

## Continental IO550N Cracked Exhaust, ATA 7810

A repair station mechanic says, "This aircraft has a Tornado Alley Turbo normalizing system, installed under STCs SA10588SC and SE10589SC. When the cowling was removed for an unrelated issue, the right tail pipe was found cracked completely in half along the forward edge of the cabin heat exchanger weldment. It is not rare for cracks to be found along the heat exchanger in this type of tail pipe design. Undetected, the crack will eventually propagate around the tube. There is also potential for the crack to compromise the heat exchanger, possibly allowing exhaust gasses to enter the environmental system. Complicating this failure, this aircraft also had a major fuel leak, as detailed under report number 2012FA0000689. This fuel leak could have been ignited by the exhaust gasses entering the cowling from the fracture. Note: there is an improved designed tail pipe available from Tornado Alley—it is recommended any cracked tail pipes not be welded (as has been seen on other aircraft). The (tail pipes) should be replaced with the new design."



Part Total Time: 678.0 hours