

MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATIONS
UNITED STATES POSTAL SERVICE



Maintenance Management Order

SUBJECT: Preventive Maintenance Guidelines for
Automatic Flats Tray Lidder (AFTL)

DATE: March 26, 2010

NO: MMO-023-10

TO: All AFTL Offices

FILE CODE: F11

same: mm09105ab

Online Change Record		
Change #	Date	Description of Change
1	08/23/2021	In Attachment 3, Item #2, added new step after Step 11.

This Maintenance Management Order (MMO) supersedes MMO-048-06. This MMO updates the Preventive Maintenance (PM) guidelines and adds Infrared and Ultrasound monitoring procedures for the AFTL.

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.

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

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. 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.

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.

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
Maintenance Policies and Programs

- Attachments:
1. Summary Work Load Estimate
 2. AFTL Master Checklist : 03-AFTL-AA-101-M : Daily
 3. AFTL Master Checklist : 03-AFTL-AA-102-M : Weekly
 4. AFTL Master Checklist : 03-AFTL-AA-103-M : Monthly
 5. AFTL Master Checklist : 03-AFTL-AA-104-M : Quarterly
 6. AFTL Master Checklist : 03-AFTL-AA-105-M : Semi-Annual
 7. AFTL Master Checklist : 03-AFTL-AA-106-M : Annual

ATTACHMENT 1

SUMMARY

WORKLOAD ESTIMATE

FOR

AFTL

SUMMARY
WORKLOAD ESTIMATE
FOR AFTL

Days	Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Total Servicing & Repair Time (hrs/yr)	Nonproductive Time ** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
5 Day	102.17	20.43	122.60	12.26	134.86
6 Day	112.57	22.51	135.08	13.51	148.59
7 Day	122.97	24.59	147.56	14.76	162.32

Service Condition is based on a seven day per week operation.

* Repair estimates based on 20% of servicing.

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

PM CHECKLIST TIME SUMMARY

Checklist	Checklist Times (per year) for 5 day PM week	Checklist Times (per year) for 6 day PM week	Checklist Times (per year) for 7 day PM week
03-AFTL-AA-101-M (Daily)	3132 minutes	3756 minutes	4380 minutes
03-AFTL-AA-102-M (Weekly)	2392 minutes	2392 minutes	2392 minutes
03-AFTL-AA-103-M (Monthly)	204 minutes	204 minutes	204 minutes
03-AFTL-AA-104-M (Quarterly)	364 minutes	364 minutes	364 minutes
03-AFTL-AA-105-M (Semi-Annual)	24 minutes	24 minutes	24 minutes
03-AFTL-AA-106-M (Annual)	26 minutes	26 minutes	26 minutes

ATTACHMENT 2

AFTL MASTER CHECKLIST

03-AFTL-AA-101-M

DAILY

Time Total: 12 Minutes

Refer to MS-223 if additional maintenance information is required.

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	1
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Daily				

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

5 All

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.

CENTER ASSEMBLY

2. **Verify air supply.**
Verify as follows:
1. No water/oil/debris in air preparation assembly filter/regulator polycarbonate bowl and filter.
 2. Air pressure of 90 ±5 PSI on the air preparation assembly air pressure gauge.
 3. Air pressure of 40 +5/-0 PSI on the three (3) air valve assembly air pressure gauges.
 4. If any deficiency is noted, notify the supervisor.

1 7

MAIL SEARCH

3. **Perform mail search of the AFTL.**
Perform mail search as follows:
1. Power down the machine and lock out air and electrical power as prescribed by current local lockout instructions providing lockout/restore procedures.

2 7

U.S. Postal Service Maintenance Checklist		IDENTIFICATION													
		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L					A	A	1	0
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Daily				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	Min. Skill Level
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2. Open side access doors.
3. Search for mail pieces in and under the machine.
4. Follow local procedures for returning mail to operations for processing.
5. Close side access doors.

WARNING

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

SYSTEM	4.	Return AFTL to service. Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures. Return the AFTL to normal operation.	2	9
CLEAN UP	5.	Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Clean up water that may get on the floor as the result of doing this procedure. Report all deficiencies to supervisor.	2	All

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	1
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Daily				
Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)										Est. Time Req'd In Min.	Min. Skill Level		

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ATTACHMENT 3

AFTL MASTER CHECKLIST

03-AFTL-AA-102-M

WEEKLY

Time Total: 46 Minutes

Refer to MS-223 if additional maintenance information is required.

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	2
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Weekly				

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

5 All

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.

WARNING

Use only rubber or neoprene gloves that are in good condition. Do not use cotton, latex, nitrile, or other gloves to do the following procedure.

SYSTEM

2. **Operate vacuum system.**
1. Remove lids from the lid conveyor.
 2. Open the carriage doors and bypass the door interlocks on the lid conveyor side of the AFTL.
 3. Press the MAINTENANCE MENU BUTTON on the Operator Menu screen to place the AFTL in the Maintenance Mode.
 4. Press ENTER on Graphic Logic Controller to initialize the Cursor Position.

3 9

U.S. Postal Service Maintenance Checklist		IDENTIFICATION													
		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L					A	A	1	0
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB				Frequency Weekly			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	Min. Skill Level
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5. Enter the 4-Digit Maintenance PIN and Press Enter.
6. The Maintenance Menu screen appears.
7. Press the MAINTENANCE CONTROLS button to access the Maintenance Control Function.
8. Press the HEAD TO LID LIFT to move the lift carriage slide assembly to the lid conveyor side of the AFTL.
9. Press the maroon VACUUM OFF button on the Maintenance Control Screen.
10. The button turns green, shows VACUUM ON, and the vacuum generators are turned ON.
11. While wearing rubber or neoprene gloves, use your finger to block the output of each of the 4 suction cup pump mufflers, one at a time. This re-routes air through the suction pump lines and suction cup cleaning out any debris.
12. Close carriage doors.
13. Place the AFTL back in the normal operating condition by selecting the MAINTENANCE MENU, then the OPERATOR MENU.

SYSTEM	3.	Power down and lockout power. Stop the AFTL. Power down the machine and lock out air and electrical power as prescribed by the current local lockout procedures.	2	All
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CLEANING	4.	Clean AFTL. Remove dust and debris from the AFTL. Wipe off faces of sensors and vacuum the power distribution vent filter. Use care not to bump sensors out of alignment. 1. Use a vacuum to clean the inside and outside of the AFTL, including the power distribution vent filter. 2. Using a clean, dry, soft cloth, wipe dust off faces of all sensors: a. 4 Tray Conveyor Zone Sensors (Emitter/Receiver is one unit): 1) PE-205-Tray in Zone 1 2) PE-115-Tray in Position 3) PE-208Tray in Zone 3	30	7
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U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	2
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Weekly				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	Min. Skill Level
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4) PE-209-Tray in Zone 4

- b. 1 Flats Tray Sensor Emitter/Receiver is one unit – PE-207-Tall Tray at Inspection Station
- c. Over-Height Sensor (Emitter and Receiver are 2 units):
 - 1) PR-213-Receiver Sensor
 - 2) PT-213-Transmitter Sensor
- d. 3 Lid Conveyor Sensors (Emitter/ Receiver is one unit):
 - 1) PE-104-Lid in Load Position
 - 2) PE-105-Lid in 2nd Position
 - 3) PE-106 -Lid in 3rd Position
- e. Lids on Lift - PR-107-PR Receiver Sensor, PT-107 Transmitter Sensor
- f. Lids Up Position PR-109 Receiver Sensor and PT-109 Transmitter Sensor
- g. Lid Present – Ultra-Sonic Sensor 1 - US502 and Ultra-Sonic Sensor 2 – US-503

CENTER
ASSEMBLY

5. **Check and clean lift carriage slide assembly suction cups.** 2 7

Check lift carriage slide assembly suction cups for cracks or tears. Clean the suction cups.

- 1. Using a soft clean cloth dampened with water, clean the suction cups.
- 2. Check the suction cups and replace if cracked or torn.

WARNING

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

SYSTEM

6. **Return AFTL to service.** 2 9

Restore equipment to service as prescribed by the current local procedure providing lockout/restore

U.S. Postal Service Maintenance Checklist		IDENTIFICATION													
		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L					A	A	1	0
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Weekly				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	Min. Skill Level
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CLEAN UP 7. procedures. Return the AFTL to normal operation.
Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor.
 2 All

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number		Type
		0	3	A	F	T	L				A	A	1	0
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB		Frequency Weekly				
Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)									Est. Time Req'd In Min.	Min. Skill Level		

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ATTACHMENT 4

AFTL MASTER CHECKLIST

03-AFTL-AA-103-M

MONTHLY

Time Total: 17 Minutes

Refer to MS-223 if additional maintenance information is required.

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	3
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Monthly				

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

5 All

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. **Operate E-Stop push buttons and access door interlock switches.**
1. Operate all E-Stop push buttons and access door interlock switches while the machine is in the run mode with the green stack light illuminated and not processing flat trays.
 2. Observe the Graphic Logic Controller (GLC) Display Operator Menu Screen for proper change of state during the operation of the E-Stop switches and access door interlock switches. Ensure the machine stops and the red stack light illuminates.
 - a. GLC denotes the correct E-Stop switch and its status is indicated when each E-Stop switch is activated.
 - b. GLC denotes the correct access door interlock switch and its status is indicated when each access door is opened and the access door

5 7

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	3
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Monthly				
Part or Component		Item No.	Task Statement and Instruction (Comply with all current safety precautions)										Est. Time Req'd In Min.	Min. Skill Level	

interlock switch is activated.

3. Re-start the machine after each switch is activated and reset to fully test proper operation of the switches.
4. All door interlocks and/or E-Stop deficiencies should be reported to supervisor immediately.

PERFORMANCE CHECK	3.	Run performance test to check AFTL operation.	3	9
		<ol style="list-style-type: none"> 1. Manually activate all machine sub-functions to ensure proper operation. 2. Log in to Maintenance Mode, and then enter the Maintenance Menu. Select the Maintenance Control Function, and activate all sub-functions to ensure correct operation. 3. Use GLC AFTL Maintenance Control Screen to operate the following functions: <ol style="list-style-type: none"> a. HEAD TO LIFT/TRAYS b. HEAD UP c. VACUUM OFF d. LIFT UP/DOWN e. LID CLAMP f. TRAY STOP g. FOLD FLAPS h. SQUARING RODS i. LIGHT TREE j. ROLLER CONVEYOR 		
SYSTEM	4.	Return AFTL to service. Return the AFTL to normal operation.	2	9
CLEAN UP	5.	Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2	All

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	3
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Monthly				
Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)										Est. Time Req'd In Min.	Min. Skill Level		

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ATTACHMENT 5

AFTL MASTER CHECKLIST

03-AFTL-AA-104-M

QUARTERLY

Time Total: 91 Minutes

Refer to MS-223 if additional maintenance information is required.

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	4
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Quarterly				

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

5 All

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.

SYSTEM

2. **Power down and lockout power.**

2 All

Stop AFTL. Power down the machine and lock out its air and electrical power as prescribed by the current local lockout procedures.

CENTER ASSEMBLY

3. **Check and clean air preparation assembly filter.**

2 9

Check and clean air pressure assembly filter and muffler.

1. Remove air prep assembly filter and muffler.
2. Vacuum debris from the filter and muffler.
3. Check both filter and muffler to check if they are clogged, discolored, or deteriorated.
4. Replace filter or muffler if it appears discolored, deteriorated, or clogged.
5. Re-install air prep assembly filter and muffler.

AIR VALVE ASSY MUFFLER CHECK

4. **Check and clean air valve assembly mufflers (silencer).**

5 7

Check and clean air valve assembly mufflers (silencers).

1. Remove air valve assembly mufflers (silencers) from air valve assembly. Air valve assembly mufflers

U.S. Postal Service Maintenance Checklist		IDENTIFICATION													
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		0	3	A	F	T	L				A	A	1	0	4
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model				Bulletin Filename MM09105AB				Frequency Quarterly					

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	Min. Skill Level
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unscrew from the brass elbow fitting.

2. Vacuum debris from the mufflers.
3. Replace muffler if it is clogged.

AFTL CHECK	5.	Check AFTL. Visually check the entire machine. Check for loose bolts, air fittings, and other abnormalities. Tighten or repair as necessary.	10	9
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WARNING

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

SYSTEM	6.	Return AFTL to service. Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures. Return the AFTL to normal operation.	2	9
DC POWER SUPPLIES	7.	Check DC power supplies. Check power supply outputs. Check PS-1 and PS-2 outputs for 24 (±0.2) VDC.	10	9
SENSORS	8.	Sensor operation. Check that all sensors (14) are aligned and operating correctly. See Weekly checklist item 4 for list of sensors.	15	9
ULTRASONIC SENSORS	9.	Check ultrasonic sensors. Check that both ultrasonic sensors are adjusted correctly.	10	9
TRAY CONVEYOR ROLLERS	10.	Check tray conveyor DC power rollers. Check speed of tray conveyor DC power rollers (4). If required, adjust speed of tray conveyor DC power rollers to 175 Ft/min (± 10 Ft/min).	15	9

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	4
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Quarterly				

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

The machine must have been running for a minimum of fifteen minutes and remain running when using the non-contact infrared to obtain a meaningful scan. Investigate the cause of an abnormal temperature. If any deficiencies are noted, notify supervisor.

POWER DISTRIBUTION BOX ASSEMBLY	11.	Infrared scan. Use non-contact infrared to monitor and scan the following for abnormal temperatures: 1. Facility input power connector plug 2. Power distribution box assembly electrical connections 3. Circuit breaker (CB100) 4. Filter (FL1) 5. Power supplies (PS1 and PS2) 6. Transformer (T1) 7. Circuit breakers (CB1-CB8) 8. Motor protector (OL1) 9. Fuses (F201-F206) 10. Relays (K1 & K2) 11. Analog to digital signal converter (A/D module) 12. Graphic logic controller (GLC) 13. Input – output modules (I & O 1 - 3) 14. Light stack assembly 15. Terminal connections 16. Connector plugs 17. Jumpers	2	9
TRAY CONVEYOR ASSEMBLY	12.	Infrared scan. Use non-contact infrared to monitor and scan the following for abnormal temperatures:	1	9

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L					A	A	1	0
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB				Frequency Quarterly			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	Min. Skill Level
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1. Tray conveyor assembly electrical connections
2. Power rollers (4)
3. Terminal connections
4. Connector plugs

NOTE

Investigate the cause of an air leak and notify supervisor.

TRAY CONVEYOR ASSEMBLY	13.	Ultrasound scan. Use ultrasonic detector to scan following: 1. The tray conveyor assembly 2. The pop up stop assembly 3. Tray clamp rotary motor 4. Air lines 5. Fittings 6. Connections	1	9
LID LOADING CONVEYOR ASSEMBLY	14.	Ultrasound scan. Use ultrasonic detector to scan following: 1. Lid loading conveyor assembly 2. Squaring rod assembly 3. Lid lift assembly 4. H-slide assembly 5. Air lines 6. Fittings 7. Manifold 8. Connections	1	9
CENTER ASSEMBLY LIFT CARRAGE	15.	Ultrasound scan. Use ultrasonic detector to scan following: 1. Center assembly lift slide assembly	2	9

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Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Quarterly				

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

2. Suction cup pump
3. Power block
4. Horizontal band cylinder
5. Air lines
6. Fittings
7. Connections

CENTER
ASSEMBLY
AIR VALVE
ASSEMBLY

- | | | | |
|-----|--|---|---|
| 16. | Ultrasound scan. | 2 | 9 |
| | Use ultrasonic detector to scan following: | | |
| | 1. Center assembly air valve assembly | | |
| | 2. MAC connect air valves physical connections | | |
| | 3. Air lines | | |
| | 4. Fittings | | |
| | 5. Connections | | |

CENTER
ASSEMBLY
AIR PREP
ASSEMBLY

- | | | | |
|-----|--|---|---|
| 17. | Ultrasound scan. | 2 | 9 |
| | Use ultrasonic detector to scan following: | | |
| | 1. Facility air shut off valve | | |
| | 2. Center assembly air prep assembly | | |
| | 3. Soft start and dump valves | | |
| | 4. Filter regulator | | |
| | 5. Soft start pilot valve | | |
| | 6. Physical connections | | |
| | 7. Pneumatic lines | | |
| | 8. Fittings | | |
| | 9. Connections | | |

SYSTEM

- | | | | |
|-----|--------------------------------------|---|---|
| 18. | Return AFTL to service. | 2 | 9 |
| | Return the AFTL to normal operation. | | |

CLEAN UP

- | | | | |
|-----|---|---|-----|
| 19. | Clean up. Ensure all tools, lubricants, rags, etc. are removed from the work area. Report all deficiencies to your supervisor. | 2 | All |
|-----|---|---|-----|

ATTACHMENT 6

AFTL MASTER CHECKLIST

03-AFTL-AA-105-M

SEMI-ANNUAL

Time Totals: 12 Minutes

Refer to MS-223 if additional maintenance information is required.

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	5
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Semi-Annual				

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

5 All

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.

SYSTEM

2. **Power down and lockout power.**
Stop AFTL. Power down the machine and lock out its air and electrical power as prescribed by the current local lockout procedures.

2 All

TRAY CONVEYOR

3. **Check tray conveyor flats guide rails.** Check tray guide rails for cracks, missing guides or pieces of guides, loose or missing hardware, or broken supports.

1 7

WARNING

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

SYSTEM

4. **Return AFTL to service.** Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures. Return the AFTL to normal operation.

2 9

CLEAN UP

5. **Clean up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor.

2 All

ATTACHMENT 7

AFTL MASTER CHECKLIST

03-AFTL-AA-106-M

ANNUAL

Time Total: 26 Minutes

Refer to MS-223 if additional maintenance information is required.

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L				A	A	1	0	6
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Annual				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	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 shut down and lock out this machine. Open equipment and check 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. 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>	5	All
SYSTEM	2.	<p>Power down and lock out air and electrical power.</p> <p>Stop AFTL. Power down the machine and lock out its air and electrical power as prescribed by the current local lockout procedures.</p>	2	All
LID CONVEYOR	3.	<p>Check lid conveyor belts.</p> <p>There are two lid conveyor belts (gray web belts) and a notch drive belt. Replace damaged areas of lid conveyor belts if needed and check its tension. Also check tension of notched drive belt.</p>	10	9
POWER DISTRIBUTION BOX	4.	<p>Replace power distribution box vent filter.</p> <p>The filter is on lower left side of Main Power Distribution Box. Remove 4 screws from corners of filter, remove filter and discard it. Reverse process for replacement.</p>	5	7

WARNING

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

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		Work Code		Equipment Acronym						Class Code		Number			Type
		0	3	A	F	T	L					A	A	1	0
Equipment Nomenclature Automatic Flats Tray Lidder		Equipment Model						Bulletin Filename MM09105AB			Frequency Annual				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd In Min.	Min. Skill Level
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|----------|----|--|---|-----|
| SYSTEM | 5. | Return AFTL to service.

Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures. Return the AFTL to normal operation. | 2 | 9 |
| CLEAN UP | 6. | Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor. | 2 | All |