Let $Z$ be a one-dimensional Lévy process, $C$ an independent subordinator and $X = Z - C$. We discuss the infimum process of $X$. To be more specific, we are interested in times when a new infimum is reached by a jump of the subordinator $C$. We give a necessary and sufficient condition that such times are discrete. A motivation for this problem comes from the ruin theory where $X$ can be interpreted as a perturbed risk process. In case $Z$ is spectrally negative, decomposition of $X$ at times when a new infimum is reached by a jump of a subordinator leads to a Pollaczek-Khintchine-type formula for the probability of ruin.