MAINTENANCE TECHNICAL SUPPORT CENTER **HEADQUARTERS MAINTENANCE OPERATIONS**

UNITED STATES POSTAL SERVICE



Maintenance Management Order

SUBJECT: Mail Staging Tower (MST) Daifuku Preventive **DATE:** May 28, 2014

Maintenance

NO: MMO-044-14

TO: Mail Staging Tower (Daifuku) Sites FILE CODE: TM3

pmur:mm13047ab

This Maintenance Management Order (MMO) provides Preventive Maintenance Guidelines for the Mail Staging Tower (MST). This bulletin applies to Acronym MST, Class Code DA.

The workhours indicated in the workload estimate (Attachment 1) reflect the maximum annual workhours required to maintain each system. Management may modify task frequencies to address local conditions.

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

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.

Direct any questions or comments concerning this bulletin to the MTSC HelpDesk, online at http://mtsc.usps.gov/apps/remedyticket/index.cfm or call (800) 366-4123 or (405) 573-2123.

Robert E. Albert

Manager

Maintenance Technical Support Center

HQ Maintenance Operations

- Attachments 1. Summary of Workload Estimate
 - 2. Master Checklist 03-MST-DA-001-M Monthly PM
 - 3. Master Checklist 03-MST-DA-002-M Quarterly PM
 - 4. Master Checklist 03-MST-DA-003-M Annual PM

ATTACHMENT 1

SUMMARY

WORKLOAD ESTIMATE

FOR

MST SYSTEM

SUMMARY WORKLOAD ESTIMATE FOR MST

Operation	Routine Servicing (Hrs/Yr)	Repair* (Hrs/Yr)	Total Servicing & Repair Time (Hrs/Yr)	Nonproductive Time** (Hrs/Yr)	Total Servicing Per Unit (Hrs/Yr)
Monthly	36.00	10.80	46.80	4.68	51.48
Quarterly	13.87	4.16	18.03	1.80	19.83
Annual	3.53	1.06	4.59	0.46	5.05
Totals	53.40	16.02	69.42	6.94	76.36

NOTES:

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

NOTE

The time shown does not allow for multiple assemblies on any equipment. Should multiple assemblies exist, the time must be modified at the local level to account for those occurrences. Other unique site conditions that require additional time are also to be addressed at the local level.

ATTACHMENT 2

MST MASTER CHECKLIST

03-MST-DA-001-M

Monthly Time Total: 180 minutes

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		8. Repo	rt discrep	pancies to supe	rvisor.						
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		from	outside	servations are the safety fend s still in operat	ce whil						
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		6.	Repor	t discre	pano	cies t	o su	iperv	isor.								

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		4. Repo	rt discrep	pancies to s	upervisor.						
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				CAUTION							
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		Fig. 1. Insperstrand The st 6.35 diame diame section section pulley: 2. Using meas	gure 1. ' cut the vertical territory are softh that part is 5.9 calipe ture the	Vertical trader signs NOT diameter The mident of the miden of the mide	wire Travel Vel lift of dam E for a r nimum fleasure caliper ire, par bugh the shown of the	Lift Wiwires for age. wew lift wing acceed the lift is to vorticular to upper lift wing a	ire or broken wire is ptable ft wire arious ly the					

Maintenance Technical Support Center

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		6. Repo	rt discre	pancies	to sup	ervisor.						
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		6.	Rep	eck the horizontal travel encoder for cessive wear, bearing failure, cracks, or ter signs of damage. eck all mounting brackets, bolts, and sociated hardware for cracks, looseness, other signs of damage. port discrepancies to supervisor. Et Horizontal Travel Drive Belt. spect the horizontal travel drive belt for cessive wear or other signs of damage. eck for the following conditions: Tooth wear — Canvas fibers on tooth becoming fluffy, rubber layer worn down and faded white, or canvas texture becoming dim or unclear due to over													
HORIZONTAL	13.	Ins	pect	Horizont	al Tra	avel	Dri	ve B	elt.			8	9				
TRAVEL DRIVE BELT		1.	exce	essive we	ar o	r oth	her	sign	s of								
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		2.		Task Statement and Instruction (Comply with all current safety precautions) aring failure, or other signs of damage. eck the horizontal travel encoder cessive wear, bearing failure, cracks are signs of damage. eck all mounting brackets, bolts, sociated hardware for cracks, loosen other signs of damage. port discrepancies to supervisor. It Horizontal Travel Drive Belt. Expect the horizontal travel drive belt cessive wear or other signs of damage eck for the following conditions: Tooth wear — Canvas fibers on to becoming fluffy, rubber layer worn dand faded white, or canvas text becoming dim or unclear due to detensioning. Tooth shear — Broken teeth or craformed in tooth roots due to jamin pulleys, mechanical interference, improper installation. Side wear — Belt edges rounded off core fibers (wicks) exposed and fradue to improper tracking, worn or pulleys, or interference with belt cover Partial cuts — Cuts formed by engage foreign substances or improvinstallation. Back surface sticky / soft — Stickines softening of the belt back surface have occurred from oil contamination.							for						

Maintenance Technical Support Center IDENTIFICATION

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		take	nstall the e-up pulle port discre	y, and en	coder	covers.	e motor,					
STAGING CRANE VERTICAL TRAVEL GUIDE ROLLERS	14.	Rollers Check end of twear, separat	staging the vertice the stagin loosenes ion, or of ancies to	al travel g crane ss, bea ther signs	guide (12 to ring s of c	rollers tal) for e failure,	on each	6	7			
CARRIAGE AND	15.	Clean C	Carriage a	and Shut	tle.			8	7			
SHUTTLE		ass	ver the co embly. nove the s				carriage					
			eck for loc			` '						
		4. Who cleat vac or com defi	en clean aning me uum clea brush, npressed ciencies in detection	ng is rethod sucher, a damust be or blow to your son.	h as mp clo use use n air. superv	a HEPA oth, lint-f ed in p Repo visor imn	A filtered ree cloth place of rt safety					
CARRIAGE	16.	Check	Carriage	Motors a	nd Dr	ive Gea	rs.	8	7			
MOTORS AND DRIVE GEARS		 Che exc sigr Che and 	eck the essive was of dama eck the colored driven seness, b	conveyear, bea age. onveyor of gears	or daring	rive mo failure, chains, s excessive	otor for or other sprockets e wear,					
		dan 3. Che racl bea	seriess, b nage. eck the lift k and pir ring failu nage.	ing motor	s for	ort beari excessiv	ngs, and ve wear,					
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Equipment Nomenciature Mail Staging		\r	⊏quipmer	Daifuku			iename I 3047al	h	Occurre	ence Monthly	.,
iviali Stayini	y rowe	71		Dalluku		1111111	3041 a				
Part or	Item No			Statement and			Est.	Min.		Threshold	
Component		((Comply wit	h all current sa	fety precautio	ons)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		exces dama		ar, loosenes	ss, or other	r signs of					
		assoc or oth	ciated ha ner signs	nounting brardware for of damage.	cracks, lo						
CARRIAGE	17.	Chack C	arriago S	Support / G	uido Bollo	re	4	7			
SUPPORT / GUIDE ROLLERS	17.	Check th side / lounderside looseness	e carriagower gue of the s, bearings of dar	ge main su lide rollers carriage fo g failure, ru mage. Repo	pport (4 to (8 total) or excessi bber sepa	otal) and on the ve wear, ration, or	7	,			
CARRIAGE	18.				rriage T	raveling	3	7			
TRAVELING DETECTORS AND		Detector	s and Lii	mit Switch.							
LIMIT SWITCH		TI		NOTE	1 1 / 4						
		are	U-shape	raveling de d photoele underside o	ectric sw	itches					
				nsure the puned and not							
				cloth, clean er and receiv							
		3. Chec	k for prop	oer alignmer	nt.						
		secur partic	e and	ure the care not visibly ention to	damaged	d. Pay					
				ctrical conne are not fray							
		6. Repo	rt discrep	oancies to si	upervisor.						
											1

Maintenance Technical Support Center IDENTIFICATION

Maintenance Cl	heckli	st	WORK CODE			IPMENT RONYM		_	ASS ODE	NU	MBER	TYPE
Equipment Nomenclature			0 3 Equipmen	M S	Т		Bulletin Fi	D	Α	0 Occurre	0 1	М
Mail Staging	Tower		Lquipinei	Daifu	ku			13047a	b	Occurre	Monthly	,
Part or	Item		Task	Statement a	and Insti	uction		Est.	Min.		Threshold	
Component	No	((Comply wit				ons)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
CARRIAGE 1	19. (Clean an	d Check	Carriag	e Phot	o Sens	sors	4	7			
PHOTO SENSORS		J. J	u 0110011	NOT		00.110			•			
	2	combi photoe locate 1. Chec secur 2. Using exteri 3. Chec are so the le 5. Chec Tighto	rely faste g a dan iors and o k to ensecure, clo re all elected ad wires	photo of s switches topside of sure the pean, and ctrical co are not funting hacessary.	sens severa s and of the c e pho- not vis n, cle photo s proper nnection rayed ardward	dificial distribution distribut	sors are maged. e sensor ndows. reflectors ed. tight and					
CARRIAGE BELTS 2	20. I	nsnect (: :arriane	Relts				8	9			
CARRIAGE BELIS 2		excess Checca. To be a be to be composed by the composed by th	ct the ssive we k for the cooth we ecoming and fade ecoming cooth should be controlled in the cooth should be	carriage ar or oth following ear — Ca fluffy, ru ed white dim or j. ear — Br n tooth n mechani nstallatio r — Belt e s (wicks mproper r interfere substan	her signormal conditions and conditions and conditions are conditions. The condition conditions are conditions are conditions are conditions. The conditions are conditions are conditions are conditions are conditions are conditions. The conditions are conditional conditions.	gns of ions: fibers ayer we canvas ar due teeth counde to interfere rounde sed aring, we the belt ed by	belts for damage. on tooth orn down texture to over cracks jammed ence, or doff and frayed orn drive covers. engaging improper		9			

Maintenance Tec		al S	Suppo	rt C	ente	er				A T !	ON			M	M	O-0	44-14			
U.S. Postal S	Service											ENTIFIC	ATI	ON						
Maintenance	Check	list			ORK ODE					MENT NYM	•			_	ASS ODE		NU	IMB	BER	TYP
				0	3	М	S	Т						D	Α		0	0	1	М
Equipment Nomenclature)			Equ	iipmei	nt Mo	del					Bulletin F	ilen	ame		Oc	curre	ence	Э	
Mail Staging	Towe	er				[Daifu	ku				mm	130)47al	b			М	onthl	у
Part or	Item			-	Task	State	ment a	and I	nstruc	tion				Est.	Min.			Thr	reshol	ds
Component	No		(ecautio	าทร	3)		Time	Skill	R	un	Pi	ieces	Free
Component			(Comp	ory with	ii aii (Julion	Cour	oty pr	Journe	,,,,	<i>5)</i>		Req (min)	Lev		ours	F	Fed 000)	116
																	· ·		1	
			s h	ofter ave																
			fo	orme	ave occurred from oil contamination or rt adherence to the belt. ack surface cracked / worn - Cracks rmed on the belt back surface due to gh or low temperature extremes.															
		2.	Chec tension									proper								
			u e	ısing	a s _l e ur	oring	g sca	le a	ınd r	netal	fit	ge belt tting (to nown in								
			tl		pring							es when g (35.3								
												5 mm tened.								
		3.	Repo	rt di	screp	oand	ies t	o su	perv	isor.										
				Sprin	ng scal	<u>e</u>				Carriage	e b	elt								



Replacement of the carriage belt is recommended every three years or 1,500,000 cycles of operation. Refer to the appropriate maintenance documentation for procedures on determining the carriage belt cycles of operation using the hand held maintenance unit.

Maintenance Technical Support Center IDENTIFICATION

Maintenance	Check	dist		WOR COD	DE					MENT DNYM						LASS ODE		NU	IMBE	R	TYPE
Environment No.							S	Т			1	D "	-1'	-:1.	D	Α	_	0	0	1	М
Equipment Nomenclature				quip	ment							Bull			ame	i	O	ccurre			
Mail Stagin	g Towe	er				D	aiful	ku					mm	1130)47al	b			Mo	nthly	'
Part or	Item			Ta	ask St	atem	nent a	and li	nstru	ction					Est.	Min.			Thre	shold	s
Component	No		(Co	mply	/ with	all cu	urrent	t safe	ety pr	ecautio	ns	s)			Time Req (min)	Skill Lev		Run Iours	F	eces ed 00)	Freq.
																'	_		'		
SHUTTLE MOTOR AND DRIVE	21.	Chec	k Shu	ittle	Mot	or a	and	Driv	ve G	ears.					6	7					
GEARS				NOTE																	
		th	e full İ	nually extend the primary shuttle fork to full left and to the full right positions to applete the following inspections. The extended the shuttle servomotor for excest the shuttle servomotor for excest the shuttle servomotor.																	
		W	/ear,	anually extend the primary shuttle fork to e full left and to the full right positions to implete the following inspections. heck the shuttle servomotor for exces ear, bearing failure, or other signs amage.																	
		W	heck ear, igns o	loos	senes	SS,															
		а	check ssocia r othe	ated	har	dwa	ıre f	or o													
		4. R	Report	disc	crepa	ancie	es to	su	perv	isor.											
SHUTTLE CHAINS	22.	Inspe	ct Sh	uttl	e Ch	ains	s.								4	9					
						N	ОТЕ	Ε													
		th	anually e full l omplet	eft a	and '	to th	ne fu	ıll ri	ght	positio											
			check wists, o							xcess	iv	e w	ear	,							
		е	check xcessi r other	ive	wea	r, lo	ose	nes													
			heck ecurel				he n	nast	ter li	ink C-	-c	lips	are	Э							
		(/	Check A ar See Fig	nd	B)		he d		n ac				nut: ned								
		В	Check Soth ch ne shu	nains	s sh	ould	l hav	ve e	qua	l tens	io	n w	her	ו							
			heck ave no							ljustm	e	nt l	oolts	5							

Maintenance reci	inicai Suppo		אווכ	71								I.	VIIVI	<i>J</i> -U-	77 17
U.S. Postal Se	ervice							I	DENTIFICAT	ION					
Maintenance C	Checklist	COI					QUIPM ACRON				_ASS ODE	N	UMBE	R	TYPE
		0	3	М	S	Т				D	Α	0	0	1	М
Equipment Nomenclature		Equip	pmer	nt Mo	del				Bulletin Filer	name		Occur	rence		
Mail Staging	Tower				Daifu	ıku			mm13	047a	b		Мс	nthly	/
Part or	Item	Т	ask :	State	ment	and Ir	nstructio	on		Est.	Min.		Thre	sholo	ls

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

		7. Check the chains for light lubrication. If necessary, use a slight amount of Extra Heavy DTE oil by Mobil to lubricate the chains. Nut B Nut B Bracket Figure 4. Shuttle Chain Adjustment Nuts				
		8. Report discrepancies to supervisor.				
SHUTTLE CAM FOLLOWERS AND GUIDE TRACKS	23.	Clean and Check Shuttle Cam Followers and Guide Tracks. NOTE	4	7		
		Manually extend the primary shuttle fork to the full left and to the full right positions to complete the following inspections.				
		Check to ensure the cam followers rotate smoothly when turning them by hand.				
		Clean and check the shuttle guide tracks for damage or foreign materials.				
		3. Report discrepancies to supervisor.				

Maintenance Technical Support Center IDENTIFICATION

Maintenance	Check	list		WORK CODE		,	P		MENT DNYM					ASS ODE		JMBE	:R	TYPE
Equipment Nomenclature				3 quipme	M nt Mo	S	Т			D	otin	Filen	D	Α	0 Occurr	0	1	М
				quipme			la			Duli					Occum		را ما 4 م	_
Mail Stagin	y rowe	;i				Daifu	κu			<u> </u>	шп	1113()47al	J		IVIO	nthly	<u> </u>
Part or	Item			Task	State	ment a	and Ir	nstru	ction				Est.	Min.		Thre	shold	S
Component	No		(Co	mply wi	th all o	curren	t safe	ety pr	ecautio	ns)			Time Req (min)	Skill Lev	Run Hours	F	eces ed 00)	Freq.
SHUTTLE LIMIT	24.	Ch	eck Shu	ttle Li	mit \$	Swite	ch.						2	7				
SWITCH			Check	the s	huttl	e lin	nit s			ıngeı	r fc	or						
		2.		mooth up and down operation. Theck to ensure the limit switch actually belief turns smoothly. WARNING														
				[WA	ARNI	NG											
			Discard material accorda	ls ac	cord	ing	to	MSE	OS ar									
		3.	If neces					mit :	switch	plu	nge	er						
		4.	Reinsta	III the	carria	age a	ınd s	shutt	le sid	e co	vers	S.						
		5.	Report	discre	panc	ies t	o su	perv	isor.									
STAGING BINS	25.	Ch	eck Stag	ging B	ins	and :	Sup	port	Trus	ses.			14	7				
AND SUPPORT TRUSSES		1.	Check to bent or			bins	to e	ensu	re the	y are	e no	ot						
		2.	Check t	to ens	ure a	ıll sta	ging	g bin	s are	level								
		3.	Remove from the				nate	rials	or lo	ose	ma	ıil						
		4.	Check to				ses	to e	nsure	they	/ ar	е						
		5.	Report	discre	panc	ies t	o su	perv	isor.									
INPUT / OUTPUT /	26.	Ch	eck Inpu	ıt / Ou	tput	/Re	ject	Coı	nveyo	rs.			6	7				
REJECT CONVEYORS		1.	Check belts for edges,	or ex	cess	ive	wea	ır, t										
		2.	Replace signs of the inpu	f slipp	age.	Pay												
		3.	Report	discre	panc	cies t	o su	perv	isor.									

IVIAITILETIATICE TEC		и Зирро	it Cent	CI .		-	DENITICIO/	TION		IV	IVIO-04	
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Maintenance	Check	list	WORK CODE		EQUIPMI ACRON				LASS ODE	NU	MBER	TYPE
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Mail Staging	g Towe	r		Daifuk	u		mm1	3047a	b		Monthly	/
Part or	Item		Task	Statement a	nd Instructio	n		Est.	Min.		Threshold	s
Component	No	(0	Comply wit	th all current	safety preca	autior	ns)	Time	Skill	Run	Pieces	Freq.
								Req (min)	Lev	Hours	Fed (000)	
	I											
PHOTO SENSORS / REFLECTORS	27.			ck Input Sensors			Reject	6	7			
		1. Chec	k to er	sure the	photo s	ens	ors and					
		assoc	iated re	eflectors a / damaged	re secur							
		2. Ensui	e all ele	ctrical con	nections	are t	tight.					
				cloth clea w, and ass								
		4. Chec	k photo (cell alignm	ent.							
		5. Repo	rt discre _l	pancies to	supervise	or.						
INPUT	28.	Check In	put Con	veyor Sto	p Plate.			2	7			
CONVEYOR STOP PLATE		excessive frayed or	wear, broken v	ut conve loosenes wires, or o cies to sup	ss, soler ther signs	noid						
MAINTENANCE	29.	Check Ma	aintenar	nce Unit.				3	7			
UNIT		1. Checl	k for enance	physical unit.	damag	е	to the					
		2. Check		mage to	the main	tena	nce unit					
		3. Chec	•	mage to tl unit.	ne box th	at h	olds the					
		4. Check	k for da	amage to	the stat	us	indicator					
		5. Chec	k for dan	nage to the	e key-lock	(SW	itch.					
			k for da button.	amage to	the eme	rger	ncy stop					
		·		pancies to	superviso	or.						
STAGING CRANE	30.	Unsecure	Stagin	g Crane N	lask.			6	All			
		were pla Remove	ced und all tools staging	1-ton adjus der the s s, lubrica g unit. Re	staging onts, rags	rane, et	e mask. c., from					

Maintenance Technical Support Center IDENTIFICATION

									_	_				
Maintenance	e Check	list	WORK CODE				MENT NYM				_ASS ODE	NU	JMBER	TYPE
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Equipment Nomenclatu	re		Equipmer	nt Model	•			Bul	letin Fil	ename	•	Occurre	ence	
Mail Stagir	ng Towe	r		Da	fuku				mm1	3047a	b		Monthl	y
Part or	Item		Task	Stateme	nt and	Instruc	ction			Est.	Min.		Threshold	ds
Component	No	(0	Comply wit	h all curi	ent saf	ety pr	ecautio	ns)		Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		equip applie		vhen	orkin pow	g ard er								
	31.	Restore I	Equipme T	ent To WAR		_		3	All					
		you n requir	e perfor nust do red by th EWP) M	ming n the he cur	the f	ollov opria	S							
		Restore LOCKOU ON/OFF "ON" pos switch is faults and status.	T/TAGO switch o sition. E in the (UT den the insure ON-LIN	evice stagir the n IE po	and	the the key any							
CLEAN UP	32.	Clean Up Ensure a removed deficienci	all tools from t	he wo	ork a	rea.	•		are t all	3	All			

ATTACHMENT 3

MST MASTER CHECKLIST

03-MST-DA-001-M

Quarterly Maintenance

Quarterly Time Total: 208 minutes

Maintenance Technical Support Center IDENTIFICATION

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Maintenance	e Checkl	ist	WORK CODE			PMENT ONYM		_	_ASS ODE	NU	JMBER	TYPE
Equipment Nomenclatu	re		0 3 Equipmen	M S	Т		Bulletin Fil	D	Α	Occurre	0 2	M
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Part or	Item		Task	Statement	and Instru	ıction		Est.	Min.		Thresho	olds
Component	No	((Comply wit	h all currer	nt safety p	recautio	ns)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	
SAFETY STATEMENT		Disconner required local	(Comply with all current safety precautions) IPLY WITH ALL SAFETY PRECAUTION: onnect power and apply lockouts whired by this instruction. Refer to current lockout procedures to properly sign and lock out this machine. Oppment and inspect dust conditions of the for suspicious dust or unusual debuty unusual substance is found not be revisor prior to proceeding with a per action on the equipment. USE OF COMPRESSED OR BLOWN AROHIBITED. In cleaning is required, an alternate in the machine method such as a HEPA filter in the cleaning method such as a HEPA filter in the cleaning method in the such as a HEPA filter in the cleaning method in the such as a HEPA filter in the such as a HEPA filter in the cleaning method in the such as a HEPA filter in the such as a HE						All			
		stagir one e	res turi ng unit, d except t nspection	inspening or confirm the person are	ction n pow in adva son(s)	er to nce th perfor	at no ming					
		stagir vertic	ng crar al travel	WARN under, ne whe drive me on the	over, n ope	rating o not	the allow					

Maintenance Led	<u>chnica</u>	al Suppo	IDENT												N	IIVI(<u>U-04</u>	4-14	
U.S. Postal	Service		IDENTIFI WORK EQUIPMENT																
Maintenance	Check	list											_	_ASS ODE	NU	JMB	ER	TYPE	
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Equipment Nomenclature			Equ	ipmer			_	_		Ві			ename		Occurre				
Mail Staging	g Towe	r				Daifu	ku				r	nm1:	3047a	b		Qu	arterl	У	
Part or	Item		-	Task \$	State	ment a	and In	struc	tion				Est.	Min.		Thr	eshold	S	٦
Component	No	(0	Comp	ly wit	h all d	curren	t safe	ty pre	ecautio	ns)			Time	Skill	Run		ieces	Freq.	
													Req (min)	Lev	Hours		Fed 000)		
STAGING CRANE	2.	Position Inspectio		agin		rane		r C	leani	ing	a	and	3	9					
		For visual stagin operar mainte possil shuttle when Using the	ly ig o ting enar ble t e po ope	chectrane the nce o visositi ratin	e ar crai uni sual on, ng th	nd s ne oi it. ly ch use ne cra	pos shutt r shu Who eck ext ane	ition le futtle en the rem	n of ork usin it is cran e ca huttle										
		the stagin	g cr	ane	at a	com	forta	ble ۱											
	3.	Lock Out	Pov	wer.									2	All					
				Г	WA	ARNI	NG	1											
		Before you n requir Plan (nust ed l	doı by th	n th ne c	e ap urre	prop	oria	te PF	PΕ	as	;							
					WA	ARNI	NG												
		With to open, side o	480	OVA	C st	till e	xists												
		Power do ON/OFF "OFF" pos device.	swit	ch o	n th	e sta	aging	g co	ntroll	er	in	the							
	4.	SECURE	STA	AGIN	IG C	RAN	IE M	ASŁ	ζ.				6	All					
					CA	UTI	ON												
		Place stagin stands mask attem mask vertica the ve	g with with with all tra	cran ntil h mi o su th t avel	e r they inim uppo the lift	mask y ard al cl ort t jack wires	c ar e ju leara he v c st s wil	nd st l nce weig and l un	raise belov e. D jht o s oi wrap	t t t or of t	he he not he he								

Maintenance Technical Support Center IDENTIFICATION

Maintenance	Check	list	CODE					MENT NYM				LASS ODE	NU	MBER	TYPE
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Equipment Nomenclature			Equipn	nent M					Bu	lletin Fi			Occurre		
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Part or	Item		Tas	sk Stat	ement	and Ir	nstru	ction			Est.	Min.		Threshol	ds
Component	No		(Comply	with al	l currer	nt safe	ty pr	ecautio	ns)		Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		Place two staging of prevent to of a co- inspectionallowing discrepan	crane in the massimpone of the contract of the	mask sk from nt fa osition ase o supe	as am falli ailure n one of n erviso	a sat ng in duri e sta nainte	fety the ing and ena	preca unlike clean at e	aution ely e sing ach	on to event and					
VERTICAL TRAVEL DRIVE UNIT	5.	Clean Ve	ertical [*]				nit.				8	7			
		The use of compressed or blown air is prohibited. When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used only on optical equipment when other cleaning methods can not be used. 1. Remove the vertical travel drive motor													
		1. Ren		he v	ertica/	al tra	avel	driv	e r	notor					
		vac	ng HE uum oder, a	the	moto	or, I	brak	e a	sse	mbly,					
		3. Rep	ort disc	crepa	ncies	to su	uper	visor.							
VERTICAL TRAVEL DRIVE	6.	Inspect Gap.	Vertic	al T	ravel	Dri	ve	Moto	r B	Brake	15	9			
MOTOR BRAKE GAP			the ve							move					
		2. Ren	nove th	e end	oder	plug.									
		mou	nove th unted umfere	at	two	ро	sitic	ns	iago on	onally the					
		4. Ren	nove th	e fan	cove	r.									
		gau mov at	asure the ge betweet of the second se	ween on co thr	the force.	ixed	iror me	core	an mer	d the					

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Service									ID	ENT	IFIC	ATIO	N						
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glowe	r			L	Jaitu	iku					mm	1304	1/a	b		(Jua	rteri	y
Item		Та	sk S	State	ment	and I	nstruc	tion				E	st.	Min.		Т	hres	shold	S
140	((Comply	with	n all d	currer	nt saf	ety pr	ecauti	ons	s)		R	eq	Skill Lev			Fe	ed	Freq.
				ı	NOT	E													
	0.5 mi excee motor adjust measu washe 6. Moto a. 3 b. F c. N d. L 7. Moto a. 5 b. F c. N	mm. If any of the gap measurements eed the limit value listed below for the or frame used, the brake gap must be ested. If the gap is too large to asure, reduce the number of adjusting hers and re-measure. Ottor Frame No. F112M 3.7kw Motor Capacity FB-5B Brake Type Normal Gap Value: 0.4 - 0.5mm Limit Gap Value: 1.0mm otor Frame No. F132S																	
				ı	NOT	E													
	brake Turn 6 pattern gap as 8. Moto a. 7 b. F c. N	reduce the brake gap, turn the three ake gap adjustment bolts clockwise. rn each bolt little by little in a rotating ttern to ensure a uniform gap. Re-check p as the adjustments are being made. Motor Frame No. F132M 7.5kw Motor Capacity FB-10B Brake Type Normal Gap Value: 0.4 - 0.5 mm																	
	Service Checkle Towe Towe Item No	Checklist To receptake Turn expattering gap as as as a condition of the c	Checklist Checklist Checklist Checklist Checklist Code Checklist Code Checklist Checklist Checklist CODE O 3 M Equipment Mo Task State (Comply with all of Normal brake ga 0.5 mm. If any of exceed the limit va motor frame used, adjusted. If the measure, reduce t washers and re-me 6. Motor Frame No. a. 3.7kw Motor C b. FB-5B Brake c. Normal Gap V d. Limit Gap Valu 7. Motor Frame No. a. 5.5kw Motor C b. FB-8B Brake c. Normal Gap V d. Limit Gap Valu To reduce the bra brake gap adjust Turn each bolt litt pattern to ensure a gap as the adjustm 8. Motor Frame No. a. 7.5kw Motor C b. FB-10B Brake c. Normal Gap V d. Limit Gap Valu To reduce the bra brake gap adjust Turn each bolt litt pattern to ensure a gap as the adjustm 8. Motor Frame No. a. 7.5kw Motor C b. FB-10B Brake c. Normal Gap V d. Limit Gap Valu A Limit Gap Valu To reduce the bra brake gap adjust Turn each bolt litt pattern to ensure a gap as the adjustm 8. Motor Frame No. a. 7.5kw Motor C b. FB-10B Brake c. Normal Gap V d. Limit Gap Valu	Checklist Checklist Checklist CODE O 3 M S Equipment Model Daifu Task Statement (Comply with all currer No Normal brake gap s 0.5 mm. If any of the exceed the limit value motor frame used, the adjusted. If the ga measure, reduce the r washers and re-measur 6. Motor Frame No. F11 a. 3.7kw Motor Capa b. FB-5B Brake Type c. Normal Gap Value d. Limit Gap Value: 7. Motor Frame No. F13 a. 5.5kw Motor Capa b. FB-8B Brake Type c. Normal Gap Value d. Limit Gap Value: NOT To reduce the brake gap adjustment Turn each bolt little by pattern to ensure a unif gap as the adjustments 8. Motor Frame No. F13 a. 7.5kw Motor Capa b. FB-10B Brake Typ c. Normal Gap Value d. Limit Gap Value: Normal Gap Value Limit Gap Value Limit Gap Value Limit Gap Value Limit Gap Value	Checklist Checklist Checklist CODE Telegrower Code Cod	Checklist WORK CODE ACRO O 3 M S T Equipment Model Task Statement and Instruct (Comply with all current safety present the present service of t	Checklist WORK EQUIPMENT ACRONYM 0 3 M S T 1 Equipment Model 3 Task Statement and Instruction (Comply with all current safety precaution) NOTE Normal brake gap should be 0.5 mm. If any of the gap measure exceed the limit value listed below motor frame used, the brake gap is too la measure, reduce the number of act washers and re-measure. 6. Motor Frame No. F112M a. 3.7kw Motor Capacity b. FB-5B Brake Type c. Normal Gap Value: 0.4 - 0.5 mm d. Limit Gap Value: 1.0 mm 7. Motor Frame No. F132S a. 5.5kw Motor Capacity b. FB-8B Brake Type c. Normal Gap Value: 0.4 - 0.5 mm d. Limit Gap Value: 1.0 mm NOTE To reduce the brake gap, turn the brake gap adjustment bolts clost Turn each bolt little by little in a repattern to ensure a uniform gap. Regap as the adjustments are being materials and the state of the part of the part of the state of the part of	Checklist Code Cod	Checklist Checklist Checklist CODE COD COD	Checklist Checklist Checklist CODE WORK CODE REQUIPMENT ACRONYM O 3 M S T	Checklist WORK EQUIPMENT ACRONYM Daifuku Daifuku Daifuku Mm1304	Checklist CODE	Checklist WORK EQUIPMENT CLASS CODE	Checklist Checklist Checklist CODE COD	Checklist Code	Service IDENTIFICATION CODE ACRONYM CODE NUMBER CODE ACRONYM CODE NUMBER CODE O 3 M S T D A 0 0 0 O	Checklist WORK EQUIPMENT CLASS NUMBER CODE ACRONYM CODE CODE		

Attachment 3 5

Re-install the encoder plug and encoder lead wire drawing cover.

10. Re-install the manual release bolts.

12. Report discrepancies to supervisor.

Maintenance Technical Support Center IDENTIFICATION

U.S. Postal	Service		IDENTIFICATION WORK SOLUTION												
Maintenance	Check	list	WORK CODE		EQUIPMENT ACRONYM			_ASS ODE	NU	MBER	TYPE				
Fauinment Nemeneletur			0 3 Equipmen	M S T		Bulletin Fi	D	Α	0	0 2	М				
Equipment Nomenclature Mail Staging		\r	Equipmen	Daifuku			iename 3047al	h	Occurre	nce Quarterl	lv				
Mail Staging	g rowe	;I		Dalluku		1111111	3041 a	U							
Part or	Item No			Statement and			Est.	Min.		Threshold					
Component		(0	Comply wit	h all current saf	ety precautior	ns)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.				
VERTICAL	7.	Check Ve	ertical Ti	ravel Drive I	Motor Oil L	evel.	4	7							
TRAVEL DRIVE MOTOR		gaug trave 2. Ensu mark	ge mouned drive muse that the second the sec	the oil level gauge.	side of the	vertical the two									
		addit as fo	tional oil Ilows:	l is below the (Mobil Gear	629, ISO	VG 150)									
				ne oil filler p ite side of th	•										
			the opposite side of the drive motor. Add the specified oil until the oil level is between the two marks.												
				CAUTION]										
		Do no gauge liters.		l above top imum oil o											
		c. R	eplace tl	he filler plug	сар.										
		4. Repo	ort discre	epancies to s	supervisor.										
VERTICAL	8.	Lubricate	Vertica	I Travel Lift	Wires.		45	7							
TRAVEL LIFT WIRES				WARNING											
		mater	ials acc	spose of che cording to rith local pro	MSDS an										
				NOTE											
			re to lub unterwei	ricate all lift ght.	wires, incl	uding									
		1000 trave)) to all al lift wir	ope lubricar accessible es, includino vrapped arou	portions of goverhead	vertical portion									
		lubrio	cant so twire. A	a brush or a hat it coats void over sa	and perme	ates into									

Maintenance Te	<u>chnica</u>	al Suppo	<u>rt Cente</u>	er						M	MO-04	4-14
U.S. Postal	Service						IDENTIFICA	TION				
Maintenance	Check	list	WORK CODE			QUIPMENT CRONYM			_ASS ODE	NU	MBER	TYPE
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Equipment Nomenclature	е		Equipmer				Bulletin Fi			Occurre	nce	
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Part or	Item		Task	Statement	and In	struction		Est.	Min.		Threshold	s
Component	No	(0	Comply wit	h all curren	t safet	ty precautio	ns)	Time	Skill	Run	Pieces	Freq.
								Req (min)	Lev	Hours	Fed (000)	
		the v	vire.			ant that d						
		5. Repo	ort discre	epancies	to su	pervisor.						
HORIZONTAL	9.	Clean Ho	rizontal	Travel D	rive	Unit.		8	7			+
TRAVEL DRIVE UNIT				WARNI	NG]						
		prohit an alte a HEI damp comp cloth optica	oited. Wernative PA filter rag meressed or brus Il equipr	When cle cleaning red vacuust be or blow sh may	aning meduum uum used nair be u	or blown g is requesthod successed in place c. A linused onle other clea	uired, ch as or a ce of t-free ly on					
				horizon y and en		avel driv r covers.	e motor,					
		the	drive mo		oder	um clean , horizon	er, clean Ital drive					
						avel driv r covers.	e motor,					
		4. Repo	ort discre	epancies	to su	pervisor.						
CARRIAGE AND	10.	Clean Ca	rriage a	nd Shutt	le.			10	7			
SHUTTLE				WARNI	NG]						
		prohik an alto a HEI damp comp cloth optica	oited. Wernative PA filter rag meressed or brus Il equipr	Vhen cle cleaning red vacuust be or blow sh may	aning meduum uum used nair be u	r blown g is requesthod successed cleaner d in placer. A linused onlother clean	uired, ch as or a ce of t-free ly on					

Attachment 3 7

1. Lower the cover on the bottom of the

carriage assembly.

Maintenance Technical Support Center

U.S. Postal	Service				I	DENTIFICA	TION				
Maintenance	Check	list	WORK CODE		QUIPMENT ACRONYM			_ASS ODE	NU	MBER	TYPE
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Equipment Nomenclature			Equipmer			Bulletin Fil		_	Occurre		
Mail Staging	g Iowe	er		Daifuku		mm1	3047a	b		Quarter	y
Part or	Item No		Task	Statement and Ir	nstruction		Est.	Min.		Threshold	ls
Component	INO	((Comply wit	h all current safe	ty precaution	ns)	Time Req	Skill	Run Hours	Pieces Fed	Freq.
							(min)	Lev	riodio	(000)	
		2. Rem	ove the	shuttle side c	over(s)			1			
		3. Usin vacumote spro asset 4. Rein cove 5. Rep	g a HE uum out or, shuttl ckets, di embly. estall the ers. ort discre	EPA filtered the convelle motor, all trive chains a e carriage	vacuum yor moto drive ge nd entire and shut	ears and carriage					
STAGING CONTROLLER	11.	Clean Sta	aging Co	ontroller.			5	9			
		you nequired Plan (With open, side of the optical method open) With open optical method open open open open open open open open	the stage 480VA0 of the discontinuity of the discontinuity of the stage of control of the discontinuity of the stage of th	WARNING ging controll C still exist sconnect. WARNING OMPRESSED OF WHEN Cleaning more cleaning cleaning more clea	er discors on the cleaner d in placer. A line used onlother clear panel do vacuum	e as Work nnect line air is uired, ch as or a ce of t-free y on aning ked out, or.					
				nterior of the aging controlle		ontroller.					

Maintenance Tec	chnica	al Suppo	Il Support Center MMO-044-14												
U.S. Postal	Service							IDEN	NTIFIC	ATION					
Maintenance	Check	list	WORK CODE				PMENT DNYM				LASS	N	JMB	SER	TYPE
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Equipment Nomenclature	Э		Equipmer	nt Mode	ı			Bu	lletin F	ilename		Occurr	ence)	
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Part or	Item		Task	Stateme	ent and	lnstru	ction			Est.	Min.		Thr	eshold	ls
Component	No		(Comply wit	h all cu	rent s	afety pi	ecautio	ns)		Time Req (min)	Skill	Run Hours		ieces Fed	Freq.
		4. Rep	ort discre	panci	es to	supe	visor.			(!!!!!)			<u> </u>	000)	
CELL	12.	·	ell Contro							8	9		+		
CONTROLLER	12.	Clean C		WAF	RNIN	3				0	9				
		prohi an ali a HE damp comp cloth optic	use of co bited. V ternative PA filter o rag mo oressed or brus al equiprods can	Vhen clear red voust bor bloom	clear ning i acuu e us own ny be wher	ning imethomethomethologies in coloring in	s requested successive	uire cha or ce t-fre	d, as a of ee on						
		1. Ope	en the oinet.	doors	on	the	cell (cont	troller						
		vac	ng a HE uum the S, and cal	keyb	oard,	mon									
			eck the essary.	UPS	for a	any f	aults,	res	set if						
		4. Clos	se the cal	binet o	loors										
		5. Rep	ort discre	panci	es to	supe	visor.								
INPUT / OUTPUT /	13.	Clean In	put / Out	put / I	Rejec	t Cor	vevo	rs.		10	7		+		
REJECT CONVEYORS				WAF			.,								
		prohi an ali a HE damp comp cloth optic	use of co bited. V ternative PA filter rag moressed or brus al equiprods can	Vhen clear red valuest bloom b	clear ning s acuu e us own ny be wher	ning imethomethomethologies in classification in	s requested successive	uire cha or ce t-fre	d, as a of ee on						

Attachment 3 9

Remove all loose string, rubber bands, labels, and other debris from the conveyor

Using a HEPA filtered vacuum cleaner, vacuum conveyor rollers and framework.

rollers.

Maintenance Technical Support Center

IDENTIFICATION

Maintenance	Check	dist	WORK CODE				PMENT ONYM				ASS ODE	NU	MBER	TYPE
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Equipment Nomenclature			Equipmer					E	Bulletin Fil			Occurre		
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Part or	Item		Task	Stateme	ent and	Instru	ıction			Est.	Min.		Threshol	ds
Component	No	((Comply wit	h all cu	rent sa	fety p	recautic	ns))	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
							_							
			ort discre	•										
LIFT WIRE UPPER IDLER PULLEYS	14.	Inspect I	Lift Wire	Uppe	r Idlei	r Pul	leys.			14	9			
IDLLIN FULLE 13		or c	ck each other sigr ntion to b	ns of	dama	ge.	Pay	ра	rticular					
			eck all idl cks or loo						ets for					
		3. Rep	ort discre	epanci	es to	supe	rvisor.							
LIFT WIRE SPRING	15.	Inspect and Micr			ng H	olde	rs, Ja	ım	Nuts,	8	9			
HOLDERS, JAM NUTS AND MICRO				N	OTE									
SWITCHES			ire to che ling the c				all lift	wii	res,					
			ck each			•	-	old	er for					
		2. Ens	ure jam r	nuts (w	-nuts)) are	secur	e.						
			ure the "surely fast											
			ure all e the lead											
		•	ort discre											
CARRIAGE CONTROL	16.	Inspect (Carriage	Contr	ol Ca	bles	-	_		10	9			
CABLES				NO	DTE									
		stagin cables the house folds moves simila crane This of moves crane	carriage / ag control s. The f ome posite d in a bla up and pl s vertical r cable c mask to cable carr s horizo eck for pr	ller us irst setion of ack plack plack plack ays outly inside arrier oconnitier plack antally	ing a the s astic c it as t de the is use ect w ys ou acro	serie contr tagir cable he sta e sta e d on vith t it as ss	es of color cab ag crarie carried taging under the sind the car the car the sind	con les ne er t cra cria rria tria tag	atrol s at are that ane . A ging age. age					

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U.S. Postal	Service									Ш	DEN.	TIFI	ICAT	ION						
Maintenance	Check	list		DRK DDE					MEN [*]						ASS ODE		NU	JMB	ER	TYPE
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Equipment Nomenclature	е		Equ	ipmer	nt Mo	del					Bull	letin	File	name		(Occurr	ence		
Mail Stagin	g Towe	er			[Daifu	ıku					mr	m13	047a	b			Qu	arterl	У
Part or	Item		-	Task :	State	ment	and I	nstru	ction					Est.	Min.			Thre	eshold	s
Component	No	((Comr	olv wit	h all o	currer	nt saf	etv pr	ecauti	or	ıs)			Time	Skill		Run	Pi	eces	Freq.
			p	.,		,		оч, р.			.0,			Req (min)	Lev	ш	Hours	F	ed (000)	1 104.
		and cable				ere	cab	es (enter		and	ex	kit							
			ble carriers. neck for proper location of cables, and																	
		ensu	sure cables are not twisted inside cable rriers.																	
		4. Chec plate cable	e wh	nere	the															
		Ensureor to partion	he	hori	izont	tal o	cabl	е с	arriei	s.		Pa								
		6. Chec					o th	e pla	astic	р	iece	es (of							
		7. Checinsid	e th	ne ca	able	carr	iers	tha	t sep	oa	rate	th:	ne							
		8. Repo	ort d	iscre	pan	cies	to s	uper	visor											
VERTICAL POSITIONING	17.	Clean an Sensors							onin	g	Pho	oto		6	9					

VERTICAL POSITIONING PHOTO SENSORS AND LIMIT SWITCHES

NOTE

The vertical positioning photo sensors (4 each) are U-shaped photoelectric switches located on the home position end of the staging crane.

- 1. Ensure the photo sensors are securely fastened and not visibly damaged.
- 2. Using a damp cloth, clean sensor exteriors and emitter and receiver windows.
- 3. Check for proper alignment.
- Ensure vertical travel limit switches are securely fastened and not visibly damaged. Pay particular attention to roller on actuating arm.
- 5. Ensure all electrical connections are tight and the lead wires are not frayed or broken.

Maintenance Technical Support Center

IDENTIFICATION

Maintenance	Check	list	WORK CODE					MENT DNYM				_ASS ODE	NU	JMBEI	R	TYPE
Equipment Nomenclature	-		0 3 Equipme	M ant Mo	S	Т			D	letin Fil	D	Α	0 Occurre	0	2	М
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Part or	Item No		Task	State	ment	and l	Instru	ction			Est.	Min.		Thres	sholds	S
Component	110	(Comply w	ith all	currer	nt saf	ety pr	ecautio	ns)		Time Req (min)	Skill Lev	Run Hours	Pied Fe (00	ed	Freq.
		6. Repo	ort discre	epano	cies t	o su	ıperv	isor.								
VERTICAL	18.	Inspect \	/ertical	Loca	ation	De	tecti	on Pl	ates	-	4	9				
LOCATION DETECTION PLATES		each)	ertical are mo	locat ounte	d to	dete	hor	ne po	sitio	n						
		height	end of the staging unit. They run the entire height of the staging unit. Ensure the detection plates are not bent or													
			ure the aged.	dete	ction	pla	tes a	ire no	t be	nt or						
			fastened.													
		3. Rep	eport discrepancies to supervisor.													
HORIZONTAL	19.	Inspect I	Horizon	tal L	ocat	ion	Zone	Plate	es.		4	9				
LOCATION ZONE PLATES					NOT	E										
			norizont ted to t													
		Ensure t and not Report di	shifted	fror	m th	eir	orig	inal p								
BEAM LEVEL	20.	Perform	Beam L	.evel	Che	ck.					18	9				
CHECK																
		tender mask stagin a fixe this p they r An al	Perform Beam Level Check. NOTE Since the vertical travel lift wires have a tendency to stretch, the staging crane mask must be checked for level. The staging bins / support trusses are used as a fixed reference point when performing this procedure. If the bins are not level, they must be leveled before proceeding. An alternate beam leveling procedure is shown in Figure 1.													
		on t liftin	ure the s he 4-tor g wires oves of t	adjı are	ustat pro	ole ja perl	ack s ly w	stands	and	d the						
		2. Plac	e a stri	ng or	othe	er st	traigl	nt edg	e ac	ross						

U.S. Postal Service							II	DENTI	FICAT	ON						
Maintenance Checklist		ORK ODE				 PMEN ONYN					ASS ODE		NUN	MBER		TYPE
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Equipment Nomenclature	Equ	iipme	ent Mo	del				Bullet	in Filer	name		Occi	ırrer	nce		
Mail Staging Tower			Daifu	ıku			n	nm13	047al)		(Quart	erl	y	

		<u> </u>		ا		,	
Part or	Item	Task Statement and Instruction	Est.	Min.	TI	hresholds	
Component	No	(Comply with all current safety precautions)	Time Req (min)	Skill Lev	Run I Hours	Pieces Fed (000)	Freq.
		the top of the left and right staging bins directly above the staging crane mask (beam). Place one string or straight edge at the home position and one at the opposite end of the beam, i.e., first and last bays. 3. At the home position, measure the gap between the string and the beam. 4. Measure the same gap at the opposite end of the beam. 5. Compare values to determine if beam is level. 6. If necessary, adjust the lift wire end nuts to level the beam. 7. Report discrepancies to supervisor. Scale Carriage beam Figure 1. Alternate Beam Leveling Procedure					
STAGING CRANE	21.	Unsecure Staging Crane Mask.	6	All			
		Remove the two 4-ton adjustable jack stands that were placed under the staging crane mask. Remove all tools, lubricants, rags, etc., from inside the staging unit. Report discrepancies to supervisor.					

Maintenance Technical Support Center

IDENTIFICATION

Maintenance	Check	list		DRK DDE					MENT DNYM		•			ASS ODE	A 0 0 Occurrence Qua Min. Thres Skill Run Piet Hours Fe (00		R	TYPE					
Equipment Nomenclature			0	3 ipmen	M t Moo	S	Т			D	llotic	Eilo:	D name	A			2	М					
			⊢Equ	ibinen			بيار			Bu				h	Occurr		orto -l	,					
Mail Staging	y rowe	<u> </u>				aifu	KU			<u> </u>	rnn	113	047al	υ		Qua	arteri	y					
Part or	Item No			Task S	Staten	nent a	and I	nstru	ction				Est.	Min.		Thre	shold	S					
Component	NO		(Comp	oly with	all c	urren	t saf	ety pr	ecautio	ns)			Time Req (min)	Skill Lev		F	eces ed 00)	Freq.					
					WA	RNI	NG																
		equi appl		t w	hen	р	owe	er		or o													
	22.	Restore	e Equi	ipme									2	All									
				L	WA	RNI	NG																
		you requ	ore pe must iired b (EWF	e ap	pro	pria	te PF	PE a	as														
		Restore LOCKO ON/OFF "ON" po switch is	UT/TA swite osition	AGOU ch oi i. Ei	JT n the nsur	devi e sta e th	ice agir ie n	and ng co node	plac	cing er i	th n th	e e											
VERTICAL	23.	Perform	n Vert	ical l	_ear	ning	g.						6	9									
LEARNING		At the c	ell con	ntrolle	er:																		
		but	ck the ttons y faults	on th	ne N	/loni	torir																
		Ма	ck th aintena een.																				
		3. Cli Ma	ck t intena	he ance		arnin en.	g	butt	on	on	th	е											
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Equipment Nomenclature	Equipment Model						Bulleti		Occurrence							
Mail Staging Tower	Daifuku						mm13047ab				Quarterly			ly		

Part or	Item	Task Statement and Instruction	Est.	Min.		Thresholds	3
Component	No	(Comply with all current safety precautions)	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.
		NOTE					
		For newly learned parameters to take effect, the staging controller must be powered down and back up. New parameters are loaded when the staging controller restarts.					
		 Power down the staging controller by placing the ON/OFF switch on the staging controller in the "OFF" position. 					
		Restore electrical power by returning the ON/OFF switch to the "ON" position.					
		 Click the Cancel Alarm and Error Reset buttons on the Monitoring screen at the cell controller to clear any faults that may exist. 					
		 Click the Start button on the Monitoring screen and return the staging unit to operational status. 					
		12. Report discrepancies to supervisor.					
CLEAN UP		CLEAN UP. Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	3	All			

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U.S. Postal Service	IDENTIFICATION															
Maintenance Checklist	_	WORK EQUIPMENT CODE ACRONYM							_	ASS DE	NI	JMBE	R	TYPE		
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			0 0
Equipment Nomenclature	Equipment Model	Bulletin Filename	Occurrence
Mail Staging Tower	Daifuku	mm13047ab	Quarterly

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

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ATTACHMENT 4

MST MASTER CHECKLIST

03-MST-DA-003-M

ANNUAL

Annual Time Total: 212 minutes

Maintenance Technical Support Center

U.S. Postal Service			IDENTIFICATION														
Maintenance	e Checkl		VORK CODE					PMENT ONYM				_ASS ODE	N	UMB	ER	TYPE	
Equipment Nomenclatu	re	C	_	M ent M		Τ			Bu	lletin Fil	D	Α	0 Occur	0 rence	2	М	
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	Ţ.,	·	Task Statement and Instruction							'	Thresholds						
Part or Component	Item No	(Cor						ction	ns)		Est. Time Req (min)	Min. Skill Lev	Run Hours	Pi	eshold eces ed 000)	Freq.	
SAFETY STATEMENT		COMPLY We Disconnector required by local locked down and equipment Check for some supervisor further action of the USE Of the USE Of the Couloment cannot be used of the USE OF	poly this put loc and suspusual principle on o of TED method and principle of the configuration of the configurati	wer sins process in section the section that the section the section that	and struct sedure us de us de ubsta to perecent a da ssed n ma en of eport medi P/PP this I Prot curre	apprinted apprinted approach to the content of the	oly lo . Re to made dus or un e is eedin ent. D OF d, a rag blow e us clea gy upo etin r ve E Elect	bockour efer to proper chine. t corn nusua found ng w R BLO an alt HEPA must vn air. ed on ning re deficie on det	ts of curry (notified in the fill be An openite ections of the ect	when irrent shut Open ions. ebris. notify any I AIR ative tered used lint-otical hods es to ion.	3	All					
		When requires staging one exc the insp	unit, ept	irning con the on is	firm per	ection in a rson r the	on powe advar (s) e sta	nce th perfor	th at r mir	ne no ng							
		Never s crane when the drive me drive on s	hen otor.	oper D	rating	g th	e vei	rtical t	rav	el							

IDENTIFICATION															
-	WORK EQUIPMENT CODE ACRONYM					-	CLASS CODE				NUMBER			TYPE	
0	3	М	S	Т						D	Α	0	0	2	М
Equi	Equipment Model							Bulletin Filename				Occurrence			
Daifuku							mm13047ab				Annual				
	0	CODE 0 3	CODE 0 3 M Equipment Mo	CODE 0 3 M S Equipment Model	O 3 M S T Equipment Model	CODE ACRO 0 3 M S T Equipment Model	CODE ACRONYM 0 3 M S T T Equipment Model Feature of the control of the contro	WORK CODE EQUIPMENT ACRONYM 0 3 M S T Equipment Model B	WORK CODE EQUIPMENT ACRONYM 0 3 M S T Bulletir	WORK CODE EQUIPMENT ACRONYM 0 3 M S T Bulletin Filer	WORK CODE EQUIPMENT ACRONYM CLA 0 3 M S T D Equipment Model Bulletin Filename	WORK CODE EQUIPMENT ACRONYM CLASS CODE 0 3 M S T D A Equipment Model Bulletin Filename C	WORK CODE EQUIPMENT ACRONYM CLASS CODE NI CODE 0 3 M S T D A 0 Equipment Model Bulletin Filename Occurr	WORK CODE EQUIPMENT ACRONYM CLASS CODE NUMBER 0 3 M S T D A 0 0 Equipment Model Bulletin Filename Occurrence	WORK CODE EQUIPMENT ACRONYM CLASS CODE NUMBER 0 3 M S T D A 0 0 2 Equipment Model Bulletin Filename Occurrence

Mail Stagin	g Iowe	r	Daifuku	mm1	3047a	b	Annual				
Part or	Item		Task Statement and Instruction		Est.	Min.		Thresholds	3		
Component	No	(Comply with all current safety precaution	Time Req (min)	Skill Lev	Run Hours	Pieces Fed (000)	Freq.			
STAGING CRANE	2.	For visua crane the crunit. check extres opera	cauring Crane To Lowest Position CAUTION equipment protection, alvers and shuttle fork when operation or shuttle using maintenative to the crane and shuttle position must be used withing the crane or shuttle. The hand held maintenance unit, and crane at its lowest position.	3	9						
	3.	you required Plan (With open, side of switch or switch or required power do switch o	WARNING e performing the following smust don the appropriate PPlered by the current Electrical V(EWP) MMO. WARNING the staging controller discontroller d	2	All						
STAGING BINS		Using a stramework across a supervisor		180	7						
STAGING FRAMEWORK	5.	1. Che loos atte	taging Unit Hardware. ck the entire staging unit frame e or missing hardware. Pay p ntion to the overhead support s the bin support trusses.	articular	18	7					

Maintenance Technical Support Center IDENTIFICATION

Maintenance Checklist			WORK EQUIPMENT CODE ACRONYM						LASS ODE	NU	TYPE	
			0 3	M S	Т			D	Α	0	0 2	М
Equipment Nomenclatur			Equipme	ent Model			Bulletin F			Occurre		
Mail Stagin	g Towe	r		Daifu	ıku		mm	13047a	b			
Part or	Item No		Task	Statement	and Ins	truction		Est. Time	Min. Skill		ds	
Component		((Comply wi	th all curre	nt safety	/ precauti	ons)	Req (min)	Lev	Run Hours	Pieces Fed	Freq.
											(000)	
		2. Che	ck each	staging b	oin for	loosene	ess.					
		3. Rep	,									
		4. Rep										
			report dissipations to supervisor.									
				WARN	ING							
		Ве са	- utious v	vhen wo	rking	- around	or on					
		equip	Be cautious when working around or on equipment when power has been applied.									
	6.	RESTOR		PMENT 1	TO SE	RVICE.		3	All			
]		Γ	WARN		7						
			L			_						
		you n	nust do	rming then the appropriate	pprop	riate P	PE as					
			ed by t EWP) M	he curre IMO.	ent Ele	ectrical	vvork					
							ving your					
							acing the ller in the					
		"ON" pos	sition. E	Ensure th	ne mo	de sele	ection key	·				
							Reset any perational					
		status.		,			•					
CLEAN UP	7.	CLEAN U						3	All			
		Ensure removed					etc., are Report all					
		deficienci					- 1					