



Maintenance Management Order

SUBJECT: Operational and Preventive Maintenance Guidelines for
Delivery Bar Code Sorter/Optical Character Reader
(DBCS/OCR) Model 994, 995, 996, and 998 Production
Based Maintenance Program

DATE: July 20, 2007

NO: MMO-069-07

TO: Maintenance Manager DBCS/OCR Model 994,
995, 996, and 998 Offices

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MAINTENANCE MANAGEMENT ORDER

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This Maintenance Management Order (MMO) provides Operational and Preventive Maintenance (PM) Guidelines based on pieces fed per production run (Production Thresholds), for the DBCS/OCR Model 994, 995, 996, and 998.

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.

Local Maintenance Operational Support will also compile and be the custodian of the ongoing data used for determining when all other routes (Senior) will be issued based on pieces fed thresholds; until such time as this task can be automated through eMARS or comparable data bases.

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.

This is a PM guideline, any problems found that require adjustment or replacement of parts will require a work order. The PM tasks 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.

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.

Maintenance Managers are to use these preventive maintenance guidelines when preparing the route sheets for local maintenance personnel. It is the responsibility of each Maintenance Manager to ensure all WARNINGS, CAUTIONS, and NOTES are included with each applicable task as part of the preparation of any local route sheets.

WARNING

Various products, 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.

Any questions or comments concerning this bulletin should be directed 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
Maintenance Technical Support Center
Maintenance Policies and Programs

- Attachments:
1. Summary Workload Estimate
 2. Workload Estimate Adjustments
 3. 03-DBCS-CC-001-M: Threshold Severity: Severity 1
 4. 03-DBCS-CC-002-M: Threshold Severity: Severity 2
 5. 03-DBCS-CC-003-M: Threshold Severity: Severity 3
 6. 03-DBCS-CC-004-M: Production Threshold of 1,300,000
 7. 03-DBCS-CC-005-M: Production Threshold of 5,600,000
 8. 03-DBCS-CC-006-M: Production Threshold of 16,900,000
 9. 03-DBCS-CC-007-M: Production Threshold of 67,500,000
 10. 09-DBCS-CC-001-M: Operational Tour

ATTACHMENT 1

**SUMMARY
WORKLOAD ESTIMATE
FOR
DBCS/OCR**

**SUMMARY
WORKLOAD ESTIMATE
FOR DBCS/OCR**

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	590.80	177.24	768.04	76.80	844.85	82.30	927.15	1009.45	1091.75
6 Days	674.05	202.21	876.26	87.63	963.89	98.80	1062.69	1161.49	1260.29
7 Days	757.29	227.19	984.48	98.45	1082.92	115.27	1198.19	1313.46	1428.73
*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	84				
				Sev. 2 90-180K	95				
				Sev. 3 >180K	102				
				1,300,000.00	165				
				5,600,000.00	233				
				16,900,000.00	313				
				67,500,000.00	230				
PM HOURS PER YEAR							PM HOURS PER YEAR SENIOR		
Percentage of Utilization	5 Day Wk	6 Day Wk	7 Day Wk	Thresholds	# times Completed	Hours Yr per DBCS			
Sev. 1-14%	50.96	61.15	71.34	1300000	42.31	116.35			
Sev. 2-49%	201.72	242.06	282.40	5600000	9.82	38.14			
Sev. 3-37%	163.54	196.25	228.96	16900000	3.25	16.98			
Total	416.22	499.46	582.70	67500000	0.81	3.12			
						Total	174.59		

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	2 Tours Hrs/Yr	3 Tours Hrs/Yr
							OpMt x 1	OpMt x 2	OpMt x 3
5 Days	639.11	191.73	830.84	83.08	913.92	82.30	996.22	1078.52	1160.82
6 Days	724.07	217.22	941.30	94.13	1035.43	98.80	1134.23	1233.03	1331.83
7 Days	809.04	242.71	1051.75	105.18	1156.93	115.27	1272.20	1387.47	1502.74
* 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	84			
					Sev. 2 90-180K	95			
					Sev. 3 >180K	102			
					1,300,000.00	165			
					5,600,000.00	233			
					16,900,000.00	313			
					67,500,000.00	230			
PM HOURS PER YEAR				PM HOURS PER YEAR SENIOR					
Percentage of Utilization	5 Day Wk	6 Day Wk	7 Day Wk				Thresholds	# times Completed	Hours Yr per DBCS
Sev. 1- 8%	29.12	34.94	40.77				1300000	51.92	142.79
Sev. 2-36%	148.20	177.84	207.48				5600000	12.05	46.81
Sev. 3-56%	247.52	297.02	346.53				16900000	3.99	20.84
Total	424.84	509.81	594.78				67500000	1.00	3.83
							Total		214.27

SUMMARY WORK LOAD ESTIMATES FOR DBCS TIER THREE BASED ON OVER 80,000,000 PIECES FED LAST FISCAL YEAR									
Operation	Routine	Repair	Routine	Non-Productive	Total	Operational	Operational Maintenance (OpMt) + Total Servicing		
Days	Servicing/	Time per	Servicing +	Time per	Servicing/	Maint.			
	Machine	Machine	Repair Time	Machine	Machine	Time	1 Tour	2 Tours	3 Tours
	(Hrs/Yr)	(Hrs/yr) *	(Hrs/Yr)	(Hrs/yr) **	(Hrs/Yr)	(Hrs/Yr)	Hrs/Yr	Hrs/Yr	Hrs/Yr
							OpMt x 1	OpMt x 2	OpMt x 3
5 Days	691.35	207.41	898.76	89.88	988.63	82.30	1070.93	1153.23	1235.53
6 Days	778.83	233.65	1012.48	101.25	1113.73	98.80	1212.53	1311.33	1410.13
7 Days	866.31	259.89	1126.21	112.62	1238.83	115.27	1354.10	1469.37	1584.64
* Repair maintenance estimates based on 30% of preventive maintenance.									
** Based on 10% of total PM and repair.									

PM TIME SUMMARY	
IN MINUTES	
Thresholds	MIN.
Pieces Fed	
Sev. 1 <90K	84
Sev. 2 90-180K	95
Sev. 3 >180K	102
1,300,000.00	165
5,600,000.00	233
16,900,000.00	313
67,500,000.00	230

PM HOURS PER YEAR			
Percentage of Utilization	5 Day Wk	6 Day Wk	7 Day Wk
Sev. 1- 3%	10.92	13.10	15.29
Sev. 2-22%	90.57	108.68	126.79
Sev. 3-76%	335.92	403.10	470.29
Total	437.41	524.89	612.37

PM HOURS PER YEAR SENIOR		
Thresholds	# times Completed	Hours Yr per DBCS
1300000	61.54	169.23
5600000	14.29	55.48
16900000	4.73	24.69
67500000	1.19	4.54
	Total	253.94

TIER ONE HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
Op	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	590.80	177.24	768.04	76.80	844.85	82.30	927.15	1009.45	1091.75
6 Days	674.05	202.21	876.26	87.63	963.89	98.80	1062.69	1161.49	1260.29
7 Days	757.29	227.19	984.48	98.45	1082.92	115.27	1198.19	1313.46	1428.73
126 Stacker Machine									
5 Days	610.42	183.13	793.54	79.35	872.90	82.30	955.20	1037.50	1119.80
6 Days	696.43	208.93	905.35	90.54	995.89	98.80	1094.69	1193.49	1292.29
7 Days	782.43	234.73	1017.16	101.72	1118.88	115.27	1234.15	1349.42	1464.69
142 Stacker Machine									
5 Days	630.68	189.21	819.89	81.99	901.88	82.30	984.18	1066.48	1148.78
6 Days	719.55	215.86	935.41	93.54	1028.95	98.80	1127.75	1226.55	1325.35
7 Days	808.41	242.52	1050.93	105.09	1156.02	115.27	1271.29	1386.56	1501.83
158 Stacker Machine									
5 Days	651.62	195.49	847.11	84.71	931.82	82.30	1014.12	1096.42	1178.72
6 Days	743.44	223.03	966.47	96.65	1063.11	98.80	1161.91	1260.71	1359.51
7 Days	835.25	250.57	1085.82	108.58	1194.40	115.27	1309.67	1424.94	1540.21
174 Stacker Machine									
5 Days	673.26	201.98	875.23	87.52	962.76	82.30	1045.06	1127.36	1209.66
6 Days	768.12	230.44	998.55	99.86	1098.41	98.80	1197.21	1296.01	1394.81
7 Days	862.98	258.89	1121.87	112.19	1234.06	115.27	1349.33	1464.60	1579.87
190 Stacker Machine									
5 Days	695.61	208.68	904.29	90.43	994.72	82.30	1077.02	1159.32	1241.62
6 Days	793.62	238.09	1031.70	103.17	1134.88	98.80	1233.68	1332.48	1431.28
7 Days	891.63	267.49	1159.12	115.91	1275.03	115.27	1390.30	1505.57	1620.84
206 Stacker Machine									
5 Days	718.70	215.61	934.31	93.43	1027.75	82.30	1110.05	1192.35	1274.65
6 Days	819.97	245.99	1065.96	106.60	1172.55	98.80	1271.35	1370.15	1468.95
7 Days	921.23	276.37	1197.60	119.76	1317.36	115.27	1432.63	1547.90	1663.17
222 Stacker Machine									
5 Days	742.56	222.77	965.33	96.53	1061.87	82.30	1144.17	1226.47	1308.77
6 Days	847.19	254.16	1101.35	110.13	1211.48	98.80	1310.28	1409.08	1507.88
7 Days	951.82	285.54	1237.36	123.74	1361.10	115.27	1476.37	1591.64	1706.91
238 Stacker Machine									
5 Days	767.22	230.17	997.38	99.74	1097.12	82.30	1179.42	1261.72	1344.02
6 Days	875.32	262.60	1137.91	113.79	1251.70	98.80	1350.50	1449.30	1548.10
7 Days	983.42	295.02	1278.44	127.84	1406.29	115.27	1521.56	1636.83	1752.10
254 Stacker Machine									
5 Days	792.69	237.81	1030.50	103.05	1133.54	82.30	1215.84	1298.14	1380.44
6 Days	904.38	271.31	1175.69	117.57	1293.26	98.80	1392.06	1490.86	1589.66
7 Days	1016.07	304.82	1320.89	132.09	1452.97	115.27	1568.24	1683.51	1798.78
270 Stacker Machine									
5 Days	819.01	245.70	1064.71	106.47	1171.18	82.30	1253.48	1335.78	1418.08
6 Days	934.40	280.32	1214.72	121.47	1336.20	98.80	1435.00	1533.80	1632.60
7 Days	1049.80	314.94	1364.74	136.47	1501.21	115.27	1616.48	1731.75	1847.02

286 Stacker Machine									
5 Days	846.20	253.86	1100.06	110.01	1210.06	82.30	1292.36	1374.66	1456.96
6 Days	965.42	289.63	1255.05	125.51	1380.56	98.80	1479.36	1578.16	1676.96
7 Days	1084.65	325.40	1410.05	141.00	1551.05	115.27	1666.32	1781.59	1896.86
302 Stacker Machine									
5 Days	874.29	262.29	1136.58	113.66	1250.24	82.30	1332.54	1414.84	1497.14
6 Days	997.48	299.24	1296.72	129.67	1426.39	98.80	1525.19	1623.99	1722.79
7 Days	1120.66	336.20	1456.86	145.69	1602.55	115.27	1717.82	1833.09	1948.36

TIER TWO HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
Op 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
110 Stacker Machine									
5 Days	639.11	191.73	830.84	83.08	913.92	82.30	996.22	1078.52	1160.82
6 Days	724.07	217.22	941.30	94.13	1035.43	98.80	1134.23	1233.03	1331.83
7 Days	809.04	242.71	1051.75	105.18	1156.93	115.27	1272.20	1387.47	1502.74
126 Stacker Machine									
5 Days	660.32	198.10	858.42	85.84	944.26	82.30	1026.56	1108.86	1191.16
6 Days	748.11	224.43	972.55	97.25	1069.80	98.80	1168.60	1267.40	1366.20
7 Days	835.90	250.77	1086.67	108.67	1195.34	115.27	1310.61	1425.88	1541.15
142 Stacker Machine									
5 Days	682.25	204.67	886.92	88.69	975.61	82.30	1057.91	1140.21	1222.51
6 Days	772.95	231.89	1004.84	100.48	1105.32	98.80	1204.12	1302.92	1401.72
7 Days	863.65	259.10	1122.75	112.27	1235.02	115.27	1350.29	1465.56	1580.83
158 Stacker Machine									
5 Days	704.90	211.47	916.37	91.64	1008.00	82.30	1090.30	1172.60	1254.90
6 Days	798.61	239.58	1038.20	103.82	1142.02	98.80	1240.82	1339.62	1438.42
7 Days	892.33	267.70	1160.03	116.00	1276.03	115.27	1391.30	1506.57	1621.84
174 Stacker Machine									
5 Days	728.30	218.49	946.79	94.68	1041.47	82.30	1123.77	1206.07	1288.37
6 Days	825.13	247.54	1072.66	107.27	1179.93	98.80	1278.73	1377.53	1476.33
7 Days	921.95	276.59	1198.54	119.85	1318.39	115.27	1433.66	1548.93	1664.20
190 Stacker Machine									
5 Days	752.48	225.74	978.22	97.82	1076.05	82.30	1158.35	1240.65	1322.95
6 Days	852.52	255.76	1108.28	110.83	1219.10	98.80	1317.90	1416.70	1515.50
7 Days	952.56	285.77	1238.33	123.83	1362.16	115.27	1477.43	1592.70	1707.97
206 Stacker Machine									
5 Days	777.46	233.24	1010.70	101.07	1111.77	82.30	1194.07	1276.37	1358.67
6 Days	880.82	264.25	1145.07	114.51	1259.58	98.80	1358.38	1457.18	1555.98
7 Days	984.19	295.26	1279.44	127.94	1407.39	115.27	1522.66	1637.93	1753.20
222 Stacker Machine									
5 Days	803.27	240.98	1044.26	104.43	1148.68	82.30	1230.98	1313.28	1395.58
6 Days	910.07	273.02	1183.09	118.31	1301.40	98.80	1400.20	1499.00	1597.80
7 Days	1016.86	305.06	1321.92	132.19	1454.11	115.27	1569.38	1684.65	1799.92
238 Stacker Machine									
5 Days	829.94	248.98	1078.92	107.89	1186.82	82.30	1269.12	1351.42	1433.72
6 Days	940.28	282.08	1222.37	122.24	1344.60	98.80	1443.40	1542.20	1641.00
7 Days	1050.62	315.19	1365.81	136.58	1502.39	115.27	1617.66	1732.93	1848.20
254 Stacker Machine									
5 Days	857.50	257.25	1114.75	111.47	1226.22	82.30	1308.52	1390.82	1473.12
6 Days	971.50	291.45	1262.95	126.29	1389.24	98.80	1488.04	1586.84	1685.64
7 Days	1085.50	325.65	1411.15	141.12	1552.27	115.27	1667.54	1782.81	1898.08
270 Stacker Machine									
5 Days	885.97	265.79	1151.75	115.18	1266.93	82.30	1349.23	1431.53	1513.83
6 Days	1003.75	301.13	1304.88	130.49	1435.37	98.80	1534.17	1632.97	1731.77
7 Days	1121.54	336.46	1458.00	145.80	1603.80	115.27	1719.07	1834.34	1949.61

286 Stacker Machine									
5 Days	915.38	274.61	1189.99	119.00	1308.99	82.30	1391.29	1473.59	1555.89
6 Days	1037.08	311.12	1348.20	134.82	1483.02	98.80	1581.82	1680.62	1779.42
7 Days	1158.78	347.63	1506.41	150.64	1657.05	115.27	1772.32	1887.59	2002.86
302 Stacker Machine									
5 Days	945.77	283.73	1229.50	122.95	1352.45	82.30	1434.75	1517.05	1599.35
6 Days	1071.51	321.45	1392.96	139.30	1532.26	98.80	1631.06	1729.86	1828.66
7 Days	1197.25	359.17	1556.42	155.64	1712.06	115.27	1827.33	1942.60	2057.87

TIER THREE HOURS PER YEAR ACCORDING TO STACKER CONFIGURATION									
Op 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
110 Stacker Machine									
5 Days	691.35	207.41	898.76	89.88	988.63	82.30	1070.93	1153.23	1235.53
6 Days	778.83	233.65	1012.48	101.25	1113.73	98.80	1212.53	1311.33	1410.13
7 Days	866.31	259.89	1126.21	112.62	1238.83	115.27	1354.10	1469.37	1584.64
126 Stacker Machine									
5 Days	714.30	214.29	928.60	92.86	1021.45	82.30	1103.75	1186.05	1268.35
6 Days	804.69	241.41	1046.10	104.61	1150.71	98.80	1249.51	1348.31	1447.11
7 Days	895.08	268.52	1163.60	116.36	1279.96	115.27	1395.23	1510.50	1625.77
142 Stacker Machine									
5 Days	738.02	221.41	959.42	95.94	1055.37	82.30	1137.67	1219.97	1302.27
6 Days	831.41	249.42	1080.83	108.08	1188.91	98.80	1287.71	1386.51	1485.31
7 Days	924.79	277.44	1202.23	120.22	1322.45	115.27	1437.72	1552.99	1668.26
158 Stacker Machine									
5 Days	762.52	228.76	991.28	99.13	1090.41	82.30	1172.71	1255.01	1337.31
6 Days	859.01	257.70	1116.71	111.67	1228.38	98.80	1327.18	1425.98	1524.78
7 Days	955.49	286.65	1242.14	124.21	1366.36	115.27	1481.63	1596.90	1712.17
174 Stacker Machine									
5 Days	787.84	236.35	1024.19	102.42	1126.61	82.30	1208.91	1291.21	1373.51
6 Days	887.53	266.26	1153.79	115.38	1269.16	98.80	1367.96	1466.76	1565.56
7 Days	987.22	296.17	1283.38	128.34	1411.72	115.27	1526.99	1642.26	1757.53
190 Stacker Machine									
5 Days	813.99	244.20	1058.19	105.82	1164.01	82.30	1246.31	1328.61	1410.91
6 Days	916.99	275.10	1192.09	119.21	1311.30	98.80	1410.10	1508.90	1607.70
7 Days	1019.99	306.00	1325.99	132.60	1458.59	115.27	1573.86	1689.13	1804.40
206 Stacker Machine									
5 Days	841.02	252.31	1093.32	109.33	1202.66	82.30	1284.96	1367.26	1449.56
6 Days	947.44	284.23	1231.67	123.17	1354.84	98.80	1453.64	1552.44	1651.24
7 Days	1053.86	316.16	1370.01	137.00	1507.02	115.27	1622.29	1737.56	1852.83
222 Stacker Machine									
5 Days	868.94	260.68	1129.62	112.96	1242.58	82.30	1324.88	1407.18	1489.48
6 Days	978.89	293.67	1272.56	127.26	1399.82	98.80	1498.62	1597.42	1696.22
7 Days	1088.84	326.65	1415.50	141.55	1557.05	115.27	1672.32	1787.59	1902.86
238 Stacker Machine									
5 Days	897.79	269.34	1167.12	116.71	1283.84	82.30	1366.14	1448.44	1530.74
6 Days	1011.39	303.42	1314.81	131.48	1446.29	98.80	1545.09	1643.89	1742.69
7 Days	1124.99	337.50	1462.49	146.25	1608.74	115.27	1724.01	1839.28	1954.55
254 Stacker Machine									
5 Days	927.59	278.28	1205.87	120.59	1326.46	82.30	1408.76	1491.06	1573.36
6 Days	1044.97	313.49	1358.46	135.85	1494.31	98.80	1593.11	1691.91	1790.71
7 Days	1162.34	348.70	1511.05	151.10	1662.15	115.27	1777.42	1892.69	2007.96
270 Stacker Machine									
5 Days	958.39	287.52	1245.91	124.59	1370.50	82.30	1452.80	1535.10	1617.40
6 Days	1079.66	323.90	1403.56	140.36	1543.92	98.80	1642.72	1741.52	1840.32
7 Days	1200.93	360.28	1561.21	156.12	1717.34	115.27	1832.61	1947.88	2063.15

286 Stacker Machine									
5 Days	990.21	297.06	1287.27	128.73	1416.00	82.30	1498.30	1580.60	1662.90
6 Days	1115.51	334.65	1450.16	145.02	1595.18	98.80	1693.98	1792.78	1891.58
7 Days	1240.81	372.24	1613.05	161.30	1774.35	115.27	1889.62	2004.89	2120.16
302 Stacker Machine									
5 Days	1023.08	306.93	1330.01	133.00	1463.01	82.30	1545.31	1627.61	1709.91
6 Days	1152.54	345.76	1498.30	149.83	1648.14	98.80	1746.94	1845.74	1944.54
7 Days	1282.00	384.60	1666.60	166.66	1833.26	115.27	1948.53	2063.80	2179.07

ATTACHMENT 2

WORKLOAD ESTIMATE ADJUSTMENTS

FOR

DBCS/OCR MODELS 994, 995, 996, and 998

FOR

DIFFERENT STACKER CONFIGURATIONS

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS
FOR DIFFERENT STACKER CONFIGURATIONS

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

(Summary for Attachment 3)

Number of Stackers	Time (min.) for Item 6	Time (min.) for Item 17	Total Time (min.)
110	10	4	84

Number of Stackers	Additional Time (min.) for Item 4	Additional Time (min.) for Item 12	Total Time (min.)
126	1	1	86
142	2	1	87
158	3	1	88
174	4	1	89
190	5	2	91
206	6	2	92
222	7	2	93
238	8	2	94
254	9	3	96
270	10	3	97
286	11	3	98
302	12	3	99

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS
 FOR DIFFERENT STACKER CONFIGURATIONS

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

(Summary for Attachment 4)

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

Number of Stackers	Time (min.) for Item 6	Time (min.) for Item 23	Total Time (min.)
110	10	4	95

Number of Stackers	Additional Time (min.) for Item 4	Additional Time (min.) for Item 14	Total Time (min.)
126	1	1	97
142	2	1	98
158	3	1	99
174	4	1	100
190	5	2	102
206	6	2	103
222	7	2	104
238	8	2	105
254	9	3	107
270	10	3	108
286	11	3	109
302	12	3	110

WORKLOAD ESTIMATE ADJUSTMENTS
FOR DIFFERENT STACKER CONFIGURATIONS

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

(Summary for Attachment 5)

Number of Stackers	Time (min.) for Item 6	Time (min.) for Item 27	Total Time (min.)
110	10	4	102

Number of Stackers	Additional Time (min.) for Item 4	Additional Time (min.) for Item 16	Total Time (min.)
126	1	1	104
142	2	1	105
158	3	1	106
174	4	1	107
190	5	2	109
206	6	2	110
222	7	2	111
238	8	2	112
254	9	3	114
270	10	3	115
286	11	3	116
302	12	3	117

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS
FOR DIFFERENT STACKER CONFIGURATIONS

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

(Summary for Attachment 6)

Number of Stackers	Time (min.) for Item 5	Time (min.) for Item 13	Time (min.) for Item 14	Time (min.) for Item 16	Time (min.) for Item 24	Total Time (min.)
110	4	45	21	4	7	165

Number of Stackers	Additional Time (min.) for Item 3	Additional Time (min.) for Item 8	Additional Time (min.) for Item 9	Additional Time (min.) for Item 10	Additional Time (min.) for Item 15	Total Time (min.)
126	1	5	3	1	1	176
142	1	10	6	1	2	185
158	1	15	9	1	3	194
174	1	20	12	1	4	203
190	2	25	15	2	5	214
206	2	30	18	2	6	223
222	2	35	21	2	7	232
238	2	40	24	2	8	241
254	3	45	27	3	9	252
270	3	50	30	3	10	261
286	3	55	33	3	11	270
302	3	60	36	3	12	279

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

DIFFERENT STACKER CONFIGURATIONS

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

(Summary for Attachment 7)

Number of Stackers	Time (min.) for Item 5	Time (min.) for Item 14	Time (min.) for Item 23	Time (min.) for Item 25	Total Time (min.)
110	21	70	17	21	233

Number of Stackers	Additional Time (min.) for Item 3	Additional Time (min.) for Item 8	Additional Time (min.) for Item 10	Additional Time (min.) for Item 12	Total Time (min.)
126	3	10	2	3	251
142	6	20	4	6	269
158	9	30	6	9	287
174	12	40	8	12	305
190	15	50	10	15	323
206	19	60	12	19	343
222	23	70	14	23	363
238	27	80	16	27	383
254	31	90	18	31	403
270	35	100	20	35	423
286	39	110	22	39	443
302	43	120	24	43	463

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

WORKLOAD ESTIMATE ADJUSTMENTS

DIFFERENT STACKER CONFIGURATIONS

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

(Summary for Attachment 8)

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

Number of Stackers	Time (min.) for Item 5	Time (min.) for Item 6	Time (min.) for Item 7	Time (min.) for Item 12	Time (min.) for Item 22	Time (min.) for Item 29	Time (min.) for Item 32	Total Time (min.)
110	23	14	14	14	16	56	23	313

Number of Stackers	Additional Time (min.) for Item 3	Additional Time (min.) for Item 4	Additional Time (min.) for Item 5	Additional Time (min.) for Item 7	Additional Time (min.) for Item 14	Additional Time (min.) for Item 18	Additional Time (min.) for Item 21	Total Time (min.)
126	3	2	2	2	2	8	3	335
142	6	4	4	2	4	16	6	355
158	9	6	6	3	6	24	9	376
174	12	8	8	3	8	32	12	396
190	15	10	10	4	10	42	15	419
206	19	12	12	4	12	50	19	441
222	23	14	14	5	14	58	23	464
238	27	16	16	5	16	66	27	486
254	31	18	18	6	18	72	31	507
270	35	20	20	6	20	80	35	529
286	39	22	22	7	22	88	39	552
302	43	24	24	7	24	96	43	574

WORKLOAD ESTIMATE ADJUSTMENTS
FOR DIFFERENT STACKER CONFIGURATIONS

CHECKLIST 03-DBCS -CC-007-M
67,500,000 Threshold Pieces Fed

(Summary for Attachment 9)

Number of Stackers	Time (min.) for Item 7	Time (min.) for Item 17	Time (min.) for Item 20	Total Time (min.)
110	16	42	16	230

Number of Stackers	Additional Time (min.) for Item 5	Additional Time (min.) for Item 12	Additional Time (min.) for Item 13	Total Time (min.)
126	1	6	1	238
142	1	12	1	244
158	1	18	1	250
174	1	24	1	256
190	2	30	2	264
206	2	36	2	270
222	2	42	2	276
238	2	48	2	282
254	3	54	3	290
270	3	60	3	296
286	3	66	3	302
302	3	72	3	308

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 3

DBCS/OCR MASTER CHECKLIST

MODELS 994, 995, 996, and 998

03-DBCS-CC-001-M

THRESHOLD SEVERITY 1

Time Total: 84 Minutes

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	C	0	0	1
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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.** 3 ALL
MIN

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 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.

WARNING

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

SYSTEM 2. **Generate and print or view an End Of Run Report.** Analyze data provided in this report to determine if any areas of machine are degrading or need attention. 2 11
MIN

POSTNET IJP 3. **Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shut down of IJP. 4 8
MIN

OCR COMPUTER 4. **Orderly shut down of the OCR computer.** From the Main Menu go to menu item System Computer then to menu item System Shutdown. 2 11
MIN

TRANSPORT MODULE 5. **Power down and lockout procedure.** Power down the machine and lockout power as prescribed by the current local lockout instructions providing lockout/restore procedures. 1 ALL
MIN

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION											
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE	
		0	3	D	B	C	S			C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998				Bulletin Filename MM06054AC			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

MACHINE	6.	Open machine, search for mail.	10	6			
		1. Open all machine doors.	MIN				
		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.					
FEEDER MODULE	7.	Clean Feeder module.	3	6			
		1. Clean/vacuum outside surfaces of Feeder module.	MIN				
		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).					
	8.	Check feeder. Check feeder as follows:	1	8			
		1. Check Teflon strip for wear.	MIN				

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	1
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

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-070-00)

MAINTENANCE MANAGEMENT ORDER

TRANSPORT MODULE	9.	Clean Transport module.	2 MIN	6			
		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.					
TAG/SCANNER MODULE	10.	Clean tag scanner module.	2 MIN	6			
		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.					
IJP/OCR MODULE	11.	Clean IJP/OCR module.	2 MIN	6			
		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.					

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	C	0	0	1
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

IJP DELAY LINE MODULE	12.	Clean IJP delay line module.	2 MIN	6
		<ol style="list-style-type: none"> 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. 		

READER MODULE	13.	Clean Reader module.	3 MIN	6
		<ol style="list-style-type: none"> 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, broke, cut or frayed cables, burred, notched, or broke 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. 		

READER MODULE (CONT.)	14.	Clean WFOV assy.	6 MIN	6
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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

U.S. Postal Service		IDENTIFICATION											
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	D	B	C	S			C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

POSTNET IJP 16. **Check and replenish POSTNET bar code ink jet printer ink bottles.** 1 8
MIN

CAUTION

Do not pour ink from bottle to bottle. This stirs up sediment in bottom of bottle and will clog filters.

NOTE

Place the makeup ink bottle on the left.

NOTE

Do not use expired ink.

Check and replenish POSTNET bar code ink jet printer ink bottles as follows:

1. Open printer front door.
2. Remove and discard ink bottle if ink level is insufficient for a day's operation.
3. Insert new bottle and replace cap.
4. Clean up any spilled or splattered ink.
5. Close printer front door.

STACKER MODULE 1 17. **Clean the stacker transport.** 5 6
MIN

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.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	1
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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

MACHINE	18.	Close panels. Close all machine doors and machine panels.	4 MIN	6			
CLEAN UP	19.	Clean up. Ensure tools and materials are removed from the area.	1 MIN	ALL			

WARNING

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

SYSTEM	20.	Restore power. Remove power lockout device. Place Main Power Unit Main Disconnect Switch (3A4S1) in ON position. Press POWER ON switch (2A1S1) on operator control panel.	1 MIN	6			
OCR	21.	Power up OCR cabinet and computer. <ol style="list-style-type: none"> 1. Wait for OCR computer screen to display chevron prompt >>>. 2. Type b and press return. 3. When message appears "Boot was successful ... Alpha inside!" at the upper left corner of the screen, the OCR is ready for Logon. 	3 MIN	11			
POSTNET IJP	22.	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	8			
MACHINE	23.	Check basic machine functions. <ol style="list-style-type: none"> 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 	4 MIN	8			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	1
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

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.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

SYSTEM

24. **In DBCS mode run BCS test deck (NSN 5210-01-371-4906).** Load sort-plan and run 300 piece test deck. 2 8
MIN

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 accept rate. If 98% or higher MAR accept-rate is not achieved, refer to supervisor for corrective action.

POSTNET IJP

25. **IJP test.** From Main Menu select Maintenance then System Tests then Ink Jet Printer Test. 3 8
min
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.
26. **Run ID tag test deck (NSN 3915-04-000-6902) test procedure:** 5 8
MIN
1. Clear all mail from stacker.

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	1
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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.

CLEAN UP	27.	Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 MIN	ALL		
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MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 4

DBCS/OCR MASTER CHECKLIST

MODELS 994, 995, 996, and 998

03-DBCS-CC-002-M

THRESHOLD SEVERITY 2

Time Total: 95 Minutes

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION											
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	D	B	C	S			C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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 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 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.

WARNING

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

- | | | | | |
|------------------|----|---|----------|-----|
| SYSTEM | 2. | Generate and print or view an End Of Run Report. Analyze data provided in this report to determine if any areas of machine are degrading or need attention. | 2
MIN | 11 |
| POSTNET IJP | 3. | Initiate IJP shut down. Press the OFF switch located on the upper right front panel of the IJP to initiate shut down of IJP. | 4
MIN | 8 |
| OCR COMPUTER | 4. | Orderly shutdown of the OCR computer. From the Main Menu go to menu item System Computer then to menu item System Shutdown. | 2
MIN | 11 |
| TRANSPORT MODULE | 5. | Power down and lockout procedure. Power down the machine and lockout power as prescribed by the current local lockout instructions providing lockout/restore procedures. | 1
MIN | ALL |

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	2
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

	8.	Check Feeder. Check Feeder as follows:	1	8			
		1. Check Teflon strip for wear.	MIN				
		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-070-00)					
MONITOR, KEYBOARD, PRINTER	9.	Clean system. Clean exterior of the monitor, keyboard, printer, and printer stand.	1	6			
			MIN				
TRANSPORT MODULE	10.	Clean Transport module.	2	6			
		1. Clean/vacuum the transport area.	MIN				
		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.					
TAG/SCANNER MODULE	11.	Clean tag scanner module.	2	6			
		1. Clean/vacuum the transport area.	MIN				
		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.					
IJP/OCR MODULE	12.	Clean IJP/OCR module.	2	6			
		1. Clean/vacuum the transport area.	MIN				
		2. If transport cover gas springs are unable to hold cover in uppermost position, replace defective gas spring using work order for					

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
		0	3	D	B	C	S				C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

additional time.

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

MAINTENANCE MANAGEMENT ORDER

IJP DELAY LINE MODULE

- | | | | |
|-----|-------------------------------------|----------|---|
| 13. | Clean IJP delay line module. | 2
MIN | 6 |
|-----|-------------------------------------|----------|---|
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.

READER MODULE

- | | | | |
|-----|-----------------------------|----------|---|
| 14. | Clean Reader module. | 3
MIN | 6 |
|-----|-----------------------------|----------|---|
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, broke, 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.

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION											
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE	
		0	3	D	B	C	S			C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998				Bulletin Filename MM06054AC			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

SYSTEM COMPUTER & WFOV	15.	Clean/vacuum exterior. Clean exterior of the system computer and WFOV processor.	1 MIN	6
------------------------	-----	---	----------	---

READER MODULE (CONT.)	16.	Clean WFOV assy.	6 MIN	6
-----------------------	-----	-------------------------	----------	---

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 buildup on exterior of camera sapphire glass using dry cotton swabs. If adhesive buildup 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 MS212, 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	17.	Clean ICS-3 system (Verifier) read head. Clean ICS-3 system (Verifier) read head as follows:	1 MIN	6
--------------------	-----	---	----------	---

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

GRAY SCALE SCANNER	18.	Clean scanner faceplate. Clean scanner faceplate as follows:	3 MIN	6
--------------------	-----	---	----------	---

1. Wipe dust and dirt from both sides of scanner faceplate using a soft cloth. Pay particular attention to aperture slot.

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	C	0	0	2
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

2. Clean stamps and/or glue accumulation off scanner faceplate.

MAINTENANCE MANAGEMENT ORDER

GRAY SCALE SCANNER

- | | | | |
|-----|---|----------|---|
| 19. | Clean gray scale camera assembly lens, fiber bundle windows, and cylinder lamp assemblies. | 2
MIN | 6 |
|-----|---|----------|---|
1. Remove lens cap.
 2. Clean dust from gray scale camera assembly lens with a lens brush.
 3. Clean dirt or streaks from lens using an optical lens cleaning kit.
 4. Replace lens cap.
 5. With soft lint free cloth clean the fiber bundle windows.
 6. Clean the cylindrical lens in front of the lamps.

STACKER MODULE
1

- | | | | |
|-----|-------------------------------------|----------|---|
| 20. | Clean the stacker transport. | 5
MIN | 6 |
|-----|-------------------------------------|----------|---|

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 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		IDENTIFICATION											
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER		TYPE
		0	3	D	B	C	S			C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

insufficient for a day's operation.

3. Insert new bottle and replace cap.
4. Clean up any spilled or splattered ink.
5. Close printer front door.

MACHINE	23.	Close panels. Close all machine doors and machine panels.	4 MIN	6
CLEAN UP	24.	Clean up. Ensure tools and materials are removed from the area.	1 MIN	ALL

WARNING

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

NOTE

Ensure lens cap is removed prior to operating in the OCR mode.

SYSTEM	25.	Restore power. Remove power lockout device. Place Main Power Unit Main Disconnect Switch (3A4S1) in ON position. Press POWER ON switch (2A1S1) on operator control panel.	1 MIN	6
OCR	26.	Power up OCR cabinet and computer. <ol style="list-style-type: none"> 1. Wait for OCR computer screen to display chevron prompt >>>. 2. Type b and press return. 3. When message appears "Boot was successful ... Alpha inside!" at the upper left corner of the screen, the OCR is ready for Logon. 	3 MIN	11
POSTNET IJP	27.	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	8
MACHINE	28.	Check basic machine functions. <ol style="list-style-type: none"> 1. Turn Maintenance Mode switch on operator 	4 MIN	8

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	2
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

control panel to Maintenance Mode position.

2. Start machine. Verify when START switch is pressed, startup 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

29. **WFOV AUTO calibration.** From Camera Maintenance screen (Note for detailed information and screen shots of procedure for calibration of WFOV refer to MS 212). 2 8
MIN
 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, click on the Tools menu.
 6. From Tools menu, select Auto Calibration.
 7. The Auto Calibration process takes

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION											
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM				CLASS CODE		NUMBER		TYPE	
		0	3	D	B	C	S			C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998				Bulletin Filename MM06054AC			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

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

30. **In DBCS mode run BCS test deck** (NSN 5210-01-371-4906). Load sortplan and run 300 piece test deck. 2 8
MIN

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 accept rate. If 98% or higher MAR accepts rate is not achieved, refer to supervisor for corrective action.

POSTNET IJP

31. **IJP test.** From Main Menu select Maintenance then System Tests then Ink Jet Printer Test. 3 8
MIN

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.

32. **Run ID tag test deck** (NSN 3915-04-000-6902) **test procedure:** 5 8
MIN

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

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U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	2
Equipment Nomenclature Delivery Bar Code Sorter /OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

CLEAN UP

33. **Clean up.** Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor. 2 ALL MIN

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 5

DBCS/OCR MASTER CHECKLIST

MODELS 994, 995, 996, and 998

03-DBCS-CC-003-M

THRESHOLD SEVERITY 3

Time Total: 102 Minutes

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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	<p>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 the equipment.</p>	3 MIN	ALL
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THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.
 When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods can not be used. Report safety deficiencies to your supervisor immediately upon detection.

WARNING

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

SYSTEM	<p>2. Generate and print or view an End Of Run Report. Analyze data provided in this report to determine if any areas of machine are degrading or need attention.</p>	2 MIN	11
POSTNET IJP	<p>3. Initiate IJP shutdown. Press the OFF switch located on the upper right front panel of the IJP to initiate shut down of IJP.</p>	4 MIN	8
OCR COMPUTER	<p>4. Orderly shutdown of the OCR computer. From the Main Menu go to menu item System Computer then to menu item System Shutdown.</p>	2 MIN	11
TRANSPORT MODULE	<p>5. Power down and lockout procedure. Power down the machine and lockout power as prescribed by the current local lockout instructions providing lockout/restore procedures.</p>	1 MIN	ALL

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

MACHINE	6.	Open machine, search for mail.	10	6			
		1. Open all machine doors.			MIN		
		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.					
FEEDER MODULE	7.	Clean Feeder module.	3	6			
		1. Clean/vacuum outside surfaces of Feeder module.			MIN		
		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).					
	8.	Check Feeder. Check Feeder as follows:	1	8			
		1. Check Teflon strip for wear.			MIN		

MAINTENANCE MANAGEMENT ORDER

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U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

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-070-00)

MONITOR, KEYBOARD, PRINTER	9.	Clean system. Clean exterior of the monitor, keyboard, printer, and printer stand.	1 MIN	6
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OCR MONITOR KEYBOARD	10.	Clean OCR reader cabinet. Clean exterior of the OCR monitor, keyboard, and reader cabinet.	2 MIN	6
----------------------	-----	--	----------	---

TRANSPORT MODULE	11.	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	6
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ICS-3	12.	Clean ICS-3 system (Verifier) electronic enclosure. Clean interior of ICS-3 electronic enclosure and electronic enclosure filters.	1 MIN	6
-------	-----	---	----------	---

TAG/SCANNER MODULE	13.	Clean tag/scanner 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	6
--------------------	-----	--	----------	---

U.S. Postal Service Maintenance Checklist	IDENTIFICATION													
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S			C	C	0	0	3	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

- 5. Remove any mail pieces found.
- 6. Follow local procedures for returning mail to operations for processing.

SYSTEM
COMPUTER &
WFOV

- 17. **Clean exterior.** Clean exterior of the system computer and WFOV processor. 1 6
MIN

READER
MODULE

- 18. **Clean WFOV assy.** 6 6
MIN

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 buildup on exterior of camera sapphire glass using dry cotton swabs. If adhesive buildup 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 MS212, 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.** 1 6
MIN
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.

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U.S. Postal Service		IDENTIFICATION													
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		0	3	D	B	C	S				C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

GRAY SCALE SCANNER 20. **Clean scanner faceplate.** Clean scanner faceplate as follows: 3 6
MIN

1. Wipe dust and dirt from both sides of scanner faceplate using a soft cloth. Pay particular attention to aperture slot.
2. Clean stamps and/or glue accumulation off scanner faceplate.

GRAY SCALE SCANNER 21. **Clean gray scale camera assembly lens, fiber bundle windows, and cylinder lamp assemblies.** 2 6
MIN

1. Remove lens cap.
2. Clean dust from gray scale camera assembly lens with a lens brush.
3. Clean dirt or streaks from lens using an optical lens cleaning kit.
4. Replace lens cap.
5. With soft lint free cloth clean the fiber bundle windows.
6. Clean the cylindrical lens in front of the lamps.

STACKER MODULE 1 22. **Clean the stacker transport.** 5 6
MIN

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 with micro fiber glove or cloth).

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

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

LABEL PRINTER	23.	Check label printers.	1	6		
			MIN			
		1. Clean/vacuum interior and exterior of label printers, located on first and eighth stacker modules.				
		2. Ensure label printers are loaded with sufficient supply of label material. 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.				

POSTNET IJP	24.	Clean POSTNET bar code ink jet printer print head and guide plate (fence).	8	8		
			MIN			

CAUTION

**Use extreme care in charge tunnel area.
DO NOT touch or bump charge tunnel.**

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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

25. **Check and replenish POSTNET bar code ink jet printer ink bottles.** 2 8
MIN

CAUTION

Do not pour ink from bottle to bottle. This stirs up sediment in bottom of bottle and will clog filters.

NOTE

Place the makeup ink bottle on the left.

NOTE

Do not use expired ink.

Check and replenish POSTNET bar code ink jet printer ink bottles as follows:

1. Open printer front door.
2. Remove and discard ink bottle if ink level is insufficient for a day's operation.
3. Insert new bottle and replace cap.
4. Clean up any spilled or splattered ink.
5. Close printer front door.

26. **POSTNET bar code printer air line.** Check air lines for oil and/or water contamination. Drain filter/separator. Report excessive accumulation to supervisor. 1 8
MIN

- MACHINE 27. **Close panels.** Close all machine doors and machine panels. 4 6
MIN

- CLEAN UP 28. **Clean up.** Ensure tools and materials are removed from the area. 1 ALL
MIN

WARNING

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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

Ensure lens cap is removed prior to operating in the OCR mode.

MAINTENANCE MANAGEMENT ORDER

SYSTEM	29.	Restore power. Remove power lockout device. Place Main Power Unit Main Disconnect Switch (3A4S1) in ON position. Press POWER ON switch (2A1S1) on operator control panel.	1 MIN	6			
OCR	30.	Power up OCR cabinet and computer. 1. Wait for OCR computer screen to display chevron prompt >>>. 2. Type b and press return. 3. When message appears "Boot was successful ... Alpha inside!" at the upper left corner of the screen, the OCR is ready for Logon.	3 MIN	11			
POSTNET IJP	31.	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	8			
LABEL PRINTER	32.	Check label printer. On label printer, press LINE FEED button one time. The label printer 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.	2 MIN	6			
MACHINE	33.	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	4 MIN	8			

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

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.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

WFOV

34. **WFOV AUTO Calibration.** From Camera Maintenance screen (Note for detailed information and screen shots of procedure for calibration of WFOV refer to MS 212). 2 MIN 8
 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 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

35. **Run BCS test deck** (NSN 5210-01-371-4906). Load sort-plan and run 300 piece test deck. 2 MIN 8

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	3
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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 accept rate. If 98% or higher MAR accepts rate is not achieved, refer to supervisor for corrective action.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

POSTNET IJP	36.	IJP test. From Main Menu select Maintenance then System Tests then Ink Jet Printer Test.	3 MIN	8		
		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.				
	37.	Run ID tag test deck (NSN 3915-04-000-6902) test procedure:	5 MIN	8		
		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.				
		Results: 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.				
CLEAN UP	38.	Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 MIN	ALL		

ATTACHMENT 6

DBCS/OCR MASTER CHECKLISTS

MODELS 994, 995, 996, and 998

03-DBCS-CC-004-M

PRODUCTION THRESHOLD OF 1,300,000

Time Total: 165 Minutes

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	C	0	0	4
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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.	<p>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 the equipment.</p> <p>THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.</p> <p>When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods can not be used. Report safety deficiencies to your supervisor immediately upon detection.</p>	3	ALL	MIN		
POSTNET IJP	2.	<p>Initiate IJP shutdown. Press the OFF switch located on the upper right front panel of the IJP to initiate shut down of IJP.</p>	4	8	MIN		
OCR COMPUTER	3.	<p>Orderly shut down of the OCR computer. From the Main Menu go to menu item System Computer then to menu item System Shutdown.</p>	2	11	MIN		
TRANSPORT MODULE	4.	<p>Power down and lockout procedure. Power down the machine and lockout power as prescribed by the current local lockout instructions providing lockout/restore procedures.</p>	1	ALL	MIN		
MACHINE	5.	<p>Open panels. Open/remove all machine panels and doors, except for diverter plate cover assemblies (Wimpy panels) and stacker lower front panel assemblies.</p>	4	6	MIN		
FEED TABLE	6.	<p>Check for wear.</p> <p>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</p>	5	8	MIN		

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	4
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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 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.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

TRANSPORT MODULE

- | | | | |
|----|--|----------|---|
| 7. | Check Transport module. | 2
MIN | 8 |
| | 1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace worn, deformed, split, or torn belts. | | |
| | 2. Check all rollers (drive/idler) for proper adjustment and indications of wear. Replace and/or adjust rollers as required | | |
| | 3. Clean any dirt or glue buildup from rollers using cleaning solvent. | | |
| | 4. Write work orders as needed for replacement of belts, rollers, etc. | | |

TAG/SCANNER

- | | | | |
|----|---|----------|---|
| 8. | Service belts & rollers. | 2
MIN | 8 |
| | 1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace belts as necessary. | | |
| | 2. Check all rollers (drive and idler) for proper adjustment and indications of wear. Replace and adjust rollers as required. | | |
| | 3. Clean any dirt, glue, or ink buildup from rollers using cleaning solvent. | | |

U.S. Postal Service Maintenance Checklist	IDENTIFICATION														
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE	
	0	3	D	B	C	S			C	C	0	0	4	M	
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

OCR/IJP MODULE	9.	Service belts & rollers.	2 MIN	8	
		<ol style="list-style-type: none"> 1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace belts as necessary. 2. Check all rollers (drive and idler) for proper adjustment and indications of wear. Replace and adjust rollers as required. 3. Clean any dirt, glue, or ink buildup from rollers using cleaning solvent. 			
IJP DELAY LINE MODULE	10.	Service belts & rollers.	2 MIN	8	
		<ol style="list-style-type: none"> 1. Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace belts as necessary. 2. Check all rollers (drive and idler) for proper adjustment and indications of wear. Replace and adjust rollers as required. 3. Clean any dirt, glue, or ink buildup from rollers using cleaning solvent. 			
READER MODULE	11.	Check Reader module.	4 MIN	8	
		<ol style="list-style-type: none"> 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. 2. Check all rollers (drive and idler) for proper adjustment and indications of wear. Replace and adjust rollers as required. 3. Clean any dirt or glue buildup from rollers. 4. Write work orders as needed for replacement of gates, belts, rollers, etc. 			
	12.	Clean motor power unit filter. Remove, clean, and replace filter on motors power unit.	1 MIN	6	

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	4
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

STACKER
MODULES
1 - 7

13. **Clean the stacker transport.**

45 6
MIN

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 barriers (wipe 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

14. **Check stacker modules.**

21 8
MIN

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

OCR CABINET

15. **OCR cabinet filters.** Remove all filters from the doors of the OCR cabinet. Clean filters and replace.

4 6
MIN

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	4
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

- | | | | | |
|----------|-----|--|----------|-----|
| MACHINE | 16. | Close panels. Close all machine doors and machine panels. | 4
MIN | 6 |
| CLEAN UP | 17. | 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 | 18. | Restore equipment to service. Remove the power lockout device and place the AC Power Distribution Panel Switch, 3A4S1, to the ON position. Power up the DBCS. | 1
MIN | 6 |
| OCR | 19. | Power up OCR cabinet and computer.

1. Wait for OCR computer screen to display chevron prompt >>>.
2. Type b and press return.
3. When message appears "Boot was successful ... Alpha inside!" at the upper left corner of the screen, the OCR is ready for Logon. | 3
MIN | 11 |
| POSTNET IJP | 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 | 8 |
| FEEDER | 21. | Check Feeder alignment. | 30
MIN | 6 |

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-070-00. Make adjustments as required.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	4
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

SYSTEM	22.	Run WFOV test deck (NSN 3915-06-000-8292). Load sort plan and run 400 piece test deck. Print or view an End of Run Report and verify all pieces read. If any problems are found, notify supervisor.	3 MIN	8			
OCR	23.	Perform the gray scale test procedures. 1. Log on to the OCR computer. 2. At the OCR Alpha computer monitor select Address Block Coordinates from the Machine Menu and set bottom and right coordinates to 1mm, top to 120mm, and left to 240mm. This should produce test deck results with all groups passing except groups 3 and 4 (window detector stress). These groups usually fail because the DBCS/OCR does not have a window detector. 3. In OCR MODE perform this procedure using the gray scale test deck, NSN 5210-05-000-9583. Ensure lens cap is removed.	10 MIN	11			
	24.	Check bin switches. Check all bin 3/4 and bin full switches and stacker blades. 1. Verify get 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.	7 MIN	6			
CLEAN UP	25.	Clean up. Ensure all tools, lubricants; rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	2 MIN	ALL			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	4
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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/OCR MASTER CHECKLISTS

MODELS 994,995, 996, and 998

03-DBCS-CC-005-M

PRODUCTION THRESHOLD OF 5,600,000

Time Total: 233 Minutes

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	C	0	0	5	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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 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 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	ALL
MIN	

2. **Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shut down of IJP.

2	8
MIN	

3. **Orderly shut down of the OCR computer.** From the Main Menu go to menu item System Computer then to menu item System Shutdown.

2	11
MIN	

4. **Power down and lockout procedure.** Power down the machine and lockout power as prescribed by the current local lockout instructions providing lockout/restore procedures.

1	ALL
MIN	

5. **Open panels.** Open all machine doors. Open or remove all machine panels. This includes diverter plate cover assemblies (Wimpy panels).

21	6
MIN	

6. **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	6
MIN	

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	5
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

TRANSPORT MODULE	7.	Clean Transport module.	5	6
		1. Remove and clean the two filters located in the knob of the air compressor.	MIN	
		2. Re-install the two filters.		
		3. Replace the filters if necessary.		
		4. Clean all plates, covers, doors, framework, etc.		

TAG/SCANNER	8.	Clean tag/scanner module. Clean/vacuum all plates, covers, doors, framework, top of module, etc.	3	6
			MIN	

OCR/IJP MODULE	9.	Clean OCR/IJP module. Clean/vacuum all plates, covers, doors, framework, top of module, etc.	3	6
			MIN	

IJP DELAY LINE MODULE	10.	Clean IJP delay line module. Clean/vacuum all plates, covers, doors, framework, top of module, etc.	3	6
			MIN	

READER MODULE	11.	Clean Reader module. Clean/vacuum all plates, covers, doors, framework, top of module, etc.	10	6
			MIN	

CAUTION

Extreme care should be taken that rules regarding electro-static-discharge (ESD) are strictly followed when handling all printed circuit boards, including those in logic racks, system computers, etc. This includes the use of wrist straps and ESD pads.

SYSTEM COMPUTER & WFOV	12.	Clean/vacuum system computer and WFOV. Remove covers from system computer and WFOV processor and clean using ESD compliant vacuum attachments and/or the ESD compliant dust containment unit. Re-install covers.	15	11
			MIN	

ALPHA 600 COMPUTER	13.	Clean/vacuum Alpha Work Station 600 Computer. Remove covers from Alpha Computer and clean using ESD compliant vacuum attachments and/or the ESD compliant dust containment unit.	7	11
			MIN	

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	C	0	0	5	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

STACKER
MODULE
1 - 7

14. **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 6
MIN

POSTNET IJP

15. **Replace vacuum filter.** Replace vacuum filter, NSN 4330-01-000-2034, as follows:

7 8
MIN

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.
7. Reconnect black rubber hose to output side of vacuum filter.
8. Close gauge door in front of fluid compartment.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	5
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

16. **Replace ink and makeup replenishment in-line filters.** Replace ink and makeup replenishment in-line filters, NSN 4330-03-000-6410, as follows: 7 8
MIN

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 makeup ink filter as follows:
 - a. Place absorbent towel on top of replenishment bottles.
 - b. Remove clamps at both ends of filter.
 - c. Remove makeup ink tubes from both ends of filter.
 - d. Connect makeup 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.
 - f. Wipe up any spilled ink or makeup ink and dispose of towel.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	5
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

17. **Clean bar code printer cap and stem assembly stainless steel vacuum tube.** 10 8
MIN

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 Video-jet cleaning solution, clean ink buildup 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.
18. **Clean bar code printer cabinet.** Clean interior and exterior of bar code printer cabinet as follows: 5 8
MIN
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

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	5
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

WARNING

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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

MACHINE	19.	Restore equipment to service. Remove the power lockout device and place the AC Power Distribution Panel Switch, 3A4S1, to the ON position. Power up the DBCS.	1 MIN	6
OCR	20.	Power up OCR cabinet and computer. 1. Wait for OCR computer screen to display chevron prompt >>>. 2. Type b and press return. 3. When message appears "Boot was successful ... Alpha inside!" at the upper left corner of the screen, the OCR is ready for Logon.	3 MIN	11
POST-NET IJP	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	8
	22.	Enter date of filter change in POSTNET bar code printer. Enter date of filter change in POSTNET bar code printer as follows: 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.	2 MIN	8
	23.	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	6

U.S. Postal Service Maintenance Checklist		IDENTIFICATION														
		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE	
		0	3	D	B	C	S				C	C	0	0	5	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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.
 - 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 E-Stop mushroom switches one at a time to ensure that each one causes actions as described in steps 2-b, c,

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	5
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

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.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

READER MODULE

24. **Power supply PS1 (5VDC Reader) adjustment.** 2 8
MIN
 1. Open Reader lower left door.
 2. Place multi-meter 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).
 4. Close door.

MACHINE

25. **Close panels.** Replace or close all machine panels, doors, and covers. 21 6
MIN

CLEAN UP

26. **Clean up.** Ensure tools and materials are removed from the area. 1 ALL
MIN

POSTNET IJP

27. **IJP test.** From Main Menu select Maintenance then System Tests then Ink Jet Printer Test. 3 8
MIN
 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.

SYSTEM

28. **Run BCS test deck (NSN 5210-01-371-4906).** 2 8
MIN
Load sort-plan and run 300 piece test deck.

U.S. Postal Service Maintenance Checklist		IDENTIFICATION													
		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S					C	C	0	0
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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 accept rate. If 98% or higher MAR accepts rate is not achieved, refer to supervisor for corrective action.

CLEAN UP

- 29. **Clean up.** Ensure all tools, lubricants, rags, etc. 2 ALL are removed from the work area. Report all MIN deficiencies to your supervisor.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 8

DBCS/OCR MASTER CHECKLISTS

MODELS 994, 995, 996, and 998

03-DBCS-CC-006-M

PRODUCTION THRESHOLD OF 16,900,000

Time Total: 313 Minutes

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S			C	C	0	0	6
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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 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 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.

POSTNET PRINTER

2. **Initiate IJP shutdown.** Press the OFF switch located on the upper right front panel of the IJP to initiate shut down of IJP.

OCR COMPUTER

3. **Orderly shut down of the OCR computer.** From the Main Menu go to menu item System Computer then to menu item System Shutdown.
4. **Power down and lockout procedure.** Power down the machine and lockout 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 _____.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	6
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

MACHINE 5. **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. 23 MIN 6

STACKERS 1-7 6. **Clean/vacuum diverter plate cover assemblies.** 14 MIN 6

STACKERS 1-7 7. **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). 14 MIN 6

1. Clean power supplies.
2. Do not replace covers.

CAUTION

Extreme care should be taken that rules regarding electro-static-discharge (ESD) are strictly followed when handling all printed circuit boards, including those in logic racks, system computers, etc. This includes the use of wrist straps and ESD pads.

OCR READER CABINET 8. **Clean interior of the OCR reader cabinet.** Open OCR reader cabinet and clean/vacuum interior of cabinet including card cages using ESD compliant vacuum and attachments. (OMEGA Vacuum eBuy # 58654) 20 MIN 8

WARNING

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

MACHINE 9. **Restore equipment to service.** Rear Main Power Unit must bypass the magnetic contacts for DBCS to run. Remove the power lockout device and place the AC Power Distribution Panel Switch, 3A4S1, to the ON position. Power up the DBCS. 1 MIN 8

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	6
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

FEEDER	14.	Infrared scan. Use non-contact infrared to monitor the Feeder for abnormal temperature (machine should still be running from Item 7). 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	8			
FEEDER POWER DISTRIBUTION	15.	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	8			
TRANSPORT	16.	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	8			
TAG/SCANNER MODULE	17.	Infrared scan. Use non-contact infrared to monitor 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	8			
OCR/IJP MODULE	18.	Infrared scan. Use non-contact infrared to monitor 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	8			

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	6
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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 DRYING MODULE	19.	Infrared scan. Use non-contact infrared to monitor for abnormal temperature.	2 MIN	8			
		1. Scan all motors, terminal connections, and connector plugs.					
		2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.					
READER	20.	Infrared scan. Use non-contact infrared to monitor the Reader for abnormal temperature.	2 MIN	8			
		1. Scan all motors, terminal connections, and connector plugs.					
		2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.					
MOTOR POWER DISTRIBUTION	21.	Infrared scan. Use non-contact infrared to monitor motor distribution panel for abnormal temperature.	13 MIN	8			
		1. Scan all terminal connections and connector plugs.					
		2. Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.					
STACKERS 1-7 TIERS 1-4	22.	Infrared scan. Use non-contact infrared to monitor stacker tiers 1-4 for abnormal temperature.	16 MIN	8			

NOTE

Do not use contact probe for following checks. Use focusing probe or airborne technique.

1. Scan all motors, terminal connections, pusher assemblies, and connector plugs.
2. Investigate cause of abnormal temperature and notify supervisor of necessary corrective action.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	6
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

FEEDER	23.	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	8			
TRANSPORT	24.	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	8			
TAG/SCANNER	25.	Ultrasonic scan. Use ultrasonic detector to monitor all bearing assemblies top and bottom of the Tag/Scanner for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	5 MIN	8			
OCR/IJP MODULE	26.	Ultrasonic scan. Use ultrasonic detector to monitor all bearing assemblies top and bottom of the OCR/IJP module for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	5 MIN	8			
IJP DRYING MODULE	27.	Ultrasonic scan. Use ultrasonic detector to monitor all bearing assemblies top and bottom of the IJP drying module for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.	5 MIN	8			
READER	28.	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	8			
STACKERS 1-7 TIERS 1-4	29.	Ultrasonic scan.	56 MIN	8			

NOTE

Stacker work sheets are available for down load from MTSC Web site 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

U.S. Postal Service Maintenance Checklist	IDENTIFICATION													
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	3	D	B	C	S			C	C	0	0	6	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order

MAINTENANCE MANAGEMENT ORDER

SYSTEM

- | | | | |
|---|--|-----------|-----|
| 30. | Gate and solenoid pusher assembly test. | 20
MIN | 8 |
| <ol style="list-style-type: none"> 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-<u>A</u>ll, Select Gates-<u>A</u>ll, and Select Action-Sequence. <p style="text-align: center;">NOTE</p> <p>Identify visually inoperative solenoid pusher assemblies and gates by viewing each stacker module one by one.</p> <ol style="list-style-type: none"> 3. One stacker module will be tested at a time, energizing every gate and solenoid pusher assembly sequentially, repeatedly. By responding to the testing screen on the DBCS monitor and answering <u>Y</u>es or <u>N</u>o, the test will move to the next stacker module. The testing will be identical for each stacker module. 4. Type T to begin Start <u>T</u>est 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. | | | |
| 31. | Power down and lockout procedure. | 1
MIN | ALL |
| <p>Power down the machine and lockout power as prescribed by the current local lockout instructions providing lockout/restore procedures.</p> | | | |

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	6
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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/OCR MASTER CHECKLISTS

MODELS 994,995, 996, and 998

03-DBCS-CC-007-M

PRODUCTION THRESHOLD OF 67,500,000

Time Total: 230 Minutes

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	C	0	0	7	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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 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 the equipment. | 3 | All |
| | | MIN | |

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.

POST-NET IJP

- | | | | |
|----|--|-----|---|
| 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 | 8 |
| | | MIN | |

OCR COMPUTER

- | | | | |
|----|---|-----|----|
| 3. | Orderly shut down of the OCR computer. From the Main Menu go to menu item System Computer then to menu item System Shutdown. | 2 | 11 |
| | | MIN | |

SYSTEM

- | | | | |
|----|---|-----|-----|
| 4. | Power down and lockout procedure. Power down the machine and lockout power as prescribed by the current local lockout instructions providing lockout/restore procedures. | 1 | ALL |
| | | MIN | |

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 _____.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	7
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

NOTE

The following lockout instructions does 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.

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

MACHINE	5.	Check for mail under machine.	18 MIN	6			
		1. Remove foam strips from backside 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.					
	6.	Clean under machine.	40 MIN	6			
		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. Re-install foam strips to backside of machine.					
MACHINE	7.	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	6			
MAIN AC POWER DISTRIBUTION	8.	Main AC power distribution. Check for loose connections and discoloration of cables due to heat. (front and backside)	16 MIN	8			
		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.					

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	7
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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 9. **Feeder.** Check for loose connections and discoloration of cables due to heat. 2 8
MIN

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.

FEEDER POWER DISTRIBUTION 10. **Feeder power distribution.** Check for loose connections and discoloration of cables due to heat. 7 8
MIN

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.

TRANSPORT 11. **Transport.** Check for loose connections and discoloration of cables due to heat. 1 8
MIN

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.

TAG/SCANNER 12. **Tag scanner module.** Check for loose connections and discoloration of cables due to heat. 2 8
MIN

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.

OCR/IJP MODULE 13. **OCR/IJP module.** Check for loose connections and discoloration of cables due to heat. 2 8
MIN

1. Verify all terminal connections are tight.
2. Verify all cable connections are properly seated.

MAINTENANCE MANAGEMENT ORDER

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U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	7
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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.

MAINTENANCE MANAGEMENT ORDER

IJP DRYING MODULE

14. **IJP drying module.** Check for loose connections and discoloration of cables due to heat. 2 MIN 8
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.

READER

15. **Reader.** Check for loose connections and discoloration of cables due to heat. 3 MIN 8
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.

MOTOR POWER DISTRIBUTION

16. **Motor power distribution.** Check for loose connections and discoloration of cables due to heat. 8 MIN 8
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.

STACKERS 1-7

17. **Stackers.** Check for loose connections and discoloration of cables due to heat. 42 MIN 8
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.

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	C	0	0	7
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

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.

POSTNET IJP

18. **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: 8 8
MIN

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 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 ink that may spill during 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.

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U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	7
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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.

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.
19. **Replace ink jet printer muffler.** Replace IJP muffler as follows:

15	8
MIN	

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

MACHINE

20. **Close panels.** Replace or close all machine panels, doors, and covers.

16	6
MIN	
21. **Clean up.** Ensure tools and materials are removed from the area.

2	ALL
MIN	

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	C	0	0	7	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

WARNING

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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

- | | | | | |
|-------------|-----|---|----------|----|
| SYSTEM | 22. | Restore equipment to service. Remove power lockout device from facility power feed to the machine. Energize the facility power feeder to the machine using locally approved procedures. Press POWER ON switch on operator control panel. | 1
MIN | 6 |
| OCR | 23. | Power up OCR cabinet and computer.

1. Wait for OCR computer screen to display chevron prompt >>>.
2. Type b and press return.
3. When message appears "Boot was successful ... Alpha inside!" at the upper left corner of the screen, the OCR is ready for Logon. | 3
MIN | 11 |
| POSTNET IJP | 24. | 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 | 8 |
| | 25. | Enter date of filter change in POSTNET bar code tag printer. Enter date of filter change in POSTNET bar code printer as follows:

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. | 2
MIN | 8 |

U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	7
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

MAIN AC POWER DISTRIBUTION 26. **Power factor capacitors.** Verify power factor capacitors are functioning. 5 MIN 8

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 Maintenance Mode switch on operator control panel to maintenance mode position.
4. Start the machine
5. Observe current reading. Current will vary 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 detected, check for defective wire or capacitor and repair.
8. Close panel door and turn maintenance switch to Normal Mode.

POSTNET IJP 27. **IJP test.** From Main Menu select Maintenance then System Tests then Ink Jet Printer Test. 3 MIN 8

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.

28. **In DBCS mode run BCS test deck** (NSN 5210-01-371-4906). Load sort-plan and run 300 piece test deck. 2 MIN 8

NOTE

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

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U.S. Postal Service		IDENTIFICATION													
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
		0	3	D	B	C	S				C	C	0	0	7
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998						Bulletin Filename MM06054AC			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

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

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

ATTACHMENT 10

OPERATIONAL MAINTENANCE PROCEDURES

DBCS/OCR MODELS 990, 994, 995, 996, and 998

09-DBCS-CC-001-M

OPERATIONAL TOUR

Time Total: 19 Minutes

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U.S. Postal Service Maintenance Checklist	IDENTIFICATION													
	WORK CODE		EQUIPMENT ACRONYM						CLASS CODE		NUMBER			TYPE
	0	9	D	B	C	S			C	C	0	0	1	M
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

SAFETY STATEMENT

1. **COMPLY WITH ALL SAFETY PRECAUTIONS.** Tour All
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 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.

SYSTEM

2. **Operational checks must be made with machine processing mail in a normal operating mode.** Tour 8

MACHINE LOGBOOK

3. **Examine machine logbook.** Examine log and bring forward any unresolved problems from the previous tour. Begin Tour 8

MACHINE SAFETY

4. **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. Tour 8

MACHINE SAFETY

5. **Observe warning horn and beacons.** Watch for proper operation of warning horn and beacons on machine start-ups. Tour 8

DBCS COMPUTER MONITOR

6. **Check mail processing screen.** Check current GAR, MAR, Jams, mechanical rejects and fault indications and ensure all performance metrics are meeting their target. Tour 8

MAINTENANCE MANAGEMENT ORDER

MAINTENANCE MANAGEMENT ORDER

U.S. Postal Service		IDENTIFICATION												
Maintenance Checklist		WORK CODE		EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
		0	9	D	B	C	S			C	C	0	0	1
Equipment Nomenclature Delivery Bar Code Sorter/OCR		Equipment Model 994, 995, 996, 998					Bulletin Filename MM06054AC			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

MAINTENANCE MANAGEMENT ORDER

- | | | | | | | | |
|-------------------------|-----|---|------------|---|--|--|--|
| MACHINE | 7. | Use the Diagnostic Tracking Report (select F9 and then F6) to view diagnostic information if problems are noted in Item 6. Take appropriate corrective action based on diagnostic information. | Per Item 6 | 8 | | | |
| READER, WFOV | 8. | If MAR or GAR is below acceptable values: Check for dust/debris accumulations on faceplate. Check cooling fan filter for accumulated dust and debris on WFOV computer. Correct as necessary. | Tour | 8 | | | |
| 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. | Tour | 8 | | | |
| FEEDER | 10. | Observe feeder operation. Check area for debris. Verify feeding of mail is smooth and consistent. Loud popping noises made when mail is being inducted indicate a possible feeder alignment problem. Correct as necessary. | Tour | 8 | | | |
| READER, ICS-3 | 11. | If excessive ID TAG ERROR messages are occurring. Identify type by using online display and machine fault log. Check ICS-3 ID tag reader exterior for accumulated dust, dirt and debris or loose/worn belts. Pay particular attention to the aperture and to the raised portion of the faceplate. Clean/adjust/replace as necessary. | Tour | 8 | | | |
| CERTIFIED MAIL STACKER | 12. | Check certified mail stacker. Check for presence of certified mail. If none is present, investigate. Notify Operations and SMO if CMD read problem is discovered with WFOV system. Correct as necessary. | Tour | 8 | | | |
| ACE/Mkat COMPUTER | 13. | Check MPE-watch computer files. Check current GAR, MAR, Jams, mechanical rejects and fault indications and ensure all performance metrics are meeting their target. | Each 2 Hrs | 8 | | | |
| OPERATORS | 14. | Enquire if operators are having excessive processing problems and investigate as necessary. Initiate corrective action as appropriate. | Tour | 8 | | | |
| MACHINE LOGBOOK AND SMO | 15. | Log problems discovered and work performed. Report unresolved problems at the end of tour to the SMO and generate appropriate work orders. | Tour | 8 | | | |

MAINTENANCE MANAGEMENT ORDER