Let $R$ be a commutative Noetherian ring and $E$ the minimal injective cogenerator of the category of $R$-modules. An $R$-module $M$ is (Matlis) reflexive if the natural evaluation map $M \to \text{Hom}_R(\text{Hom}_R(M, E), E)$ is an isomorphism. We prove that if $S$ is a multiplicatively closed subset of $R$ and $M$ is an $R_S$-module which is reflexive as an $R$-module, then $M$ is a reflexive $R_S$-module. The converse holds when $S$ is the complement of the union of finitely many nonminimal primes of $R$, but fails in general. (Received January 17, 2017)