

	10/16/2026	20000 Watts Engine Power Output							
		VALUES are from the COMBUSTION CYCLE							
	Time (seconds)	Displacement (in)	Gas Pressure (PSI)	Gas Thrust Force (lbs)	Hydraulic Load (lbs)	Net Linear Force (lbs)	Frame Acceleration (ft/s ²)	Piston Velocity (ft/s)	Stored Piston Energy (ft-lbs)
	0	0	338.1	7600.2	28347.55	-20747.35	-538.3	0	0
	0.035	0.3	338.1	7600.2	28347.55	-20747.35	-538.3	0.41	1.7
	0.07	1.5	338.1	7600.2	28347.55	-20747.35	-538.3	1.1	12
	0.072	1.54	2611	58694	28347.55	30346.45	787.4	1.15	13.1
	0.12	2.5	1850.5	41598	28347.55	13250.45	343.8	5.2	267.7
	0.18	4	945	21243.6	28347.55	-7103.95	-184.3	9.45	884.2
	0.24	5.5	430.2	9670.3	28347.55	-18677.25	-484.6	12.3	1498.4
	0.3	6.5	185.4	4167.5	28347.55	-24180.05	-627.4	13.8	1885.1
	0.36	7.2	82.5	1854.5	28347.55	-26493.05	-687.4	10.1	1009.8
	0.41	7.7	35.4	795.7	28347.55	-27551.85	-714.9	4.5	200.5
	0.45	8	23.1	519.3	28347.55	-27828.25	-722.1	0	0

	10/16/2026	THERMODYNAMICS 20000 Watt Engine Power Output									
		VALUES are from the COMBUSTION CYCLE									
	Time Interval	Cylinder Volume (cu in)	Air Mass Transferred (g)	Cumulative Air Mass (g)	Gas Temp (°F)	Combustion Pressure (PSI)	Combustion Pressure (atm)	Rod Transmission Force (lbs)	Incremental Fuel Injected (g)	Cumulative Fuel Energy Input (J)	Mechanical Energy Output (Watts)
	0	0.003	0	0.001	70	338.1	23	0	0	0	0
	0.035	6.743	0.237	0.237	70	338.1	23	-20747.35	0	0	320
	0.07	33.718	0.237	0.474	70	338.1	23	-20747.35	0	0	860
	0.072	34.617	0	0.474	451	2611	177.61	30346.45	0.95	40470	20000
	0.12	56.196	0	0.474	420	1850.5	125.88	13250.45	0	40470	20000
	0.18	89.914	0	0.474	360	945	64.28	-7103.95	0	40470	20000
	0.24	123.632	0	0.474	295	430.2	29.26	-18677.25	0	40470	20000
	0.3	146.11	0	0.474	210	185.4	12.61	-24180.05	0	40470	20000
	0.36	161.846	0	0.474	145	82.5	5.61	-26493.05	0	40470	20000
	0.41	173.085	0	0.474	92	35.4	2.41	-27551.85	0	40470	20000
	0.45	179.829	0	0.474	70	23.1	1.57	-27828.25	0	40470	20000

		19/16/26		GAS FLOW 20000 Watts Engine Power Output												
				VALUES are from the SUPERCHARGER CYCLE												
	Parameter milliseconds	0.0 ms	35.0 ms	70.0 ms	72.0 ms	120.0 ms	180.0 ms	240.0 ms	300.0 ms	360.0 ms	410.0 ms	450.0 ms	452.0 ms	660.0 ms	704.0 ms	750.0 ms
	1) Comb_Vol (cu in)	33.7	34.4	34.6	35.4	56.2	89.9	123.6	146.1	161.8	173.1	179.8	179.8	179.8	179.8	33.7
	2) Comb_Temp (Â°F)	70	70	70	451	420	360	295	210	145	92	70	70	90	83	70
	3) Comb_Press (PSI)	338.1	338.1	338.1	2611	1850.5	945	430.2	185.4	82.5	35.4	23.1	23.1	14.7	14.7	338.1
	4) Comb_Super_Valve	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Open	Closed	Closed	Closed
	5) Comp_Vol (cu in)	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	32.7	32.7	402.1
	6) Comp_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	450	450	70
	7) Comp_Press (PSI)	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	338.1	338.1	14.7
	8) Valve_Flow_Gas (ft/s)	0	0	0	0	0	0	0	0	0	0	0	107.2	0	0	0
	9) Air_Chg_Vol (cu in)	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3
	10) Air_Chg_Press (PSI)	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1
	11) Air_Chg_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	12) Valve_Flow_Air (ft/s)	0	0	0	0	0	0	0	0	0	0	0	0	107.2	0	0
	13) Accum_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	450	450	70
	14) Accum_Press (PSI)	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1
	15) Accum_Piston_Vol (cu in)	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3
	16) Accum_Comb_Valve	Closed	Open	Open	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	17) Intercooler_Flow (ft/s)	0	0	0	0	0	0	0	0	0	0	0	0	0	107.2	0
	18) Intercooler_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	10	70
	19) Exhaust_In_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	125	83	70
	20) Exhaust_Out_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	90	10	70
	21) Air_In_Temp (Â°F)	70	451	451	70	70	70	70	70	70	70	70	70	451	451	70
	22) Air_Out_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	23) Air_Comb_Flow (ft/s)	0	55.8	55.8	0	0	0	0	0	0	0	0	0	0	0	0
	24) Air_Comb_Valve	Closed	Open	Open	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	25) Valve_Delta_P (PSI)	0	0	0	2272.9	1512.4	606.9	92.1	152.7	255.6	302.7	315	8.4	323.4	323.4	0
	26) Physics_Flow_Calc (L/min)	0	41.41	41.41	0	0	0	0	0	0	0	0	165.64	165.64	165.64	0

	10/16/2026	KINETICS Stable Hover Engine Power Output							
		VALUES are from the COMBUSTION CYCLE							
	Time (seconds)	Displacement (in)	Gas Pressure (PSI)	Gas Thrust Force (lbs)	Hydraulic Load (lbs)	Net Linear Force (lbs)	Frame Acceleration (ft/s ²)	Piston Velocity (ft/s)	Stored Piston Energy (ft-lbs)
	0	0	338.1	7600.2	25804.8	-18204.6	-472.4	0	0
	0.035	0.3	338.1	7600.2	25804.8	-18204.6	-472.4	-0.41	1.7
	0.07	1.5	338.1	7600.2	25804.8	-18204.6	-472.4	-1.1	12
	0.072	1.54	2256.1	50711.2	25804.8	24906.4	646.2	1.15	13.1
	0.12	2.5	1610.4	36202.1	25804.8	10397.3	269.8	4.72	220.4
	0.18	4	820.5	18445.1	25804.8	-7359.7	-190.9	8.12	710.2
	0.24	5.5	370.4	8326.6	25804.8	-17478.2	-453.5	10.4	1110.8
	0.3	6.5	158.2	3556.3	25804.8	-22248.5	-577.3	11.55	1385.4
	0.36	7.2	69.4	1560.2	25804.8	-24244.6	-629.1	8.21	698.4
	0.41	7.7	28.6	642.9	25804.8	-25161.9	-652.9	3.4	114.6
	0.45	8	18.4	413.6	25804.8	-25391.2	-658.8	0	0

	10/16/2026	THERMODYNAMICS Stable Hover Engine Power Output									
		VALUES are from the COMBUSTION CYCLE									
	Time Interval	Cylinder Volume (cu in)	Air Mass Transferred (g)	Cumulative Air Mass (g)	Gas Temp (Å°F)	Combustion Pressure (PSI)	Combustion Pressure (atm)	Rod Transmission Force (lbs)	Incremental Fuel Injected (g)	Cumulative Fuel Energy Input (J)	Mechanical Energy Output (Watts)
	0	0.003	0	0.001	70	338.1	23	0	0	0	0
	0.035	6.743	0.207	0.207	70	338.1	23	-18204.6	0	0	265
	0.07	33.718	0.207	0.414	70	338.1	23	-18204.6	0	0	710
	0.072	34.617	0	0.414	451	2256.1	153.48	24906.4	0.718	30586.8	13859
	0.12	56.196	0	0.414	410	1610.4	109.55	10397.3	0	30586.8	13859
	0.18	89.914	0	0.414	345	820.5	55.82	-7359.7	0	30586.8	13859
	0.24	123.632	0	0.414	280	370.4	25.2	-17478.2	0	30586.8	13859
	0.3	146.11	0	0.414	195	158.2	10.76	-22248.5	0	30586.8	13859
	0.36	161.846	0	0.414	130	69.4	4.72	-24244.6	0	30586.8	13859
	0.41	173.085	0	0.414	85	28.6	1.95	-25161.9	0	30586.8	13859
	0.45	179.829	0	0.414	70	18.4	1.25	-25391.2	0	30586.8	13859

	10/16/2026	GAS FLOW Stable Hover Engine Power Output														
		VALUES are from the SUPERCHARGER CYCLE														
	Parameter milliseconds	0.0 ms	35.0 ms	70.0 ms	72.0 ms	120.0 ms	180.0 ms	240.0 ms	300.0 ms	360.0 ms	410.0 ms	450.0 ms	452.0 ms	660.0 ms	704.0 ms	750.0 ms
	1) Comb_Vol (cu in)	33.7	34.4	34.6	35.4	56.2	89.9	123.6	146.1	161.8	173.1	179.8	179.8	179.8	179.8	33.7
	2) Comb_Temp (Â°F)	70	70	70	451	410	345	280	195	130	85	70	70	90	83	70
	3) Comb_Press (PSI)	338.1	338.1	338.1	2256.1	1610.4	820.5	370.4	158.2	69.4	28.6	18.4	18.4	14.7	14.7	338.1
	4) Comb_Super_Valve	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Open	Closed	Closed	Closed
	5) Comp_Vol (cu in)	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	32.7	32.7	402.1
	6) Comp_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	450	450	70
	7) Comp_Press (PSI)	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	338.1	338.1	14.7
	8) Valve_Flow_Gas (ft/s)	0	0	0	0	0	0	0	0	0	0	0	102.3	0	0	0
	9) Air_Chg_Vol (cu in)	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3
	10) Air_Chg_Press (PSI)	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1
	11) Air_Chg_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	12) Valve_Flow_Air (ft/s)	0	0	0	0	0	0	0	0	0	0	0	0	102.3	0	0
	13) Accum_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	450	450	70
	14) Accum_Press (PSI)	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1
	15) Accum_Piston_Vol (cu in)	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3
	16) Accum_Comb_Valve	Closed	Open	Open	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	17) Intercooler_Flow (ft/s)	0	0	0	0	0	0	0	0	0	0	0	0	0	102.3	0
	18) Intercooler_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	10	70
	19) Exhaust_In_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	125	83	70
	20) Exhaust_Out_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	90	10	70
	21) Air_In_Temp (Â°F)	70	451	451	70	70	70	70	70	70	70	70	70	451	451	70
	22) Air_Out_Temp (Â°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	23) Air_Comb_Flow (ft/s)	0	49.6	49.6	0	0	0	0	0	0	0	0	0	0	0	0
	24) Air_Comb_Valve	Closed	Open	Open	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	25) Valve_Delta_P (PSI)	0	0	0	1918	1272.3	482.4	32.3	79.1	180.4	221.3	233.7	6.2	241.4	241.4	0
	26) Physics_Flow_Calc (L/min)	0	40.88	40.88	0	0	0	0	0	0	0	0	163.54	163.54	163.54	0

	11/16/2026	KINETICS Cruising 60mph 6000ft Altitude Engine Power Output							
		VALUES are from the COMBUSTION CYCLE							
	Time (seconds)	Displacement (in)	Gas Pressure (PSI)	Gas Thrust Force (lbs)	Hydraulic Load (lbs)	Net Linear Force (lbs)	Frame Acceleration (ft/s ²)	Piston Velocity (ft/s)	Stored Piston Energy (ft-lbs)
	0	0	58.8	1321.8	5502.5	-4180.7	-108.5	0	0
	0.035	0.3	58.8	1321.8	5502.5	-4180.7	-108.5	-0.67	5.4
	0.07	1.5	58.8	1321.8	5502.5	-4180.7	-108.5	-1.34	37.2
	0.072	1.54	215.4	4842.2	5502.5	-660.3	-17.1	-1.36	39.8
	0.12	2.5	185.2	4163.3	5502.5	-1339.2	-34.7	-3.12	124.6
	0.18	4	123.6	2778.5	5502.5	-2724	-70.7	-4.88	321.4
	0.24	5.5	82.4	1852.4	5502.5	-3650.1	-94.7	-6.12	548.6
	0.3	6.5	58.8	1321.8	5502.5	-4180.7	-108.5	-6.84	721.4
	0.36	7.2	35.1	789.1	5502.5	-4713.4	-122.3	-8.12	412.4
	0.41	7.7	18.2	409.1	5502.5	-5093.4	-132.2	-2.11	84.6
	0.45	8	12.5	281	5502.5	-5221.5	-135.5	0	0

	11/16/2026	THERMODYNAMICS Cruising 60mph 6000ft Altitude Engine Power Output									
		VALUES are from the COMBUSTION CYCLE									
	Time Interval	Cylinder Volume (cu in)	Air Mass Transferred (g)	Cumulative Air Mass (g)	Gas Temp (°F)	Combustion Pressure (PSI)	Combustion Pressure (atm)	Rod Transmission Force (lbs)	Incremental Fuel Injected (g)	Cumulative Fuel Energy Input (J)	Mechanical Energy Output (Watts)
	0	0.003	0	0.001	70	58.8	4	0	0	0	0
	0.035	6.743	0.355	0.355	70	58.8	4	-4180.7	0	0	115
	0.07	33.718	0.355	0.71	70	58.8	4	-4180.7	0	0	320
	0.072	34.617	0	0.71	451	215.4	14.6	-660.3	0.63	26838	1231
	0.12	56.196	0	0.71	410	185.2	12.6	-1339.2	0	26838	1231
	0.18	89.914	0	0.71	345	123.6	8.41	-2724	0	26838	1231
	0.24	123.632	0	0.71	280	82.4	5.61	-3650.1	0	26838	1231
	0.3	146.11	0	0.71	195	58.8	4	-4180.7	0	26838	1231
	0.36	161.846	0	0.71	130	35.1	2.39	-4713.4	0	26838	1231
	0.41	173.085	0	0.71	85	18.2	1.24	-5093.4	0	26838	1231
	0.45	179.829	0	0.71	70	12.5	0.85	-5221.5	0	26838	1231

	10/16/2026		GAS FLOW Cruising 60mph 6000ft Altitude Engine Power Output													
			VALUES are from the SUPERCHARGER CYCLE													
	Parameter milliseconds	0.0 ms	35.0 ms	70.0 ms	72.0 ms	120.0 ms	180.0 ms	240.0 ms	300.0 ms	360.0 ms	410.0 ms	450.0 ms	452.0 ms	660.0 ms	704.0 ms	750.0 ms
	1) Comb_Vol (cu in)	33.7	34.4	34.6	35.4	56.2	89.9	123.6	146.1	161.8	173.1	179.8	179.8	179.8	179.8	33.7
	2) Comb_Temp (Å°F)	70	70	70	451	380	310	225	150	105	82	70	70	90	83	70
	3) Comb_Press (PSI)	338.1	338.1	338.1	551.2	410.5	240.2	110.4	52.3	26.4	13.8	10.2	10.2	14.7	14.7	338.1
	4) Comb_Super_Valve	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Open	Closed	Closed	Closed
	5) Comp_Vol (cu in)	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	402.1	32.7	32.7	402.1
	6) Comp_Temp (Å°F)	70	70	70	70	70	70	70	70	70	70	70	70	450	450	70
	7) Comp_Press (PSI)	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	338.1	338.1	14.7
	8) Valve_Flow_Gas (ft/s)	0	0	0	0	0	0	0	0	0	0	0	60.3	0	0	0
	9) Air_Chg_Vol (cu in)	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3
	10) Air_Chg_Press (PSI)	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1
	11) Air_Chg_Temp (Å°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	12) Valve_Flow_Air (ft/s)	0	0	0	0	0	0	0	0	0	0	0	0	60.3	0	0
	13) Accum_Temp (Å°F)	70	70	70	70	70	70	70	70	70	70	70	70	450	450	70
	14) Accum_Press (PSI)	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1	338.1
	15) Accum_Piston_Vol (cu in)	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3	196.3
	16) Accum_Comb_Valve	Closed	Open	Open	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	17) Intercooler_Flow (ft/s)	0	0	0	0	0	0	0	0	0	0	0	0	0	60.3	0
	18) Intercooler_Temp (Å°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	10	70
	19) Exhaust_In_Temp (Å°F)	70	70	70	70	70	70	70	70	70	70	70	70	125	83	70
	20) Exhaust_Out_Temp (Å°F)	70	70	70	70	70	70	70	70	70	70	70	70	90	10	70
	21) Air_In_Temp (Å°F)	70	451	451	70	70	70	70	70	70	70	70	70	451	451	70
	22) Air_Out_Temp (Å°F)	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
	23) Air_Comb_Flow (ft/s)	0	55.8	55.8	0	0	0	0	0	0	0	0	0	0	0	0
	24) Air_Comb_Valve	Closed	Open	Open	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
	25) Valve_Delta_P (PSI)	0	0	0	213.1	72.4	14.7	0	0	0	0	0	4	323.4	323.4	0
	26) Physics_Flow_Calc (L/min)	0	21.52	21.52	0	0	0	0	0	0	0	0	64.45	64.45	64.45	0