MAINTENANCE TECHNICAL SUPPORT CENTER / MAINTENANCE POLICIES & PROGRAMS ENGINEERING / UNITED STATES POSTAL SERVICE

Maintenance Management Order

SUBJECT: Operational & Preventive Maintenance Guidelines for Delivery Bar Code Sorter/Output SubSystem (DBCS/OSS) Production Based Maintenance Program

DATE: May 1, 2008

NO: MMO-005-08

FILE CODE: D9

TO: Maintenance Manager DBCS/OSS Offices

bpet:mm04077ag

Online version changed to reflect the changes from MMO-019-10.

MAINTENANCE MANAGEMENT ORDER

This Maintenance Management Order (MMO) provides Operational & Preventive Maintenance (PM) Guidelines based on pieces fed per production run (Production Thresholds), for the DBCS/OSS Phase 2-5 machines.

This maintenance program is a production-based (throughput [pieces fed]) alignment of preventive, predictive, and operational maintenance.

The term Threshold Severity as used in this document will be defined as one of the three Production Thresholds based on pieces fed and issued on a daily basis. All other routes (Senior) will be issued at the Production Threshold determined for that route based on pieces fed; these routes are not divided into individual Threshold Severities.

Routes issued on a real-time daily basis are categorized by Threshold Severities One, Two, and Three. These are based on the following Production Thresholds: SEVERITY 1 (less than 90,000 pieces fed), SEVERITY 2 (between 90,000 and 180,000 pieces fed), or SEVERITY 3 (greater than 180,000 pieces fed), based on End-of-Run (EOR) report of daily pieces fed, and will be issued based on this data by Maintenance Operational Support or as locally designated. Presently in accordance with MMO-103-07, and until further notice, the Severity 3 (Attachment 5 of this MMO) will be issued exclusively as the daily route.

Local Maintenance Operational Support will also compile and be the custodian of the ongoing data used for determining when all other (Senior maintenance routes) will be issued based on pieces fed thresholds. However, until such time as these tasks can be automated through the eMARS System or comparable data bases, the Senior Routes will be issued on a calendar base as outlined in MMO-103-07.

PM checklists based on Threshold Severities 1, 2, and 3 are included in this bulletin. Additionally, all other checklists that will be issued based on their Production Thresholds (Senior) are included. The last attachment to this bulletin includes the tasks needed to accomplish Operational Maintenance on the DBCS. Senior Maintenance Officials are directed to use these master checklists when preparing the route sheets for local servicing.

The work hours represented in this MMO reflect the maximum work hours required to maintain the equipment. Given local conditions, management may modify task frequencies. For a more efficient maintenance operation, routes with duplicate items should be performed together.

This is a PM guideline, any problems found that require adjustment or replacement of parts will require a work order. The PM inspection and cleaning sequence starts at Feeder and ends at last stacker. The local technician or mechanic may wish to use a different sequence, as long as all tasks are covered this is acceptable.

MAINTENANCE MANAGEMENT ORDER

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.

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

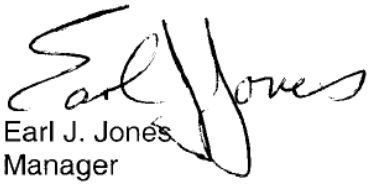
WARNING

Various products, which require Material Safety Data Sheets (MSDS), may be utilized during the performance of the procedures in this bulletin. Ensure the current MSDS for each product used is on file and available for reference by all employees. Refer to MSDS for appropriate personal protective equipment.

WARNING

The use of compressed or blown air is prohibited. When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used only on optical equipment when other cleaning methods can not be used.

Direct any questions or comments concerning this bulletin to the HelpDesk, Maintenance Technical Support Center, P.O. Box 1600, Norman OK 73070-1600; telephone FTS 2000 (405) 573-2123 or toll free (800) 366-4123.



Earl J. Jones
Manager
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Maintenance Policies and Programs

Attachments:
1. Summary Workload Estimate
2. Workload Estimate Adjustments
3. DBCS/OSS Master Checklist**:** 03-DBCS-CD-001-M: Threshold Severity: Severity 1
4. DBCS/OSS Master Checklist**:** 03-DBCS-CD-002-M: Threshold Severity: Severity 2
5. DBCS/OSS Master Checklist**:** 03-DBCS-CD-003-M: Threshold Severity: Severity 3
6. DBCS/OSS Master Checklist**:** 03-DBCS-CD-004-M: Production Threshold of 1,300,000
7. DBCS/OSS Master Checklist**:** 03-DBCS-CD-005-M: Production Threshold of 5,600,000
8. DBCS/OSS Master Checklist**:** 03-DBCS-CD-006-M: Production Threshold of 16,900,000
9. DBCS/OSS Master Checklist**:** 03-DBCS-CD-007-M: Production Threshold of 33,800,000
10. DBCS/OSS Master Checklist**:** 03-DBCS-CD-008-M: Production Threshold of 67,500,000
11. DBCS/OSS Master Checklist**:** 09-DBCS-CD-001-M: Operational Tour

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 1

SUMMARY

WORKLOAD ESTIMATE

FOR

DBCS/OSS

SUMMARY

WORKLOAD ESTIMATE

FOR DBCS/OSS

SUMMARY WORK LOAD ESTIMATES FOR DBCS

TIER ONE BASED ON UNDER 55,000,000 PIECES FED LAST FISCAL YEAR

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 DBCS (Hrs/Yr)	Operational Maint. Time (Hrs/Yr)	Operational Maintenance (OpMt) + Total Servicing		
							1 Tour Hrs/Yr OpMt x 1	2 Tours Hrs/Yr OpMt x 2	3 Tours Hrs/Yr OpMt x 3
5 Days	556.35	166.91	723.26	72.33	795.59	199.33	994.92	1194.25	1393.58
6 Days	635.16	190.55	825.71	82.57	908.28	239.20	1147.48	1386.68	1625.88
7 Days	713.95	214.19	928.14	92.81	1020.95	279.07	1300.02	1579.09	1858.16

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

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

PM TIME SUMMARY IN MINUTES	
Thresholds Pieces Fed	MIN.
Sev. 1 <90K	86
Sev. 2 90-180K	90
Sev. 3 >180K	94
1,300,000	150
5,600,000	223
16,900,000	300
33,800,000	45
67,500,000	194

PM HOURS PER YEAR			
Percentage of Utilization	5 Day Wk	6 Day Wk	7 Day Wk
Sev. 1-14%	52.17	62.61	73.04
Sev. 2-49%	191.10	229.32	267.54
Sev. 3-37%	150.71	180.86	211.00
Total	393.98	472.79	551.58

PM HOURS PER YEAR SENIOR		
Thresholds	# times Completed	Hours Yr per DBCS
1,300,000	42.31	105.78
5,600,000	9.82	36.50
16,900,000	3.25	16.25
33,800,000	1.63	1.22
67,500,000	0.81	2.62
	Total	162.37

SUMMARY WORK LOAD ESTIMATES FOR DBCS

TIER TWO BASED ON 55,000,000 - 80,000,000 PIECES FED LAST FISCAL YEAR

Operation Days	Routine Servicing/ Machine (Hrs/Yr)	Repair Time per Machine (Hrs/yr) *	Routine Servicing + Repair Time (Hrs/Yr)	Non-Productive Time per Machine (Hrs/yr) **	Total Servicing/ Machine (Hrs/Yr)	Operational Maint. Time (Hrs/Yr)	Operational Maintenance (OpMt) + Total Servicing		
							1 Tour Hrs/Yr OpMt x 1	2 Tours Hrs/Yr OpMt x 2	3 Tours Hrs/Yr OpMt x 3
5 Days	597.59	179.28	776.87	77.69	854.56	199.33	1053.89	1253.22	1452.55
6 Days	677.26	203.18	880.44	88.04	968.48	239.20	1207.68	1446.88	1686.08
7 Days	756.92	227.08	984.00	98.40	1082.40	279.07	1361.47	1640.54	1919.61

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

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

PM TIME SUMMARY IN MINUTES

Thresholds Pieces Fed	MIN.
Sev. 1 <90K	86
Sev. 2 90-180K	90
Sev. 3 >180K	94
1,300,000	150
5,600,000	223
16,900,000	300
33,800,000	45
67,500,000	194

PM HOURS PER YEAR

Percentage of Utilization	5 Day Wk	6 Day Wk	7 Day Wk
Sev. 1- 8%	29.81	35.78	41.74
Sev. 2-36%	140.40	168.48	196.56
Sev. 3-56%	228.11	273.73	319.35
Total	398.32	477.99	557.65

PM HOURS PER YEAR SENIOR

Thresholds	# times Completed	Hours Yr per DBCS
1,300,000	51.92	129.80
5,600,000	12.05	44.79
16,900,000	3.99	19.95
33,800,000	2.00	1.50
67,500,000	1.00	3.23
	Total	199.27

SUMMARY WORK LOAD ESTIMATES FOR DBCS

TIER THREE BASED ON OVER 80,000,000 PIECES FED LAST FISCAL YEAR

Operation Days	Routine Servicing/ Machine (Hrs/Yr)	Repair Time per Machine (Hrs/yr) *	Routine Servicing + Repair Time (Hrs/Yr)	Non-Productive Time per Machine (Hrs/yr) **	Total Servicing/ Machine (Hrs/Yr)	Operational Maint. Time (Hrs/Yr)	Operational Maintenance (OpMt) + Total Servicing		
							1 Tour Hrs/Yr OpMt x 1	2 Tours Hrs/Yr OpMt x 2	3 Tours Hrs/Yr OpMt x 3
5 Days	642.79	192.84	835.63	83.56	919.19	199.33	1118.52	1317.85	1517.18
6 Days	724.11	217.23	941.34	94.13	1035.47	239.20	1274.67	1513.87	1753.07
7 Days	805.41	241.62	1047.03	104.70	1151.73	279.07	1430.80	1709.87	1988.94

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

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

PM TIME SUMMARY IN MINUTES

Thresholds Pieces Fed	MIN.
Sev. 1 <90K	86
Sev. 2 90-180K	90
Sev. 3 >180K	94
1,300,000	150
5,600,000	223
16,900,000	300
33,800,000	45
67,500,000	194

PM HOURS PER YEAR

Percentage of Utilization	5 Day Wk	6 Day Wk	7 Day Wk
Sev. 1- 8%	11.18	13.42	15.65
Sev. 2-36%	85.80	102.96	120.12
Sev. 3-56%	309.57	371.49	433.40
Total	406.55	487.87	569.17

PM HOURS PER YEAR SENIOR

Thresholds	# times Completed	Hours Yr per DBCS
1,300,000	61.54	153.85
5,600,000	14.29	53.11
16,900,000	4.73	23.65
33,800,000	2.37	1.78
67,500,000	1.19	3.85
	Total	236.24

TIER ONE HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
	Routine	Repair time	Routine +	Non-Productive	Total	Operational	Ops Maint. + Total Servicing		
Day	Service hr/yr	30%	Repair time	Time 10%	Servicing	Maint. hrs	OpMt x 1	OpMt x 2	OpMt x 3
110 Stacker Machine									
5 Days	556.35	166.91	723.26	72.33	795.59	199.33	994.92	1194.25	1393.58
6 Days	635.16	190.55	825.71	82.57	908.28	239.20	1147.48	1386.68	1625.88
7 Days	713.95	214.19	928.14	92.81	1020.95	279.07	1300.02	1579.09	1858.16
126 Stacker Machine									
5 Days	577.02	173.11	750.13	75.01	825.14	199.33	1024.47	1223.80	1423.13
6 Days	657.54	197.26	854.80	85.48	940.28	239.20	1179.48	1418.68	1657.88
7 Days	738.08	221.42	959.50	95.95	1055.45	279.07	1334.52	1613.59	1892.66
142 Stacker Machine									
5 Days	591.81	177.54	769.35	76.94	846.29	199.33	1045.62	1244.95	1444.28
6 Days	673.21	201.96	875.17	87.52	962.69	239.20	1201.89	1441.09	1680.29
7 Days	754.61	226.38	980.99	98.10	1079.09	279.07	1358.16	1637.23	1916.30
158 Stacker Machine									
5 Days	606.65	182.00	788.65	78.87	867.52	199.33	1066.85	1266.18	1465.51
6 Days	688.91	206.67	895.58	89.56	985.14	239.20	1224.34	1463.54	1702.74
7 Days	771.18	231.35	1002.53	100.25	1102.78	279.07	1381.85	1660.92	1939.99
174 Stacker Machine									
5 Days	621.45	186.44	807.89	80.79	888.68	199.33	1088.01	1287.34	1486.67
6 Days	704.58	211.37	915.95	91.60	1007.55	239.20	1246.75	1485.95	1725.15
7 Days	787.70	236.31	1024.01	102.40	1126.41	279.07	1405.48	1684.55	1963.62
190 Stacker Machine									
5 Days	642.17	192.65	834.82	83.48	918.30	199.33	1117.63	1316.96	1516.29
6 Days	727.03	218.11	945.14	94.51	1039.65	239.20	1278.85	1518.05	1757.25
7 Days	811.90	243.57	1055.47	105.55	1161.02	279.07	1440.09	1719.16	1998.23
206 Stacker Machine									
5 Days	657.39	197.22	854.61	85.46	940.07	199.33	1139.40	1338.73	1538.06
6 Days	743.11	222.93	966.04	96.60	1062.64	239.20	1301.84	1541.04	1780.24
7 Days	828.85	248.66	1077.51	107.75	1185.26	279.07	1464.33	1743.40	2022.47
222 Stacker Machine									
5 Days	672.66	201.80	874.46	87.45	961.91	199.33	1161.24	1360.57	1559.90
6 Days	759.26	227.78	987.04	98.70	1085.74	239.20	1324.94	1564.14	1803.34
7 Days	845.86	253.76	1099.62	109.96	1209.58	279.07	1488.65	1767.72	2046.79
238 Stacker Machine									
5 Days	687.90	206.37	894.27	89.43	983.70	199.33	1183.03	1382.36	1581.69
6 Days	775.37	232.61	1007.98	100.80	1108.78	239.20	1347.98	1587.18	1826.38
7 Days	862.84	258.85	1121.69	112.17	1233.86	279.07	1512.93	1792.00	2071.07
254 Stacker Machine									
5 Days	708.83	212.65	921.48	92.15	1013.63	199.33	1212.96	1412.29	1611.62
6 Days	798.03	239.41	1037.44	103.74	1141.18	239.20	1380.38	1619.58	1858.78
7 Days	887.22	266.17	1153.39	115.34	1268.73	279.07	1547.80	1826.87	2105.94
270 Stacker Machine									
5 Days	724.06	217.22	941.28	94.13	1035.41	199.33	1234.74	1434.07	1633.40
6 Days	814.12	244.24	1058.36	105.84	1164.20	239.20	1403.40	1642.60	1881.80
7 Days	904.18	271.25	1175.43	117.54	1292.97	279.07	1572.04	1851.11	2130.18

TIER ONE HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
Day	Routine Service hr/yr	Repair time 30%	Routine + Repair time	Non-Productive Time 10%	Total Servicing	Operational Maint. hrs	Ops Maint. + Total Servicing OpMt x 1	OpMt x 2	OpMt x 3
286 Stacker Machine									
5 Days	739.36	221.81	961.17	96.12	1057.29	199.33	1256.62	1455.95	1655.28
6 Days	830.28	249.08	1079.36	107.94	1187.30	239.20	1426.50	1665.70	1904.90
7 Days	921.21	276.36	1197.57	119.76	1317.33	279.07	1596.40	1875.47	2154.54
302 Stacker Machine									
5 Days	754.56	226.37	980.93	98.09	1079.02	199.33	1278.35	1477.68	1677.01
6 Days	846.37	253.91	1100.28	110.03	1210.31	239.20	1449.51	1688.71	1927.91
7 Days	938.16	281.45	1219.61	121.96	1341.57	279.07	1620.64	1899.71	2178.78

TIER TWO HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
	Routine	Repair time	Routine +	Non-Productive	Total	Operational	Ops Maint. + Total Servicing		
Day	Service hr/yr	30%	Repair time	Time 10%	Servicing	Maint. hrs	OpMt x 1	OpMt x 2	OpMt x 3
110 Stacker Machine									
5 Days	597.59	179.28	776.87	77.69	854.56	199.33	1053.89	1253.22	1452.55
6 Days	677.26	203.18	880.44	88.04	968.48	239.20	1207.68	1446.88	1686.08
7 Days	756.92	227.08	984.00	98.40	1082.40	279.07	1361.47	1640.54	1919.61
126 Stacker Machine									
5 Days	620.99	186.30	807.29	80.73	888.02	199.33	1087.35	1286.68	1486.01
6 Days	702.38	210.71	913.09	91.31	1004.40	239.20	1243.60	1482.80	1722.00
7 Days	783.78	235.13	1018.91	101.89	1120.80	279.07	1399.87	1678.94	1958.01
142 Stacker Machine									
5 Days	638.16	191.45	829.61	82.96	912.57	199.33	1111.90	1311.23	1510.56
6 Days	720.42	216.13	936.55	93.66	1030.21	239.20	1269.41	1508.61	1747.81
7 Days	802.69	240.81	1043.50	104.35	1147.85	279.07	1426.92	1705.99	1985.06
158 Stacker Machine									
5 Days	655.38	196.61	851.99	85.20	937.19	199.33	1136.52	1335.85	1535.18
6 Days	738.52	221.56	960.08	96.01	1056.09	239.20	1295.29	1534.49	1773.69
7 Days	821.64	246.49	1068.13	106.81	1174.94	279.07	1454.01	1733.08	2012.15
174 Stacker Machine									
5 Days	672.56	201.77	874.33	87.43	961.76	199.33	1161.09	1360.42	1559.75
6 Days	756.56	226.97	983.53	98.35	1081.88	239.20	1321.08	1560.28	1799.48
7 Days	840.55	252.17	1092.72	109.27	1201.99	279.07	1481.06	1760.13	2039.20
190 Stacker Machine									
5 Days	696.01	208.80	904.81	90.48	995.29	199.33	1194.62	1393.95	1593.28
6 Days	781.74	234.52	1016.26	101.63	1117.89	239.20	1357.09	1596.29	1835.49
7 Days	867.47	260.24	1127.71	112.77	1240.48	279.07	1519.55	1798.62	2077.69
206 Stacker Machine									
5 Days	713.72	214.12	927.84	92.78	1020.62	199.33	1219.95	1419.28	1618.61
6 Days	800.31	240.09	1040.40	104.04	1144.44	239.20	1383.64	1622.84	1862.04
7 Days	886.91	266.07	1152.98	115.30	1268.28	279.07	1547.35	1826.42	2105.49
222 Stacker Machine									
5 Days	731.48	219.44	950.92	95.09	1046.01	199.33	1245.34	1444.67	1644.00
6 Days	818.95	245.69	1064.64	106.46	1171.10	239.20	1410.30	1649.50	1888.70
7 Days	906.41	271.92	1178.33	117.83	1296.16	279.07	1575.23	1854.30	2133.37
238 Stacker Machine									
5 Days	749.18	224.75	973.93	97.39	1071.32	199.33	1270.65	1469.98	1669.31
6 Days	837.52	251.26	1088.78	108.88	1197.66	239.20	1436.86	1676.06	1915.26
7 Days	925.84	277.75	1203.59	120.36	1323.95	279.07	1603.02	1882.09	2161.16

TIER TWO HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
	Routine	Repair time	Routine +	Non-Productive	Total	Operational	Ops Maint. + Total Servicing		
Day	Service hr/yr	30%	Repair time	Time 10%	Servicing	Maint. hrs	OpMt x 1	OpMt x 2	OpMt x 3
254 Stacker Machine									
5 Days	772.91	231.87	1004.78	100.48	1105.26	199.33	1304.59	1503.92	1703.25
6 Days	862.97	258.89	1121.86	112.19	1234.05	239.20	1473.25	1712.45	1951.65
7 Days	953.04	285.91	1238.95	123.90	1362.85	279.07	1641.92	1920.99	2200.06
270 Stacker Machine									
5 Days	790.60	237.18	1027.78	102.78	1130.56	199.33	1329.89	1529.22	1728.55
6 Days	881.53	264.46	1145.99	114.60	1260.59	239.20	1499.79	1738.99	1978.19
7 Days	972.46	291.74	1264.20	126.42	1390.62	279.07	1669.69	1948.76	2227.83
286 Stacker Machine									
5 Days	808.38	242.51	1050.89	105.09	1155.98	199.33	1355.31	1554.64	1753.97
6 Days	900.18	270.05	1170.23	117.02	1287.25	239.20	1526.45	1765.65	2004.85
7 Days	991.97	297.59	1289.56	128.96	1418.52	279.07	1697.59	1976.66	2255.73
302 Stacker Machine									
5 Days	826.09	247.83	1073.92	107.39	1181.31	199.33	1380.64	1579.97	1779.30
6 Days	918.76	275.63	1194.39	119.44	1313.83	239.20	1553.03	1792.23	2031.43
7 Days	1011.42	303.43	1314.85	131.49	1446.34	279.07	1725.41	2004.48	2283.55

TIER THREE HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
Day	Routine Service hr/yr	Repair time 30%	Routine + Repair time	Non-Productive Time 10%	Total Servicing	Operational Maint. hrs	Ops Maint. + Total Servicing OpMt x 1	OpMt x 1	OpMt x 1
110 Stacker Machine									
5 Days	642.79	192.84	835.63	83.56	919.19	199.33	1118.52	1317.85	1517.18
6 Days	724.11	217.23	941.34	94.13	1035.47	239.20	1274.67	1513.87	1753.07
7 Days	805.41	241.62	1047.03	104.70	1151.73	279.07	1430.80	1709.87	1988.94
126 Stacker Machine									
5 Days	669.01	200.70	869.71	86.97	956.68	199.33	1156.01	1355.34	1554.67
6 Days	752.07	225.62	977.69	97.77	1075.46	239.20	1314.66	1553.86	1793.06
7 Days	835.13	250.54	1085.67	108.57	1194.24	279.07	1473.31	1752.38	2031.45
142 Stacker Machine									
5 Days	688.60	206.58	895.18	89.52	984.70	199.33	1184.03	1383.36	1582.69
6 Days	772.53	231.76	1004.29	100.43	1104.72	239.20	1343.92	1583.12	1822.32
7 Days	856.48	256.94	1113.42	111.34	1224.76	279.07	1503.83	1782.90	2061.97
158 Stacker Machine									
5 Days	708.26	212.48	920.74	92.07	1012.81	199.33	1212.14	1411.47	1610.80
6 Days	793.08	237.92	1031.00	103.10	1134.10	239.20	1373.30	1612.50	1851.70
7 Days	877.88	263.36	1141.24	114.12	1255.36	279.07	1534.43	1813.50	2092.57
174 Stacker Machine									
5 Days	727.86	218.36	946.22	94.62	1040.84	199.33	1240.17	1439.50	1638.83
6 Days	813.55	244.07	1057.62	105.76	1163.38	239.20	1402.58	1641.78	1880.98
7 Days	899.23	269.77	1169.00	116.90	1285.90	279.07	1564.97	1844.04	2123.11
190 Stacker Machine									
5 Days	754.16	226.25	980.41	98.04	1078.45	199.33	1277.78	1477.11	1676.44
6 Days	841.60	252.48	1094.08	109.41	1203.49	239.20	1442.69	1681.89	1921.09
7 Days	929.04	278.71	1207.75	120.78	1328.53	279.07	1607.60	1886.67	2165.74
206 Stacker Machine									
5 Days	774.38	232.31	1006.69	100.67	1107.36	199.33	1306.69	1506.02	1705.35
6 Days	862.68	258.80	1121.48	112.15	1233.63	239.20	1472.83	1712.03	1951.23
7 Days	951.00	285.30	1236.30	123.63	1359.93	279.07	1639.00	1918.07	2197.14
222 Stacker Machine									
5 Days	794.67	238.40	1033.07	103.31	1136.38	199.33	1335.71	1535.04	1734.37
6 Days	883.87	265.16	1149.03	114.90	1263.93	239.20	1503.13	1742.33	1981.53
7 Days	973.05	291.92	1264.97	126.50	1391.47	279.07	1670.54	1949.61	2228.68
238 Stacker Machine									
5 Days	814.91	244.47	1059.38	105.94	1165.32	199.33	1364.65	1563.98	1763.31
6 Days	904.98	271.49	1176.47	117.65	1294.12	239.20	1533.32	1772.52	2011.72
7 Days	995.04	298.51	1293.55	129.36	1422.91	279.07	1701.98	1981.05	2260.12

TIER THREE HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
Day	Routine Service hr/yr	Repair time 30%	Routine + Repair time	Non-Productive Time 10%	Total Servicing	Operational Maint. hrs	Ops Maint. + Total Servicing OpMt x 1	OpMt x 1	OpMt x 1
254 Stacker Machine									
5 Days	841.51	252.45	1093.96	109.40	1203.36	199.33	1402.69	1602.02	1801.35
6 Days	933.33	280.00	1213.33	121.33	1334.66	239.20	1573.86	1813.06	2052.26
7 Days	1025.14	307.54	1332.68	133.27	1465.95	279.07	1745.02	2024.09	2303.16
270 Stacker Machine									
5 Days	861.74	258.52	1120.26	112.03	1232.29	199.33	1431.62	1630.95	1830.28
6 Days	954.42	286.33	1240.75	124.08	1364.83	239.20	1604.03	1843.23	2082.43
7 Days	1047.12	314.14	1361.26	136.13	1497.39	279.07	1776.46	2055.53	2334.60
286 Stacker Machine									
5 Days	882.06	264.62	1146.68	114.67	1261.35	199.33	1460.68	1660.01	1859.34
6 Days	975.63	292.69	1268.32	126.83	1395.15	239.20	1634.35	1873.55	2112.75
7 Days	1069.19	320.76	1389.95	139.00	1528.95	279.07	1808.02	2087.09	2366.16
302 Stacker Machine									
5 Days	902.27	270.68	1172.95	117.30	1290.25	199.33	1489.58	1688.91	1888.24
6 Days	996.72	299.02	1295.74	129.57	1425.31	239.20	1664.51	1903.71	2142.91
7 Days	1091.15	327.35	1418.50	141.85	1560.35	279.07	1839.42	2118.49	2397.56

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 2

WORKLOAD ESTIMATE ADJUSTMENTS FOR DBCS/OSS FOR DIFFERENT STACKER CONFIGURATIONS

WORKLOAD ESTIMATE ADJUSTMENTS

FOR DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS-CD-001-M
Severity 1

(Summary for Attachment 3)

Number of Stackers	Time (min.) for Item 5	Time (min.) for Item 18	Total Time (min.)
110	11	5	86

Number of Stackers	Additional Time (min.) for Item 5	Additional Time (min.) for Item 18	Total Time (min.)
126	1	1	88
142	2	1	89
158	3	1	90
174	4	1	91
190	5	2	93
206	6	2	94
222	7	2	95
238	8	2	96
254	9	3	98
270	10	3	99
286	11	3	100
302	12	3	101

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

FOR DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS-CD-002-M
Severity 2

(Summary for Attachment 4)

Number of Stackers	Time (min.) for Item 5	Time (min.) for Item 20	Total Time (min.)
110	11	5	90

Number of Stackers	Additional Time (min.) for Item 5	Additional Time (min.) for Item 20	Total Time (min.)
126	1	1	92
142	2	1	93
158	3	1	94
174	4	1	95
190	5	2	97
206	6	2	98
222	7	2	99
238	8	2	100
254	9	3	102
270	10	3	103
286	11	3	104
302	12	3	105

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

FOR DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS-CD-003-M
Severity 3

(Summary for Attachment 5)

Number of Stackers	Time (min.) for Item 5	Time (min.) for Item 22	Total Time (min.)
110	11	5	94

Number of Stackers	Additional Time (min.) for Item 5	Additional Time (min.) for Item 22	Total Time (min.)
126	1	1	96
142	2	1	97
158	3	1	98
174	4	1	99
190	5	2	101
206	6	2	102
222	7	2	103
238	8	2	104
254	9	3	106
270	10	3	107
286	11	3	108
302	12	3	109

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

FOR DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS-CD-004-M
1,300,000 Threshold Pieces Fed

(Summary for Attachment 6)

Number of Stackers	Time (min.) for Item 4	Time (min.) For Item 12	Time (min.) for Item 13	Time (min.) for Item 14	Time (min.) for Item 20	Total Time (min.)
110	5	45	21	5	7	150

Number of Stackers	Additional Time (min.) for Item 4	Additional Time (min) For Item 12	Additional Time (min.) for Item 13	Additional Time (min.) for Item 14	Additional Time (min.) for Item 20	Total Time (min.)
126	1	5	3	1	1	161
142	1	10	6	1	2	170
158	1	15	9	1	3	179
174	1	20	12	1	4	188
190	2	25	15	2	5	199
206	2	30	18	2	6	208
222	2	35	21	2	7	217
238	2	40	24	2	8	226
254	3	45	27	3	9	237
270	3	50	30	3	10	246
286	3	55	33	3	11	255
302	3	60	36	*3	12	264

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS-CD-005-M
5,600,000 Threshold Pieces Fed

(Summary for Attachment 7)

Number of Stackers	Time (min.) for Item 4	Time (min.) for Item17	Time (min.) for Item 21	Time (min.) for Item 23	Total Time (min.)
110	21	70	17	21	223

Number of Stackers	Additional Time (min.) for Item 4	Additional Time (min.) for Item 17	Additional Time (min.) for Item 21	Additional Time (min.) for Item 23	Total Time (min.)
126	3	10	2	3	241
142	6	20	4	6	259
158	9	30	6	9	277
174	12	40	8	12	295
190	15	50	10	15	313
206	19	60	12	19	333
222	23	70	14	23	353
238	27	80	16	27	373
254	31	90	18	31	393
270	35	100	20	35	413
286	39	110	22	39	433
302	43	120	24	43	453

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS-CD-006-M
16,900,000 Threshold Pieces Fed

(Summary for Attachment 8)

Number of Stackers	Time (min.) for Item 4	Time (min.) for Item 5	Time (min.) for Item 6	Time (min.) for Item 9	Time (min.) for Item 19	Time (min.) for Item 26	Time (min.) for Item 30	Total Time (min.)
110	23	14	14	14	16	56	23	300

Number of Stackers	Additional Time (min.) for Item 4	Additional Time (min.) for Item 5	Additional Time (min.) for Item 6	Additional Time (min.) for Item 9	Additional Time (min.) for Item 19	Additional Time (min.) for Item 26	Additional Time (min.) for Item 30	Total Time (min.)
126	3	2	2	2	2	8	3	322
142	6	4	4	2	4	16	6	342
158	9	6	6	3	6	24	9	363
174	12	8	8	3	8	32	12	383
190	15	10	10	4	10	42	15	406
206	19	12	12	4	12	50	19	428
222	23	14	14	5	14	58	23	451
238	27	16	16	5	16	66	27	473
254	31	18	18	6	18	72	31	494
270	35	20	20	6	20	80	35	516
286	39	22	22	7	22	88	39	539
302	43	24	24	7	24	96	43	561

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

FOR DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS-CD-007-M

67,500,000 Threshold Pieces Fed

(Summary for Attachment 10)

Number of Stackers	Time (min.) for Item 6	Time (min.) for Item 16	Time (min.) for Item 17	Total Time (min.)
110	16	42	16	194

Number of Stackers	Additional Time (min.) for Item 6	Additional Time (min.) for Item 16	Additional Time (min.) for Item 17	Total Time (min.)
126	1	6	1	202
142	1	12	1	208
158	1	18	1	214
174	1	24	1	220
190	2	30	2	228
206	2	36	2	234
222	2	42	2	240
238	2	48	2	246
254	3	54	3	254
270	3	60	3	260
286	3	66	3	266
302	3	72	3	272

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 3

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-001-M

THRESHOLD SEVERITY 1

Time Total: 86 Minutes

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	ALL			
SYSTEM	2.	**Generate and print or view an End Of Run report.** Analyze data provided on this report to determine if any areas of machine are degrading or need attention.	2 MIN	10			
	3.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7			
TRANSPORT MODULE	4.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures.	1 MIN	ALL			
MACHINE	5.	**Open machine, search for mail.** 1. Open all machine doors. 2. Remove all machine panels, except for diverter plate cover assemblies (Wimpy panels) and stacker lower front panel assemblies. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	11 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks
FEEDER MODULE	6.	**Clean Feeder module.** 1. Clean/vacuum outside surfaces of Feeder Module. 2. Clean/vacuum internal areas of Feeder Module. 3. Clean/vacuum outside surfaces of jogger assembly. 4. Clean/vacuum underside surfaces of jogger assembly. Visually check for broken jogger springs and loose cabling while cleaning. 5. Search for mail pieces. 6. Remove any mail pieces found. 7. Follow local procedures for returning mail to operations for processing. 8. Clean/vacuum the following items: a. Two power supplies (exterior cage). b. Pickoff belts. c. Compensator levers. d. Stripper assemblies. e. All feeder belts (transport and drive). f. The P-SEN10 (vacuum) and P-LED10 (wipe with micro fiber glove or cloth).	3 MIN	7			
	7.	**Check Feeder.** Check Feeder as follows: 1. Check Teflon strip for wear. 2. Check rubber strippers for proper wear and installation. 3. Check pickoff belts for wear. 4. Replace and repair using work order as required. (Ref MMO-029-08) 5. Check for gap setting of 5 on P-SFC board.	1 MIN	9			
TRANSPORT MODULE	8.	**Clean Transport module.** 1. Clean/vacuum the transport area. 2. If transport cover gas springs are unable to hold cover in uppermost position, replace	2 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks
		defective gas spring, using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.					
ID TAG MODULE	9.	**Clean ID Tag module.** 1. Clean/vacuum the ID Tag module area. 2. If ID Tag cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			
IJP MODULE	10.	**Clean IJP module.** 1. Clean/vacuum the IJP area. 2. If IJP module cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			
DRYING LINE MODULE	11.	**Clean drying line module.** 1. Clean/vacuum the drying line area. 2. If drying line cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found.	3 MIN	7			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG		Threshold Severity: SEVERITY 1			

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 (<90k)	Weeks

5. Follow local procedures for returning mail to operations for processing.

READER MODULE 12. **Clean Reader module.** 3 MIN 7

1. Clean/vacuum the elevator doors in Reader module and check for loose, cracked, or damaged hinges. Notify supervisor if problem found. Refer to MMO-077-03.
2. Clean the letter transport area and interior of the Reader module, including the 5V power supply and the light barriers (wipe off with micro fiber glove or cloth).
3. Do a visual check for loose, deformed, split, or torn belts; misaligned photocells; broken, cut or frayed cables; burred, notched, or broken gate flags; bent or misaligned gate stops; compressed or missing rubber cushions when cleaning Reader module.
4. Search for mail pieces.
5. Remove any mail pieces found.
6. Follow local procedures for returning mail to operations for processing.

13. **Clean POSTNET bar code printer print head and guide plate (fence).** Clean POSTNET bar code printer print head and guide plate (fence) as follows: 8 MIN 7

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).

WARNING

Eye protection (goggles or face shield) must be worn when flushing away contaminants using make-up ink.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks

CAUTION

Use extreme care in charge tunnel area. Do not touch or bump charge tunnel.

1. Remove print head and protective sleeve from deck plate mount.
2. Remove print head from protective sleeve and place in holder aiming it into service tray.
3. Flush away contaminants using make-up ink. Use solution sparingly.
4. Dry all areas thoroughly including inside of charge tunnel.
5. Re-install print head in protective sleeve.
6. Re-install print head and protective sleeve in deck plate mount.
7. Lift fence off mounting studs.
8. Clean fence using a towel and cleaning solution or make-up ink.
9. Re-install fence on mounting studs.

14. **Check/replenish POSTNET bar code printer fluid bottles.** Check and replenish POSTNET bar code printer fluid bottles and drain bar code printer ink trap as follows: 2 MIN 7

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).

NOTE

Place the make-up fluid bottle on left.

NOTE

Do not use expired ink.

1. Open printer front door.
2. Remove and discard ink bottle if ink level is below 75% full.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks

CAUTION

When performing next step, do not pour leftover ink into replacement bottle. Contamination may occur.

3. Insert new bottle and replace cap.
4. Clean up any spilled or splattered ink.
5. Open printer gauge door and locate ink trap on rear of fluid pan.
6. Locate drain valve on bottom of ink trap.
7. Place paper towels underneath drain valve and press drain valve.
8. Remove paper towels.
9. Close gauge door.
10. Close printer front door.

READER MODULE (CONT.) 15. **Clean WFOV assembly.** 6 MIN 7

WARNING

Use extreme caution when working around the WFOV aperture. The edges of the aperture may become extremely sharp during use of the DBCS.

1. Following safety precautions, remove the Aperture/Illumination Assembly. Loosen the thumbscrew on top and pull straight up to remove. Check the aperture plates and sapphire glass for foreign objects.
2. Remove dust build-up on exterior of camera sapphire glass using dry cotton swabs. If adhesive build-up appears on the sapphire glass, use a swab or soft cloth wetted with an acceptable site approved cleaner.
3. If dust is found inside Aperture/Illumination Assembly refer to MS-212, Appendix A for detailed cleaning instructions.
4. Replace the Aperture/Illumination Assembly. Slide assembly straight down on the front of camera head assembly and tighten thumbscrew.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks
TAG SCANNER MODULE	16.	**Clean ICS-3 system (verifier) read head.** Clean ICS-3 system (verifier) read head as follows: 1. Clean ICS-3 read head. Recommended cleaner is Riptide, NSN 6850-01-394-0164. 2. Clean read head reflector. Recommended cleaner is Riptide.	1 MIN	7			
STACKER MODULE 1	17.	**Clean the stacker transport**. **WARNING** **Edges of the spiral stacking auger may be sharp. Use extreme caution when working near the spiral-stacking auger.** **WARNING** **Use extreme caution in the area of the pocket assembly wear plate. On some machines, the wear plate extends past the edge of its base and into the stacker area, exposing sharp edges**. 1. Clean/vacuum stacker transport area and pocket assemblies, including light barriers (use micro fiber glove or cloth). 2. Search for mail pieces. 3. Remove any mail pieces found. 4. Follow local procedures for returning mail to operations for processing.	5 MIN	7			
MACHINE	18.	**Close panels.** Close all machine doors and machine panels.	5 MIN	7			
CLEAN UP	19.	**Clean up.** Ensure tools and materials are removed from the area. **WARNING** **Be cautious when working around or on equipment when power has been applied.**	1 MIN	7			
SYSTEM	20.	**Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect	3 MIN	ALL			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks
		switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen.					
	21.	**Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation.	2 MIN	7			
MACHINE	22.	**Check basic machine functions.** 1. Turn Maintenance Mode switch on operator control panel to Maintenance Mode position. 2. Start machine. Verify when START switch is pressed, start-up warning indicators around sorter flash amber. At the same time, start-up warning horns sound. The horns sound for 5 seconds and go off, while warning indicators continue to flash for a total of 10 seconds. 3. Perform a visual and audible check of the machine to verify there are no problems with belt tracking, bearing noise, inappropriate bin gate activity, or any indications of impending or existing machine problems. 4. Proceed to the end stacker and press the Emergency Stop button. Verify that the machine stops. 5. If machine fails to stop, notify supervisor. Refer to MMO-002-03. 6. De-activate E-Stop and turn Maintenance Mode switch back to Normal on operator control panel.	4 MIN	9			
SYSTEM	23.	**Run BCS test deck (**NSN 5210-01-371-4906)**.** Load sortplan and run 300 piece test deck. **NOTE** Ensure BCS test deck contains 5 cards with CMD test labels (PS Form 3800) attached. Print or view an End of Run report and verify 5 CMD test labels detected, and 98% or higher MAR acceptance rate. If 98% or higher MAR acceptance rate is not achieved, refer to supervisor for corrective action.	2 MIN	9			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 1

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 (<90k)	Weeks
	24.	**Run ID Tag test deck** (NSN 3915-04-000-6902) **test procedure**:	5 MIN	9			
		1. Clear all mail from stacker.					
		2. Select (Mail Processing>Load Run Information Header) from Main Menu Select.					
		3. Enter 891 for Operation Number.					
		4. Press Return through all other entries.					
		5. Select sort plan icstst1.ebf.					
		6. Start mail processing and run test deck.					
		The test deck should sort 10 pieces to pocket 1, 30 pieces to pockets 2, 3, 4, 5, and 6, and 40 pieces to pocket 7.					
	25.	**IJP test.** From Main Menu, select Maintenance, then System Tests, and then Ink Jet Printer Test.	3 MIN	10			
		NOTE Right edge of letter to left framing bar should be 4 1/8" to 4 1/4". Bottom of bars should be even and 1/4" ± 1/16" above bottom edge.					
		1. Spray five blank cards (NSN 5220-03-000-5975) with an A-field bar code.					
		2. Check the bar codes for location and quality.					
		3. Make adjustments if needed.					
CLEAN UP	26.	**Clean up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor.	2 MIN	All			

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 4

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-002-M

THRESHOLD SEVERITY 2

Time Total: 90 Minutes

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	ALL			
SYSTEM	2.	**Generate and print or view an End Of Run report.** Analyze data provided on this report to determine if any areas of machine are degrading or need attention.	2 MIN	10			
	3.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7			
TRANSPORT MODULE	4.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures.	1 MIN	ALL			
MACHINE	5.	**Open machine, search for mail.** 1. Open all machine doors. 2. Remove all machine panels except for diverter plate cover assemblies (Wimpy panels) and stacker lower front panel assemblies. 3. Search for mail pieces.	11 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks
		4. Remove any mail pieces found.					
		5. Follow local procedures for returning mail to operations for processing.					
FEEDER MODULE	6.	**Clean Feeder module.**	3 MIN	7			
		1. Clean/vacuum outside surfaces of Feeder module.					
		2. Clean/vacuum internal areas of Feeder module.					
		3. Clean/vacuum the outside surfaces of the jogger assembly.					
		4. Clean/vacuum underside surfaces of jogger assembly. Visually check for broken jogger springs and loose cabling while cleaning.					
		5. Search for mail pieces.					
		6. Remove any mail pieces found.					
		7. Follow local procedures for returning mail to operations for processing.					
		8. Clean/vacuum the following items:					
		a. Two power supplies (exterior cage).					
		b. Pickoff belts.					
		c. Compensator levers.					
		d. Stripper assemblies.					
		e. All feeder belts (transport and drive).					
		f. The P-SEN10 (vacuum) and P-LED10 (wipe with micro fiber glove or cloth).					
	7.	**Check Feeder.** Check feeder as follows:	1 MIN	9			
		1. Check Teflon strip for wear.					
		2. Check rubber strippers for proper wear and installation.					
		3. Check pickoff belts for wear.					
		4. Replace and repair using work order as required. (Ref MMO-029-08)					
		5. Check for gap setting of 5 on P-SFC board.					

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks
MONITOR, KEYBOARD, PRINTER	8.	**Clean system.** Clean exterior of the monitor, keyboard, printer, and printer stand.	1 MIN	7			
TRANSPORT MODULE	9.	**Clean Transport module.** 1. Clean/vacuum the transport area. 2. If transport cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			
ID TAG MODULE	10.	**Clean ID Tag module.** 1. Clean/vacuum the ID Tag module area. 2. If ID Tag cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			
IJP MODULE	11.	**Clean IJP module.** 1. Clean/vacuum the IJP area. 2. If IJP module cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks
DRYING LINE MODULE	12.	**Clean drying line module.** 1. Clean/vacuum the drying line area. 2. If drying line cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	3 MIN	7			
READER MODULE	13.	**Clean Reader module.** 1. Clean/vacuum the elevator doors in Reader module and check for loose, cracked, or damaged hinges. Notify supervisor if problem found. Refer to MMO-077-03. 2. Clean the letter transport area and interior of the Reader module, including the 5V power supply and the light barriers (wipe off with micro fiber gloves or cloth). 3. Do a visual check for loose, deformed, split, or torn belts; misaligned photocells; broken, cut, or frayed cables; burred, notched, or broken gate flags; bent or misaligned gate stops; compressed or missing rubber cushions when cleaning Reader module. 4. Search for mail pieces. 5. Remove any mail pieces found. 6. Follow local procedures for returning mail to operations for processing.	3 MIN	7			
SYSTEM COMPUTER & WFOV	14.	**Clean/vacuum exterior.** Clean exterior of the system computer and WFOV processor.	1 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks
		15. **Clean POSTNET bar code printer print head and guide plate (fence).** Clean POSTNET bar code printer print head and guide plate (fence) as follows: **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).** **WARNING** **Eye protection (goggles or face shield) must be worn when flushing away contaminants using make-up ink.** **CAUTION** **Use extreme care in charge tunnel area. Do not touch or bump charge tunnel.** 1. Remove print head and protective sleeve from deck plate mount. 2. Remove print head from its protective sleeve and place in holder aiming it into service tray. 3. Flush away contaminants using make-up ink. Use solution sparingly. 4. Dry all areas thoroughly including inside of charge tunnel. 5. Re-install print head in its protective sleeve. 6. Re-install print head and protective sleeve in deck plate mount. 7. Lift fence off its mounting studs. 8. Clean fence using a towel and cleaning solution or make-up ink. 9. Re-install fence on mounting studs.	8 MIN	7			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG					Threshold Severity SEVERITY 2

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 (90-180k)	Weeks
	16.	**Check/replenish POSTNET bar code printer fluid bottles.** Check and replenish POSTNET bar code printer fluid bottles and drain bar code printer ink trap as follows:	2 MIN	7			

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).

NOTE

Place the make-up fluid bottle on left.

NOTE

Do not use expired ink.

1. Open printer front door.
2. Remove and discard ink bottle if ink level is below 75% full.

CAUTION

When performing next step, do not pour leftover ink into replacement bottle. Contamination may occur.

3. Insert new bottle and replace cap.
4. Clean up any spilled or splattered ink.
5. Open printer gauge door and locate ink trap on rear of fluid pan.
6. Locate drain valve on bottom of ink trap.
7. Place paper towels underneath drain valve and press drain valve.
8. Remove paper towels.
9. Close gauge door.
10. Close printer front door.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks
READER MODULE (CONT.)	17.	**Clean WFOV assembly.**	6 MIN	7			

WARNING

Use extreme caution when working around the WFOV aperture. The edges of the aperture may become extremely sharp during use of the DBCS.

1. Following safety precautions, remove the Aperture/Illumination Assembly. Loosen the thumbscrew on top and pull straight up to remove. Check the aperture plates and sapphire glass for foreign objects.
2. Remove dust build-up on exterior of camera sapphire glass using dry cotton swabs. If adhesive build-up appears on the sapphire glass, use a swab or soft cloth wetted with an acceptable site approved cleaner.
3. If dust is found inside Aperture/Illumination Assembly, refer to MS-212, Appendix A for detailed cleaning instructions.
4. Replace Aperture/Illumination Assembly. Slide assembly straight down on front of camera head assembly and tighten thumbscrew.

TAG SCANNER MODULE	18.	**Clean ICS-3 system (verifier) read head.** Clean ICS-3 system (verifier) read head as follows:	1 MIN	7			

1. Clean ICS-3 read head. Recommended cleaner is Riptide, NSN 6850-01-394-0164.
2. Clean read head reflector. Recommended cleaner is Riptide.

STACKER MODULE 1	19.	**Clean the stacker transport**.	5 MIN	7			

WARNING

Edges of the spiral stacking auger may be sharp. Use extreme caution when working near the spiral-stacking auger.

MAINTENANCE MANAGEMENT ORDER

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U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks

WARNING

Use extreme caution in the area of the pocket assembly wear plate. On some machines, the wear plate extends past the edge of its base and into the stacker area, exposing sharp edges.

1. Clean/vacuum stacker transport area, interior, and pocket assemblies, including light barriers (wipe off with micro fiber glove or cloth).
2. Search for mail pieces.
3. Remove any mail pieces.
4. Follow local procedures for returning mail to operations for processing.

MACHINE — 20. **Close panels.** Close all machine doors and machine panels. — 5 MIN — 7

CLEAN UP — 21. **Clean up.** Ensure tools and materials are removed from the area. — 1 MIN — 7

WARNING

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

SYSTEM — 22. **Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen. — 3 MIN — ALL

23. **Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation. — 2 MIN — 7

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 2

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 (90-180k)	Weeks
MACHINE	24.	**Check basic machine functions.** 1. Turn Maintenance Mode switch on operator control panel to Maintenance Mode position. 2. Start machine. Verify when START switch is pressed, start-up warning indicators around sorter flash amber. At the same time, start-up warning horns sound. The horns sound for 5 seconds and go off, while warning indicators continue to flash for a total of 10 seconds. 3. Perform a visual and audible check of the machine to verify there are no problems with belt tracking, bearing noise, inappropriate bin gate activity, or any indications of impending or existing machine problems. 4. Proceed to the end stacker and press the Emergency Stop Button. Verify that the machine stops. 5. If machine fails to stop, notify supervisor. Refer to MMO-002-03. 6. De-activate E-Stop and turn Maintenance Mode switch back to Normal on operator control panel.	4 MIN	9			
WFOV	25.	**WFOV AUTO Calibration. From Camera Maintenance Screen:** (For detailed instructions refer to MS-212.) 1. Ensure system is Off Line and WFOV Main Screen is displayed. If system is not in OFF Line mode, press F3. 2. With WFOV Screen displayed click the System Analysis button or press F5. 3. In WFOV System Analysis screen, click the Camera Maintenance button or press F5. 4. Place WFOV illumination test card in front of read head assembly, ensuring the card bottom edge contacts the transport deck along the full length of the edge. 5. In the WFOV Camera Maintenance screen,	2 MIN	9			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG					Threshold Severity SEVERITY 2

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 (90-180k)	Weeks

click on the Tools menu.

6. From Tools menu, select Auto Calibration.
7. The Auto Calibration process takes approximately 1.5 minutes. From the File menu, select Exit**.**
8. Click Close or press F12 in the System Analysis screen.
9. Click Go On-Line or press F4 in the WFOV Main Screen.
10. Remove the illumination card.

SYSTEM

26. **Run BCS test deck** (NSN 5210-01-371-4906**).** Load sortplan and run 300 piece test deck. — 2 MIN — 9

NOTE

Ensure BCS test deck contains 5 cards with CMD test labels (PS Form 3800) attached.

Print or view an End of Run report and verify 5 CMD test labels detected, and 98% or higher MAR acceptance rate. If 98% or higher MAR acceptance rate is not achieved, refer to supervisor for corrective action.

27. **Run ID Tag test deck** (NSN 3915-04-000-6902) **test procedure**: — 5 MIN — 9

1. Clear all mail from stacker.
2. Select Mail Processing>Load Run Information Header from Main Menu Select.
3. Enter 891 for Operation Number.
4. Press Return through all other entries.
5. Select sort plan icstst1.ebf.
6. Start mail processing and run test deck.

The test deck should sort 10 pieces to pocket 1, 30 pieces to pockets 2, 3, 4, 5, and 6, and 40 pieces to pocket 7.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	2	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Threshold Severity SEVERITY 2	

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 (90-180k)	Weeks
	28.	**IJP test.** From Main Menu, select Maintenance, then System Tests, and then Ink Jet Printer Test.	3 MIN	10			
		NOTE Right edge of letter to left framing bar should be 4 1/8" to 4 1/4". Bottom of bars should be even and 1/4" ± 1/16" above bottom edge. 1. Spray five blank cards (NSN 5220-03-000-5975) with an A-field bar code. 2. Check the bar codes for location and quality. 3. Make adjustments if needed.					
CLEAN UP	29.	**Clean up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor.	2 MIN	All			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 5

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-003-M

THRESHOLD SEVERITY 3

Time Total: 94 Minutes

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 3

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 (>180k)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	ALL			
SYSTEM	2.	**Generate and print or view an End Of Run report.** Analyze data provided on this report to determine if any areas of machine are degrading or need attention.	2 MIN	10			
IJP MODULE	3.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7			
TRANSPORT MODULE	4.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures.	1 MIN	ALL			
MACHINE	5.	**Open machine, search for mail.** 1. Open all machine doors. 2. Remove all machine panels, except for diverter plate cover assemblies (Wimpy panels) and stacker lower front panel assemblies. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to	11 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG				Threshold Severity: SEVERITY 3	

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 (>180k)	Weeks
		operations for processing.					
FEEDER MODULE	6.	**Clean Feeder module.** 1. Clean/vacuum outside surfaces of Feeder module. 2. Clean/vacuum internal areas of the Feeder module. 3. Clean/vacuum the outside surfaces of the jogger assembly. 4. Clean/vacuum underside surfaces of jogger assembly. Visually check for broken jogger springs and loose cabling while cleaning. 5. Search for mail pieces. 6. Remove any mail pieces found. 7. Follow local procedures for returning mail to operations for processing. 8. Clean the following items: a. Two power supplies (exterior cage). b. Pickoff belts. c. Compensator levers. d. Stripper assemblies. e. All feeder belts (transport and drive). f. The P-SEN10 (vacuum) and P-LED10 (wipe with micro fiber glove or cloth).	3 MIN	7			
	7.	**Check Feeder.** Check feeder as follows: 1. Check Teflon strip for wear. 2. Check rubber strippers for proper wear and installation. 3. Check pickoff belts for wear. 4. Replace and repair using work order as required. (Ref MMO-029-08) 5. Check for gap setting of 5 on P-SFC board.	1 MIN	9			
MONITOR, KEYBOARD, PRINTER	8.	**Clean system.** Clean exterior of the monitor, keyboard, printer, and printer stand.	1 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 3

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 (>180k)	Weeks
TRANSPORT MODULE	9.	**Clean Transport module.** 1. Clean/vacuum the transport area. 2. If transport cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			
ID TAG READER MODULE	10.	**Clean ID Tag module.** 1. Clean/vacuum the ID Tag module area. 2. If ID Tag cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			
IJP MODULE	11.	**Clean IJP module.** 1. Clean/vacuum the IJP area. 2. If IJP module cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time. 3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.	2 MIN	7			
DRYING LINE MODULE	12.	**Clean drying line module.** 1. Clean/vacuum the drying line area. 2. If drying line cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for additional time.	3 MIN	7			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 3

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 (>180k)	Weeks
		3. Search for mail pieces. 4. Remove any mail pieces found. 5. Follow local procedures for returning mail to operations for processing.					
	13.	**Clean ICS-3 system (verifier) electronic enclosure.** Clean interior of ICS-3 electronic enclosure and electronic enclosure filters.	1 MIN	7			
READER MODULE	14.	**Clean Reader module.** 1. Clean/vacuum the elevator doors in Reader module and check for loose, cracked, or damaged hinges. Notify supervisor if problem found. Refer to MMO-077-03. 2. Clean letter transport area and interior of Reader module, including 5V power supply and light barriers (wipe off with micro fiber glove or cloth). 3. Do a visual check for worn, deformed, split, or torn belts; misaligned photocells; broken, cut or frayed cables; burred, notched, or broken gate flags; bent or misaligned gate stops; compressed or missing rubber cushions when cleaning Reader module. 4. Search for mail pieces. 5. Remove any mail pieces found. 6. Follow local procedures for returning mail to operations for processing.	3 MIN	7			
SYSTEM COMPUTER & WFOV	15.	**Clean exterior.** Clean exterior of the system computer and WFOV processor.	1 MIN	7			
	16.	**Clean POSTNET bar code printer print head and guide plate (fence).** Clean POSTNET bar code printer print head and guide plate (fence) as follows: **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).**	8 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Threshold Severity SEVERITY 3	

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 (>180k)	Weeks

WARNING

Eye protection (goggles or face shield) must be worn when flushing away contaminants using make-up ink.

CAUTION

Use extreme care in charge tunnel area. Do not touch or bump charge tunnel.

1. Remove print head and protective sleeve from deck plate mount.
2. Remove print head from protective sleeve and place in holder aiming it into service tray.
3. Flush away contaminants using make-up ink. Use solution sparingly.
4. Dry all areas thoroughly including inside of charge tunnel.
5. Re-install print head in protective sleeve.
6. Re-install print head and protective sleeve in deck plate mount.
7. Lift fence off mounting studs.
8. Clean fence using a towel and cleaning solution or make-up ink.
9. Re-install fence on mounting studs.

17. **Check/replenish POSTNET bar code printer fluid bottles.** Check and replenish POSTNET bar code printer fluid bottles and drain bar code printer ink trap as follows: — 2 MIN — 7

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 3

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 (>180k)	Weeks

NOTE

Place the make-up fluid bottle on left.

NOTE

Do not use expired ink.

1. Open printer front door.
2. Remove and discard ink bottle if ink level is below 75% full.

CAUTION

When performing next step, do not pour leftover ink into replacement bottle. Contamination may occur.

3. Insert new bottle and replace cap.
4. Clean up any spilled or splattered ink.
5. Open printer gauge door and locate ink trap on rear of fluid pan.
6. Locate drain valve on bottom of ink trap.
7. Place paper towels underneath drain valve and press drain valve.
8. Remove paper towels.
9. Close gauge door.
10. Close printer front door.

READER MODULE	18.	**Clean WFOV assembly.**	6 MIN	7

WARNING

Use extreme caution when working around the WFOV aperture. The edges of the aperture may become extremely sharp during use of the DBCS.

1. Following safety precautions, remove the Aperture/Illumination Assembly. Loosen the thumbscrew on top and pull straight up to remove. Check the aperture plates and sapphire glass for foreign objects.
2. Remove dust build-up on exterior of camera

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 3

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 (>180k)	Weeks

sapphire glass using dry cotton swabs. If adhesive build-up appears on the sapphire glass, use a swab or soft cloth wetted with an acceptable site approved cleaner.

3. If dust is found inside Aperture/Illumination Assembly, refer to MS-212, Appendix A for detailed cleaning instructions.
4. Replace Aperture/Illumination Assembly. Slide assembly straight down on front of camera head assy and tighten thumbscrew.

TAG SCANNER MODULE — 19. **Clean ICS-3 system (verifier) read head.** Clean ICS-3 system (verifier) read head as follows: — 1 MIN — 7

1. Clean ICS-3 read head. Recommended cleaner is Riptide, NSN 6850-01-394-0164.
2. Clean read head reflector. Recommended cleaner is Riptide.

STACKER MODULE 1 — 20. **Clean the stacker transport**. — 5 MIN — 7

WARNING

Edges of the spiral stacking auger may be sharp. Use extreme caution when working near the spiral stacking auger.

WARNING

Use extreme caution in the area of the pocket assembly wear plate. On some machines, the wear plate extends past the edge of its base and into the stacker area, exposing sharp edges.

1. Clean/vacuum stacker transport area, interior, and pocket assemblies, including light barriers (wipe off with micro fiber glove or cloth).
2. Search for mail pieces.
3. Remove any mail pieces.
4. Follow local procedures for returning mail to operations for processing.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 3

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 (>180k)	Weeks
LABEL PRINTER	21.	**Check label printers.** 1. Clean/vacuum interior and exterior of label printers, located on first and eighth stacker modules. 2. Ensure label printers are loaded. Load label printer by: a. Insert the label stock between the guides into the back of the label printer. b. Place the wide end of the label stock into the label printer first, face down. c. Push the print head lever back. d. Push the label stock through until it comes out the front of the label printer.	1 MIN	7			
MACHINE	22.	**Close panels.** Close all machine doors and machine panels.	5 MIN	7			
CLEAN UP	23.	**Clean up.** Ensure tools and materials are removed from the area.	1 MIN	7			
		WARNING **Be cautious when working around or on equipment when power has been applied.**					
SYSTEM	24.	**Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen.	3 MIN	ALL			
	25.	**Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation.	2 MIN	7			
LABEL PRINTER	26.	**Check label printer.** On label printer, press LINE FEED button one time. The label printer	2 MIN	7			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG				Threshold Severity: SEVERITY 3	

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 (>180k)	Weeks

will print out a test label and automatically align the label at the perforation. Verify test label has good quality print (not blurred) and is clear readable print to the human eye.

MACHINE 27. **Check basic machine functions.** 4 MIN 9

1. Turn Maintenance Mode switch on operator control panel to Maintenance Mode position.
2. Start machine. Verify when START switch is pressed, start-up warning indicators around sorter flash amber. At the same time, start-up warning horns sound. The horns sound for 5 seconds and go off, while warning indicators continue to flash for a total of 10 seconds.
3. Perform a visual and audible check of the machine to verify there are no problems with belt tracking, bearing noise, inappropriate bin gate activity, or any indications of impending or existing machine problems.
4. Proceed to the end stacker and press the Emergency Stop Button. Verify that the machine stops.
5. If machine fails to stop, notify supervisor. Refer to MMO-002-03.
6. De-activate E-Stop and turn Maintenance Mode switch back to Normal on operator control panel.

WFOV 28. **WFOV AUTO Calibration. From Camera Maintenance Screen:** (For detailed instructions refer to MS-212**.**) 2 MIN 9

1. Make sure system is Off Line and WFOV Main Screen is displayed. If system is not in OFF Line mode, press F3.
2. With WFOV Screen displayed click the System Analysis button or press F5.
3. In WFOV System Analysis screen, click the Camera Maintenance button or press F5.
4. Place WFOV illumination test card in front of read head assembly, ensuring the card bottom edge contacts the transport deck

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: SEVERITY 3

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 (>180k)	Weeks

along the full length of the edge.

5. In the WFOV Camera Maintenance screen, click on the Tools menu.
6. From Tools menu, select Auto Calibration.
7. The Auto Calibration process takes approximately 1.5 minutes. From the File menu, select Exit**.**
8. Click Close or press F12 in the System Analysis screen.
9. Click Go On-Line or press F4 in the WFOV Main Screen.
10. Remove the illumination card.

SYSTEM

29. **Run BCS test deck** (NSN 5210-01-371-4906)**.** Load sortplan and run 300 piece test deck. — 2 MIN — 9

NOTE

Ensure BCS test deck contains 5 cards with CMD test labels (PS Form 3800) attached.

Print or view an End of Run report and verify 5 CMD test labels detected, and 98% or higher MAR acceptance rate. If 98% or higher MAR acceptance rate is not achieved, refer to supervisor for corrective action.

30. **Run ID Tag test deck** (NSN 3915-04-000-6902) **test procedure**: — 5 MIN — 9

1. Clear all mail from stacker.
2. Select Mail Processing>Load Run Information Header from Main Menu Select.
3. Enter 891 for Operation Number.
4. Press Return through all other entries.
5. Select sort plan icstst1.ebf.
6. Start mail processing and run test deck.

The test deck should sort 10 pieces to pocket 1, 30 pieces to pockets 2, 3, 4, 5, and 6, and 40 pieces to pocket 7.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	3	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG		Threshold Severity: SEVERITY 3			

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 (>180k)	Weeks
	31.	**IJP test.** From Main Menu, select Maintenance, then System Tests, and then Ink Jet Printer Test.	3 MIN	10			
		NOTE Right edge of letter to left framing bar should be 4 1/8" to 4 1/4". Bottom of bars should be even and 1/4" ± 1/16" above bottom edge. 1. Spray five blank cards (NSN 5220-03-000-5975) with an A-field bar code. 2. Check the bar codes for location and quality. 3. Make adjustments if needed.					
CLEAN UP	32.	**Clean up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor.	2 MIN	All			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 6

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-004-M

PRODUCTION THRESHOLD OF
1,300,000

Time Total: 150 Minutes

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	4	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: NONE

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 (1,300,000)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	ALL			
	2.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shut down of IJP.	4 MIN	7			
TRANSPORT MODULE	3.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures.	1 MIN	ALL			
MACHINE	4.	**Open panels.** Open/remove all machine panels and doors, except for diverter plate cover assemblies (Wimpy panels) and stacker lower front panel assemblies.	5 MIN	7			
FEED TABLE	5.	**Check for wear.** 1. Remove bottom feeder panel (clean). Check transport belt for splits, tears, and deformity. Check drive chain for stretch, sprockets for broken teeth and sprocket teeth wear. If chain needs lubrication, refer to DBCS Maintenance Handbook at completion of this route. 2. Check transport blade, transport blade mounting bracket, and sliding bearing block	5 MIN	9			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	4	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: NONE

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 (1,300,000)	Weeks

for loose bolts.

3. Check transport blade assembly for bearing wear. Ensure transport assembly moves smoothly along guide rod.
4. Check pawl for wear.

WARNING

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

TRANSPORT MODULE

6. **Check Transport module.** — 2 MIN — 7

1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace worn, deformed, split, or torn belts. Refer to Visual Resource Placard.
2. Check all rollers (drive/idler) for proper adjustment and indications of wear. Replace and/or adjust rollers as required. Refer to Visual Resource Placard.
3. Clean any dirt or glue buildup from rollers using cleaning solvent.
4. Write work orders as needed for replacement of belts, rollers, etc.

WARNING

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

ID TAG MODULE

7. **Check ID Tag module.** — 2 MIN — 9

1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace worn, deformed, split, or torn belts. Refer to Visual Resource Placard.
2. Check all rollers (drive/idler) for proper adjustment and indications of wear. Replace and/or adjust rollers as required. Refer to Visual Resource Placard.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	4	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Threshold Severity NONE	

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 (1,300,000)	Weeks
		3. Clean any dirt or glue buildup from rollers using cleaning solvent. 4. Write work orders as needed for replacement of belts, rollers, etc. **WARNING** **Discard solvent soaked materials according to local procedures to prevent pollution or spontaneous combustion.**					
IJP MODULE	8.	**Check IJP module.** 1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace worn, deformed, split, or torn belts. Refer to Visual Resource Placard. 2. Check all rollers (drive/idler) for proper adjustment and indications of wear. Replace and/or adjust rollers as required. Refer to Visual Resource Placard. 3. Clean any dirt or glue buildup from rollers using cleaning solvent. 4. Write work orders as needed for replacement of belts, rollers, etc. **WARNING** **Discard solvent soaked materials according to local procedures to prevent pollution or spontaneous combustion.**	2 MIN	9			
DRYING LINE MODULE	9.	**Check drying line module.** 1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace worn, deformed, split, or torn belts. Refer to Visual Resource Placard. 2. Check all rollers (drive/idler) for proper adjustment and indications of wear. Replace and/or adjust rollers as required. Refer to Visual Resource Placard. 3. Clean any dirt or glue buildup from rollers using cleaning solvent.	2 MIN	9			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	4	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: NONE

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 (1,300,000)	Weeks

4. Write work orders as needed for replacement of belts, rollers, etc.

WARNING

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

READER MODULE — 10. **Check Reader module.** — 4 MIN — 9

1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace worn, deformed, split, or torn belts. Check for broken and burred gate flags. Refer to Visual Resource Placard.
2. Check all rollers (drive and idler) for proper adjustment and indications of wear. Replace and adjust rollers as required. Refer to Visual Resource Placard.
3. Clean any dirt or glue buildup from rollers.
4. Write work orders as needed for replacement of gates, belts, rollers, etc.

11. **Clean motor power unit filter.** Remove, clean, and replace filter on motors power unit. — 1 MIN — 7

STACKER MODULES 1 - 7 — 12. **Clean the Stacker Transport**. — 45 MIN — 7

WARNING

The edges of the spiral stacking auger may be sharp. Use extreme caution when working near the spiral stacking auger.

WARNING

Use extreme caution in the area of the pocket assembly wear plate. On some machines, the wear plate extends past the edge of its base and into the stacker area, exposing sharp edges.

1. Clean/vacuum stacker transport area, interior, and pocket assemblies including light

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	4	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Threshold Severity NONE	

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 (1,300,000)	Weeks

barriers (wipe off with micro fiber glove or cloth).

2. Search for mail pieces.
3. Remove any mail pieces.
4. Follow local procedures for returning mail to operations for processing.

STACKER MODULES 1 - 7

13. **Check Stacker modules.** — 21 MIN — 7

1. Check all belts (drive and letter transport) for proper adjustment. Replace worn, deformed, split, or torn belts. Refer to Visual Resource Placard.
2. Check gate flags for cuts, nicks, and burrs.
3. Check all rollers (drive and idler) for proper adjustment and indications of wear. Refer to Visual Resource placard.
4. Write work orders for replacement of gates, belts, rollers, etc.

MACHINE

14. **Close panels.** Close all machine doors and machine panels. — 5 MIN — 7

CLEAN UP

15. **Clean up.** Remove tools and materials from the DBCS area. — 1 MIN — ALL

WARNING

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

MACHINE

16. **Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen. — 3 MIN — ALL

17. **Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation. — 2 MIN — 7

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	4	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Threshold Severity: NONE

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 (1,300,000)	Weeks
FEEDER	18.	**Check Feeder alignment.**	30 MIN	7			
		WARNING **All mechanical adjustments that do not require power to machine in order to perform the adjustments will be done with the machine locked out.**					
		Check using latest Feeder Adjustment and Performance Alignment Guide (FAAPA). Refer to MMO-029-08. Make adjustments as required.					
	19.	**Run WFOV test deck** (NSN 3915-06-000-8292)**.** Load sortplan and run 400 piece test deck.	3 MIN	9			
		Print or view an End of Run report and verify all pieces read. If any problems are found, notify supervisor.					
	20.	**Check bin switches.** Check all Bin 3/4 and Bin Full switches and stacker blades.	7 MIN	7			
		1. Verify a flashing bin light and audible chime at ¾ full and a constant bin light and audible chime at 100% full.					
		2. Verify stacker rides smoothly on stacker rod.					
CLEAN UP	21.	**Clean up.** Ensure all tools, lubricants; rags, etc. are removed from the work area. Report all deficiencies to supervisor.	2 MIN	All			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	4	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Threshold Severity NONE	

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 (1,300,000)	Weeks

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MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 7

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-005-M

PRODUCTION THRESHOLD OF
5,600,000

Time Total: 223 Minutes

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (5,600,000)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	ALL			
IJP MODULE	2.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7			
TRANSPORT MODULE	3.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures.	1 MIN	ALL			
MACHINE	4.	**Open panels.** Open all machine doors. Open or remove all machine panels. This includes diverter plate cover assemblies (Wimpy panels).	21 MIN	7			
FEEDER MODULE	5.	**Clean Feeder module.** Clean/vacuum all plates, covers, doors, framework, etc., including the vibrator assembly. Verify vibrator motor power cord is not rubbing against frame.	3 MIN	7			
TRANSPORT MODULE	6.	**Clean Transport module.** 1. Remove and clean the two filters located in the knob of the air compressor. 2. Re-install the two filters.	5 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (5,600,000)	Weeks

3. Replace the filters if necessary.
4. Clean all plates, covers, doors, framework, etc.

ID TAG READER MODULE	7.	**Clean ID Tag module.** Clean/vacuum all plates, covers, framework, top of module, etc.	2 MIN	7
IJP MODULE	8.	**Clean IJP module.** Clean/vacuum all plates, covers, framework, top of module, etc.	1 MIN	7
DRYING LINE MODULE	9.	**Clean drying line module.** Clean/vacuum all plates, covers, framework, top of module, etc.	1 MIN	7
IJP	10.	**Replace vacuum filter.** Replace vacuum filter, NSN 4330-01-000-2034, as follows**:**	7 MIN	7

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheet (MSDS).

NOTE

Refer to Cheshire Excel Series PC-70/PI owner's manual for 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.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG					Frequency NONE

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 (5,600, 000)	Weeks

7. Reconnect black rubber hose to output side of vacuum filter.

8. Close gauge door in front of fluid compartment.

11. **Replace ink and make-up replenishment in-line filters.** Replace ink and make-up replenishment in-line filters, NSN 4330-03-000-6410, as follows: 7 MIN 7

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheet (MSDS).

NOTE

Refer to Cheshire Excel Series PC-70/PI owner's manual for illustrations related to replacing in-line filters.

1. Replace make-up ink filter as follows:
   a. Place absorbent towel on top of replenishment bottles.
   b. Remove clamps at both ends of filter.
   c. Remove make-up ink tubes from both ends of filter.
   d. Connect make-up ink tubes to each end of replacement filter.
   e. Replace clamps on each end of filter.
2. Replace ink filter as follows:
   a. Remove clamps at both ends of filter.
   b. Remove ink tubes from both ends of filter.
   c. Connect ink tubes to each end of replacement filter.
   d. Replace clamps on each end of filter.
   e. Dispose of towel placed on replenishment bottles.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency NONE	

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 (5,600,000)	Weeks

f. Wipe up any spilled ink or make-up ink and dispose of towel.

12. **Clean bar code printer cap and stem assembly stainless steel vacuum tube.** 10 MIN 10

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheet (MSDS).

Clean bar code printer cap and stem assembly stainless steel vacuum tube as follows:

1. Locate stainless steel vacuum tube mounted in cap and stem assembly at left-hand top of ink module.
2. Remove clear plastic vacuum tube from stainless vacuum tube.
3. Using long nose pliers, gently work stainless steel tube back and forth, and pull it out of cap and stem assembly.
4. Using cotton swab and Videojet cleaning solution, clean ink build up from interior of stainless steel tube.
5. Dry tube.
6. Using long nose pliers, gently work stainless steel tube back and forth into cap and stem assembly.
7. Attach clear plastic tube to stainless steel vacuum tube.

13. **Clean bar code printer cabinet.** Clean interior and exterior of bar code printer cabinet as follows: 5 MIN 7

1. Wipe interior and exterior of printer cabinet using lint free rags and locally approved cleaning agent.
2. Close printer door.
3. Dispose of rags.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (5,600, 000)	Weeks
	14.	**Clean light barriers adjacent to bar code printer print head.** Clean light barriers adjacent to bar code printer print head by wiping away ink buildup from light barrier lens using a cotton swab and Videojet make-up or cleaning solution.	3 MIN	7			
READER MODULE	15.	**Clean Reader module.** Clean/vacuum all plates, covers, doors, framework, top of module, etc.	10 MIN	7			
SYSTEM COMPUTER & WFOV	16.	**Clean/vacuum system computer and WFOV.** Remove covers from system computer and WFOV processor and clean. Re-install covers.	15 MIN	9			
STACKER MODULE 1 - 7	17.	**Clean stacker module.** Clean/vacuum all plates, covers, doors, framework, top of stacker modules, stacker display panels back and front side, etc. Do a visual check of wiring harnesses, cabling, and connectors for wear, loose connections, etc., while cleaning.	70 MIN	7			
		WARNING **Be cautious when working around or on equipment when power has been applied.**					
MACHINE	18.	**Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen.	3 MIN	ALL			
	19.	**Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation.	2 MIN	7			
	20.	**Enter date of filter change in POSTNET bar code printer.** Enter date of filter change in POSTNET bar code printer as follows:	2 MIN	10			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency NONE	

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 (5,600,000)	Weeks

1. Press PRINT key.
2. Press F5 to enter 01 SERVICE menu.
3. Press F2 to enter 01 LOG menu.
4. Press F3 to enter 01 MAINT menu.
5. Press F2 to enter INK FILTER data display.
6. Enter date filter was changed.

21. **Check E-Stops.** Check all system interlocks and emergency stop switches. Requires two people. (Time is doubled for staffing purposes.) Verify light conditions and warning sounds for each E-stop and interlock. 17 MIN 9

NOTE

One person may be a level 6.

NOTE

Check only one emergency stop switch with machine running. Check all other emergency stop switches and interlocks with machine stopped.

1. Start the machine. Verify that when START switch is pressed, the start-up warning indicators around the sorter flash amber. At the same time, the start-up warning horns sound. The horns sound for 5 seconds and go off, while the 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 the 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.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (5,600,000)	Weeks

e. Pressing Start pushbutton does not start machine.

3. Reset EMERG. STOP mushroom switch and note that the 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.

4. Without starting and stopping the machine, check all remaining EMERG. STOP mushroom switches one at time to ensure that each one causes actions as described in steps 2-b, c, and d above to occur when pressed and actions described in steps 3-a, b, and c above to occur when they are reset.

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 steps 2-c and d above to occur when opened and actions described in steps 3-a and c occur when panel or door closed. When an interlock is activated in a stacker there will also be indication on stacker display panel. The red full bin lights will flash on top row of panel. When interlock deactivated lights will go out.

READER MODULE

22. **Power supply PS1 (5VDC Reader) adjustment.** — 2 MIN — 9

1. Open Reader lower left door.

2. Place multimeter leads with clips on connectors J14 and J15 of Reader card cage backplane.

3. A reading of 5.1 VDC should be present, if not adjust, 5 VDC power supply potentiometer to obtain a reading of +5.0 VDC (+0.1/-0.0 VDC).

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (5,600, 000)	Weeks

4. Close door.

MACHINE — 23. **Close panels.** Replace or close all machine panels, doors, and covers. — 21 MIN — 7

CLEAN UP — 24. **Clean up.** Ensure tools and materials are removed from the area. — 1 MIN — 7

SYSTEM — 25. **Run BCS test deck** (NSN 5210-01-371-4906)**.** Load sortplan and run 300 piece test deck. — 2 MIN — 9

NOTE

Ensure BCS test deck contains 5 cards with CMD (PS Form 3800) test labels attached.

Print or view an End of Run report and verify 5 CMD labels detected, and 98% or higher MAR acceptance rate. If 98% or higher MAR acceptance rate is not achieved, refer to supervisor for corrective action.

26. **IJP test.** From Main Menu, select Maintenance, then System Tests, and then Ink Jet Printer Test. — 3 MIN — 10

NOTE

Right edge of letter to left framing bar should be 4 1/8" to 4 1/4". Bottom of bars should be even and 1/4" ± 1/16" above bottom edge.

1. Spray five blank cards (NSN 5220-03-000-5975) with an A-field bar code.
2. Check the bar codes for location and quality.
3. Make adjustments if needed.

CLEAN UP — 27. **Clean up.** Ensure all tools, lubricants, rags, etc. are removed from the work area. Report all deficiencies to supervisor. — 2 MIN — All

MAINTENANCE MANAGEMENT ORDER

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	0	3	D	B	C	S					C	D	0	0	5	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG					Frequency NONE

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 (5,600,000)	Weeks

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MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 8

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-006-M

PRODUCTION THRESHOLD OF
16,900,000

Time Total: 300 Minutes

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (16,900 000)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	All			
IJP MODULE	2.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7			
	3.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures. **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 _____.**	1 MIN	ALL			
MACHINE	4.	**Open panels.** Open/remove all machine panels and doors, including Main AC Power Panel, Feeder Distribution Panel, Motor Distribution Panel, and diverter plate cover assemblies (Wimpy panels). Override interlock switches. Rear Main Power Unit must by-pass the magnetic contacts for DBCS to run.	23 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (16,900 000)	Weeks
STACKERS 1-7	5.	**Clean/vacuum diverter plate cover assemblies.**	14 MIN	7			
STACKERS 1-7	6.	**Clean/vacuum power supplies.** Remove each cover on stacker module 5/24/42 VDC power supplies. Verify power supply has two fuse blocks (MSB–022–98). 1. Clean power supplies. 2. Do not replace covers. **WARNING** **Be cautious when working around or on equipment when power has been applied.**	14 MIN	7			
MACHINE	7.	**Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen.	3 MIN	ALL			
	8.	**Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation.	2 MIN	7			
STACKERS 1-7	9.	**Power supply adjust PS1 5 volts (stackers).** 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 the power supply potentiometer to obtain a reading of +5.0 VDC (+0.1/-0.0 VDC).	14 MIN	9			

MAINTENANCE MANAGEMENT ORDER

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	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency NONE	

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 (16,900 000)	Weeks

WARNING

Comply with local safety procedures for operating system with power panel door open.

NOTE

The machine must be running a minimum of 15 minutes before using non-contact infrared thermometer in items 10 through 19.

MAIN AC POWER DISTRIBUTION	10.	**Infrared scan.** Use non-contact infrared to scan main power unit front and rear (magnetic interlock on panel). 1. Start DBCS machine. 2. Scan all terminal connections and connector plugs. 3. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	25 MIN	9
FEEDER	11.	**Infrared scan.** Use non-contact infrared to monitor the Feeder for abnormal temperature. 1. Scan all motors, terminal connections, and connector plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	2 MIN	9
FEEDER POWER DISTRIBUTION	12.	**Infrared scan.** Use non-contact infrared to monitor the feeder distribution panel for abnormal temperature. 1. Scan all terminal connections and connection plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	8 MIN	9

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (16,900 000)	Weeks
TRANSPORT	13.	**Infrared scan.** Use non-contact infrared to monitor the Transport for abnormal temperature. 1. Scan all motors, terminal connections, and connector plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	2 MIN	9			
ID TAG READER MODULE	14.	**Infrared scan.** Use non-contact infrared to monitor the ID TAG module for abnormal temperature. 1. Scan all motors, terminal connections, and connector plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	2 MIN	9			
IJP MODULE	15.	**Infrared scan.** Use non-contact infrared to monitor the IJP Module for abnormal temperature. 1. Scan all motors, terminal connections, and connector plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	2 MIN	9			
DRYING LINE MODULE	16.	**Infrared scan.** Use non-contact infrared to monitor the drying line module for abnormal temperature. 1. Scan all motors, terminal connections, and connector plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	2 MIN	9			
READER	17.	**Infrared scan.** Use non-contact infrared to monitor the Reader for abnormal temperature. 1. Scan all motors, terminal connections, and connector plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	2 MIN	9			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
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	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (16,900 000)	Weeks
MOTOR POWER DISTRIBUTION	18.	**Infrared scan.** Use non-contact infrared to monitor motor distribution panel for abnormal temperature. 1. Scan all terminal connections and connector plugs. 2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.	13 MIN	9			
STACKERS 1-7 TIERS 1-4	19.	**Infrared scan.** Use non-contact infrared to monitor stackers tiers 1-4 for abnormal temperature. 1. Scan all motors, terminal connections, pusher assemblies, and connector plugs. 2. Investigate cause of abnormal temperature and notify supervisor of necessary corrective action. **NOTE** Do not use contact probe for checks in items 20 through 26. Use focusing probe or airborne technique.	16 MIN	9			
FEEDER	20.	**Ultrasonic scan.** Use ultrasonic detector to monitor all bearing assemblies top and bottom of the Feeder for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	9 MIN	9			
TRANSPORT	21.	**Ultrasonic scan.** Use ultrasonic detector to monitor all bearing assemblies top and bottom of the Transport for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	5 MIN	9			
ID TAG READER MODULE	22.	**Ultrasonic scan.** Use ultrasonic detector to monitor all bearing assemblies top and bottom of the ID TAG Reader module for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	5 MIN	9			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
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Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (16,900 000)	Weeks
IJP MODULE	23.	**Ultrasonic scan.** Use ultrasonic detector to monitor all bearing assemblies top and bottom of the IJP module for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	5 MIN	9			
DRYING LINE MODULE	24.	**Ultrasonic scan.** Use ultrasonic detector to monitor all bearing assemblies top and bottom of the drying line module for excessive vibration and noise. Label and date all bad bearings/ assemblies found and submit work order.	5 MIN	9			
READER	25.	**Ultrasonic scan.** Use ultrasonic detector to monitor all bearing assemblies top and bottom of the Reader for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	10 MIN	9			
STACKERS 1-7 TIERS 1-4	26.	**Ultrasonic scan.** **NOTE** Stacker work sheets are available for down load from MTSC Web site (PDM Site Map) for use in keeping track of location of bad bearings in stacker modules. Use ultrasonic detector to monitor all bearing assemblies top and bottom of the stackers for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order	56 MIN	9			
SYSTEM	27.	**Gate and Solenoid Pusher Assembly Test.** 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,	20 MIN	9			

MAINTENANCE MANAGEMENT ORDER

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	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
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energizing every gate and solenoid pusher assembly sequentially, repeatedly. By responding to the testing screen on the 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.

IJP MODULE	28.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7
	29.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures.	1 MIN	ALL
MACHINE	30.	**Close panels.** Replace or close all machine panels, doors, and covers.	23 MIN	7

WARNING

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

SYSTEM	31.	**Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press	3 MIN	ALL

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency NONE	

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 (16,900 000)	Weeks
		1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen.					
	32.	**Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation.	2 MIN	7			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	6	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency NONE	

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 (16,900 000)	Weeks

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MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 9

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-007-M

PRODUCTION THRESHOLD OF
33,800,000

Time Total: 45 Minutes

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	7	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (33,800 000)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	All			
IJP MODULE	2.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7			
SYSTEM POWER DOWN	3.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures.	1 MIN	ALL			
IJP MODULE	4.	**Replace POSTNET bar code printer final ink filter.** Replace bar code printer plastic final ink filter NSN 4330-04-000-6984, located in ink cylinder top cap, as follows: **WARNING** **When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheet (MSDS).**	8 MIN	10			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	7	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (33,800 000)	Weeks

MAINTENANCE MANAGEMENT ORDER

NOTE

Refer to Cheshire Excel Series PC-70/PI owner's manual for illustrations related to replacing final ink filter.

1. Open front door of printer.
2. Open gauge door in front of fluid compartment.
3. Spread paper towels or absorbent rags on bottom of fluid pan to catch any ink that may spill during this procedure.
4. Remove ink cylinder input line from bottom of existing ink filter.
5. Turn existing ink filter counterclockwise to remove it from bottom of ink cylinder top cap.

CAUTION

Do not use Teflon tape on ink filter. Use caution when threading filter into top cap and ink cylinder input line to avoid cross-threading filter.

6. Mount new filter to top cap of ink cylinder. Carefully hand-tighten filter into top cap by turning it clockwise.
7. Connect ink cylinder input line to input end of new filter.

CAUTION

After performing next step, if leaks occur around final filter threaded fittings during normal operation, tighten input line nut another half turn. Do not exceed a total of one full turn or filter threads could be stripped.

8. While holding filter by hand, carefully tighten nut with fingers. Then use a 7/16" wrench to tighten nut an addition half turn. If filter leaks during operation, it may be tightened another half turn. Do not exceed a total of one full turn, filter threads may be stripped.

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	7	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (33,800 000)	Weeks

WARNING

When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheet (MSDS).

9. Wipe up any ink spilled in fluid pan.

IJP MODULE — 5. **Replace ink jet printer muffler.** Replace IJP muffler as follows: — 15 MIN — 7

1. Remover muffler from bottom of IJP cabinet.
2. Install new muffler.
3. Close printer doors.

WARNING

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

SYSTEM — 6. **Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen. — 3 MIN — ALL

IJP — 7. **Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation. — 4 MIN — 7

IJP MODULE — 8. **Enter date of filter change in POSTNET bar code printer.** Enter date of filter change in POSTNET bar code printer as follows: — 2 MIN — 10

1. Press PRINT key.
2. Press F5 to enter 01 SERVICE menu.
3. Press F2 to enter 01 LOG menu.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	7	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG					Frequency NONE

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 (33,800 000)	Weeks

4. Press F3 to enter 01 MAINT menu.
5. Press F2 to enter INK FILTER data display.
6. Enter date filter was changed.

IJP TEST — 9. **IJP test.** From Main Menu, select Maintenance, then System Tests, and then Ink Jet Printer Test. — 3 MIN — 10

NOTE

Right edge of letter to left framing bar should be 4 1/8" to 4 1/4". Bottom of bars should be even and 1/4" ± 1/16" above bottom edge.

1. Spray five blank cards (NSN 5220-03-000-5975) with an A-field bar code.
2. Check the bar codes for location and quality.
3. Make adjustments if needed.

CLEAN UP — 10. **Clean up.** Ensure all tools, lubricants, rags, etc. are removed from work area. Report all deficiencies to supervisor. — 2 MIN — All

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	7	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency NONE	

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 (33,800 000)	Weeks

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MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 10

DBCS/OSS MASTER CHECKLIST

03-DBCS-CD-008-M

PRODUCTION THRESHOLD OF
67,500,000

Time Total: 194 Minutes

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	8	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (67,500 000)	Weeks
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 can not be used. Report safety deficiencies to your supervisor immediately upon detection.**	3 MIN	All			
IJP MODULE	2.	**Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shutdown of IJP.	4 MIN	7			
SYSTEM	3.	**Power down and lockout procedure.** Power down the machine and lock out power as prescribed by the current local lockout instructions providing lockout/restore procedures. **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 _____.** **NOTE** The following lockout instructions do not refer to machine lockout knife switch (S1). **Deenergize the DBCS incoming power feed** at the facility power distribution panel and lock it out using locally approved lockout procedure. Follow all safety precautions before proceeding.	1 MIN	ALL			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	8	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (67,500 000)	Weeks
MACHINE	4.	**Check for mail under machine.** 1. Remove foam strips from back side of machine and outer side of Feeder and Transport section. 2. Using a flashlight, start at Transport and look for mail pieces under machine, proceed to check for mail to last stacker. 3. Remove any mail pieces found. 4. Follow local procedures for returning mail to operations for processing.	18 MIN	7			
	5.	**Clean under machine.** 1. Clean/vacuum any dust and debris found from under machine, recommend start at backside of last stacker and work back to Transport and Feeder. 2. Reinstall foam strips to backside of machine.	40 MIN	7			
MACHINE	6.	**Open panels.** Open/remove all machine panels and doors, including Main AC Power Panel, Feeder Distribution Panel, and Motor Distribution Panel. Do not remove diverter plate cover assemblies (Wimpy panels).	16 MIN	7			
MAIN AC POWER DISTRIBUTION	7.	**Main AC power distribution.** Check for loose connections and discoloration of cables due to heat. (front and backside) 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	16 MIN	9			
FEEDER	8.	**Feeder.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	2 MIN	9			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	8	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (67,500 000)	Weeks
FEEDER POWER DISTRIBUTION	9.	**Feeder power distribution.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	7 MIN	9			
TRANSPORT	10.	**Transport.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	1 MIN	9			
ID TAG READER MODULE	11.	**ID Tag Reader.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	1 MIN	9			
IJP MODULE	12.	**IJP module.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	1 MIN	9			
DRYING LINE MODULE	13.	**Drying line.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated.	1 MIN	9			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	8	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG					Frequency NONE

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 (67,500 000)	Weeks
		3. Look for any cable or wiring discoloration due to heat.					
READER	14.	**Reader.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	3 MIN	9			
MOTOR POWER DISTRIBUTION	15.	**Motor power distribution.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat.	8 MIN	9			
STACKERS 1-7	16.	**Stackers.** Check for loose connections and discoloration of cables due to heat. 1. Verify all terminal connections are tight. 2. Verify all cable connections are properly seated. 3. Look for any cable or wiring discoloration due to heat. 4. Remove cover from power distribution assembly. 5. Verify all terminal connections are tight. 6. Verify all cable connections are properly seated. 7. Look for any cable or wiring discoloration due to heat. 8. Place cover on power distribution assembly.	42 MIN	9			
MACHINE	17.	**Close panels.** Replace or close all machine panels, doors, and covers.	16 MIN	7			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	8	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (67,500 000)	Weeks
	18.	**Clean up.** Ensure tools and materials are removed from the area.	2 MIN	7			
		WARNING **Be cautious when working around or on equipment when power has been applied.**					
SYSTEM	19.	**Restore power to equipment.** Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures. To restore power move the main disconnect switch to the ON position. Press POWER ON switch (2A1S1) on operator control panel. Press 1 on rocker switch on system computer, located in Reader module. System computer powers up to the logon screen.	3 MIN	ALL			
	20.	**Power up bar code printer.** Press the ON switch located on the upper right front panel of the IJP to restore the bar code printer to operation.	2 MIN	7			
		WARNING **Ensure item 7 of this checklist has been completed prior to checking power factor capacitors. Integrity of wiring must be verified prior to checking power factor capacitors.**					
MAIN AC POWER DISTRIBUTION	21.	**Power factor capacitors.** Verify power factor capacitors are functioning. **NOTE** Use inductive ampere test meter to check current in following steps. 1. Open main power panel door. 2. Attach amp probe to one of the 3 wires that feed capacitors. 3. Turn the Maintenance Mode switch on the operator control panel to Maintenance Mode position.	5 MIN	9			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	8	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: NONE

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 (67,500 000)	Weeks

4. Start the machine.
5. Observe current reading, which varies with different stacker configurations. For example a three stacker machine averages 24 amps on each of three wires going to capacitor bank.
6. Repeat above steps with other two wires that feed to capacitors.
7. If no current is detected, check for defective wire or capacitor and repair.
8. Close panel door and turn Maintenance Mode switch to Normal Mode.

22. **Run BCS test deck** (NSN 5210-01-371-4906)**.** Load sortplan and run 300 piece test deck. — 2 MIN — 9

NOTE

Ensure BCS test deck contains 5 cards with CMD test labels (PS Form 3800) attached.

Print or view an End of Run report, and verify 5 CMD test labels detected and 98% or higher MAR acceptance rate. If 98% or higher MAR acceptance rate is not achieved, refer to supervisor for corrective action.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S					C	D	0	0	8	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG					Frequency NONE

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 (67,500 000)	Weeks

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MAINTENANCE MANAGEMENT ORDER

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ATTACHMENT 11

OPERATIONAL MAINTENANCE PROCEDURES

DBCS/OSS

09-DBCS-CI-001-M

OPERATIONAL TOUR

Time Total: 46 Minutes

Total Time Per Item

ITEM	TOTAL TIME (MINUTES)
1	1
2	1
3	3
4	3
5	3
6	3
7	3
8	3
9	6
10	3
11	6
12	3
13	6
14	2
Total	**46**

SAFETY STATEMENT	1.	**COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shutdown and lockout this machine. 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**	Tour 1 MIN	All

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	9	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency TOUR	

Part or Component	Item No	Task Statement and Instruction (Complete with all relevant safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Weeks
		the equipment. **THE USE OF COMPRESS IS PROHIBITED.** **When cleaning is req cleaning method such vacuum cleaner or a dam place of compressed or cloth or brush may equipment only when ot can not be used. Report your supervisor immedia**					

MAINTENANCE MANAGEMENT ORDER

NOTE

Operational checks must be made with machine processing mail in a normal operating mode.

MACHINE LOGBOOK	2.	**Examine machine logbook.** Examine log and bring forward any unresolved problems from the previous tour.	Begin Tour 1 MIN	9
MACHINE SAFETY	3.	**Be alert for unusual sounds or odors.** While performing listed operational maintenance tasks, be alert for unusual sounds, odors, or other indications of potential failure conditions in the machine.	Every 2 Hrs 1 MIN	9
MACHINE SAFETY	4.	**Observe warning horn and beacons.** Watch for proper operation of warning horn and beacons on machine start-ups.	Every 2Hrs 1 MIN	9
MACHINE SAFETY	5.	**Lamps.** Watch for proper functionality of all indicator lamps during normal machine operations. Correct deficiencies as soon as practical.	Every 2Hrs 1 MIN	9
OPERATORS	6.	**Observe feeder for proper operation, while checking to see if operators are having excessive processing problems.** Investigate as necessary. Initiate corrective action as appropriate.	Every 2 Hrs 1 MIN	9

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	9	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature: Delivery Bar Code Sorter	Equipment Model: DBCS/OSS										Bulletin Filename: MM04077AG					Frequency: TOUR

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)	Weeks
VIDEO DISPLAY TERMINAL WFOV	7.	**Check mail processing screen.** Check current read value and fault indicators. Ensure current sort plan, operating mode, and read rate values are correct for the mail being processed. If MAR or GAR is below acceptable values, check for dust/debris accumulations on WFOV faceplate. Check cooling fan filter for accumulated dust and debris on WFOV computer. Correct as necessary	Every 2 Hrs 1 MIN	9			
INK JET PRINTER	8.	**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 the print head. Clean as necessary.	Every 2 Hrs 1 MIN	9			
OVERFLOW STACKER	9.	**Check mail in last/overflow stackers on each tier.** Check the type of mail present in the overflow stackers to determine which areas of the machine might be malfunctioning.	Every 2 Hrs 2 MIN	9			
REJECT STACKER(S)	10.	**Check ID Tag printing.** Check for print quality of ID tags. Are ID codes smudged or out-of-tolerance? Report any problems found to SDO and SMO.	Every 2 Hrs 1 MIN	9			
SORTING STACKERS	11.	**Check for missorts.** Sample check at least 5 stackers for correct sortation. Verify that the bar code matches with the address block and scheme. Verify mail pieces enter stacker in a uniform manner.	Every 2 Hrs 2 MIN	9			
READER, ICS-3	12.	**If excessive ID TAG ERROR messages are occurring:** 1. Identify type by using online display and machine fault log. 2. Check ICS-3 ID tag reader exterior for accumulated dust, dirt and debris or loose/worn belts. 3. Pay particular attention to the aperture and to the raised portion of the faceplate. 4. Clean/adjust/replace as necessary.	Every 2 Hrsr 1 MIN	9			
ACE/MKAT COMPUTER	13.	**Check MPEwatch computer files.** Check for, jams and fault indications and ensure all performance metrics are meeting their target.	Every 2 Hrs 2	9			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service **Maintenance Checklist**	IDENTIFICATION															
	WORK CODE		EQUIPMENT ACRONYM								CLASS CODE		NUMBER			TYPE
	0	9	D	B	C	S					C	D	0	0	1	M
Equipment Nomenclature Delivery Bar Code Sorter	Equipment Model DBCS/OSS										Bulletin Filename MM04077AG				Frequency TOUR	

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)	Weeks
MACHINE LOGBOOK AND SMO	14.	**Log problems discovered and work performed.** Report unresolved problems at the end of tour to the SMO and generate appropriate work orders.	MIN Tour 2 MIN	9			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER