



Service Letter

Service letter Number	Issue Date	Revision	Revision Date
RASL-002	10/26/2006	B	6/11/2009

Subject: Pneumatic pump vane inspection without S.M.A.R.T Stick

Applicability:

This inspection procedure applies to all new FAA PMA approved pneumatic pumps manufactured by Rapco, Inc. that are equipped with a vane wear inspection port.

Inspection Compliance:

The inspection procedure listed below should be accomplished after 500 hours time in service on all 200 series pumps and after 200 hours time in service on all 400 series pumps. After the initial inspection, the pump should be re-inspected after 100 hours time in service or annually (which ever occurs first).

This inspection procedure is recommended to be accomplished in conjunction with a 100 hour or annual inspection.

Procedure:

NOTE: Before accomplishing this inspection it is important to make sure that the Aircraft Engine Magnetos are in the off position.

1. Remove inspection port cap screw and lock washer.
2. Rotate Propeller by hand while looking into the inspection port with a flashlight.
3. Line up a vane slot with the inspection port. **NOTE:** If vane slot to inspection port alignment is incorrect it will result in an incorrect vane wear measurement.
4. Insert probe (A) through the inspection port and into the vane slot slowly until it comes into contact with the vane face. **NOTE:** The use of a tooth pick or a small drink straw is recommended for use as the probe.
5. Using a felt tip marker, mark the probe level to the plane (Reference Plane 1) at which the inspection port cap screw washer comes into contact with the pump cavity. (See figure 1)
6. Remove the probe from the inspection port.
7. Measure the distance from the tip that was inserted into the pump to the mark that was made with the felt tip marker. (See figure 2)
8. If the distance measured is $11/16"$ (.687") or greater the pump should be **removed** from service. If the distance measured is less than $11/16"$ (.687") the pump may be **returned to service** pending that the next inspection is accomplished after 100 hours time in service or at the next annual inspection.
9. Re-install the cap screw and washer (MS35338-43) and torque to 14 inch lbs.

