Instruction Manual for ASP/MAGNUM/SC/DC Engines

(prepared by HiModel, 9th May, 2007)

Safety instructions and warnings:

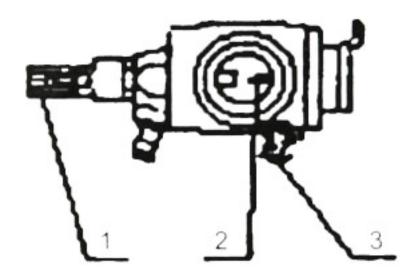
Remember that your engine is not a "toy", but a highly efficient internal-combustion machine whose power is capable of harming you, or others, if it is misused.

As owner, you are fully responsible for the safe operation of your engine, so act with discretion and care at all times.

R/C carburetor:

R/C model engines are equipped with carburetor, the structure is as shown below:

The carburetor has two fuel needle systems:



- 1 high speed adjustment valve (hi-speed needle, starting setting: $1\ 1/2$ to 2 turns from full closed position)
- 2 low speed mixture adjustment (idling speed needle)
- 3 air inlet valve adjustment, it controls idling speed (set the valve to far close position)

Idling speed needle is factory set for the approximate best result. First run the engine as received and readjust the idling needle only if necessary.

Fuel:

For the best performance, a fuel containing 10% Nitromethne is preferable, and containing 20%-25% lubricant by volume.

Glow plug:

Any middle hot type glow plug

Attachment: Engine specifications

Type	Capacity(cc)	Cylinder	Displacement	Recommended	R.P.M.	Weight
		Dia.(mm)	(mm)	Prop	Range	(g)
12A	1.94	13.8	13	7x4 -7x6	3000/17000	136
15A	2.47	15	14	7x4 -8x4	3000/20000	165
21A	3.41	16.6	16	8x5 – 9x8	2000/25000	185
25A	4.07	17.5	17	9x5 – 10x5	2000/25000	245
28A	4.57	18.5	17	9x5 –10x5	2500/17500	246
32A	5.23	19	18.4	9x6 – 10x6	2000/17500	330
36A	5.90	20.2	18.4	9x6 -10x6	2000/17500	365
40A	6.64	21.66	19.28	9x8 – 10x6	2000/17500	423
46A	7.46	22.25	19.28	10x7 – 11x6	2000/17000	418
53A	8.46	23.7	19.28	10x7 – 11x7	2000/17000	420
61A	9.95	24	22	11x7 – 12x7	2000/18000	609
75A	12.4	26.6	22	12x7 - 13x7	2000/17500	614
91A	14.97	27.3	2 5. 5	13x8 – 14x6	2000/17500	728
108A	17.3	28.5	25.5	14x8 – 15x6	2000/17500	733
120AR	19.96	30.68	27.0	14x8 – 15x6	2000/17500	955
FS65	10.63	24.8	22	11x7 – 12x7	2000/10500	620
FS80	12.8	26.5	23.2	12x7 - 13x7	2000/9000	630
FS91	14.96	27.7	24.8	12x8 – 13x6	2000/9500	645