Stochastic comparison of repairable systems

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The aim of this paper is to study the repairable systems which begins to operate at time 0. If the system fails, then it undergoes minimal repair and begins to operate again. Here minimal repair means that the repair done on a system leaves the system in exactly the same condition as it was just before failure, (see for example Barlow and Proschan, 1966). It is assumed that the number of repair is a random variable, the proposed plan was introduced by Chahkandi et al. (2014). The idea is extended for comparing the performance of two repairable systems. Comparison results for the inactivity and residual lifetimes of two repairable systems are obtained.

References

M. Chahkandi, J. Ahmadi, S. and Baratpour (2014) Some results for repairable systems with minimal repairs. *Applied Stochastic Models in Business* and Industry **30**, 218–226.

R. Barlow, F. Proschan (1966). *Mathematical Theory of Reliability*, John Wiley and Sons, London.