



Phase A L2 Engine Requirements

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Requirement ID	Requirement Description	L1 Reference Requirement
L2_Eng_1	Engine shall provide at least 281.6 lbf thrust	L1_Req_2
L2_Eng_2	Engine shall provide at least 4891 lbf-s impulse (See Minimum Impulse Calculations)	L1_Req_1, L1_Req_2
L2_Eng_3	Engine shall not exceed 9,208 lbf-s impulse	
L2_Eng_4	Engine shall boost rocket to at least 100 ft/s by the end of the launch rail	L1_Req_13
L2_Eng_5	Casing shall be rated for twice maximum chamber pressure	
L2_Eng_6	Engine shall have a pressure relief device at no greater than twice maximum chamber pressure	
L2_Eng_7	Competition engine shall be tested to 1.5 times maximum chamber pressure for twice the expected burn time	
L2_Eng_8	Engine shall complete a full-scale, instrumented (chamber pressure and thrust) hot-fire test. Does not need to be the engine used for competition.	
L2_Chem_1	Amount of fuel shall sustain one complete flight	L1_Req_1, L1_Req_2
L2_Chem_2	Fuel will have tested specific impulse, density, temperature, and enthalpy	L1_Req_1, L1_Req_2
L2_Chem_3	Fuel will have a rapid but stable burn rate	L1_Req_1, L1_Req_2