

MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATIONS
UNITED STATES POSTAL SERVICE



Maintenance Management Order

SUBJECT: Tray Sorting Machine Novasort Preventive Maintenance

DATE: December 18, 2013

NO: MMO-112-13

TO: Tray Sorting Machine Novasort Sites

FILE CODE: TM

pmur:mm13052ab

This Maintenance Management Order (MMO) provides Preventive Maintenance Guidelines for the Tray Sorting Machine Novasort System (TSM). 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. 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.

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: Quarterly PM

ATTACHMENT 1

**SUMMARY
WORKLOAD ESTIMATE
FOR
TSM SYSTEM**

**SUMMARY
WORKLOAD ESTIMATE
FOR TSM**

	Routine Servicing (Hrs/Yr)	Repair* (Hrs/yr.)	Total Servicing & Repair Time (Hrs/Yr)	Nonproductive Time** (Hrs/Yr)	Total Servicing Per Unit (Hrs/Yr)
Quarterly	1.93	0.77	2.70	0.27	2.97

NOTES

*Repair estimates based on 40% of servicing.

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

NOTE

The time shown does not allow for multiple assemblies on any equipment. Should multiple assemblies exist, the time must be modified at the local level to account for those occurrences. Other unique site conditions that require additional time are also to be addressed at the local level.

ATTACHMENT 2

TSM MASTER CHECKLIST

03-TSM-CA-001-M

Quarterly Time Total: 29 minutes

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 mm13052ab				Occurrence Quarterly			

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.	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. THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED. 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. 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.	3	All			
	2.	Lock Out Power. Place appropriate PLC control panel "AUTO/MANUAL" switch in the "MANUAL" position. Lock out electrical power by placing the PLC disconnect lever in the "OFF" position and installing a LOCKOUT/TAGOUT device.	2	All			
	3.	Check Discharge Chute. 1. Visually check for any damage (large gouges or cracking) to the fiberglass chute. 2. Remove foreign objects (i.e., tape, labels, string, rubber bands, etc.) from the interior. 3. Report discrepancies to supervisor.	3	7			

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PHOTO SENSORS AND REFLECTORS	4.	Check Photo Sensors, Reflectors, and Infrared Emitters. <ol style="list-style-type: none"> Check the photo sensor, reflector, and/or infrared emitter for physical damage. Check the mounting connections for tightness. If loose, tighten the connections. Check the electrical connections for tightness. Report discrepancies to supervisor. 	4	7			
	5.	Clean Photo Sensors, Reflectors, and Infrared Emitters. <ol style="list-style-type: none"> Wipe the photo sensor/emitter window with a damp rag to remove dust and dirt. Wipe the reflector with a damp rag to remove dust and dirt. Wipe the emitter window with a damp rag to remove dust and dirt. 	4	7			
DISCHARGE CHUTE	6.	Clean Discharge Chute. <div style="border: 1px solid black; padding: 5px; margin: 10px 0; text-align: center;">WARNING</div> <p>Ensure the current MSDS for Odorless Mineral Spirits (or equivalent) 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.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0; text-align: center;">WARNING</div> <p>Ensure the current MSDS for Pledge Furniture Polish (or equivalent) 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.</p>	5	7			

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		<p style="text-align: center;">WARNING</p> <p>Discard or dispose of chemical soaked materials according to MSDS and in accordance with local procedures.</p> <p style="text-align: center;">WARNING</p> <p>Do not ride in the chute. Personal injury could result from riding in chute.</p> <ol style="list-style-type: none"> 1. Remove loose material from the chute. 2. Remove surface contamination using Odorless Mineral Spirits (or equivalent) on the inside surface of the chute. Distribute liquid using clean dry cloth, ensure entire inside surface is wiped. Contaminants being removed during this process may be present on the cloth. Continue to wipe inside surface of the chute until dirty residue is no longer present on the cloth being used to distribute the Mineral Spirits. The inside surface shall then be wiped again with a dry clean cloth to remove all excess Mineral Spirits that has accumulated on the surface. 3. Perform a complete check of the inside surface of the chute. Materials such as grease or oil may be difficult to see on the surface. This problem can be compounded by lighting arrangements, so it is critical that the surface be looked at from several angles. If any material is found at this check, repeat previous step until material is completely removed from the chute surface. 4. Treat surface using Pledge Furniture Polish (or equivalent) on the inside surface of the chute. Distribute polish using a clean dry cloth. Do not spray the polish directly onto the inside surface of the chute. Spray onto the cloth and wipe the chute with the cloth. Ensure the entire inside surface is wiped. Wipe the inside surface again with a dry clean cloth to remove all access polish that may have accumulated on the surface. 					
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		5. Report discrepancies to supervisor.					
DISCHARGE CHUTE	7.	Test Discharge Chute. Test the chute with 5 trays of mail. Ensure trays slide smoothly and do not hang up. Report discrepancies to supervisor.	3	7			
		<div style="border: 1px solid black; padding: 5px; text-align: center;">WARNING</div> <p>Be cautious when working around or on equipment when power has been applied.</p>					
	8.	Restore Equipment To Service. Restore electrical power by removing your LOCKOUT/TAGOUT device and placing the PLC disconnect lever in the "ON" position. Place the PLC control panel "AUTO/MANUAL" switch in the "AUTO" position.	2	All			
CLEAN UP	9.	Clean Up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	3	All			