Consider the $RL$ circuit shown below. Switch $S$ is closed at $t = 0$.

Find the current $I$ through $L$ at $t = 0_+$. 

A) $I = 0$.

B) $I = \frac{\epsilon}{R_1}$.

C) $I = \frac{\epsilon}{R_1 + R_2}$.

D) $I = \frac{\epsilon}{R_2}$.

At $t = 0_+$, the flux in the inductor is zero $\Phi_B = 0$. Also, $\epsilon = \frac{dL}{dt}$ is maximum and equal to $V_{R_2}$.

Thus, the current through the inductor is zero $I = 0$.

Answer A.

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