DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

Inspection and Repair of Aviation Ground Support Equipment Tester, Pitot and Static Systems (PSTS) NSN 4920-01-388-6790 (LIN T03597)

Headquarters Department of the Army, Washington, D.C.
24 November 2008

NOTE
THIS PUBLICATION IS EFFECTIVE UNTIL RECINDED OR SUPERSEDED.

1. **PURPOSE.** The purpose of this TB is to inspect Pitot and Static Test Sets (PSTS) returning from Enduring Freedom/Iraqi Freedom (OEF/OIF) to determine the need for cleaning, maintenance, repair or replacement.

2. **PRIORITY CLASSIFICATION.** Routine.

3. **SUMMARY OF PROBLEM.** System deterioration encountered during OEF/OIF operations may have caused deterioration that requires cleaning, maintenance, repair or replacement.

4. **APPLICATION.** This TB shall be applied to all PSTS systems listed in Table 1 returning from operations in OEF/OIF.

Table 1. PSTS Systems

Description	Part Number	NSN
Digital Pitot and Static Test Set	**ADTS 405-1-8159-M4 TS 4463/P TS-4463/P**	**4920-01-388-6790**

5. **INSPECTION AND REPAIR PROCEDURES**. PSTS RESET will be accomplished by a PM AGSE designated facility. The PSTS systems inducted for RESET will be inspected IAW the Inspection and Maintenance Checklist in Appendix A for serviceability, completeness, and repaired IAW TM 43-4920-910-40, TM 43-4920-910-12, TM 43-4920-910-24P and calibrated IAW TB 9-4920-459-24. Inspection criteria for the PSTS are as follows:

   a. Inspect systems for missing components and serviceability.

   b. Clean and perform operational tests.

   c. Repair or replace unserviceable components.

   d. All PSTS will require calibration.

6. **CORRECTION PROCEDURES**. Not applicable unless a questionable defect with the system is identified. A questionable defect will require that a quality Deficiency Report be processed.

7. **SUPPLY/PARTS AND DISPOSITION.** For all PSTS systems identified for RESET, the loosing organization is responsible for ensuring that the system is complete and for PSTS transfer to the RESET location. The destination Transportation Account Code funding will be provided by PM AGSE. All PSTS equipment identified for RESET will be shipped to the address below.

Lakehurst, New Jersey, RIC: WC6
DODAAC: W15RM6
CERDEC Flight Activity
Hanger 5, Bldg 194
NAES Lakehurst, NJ 08733-5009

MARK FOR: AGSE PSTS RESET
ATTN: Todd A. Koveleski, QAR
Tel: 732-323-2686

NOTE

Replacement parts shall be ordered as required in accordance with the applicable Technical Manual(s).

TM 43-4920-910-12, 5 March 1997, Change 1, 15 June 1999
TM 43-4920-910-40, 10 December 1997
TM 43-4920-910-24P, 30 January 1998
TB 9-4920-459-24, 10 August 2006

8. **TECHNICAL PUBLICATIONS AFFECTED/CHANGED.** None.

9. **INSPECTION AND MAINTENANCE CHECKLIST, APPENDIX A.**

APPENDIX A

INSPECTION AND MAINTENANCE CHECKLIST

a. Preliminary Inspection.

(1) Case, Flight line. Check for cracks, deep scratches, lid alignment and deformities, tow handles and wheels, latches and placards.

(2) End Item Components. Check for condition of each item and listed quantity, TM 43-4920-910-24P.

(3) Perform operational checks IAW TM 43-4920-910-12.

(4) Perform 1000 hour and 3000 hour interval PMCS inspections IAW TM 43-4920-910-40 Section V.

(5) Clean the exterior and interior surfaces IAW TM 43-4920-910-40 Section IV, Chapter 3, paragraph 3-52.

NOTE

Most common missing items are bag, fuse kit, hose clamp, nipples and reducers, one or more hoses, adapter hose, DC power lead, Altimeter encoder lead, pitot head adapter.

Table 2. Most Common Missing Items

DESCRIPTION	NSN or Part Number/CAGE
Bag shoulder	6625-01-435-7986
Fuse Kit	6620-01-437-2460
Hose Kit	6625-01-435-7996
(No part numbers are available for individual hoses)	
Hose Clamp	4730-00-555-1352
Boss Nipple	4730-00-417-2340
Boss Nipple	4730-00-925-4752
Boss Reducer	4730-00-812-5036
Boss Reducer	4730-00-187-3575
Hose Adaptor	4730-01-466-0954
DC Power Lead	6625-01-435-6348
Altimeter Encoder Lead	6625-01-435-6341
Pitot Head Adapter	4920-00-866-6980

NOTE

Hose kit contains four hoses. Two short hoses (blue), one long hose (blue) and one red hose. Individual hoses can not be ordered separately, they can only be ordered as a kit.

b. System Inspection and Calibration.

(1) Remove Electronic Rack assembly from case; disconnect power and airlines from unit.

(2) Remove pump assembly from case; disconnect vent line from case. Inspect inside of case for any damage.

(3) Place Rack assembly and pump assembly on workbench. Remove 18 screws from top and side of rack assembly shield. Remove shield and reconnect power and air lines removed in Step 1. Also check rubber O-Rings on bulkhead connectors.

NOTE

Screw threads are metric and screw heads are POZI drive. Although a Phillips screw driver will work, stripping screw heads is possible. POZI drive bits are highly recommended.

(4) Remove 5 screws on bottom of Rack Assembly case (nearest front panel). Remove 4 screws above and below Rack Assembly handles.

NOTE

Tilt, do not pull out face panel.

(5) Visually inspect wiring, airlines, circuit cards (inside and on both ends) for any damage. Also ensure frame is square and not bent.

NOTE

Large vacuum and regulator lines coming from back bulkhead to bottom of manifold are the source of most air and vacuum leaks. These connections to the manifold are just pushed in.

(6) Tilt faceplate back towards Rack Assembly. Attach Druck Multifunction Pressure Indicator, Model DPI 145 to face plate Ps (red) and Pt (blue) bulkhead fittings. Check O-Rings.

(7) Ensure Rack Assembly and Pump Assembly power switches are off. Connect AC power cable to outlet and then to Pump Assembly. If red AC power supply LED does not illuminate, troubleshoot before proceeding.

(8) Turn on Druck Pressure Indicator and perform the calibration process in TB 9-4920-459-24, Section III.

(9) Reassemble following steps outlined in TM 43-4920-910-40, Chapter 3.

WARNING

On pumping unit, under the cover marked “No Step” is an equipment fan. It does not come on immediately. If it is not on after a couple of minutes, troubleshoot.

WARNING

TB 9-4920-459-24, Step 9a3. Do not perform this step. Leave at ground, otherwise air speed accuracy check will not perform correctly.

10. POINTS OF CONTACT.

a. Logistics points of contact for this TB is Mr. Michael Boyajian, SFAE-AV-AS-AG, DSN: 645-0765 or commercial (256) 955-0765, e-mail mike.boyajian@us.army.mil or Mr. Douglas Smith, SFAE-AV-AS-AG, DSN: 897-3174 or commercial (256) 313-3174, e-mail douglas.smith@peoavn.army.mil.

b. Technical point of contact for this TB is Mr. Mike Boyajian, Logistics Chief, AGSE, SFAE-AV-AS-AG, DSN: 645-0765 or commercial (256) 955-0765, e-mail mike.boyajian@us.army.mil.

c. Engineering point of contact for this TB is Mr. Ali Mangieri, SFAE-AV-AS-AG, DSN: 788-0495 or commercial (256) 842-0495, e-mail alvio.mangieri@us.army.mil.

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MMC-MA-NP, Redstone, Arsenal, AL 35898-5000. A reply will be furnished to you. You may also provide DA Form 2028 information to AMCOM via e-mail, fax or the World Wide Web. Our fax number is:

DSN: 788-6546 or Commercial (256) 842-6546. Our e-mail address is: 2028@redstone.army.mil. Instructions for sending an electronic 2028 may be found at the back of this bulletin immediately preceding the hard copy 2028. For the World Wide Web use: https://amcom2028.redstone.army.mil

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