44. The total magnetic force on the loop L is

$$\vec{F}_B = i \oint_L (d\vec{L} \times \vec{B}) = i(\oint_L d\vec{L}) \times \vec{B} = 0 \ .$$

We note that $\oint_L d\vec{L} = 0$. If $\vec{B}$ is not a constant, however, then the equality

$$\oint_L (d\vec{L} \times \vec{B}) = (\oint_L d\vec{L}) \times \vec{B}$$

is not necessarily valid, so $\vec{F}_B$ is not always zero.