

1.

$$\Delta_v = v_e \cdot \ln \left(\frac{m_0}{m_1} \right)$$

	value	units	link	description
Δ_v	= 8814.78318123	m/sec		Maximum change of velocity (dimensionless)
v_e	= 3738	m/sec		Effective exhaust velocity (dimensionless)
m_0	= 74000	kg		Initial total mass (including propellant) - "wet mass" (dimensionless)
m_1	= 7000	kg		Final total mass - "dry mass" (dimensionless)