50	2.70														
36x11	22	TL	190	23300	200	34950	69900	Aircraft Rib	461B-3383-TL	35.1	34	11.5	10.8	31.65	10.1	14.75	11.19	0.832	36x11	9.00	16	1.38	2.90														
36x11	22	TL	225	23300	200	34950	69900	Flight Leader	361F22-2 361F22T1	35.1	34	11.5	10.8	31.65	10.1	14.75	11.19	0.832	36x11	9.00	16	1.38	2.60														
36x11	24	TL	201	26500	235	39750	79500	Aircraft Rib	461B-3219-TL	35.1	34	11.5	10.8	31.65	10.1	14.75	11.00	0.832	36x11	9.00	16	1.38	2.80														
39x13	14	TL	210	15000	100	22500	45000	Flight Leader	393F43-1	38.25	37.3	13	12.25	34.25	11.44	15.8	10.69	0.861	12.50-16	10.00	16	1.25	2.20														
39x13	16	TL	195K	17200	115	25800	51600	Aircraft Rib	461B-2787-TL	38.25	37.3	13	12.25	34.25	11.44	15.8	11.00	0.861	12.50-16	10.00	16	1.25	2.30														
39x13	16	TL	225	17200	115	25800	51600	Flight Leader	393F62G5 393F62T2	38.25	37.3	13	12.25	34.25	11.44	15.8	11.00	0.861	12.50-16	10.00	16	1.25	2.30														
39x13	18	TL	210	19400	130	29100	58200	Flight Leader	393F83-1	38.25	37.3	13	12.25	34.25	11.45	15.8	11.00	0.861	12.50-16	10.00	16	1.38	2.30														
39x13	24	TL	210	27400	188	41100	82200	Flight Leader	393F53-1	38.25	37.3	13	12.25	34.25	11.44	15.85	11.00	0.861	12.50-16	10.00	16	1.38	2.80														
40x14	16	TL	210	17300	105	25950	51900	Flight Leader	404F63T2	39.8	38.85	14	13.25	35.09	12	16.45	10.30	0.856	40x14	11.00	16	1.63	2.40														
40x14	24	TL	225	27700	170	41500	83100	Flight Leader	404F42-9 404F42T2	39.8	38.85	14	13.25	35.09	12	16.45	10.60	0.856	40x14	11.00	16	1.63	2.95														
40X14	28	TL	174K	33500	200	50250	100500	Aircraft Rib	461B-3208-TL	39.8	38.85	14	13.25	35.09	12	16.45	10.80	0.856	40x14	11.00	16	1.63	3.10														
44x16	28	TL	174K	38400	200	57600	115200	Aircraft Rib	461B-2886-TL	43.25	42.3	16	15.05	38.2	13.7	17.95	12.80	0.797	44x16	13.25	18	1.63	3.25														
44x16	30	TL	225	41700	210	62550	125100	Flight Leader	446F02-4	43.25	42.3	16	15.05	38.2	13.7	17.95	12.80	0.797	44x16	13.25	18	1.63	3.40														
46x16	28	TL	195K	41800	210	62700	125400	Flight Leader ER	461B-3562-TL	45.25	44.3	16	15.05	40.7	14.1	19	13.70	0.797	46x16	13.25	20	1.75	3.25														
46x16	28	TL	225	41800	210	62700	125400	Flight Leader	466F82T6	45.25	44.3	16	15.05	40.7	14.1	19	13.70	0.797	46x16	13.25	20	1.75	3.25														
46x16	30	TL	225	44800	225	67200	134400	Flight Leader	466F02-6 461B-3393-TL 466F02T5	45.25	44.3	16	15.05	40.7	14.1	19	14.00	0.797	46x16	13.25	20	1.88	3.40														
46x16	32	TL	225	48000	245	72000	144000	Flight Leader	466F22G1	45.25	44.3	16	15.05	40.7	14.1	19	14.00	0.797	46x16	13.25	20	1.88	3.40														
49x17	26	TL	174K	39600	170	59400	118800	Aircraft Rib	461B-3505-TL	48.75	47.7	17.25	16.4	43	14.5	20.14	13.40	0.838	46x16	13.25	20	1.75	3.25														
49x17	26	TL	195K	39600	170	59400	118800	Aircraft Rib	461B-2688-TL	48.75	47.7	17.25	16.4	43	14.5	20.14	13.40	0.838	46x16	13.25	20	1.75	3.25														
49x17	30	TL	225	46700	195	70050	140100	Flight Leader	497F02-7 497F02T5 497F02T6	48.75	47.7	17.25	16.4	43	14.5	20.2	14.40	0.838	46x16	13.25	20	1.88	3.50														
49x17	32	TL	235	50400	210	75600	151200	Flight Leader	497F29-3 497F29T1	48.75	47.7	17.25	16.4	43	14.5	20.2	14.00	0.838	46x16	13.25	20	1.88	3.65														
56x16	38	TL	217K	76000	315	114000	228000	Aircraft Rib	461B-2403-TL	55.9	54.8	16.2	15.5	50.84	14.26	24	18.80	0.862	56x16	12.75	28	2.25	4.60														

## SECTION 4E | Metric

| Size | CONSTRUCTION | | |
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## SECTION 4F | Radial

Size	CONSTRUCTION			SERVICE RATING				Tread Design / Trademark	Part Number	INFLATED DIMENSIONS (IN)				STATIC LOADED RADIUS (IN)		WHEEL (IN)					Notes Section			
	Ply Rating	TT or TL	Rated Speed (MPH)	Rated Load (Lbs)	Rated Inflation (PSI)	Maximum Braking Load (Lbs)	Maximum Bottoming Load (Lbs)			Outside Diameter	Section Width	Shoulder		Grown Min	Grown Max	Wheel (Rim) Size	Width Between Flanges	Specified Rim Diameter	Flange Height	Min Ledge Width				
										Grown Max	Grown Max	Diameter Max	Width Max											
16x4.4R8	10	TL	225	2900	155	4350	8700	Flight Radial DT	168Q02-1	16.40	4.68	14.90	4.10	6.80	7.05	16x4.4	3.50	8.0	0.812	1.20				
20x4.4R12	14	TL	255	6500	265	9750	14000	Flight Radial	461B-3946-TL	20.40	4.65	19.80	4.10	8.85	9.15	20x4.4	3.50	12.0	0.812	1.30				
21x7.25R10	12	TL	225	6400	166	9600	19200	Flight Radial DT	217Q22-1	21.25	7.2	19.25	6.35	9.05	9.45	22x6.6	5.50	10.0	1	1.95				
21x7.25R10	14	TL	225	7600	198	11400	22800	Flight Radial DT	217Q42-1	21.25	7.2	19.25	6.35	9.05	9.45	22x6.6	5.50	10.0	1	1.95				
23.5x8.0R12	14	TL	190	9475	212	14150	28275	Flight Radial	235Q48-2	24.25	8.35	23.00	7.50	10.10	10.55	23.5x8.0-12	6.25	12.0	1.00	1.00				
25.5x8.0R14	20	TL	217K	16200	310	23500	36500	Flight Radial	461B-3917-TL AP-92-053M1	26.20	8.32	23.70	7.11	10.94	11.35	25.5x8.0-14	5.75	14.0	1.00	2.10				
25.5x8.0R14	20	TL	250	16200	310	23500	36500	Flight Radial		26.20	8.32	23.70	7.11	10.94	11.35	25.5x8.0-14	5.75	14.0	1.00	1.22				
26x6.6R14	14	TL	210	10000	210	15000	30000	Flight Radial	266Q43-3	26.32	6.92	24.02	6.08	11.15	11.60	26x6.6	5.00	14.0	1.00	1.70				
26x6.6R14	14	TL	225	10000	225	15000	30000	Flight Radial	266Q42-1	26.32	6.92	24.02	6.08	11.15	11.60	26x6.6	5.00	14.0	1.00	1.70				
26x6.6R14	14	TL	225	10000	225	15000	30000	Flight Radial	266Q42-3	26.32	6.92	24.02	6.08	11.15	11.60	26x6.6	5.00	14.0	1.00	1.70				
H26.5x8.0R14	14	TL	210	10975	189	16475	36500	Flight Radial	269Q43-2	27.25	8.35	25.90	7.50	11.07	11.86	H26.5x8.0-14	5.25	14.0	1.00	2.00				
26x7.75R13	10	TL	230	8100	125	12150	21200	Flight Radial	461B-3598-TL	27.36	8.32	24.47	7.54	10.60	11.39	26x7.75-13	6.50	13.0	0.70	1.60				
27x7.75R15	12	TL	225	9650	200	14475	28950	Flight Radial	275Q22-1	27.70	8.10	25.40	7.15	11.75	12.20	29x7.7	6.00	15.0	1.00	1.65				
27x7.75R15	12	TL	235	9650	200	14475	28950	Flight Radial	275Q29-1	27.70	8.10	25.40	7.15	11.75	12.20	29x7.7	6.00	15.0	1.00	1.65				
27.75x8.75R14.5	24	TL	225	22200	330	31175	58050	Flight Radial	461B-3790-TL 461B-3792-TL	28.68	9.19	25.31	7.85	11.85	12.30	H27.75x8.75-14.5	6.00	14.5	1.20	2.35				
27.75x8.75R14.5	24	TL	225K	22200	330	31175	58050	Flight Radial		28.68	9.19	25.31	7.85	11.85	12.30	H27.75x8.75-14.5	6.00	14.5	1.20	2.35				
27.75x8.75R14.5	24	TL	250K	22200	330	31175	58050	Flight Radial	461B-3816-TL	28.68	9.19	25.31	7.85	11.85	12.30	H27.75x8.75-14.5	6.00	14.5	1.20	2.35				
30x8.8R15	16	TL	225	14200	199	21300	42680	Flight Radial	309Q62-1	31.10	9.30	29.50	8.30	12.90	13.50	30x8.8	7.00	15.0	1.13	2.10				
30x11.50R14.5	24	TL	205K	27600	335	41400	74525	Flight Radial HH	461B-3708-TL	30.75	11.96	27.82	10.50	12.00	12.65	30x11.5-14.5	9.75	14.5	1.25	1.25				
30x11.50R14.5	24	TL	205K	25000	243	36250	67500	Flight Radial	461B-3924-TL	30.75	11.96	27.82	10.50	12.00	12.65	30x11.5-14.5	9.75	14.5	1.25	2.75				
32x8.8R16	12	TL	190	11000	140	16500	29700	Flight Radial	328Q28-2	31.80	9.25	28.70	8.53	12.40	13.15	32x8.8	7.00	16.0	1.13	1.65				
H34x9.5R18	18	TL	225	19550	221	35100	52805	Flight Radial	349Q82-2	34.80	9.65	33.15	8.70	15.05	14.45	H34x9.5-18	6.00	18.0	1.20	2.28				
H34x10.0R16	14	TL	190	13400	130	20100	36180	Flight Radial	346Q48-1 346Q48-4	34.85	10.40	32.95	9.35	14.00	14.75	32x8.8	7.00	16.0	1.13	2.15				
H35x11.0R18	20	TL	225	23400	216	35100	63200	Flight Radial		351Q02-1	35.97	11.44	34.17	10.30	14.80	15.40	H35x11.0-18	7.00	18.0	1.20	2.73			
36x11.0R18	30	TL	227	35800	305	53700	96660	Flight Radial	461B-3607-TL	36.75	10.92	35.25	8.08	15.25	15.90	36x11.0-18	8.50	18.0	1.75	3.20				
H37.5x12.0R19	-	TL	225	26750	212	38400	69120	Flight Radial	379Q02-2	39.10	12.50	37.05	11.25	15.80	16.50	H37.5x12.0R19	7.75	19.0	1.33	1.52				
H39x12.0R19	22	TL	225	29250	218	43875	82800	Flight Radial	399Q22-1	40.05	12.50	37.95	11.25	16.35	17.15	H39x12.0R19	7.75	19.0	1.38	2.62				
40x16.0R16	26	TL	235	31475	180	47225	94400	Flight Radial	403Q69-1	41.45	16.65	38.90	15.00	16.50	17.40	40x16.0R16	12.50	16.0	1.75	1.95				
42x17.0R18	26	TL	235	36100	194	54150	108300	Flight Radial	427Q69-1	43.50	17.70	40.95	15.95	17.42	18.32	42x17.0-18	14.00	18.0	1.63	2.00				
43x17.5R17	32	TL	235	44500	212	66750	133500	Flight Radial	437Q29-2	44.55</														

## SECTION 5 | Tubes and Valves

### GOODYEAR AIRPLANE INNERTUBES ARE MANUFACTURED TO RIGID STANDARDS

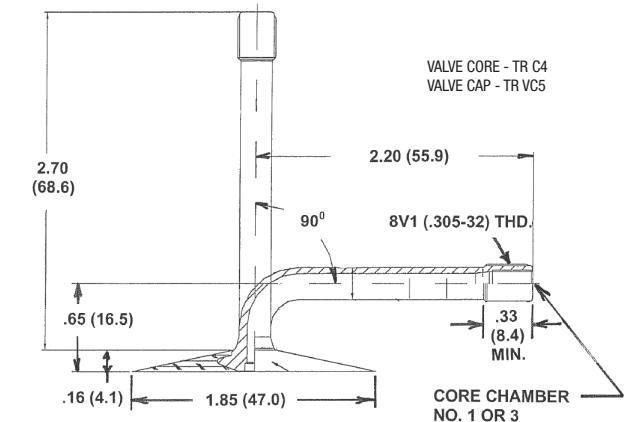
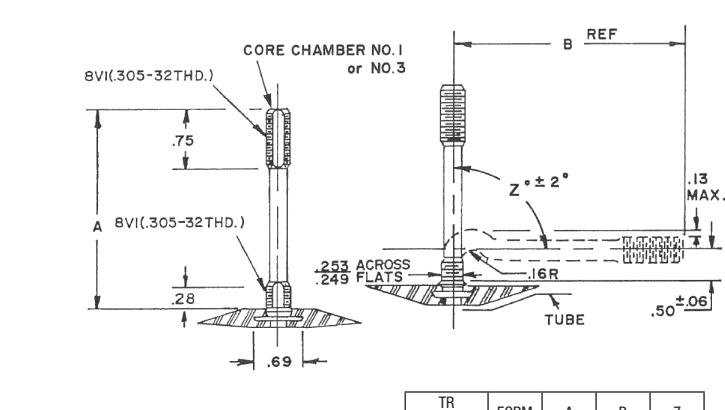
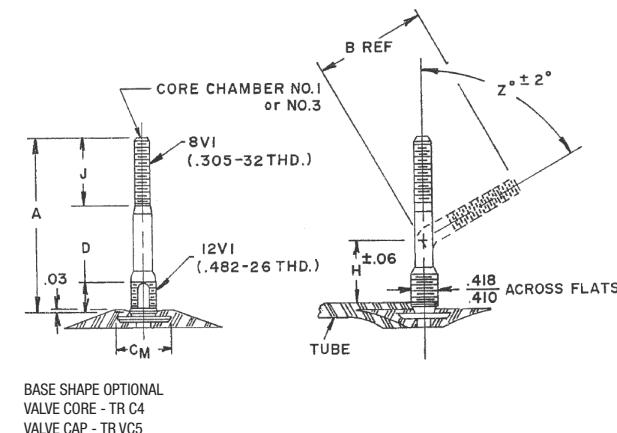
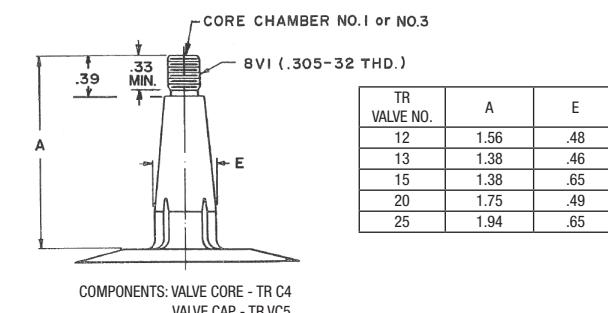
- Meets or exceeds all commercial and military performance requirements.
  - Meets MIL-I-5014 military specification except for packaging.

*All tubes are individually wrapped in .005mm gauge clear plastic and cardboard boxed in various quantities.*
- Made from natural rubber which offers long life and meets cold temperature performance requirements.
- Factory balanced. The heavy spot is marked with a yellow stripe. If it does not have a stripe the valve is considered the heavy spot.
- The valve stem, core and cap are manufactured by Schrader International for aircraft use.
  - Designed for high and low pressure requirements

*High Pressure Cap=Metal (MS20813-1)*  
*Low Pressure Cap=Plastic*

Tube Size	Corresponding Tire Size(s)	Valve Type(s)	Nominal Tube Size			Gross Weight	Valve	
			OD	Width	Wheel Dia		Shape	Location
5.00-4	5.00-4	TR 67, 21AC	13	5.00	4	1	B90°	0
5.00-5	5.00-5, G380x150-5, 15x6.00-5	TR 67, 21AC	13	5.00	5	1	B90°	0
6.50-10	6.50-10	TR 25	22	6.50	10	2	STR	.75"
7.00/8.00-6	7.00-6, 8.00-6	TR 20	18	7.00	6	2	STR	1.0"
8.50-6	8.50-6	TR 20	21.5	8.50	6	3	STR	1.12"
7.50/8.50-10	7.50-10, 8.50-10	TR 25	23	7.50	10	3	STR	.8"
8.90-12.50	29x11.0-10* (7.50-10 Wheel only)	TR 25	27.5	8.90	12.5	6	STR	1.7"
11.00-12	11.00-12	TR 13	31.5	11.00	12	7	STR	1.8"
G15/6.00-6	15x6.00-6	TR 67	15	6.00	6	1	B90°	1.0"
G15/6.00-6	6.00-6, 15x6.00-6	TR 20	15	6.00	6	1	STR	1.0"
G19.5x6.75-8	6.50-8, 19.5x6, 75-8. 22x8.0-8	TR 15	19.5	6.50	8	2	STR	.6"

### Tube Valve Types and Technical Data



- Note:
1. For multiple tire sizes listed, the tube is designed to fit correctly in all identified sizes. Some tube stretch is required for maximum performance.
  2. The nominal tube size reflects the minimum inflated outside tire dimensions and wheel diameter in which the tube will properly operate.  
O.D. = outside diameter at center line, width = overall tire width at the widest point, wheel dia = nominal diameter of wheel, tire bead, and tube opening).
  3. Valve Shape: B = Bent, STR = Straight.
  4. Valve location is the distance the centerline of the valve is located from the centerline of the tube.

## SECTION 6A | General Aviation/Business Aircraft Application Charts

The application information presented within this manual is based on the most current information available and is intended for use as a **GENERAL REFERENCE ONLY**. Any inquiries regarding specific model aircraft should be directed to the applicable airframe manufacturer. Your requirements may vary depending upon the actual configuration of your aircraft. All Goodyear tires are manufactured in accordance with TSO-C62, MIL-T-5041, AIR8505A and/or applicable airframe manufacturer specifications. Additionally, all tire sizes included in this manual may not necessarily be available from Goodyear. Contact your Goodyear Representative for specific tire information and availability.

**FAILURE TO MAKE VERIFICATION WITH THE AIRCRAFT MANUFACTURER AND INSTALLING UNAPPROVED TIRES ON AN AIRCRAFT MAY RESULT IN TIRE FAILURE CAUSING PROPERTY DAMAGE, SERIOUS INJURY, OR LOSS OF LIFE.**

### GENERAL AVIATION/BUSINESS AIRCRAFT

#### LEGEND

- o Tires are low speed unless designated.
- o Tires are tube-type unless otherwise indicated.
- o Consult aircraft manual for individual tire pressure.

#### CODE:

**TL=Tubeless**      **DT = Deflector Type**

**C=Smooth Contour**      **DDT=Dual Deflector Types**



MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Aero Commander	500	Twin Commander	8.50-10	8 TL	6.00-6	6
	500S	Shrike Commander	8.50-10	8 TL	6.00-6	6
	520, 560	Twin Commander	8.50-10	6/8 TL	6.00-6	6
	680, 720	Twin Commander	8.50-10	8 TL	6.00-6	6
Aeronca	Model 7	Champ	6.00-6	4	6x2.00 2.80/2.50-4	—
	Model 11	Chief	6.00-6 7.00-6	4	6x2.00 2.80/2.50-4	—
Aerospatiale	SN 601	Corvette	26x6.6	10 TL	17.5x6.25-6DDT	8 TL
Air Tractor	AT-300 thru 401A		8.50-10	8	5.00-5	6
	AT-401B		8.50-10 29x11.0-10	8 10	5.00-5	6
	AT-402		29x11.0-10	10	5.00-5	6
	AT-502, 504		29x11.0-10	10	5.00-5	6
	AT-602		29x11.0-10	10	17.5x6.25-6	10 TL
Airbus	AT-802		11.00-12	10 TL	17.5x6.25-6	10 TL
	ACJ318/319/320		46x17.0R20	30 TL	30x8.8R15	16 TL
	ACJ321		49x18.0-22	30 TL	30x8.8R15	16 TL
American Champion Aircraft	8GCBC	Scout	8.50-6	4/6	2.80/2.50-4	4
	7ECA, 7GCAA, 7GCBC, 7KCAB	Citabria	6.00-6 7.00-6 8.00-6	4/6	2.80/2.50-4	4
	8KCAB	Decathlon Super Decathlon	6.00-6 7.00-6 8.00-6	4/6	2.80/2.50-4	4
	A-1, 1A, 1B, 1C	Husky	6.00-6 8.00-6 8.50-6 26x10.5-6	4/6 4/6 4/6 6	Solid	—
Aviat	S-1, S-2	Pitts Special	5.00-5	6	Solid	—
	Ayres	S-2R	Thrush	8.50-10 29x11.0-10	10	12.5x4.5
(Snow, Rockwell)	S-2R-T	Thrush	29x11.0-10	10	12.5x4.5	10
	BAe	HS-125	—	23x7.0-12	12 TL	18x4.25-10 DT
Beechcraft	17	Staggerwing	7.50-10	6	10.00SC	—
	18	Twin Beech	11.00-12	8 TL	14.50SC	8 TL
	19	Musketeer Sport	6.00-6	4	6.00-6	4
	23	Musketeer	6.00-6	4	6.00-6	4
	C23	Sundowner	6.00-6	4	6.00-6	4
	24	Sierra	6.00-6	4	5.00-5	4
	33	Debonair	7.00-6	6	5.00-5	4
	35, 36	Bonanza	7.00-6	6	5.00-5	4
	50	Twin Bonanza	8.50-10	6	6.50-10	4
	55, 56, 58	Baron	6.50-8	6/8	5.00-5	6
	58P	Baron	19.5x6.75-8	8/10	5.00-5	6
	60	Duke	19.5x6.75-8	8/10	15x6.0-6	4
	65, 70, 80, 88	Queen Air	8.50x10	8 TL	6.50-10	6 TL
	76	Duchess	6.00-6	6	5.00-5	6
	77	Skipper	15x6.0-6	4	5.00-5	4
	90, 100	King Air	8.50-10	8/10 TL	6.50-10	6 TL
	95	Travel Air	6.50-8 7.00-6	6/8 6	5.00-5	6
	99	Airliner	18x5.5	8 TL	6.50-10	6 TL
	200	Super King Air	18x5.5 22x6.75-10	8/10 TL 8/10 TL	6.50-10 22x6.75-10	8 TL
(Raytheon, Hawker Beechcraft)	300, 350	Super King Air	19.5x6.75-8	10 TL	22x6.75-10	8 TL
	1900		22x6.75-10	8 TL	19.5x6.75-8	10 TL
	1900D		22x6.75-10	10 TL	19.5x6.75-8	10 TL
	2000	Starship 1	H19.5x6.75-10	8 TL	19.5x6.75-8	10 TL
	390	Premier I	H22x8.25-10	12 TL	18x4.4	6 TL
	400, 400XP	Beechjet	24x7.7	16 TL	18x4.4 DDT	10 TL
	700, 750, 800, 850XP, 900XP, 1000	Hawker	23x7.0-12	12 TL	18x4.25-10 DT	6 TL
	4000	Horizon	26x6.6R14	14 TL	18x4.4 DT	12 TL

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Bellanca	14-13	Cruisair	6.00-6 7.00-6	4	6x2.00 2.80/2.50-4	—
	17-30A	Viking	6.00-6	6	15x6.0-6	6/8
	17-31A	Super Viking	6.00-6	6	15x6.0-6	6/8
	17-31ATC	Turbo Viking	6.00-6	6	15x6.0-6	6/8
Boeing	BBJ, BBJ2, BBJ3		H44.5x16.5-21	28 TL	27x7.75-15 27x7.75R15	12 TL
Bombardier	BD-700	Global Express	H38x12.0-19	20 TL	21x7.25-10 DT	12 TL
	BD-700	Global 5000, 6000	H38x12.0-19	20 TL	21x7.25-10 DT	12 TL
	BD-700	Global 5500, 6500	H38x12.0-19	20 TL	21x7.25-10 DT	12 TL
	BD-700	Global 7500	H39x12.0R19	22 TL	21x7.25R10 DT	14 TL
	BD-100	Challenger 300/350	H26.5x8.0-14	14 TL	18x5.5 DT	10 TL
	CL-600/601	Challenger 600/601	25.75x6.75-14	14 TL	18x4.4 DT	12 TL
	CL-604/605/650	Challenger 604/605	H27x8.5-14	16 TL	18x4.4 DT	12 TL
	CRJ200	Challenger 800/850	H29x9.0-15	16 TL	18x4.4 DT	12 TL
Bombardier (Learjet)	LR-23/24/25	Learjet	18x5.5	10 TL	18x4.4 DDT	10 TL
	LR-31/35/35A/36/36A	Learjet	17.5x5.75-8	12 TL	18x4.4 DDT	10 TL
	LR-40/45	Learjet	22x5.75-12	10 TL	18x4.4 DDT	10 TL
	LR-55/60	Learjet	17.5x5.75-8	14 TL	18x4.4 DDT	10 TL
	LR-70/75	Learjet	22x5.75-12	10 TL	18x4.4 DDT	10 TL
Britten-Norman	BN-2	Islander	7.00-6	6	6.00-6	6
	BN-2A MKIII	Trislander	6.50-8	8	6.00-6	6
Cessna	120, 140	—	6.00-6	4	6x2.00 2.80/2.50-4	4
	150, 152	Commuter, Aerobat	6.00-6	4	5.00-5	4
	162	Skycatcher	5.00-5	4	11x4.00-5	8
	172	Skyhawk	6.00-6	4/6	5.00-5	4
	172RG	Cutlass RG	15x6.0-6	6	5.00-5	4
	175	Skylark	6.00-6	4	5.00-5	4
	177	Cardinal	6.00-6	6	5.00-5	4
	177RG	Cardinal RG	15x6.0-6	6	5.00-5	4
	180	Skywagon	6.00-6	6	8.00" SC	6
	182, T182	Skylane	6.00-6	6	5.00-5	6
	182RG, T182RG	Skylane	15x6.0-6	6	5.00-5	4
	185	Skywagon	6.00-6	6	2.80/2.50-4	8
	188	AG Wagon	22x8.0-8 8.50-10	6	10x3.50-4	6
	195	—	6.50-10 6.50-8 7.00-8	6	10.00 SC	—
	205	—	6.00-6	6	5.00-5	6
	206	Station Air	6.00-6 8.00-6	6	5.00-5	6
	207	Skywagon	6.00-6 8.00-6	8	6.00-6	8
	208	Caravan	6.50-10 8.50-10 29x11.0-10	8	6.50-8 22x8.0-8	6
	208B	Grand Caravan	8.50-10 29x11.0-10	8 10	22x8.0-8	6
	210	Centurion	6.00-6	8	5.00-5	6
	T210, P210	Turbo Centurion	6.00-6	8	5.00-5	10
	300, 350, 400, T240	Corvalis	15x6.0-6	6	5.00-5	6
	T303	Crusader	6.00-6	8	6.00-6	6
	310, T310, 320	—	6.50-10	6	6.00-6	6
	335, 340	—	6.50-10	8	6.00-6	6
	336	—	6.00-6	6	15x6.0-6	6
	337	Super Skymaster	18x5.5	8	15x6.0-6	6
	401, 402	—	6.50-10	8	6.00-6	6
	404	Titan	22x7.75-10	10 TL	6.00-6	6
	F406	Caravan II	22x7.75-10	10 TL	6.00-6	6
	411	—	6.50-10	8	6.00-6	6
	414	Chancellor	6.50-10	8	6.00-6	6
	421	Golden Eagle	6.50-10	8	6.00-6	6

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Cessna	425	Conquest I	6.50-10	8	6.00-6	6
	441	Conquest II	22x7.75-10	10 TL	6.00-6	6
	500, 501	Citation I	22x8.00-10	10 TL	18x4.4 DDT	10 TL
	510	Mustang	22x6.75-10	8 TL	16x4.4	8 TL
	525	CJ, CJ1	22x7.75-10	10 TL	18x4.4 DDT	6 TL
	525A	CJ2	22x7.75-10	12 TL	18x4.4 DDT	6 TL
	525B	CJ3	H22x8.25-10	12 TL	18x4.4 DDT	10 TL
	525C	CJ4	H22x8.25-10	14 TL	16x4.4 DT 16x4.4R8 DT	10 TL
	550, 551	Citation II, II/SP	22x8.0-10	10/12 TL	18x4.4 DDT	10 TL
	S550	Citation S/II	22x8.0-10	12 TL	18x4.4 DDT	10 TL
	550B	Bravo	H22x8.25-10	14 TL	18x4.4 DDT	10 TL
	560	Citation V, Ultra	22x8.0-10	12 TL	18x4.4 DDT	10 TL
	560	Encore	H22x8.25-10	14 TL	18x4.4 DDT	10 TL
	560XL	Excel	23.5x8.0R12	12 TL	18x4.4 DDT	10 TL
Cirrus Design	650	Citation III, VI, VII	22x5.75-12	10 TL	18x4.4 DDT	10 TL
	680	Sovereign	26x6.6R14	12 TL	16x4.4R8 DT	10 TL
	680A	Latitude	26x6.6R14	14 TL	16x4.4R8 DT	10 TL
	700	Longitude	26x6.6R14	14 TL	16x4.4R8 DT	10 TL
	750	Citation X	26x6.6R14	12 TL	16x4.4 DT 16x4.4R8 DT	10 TL
	750	Citation X+	26x6.6R14	14 TL	16x4.4 DT	10 TL
	SR20	—	15x6.0-6	6 TT / 10 TL	5.00-5	6 TT / 10 TL
	SR22	—	15x6.0-6	6 TT / 10 TL	5.00-5	6 TT / 10 TL
Dassault	10, 100	Falcon	22x5.75-12	10 TL	18x5.75-8	8 TL
	20, 50, 200	Falcon	26x6.6 26x6.6R14	14 TL	14.5x5.5-6 DT	14 TL
	900	Falcon	29x7.7R15	TL	17.5x5.75R8 DT	TL
	2000, 2000EX	Falcon	26x6.6R14	14 TL	14x5.5R6 DT	—
	7X	Falcon	H32x10.5R16.5	16 TL	16x6.0R6	12 TL
de Havilland Canada	DHC-1	Chipmunk	6.00-6.5	—	3.00-3.5	—
	DHC-2	Beaver	8.50-10	6	5.50-4	6
	DHC-3	Otter	11.00-12	6	6.00-6	6
	DA20	Katana	5.00-5 15x6.0-5	6	5.00-4	6
Diamond	DA20-C1	Eclipse	5.00-5	6	5.00-4	6
	DA40	Diamond Star	6.00-6 15x6.0-6	6	5.00-5	6
	DA42	Twin Star	15x6.0-6	6	5.00-5	10
	500	—	18x5.5 18x5.5R8	8 TL	5.00-5	8 TL
Embraer	EMB 201/202	Ipanema	8.50-10	8	10x3.50-4	4
	EMB 202A	Ipanema	22x8.0-8	6	10x3.50-4	4
	EMB 500	Phenom 100	21x6.5-10	12 TL	15X6.0-6	10 DDT
	EMB 505	Phenom 300	H25x8.0-12	16 TL	15X6.0-6	12 DDT
	EMB 545	Legacy 450/500	H26.5x8.0-14	14 TL		

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Grumman American	AA-1	Yankee Clipper, Trainer, Lynx	6.00-6	4	5.00-5	4
	AA-5	Traveler	6.00-6	4	5.00-5	4
	AA-5A	Cheetah	6.00-6	4	5.00-5	4
	AG-5B	Tiger	6.00-6	6	5.00-5	4
	GA-7	Cougar	6.00-6	6	15x6.0-6	6
	G-164	Ag Cat	8.50-6 8.50-10	6	Solid	—
	G-164A/B/C	Super Ag Cat	8.50-10 29x11.0-10	6 10	10x3.50-4	6
(Grumman)	G-164D	Turbo Ag Cat	8.50-10 29x11.0-10	6 10	10x3.50-4	6
	G-159	Gulfstream I	7.50-14	12 TL	6.50-8	6 TL
	G-1159	Gulfstream II	34x9.25-16	18 TL	21x7.25-10 DT	12 TL
	G100		23x7.00-12	12 TL	16x4.4 DT	6 TL
Gulfstream	G150		23x7.00-12	12 TL	16x4.4R8 DT	10 TL
	G200		26x6.6R14	14 TL	18x4.4 DT	10 TL
	G280		26x6.6R14	14 TL	18x4.4 DT	12 TL
	II, III, IV		34x9.25-16	18 TL	21x7.25-10 DT	12 TL
	GIV-SP, G300, G350, G450		H34x9.25-18	18 TL	21x7.25-10 DT	12 TL
	G500		H34x9.5R18	18 TL	21x7.25R10 DT	12 TL
	GV, G550		H35x11.0-18	20 TL	21x7.25-10 DT	12 TL
	G600		H35x11.0R18	20 TL	21x7.25R10 DT	14 TL
	G650		H37.5x12.0R19	20 TL	21x7.25-10 DT	14 TL
	G700		H37.5x12.0R19	20 TL	21x7.25-10 DT	14 TL
Helio	H-250	Courier	8.00-6 6.50-8	4 6	10.00SC	8
	H-295	Super Courier	8.00-6 6.50-8	6	10.00SC	8
	H-395	Super Courier	8.00-6	6	10.00SC	8
Israel Aircraft Industries	1121	Jet Commander	24x7.7	16 TL	16x4.4	4 TL
	1123	Westwind	24x7.7	16 TL	16x4.4	4 TL
	1124	Westwind	B24x9.5-10.5	18 TL	16x4.4	4 TL
	1125	Astra	23x7.00-12	12 TL	16x4.4 DT	6
	1126	Galaxy	26x6.6R14	14 TL	18x4.4 DT	12 TL
Lake Aircraft	LA-250	Renegade/Seafury	6.00-6	6	5.00-5	4
	LA-4	Buccaneer	6.00-6	4	5.00-4	4
	LA4-200	Amphibian	6.00-6	6	5.00-4	4
Lancair		Legacy	5.00-5	6	5.00-5	4
		Evolution	18x4.4 18x6.5-8	6/10 TL 12 TL	5.00-5	6 TT/TL
Lockheed	—	Jet Star	26x6.6	14 TL	18x4.4 DT	10 TL
	—	Jet Star II	26x6.6	14 TL	18x4.4 DT	12 TL
	SA-60	Azacarte-60	6.50-8	4	6.00-6	4
Luscombe	Model 8	Luscombe 50	6.00-6	4	6x2.00 2.80/2.50-4	—
Mahindra (Gipps)	GA8	Airvan	8.50-6	6	6.00-6	6
Maule Air	M-4	—	7.00-6 8.50-6	4/6	2.80/2.50-4	—
	M-5	Lunar Rocket	7.00-6 8.50-6	4/6	2.80/2.50-4	—
	M-6	Super Rocket	7.00-6 8.50-6	4/6	2.80/2.50-4	—
	M-7	—	7.00-6 8.50-6	4/6	2.80/2.50-4	—
Mitsubishi	MU-2	—	8.50-10	10 TL	5.00-5	6
	MU-300	Diamond I	24x7.7	14 TL	18x4.4 DDT	10 TL
Mooney	M-18	Mite	5.00-5	4	5.00-5 5.00-4	4
	M-20	—	6.00-6	6	5.00-5	4/6
	M-22	Mustang	6.00-6	6	15x6.0-6	6
Navion	A,B,D,E,F	Navion	7.00-8	4	6.00-6	4
(North American, Ryan)	G,H	Rangemaster	6.50-8	6	6.00-6	4
Nextant	400XT	Beechjet	24x7.7	16 TL	18x4.25-10 DT	10 TL
Partenavia	P68C	—	6.00-6	6	5.00-5	6
Piaggio	P180	Avanti, Avanti II	6.50-10	12 TL	5.00-5	8 TL

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Pilatus	PC-6	Porter	24x7.7 11.00-12	6 TL 8 TL	5.00-4	6 TT
	PC-12	—	8.50-10	10 TL	17.5x6.25-6	8 TL
	J-2, J-3	Cub	8.00-4	4	6x2.00 2.80/2.50-4	—
	J-4	Cub Coupe	8.00-4	4	6x2.00 2.80/2.50-4	—
	J-5	Cub Cruiser	8.00-4	4	6x2.00 2.80/2.50-4	—
	PA-11	Cub Special	8.00-4	4	6x2.00 2.80/2.50-4	—
	PA-12	Super Cruiser	8.00-4	4	6x2.00 2.80/2.50-4	—
	PA-14	Family Cruiser	8.00-4	4	6x2.00 2.80/2.50-4	—
	PA-15, PA-17	Vagabond	8.00-4	4	6x2.00 2.80/2.50-4	—
	PA-16	Clipper	8.00-4	4	6x2.00 2.80/2.50-4	—
	PA-18	Super Cub	8.00-4 6.00-6	4	6x2.00 2.80/2.50-4	—
	PA-20	Pacer	8.00-4	4	6x2.00 2.80/2.50-4	—
	PA-22	Tri Pacer	6.00-6	6	6.00-6	6
	PA-23	Apache	7.00-6	6/8	6.00-6	4/6
Piper	PA-23-250, PA-27	Aztec	7.00-6	8	6.00-6	4/6
	PA-24	Comanche	6.00-6	4/6	6.00-6	4/6
	PA-25-150	Pawnee	7.00-6	4	8x3.00-4	4
	PA-25-235/260	Pawnee	8.00-6	4	8x3.00-4	4
	PA-28-140	Cherokee Cruiser	6.00-6	4	6.00-6	4
	PA-28-150/160/180	Cherokee	6.00-6	4	6.00-6	4
	PA-28-151/161	Warrior	6.00-6	4	5.00-5	4
	PA-28-161	Cadet	6.00-6	4	6.00-6	4
	PA-28-180/181	Archer	6.00-6	4	6.00-6	4
	PA-28-201T	Turbo Dakota	6.00-6	4	5.00-5	6
	PA-28R-200/201	Arrow	6.00-6	4/6	5.00-5	4
	PA-28RT-201	Arrow IV	6.00-6	6	5.00-5	4
	PA-28R-201T	Turbo Arrow	6.00-6	6	5.00-5	4
	PA-28RT-201T	Turbo Arrow IV	6.00-6	6	5.00-5	4
PA-28-235	PA-28-235	Pathfinder	6.00-6	6	6.00-6	4
	PA-28-236	Dakota	6.00-6	6	6.00-6	4
	PA-30	Twin Comanche	6.00-6	6	6.00-6	6
	PA-31	Navajo	6.50-10	8	6.00-6	6
	PA-31-350	Chieftain	6.50-10	8	6.00-6	6
	PA-31P	Pressurized Navajo	6.50-10	8	6.00-6	8
	PA-31P-350	Mojave	6.50-10	8	17.5x6.25-6	10
	PA-31T	Cheyenne I/IA/II/IIXL	6.50-10	10	18x4.4 17.5x6.25-6	10 TT
	PA-32-260/300	Cherokee Six	6.00-6	6	6.00-6	4/6
	PA-32-301	Saratoga	6.00-6	8	5.00-5 6.00-6	6
	PA-32R	Lance/Saratoga	6.00-6	8	5.00-5	6
	PA-34	Seneca	6.00-6	8	6.00-6	6
	PA-36	Brave	8.50-10	6	10x3.5-4	6
	PA-38	Tomahawk	5.00-5 6.00-6	4	5.00-5 6.00-6	4
PA-						

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Quest	100	Kodiak	8.50-10 29x11.0-10	8 10	6.50-8 22x8.0-8	8 6
Robin	DR.200		380x150-5	6	380x150-5	6
	DR.300		380x150-5	6	380x150-5	6
	DR.400		380x150-5	6	380x150-5	6
Rockwell	112	Commander	6.00-6	4/6	5.00-5	4/6
	114	Commander	7.00-6	6	5.00-5	6
(North American)	NA-265-40	Sabreliner 40/40A	26x6.75-14	14 TL	18x4.4 DT	10 TL
	NA-265-60	Sabreliner 60	26x6.75-14	14 TL	18x4.4 DT	10 TL
	NA-265-65	Sabreliner 65	26x6.75-14	16 TL	18x4.4 DT	10 TL
	NA-265-80	Sabreliner 75A/80	22x5.75-12	10 TL	18x4.4 DT	10 TL
	NA-265-80SC	Sabreliner 80A (80SC)	22x5.75-12	12 TL	18x4.4 DT	10 TL
Socata	TB 9, 20, 21		15x6.0-6	6	5.00-5	6
	TB 10, 200		6.00-6	6	5.00-5	6
	TB 30		15x6.0-6	6	5.00-4	6
Daher	TBM 700		18x5.5	8 TL	5.00-5	10 TL
	TBM 700C2/850/900		18x5.5	10 TL	5.00-5	10 TL
Syberjet	SJ30		16x4.4	12 TL	16x4.4	6 DT
Taylorcraft	A, B, D		6.00-6	4	6x2.00	—
	F19, F21, F22, F22B		6.00-6	4	6x2.00 8.00-3	—
	F22A, F22C		6.00-6	4	5.00-5	4
	P92		5.00-5	6	5.00-5	6
Tecnam	P2002		5.00-5	6	5.00-5	6
	P2006T		6.00-6	6	5.00-5	6
	P2008		5.00-5	6	5.00-5	6
Thrush Aircraft	S2R-H80	510G	29x11.0-10	10	12.5x4.5	10
(Ayres)	S2R-T34	510P	29x11.0-10	10	5.00-5	10
	S2R-T660	710P	29x11.0-10	10	6.00-6	8
(Rockwell, Gulfstream)	680FL, FLP	Grand Commander	8.50-10	8 TL	6.00-6	6
	680T, V, W	Turbo Commander	8.50-10	8 TL	16x4.4	4 TL
	681, 685, 690, 690A, 690B	Turbo Commander	8.50-10	10 TL	6.00-6	6
	690C	Jetprop 840	8.50-10	10 TL	6.00-6 15x6.0-6	6
	690D	Jetprop 900	24x7.7	16 TL	15x6.0-6	6
	695	Jetprop 980	8.50-10	10 TL	6.00-6 15x6.0-6	6
	695A	Jetprop 1000	24x7.7 8.50-10	16 TL 10 TL	15x6.0-6	6
	RV-3, 4, 6, 7, 8, 9		5.00-5	4/6	11x4.00-5	6
	RV-10		15x6.0-6	4/6	5.00-5	4/6
	RV-12, 14		5.00-5	4/6	5.00-5	4/6



## SECTION 6B | Commercial Aircraft Application Charts

### COMMERCIAL AIRCRAFT

#### LEGEND

- Tires are low speed unless designated.
- Tires are tubeless unless otherwise indicated.

#### CODE:

**TT=Tube-Type**

**DT = Deflector Type**

**DDT=Dual Deflector Type**

MANUFACTURER	MODEL	IDENTIFYING INFO	SPEED (MPH)	MAIN GEAR		NOSE GEAR	
				TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Aerospatiale	SE 210	Caravelle	190/210	35x9.00-17	14/16/18	26x7.75-13	10 DT
(Sud, Nord)	N 262	Nord 262		12.50-16	12	6.00-6	8
(BAC)	—	Concorde	279	47x15.75-22.1	32	31x10.75-14	20
ATR	ATR 42		190	32x8.8R16	12	450x190-5	10
(Airbus/Alenia)	ATR 72		190	H34x10.0R16	14	450x190-5	10
Airbus	A300 B2		225	46x16	28/30/32	40x14 40x14.0R16	24 22/24
	A300 B4		225/235	46x16 49x17 49x19.0-20	28/30 30/32 32/34	40x14 40x14.0R16	24 22/24
	A300-600		225/235	49x17 49x19.0-20	30/32/34	40x14 40x14.0R16	24 22/24
	A310		225/235	46x16 49x17	28/30/32 26/28/30/32	40x14 40x14.0R16	24 22/24
	A318		225	46x16 46x17.0R20	30	30x8.8 30x8.8R15	16
	A319		225	46x16 46x17.0R20	30/32 30	30x8.8 30x8.8R15	16
	A320		225/235	46x17.0R20 46x16 49x17 49x19.0-20 49x18-22 36x11	30 30/32 30/32 32/34 30 22	30x8.8 30x8.8R15	16
	A321		225	49x18.0-22 1270x455R22	30	30x8.8 30x8.8R15	16
	A330		235	54x21.0-23 1400x530R23	32/36	1050x395R16	28
	A340-200/300		235	54x21.0-23 1400x530R23	32/36	1050x395R16	28
British Aerospace (BAe)	A340-500/600		235	1400x530R23	40	45x18.0R17	36
	A350		235	1400x530R23	42	1050x395R16	28
	A380		235	1400x530R23	40	1270x455R22 50x20.0R22	32/34
	3100	Jetstream 31		28x9.00-12	12	6.00-6	6
	3200	Jetstream 32		28x9.00-12	12	6.00-6 17.5x6.25-6	8
(Hawker Siddeley)	4100	Jetstream 41	190	22x6.75-10	10/12	17.5x6.25-6	8
	BAe 146 / Avro RJ			39x13 42x15	22/24 20/22	24x7.7 24.5x8.5	14 12
	HS 748	Avro 748	160	32x10.75-14	12	8.50-10	10 TT
(Vickers)	ATP			34.5x12-14	14	22x6.75-10	8
	VC10		210/225	50x18	24/26	39x13	16
	BAC-111	One-Eleven	210	40x12	16/18/20	24x7.25-12	10/12 DT
Boeing	HS 121	Trident	210	34x9.50-18 36x10.00-18	14 16	29x8.00-15	12
	720		210	46x16	24	39x13	14
	707-120		210	46x16	24	39x13	14
	707-320		210/225	46x16	26/28/30	39x13	16
	717		225	H41x15.0-19	24	26x6.6	12

Manufacturer	Model	Identifying Info	Speed (mph)	Main Gear		Nose Gear	
				Tire Size	Ply Rating	Tire Size	Ply Rating
Boeing	727		225	49x17 50x21.0-20	30	32x11.50-15	12 DT
	737-100		210/225	40x14	24	24x7.7	16
	737-200		210/225	40x14 H40x14.5-19	24 24/26	24x7.7	16
	737-300/400/500		225	H40x14.5-19 H42x16.0-19	24/26	27x7.75-15 27x7.75R15	12
	737-600/700		225/235	H43.5x16.0-21 H44.5x16.5-21	26 28/30	27x7.75-15 27x7.75R15	12
	737-700ER/800/900		225/235	H44.5x16.5-21	28/30	27x7.75-15 27x7.75R15	12
	737-900ER		235	H44.5x16.5-21	30	27x7.75-15 27x7.75R15	12
	737-7/8		235	H44.5x16.5R21	30	27x7.75R15	12
	737-9		235	H44.5x16.5R21	32	27x7.75R15	12
	747-100		225	46x16	28/30/32	46x16	28/30/32
	747SP		225	46x16 49x17	28/30/32 30/32	49x17	30/32
	747SR, 747SF		225/235	49x17	30/32	49x17	30/32
	747-200/300		225/235/245	49x17 49x19.0-20	30/32 32/34	49x17 49x19.0-20	30/32 32/34
	747-400		225/235/245	H49x19.0-22	24/32	49x17 49x19.0-20 H49x19.0-22	32 32/34 24/32
	747-400ER		235	50x20.0R22	34	50x20.0R22	34
	747-8		235	52x21.0R22	36	50x20.0R22	26/32/34
	757-200		210/225/235	H40x14.5-19	22/24/26	H31x13.0-12	20
	757-300		225/235	H40x14.5-19	24/26	H31x13.0-12	20
	767-200		225/235	H45x17.0-20 H46x18.0-20	26 26/28/32	H37x14.0-15	22/24
	767-300		225/235	H46x18.0-20	26/28/32	H37x14.0-15	22/24
	767-400ER		235	50x20.0R22	32	H37x14.0-15	22/24
	777-200/300		235	50x20.0R22	32	42x17.0R18	26
	777-200LR/300ER, 777F		235	52x21.0R22	36	43x17.5R17	32
	787-8	Dreamliner	235	50x20.0R22	34	40x16.0R16	26
	787-9	Dreamliner	235	54x21.0R23	38	40x16.0R16	26
	787-9/10	Dreamliner	235	54x21.0R23	38	40x16.0R16	26
Bombardier	CL-215	Scooper	160	15.00-16	16	6.50-10	10
(Canadair)	CL-415	Superscooper	160	15.00-16	16	6.50-10	10
	CRJ100/200	Regional Jet	210	H29x9.0-15	16	18x4.4 DT	12
	CRJ700/900		225	H36x12.0-18	18	20.5x6.75-10 DT	12
	CRJ1000		225	H36x11.5-19	20	20.5x6.75-10 DT	12
	Q400		190	34x10.75-16	16	22x6.50-10	8
	C212	Aviocar	160	11.00-12	10	24x7.7	8
CASA	CN235		160	28x9.0-12 11.00-12	12 TL 10 TL	24x7.7 8.50-10	14 TL 12 TL
	CV-240			34x9.9	12 TT	26x6	10 TT
Convair	CV-340/440/640			12.50-16	12 TT/TL	7.50x14	8 TT/TL
	CV-580			12.50-16 39x13	14 TT/TL 14	7.50x14	8 TT/TL
	CV-880		210	39x13	20	29x7.7	12
	CV-990	Coronado	210/225	41x15.0-18	22/24	29x7.7	16
Curtiss	C-46	Commando	160	19.00-23	16	10.00-7	12 Smooth
de Havilland Canada	DHC-4	Caribou		11.00-12	8	7.50-10	6
(Viking)	DHC-5	Buffalo		15.00-12	10	8.90-12.50	6
	DHC-6	Twin Otter		11.00-12 15.00-12	8 TT 10 TT	8.90-12.50	6 TT
	DHC-7	Dash 7		30x9.00-15 33.5x10.75-15	10 12	6.50-10 24x7.7	10 8
de Havilland Canada	DHC-8-100	Dash 8 Series 100	160/190	26.5x8.0-13 H31x9.75-13	12	18x5.5 22x6.50-10	8 6
(Bombardier)	DHC-8-200	Dash 8 Series 200	190	H31x9.75-13	12	18x5.5	8
	DHC-8-300	Dash 8 Series 300	190	31x9.75-14	12	22x6.50-10	6
	DHC-8-400	Dash 8 Series 400	190	34x10.75-16	16	22x6.50-10	8

Manufacturer	Model	Identifying Info	Speed (mph)	Main Gear		Nose Gear	
				Tire Size	Ply Rating	Tire Size	Ply Rating
Dornier	Do 228				25.5x8.75-10	10/12	6.00-6
	Do 328		190		24x7.7 25.5x8.75-10	14	19.5x6.75-8
(Fairchild-Dornier)	328JET		210		25.75x6.75-14	14	19.5x6.75-8
Douglas	DC-3		LS	17.00-16	10 TT/TL	9.00-6	10 TT
	DC-4		LS	15.50-20	14/16 TT	15.50-20	12 TT
	DC-6		LS	15.50-20	20 TT	15.50-20	14 TT
	DC-7		LS	17.00-20	20/22/24	17.00-20	14
	DC-8		225	44x16 44.5x16.5-18	30	34x11	22
	DC-9-10/30		210/225	40x14	22/24	26x6.6	10 DT
	DC-9-30/40/50		225	41x15.0-18	22/24	26x6.6	12 DT
	DC-10-10		225	50x20.00-20	32/34	37x14.0-14	24
	DC-10-30/40		235	52x20.5-23	28/30	40x15.5-16	26/28
	EMB 110	Bandeirante	160	670x210-12	10	6.50-8	8 TT
Embraer	EMB 120	Brasilia	190/210	24x7.25-12	12	18x5.5	10
	EMB 121	Xingu	160/210	670x210-12	10	16x4.4	6 TT
	ERJ 135/140/145ER	Regional Jet	210	30x9.5-14	16	19.5x6.75-8	8 DT
	ERJ 145LR	Regional Jet	225	H30x9.5-16	16	19.5x6.75-8	8 DT
	ERJ 145XR	Regional Jet	225	H30x9.5-16	16	19.5x6.75-8	10 DT
	ERJ 170/175	E170/E175	225	H38x13.0-18	20	24x7.7	12
	ERJ 190/195	E190/E195	225	H41x16.0-20 H41x16.0R20	22	24x7.7 24x7.7R10	16
	Fairchild	SA26/SA226	Merlin	18x5.5 19.5x6.75-8	8/10 10	16x4.4 18x4.4	6/10 DT
(Swearingen)	SA226/SA227	Metro	190	19.5x6.75-8	10	18x4.4	10 DT
	(Fairchild-Dornier)	328JET		210	25.75x6.75-14	14	19.5x6.75-8
Fokker	F27	Friendship	190	34x10.75-16 37x11.75-16	10/12 10/14	9.25-12	8
	F28	Fellowship	210/225	39x13 40x14	16	24.5x8.5	10 DT
	50		190	34x10.75-16	12	24x7.7	6
	70		225	H40x14.0-19	20	24x7.7	10 DT
	100		225	H40x14.0-19	20	24x7.7	10 DT
Let	L-410	Turbulet		12.50-10 29x11.00-1			

## SECTION 6C | Military Aircraft Application Charts

**CODE: TT=Tube-Type**

**TL=Tubeless**

**SC=Smooth Contour**

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
AIDC	F-CK-1	Ching-Kuo	24x8.0-13	18 TL	18x5.7-8	18 TL
Alenia	C-27J	Spartan	39x13	18 TL	29x11.0-10	10 TL
	G222/C-27A	Spartan	39x13	14/16 TL	27.5x10.5-12	10 TL
	AMX		670x210-12	18 TL	18x5.5	10 TL
Aermacchi	MB-326		21.5x7.0-10	12 TL	380x150-4	6 TL
	MB-339		21.5x7.0-10	12 TL	380x150-4	6 TL
	M-346		24x8.0-13	16 TL	18x5.5	14 TL
Beech (Raytheon)	T-1A	Jayhawk	24x7.7	14 TL	18x4.4 DDT	10 TL
	T-6A	Texan II	20x4.4	14 TL	16x4.4	8 TL
	T-34B	Mentor	6.50-8	6 TT	5.00-5	6 TT
	T-42A	Cochise	6.50-8	6 TL	5.00-5	6 TL
	U-87	Seminole	8.50-10	8 TT	6.50-10	6 TT
	VC-6A/C-12	King Air	8.50-10	8 TL	6.50-10	6 TL TT
Boeing	E-3A	AWACS	46x16	28 TL	39x13	16 TL
	E-4A	AACP	49x17	30 TL	49x17	30 TL
	E-6	Mercury	46x16	28 TL	39x13	16 TL
	B-52 G, H	Buff	56x16	38 TL	32x8.8	12 TT
	KC-135	Stratotanker	49x17	26 TL	38x11	14 TL
	VC-137C		46x16	28 TL	39x13	16 TL
	KC-767		H46x18.0-20	28 TL	H37x14.0-15	22/24 TL
British Aerospace	GR-5	Harrier	26x7.75-13	12 TL	26x8.75-11	16 TL
	—	Harrier Outrigger	—	—	13.5x6.00-4	14 TL
	—	Hawk	6.50-10	14 TL	—	—
	—	Jaguar	615x225-10	12 TL	550x250-6	12 TL
	—	Strikemaster	21x6.75-9	10 TL	6.00-4	12 TT
CASA	C-101	Aviojet	24.5x8.5	12 TL	18x5.75-8	8 TL
	CN235		28x9.0-12	12 TL	24x7.7	14 TL
	HC-144	Ocean Sentry	11.00-12	10 TL	8.50-10	12 TL
	C295		34x14.0-14	14 TL	24x7.7	8 TL
	0-1E	Bird Dog	8.00-6/7.00-6	6 TL	3x3.0-4	4 TT
Cessna	0-2A, B	Skymaster	6.00-6	8 TL	15x6.00-6	4 TT
	U-3B	Blue Canoe	6.50-10	6 TT	6.00-6	6 TT
	U-17A	Skywagon	6.00-6	6 TT	10" SC	8 TT
	A-37	Dragon Fly	7.00-8	16 TL	6.00-6	6 TT
	T-41A	Strike Mescalero	6.00-6	4 TL	5.00-5	4 TL
Dassault	—	Alpha Jet	615x225-10	12 TL	380-150-4	8 TL
	—	Mirage F1	605x155-13	10 TL	360-135-6	12 TL
	—	Mirage III	750x230-15	14 TL	450x190-5	10 TL
	—	Mirage V	750x230-15	14 TL	450x190-5	10 TL
De Havilland (Bombardier)	U-1A	Otter	11.00-12	6 TT	6.00-6	6 TT
	CV-2B	Caribou	11.00-12	8 TL	7.50-10	6 TL
	U-6A	Beaver	8.50-10	6 TT	5.50-4	6 TT
	CV-7A	Buffalo	15.00-12	10 TL	8.90-12.50	6 TL
Douglas	A-4	Skyhawk	24x5.5	16 TT	18x5.5 18x5.7-8	12 TT 14 TL
	C-9A	Nightingale	40x14	24 TL	26x6.6	10 DT
	C-47	Skytrain	17.00-16	10 TT/TL	9.00-6	10 TT
	C-124	Globemaster II	25.00-28	30	15.50-20	14
Embraer	AM-X	—	670x210-12	18 TL	18x5.5	10 TL
	EMB-110	Bandeirante	670x210-12	10 TL	6.50-8	8 TT
	EMB-111	Patrulha	670x210-12	10 TL	6.50-8	8 TT
	EMB-121	Xingu	670x210-12	10 TL	16x4.4	6 TT
	EMB-312	Tucano	6.50-10	8 TT	5.00-5	8 /10 TT
	EMB-314	Super Tucano	6.50-10	14 TL	17.5-5.75-8	12 TL
	EMB-326	Xavante	21.5x7.00-10	12 TL	5.00-4.5	6 TL
	KC-390		H43x16.5-18	20 TL	31x16.5-10	18 TL
Fairchild	24	—	6.50-10 7.50-10	6 TT	8.00SC 10.00SC	6
	PT-19	—	6.50-10 8.50-10	6 TT	8.00SC 10.00SC	6
	C-26	Metroliner	19.5x6.75-8	10 TL	18x4.4 DT	10 TL
(Fairchild Republic)	A-10	Thunderbolt II	36x11	22 TL	24x7.7	14 TL

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
Grumman	GAF	—	Nomad	8.00-6	8 TT	8.00-6
	C-1A	Trader	34x9.9	14 TT	18x5.5	12 TT
	E-1B	Tracer	34x9.9	14 TT	18x5.5	12 TT
	OV-1C	Mohawk	8.50-10	12 TL	6.50-8	8 TL
	C-2A	Greyhound	36x11	24 TL	20x5.5	12 TL
	E-2A	Hawkeye	36x11	24 TL	20x5.5	12 TL
	S-2D	Tracker	34x9.9	14 TT	18x5.5	12 TL
	EA-6B	Prowler	36x11	24 TL	20x5.5	16 TL
	HU-16E	Albatross	40x12	14 TT	26x6	10 TT
IAI	Helio	U-10A	Courier	6.50-8	6 TT	10" SC
	—	Arava	11.00-12	10 TL	9.00-6	10 TL
	—	Kfir	750-230-15	22 TL	450x190-5	22 TL
	P-2H	Neptune	56" SC	20 TL	34x9.9	14 TL
	P-3	Orion	40x14	26/28 TL	28x7.7	14 TL
	C-5A, B	Galaxy "FRED"	49x17	26 TL	49x17	26 TL
	F-16A/B	Viper	25.5x8.0-14 25.5x8.0R14	18/20 TL	18x5.5 18x5.7-8	14 TL
	F-16C/D Block 30	Viper	25.5x8.0-14 25.5x8.0R14	20 TL	18x5.7-8	18/20 TL
	F-16C/D Block 40/50	Viper	27.75x8.75-14.5 27.75x8.75R14.5	24 TL	18x5.7-8	18/20 TL
Lockheed	F-16E/F Block 60	Viper	27.75x8.75-14.5 27.75x8.75R14.5	24 TL	18x5.7-8	18/20 TL
	C-130E	Hercules	20.00-20	26 TT	12.50-16	12 TT
	C-130H	Hercules	20.00-20	26 TL	12.50-16	12 TT/TL
	C-130J	Super Hercules	20.00-20	26 TL	12.50-16	12 TL
	C-140A	Jetstar	26x6.6	14 TL	18x4.4 DT	10 TL
	A-4	Skyhawk	24x5.5	16 TT	18x5.7-8	14 TL
	AV-8B	Harrier II	26x7.75-13 26x7.75R13	10 TL	26x8.75-11 13.5x6.0-4	16 TL
	C-17	Globemaster III	50x21.0-20	30 TL	40x16	26 TL
	F-4	Phantom II	30x11.5-14.5	24/26 TL	18x5.5	14 TL
McDonnell Douglas	F-15	Eagle	34.5x9.75-18	26 TL	22x6.6-10	18 TL
	F-15E	Strike Eagle	36x11.0-18 36x11.0R18	30 TL	22x7.75-9	26 TL
	KC-10	Extender	52x20.5-23	30 TL	40x15.5-16	28 TL
	F-86	Sabre	26x6.6	—	22x7.25-11.50	—
	P-51	Mustang	27"	8	12.5X4.5	—
	T-2	Buckeye	24x5.5	12 TL	20x4.4	10 TL
	T-6	Texan	27"	8</		

## SECTION 6D | Rotary Aircraft Application Charts

**CODE:**

**TT=Tube-Type**

**TL=Tubeless**

**SC=Smooth Contour**

MANUFACTURER	MODEL	NAME	MAIN TIRE		AUXILIARY TIRE	
			TIRE SIZE	PLY RATING	TIRE SIZE	PLY RATING
AgustaWestland	AW101, EH101		8.50-10	10 TL	7.00-8	10 TL
	AW109	Power, GrandNew	14.5x5.5-6	14 TL	SOLID	
	AW139		18x5.5	10 TL	5.00-5	10 TL
	AW149		24x7.7	14 TL	14.5x5.5-6	14 TL
	AW609		17.5x5.75-8	12 TL	5.00-4	14 TL
Airbus Helicopters (Eurocopter)	H175/EC175		615x275-10	12 TL	15x6.0-6	10 TL
(Aerospatiale)	H225/EC225	Super Puma?	615x275-10	12 TL	7.00-6	10 TL
	AS332/AS532	Super Puma/ Cougar	615x275-10	12 TL	7.00-6	10 TL
	EC725	Super Cougar	615x275-10	12 TL	7.00-6	10 TL
	SA321	Super Frelon	7.00-6	10	7.00-6	10
	SA330	Puma	7.00-6	10 TL	7.00-6	10 TL
	SA360/SA365	Dolphin	15x6.0-6	10	5.00-4	6 TT
	AS365/565/366	Dolphin	15x6.0-6	10	5.00-4	6 TT
	H155/EC155	Dolphin	15x6.0-6	10	5.00-4	6 TT
	665	Tiger	23x9.0-8	10 TL	5.00-5	8 TL
	214		19.5x6.75-8	10 TT	5.00-5	10 TT
Bell	222		6.00-6	8 TT	5.00-5	10 TT
	429	GlobalRanger	14.5x5.5-6	14 TL	5.00-4	14 TL
	XVI 5		6.50-8	8 TL	5.00-4	6 TT
	V-22	Osprey	8.50-10	12 TL	18x5.7-8	14 TL
Boeing	CH-46F	Sea Knight	18x5.5	8 TL	18x5.5	8 TL
	CH-47A	Chinook	22x5.5	12 TL	16x4.4	8 TT
	CH-47B	Chinook	8.50-10	8 TT	8.50-10	8 TT
	CH-47C	Chinook	8.50-10	12 TT	8.50-10	12 TT
	234	Chinook	8.50-10	10/12 RTL	8.50-10	10/12 TL
	AH-64A	Apache	8.50-10	10 TL	5.00-4	14 TL
	HH-2D, SH-2D, SH-2F, UH-2C	SeaSprite	17.5x6.25-11	8 TL	5.00-5	6 TT
Kaman	HH-43B, 43F	Huskie	5.00-5	10 TT	5.00-5	10 TT
	H-33D, E	SeaKing	6.50-10	6 TL	6.00-6	8 TT
Sikorsky	H34	Choctaw	11.00-12	12 TL	6.00-6	6 TT
	HH-52A	—	6.50-10	6 TL	5.00-5	6 TT
	CH/HH-53	Sea Stallion	8.50-10	10 TL	8.50-10	10 TL
	CH-53E	Super Stallion	8.50-10	16 TL	8.50-10	16 TL
	H-54A	Skycrane	12.50-16	12 TL	8.50-10	10 TL
	H-54B	Skycrane	8.50-10	12 TL	8.50-10	12 TL
	S58		11.00-12	8 TT	6.00-6	6 TT
	SH60B	Seahawk	26x10.0-11	10 TL	6.00-6	8 TT
	UH-60A	Blackhawk	26x10.0-11	12 TL	15x6.00-6	6 TT
	S61		6.50-10	6 TL	6.00-6	8 TT
	S70		26x10.0-11	12 TL	15x6.00-6	6 TT
	S76A		14.5x5.5-8	12 TL	5.00-4	12 TL
	S76B		14.5x5.5-6	14 TL	5.00-4	14 TL
Westland	W30		8.50-10	6 TL	5.00-5	4 TT

## SECTION 7 | Engineering and Technical Information

Whether designing aircraft tires or simply talking about them, standardization of terms is important to ensure a common understanding between user, supplier, and manufacturer.

### Tire Size Selection

**MAIN WHEEL TIRES** In the selecting tires for a newly designed aircraft, allowances should be made for increases in load bearing capability. Aircraft size generally grows during the life cycle of the airframe from prototype to first production units and eventually to heavier weight versions to meet operator requirements. Selecting a tire that permits an increased load capability will help avoid the costly necessity of changing tire size or wheel details required to support heavier aircraft versions.

The main wheel tire requirements should be based upon the most aft center of gravity location and the ground operational load-speed-time history considered to be the most severe during normal service operations. Consideration should be given to operations at high density altitudes.

**NOSE WHEEL TIRES** It is important that selection of a nose wheel tire be reviewed from both a static load requirement and a dynamic braking condition. Care should be taken during initial selection to allow for loading growth to avoid possible future retrofitting.

Nose wheel tire selection should be based on the most forward center of gravity load.

To enable tire manufacturers to offer technical assistance in the selection of main/nose gear tires, the forms on following pages are provided listing essential requirements for an engineering review to be conducted.

### Tubeless Tires in Place of Tube Type Tires

A Goodyear tubeless tire (with a tube) of the same size can be used in place of a tube type tire if the tubeless tire has an equal or higher speed and ply rating than the tube type tire it is being used to replace. **IMPORTANT—Ensure any manufacturing stickers on the innerliner of a tubeless tire are removed prior to mounting to prevent damage to the tube.**

### Tire Measurement Procedure

Before a tire can be measured, it must be mounted on its proper rim, inflated to the pressure given in the applicable table of the Tire Data section, allowed to stand at least 12 hours at ambient room temperature, and the pressure checked. The outside diameter of the tire should be determined by measuring circumferentially and calculating:

$$\text{OD} = \text{Circumference}$$

π

### Operating Tire Temperatures

Aircraft tires shown in this handbook are not recommended for use where surface temperatures exceed 225°F (107°C), or where brake heat results in temperatures that exceed 300°F (149°C) at wheel surfaces adjacent to the tire and tube. Consult Goodyear for operation outside these limits.

## SECTION 7 | Engineering and Technical Information (con.)

### Load Ratings Used for Helicopters

Helicopter tires have special load ratings. When used on helicopters, standard aircraft tires may be rated up to a factor of 1.50 for both load and inflation. In limited cases, maximum inflation of 1.8 times normal inflation may be permissible. These factors are to be applied to ratings shown in the tables for standard aircraft tires.

Maximum allowable dimensions for new tires used on helicopters are 4 percent larger than maximum aircraft tire dimensions. (In calculating maximum outside and shoulder diameters, rim diameters are deducted before applying the 4 %)

### Radius of Gyration

**TIRE ASSEMBLIES** The approximate value for the radius of gyration for tire assemblies is calculated by the formula:

$$\text{Radius of gyration} = \text{Max O.D.} + \text{Min O.D.}$$

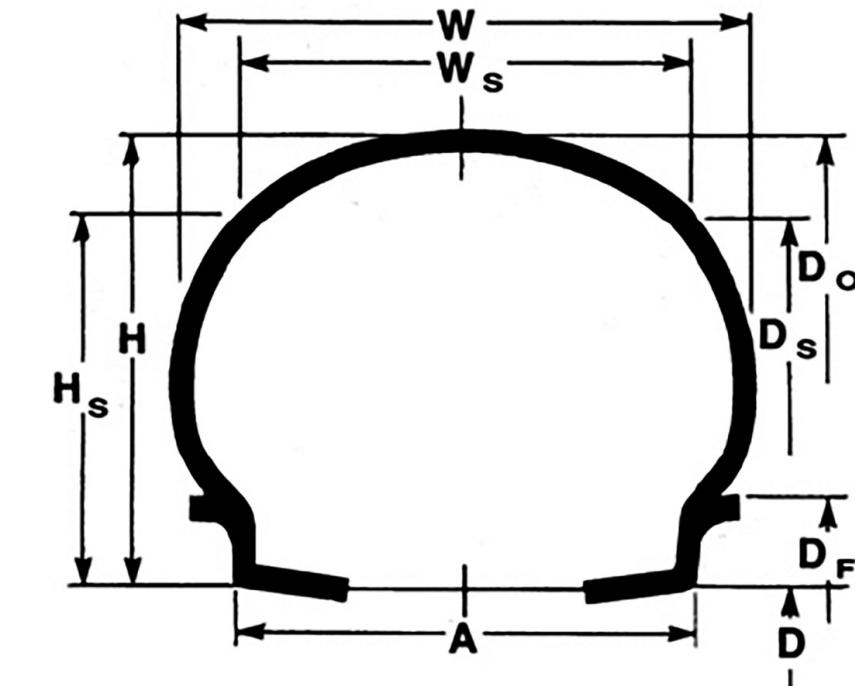
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**WHEEL ASSEMBLIES** The approximate (+/- 20 %) value for the radius of gyration for wheel assemblies is calculated by the formula:

$$\text{Radius of gyration (incl. rotating brake parts)} = 0.40 \times "D" \quad ("D" = \text{rim ledge diameter})$$



### Aircraft Tire Dimensions and Deflection



D = Rim Ledge Diameter

W<sub>S</sub> (max) = .90 W (max)

D<sub>F</sub> = Rim Flange Outer Diameter

D<sub>S</sub> (max) = 2 (.90 H (max)) + D

•D<sub>o</sub> = Outside Diameter

$$H = \frac{D_o - D}{2}$$

•D<sub>S</sub> = Shoulder Diameter

$$H_S = \frac{D_S - D}{2}$$

•W = Cross Section Width

•W<sub>S</sub> = Shoulder Width

•H = Section Height

•H<sub>S</sub> = Shoulder Section Width

•Maximum dimensions of new, unused inflated tires (after 12 hours stretch minimum).

#### METHOD OF CALCULATION

$$SLR = \frac{D_M}{2} - d \left[ \frac{(D_M - D_F)}{2} \right]$$

SLR = Static Load Radius

D<sub>M</sub> = Mean Overall Tire Diameter @ C/L

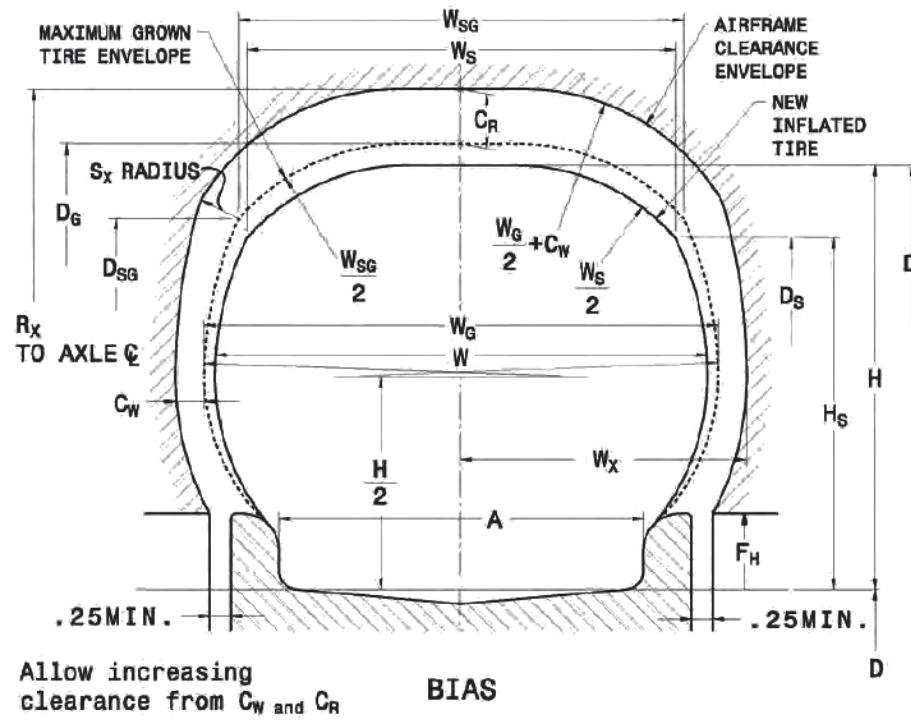
D<sub>F</sub> = Rim Flange Outer Diameter

d = Percent Tire Deflection (in Decimal Form)

## SECTION 7 | Engineering and Technical Information (con.)

### Growth and Minimum Clearance Allowance — Bias

A. An allowance on the maximum tire dimensions shown in tables must be made to compensate for the growth, stretch or deformation of the tire above the horizontal centerline during service. It is important that the following rules be observed by anyone using aircraft tire dimensions:



The above drawing represents clearances required for an unloaded free-spinning grown tire or a loaded grown tire above the axle centerline.

Note: Radii  $W_s/2$  and  $W_{sg}/2$  are drawn through their respective shoulder points tangent to  $D_o$  and  $D_g$ . Radii below the shoulder points pass through the shoulder points and are tangent to  $W$  and  $W_g$  respectively.

$D$  = Specified Rim Diameter

\* $D_o$  = Maximum Outside Diameter

\* $H$  = Maximum Section Height

\* $W$  = Maximum Cross Section Width

\* $D_s$  = Maximum Shoulder Diameter

\* $H_s$  = Maximum Shoulder Height

$A$  = Width Between Flanges

\*Dimensions of new, unused inflated tire.

Obtain new tire dimensions  $D_o$ ,  $D_s$ ,  $W$ , and  $W_s$  shown in tire tables.

\* $W_s$  = Maximum Shoulder Width

$W_g$  = Maximum Grown Section Width

$D_g$  = Maximum Grown Outside Diameter

$W_{sg}$  = Maximum Grown Shoulder Width

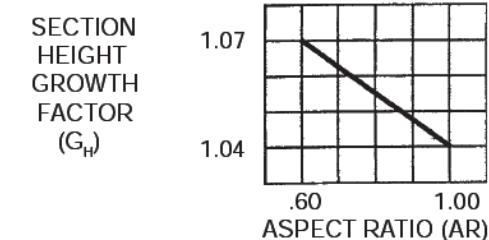
$D_{sg}$  = Maximum Grown Shoulder Diameter

### Growth and Minimum Clearance Allowance — Bias

A. (continued)

Note: Dimensions "W" and "W<sub>G</sub>" include all protective side ribs, lettering, bars and decorations, excluding chines. Determine "grown" dimensions as follows: (use appropriate growth factor)

$$\begin{aligned} W_g &= G_w(W) \\ D_g &= D + 2(G_h)(H) \\ W_{sg} &= G_w(W_s) \\ D_{sg} &= D + 2(G_h)(H_s) \\ H &= (D_o - D)/2 \\ H_s &= (D_s - D)/2 \end{aligned}$$



Section Height Growth Factor  $G_h = 1.115 - (.075 \times AR)$   
Section Width Growth Factor  $G_w = 1.04$

B. Clearance allowances between the tire and the adjacent parts of the aircraft must be made by the aircraft manufacturer. These allowances are to be based on the maximum overall tire dimensions shown in the tables, plus growth allowances due to service, plus the increase in diameter due to centrifugal force, and tire deformation above the horizontal centerline due to load. Minimum distances to adjacent parts of the aircraft are determined as follows:

1. Determine maximum grown tire envelope as instructed in note 13.A on page 8.
2. Obtain radial clearance  $C_R$  and lateral clearance  $C_w$  from the following formulae:

$$C_R = \frac{[17.02 + 2.61 (\text{SPEED}/100)^{3.348}]}{1000} \times W_g + 0.4$$

SPEED = MPH

$$C_w = .019 \times W_g + .23$$

3. Determine distance to adjacent parts as follows:

$R_x$  (min.) = Radial distance from axle centerline to adjacent part =  $(D_g/2) + C_R$

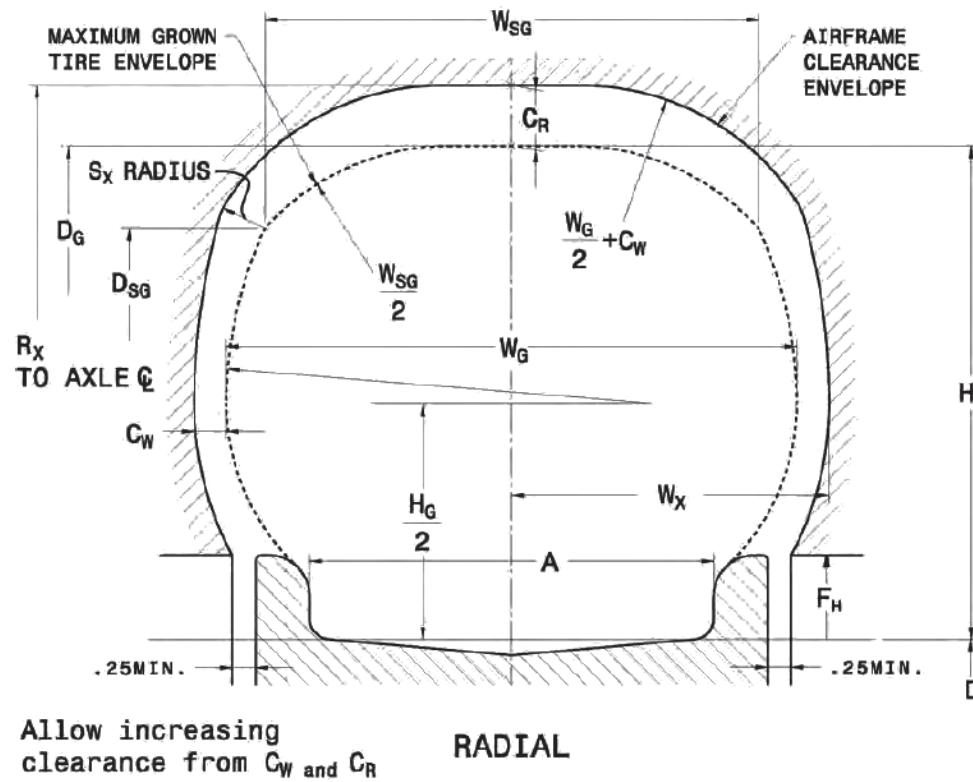
$W_x$  (min.) = Lateral distance from the centerline to adjacent part =  $(W_g/2) + C_w$

$S_x$  (min.) = Clearance allowed between tire shoulder area and adjacent part  
=  $(C_w + C_R)/2$

## SECTION 7 | Engineering and Technical Information (con.)

### Growth and Minimum Clearance Allowance — Radial

- A. An allowance on the maximum tire dimensions shown in tables must be made to compensate for the growth, stretch or deformation of the tire above the horizontal centerline during service. It is important that the following rules be observed by anyone using aircraft tire dimensions:



The above drawing represents clearances required for an unloaded free-spinning grown tire or a loaded grown tire above the axle centerline.

Note: Radii  $W_{SG}/2$  is drawn through its respective shoulder point tangent to  $D_g$ . Radii below the shoulder points pass through the shoulder points and are tangent to  $W_g$ .

$W_g$  = Maximum Grown Section Width  
 $D_g$  = Maximum Grown Outside Diameter  
 $W_{SG}$  = Maximum Grown Shoulder Width  
 $D_{sg}$  = Maximum Grown Shoulder Diameter  
 $H_g$  = Maximum Grown Section Height  
 $A$  = Rim Width Between Flanges

### Growth and Minimum Clearance Allowance — Radial

- A. (continued)

Note: Dimension " $W_g$ " includes all protective side ribs, lettering, bars and decorations, excluding chines.

Determine radial tire "maximum grown tire envelope" dimensions as follows based on Inch Code or Metric designation:

DIMENSION		FORMULA	
Inch Code	Metric	INCH CODE TIRES	METRIC TIRES
$W_g$	$W'_g$	$W_T \times 1.04$	$W_T \times 1.04$
$W_{SG}$	$W'_{SG}$	$W_g \times 0.90$	$W_g \times 0.88$
$D_g$	$D'_g$	$(D_T - D) \times G_H + D$	$(D'_T - D) \times G'_H + D$
$D_{SG}$	$D'_{SG}$	$(D_g - D) \times 0.90 + D$	$(D'_g - D) \times 0.90 + D$
$G_H$	$G'_H$	$1.115 - (0.075 \times AR)$	$1.115 - (0.075 \times AR')$
AR	AR'	$(D_T - D)/(2 \times W_T)$	$[D'_T - (D \times 25.4)]/(2 \times W'_T)$

$D_T$  = Theoretical maximum new tire outside diameter of Inch Code radial ply tire (Maximum new tire diameter of bias equivalent)

$D'_T$  = Theoretical maximum new tire outside diameter of metric tire used in calculation of maximum grown overall diameter

$W_T$  = Theoretical maximum new tire width (Maximum new tire width of bias equivalent)

$W'_T$  = Theoretical maximum new tire width (Metric Tire) (Maximum new tire width of bias equivalent)

- B. Clearance allowances between the tire and the adjacent parts of the aircraft must be made by the aircraft manufacturer. These allowances are to be based on the maximum overall tire dimensions shown in the tables, plus growth allowances due to service, plus the increase in diameter due to centrifugal force, and tire deformation above the horizontal centerline due to load. Minimum distances to adjacent parts of the aircraft are determined as follows:

1. Determine maximum grown tire envelope as instructed in note 14.A on page 10.
2. Obtain radial clearance  $C_R$  and lateral clearance  $C_W$  from the following formulae:  
 NOTE: Radial tires require less clearance between the maximum grown tire envelope and the surrounding aircraft structure than bias tires. Aircraft designed for RADIAL TIRE USE ONLY can apply the clearance values below:

#### Radial Tire Only Envelope

$$C_R = [0.029 \times (D_g - D)^{.5} \times (W_g - A)^{.5} \times (\text{SPEED}/D_g)^{.5}] + 0.15$$

SPEED = MPH

$$C_W = 0.01 \times W_g, (0.10 \text{ MIN.})$$

3. Determine distance to adjacent parts as follows:

$$R_x (\text{min.}) = \text{Radial distance from axle centerline to adjacent part} = (D_g/2) + C_R$$

$$W_x (\text{min.}) = \text{Lateral distance from the centerline to adjacent part} = (W_g/2) + C_W$$

$$S_x (\text{min.}) = \text{Clearance allowed between tire shoulder area and adjacent part} = (C_W + C_R)/2$$

