

Method for Monitoring Performance of the Lubricant Cooler in Aircraft Auxiliary Power Unit

Abstract

5 The present invention relates to a method for detecting performance of
the lubricant cooler in aircraft auxiliary power unit APU, comprising:
acquiring APU-related messages within a time period; obtaining the
operation parameters of the APU lubricant cooler, the operation parameters
comprise: lubricant temperature OT and load compressor inlet temperature
10 LCIT; the revised lubricant temperature OT is obtained by the following
formula: the revised lubricant temperature = lubricant temperature OTA – the
load compressor inlet temperature LCIT; determining the performance of the
APU lubricant cooler is in stable phase, decline phase or malfunction phase
according to the change trend of the revised lubricant temperature OT with
15 respect to time.

Fig. 6