



Find: Maximum force, T

Solution

$$k_{eq} = k_1 + k_2$$

$$\Delta_{total} = F / k_{eq} = F / (k_1 + k_2)$$

$$F_1 = k_1 \Delta_{total} = \frac{k_1 F}{(k_1 + k_2)}$$

$$F_2 = k_2 \Delta_{total} = \frac{k_2 F}{(k_1 + k_2)}$$

$$T = |F_1 - F_2| =$$

$$= \frac{F}{(k_1 + k_2)} \times |k_1 - k_2|$$