

TEMPEST[™] excellence

SERVICE LETTER

Service Letter Number: SL-004-1

Subject: REAR Wear Indicator Instructions Overhauled Pumps

Applicability: Overhauled Tempest AA215CC/AA216CW or Airborne 215CC/216CW Dry Air Pumps

Aero Accessories, Inc. now installs our patented Rear Wear Indicator Port (WIP) on all of the newly overhauled AA215CC / 215CC series and AA216CW / 216CW series dry air pumps. When the port plug is removed, it allows an internal observation to determine vane wear. When end of the vane is seen in the bottom 1/8 of the indicator hole it is time to replace the pump. The pump must be installed per the aircraft manufacturer's installation instructions. Should the pump be mounted with the inlet and outlet ports located other than the 11:00, 12:00, or 1:00 o'clock position, pump removal will be necessary to perform the recommended observation.

The Wear Indicator Port is a visual aid in determining vane length at recommended observation intervals. Your findings with the Wear Indicator Port do not constitute the actual life of the pump. Components of an aircraft can and do fail at anytime 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 by normal wear to a point that it may bind in a rotor slot and break, causing pump failure. The wear indicator port is designed as an aid to help monitor vane length.

Failure of an air pump may result in the loss of the pneumatically powered gyro instruments. IMC equipped aircraft should have a backup source to provide pneumatic power in the event the aircraft's primary pump fails.

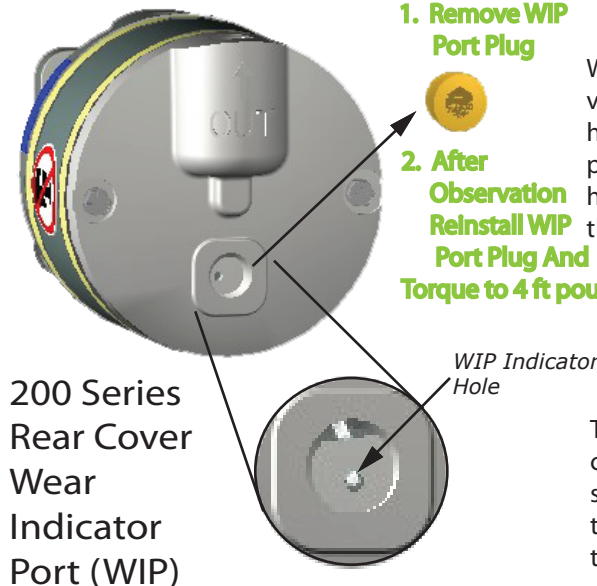
Recommended Rear WIP Vane Wear Observation Procedure

1st Observation 600 hours time-in-service

Next Observation(s) should be made as deemed necessary
based on vane wear rate shown;

At 600 hours 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 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.



1. Remove WIP Port Plug

2. After Observation Reinstall WIP Port Plug And Torque to 4 ft pounds

When observations reveal the end of the vane to be in the middle of the indicator hole, future observations should be performed at every one hundred (100) hours of service until the vane reaches the bottom 1/8 of the indicator hole.

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

ISSUED			REVISED			 Aero Accessories, Inc. 1240 Springwood Avenue Gibsonville, N.C. USA	PAGE No.	REVISION
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