

MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATIONS
UNITED STATES POSTAL SERVICE



Maintenance Management Order

SUBJECT: Preventive Maintenance Guidelines for
Package Sorter Overhead Camera (PSOC)

DATE: October 30, 2012

TO: All Network Distribution Centers (NDCs)
New Hampshire PMPC (Nashua)
New Jersey Metro PMPC (Kearny)
New York Metro PMPC (Bethpage)

NO: MMO-128-12

FILE CODE: R9

jsta: mm11021ac

This Maintenance Management Order (MMO) provides Preventive Maintenance Guidelines for the Package Sorter Overhead Camera (PSOC) systems installed at the above listed sites. These guidelines do not apply to the PSOC systems installed on the Automated Parcel Bundle Sorter (APBS). The acronym is PSOC. The class code is AA.

The workhours indicated in the workload estimate (Attachment 1) are based on a 20-hour operations window and reflect the maximum annual workhours required to maintain each system. Actual workhour requirements and the frequency of tasks are dependent on run time and pieces processed. Therefore, PM workhour requirements will vary day-to-day based on site specific machine utilization. Management may modify task frequencies to address local conditions.

The minimum maintenance skill level required to perform each task is included in the Minimum Skill Level column of each checklist. This does not preclude higher level employees from performing any of this work.

Maintenance Managers are to use these preventive maintenance guidelines when preparing the route sheets for local maintenance personnel. It is the responsibility of each Maintenance Manager to ensure all WARNINGS, CAUTIONS, and NOTES are included with each applicable task as part of the preparation of any local route sheets.

WARNING

Various products requiring Material Safety Data Sheets (MSDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current MSDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current MSDS be requested. Refer to MSDS for appropriate personal protective equipment.

WARNING

The use of compressed or blown air is prohibited. An alternative cleaning method such as a HEPA filtered vacuum cleaner, a damp rag, lint-free cloth, or brush must be used in place of compressed or blown air.

WARNING

Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.

For questions or comments concerning this bulletin contact the MTSC HelpDesk, either online at **MTSC>HELPDESK>Create/Update Tickets** or call (800) 366-4123.



Robert E. Albert
Manager
Maintenance Technical Support Center
HQ Maintenance Operations

Attachments:

1. Summary Workload Estimate for PSOC System
2. PSOC Master Checklist: 03-PSOC-AA-001-M: Monthly PM
3. PSOC Master Checklist: 03-PSOC-AA-002-M: Annual PM

ATTACHMENT 1

SUMMARY

WORKLOAD ESTIMATE

FOR PSOC SYSTEM

**SUMMARY
WORKLOAD ESTIMATE
FOR PSOC SYSTEM**

Operation	Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Routine Servicing + Repair Time (hrs/yr)	Non-productive Time** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
5	8.45	2.54	10.99	1.10	12.08
6	8.45	2.54	10.99	1.10	12.08
7	8.45	2.54	10.99	1.10	12.08

NOTES:

*Repair estimates based on 30% of servicing.

**Based on 10% of total servicing and repair.

ATTACHMENT 2

PSOC MASTER CHECKLIST

MONTHLY

03-PSOC-AA-001-M

TIME TOTAL: 34 minutes

U.S. Postal Service Maintenance Checklist	IDENTIFICATION													
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	3	P	S	O	C			A	A	0	0	1	M
Equipment Nomenclature Package Sorter Overhead Camera		Equipment Model					Bulletin Filename MM11021AC			Frequency Monthly				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Weeks

SAFETY STATEMENT	1.	<p>COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. Open equipment and inspect dust conditions. Check for suspicious dust or unusual debris. If any unusual substance is found notify supervisor prior to proceeding with any further action on the equipment.</p> <p>THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.</p> <p>When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection.</p> <p>WARNING FOR EWP/PPE</p> <p>Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.</p>		All			
		<div style="border: 1px solid black; padding: 2px; display: inline-block;">WARNING</div> <p>De-energize the Parcel Sorting Machine (PSM) over which the PSOC is located prior to servicing PSOC system.</p>					
		<div style="border: 1px solid black; padding: 2px; display: inline-block;">WARNING</div> <p>Use of a ladder may be necessary. If use of a ladder is necessary, face the ladder and use both hands when ascending or descending the ladder. Keep your body centered between the rails of the ladder at all times. Failure to do so may cause injury or death.</p>					

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
		WORK CODE		EQUIPMENT ACRONYM				CLASS CODE		NUMBER			TYPE
		0	3	P	S	O	C			A	A	0	0
Equipment Nomenclature Package Sorter Overhead Camera		Equipment Model				Bulletin Filename MM11021AC			Frequency Monthly				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Weeks

	2.	Power down and lock out power. Power down the machine and lock out its electrical power source as prescribed by the current local lockout/restore procedures.	3	All			
SYSTEM OPTICS	3.	Check and clean system optics. <div style="border: 1px solid black; padding: 2px; text-align: center; width: fit-content; margin: 10px auto;">CAUTION</div> <p>The glass used in this system is fragile enough to break if pressure is applied. Wipe very gently.</p> <div style="border: 1px solid black; padding: 2px; text-align: center; width: fit-content; margin: 10px auto;">CAUTION</div> <p>Do not scratch the glass. Wiping the glass with a dirty cloth can result in very small scratches.</p> <p style="text-align: center;">NOTE</p> <p>Do not wet microfiber cloth. It should not feel wet; otherwise it is too moist and could leave wet spots on the glass. Only a misting of the cloth is required. Optionally, use a locally approved streak-free glass cleaner.</p> <ol style="list-style-type: none"> 1. Check ViCAMssi2-PSOC camera unit glass. <ol style="list-style-type: none"> a. If glass is noticeably covered with dust, wipe the glass with a clean microfiber cloth. b. Wipe off any smudges. Use spray bottle with glass cleaner to mist microfiber cloth for wiping away stubborn smudges 2. Check LED light grid receiver glass. <ol style="list-style-type: none"> a. If glass is noticeably covered with dust, wipe the glass with a clean microfiber cloth. b. Wipe off any smudges. Use spray bottle to mist microfiber cloth for wiping away stubborn smudges 3. Check LED light grid transmitter glass. 	15	7			

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Equipment Nomenclature Package Sorter Overhead Camera		Equipment Model						Bulletin Filename MM11021AC			Frequency Monthly				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Weeks

		<ol style="list-style-type: none"> a. If glass is noticeably covered with dust, wipe the glass with a clean microfiber cloth. b. Wipe off any smudges. Use spray bottle with glass cleaner to mist microfiber cloth for wiping away stubborn smudges <p>4. If applicable, check mirror glass.</p> <ol style="list-style-type: none"> a. If glass is noticeably covered with dust, wipe the glass with a clean microfiber cloth. b. Wipe off any smudges. Use spray bottle with glass cleaner to mist microfiber cloth for wiping away stubborn smudges 					
COMPUTER ENCLOSURE	4.	<p>Clean fan filters.</p> <ol style="list-style-type: none"> 1. Pull off outside covers of enclosure cabinet fan filters. 2. Rinse filters out with water until clean. Replace filters if torn or damaged. 3. Let filters dry. 4. Place clean (or new) filters back on enclosure and snap cover back into place. 	10	7			
	5.	<p>Restore equipment to service.</p> <p>Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures.</p>	3	All			
CLEAN UP	6.	<p>Clean up.</p> <p>Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.</p>	3	All			

ATTACHMENT 3

PSOC MASTER CHECKLIST

ANNUAL

03-PSOC-AA-002-M

TIME TOTAL: 99 minutes

U.S. Postal Service Maintenance Checklist	IDENTIFICATION													
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	3	P	S	O	C			A	A	0	0	2	M
Equipment Nomenclature Package Sorter Overhead Camera		Equipment Model					Bulletin Filename MM11021AC			Frequency Annual				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Weeks

SAFETY STATEMENT	1.	<p>COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. Open equipment and inspect dust conditions. Check for suspicious dust or unusual debris. If any unusual substance is found notify supervisor prior to proceeding with any further action on the equipment.</p> <p>THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.</p> <p>When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection.</p> <p>WARNING FOR EWP/PPE Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.</p>		All			
		<div style="border: 1px solid black; padding: 2px; display: inline-block;">WARNING</div> <p>De-energize the Parcel Sorting Machine (PSM) over which the PSOC is located prior to servicing PSOC system.</p>					
		<div style="border: 1px solid black; padding: 2px; display: inline-block;">WARNING</div> <p>Use of a ladder may be necessary. If use of a ladder is necessary, face the ladder and use both hands when ascending or descending the ladder. Keep your body centered between the rails of the ladder at all times. Failure to do so may cause injury or death.</p>					

U.S. Postal Service Maintenance Checklist		IDENTIFICATION													
		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	P	S	O	C				A	A	0	0	2
Equipment Nomenclature Package Sorter Overhead Camera		Equipment Model						Bulletin Filename MM11021AC			Frequency Annual				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Weeks

	2.	Power down and lock out power. Power down the machine and lock out its electrical power source as prescribed by the current local lockout/restore procedures.	3	All			
FRAME AND CABLES	3.	Check frame and cables. 1. Check all frame hardware, making sure all bolts are secure and there is no frame damage or looseness. 2. Check all cables and connections, making sure no cables are damaged or loose and unsecured.	30	7			
	4.	Restore equipment to service. Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures.	3	All			
SYSTEM CALIBRATION	5.	Perform system calibration and testing. Follow the alignment and adjustment procedures in MS-273 TL-1, Section 9.2.2 to recalibrate and test the ViCAMssi2-PSOC camera unit.	60	9			
CLEAN UP	6.	Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	3	All			