

MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATION
UNITED STATES POSTAL SERVICE



Maintenance Management Order

SUBJECT: PM Guidelines for Crisplant High Speed
Induction Units on the Singulator Scan Induction
Unit (SSIU)

DATE: July 7, 2004

NO: MMO-057-04

TO: Bulk Mail Centers

FILE CODE: Y

Dfau:MM02056AD

Online Change Record		
Change #	Date	Description of Change
3	05/02/2022	Attachments 2-4, corrected skill level 4, no longer in use, to level 7.
2	03/05/2021	In Attachment 3, Item No 4 added a new Step 4.
1	03/12/2014	Safety Warning added for working around moving conveyors.

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) guidelines for the Crisplant High Speed Induction Unit on the SSIU equipment.

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

WARNING

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

WARNING

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 only on optical equipment when other cleaning methods can not be used.

The attached master checklist provides tasks to be performed at periodic intervals, the time required per task, and the minimum skill level for each task.

The workhours represented in this MMO reflect the maximum workhours required to maintain the equipment. Given local conditions, management may modify task frequencies.

WARNING

Moving conveyors may expose employees to personal safety hazards. Do not climb, sit, or walk on conveyors without first performing local Energy Control Procedure (ECP).

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 Tschantz
Manager (A)
Maintenance Technical Support Center
HQ Maintenance Operations

Attachments:

1. Summary of Workload Estimate
2. Crisplant High Speed Induction Unit (SSIU) Master Checklist (Monthly)
3. Crisplant High Speed Induction Unit (SSIU) Master Checklist (Quarterly)
4. Crisplant High Speed Induction Unit (SSIU) Master Checklist (Semi-annual)

ATTACHMENT 1

SUMMARY

**WORKLOAD ESTIMATE FOR
CRISPLANT HIGH SPEED INDUCTION UNIT**

Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Total Servicing & Repair Time (hrs/yr)	Nonproductive Time ** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
25.5	7.7	33.2	3.3	36.5

* Repair estimates based on 30% of servicing.

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

TIME TOTALS

<u>Monthly Time Total:</u>	1.9 Hrs. ***
<u>Quarterly Time Total:</u>	0.4 Hrs. ***
<u>Semi-Annual Time Total:</u>	0.5 Hrs. ***

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 to be addressed at the local level.

*** These times are provided for data entry for the VMARS System.

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ATTACHMENT 2

CRISPLANT HIGH SPEED INDUCTION UNIT MASTER CHECKLIST

03-SSIU-HA-001-M

MONTHLY

MONTHLY TIME TOTALS: 114.5 MINUTES

U.S. Postal Service Maintenance Checklist	IDENTIFICATION										
	Work Code		Equipment Acronym				Class Code		Number		Type
	0 3		S S I U				H A		0 0 1		M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU			Bulletin Filename MM02056AD			Frequency MONTHLY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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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 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>	3 min	All
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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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.

WARNING

Be cautious when working around or on equipment when power has been applied.

SYSTEM	2.	<p>CHECK FOR MAIL. - Look for stray mail while performing all activities.</p>	2.5 min	7
CONVEYOR BELTS	3.	<p>CHECK CONVEYOR BELTS. –</p> <ol style="list-style-type: none"> 1. Jog individual high-speed belts using remote tether. 2. Listen for bearing noise from operation of belts and associated VFD/motor. 3. Check belts for frayed edges or other visible wear and/or damage. 4. Check for proper tracking and belt tensioning (slippage). 5. Stop high-speed belts and check for proper clearance on transfer plate gap. 6. Adjust as needed. 	40 min	7

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	S	S	I	U	H	A	0	0	1	M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU				Bulletin Filename MM02056AD		Frequency MONTHLY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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SYSTEM (Cont.)	4.	POWER DOWN AND LOCKOUT POWER. - Power down the equipment and lockout its electrical power as prescribed by the procedures contained in, or locally developed in accordance with the current Maintenance Management Order (MMO) providing lockout/restore procedures.	3 min	All
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WARNING

Discard solvent soaked materials according to local procedures to prevent spontaneous combustion.

	5.	CLEAN UNIT. - Clean HSIU as follows:	60 min	7
		1. Open all access panels.		
		2. Clean entire interior and exterior of the unit using vacuum and rags.		
		3. Clean photocells with soft lint-free cloth.		
		4. Check alignment of Alignment LED.		
		5. Re-install all covers and access panels.		
		6. Close all access panels.		

WARNING

Be cautious when working around or on equipment when power has been applied.

SYSTEM	6.	RESTORE EQUIPMENT TO SERVICE. - Restore equipment to service as prescribed by the procedures contained in, or locally developed in accordance with, the current Maintenance Management Order (MMO) providing lockout/restore procedures.	3 min	All
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U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	S	S	I	U	H	A	0	0	1	M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU				Bulletin Filename MM02056AD		Frequency MONTHLY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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CLEAN-UP	7.	CLEAN-UP. - Ensure all tools, lubricants, rags, etc. are removed from the work area. Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs, or to remove excessive debris.	3 min	All
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ATTACHMENT 3

CRISPLANT HIGH SPEED INDUCTION UNIT MASTER CHECKLIST

03-SSIU-HA-002-M

QUARTERLY

QUARTERLY TIME TOTALS: 24.5 MINUTES

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	S	S	I	U	H	A	0	0	2	M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU				Bulletin Filename MM02056AD		Frequency QUARTERLY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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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 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><u>THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.</u> 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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.</p>	3 min	All
SYSTEM	2.	<p>CHECK FOR MAIL. - Look for stray mail while performing all activities.</p>	2.5 min	All
SYSTEM	3.	<p>POWER DOWN AND LOCKOUT POWER. - Power down the equipment and lockout its electrical power as prescribed by the procedures contained in, or locally developed in accordance with the current Maintenance Management Order (MMO) providing lockout/restore procedures.</p>	3 min	All
VFD	4.	<p>CHECK VARIABLE FREQUENCY DRIVES. –</p> <ol style="list-style-type: none"> 1. Remove covers as needed. 2. Look for damage to VFD. 3. Check cogged timing drive belts for proper tension and wear (1/4" - 1/2" deflection at midpoint). 4. Replace all covers removed. 	10 min per VFD	7

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	S	S	I	U	H	A	0	0	2	M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU				Bulletin Filename MM02056AD		Frequency QUARTERLY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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WARNING

Be cautious when working around or on equipment when power has been applied.

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| SYSTEM | 5. | RESTORE EQUIPMENT TO SERVICE. – Restore equipment to service as prescribed by the procedures contained in, or locally developed in accordance with, the current Maintenance Management Order (MMO) providing lockout/restore procedures. | 3
min | All |
| | 6. | CLEAN-UP. – Ensure all tools, lubricants, rags, etc. are removed from the work area. | 3
min | All |

Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs, or to remove excessive debris.

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	S	S	I	U	H	A	0	0	2	M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU				Bulletin Filename MM02056AD		Frequency QUARTERLY				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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ATTACHMENT 4

CRISPLANT HIGH SPEED INDUCTION UNIT MASTER CHECKLIST

03-SSIU-HA-003-M

SEMI-ANNUAL

SEMI-ANNUAL TIME TOTALS: 29.5 MINUTES

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	S	S	I	U	H	A	0	0	3	M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU				Bulletin Filename MM02056AD		Frequency SEMI-ANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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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 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><u>THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.</u> 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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.</p>	3 min	All
MAIN CONTROL CABINET	2.	<p>CHECK FOR MAIL. - Look for stray mail while performing all activities.</p>	2.5 min	All
MAIN CONTROL CABINET	3.	<p>CHECK HSIU PROCESSOR ADAPTER BATTERY STATUS. -</p> <p>Through PROWORX on the SPC, launch the NetScan Utility and check processor adapter battery status(s).</p> <p>If low Bat condition exists, replace the two "AAA" batteries in the appropriate Processor Adapter.</p>	5 min	7
SYSTEM	4.	<p>POWER DOWN AND LOCKOUT POWER. - Power down the equipment and lockout its electrical power as prescribed by the procedures contained in, or locally developed in accordance with the current Maintenance Management Order (MMO) providing lockout/restore procedures.</p>	3 min	All
	5.	<p>CHECK CABLE WIRING. - Check for damage to wiring cables and components.</p>	10 min	All

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	0	3	S	S	I	U	H	A	0	0	3	M
Equipment Nomenclature CRISPLANT HIGH SPEED INDUCTION UNIT		Equipment Model SSIU				Bulletin Filename MM02056AD		Frequency SEMI-ANNUAL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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WARNING

Be cautious when working around or on equipment when power has been applied.

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|--------|----|---|----------|-----|
| SYSTEM | 6. | RESTORE EQUIPMENT TO SERVICE. - Restore equipment to service as prescribed by the procedures contained in, or locally developed in accordance with, the current Maintenance Management Order (MMO) providing lockout/restore procedures. | 3
min | All |
| | 7. | CLEAN-UP. - Ensure all tools, lubricants, rags, etc. are removed from the work area. | 3
min | All |

Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs, or to remove excessive debris.