



555 $\begin{cases} R_A \\ R_B \\ C \end{cases}$ needed to produce $\sim \frac{1}{14}$ Hz are $R_A = 28k\Omega$
 $R_B = 82k\Omega$
 $C = 100\mu F$

Voltage at output to motor (assuming transistor has same effect as final circuit)

$$V_{out} = 568mV$$

$$\text{Duty Cycle of 555 @ } \sim \frac{1}{14} \text{ Hz} = \frac{8\text{sec}}{13.9\text{sec}} = 57.55\%$$