

FSAE TTC -- ROUND 9 RUN GUIDE

Run numbers correspond to the data files, such as "A2356run17.dat" for Run 17.

Rim Diameter, in		Tire	Rim Width, in	Free-Rolling (Cornering)					
				¹ Transient	² Initial 12 psi	10, 14 psi	8 psi	³ Final 12 psi	^{4,5} Speed test
10	Hoosier	43075 16x7.5-10 R20	7	2	4, 5†	4, 5†	6	6	6
10	Hoosier	43075 16x7.5-10 R20	8	7	8	8	9	9	9
10	Hoosier	43070 16x6.0-10 R20	6	10	11	11	12	12	12
10	Hoosier	43070 16x6.0-10 R20	7	13	14	14	15	15	15
10	Hoosier	43100 18.0x6.0-10 R20	6	27	28	28	29	29	29
10	Hoosier	43100 18.0x6.0-10 R20	7	30	31	31	32	32	32
10	Goodyear	D0571 18.0x6.5-10	6	33	34	34	35	35	35
10	Goodyear	D0571 18.0x6.5-10	7	36	37	37	38	38	38
10	MRF	18x6.0-10 ZTD1	6	39	40	40	41	41	41
10	MRF	18x6.0-10 ZTD1	7	42	43	43	44	44	44
13	Hoosier	43164 20.5x7.0-13 R20	7	16	17	17	18	18	18
13	Hoosier	43164 20.5x7.0-13 R20	8	19	20	20	21	21	21
13	Goodyear	D2704 20.0x7.0-13	7	22	23	23	24	24	24
13	Goodyear	D2704 20.0x7.0-13	8	25	46*	46*	#	49*#	49*#

1. Includes initial spring rates (12 psi) and step steers for transient analysis (12, 10 and 14 psi)
2. Includes cold to hot sweeps, break-in and post-break-in spring rates
3. Slip angle sweeps at 12 psi repeated after 10, 14 and 8 psi for comparison with the initial 12 psi block.
4. Slip angle sweeps at 12 psi tested at 15 mph and 45 mph. In all previous slip angle sweeps the speed is 25 mph.
5. Includes camber sweeps at zero slip angle (new in Round 8, continued in Round 9).

† Pressure hose detached during Run 4, causing an abort. Hose reattached and run continued as Run 5.

* Added bead screws to discourage tire from debearing at extreme conditions. See the discussion under "Test Comments" in Contents_Round9.pdf

No 8psi data collected, 350 lb load replaced with 200 lb load (i.e., uses the 10 inch loads)

Rim Diameter, in	Tire	Rim Width, in	Drive/Brake/Combined					
			⁶ Warmup	Initial 12 psi	10, 14 psi	8 psi	⁷ Final 12 psi	⁸ Speed test
10	Hoosier	43100 18.0x6.0-10 R20	6	68	69	69	70	70
10	Hoosier	43100 18.0x6.0-10 R20	7	71	72	73	73	73
10	Goodyear	D0571 18.0x6.5-10	6	74	75	75	76	76
10	Goodyear	D0571 18.0x6.5-10	7	77	78	79	79	79

10	MRF	18x6.0-10 ZTD1	6	62	63	63	64	64	64
10	MRF	18x6.0-10 ZTD1	7	65	66	66	67	67	67
13	Hoosier	43164 20.5x7.0-13 R20	7	50	51	51	52	52	52
13	Hoosier	43164 20.5x7.0-13 R20	8	53	54	54	55	55	55
13	Goodyear	D2704 20.0x7.0-13	7	56	57	57	58	58	58
13	Goodyear	D2704 20.0x7.0-13	8	59	60	60	61	61	61

6. Includes initial spring rates, cold to hot, break-in and spring rates.

7. Slip ratio sweeps at 12 psi repeated after 10, 14 and 8 psi for comparison with the initial 12 psi block.

8. Slip ratio sweeps at 12 psi tested at 15 mph and 45 mph. In all previous slip angle sweeps the speed is 25 mph.

See "2356 Summary Tables.xlsx" for Calspan's complete run log.

- Tire spring rate, cornering stiffness, probe temperatures, tire weights and wheel weights are also included.

Data for aborted/check runs is not presented.