BLOWER DRIVE RATIO GUIDE

Because there are many varabkes from one engine to another such as compression ratio - cam lift, duration, and overlap - combustion chamber shape - valve size and placement - intake port shape (siamese or separate). The following information is for general guideance only.

The following is a general guide for matching the MAX 25 series superchargers to various engine displacements at different boost outputs. This guide does not consider air density or anbient tempreture which will effect the final supercharger proformance:

Supercharger RPM ranges:
3,600 to 12,500 RPM. (E 1) optomum port speed is 8,750 RPM. SEE CHART 1A

SUPERCHARGER CONSTANTS:

a. = atmospheres @ pressure ph. = pressure heat factor @ pressure

5 psi.= .34 atmospheres	5 psi= .928ph. air only	5 psi.=.963ph. pump	5 psi.=.975ph. menthol
10psi.= .68 atmospheres	10 psi.=.806ph. air only	10 psi.=.868ph. fuel	10 psi.=.912ph. max.
15psi.=1.02 atmospheres	15 psi.=.644ph. air only	15 psi.=.744ph. carb	15 psi.=.837ph. 20%
20psi.=1.36 atmospheres	20 psi.=.462ph. air only	20 psi.=.600ph. only	20 psi.=.743ph. only

e. = engine breahting efficency: Two valve head = .8
Four valve head = .9

SUPERCHARGER VARIABLES:

L = litre displacement (61.02 cu. in. per litre)
c.d.r. = engine air requirements cu. in. displacement / 2 x e. (4 cycle only)
bd = supercharger displacement per revolution 7.436 x rotor length
er = engine requirements c.d.r. x a. / ph.
dr 1 = drive ratio er / bd
bs = supercharger speed dr 1 x engine RPM
e 2 = actual supercharger output E 1 x bd x dr 1
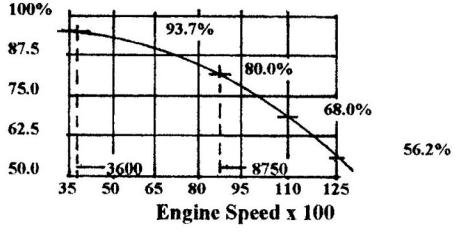
CHART 1A
E1 SUPERCHARGER PORT OUTPUT EFFICIENCY