MAINTENANCE TECHNICAL SUPPORT CENTER
HEADQUARTERS MAINTENANCE OPERATIONS
UNITED STATES POSTAL SERVICE

Maintenance Management Order

SUBJECT: Preventive, Predictive, and Operational Maintenance Guidelines for Delivery Input Output Sub-System (DIOSS) AC Using eCBM

DATE: August 8, 2016

NO: MMO-126-16

FILE CODE: D8C

TO: All DIOSS AC Offices

dgue: mm13090af

Online Change Record		
Change #	**Date**	**Description of Change**
1	May 12, 2017	Item 25 changed to read: LEVELER MODULE: POSTNET IJP VACUUM FILTER
2	Oct 26, 2017	Made online chg 2. Updated item13.
3	05/22/2020	Added the Infrared Thermography information after the online change record.

Infrared Thermography Information for DBCS Based Sorting Equipment – Plug and Receptacle Connectors is located at **MTSC>HELPDESK>Service Portal>Knowledge Base>KB0013384.**

This Maintenance Management Order (MMO) provides Preventive, Predictive, and Operational Maintenance Guidelines for the Delivery Input Output Sub-System (DIOSS - B), and supersedes MMO-047-08 and MMO-111-09.

The workhours indicated in the workload estimate (Attachment 1) reflect the *maximum* annual workhours required to maintain each system. Actual workhour requirements and the frequency of tasks are dependent on pieces processed. Therefore, PM workhour requirements will vary day-to-day based on site specific machine utilization. Management may modify task frequencies to address local conditions.

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

Preventive Maintenance (PM) guidelines provide maintenance employees with the recommended task based maintenance activities. The Electronic Conditioned Based Maintenance (eCBM) is an abbreviated task list that represents a portion of the PM checklist. The complete master PM checklist must be accessible to all maintenance employees when performing PM and eCBM task based maintenance activities.

WARNING

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

WARNING

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

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.

Direct any questions or comments concerning this bulletin to the MTSC HelpDesk, online at https://tickets.mtsc.usps.gov/login.php or call (800) 366-4123 or (405) 573-2123.

Kevin Couch
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Maintenance Technical Support Center
HQ Maintenance Operations

Attachments:

1. Summary of Workload Estimate
2. Master Checklist: 03-DIOSS-AC-001-M: Power Off and Power On Tasks
3. Master Checklist: 09-DIOSS-AC-001-M: Operational Maintenance

ATTACHMENT 1

SUMMARY

WORKLOAD ESTIMATE

FOR

DIOSS - B

Class Code AC

SUMMARY
WORKLOAD ESTIMATE
FOR
DIOSS - B

SUMMARY WORK LOAD ESTIMATES FOR DIOSS-B AC

Number of mail pieces Processed for 1 Year >	**57,200,000**	**High end estimate**	**For a 110 Stacker Machine**

Operation Days	Routine Servicing per Machine (Hrs/Yr)	Repair Time per Machine (Hrs/Yr) *	Routine Servicing + Repair Time (Hrs/Yr)	Non-Productive Time per Machine (Hrs/Yr) **	Total Servicing per Machine (Hrs/Yr)	Operational Maintenance + Total Servicing		
						1 Tour Hrs/Yr OpM x 1	2 Tours Hrs/Yr OpM x 2	3 Tours Hrs/Yr OpM x 3
5 Days	927.12	278.14	1205.26	120.53	1325.78	1,603.12	1,880.46	2,157.79
6 Days	1074.45	322.34	1396.79	139.68	1536.46	1,869.27	2,202.07	2,534.87
7 Days	1221.78	366.54	1588.31	158.83	1747.15	2,135.41	2,523.67	2,911.94

* **Repair maintenance estimates based on 30% of preventive maintenance.**

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

THRESHOLDS and PM TIME SUMMARY Hrs PER Year

Daily	1,031.33	
Weekly	1.73	
4 Wks	4.33	5 Day
Monthly	4.00	6 Day
60 Wks	0.06	7 Day
1,100,000	127.40	
4,400,000	34.88	
14,300,000	3.93	
20,000,000	10.73	
28,600,000	1.07	
57,200,000	2.32	

OPERATIONAL MAINTENANCE

192 MIN. PER DAY PER MACHINE

One Tour	Two Tours	Three Tours
277.33	554.67	832.00
332.80	665.60	998.40
388.27	776.53	1164.80

∗Repair estimates based on 30% of servicing.

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

Machine Operating 5 Days/Week						Operational Maintenance + Total Servicing		
# of Stackers	Routine Servicing per Machine (Hrs/Yr)	Repair Time per Machine (Hrs/Yr) *	Routine Servicing + Repair Time (Hrs/Yr)	Non-Productive Time per Machine (Hrs/Yr) **	Total Servicing per Machine (Hrs/Yr)	1 Tour Hrs/Yr OpM x 1	2 Tours Hrs/Yr OpM x 2	3 Tours Hrs/Yr OpM x 3
110	927.12	278.14	1205.26	120.53	1325.79	1603.12	1880.46	2157.79
126	947.57	284.27	1231.84	123.18	1355.02	1632.35	1909.69	2187.02
142	963.71	289.11	1252.82	125.28	1378.10	1655.43	1932.77	2210.10
158	979.83	293.95	1273.78	127.38	1401.16	1678.49	1955.83	2233.16
174	995.95	298.79	1294.74	129.47	1424.21	1701.54	1978.88	2256.21
190	1016.51	304.95	1321.46	132.15	1453.61	1730.94	2008.28	2285.61
206	1032.63	309.79	1342.42	134.24	1476.66	1753.99	2031.33	2308.66
222	1048.77	314.63	1363.40	136.34	1499.74	1777.07	2054.41	2331.74
238	1064.89	319.47	1384.36	138.44	1522.80	1800.13	2077.47	2354.80
254	1085.26	325.58	1410.84	141.08	1551.92	1829.25	2106.59	2383.92
270	1101.38	330.41	1431.79	143.18	1574.97	1852.30	2129.64	2406.97
286	1117.51	335.25	1452.76	145.28	1598.04	1875.37	2152.71	2430.04
302	1133.64	340.09	1473.73	147.37	1621.10	1898.43	2175.77	2453.10

∗Repair estimates based on 30% of servicing.
∗∗Based on 10% of total servicing and repair.

Machine Operating 6 Days/Week

# of Stackers	Routine Servicing per Machine (Hrs/Yr)	Repair Time per Machine (Hrs/Yr)*	Routine Servicing + Repair Time (Hrs/Yr)	Non-Productive Time per Machine (Hrs/Yr) **	Total Servicing per Machine (Hrs/Yr)	Operational Maintenance + Total Servicing		
						1 Tour Hrs/Yr OpM x 1	2 Tours Hrs/Yr OpM x 2	3 Tours Hrs/Yr OpM x 3
110	1074.45	322.34	1396.79	139.68	1536.47	1869.27	2202.07	2534.87
126	1096.64	328.99	1425.63	142.56	1568.19	1900.99	2233.79	2566.59
142	1113.64	334.09	1447.73	144.77	1592.50	1925.30	2258.10	2590.90
158	1130.63	339.19	1469.82	146.98	1616.80	1949.60	2282.40	2615.20
174	1147.62	344.29	1491.91	149.19	1641.10	1973.90	2306.70	2639.50
190	1169.91	350.97	1520.88	152.09	1672.97	2005.77	2338.57	2671.37
206	1186.90	356.07	1542.97	154.30	1697.27	2030.07	2362.87	2695.67
222	1203.90	361.17	1565.07	156.51	1721.58	2054.38	2387.18	2719.98
238	1220.89	366.27	1587.16	158.72	1745.88	2078.68	2411.48	2744.28
254	1242.99	372.90	1615.89	161.59	1777.48	2110.28	2443.08	2775.88
270	1259.98	377.99	1637.97	163.80	1801.77	2134.57	2467.37	2800.17
286	1276.98	383.09	1660.07	166.01	1826.08	2158.88	2491.68	2824.48
302	1293.97	388.19	1682.16	168.22	1850.38	2183.18	2515.98	2848.78

Machine Operating 7 Days/Week

# of Stackers	Routine Servicing per Machine (Hrs/Yr)	Repair Time per Machine (Hrs/Yr)*	Routine Servicing + Repair Time (Hrs/Yr)	Non-Productive Time per Machine (Hrs/Yr) **	Total Servicing per Machine (Hrs/Yr)	Operational Maintenance + Total Servicing		
						1 Tour Hrs/Yr OpM x 1	2 Tours Hrs/Yr OpM x 2	3 Tours Hrs/Yr OpM x 3
110	1221.78	366.53	1588.31	158.83	1747.14	2135.41	2523.67	2911.94
126	1245.71	373.71	1619.42	161.94	1781.36	2169.63	2557.89	2946.16
142	1263.57	379.07	1642.64	164.26	1806.90	2195.17	2583.43	2971.70
158	1281.43	384.43	1665.86	166.59	1832.45	2220.72	2608.98	2997.25
174	1299.29	389.79	1689.08	168.91	1857.99	2246.26	2634.52	3022.79
190	1323.31	396.99	1720.30	172.03	1892.33	2280.60	2668.86	3057.13
206	1341.17	402.35	1743.52	174.35	1917.87	2306.14	2694.40	3082.67
222	1359.03	407.71	1766.74	176.67	1943.41	2331.68	2719.94	3108.21
238	1376.89	413.07	1789.96	179.00	1968.96	2357.23	2745.49	3133.76
254	1400.72	420.22	1820.94	182.09	2003.03	2391.30	2779.56	3167.83
270	1418.58	425.57	1844.15	184.42	2028.57	2416.84	2805.10	3193.37
286	1436.45	430.94	1867.39	186.74	2054.13	2442.40	2830.66	3218.93
302	1454.30	436.29	1890.59	189.06	2079.65	2467.92	2856.18	3244.45

Repair maintenance estimates based on		30.00%	**of preventive maintenance.**
	Based on	10.00%	**of total PM and repair.**

Power Off Tasks

# Stackers	Threshold ->	3K	1.1M	1.1M	4.4M	4.4M	57.2M	Minutes
	Item # ->	5	9	10	30	32	33	
	110	9	35	36	71	21	70	
	126	1	5	3	10	3	10	
	142	2	10	6	20	6	20	
	158	3	15	9	30	9	30	
	174	4	20	12	40	12	40	
	190	5	25	15	50	15	50	
	206	6	30	18	60	18	60	
	222	7	35	21	70	21	70	
	238	8	40	24	80	24	80	
	254	9	45	27	90	27	90	
	270	10	50	30	100	30	100	
	286	11	55	33	110	33	110	
	302	12	60	36	120	36	120	

Power On Tasks

# Stackers	Threshold ->	1K	1.1M	14.3M	20M	1 Month	Minutes
	Item # ->	34	44	45	40	37	
	110	10	7	14	225	20	
	126	1	1	2	10	2	
	142	1	2	4	20	4	
	158	1	3	6	30	6	
	174	1	4	8	40	8	
	190	2	5	10	52	10	
	206	2	6	12	62	12	
	222	2	7	14	72	14	
	238	2	8	16	82	16	
	254	3	9	18	90	18	
	270	3	10	20	100	20	
	286	3	11	22	110	22	
	302	3	12	24	120	24	

ATTACHMENT 2

DIOSS MASTER CHECKLIST

03-DIOSS-AC-001-M

POWER OFF AND POWER ON TASKS

Time Total: See roll-ups in Attachment 1.

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090					Occurrence eCBM

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT	1.	**COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. Open equipment and inspect dust conditions. Check for suspicious dust or unusual debris. If any unusual substance is found notify supervisor prior to proceeding with any further action on the equipment.** **THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.** **When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection.** **WARNING FOR EWP/PPE:** **Steps contained in this bulletin may require the use of Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade requirements.**	4	All			
DIOSS SYSTEM: REPORT ANALYSIS	2.	**Generate, print, or view End of Day and Tracking Report.** Prior to performing the power down lockout procedures, analyze data provided on these reports to determine if any areas of machine are degraded or in need of attention.	4	10		1	
DIOSS SYSTEM SHUTDOWN PRINTERS AND COMPUTERS	3.	**Shut down the DIOSS - B System in accordance with the procedures in the most recent documentation.** As of the date of this writing for detailed steps to properly shut down the DIOSS – B system refer to MS Handbook MS-251, Volume B, Section 5.3. **NOTE** If any problems are encountered while performing these procedures report them to your supervisor.	12	9		1	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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.
DIOSS SYSTEM: POWER DOWN	4.	**Power down and lock out power.** **WARNING** **Electrical power will always be present at the input of the disconnect device unless the circuit is disabled at the facility power distribution panel located at _____.** Power down the machine and lock out its electrical power as prescribed by the current local lockout instructions providing energy control procedures.	6	All		1	
DIOSS SYSTEM: MAIL SEARCH	5.	**Mail search.** 1. Remove all machine panels, except for diverter plate cover assemblies (Wimpy panels) and stacker lower front panel assemblies. 2. Ensure each cover's gas spring and retaining clip is able to hold cover in uppermost position. Report defective components to supervisor or perform work order. 3. Search all base plate areas and module interiors for mail. 4. Remove any mail pieces found. 5. Remove any large amounts of debris while doing this mail search to prevent clogging of the vacuum when doing vacuuming tasks. 6. Follow local procedures for returning mail to operations for processing.	9	7		3	
DIOSS SYSTEM: VACUUM 1	6.	**Vacuum/clean machine.** **WARNING** **Edges of spiral stacking auger may be sharp. Use extreme caution when working near spiral-stacking auger.** **WARNING** **Use extreme caution in area of pocket assembly wear plate. On some**	30	7		60	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model										Bulletin Filename: mm13090					Occurrence: eCBM

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.
		machines, wear plate extends past edge of its base and into stacker area, exposing sharp edges. **NOTE** Check for loose, cracked, or damaged hinges. Notify supervisor if problem found. Refer to the most recent Maintenance Management Order, currently MMO-077-03, concerned with damaged hinges. Vacuum and clean internal and base-plate areas of the machine starting at the front of Stacker Module #1, and proceed toward the Feeder and around the machine to end up and include the rear of Stacker Module #1. Ensure the following areas are cleaned: 1. P-SEN10 and P-LED10 assemblies. 2. Outside surfaces of Jogger Assembly. 3. Exterior of monitor, keyboard, printer, and printer stand. 4. Ensure laser printer has an adequate amount of paper, add paper if necessary by following instructions in MS Handbook MS-251, Volume B, Section 2.3.1. a. Open paper tray. b. Fill paper tray with paper. c. Close paper tray. 5. Reader and Transition Module 5V power supply and light barriers.					
DIOSS SYSTEM: VACUUM 2 FILTERS	7.	**Ensure cleaning of following filters is done.** 1. Tag Scanner module cleaning. Clean the three Variable Frequency Drive (VFD) filters as follows: a. Remove plastic retainers and filters from VFD. b. Clean VFD filters. c. Re-install VFD filters and plastic retainers. 2. OCR/IJP printer module cleaning:	20	7		150	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:										Bulletin Filename: mm13090					Occurrence: eCBM

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.
		a. Clean/vacuum the air filter located on the ICS reader electronics unit. b. Clean/vacuum the air filters mounted in the door in front of the CM card cage. 3. IJP/Drying Line module cleaning. Clean/vacuum the air filter located on the ICS reader electronics unit. 4. Reader module cleaning. a. Clean/vacuum the WFOV computer air filter located on the front of the computer. b. Clean/vacuum the IPC computer air filter located on the front of the computer. 5. Computer system component air filters cleaning: a. At front of computer cabinet, loosen thumbscrews on following components filter grill: 1) Host computer 2) OCR computer 3) VPC 4) VPC2 5) IS computer. b. Remove each filter grill and filter material. c. Clean each filter grill and filter material. d. Re-install the filter material and filter grill. e. Tighten thumbscrews.					
DIOSS SYSTEM: COMPUTER SYSTEMS FILTER WASHING	8.	**Clean and wash computer cabinet and IPC filters.** 1. Vacuum and wash IPC filter: a. Vacuum filter located on IPC computer. b. Remove and wash, in warm water, filter located on computer assembly.	22	7		1100	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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.
		2. IS computer filter cleaning: a. Vacuum filter located on IS computer. Pull gently on rear corner of square filter holder to remove it. b. Remove and wash, in warm water, filter located on IS computer assembly. c. Allow filter to dry, then reassemble and reinstall filter assembly. 3. VPC, VPC1, OCR, and Host computer filter cleaning. a. Remove and vacuum four filters located in computer cabinet. Pull gently on rear corner of square filter holder to remove it. b. Remove filters and wash in warm water. c. Allow filters to dry, and then reassemble and reinstall filter assembly.					
DIOSS SYSTEM: VACUUM 3 STACKERS	9.	**Clean Stacker Module 2 - End Module by vacuuming / removing dust and debris.** **WARNING** **Edges of spiral stacking auger may be sharp. Use extreme caution when working near spiral stacking auger.** **WARNING** **Use extreme caution in area of pocket assembly wear plate. On some machines, wear plate extends past edge of its base and into stacker area, exposing sharp edges.** 1. Clean Stacker Module #2 through the end of the machine, transport area, interior, and pocket assemblies, including light barriers. This does not include the Wimpy Panels. 2. Ensure light barriers are clean.	35	7		1100	
DIOSS SYSTEM: BELTS, ROLLERS AND GATES	10.	**Check belts, rollers, and gates.** Starting at the front of Stacker Module #1, proceed toward the feeder and around the machine to end up and include the rear of Stacker Module #1. Then proceed down the	36	9		1100	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:										Bulletin Filename: mm13090		Occurrence: eCBM			

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.
		back of the stacker modules and around the front of the stacker modules to end at the front of stacker #2. 1. Check all belts (drive and letter transport) for indications of wear. Replace worn, deformed, split, or torn belts. 2. Check for broken or burred gate flags. 3. Write work orders as needed for replacement of belts and/or gates. 4. Check all rollers (drive and idler) for proper adjustment and indications of wear. Replace rollers as necessary. 5. Write work orders as needed for adjustments, cleaning, and/or replacement of parts.					
DIOSS SYSTEM: MACHINE SAFETY LABELS	11.	**Verification of safety warning labels.** **NOTE** Refer to the most recent Maintenance Management Order for label locations and part numbers. As of the time this document was being created that reference is MMO-056-09. 1. Verify feeder modules have safety warning labels present, correctly located and in good condition. 2. Verify stacker modules have safety warning labels present, correctly located and in good condition. 3. Notify supervisor of missing or worn feeder/stacker safety labels and initiate a work order to replace or remove and replace as necessary.	2	7		4400	
DIOSS SYSTEM: FOAM ROLLERS	12.	**Foam roller checks.** 1. Check WFOV foam roller in OCR/IJP printer module. Replace roller if necessary. 2. Check WFOV foam roller in Reader module. Replace roller if necessary.	2	9		4400	
DIOSS SYSTEM: ENCODERS	13.	**Replace Encoder (Tachometer) Tube Coupler and Hose Clamp.**	20	9		14300	

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	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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.
		NOTE There are two types of Hose Couplers: The 7/32 ID by 1.269 inches in length, which is PSN 4720-02-000-4060, and the Hose Coupler that is 39 mm, with PSN 4730-10-000-5863; consult most current MS Manual Illustrated Parts Breakdown on the MTSC web site to be certain which to use. 1. Remove and replace the Encoder Tube Coupler and Hose Clamp, located on the TAG/Scanner Module and Reader Module. 2. The date this document was written, the following references in the MS-251 parts volume for the DIOSS B applied: a. TAG/Scanner Module – Fig 12-9, items 22 & 23 b. Reader Module – Fig 7-59, items 22 & 23 3. If problems occur while doing these procedures, notify your supervisor, and if needed generate a work order to resolve those problems.					
DIOSS SYSTEM: UNDER MACHINE CLEANING	14.	**Check for mail and clean under machine.** 1. Remove foam strips from back side of machine and outer side of Feeder, Transport Section, and Tag Scanner: a. Using a flashlight, start at Transport, and look for mail pieces under machine, proceed to check for mail to last stacker. b. Remove any mail pieces found. c. Follow local procedures for returning mail to operations for processing. 2. Clean under machine: a. Clean/vacuum any dust and debris found from under machine, start at backside of last stacker and work back to transport and feeder. b. Re-install foam strips to backside of machine.	64	7		57200	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:										Bulletin Filename: mm13090					Occurrence: eCBM

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.
READER MODULE: ICS AND WFOV	15.	**Reader Module ICS and WFOV cleaning.** 1. Clean the ICS read head and associated reflector. Recommended cleaner is Riptide, PSN 6850-01-394-0164, P/N RIP-TIDE-BX4EA. 2. Clean WFOV camera lens and lamp assemblies as follows: **WARNING** **Use caution when working around WFOV aperture. Edges of aperture may become extremely sharp during machine use.** **CAUTION** **Ensure surrounding transport area is free of dust and debris before removing the Aperture/Illumination Assembly. Cleaning or checks should occur only after immediate area is clear of mail dust.** a. Remove WFOV LED Aperture/ Illumination Assembly by loosening thumbscrew and pulling unit up. b. Visually check the aperture plates and sapphire glass for foreign objects. c. Remove dust on the exterior of camera sapphire glass using dry cotton swabs. If adhesive build-up is on the sapphire glass, remove it with a soft cloth dampened with a site-approved cleaner. **CAUTION** **Do not contact camera LED arrays or diffuser when cleaning inside of sapphire glass.** d. Clean dust from inside WFOV camera LED assembly with lens brush or air syringe. e. Clean dirt or streaks from LED assembly, using lens brush or optical lens cleaning kit. Carefully, move brush or cleaning	5	7		170	

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	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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.
		media straight down the slot in the Aperture/Illumination Assembly, while keeping brush or cleaning media pressed to sapphire glass, to remove any dust. f. Replace LED assembly and tighten thumbscrew.					
READER MODULE COMPUTERS	16.	**Clean WFOV and IPC Assemblies.** Clean WFOV and IPC Assemblies as follows: 1. Slide out WFOV processor slide shelf. 2. Remove cover from WFOV processor. 3. Clean assembly interior using vacuum cleaner. 4. Replace cover. 5. Slide WFOV processor slide shelf back. 6. Repeat process for IPC computer.	15	10		4400	
OCR/IJP MODULE: ICS, WFOV/OCR, ID TAG PRINTER	17.	**Clean ICS read head, WFOV, and ID Tag print head, and service printer.** 1. Clean ICS read head and associated reflector. Recommended cleaner is Riptide, PSN 6850-01-394-0164, P/N RIP-TIDE-BX4EA. 2. Clean/vacuum WFOV LED Aperture/ Illumination Assembly as follows: **WARNING** **Use caution when working around WFOV aperture. Edges of aperture may become extremely sharp during machine use.** **CAUTION** **Ensure surrounding transport area is free of dust and debris before removing the Aperture/Illumination assembly. Cleaning or checks should occur only after the immediate area is clear of mail dust.** a. Remove WFOV LED Aperture/ Illumination assembly by loosening thumbscrew and pulling unit up.	13	7		170	

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Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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. Visually check aperture plates and sapphire glass for foreign objects. **CAUTION** **Do not contact the camera LED arrays or diffuser when cleaning the inside of the sapphire glass.** c. Remove dust on exterior of camera sapphire glass, using dry cotton swabs. If adhesive build-up is on sapphire glass, remove it with a soft cloth dampened with a site approved cleaner. d. Clean dust from inside WFOV camera LED assembly with a lens brush. e. Clean dirt or streaks from LED assembly, using a lens brush or optical lens cleaning kit. Carefully move brush or cleaning media straight down slot in Aperture/Illumination assembly while keeping brush or cleaning media pressed to sapphire glass to remove any dust. f. Replace LED assembly and tighten thumbscrew. **WARNING** **When disposing of ink or ink-saturated waste in following steps, refer to procedures outlined in Safety Data Sheets (SDS). Eye protection (goggles or face shield) must be worn when flushing away contaminants using make-up ink.** **WARNING** **Ink Jet Printer (IJP) print head must be dried as part of its service. Do not use compressed or blown air. Appropriate, alternate means of drying head must be implemented and may include use of paper towels or use of vacuum suction. Other, equally effective methods may be determined locally.**					

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:										Bulletin Filename: mm13090					Occurrence: eCBM

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.
		CAUTION **Use extreme care in charge tunnel area. Do not touch or bump charge tunnel area during checks or cleaning.** 3. Clean ID Tag printer print head and guide plate (fence) as follows: a. Lift fence off its mounting studs. b. Remove print head from deck plate mount. c. Install print head onto service mount and place service tray directly below it. d. Clean base plate of any ink, using towel and cleaning solution or replenishing fluid. e. Clean fence using a towel and cleaning solution or replenishing fluid. f. Clean up any spilled or splattered ink. g. Remove print head cover and check print head assembly for traces of ink. h. Clean print head as required. i. Replace print head cover and re-install print head onto deck plate mount. j. Re-install fence on mounting studs. 4. ID Tag printer fluid replenishment. **NOTE** Do not use expired ink. a. Check and replenish, if necessary, ID Tag printer fluid bottles. b. Recommend removal and discarding of ink bottles if ink level is below 25%. c. Insert new bottle and replace cap. d. Clean up any spilled or splattered ink.					
OCR/IJP MODULE: ID TAG PRINTER VACUUM FILTER	18.	**Replace the vacuum filter.** 1. Replace ID TAG bar code printer vacuum filter. Replace bar code printer vacuum filter.	12	9		4400	

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Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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.
		NOTE Refer to Videojet Universal Series 37PC service manual for part number and for illustrations related to replacing filters. a. Open printer front door. b. Turn fitting located on top of vacuum filter CCW one turn, and remove fitting from filter. c. Pull vacuum tube (attached to top of vacuum filter) off barbed fitting located behind vacuum filter. **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheets (SDS).** d. Remove vacuum filter from top of ink module by turning filter CCW until it becomes loose. e. Discard old vacuum filter and tubing. f. Ensure that O-ring is in place on filter, and then thread new vacuum filter into top of ink module until it is finger tight. Do not over tighten. g. Push tube (supplied with filter) onto stem on top of vacuum filter, and insert opposite end of tube onto barbed fitting located behind vacuum filter. h. Install fitting removed in step b into top of new vacuum filter. **Replace ID tag printer vacuum filter (PC80).** Replace ID tag printer vacuum filter, NSN 4330-01-000-2034, as follows**:** **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheet (SDS).**					

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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.
		NOTE Refer to Cheshire Excel Series PC80 owner's manual for part number and illustrations related to replacing vacuum filter. 1. Open printer front door and interior gauge door in front of fluid compartment. 2. Disconnect black rubber hose from output side of vacuum filter. 3. Disconnect white cap (connected to clear vacuum gauge tube) from output side of vacuum filter. 4. Unscrew vacuum filter, in a CCW direction, from L fitting and discard filter. 5. Screw new vacuum filter, in a CW direction, into L fitting. 6. Reconnect white cap (connected to clear vacuum gauge tube) to output side of vacuum filter. 7. Reconnect black rubber hose to output side of vacuum filter. 8. Close gauge door in front of fluid compartment. **Replace ID tag printer final ink filter (PC80).** Replace ID tag printer final ink filter as follows**:** **WARNING** **Before starting this procedure, make certain that AC power to the printer is OFF, and the AC power and compressed air supply to the printer are disconnected (unplugged). Failure to follow these warnings may result in personal injury** **NOTE** Refer to Cheshire Excel Series PC80 owner's manual for part number and illustrations related to replacing final ink filter.					

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:										Bulletin Filename: mm13090		Occurrence: eCBM			

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.
		Replace ID tag printer vacuum filter (PC80). Replace ID tag printer vacuum filter, PSN 4330-01-000-2034, as follows**:** **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheet (SDS).** **NOTE** Refer to Cheshire Excel Series PC80 owner's manual for part number and illustrations related to replacing vacuum filter. 1. Place absorbent towels below the fluid pan to catch any ink that may spill when removing final ink filter 2. Remove ink cylinder input line from the bottom of the existing ink filter 3. Mount the new filter to the top cap of the ink cylinder. Hand-tighten the filter into the top cap by turning it clockwise 4. Connect the ink cylinder input line to the input end of the new filter 5. Carefully hand-tighten the nut. Use a 7/16" wrench to tighten the nut an additional half turn. If the filter leaks during operation, it may be tightened another half turn. **Do not** exceed a total of one full turn, or the threads may strip on the filter. 6. Prime system with new ink.					
OCR/IJP MODULE: ID TAG PRIMARY AND INPUT AIR FILTER	19.	**Replace the primary ink and input air filter:** 1. Replace the primary ink filter. **NOTE** Refer to Videojet Universal Series 37PC service manual for part number and for illustrations related to replacing filters.	16	10		28600	

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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.
		NOTE Compressed air is shut off when electrical power is locked out. a. Verify there is no compressed air to printer. b. Open printer front door. **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheets (SDS).** c. Place absorbent towels below ink module to catch any ink that may spill when removing primary ink filter. d. Remove fitting from bottom of primary ink filter by turning with a 7/16 inch wrench. e. Unscrew primary ink filter from bottom of ink module. f. Wipe excess ink from bottom of ink module mounting hole with absorbent towels and cleaning solution. g. Discard old primary ink filter. h. Install new primary ink filter into bottom of ink module finger tight. Do not over tighten. Hand-tighten only. i. Install fitting into bottom of primary ink filter. 2. Replace ID tag bar code printer input air filter. **NOTE** Refer to Videojet Universal Series 37PC service manual for part number and for illustrations related to replacing filters. **NOTE** Compressed air is shut off when electrical power is locked out. a. Verify there is no air pressure to printer. b. Open printer door. c. Use hexagonal wrench (Allen key) to					

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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.
		open fluid pan section (door latch located upper right hand corner of fluid pan). d. Use a 3/4 inch wrench to loosen black nut at top of elbow fitting. e. Use a dull, pointed instrument to pull input air filter out of bottom of air manifold. f. Install new input air filter into bottom of air manifold. g. Thread elbow fitting back into bottom of air manifold and tighten nut to secure fitting. Do not over tighten. h. Close fluid pan section door and then close outer door.					
OCR/IJP PRINTER MODULE: BOTTLE FILTERS	20.	**Replace Bottle Filter Assemblies in both IJP ink bottles.** **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheets (SDS).** **NOTE** This procedure is applicable to Ink Bottle Filters on the Ink Jet Printers. 1. Pull the bottle (ink or make-up), in which the bottle filter tube assembly is being replaced, away from the fluid pan. 2. Pull the cap off the bottle, and slide the attached bottle filter tube assembly out of the bottle. Place the bottle aside. 3. Remove the fitting from the top of the cap by turning counterclockwise one full turn. 4. Pull the line with attached rubber tube off the cap top. 5. Discard the old bottle filter tube assembly. 6. Install the fitting on the top of the cap on the new bottle filter tube assembly. 7. Install the line with attached rubber tube (removed in step 4) on the top of the cap on	2	9			60 Wks

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:							Bulletin Filename: mm13090			Occurrence: eCBM					

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	Thresholds: Pieces Fed (000)	Thresholds: Freq.
		the new bottle filter tube assembly. 8. Insert the bottle filter tube assembly into the bottle, and push the cap down to secure the assembly. Place the bottle into the fluid pan. 9. Repeat steps 1-8 to replace the bottle filter tube assembly in the other bottle.					
FEEDER MODULE: HARDWARE	21.	**Check feeder hardware items.** 1. Teflon strip. 2. Rubber strippers. 3. Pick-off belts. 4. Generate a Work Order as required. Refer to the most recent Maintenance Management Order covering Feeder alignment and performance adjustments, currently MMO-029-08.	1	9		170	
FEEDER MODULE: ALIGNMENT CHECK	22.	**Check Feeder alignment.** Check Feeder alignment (those steps that do not require power) in accordance with the most recent Maintenance Management Order, currently MMO-029-08, covering Feeder Alignment and Performance Adjustments. **NOTE** If any discrepancies are found, write a work order to do a full Feeder alignment in accordance with the most recent MMO, currently MMO-029-08, covering Feeder alignment and performance adjustments	15	7		1100	
FEEDER MODULE: REPORT PRINTER	23.	**Report printer cleaning and paper check.** 1. Clean report printer using a vacuum cleaner. 2. Ensure there is a sufficient amount of paper to support at least three tours of operation; add paper as necessary.	2	7		1100	
IJP/DRYING LINE MODULE: POSTNET IJP	24.	**Clean POSTNET bar code printer print head and guide plate (fence) and replenish ink.** **WARNING** **When disposing of ink or ink-saturated waste, refer to procedures outlined in Safety Data Sheets (SDS). Eye**	14	7		200	

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:										Bulletin Filename: mm13090					Occurrence: eCBM

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					Run Hours	Pieces Fed (000)	Freq.
		protection (goggles or face shield) must be worn when flushing away contaminants using make-up ink. **WARNING** **Ink Jet Printer (IJP) print head must be dried as part of its service. Do not use compressed or blown air. Appropriate, alternate means of drying head must be implemented and may include use of paper towels or use of vacuum suction. Other, equally effective methods may be determined locally.** **CAUTION** **During print head check and cleaning, use extreme care in charge tunnel area. Do not touch or bump charge tunnel.** 1. Clean POSTNET print head and guide plate. a. Lift fence off its mounting studs. b. Remove print head from deck plate mount. c. Install print head onto service mount and place service tray directly below it. d. Clean base plate of any ink, using towel and cleaning solution or make-up ink fluid. e. Clean fence using a towel and cleaning solution or make-up ink fluid. f. Clean up any spilled or splattered ink. g. Remove print head cover and check print head assembly for traces of ink. h. Clean print head as required. i. Replace print head cover and re-install print head onto deck plate mount. j. Re-install fence on mounting studs. 2. Ink jet printer fluid replenishment. a. Check and replenish POSTNET printer fluid bottles.					

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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.
		NOTE Do not use expired ink. b. Recommend removal and discarding of ink bottles if ink level is below 25%. c. Insert new bottle and replace cap. d. Clean up any spilled or splattered ink.					
IJP/DRYING LINE MODULE: POSTNET IJP VACUUM FILTER	25.	**Replace POSTNET bar code printer vacuum filter.** 1. Replace POSTNET bar code printer vacuum filter. **NOTE** Refer to Videojet Universal Series 37PC service manual for part number and for illustrations related to replacing filters. a. Open printer front door. b. Turn fitting located on top of vacuum filter CCW one turn, and remove fitting from filter. c. Pull vacuum tube, attached to top of vacuum filter, off barbed fitting located behind vacuum filter. **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheets (SDS).** d. Remove vacuum filter from top of ink module by turning filter CCW until it is loose. e. Discard old vacuum filter and tubing. f. Ensure that O ring is in place on filter, and then thread new vacuum filter into top of ink module until it is finger tight. Do not over tighten. g. Push tube (supplied with filter) onto stem on top of vacuum filter, and insert opposite end of tube onto barbed fitting located behind vacuum filter. h. Install fitting removed in step b into top of new vacuum filter.	12	9		4400	

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Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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.
IJP/DRYING LINE MODULE: POSTNET IJP PRIMARY INK AND INPUT AIR FILTERS	26.	**Replace POSTNET bar code printer primary ink and input air filters.** 1. Replace POSTNET bar code printer primary ink filter. **NOTE** Refer to Videojet Universal Series 37PC service manual for part number and for illustrations related to replacing filters. **NOTE** Compressed air is shut off when electrical power is locked out. a. Verify there is no compressed air to printer. b. Open printer front door. **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheets (SDS).** c. Place absorbent towels below ink module to catch any ink that may spill when removing primary ink filter. d. Remove fitting from bottom of primary ink filter by turning with a 7/16 inch wrench. e. Unscrew primary ink filter from bottom of ink module. f. Wipe excess ink from bottom of ink module mounting hole with absorbent towels and cleaning solution. g. Discard old primary ink filter. h. Install new primary ink filter into bottom of ink module finger tight. Do not over tighten. Hand-tighten only. i. Install fitting into bottom of primary ink filter. 2. Replace POSTNET bar code printer input air filter. Replace bar code printer input air filter.	16	10		28600	

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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.
		NOTE Refer to Videojet Universal Series 37PC service manual for part number and for illustrations related to replacing filters. **NOTE** Compressed air is shut off when electrical power is locked out. a. Verify there is no compressed air to printer. b. Open printer door. c. Use hexagonal wrench (Allen key) to open fluid pan section (door latch located upper right hand corner of fluid pan). d. Use a 3/4 inch wrench to loosen black nut at top of elbow fitting. e. Use a dull, pointed instrument to pull input air filter out of bottom of air manifold. f. Install new input air filter into bottom of air manifold. g. Thread elbow fitting back into bottom of air manifold and tighten nut to secure fitting. Do not over tighten. h. Close fluid pan section door and then close outer door.					
IJP/DRYING LINE MODULE: POSTNET IJP BOTTLE FILTER	27.	**Replace Bottle Filter Assemblies in both IJP ink bottles.** **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Safety Data Sheets (SDS).** **NOTE** This procedure is applicable to Ink Bottle Filters on the Ink Jet Printers. 1. Pull the bottle (ink or make-up), in which the bottle filter tube assembly is being replaced, away from the fluid pan.	2	9			60

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:										Bulletin Filename: mm13090		Occurrence: eCBM			

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.
		2. Pull the cap off the bottle, and slide the attached bottle filter tube assembly out of the bottle. Place the bottle aside. 3. Remove the fitting from the top of the cap by turning counterclockwise one full turn. 4. Pull the line with attached rubber tube off the cap top. 5. Discard the old bottle filter tube assembly. 6. Install the fitting on the top of the cap on the new bottle filter tube assembly. 7. Install the line with attached rubber tube (removed in step 4) on the top of the cap on the new bottle filter tube assembly. 8. Insert the bottle filter tube assembly into the bottle, and push the cap down to secure the assembly. Place the bottle into the fluid pan. 9. Repeat steps 1-8 to replace the bottle filter tube assembly in the other bottle.					
STACKER MODULES: GATE SOLENOID PUSHERS	28.	**Gate and solenoid pusher assembly test.** **WARNING** **Be cautious when working around or on equipment when power has been applied.** 1. Main Menu, select following maintenance test: Maintenance-Systems Tests-Stacker Module Test-Gate Activation Test. 2. At the Gate Activation Test screen select the following: Select Stackers-All, Select Gates-All, and Select Action-Sequence. **NOTE** Identify visually inoperative solenoid pusher assemblies and gates by viewing each stacker module one by one. 3. One stacker module will be tested at a time, energizing every gate and solenoid pusher assembly sequentially, repeatedly. By responding to the testing screen on the	20	09		14300	

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					Run Hours	Pieces Fed (000)	Freq.
		DBCS monitor and answering Yes or No, the test will move to the next stacker module. The testing will be identical for each stacker module. 4. Type T to begin-Start Test. 5. Verify gate and pusher solenoids are firing in each stacker. Also verify driver module LEDs are operating for each gate and pusher. Green LED is for power and amber LED blinks when a solenoid is to be energized. 6. Refer to safety bulletin MMO-035-04 for corrective procedures and additional information. 7. Exit maintenance menu.					
STACKER MODULES: TRAY LABEL PRINTERS	29.	**Tray label printers cleaning and label stock loading.** 1. Clean/Vacuum interior and exterior of label printers, located on first and eighth stacker modules. 2. Ensure label printers are loaded with a sufficient supply of label material to support three tours of operation. If required, load the label printer: a. Insert label stock between guides into back of label printer. b. Place wide end of label stock into label printer first, face down. c. Push print head lever back. d. Push label stock through until it comes out front of label printer.	2	7		170	
STACKER MODULES: HARDWARE CLEANING	30.	**Stacker modules cleaning including Wimpy panels.** 1. Open covers and remove panels. In the stacker section, open or remove all machine panels, this includes diverter plate cover assemblies (Wimpy panels) and stacker lower front panel assemblies. 2. Clean stacker module. Clean all plates, covers, doors, framework, top of stacker	71	7		4400	

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					Run Hours	Pieces Fed (000)	Freq.
		modules, stacker display panels back and front side, etc. Do a visual check of wiring harnesses, cabling, and connector for wear, loose connections, etc., while cleaning.					
	31.	**Vacuum/clean top of Reader and Stacker Modules.**	20	7			4
STACKER MODULES: POWER SUPPLIES	32.	**Power supply cleaning.** **WARNING** **Use non-metallic ends on the vacuum while cleaning the power supplies.** 1. Remove covers on power supplies located in each stacker module. 2. Using an approved vacuum cleaner, clean inside of each power supply assembly. 3. Install covers.	21	9		4400	
STACKER MODULES: FOAM PADS	33.	**Check the Foam Pads located on every Guard Finger of the Stacker Fence Assembly in each Stacker Pocket area all Tiers.** **NOTE** For a location reference use MS-251, Vol. C, Figure 9-10, Tier 1 Fence Assembly, Index Number 38. This reference was valid as of the date of this writing, as always use the most recent documentation available. 1. Check Foam Pads (PSN 9320-03-000-0023) to see if they are missing, damaged, and/or degraded in any way. 2. Make a list of the Foam Pads needing replacement and their locations. 3. Generate a Work Order to replace the Foam Pads found and recorded in Steps 1 and 2 of this instruction.	70	9		57200	
DIOSS SYSTEM: POWER UP SYSTEM AND IJP PRINTERS	34.	**Power Up DIOSS system and IJP printers.** **WARNING** **Be cautious when working around or on**	10	7		1	

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	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090					Occurrence eCBM

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.
		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. 1. Power up preparation. a. Ensure tools and materials are removed from work area. b. Replace all machine panels. c. Close all machine doors and covers. 2. Restore power to equipment as prescribed by current local procedure providing lockout/ restore procedures and the most current procedures as presently outlined in MS-251, Vol. B, Section 5.8. 3. IJP printers start up in accordance with the most recent documentation that presently is the MS-251, Vol. B, Section 5.8.					
DIOSS SYSTEM: POWER ON COMPUTER SYSTEMS	35.	**Power on computer systems.** **WARNING** **Be cautious when working around or on equipment when power has been applied.** Power on computer systems using current local computer restore procedures, as of this writing that is located in the MS-251, Vol. B, Section 5.8.	5	10		1	
DIOSS SYSTEM: DIRECTORY DOWNLOAD	36.	**Directory downloads FIN files from NDSS.** Download FIN files as follows: 1. From level three DIOSS Main Menu, select Disk Base Lookup. 2. From Disk Base Lookup Menu, select Reload FIN Files From NDSS. 3. Select YES to answer prompt, "Do you want to reload FIN files from NDSS?" 4. Click OK when message "Reload FIN files completed" appears. 5. Press F1 three times to return to Main Menu.	2	10			W

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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.
DIOSS SYSTEM: INTERLOCKS AND E-STOPS	37.	**Check all system interlocks and emergency stop switches.** **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** Requires two people. Time is doubled for staffing purposes for this task. Verify light conditions and warning sounds for each E-Stop and interlock. 1. Start machine. Verify that when START switch is pressed, start-up warning indicators around sorter flash amber. At same time, start-up warning horns sound. The horns sound for 5 seconds and go off, while warning indicators flash for a total of 10 seconds. Machine runs. 2. Press EMERG STOP mushroom switch on feeder control panel assembly and note that following occurs: a. Machine stops immediately. b. Lamp lights in EMERG STOP switch. c. Red EMERG STOP indicator lights on appropriate system control panel column. d. READY lamp goes out on system control panel. e. Pressing Start pushbutton does not start machine.	20	7			M

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Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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.
		3. Reset EMERG STOP mushroom switch and note that following occurs: a. System READY lamp illuminates on system control panel. b. Red EMERG STOP indicator goes out on appropriate system control panel column. c. Lamp goes out in module control panel EMERG STOP switch. d. Machine can now be started. e. Start machine. Verify that when START switch is pressed, start-up warning indicators around sorter flash amber. At same time, start-up warning horns sound. The horns sound for 5 seconds and go off, while warning indicators flash for a total of 10 seconds. Machine runs. f. Open Reader module front panel door and note that the following occurs: 1) Machine stops immediately. 2) Red EMERG STOP indicator goes out on appropriate system control panel column. 3) READY lamp goes out on system control panel. 4) Pressing Start pushbutton does not start machine. g. Close Reader module front panel door and note that the following occurs: 1) System READY lamp illuminates on system control panel. 2) Red EMERG STOP indicator goes out on appropriate system control panel column. h. Machine can now be started. 4. Without starting and stopping machine, check all remaining EMERG STOP mushroom switches one at time to ensure that each one causes actions as described in items 2-b, c, and d above to occur when pressed and actions described in items 3-a, b, and c above to occur when they are reset.					

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:								Bulletin Filename: mm13090				Occurrence: eCBM			

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.
		5. Without starting and stopping machine, check interlocks one at a time, by opening of panel or door, to ensure that each one causes actions described in items 2-c and d above to occur when opened and actions described in items 3-a and c occur when panel or door closed. When an interlock is activated in stacker there will be an indication on stacker display panel. Red full bin lights will flash on top row of panel. When interlock is deactivated lights will go out. 6. If any problems are found, notify supervisor.					
DIOSS SYSTEM: ID TAG READERS	38.	**ID Tag Reader System electrical enclosure inspection.** **WARNING** **Be cautious when working around or on equipment when power has been applied.** Use the most recent Maintenance Management Order, covering the ICS ID-Tag reader system electrical enclosure inspection, to perform procedures on the two ICS readers in order to locate enclosures with defective power supplies, switches not configured properly, incorrect lamps, and lamps not installed properly.	10	10		4400	
DIOSS SYSTEM: WFOV ALIGNMENT	39.	**Perform the following on all WFOV Read Head Assemblies on the DIOSS.** **WARNING** **Be cautious when working around or on equipment when power has been applied.** 1. The WFOV Read Head Assembly (RHA) is position-mounted on a spacer plate. On the DBCS, DIOSS, and CIOSS the spacer plate is secured to a mounting plate. Ensure the spacer plate is properly aligned in accordance with the most recent documentation covering this procedure, currently this will be MS-212, Section 5.2.1. 2. Perform the WFOV Installation Alignment in	16	10		4400	

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					Run Hours	Pieces Fed (000)	Freq.
		accordance with the most recent documentation covering this procedure, currently this will be MS-212, Section 5.2.2.1. Followed by an Auto Calibration procedure as outlined in Section 5.2.2.2. 3. If any problems require corrective actions, write a work order to document the time and events associated with those problems.					
DIOSS SYSTEM: PREDICTIVE MAINTENANCE	40.	**Perform predictive maintenance tasks and procedures.** **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** While performing all of the PdM tasks, make a note of any area where excessive vibration, noise, and/or heat are detected. Initiate a work order to cover any annotated area that requires additional investigation. 1. Prepare machine. a. Perform power down procedures. **CAUTION** **Ensure all ink jet printers are shut down in accordance with MS-251 normal shut down procedures. Failure to properly shut down may cause damage to printers.** 1) For DIOSS B refer to the MS-251, Vol. B, Section 5.3. 2) Power down and lock out power. Power down the machine and lock out its electrical power as prescribed by the current local lockout instructions providing lockout/restore procedures.	225	10		20000	

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Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence eCBM	

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. Open covers and remove panels. Open all machine doors including Main AC Power Panel, Feeder Distribution Panel, and Motor Distribution Panel. Open or remove all machine panels, this includes diverter plate cover assemblies (Wimpy panels). Override interlock switches. Rear Main Power Unit must by-pass magnetic contacts for DIOSS to run. **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** Rear Main Power Unit must by-pass the magnetic contacts for DIOSS to run. c. Restore power to equipment as prescribed by the current local procedure providing lockout/restore procedures. To restore power move the Main Disconnect Switch to the ON position. Press the POWER ON switch on the operator control panel. d. Restore systems on DIOSS B, refer to MS-251, Vol. B, Section 5.8. **NOTE** Machine must have been running for a minimum of 15 minutes prior to doing the ultrasonic and infrared scans. 2. Ultrasonic scans. **NOTE** Use the Long Range Module (cone) on the Ultra-Probe when doing the ultrasonic scans. a. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of						

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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.
		the Feeder, for excessive vibration and noise. b. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of the Transport, for excessive vibration and noise. c. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of the Tag /Scanner module, for excessive vibration and noise. d. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of the OCR/IJP Printer module, for excessive vibration and noise. e. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of the Reader module, for excessive vibration and noise. f. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of the Leveler module, for excessive vibration and noise. g. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of Motor Power Distribution, for excessive vibration and noise. h. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of the IJP/Drying Line module, for excessive vibration and noise. i. Use ultrasonic detector to monitor all bearing assemblies, top and bottom of Tiers 1-4 of the Stacker modules, for excessive vibration and noise. 3. Infrared scans. a. Use non-contact infrared to scan Main Power Unit front and rear (magnetic interlock on panel), scan all terminal connections and connector plugs. b. Use non-contact infrared to monitor all motors, terminal connections, and connector plugs in the Feeder for abnormal temperature.					

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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.
		c. Use non-contact infrared to monitor all terminal connections and connection plugs in the Feeder Distribution Panel for abnormal temperature. d. Use non-contact infrared to monitor all motors, terminal connections, and connector plugs in the Transport for abnormal temperature. e. Use non-contact infrared to monitor all terminal connections and connection plugs in the TAG/Scanner module for abnormal temperature. f. Use non-contact infrared to monitor all terminal connections and connection plugs in the OCR/IJP module for abnormal temperature. g. Use non-contact infrared to monitor all terminal connections and connection plugs in the IJP/Drying Line module for abnormal temperature. h. Use non-contact infrared to monitor to scan all terminal connections and connection plugs in the Reader module for abnormal temperature. i. Use non-contact infrared to monitor all motors, terminal connections, and connector plugs in the Computer Rack module for abnormal temperature. j. Use non-contact infrared to monitor all terminal connections and connector plugs in the Motor Distribution Panel for abnormal temperature. k. Use non-contact infrared to monitor all terminal connections and connector plugs in the Stacker Modules, Tiers 1-4 for abnormal temperature. 4. Restore equipment to ready status. a. Perform orderly shutdown of computer system. Shut down system as prescribed by current local shutdown procedures. b. Power down and lock out power. Power down the machine and lock out its					

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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	Thresholds: Pieces Fed (000)	Thresholds: Freq.
		electrical power as prescribed by the current local lockout instructions providing lockout/restore procedures. c. Replace all panels and doors. Ensure tools and materials are removed from work area. Replace all machine panels. Close all machine doors and covers. **WARNING** **Be cautious when working around or on equipment when power has been applied.** d. Restore power to equipment. Restore power to equipment as prescribed by the current local procedure providing lockout/restore procedures. To restore power move the Main Disconnect Switch to the ON position. Press the POWER ON switch on the operator control panel. e. System restore for DIOSS B, refer to MS-251, Vol. B, Section 5.8. f. IJP printers start up. DIOSS B refers to MS-251, Vol. B, Section 5.8.					
DIOSS SYSTEM: POWER FACTOR CAPACITORS	41.	**Verify power factor capacitors are functioning.** **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** Use inductive ampere test meter to check current in following items. 1. Open main power panel door. 2. Attach amp probe to one of 3 wires that feed capacitors.	5	9		57200	

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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.
		3. Turn Maintenance Switch on operator control panel to Maintenance Mode position. 4. Start machine. 5. Observe current reading, will vary with different stackers configurations, example a three stacker machine averages 24 amps on each of three wires going to capacitor bank. 6. Repeat above items with other two wires that feed to capacitors. 7. If no current detected, check for defective wire or capacitor and repair. 8. Close panel door and turn maintenance switch to Normal mode.					
FEEDER MODULE: ALIGNMENT CHECK W/POWER	42.	**Check Feeder alignment** **WARNING** **Be cautious when working around or on equipment when power has been applied.** Check Feeder alignment (Power On steps) using template, PSN 5220-04-000-5005, and in accordance with most recent MMO, currently MMO-029-08, covering Feeder alignment and performance adjustments. **NOTE** If any discrepancies are found, write a work order to do a full feeder alignment in accordance with the most recent MMO, currently MMO-029-08, covering Feeder Alignment and Performance Adjustments.	15	7		1100	
READER MODULE: READER CARD CAGE	43.	**Power supply PS1 (5VDC Reader) adjustment.** **WARNING** **Be cautious when working around or on equipment when power has been applied.** 1. Open Reader lower left door. 2. Disengage card cage latch, carefully swing open card cage. Connect multimeter leads to	5	9		14300	

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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.
		J30 pin 1(+) and J30 pin 7 (Grd) of Reader card cage backplane. 3. A reading of 5.1 VDC should be present, if not remove bottom cover, adjust, 5 VDC power supply potentiometer to obtain a reading of +5.0 VDC (+0.1/-0.0 VDC). 4. Swing card cage back into place, make sure latch locks. Replace bottom cover of card cage if removed, close elevator door.					
STACKER MODULES: BIN SWITCH TEST	44.	**Stacker bin-full switch checks.** **WARNING** **Be cautious when working around or on equipment when power has been applied.** 1. Pull each stacker blade to its 3/4 full position and note that its associated red indicator on stacker module display panel flashes and stacker module horn beeps. Note defective stacker switches. 2. Pull each stacker blade to its full position and note that its associated red indicator on stacker module display panel is illuminated and stacker module horn beeps. Note defective stacker switches. 3. Verify stacker blade rides smoothly on the guide rod. 4. Notify supervisor of defective stacker switches and initiate a work order to repair or replace as necessary.	7	7		1100	
STACKER MODULES: POWER SUPPLY 5V	45.	**Power supply adjust PS1 5 volts (stackers).** **WARNING** **Be cautious when working around or on equipment when power has been applied.** 1. Place multimeter leads with clips on connectors J10 and J11 of the stacker backplane. 2. A reading of 5.1 VDC should be present, if not adjust power supply potentiometer to obtain reading of +5.0 VDC (+0.1/-0.0 VDC).	14	9		14300	

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:							Bulletin Filename: mm13090			Occurrence: eCBM					

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.
DIOSS VALIDATION: TRAY LABEL PRINTER	46.	**Perform tray label printer verification procedures.** **WARNING** **Be cautious when working around or on equipment when power has been applied.** **NOTE** Label printer located in stacker modules. Verify label printer operation as follows: 1. On label printer, press LINE FEED button one time. Label printer will print out test label. 2. Verify test label has good quality print (not blurred) and is readable to human eye. 3. If the quality of the print is unacceptable, write a work order to troubleshoot and/or do cleaning of the thermal head using cleaning kit (PSN 7930-07-000-1593).	2	7		3	
DIOSS VALIDATION: MACHINE VALIDATION	47.	**Perform the mail path validation by checking basic machine functions.** **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.** 1. Turn Maintenance Mode key switch on operator control panel to MAINT position. 2. Start machine. Verify when START switch is pressed, start-up warning indicators around sorter flash amber. At same time, start-up warning horns sound. Horns sound for 5 seconds and go off, while warning indicators continue to flash for a total of 10 seconds. 3. Do a visual and audible check of machine to verify there are no problems with belt	4	9		3	

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:							Bulletin Filename: mm13090			Occurrence: eCBM					

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.
		tracking, bearing noise, inappropriate bin gate activity, or any indications of impending or existing machine problems. 4. Proceed to end stacker and press Emergency Stop button. Verify machine stops. 5. If machine fails to stop, notify supervisor. Refer to the most recent Maintenance Management Order, currently MMO-002-03, concerning failure to stop. 6. De-activate E-Stop and turn Maintenance Mode switch back to NORMAL on operator control panel.					
DIOSS VALIDATION: WFOV 400 PIECE TEST DECK	48.	**In OCR Mode, run the WFOV 400 piece test deck to verify proper GAR and that both readers are reading.** **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** Ensure that read head aperture is clean. Using WFOV 400 piece test deck (PSN 3915-06-000-8292, P/N 237A073-2), perform following at Main Menu: 1. Select Mail Processing. 2. Load Run Information. 3. Enter 750 for operation number. 4. Press F2. 5. Load Sortplan. 6. Select ALL button (displays all sort plans). 7. Double Click Sortplan WFOV_TDK.EBF. 8. Select Start Mail Processing.	9	9		3	

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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.
		9. Select Display ZIPs/Pkts and Online Display. 10. Start machine and process WFOV test deck. Ensure WFOV has a GAR that equals 99% or greater. If the GAR is lower than 99%, check read reject bins for any test cards that may have unreadable bar codes. If necessary, perform a WFOV auto-calibration in accordance with MS-212, Section 5.2.2.2. 11. Verify the Certified Mail portion of the test deck sorts properly. 12. On screen, verify ZIPs/Pkts results for both readers are the same. 13. If any additional time is needed to correct ZIP result discrepancies and/or GAR issues, including auto-calibration, initiate a work order.					
DIOSS VALIDATION: POSTNET IJP	49.	**Check POSTNET bar code printing.** **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.** 1. From Main Menu, select Maintenance, System Tests, and then Bar Code Printer Test. 2. At ZIP Code field, type in a 5 digit ZIP Code. 3. At Carrier Route field, type in from 1-4 ASCII characters. 4. Press F2 key. 5. Start machine with control panel MAINTENANCE MODE key in NORMAL mode and feed five blank cards (PSN 5220-03-000-5975, P/N CO-2823NH). **NOTE** Right edge of letter to left framing bar should be 4 1/8" to 4 1/4". Bottom of bars	4	10		3	

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Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:							Bulletin Filename: mm13090			Occurrence: eCBM					

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					Run Hours	Pieces Fed (000)	Freq.
		should be even and 1/4" ± 1/16" above bottom edge. 6. Check bar codes for location and quality. 7. If necessary, use the most recent Maintenance Management Order, currently MMO-103-08, to align. 8. Once satisfactory bar codes are sprayed, press F1 key three times to return to Main Menu screen.					
DIOSS VALIDATION: ID TAG IJP	50.	**Perform the ID Tag IJP validation.** Check ID tag as follows: **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.** 1. From Main Menu, select Maintenance, System Tests, and then ID Tag Printer Test. 2. Fill in fields as follows: a. Machine Number - between 1-3999 b. Time of Day - between 0-47 c. Day of Month - between 1 - 31 d. Sequence Number - between 1-25,000 e. Mail Class - 1 or 3 3. Press F2 key. 4. Start machine with MAINTENANCE MODE key in NORMAL mode and feed five blank cards, PSN 5220-03-000-5975, P/N CO-2823NH. 5. Check ID Tag quality and position using ID TAG template, PSN 9330-03-000-6399, P/N MM959601. 6. Make adjustments to OCR/IJP Module P-IJP02 circuit board and/or ID Tag printer, if	4	10		3	

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					Run Hours	Pieces Fed (000)	Freq.
		needed. Refer to MS-251, Section 6.7.5. Repeat test, if necessary. 7. Save above 5 cards for ICS validation. 8. Once satisfactory bar codes are sprayed, press F1 key three times to return to Main Menu screen.					
DIOSS VALIDATION: ICS READERS	51.	**ICS reader validation. Verify ICS-3 readers as follows:** **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.** 1. Set machine up to run in DBCS mode. 2. From ON LINE MAIL PROCESSING screen, select Display ZIPs/Pkts. 3. From Select Display Option screen, select On-Line Display. 4. Start machine and re-run 5 test cards saved from ID TAG IJP validation. 5. At on-line display screen, verify that ICS-3 Pre-reader and ICS-3 Verifier detected five (5) ID Tags present and they read same. 6. Stop machine. 7. Retrieve cards from stackers.	3	10		3	
DIOSS VALIDATION: ICS STRESS TEST DECK	52.	**Run the ICS Stress Test Deck.** **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.**	5	9		3	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:							Bulletin Filename: mm13090			Occurrence: eCBM					

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.
		1. Set machine up to run in DBCS mode, use sort plan ICSTSTI.ebf. 2. From ON LINE MAIL PROCESSING screen, select Display ZIPs/Pkts. 3. From Select Display Option screen, select On-Line Display. 4. Start machine and run the stress deck, PSN 3915-10-000-6361. 5. At on line display screen, verify that ICS-3 Pre-reader and ICS-3 Verifier detected all ID Tags present and they read same. 6. Stop machine. 7. Retrieve and verify cards sorted correctly. Refer to the most recent Maintenance Management Order, currently MMO-144-15, concerning sorting.					
DIOSS VALIDATION: UAA INTERCEPT WITH AND WITHOUT BARCODES	53.	**UAA intercept with and without bar codes.** **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.** 1. Verify that the OCR engine in OCR mode can intercept UAA without bar code mail by using Xanadu Test Deck, PSN 9310-08-000-3865, P/N 66.1026.035-00. Do the following from the Main Menu: a. Select Mode Select. b. OCR. c. Load Run Information. d. Enter Operation Number. e. Select F2 to accept. f. Load a sort plan that has a confirmed UAA pocket assigned. (PARS Special	15	9		1100	

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature: Delivery Input Output SubSystem	Equipment Model:							Bulletin Filename: mm13090			Occurrence: eCBM					

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.
		Pockets.ebf assigns pocket 39 for UAA.) g. Start Mail Run. h. Access System Components menu. i. Disable Barcode IJP. j. Start mail processing and run UAA test deck. k. Access System Component menu. l. Enable Barcode IJP. m. Print the end of run report. n. Calculate the intercept rate (# confirmed UAA test pieces divided by the total # of test pieces fed, multiplied by 100). o. Verify that at least 90% of the UAA test deck was intercepted. 2. Verify that OCR engine in DBCS mode can intercept UAA with bar coded mail by using Xanadu Test Deck, PSN 9310-08-000-3864, P/N 66.1026.034-00. Do the following from the Main Menu. a. Select Mode Select. b. DBCS. c. Load Run Information. d. Enter Operation Number. e. Select F2 to accept. f. Load a sortplan that has a confirmed UAA pocket assigned. (ParsSpecial Pockets.ebf assigns pocket 39 for UAA.) g. Start Mail Processing and run UAA test deck. h. Print End of Run report. 1) Calculate intercept rate (# confirmed UAA test pieces divided by total # of test pieces fed, multiplied by 100). 2) Verify that at least 90% of the UAA test deck was intercepted. i. Log off system computer.					

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090					Occurrence eCBM

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.
FINAL CLEANUP	54.	**Clean up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor.	4	All			

ATTACHMENT 3

DIOSS MASTER CHECKLIST

09-DIOSS-AC-001-M

Operational Maintenance

Time Total: 64 minutes

Item #	Base Time Minutes	Times Done per Tour	Total Time per Task per Tour
1	1	1	1
2	1	1	1
3	1	3	3
4	1	3	3
5	1	3	3
6	1	3	3
7	2	3	6
8	2	3	6
9	2	3	6
10	1	3	3
11	2	3	6
12	2	3	6
13	5	3	15
14	2	1	2
	Total Minutes =		**64**

U.S. Postal Service Maintenance Checklist	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	9	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090					Occurrence Tourly

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT	1.	**COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. Open equipment and inspect dust conditions. Check for suspicious dust or unusual debris. If any unusual substance is found notify supervisor prior to proceeding with any further action on the equipment.** **THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.** **When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection.** **WARNING FOR EWP/PPE:** **Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.**	1	All			
DIOSS OPM: MACHINE LOG BOOK	2.	**At the beginning of the operation, examine machine log.** **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** While performing listed operational maintenance tasks, be alert for unusual sounds, odors, or other indications of potential failure conditions in the machine.	1	9			T

U.S. Postal Service Maintenance Checklist	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	9	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence Tourly	

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.
		Examine log and document any unresolved problems from the previous tour. **NOTE** Operational checks must be made with machine processing mail in a normal operating mode.					
DIOSS OPM: SAFETY INDICATORS	3.	**Every two hours check warning horn and beacons.** Check for proper operation of warning horns and beacons on start-ups.	1	9			T
DIOSS OPM: SYSTEM INDICATORS	4.	**Every two hours check lamps.** Watch for proper functionality of all indicator lamps used during normal machine operations. Correct deficiencies as soon as practical.	1	9			T
DIOSS OPM: OPERATORS	5.	**Every two hours observe Feeder and check with operator.** Observe the Feeder operation and inquire if operators are having excessive processing problems. Investigate as necessary. Initiate corrective action as appropriate.	1	9			T
DIOSS OPM: VIDEO DISPLAY TERMINAL WFOV	6.	**Every two hours check mail processing screen.** 1. Check current Accept Rate Value on the GUI to ensure the sort plan, operating mode, and Accept Rate is correct for the mail being processed in accordance with the following: a. Operation 918 and 919 - 99.1% GAR b. All other Operations 98.8% GAR 2. If MAR or GAR is below acceptable values: a. Check for degraded image and/or dust/debris accumulations on WFOV faceplate by observing the thumbnail image on the upper left on the GUI. b. If the image is degraded or if problems are noted take appropriate corrective action.	1	9			T

U.S. Postal Service Maintenance Checklist	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	9	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090					Occurrence Tourly

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.
DIOSS OPM: ICS READERS	7.	**Every two hours check for dirt accumulations.** 1. Check ICS-3 ID tag reader's exterior for accumulated dust, dirt and debris or loose/worn belts, paying particular attention to the aperture and to the raised portion of the faceplate. 2. Document any problems found, and if needed write a work order.	2	9			T
DIOSS OPM: POSTNET IJP	8.	**Every two hours check for dirt/ink accumulations.** Check POSTNET ink jet printer to ensure there is no build-up of foreign material or accumulation of ink at print head. Clean as necessary.	2	9			T
DIOSS OPM: ID TAG IJP	9.	**Every two hours check for dirt/ink accumulations.** Check ID Tag ink jet printer to ensure there is no build-up of foreign material or accumulation of ink at print head. Clean as necessary.	2	9			T
DIOSS OPM: REJECT STACKER(S)	10.	**Every two hours check bar code printing.** Check for print quality of POSTNET and ID Tag bar codes as well as quality of address in the address block. Are bar codes smudged or out of tolerance? Correct problems as noted.	1	9			T
DIOSS OPM: SORTING STACKERS	11.	**Every two hours check for missorts.** Take a sample from at least 5 stackers and verify the address block matches the scheme for that pocket. Verify mail pieces enter stacker in a uniform manner. Document any problems found and if needed write a work order.	2	9			T
DIOSS OPM: OVERFLOW STACKER	12.	**Every two hours check mail in the Overflow/Reject Stacker.** Check type of mail present in overflow stacker to determine which area(s) of the machine might be malfunctioning. Check for indications of double feeds, one particular code, a single gate, or mail path blockage problem. Document any problems found, and if needed write a work order.	2	9			T

U.S. Postal Service Maintenance Checklist	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	9	D	I	O	S	S				A	C	0	0	1	M
Equipment Nomenclature Delivery Input Output SubSystem	Equipment Model										Bulletin Filename mm13090				Occurrence Tourly	

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.
DIOSS OPM: ACE/MKAT LAPTOP COMPUTER	13.	**Every 2 hours check all performance indicators displayed on the MPEWatch Realtime Maintenance View Screen, including the following items:** 1. Key Performance Indicators (KPI) report. **NOTE** Access to KPI can be done by clicking on the hyperlink located in the column titled "KPI%". 2. Unplanned Events. 3. DPS Information. 4. Take appropriate action to investigate and correct any abnormalities detected in viewing MPEWatch. Generate a work order for further maintenance actions if required.	5	9			T
DIOSS OPM: ADMINISTRATIVE	14.	**At the end of the operation, compile the following information:** 1. Interim reports taken during the operational run with any abnormalities noted and/or highlighted. 2. Route sheet information. 3. Any work orders generated. 4. Make entries in Machine Logbook of any discrepancies found during the mail run. 5. Turn this information into Maintenance Supervision. Brief personnel coming on duty.	2	9			T