

TOYOTA PRIUS

DATE: March 3, 2008

NOMOGRAPH FOR CAR SPEED, ICE, MOTOR/GENERATOR1 AND MOTOR/GENERATOR2 SPEEDS.

MG1 = Small Motor/Generator speed (rpm)
MG2 = Traction Motor/Generator speed (rpm)
ICE = Internal Combustion Engine speed (rpm)
V = Car Forward Velocity (mph)

Controlling Equations:

$mg1 = 3.6 * ICE - 2.6 * mg2$
 $mg2 = 57.07 * V$ (rpm when V is in mph)
(drive wheel rolling radius = 11.5")
 $ICE = (mg1 + 2.6 * mg2) / 3.6$

