## Amendment No. 1 to Contract MA-031-21011546 with DMT Solutions Global Corporation DBA Bluecrest for Hardware Maintenance on DMT Sorters, Inserter and Server and Software Licensing and Maintenance

This Amendment No. 1 (hereinafter referred to as "Amendment No. 1") to Contract MA-031-21011546 is made and entered into as of the date fully executed by and between the County of Orange, a political subdivision of the State of California, (hereinafter referred to as "County") and DMT Solutions Global Corporation DBA Bluecrest, with a place of business at 37 Executive Drive, Danbury, CT 06810-4147 (hereinafter referred to as "Contractor"), with County and Contractor sometimes referred to as "Party" or collectively as "Parties".

### **RECITALS**

WHEREAS, the Parties executed Contract MA-031-21011546 (hereinafter referred to as "Contract") for Hardware Maintenance on DMT Sorters, Inserter, and Server and Software Licensing and Maintenance under a firm fixed fee, in the amount not to exceed \$566,243.43, effective on August 12, 2021, through and including August 11, 2024; and

**WHEREAS**, County purchased additional mail sorting systems through Contract MA-031-23011217 and an additional mail inserting system through Contract MA-031-24010499; and

**WHEREAS,** County desires to renew the Contract for a two-year term of August 12, 2024, through and including August 11, 2026; and

WHEREAS, Contractor has agreed to provide hardware maintenance and software licensing and maintenance for the additional equipment purchased pursuant to Contract MA-031-23011217 and Contract MA-031-24010499 through this Amendment No. 1 to the Contract; and

**NOW, THEREFORE**, in consideration of the mutual obligations set forth herein, the parties mutually agree as follows:

- 1. The Contract is renewed for a term of two (2) years, effective August 12, 2024 through August 11, 2026, in an amount not to exceed \$792,522.85 for the renewal term, for a revised total amount not to exceed \$1,358,766.28.
- 2. Additional Terms and Conditions, Paragraph 2. Term of Contract, of the Contract is deleted in its entirety and replaced with the following:

**"2. Term of Contract:** This Contract shall commence on August 12, 2021 and continue through and including August 11, 2026, unless otherwise terminated by County."

3. Additional Terms and Conditions, Paragraph 3. Renewal, of the Contract is deleted in its entirety and replaced with the following:

- "3. Renewal: This Contract is non-renewable."
- 4. Attachment A, Section 2.1., of the Contract is deleted in its entirety and replaced with the following:

"2.1. Contractor shall be required to maintain all optimal service levels of the System:

- Mailstream Productivity Series Inserter
- Roll Input Unwinder and Cutter
- Inserter Module Inline Printing
- Epic Inserter
- Four (4) Vantage Mail Sorting Systems. One (1) has been designated as a backup unit. If utilized by County, Annual Hardware Maintenance fee will be charged at the Designated Backup Sorter rate specified in Attachment D.
- Four (4) Selective Envelope Openers
- Stratus Server"
- 5. Attachment A, Section 2.2.2., of the Contract is deleted in its entirety and replaced with the following:

"2.2.2. Annual Vantage and Epic Software licenses"

- 6. Attachment B. Sorters, Inserter, and Inkjet Addressers Preventative Maintenance Schedules, of the Contract is deleted in its entirety and replaced with Attachment B. Sorters and Inserters Preventative Maintenance Schedules, attached hereto.
- 7. The following table is added to the end of Paragraph B. Fees in Attachment D of the Contract:

Annual Hardware Maintenance for 4 Sorters, 2 Inserters, and Server (System) (includes Embedded Software) Onsite Equipment Maintenance includes up to 40	Model/Serial STV1-0004215 STV1-0004155 * Y507-1742358 STV1-0004333		Year Four 8/12/24 – 8/11/25 \$149,739.31	Year Five 8/12/25 – 8/11/26 \$154,231.49
weekday and 6 weekend day shifts Designated Backup Sorter *	STV1-0004332 2410022		\$34,321.66	\$35,351.31
TOTAL HARDWARE MAINTENANCE			\$184,060.97	\$189,582.80
Annual Software License and Maintenance	License / Subscription	Maintenance	Year Four 8/12/24 – 8/11/25	Year Five 8/12/25 – 8/11/26
Inserter:				
Embedded Software	Perpetual	Included in hardware maintenance		
Epic Inserting System Software	Annual		\$10,900.00	\$11,227.00
Sorters:				
Vantage Software	Perpetual	Annual Software Maintenance	\$17,389.12	\$17,910.79
Absentee Ballot Data Capture & Integration	Annual	Included in Vantage Software		

Local Image Archiving	Perpetual	Included in Vantage Software		
Code X WABCR	Perpetual	Included in Vantage Software		
Relia-Vote licensed software	Annual	Annual Software Maintenance	\$17,449.89	\$17,973.39
Third Sorter	Annual		\$34,778.24	\$35,821.59
Forth Sorter	Annual		\$34,778.24	\$35,821.59
Server:				
Stratus Server Software	Annual		\$17,157.26	\$17,671.97
TOTAL SOFTWARE LICENSE AND MAINTENANCE			\$132,452.75	\$136,426.33
Annual Hardware Maintenance and Software License and Maintenance			Year Four 8/12/24 – 8/11/25	Year Five 8/12/25 – 8/11/26
GRAND TOTAL			\$316,513.72	\$326,009.13
Additional Services & Miscellaneous Non-Covered Consumables as detailed in Paragraph B (above)			Year Four 8/12/24 – 8/11/25	Year Five 8/12/25 – 8/11/26
Additional Services & Training as needed		Not To Exceed	\$50,000.00	\$50,000.00
Miscellaneous Non-covered Consumables as needed		Not To Exceed	\$25,000.00	\$25,000.00
Annual Hardware Maintenance and Software License and Maintenance			Year Four 8/12/24 – 8/11/25	Year Five 8/12/25 – 8/11/26
NOT TO EXCEED (NTE) GRAND TOTAL			\$391,513.72	\$401,009.13

\* Annual Hardware Maintenance for designated backup unit is \$0. If designated backup is used, Annual Hardware Maintenance fee will be charged.

8. This Amendment No. 1 modifies the Contract, including all previous amendments, only as expressly set forth herein. Except as amended herein, all other terms and conditions of the Contract, including all previous amendments, are incorporated by this reference as if fully set forth herein and shall remain in full force and effect.

# SIGNATURE PAGE FOLLOWS

#### SIGNATURE PAGE

The Parties hereto have executed this Contract on the dates shown opposite their respective signatures below.

#### CONTRACTOR: DMT SOLUTIONS GLOBAL CORPORATION DBA BLUECREST

Tim Rodriguez	SVP, Global Service	
Print Name	Title	W
Ti Rodrigues	May 28, 2024	
Signature	Date	<u> </u>
hours D. Andreadad	CF0	
Print Name	Title	
//V	5/28/24	
Signature	Date	

\* If Contractor is a corporation, signatures of two specific corporate officers are required as further set forth.

The first corporate officer signature must be one of the following: 1) the Chairman of the Board; 2) the President; 3) any Vice President.

The second corporate officer signature must be one of the following: 1) Secretary; 2) Assistant Secretary; 3) Chief Financial Officer; 4) Assistant Treasurer.

The signature of one person alone is sufficient to bind a corporation, as long as he or she holds corporate offices in each of the two categories described above. For County purposes, proof of such dual office holding will be satisfied by having the individual sign the instrument twice, each time indicating his or her office that qualifies under the above-described provision. In the alternative, a single corporate signature is acceptable when accompanied by a corporate resolution demonstrating the legal authority of the signature to bind the company.

### COUNTY OF ORANGE, a political subdivision of the State of California

Print Name	Title	
Signature	Date	
APPROVED AS TO FORM County Counsel		
Brittany McLean	Deputy County Counsel	
Print Name	Title	
Print Narsened by: Brittary Mclean Signalifie 638662E411	5/28/2024	
Signature 638662E411	Date	

## ATTACHMENT B Sorters and Inserters Preventative Maintenance Schedules

## VANTAGE MAIL SORTING SYSTEMS

Sorter Preventative Maintenance Checklist

This check list is based on a 100,000 piece daily volume and a 6 day work week with a VideoJet printer. Based on a standard transport. Adjust intervals as needed.

#### Daily cleaning- by County Operator, Contractor will assist when onsite

Inspect VideoJet printers for proper operation Verify the transport top deck and elevator are clean Check the sensors in the transport and elevator for looseness or damage Inspect the Double Detect and camera platen areas for debris Dust the camera (with dry air only at very low pressure) Wipe off the barcode verifier front platen and lens of any ink or paper dust Run the Go no Go utility two (2) times **Every two days** Inspect the blue separator belts and replace them every 4-4.5,000,000 mail pieces or if more that 75% worn Inspect the feeder belts. Rotate or replace them if needed. Possible interval is 1.3-1.5 million mail pieces Check fluid levels of the printers. Replace if needed Complete the daily list

# Weekly PM by County Operator, Contractor will assist when onsite.

Use the Task list as a guide to the maintenance services Add 1 drop of light oil to the Separator needle bearing and wipe off excess oil from the top plate Vacuum computer bay area and inside the module cabinets Check the OCR and SIM cabinet filters. Clean or replace if needed. Check function and clean cabinet fans in the Feeder/OCR and SIM Modules Inspect system fan and filter (OCR and SIM sections) Vacuum and inspect the stacker sections Look for worn belts and bearings Wipe off the sensors in the stacker sections Verify operation of the Array, Camera platen and Double Detect puffers Clean the E-mill fine filter (selective opener only) Inspect the E-mill drive belt and sensor (selective opener only) Check the VideoJet printer pressure for correct setting. Adjust if needed Check the VideoJet printer break off for correct calibration. Adjust if needed Inspect the Feeder Drive belt for wear. Loosen securing bolts and retention the belt. Inspect the Take Away NIP drive belt for ware. Loosen securing bolts and retention the belt Complete the daily cleaning lists

### **Monthly PM**

Every 15,000,000 mail pieces follow monthly PM procedures Remove Green belts and check all bearings and hubs. Replace any worn parts. Scrape/clean debris stuck to the rollers in the mail path.

Inspect the green belts in the transport and elevator and replace as needed

County of Orange Registrar of Voters *MA-031-21011546 DMT Inserter & Sorter Maintenance*  Page 5 of 19 File No.: C031295 5 of 19 Replace Green belts every 30-45,000,000 mail pieces.

Inspect the TakeAway NIP drive pulleys and Feeder motor pulleys for wear. Replace if there are signs of sharp worn teeth

Replace the double sided timing belt for the Take Away NIP every 40-75,000,000 mail pieces (p/n 566-5014) Inspect Top deck panther belts. Replace any with excessive wear.

Inspect the transport motor drive panther belts, replace if glased or damaged

Inspect the belts in the stacker sections and pockets. Replace as needed

Inspect and check the Light Line calibration with alignment card. Adjust if needed

Check the camera alignment with the alignment card, adjust if necessary Inspect Take Away Nip and compliant rollers on the SIM, replace as needed Test all systems in the stacker:

(Diverters, pocket clutches, push buttons, pocket full switches, LCD's, tray tag printers & Estops) Clear out the jobs in the computer and move them to a backup folder

Check the battery and function of the UPS. Complete the weekly PM list

### **Quarterly PM**

Inspect the UHMW feeder platen. Replace if worn.

Replace the motor drive belts for the Feeder, Take Away NIP and Hopper motor drive. Inspect the Hopper bearings, mounts and motor for wear. Replace any worn out parts Inspect all motor drive belts (panther belts) replace if frayed or cracked

Clean tray tag printers with the cleaning pen

Inspect the system fans for play or vibration. Replace if worn. Complete the items in the monthly PM list

#### Annual PM

Remove all old files from computers. Run the disk Clean and Defrag utilities Remove all computers in the transport, open the case and blow out dust Re clone the backup drives Complete the steps in the quarterly PM list

## **MAILSTREAM PRODUCTIVITY SERIES INSERTER**

#### DMT MPS Machines with HPI Input

Weekly Inspection and Maintenance Checklist

#### The purpose of a preventative maintenance system:

- 1. Maintain machine performance at peak productivity
- 2. Identify and correct potential issues before they degrade productivity
- 3. Minimize repair costs

### Weekly PM Procedures during elections:

- Print a Direct Reports 'Top 10 Error' Report for this machine. Determine machine problem areas.
- Schedule a minimum of two hours with the Discover supervisor.
- Start a PM Coversheet
- Initial the PM checklist items that are completed
- Understand the purposes of two 'notes' sections:
  - The notes section of the 'Coversheet' is used to track events related to gaining access from, and returning the machine to the customer
  - The notes section of the 'Checklist' is used to track issues effecting machine performance including unresolved issues.
- Complete the PM Coversheet including customer sign off
- Attach the cover sheet and the Top 10 Report to the checklist and place it in the completed area of the PM box

#### **Online Actions**:

Checklist items that can be completed while the machine is live

- Observe operation of each section of the machine noting unusual sounds, vibrations and operation
- Wipe down covers
- Lubricate V-bin wall bushings, and gate pivots
- Lubricate MOS roller pivot points
- Clean computer filters
- Print an Alarm Summary for this machine
- Clean all covers
- □ Vacuum or blow out all section

### **UNWINDER:**

- Inspect main drive belt and dancer assembly belt
- Inspect the pneumatic mandrel and gears

### **CUTTER:**

- □\_\_\_\_\_Inspect slitter/exit roller and blade bearings for binds
- Blow-out debris from behind the slitters
- □\_\_\_\_Inspect and lubricate the slitters
- □\_\_\_\_Inspect all rollers, pulleys, belts and o-rings
- □ Inspect the blade connecting rod for play

# FIM:

Inspect the blue belts

□\_\_\_\_Inspect drive belts, pulleys and rollers

## RAT:

- □ \_\_\_\_\_Inspect all belts, rollers and bearings
- □\_\_\_\_Inspect and clean the upper arm belts
- □\_\_\_\_Inspect the RAT tubes

## **HPI ACCUMULATOR:**

- □ Inspect the blue belting
- □\_\_\_\_Inspect and clean the high speed nip rollers
- Inspect and clean the ramp rollers and exit rollers
- □\_\_\_\_Inspect and clean the orange belt
- Clean excess toner from the upper and lower decks

## FOLDER:

- □\_\_\_\_Inspect the folder rollers
- Inspect the buckle chutes
- □ \_\_\_\_\_ Inspect drive chain and pulleys
- □\_\_\_\_Inspect the bearings and shafts

## **CHASSIS:**

- □\_\_\_\_Inspect the pusher belts
- □\_\_\_\_Inspect all rollers, straps, belts and bearings
- Clean the computer filters

# **FRICTION FEEDERS:**

- □\_\_\_\_Inspect the belts
- Inspect the separator roller and clean as needed

### **ENVELOPE FEEDER:**

- Inspect the envelope hopper and paddle
- □\_\_\_\_Inspect the stripper bar
- During testing, inspect hopper for excessive vibration

### **ENGINE and DRUM:**

- □ \_\_\_\_\_Inspect and clean the feed head pad
- □ \_\_\_\_\_ Inspect and clean the double detect bearing and hub
- □\_\_\_\_Inspect all drive belts, pulleys, bearings
- □\_\_\_\_\_Inspect and clean all rollers and trucks
- Inspect the horns, backstops and overhead pushers
- □\_\_\_\_Inspect the sucker cups
- Clean the sucker filters
- □\_\_\_\_Inspect, clean and lubricate the flapper
- Clean glue from the pocket and arming areas
- □\_\_\_\_Inspect the spur gears for wear and backlash
- □\_\_\_\_Inspect the vacuum deck belts and clean as needed
- Inspect and lubricate the vacuum deck exit rollers

□ \_\_\_\_\_ Inspect the drum belts and jack shaft

### **OUTPUT:**

- Clean the sealer brush
- □\_\_\_\_\_Inspect the aligner wall belt and aligner balls
- Clean the glue and ink from the deck and rollers
- □\_\_\_\_Inspect and lubricate the MOS roller pivots
- □\_\_\_\_\_Inspect the v-bin gates and wall bushings lubricate as needed
- Clean the sealer pump filter
- Clean both of the Becker pump filters

### Weekly PM Completion:

- Top 10 Errors report attached
- Cover sheet completed and attached
- □ All Checklist items signed off
- □ Notes sections completed
- Parts recorded on the Blackberry and call completed
- □ Service ticket completed
- Completed Weekly PM paperwork placed in the PM box
- **D** Required signatures obtained

## EPIC INSERTER

#### Epic v1.0 and Epic Select Maintenance Activity and Preventive Maintenance Schedule

The PM interval is currently 30 million collations for the Epic Engine and Output modules (PPM and OES modules are not included). HPI inputs PM interval is 40M sheets.

#### Epic PM activities are broken into two groups:

**Maintenance** - tasks that need to happen at intervals from daily up to 30 million cycles. Usually short activities in duration (time to perform) and require a minimal amount of parts; easy to do.

**PM Activities** - tasks that happen at intervals of 30 million cycles or more. These activities are more involved and require more time to perform.

### <u>Notes</u>

**Needle Bearings:** Needle bearings need special attention during a PM. When properly designed and maintained a needle bearing should provide years of use. When maintaing a needle bearing it is important to properly clean and lubricate both the bearing and mating shaft. To clean the needle bearing and the shaft a lint free towel should be used to remove an old grease or contaminates.

Inspect the bearing and shaft for signs of wear When lubricating the bearing use the appropriate lubrication (TO1400 or equivalent), a clean spatula (wooden cotton swap stick, large ty wrap, foam tip applicator) and fill the bearing only 1/3 to 1/2 full to avoid over lubricating. Work the grease into the rollers by rotating the inner race of the bearing. All grease containers must be stored with its original top/cap to prevent dust contamination.

**Timing Belts:** Timing belts that are pre-tension using an auto-tensioning device are not required to be retensioned at periodic intervals. Only re-tension the belt if it has been removed to perform repairs.

#### Epic v1.0 and Epic Select Maintenance Activities

Maintenance tasks that are required in-between PM activities. ENGINE\_OUTPUT

А	Adjust	L	Lube
с	Clean	R	Replace
1	Inspect	RO	Rotate

						l (millions)		
Module	Activity		Part Number	Daily	Weekly	Monthly	5	10
General								
	ESTOPs and Interlocks	Verify functionality			I			
	Paper Path	Remove any dust / toner / glue buildup			С			
	Electrical Cabinet Filters	Remove filters clean or replace	240-0338			С		
	Engine Cover	Inspect struts are working and that top engine cover is supported (not able to free fall) when	ZY84304 Gas Strut		I			
		lowered.						
Envelope Feeder								
	Shaft Maintenance	Clean the top shaft with denatured alcohol only. Other three shaft to be coated with a very			C/L		1	ĺ
		light coat of silicone oil. (APPLICATION and MATERIAL SPECIFIC)						
	Feed Head Belts	Inspect for wear, replace when vacuum ports in belt are worn flat. Rotate belts if	ZY65011 Vacuum Belt (2x)		RO		1	R
		continuously running #10's size envelopes. Inspect Idler pulleys.	ZY17119 Idler Pulley (4x)				$\vdash$	<u> </u>
	Feed Assist Cup	Inspect cup (application specific)	508-0048 Green Cup		I		$\vdash$	
	Transport Door Pivot	Opens without binding, lube the two pivot points with light oil.				L		
							$\square$	1
Lower Engine							1	1
	Flapper Deflector	Inspect for wear to lead edge. Remove glue buildup. Lube needle bearings with TO1400.	ZY67301 Deflector Flapper,				1	I.
		Check for binds in assembly. Inspect blue bumper for wear. Adjustment required after	ZY46301 BEARING ASSY-				ĺ	ĺ
		replacement.	DEFLECTOR PIVOT,				1	1
			R284037 Stop Diverter				ĺ	1
	Flapper Blade	Inspect for wear at the tips of each finger. Check for glue. Clean as needed. Inspect stop	ZY67300 Flapper Blade,					Ι
		bumpers and return springs for wear or damage. Adjustment may be required after	212-5134 Return Spring,				ĺ	1
		replacement.	83-2002 Bumper				1	1
	Pocket Pusher Belts	Inspect pushers for wear to belt teeth and pusher lugs. Inspect pulleys.	MD00176 Lower Engine Pocket					Ι
			Pusher Belts				1	ĺ
Vacuum Deck								
	Clean photocells under vacuum deck	Remove dust by using compressed air monthly. Vacuum out area during PM.				С		
							1	1

#### Epic v1.0 and Epic Select Maintenance Activities

Maintenance tasks that are required in-between PM activities. ENGINE\_OUTPUT

Α	Adjust	L	Lube
С	Clean	R	Replace
1	Inspect	RO	Rotate

			-		Interva	l (millions)		
Module	Activity		Part Number	Daily	Weekly	Monthly	5	10
Upper Engine								
	Suction Cups	Inspect for wear to bottom surface or tears in bellows.	508-0048 Vacuum Cup		I			
	Overhead Pusher Belts	Inspect belts and pulleys for wear.	ZY66401 Belt Overhead Pusher					T
			Y637006 Idler Pulley					
			Y600257 Driven Pulley					ı
	Upper Platform	Check for alignment of upper platform to latch points. Check that struts support upper			I			
		engine in the open position. Tighten pivot point hardware if loose.						
Engine Turn								
	Rear Wall Belt	Belt will groove, exposing black substrate. Rotate when belt is worn thru. Replace after both	ZY15629 BELT, VERTICAL, RAT				RO	R
		top and bottom side of belt are grooved.						
Sealer								
	Brush	Clean brush is warm water. Inspect for wear. Adjust so it's not touching deck. Inspect clear	ZY46831 BRUSH SEALER,					I/C
		pre-deflector for wear and adjust so it's just touching deck.	ZY56806 SPRING STRAP BRUSH					
	Lower Sealer Drive Belts	Inspect transport belts for wear or cuts. Inspect drive and idler rollers for binds. Inspect idler	U765100 TRANSPORT BELT,					R
		tension roller for glue buildup.	ZY15829 PULLEY Idler, R710000					
			Belt Idler					1
	Glue Buildup	Clean any glue from, no seal, deck surfaces, underside of cannoli and straps.				С		
	Filter Screen	Clean or replace screen when DC indicates filter is clogged.	509-3143 Filter Screen				R	
	Overflow Tray	Dispose of water if present. Intervals will vary based on sealer setup. If overflow is filling up			С			
		within a day, check sealer fluid setup; monitor.						1
	Cover	Verify cover struts hold the cover in the up/open position.	ZY81841 Gas Spring		1			
VS1								
	Lower Sealer Drive Belts	Inspect transport belts for wear or cuts. Inspect drive and idler rollers.	U765100 TRANSPORT BELT,					R
			ZY15829 PULLEY Idler, R710000					1
			Belt Idler					
	Cover	Verify the cover struts hold the cover in the up/open position.	ZY81842 Gas Spring					
	Glue Buildup	Clean any glue from decks and divert door.				С		
	Divert Door	Inspect divert door for cracks at mounting screws. Clean any glue buildup.	Y350700 DIVERTER					
Turn Over								
	Red Belt Rollers	Inspect all rollers red belts ride on for glue contimination or dust buildup; clean as required.	1				I/C	R
							1/0	iv.
			1					

<b>Bold</b> - perform action to right for this number	Α	Adjust	L	Lube	RO	Rotate
Non-bold - supporting numbers for reference only	с	Clean	М	Measure	RT	Retension
(3x) - refers to number of parts; if no number shown qty is 1	I	Inspect	R	Replace		

								Interval	(millions	)			
Module	Activity	Instructions / Directions	Part Number	30	60	90	120	150	180	210	240	270	300
Envelope Feeder													
Y563 Hopper													
	Hopper Rod Drive Belt and Idlers	Inspect drive belt and idler rollers. Replace belt when unable to apply tension too belt.	ZY65012 Belt	1	I.	1	1	1	1	1	1	1	1
			SR67042 Idler (4x)										
	1		ZY17198 Motor Drive Pulley										
	Hopper Drive Rods Needle Bearings & Ball	Lubricate needle bearings with TO1400. Check mating pins for being tight (pins are threaded	591-1289 Needle Bearing (3x)	I/L	I/L	I/L	I/L	I/L	I/L	I/L	I/L	I/L	I/L
	Bearings	into mounting block). Loctite if needed. Check ball bearings for play or binds. Keep track of	ZY17000 Shaft (3x)										
		which location each shaft is removed from and reinstall in same location.	59-0720 Dowel Pin (3X)										
	2		591-2249 Ball Bearing (4x)										
	Registration Shaft	Check for play in shaft. Check play in left side bushing, should have no movement.	175-0927 Bushing	1	1	1	1	I	I	1	I	I	I
	3		ZY170001 Shaft										
	Hopper Rod Trucks	Inspect for wear /flat spots. Adjust so both trucks are just touching shafts. Replace when OD	591-3029 Tire	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A
		of rollers are no longer able to be adjusted to shaft. If running large volumes of flats, this	ZY87271 Complete Truck										
		interval will need to be more frequent. When reinstalling the deck use two envelope											
		thickness to space decks from hopper rods - top of rod side to bottom of mating deck.											
	4												
	Paddle Roller	Roller needs to spin freely. Check for flat spots. OD is worn when paddle rides on rods or fails	Y618001 Tire	1	R	1	R	1	R	1	R	1	R
		to drive paddle.	Y613006 Hub										
	5		Y684455 Shoulder Screw										
	Paddle Alignment	Use alignment gauge to adjust for squareness (remove paddle roller when checking). Check	Tool mounted in lower hopper cabinet	1	1	1	1	1	1	1	1	1	1
		for excessive play in arm and slide. Verify all screws are secure. Paddle needs to move freely											
		thru entire range (Right to Left). When testing make sure last 1" of material feeds out											
	6	completely without errors.											
	Hopper to Engine Alignment Pins	Verify that the two brass alignment pins are present and secure. If pins have scrape marks on	ZY16321 Pin Alignment (2x)	1	I.	1	1	I.	1	1	I.	1	1
		them check the alignment height of the hopper to engine mounting holes. Adjust height of											
	7	hopper casters to properly align pins.											
	Clean	Vacuum out hopper. When rods are removed vacuum behind rods. Clean dust off sensors		С	С	С	С	С	С	С	С	С	С
		under decks. Remove electrical cover on front and clean inside. Remove dust from lower											
	8	cabinet area front and back of unit. Clean paddle slide.											

<b>Bold</b> - perform action to right for this number	Α	Adjust	L	Lube	RO	Rotate
Non-bold - supporting numbers for reference only	с	Clean	м	Measure	RT	Retension
(3x) - refers to number of parts; if no number shown qty is 1	I	Inspect	R	Replace		

					Interval (millions)									
Module		Activity	Instructions / Directions	Part Number	30	60	90	120	150	180	210	240	270	300
									<u> </u>					
(563 Feed Head	1	Fence Rollers	Idlers turn freely and square rings are above flange. Inspect for cracks. Inspect for wear on	ZX01479 Square Ring (6x)	I/L	1/L	I/L	I/L	I/L	I/L	I/L	1/1	I/L	I/L
	1	Tence Rollers	shafts. Oil shafts where they contact mounting brackets.	SR62046 Idler (6x)	1/1	1/ L	1/1	1/ L	1/ 2	1/ L	1/ L	1/ L	1/ L	1/2
				ZY16739 Pin (Shaft) (3x)										1
	2	Feedhead Drive Support	Lube needle bearing with TO1400. Plug can be removed if bearing needs to be replaced.	ZY45217 Assembly	I/L	I/L	I/L	I/L	I/L	I/L	I/L	I/L	I/L	I/L
			Remove tension to vacuum belts before removing this support block.	591-1243 Bearing										
	3	Feedhead Belt Drive Shaft	Inspect for play in shaft/bearing.	ZY17193 shaft with pressed on bearing	I	1	I	I	Т	I.	I	I	I	I
	4	Feedhead Drive Belt (under deck)	Check belt for wear. Inspect pulley teeth for buildup. Check mounting screws are tight.	566-7156 Belt	I	I	I	I	I	I	I	I	I	I
	-				. 4	_	. 6		. /.	_	. 6		. /.	
	5	Separator Roller (Black)	Check for flat spots, clean roller, measure OD. Lube with TO1400. Roller locks to shaft in the counterclockwise direction. Change if diameter is less then 44.0mm	FL13800 SEPARATOR ROLLER	I/L	R	I/L	R	I/L	R	I/L	R	I/L	R
	6	Retard Roller (Green)	Check for flat spots, clean roller with denatured alcohol, measure OD. Lube with TO1400. If	ZY87704 Retard Roller	R	R	R	R	R	R	R	R	R	R
			large flat spots are present verify DC motor is working (via I/O) and is connected to drive	ZY72702 DC GEARMOTOR										
			shaft of separator. Change if diameter is less than 26.0 mm. Inspect separator shield for	ZY56774 Separator Shield										
			damage.											
		Retard Roller Cap	Lube needle bearing with TO1400	591-0803 Bearing ZY45211 Separator Roller Cap	L	L		L	L	L	L	L	L	L
	8	Separator pivot	Separator assembly pivots freely. When handle is lifted it should return to original position. Verify handle is tight, Loctite if not.		I	I	I	I	I	I	I	I	I	I
Y563 Transport														
	1	Outer Idler rollers	All rollers spin freely, slide block pivot without binding, inspect springs. Inspect slide blocks	ZY16711 Roller Idler (6x)	I.	R	1	R	1	R	1	R	I	R
			for wear between tangs. Change if diameter of roller is less than 37.7 mm	ZY46423 Slide Block (8x)										
	2	Double Detect Bearing	Inspect for binds. Clean if needed.	SR72055 Bearing	Ι	1	1	1	1	1	I	I	1	I
	3	Double Detect Arm	Arm pivot freely. When Outer Transport door is closed the double detect arm should be	ZY46703 Double Detect Arm	Α	Α	Α	Α	Α	Α	Α	Α	А	Α
			approx. 1/16" away from the sensor. Double Detect voltage when adjusted should be 6.5 to 7.4 volts.	Y683042 Hall Sensor										
	4	2nd Nip Idler Rollers	Arms pivot freely no wobble, rollers spin freely. Clean with denatured alcohol. Change if	ZY81741 Idler Arms (2x)	I	R	Т	R	Т	R	Т	R	I	R
			roller diameter is less than 39.0 mm	591-3015 Bearing Molded (2x)										
	_	Double Detect Roller	Inspect for wear or groove. Clean if needed	ZY16705 Roller Double Detect	1	1	1	1	1	1	1	1	1	1
	6	Inner Drive Belt	Check belt for wear. Inspect idler bearings for binds and material buildup. Inspect pulley teeth for buildup. Use no marking tool to remove buildup	566-7179 Belt ZY37403 Pulley (4x)	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C
			teeth for buildup. Use no marking too to remove buildup	591-2248 Bearing (4x)										
	7	Inner drive rollers	Check for wear, binds, clean if needed. Change if roller diameter is less than 38.1 mm	ZY16703 Drive Rollers (8x)	I	R	Т	R	I.	R	I	R	I	R
				ZY16744 Shaft (4x)										
				591-2248 Bearing (8x)										

<b>Bold</b> - perform action to right for this number	Α	Adjust	L	Lube	RO	Rotate
Non-bold - supporting numbers for reference only	с	Clean	м	Measure	RT	Retension
(3x) - refers to number of parts; if no number shown qty is 1	I	Inspect	R	Replace		

								Interval	(millions	)			
Module	Activity	Instructions / Directions	Part Number	30	60	90	120	150	180	210	240	270	300
Lower Engine													
	1 Engine Exit/Flapper Roller Drive	Inspect belt for wear. Inspect pulleys and idlers for buildup. Clean if needed.	566-7176 Drive Belt	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C	I/C
	2 Pocket Entrance Nip Rollers Idlers	Verify both idlers spin freely. Check for wear to tires. Check both springs are installed and	Y613006 Roller Idler (2x)	I	R	I	R	1	R	Т	R	1	R
		arms pivot freely	Y618001 Tire (2x)										
			212-5113 Spring (2x)										
	3 Pocket Entrance Nip Rollers Drive	Inspect drive roller spins freely. Inspect that knurls on drive roller are present. Inspect drive	ZY81326 Entry Roller	1	1	R	1	1	R	1	I.	R	1
		belt.	566-7182 Belt										
	4 Pocket Entrance Nip Assembly (auto	Inspect range of travel for binds. Inspect auto adjust belt. Auto adjust belts are usually looser	566-2063 Auto Adjust Belt	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A
	adjust)	than tight.											
	5 Pocket Pusher Belts	Inspect pushers for wear both to belt teeth and pusher lugs. Verify that pushers are aligned	MD00176 Lower Engine Pocket	R	R	R	R	R	R	R	R	R	R
		to each other.	Pusher Belts (2x)										
	5a Pocket Pusher Belts Pulleys	Inspect pulleys for wear to teeth or bearings. Remove dust buildup.	Y600257 Drive Pulley (2x)	I.	1	1	1	1	1	1	1	1	1
			Y637006 Idler Pulley (2x)										
	6 Pocket Pusher Drive Belt	Inspect belts and pulleys for wear.	566-7156 Belt	I	I	I	1	I	I	I	I	I	I
	7 Spring steel Drag Strip	Check for cracks/damage	ZY56318 Spring steel Drag	1	1	1	1	I	I	I	I	I	I
	8 Pocket Stops	Check for wear to front surface.	ZY46313 Stop Pocket		I	I	1	I	I	I	I	I	I
	9 Pocket Stop Assembly (auto adjust)	Inspect range of travel for binds. Inspect auto adjust belt. Auto adjust belts are usually looser than tight.	566-2063 Auto Adjust Belt	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A	I/C/A
	10 Transport Rollers Engine Exit	Inspect rollers for wear. Replace roller at interval. Inspect shaft and bearings for binds. Change if diameter is less than 43.6 mm	<b>ZY81329 Transport Rollers (2x)</b> 591-2250 Bearing ZY46315 Bearing Housing	I	R	Ι	R	I	R	I	R	I	R
Pocket / Flapper													
	1 Pocket Transport Idler Rollers	Inspect rollers for wear. Lubricate needle bearing with TO1400. Inspect block slides for	ZY17301 (2x) ROLLER ASSY-FLAPPER	L	R	L	R	L	R	L	R	L	R
		excessive play or wear between tangs. Inspect shafts for wear under needle bearing	IDLER										
		locations. ZY17301 -change if diameter is less than 29.0 mm. ZY17303 - change if diameter	ZY17303 (1x) ROLLER ASSY-										
		is less than 34.0 mm	TRANSPORT IDLER										
			ZY46423 Block Slide (6x)										
	2 Flapper Deflector	Inspect for wear to lead edge. Remove glue buildup. Lube needle bearings with TO1400.	TVCT201 D-flaster Flammer TV4C201	R	R	R	R	R	R	R	R	R	R
		Check for binds in assembly. Inspect blue bumper for wear, rotate if worn. Adjustment	ZY67301 Deflector Flapper ZY46301										
		required after replacement.	BEARING ASSY-DEFLECTOR PIVOT (2x)										
			R284037 Stop Diverter (2x)	-		-							
	3 Flapper Blade	Inspect for wear at the tips of each finger. Check for glue. Clean as needed. Inspect stop	ZY67300 Flapper Blade,	R	R	R	R	R	R	R	R	R	R
		bumpers and return springs for wear or damage. Adjustment may be required after replacement.	212-5134 Return Spring (2x) 83-2002 Bumper (2x)										
	4 Flapper Roller	Inspect roller for wear. Inspect drive belt and pulleys, retention. ZY16326 -change if	,		R		R		R		R		R
	4 Flapper Roller	diameter is less than 56.3 mm.	ZY16326 Flapper Roller (2x)	1	ĸ		ĸ	l '	ĸ	l '	к	'	ĸ
			566-7176 Belt					<u> </u>		<u> </u>			
	Flapper Idler Rollers	Inspect rollers for binds. Inspect roller for wear. Verify that three segments free spin. Inspect	ZY16325 Roller Guide Idler (3x)		R		R	L '	R		R		R
		three static brushed for contact. ZY16325 -Change if diameter is less than 56.2 mm.	ZX02008 Brush (3x)										
	<u> </u>												
	5 Clean	Remove any glue that might be build up on decks (exit deck has had buildup)		С	С	С	С	C	C	С	C	C	С

<b>Bold</b> - perform action to right for this number	Α	Adjust	L	Lube	RO	Rotate
Non-bold - supporting numbers for reference only	с	Clean	М	Measure	RT	Retension
(3x) - refers to number of parts; if no number shown qty is 1	I	Inspect	R	Replace		

									Interval	(millions	)			
Module		Activity	Instructions / Directions	Part Number	30	60	90	120	150	180	210	240	270	300
Variation Darah														
Vacuum Deck	1	Arming Deck	learning of the static brushed mounted below deck. Deck or flapper rollers need to be removed to access.	ZY56411 DECK, INNER ARMING	С	С	С	С	С	С	С	С	С	с
	2	Arming Driven Roller	Inspect for binds or uneven wear. Change if diameter is less than 50.2 mm	ZY16413 Roller Arming Drive (2 x)	I	R	1	R	1	R	Т	R	I	R
	3	Arming Idler Roller	Inspect rollers for binds. Inspect for wear. Lubricate needle bearings with TO1400. Change if diameter is less than 15 mm. Clean any glue/Toner buildup from under arming deck.	ZY66400 Roller Arming Idler (4x)	L	R	L	R	L	R	L	R	L	R
	4	Vacuum Deck Drive Belts	Inspect timing belts and pulleys for wear. Inspect pulley teeth and idler bearings for buildup, clean if needed.	566-7115 Belt op side, 566-7125 Belt Non op side	I	I	I	I	I	I	I	I	I	I
	5	Vacuum Deck Belts	Inspect for wear. Inspect vacuum deck plate for wear or divoting. Inspect drive and idler rollers for binds. If belts are loose Retension using auto tensioner. If cleaning Vacuum deck plate (belt track) use non scratching tool to remove any buildup.	566-0612 Vacuum Deck Belts (8x) ZY37400 Pulley Drive (2x) ZY16406 Idler Vacuum Deck (2x)	I	R	I	R	I	R	I	R	I	R
Upper Engine														-
	1	Overhead Pusher Belts	Inspect belts and pulleys for wear. Inspect lugs to belt connection.	<b>ZY66401 Belt Overhead Pusher (2x)</b> Y637006 Idler Pulley (2x) Y600257 Driven Pulley (2x)	R	R	R	R	R	R	R	R	R	R
	2	Overhead Pusher Drive	Inspect belts and pulleys for wear.	566-5030 Timing Belt	I	1	1	1	1	I	I	I	I	I
	3	Suction Cup Cam	Check for wear to cam surface. Check follower bearings for bind.	ZY46416 Cam suction Cup ZX00242 BEARING -CAM FOLLOWER		I	I	I	I	I	I	I	I	I
	4	Suction Cup Pivot shaft	Lube needle bearings with TO1400. Three total in this area. Will need to retime suction cup arms.	ZY16434 BEARING, SUCTION CUP SHAFT	L	L	L	L	L	L	L	L	L	L
	5	Suction Cup Arms	Verify that arm slide full range of travel.	ZY46411 Center ZY46412 Outer (2x) ZY46409 Adjustable	I	I	I	I	I	I	I	I	I	I
	6	Horn Assemblies Auto adjust	Inspect range of travel for binds. Inspect auto adjust belt. Auto adjust belts are usually looser than tight. Dry lube can be applied to shafts if needed.	566-2015 Belt	I	1	1	1	1	I	I	I	I	1
Funding Fulk	-													
Engine Exit	1	Lower Drive	Inspect green endless belt for wear. Inspect idler pulleys for binds or wear.	ZY62400 Belt transport SR67042 Pulley	I	R	1	R	1	R	I	R	I	R
	2	Compliant Rollers	Inspect that rollers spin freely and have no flat spots. Springs are all in place. Air Piston operate freely.	ZY62401 ROLLER, COMPLIANT, 3.25" Y785000 Air Piston 212-5130 Spring	I	I	I	I	I	I	I	I	I	I

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Non-bold - supporting numbers for reference only	с	Clean	м	Measure	RT	Retension
(3x) - refers to number of parts; if no number shown qty is 1	I	Inspect	R	Replace		

E.

					Interval (millions)									
Module		Activity	Instructions / Directions	Part Number	30	60	90	120	150	180	210	240	270	300
Engine Turn	_													-
Engine Turn	_	45 Degree Compliant	Inspect that rollers spin freely and have no flat spots. Air Piston operate freely.	ZY62401 ROLLER, COMPLIANT, 3.25"	1					1				+ -
		45 Degree compliant	inspect that rollers spin neery and have no hat spots. All riston operate neery.	Y785000 Air Piston			l '					· ·	· ·	1
	1													
		45 Degree Drive Roller (below deck)	Inspect for wear on roller. Inspect timing belt. Inspect shaft for play. Rollers will wear with a	ZY15600 45 Degree Roller (2x)	RO	R	RO	R	RO	R	RO	R	RO	R
			chamfer on its sides. Important measurement is the center dimension of the roller wher	566-7174 Belt										
			ethe upper compiant roller makes contact with. Rollers can be rotated if chamfer is casuing											
			an issue. 70.3 mm MIN diameter of roller measured in middle of roller.											
	2													_
		Cone Rollers	Inspect fit between cap and cone should be no play. Cones should spin freely. Check for wear		R	R	R	R	R	R	R	R	R	R
			to plastic. OD gets very thin. First wears less then last position. Verify springs are in place	ZY15632 ASSY IDLER CONE (4x)										
	3	Cause Dellars (halassidash)	land at families and all a True at land and an include the familie to the land the land at	212-5131 Spring (4x)				R						R
		Cone Drive Rollers (below deck)	Inspect for wear on roller. Two rollers near sealer wear faster. Inspect timing belts. Inspect shaft for play. 51.75 MIN diameter if measured anywhere on roller.	ZY15601 20 Degree roller (4x) 566-7172 Timing Belt	I.	R	l '	к	· ·	R	1	R	· ·	к
	4	Bevel Gear	Inspect gap and alignment. Lubricate with thick grease. Check for noise using diagnostics.	ZY15630 BEVEL GEAR, LH (2x)	I/L	R	I/L	R	I/L	R	I/L	R	I/L	R
	5	bevel Geal	Minimal backlash.	ZY15631 BEVEL GEAR, RH (2x)	1/ L	n.	1/1	n.	1/1	n	1/1	n	1/1	Ň
	6	RAT Drive	Inspect timing belt and drive pulleys.	566-7170 Timing Belt						1		1		1
		Auto adjust Motor pulley	Inspect pulley fit to shaft.	DE62308 Pulley 18T	1	1	1	1	1	1	1	1	1	1
				*										
Sealer					1		1							1
		Upper Sealer Driven Belt	Check belt for wear. Check roller assembly's are free of binds and have even wear. Clean	ZY62805 SEALER BELT	R	I/C								
			drive and idler rollers. Lubricate needle bearings? May not be worth the time.	R710003 IDLER SHAFT										
				R710010 HUB IDLER ROLLER										
				U765002 SLEEVE - IDLER										
-	1			ZY62401 ROLLER, COMPLIANT			_					_	_	_
		Lower Sealer Drive Belts	Inspect transport belts for wear or cuts. Inspect drive and idler rollers for binds. Inspect idler	U765100 TRANSPORT BELT,	R	R	R	R	R	R	R	R	R	R
	2		tension roller for glue buildup.	ZY15829 PULLEY Idler, R710000 Belt Idler										
	2	Glue Buildup	Clean any glue from, no seal, deck surfaces, underside of cannoli, overflow funnel and straps.		С	С	С	С	С	С	с	С	с	С
	3	Giue Bulluup	clean any give nom, no sear, deck surfaces, underside of cannoli, overnow runner and straps.		C	C	C C	C	C	C	C	C	C	C
	4	Seal Roller	Inspect for wear, Clean any glue buildup. 34.05 mm MIN DIA	ZY15807 SEAL ROLLER	I/C	R	I/C	R	I/C	R	I/C	R	I/C	R
	5	Reservoir Tank	Remove tank from sealer and clean out fluid /sludge from bottom of tank		C	С	C	С	C	С	C	С	C	С
		Overflow Tray	Dispose of water if present. Intervals will vary based on sealer setup. If overflow is filling up		С	С	С	С	С	С	С	С	С	С
	6		within a day check sealer fluid setup. Monitor											
ļ														
VS1	_									_				_
	1	Seal Roller	Inspect for wear, Clean any glue buildup. 34.05 mm MIN DIA	ZY15807 SEAL ROLLER	I/C	R	I/C	R	I/C	R	I/C	R	I/C	R
		Upper Vertical Stacker Driven Belt	Inspect transport belts for wear or cuts. Inspect drive and idler rollers for binds. Inspect idler	ZY62804 VBIN BELT	I			I	1			1		1
			tension roller for glue buildup.	R710003 IDLER SHAFT R710010 HUB IDLER ROLLER										
				U765002 SLEEVE - IDLER.										
	2			ZY62401 ROLLER, COMPLIANT										
	-	Divert Gate	Inspect gate for binds, loose hardware or cracks at mounts. Adjust pneumatic stops if		1						1			1
	3		needed.	Y350700 Diverter										
	4	Glue Buildup	Clean any glue from decks, divert door and seal roller.		С	С	С	С	С	С	С	С	С	С

<b>Bold</b> - perform action to right for this number	Α	Adjust	L	Lube	RO	Rotate
Non-bold - supporting numbers for reference only	с	Clean	М	Measure	RT	Retension
(3x) - refers to number of parts; if no number shown qty is 1	I	Inspect	R	Replace		

					Interval (millions)									
Module		Activity	Instructions / Directions	Part Number	30	60	90	120	150	180	210	240	270	300
VS2 thru 10														
	1	Lower Pedal Drive Rollers	Inspect for wear on rollers or play in shafts. Clean if glue buildup is present.	Y380710 Pedal Roller	I/C	R	I/C	R	I/C	R	I/C	R	I/C	R
	2	Pedal Roller Idlers	Inspect for binds and wear. Clean if glue buildup is present; lightly oil springs.	Y712345 Roller	I/C/L	I/C/L	I/C/L	I/C/L	I/C/L	I/C/L	I/C/L	I/C/L	I/C/L	I/C/L
	3	Timing Belt Drive	Inspect belt, pulleys and idler for wear.	566-7177 Belt	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A
	4	Divert Gate	Inspect gate for binds, loose hardware or cracks at mounts. Inspect stop bumpers. Adjust		I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A	I/A
			stop bumpers if needed.	Y350720 Diver Gate										
	5	Glue Buildup	Clean any glue from decks and divert door.		С	С	С	С	С	С	С	С	С	С
Turnover														
		Red Belts	Inspect for wear, replace is red belt material wearing.	ZX00886 (2) BELT, SHORT - SHORT	R	R	R	R	R	R	R	R	R	R
				FOOTPRINT TURNOVER										
		Primary Drive Belt	Inspect belt, pulleys and idler for wear.		I	I	I.	I	1	I	1	1	I	I
				566-0332 TIMING BELT 64T, 24.00 PL										
		Secondary Drive Belt	Inspect belt, pulleys and idler for wear.	Y370801 TIMING BELT - 3 MM P HTD,	I	I.	I	1	1	I.	1	1	I	I
				223 T										
		Glue Buildup	Clean glue buildup from all guides, decks, rollers and red belts.		C	С	C	C	С	С	С	С	C	C

## Epic v1.0 and Epic Select PM Tools and Supplies

Tools	Qty
Metric Allen set (up to 6 mm)	2
Metric T-handle set (up to 6 mm)	1
Flat Blade screwdriver Fine Tip	1
Flat Blade screwdriver Medium Tip	1
Flat Blade screwdriver Large Tip	1
Philips screwdriver #1	1
Philips screwdriver #2	1
Spring Hook	1
8 mm nut driver or equivalent	1
10 mm nut driver or equivalent	1
10 mm open/box wrench	1
Tru arc plyers	1
Needle nose plyers	1
Adjustable wrench (6" or 8")	1
Calipers	1
Diagnol Cutters	1
Vacuum cleaner (filtered)	1
Extension cord	1
Air nozzle	1
Safety Glasses	1
File	1
Ball Peen Hammer	1
Retrieving Magnet	1
Magnetic Tray	1
LOTO Kit	1
Setup Tool	1
Torx Set up to XXX side	1
O Ring Belt Welding Kit	1

Supplies	
Shop rags	
Pomeca / Whitmores oil	
TO1400 Grease	
Grease applicators	
Denatured Alcohol	
902-F cover cleaner	
General office cleaner	
Ty Wraps	