1025-05-43 **Richard H Schelp*** (rschelp@memphis.edu), 373 Dunn Hall, Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152-3240, and **V Nikiforov**, 373 Dunn Hall, Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152-3240. *Making the Components of a Graph k-Connected.*

For every integer $k \geq 2$ and graph G, consider the following natural procedure: if G has a component G' that is not k-connected, remove G' if $|G'| \leq k$, otherwise remove a cutset $U \subset V(G')$ with $|U| < k$; do the same with the remaining graph until only k-connected components are left or all vertices are removed.

We are interested when this procedure stops after removing $o(|G|)$ vertices. Surprisingly, for every graph G of order n with minimum degree $\delta(G) \geq \sqrt{2(k-1)n}$, the procedure always stops after removing at most $2n(k-1)/\delta$ vertices. We give examples showing that our bounds are essentially best possible. (Received January 08, 2007)