maintenance management order

UNITED STATES POSTAL SERVICE™

SUBJECT: PM Guidelines for Siemens Loose Mail System (LMS)	**DATE:** July 10, 2000
	NO: MMO-062-00
TO: All Siemens Loose Mail System Sites.	**FILE CODE:** J10

mova:M99066AC

Online Change Record		
Change #	**Date**	**Description of Change**
1	4/26/2022	Attachments 2, 3, 4, and 5 - corrected skill levels 4 and 5, no longer in use, to level 7.

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) guidelines for the Siemens Loose Mail System (LMS). The VMARS acronym for this equipment is "LMS" and the class code is "BB".

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

WARNING

Various chemical products may be used while performing tasks outlined in this bulletin. Ensure that current Material Safety Data Sheet (MSDS) for each chemical product is on file and available for all employees.

The preventive maintenance hours outlined in this MMO are based on 16 hours of machine run time each day. There are several configurations of Siemens LMS machines in the field, therefore, local maintenance management is requested to use these PM guidelines as a reference and prepare a site specific PM schedule. Furthermore, local maintenance management may modify and customize the tasks and frequencies to better fit their site needs.

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

Rex M Gallaher
Manager
Maintenance Technical Support Center
Maintenance Policies and Programs

Attachments: 1. Summary, Workload Estimate for Siemens LMS
2. Siemens LMS Master Checklist (Daily)
3. Siemens LMS Master Checklist (Weekly)
4. Siemens LMS Master Checklist (Semiannual)
5. Siemens LMS Master Checklist (Annual)

ATTACHMENT 1

-SUMMARY-

WORKLOAD ESTIMATE

FOR

Siemens Loose Mail System

SUMMARY WORKLOAD ESTIMATE FOR SIEMENS LMS

SIEMENS LMS USED WITH SIX INDUCTION STATION SPBM

Service Condition (days/wk)	Routine PM (hrs/yr)	Repair* (hrs/yr)	Total PM and Repair (hrs/yr)	Nonproduc- tive Time** (hrs/yr)	Total Maint. Per Machine (hrs/yr)
6 days	602	120	722	72	794
7 days	678	136	814	81	895

 * Repair maintenance estimates based on 20% of Preventive Maintenance.
 ** Based on 10% of total preventive maintenance and repair.

NOTE

> This PM guideline lists one module of each type in a given LMS. However, it is likely that more than one module of the same type exists on a given LMS. Therefore, if an "*****" appears in the time column of a task, that task must be performed on all modules of the same type. Furthermore, the allocated time in the time column reflects the amount of time required to perform a task per module.

The preventive maintenance hours outlined in this Attachment are based on 16 hours of machine run time each day. There are no standard configurations of Siemens LMS machine in the field. Therefore, local maintenance management is requested to use these PM guidelines as a reference and prepare a site specific PM schedule. Local maintenance management may modify and customize the tasks and frequencies to better fit their individual needs.

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Power Turn.	1
Incline Module	2
Transport Module	2
Diverter Module	6
Buffer Module (three per SPBM induction stations)	18

ATTACHMENT 2

LMSBB MASTER CHECKLIST

03-LMS-BB-001-M

DAILY

DAILY TIME TOTALS:

88 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Power Turn.	1
Incline Module	2
Transport Module	2
Diverter Module	6
Buffer Module (three per SPBM induction stations)	18

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION					
		Work Code	Equipment Acronym	Class Code	Number		Type
		0 3	L M S	B B	0 0 1		M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS		Bulletin Filename M99066AC	Frequency DAILY		

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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 shutdown and lockout this machine. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.**	3 min	All
LMS SYSTEM	2.	**POWER DOWN AND LOCKOUT POWER. -** Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	3 min	All
LOAD MODULE	3.	**PERFORM MAIL SEARCH. -** Perform mail search as follows:	2 min	7

1. Remove covers and panels as necessary.

2. Search for mailpieces.

3. Return all mail found during mail search to the proper mail path.

4. Check conveyor belt for damage.

5. Replace all covers and panels.

6. Check that all equipment guards are in place.

		IDENTIFICATION				
U.S. Postal Service **Maintenance Checklist**		Work Code	Equipment Acronym	Class Code	Number	Type
		0 3	L M S	B B	0 0 1	M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS	Bulletin Filename M99066AC	Frequency DAILY		

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

PALLET UNLOADER MODULE

4.

PERFORM MAIL SEARCH. - Perform mail search as follows:

    2* min   7

1. Remove covers and panels as necessary.

2. Search for mailpieces.

3. Return all mail found during mail search to the proper mail path.

4. Check unloader for physical damage.

5. Replace all covers and panels.

6. Check that all equipment guards are in place.

ALL PURPOSE UNLOADER MODULE

5.

PERFORM MAIL SEARCH. - Perform mail search as follows:

    2* min   7

1. Remove covers and panels as necessary.

2. Search for mailpieces.

3. Return all mail found during mail search to the proper mail path.

4. Check unloader for physical damage.

5. Replace all covers and panels.

6. Check that all equipment guards are in place.

* per module

U.S. Postal Service	IDENTIFICATION						
Maintenance Checklist	Work Code	Equipment Acronym		Class Code	Number		Type
	0 3	L M S		B B	0 0 1		M
Equipment Nomenclature Siemens SPBM Feed System	Equipment Model LMS		Bulletin Filename M99066AC		Frequency DAILY		

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

90 DEGREE POWER TURN MODULE   6.   **PERFORM MAIL SEARCH. -** Perform mail search as follows: 2* min   7

     1.   Remove covers and panels as necessary.

     2.   Search for mailpieces.

     3.   Return all mail found during mail search to the proper mail path.

     4.   Check conveyor belt for damage.

     5.   Replace all covers and panels.

     6.   Check that all equipment guards are in place.

INCLINE MODULE   7.   **PERFORM MAIL SEARCH. -** Perform mail search as follows: 2* min   7

     1.   Remove covers and panels as necessary.

     2.   Search for mailpieces.

     3.   Return all mail found during mail search to the proper mail path.

     4.   Check conveyor belt for damage.

     5.   Replace all covers and panels.

     6.   Check that all equipment guards are in place.

                                               * per module

U.S. Postal Service	IDENTIFICATION									
Maintenance Checklist	Work Code	Equipment Acronym			Class Code		Number			Type
	0	3	L	M	S		B	B	0	0	1	M

Equipment Nomenclature	Equipment Model	Bulletin Filename	Frequency
Siemens SPBM Feed System	LMS	M99066AC	DAILY

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

TRANSPORT MODULE   8.   **PERFORM MAIL SEARCH. -** Perform mail search as follows: 2* min   7

1. Remove covers and panels as necessary.

2. Search for mailpieces.

3. Return all mail found during mail search to the proper mail path.

4. Check conveyor belt for damage.

5. Replace all covers and panels.

6. Check that all equipment guards are in place.

DIVERTER MODULE   9.   **PERFORM MAIL SEARCH. -** Perform mail search as follows: 2* min   7

1. Remove covers and panels as necessary.

2. Search for mailpieces.

3. Return all mail found during mail search to the proper mail path.

4. Check conveyor belt for damage.

5. Replace all covers and panels.

6. Check that all equipment guards are in place.

         * per module

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION					
		Work Code	Equipment Acronym	Class Code	Number		Type
		0 3	L M S	B B	0 0 1		M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS		Bulletin Filename M99066AC	Frequency DAILY		

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
BUFFER MODULES (three per induction unit)	10.	**PERFORM MAIL SEARCH. -** Perform mail search as follows: 1. Remove covers and panels as necessary. 2. Search for mailpieces. 3. Return all mail found during mail search to the proper mail path. 4. Check conveyor belt for damage. 5. Replace all covers and panels. 6. Check that all equipment guards are in place.	1* min	7

WARNING

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

LMS SYSTEM	11.	**RESTORE EQUIPMENT TO SERVICE. -** Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	2 min	ALL

* per module

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION					
		Work Code	Equipment Acronym	Class Code	Number		Type
		0 **3**	**L** **M** **S**	**B** **B**	**0** **0** **1**		**M**
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS	Bulletin Filename M99066AC	Frequency DAILY			

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

LMS   12.   **PERFORM OPERATIONAL CHECK. -** Perform   20   7
SYSTEM   operational check as follows: min

> ### WARNING
>
> **Be cautious when working around or on equipment when power has been applied.**

1. Ensure that there is no mail loaded on the load module and that the system is empty.

2. Boot the MMI computer by pressing the computer power on button. The LMS application software will load automatically.

3. Ensure all E-stop switches are in the reset position.

4. Depress and hold the "480V Master Start Applied" push button until the green "Power On" light illuminates.

5. Depress "Auto Cycle Push to Start" push button.

6. Ensure that all audible alarms are in working condition.

7. While the system is running, walk around and observe the operation of the entire system.

8. Check for abnormal noises, vibration, and other abnormal conditions.

9. Check each conveyor belt for abnormal tension and tracking problems.

10. Depress the "Reset Auto Cycle Push to Stop" push button.

U.S. Postal Service	IDENTIFICATION						
Maintenance Checklist	Work Code	Equipment Acronym		Class Code	Number		Type
	0 3	L M S		B B	0 0 1		M
Equipment Nomenclature Siemens SPBM Feed System	Equipment Model LMS		Bulletin Filename M99066AC		Frequency DAILY		

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
PALLET UNLOADER MODULE	13.	**PERFORM OPERATIONAL CHECK. -** Perform operational check as follows: 1. Cycle the Pallet Unloader and observe for proper operation. 2. Check for abnormal noises, vibration, and other abnormal conditions. 3. Check the hydraulic system for physical damage.	3* min	7
ALL PURPOSE UNLOADER MODULE	14.	**PERFORM OPERATIONAL CHECK. -** Perform operational check as follows: 1. Cycle the All Purpose Unloader and observe for proper operation. 2. Check for abnormal noises, vibration and/or other abnormal conditions. 3. Check the hydraulic system for physical damage.	3* min	7
LMS SYSTEM	15.	**RESTORE SYSTEM TO OPERATIONAL MODE.** – Place system to the operational mode by depressing "Auto Cycle Push to Start" push button located on the Keyer Buffer Control Panel.	1 min	ALL
	16.	**CLEAN-UP. -** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 min	ALL

* per module

ATTACHMENT 3

LMSBB MASTER CHECKLIST

03-LMS-BB-002-M

WEEKLY

WEEKLY TIME TOTALS:

151 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Power Turn.	1
Incline Module	2
Transport Module	2
Diverter Module	6
Buffer Module (three per SPBM induction stations)	18

U.S. Postal Service	IDENTIFICATION						
Maintenance Checklist	Work Code	Equipment Acronym		Class Code		Number	Type
	0　3	L　M　S		B　B	0	0　2	M
Equipment Nomenclature Siemens SPBM Feed System	Equipment Model LMS		Bulletin Filename M99066AC		Frequency WEEKLY		

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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 shutdown and lockout this machine. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.**	3 min	All
LMS SYSTEM	2.	**POWER DOWN AND LOCKOUT POWER. -** Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current Local procedure providing lockout/restore procedures for this equipment.	3 min	All
LOAD MODULE	3.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	5 min	7

* per module

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION								
		Work Code	Equipment Acronym			Class Code		Number		Type
		0 **3**	**L** **M** **S**			**B** **B**		**0** **0** **2**		**M**
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS		Bulletin Filename M99066AC			Frequency WEEKLY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
PALLET UNLOADER MODULE	4.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	4* min	7
ALL PURPOSE UNLOADER MODULE	5.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	4* min	7
90 DEGREE POWER TURN MODULE	6.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	4* min	7

* per module

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION					
		Work Code	Equipment Acronym	Class Code	Number		Type
		0 3	L M S	B B	0 0 2		M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS	Bulletin Filename M99066AC	Frequency WEEKLY			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
INCLINE MODULE	7.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	5 min	7
TRANSPORT MODULE	8.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels	4* min	7
DIVERTER MODULE	9.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels.	6* min	7

* per module

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION					
		Work Code	Equipment Acronym		Class Code	Number	Type
		0 3	**L M S**		**B B**	**0 0 2**	**M**
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS		Bulletin Filename M99066AC		Frequency WEEKLY	

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
BUFFER MODULES (three per induction unit)	10.	**CLEAN BELT, ROLLERS, AND BEARINGS. -** Clean belt, rollers, and bearings as follows: 1. Remove covers and panels as necessary. 2. Clean belt, rollers, and bearings of all debris. 3. Remove strings, wrapping materials, and all foreign objects. 4. Replace all covers and panels. * per module	3* min	7
		WARNING **Be cautious when working around or on equipment when power has been applied.**		
LMS SYSTEM	11.	**RESTORE EQUIPMENT TO SERVICE. -** Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	2 min	ALL
SUPERVISOR WORK STATION	12.	**CLEAN CRT. -** Clean CRT with a lint-free cloth.	1 min	7
EMERGENCY STOP SWITCHES **EMERGENCY**	13.	**CHECK ALL EMERGENCY STOP SWITCHES.** - 1. Ensure that there is no mail loaded on the load module and that the system is empty. 2. Boot the MMI computer by pressing the computer power on button. The LMS application software will load automatically. 3. Ensure all E-stop switches are in the reset position. 4. Depress and hold the "480V Master Start Applied" push button until the green "Power On" light	10 min	7

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION					
		Work Code	Equipment Acronym		Class Code	Number	Type
		0 3	L M S		B B	0 0 2	M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS		Bulletin Filename M99066AC		Frequency WEEKLY	

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
STOP SWITCHES (Continued)		illuminates.		
		5. Depress "Auto Cycle Push to Start" push button.		
		6. While the system is running, Depress one emergency-stop switch, ensure that the machine stops immediately. Red light on the Light Tree will illuminate and the alarm will sound indicating an e-stop condition.		
		7. Check all remaining emergency-stop switches by depressing one switch at a time; ensure the Red light on the Light Tree illuminates and the alarm sounds.		
LMS SYSTEM	14.	**RESTORE SYSTEM TO OPERATIONAL MODE.** – Return system to the operational mode by depressing "Auto Cycle Push to Start" push button located on the Keyer Buffer Control Panel.	1 min	ALL
	15.	**CLEAN-UP. -** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 min	ALL

ATTACHMENT 4

LMSBB MASTER CHECKLIST

03-LMS-BB-003-M

SEMIANNUAL

SEMIANNUAL TIME TOTALS:

221 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Power Turn.	1
Incline Module	2
Transport Module	2
Diverter Module	6
Buffer Module (three per SPBM induction stations)	18

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION					
	Work Code	Equipment Acronym	Class Code	Number		Type
	0 3	L M S	B B	0 0 3		M

Equipment Nomenclature Siemens SPBM Feed System	Equipment Model LMS	Bulletin Filename M99066AC	Frequency SEMIANNUAL

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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 shutdown and lockout this machine. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.**	3 min	All
LOAD MODULE	2.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary.	3 min	7
PALLET UNLOADER MODULE	3.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive mechanism. Lube and adjust as necessary.	3* min	7
ALL PURPOSE UNLOADER MODULE	4.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive mechanism. Adjust as necessary.	3* min	7

* per module

U.S. Postal Service	IDENTIFICATION										
Maintenance Checklist	Work Code	Equipment Acronym				Class Code	Number			Type
	0	3	L	M	S		B	B	0	0	3	M
Equipment Nomenclature Siemens SPBM Feed System	Equipment Model LMS		Bulletin Filename M99066AC		Frequency SEMIANNUAL						

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
90 DEGREE POWER TURN MODULE	5.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check tightness and proper location of each curve's guide rollers. 3. Check each curve's cam-action drive system is providing proper tensioning to the belt. 4. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary.	3* min	7
INCLINE MODULE	6.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary.	3* min	7
TRANSPORT MODULE	7.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Lube and adjust as necessary.	3* min	7

* per module

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION					
		Work Code	Equipment Acronym	Class Code	Number		Type
		0 3	L M S	B B	0 0 3		M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS	Bulletin Filename M99066AC	Frequency SEMIANNUAL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
DIVERTER MODULE	8.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chains and pulleys for binding, stretching, and play. Lube and adjust as necessary. 3. Check diverter's extendable boom chains for binding, stretching, and play. Lube and adjust as necessary.	6* min	7
BUFFER MODULES (three per SPBM induction unit)	9.	**CHECK DRIVE MECHANISM. –** Check drive mechanism as follows: 1. Remove covers and panels as necessary. 2. Check the drive chain and pulley for binding, stretching, and play. Adjust as necessary.	3* min	7
	10.	**POWER DOWN AND LOCKOUT POWER. -** Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current Local procedure providing lockout/restore procedures for this equipment.	3 min	ALL
LOAD MODULE	11.	**CHECK GEAR MOTOR OIL. –** 1. Check gear motor oil level. 2. Replace all covers and panels.	3 min	7
PALLET UNLOADER MODULE	12.	**CHECK HYDRAULIC OIL. –** 1. Check hydraulic oil level. 2. Replace all covers and panels.	1* min	7
ALL PURPOSE UNLOADER MODULE	13.	**CHECK HYDRAULIC OIL. –** 1. Check hydraulic oil level. 2. Replace all covers and panels.	1 * min	7

* per module

	IDENTIFICATION					
U.S. Postal Service **Maintenance Checklist**	Work Code	Equipment Acronym	Class Code	Number		Type
	0 **3**	**L** **M** **S**	**B** **B**	**0** **0** **3**		**M**
Equipment Nomenclature Siemens SPBM Feed System	Equipment Model LMS	Bulletin Filename M99066AC	Frequency SEMIANNUAL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
90 DEGREE POWER TURN MODULE	14.	**CHECK GEAR MOTOR OIL. –** 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
INCLINE MODULE	15.	**CHECK GEAR MOTOR OIL. –** 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
TRANSPORT MODULE	16.	**CHECK GEAR MOTOR OIL. –** 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
DIVERTER MODULE	17.	**CHECK GEAR MOTOR OIL. –** 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
BUFFER MODULES (three per SPBM induction unit)	18.	**CHECK GEAR MOTOR OIL. –** 1. Check gear motor oil level. 2. Replace all covers and panels.	3 * min	7
	19.	**RESTORE EQUIPMENT TO SERVICE. -** Restore equipment to service as prescribed by the current Local procedure providing lockout/restore procedures for this equipment.	2 min	ALL
LMS SYSTEM	20.	**RESTORE SYSTEM TO OPERATIONAL MODE.** – Place system to the operational mode by depressing "Auto Cycle Push to Start" push button located on the Keyer Buffer Control Panel.	1 min	ALL
		* per module		
	21.	**CLEAN-UP. -** Ensure all tools, lubricants, rags, etc., are	2	ALL

U.S. Postal Service	IDENTIFICATION								
Maintenance Checklist	Work Code		Equipment Acronym			Class Code		Number	Type
	0	**3**	**L**	**M**	**S**		**B**	**B**	**0**	**0**	**3**	**M**

Equipment Nomenclature	Equipment Model	Bulletin Filename	Frequency
Siemens SPBM Feed System	LMS	M99066AC	SEMIANNUAL

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

removed from the work area. Report all deficiencies to   min
your supervisor.

ATTACHMENT 5

LMSBB MASTER CHECKLIST

03-LMS-BB-005-M

ANNUAL

ANNUAL TIME TOTALS:

336 minutes

The cumulative time to perform this PM schedule is based on the number of modules listed in the following chart:

Module Name	Number of modules.
Load Module	1
Pallet Unloader Module	2
All Purpose Unloader Module	1
90-Degree Power Turn.	1
Incline Module	2
Transport Module	2
Diverter Module	6
Buffer Module (three per SPBM induction stations)	18

U.S. Postal Service		IDENTIFICATION						
Maintenance Checklist		Work Code	Equipment Acronym		Class Code		Number	Type
		0 3	L M S		B B		0 0 5	M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS		Bulletin Filename M99066AC		Frequency ANNUAL		

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
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 shutdown and lockout this machine. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.**	3 min	All
LMS SYSTEM	2.	**POWER DOWN AND LOCKOUT POWER. -** Power down the machine and lockout its electrical and/or pneumatic power source as prescribed by the current Local procedure providing lockout/restore procedures for this equipment.	3 min	All
LOAD MODULE	3.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	15 min	7

		IDENTIFICATION				
U.S. Postal Service **Maintenance Checklist**		Work Code	Equipment Acronym	Class Code	Number	Type
		0 3	L M S	B B	0 0 5	M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS	Bulletin Filename M99066AC	Frequency ANNUAL		

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
PALLET UNLOADER MODULE	4.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 3. Replace the Hydraulic oil filter. 4. Replace all covers and panels.	5* min	7
ALL PURPOSE UNLOADER MODULE	5.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 3. Replace the Hydraulic oil filter. 4. Replace all covers and panels.	5* min	7
90 DEGREE POWER TURN MODULE	6.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	15* min	7

* per module

U.S. Postal Service		IDENTIFICATION							
Maintenance Checklist		Work Code	Equipment Acronym		Class Code		Number		Type
		0 3	L M S		B B		0 0 5		M
Equipment Nomenclature Siemens SPBM Feed System		Equipment Model LMS		Bulletin Filename M99066AC		Frequency ANNUAL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
INCLINE MODULE	7.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	10* min	7
TRANSPORT MODULE	8.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	10* min	7
DIVERTER MODULE	9.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	10* min	7

* per module

U.S. Postal Service	IDENTIFICATION									
Maintenance Checklist	Work Code	Equipment Acronym				Class Code	Number			Type
	0	**3**	**L**	**M**	**S**			**B**	**B**	**0**	**0**	**5**	**M**

Equipment Nomenclature	Equipment Model	Bulletin Filename	Frequency
Siemens SPBM Feed System	LMS	M99066AC	ANNUAL

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
BUFFER MODULES (three per SPBM induction unit)	10.	**Lubrication Schedule. -** 1. Remove covers and panels as necessary. 2. Drain and replace gear motor oil. 3. Grease each bearing block assembly as necessary. DO NOT OVER GREASE THE BEARING ASSEMBLIES, PREMATURE FAILURE MAY OCCUR. 4. Replace all covers and panels.	10* min	7
		WARNING **Be cautious when working around or on equipment when power has been applied.**		
LMS SYSTEM	11.	**RESTORE EQUIPMENT TO SERVICE. -** Restore equipment to service as prescribed by the current local procedure providing lockout/restore procedures for this equipment.	2 min	ALL
LMS SYSTEM	12.	**RESTORE SYSTEM TO OPERATIONAL MODE.** – Place system to the operational mode by depressing "Auto Cycle Push to Start" push button located on the Keyer Buffer Control Panel.	1 min	ALL
	13.	**CLEAN-UP. -** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 min	ALL

* per module