# MAINTENANCE TECHNICAL SUPPORT CENTER HEADQUARTERS MAINTENANCE OPERATIONS UNITED STATES POSTAL SERVICE



## Maintenance Management Order

**SUBJECT:** Operational, Predictive, & Preventive

Maintenance Guidelines for Low Cost Reject

**Encoding Machine (LCREM)** 

**NO:** MMO-040-13

**DATE:** March 29, 2013

TO: Maintenance Manager LCREM Offices FILE CODE: K3

rhau:mm12094ae

This Online Change removes all references to non-IMb codes from the MMO.

This Maintenance Management Order (MMO) provides Operational & Preventive Maintenance (PM) Guidelines for the Low Cost Remote Encoding Machine (LCREM). The acronym is LCREM and the class code is AA.

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

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

#### WARNING

Various products requiring 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 to all employees. When reordering such a product, it is suggested that current MSDS be requested. Refer to MSDS for appropriate personal protective equipment.

#### WARNING

The use of compressed or blown air is prohibited. An alternative cleaning method such as a HEPA filtered vacuum cleaner, a damp rag, lint-free cloth, or brush must be used in place of compressed or blown air.

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

#### WARNING

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

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

Robert E. Albert

Manager

Maintenance Technical Support Center

**HQ** Maintenance Operations

- Attachments 1. Summary Workload Estimate For LCREM
  - 2. LCREM Master Checklist: 03-LCREM-AA-001-M: Daily
  - 3. LCREM Master Checklist: 03-LCREM-AA-002-M: Weekly
  - 4. LCREM Master Checklist: 03-LCREM-AA-003-M: Monthly
  - 5. LCREM Master Checklist: 03-LCREM-AA-004-M: Quarterly
  - 6. LCREM Master Checklist: 03-LCREM-AA-005-M: Semi-Annually
  - 7. LCREM Operational Maintenance Procedures: 09-LCREM-AA-001-M

#### **ATTACHMENT 1**

**SUMMARY** 

**WORKLOAD ESTIMATE** 

**FOR** 

**LCREM** 

Attachment 1 i

#### THIS PAGE BLANK

ii Attachment 1

#### SUMMARY WORKLOAD ESTIMATE FOR LCREM

	Routine		Routine Servicing +	Non-	Total Servicing		onal Mainte otal Servicir	
Operation	Servicing (Hrs/Yr)	Repair* (Hrs/Yr)	Repair Time (Hrs/Yr)	productive Time** (Hrs/Yr)	Per Machine (Hrs/Yr)	1 Tour (Hrs/Yr)	2 Tours (Hrs/Yr)	3 Tours (Hrs/Yr)
5	475.80	142.74	618.54	61.85	680.39	845.06	1009.73	1174.39
6	557.27	167.18	724.45	72.44	796.89	994.49	1192.09	1389.69
7	638.73	191.62	830.35	83.04	913.39	1143.92	1374.46	1604.99

#### NOTES:

- \*Repair estimates based on 30% of servicing.
- \*\*Based on 10% of total servicing and repair.

#### THIS PAGE BLANK

#### **ATTACHMENT 2**

#### **LCREM MASTER CHECKLIST**

Daily

03-LCREM-AA-001-M

Time Total: 94 minutes

MMO-040-13		1			Ma				nnic	aı Sur	port C	enter
U.S. Postal Se	ervice	WORK	1	FΩ	UIPMEN		TIFICA		LASS	NI	JMBER	TYPE
Maintenance C	Checklis	CODE		AC	RONYN				ODE			
Equipment Nomenclature Low Cost Remote	Encoding	0 3 Equipme	L C ent Model LCRE	l	E M	Bul		A ename 2094a	A e	Occurre	0 1 ence Daily	M
Machine	e											
Part or Component	Item No		Statement th all currer			ions)		Est. Time	Min. Skill		Threshold	ds ———
,				Í	•	,		Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq
SAFETY STATEMENT	Discovered local down equifor summer of the control	PLY WITH onnect povired by this lockout proceed and substate to proceed quipment.  USE OF COROHIBITED on cleaning method method or both or bot	ver and s instruct procedur k out inspect of dust or the control of the control o	applytion. res to this lust cunusion any SED Cuired as np ra l or k y be cher co safet ately t E: bulk Protee	r locker Refer to proper maching on ditional debenotify: further to R BLC, an a HEF ag musulown used leaning defined apon detin mettive	outs to cu perly ne. ons. Co oris. I super actio OWN alterr A fil st be air. A on o g met cience etecti ay re Equip	when irrent shut Open Check fany visor on AIR hative tered used hods es to on.		ALL			
SYSTEM	Plan requ 2. Gen Anal	). Refer to (EWP) irements. erate and ze data pro	MMO for view an ovided on	End	Of Report to	un re	PPE port.	2	10			
	if ar atter	y areas of tion.	machine	are d	egradir	ng or	need					
	3. Initia	te IJP shut	down.					4	7			
	1	the printher dight corner ashing), processed to be start shuted lown processinutes). The printher complete.	on States the turn the lown. Watedure to evacuum	art/Sto Start/ printhe it for t con	p key Stop ke ead Of he prin nplete e will re	is ey o f. Pre thead (abo	lit or n the ss F2 shut- ut 2 when					

2 Attachment 2

Press the AC power switch (located below the keyboard) to the OFF (O) position to turn the AC power off.

U.S. Postal Service								IDE	NTIF	ICAT	ION						
Maintenance Checklist	_	ORK ODE					NEM ONYN					ASS DE	1	IUV	MBE	R	TYPE
	0	3	L	С	R	Е	М				Α	Α	0		0	1	М
Equipment Nomenclature Low Cost Remote Encoding Machine	Equ	ipmeı		<sup>del</sup> ₋CRI	EM			В	ulletir m		name 094ae		Occu	rrer		aily	

Part or	Item	Task Statement and Instruction	Est.	Min.		Threshold	s
Component	No	(Comply with all current safety precautions)	Time Req (min)	Skill - Lev	Run Hours	Pieces Fed (000)	Freq.
		WARNING					
		Before performing the following steps you must don the appropriate PPE as required by the current Electrical Work Plan (EWP) MMO.					
MACHINE	4.	<b>Power down and lockout procedure.</b> Power down the machine and lock out power and compressed air as prescribed by current local lockout instructions providing lockout/restore procedures.	2	ALL			
MACHINE	5.	Open machine, search for mail.	5	7			
		Open all machine doors and covers.					
		<ol><li>Remove all machine panels. Search for mail pieces.</li></ol>					
		3. Remove any mail pieces found.					
		<ol> <li>Follow local procedures for returning mail to operations for processing.</li> </ol>					
FEEDER MODULE	6.	Clean Feeder/Jogger Modules.	5	7			
		Clean/vacuum outside surfaces of Feeder Module.					
		<ol><li>Clean/vacuum internal areas of Feeder Module.</li></ol>					
		<ol><li>Clean/vacuum outside surfaces of jogger assembly.</li></ol>					
		<ol> <li>Clean/vacuum underside surfaces of jogger assembly. Visually check for broken components and loose cabling while cleaning.</li> </ol>					
		5. Search for mail pieces.					
		6. Remove any mail pieces found.					
		<ol><li>Follow local procedures for returning mail to operations for processing.</li></ol>					
		8. Clean/vacuum the following items:					
		<ul> <li>Area around the pickoff belts (Stripper assemblies, Compensator levers, etc.).</li> </ul>					
		b. The P-DZ90 and P-LS80.					

READER MODULE 9.

(CONT.)

Maintenance Technical Support Center

7

6

MIMO-040-13			ATTIL	<u> </u>	iano	C ICC	111110	<u>ai c</u>	<u> </u>	<u> </u>	10	CITICI						
U.S. Postal S	Service									ĒN٦	TIFICA							
Maintenance	Chec	klist	WORK CODE		_			PMENT DNYM		_			ASS ODE	$\int$	NÜ	JMBE	R	TYPE
		i	0 3	L	С	R	Е	М		T	$\top$	Α	Α	$\top$	0	0	1	М
Equipment Nomenclature			Equipmer						В		etin File		<u> </u>	Occ	curre			
Low Cost Remot		oding	ļ	L	_CRE	ΞM					mm1	2094ae	Э			D.	aily	
Machir	ne																	
										_								
Part or	Item			Stater					Jnc)			Est.	Min. Skill			Thre	shold	IS
Component	No	((	Comply wit	ur all (	ourer	ıı safı	ety pr	<del>c</del> caut.	ıuıs)	,		Time Rea	Skill	Ru	ın		eces	Freq.
												(min)		Ηοι		F	ed	!
			and Free land Olived Free land falls										Щ	Щ		(0	00)	
	7	7. Check Feeder. Check Feeder as follows:											9	$\top$	$\overline{}$	$\overline{}$		
	<ul><li>7. Check Feeder. Check Feeder as follows:</li><li>1. Check Teflon strip for wear.</li></ul>										2	9	1	ŀ				
							ŀ											
			k frictio llation.	n st	trips	for	prc	per	we	ar	and				ļ			
	1	3. Chec				1	ŀ											
		4. Repla	•					ır əc	rea.	11 16	יבּל			1	ŀ			
			•		•					•					ŀ			
		unab repla	eeder M le to ho ce defect dditional	old co	over gas	່ in ເ	uppe	ermos	st p	oos	sition,							
READER MODULE	8.	Clean Re	ader Mo	odul	e.							5	7					
		the R suppl	n the lett Reader M ly and to fiber glo	√lodu the li	ıle, ir light	nclud barr	ding riers	the 2	24V	√ p	ower							
		or to	visual or orn belts or frayed ule.	s; da	amag	ged	ls; k	oken,										
		unab repla	eader M le to ho ce defec dditional	old co	over gas	່ in ເ	uppe	ermos	st p	oos	sition,							

Following safety precautions, remove the Aperture/Illumination Assembly, loosen the thumbscrew on top, and pull straight up to remove. Check the aperture plates and

4. Search for mail pieces.

Clean WFOV Assembly.

5. Remove any mail pieces found.

operations for processing.

Follow local procedures for returning mail to

WARNING

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

sharp during use of the LCREM.

U.S. Postal Service								IDENT	IFICAT	ION						
Maintenance Checklist	_	RK DE					MENT DNYM			_	ASS DE		NUM	BE	R	TYPE
	0	3	L	С	R	Е	М			Α	Α	О	(	)	1	М
Equipment Nomenclature	Equ	ipmeı	nt Mo	del				Bulle	tin File	name		Occi	rrend	се		
Low Cost Remote Encoding			L	_CRI	EΜ				mm12	094ae	!			Da	aily	
Machine																

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	s
Component	140	(Comply with all current salety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
	I	combine along for foreign phinate			1		
		sapphire glass for foreign objects.					
		<ol> <li>Remove dust build-up on exterior of camera sapphire glass using dry cotton swabs. If adhesive build-up appears on the sapphire glass, use a swab or soft cloth wetted with an acceptable site approved cleaner.</li> </ol>					
		<ol> <li>If dust is found inside Aperture/Illumination Assembly refer to MS-212, Appendix A for detailed cleaning instructions.</li> </ol>					
		<ol> <li>Replace the Aperture/Illumination Assembly. Slide assembly straight down on the front of camera head assembly and tighten thumbscrew.</li> </ol>					
READER MODULE (CONT.)	10.	Clean ICS-3 System Read Head. Clean ICS-3 system read head as follows:	1	7			
		<ol> <li>Clean ICS-3 read head. Recommended cleaner is Riptide, NSN 6850-01-394-0164.</li> </ol>					
		Clean read head reflector. Recommended cleaner is Riptide.					
ENCODE AND	11.	Clean Encode and Print Module.	5	7			
PRINT MODULE (EPM)		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.					
		<ol> <li>Clean/vacuum the Encode and Print Module (EPM) area.</li> </ol>					
		<ol><li>If EPM cover gas springs unable to hold cover in uppermost position, replace defective gas spring using work order for additional time.</li></ol>					
		<ol><li>Clean the letter transport area and interior of the EPM, including the light barriers (wipe off</li></ol>					

Maintenance Technical Support Center

U.S. Postal	Service							DENTIFICAT				роп		
Maintenance		klist	WORK CODE			QUIP	MENT	DEIGH TOA	CL	ASS ODE	NL	IMBER		TYPE
		• •	0 3	L C	R	E	М		A	A	0	0	1	М
Equipment Nomenclatur Low Cost Remo Machi	ote Enco	oding	Equipme	nt Model LCRI	EM		<u> </u>	Bulletin File	ename 2094a	Э	Occurre	ence Dai	ly	
Part or	Item		Task	Statement	and Ir	nstruc	tion		Est.	Min.		Thresh	old	9
Component	No		(Comply wit					ns)	Time Req (min)	Skill Lev	Run Hours	Piece Fed (000	es	Freq.
	1								ı		T	(000		
		with	micro fib	er glove	or clo	oth).								
		or to	orn belts;	; misalig l cables;	ned com	phot pres	ocells sed o	ned, split, s; broken, or missing EPM.						
		5. Clea	ın verifier	lens.										
			nove any transport		label	ma	terial	from the						
			nove any rs, diverte		teria	l fror	n mod	dule belts,						
		8. Sear	rch for ma	ail pieces	S.									
		9. Rem	ove any	mail pied	es fo	ound								
			ow local ations fo			or re	turnin	g mail to						
LABELER	12.	Clean la	beler cu	tting bla			filter.		4	9				
		arou	extremend labeless could	er cutting	g bla odily	ndes y inji	. The							
		perfo hand curre (MSD	one oil orming p lled acco ent Mat OS). Failu ly injury.	rocedure ording to erial D ure to do	e. Pi ins ata	rodu truct Saf	ct mu tions ety	ust be in the Sheet						
			n Bell ar silicone d		ell lab	oeler	cuttir	ng blades						
		2. Clea	n filter	on Bel	l an	nd F	lowell	l labeler.						

6 Attachment 2

Replace filter when impacted dirt and debris

can not be removed by vacuuming.

U.S. Postal Service								IDE	NTIF	ICATI	ON					
Maintenance Checklist		RK DE					MEN'					ASS DE	NI	JMBE	ĒR	TYPE
	0	3	L	С	R	Е	М				Α	Α	0	0	1	М
Equipment Nomenclature  Low Cost Remote Encoding  Machine	Equ	ipmeı	nt Mo L	del _CRI	EM			В	ulletir <b>m</b> ı		name 094ae	1 -	ccurr		aily	

Machi	IIC						
Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Сопропени	INO	(Comply with all current salety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
INK JET PRINTER (IJP)	13.	Clean IJP print head and guide plate (fence). Clean IJP print head and guide plate (fence) as follows:  WARNING  When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).  WARNING  Eye protection (goggles or face shield) must be worn when flushing away contaminants using make-up fluid.  CAUTION  Use extreme care in charge tunnel area. Do not touch or bump charge tunnel.  1. Remove print head and protective sleeve from deck plate mount.  2. Remove print head from protective sleeve and place in holder aiming it into service tray.  3. Flush away contaminants using make-up fluid. Use solution sparingly.  4. Dry all areas thoroughly including inside of charge tunnel.  5. Re-install print head in protective sleeve.  6. Clean fence using a towel and cleaning solution or make-up fluid.  7. Re-install print head and protective sleeve in deck plate mount.	8	7			
INK JET PRINTER (IJP)	14.	Check/replace low IJP fluid bottles. Check and replace low IJP fluid bottles.  WARNING  When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheets (MSDS).	4	7			

Maintenance Technical Support Center IDENTIFICATION

U.S. Postal	Service						DENTIFICAT					
Maintenance	Chec	klist	WORK CODE			IPMENT RONYM			LASS ODE	NU	IMBER	TYPE
			0 3	L C	R E	М		Α	А	0	0 1	М
Equipment Nomenclature Low Cost Remo Machir	te Enc	oding	Equipme	nt Model LCRI	EM		Bulletin File	ename 2094a	е	Occurre	Daily	
Part or	Item	1	Tock	Statement	and Inetr	uction		Est.	Min.		Threshold	le l
Component	No	((		th all currer			ns)	Time Req (min)	Skill - Lev	Run Hours	Pieces Fed (000)	Freq.
	<u>'</u>			NO	TE						(555)	
		Place	the mak	e-up flui		on left						
		1 1000	tilo mar	NO		011 1011.						
		Do no	t use ex	pired ink	or mak	e-up flu	ıid.					
		1. Oper	printer	side pan	el door.							
		2. Remilow.	ove and	discard i	nk bottl	e if fluic	l level is					
				CAUT	ION							
		leftov	er fluic	ming nex d into r on may o	eplace							
		3. Inser	t new bo	ttle and	replace	сар.						
		4. Clear	n up any	spilled c	r splatt	ered flu	id.					
		5. Close	e printer	door.								
STACKER	15.	Clean th	e stacke	er transp	ort.			5	7			
MODULE		be s	harp. U	WARN spiral s se extre the spir	stackin eme c	aution	when					
				WARN	IING							
		pocke mach the e	et assei ines, th dge of it	caution mbly we ne wear ts base a ng sharp	ear plate of and interest	te. On extends the st	some s past					
		pock	et asse		includir	ig light	area and t barriers					
		2. Sear	ch for m	ail pieces	S.							
		unab repla	le to ho	old cover ctive gas	in upp	ermost	rings are position, vork order					
			ove any transpor		label m	aterial	from the					

MMO-040-13

Wantonanoo i	oorninoar Oap	port o	Oiit	<u> </u>										/ I I V I \	<u> </u>	10 10
U.S. Post	al Service								IDENTIF	ICAT	ION					
Maintenand	aintenance Checklist							MEN <sup>*</sup>			_	ASS DDE	N	UMBI	ER	TYPE
		0	3	L	С	R	Е	М			Α	Α	0	0	1	М
	ture note Encoding chine	Equ	ipmeı	nt Mo	del _CRI	ΕM			Bulletii m		name 094ae		Occurr		aily	
Dantan	Itam		Taal.	C4-4-		a .a al I		-4:			F-4	Min		Thu		ı.
Part or	Item		iask	State	ment	and I	nstru	ction			Est.	Min.		ı nre	esholo	ıs

Part or	Item	Task Statement and Instruction	Est.	Min.		Threshold	S
Component	No	(Comply with all current safety precautions)	Time Req (min)	Skill - Lev	Run Hours	Pieces Fed (000)	Freq.
		<ul><li>5. Remove any label material from module belts, rollers, diverters, etc.</li><li>6. Remove any mail pieces found.</li></ul>					
		<ol><li>Follow local procedures for returning mail to operations for processing.</li></ol>					
MACHINE	16.	Close panels. Close all machine doors, covers, and machine panels.	3	7			
CLEAN UP	17.	Clean up. Ensure tools and materials are removed from the area.  WARNING	1	7			
		Be cautious when working around or on equipment when power has been applied.					
		WARNING  Before performing the following steps you must don the appropriate PPE as required by the current Electrical Work Plan (EWP) MMO.					
SYSTEM	18.	<b>Restore power to equipment.</b> Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures.	3	ALL			
IJP	19.	Power up bar code printer. Press the AC power switch to the ON ( ) position to restore the bar code printer to operation. Once the printer has powered on, press the Start/Stop button. Once the printer is up and the Start/Stop button stops blinking, press the Print button.	2	7			
MACHINE	20.	<ol> <li>Check basic machine functions.</li> <li>Turn Service Mode switch on Operator Control Panel to Service Mode position.</li> <li>Start machine. Verify when Start switch is pressed, start-up warning indicators around sorter flash. At the same time, start-up warning beepers sound. The beepers sound for 5 seconds and go off, while warning indicators continue to flash for a total of 10 seconds.</li> </ol>		9			

U.S. Postal Service

Maintenance Technical Support Center IDENTIFICATION

Maintenance	<b>Chec</b>	klist	CODE			NYM			ODE	INC	TTPE		
			0 3	L C	R E	М		Α	Α	0	0 1	М	
Equipment Nomenclatur Low Cost Remo Mach	ote Enc	oding	Equipme	nt Model LCRI	EM		Bulletin File mm12		е	Occurre	nce Daily		
Part or	Item		Task	Statement	and Instru	ction		Est.	Min.		Threshold	ds	
Component	No	(	Comply wit	h all currer	nt safety pr	ecautior	ns)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.	
		mack belt gate or ex 4. Prod Eme	orm a vi hine to vi tracking, activity, kisting ma eed to t rgency hine stop	erify the bearing or any i achine pr he end Stop bi	re are no noise, ir ndicatior oblems. stacker								
		5. If ma	achine fai	ls to stop	o, notify s	superv	isor.						
		Mod		back t			intenance Operator						
SYSTEM	21.	1. Log ( <b>m)</b>	with the a	Sort Co ppropria	mputer a te passv	as Mai vord.	intenance	3	9				
			n the CESS M		Main	Menu	u Select						
		3. Sele	ct LOAD	SORTPI	_AN.								
		FILE		TION dia	log sele	ct Tes	ORTPLAN tWfov.prs						
		5. Sele	ct LOAD	in the S0	ORTPLA	N INF	O dialog.						
			e the WF for 30-4			the jo	ogger and						
				NO	ΓΕ								
		proper piece edge shifte edge "dog barco unrea"	ris important that the test deck is jogged roperly to ensure that none of the mail ieces are shifted away from the leading dge of the envelope. If the mail piece is hifted inside of the envelope, the leading dge of the envelope may bend back or dog ear" resulting in a portion of the arcode being obscured making it nreadable by the WFOV camera.  Slide the WFOV test deck up to the feeder										
		way	from the	e pick-o	ff belts	and p	nail facing place the the test						

10 Attachment 2

8. Rotate the slide switch to the DISENGAGE

Maintonanoo 1	oninoai Capp		Oiit	<u> </u>											V 1 1 V 1	<u> </u>	, 10 10
U.S. Posta	I Service								IDE	NTIF	ICAT	ION					
Maintenance	e Checklist		ORK ODE					MEN <sup>-</sup>				_	ASS DE	N	IUME	ER	TYPE
		0	3	Г	С	R	Е	М				Α	Α	0	0	1	М
Equipment Nomenclatu  Low Cost Rem  Mach	ote Encoding	Equ	ipmeı		del _CRI	EM			В			name 094ae		Occur		) Daily	/
Part or	ltem		Tack	Stata	mant	and I	netru	ction				Fet	Min		Th	achr	lde

IVIaCIIIII							
Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Component	INO	(Comply with all current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
		position.					
		·					
		<ol><li>Press the start button on the Operator Control Panel (OCP).</li></ol>					
		<ol><li>Once the machine has started, rotate the slide switch to the ENGAGE position.</li></ol>					
		<ol> <li>Let the machine run until all mail pieces have been fed.</li> </ol>					
		NOTE					
		Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.					
		12. After all of the mail has fed, press the stop button on the OCP. The machine will stop.					
		13. Select <b>View Interim Report</b> from the top of the screen and verify the results of the run are within specification.					
		Expected Results:					
		Pieces Fed:  Machine Acceptance Rate (MAR): 100% Gross Acceptance Rate (GAR): 100% Machine Throughput: >=18,500 pph Pocket Counts:  Stacker 1: 0 Stacker 2: 108 Stacker 3: 56 Stacker 4: 115 Stacker 5: 121  Any deviation from the results above is indicative of machine problems or a problem with the WFOV test deck.					
	22.	<ul><li>Run ICS Test Deck (NSN 3915-10-000-6361)</li><li>1. Log in as Maintenance (m) with the appropriate password.</li></ul>	2	9			
		<ol><li>From the LCREM Main Menu Select PROCESS MAIL.</li></ol>					
		3. Select LOAD SORTPLAN.					
		<ol> <li>In the PRIMARY SORTATION SORTPLAN FILE SELECTION dialog TestIdtag.prs and press the SELECT button.</li> </ol>					

U.S. Postal Service

Maintenance Technical Support Center IDENTIFICATION

CLASS NUMBER TYPE

Equipment Nomenclature Low Cost Remote Encoding Machine  Part or Component No Task Statement and instruction Component No	Maintenance	Chec	klist	WORK CODE			QUIPMENT ACRONYM	Г	C	ASS ODE	MBER	TYPE
Component   No   (Comply with all current safety precautions)   Time   Red   Law   Rours   Freq.	Low Cost Remo	te Enc	oding		nt Mode	el	E   M		ename		ence	IVI
5. Select LOAD in the SORTPLAN INFO dialog. 6. Place the ICS test deck in the feeder with the text on the test pieces facing the pick off bells. Place the Feeder Transport Paddle behind the test deck. 7. Rotate the slide switch to the DISENGAGE position. 8. Press the start button on the Operator Control Panel (OCP). 9. Once the machine has started, rotate the slide switch to the ENGAGE position. 10. Let the machine run until all mail pieces have been fed.  NOTE  Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end. 12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR): 75% Stacker Pocket Contents:  Stacker 1: Card 1 Stacker 2: Card 6 Stacker 4: Card 10 Stacker 5: Card 5 Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the									I		Threshold	s
6. Place the ICS test deck in the feeder with the text on the test pieces facing the pick off belts. Place the Feeder Transport Paddle behind the test deck.  7. Rotate the slide switch to the DISENGAGE position.  8. Press the start button on the Operator Control Panel (OCP).  9. Once the machine has started, rotate the slide switch to the ENGAGE position.  10. Let the machine run until all mail pieces have been fed.  NOTE  Do not hand-feed the mail If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  4 Machine Acceptance Rate (MAR): 100% Gross Acceptance Rate (GAR): 75% Stacker 1: Card 1 Stacker 2: Card 8 Stacker 1: Card 1 Stacker 2: Card 10 Stacker 3: Card 5 Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test  This function has not yet been implemented in the	Component	No	((	Comply wit	h all cu	rrent saf	ety precauti	ons)	Req	1	Fed	Freq.
6. Place the ICS test deck in the feeder with the text on the test pieces facing the pick off belts. Place the Feeder Transport Paddle behind the test deck.  7. Rotate the slide switch to the DISENGAGE position.  8. Press the start button on the Operator Control Panel (OCP).  9. Once the machine has started, rotate the slide switch to the ENGAGE position.  10. Let the machine run until all mail pieces have been fed.  NOTE  Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR):  Stacker 1: Card 1 Stacker 2: Card 8 Stacker 1: Card 1 Stacker 2: Card 8 Stacker 4: Card 10 Stacker 5: Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test  This function has not yet been implemented in the			5. Selec	ct LOAD	in the	SORT	PLAN INI	O dialog.				
position.  8. Press the start button on the Operator Control Panel (OCP).  9. Once the machine has started, rotate the slide switch to the ENGAGE position.  10. Let the machine run until all mail pieces have been fed.  NOTE  Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Addachine Acceptance Rate (MAR):  100%  Gross Acceptance Rate (GAR):  75%  Stacker Pocket Contents:  Stacker 1:  Card 1  Stacker 2:  Card 8  Stacker 4:  Card 10  Stacker 5:  Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test  This function has not yet been implemented in the			6. Place text belts behir	e the ICS on the Place nd the tes	test of test p the l st decl	deck ir ieces Feeder k.	the feed facing th Transpo	er with the e pick off ort Paddle				
Panel (OCP).  9. Once the machine has started, rotate the slide switch to the ENGAGE position.  10. Let the machine run until all mail pieces have been fed.  NOTE  Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR):  75%  Stacker 1: Card 1  Stacker 2: Card 8  Stacker 1: Card 1  Stacker 2: Card 8  Stacker 4: Card 10  Stacker 5: Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test  This function has not yet been implemented in the					ide sv	witch t	o the DIS	SENGAGE				
slide switch to the ENGAGE position.  10. Let the machine run until all mail pieces have been fed.  NOTE  Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR):  Stacker Pocket Contents:  Stacker 1:  Stacker 1:  Card 1  Stacker 2:  Card 8  Stacker 4:  Card 10  Stacker 5:  Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the					t butte	on on t	he Opera	tor Control				
NOTE  Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR):  Stacker Pocket Contents:  Stacker 1:  Card 1  Stacker 2:  Card 8  Stacker 4:  Card 10  Stacker 5:  Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the												
Do not hand-feed the mail! If the machine will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR):  100%  Gross Acceptance Rate (GAR):  75%  Stacker Pocket Contents:  Stacker 1:  Card 1  Stacker 2:  Card 8  Stacker 4:  Card 10  Stacker 5:  Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the					ne rui	n until	all mail p	ieces have				
will not feed the mail on its own, then there are mechanical issues that need to be addressed.  11. After all of the mail has fed, press the END OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR): 100%  Gross Acceptance Rate (GAR): 75%  Stacker Pocket Contents:  Stacker 1: Card 1  Stacker 2: Card 8  Stacker 4: Card 10  Stacker 5: Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the					N	OTE						
OF RUN PRINT REPORT button on the OCP. The machine will stop and the run will end.  12. View the stacker pockets and verify the cards have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR):  Gross Acceptance Rate (GAR):  Stacker Pocket Contents:  Stacker 1:  Card 1  Stacker 2:  Card 8  Stacker 4:  Card 10  Stacker 5:  Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the			will no are n	ot feed th nechanic	ie mai	I on its	own, the	n there				
have sorted as follows:  Expected Results:  Pieces Fed:  Machine Acceptance Rate (MAR): 100% Gross Acceptance Rate (GAR): 75% Stacker Pocket Contents:  Stacker 1: Card 1 Stacker 2: Card 8 Stacker 4: Card 10 Stacker 5: Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the			OF R	RUN PRII	NT RE	PORT	button or	n the OCP.				
Pieces Fed: Machine Acceptance Rate (MAR): 100% Gross Acceptance Rate (GAR): 75% Stacker Pocket Contents: Stacker 1: Card 1 Stacker 2: Card 8 Stacker 4: Card 10 Stacker 5: Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the							and verify	the cards				
Machine Acceptance Rate (MAR): 100% Gross Acceptance Rate (GAR): 75% Stacker Pocket Contents: Stacker 1: Card 1 Stacker 2: Card 8 Stacker 4: Card 10 Stacker 5: Card 5  Any deviation from the results above is indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the			Expe	cted Res	ults:							
indicative of machine problems or a problem with the ICS test deck.  SYSTEM  23. OCR Test This function has not yet been implemented in the			Mach Gros Stack	nine Acce s Accept ker Pock Stacker 1 Stacker 2 Stacker 2	ance let Cor :: :: ::	Rate (Contents: Card Card Card	GAR): 1 8 10	100%				
This function has not yet been implemented in the			indica	ative of n	nachir	e prob						
	SYSTEM	23.	This fund	tion has	not ye	et been	impleme	nted in the		9		

Maintenance rec	chinical	Suppo	II C	enu	<del>=</del> 1										I\	/IIVIC	J-U <sup>2</sup>	+0-13
U.S. Postal	Service									IDE	NTIF	ICAT	ION					
Maintenance	Check	dist		ORK ODE					MEN NYM					ASS DDE	N	UMBI	ĒR	TYPE
			0	3	Г	С	R	Е	М				Α	Α	0	0	1	M
Equipment Nomenclature Low Cost Remo	te Enco	ding	Equ	ipme		del _CRI	ΞM			В			name 2094ae		Occurr	ence D		
Part or Component	Item No	(	Task Statement and Instruction Est. Min. Thresholds (Comply with all current safety precautions) Time Skill								ds							

Machi	IIE						
Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Сопропен	INO	(Comply with all current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
SYSTEM	24.	_abel/IJP Test	10	10			
		/erify Label and Barcode Application.					
		<ol> <li>Log in to the LCREM application using Us m and enter the appropriate password.</li> </ol>	ser:				
		<ol><li>From the MAIN menu, select PROCE MAIL.</li></ol>	ss				
		B. Select <b>LOAD SORTPLAN</b> .					
		<ol> <li>Select TestPrn.prs. Press SELECT a LOAD.</li> </ol>	and				
		5. Obtain several blank test cards.					
		<ol> <li>Press Print Test on the SC. Enter rout code 12345. Click OK.</li> </ol>	ing				
		7. Run the blank cards and verify that a labe applied, a barcode is printed, and mailpiece sorts to the appropriate bin (reject). The printed and verified result can viewed by selecting the MPC Codes buttor the upper right hand corner of the screen a looking under the Verifier column.	the not be n in				
		<ol> <li>Verify that the front side label and barco position is correct using label applicat template NSN: 5220-03-000-5594 a barcode template NSN: 6675-03-000-9366.</li> </ol>	ion and				
		NOTE					
		The barcode and/or label applied to first piece of test mail will be shifted to the left approximately 1/4". This is a known issue with the software. Do not use the first piece of test mail for barcode or label position verification.					
		<ol> <li>If the label or barcode position is correct, to Step 11. If the label or barcode posit requires adjustment, perform the follow sub-steps:</li> </ol>	ion				
		<ol> <li>Press CTRL, CTRL, 3 on the syst keyboard to access the EPMC.</li> </ol>	em				
		<ul> <li>The maintenance account will automatically logged in. Using the me on the top left corner of the screen, sel "System", and then "Log out maint".</li> </ul>					

Maintenance Technical Support Center

U.S. Postal Service										NTIFICAT			л. <b>Э</b> и	000		
Maintenance Chec	klist		ORK ODE					MENT ONYM		THE ICA	CL	ASS ODE	NI	JMBE	ĒR	TYPE
		0	3	L	. C	_	E	М			Α	Α	0	0	1	М
Equipment Nomenclature Low Cost Remote Enco Machine	ding	Equ	uipme	ent M	lodel LCR	REM			Bu	lletin File mm12	ename 2094a	Э	Occurr		aily	
Part or Item					temen						Est.	Min.		Thre	eshold	ls
Component No		(Com	ply w	rith a	II curre	ent saf	ety pr	ecautio	ons)		Time Req (min)	Skill Lev	Run Hours	F	eces ed 00)	Freq.
	C.							itch U		". The						
	d.	with	the	e a		priate				<b>strator</b> if not						
	e.	Log logg			e GU	l as a	admi	in if n	not a	lready						
	f.							n lir the so		n the n.						
	g.				<b>Lab</b> gurat				ab i	in the						
	h.	a lar	ger e let	val ft, o	ue to r a s	mo۱	e th	e lab	el po	eter to osition ve the						
	i.	para barc 11-d value left,	meto ode igit). e to or	er bei Ad mo	(deping pi ljust t ve th	ends rinted the p e bai ler v	on d, i.e aram rcode	the 5-dig neter posi	ty <sub>l</sub> git, § to a ition	delay pe of 9-digit, larger to the re the						
	j.	Sele	ct S	ave	١.											
	k.				more took			Ipiece	es to	verify						
	l.		l an	d b						proper been						
	10. Ret	urn to					sing	CTRL	_, C1	ΓRL, 1						
			of 9	-dig	jit IMI	b cod	des a	and 1		fy the git IMb						
	Se par	11-D	igit:	123	45678 34567 <b>1</b> on t	7890		tor Co	ontro	ol						
	12. Sel	ect <b>O</b>	K.													

Maintenance Technical Support Center

MMO-040-13

U.S. Posta	al Service									IDE	NTIF	ICAT	ION					
Maintenanc	e Chec	klist		RK DE					MEN NYM				_	LASS ODE	NU	JMBI	ER	TYPE
			0	3	L	С	R	Е	М				Α	Α	0	0	1	М
Low Cost Rem	Equipment Nomenclature Low Cost Remote Encoding Machine					<sup>del</sup> CRI	ΕM		•	В	Bulletin Mi		name 094a	е	Occurr		Daily	
Part or Component	Item No		- Comp		Stater					ions)			Est. Time	Min. Skill		Thre	eshold	ls
Component		,	оор	,				э., p.		.0			Req (min)	Lev	Run Hours	F	eces Fed 000)	Freq.
CLEAN UP	25.	Clean up are rem deficienc	oved	l fro	m t	he	worl						2	All				

	Maintenance	: i ecnnicai	Support C	enter
	IDENTIFICAT	ION		
WORK	EQUIPMENT	CLASS	NUMBER	TYPE
CODE	ACRONYM	CODE		
		WORK EQUIPMENT	IDENTIFICATION   WORK   EQUIPMENT   CLASS	WORK EQUIPMENT CLASS NUMBER

Maintenance Checkinst		שטע				ACK	ואו ז אוכ	!			CO	שטי				
	0	3	L	C	R	Е	М				Α	Α	0	0	1	M
Equipment Nomenclature	Equ	ipmer	nt Mo	del				В	ulletin	Filer	name		Occur	rence		
Low Cost Remote Encoding			L	_CRI	EΜ				mı	m12	094ae				Daily	
Machine															-	

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Component	110	(Comply with all current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.

### THIS PAGE BLANK

#### **ATTACHMENT 3**

#### **LCREM MASTER CHECKLIST**

Weekly

03-LCREM-AA-002-M

Time Total: 35 minutes

Maintenance Technical Support Center

MMO-040-13		Ma	intenance <sup>-</sup>	I ecr	nnica	al Sup	port C	<u>enter</u>
U.S. Postal Se	rvice	WORK I	IDENTIFICATIO		100			T. /
Maintenance C	hecklist	WORK EQUIPMENT CODE ACRONYM			ASS DE	NU	MBER	TYPE
		0 3 L C R E M		Α	Α	0	0 2	М
Equipment Nomenclature Low Cost Remote Machine	-	Equipment Model  LCREM	Bulletin Filena mm120			Occurre	nce Weekly	,
Part or	Item	Task Statement and Instruction			Min.		Threshold	S
Component	No	(Comply with all current safety precaution	F		Skill - Lev	Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT	Discont required local shutdown equipm Check for the report of the US IS PROFEST OF THE US IS IN THE US IS IN THE US IS IN THE US IS IN THE US IN THE US IS IN THE US IN	Y WITH ALL SAFETY PRECAUTE A CONTROL OF THE PRECAUTE OF THE PR	uts when o current properly ne. Open onditions. al debris. nd notify with any OWN AIR Iternative A filtered ir. A linton optical methods encies to etection.	3	ALL			
		WARNING autious when working around pment when power has ied.						
IMB PRINTER	1. Che betv to M 2. Che 2.0: (SC	JP vacuum and positive air pock that IJP vacuum gaug veen 12 and 13 inches in vacu IS-224.  ck IJP positive air with flow ± 0.5 Standard Cubic Feet FH).  ress any deficiencies found.	ge reads um. Refer meter for	4	9			

MMO-040-13

U.S. Postal	Service					DENTIFICA <sup>T</sup>	TION				
Maintenance	Chec	klist	WORK CODE		EQUIPMENT ACRONYM		CL	ASS ODE	NU	MBER	TYPE
			0 3	L C R	EM		Α	Α	0	0 2	М
Equipment Nomenclature Low Cost Remo Machin	te Enco	oding	Equipme	nt Model LCREM		Bulletin File	ename 2094a	Э	Occurre	mce Weekly	′
			Į.			ı					
Part or Component	Item No	((		Statement and th all current sa	I Instruction afety precautior	ns)	Est. Time	Min. Skill		Threshold	_
		,	( )		,,	-,	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
LABELER	3.	Clean ar	nd checl	k labeler.			4	9			
				WARNIN	G						
		arour	nd labe	eler cuttin	when wo g blades. se bodily in	The					
				WARNIN	G						
		perfo hand curre (MSD	rming p led acco nt Mat	orocedure. I ording to in erial Data ure to do s	present Product mu structions Safety cocould res	ist be in the Sheet					
		1. Rem	ove and	clean label	er cutting bla	ades.					
		2. Chec	ck labele	r wick for da	amage or re	sidue.					
			n label a		oller using S	Scrubs in					
			ck label ssary.*	er oil leve	l and repl	enish as					
WFOV	4.		ance Sc	reen: (For	tion From detailed ins		6	9			
				CREM trans for Control F	port in servi Panel.	ice mode					
		Scre	•	splayed. If	ne and WF system is n						
					displayed or press F5.						
			•	•	rsis screen, etton or pres						
				/ Camera I ools menu.	Maintenance	e screen,					
		6. From Calib	n Tools oration.	s menu,	select In	stallation					
					Calibration <b>Next</b> button.						

Maintenance Technical Support Center

U.S. Postal	Service							IDENTIFICA <sup>-</sup>	ΓΙΟΝ						
Maintenance	Chec	klist	WORK CODE				MENT DNYM			ASS ODE	NU	IMBER	TYPE		
			0 3	L (	CR	Е	М		Α	Α	0	0 2	М		
Equipment Nomenclature			Equipmer					Bulletin File			Occurre				
Low Cost Remo		oding		LC	REM			mm1	2094a	е		Weekly	/		
Machi	ne														
Part or	Item		Task	Stateme	ent and	Instru	ction		Est.	Min.		Threshold	ds		
Component	No	(0	Comply wit	h all cui	rent sa	fety pr	ecautio	ns)	Time	Skill	Run	Pieces	Freq.		
									Req (min)	Lev	Hours	Fed	rieq.		
									(111111)			(000)			
		8. The	second	Inetal	lation	Cali	hratio	n Wizard							
		-													
			screen opens. At this point, start the transport by pressing the Start button on the												
			Operator Control Panel.												
		0 F000	Operator Control Panel.  Feed the Set-up Calibration Card (P/N												
								n screen							
			uctions.	as un	GOIGU	Бy	uie c	ii scieeii							
		10. Cont	inue to fo	ollow t	he on	scre	en ins	tructions.							
			y correcture in acc					om edge 212.							
			n the cal rected by					ick Finish ons.							
WFOV	5.	_	ance Sc	reen:	(For	detai	led in	Camera structions ages.)	3	9					
		Scre		splaye	d. If s			OV Main not in Off							
			WFOV em Analy				-	click the							
		3. In W	FOV Sv	stem	Analy	sis s	creen.	click the							

Camera Maintenance button or press F5.
4. Place WFOV Illumination Calibration test card (PSN 3915-06-000-0139) between the transport belt and read head assembly with the card identification facing away from the read head assembly, ensuring the card bottom edge contacts the transport deck along the full length of the edge. Position the card so that the white outer edge of the card is in front of the WFOV aperture, and none of the black printing on the card is exposed to the aperture on either side of the card.
5. In the WFOV Camera Maintenance screen,

click on the Tools menu.

Auto

menu, select Exit.

7. The

6. From Tools menu, select Auto Calibration.

4 Attachment 3

Calibration process

approximately 1.5 minutes. From the File

takes

Maintenance Te	chnica	ıl Suppo	rt Cente	<u>ə</u> r								M	IMO-04	10-13
U.S. Posta	Service		WORK	<u> </u>		E	QUIF	MENT	IDENTIFICA		_ASS		IMBER	TYPE
Maintenance	e Chec	klist	CODE 0 3	L	С	R	ACRO E	MYM M		A	ODE A	0	0 2	М
Equipment Nomenclatu Low Cost Rem Mach	ote Enc	oding	Equipme		el CRE	EM			Bulletin Fil mm1	ename 2094a	e	Occurre	ence Weekly	,
Part or	Item			Statem					na)	Est.	Min. Skill		Threshold	s
Component	No	(	Comply wit	n all ct	urren	t sare	ety pr	ecautio	ns)	Time Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
		The proce for an runs utilizing calibr	LCREM dure is ny other at a slo ng the Wation calback of A082-2) ie Auto C	WF differed MPE wer strong VFOV rd that the strong	NOT ent E. Be spee , the at is Set-l	thar ecau ed to be LC so a Up of sed	uto use han REM "brig	e prootine Lother other of required the proof of the proo	cedure CREM MPE uires a white.					
				١	TOP	Έ								

Position the WFOV Set-Up calibration card (237A082-2) in front of the WFOV RHA aperture in such a way that the printing on the card will not be in front of the WFOV aperture. The WFOV will read the print through the card and the integrity of the illumination calibration will be comprised if the card is placed improperly.

- 9. Place WFOV Set-Up Calibration test card between the transport belt and read head assembly with the test pattern facing away from the read head assembly, ensuring the card bottom edge contacts the transport deck along the full length of the edge. Position the card so that the white outer edge of the card is in front of the WFOV aperture, and none of the black printing on the card is exposed to the aperture on either side of the card.
- In the WFOV Camera Maintenance screen, click on the Tools menu.
- 11. From Tools menu, select Auto Calibration.
- 12. The Auto Calibration process takes approximately 1.5 minutes. From the File menu, select Exit.
- 13. Click Close or press F12 in the System Analysis screen.
- Click Go On-Line or press F4 in the WFOV Main Screen.

Maintenance Technical Support Center

U.S. Postal	Service			1			IDENTIFICAT					
Maintenance	Chec	klist	WORK CODE			JIPMENT RONYM			LASS ODE	NU	IMBER	TYPE
			0 3	L C	RE	M		Α	Α	0	0 2	М
Equipment Nomenclature Low Cost Remo	te Enco	oding	Equipme	nt Model LCR	EM	•	Bulletin File mm12	ename 2094a	е	Occurre	weekly	,
Machi	ne											
Part or	Item	,,		Statement				Est.	Min.		Threshold	ls
Component	No	(0	comply wi	th all curre	nt sarety	precautio	ns)	Time Req (min)	Skill - Lev	Run Hours	Pieces Fed (000)	Freq.
		15. Rem	ove the	Set-Up C	Calibrat	ion card	l.					
	6.	Verifier	Calibrat	ion Veri	ficatio	1		5	9			
				Maintena bassword		ser <b>m</b> )	with the					
			n the	LCREM <b>IAIL</b> .	Mair	menu	ı, select					
		3. Sele	ct <b>LOA</b> E	SORTP	LAN.							
		FILE	SELEC		alog, s	elect Te	ORTPLAN estlvt.prs					
		5. Seledialo		<b>.D</b> in t	he S0	ORTPLA	N INFO					
		Card pick- the b	(66.00 off belts	32.001-0 with the ace the f	1 Rev	. A) ag facing a	ation Test painst the way from in front of					
		7. Rota posit		slide swit	ch to	the DIS	ENGAGE					
				Start bu	itton o	n the	Operator					
				nachine o the EN			otate the					
		has					test card op button					
		succ have not r	essfully sorted ecogniz	by the to Pocke ed and r	verified t 2. If ead su	then the test ccessfu	and read it should card was lly by the to Pocket					
		seled					EPMC by e system					
			n a new then Nev		r tab I	by selec	cting File,					

Maintenance Te	chnica	l Suppo	rt Cente	er												М	MC	)-04	10-13
U.S. Postal	Service									EN <sup>-</sup>	ΓIFIC	ATION							
Maintenance	Chec	klist	WORK CODE		1		ACR	MEN <sup>-</sup>					CC	ASS DDE			MBE		TYPE
			0 3	L	С	R	Е	М					4	Α		0	0	2	M
Equipment Nomenclatur Low Cost Remo Machi	te Enco	oding	Equipme		<sub>del</sub> _CRE	EM			E			ilenam 12094		)	O	ccurre		eekly	,
Part or	Item		Took	State	mont	and I	notru	otion				Es	<b>.</b>	Min.			Thro	eshold	lo.
Component	No	(0	Task Comply wit						ons	)		Tim		Skill					1
		,										Re (mi		Lev		Run ours	F	eces ed 100)	Freq.
		14. Sele	ct the Ho	nme	hutte	าท													
		15. Log		Gra			lser	Inter	fac	е (	GUI	)							
		16. Go t	o the let Diagnosti																
		17. Sele	ct Get In																
			verifier tes. The pload is																
		barc mea: lines card Verit IVT mea: Resi	verifier s barcoc ode, it sure the on the I If the fier Res Test suremen ult Type et Foun	de. V de. dis de dis leadi mea ult 1 Ta ts a	Wher utom tancoing a sure Type arge are	n the natice beand to mere field to the national to the national treatment of the national treat	e verally etweetrailing the allower of the allower	rifier atterned to a tree control atterned to a tree control atterned to a tree atterned	reachemple	ads ve s c ect <b>0x</b> If <b>Ve</b>	the to rtica of the the the rifie	e							
		out o	n finishent, then so the Gladente of the Glade	seled Ul ar	ct <b>Lo</b> nd th	g O	ut.	This v	will	log	you	ı							
	7.			Main softw	n M vare	lenu on	the			_				9					

Attachment 3 7

3. The LCREM Application software will shut down. At the Login prompt enter calibrate.

6. Cycle power on the LCREM sort Computer.

4. Follow the instructions on the screen.

2. Select OK.

5. Select Exit.

U.S. Postal Service

Maintenance Technical Support Center

Maintenance	Chec	klist	WORK CODE		ſ		ACR	PMENT MYNC	•	, ,	C	ASS ODE		JMBE		TYPE
Equipment Nomenclature Low Cost Remo Machi	te Enco	oding	0 3 Equipn	3 L	L C Model LCRI	R EM	E	M	В	Bulletin File	A ename 2094ae	A e	Occurr		2 eekly	M
Part or	Item		Tas	sk Sta	atement	and I	nstru	ction			Est.	Min.		Thre	shold	s
Component	No		(Comply						ons)		Time Req (min)	Skill Lev	Run Hours	Pie	eces ed 00)	Freq.
	8.	Check WFOV,						LCR	EN	1 Sort,	3	10				
		1. Pres	ss <b>ctrl</b> , ess the													
				се	( <b>m</b> ) \	with	the			gin as priated						
		3. Sele	ect SYS	TEN	/ MAN	IAGI	EME	NT.								
		4. Sele	ect CON	NFIG	URAT	ION	l.									
		5. Sele	ect SET	TE/TIN												
			ify date Time if		he co	ct Date										
		7. Pre	ss OK.													
		8. Sele	ect BAC	CK.												
		9. Sele	ect BAC	CK.												
		10. Sele	ect <b>LOG</b>	OU	T.											
		11. Pres	ss <b>ctrl</b> , ess the					em ke	eyb	oard to						
				er of	the so	cree	n ar	e corr	ect	t. Enter						
										oard to Module						
		14. Log adn	in to <b>nin</b> with													
				corr	ner of	the	scre	en ai	e o	correct.						
CLEAN UP	9.	Clean u are ren deficien	noved	from	the	worl					2	All				

#### **ATTACHMENT 4**

#### **LCREM MASTER CHECKLIST**

03-LCREM-AA-003-M

MONTHLY

Time Total: 102 Minutes

Maintenance Technical Support Center

U.S. Postal	Service										ICAT					port C	
Maintenance		klist	WORK CODE					MENT NYM	Ī		, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	CL	ASS ODE	1	NUI	MBER	TYPE
			0 3	L	С	R	Е	М				Α	А	0		0 3	М
Equipment Nomenclatur Low Cost Remo Machi	ote Enc	oding	Equipme		lodel LCRI	EM		•	В			name 2094a	е	Occu		nce Monthly	/
Part or	Item				tement							Est.	Min.		-	Threshold	ls
Component	No	((	Comply w	ith al	l currer	nt safe	ety pro	ecautio	ons)			Time Req (min)	Skill Lev	Run Hour	- 1	Pieces Fed (000)	Freq.
SAFETY STATEMENT	1.	Disconn required local shutdow equipmed Check for If any supervise further at THE US IS PROHWhen control local shutdown in place free clorequipmed cannot I your supervise the use (PPE). For If I and (I requirement I should be used (PPE). For I and (I requirement I should be used (PPE). For I and (I requirement I should be used (PPE). For I and (I requirement I should be used (PPE). For I and (I requirement I should be used (PPE). For I and (I requirement I should be used (PPE). For I and I should be used (PPE). For I should be used (PPE).	cleaning is required, an alternative method such as a HEPA filtered cleaner or a damp rag must be used of compressed or blown air. A lint-th or brush may be used on optical ent only when other cleaning methods be used. Report safety deficiencies to pervisor immediately upon detection.  NG FOR EWP/PPE:  ontained in this bulletin may require of Personal Protective Equipment Refer to the current Electrical Work EWP) MMO for appropriate PPE									3	ALL				
	2.	flash keyb butto printl (abo read proce 2. Pres	e printhe corner ing), property to some to shead	ead ress turr star nut-c nute hen cor	is Or n Sta the n the t shu down es). T the mplete	art/S Star print utdov proc he pr	top rt/Sto head wn. cedu vacu inthe	key op key d Off. Wait re to um (ead	is Ey C Pre t fo con gaug shu	lit on t ess or t mplo ge v utdo	or the F2 the ete will wn	4	7				

U.S. Postal S	Service		,	1				DENTIFICAT		1.5		IP :-		
Maintenance	Chec	klist	WORK CODE		A	ACRO	MENT	<u>, , , , , , , , , , , , , , , , , , , </u>	C	ASS ODE		JMBE		TYPE
Equipment Name			0 3	L C	R	Е	М	Dollari Fi	A	Α	0	0	3	М
Equipment Nomenclature Low Cost Remo Machi	te En	coding	Equipme	nt Model LCRI	EM			Bulletin File mm12	ename 2094a	)	Occurr	ence Mor	nthly	<u>'</u>
	1.	1	<b>-</b> .	01-1						N 4"		Τ.		
Part or Component	Item No	(0		Statement th all currer				ns)	Est. Time Req (min)	Min. Skill Lev	Run Hours	Pied Fe	ces	s Freq.
	<u>.                                    </u>	L						7	ı	ı		1 100	· • <i>j</i>	I
				WARN	IING									
		requi Equip Elect	re the u oment (l rical Wo	ned in se of Pe PPE). Re ork Plan PPE requ	ersoi efer t n (EV	nal I to th NP)	Protection of the Cur MMO	tive rent						
MACHINE	3.	down th compres	e mach sed air a instructi	ine and is prescr	l loc ibed	k o by t	ut po ne cur	e. Power wer and rent local ut/restore	2	ALL				
IJP	4.	-	vacuun	n filter. F	Repla	ace \	acuur	n filter as	7	7				
		follows:		WARN	IING									
		waste	e, refer nt Mat	sing of i to proc erial S	edui	res	outlin	ed in						
				NO	ΓΕ									
				S-224 for elated to										
		filter	counter		e one			vacuum d remove						
		the	vacuum		ff <sup>`</sup> of	the	barb	he top of ed fitting						
				NO	ΓΕ									
		vacuu Have	ım filter	y spill fro once it ent towe je.	has	bee	n rem	oved.						
		ink	modul		tur	rning	j th							
		4. Disca	ard the	old vacu	ıum	filte	and	attached						

Maintenance Technical Support Center

U.S. Postal Service								IDE	NTIF	ICAT	ION					
Maintenance Checklist		RK DE					MENT MYMC					ASS DE	N	UMBI	ER	TYPE
	0	3	L	С	R	Е	М				Α	Α	0	0	3	М
Equipment Nomenclature  Low Cost Remote Encoding  Machine	Equ	ipmeı		<sup>del</sup> ₋CRI	EM			В	Bulletir M		name 094ae	I	Occur		onthl	У

Macnin	C						
Part or	Item	Task Statement and Instruction	Est.	Min.		Threshold	S
Component	No	(Comply with all current safety precautions)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		<ul><li>tubing.</li><li>5. Make certain that the "O" ring is in place on the filter, then thread the new vacuum filter into the top of the ink module until it is finger tight. Do not over tighten.</li></ul>					
		<ul><li>6. Push the tube (supplied with the filter) onto the stem on top of the vacuum filter, and insert the opposite end of the tube onto the barbed fitting located behind the vacuum filter.</li><li>7. Install the fitting removed in step #3 into the top of the new vacuum filter.</li></ul>					
	5.	Clean bar code printer cabinet. Clean interior and exterior of bar code printer cabinet as follows:  1. Open printer door.  2. Wipe interior and exterior of printer cabinet using lint free rags and make-up fluid.  3. Close printer door.  4. Dispose of rags.	2	7			
	6.	Clean light barriers adjacent to bar code printer print head. Clean light barriers adjacent to bar code printer print head by wiping away ink buildup from light barrier lens using a cotton swab and Videojet make-up or cleaning solution.	3	7			
FEED TABLE	7.	<ol> <li>Check for wear.</li> <li>Check transport belt for splits, tears, and deformity. Check drive chain for stretch, sprockets for broken teeth and sprocket teeth wear. If chain needs lubrication, refer to LCREM Maintenance Handbook at completion of this route.</li> <li>Check transport paddle, transport paddle mounting bracket, clutch.</li> </ol>	8	9			
FEED TABLE	8.	Check Transport Paddle Adjustments. Refer to MS-267 for detailed instructions.	8	7			

U.S. Postal Service

MMO-040-13

IDENTIFICATION

Maintenance	Chec	klist	CODE				NYM			ODE	INC	IVIDER	ITPE
			0 3	L	С	R E	М		Α	Α	0	0 3	М
Equipment Nomenclature			Equipmer					Bulletin File		•	Occurre		
Low Cost Remo	te En	coding		L	CRE	M		mm1	2094a	е		Monthl	y
Machi	ne												
	1.	1											,
Part or Component	Item No	(	Task : Comply wit			nd Instru safety pr		ns)	Est. Time	Min. Skill		Threshold	ds
Component	140	,	Comply wit	ii ali o	arront	outoty pi	Coddiloi	10)	Req	Lev	Run	Pieces	Freq.
									(min)		Hours	Fed (000)	
									1	1		1	
		Check t include:	ransport	pado	dle a	adjustm	ents to	0					
		iriciuae.											
			sport Pa	addle	: Clu	utch P	ressur	е					
		-	stment.			0.	_						
			sport l stment.	Padd	ie	Stop	Screv	N					
				Paddl	le I	Belt <sup>-</sup>	Tensio	n					
			istment.	addi		Jon	0110101						
		,	sport P	addle	e C	hain <sup>-</sup>	ensio	n					
		Dista	ance.										
		Write w	ork orde	rs as	s ne	eded t	o add	ress any					
			cies found					•					
				W	ARNI	NG							
		Disca		lvent	_	oaked		erials					
			rding t ent po	o i Ilutio		•	edure oontar						
			bustion.	iiutio	<b>/</b> 11	Oi S	Joinai	icous					
FEEDER MODULE	9.	Chook E	eeder M	odul					3	9			
FEEDER WODULE	9.								3	9			
								sport) for of wear.					
			lace worr										
		·		-		•							
								r proper Replace					
			or adjust					Toplace					
			•			•		m rollers					
			g cleanin				ωρ 110	1011013					
		,	•	•			or ren	lacement					
			elts, roller			Joaca	э. тор						
													+
				WA	ARNI	NG							
		Disca	ard so	lvent	t s	oaked	mat	erials					
			rding t		ocal	proc							
			ent po	llutio	n	or s	ontar	neous					
			bustion.						<u> </u>				<u>L</u>
READER	10.	Check R	Reader M	odul	e.				4	9			
MODULE		1. Che	ck all bel	ts (dr	rive a	and lett	er tran	sport) for					
		prop	er adjus	tmen	t and	d indic	ations	of wear.					
			lace worr										1

MMO-040-13	O-040-13 Maintenance Fedr								i II IIC	nnicai Support Center					
U.S. Postal Service	IDENTIFICATION														
Maintenance Checklist	_	RK DE	EQUIPMENT ACRONYM							_	CLASS CODE		NUMBER		TYPE
	0	3	L	С	R	Е	М			Α	Α	. 0	0	3	М
Equipment Nomenclature  Low Cost Remote Encoding  Machine	Equipment Model LCREM						В	Bulletin Filename mm12094ae			Occurrence Monthly				
Part or Item Component No (	Task Statement and Instruction Comply with all current safety precautior						ons)		Est. Time	Min. Skill		Thresholds			
·	'								Req (min)		Lev	Run Hours	F	eces ed 000)	Freq.

Part or	Item	Task Statement and Instruction	Est. Time	Min.	Thresholds			
Component	Component No (Comply with all current safety precautions)			Skill Lev	Run	Pieces	Freq.	
			(min)		Hours	Fed (000)		
						· , , .		
		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 belts, rollers, etc.						
ENCCODE AND	11.	Check Encode and Print Module.	4	9				
PRINT MODULE		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.						
		<ol> <li>Check all belts (drive and letter transport) for proper adjustment and indications of wear. Replace worn, deformed, split, or torn belts.</li> </ol>						
		<ol> <li>Check all rollers (drive/idler) for proper adjustment and indications of wear. Replace and/or adjust rollers as required.</li> </ol>						
		<ol> <li>Check that the label press roller is adjusted properly. See MS-267 for detailed adjustment procedures.</li> </ol>						
		4. Clean any dirt or glue buildup from rollers using cleaning solvent.						
		5. Write work orders as needed for replacement of belts, rollers, etc.						
		WARNING						
		Discard solvent soaked materials according to local procedures to prevent pollution or spontaneous combustion.						

Maintenance red		ai Suppo	n Cente	31					IVI	IVIO-04	<del>1</del> U-13
U.S. Postal	Service		WORK		<u>UUIPMENT</u>	DENTIFICA		ASS	l NII	MBER	TYPE
Maintenance	Chec	klist	CODE		ACRONYM			ODE	INO	WIDER	
			0 3	L C R	E M		Α	Α	0	0 3	М
Equipment Nomenclature Low Cost Remo		aadina	Equipmer	nt Model LCREM		Bulletin File	ename 2094a	_	Occurre	nce Monthly	,
Machi		county		LOTTEIN			200 14			Wioritin,	,
Widom	110										
Part or Component	Item No	(1		Statement and In h all current safe		ne)	Est. Time	Min. Skill		Threshold	ls
Component	140	(	Comply with	ii ali cuirent sait	ety precaution	113)	Req	Lev	Run Hours	Pieces Fed	Freq.
							(min)		Tiouis	(000)	
STACKER/TURN	12.	Check S	tacker/T	urn Module			5	9			
MODULE	12.			ts (drive and		eport) for					
				ment. Repla							
			or torn b		,	,					
		2. Chec	ck gate fla	ags for cuts,	nicks, and	burrs.					
				lers (drive a		or proper					
		1		nd indications							
			e work o , rollers,	rders for rep	lacement	of gates,					
		Deits	, rollers,	eic.							
FEEDER	13.			lignment. R	efer to MS	S-267 for	30	7			
		detailed	instruct	ions.							
				WARNING	i						
				al adjustme							
				er to machi adjustmen							
				machine lo							
		Check fe	eder alig	nment to inc	lude:						
		<ul> <li>Mail Adju</li> </ul>	Guide stment.	e Strippei	r Lengt	h					
		• Mail	Guide G	ap Adjustme	nt.						
		• 60D	Drive Pu	lley Height A	djustment						
		• Feed	der Belt T	ension Adjus	stment.						
		• Swin	ıg Arm Aı	ngle Adjustm	ent.						
		• Swin	ig Arm stment.	n Spring	Pressur	е					
		• Swin	ıg Arm Tr	avel Adjustm	nent.						
				nsport Belt djustment.	Proximit	у					
			pensator tion Adju		Vertica	al					
		• Com	nensator	Levers	Horizonta	al				1	

7 Attachment 4

Slide Plate Adjustable Grooved Pulley Adjustment.

Position.

MACHINE

CLEAN UP

Maintenance Technical Support Center

3

7

ALL

U.S. Postal	Service						DENTIFIC					
Maintenance	Chec	klist	WORK CODE			TNBMP			_ASS ODE	NU	JMBER	TYPE
mannonano	000		0 3	L C	RE	M		A	A	0	0 3	М
Equipment Nomenclature Low Cost Remo Machin	te Enco	oding	Equipmer	nt Model LCR				Filename 112094a	e	Occurre	ence Monthl	y
Part or	Item		Task 9	Statement	and Instru	ction		Est.	Min.		Threshold	de
Component	No	((	Comply with				ns)	Time	Skill			
								Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
		• Slide	Plate G	an Adius	tment							
		• Large	e Strip <sub>l</sub> stment.			ressur	e					
		<ul><li>Strip Posit</li></ul>	per Fino	ger Ass	embly	Vertica	al					
			oer Idle stment.	r Rolle	er -2	Positio	n					
		• Rubk Adjus	oer Idle stment.	er Roll	er -1	Trave	el					
			290 and I stment.	P-LS80 \	Vertical	Positio	n					
		<ul> <li>P-DZ Posit</li> </ul>	290 and ion Adju		880 Ho	orizonta	al					
			e Rolle stment.	er Asse	embly	Positio	n					
			e Rolle sure Adju	` '	Distanc	e an	d					
			e Rolle sure Adju			e an	d					
			e Rolle sure Adju		Distanc	e an	d					
		Write wo	rk orders	to addr	ess any	deficie	ncies					

WARNING

Close panels. Close all machine doors and

Clean up. Remove tools and materials from the

found.

machine panels.

LCREM area.

14.

15.

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

Maintenance Ted	chnica	ıl Suppo	rt Cente	er											N	<u>IM</u> C	)-04	10-13
U.S. Postal S	Service									N	ΓIFICA	TION						
Maintenance	Chec	klist	WORK CODE				ACR	MENT MYNC				С	_ASS ODE			JMBE		TYPE
Fordament M			0 3	L	С	R	Е	М	1-			Α	Α		0	0	3	М
Equipment Nomenclature Low Cost Remo		codina	Equipmer		aei .CRE	=м			B			lename 2094a	<b>6</b>	0	ccurre		nthly	,
Machi		county		_								200 14	•					•
iviaciii	116																	
Part or	Item		Task									Est.	Min.			Thre	shold	ls
Component	No	(	Comply wit	h all c	curren	nt sat	ety pr	ecautio	ons)	)		Time Req	Skill Lev		Run		eces	Freq.
												(min)		F	lours		ed 00)	
		1											1	_			<i>50</i>	
				W	ARN	IING	;											
		Befo	re perfo	rmin	ıg ti	he f	ollo	wina	ste	ep	s							
		you	must do	n th	ne a	ppr	opri	ate P	PE	: a	IS							
			ired by t			ent	Elec	trica	I W	/or	'k							
		Plan	(EWP) N	IMO.	•													
MACHINE	16.		power t										ALL	-				
			ent as p															
			res provid					•										
IJP	17.		ip bar co										7					
			inter to c															
		powered	I on, pre	ss th	he S	Start	/Sto	p but	ton.	. (	Once							
		the print	er Start/S	Stop	butte	on s	tops	blink	king	j, ŗ	oress							
FEEDER MODULE	18.	Check tapplied.	he follow Refer					ts w		-	ower ailed		7					
		instruct		ιο	· IV	13-2	.07	101	u	Cli	aneu							
		• Tran	nsport Pa	ddle	Swit	tch /	Activ	ation										
			istment.	aaio	J W II	.0117	TOUV	allori										
		• Tran	sport Be	lt Tra	ackin	ng A	djus	tment	t.									
			er Presen Istment.	t Pro	oxim	ity S	Switc	h Ler	ngth	า								
		• Bott	om Trai	nspo	rt	Belt	Р	roxim	ity									

Attachment 4 9

Switch Actuation.

deficiencies to supervisor.

Adjustment.

found.

19.

CLEAN UP

Slide Plate Slide Switch Activation

Write work orders to address any deficiencies

Clean up. Ensure all tools, lubricants; rags, etc.

are removed from the work area. Report all

2

All

Servo-Drive Motor Adjustment.

									0		. 00.			-		011101
U.S. Postal Service								IDE	NTIF	CAT	ON					
Maintenance Checklist		RK DE					MEN ONYM				CL/ CO	ASS DE	N	UMBE	ĒR	TYPE
	0	3	L	С	R	Ε	М				Α	Α	0	0	3	М
Equipment Nomenclature Low Cost Remote Encoding Machine	Equ	ipmer		del _CRI	EM			В	ulletir <b>m</b> ı		name 094ae		Occurr		nthl	/

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Component	110	(Comply with all current salety presidents)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.

## THIS PAGE BLANK

### ATTACHMENT 5

### **LCREM MASTER CHECKLIST**

03-LCREM-AA-004-M

QUARTERLY

Time Total: 218

U.S. Postal Service								IDEN	NTIFI	CAT	ION					
Maintenance Checklist	_	RK DE					MENT MYNC				CLA CO		N	UMBI	ĒR	TYPE
	0	3	L	С	R	Е	М				Α	Α	0	0	4	М
Equipment Nomenclature Low Cost Remote Encoding Machine	Equ	ipmeı		del _CRI	EM			Bu			name 094ae		Occurr		arter	ly

Iviaciiii	_						
Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Component	NO	(Comply with all current salety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT	1.	COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly 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	3	All			
		IS PROHIBITED. When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection.					
		WARNING FOR EWP/PPE: Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.					
IJP MODULE	2.	Initiate IJP shutdown.  1. If the printhead is on (light in upper right corner on Start/Stop key is lit or flashing), press the Start/Stop key and the F2 button on the keyboard to turn the printhead Off. Wait for the printhead shut-down procedure to complete (about 2 minutes). The vacuum gauge will read 0 when the printhead shutdown procedure is complete.	4	7			
		2. Press the AC power switch (located below the keyboard) to the OFF (O) position to turn the AC power off.					
	3.	Power down and lockout procedure. Power down the machine and lock out power and compressed air as prescribed by the current local lockout instructions providing lockout/restore procedures.	2	ALL			

Maintenance Ted	chnica	ıl Suppo	rt Cer	nter											М	MC	)-04	0-13
U.S. Postal	Service								IDE	NTIF	ICATI	ION						
Maintenance	Chec	klist	WORK CODE	- 1		_		MEN <sup>*</sup>	-				ASS DDE		NU	MBE	R	TYPE
			0 3	3 L	С	R	Е	М				Α	Α		0	0	4	М
Equipment Nomenclature Low Cost Remo Machi	te Enc	oding	Equipm	nent M	odel LCRI	EM		1	E		n Filer m12	name 094ae	e	Oc	curre		rterl	у
Part or	Item				ement							Est.	Min.			Thre	shold	S
Component	No	(0	Comply v	with al	l currer	nt safe	ety pr	ecauti	ons)			Time Req (min)	Skill Lev		lun ours	Fe	ces ed 00)	Freq.
		at th unles facilit at	rical p e inpu ss the ty pow	owe ut of circ	the cuit i	alw disc is d utio	ays conr isab n pa	lect led nel l	dev at oca	vice the ated								
MACHINE	4.	Open pa	s. Ove	rride	interl	ock :	swite	hes.				5	7					
MACHINE	5.	CLEAN Clean all										20	7					

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.

Remove all covers necessary to gain access to all system printed circuit cards.

VACUUM INTERIOR SURFACES. Vacuum the

25

7

- 2. Vacuum all system printed circuit cards.
- 3. Do not replace covers.

COMPUTER computer interior surfaces as follows: 1. Disconnect all cables from computer.

LCREM SORT

- 2. Remove computer from machine.
- 3. Remove computer cover.
- 4. Vacuum all computer interior surfaces.
- 5. Replace computer cover.
- 6. Reinstall computer in machine.
- 7. Reconnect all computer cables.

U.S. Postal Service								IDENTIF	ICAT	ION					
Maintenance Checklist		ORK ODE					MENT DNYM			_	ASS DE	N	UMBI	ĒR	TYPE
	0	3	L	C	R	Е	М			Α	Α	0	0	4	М
Equipment Nomenclature	Equ	ipmeı	nt Mo	del				Bulleti	n File	name		Occuri	rence		
Low Cost Remote Encoding			L	_CRI	EΜ			m	m12	094ae			Qua	arter	ly
Machine															

R SURFACES. Vacuum the rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. er cover. exterior filter as needed. ter in machine.	Time Req (min)	Skill Lev 7	Run Hours	Pieces Fed (000)	Freq.
rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. ter cover. exterior filter as needed. ter in machine.	20	7			
rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. ter cover. exterior filter as needed. ter in machine.	20				
ter from machine. ter cover. puter interior surfaces. ter cover. exterior filter as needed. ter in machine.					
ter cover.  puter interior surfaces.  er cover.  kterior filter as needed.  ter in machine.					
puter interior surfaces. er cover. kterior filter as needed. ter in machine.					
er cover. xterior filter as needed. ter in machine.					
xterior filter as needed. ter in machine.					
ter in machine.					
l l					
omputer cables.					
R SURFACES. Vacuum the rfaces as follows:	20	7			
ables from computer.					
ter from machine.					
ter cover.					
puter interior surfaces.					
er cover.					
xterior filter as needed.					
ter in machine.					
omputer cables.					
OR SURFACES. Vacuum of the Power Distribution :	15	7			
tribution assembly.					
ior surfaces.					
tribution assembly.					
ver supply. Vacuum 24 VDC	2	7			
	rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. ter cover. exterior filter as needed. ter in machine. computer cables.  OR SURFACES. Vacuum of the Power Distribution : tribution assembly. ior surfaces. tribution assembly.	rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. ter cover. exterior filter as needed. ter in machine. computer cables.  OR SURFACES. Vacuum of the Power Distribution : tribution assembly. ior surfaces. tribution assembly.	rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. ter cover. exterior filter as needed. ter in machine. computer cables.  OR SURFACES. Vacuum of the Power Distribution : tribution assembly. ior surfaces. tribution assembly.	rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. ter cover. exterior filter as needed. ter in machine. computer cables.  OR SURFACES. Vacuum of the Power Distribution : tribution assembly. ior surfaces. tribution assembly.	rfaces as follows: ables from computer. ter from machine. ter cover. puter interior surfaces. ter cover. eter in machine. computer cables.  OR SURFACES. Vacuum of the Power Distribution : tribution assembly. ior surfaces. tribution assembly.

Maintenance Te	chnica	l Suppo	rt Cent	er								M	MO-0	40-13
U.S. Postal	Service		MODIC			) IID			TIFICA		400	N.II	MDED	TVDE
Maintenance	Chec	klist	WORK CODE			JUIPI CRO	MENT NYM				LASS ODE	NU	MBER	TYPE
			0 3	L C	R	Е	М			А	Α	0	0 4	М
Equipment Nomenclature Low Cost Remo Machi	te Enco	oding	Equipme	nt Model LCRE	ΞM			Bul	letin File mm1:	ename 2094a	е	Occurre	<sup>ince</sup> Quartei	·ly
Part or	Item		Task	Statement	and In	struct	tion			Est.	Min.		Threshol	ds
Component	No	(	Comply wit	th all curren	it safet	ty pre	cautio	ns)		Time Req	Skill Lev	Run Hours	Pieces	Freq.
										(min)		Hours	Fed (000)	
				WARN	IING									
				WARN	IIIVG									
				when wo when ا	rking powe		ound has	or o						
		appli			,,,,,									
			_											
				WARN	ING									
				rming tl										
				on the a										
			(EWP) N		#IIL E	.ieci	iicai	WO	I K					
MACHINE	11	Postoro	nower t	to oquin	mont	D <sub>0</sub>	ctoro	, nov	vor to	2	A 1 1			
MACHINE	11.	equipme	ent as p	t <b>o equip</b> r rescribed	d by	the	cur	rent	local		ALL			
		procedu	res provi	ding lock	out/re	estor	e pro	oced	ures.					
IJP	12.			ode print							7			
		code pri	inter to d	N ( ) posi operation	. On	ce tl	he p	rinte	r has					
				ess the S Stop butto										
		the Print		Stop Butt	011 00	оро		ıııg,	prooo					
MACHINE	13.			and Swit							9			
				mergency and warn										
		_	l interlock		9 0				-					
				ervice Mo										
				tion. Start art switch										
		up w	arning ir	ndicators	aroui	nd th	ne so	rter f						
		beep	oers sour	time, the nd. The b	eepe	ers so	ound	for 5	5					
				go off, w sh for a to										

Attachment 5 5

2. Press EMERG. Stop mushroom switch on

Machine stops immediately.

Operator Control Panel.

feeder Transport assembly and note that the following occurs:

Lamp lights in EMERG. STOP switch.

Red EMERG. STOP indicator lights on

Machine runs.

U.S. Postal Service								IDE	NTIFI	CAT	ION						
Maintenance Checklist	_	ORK ODE			_		MENT MYM					ASS DE		ΝL	JMBE	ĒR	TYPE
	0	3	L	C	R	Е	М				Α	Α	C	)	0	4	М
Equipment Nomenclature Low Cost Remote Encoding Machine	Equ	ipmer		del _CRI	EM			В	ulletin mr		name 094ae		Оссі			arter	ly

Part or	Item		Task Statement and Instruction	Est.	Min.		Threshold	S
Component	No		(Comply with all current safety precautions)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		d.	Pressing Start pushbutton does not start machine.					
		-	set EMERG. STOP mushroom switch and e that the following occurs:					
		a.	Red EMERG. STOP indicator goes out on Operator Control Panel.					
		b.	Lamp goes out in module EMERG. STOP switch.					
		C.	Machine can now be started.					
			eck all remaining machine switches by forming a switch test:					
		a.	Switch the Service Mode switch to the Normal Position.					
		b.	Login as maintenance (user $\mathbf{m}$ ) with the appropriate password.					
		C.	From the Main Menu select System Management-Maintenance-LCREM Diag-Next-Switch Test.					
		d.	In the "Switch Name" dialog box select ALL.					
		e.	Select the Start button in the Switch Test Utility.					
		f.	Follow the instructions on the screen to verify that each switch is functioning correctly.					
		g.	Once testing has completed, address any deficiencies found.					
MACHINE	14.	Check lamps.	All Machine Lamps. Check all system	10	9			
			eck all machine lamps by performing a ap test:					
		a.	From the Main Menu select System Management-Maintenance-LCREM Diag-Lamp Test.					
		b.	Select the Start button in the Lamp Test Utility.					
		c.	Verify that each lamp is functioning					

		і Оцррс	1												10-13
U.S. Postal S	Service		WORK	1			OLUD	MENT	IDENTIFIC/		ASS	NII	JMBI	ED	TYPE
Maintenance	Chec	klist	CODE					NYM			ODE	INI	JIVIBI	LK	TIPE
		- <del>-</del>	0 3	L	_ C	R	Е	М		Α	A	0	0	4	М
Equipment Nomenclature	)		Equipme	ent N			_		Bulletin F		1 .,	Occurr			
Low Cost Remot		oding	Lquipine	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LCR	EΜ				12094a	е	Occur		arter	V
Machir	ne	J													
		•													
Part or Component	Item No		Task Comply w		tement				ne)	Est. Time	Min. Skill		Thre	esholo	ls
Component	INO	,	Comply w	ilii a	ii cuii ci	it said	sty pri	Scaulio	113)	Req	Lev	Run		eces	Freq.
										(min)		Hours		Fed (000)	
													. (	,00,	
			correctly												
			Screen s State/Re				test	resul	t: Test						
			Click exi		ι. Γαδ	ι.									
						عمام	ما ۔	44	o on:						
			e testing ciencies			piete	eu, a	uures	s any						
MACHINE	15.					ners	. Ch	neck a	all system	10	9				
101 111 12		Beepers				J- 0. 0	01		0,00011						
				ach	ina h	aana	re h	v nor	forming a						
			oer test:	acı	iiie b	eepe	:15 D	y pei	ioiiiiig a	l					
		a.	From	the	Mair	Me	enu	selec	t System	1					
			Manag Diag-N	em	ent-M	ainte	enan								
		b.							oox selection 1, or 2).	t					
		c.	Select Test U			t bu	tton	in th	e Beepe	-					
		d.	Verify correct						functions	5					
		e.	Press	STO	OP bu	tton.									
		f.	•	rify	-				ch Beeper unctioning						
		g.	Select	Exi	t.										
		1009	% fulİ <sub> </sub>	pos	ition.	Ver	ify 1	that a	lule to the an alarm epressed.	1					
					NO	ΓΕ									
		stack teste selec stack Verify	ng this to ter bin 10 d if logo ted. The ter modu y that ar witch is o	00% ged en p ule n al	ofull particular for full earth for the larm is	oositi nd ha ich b e 100 ound	ions ave oin p 0% 1	can o a sor addle ull po	only be t plan in the osition.						

Attachment 5 7

3. Once testing has completed, address any deficiencies found.

U.S. Postal Service								IDE	NTIFI	CAT	ION						
Maintenance Checklist	_	ORK ODE			_		MENT MYM					ASS DE		ΝL	JMBE	ĒR	TYPE
	0	3	L	C	R	Е	М				Α	Α	C	)	0	4	М
Equipment Nomenclature Low Cost Remote Encoding Machine	Equ	ipmer		del _CRI	EM			В	ulletin mr		name 094ae		Оссі			arter	ly

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Сопропен	NO	(Comply with an current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
MACHINE	16.	Gate and Solenoid Test.	3	9			
		From the Main Menu, select System Management-Maintenance-LCREM DIAGNext-Gate Test.					
		2. In the Gate Test Utility select Single and enter the gate to be tested in the gate selection box.					
		3. Select the Start button.					
		4. The specified gate should begin to cycle. Verify that it does, and that it is not striking the transport fence when it is in the open position.					
		5. Select Stop.					
		6. Repeat steps 2-5 for the remaining gates.					
		7. Exit the Gate Test Utility.					
MACHINE	17.	Lightbarrier Distance Test.	5	10			
		From the Main Menu select: System Management-Maintenance-LCREM DIAG-LB Distance.					
		2. Select Start from the Lightbarrier Distance Test Utility.					
		3. Press the Start button on the Operator Control Panel.					
		4. The machine will start. Feed a single piece of test mail.					
		<ol> <li>Once the test mail has fed through the machine the transport motors will stop. Verify that the Test/state result: line indicates "passed".</li> </ol>					
		6. Select View.					
		7. If the Test /state result: line indicated failed in the previous step, find the LB position that failed. If the previous step passed, look through the results for any distances that are approaching the upper or lower limits.					
		8. Address any deficiencies found with a work order.					

MMO-040-13

U.S. Postal		2  -  - 0							IDENTI	FICAT	ION					
Maintenance	Chec	klist	WORK CODE					MENT NYM				ASS DDE	NU	JMBEI	₹	TYPE
			0 3		. C	R	E	М			Α	Α	0	0	4	М
Equipment Nomenclature Low Cost Remo Machin	te Enco	oding	Equipm	ent M	lodel LCR	EM				in File nm12	name 2094a	e	Occurre	ence Qua	rterly	У
Part or	Item					and In			,		Est.	Min.		Thres	hold	S
Component	No	(	Comply v	with al	II curre	nt safe	ty pr	ecautio	ons)		Time Req (min)	Skill Lev	Run Hours	Pied Fe (00	d	Freq.
				V	NARI	NING										
		opera	ply with ating sopen.													
					NO	TE										
		of 15	machine 5 minuted ed ther	tes l	befor	e usi	ng	non-c	contac	t						
MAIN POWER	18.	Infrared the interi									5	9				
DISTRIBUTION			LCRE													
		2. Scar	n all ter s.	mina	al cor	necti	ons	and	conne	ctor						
		temp	stigate erature essary o	e a	and	of notify action	/	ny super	abnor visor							
FEEDER	19.	Infrared monitor									2	9				
		1. Scar	n all circ	cuit c	cards,	moto	rs,	termir								
		temp	stigate perature essary o	e and	d notif	fy sup	erv		f							
READER	20.	Infrared monitor									2	9				
			n all circ						nal							
			stigate erature essary o	e and	d notif	fy sup	erv		f							
ENCODE AND PRINT MODULE	21.	Infrared monitor									4	9				
			n all circ connec				inal	conn	ections	s,						

U.S. Postal Service								IDENTIF	ICAT	ION					
Maintenance Checklist		ORK ODE					MENT DNYM			_	ASS DE	N	UMBI	ĒR	TYPE
	0	3	L	C	R	Е	М			Α	Α	0	0	4	М
Equipment Nomenclature	Equ	ipmeı	nt Mo	del				Bulleti	n File	name		Occuri	rence		
Low Cost Remote Encoding			L	_CRI	EΜ			m	m12	094ae			Qua	arter	ly
Machine															

Part or	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Component	INU	(Comply with all current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
		Investigate cause of any abnormal temperature and notify supervisor of necessary corrective action.					
STACKERS/TURN MODULE	22.	<b>Infrared scan.</b> Use non-contact infrared to monitor stackers for abnormal temperature.	5	9			
		<ol> <li>Scan all circuit cards, terminal connections, and connector plugs.</li> </ol>					
		2. Investigate cause of abnormal temperature and notify supervisor of necessary corrective action.					
		NOTE					
		Do not use contact probe for checks in items 23 through 26. Use focusing probe or airborne technique.					
FEEDER	23.	<b>Ultrasonic scan.</b> 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.	5	9			
READER	24.	<b>Ultrasonic scan.</b> 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.	5	9			
ENCODE AND PRINT MODULE	25.	Ultrasonic scan. Use ultrasonic detector to monitor all bearing assemblies top and bottom of the Transport for excessive vibration and noise. Check IJP and Labeler pneumatics for air leakage. Label and date all bad bearings/assemblies found and submit work order.	8	9			
STACKER/TURN	26.	Ultrasonic scan.	8	9			
MODULE		NOTE					
		Stacker work sheets are available for down load from MTSC Web site (PDM Site Map) for use in keeping track of location of bad bearings in stacker modules.					

U.S. Postal Service								IDE	NTIF	ICAT	ION					
Maintenance Checklist	_	RK DE					MENT MYMC				_	ASS DE		IMU	BER	TYPE
	0	3	L	С	R	Е	М				Α	Α	0	0	4	M
Equipment Nomenclature	Equ	ipmer	nt Mo	del				В	ulletin	Filer	name		Occu	rrenc	е	
Low Cost Remote Encoding			L	_CRI	ΞM				mı	m12	094ae			Q	uarte	rly
Machine																

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Thresholds	S
Component	INO	(Comply with all current salety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
		Use ultrasonic detector to monitor all bearing assemblies top and bottom of the Stacker Module for excessive vibration and noise. Label and date all bad bearings/assemblies found and submit work order.					
MACHINE	27.	Close panels. Replace or close all machine panels, doors, and covers.	5	7			
	28.	Restore power to equipment. Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures.	3	All			
CLEAN UP	29.	Clean up. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to supervisor.	2	7			

U.S. Postal Service								IDE	NTIF	CAT	ON					
Maintenance Checklist	_	ORK ODE					MEN <sup>-</sup> NYM				CL/ CO		N	UMBE	ĒR	TYPE
	0	3	L	C	R	Е	М				Α	Α	0	0	4	М
Equipment Nomenclature  Low Cost Remote Encoding  Machine	Equ	ipme	nt Mo L	<sup>del</sup> ₋CRI	EM			В	ulletin <b>m</b> ı		name 094ae		Occurr		arter	ly

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	s
Component	110	(Comply with all current surety presidential)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.

# THIS PAGE BLANK

### **ATTACHMENT 6**

### **LCREM MASTER CHECKLIST**

**SEMI-ANNUAL** 

03-LCREM-AA-005-M

Time Total: 96 Minutes

IJР

7

4

MMO-040-13							Ма	inter	nance	Tec	hnica	al Sup	port C	enter
U.S. Postal S <b>Maintenance</b>		dist	WORK CODE				MENT NYM		TIFICAT	Cl	_ASS ODE	NU	MBER	TYPE
			0 3	L C	R	Е	М			Α	Α	0	0 5	М
Equipment Nomenclature Low Cost Remot Machir	te Encod	ding	Equipment	Model LCR	EM			Bull	etin File mm12		е	Occurre Se	ence emi-Anr	nual
Part or	Item			tatement						Est.	Min.		Threshold	ds
Component	No	((	Comply with	all curre	nt safe	ty pre	ecautio	ons)		Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT		Disconn required local l	ect power leaves to the control of t	er and instructions out out inspections discount the equivalent of the equivalent or a day or	appiction restricts this ect cance or occurred as ampictured as at a stately estimated as a	ly lo. Re to particular to par	bekonfer to propose to construct to construc	uts voor cuts vo	when rrent shut Dpen ions. ebris. notify any AIR ative tered used lint-otical hods es to ion.	3	All			

the AC power off. SYSTEM POWER Power down and lockout procedure. Power 3. 2 ALL down the machine and lock out power and DOWN compressed air as prescribed by the current local lockout instructions providing lockout/restore

(PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE

1. If the printhead is On (square light in upper right corner on Start/Stop key is lit or flashing), press the Start/Stop key on the keyboard to turn the printhead Off. Press F2 to start shutdown. Wait for the printhead shut-down procedure to complete (about 2 minutes). The vacuum gauge will read 0 when the printhead shutdown procedure is

2. Press the AC power switch (located below the keyboard) to the OFF (O) position to turn

requirements.

complete.

2.

Initiate IJP shutdown.

U.S. Postal Service								IDENT	IFICAT	ION					
Maintenance Checklist	_	RK DE					MENT DNYM			_	ASS DE		NUMI	BER	TYPE
	0	3	L	С	R	Е	М			Α	Α	C	0	5	М
Equipment Nomenclature	Equ	ipmer	nt Mo	del				Bulle	tin File	name		Оссі	rrenc	е	
Low Cost Remote Encoding			L	_CRI	ΕM				mm12	:094ae	:		Sen	ni-An	nual
Machine															

IVIACIII	1110						
Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	S
Component	140	(comply with all current salety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
		procedures.					
MACHINE	4.	Check for mail under machine.	8	7			
		<ol> <li>Using a flashlight, start at the Feeder Module and look for mail pieces under machine, proceed to check for mail to last stacker.</li> </ol>					
		2. Remove any mail pieces found.					
		3. Follow local procedures for returning mail to operations for processing.					
	5.	Clean under machine. Clean/vacuum any dust and debris found from under machine, recommend start at backside of last stacker and work back to Transport and Feeder.	12	7			
MACHINE	6.	Open panels and remove covers. Open/remove all machine panels, doors, circuit card covers, and doors, including Main Power Distribution Assembly.	18	7			
MAIN POWER DISTRIBUTION	7.	Main AC power distribution. Check for loose connections and discoloration of cables due to heat.	16	9			
		1. Verify all terminal connections are tight.					
		2. Verify all cable connections are properly seated.					
		Look for any cable or wiring discoloration due to heat.					
FEEDER	8.	<b>Feeder.</b> Check for loose connections and discoloration of cables due to heat.	2	9			
		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	9.	<b>Reader.</b> Check for loose connections and discoloration of cables due to heat.	5	9			
		1. Verify all terminal connections are tight.					
		2. Verify all cable connections properly seated.					

															_			
U.S. Posta	l Service								IDE	NTIF	ICAT	ION						
Maintenance	e Checklist		ORK ODE				EQUIF ACRO	PMEN ONYM					ASS DDE		NU	JMBE	:R	TYPE
		0	3	L	С	R	E	М				Α	Α	C	)	0	5	М
Low Cost Rem	quipment Nomenclature Low Cost Remote Encoding Machine			nt Mo	odel LCRE	ΕM			В	Bulletir M		name 2094ae		Оссі			-Ann	₁ual
Part or	Item	-	Task	State	ment	and '	Instru	ction				Est.	Min.			Thre	sholo	ls

Part or	Item	Task Statement and Instruction	Est.	Min.		Thresholds	S
Component	No	(Comply with all current safety precautions)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
ENCODE AND	10.	<ol> <li>Look for any cable or wiring discoloration due to heat.</li> <li>Verify all terminal connections are tight.</li> <li>Verify all cable connections are properly seated.</li> <li>Look for any cable or wiring discoloration due to heat.</li> <li>Close the door on power distribution assembly.</li> </ol> Check for loose connections and	1	9		(000)	
PRINT MODULE		<ol> <li>discoloration of cables due to heat.</li> <li>Verify all terminal connections are tight.</li> <li>Verify all cable connections are properly seated.</li> <li>Look for any cable or wiring discoloration due to heat.</li> </ol>					
STACKERS/TURN MODULE	11.	<ol> <li>Check for loose connections and discoloration of cables due to heat.</li> <li>Verify all terminal connections are tight.</li> <li>Verify all cable connections are properly seated.</li> <li>Look for any cable or wiring discoloration due to heat.</li> </ol>	3	9			
IJP	12.	Replace Filter Tube Assemblies. Complete the following steps to replace the filter tube assemblies in both the ink and make-up fluid bottles:  WARNING  When disposing of ink or ink saturated waste, refer to procedures outlined in current Material Safety Data Sheet (MSDS).  1. Pull the bottle (ink or make-up) which you are replacing the filter tube assembly away from the fluid pan.	5	7			

Walliteriance rec		ii Guppo	T CEIII	ıcı					ID-	NITITIO :	EIC:			IVII	VIC	J-U4	10-13
U.S. Postal			WORK	$\top$				MENT		NTIFICAT	CL	ASS	<del>   </del>	NUM	1BE	R	TYPE
Maintenance	Chec	klist	CODE		T	A	ACRO	MYM			CC	ODE					
Equipment Nomenclature			0 3 Equipme			R	Е	М	D.	ulletin File	A ename	A	Occu		0 Ice	5	M
Low Cost Remo		oding	⊏quipm€		lodel LCRI	ΞM			B		ename 2094ae	9				Ann	ual
Machi										1							
Part or	Item		Task	Stat	tement	and I	nstruc	tion			Est.	Min.		T	hre	shold	s
Component	No	(	Comply w						ns)		Time	Skill Lev	Run			ces	Freq.
											Req (min)	∟€V	Hour		Fe	ed 00)	
	<u>'                                      </u>			_	NOT	E			<del>_</del>		<del>'</del>			+	101	. J	<u> </u>
		If you	ı are rep	lacir			er tur	e ass	em	ıblv							
		in the	ink bot to clean	ttle, I	have	abso	orber	nt tow									
		2. Pull		-	-		-	•	slic	de the							
		attac	ched filt e. Place	ter	tube	ass	semb										
		3. Rem	ove the							cap by							
		4. Pull	Ü	with	h atta					off of							
			•		•	ıba -	2000	mble									
			card the old filter tube assembly.  all the fitting (removed in step #5) on														
		the	·														
		(rem	embly.  all the line with attached rubber tube noved in step #6) onto the top of the cap he new filter tube assembly.														
		and	rt the filt push embly. P	the	cap	dov	wn 1	to se	ecur	re the							
		9. Repo	eat step embly in					the	filte	er tube							
IJP	13.	Replace following									5	10	$\vdash$	$\dagger$			
			-		VARN		_										
		waste	n disposing of ink or ink saturated te, refer to procedures outlined in ent Material Safety Data Sheets DS).														
		to ca	ce absorbent towels below the ink modul atch any ink that may spill when removin primary ink filter.														
			nove the ary ink f nch.														

U.S. Postal	Service						IDENTIF	FICAT	ION			-	
Maintanana	Chaa	klict	WORK			IPMENT			CL	ASS	NU	JMBER	TYPE
Maintenance	Cnec	KIIST	CODE	1 10		RONYM			<u> </u>	ODE		0   5	N 4
Facilities and November 1			0 3		R E	M	I Danier		A	A	0	0   5	M
Equipment Nomenclature Low Cost Remo		ndina	Equipmer	nt Model LCRE	М		Bulleti		name 2094a	a	Occurre	<sub>ence</sub> emi-An	nual
Machi		Juling		LOIL	IVI		'''	111112	-00-400	•	O	CIIII AII	iluai
			ı										
Part or	Item			Statement a			,		Est.	Min.		Thresho	lds
Component	No	(	Comply wit	h all current	safety	precautio	ns)		Time Req	Skill Lev	Run	Pieces	Freq.
									(min)		Hours	Fed	
												(000)	
		3. Unso	crow the	primary in	k filto	r from th	20						
				ink modu		i iiOiii ti	10						
							d						
				ink from t nting hole									
				solution c				513					
			•	ld primary		•							
							41						
				w primary ink modu				Do					
				en. Hand-		DU							
			ıll the fitti ary ink fil	ng into the	om of th								
			•	NOT									
		The r	rinter wil	I compen	sate fo	or any ir	nk that						
				ng this pr									
			iming is r			·							
IJP	14.	Check Ir	nput Air	Filter. Co	mplet	e the fo	llowing	נ	3	10			
				id/or repla					-				
		1. Use	a wrench	n to loosei	n the b	olack nu	it at the	e l					
				ow fitting.									
			se a dull, pointed instrument to pull the										
				out of the	m of the								
		man	itold.										
				out air filte				je.					
				nput air fil									
				replace t operation		er to en	sure						
			•	•		, ,							
				w or existi the air m			iter into	0					

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

6 Attachment 6

5. Thread the elbow fitting back into the bottom of the air manifold, and tighten the nut to secure the fitting. Do not over tighten.

Maintonanoo roominaa oappa		0116	<u> </u>											/ I I V I V		10 10
U.S. Postal Service								IDE	NTIF	ICAT	ION					
Maintenance Checklist		ORK ODE					DNYM				_	ASS DE	N	UMBI	ER	TYPE
	0	3	L	С	R	Е	М				Α	Α	0	0	5	М
Equipment Nomenclature Low Cost Remote Encoding Machine	Equ	ipmeı		del _CRI	EM			В			name 094ae		Occurr S		-Anr	nual
Part or Item		Task :	State	ment	and I	nstru	ction				Est.	Min.		Thre	esholo	ds

Part or	Item No	Task Statement and Instruction	Est. Time	Min. Skill	,	Threshold	S
Component	INO	(Comply with all current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.
		WARNING					
		Before performing the following steps you must don the appropriate PPE as required by the current Electrical Work Plan (EWP) MMO.					
SYSTEM	15.	Restore power to equipment. Restore power to equipment as prescribed by the current local procedures providing lockout/restore procedures.	3	ALL			
IJP	16.	<b>Power up bar code printer.</b> Press the AC power switch to the ON ( ) position to turn the AC power On.	4	7			
CLEAN UP	17.	<b>Clean up.</b> Ensure all tools, lubricants, rags, etc. are removed from work area. Close/replace all machine covers and doors. Report all deficiencies to supervisor.	2	All			

U.S. Postal Service								IDE	NTIF	CATI	ON					
Maintenance Checklist	_	ORK ODE					MEN <sup>-</sup>				CLA CO		N	UMBE	ĒR	TYPE
	0	3	L	С	R	Е	М				Α	Α	0	0	5	М
Equipment Nomenclature  Low Cost Remote Encoding  Machine	Equ	ipmer		del _CRI	EM			В	ulletin <b>m</b> ı		name 094ae		Occurr S		-Ann	ual

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	s
Component	140	(Comply with all current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.

# THIS PAGE BLANK

### **ATTACHMENT 7**

#### **LCREM OPERATIONAL MAINTENANCE PROCEDURES**

**OPERATIONAL TOUR** 

09-LCREM-AA-001-M

Time Total: 38 Minutes

Maintenance Checklist         CODE         ACRONYM         CODE           0         9         L         C         R         E         M         A         A         A         0         0         1         M           Equipment Nomenclature Low Cost Remote Encoding         Equipment Model LCREM         Bulletin Filename mm12094ae         Occurrence Tour         Tour															_		
Maintenance Checklist         CODE         ACRONYM         CODE         CODE           0         9         L         C         R         E         M         A         A         A         0         0         1         M           Equipment Nomenclature Low Cost Remote Encoding         Equipment Model LCREM         Bulletin Filename mm12094ae         Occurrence Tour         Tour	U.S. Postal Service								IDE	NTIF	ICAT	ION					
Equipment Nomenclature Low Cost Remote Encoding  Equipment Model LCREM  Bulletin Filename mm12094ae  Tour	Maintenance Checklist											_		N	UMBI	ĒR	TYPE
Low Cost Remote Encoding LCREM mm12094ae Tour		0	9	L	С	R	Е	М				Α	Α	0	0	1	M
		Equ	ipmer			EM			В					Occuri			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time	Min. Skill		Threshold	s
Component	140	(Comply with all current safety precautions)	Req (min)	Lev	Run Hours	Pieces Fed (000)	Freq.

SAFETY STATEMENT	1.	COMPLY WITH ALL SAFETY PRECAUTIONS. Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. Open equipment and inspect dust conditions. Check for suspicious dust or unusual debris. If any unusual substance is found notify supervisor prior to proceeding with any further action on the equipment.  THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.  When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods can not be used. Report safety deficiencies to your supervisor immediately upon detection.  WARNING FOR EWP/PPE: Steps contained in this bulletin may require the use of Personal Protective Equipment (PPE). Refer to the current Electrical Work Plan (EWP) MMO for appropriate PPE requirements.		All		
MACHINE	2.	NOTE  Operational checks must be made with machine processing mail in a normal operating mode.  Examine machine logbook. Examine log and	Begin	9		
LOGBOOK	۷.	bring forward any unresolved problems from the previous tour.	Tour			
MACHINE SAFETY	3.	Be alert for unusual sounds or odors. While performing listed operational maintenance tasks, be alert for unusual sounds, odors, or other indications of potential failure conditions in the machine.	2 Hrs			
MACHINE SAFETY	4.	Observe warning beepers and indicators. Watch for proper operation of warning beepers and indicators on machine start-ups.	Every 2Hrs	9		

U.S. Postal Service		IDENTIFICATION															
Maintenance Checklist		WORK EQUIPMENT CODE ACRONYM							CLASS CODE				NUMBER			TYPE	
	0	9	L	С	R	Е	М				Α	Α	(	)	0	1	М
Equipment Nomenclature	Equipment Model				В	Bulletin Filename				Occurrence							
Low Cost Remote Encoding Machine	LCREM							mm12094ae			Tour						

Part or Component	Item	Task Statement and Instruction	Est. Time Req (min)	Min.	Thresholds			
Component	No	(Comply with all current safety precautions)		Skill Lev	Run Hours	Pieces Fed (000)	Freq.	
MACHINE SAFETY		Lamps. Watch for proper functionality of all indicator lamps during normal machine operations. Correct deficiencies as soon as practical.	Every 2Hrs	9				
OPERATORS		Observe feeder for proper operation, while checking to see if operators are having excessive processing problems. Investigate as necessary. Initiate corrective action as appropriate.	Every 2 Hrs					
VIDEO DISPLAY TERMINAL WFOV		Check mail processing screen. Check current read value and fault indicators. Ensure current sort plan, operating mode, and read rate values are correct for the mail being processed. If MAR or GAR is below acceptable values, check for dust/debris accumulations on WFOV faceplate. Check cooling fan filter for accumulated dust and debris on WFOV computer. Correct as necessary.	2 Hrs					
INK JET PRINTER		Check for dirt/ink accumulations. Check IMB ink jet printer to ensure there is no build-up of foreign material or accumulation of ink at the print head. Clean as necessary.						
SORTING STACKERS		<b>Check for mis-sorts.</b> Sample check stackers for correct sortation. Verify that the bar code matches with the address block and scheme. Verify mail pieces enter stacker in a uniform manner.	2 Hrs					
ACE/MKAT COMPUTER		<b>Check WebEOR reports.</b> Check for, jams and fault indications and ensure all performance metrics are meeting their target.		9				
MACHINE LOGBOOK AND SMO		Log problems discovered and work performed. Report unresolved problems at the end of tour to the SMO and generate appropriate work orders.	Tour	9				