

	Takeoff gross weight	
	TOGW [lb]	236,420 <= input
Main Gear 100% TOGW	Minimum load per tire [lb]	29,552
Nose Gear 15% TOGW	Minimum load per tire [lb]	17,731

Type VII - Extra High Pressure Tires Main Wheels									
Tire Size	Ply Rating	Max Width inches	Max Diam. inches	Loaded Radius inches	Tire and tube wt. lbs.	Commercial		Military	
						Press lbs/sq.in.	Rated Load lbs	Press lbs/sq.in.	Rated Load lbs.
24 x 7.25	10	7.3	24.0	10.3	29.7	120	6,600		
29 x 7.7	12-16	7.6	28.0	12.2	36-44	160	9,800	220	13,800
34 x 11	18	11.0	33.0	13.9	84.1	125	15,500		
36 x 11	24	11.1	35.0	15.0	86.2			220	25,600
40 x 14	22	13.5	39.2	11.8	112	145	25,600		
44 x 13	26	13.4	43.2	18.4	141.5			200	35,000
44 x 16	26	15.6	43.1	18.0	151.6	165	35,500		
56 x 16	24	16.0	55.8	24.1	258.7			178	45,000
56 x 16	32	16.1	55.8	24.1	296.3			240	60,000
56 x 16	36	16.1	55.8	24.1	297.0			280	71,000

AERODYNAMIC DESIGN



Main gear has double amount of tire in the pic ~ 8 tires for main gear
Front gear has 2 tires

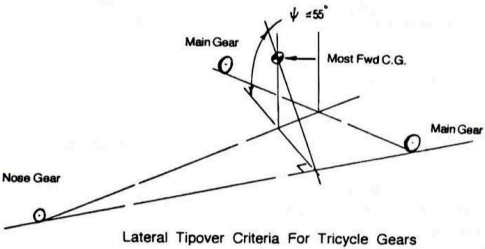


Fig. 7-2 Tipover Criteria for Landing Gears
Adapted with permission from Ref. 7.3

Business Jets	12,000	22 x 6.3	0.93	90	1	18 x 5.7	0.07	120	1
	23,000	27.6 x 9.3	0.95	155	1	17 x 5.5	0.05	50	2
	39,000	26 x 6.6	0.92	208	2	14.5 x 7.7	0.08	130	2
	68,000	24 x 9.25	0.93	174	2	21 x 7.25	0.07	113	2
Jet Transports	44,000	34 x 12	0.89	75	2	24 x 7.7	0.11	68	2
	73,000	40 x 14	0.92	77	2	29.5 x 6.75	0.08	68	2
	116,000	40 x 14	0.94	170	2	24 x 7.7	0.06	150	2
	220,000	40 x 14	0.94	180	4	29 x 7.7	0.06	180	2
	330,000	46 x 16	0.93	206	4	40 x 14	0.07	131	2
	572,000	52 x 20.5	0.93	200	4*	40 x 15.5	0.07	190	2
	775,000	49 x 17	0.94	205	4**	46 x 16	0.06	190	2
Military Trainers	2,500	17 x 6		36	1	13.5 x 5	0.18	28	1
	5,500	20.3 x 6.5	0.82	60	1	14 x 5	0.09	40	1
	7,500	20.25 x 6	0.91	65	1	17.2 x 5.0	0.08	45	1
	11,000	23.3 x 6.5	0.92	143	1	17 x 4.4	0.10	120	1
Military Fighters	9,000	20 x 5.25	0.86	135	1	17 x 3.25	0.14	82	1
	14,000	18.5 x 7	0.87	110	1	18 x 6	0.13	37	1
	25,000	24 x 8	0.91	210	1	18 x 6.5	0.09	120	1
	35,000	24 x 8	0.90	85	2	21.6 x 9.8	0.10	57	1
	60,000	35.3 x 9.3	0.88	210	1	21.6 x 7.5	0.12	120	2
	92,000	42 x 13	0.93	150	1	20 x 6.5	0.07	120	2

*Three main gear struts ** Four main gear struts

Fig. 7-7 Typical Landing Gear Wheel and Tire Data

Adapted with permission from Ref. 7.3