



Service Letter

Service letter Number	Issue Date	Revision	Revision Date
RASL-006	6/12/2009	A	12/15/2021

Subject: Pneumatic pump vane inspection with S.M.A.R.T Caliper

Applicability:

This inspection procedure applies to all new and overhauled 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 RAP200 series pumps and after 200 hours time in service on all RAP240 Series and RAP400 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.

NOTE: No other vane wear measuring devices are approved for use with this inspection procedure.

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. Open S.M.A.R.T Caliper to 1" or greater.
5. Holding the body of the S.M.A.R.T caliper, push the tail of the S.M.A.R.T caliper into the inspection port slowly until the body of the S.M.A.R.T caliper comes into contact with the outside of the pneumatic pump. **NOTE:** The S.M.A.R.T caliper slider will slide on the S.M.A.R.T caliper body during this process.
6. Remove the S.M.A.R.T caliper from the inspection port.
7. Read the position of the of the S.M.A.R.T caliper slider relative to the S.M.A.R.T caliper body in accordance with the measurements on the caliper. (See figure 1 below) **Note:** The Maximum wear limit for the pneumatic pump is 11/16" (.687"). Any pneumatic pump wear greater than that should be removed from service.
8. Determine if pump is within serviceable limits. (See figure 1 below)
9. If the pump is determined **not** to be within serviceable limits it should be **removed** from service. If pump is determined to be serviceable, it may be **returned to service** pending that the next inspection is accomplished after 100 hours time in service or at the next annual inspection.
10. Re-install cap screw and washer (MS35338-43) and torque to 14 inch lbs.

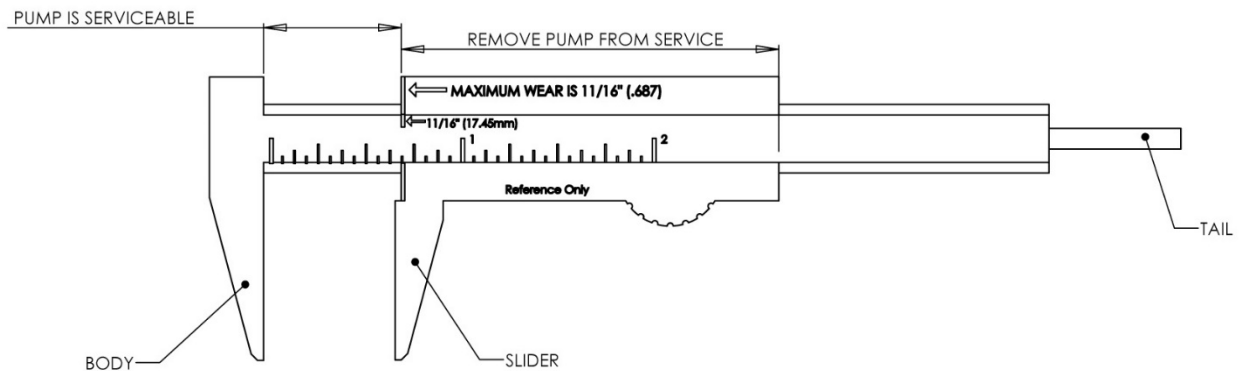


Figure 1

