

Date	Degrees Advance	RPM	Revs/sec	Ft/sec	Grams	Force (lbs)	Torque In-lbs	Power ft-lbs/sec	HP	Watts	Volts	Amps	Power	Eff %	
8/18/2018	55	9530	156.58	20.79	0	0.00	0.00	0.00	0.000	0.00	24.1	0.91	21.93	0.00	Parallel Coils
		9677	139.83	21.11	0	0.00	0.00	0.00	0.000	0.00	25.16	0.94	23.65	0.00	No Bi
		8495	141.58	18.53	110	0.24	0.06	4.49	0.008	6.08	24.25	1.13	27.40	22.20	Same config
		7620	127.00	16.62	185	0.41	0.10	6.77	0.012	9.18	24.32	1.37	33.32	27.54	
		6866	114.43	14.98	265	0.58	0.15	8.74	0.016	11.84	24.39	1.56	38.05	31.13	
		5618	93.63	12.26	365	0.80	0.20	9.85	0.018	13.35	24.29	1.94	47.12	28.33	
		4572	76.20	9.97	450	0.99	0.25	9.89	0.018	13.39	24.26	2.14	51.92	25.80	Almost Stall
		9549	159.15	20.83	0	0.00	0.00	0.00	0.000	0.00	24.01	0.91	21.85	0.00	
8/20/2018	55	9500	158.33	20.73	0	0.00	0.00	0.00	0.000	0.00	24.09	0.89	21.44	0.00	Parallel coils
		10811	180.18	23.59	0	0.00	0.00	0.00	0.000	0.00	29.99	0.99	29.69	0.00	
		11617	193.62	25.34	0	0.00	0.00	0.00	0.000	0.00	34.09	1.16	39.54	0.00	
		11759	195.98	25.65	0	0.00	0.00	0.00	0.000	0.00	36.01	1.17	42.13	0.00	

Both ZFM Coils are now in Parallel and yield 1.6 Ohms total resistance. Each individual coil of 4 strands of #20 wire in series is 3.0 Ohms. Refer to attached wiring schematic for details. The above performance table demonstrates that the coils in Parallel yield the same performance as the previous Bifilar configuration.

The total resistance is now ~1/4 of the ZFM original 6 ohm series configuration. There appears to be more here than meets the eye.

YIS 8/20/18