



SERVICE LETTER

Service Letter Number: 004

Subject: **Wear Port Indicator Instructions**

Applicability: **AA3215CC, AA3216CW, AA215CC, AA216CW, CH215CC, CH216CW Dry Air Pumps**

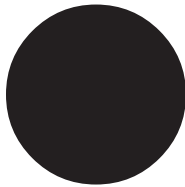
The Aero Accessories Tempest AA215CC, AA216CW and our new Tempest Tornado AA3215CC, AA3216CW dry air pumps feature a patented Wear Indicator Port.

When applicable AAI recommends the pump be mounted on engine with the inlet and outlet ports at the 12:00 position in order to accomplish vane length observations with minimal labor. Removing the port plug allows for a visual observation to determine vane wear. The end of the vane closest to the center of the rotor may be viewed through the small indicator hole in the port area. Remove and replace pump when the end of vane is observed to be in the lower 1/8 of the indicator hole.

The Wear Port Indicator is a visual aid in determining vane length at recommended observation intervals. Your findings with the Wear Indicator Port do not constitute the actual remaining life of the pump. Components of an aircraft can and do fail at any time without warning. During the typical service life of a pump its vane length will become a critical factor in determining the remaining life of the pump. The vane length will be reduced to a point that it may bind in a rotor slot and break, causing pump failure. The wear port indicator is designed as an aid to help a mechanic monitor the vane length.

Failure of an air pump will result in the loss of the pneumatically powered gyro flight instruments. IMC equipped aircraft should have a pneumatic or electric backup source in the event the aircraft's primary pump fails.

AAI recommends that at 600 hours of service the first observation be performed. Future checks should be made as deemed necessary based on wear rate shown below.



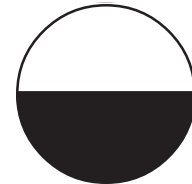
At 600 hours of pump service life perform a visual observation of the wear port indicator. If the top of the vane has not entered the indicator hole, the next observation should be performed at 1000 hours of pump service life.



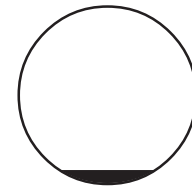
At 600 hours of pump service life the visual observation reveals the backside of the vane has entered the indicator hole, the next observation should be performed at 800 hours of pump service life.



Wear Indicator Port (WIP)



When the top of the vane is observed to be in the middle of the indicator hole, observations should be performed at every one hundred hours of service until the vane reaches the bottom 1/8 of the hole.



To help prevent in-flight failure due to a critically short vane binding in a rotor slot. Replace the pump when the vane is observed in the lower 1/8 of the indicator hole

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