MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATIONS
UNITED STATES POSTAL SERVICE
Maintenance Management Order

UNITED STATES POSTAL SERVICE™

SUBJECT: Small Parcel Sortation System (SPSS)
Operational and Preventive Maintenance

DATE: August 2, 2017

NO: MMO-115-17

TO: All SPSS Sites

FILE CODE: R1A, R1B

rfer:mm15120ax

Online Change Record		
Change #	Date	Description of Change
1	11/27/18	* --- the tasks marked with an asterisk are per unit tasks. ** --- the tasks marked with two asterisks are critical tasks.

This Maintenance Management Order (MMO) provides Operational and Preventive Maintenance Guidelines for the Small Parcel Sorting System (SPSS). This bulletin applies to Acronym SPSS, Class Codes AA and BA.

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

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.

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.

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.

Web Access: http://www1.mtsc.usps.gov

<div style="border:1px solid black; display:inline-block">WARNING</div>

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.

<div style="border:1px solid black; display:inline-block">WARNING</div>

Steps contained in this bulletin may require the use of Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade 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.

Kevin Couch
Manager
Maintenance Technical Support Center
HQ Maintenance Operations

Attachments   1.   Summary of Workload Estimate
                 2.   Master Checklist 03-SPSS-AA-001-M – Pilot PM
                 3.   Master Checklist 09-SPSS-AA-002-M – Pilot Operational Maintenance
                 4.   Master Checklist 03-SPSS-BA-003-M – PM
                 5.   Master Checklist 09-SPSS-BA-004-M – Operational Maintenance

<u>ATTACHMENT 1</u>

SUMMARY

WORKLOAD ESTIMATE

FOR

SPSS SYSTEM

THIS PAGE BLANK

**SUMMARY
WORKLOAD ESTIMATE
FOR SPSS
CLASS CODES AA AND BA**

SPSS_AA

SPSS_AA

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)	Operational Maintenance + Total Servicing		
						1 Tour (Hrs/Yr)	2 Tours (Hrs/Yr)	3 Tours (Hrs/Yr)
5	859.28	257.78	1,117.06	111.71	1,228.77	1,384.77	1,540.77	1,696.77
6	955.48	286.64	1,242.12	124.21	1,366.33	1,553.53	1,740.73	1,927.93
7	1,051.68	315.5	1,367.18	136.72	1,503.90	1,722.30	1,940.70	2,159.10

SPSS_BA

SPSS_BA

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)	Operational Maintenance + Total Servicing		
						1 Tour (Hrs/Yr)	2 Tours (Hrs/Yr)	3 Tours (Hrs/Yr)
5	851.86	255.56	1,107.42	110.74	1,218.16	1,374.16	1,530.16	1,686.16
6	948.06	284.42	1,232.48	123.25	1,355.73	1,542.93	1,730.13	1,917.33
7	1,044.26	313.28	1,357.54	135.75	1,493.29	1,711.69	1,930.09	2,148.49

NOTES:
*Repair estimates based on 30% of servicing.
**Based on 10% of total servicing and repair.

THIS PAGE BLANK

ATTACHMENT 2

SPSS MASTER CHECKLIST

03-SPSS-AA-001-M

PILOT SYSTEM

CLASS CODE = AA

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	S	P	S	S				A	A	0	0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System			Bulletin Filename mm15120			Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
SAFETY STATEMENT	1.	**WARNING: 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. 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.** **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 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 Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade requirements.** **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.**	1	ALL			D
SPSS	2.**	**Power Down And Lock Out Power.** **NOTE:** Soft-reboot of the computers in the OVIS RACK is not needed when complying with the current Maintenance Management Order (MMO) providing lockout/restore procedures. Power down the machine and lock out its power as prescribed by the current local lockout instructions providing lockout/restore procedures.	5	ALL			D

		IDENTIFICATION									
U.S. Postal Service **Maintenance Checklist**		WORK CODE	EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE
		0 3	S P S S				A A		0 0 1		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System			Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		Reference MTSC SPSS page, PM Source Documentation, SPSS Start Up/Shut Down Folder, Maintenance Training Lesson 5.					
FMPCS	3.**	**Shut Down and Restart FMPCS Program** 1. On the FMPCS Site Utilities Screen [0] Main Menu, press **S** to shut down the FMPCS Program. 2. When the "FMPCS is down" message is displayed press Enter to continue. 3. On the FMPCS Site Utilities Screen [0] Main Menu, press **R** to restart the FMPCS program.	10	10			D
ALL PURPOSE CONTAINER UNLOADER (APCU)	4.**	**Perform Mail Search.** 1. Check the area between the APCU and the incline conveyor for mail. 2. Check all guards are in place. 3. Return all mail found during mail search to the proper mail path.	15	07			D
ALL PURPOSE CONTAINER UNLOADER (APCU)	5.	**Entry Photo Eyes.** 1. Clean entry photoeyes and reflectors on the APCU. 2. Generate a work order to address any deficiencies.	10	07			W
ALL PURPOSE CONTAINER UNLOADER (APCU)	6.	**Check Hydraulic Lines.** 1. Check the condition of all hydraulic cylinder hoses and fittings for leaks. 2. Check condition of the hydraulic reservoir unit hoses and fittings. Check for leaks. Look for damage caused by foot traffic, falling parcels, or abrasion by moving parts which could cause a future leak to occur. 3. Generate a work order to address any deficiencies.	25	09			W
ALL PURPOSE CONTAINER UNLOADER (APCU)	7.**	**Check For Signs Of Wear.** 1. Check the main pivot pins and bushings for signs of wear. 2. Check cylinder clevis pins and bushings for signs of wear.	25	09			M

U.S. Postal Service	IDENTIFICATION													
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE	
	0	3	S	P	S	S			A	A	0	0	1	M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence					

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		3. Check Unloader frame for damage or loose floor anchors. Check for cracks and metal fatigue at pivot points and near welds. Verify clevis pin retaining hardware is in place and secure.					
		4. Check for damaged or missing container stops.					
		5. Generate a work order to address any deficiencies.					
		Reference MTSC SPSS page, PM Source Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.					
ALL PURPOSE CONTAINER UNLOADER (APCU)	8.**	**Check Hydraulic Fluid.** **WARNING: Discard or dispose of chemical soaked materials according to SDS and in accordance with local procedures.** 1. Check the hydraulic fluid level using sight glass while the unloader is in the lowered position. 2. Check fluid for evidence of water contamination (cloudy), discoloration from overheating, unusual odor, and/or excessive particulates (examine sample on blotter). 3. Check reservoir for clogged breather/fill cap. Clean or replace as necessary. 4. Add fluid as necessary. Use CITGO AW 32 Hydraulic Oil. Reference MTSC SPSS page, PM Source Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.	15	09			M
ALL PURPOSE CONTAINER UNLOADER (APCU)	9.	**Change Hydraulic Fluid.** **WARNING: Discard or dispose of chemical soaked materials according to SDS and in accordance with local procedures.** 1. Change hydraulic fluid and filter. 2. Remove old hydraulic fluid and replace using 15 gallons of CITGO AW 32 Hydraulic Oil. 3. Replace oil filter element, PSN: 3920-10-000-1090.	300	07			S

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S			A	A	0 0 1		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Reference MTSC SPSS page, PM Source Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.					
INCLINE CONVEYOR	10. **	**Perform Mail Search.** 1. Check for mailpieces at the top and around the bottom of the conveyor. 2. Return all mail found during mail search to the proper mail path.	10	07			D
INCLINE CONVEYOR	11. **	**Belts, Sprockets, Wear Strips, and Rollers.** **NOTE**: Perform the following tasks after removing the hinge rods and opening the Bulk Handling conveyor belts. 1. Vacuum and clean drive sprockets at the head end and the idler wheels on the lower end of conveyor. 2. Check drive sprockets and idler wheels for wear. a. Sprockets should be in contact with the shaft where teeth engage the belt. b. Replace sprockets or wheels when a gap of more than 2 mm develops between any sprocket and wheel on the related shaft. 3. Check that the Bulk Handling conveyor cogs are engaging with the belt sections. 4. Check wear strips for signs of cracks and deteriorating conditions. 5. Check under side of belts for signs of damage. 6. Check that all Bulk Handling line rollers are clean and spinning freely. Reference MTSC SPSS page, PM Source Documentation, Incline Conveyor Folder, SH Maintenance Training Lesson 8A, Bulk Handling Conveyor.	300	09			Q
INCLINE CONVEYOR	12.	**Bulk Handling Conveyor.** 1. Measure the Bulk Handling Line conveyor belt section to section for pitch elongation.	25	09			S

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S			A	A	0 0 1		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		2. Generate a work order to address any deficiencies. Reference MTSC SPSS page, PM Source Documentation, Intralox Conveyors Folder, Instruction Handbook Modular Plastic Belt Equipment Handbook v1.0, Section 5.2.1.1 for instructions.					
INCLINE CONVEYOR	13.	**Control Photoeyes.** Clean the three (3) (Head End, Call, and Full) control photoeyes and reflectors controlling the Bulk Handling line conveyor with lint free cloth. Reference MTSC SPSS page, PM Source Documentation, Incline Conveyor Folder, SH Maintenance Training Lesson 8A, Bulk Handling Conveyor.	25	07			W
INCLINE CONVEYOR	14.	**Static Roller Conveyor.** 1. Vacuum the Static Roller Conveyor using a soft brush attachment. 2. Check the conveyor for damage or missing rollers.	25	07			M
INDUCTION PLATFORM	15. **	**Perform Mail Search.** 1. Check for mailpieces around the induction line conveyors and platform. 2. Return all mail found during mail search to the proper mail path.	10	07			D
INDUCTION CONVEYOR	16. **	**Kore Sensors and Dimensioner.** 1. Clean Kore Sensors with lint free cloth. 2. Clean Dimensioner light curtains and Kore strip LEDs using a lint free cloth or microfiber glove. Reference MTSC SPSS page, PM Source Documentation, Interoll Conveyors Folder, SH Maintenance Training Lesson 8B.	10	07			D
INDUCTION	17.	**Transition Plates.** 1. Clean the Induction Line to Sorter transition plates with a general purpose cleaner and cloth. 2. Check the transition plates for damage.	15	07			W

U.S. Postal Service		IDENTIFICATION										
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER	TYPE
		0	3	S	P	S	S		A	A	0 0 1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System				Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		3. Clean the Induction Zone Jam Sensor emitter and receiver (located on Induction line 1 and Induction line 4 or 5) with a lint free cloth or microfiber glove.					
		4. Generate a work order to address any deficiencies.					
SORTER	18. **	**Perform Mail Search.** 1. Check the areas for mail in, beneath, and around all discharge chutes. 2. Check for mail in the maintenance alley of sorter. 3. Check the areas around Turns 1 & 2. 4. Check the area near and around the Tray Closing Device. 5. Return all mail found during mail search to the proper mail path.	20	07			D
SORTER	19. **	**Article Between Trays (ABT), Product Stuck in Tray (PST) Arrays.** Clean the Article Between Tray and Product Stuck in Tray photoeye emitters and receivers for each of the ABT/PST arrays, (3 totals) with a lint free cloth or microfiber glove.	15	07			W
SORTER	20. **	**Hanging Product Photoeyes and Reflectors.** Clean both Hanging Product Photoeyes and Reflectors, located near Turn 1 and Turn 2 with a lint free cloth or microfiber glove.	4	07			W
SORTER	21.	**Chute Jam Sensors.** Clean the 2 Chute Jam Photoeye emitters and 2 Chute Jam Photoeye receivers located on both sides of the sorter, with a lint free cloth or microfiber glove.	10	07			W
SORTER	22. **	**Split Trays.** 1. Check the tray bumpers are present and properly seated. 2. Check the tray shock absorber is securely mounted and the shock absorber shaft is straight and is not leaking oil. 3. Check the shock absorber impact block is	60	09			M

U.S. Postal Service	IDENTIFICATION											
Maintenance Checklist	WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
	0	3	S	P	S	S			A	A	0 0 1	M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System				Bulletin Filename mm15120				Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		securely mounted.					
		4. Check the tray spring support rod is securely mounted, and the tray spring is present.					
		5. Generate a work order to address any deficiencies.					
SORTER	23.	**Anti-Static Brushes.** 1. Check the anti-static brushes for damage. 2. The brushes should be intact and remain in contact with the side of the split tray carrier. 3. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, SPSS Sorter Folder, SH Maintenance Training Lesson 8D.	1	09			W
SORTER	24. **	**Tray Closing Device.** 1. Check Tray Closing Brushes for damage. 2. Measure brush length; minimum brush length is 15 mm. Replace brush as needed. 3. Actuate both closing brushes to check for proper operation. 4. Check both gas spring mounting blocks are secured to the retractable arms. 5. Check both closing device hinges for signs of wear. Check that hinges are properly secured to the retractable arms. 6. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, SPSS Sorter Folder, SH Maintenance Training Lesson 8D.	5	09			W
SORTER	25. **	**Tray Support Belts.** 1. Check induction support belts for fraying and signs of damage. 2. Check the belt guides for signs of damage. Remove any built up debris from belt guides. 3. Check the induction support drive motor and	10	09			M

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION												
	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0 3	S	P	S	S				A	A	0 0 1			M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System	Bulletin Filename mm15120	Occurrence

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		gearbox for signs of leaks. 4. Ensure the drive and idler pulleys are secure. 5. Check belt idle rollers are secure, free of debris, and spin freely. Check for flat spots on wheels. 6. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, SPSS Sorter Folder, SH Maintenance Training Lesson 8D.					
SORTER	26. **	**Sorter Drive Motor(s) Hardware.** 1. Check overall drive motor assembly for loose or missing hardware. 2. Check power cable conduit for signs of damage and cracks, and conduit connection is secured and tight. 3. Generate a work order to address any deficiencies.	20	09			M
SORTER	27.	**Destination Chute Full Sensor.** 1. Check destination chute full sensor is securely mounted to the mounting plate. 2. Check sensor cable Quick disconnect connection is secured to sensor. 3. Clean the chute full sensor using a lint free cloth or microfiber glove. 4. Generate a work order to address any deficiencies. * Time per group of 4 destination chute groups.	1**	09			M
SORTER	28. **	**Main Electrical Cabinet.** Clean the air filters in the Main Electrical Panel fan housings. Replacement exhaust filter: PSN: 5915-17-000-5325. Reference the MTSC SPSS page, PM Source Documentation, SPSS Sorter Folder, SPSS-1493-Fan documentation.	4	07			Q

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S			A	A	0 0 1		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
SORTER	29.	**Destination Chutes.** 1. Check the destination chute surfaces for any damage. 2. Generate a work order to address any deficiencies.	15	09			Q
SORTER	30. **	**Carrier Tray Track.** 1. Check the Sorter curve track sections in turn 1 and turn 2 for indications of carrier tray wheel induced wear. 2. Clear the 2 debris slots in each turn 1 and turn 2. 3. Generate a work order to address any deficiencies.	30	09			S
FMPCS COMPUTER	31.	**FMPCS Computer Cabinet.** 1. Vacuum the FMPCS computer cabinet including the top of each device. 2. Clean the air filter on the FMPCS and Cimplicity computer chassis. Replace filter as necessary.	10	07			M
PSOC	32. **	**Clean Overhead Camera Clear Cover.** **CAUTION: The glass used in this system is fragile enough to break if pressure is applied.** **NOTE:** Do not spray the equipment. Only a misting of the cloth is required. Optionally, use a streak-free glass cleaner. 1. Using a lint-free cloth, gently wipe the underside of the clear cover over the camera lens and led array. 2. Use a spray bottle containing tap water to moisten cloth for wiping away stubborn smudges.	5	07			M
ITEM DETECTION CAMERAS	33. **	**Clean Item Detection Cameras.** 1. Clean the Induction Verification Sensor using a lint free cloth. 2. Clean the Load Verification Sensor using a lint free cloth.	10	07			Q
OVIS RACK: RACK	34.	**Replace Air Filters.**	5	07			Q

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION									
		WORK CODE	EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE
		0 3	S P S S				A	A	0 0 1		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System				Bulletin Filename mm15120		Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
DOOR AIR FILTER		1. Replace two (2) air filters, (PSN 4130-15-000-7240). Use 18" x 30" x 1" filter with MERV 8 rating. 2. Check the 12 exhaust fans on the rear of the OVIS cabinet to ensure fans are running.					
OPERATION GENERAL	35. **	**Restore Equipment To Service.** **WARNING: Be cautious when working around or on equipment when power has been applied.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. Reference MTSC SPSS page, PM Source Documentation, SPSS Start Up – Shut Down Folder, SH Maintenance Training Lesson 5 Start Up.	5	All			D

OPERATIONAL APCU	36. **	**(Power on)**
		
		Check Unloader Entry Photoeyes for proper operation.
		
		WARNING: Be cautious when working around or on equipment when power has been applied. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.
		
		1. Place the mode selection switch to **Auto**.
		
		   a. With the unloader in the fully lowered position, push and hold the **UP** button for up to 5 seconds to begin operation.
		
		   b. Check the amber stack light flash and horn pulse for up to 5 seconds prior to unloader movement.
		
		2. During movement, block each unloader entry photoeyes individually (3), and check that the unloader stops.
		
		   a. Check that the Guard Reset amber pushbutton is illuminated.
		
		   b. Press the Guard Reset pushbutton to clear the fault.
		
		   c. Press the **Up** pushbutton to restart
			10	07			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S		A	A	0	0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		cycle.					
		3. Lower unloader to the fully lowered position when completed.					
		4. Note any deficiencies and report them to supervisor.					
		Reference the MTSC SPSS page, PM Source Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.					
OPERATIONAL APCU	37. **	**(Power On)** **Unloader E-Stops.** **WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.** **NOTE:** The APCU Unloader E-Stop is local to the individual unloader and reports directly to the control panel. 1. Place the operational mode switch in **Auto**. 2. With the unloader in the fully lowered position, push and hold the **UP** button for up to 5 seconds to begin operation. a. Check the amber stack light flash and horn pulse for up to 5 seconds prior to unloader movement. 3. During the unloader movement, push the E-Stop pushbutton on the APCU Control Panel and check that the unloader stops. 4. Check the E-Stop Reset pushbutton lamp light comes on in the Emergency Stop switch and the E-Stop reset pushbutton light goes off. 5. Pull E-Stop switch out and press E-Stop Reset pushbutton. Check the E-Stop reset switch lamp comes on, and the Guard Reset pushbutton lamp comes on after approximately 5-10 seconds. 6. Press the guard reset pushbutton to reset	10	09			M

U.S. Postal Service	IDENTIFICATION														
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM							CLASS CODE		NUMBER			TYPE
	0	3	S	P	S	S				A	A	0	0	1	M

Equipment Nomenclature	Equipment Model	Bulletin Filename	Occurrence
Small Parcel Sortation System	Pilot System	mm15120	

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		unloader entry photoeyes.					
		7. Press the **Down** button to return unloader to the fully lowered position.					
		NOTE: The Remote Operator Terminal E-Stop pushbutton switch is not illuminated.					
		8. Repeat steps 1 thru 7 for the Remote Operator Terminal E-Stop pushbutton switch.					
		9. Note any deficiencies and report them to supervisor.					
OPERATIONAL APCU	38. **	**(Power On)**	30	09			W
		Check Unloader hydraulic unit operation on each Unloader (2 people recommended).					
		WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.					
		WARNING: If the APCU pressure levels are near or in excess of 1750 PSI, the APCU must be removed from service immediately and repaired.					
		1. Visually check pump, reservoir, filter, and all connections for leaking fluid.					
		2. With Unloader empty, operate Unloader and look for the following:					
		a. Verify smooth lift performance during operation.					
		b. Observe motion of each pivot pin & clevis, checking for signs of pin or clevis wear. If any non-rotational motion of the pin is discovered, the clevis bushing should be scheduled for replacement.					
		c. Check floor mounting points and verify floor mounting bolts are secure.					
		d. Visually check gauges for damage.					
		e. Observe the hydraulic pressure gauge.					

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S			A	A	0 0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System				Bulletin Filename mm15120			Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		If pressure indicated does not fall within ranges below, initiate corrective action. **NOTE: The typical empty APCU pressure reading ranges are as below:** • *Stage one Tilt Up: 500 PSI to 750 PSI • *Stage two Dump Up: 700 PSI to 850 PSI • *Stage three Dump Down: 950 PSI to 1350 PSI • *Stage four Tilt Down: 1100 PSI to 1450 PSI **NOTE:** The maximum operating pressure with rated capacity should be less than 1750 PSI. The system release pressure is pre-set at 1750 PSI by the manufacturer. 3. Note any deficiencies and report them to supervisor.					
OPERATIONAL INCLINE CONVEYOR	39. **	**(Power On)** **Check Incline Conveyor Belts for proper tension and tracking.** 1. On the incline conveyor, place the 3-way Selector Switch to the **ON** position. Observe the incline conveyor belt tracking. 2. Place the 3-way selector switch to the **OFF** position. 3. Check sidewalls for wear or excessive buildup of plastic dust which would indicate signs of improper tracking. 4. Check the belt tension by observing belt sag, through the viewing slot in the lower section of the frame, on both sides of the frame. The belt sag should not be below the incline conveyor frame. 5. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, Intralox Conveyors, Modular Plastic Belt Equipment Instruction Handbook.	10	09			W
OPERATIONAL INDUCT:	40.	**(Power On)**	20	09			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S		A	A	0 0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence		

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
INFEED – SCALE – TIMING-STRIP BELT CONVEYORS		**Check Belt Tracking, Tension, and Speed.** **NOTE:** Conveyor belt speeds have a speed variation of plus or minus (+/-) 2% of the nominal belt speed. • +/- 4.4 fpm on induction belts listed at 220 fpm or 215.6 to 224.4 fpm. • +/- 11.6 fpm on the strip belts listed at 290 fpm or 278.4 to 301.6 fpm 1. On the induction line control panel, push the Induct package **Start** pushbutton to start the infeed line. 2. Check Infeed Belt conveyor for proper tracking and tension. 3. Check the Infeed Belt conveyor speed (nominal 220 fpm) by using the hand held tachometer. 4. Check the Scale Belt conveyor for proper tracking and tension. 5. Check the Scale Belt conveyor speed (nominal 220 fpm) by using the hand-held tachometer. 6. Check the Timing Belt conveyor for proper tension and tracking. 7. Check the Timing Belt conveyor speed (nominal 220 fpm) by using the hand held tachometer. 8. Check the Strip Belt conveyor belt for proper tracking and tension. 9. Check the Strip Belt Conveyor speed (nominal 290 fpm) by using a handheld tachometer. 10. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, Interoll Conveyors folder.					
OPERATIONAL INDUCT: WEIGHING/	41. **	**(Power On)** **Check Weighing Accuracy.**	25	10			M

		IDENTIFICATION									
U.S. Postal Service **Maintenance Checklist**	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE	NUMBER		TYPE
	0 3	S P S S						A A	0 0 1		M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System			Bulletin Filename mm15120				Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
MEASURING CONVEYOR		Check the Weigh Scale system for accuracy. 1. Push the Induct Package **Stop** pushbutton on the induction line control panel. 2. Press the Scale Stop button on the display screen, to take scale offline. 3. Using 20 lb. (320 oz.) weight, observe measured weight in each corner, and in the center of scale conveyor. 4. Troubleshoot scale if tolerance is plus or minus (+/-) 1 ounce. 5. Generate a work order to address any deficiencies. Reference MTSC SPSS page, PM Source Documentation, Interoll Conveyors folder, SH Maintenance Training Lesson 8C Scale.					
SORTER	42. **	**(Power On)** **Check Destination Chute Jam Sensors on both sides of sorter for proper operation.** **WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.** 1. With the sorter running, block the chute jam sensor, creating a jam. 2. Check that the sorter stops, the red stack lights flash indicating a chute jam. 3. The Cimplicity HMI displays a discharge chute jam error message, while active. Press the Green Sorter Start pushbutton and start the sorter. 4. Note any deficiencies and report them to supervisor.	15	09			W
SORTER	43. **	**(Power on)** **Destination Chute Control Switches.**	30	09			M

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION												
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	S	P	S	S			A	A	0	0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System						Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		1. Check that all Destination Chute Group Control switches are operational and illuminate when placed in the **Off** position.					
		2. Return switch to the **On** position.					
		3. Check that the switches are not damaged.					
		4. Generate a work order to address any deficiencies.					
SORTER	44. **	**(Power On) Destination Chute Full Sensors.** Check the Destination Chute Full Sensors for proper operation. 1. With the sorter stopped, block the chute full sensor on the designated chute. 2. Check the chute selector switch flashes indicating the chute is full. 3. Generate a work order to address any deficiencies. * Time per group of 4 chute selector switches.	.5**	09			M
SORTER	45. **	**(Power On) Tray Closing Device.** Check the Tray Closing Devices brushes for proper operation. 1. With the sorter stopped, pull down and return one (1) closing brush. 2. Check that the alarm horn sounds and the red stack lights and MCP Sorter E-Stop indicator flash indicating a tray closing device fault. 3. Press the **Turn 2** Fault reset button to clear fault. 4. Press the **E-Stop** Reset button on the MCP. 5. Repeat steps 1-4 for the second closing brush. 6. Press the **Sorter Start** pushbutton and start the sorter. 7. Generate a work order to address any deficiencies.	5	09			M

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION									
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S			A	A	0	0	1	M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System	Bulletin Filename mm15120	Occurrence

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
SORTER	46. **	**(Power On)** **Tray Close Verification Sensor (CVS).** **NOTE**: Prior to manually opening the trays, pull the maintenance alley pull cord E-Stop to prevent unexpected start up. Once the trays are opened reset the pull cord E-Stop. Check the Close Verification Sensor for proper operation. 1. With the Sorter stopped, open 1 or 2 carrier tray doors manually, by pressing the inside and outside tray hook latches located on the outside of the trays, immediately following the Tray Closing Device. **NOTE:** The Sorter will operate at 15% of normal speed when placed into Maint. Mode. **CAUTION: In the next steps, immediately stop the sorter if the CVS fails to do so.** 2. Place the Sorter Mode Switch into **Maint.** Mode on the MCP. 3. Start the Sorter. 4. Check that the Sorter stops as the open tray door passes in front of the CVS. 5. Check that the red stack lights flash, and check the Cimplicity HMI for "closing device fault not closed" message. 6. Close the open tray doors. 7. On the Cimplicity screen, click the trays button on the upper right side of screen. a. Select tray flagged as "not operational". b. On the tray details screen select out-of-service to place the tray into a non-operational state. c. Select "In Service" to return tray to operational status. d. Close tray details screen. 8. Click the SPSS-1 button on the upper right side of screen, to return to the main screen. 9. Select the CVS-1 icon to view sensor details.	5	09			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION												
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE	
		0	3	S	P	S	S				A	A	0	0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System				Bulletin Filename mm15120				Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		a. Select reset to return the CVS-1 to operational status. b. Close sensor details window. 10. Place the sorter into Run mode when completed. 11. Note any deficiencies and report them to supervisor.					

SORTER	47. **	**(Power On)**
		Discharge Verification Sensor (DVS).
		
		NOTE: Sensor Tests are performed under Maint. Signon credentials.
		
		Check the Discharge Verification Sensor for proper operation by performing a Discharge Verification Sensor Test on DVS-1 and DVS-2.
		
		1. At the FMPCS Main Sorter Controller Menu:
		
		   a. Select **Maintenance.**
		
		   b. Select **Start a Sensor Test.**
		
		   c. Select **DVS-1.**
		
		   d. Enter Test Options:
		
		      1) Number of trays or windows to examine:**[50]**
		
		      2) Tray or window interval **[3]**
		
		2. Press Escape 2 times and return to the Test Sorter Equipment menu.
		
		   a. Select Start a **Discharge Unit Test.**
		
		   b. Select **DC-001.**
		
		   c. Enter Test Options:
		
		      1) Number of times to fire the DU: [**20**].
		
		      2) Tray or window interval [**20**].
		
		      3) Tray Modulus [**1**].
		
		3. Press Escape 4 times to Select Sorter Control Menu.
		   a. Select **Start Sorter.**
		
		4. Press Escape to return to the Main Sorter
			15	09			W

		IDENTIFICATION							

U.S. Postal Service **Maintenance Checklist**	WORK CODE	EQUIPMENT ACRONYM			CLASS CODE		NUMBER		TYPE
	0 3	S P S S			A A		0 0 1		M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System	Bulletin Filename mm15120	Occurrence

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.
		Controller Menu.					
		a. Select **View Message Log.**					
		b. Select **Specific Actions from Log.**					
		c. Select the first Action field and enter [**2**].					
		NOTE: Standard Action Specification 2 represents "Sensor Test".					
		5. View log, scroll up to view tray masks and check the tray masks profiles indicating open trays and a working DVS Sensor.					
		6. Repeat steps 1 through 5 to perform a Discharge Verification Sensor Test on DVS -2.					
		7. Note any discrepancies and report them to supervisor.					
SORTER	48. **	**(Power On)** **Sorter Protection Whisker Sensors:** **Item on Cover, Derail Detection, and Clear Drive Belt.** **NOTE:** This task will require 2 people to perform. Perform a functionality check on the Sorter Protection Sensors. 1. With the sorter not running, trip Item on Cover (IOC-1) whisker switch sensor. a. On the graphics screen check that IOC-1 reports when tripped. b. Check the Sorter Stack light assemblies and MCP Sorter E-Stop indicator for Red flashing lights. c. Press the Reset Turn 1 pushbutton to clear the Turn 1 fault. d. Press the Reset E-Stop pushbutton on the MCP. 2. With the sorter not running, trip Derail Detection Sensor 1 (DR-1) whisker switch in Turn 1. a. On the graphics screen check that DR-1 reports when tripped.	30	09			M

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION												
		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S				A	A	0	0	1	M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System	Bulletin Filename mm15120	Occurrence

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.
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 1 reset pushbutton to clear fault in Turn 1.					
		d. Press the Reset E-Stop pushbutton on the MCP.					
	3.	With the sorter not running, trip Derail Detection Sensor 2 (DR-2) whisker switch in Turn 1.					
		a. On the graphics screen check that DR-2 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 1 reset push button to clear fault in Turn 1.					
		d. Press the Reset E-Stop push button on the MCP.					
	4.	With the sorter not running, trip Derail Detection Sensors (DR-3) whisker switch in Turn 1.					
		a. On the graphics screen, check that DR-3 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 1 reset push button to clear fault in Turn 1.					
		d. Press the Reset E-Stop push button on the MCP.					
	5.	With the sorter not running, trip Clear Drive Belt (CDB-1) whisker switch in Turn 1.					
		a. On the graphics screen, check that CDB-1 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 1 reset push button to clear fault in Turn 1.					

U.S. Postal Service	IDENTIFICATION											
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
	0	3	S	P	S	S			A	A	0	0	1	M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System	Bulletin Filename mm15120	Occurrence

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		d. Press the Reset E-Stop push button on the MCP.					
	6.	With the sorter not running, trip the Derail Detection Sensor (DR-4) whisker switch in Turn 2.					
		a. On the graphics screen, check that DR-4 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 2 reset push button to clear fault in Turn 2.					
		d. Press the Reset E-Stop push button on the MCP.					
	7.	With the sorter not running, trip the Derail Detection Sensor (DR-5) whisker switch in Turn 2.					
		a. On the graphics screen, check that DR-5 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 2 reset push button to clear fault in Turn 2.					
		d. Press the Reset E-Stop push button on the MCP.					
	8.	With the sorter not running, trip the Derail Detection Sensor (DR-6) whisker switch in Turn 2.					
		a. On the graphics screen, check that DR-6 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 2 reset push button to clear fault in Turn 2.					
		d. Press the Reset E-Stop push button on the MCP.					
	9.	With the sorter not running, trip the Clear Drive Belt (CDB-2) whisker switch in Turn 2.					

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S			A	A	0 0 1		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		a. On the graphics screen, check that Clear Drive Belt (CDB-2) reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 2 reset push button to clear fault in Turn 2.					
		d. Press the Reset E-Stop push button on the MCP.					
		10. Press the Reset E-Stop push button on the MCP.					
		11. Note any deficiencies and report them to supervisor.					
SORTER	49. **	**(Power On)** **Hanging Product Sensors.** **WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.** Perform a functionality test on the Hanging Product Sensors. 1. With the Sorter in operation, block the hanging product sensors in Turns 1 & 2. 2. Check that the Sorter stops and alarm sounds. 3. Check the MCP Sorter E-Stop indicator illuminates. 4. Check the FMPCS Graphics computer for reporting. 5. Press the MCP Reset E-Stop button to clear alarm. 6. Press the MCP **Sorter Start** pushbutton to restart sorter.	10	09			M
SORTER	50.	**(Power On)** **Discharge Solenoids Operation.**	15	10			W

		IDENTIFICATION				

<table>
<tr><td rowspan="3">U.S. Postal Service
Maintenance Checklist</td><td colspan="6" align="center">IDENTIFICATION</td></tr>
<tr><td>WORK
CODE</td><td colspan="3" align="center">EQUIPMENT
ACRONYM</td><td>CLASS
CODE</td><td>NUMBER</td><td>TYPE</td></tr>
<tr><td>0 3</td><td>S P S S</td><td></td><td></td><td>A A</td><td>0 0 1</td><td>M</td></tr>
<tr><td>Equipment Nomenclature
Small Parcel Sortation System</td><td colspan="2">Equipment Model
Pilot System</td><td colspan="2">Bulletin Filename
mm15120</td><td colspan="2">Occurrence</td></tr>
</table>

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Run Hours	Pieces Fed (000)	Freq.

		Perform a Sequential Discharge Unit Test to check the functionality of the carrier tray discharge solenoids
		
		1. At the FMPCS Control Station terminal, sign on as maint.
		
		2. Press the **Sorter Start** button on the MCP.
		
		3. At the FMPCS Control Station Main Menu Select Maintenance:
		  a. Select Discharge Unit Tests.
		  b. Select start a sequential discharge unit test.
		
		4. Under Enter Test Options enter the following:
		  a. Sequential Test Side [blank]
		  b. First discharge unit name [DC-001]
		  c. Last discharge unit name [DC-196] (or last discharge on machine)
		  d. Number of times to fire each DU [4]
		  e. Tray or window interval [1]
		  f. Tray modulus [blank }
		  g. Number of times to repeat test. [1]
		
		5. Start test by pressing **Enter**.
		6. Press **Escape.**
		7. At the FMPCS Terminal screen select **Cancel a Sequential Discharge Unit Test** once the discharge unit test completes.
		8. Press the **Stop Sorter** pushbutton on the MCP.
		9. Press **Escape** 2 times; from the FMPCS Control Station terminal Main Sorter Controller Menu:
		  a. Select View Message Log.
		  b. Select specific actions from log.
		  c. Tab down 4 times to select the first action field, enter the number **4** to view Discharge Unit failures.					

U.S. Postal Service		IDENTIFICATION									
Maintenance Checklist		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER	TYPE
		0 3	S	P	S	S		A A		0 0 1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System				Bulletin Filename mm15120			Occurrence		

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		10. Note which discharge solenoids report discharge problem and/or failure.					
		11. Generate a work order to address any deficiencies.					
SORTER	51. **	**(Power on) Split Trays.** NOTE: Place the Sorter in Maint. mode to jog the sorter for access to the trays. Use a ladder placed near the MCP for easy access to the trays. 1. Clean trays using a dust removal brush or general purpose cleaner and cloth to remove any dirt or debris. 2. Remove any foreign material (I.E. labels) from within the tray on all carrier trays. 3. Generate a work order to address any deficiencies. * Time per tray	.5*	09			W
Sorter	52. **	**(Power On) Split Tray Operation** Observe Split Tray opening operation. NOTE: One sorter revolution in MAINT Mode takes approximately 18 minutes 4 seconds. 1. At the FMPCS Control Station, press **Ctrl-Ctrl** to switch to the Main Sorter Controller Menu screen [3]. NOTE: The discharge chute solenoids can be alternated by changing "DC-000" designator to the desired chute. 2. At the FMPCS terminal type: **force discharge DC-001 divert on.** 3. At the FMPCS terminal type: **force discharge DC-001 divert2 on** to open trays at Discharge Chute 1. 4. Place the Sorter Mode switch to **MAINT**. 5. Press the **Sorter Start** pushbutton on the MCP. The sorter will operate at a reduced	30	10			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0　3	S	P	S	S		A	A	0　0　1		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence		

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		speed (approximately 15% of normal speed).					
		6. Observe tray opening function:					
		a. Record the tray number if the doors slam open, bounce excessively, or are very noisy.					
		b. Verify the shock absorber impact block is present.					
		c. Verify the shock is present.					
		7. Press the **Sorter Stop** pushbutton on the MCP.					
		8. At the FMPCS terminal type **unforce all** to remove force command.					
		9. Place the Sorter Mode switch to **RUN**.					
		10. Generate a work order to address any deficiencies.					
OVIS CABINET: US – ADDRESS UPDATE OVIS ADDRESS DATABASE UPDATE SCRIPT	53. **	**Download And Update OVIS AddressDataBase Update Script.** **WARNING: Be cautious when working around or on equipment when power has been applied.** **NOTE:** The NDSS address files reside on the IRS computer, requiring each individual computer to be brought up as an IRS computer. Use one of the other computers brought up as a PIP computer. 1. Use the keyboard strokes (**CTRL, CTRL**, Workstation **#1, #2, #3,** and **Enter**) to navigate to the computer running as the PIP (Workstation 1). 2. Open OVIS Controller to display the SPSS-OVIS GUI. 3. From the home screen, click **Tools>NDSS Update.** 4. From the NDSS type window, select **Update** from the drop down field, and click OK. 5. On the NDSS update screen a message stating the OCR will be temporarily unavailable will appear. Select **YES** to proceed.	20	10			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S			A	A	0 0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		6. Click **OK** when completed.					
		7. Power down IRS computer (Workstation 2).					
		8. Power up the OVIS Spare computer (Workstation 3) as an IRS computer.					
		9. Once Workstation 3 is Up, perform steps 1 through 6.					
		10. Power down Workstations 1 & 3.					
		11. Power up Workstation 2 as a PIP and Workstation 1 as an IRS computer.					
		12. Navigate to Workstation 2 (PIP) by pressing **CTRL, CTRL, 2,** and **Enter**.					
		13. Perform steps 1 through 6.					
		14. Power down Workstations 1 & 2.					
		15. Power up the OVIS computers in their original configuration (Workstation 1 as a PIP and Workstation 2 as an IRS.					
		Reference MTSC SPSS page, PM Source Documentation, SPSS OVIS Folder, OVIS Users Handbook.					
PSOC	54.	**Perform PSOC Calibration** Perform Section 10, in the USPS - 212 SPSS Installation Manual to calibrate the PSOC, verify camera angle, focus camera, and check the camera ADC setup. **NOTE:** If site adds, removes, or replaces a light source (broken light bulb) that will affect the ambient lighting of the camera, PSOC will need to be calibrated. Reference the MTSC SPSS page, PM Source Documentation, USPS-212 SPSS Installation Manual, Section 10.	20	10			W
FMPCS	55. **	**Perform Site Data Backup** Perform Site Data Backup on the FMPCS computer. Reference the MTSC SPSS page, PM Source Documentation, SPSS FMPCS folder, Making a Site Data Backup.	15	10			M
SPSS: INTERLOCKS AND E-STOPS	56. **	**Safety Task (Power On)** **Check All Interlocks and E-Stops.**	90	09			M

U.S. Postal Service	IDENTIFICATION										
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
	0 3	S	P	S	S			A A	0 0 1		M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model Pilot System				Bulletin Filename mm15120			Occurrence			

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.

		WARNING: Be cautious when working around or on equipment when power has been applied. This task requires that the machine be running. Take precautions to prevent hair, clothing, jewelry, tools, and test equipment from being caught in moving parts.
		
		 NOTE: When performing this step, check only one interlock switch and one emergency stop switch with machine running. Check all other interlock and E-Stop switches while machine is stopped.
		
		 NOTE: Verify light conditions and warning sounds for each E-Stop and interlock.
		
		 1. Load MAINT.rt Sort plan at FMPCS Graphics Screen HMI.
		
		 2. Ensure the Mode Selection Switch on the Main Control Panel is in the "Run Mode".
		
		 3. Push the Green Sorter **Start** Pushbutton on the Main Control Panel Cabinet to start the SPSS.
		
		    a. Verify that when the Sorter **Start** pushbutton is pressed, all the amber stack light assembly indicators and horn pulses for 10 seconds, which indicates a warning that the system is starting up and a physical or electrical hazard exist.
		
		    b. 5 seconds prior to starting the sorter, the horn alarm stops and the amber stack light assembly indicators flash.
		
		    c. When the sorter starts up, the amber stack light goes off, the Green Stack light indicators flash until the machine reaches full operational speed.
		
		 4. Press one Emergency-Stop switch assembly and note that following occurs:
		
		    a. Machine stops immediately.
		
		    b. Lamp lights in EMERG STOP switch.
		
		    c. Red light illuminates on all stack light assemblies.
		
		    d. Green Sorter Running lamp goes out on Main Control Panel Cabinet.					

U.S. Postal Service	IDENTIFICATION												
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	3	S	P	S	S			A	A	0	0	1	M

Equipment Nomenclature	Equipment Model	Bulletin Filename	Occurrence
Small Parcel Sortation System	Pilot System	mm15120	

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		e. Red Sorter E-Stop lamp on Main Control Panel Cabinet illuminates.					
		f. Fault on FMPCS Graphics Screen HMI indicates approximate location of E-Stop/Interlock being tested.					
		g. Pressing Sorter Start pushbutton does not start machine.					
	5.	Reset EMERG STOP switch and note that following occurs:					
		a. Sorter E-Stop lamp on Main Control Panel Cabinet flashes.					
		b. Red light flashes on ALL the Stack Light Assemblies.					
		c. Lamp goes out in EMERG STOP switch assembly.					
		d. Press the Reset E-Stop pushbutton on the Main Control Panel Cabinet.					
		e. Red E-Stop lamp goes out on the Main Control Panel.					
		f. Red stack light goes out on all stack light assemblies.					
		g. Press the Sorter Start pushbutton on the Main Control Panel Cabinet to start the Sorter.					
		h. Verify that when SORTER START pushbutton is pressed, the stack light assembly amber indicator and horn pulses for 10 seconds, which indicates a warning that the system is starting up and a physical or electrical hazard.					
		i. Five seconds prior to starting the Sorter, the horn alarm stops and the amber stack light assembly indicators flash.					
		j. When the Sorter starts up, the amber stack light goes off, and the Green Stack light indicators flash until the machine reaches full operational speed.					
		k. Stop the machine and exit sort plan.					
	6.	Without starting and stopping machine, check all remaining EMERG STOP switches					

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S		A	A	0 0	1	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System					Bulletin Filename mm15120			Occurrence		

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.
		one at time to ensure that each one causes actions as described in items **4b – 4g** above to occur when pressed and actions described in items **5a – 5f** above to occur when they are reset.					
		7. Without starting and stopping machine, check the Pull Cord E-Stop switches one at a time, by pulling the emergency stop pull cords, to ensure that each one causes actions described in items **4b – 4g** above to occur when pulled and actions described in items **5a – 5f** occur when the Pull Cord E-Stop is reset.					
		8. Note any deficiencies and report them to supervisor.					
SPSS	57. **	**Create Work Orders For Any Needed Repairs.**	10	ALL			D
FINAL-CLEANUP	58. **	**Clean-Up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	15	ALL			D

* --- the tasks marked with an asterisk are per unit tasks.

** --- the tasks marked with two asterisks are critical tasks.

<u>ATTACHMENT 3</u>

SPSS MASTER CHECKLIST

09-SPSS-AA-002-M

Operational Maintenance

PILOT SYSTEM

CLASS CODE = AA

U.S. Postal Service	IDENTIFICATION											
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM							CLASS CODE	NUMBER		TYPE
	0	9	S	P	S	S				A	A	0	0	2	M
Equipment Nomenclature	Equipment Model					Bulletin Filename			Occurrence			
Small Parcel Sortation System	Pilot System					mm15120			Tour			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
SAFETY STATEMENT	1.	**WARNING: 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.** **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 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 Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade requirements.** **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.**	1	ALL			T
OPERATIONAL: GENERAL	2.	**Monitor Equipment Condition.** 1. Check Maintenance log book for any outstanding issues. 2. Ask operators (facers and sweepers) and operations supervisor if they are aware of any equipment problems. Investigate reported problems.	5	10			T

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0 9	S	P	S	S		A	A	0	0	2	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System				Bulletin Filename mm15120			Occurrence Tour				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
OPERATIONAL: FMPCS SORT CONTROLLER	3.	**Check FMPCS Sort Controller Computer Maintenance Reports.** 1. Run Maintenance Report on All Devices to check for anomalies. 2. Run Condition Report on All Devices to check for anomalies. 3. Run Tour Maintenance Long Report to check for reoccurring anomalies, such as Shaft Encoder errors, Index Sensor errors, or Closing Device faults.	5	10			T
OVIS CABINET: RACK COMPUTER	4.	**Check OVIS Controller Computer.** **CAUTION: Limit the time that the OVIS Rack door is open as there is no filtering of air intake to the rack components while the door is open.** Check the OVIS GUI (Graphical User Interface/Homescreen) display status of the system and it's sub-systems during operation. 1. Check that the system indicator icons on the Homescreen are green. 2. If an icon on the Homescreen is not green, open the View Messages window to obtain additional information about the status or particular error message. 3. The OVIS icon on the FMPCS Graphics Display will change color, (green, yellow, orange, red) depending on the OVIS System health status. The graphics screen will display the same error/status message found on the OVIS Message window.	5	10			T
INDUCT: INDUCTION STATION	5.	**Check Induction Stations.** 1. Check the Induction Line conveyor belts for damage. Observe proper tracking of belts. 2. Check Dimensioner for debris, clean with a lint free cloth or microfiber glove if necessary. 3. Check induction for proper positioning of parcels on carrier cells. All sizes, shapes, and weights should be centered laterally and slightly forward of center longitudinally.	10	09			T

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	9	S	P	S	S				A	A	0	0	2	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model Pilot System				Bulletin Filename mm15120			Occurrence Tour				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		4. Note any discrepancies in log book and initiate corrective action.					
SORTER	6.	**Monitor Sorter Operation.** 1. Check for proper operation of the trays. Ensure they open completely. 2. Check tray closing operation as the trays pass through the tray closing device brushes, ensure the trays close and latch properly.	10	09			T

<u>ATTACHMENT 4</u>

SPSS MASTER CHECKLIST

03-SPSS-BA-003-M

CLASS CODE = BA

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION												
	WORK CODE	EQUIPMENT ACRONYM							CLASS CODE		NUMBER		TYPE
	0 3	S	P	S	S				B	A	0 0 3		M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model					Bulletin Filename mm15120				Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
SAFETY STATEMENT	1.	**WARNING: 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. 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.** **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 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 Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade requirements.** **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.**	1	ALL			D
SPSS	2. **	**Power Down And Lock Out Power.** **NOTE:** Soft-reboot of the computers in the OVIS RACK is not needed when complying with the current Maintenance Management Order (MMO) providing lockout/restore procedures. Power down the machine and lock out its power as prescribed by the current local lockout instructions providing lockout/restore procedures.	5	ALL			D

U.S. Postal Service	IDENTIFICATION											
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
	0 3	S	P	S	S			B	A	0 0 3		M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Reference MTSC SPSS page, PM Source Documentation, SPSS Start Up/Shut Down Folder, Maintenance Training Lesson 5.					
FMPCS	3. **	**Shut Down and Restart FMPCS Program.** 1. On the FMPCS Site Utilities Screen [0] Main Menu, press **S** to shut down the FMPCS Program. 2. When the "FMPCS is down" message is displayed press Enter to continue. 3. On the FMPCS Site Utilities Screen [0] Main Menu, press **R** to restart the FMPCS program.	10	10			D
ALL PURPOSE CONTAINER UNLOADER (APCU)	4. **	**Perform Mail Search.** 1. Check the area between the APCU and the incline conveyor for mail. 2. Check all guards are in place. 3. Return all mail found during mail search to the proper mail path.	15	07			D
ALL PURPOSE CONTAINER UNLOADER (APCU)	5.	**Entry Photo Eyes.** 1. Clean entry photoeyes and reflectors on the APCU. 2. Generate a work order to address any deficiencies.	10	07			W
ALL PURPOSE CONTAINER UNLOADER (APCU)	6.	**Check Hydraulic Lines.** 1. Check the condition of all hydraulic cylinder hoses and fittings for leaks. 2. Check condition of the hydraulic reservoir unit hoses and fittings. Check for leaks. Look for damage caused by foot traffic, falling parcels, or abrasion by moving parts which could cause a future leak to occur. 3. Generate a work order to address any deficiencies.	25	09			W
ALL PURPOSE CONTAINER UNLOADER (APCU)	7. **	**Check For Signs Of Wear.** 1. Check the main pivot pins and bushings for signs of wear. 2. Check cylinder clevis pins and bushings for signs of wear. 3. Check Unloader frame for damage or loose	25	09			M

	U.S. Postal Service	IDENTIFICATION											
	Maintenance Checklist	WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S			B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		floor anchors. Check for cracks and metal fatigue at pivot points and near welds. Verify clevis pin retaining hardware is in place and secure.					
		4. Check for damaged or missing container stops.					
		5. Generate a work order to address any deficiencies.					
		Reference MTSC SPSS page, PM Source Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.					
ALL PURPOSE CONTAINER UNLOADER (APCU)	8. **	**Check Hydraulic Fluid.** **WARNING: Discard or dispose of chemical soaked materials according to SDS and in accordance with local procedures.** 1. Check the hydraulic fluid level using sight glass while the unloader is in the lowered position. 2. Check fluid for evidence of water contamination (cloudy), discoloration from overheating, unusual odor, and/or excessive particulates (examine sample on blotter). 3. Check reservoir for clogged breather/fill cap. Clean or replace as necessary. 4. Add fluid as necessary. Use CITGO AW 32 Hydraulic Oil. Reference MTSC SPSS page, PM Source Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.	15	09			M
ALL PURPOSE CONTAINER UNLOADER (APCU)	9.	**Change Hydraulic Fluid.** **WARNING: Discard or dispose of chemical soaked materials according to SDS and in accordance with local procedures.** Change hydraulic fluid and filter. 1. Remove old hydraulic fluid and replace using 15 gallons of CITGO AW 32 Hydraulic Oil. 2. Replace oil filter element, PSN 3920-10-000-1090. Reference MTSC SPSS page, PM Source	300	07			S

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE	EQUIPMENT ACRONYM				CLASS CODE		NUMBER			TYPE
		0 3	S P S S				B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model			Bulletin Filename mm15120			Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.					
INCLINE CONVEYOR	10.**	**Perform Mail Search** 1. Check for mailpieces at the top and around the bottom of the conveyor. 2. Return all mail found during mail search to the proper mail path.	10	07			D
INCLINE CONVEYOR	11.**	**Belts, Sprockets, Wear Strips, and Rollers.** **NOTE**: Perform the following tasks after removing the hinge rods and opening the Bulk Handling conveyor belts. 1. Vacuum and clean drive sprockets at the head end and the idler wheels on the lower end of conveyor. 2. Check drive sprockets and idler wheels for wear. a. Sprockets should be in contact with the shaft where teeth engage the belt. b. Replace sprockets or wheels when a gap of more than 2 mm develops between any sprocket and wheel on the related shaft. 3. Check that the Bulk Handling conveyor cogs are engaging with the belt sections. 4. Check wear strips for signs of cracks and deteriorating conditions. 5. Check under side of belts for signs of damage. 6. Check that all Bulk Handling Line rollers are clean and spinning freely. Reference MTSC SPSS page, PM Source Documentation, Incline Conveyor Folder, SH Maintenance Training Lesson 8A, Bulk Handling Conveyor.	300	09			Q
INCLINE CONVEYOR	12.**	**Bulk Handling Conveyor** 1. Measure the Bulk Handling Line conveyor belt section to section for pitch elongation. 2. Generate a work order to address any	25	09			S

<table>
<tr><td colspan="2" rowspan="2">U.S. Postal Service
Maintenance Checklist</td><td colspan="11">IDENTIFICATION</td></tr>
<tr><td colspan="2">WORK
CODE</td><td colspan="4">EQUIPMENT
ACRONYM</td><td colspan="2">CLASS
CODE</td><td colspan="2">NUMBER</td><td>TYPE</td></tr>
<tr><td colspan="2"></td><td>0</td><td>3</td><td>S</td><td>P</td><td>S</td><td>S</td><td></td><td></td><td>B</td><td>A</td><td>0</td><td>0</td><td>3</td><td>M</td></tr>
<tr><td colspan="2">Equipment Nomenclature
Small Parcel Sortation System</td><td colspan="6">Equipment Model</td><td colspan="3">Bulletin Filename
mm15120</td><td colspan="4">Occurrence</td></tr>
</table>

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		deficiencies. Reference MTSC SPSS page, PM Source Documentation, Intralox Conveyors Folder, Instruction Handbook Modular Plastic Belt Equipment Handbook v1.0, Section 5.2.1.1 for instructions.					
INCLINE CONVEYOR	13.	**Control Photoeyes.** Clean the three (3) (Head End, Call, and Full) control photoeyes and reflectors controlling the Bulk Handling Line conveyor with lint free cloth. Reference MTSC SPSS page, PM Source Documentation, Incline Conveyor Folder, SH Maintenance Training Lesson 8A, Bulk Handling Conveyor.	25	07			W
INCLINE CONVEYOR	14.	**Static Roller Conveyor** 1. Vacuum the Static Roller Conveyor using a soft brush attachment. 2. Check the conveyor for damage or missing rollers.	25	07			M
INDUCTION PLATFORM	15.**	**Perform Mail Search.** 1. Check for mailpieces around the induction line conveyors and platform. 2. Return all mail found during mail search to the proper mail path.	10	07			D
INDUCTION CONVEYOR	16.**	**Kore Sensors and Dimensioner.** 1. Clean Kore Sensors with lint free cloth. 2. Clean Dimensioner light curtains and Kore strip LEDs using a lint free cloth or microfiber glove. Reference MTSC SPSS page, PM Source Documentation, Interoll Conveyors Folder, SH Maintenance Training Lesson 8B.	10	07			D
INDUCTION	17.	**Transition Plates.** 1. Clean the Induction Line to Sorter transition plates with a general purpose cleaner and cloth. 2. Clean the Induction Jam Sensor emitter and receiver with a lint free cloth or microfiber	15	07			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION									
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE	NUMBER		TYPE
		0 3	S P S S					B A	0 0 3		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model				Bulletin Filename mm15120			Occurrence		

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		glove.					
		3. Check the transition plates for damage.					
		4. Generate a work order to address any deficiencies.					
INDUCTION	18.	**Induction Power Panels.** Clean the air filters in the Induction Power Panel fan housings. Reference the MTSC SPSS page, PM Source Documentation, Maintenance Training Diagnostics Folder, SH Maintenance Training Lesson 10.	15	07			Q
SORTER	19.**	**Perform Mail Search.** 1. Check the areas for mail in, beneath, and around all discharge chutes. 2. Check for mail in the maintenance alley of sorter. 3. Check the areas around Turns 1 & 2. 4. Check the area near and around the Tray Closing Device. 5. Return all mail found during mail search to the proper mail path.	20	07			D
SORTER	20.**	**Article Between Tray (ABT), Product Stuck in Tray (PST) Arrays.** Clean the Article Between Tray and Product Stuck in Tray photoeye emitters and receivers for each of the ABT\PST arrays, (3 total) with a lint free cloth or microfiber glove.	15	07			W
SORTER	21.**	**Hanging Product Photoeyes and Reflectors.** Clean the Hanging Product Photoeyes and Reflectors, near Turns 1 & 2 with a lint free cloth or microfiber glove.	4	07			W
SORTER	22.	**Chute Jam Sensors** Clean the Chute Jam 1-4 Photoeye emitters and receivers located on both sides of the sorter, with a lint free cloth or microfiber glove.	10	07			W
SORTER	23.**	**Split Trays.**	60	09			M

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION												
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0 3	S	P	S	S				B	A	0	0 3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120				Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		1. Check the tray bumpers are present and properly seated.					
		2. Check the tray shock absorber is not damaged, straight not leaking oil.					
		3. Check the shock absorber impact block is securely mounted.					
		4. Check the tray spring support rod is securely mounted, and the tray spring is present.					
		5. Check the condition of the drive plates.					
		6. Check mounting points for cracks and ensure that the drive plate is straight.					
		7. Check the Tray 1 Detection Magnet is securely mounted.					
		8. Generate a work order to address any deficiencies.					
SORTER	24.	**Anti-Static Brushes.** 1. Check the anti-static brushes for damage. 2. The brushes should be intact and remain in contact with the side of the split tray carrier. 3. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, SPSS Sorter Folder, SH Maintenance Training Lesson 8D.	1	09			W
SORTER	25.**	**Tray Closing Device.** 1. Check Tray Closing Brushes for damage. 2. Measure brush length; minimum brush length is 15 mm. Replace brush as needed. 3. Actuate both closing brushes to check for proper operation. 4. Check both gas spring mounting blocks are secured to the retractable arms. 5. Check both closing device hinges for signs of wear and are properly secured to the retractable arms. 6. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source	5	09			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S			B	A	0 0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Documentation, SPSS Sorter Folder, SH Maintenance Training Lesson 8D.					
SORTER	26.**	**Tray Support Belts.** 1. Check induction support belts for fraying and signs of damage. 2. Check the belt guides for signs of damage and remove any built up debris. 3. Check the induction support drive motor and gearbox for signs of leaks. 4. Ensure the drive and idler pulleys are secure. 5. Check belt idle rollers are secure, free of debris, and spin freely. Check for flat spots on wheels. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, SPSS Sorter Folder, SH Maintenance Training Lesson 8D.	10	09			M
SORTER	27.**	**Sorter Drive Motor(s) Hardware.** 1. Loosen the top 2 screws and remove the bottom 2 screws to remove the back panel safety cover, and check overall drive motor assembly for loose or missing hardware. 2. Check power cable conduit for signs of damage and cracks, and conduit connections are secured and tight. 3. Check friction and drive rollers for damage and cracks. 4. Check drive and timing belts for fraying, cracks, or signs of damage. 5. Check the tensioner assembly and ensure tension spring is secure. 6. On the drive motor assembly hosting the encoder, check that the encoder mounting bracket is secured, and cable connection is tight. 7. Replace back panel safety panel cover. Reinstall 2 screws on the back panel safety cover and tighten and secure all 4 panel	40	09			M

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0 3	S P S S					B A		0 0 3		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model				Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		mounting screws. 8. Generate a work order to address any deficiencies. *Estimated time includes 4 Drive motor assemblies total.					
SORTER	28.**	**Destination Chute Full Sensor.** 1. Check destination chute full sensor is securely mounted to the mounting plate. 2. Check sensor cable Quick disconnect connection is secured to sensor. 3. Clean the chute full sensor using a lint free cloth or microfiber glove. 4. Generate a work order to address any deficiencies. * Time per group of 4 destination chute groups.	1**	09			M
SORTER	29.**	**Main Electrical Cabinet.** Clean the air filters in the Main Electrical Panel fan housings. Replacement filter: PSN: 5915-17-000-6214 Outlet Filter, NEMA 12, 204x204mm. Reference the MTSC SPSS page, PM Source Documentation, SPSS Sorter Folder, SPSS-1493-Fan documentation.	4	07			Q
SORTER	30.	**Destination Chutes.** 1. Check the destination chute surfaces for any damage. 2. Generate a work order to address any deficiencies.	15	09			Q
SORTER	31.**	**Carrier Tray Track.** 1. Check the Sorter curve track sections in turn 1 and turn 2 for indications of carrier tray wheel induced wear. 2. Clear the 2 debris slots in each turn 1 and turn 2. 3. Check the Sorter carrier track sections	30	09			S

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S			B	A	0 0 3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		following the Drive Units for carrier tray wheel induced wear. 4. Generate a work order to address any deficiencies.					
SORTER	32.**	**Carrier Train Tension.** 1. Measure the Carrier train for proper tension. 2. Verify the tension is between 35 & 45 kg. 3. Replace carrier links (PSN 3915-17-000-6319) if tension is below 35 kg. Refer to the Eurosort Maintenance Manual, Section 3.3.3.	15	09			A
FMPCS COMPUTER	33.	**FMPCS Computer Cabinet.** 1. Vacuum the FMPCS computer cabinet including the top of each device. 2. Clean the air filter on the FMPCS and Cimplicity computer chassis. Replace Filter as necessary.	10	07			M
PSOC	34.**	**Clean Overhead Camera Clear Cover.** **CAUTION: The glass used in this system is fragile enough to break if pressure is applied.** **NOTE:** Do not spray the equipment. Only a misting of the cloth is required. Optionally, use a streak-free glass cleaner. 1. Using a lint-free cloth, gently wipe the underside of the clear cover over the camera lens and led array. 2. Use a spray bottle containing tap water to moisten cloth for wiping away stubborn smudges.	5	07			M
ITEM DETECTION CAMERAS	35.**	**Clean Item Detection Cameras** 1. Clean the Induction Verification Sensor using a lint free cloth. 2. Clean the Load Verification Sensor using a lint free cloth.	10	07			Q
OVIS RACK: RACK DOOR AIR FILTER	36.	**Replace Air Filter.** 1. Replace two (2) air filters, (PSN 4130-15-000-7240). Use 18" x 30" x 1" filter with	5	07			Q

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0 3	S	P	S	S		B	A	0 0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120			Occurrence		

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		MERV 8 rating.					
		2. Check the 12 exhaust fans on the rear of the OVIS cabinet to ensure fans are running.					
OPERATION GENERAL	37.**	**Restore Equipment To Service.** **WARNING: Be cautious when working around or on equipment when power has been applied.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. Reference MTSC SPSS page, PM Source Documentation, SPSS Start Up – Shut Down Folder, SH Maintenance Training Lesson 5 Start Up.	5	ALL			D
OPERATIONAL APCU	38.**	**(Power On)** **Check Unloader Entry Photoeyes for proper operation.** 1. Place the mode selection switch to **Auto**. a. With the unloader in the fully lowered position, push and hold the **UP** button for up to 5 seconds to begin operation. b. Check the amber stack light flash and horn pulse for up to 5 seconds prior to unloader movement. 2. During movement, block each unloader entry photoeyes individually (3) and check that the unloader stops. a. Check that that the Guard Reset amber pushbutton is illuminated. b. Press the Guard Reset pushbutton to clear the fault. c. Press the **Up** pushbutton to restart cycle. 3. Lower unloader to the fully lowered position when completed. 4. Note any deficiencies and report them to supervisor. Reference the MTSC SPSS page, PM Source	10	07			W

				IDENTIFICATION						
U.S. Postal Service **Maintenance Checklist**		WORK CODE	EQUIPMENT ACRONYM		CLASS CODE		NUMBER			TYPE
		0 3	S P S S		B A		0 0 3			M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model			Bulletin Filename mm15120		Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Documentation, Southworth APCU Folder, APCU Operating and Maintenance Manual.					
OPERATIONAL APCU	39.**	**(Power On)** **Unloader E-Stops.** **WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.** **NOTE:** The APCU Unloader E-Stop is local to the individual unloader and reports directly to the control panel. 1. Place the operational mode switch in **Auto**. 2. With the unloader in the fully lowered position, push and hold the **UP** button for up to 5 seconds to begin operation. a. Check the amber stack light flash and horn pulse for up to 5 seconds prior to unloader movement. 3. During the unloader movement, push the E-Stop Pushbutton on the APCU Control Panel and check that the unloader stops. 4. Check the E-Stop Reset pushbutton lamp light comes on in the Emergency Stop switch and the E-Stop reset pushbutton light goes off. 5. Pull E-Stop switch out and press E-stop Reset pushbutton. Check the E-Stop reset switch lamp comes on, and the Guard Reset pushbutton lamp comes on after approximately 5-10 seconds. 6. Press the guard reset pushbutton to reset unloader entry photoeyes. 7. Press the **Down** button to return unloader to the fully lowered position. **NOTE**: The Remote Operator Terminal E-Stop pushbutton switch is not illuminated. 8. Repeat steps 1 thru 7 for the Remote	10	09			M

		IDENTIFICATION								

U.S. Postal Service

Maintenance Checklist

WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
0 3	S	P	S	S			B	A	0	0	3	M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model	Bulletin Filename mm15120	Occurrence

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Operator Terminal E-Stop pushbutton switch.					
		9. Note any deficiencies and report them to supervisor.					
OPERATIONAL APCU	40.**	**(Power On)** **Check Unloader hydraulic unit operation on each Unloader (2 people recommended).** **WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.** **WARNING: If the APCU pressure levels are near or in excess of 1750 PSI, the APCU must be removed from service immediately and repaired.** 1. Visually check pump, reservoir, filter, and all connections for leaking fluid. 2. With Unloader empty, operate Unloader and look for the following: a. Verify smooth lift performance during operation. b. Observe motion of each pivot pin & clevis, checking for signs of pin or clevis wear. If any non-rotational motion of the pin is discovered, the clevis bushing should be scheduled for replacement. c. Check floor mounting points and verify floor mounting bolts are secure. d. Visually check gauges for damage. e. Observe the hydraulic pressure gauge. If pressure indicated does not fall within ranges below, initiate corrective action. **NOTE: The typical empty APCU pressure reading ranges are as below:** • *Stage one Tilt Up: 500 PSI to 750 PSI • *Stage two Dump Up: 700 PSI to 850 PSI	30	09			W

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION											
	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
	0 3	S	P	S	S				B	A	0 0 3	M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model							Bulletin Filename mm15120			Occurrence	

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		• *Stage three Dump Down: 950 PSI to 1350 PSI • *Stage four Tilt Down: 1100 PSI to 1450 PSI **NOTE:** The maximum operating pressure with rated capacity should be less than 1750 PSI. The system release pressure is pre-set at 1750 PSI by the manufacturer. 3. Note any deficiencies and report them to supervisor.					
OPERATIONAL INCLINE CONVEYOR	41.**	**(Power On)** **Check Incline Conveyor Belts for proper tension and tracking.** 1. On the incline conveyor, place the 3-way Selector Switch to the **ON** position. Observe the incline conveyor belt tracking. 2. Place the 3-way selector switch to the **OFF** position. 3. Check sidewalls for wear or excessive buildup of plastic dust which would indicate signs of improper tracking. 4. Check the belt tension by observing belt sag, through the viewing slot in the lower section of the frame, on both sides of the frame. The belt sag should not be below the incline conveyor frame. 5. Generate a work order to address any deficiencies. Reference the MTSC SPSS page, PM Source Documentation, Intralox Conveyors, Modular Plastic Belt Equipment Instruction Handbook.	10	09			W
OPERATIONAL INDUCT: INFEED – SCALE – TIMING-STRIP BELT CONVEYORS	42.	**(Power On)** **Check Belt Tracking, Tension, and Speed.** **NOTE:** Conveyor belt speeds have a speed variation of plus or minus (+/-) 2% of the nominal belt speed. • **+/- 4.4 fpm on induction belts listed at 220 fpm or 215.6 to 224.4 fpm.** • **+/- 11.6 fpm on the strip belts listed at 290**	20	09			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION												
		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	S	P	S	S			B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model						Bulletin Filename mm15120				Occurrence		

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		fpm or 278.4 to 301.6 fpm					
		1. On the induction line control panel, push the Induct package **Start** pushbutton to start the infeed line.					
		2. Check Infeed Belt conveyor for proper tracking and tension.					
		3. Check the Infeed Belt conveyor speed (nominal 220 fpm) by using the hand held tachometer.					
		4. Check the Scale Belt conveyor for proper tracking and tension.					
		5. Check the Scale Belt conveyor speed (nominal 220 fpm) by using the hand-held tachometer.					
		6. Check the Timing Belt conveyor for proper tension and tracking.					
		7. Check the Timing Belt conveyor speed (nominal 220 fpm) by using the hand held tachometer.					
		8. Check the Strip Belt conveyor belt for proper tracking and tension.					
		9. Check the Strip Belt Conveyor speed (nominal 290 fpm) by using a handheld tachometer.					
		10. Generate a work order to address any deficiencies.					
		Reference the MTSC SPSS page, PM Source Documentation, Interoll Conveyors folder.					
OPERATIONAL INDUCT: WEIGHING/ MEASURING CONVEYOR	43.**	**(Power On)** **Check Weighing Accuracy.** Check the Weigh Scale system for accuracy. 1. Push the Induct Package **Stop** pushbutton on the induction line control panel. 2. Press the Scale Stop button on the display screen, to take scale offline. 3. Using 20 lb. (320 oz.) weight, observe measured weight in each corner, and in the center of scale conveyor. 4. Troubleshoot scale if tolerance is plus or	25	10			M

U.S. Postal Service		IDENTIFICATION											
Maintenance Checklist		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0 3	S P S S						B A		0 0 3		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model				Bulletin Filename mm15120			Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		minus (+/-) 1 ounce.					
		5. Generate a work order to address any deficiencies.					
		Reference MTSC SPSS page, PM Source Documentation, Interoll Conveyors folder, SH Maintenance Training Lesson 8C Scale.					
SORTER	44.**	**(Power On)** **Check Destination Chute Jam Sensors on both sides of sorter for proper operation.** **WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.** 1. With the sorter running, block the chute jam sensor, creating a jam. 2. Check that the sorter stops, the red stack lights flash indicating a chute jam. 3. The Cimplicity HMI displays a discharge chute jam error message, while active. Press the Green Sorter Start pushbutton and start the sorter. 4. Note any deficiencies and report them to supervisor.	15	09			W
SORTER	45.**	**(Power On)** **Destination Chute Control Switches.** 1. Check that all Destination Chute Group Control switches are operational and illuminate when placed in the **Off** position. 2. Return switch to the **On** position. 3. Check that the switches are not damaged. 4. Generate a work order to address any deficiencies.	30	09			M
SORTER	46.	**(Power On)** **Destination Chute Full Sensors.**	.5**	09			M

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE		EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S	B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model				Bulletin Filename mm15120			Occurrence			

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.
		Check the Destination Chute Full Sensors for proper operation. 1. With the sorter stopped, block the chute full sensor on the designated chute. 2. Check the chute selector switch flashes indicating the chute is full. 3. Generate a work order to address any deficiencies. * Time per group of 4 chute selector switches.					
SORTER	47.**	**(Power On) Tray Closing Device.** Check the Tray Closing Devices brushes for proper operation. 1. With the sorter stopped, pull down and return one (1) closing brush. 2. Check that the alarm horn sounds and the red stack lights and MCP Sorter E-Stop indicator flash indicating a tray closing device fault. 3. Press the **Turn 2** Fault reset button to clear fault. 4. Press the **E-Stop** Reset button on the MCP. 5. Repeat steps 1-4 for the second closing brush. 6. Press the **Sorter Start** pushbutton and start the sorter. 7. Generate a work order to address any deficiencies.	5	09			M
SORTER	48.**	**(Power On) Tray Close Verification Sensor (CVS).** **NOTE:** Prior to manually opening the trays, pull the maintenance alley pull cord E-Stop to prevent unexpected start up. Once the trays are opened reset the pull cord E-Stop. Check the Close Verification Sensor for proper operation.	5	09			W

U.S. Postal Service	IDENTIFICATION												
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM							CLASS CODE		NUMBER		TYPE
	0	3	S	P	S	S				B	A	0	0	3	M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model	Bulletin Filename mm15120	Occurrence

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		1. With the sorter stopped, open 1 or 2 carrier tray doors manually, by pressing the inside and outside tray hook latches located on the outside of the trays, immediately following the Tray Closing Device.					
		2. Check that the CVS LED indicator flashes as it is flagged by the open tray door.					
		NOTE: The Sorter will operate at 15% of normal speed when placed into Maint. Mode.					
		CAUTION: In the next steps, immediately stop the sorter if the CVS fails to do so.					
		3. Place the Sorter Mode Switch into **Maint**. Mode on the MCP.					
		4. Start the Sorter.					
		5. Check that the sorter stops as the open tray door passes in front of the CVS.					
		6. Check that the red stack lights flash, the marquee displays "CVS-1 Tray not closed" and check the Cimplicity HMI for "CVS-1 Tray not closed" message.					
		7. Close the open tray doors.					
		8. On the Cimplicity screen, click the trays button on the upper right side of screen.					
		a. Select tray flagged as "not operational".					
		b. On the tray details screen select out-of-service to place the tray into a non-operational state.					
		c. Select "In Service" to return tray to operational status.					
		d. Close tray details screen.					
		9. Click the SPSS-1 button on the upper right side of screen, to return to the main screen.					
		10. Select the CVS-1 icon to view sensor details.					
		a. Select reset to return the CVS-1 to operational status.					
		b. Close sensor details window.					
		11. Place the sorter into Run mode when					

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	S	P	S	S			B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120			Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		completed.					
		12. Note any deficiencies and report them to supervisor.					
SORTER	49.**	**(Power On) Discharge Verification Sensor (DVS)**	15	09			W

Full task text for item 49:

(Power On)
Discharge Verification Sensor (DVS)

Check the Discharge Verification Sensor for proper operation by performing a Discharge Verification Sensor Test on DVS-1 and DVS-2.

NOTE: Sensor Tests are performed under Maint. Signon credentials.

1. At the FMPCS Main Sorter Controller Menu:
    a. Select **Maintenance**

    b. Select **Start a Sensor Test**

    c. Select **DVS-1**

    d. Enter Test Options:

        1) Number of trays or windows to examine:**[50]**

        2) Tray or window interval **[3]**

2. Press Escape 2 times and return to the Test Sorter Equipment menu
    a. Select Start a **Discharge Unit Test**

    b. Select **DC-001**

    c. Enter Test Options:

        1) Number of times to fire the DU: [**20**]

        2) Tray or window interval: [**20**]

        3) Tray Modulus [**1**]

3. Press Escape 4 times to Select Sorter Control Menu.
    a. Select **Start Sorter**

4. Press Escape to return to the Main Sorter Controller Menu.

    a. Select **View Message Log**

    b. Select **Specific Actions from Log**

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION									
		WORK CODE	EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE
		0 3	S P S S				B	A	0 0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model			Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		c. Select the first Action field and enter [**2**]					
		NOTE: Standard Action Specification 2 represents "Sensor Test."					
		5. View log, scroll up to view tray masks, and check the tray masks profiles indicating open trays and a working DVS Sensor.					
		6. Repeat steps 1 through 5 to perform a Discharge Verification Sensor Test on DVS - 2.					
		7. Note any discrepancies and report them to supervisor.					
SORTER	50.**	**(Power On) Sorter Protection Whisker Sensors: Item on Cover, Derail Detection, Bent Drive Plate.**	30	09			M
		NOTE: This task requires 2 people to perform.					
		Perform a functionality check on the Sorter Protection Sensors.					
		1. With the sorter not running, trip Item on Cover (IOC-1) whisker switch sensor.					
		a. On the graphics screen check that IOC-1 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP Sorter E-Stop indicator for Red flashing lights.					
		c. Press the Reset Turn 1 pushbutton to clear the Turn 1 fault.					
		d. Press the Reset E-Stop pushbutton on the MCP.					
		2. With the sorter not running, trip Derail Detection Sensor 1 (DR-1) whisker switch in Turn 1.					
		a. On the graphics screen check that DR-1 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 1 reset pushbutton to					

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION											
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0　3	S	P	S	S			B	A	0　0　3		M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model						Bulletin Filename mm15120			Occurrence		

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.
		clear fault in Turn 1.					
		d.　Press the Reset E-Stop pushbutton on the MCP.					
	3.	With the sorter not running, trip Derail Detection Sensor 2 (DR-2) whisker switch in Turn 1.					
		a.　On the graphics screen check that DR-2 reports when tripped.					
		b.　Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c.　Press the Turn 1 reset push button to clear fault in Turn 1.					
		d.　Press the Reset E-Stop push button on the MCP.					
	4.	With the sorter not running, trip Bent Drive Plate Sensor (BDP-1) whisker switch in Turn 1.					
		a.　On the graphics screen, check that BDP-1 reports when tripped.					
		b.　Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c.　Press the Turn 1 reset push button to clear fault in Turn 1.					
		d.　Press the Reset E-Stop push button on the MCP.					
	5.	With the sorter not running, Derail Detection Sensors (DR-3) whisker switch in Turn 2.					
		a.　On the graphics screen, check that DR-3 reports when tripped.					
		b.　Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c.　Press the Turn 2 reset push button to clear fault in Turn 2.					
		d.　Press the Reset E-Stop push button on the MCP.					
	6.	With the sorter not running, trip the Derail					

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0 3	S P S S					B	A	0 0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model				Bulletin Filename mm15120			Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Detection Sensor (DR-4) whisker switch in Turn 2.					
		a. On the graphics screen, check that DR-4 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 2 reset push button to clear fault in Turn 2.					
		d. Press the Reset E-Stop push button on the MCP.					
		7. With the sorter not running, trip the Bent Drive Plate Sensor (BDP-2) whisker switch sensor in Turn 2.					
		a. On the graphics screen, check that BDP-2 reports when tripped.					
		b. Check the Sorter Stack light assemblies and MCP E-Stop indicator for Red flashing lights.					
		c. Press the Turn 2 reset push button to clear fault in Turn 2.					
		d. Press the Reset E-Stop push button on the MCP.					
		8. Note any deficiencies and report them to supervisor.					
SORTER	51.**	**(Power On)** **Hanging Product Sensors.** **WARNING: Be cautious when working around or on equipment when power has been applied. Some of the following tasks require that the machine be running. Take precautions to prevent hair, clothing, tools, and test equipment from being caught in moving parts.** Perform a functionality test on the Hanging Product Sensors. 1. With the sorter in operation, block the hanging product sensors in Turns 1 & 2. 2. Check that the sorter stops and alarm	10	09			M

		IDENTIFICATION												
U.S. Postal Service **Maintenance Checklist**	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE	
	0	3	S	P	S	S			B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model					Bulletin Filename mm15120				Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		sounds.					
		3. Check the MCP Sorter E-Stop indicator illuminates.					
		4. Check the FMPCS Graphics computer for reporting.					
		5. Press the MCP Reset E-Stop button to clear alarm.					
		6. Press the MCP **Sorter Start** pushbutton to restart sorter.					
SORTER	52.**	**(Power On)** **Discharge Solenoids Operation.** Perform a Sequential Discharge Unit Test to check the functionality of the carrier tray discharge solenoids 1. At the FMPCS Control Station terminal sign on as maint. 2. Press the **Sorter Start** button on the MCP. 3. At the FMPCS Control Station Main Menu Select **Maintenance**. 4. Select **Discharge Unit Tests**. 5. Select **Start A Sequential Discharge Unit Test.** 6. Under Enter Test Options enter the following: a. Sequential Test Side [blank] b. First discharge unit name [DC-001] c. Last discharge unit name [DC-196] (or last discharge on machine) d. Number of times to fire each DU [4] e. Tray or window interval [1] f. Tray modulus [blank] g. Number of times to repeat test [1] 7. Start test by pressing **Enter**. 8. Press **Escape**. 9. At the FMPCS Terminal screen select	15	10			W

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION												
		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S				B	A	0 0 3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120				Occurrence			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Cancel a Sequential Discharge Unit Test once the discharge unit test completes.					
		10. Press the **Stop Sorter** pushbutton on the MCP.					
		11. Press **Escape** 2 times; from the FMPCS Control Station terminal Main Sorter Controller Menu:					
		a. Select **View Message Log**.					
		b. Select specific actions from log.					
		c. Tab down 4 times to select the first action field, enter the number **4** to view Discharge Unit failures.					
		12. Note which discharge solenoids report discharge problem and/or failure.					
		13. Generate a work order to address any deficiencies.					
SORTER	53.**	**(Power On) Split Trays.** NOTE: Place the Sorter in Maint. mode to jog the sorter for access to the trays. Use a ladder placed near the MCP for easy access to the trays. 1. Clean trays using a dust removal brush or general purpose cleaner and cloth to remove any dirt or debris. 2. Remove any foreign material (I.E labels) from within the tray on all carrier trays. 3. Generate a work order to address any deficiencies. * Time per tray	.5*	09			W
Sorter	54.**	**(Power On) Split Tray Operation.** Observe Split Tray opening operation. NOTE: One sorter revolution in MAINT Mode takes approximately 18 minutes 4 seconds. 1. At the FMPCS Control Station, press **Ctrl-Ctrl** to switch to the Main Sorter Controller Menu screen [3]. NOTE: The discharge chute solenoids can be	30	10			W

U.S. Postal Service	IDENTIFICATION										
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
	0	3	S	P	S	S			B	A	0	0	3	M

Equipment Nomenclature	Equipment Model	Bulletin Filename	Occurrence
Small Parcel Sortation System		mm15120	

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	

		alternated by changing "DC-000" designator to the desired chute.
		
		2. At the FMPCS terminal type:
		
		  force discharge DC-001 divert on.
		
		3. At the FMPCS terminal type:
		
		  force discharge DC-001 divert2 on to open trays at Discharge Chute 1.
		
		4. Place the Sorter Mode switch to **MAINT**.
		
		5. Press the **Sorter Start** pushbutton on the MCP. The sorter will operate at a reduced speed (approximately 15% of normal speed).
		
		6. Observe tray opening function;
		
		    a. Record the tray number if the doors slam open, bounce excessively, or are very noisy.
		    b. Verify the shock absorber impact block is present.
		
		    c. Verify the shock is present.
		
		7. Press the **Sorter Stop** pushbutton on the MCP.
		
		8. At the FMPCS terminal type **unforce all** to remove force command.
		
		9. Place the Sorter Mode switch to **RUN**.
		
		10. Generate a work order to address any deficiencies.					

OVIS CABINET: US – ADDRESS UPDATE OVIS ADDRESS DATABASE UPDATE SCRIPT	55.**	**Download And Update OVIS AddressDataBase Update Script.** **WARNING: Be cautious when working around or on equipment when power has been applied.** **NOTE:** The NDSS address files reside on the IRS computer, requiring each individual computer to be brought up as an IRS computer. Use one of the other computers brought up as a PIP computer. 1. Use the keyboard strokes (**CTRL, CTRL,** Workstation # **1**, **#2**, **#3,** and **Enter**) to navigate to the computer running as the PIP (Workstation 1). 2. Open OVIS Controller to display the SPSS-	20	10			W

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S				B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120			Occurrence				

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		OVIS GUI.					
		3. From the home screen, click **Tools>NDSS Update**.					
		4. From the NDSS type window, select **Update** from the drop down field, and click **OK**.					
		5. On the NDSS update screen a message stating the OCR will be temporarily unavailable will appear. Select **OK YES** to proceed.					
		6. Click **OK** when completed.					
		7. Power down the IRS computer (Workstation 2).					
		8. Power up the OVIS Spare computer (Workstation 3) as an IRS computer.					
		9. Once Workstation 3 is Up, perform steps 1 through 6.					
		10. Power down Workstations 1 & 3.					
		11. Power up Workstation 2 as a PIP and Workstation 1 as an IRS computer.					
		12. Navigate to Workstation 2 (PIP) by pressing **CTRL, CTRL**, **2**, and **Enter**.					
		13. Perform steps 1 through 6.					
		14. Power down Workstations 1 & 2.					
		15. Power up the OVIS computers in their original configuration (Workstation 1 as a PIP and Workstation 2 as an IRS.					
		Reference MTSC SPSS page, PM Source Documentation, SPSS OVIS Folder, OVIS Users Handbook.					
PSOC	56.**	**Perform PSOC Calibration.** Perform Section 10, in the USPS - 212 SPSS Installation Manual to calibrate the PSOC, verify camera angle, focus camera, and check the camera ADC setup. **NOTE:** If site adds, removes, or replaces a light source (broken light bulb) that will affect the ambient lighting of the camera, PSOC will need to be calibrated. Reference the MTSC SPSS page, PM Source	20	10			M

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION										
		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	S	P	S	S		B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120			Occurrence		

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		Documentation, USPS-212 SPSS Installation Manual, Section 10.					
FMPCS	57.**	**Perform Site Data Backup.** Perform Site Data Backup on the FMPCS computer. Reference the MTSC SPSS page, PM Source Documentation, SPSS FMPCS folder, Making a Site Data Backup.	15	10			M
SPSS: INTERLOCKS AND E-STOPS	58.**	**Safety Task (Power On)** **Check All Interlocks and E-Stops.** **WARNING: Be cautious when working around or on equipment when power has been applied. This task requires that the machine be running. Take precautions to prevent hair, clothing, jewelry, tools, and test equipment from being caught in moving parts.** **NOTE:** When performing this step, check only one interlock switch and one Emergency Stop switch with machine running. Check all other interlock and E-Stop switches while machine is stopped. **NOTE:** Verify light conditions and warning sounds for each E-Stop and interlock. 1. Load MAINT.rt Sort plan at FMPCS Graphics Screen HMI. 2. Ensure the Mode Selection Switch on the Main Control Panel is in the "Run Mode". 3. Push the Green Sorter **Start** Pushbutton on the Main Control Panel Cabinet to start the SPSS. a. Verify that when the Sorter **Start** pushbutton is pressed, all the amber stack light assembly indicators and horn pulses for 10 seconds, which indicates a warning that the system is stating up and a physical or electrical hazard exist. b. 5 seconds prior to starting the Sorter, the horn alarm stops and the amber stack light assembly indicators flash. c. When the Sorter starts up, the amber stack light goes off, the Green Stack	90	09			M

		IDENTIFICATION									

<table>
<tr><td colspan="2" rowspan="2">U.S. Postal Service
Maintenance Checklist</td><td colspan="9">IDENTIFICATION</td></tr>
<tr><td>WORK
CODE</td><td colspan="5">EQUIPMENT
ACRONYM</td><td>CLASS
CODE</td><td>NUMBER</td><td>TYPE</td></tr>
<tr><td colspan="2"></td><td>0 3</td><td>S</td><td>P</td><td>S</td><td>S</td><td></td><td></td><td>B A</td><td>0 0 3</td><td>M</td></tr>
<tr><td colspan="2">Equipment Nomenclature
Small Parcel Sortation System</td><td colspan="5">Equipment Model</td><td colspan="2">Bulletin Filename
mm15120</td><td colspan="2">Occurrence</td></tr>
</table>

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.
		light indicators flash until the machine reaches full operational speed.					
	4.	Press one Emergency-Stop switch assembly and note that following occurs:					
		a. Machine stops immediately.					
		b. Lamp lights in EMERG STOP switch.					
		c. Red light illuminates on all stack light assemblies.					
		d. Green Sorter Running lamp goes out on Main Control Panel Cabinet.					
		e. Red Sorter E-Stop lamp on Main Control Panel Cabinet illuminates.					
		f. Fault on FMPCS Graphics Screen HMI indicates approximate location of E-Stop/Interlock being tested.					
		g. Pressing Sorter Start pushbutton does not start machine.					
	5.	Reset EMERG STOP switch and note that following occurs:					
		a. Sorter E-Stop lamp on Main Control Panel Cabinet flashes.					
		b. Red light flashes on ALL the Stack Light Assemblies.					
		c. Lamp goes out in EMERG STOP switch assembly.					
		d. Press the **Reset E-Stop** pushbutton on the Main Control Panel Cabinet.					
		e. Red E-Stop lamp goes out on the Main Control Panel.					
		f. Red stack light goes out on all stack light assemblies.					
		g. Press the **Sorter Start** pushbutton on the Main Control Panel Cabinet to start the Sorter.					
		h. Verify that when SORTER START pushbutton is pressed, the stack light assembly amber indicator and horn pulses for 10 seconds, which indicates a warning that the system is starting up					

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.

<table>
<tr><td colspan="8">and a physical or electrical hazard.</td></tr>
</table>

and a physical or electrical hazard.

    i.   5 seconds prior to starting the sorter, the horn alarm stops and the amber stack light assembly indicators flash.

    j.   When the sorter starts up, the amber stack light goes off, and the Green Stack light indicators flash until the machine reaches full operational speed.

    k.   Stop the machine and exit sort plan.

6.   Without starting and stopping machine, check all remaining EMERG STOP switches one at time to ensure that each one causes actions as described in items **4b – 4g** above to occur when pressed and actions described in items **5a – 5f** above to occur when they are reset.

7.   Without starting and stopping machine, check the Pull Cord E-Stop switches one at a time, by pulling the Emergency Stop pull cords, to ensure that each one causes actions described in items **4b – 4g** above to occur when pulled and actions described in items **5a – 5f** occur when the Pull Cord E-Stop is reset.

8.   Check the maintenance access doors interlocks in each turn for proper function.

    a.   Perform normal start up on the SPSS.

    b.   Open a maintenance access door.

    c.   Verify that the Sorter comes to a halt.

    d.   Sorter E-Stop lamp on Main Control Panel Cabinet flashes.

    e.   Turn reset button flashes.

    f.   Fault on FMPCS Graphics Screen HMI indicates location in Turn 1 or Turn 2 Interlock.

    g.   Pressing Sorter **Start** pushbutton does not start machine.

9.   Note any deficiencies and report them to supervisor.

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION											
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE

U.S. Postal Service	IDENTIFICATION													
Maintenance Checklist	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	3	S	P	S	S				B	A	0	0	3	M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model					Bulletin Filename mm15120			Occurrence					

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
SPSS	59.**	**Create Work Orders For Any Needed Repairs.**	10	ALL			D
FINAL-CLEANUP	60.**	**Clean-Up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	15	ALL			D

* --- the tasks marked with an asterisk are per unit tasks.

** --- the tasks marked with two asterisks are critical tasks.

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION											
	WORK CODE	EQUIPMENT ACRONYM							CLASS CODE		NUMBER		TYPE
	0	3	S	P	S	S				B	A	0	0	3	M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model	Bulletin Filename mm15120	Occurrence

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.

THIS PAGE BLANK

ATTACHMENT 5

SPSS MASTER CHECKLIST

09-SPSS-BA-004-M

Operational Maintenance

CLASS CODE = BA

U.S. Postal Service **Maintenance Checklist**		IDENTIFICATION												
		WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0 9	S P S S						B	A	0	0	4	M
Equipment Nomenclature Small Parcel Sortation System		Equipment Model					Bulletin Filename mm15120				Occurrence Tour			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
SAFETY STATEMENT	1.	**WARNING: 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. **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 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 Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade requirements. **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.**	1	ALL			T
OPERATIONAL: GENERAL	2.	**Monitor Equipment Condition.** 1. Check Maintenance log book for any outstanding issues. 2. Ask operators (facers and sweepers) and operations supervisor if they are aware of any equipment problems. Investigate reported problems.	5	10			T

U.S. Postal Service **Maintenance Checklist**			IDENTIFICATION								
	WORK CODE		EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE
	0	9	S	P	S	S			B	A	0	0	4	M
Equipment Nomenclature Small Parcel Sortation System	Equipment Model			Bulletin Filename mm15120			Occurrence Tour	

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
OPERATIONAL: FMPCS SORT CONTROLLER	3.	**Check FMPCS Sort Controller Computer Maintenance Reports.** 1. Run Maintenance Report on All Devices to check for anomalies. 2. Run Condition Report on All Devices to check for anomalies. 3. Run Tour Maintenance Long Report to check for reoccurring anomalies, such as Shaft Encoder errors, Index Sensor errors, or Closing Device faults.	5	10			T
OVIS CABINET: RACK COMPUTER	4.	**Check OVIS Controller Computer.** **CAUTION: Limit the time that the OVIS Rack door is open as there is no filtering of air intake to the rack components while the door is open.** Check the OVIS GUI (Graphical User Interface/Homescreen) display status of the system and it's sub-systems during operation. 1. Check that the system indicator icons on the Homescreen are green. 2. In the event an icon on the Homescreen is not green, open the View Messages window to obtain additional information about the status or particular error message. 3. The OVIS icon on the FMPCS Graphics Display will change color, (green, yellow, orange, red) depending on the OVIS System health status. The graphics screen will display the same error/status message found on the OVIS Message window.	5	10			T
INDUCT: INDUCTION STATION	5.	**Check Induction Stations.** 1. Check the Induction Line conveyor belts for damage. Observe proper tracking of belts. 2. Check Dimensioner for debris, clean with a lint free cloth or microfiber glove if necessary. 3. Check induction for proper positioning of parcels on carrier cells. All sizes, shapes, and weights should be centered laterally and slightly forward of center longitudinally.	10	09			T

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION													
	WORK CODE	EQUIPMENT ACRONYM							CLASS CODE		NUMBER			TYPE
	0	9	S	P	S	S				B	A	0	0	4	M

Equipment Nomenclature Small Parcel Sortation System	Equipment Model	Bulletin Filename mm15120	Occurrence Tour

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
		4. Note any discrepancies in log book and initiate corrective action.					
SORTER	6.	**Monitor Sorter Operation.** 1. Check for proper operation of the trays. Ensure they open completely. 2. Check tray closing operation as the trays pass through the tray closing device brushes, ensure the trays close, and latch properly.	10	09			T