



Maintenance Management Order

SUBJECT: Tray Sorting Machine Novasort Preventive
Maintenance

DATE: February 28, 2014

NO: MMO-041-14

TO: All Novasort TMS Sites

FILE CODE: TM

tpor:mm13050ab

This Maintenance Management Order (MMO) provides Operational and Preventive Maintenance Guidelines for the Tray Sorting Machine Novasort. Include the following phrase in the first paragraph: This bulletin applies to Acronym TSM, Class Code CA.

The workhours indicated in the workload estimate (Attachment 1) 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.

Preventive Maintenance (PM) guidelines provide maintenance employees with the recommended task based maintenance activities. The Electronic Conditioned Based Maintenance (eCBM) is an abbreviated task list that represents a portion of the PM checklist. The complete master PM checklist must be accessible to all maintenance employees when performing PM and eCBM task based maintenance activities.

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 of Workload Estimate
 2. Master Checklist 03-TSM-CA-001-M – Monthly PM

ATTACHMENT 1

SUMMARY

WORKLOAD ESTIMATE

FOR TRAY SORTING MACHINE NOVASORT

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**SUMMARY
WORKLOAD ESTIMATE
FOR TRAY SORTING MACHINE NOVASORT**

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)

NOTES:

*Repair estimates based on 30% of servicing.

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

NOTE

Since this equipment contains multiple units of unknown quantity, the workload estimate cannot be provided in a traditional roll-up table. For this guideline, the annual work hours are derived from local site specific entries made in an electronic Work Hour Estimator Program (eWHEP) worksheet. Refer to eWHEP for further guidance.

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ATTACHMENT 2

TRAY SORTING MACHINE NOVASORT MASTER CHECKLIST

03-TSM-CA-001-M

MONTHLY

10 minutes per NovaSort Loop
Plus
3 minutes per 5 feet of rail

U.S. Postal Service Maintenance Checklist	IDENTIFICATION												
	WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
	0	3	T	S	M				C	A	0	0	1
Equipment Nomenclature TRAY SORTING MACHINE NOVASORT		Equipment Model					Bulletin Filename mm13050ac			Occurrence 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)	Freq.

SAFETY STATEMENT	1.	<p>COMPLY WITH ALL SAFETY PRECAUTIONS.</p> <p>Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shutdown and lockout 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>	3	All			
POWER DISTRIBUTION PANEL	2.	<p>Lockout Power.</p> <p>Lockout electrical power to the NovaSort loop by placing the disconnect lever, on the master power distribution panel, in the "OFF" position and install a LOCKOUT/TAGOUT device.</p>	2	All			

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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)	Freq.

NOVASORT RAIL	3.	<p>Check Conductor Rail Of Selected Loop.</p> <div style="border: 1px solid black; padding: 2px; text-align: center; width: fit-content; margin: 0 auto;">WARNING</div> <p>There is no visual indication that a NovaSort conductor rail has been de-energized. Always verify that the circuits are de-energized with a meter before working on the conductor rail.</p> <p>Visually inspect the entire length of the loop conductor rail and pay particular attention to the following areas.</p> <ol style="list-style-type: none"> 1. Check fasteners holding the conductor rail to the track for tightness. 2. Check all sections of conductor rail for proper alignment with the previous and next section. 3. Pay particular attention to the sections where there are changes in elevation and at joint splices. 4. Check all transfer guides for proper alignment and/or damage. 5. Check the conductor rail for signs of damage including insulation, discoloration, or burn marks that indicate arcing between the collector shoes of the tug and the conductor rail. 6. Check electrical feed terminals for tightness and signs of discoloration or overheating. 7. Report discrepancies to supervisor. 	1 per 5ft. of rail	9			
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PHOTO SENSORS AND REFLECTORS	4.	<p>Clean And Inspect Track Photo Sensors And Reflectors.</p> <ol style="list-style-type: none"> 1. Check to ensure the photo sensors and associated reflectors are securely fastened and not visibly damaged. 2. Ensure all electrical connections are tight. <p style="text-align: center;">WARNING</p> <p>Discard or dispose of chemical soaked materials in accordance with MSDS and local procedures.</p> <ol style="list-style-type: none"> 3. Using a damp cloth clean the sensor exterior, emitter window and associated reflector. <p>Ensure that the photo sensors and associated reflectors are properly aligned.</p>	2 per 5 ft. of rail	9			
		<p style="text-align: center;">WARNING</p> <p>Be cautious when working around or on equipment when power has been applied.</p>					
	5.	<p>Restore Equipment To Service.</p> <p>Restore electrical power to the NovaSort loop by removing your LOCKOUT/TAGOUT device and placing the disconnect lever on the master power distribution panel in the "ON" position.</p>	2	All			
	6.	<p>Clean-Up.</p> <p>Ensure all tools, lubricants, rags, ect., are removed from the work area. Report all deficiencies to your supervisor.</p>	3	All			