

24mm PrecisionPro (Green) Spliceable Tape Feeder 24mm PrecisionPro (Green) Spliceable Tape Feeder 24mm PrecisionPro (Green) Spliceable Tape Feeder 24mm PrecisionPro (Green) Spliceable Tape Feeder 24mm PrecisionPro (Green) Spliceable Tape Feeder

## *24mm PrecisionPro (Green) Spliceable Tape Feeder*

*T49680601  
Rev. A*

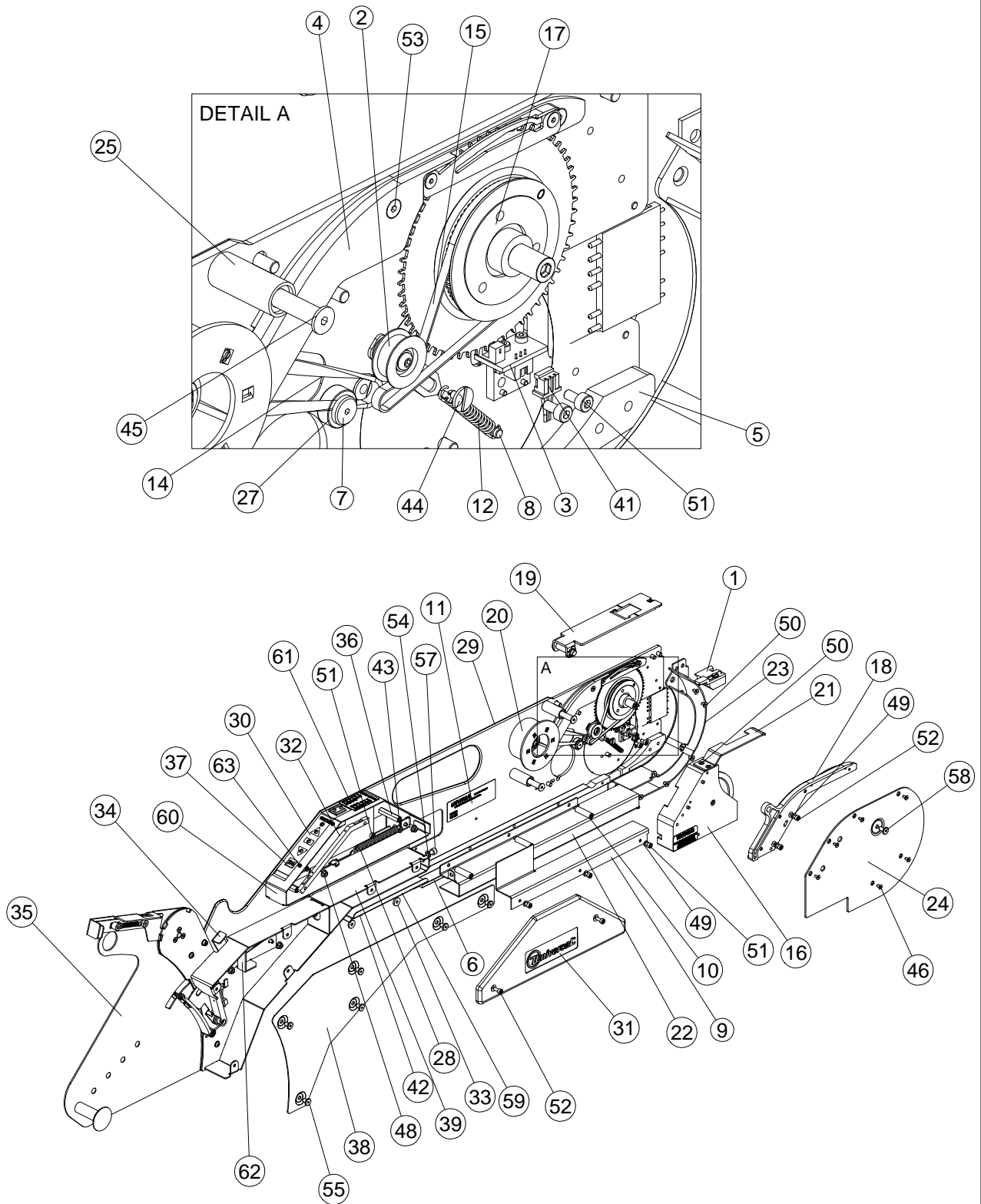
*This document supports  
assembly  
49680601 Rev. A*

## 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

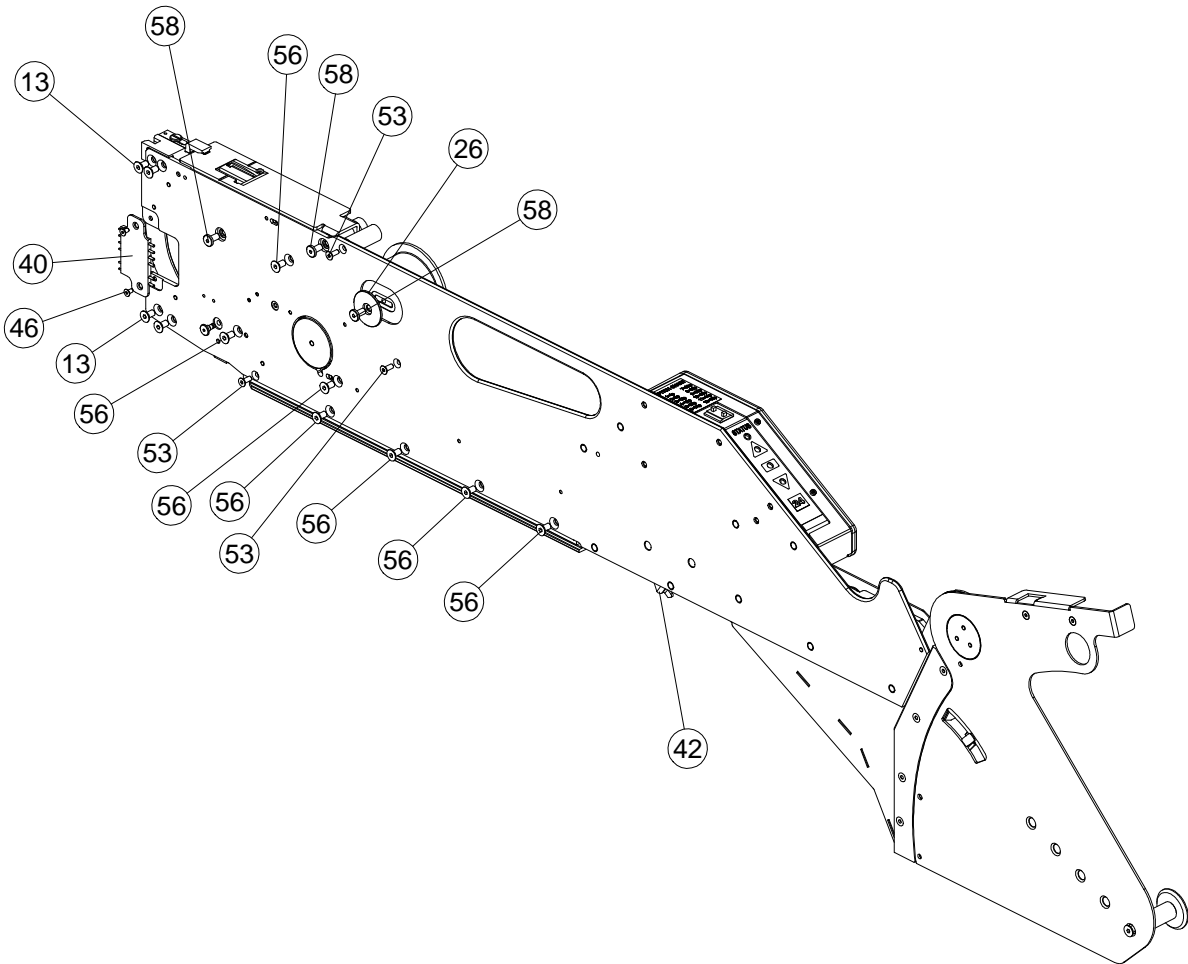
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# T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder



## 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

### Bill of Materials

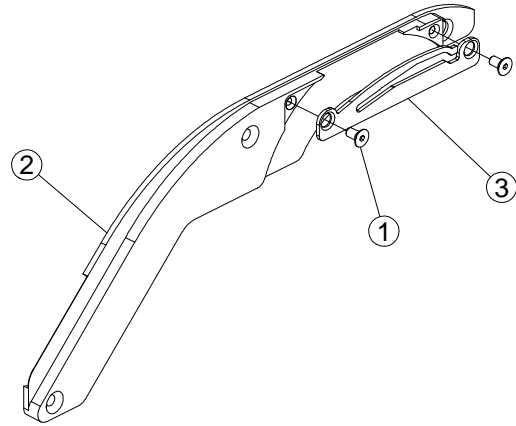
#### 49680601 24mm PrecisionPro (Green) Spliceable Tape Feeder

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	040A-S00	WINDOW LATCH
2	1	040A-S02	TENSIONER
3	1	040A-S05	SLOT SENSOR ASSY
4	1	040A-S08	INSIDE TAPE RAIL
5	1	040A-S18	LOWER LOCATOR
6	1	040C-010	FEEDER RAIL
7	1	040C-032	TENSIONER IDLER POST
8	1	040C-033	TENSIONER SPRING HOOK
9	1	040C-040	WIRE GUIDE LONG
10	3	040C-041	WIRE GUIDE STANDOFF
11	1	040C-055	MPU SERIAL STICKER, EXTERNAL
12	1	040C-104	TENSIONER SPRING
13	4	040C-152	SOCKET FLAT HEAD, 4 X 8
14	1	040C-171	MPU TUW BELT 2MMSTS
15	1	040C-172	DRIVE BELT 2MM STS
16	1	042A-S93	GEAR COVER ASSY, AIRPAX, TOP
17	1	042A-S101	SWD HUB ASSY, TOP
18	1	043A-S11	24MM OUTSIDE TAPE RAIL
19	1	043A-S09	24MM TAPE WINDOW
20	1	043A-S97	24MM TUW ASSY (STS)
21	1	042C-004	1624 BELT GUARD
22	1	042C-018	1624 LOWER EXIT TUBE
23	1	042C-011	1624 FRONT FENDER
24	1	044C-021	DWD OUTSIDE COVER
25	2	103c-034	24MM ROLLER
26	1	107C-162	LARGE T.U. WHEEL WASHER
27	1	109C-013	MPF MEC T BEARING
28	1	111C-033	FCU LATCH SPRING
29	1	0742A-0027	MPSA 16-56MM MECH PLATE
30	1	0742A-0072	CONTROLLER ASSEMBLY
31	1	0742C-0004	CONTROLLER SIDE PLATE
32	1	0742C-0005	CONTROL PANEL CLAMP
33	4	0742C-0007	TAIL MOUNT SPACER
34	1	0742C-0009	LEVER GEAR
35	1	0742A-0106	TAIL ASSEMBLY
36	2	0742C-0003	CONTROL COVER STANDOFF
37	1	0743C-0083	FEEDER SIZE LABEL
38	1	0742C-0112	TAIL COVER
39	1	0742C-0150	LEVER COVER ASSEMBLY
40	1	0748A-1002	I/O CABLE, WIDE
41	1	0748A-1004	SLOT SENSOR CABLE
42	1	550C-040	LATCH GEAR
43	1	550C-077	SCREW, SPRING
44	2	F10720	SHOULDER SCREW
45	2	F12065	ROLLER PIN
46	8	80047002	SOCKET FLAT HEAD, 2.5 X 5
47	2	80031704	FLAT WASHER, 3
48	7	HEXFLANGENUT	HEXFLANGENUT, 3
49	5	80055605	LOCK WASHER, 3
50	8	80028907	SOCKET FLAT HEAD, 3 X 5
51	11	80026802	SOCKET HEAD CAP, 3 X 6
52	4	80026803	SOCKET HEAD CAP, 3 X 8
53	5	80028901	SOCKET FLAT HEAD, 3 X 8
54	1	80055607	LOCK WASHER, 4
55	6	M04X06-SHCSSLH	SPECIAL LOW HEAD, 4 X 6
56	7	80029001	SOCKET FLAT HEAD, 4 X 8
57	1	80026903	SOCKET HEAD CAP, 4 X 8
58	4	M04X08-SHCSSLH	SPECIAL LOW HEAD, 4 X 8
59	1	0742C-0172	2 SLOT EXIT COVER
60	1	0742C-0017	BOARD COVER, 16-24-32MM
61	1	109C-020	PITCH LABEL
62	1	0742C-0010	WIDE LEVER CATCH
63	2	410C-100	PAN HEAD PLASTITE SCREW

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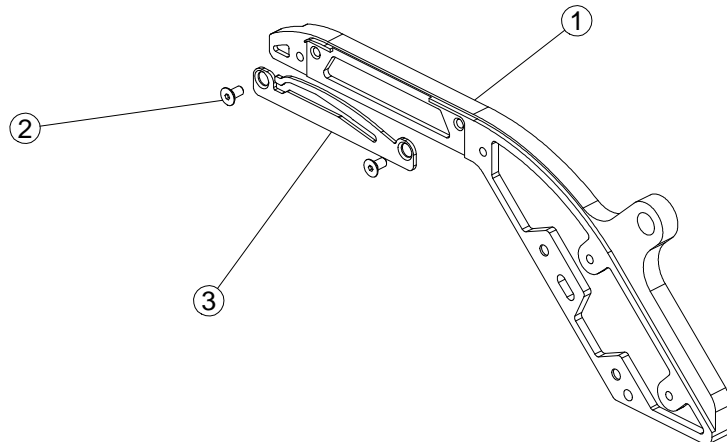
## 040A-S08 Inside Tape Rail

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	2	80047002	SOCKET FLAT HEAD, 2.5 X 5
2	1	040A-S28	INSIDE TAPE RAIL V2
3	1	040C-038	TAPE SUPPORT INNER



## 043A-S11 24MM Outside Tape Rail

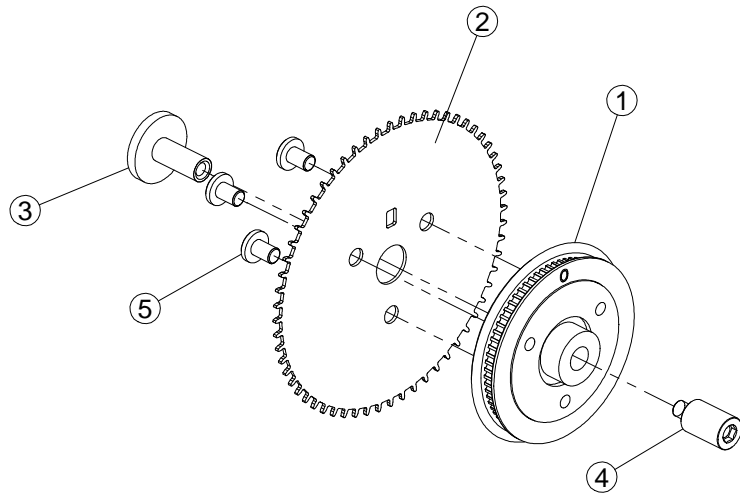
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	043C-022	24 TAPE RAIL-V2
2	2	80047002	SOCKET FLAT HEAD, 2.5 X 5
3	1	040C-039	TAPE SUPPORT, OUTER



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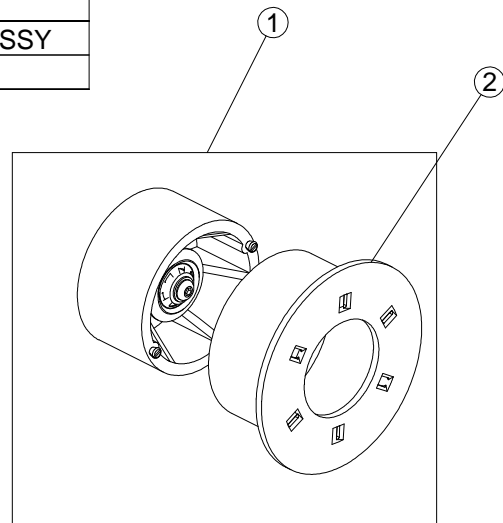
**042A-S101 SWD Hub Assembly, Top**

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	042A-S100	SWD HUB ASSEMBLY
2	1	040C-034	TOOTH PLATE SWD
3	1	040C-008	SWD DRIVE SHAFT
4	1	040C-120	COVER STANDOFF
5	3	M04X06-SHCSSLH	SPECIAL LOW HEAD, 4 X 6



**043A-S97 24MM Take Up Wheel Assembly**

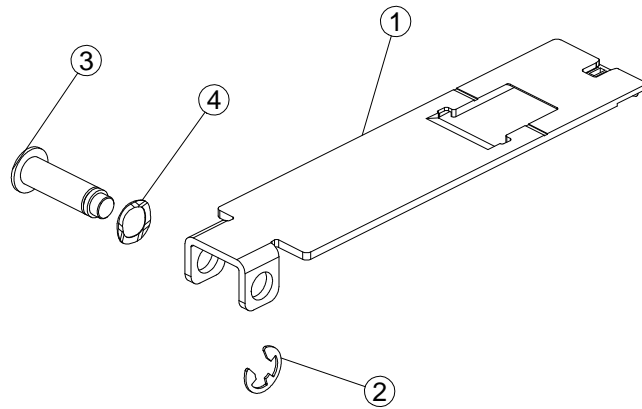
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	043A-S97	24MM TAKE UP WHEEL ASSY
2	1	103C-178	24MM TUW SLEEVE



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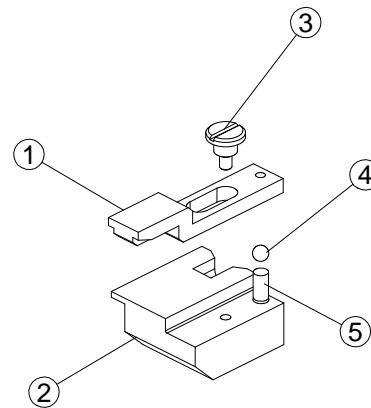
## 043A-S09 24MM Tape Window

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	043A-S23	24MM TAPE WINDOW ASSY
2	1	0312-ECLIP-E	ECLIP, .3125"
3	1	042C-030	1624 WINDOW SHAFT
4	1	040C-103	WAVY WASHER, .50" X .35"



## 040A-S00 Window Latch

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	043C-036	WINDOW LATCH SLIDER V3
2	1	040C-017	LOCATOR
3	1	040C-037	LATCH PIN
4	1	040C-105	MPU LATCH-BALL-BEARING
5	1	040C-107	MPU LATCH-SPRING

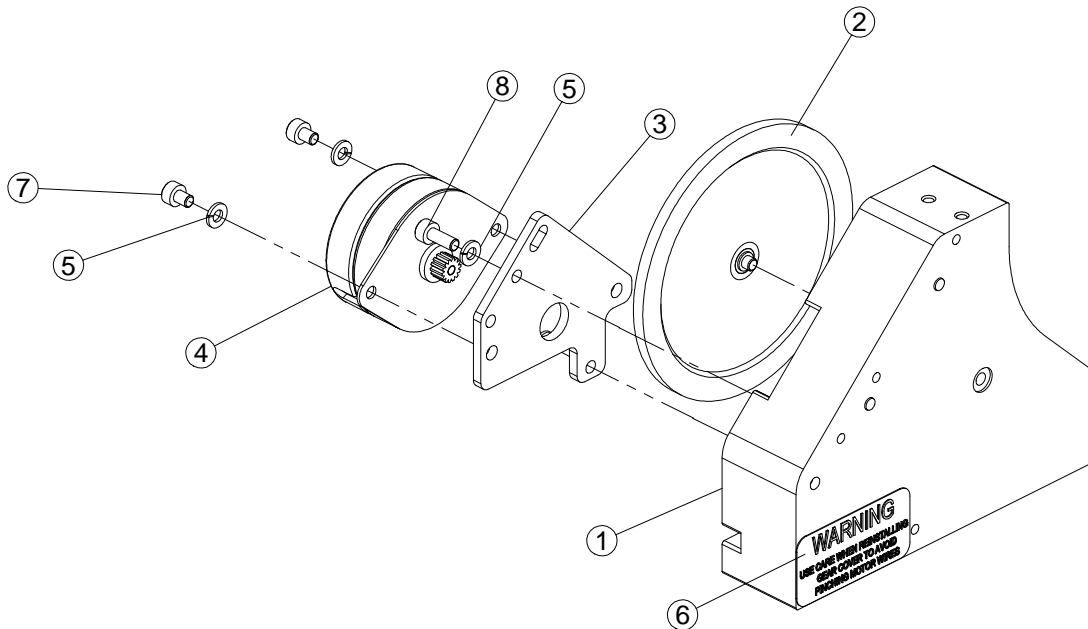




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### 042A-S93 Gear Cover Assembly, Airpax, Top

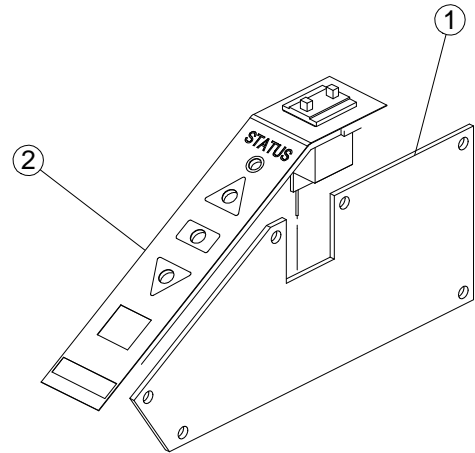
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	040A-S21	GEAR COVER
2	1	040A-S92	JACKSHAFT ASSEMBLY
3	1	042C-020	MPU MOTOR PLATE
4	1	042A-S04	DRIVE MOTOR, AIRPAX 35
5	4	80055605	LOCK WASHER, 3
6	1	040C-174	STICKER - MOTOR WIRE WARNING
7	2	M03X04-SHCS	SOCKET HEAD CAP, 3 X 4
8	2	80026803	SOCKET HEAD CAP, 3 X 8



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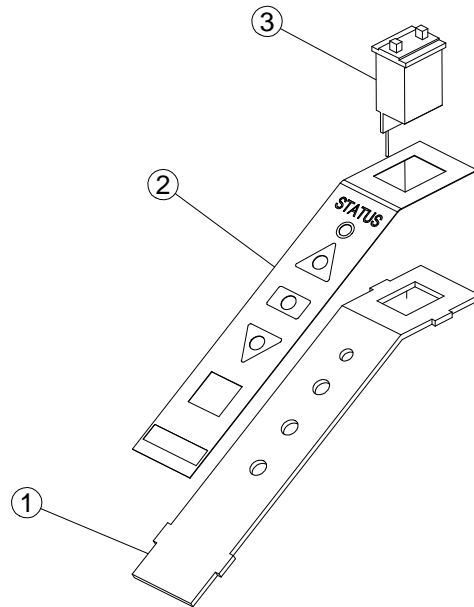
## 0742A-0072 Controller Assembly

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	0748A-1001	CONTROLLER
2	1	0742A-0071	CONTROL PANEL ASSEMBLY



## 0742A-0071 Control Panel Assembly

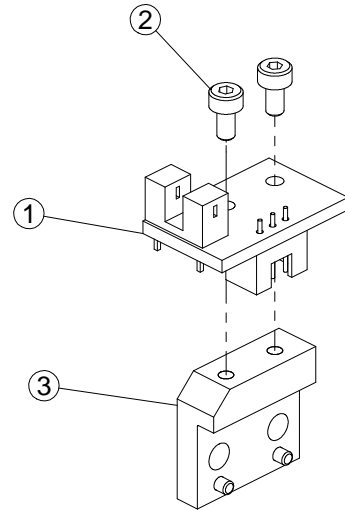
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	040C-051	CONTROL PANEL PLATE R2
2	1	0742C-0082	OVERLAY
3	1	048A-011	PITCH SELECTOR



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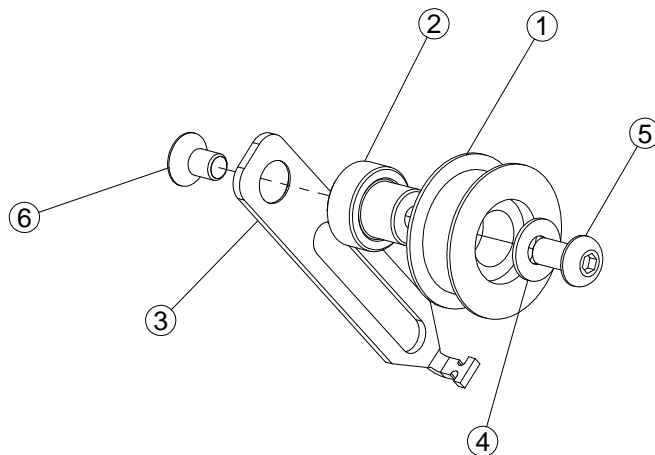
### 040A-S05 Slot Sensor Assembly

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	048A-005	SLOT SENSOR
2	2	80065601	SOCKET HEAD CAP, 2 X 4
3	1	040A-S16	SENSOR BRACKET W / DWL



### 040A-S02 Tensioner Assembly

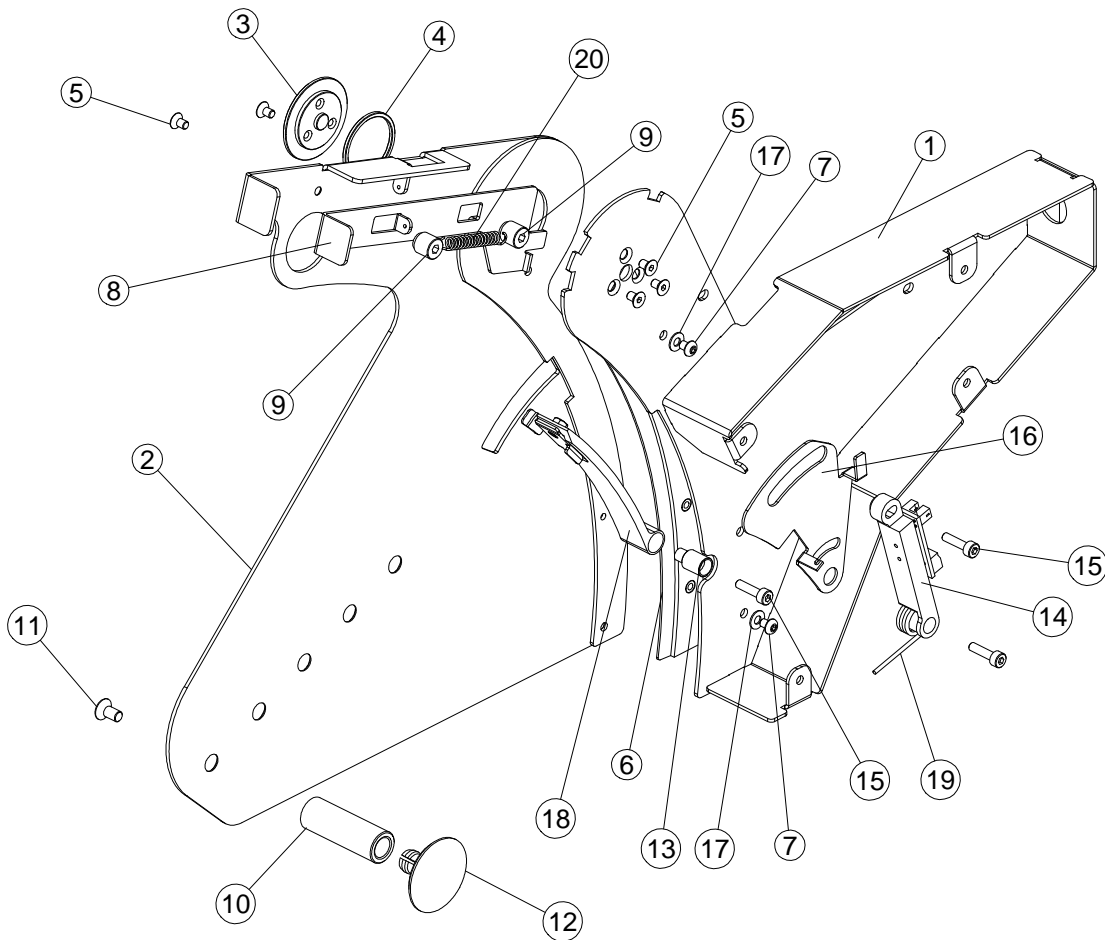
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	040A-S20	TENSIONER ROTOR
2	1	040C-035	TENS BEARING POST
3	1	040C-031	TENS CARRIER
4	1	80031704	FLAT WASHER, 3
5	1	80029806	SOCKET BUTTON HEAD, 3 X 6
6	1	80028907	SOCKET FLAT HEAD, 3 X 5



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## 0742A-0106 Tail Assembly

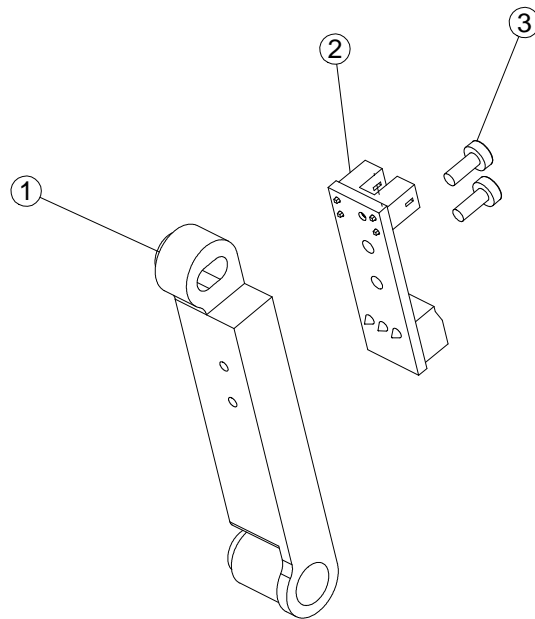
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	0742C-0151	TAIL MOUNT WELDMENT
2	1	0740C-0154	TAIL PLATE WELDMENT
3	1	0740C-0109	TAIL PIVOT
4	1	0740C-0110	TAIL PIVOT BEARING
5	5	80028907	SOCKET FLAT HEAD, 3 X 5
6	1	0740C-0113	TAIL GUIDE
7	2	80029805	SOCKET BUTTON HEAD, 3 X 4
8	1	0740C-0106	TAIL LOCK
9	2	0740C-0107	TAIL LOCK RETAINER
10	1	0742C-0111	REEL PIN
11	1	80029001	SOCKET FLAT HEAD, 4 X 8
12	1	030C-050	REEL RETAINER
13	1	0740C-0121	REEL PIVOT POST
14	1	0740A-0107	PSV SENSOR RETAINER
15	3	80026805	SOCKET HEAD CAP, 3 X 12
16	1	0740C-0122	PSV FLAG
17	2	80031704	FLAT WASHER, 3
18	1	0742A-0040	REEL TENSIONER ASSY LG
19	1	0740C-0182	REEL TENSIONER SPRING
20	1	040C-104	TENSIONER SPRING



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0740A-0107 PSV Sensor Retainer

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	0740C-0124	PSV SENSOR RETAINER
2	1	558A-010	SLOT SENSOR ASSEMBLY
3	2	410C-100	PAN HEAD PLASTITE SCREW



**T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder*****Functional Description***

The PrecisionPro (Green) Spliceable Tape Feeder advances a component from the reel holder to the peeler blade, where the mylar (cover) tape is removed. The component is then advanced to the feeder pick-up position, where it waits for pickup by the machine.

***Procedures and Adjustments***

The following subsections contain the operational procedures that are required for proper feeder operation.

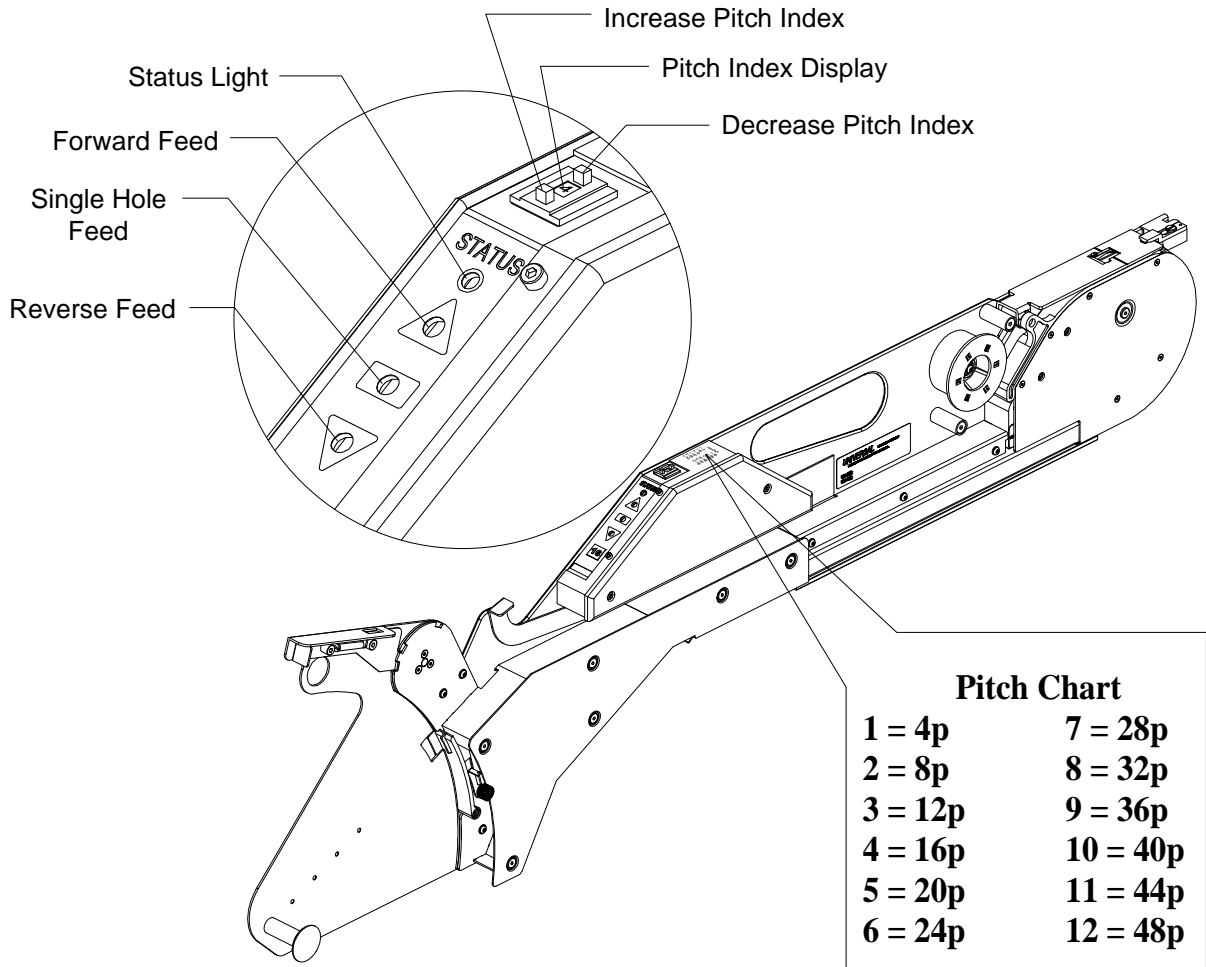
***Information***

For more information regarding this product refer to:

<http://www.idss.uic.com>

# 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

## Control Panel Detail

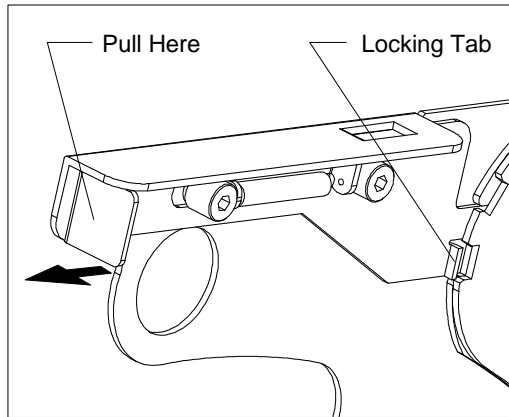


Pitch Index Display	Represents the distance the tape will advance in 4mm increments. Setting is calculated by multiplying numbers shown by 4mm.
Decrease Pitch Index	When pressed, the pitch will decrease by 1 (equivalent to 4mm).
Increase Pitch Index	When pressed, the pitch will increase by 1 (equivalent to 4mm).
Status Light	RED FLASH = Feeder in tape jam error mode GREEN / ORANGE = Feeder flashes Green while powering up, then goes Orange. The LED will turn Green after the first advance. OFF = power off.
Forward Feed	Advances the tape pitch. Pitch is equal to pitch index displayed.
Single Hole Feed	When pressed with FORWARD FEED or REVERSE FEED buttons, feeder advances or retracts 4mm.  This button also clears jams.
Reverse Feed	Retracts tape pitch. Pitch is equal to pitch index displayed.

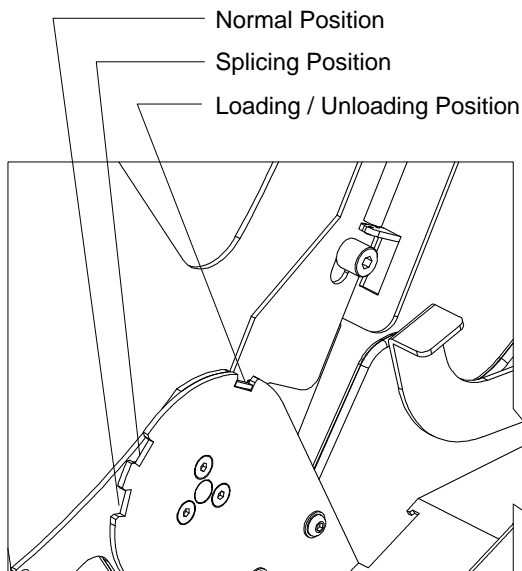
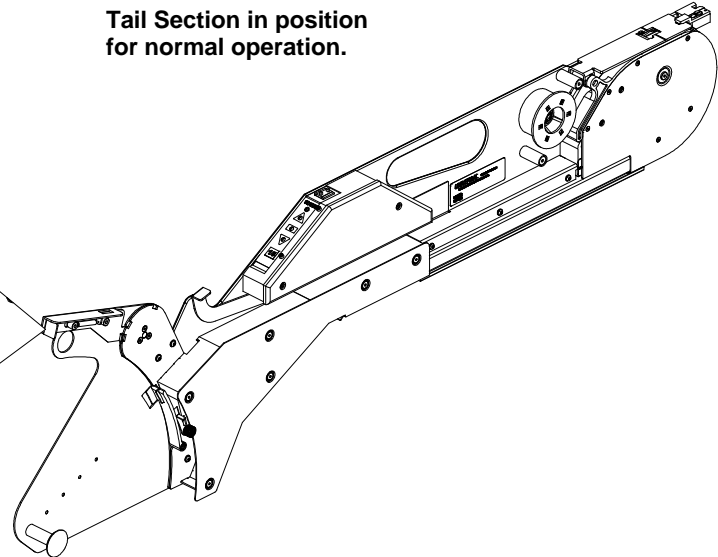
## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### ***Loading the tape reel / Splicing***

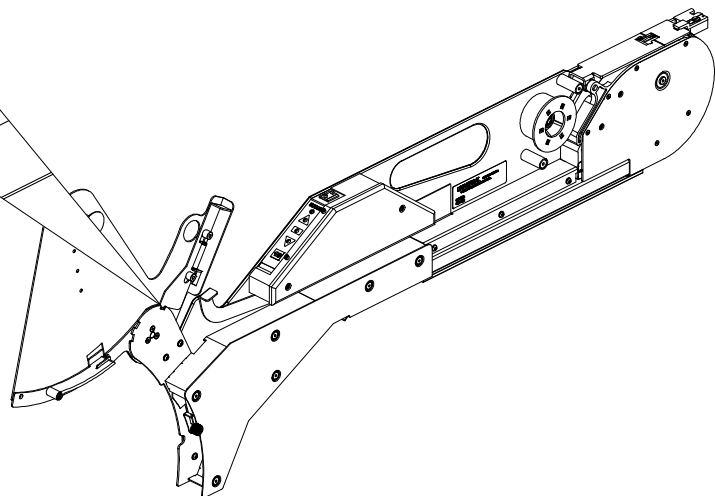
It is possible to change tape reels without removing the feeder from the pick and place machine. To do this, pull out on the tail release lock to disengage the locking mechanism. With the tail latch disengaged, rotate the tail section up into the loading and unloading position. Release the tail latch to lock the tail section into this position.



**Tail Section in position for normal operation.**



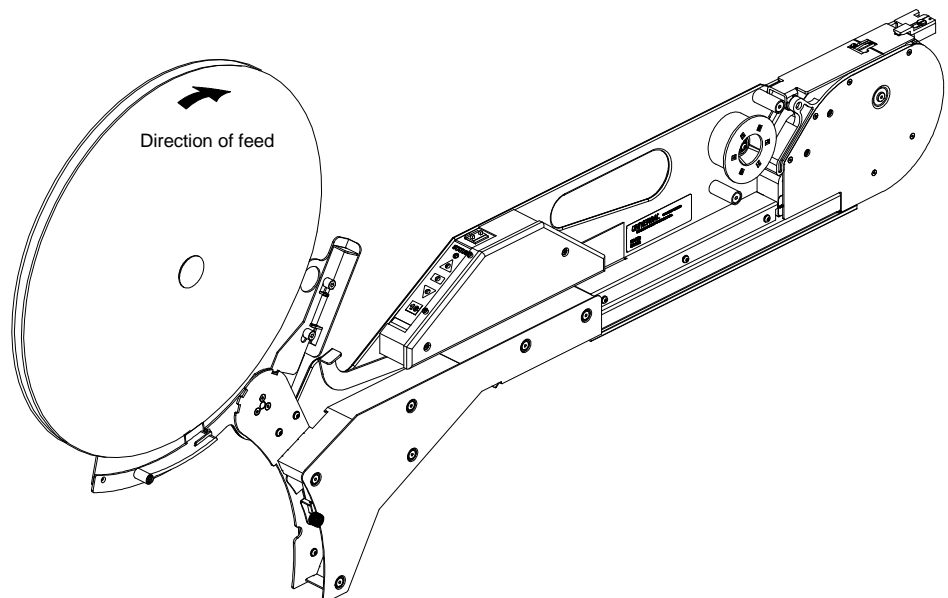
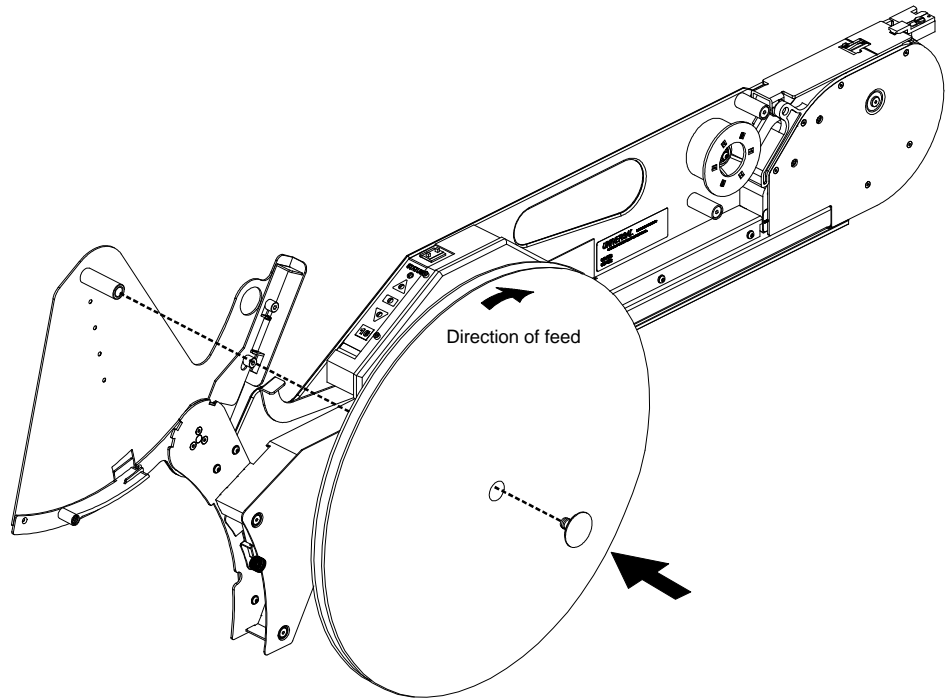
**Tail Section locked in the loading and unloading position.**





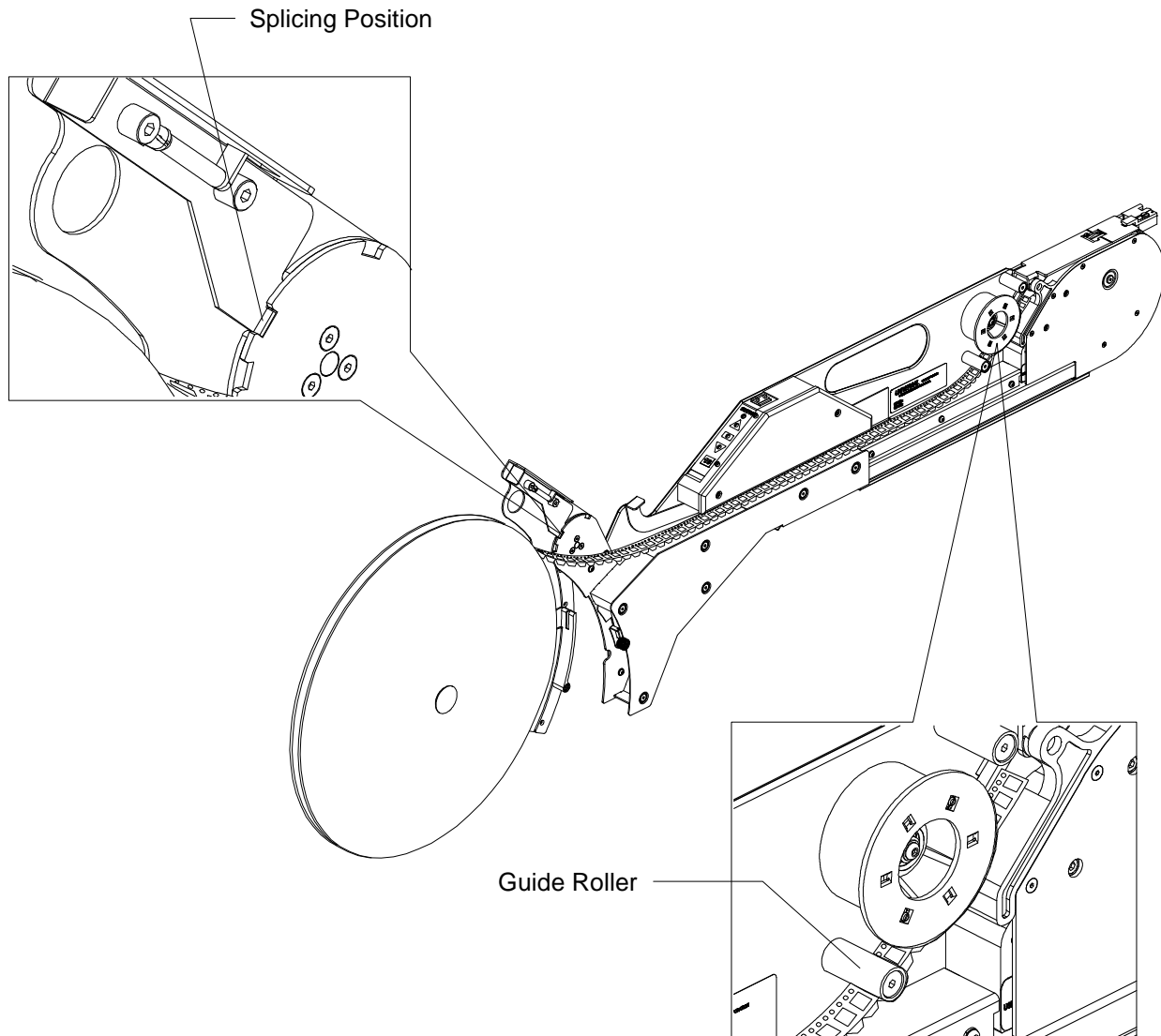
## 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

With the tail section locked in the loading position, remove the Reel Pin Cap from the Reel Pin. Place the tape reel over the reel pin so that the carrier tape feeds over the top of the reel towards the front of the feeder. Install the Reel Pin Cap to secure the tape reel.



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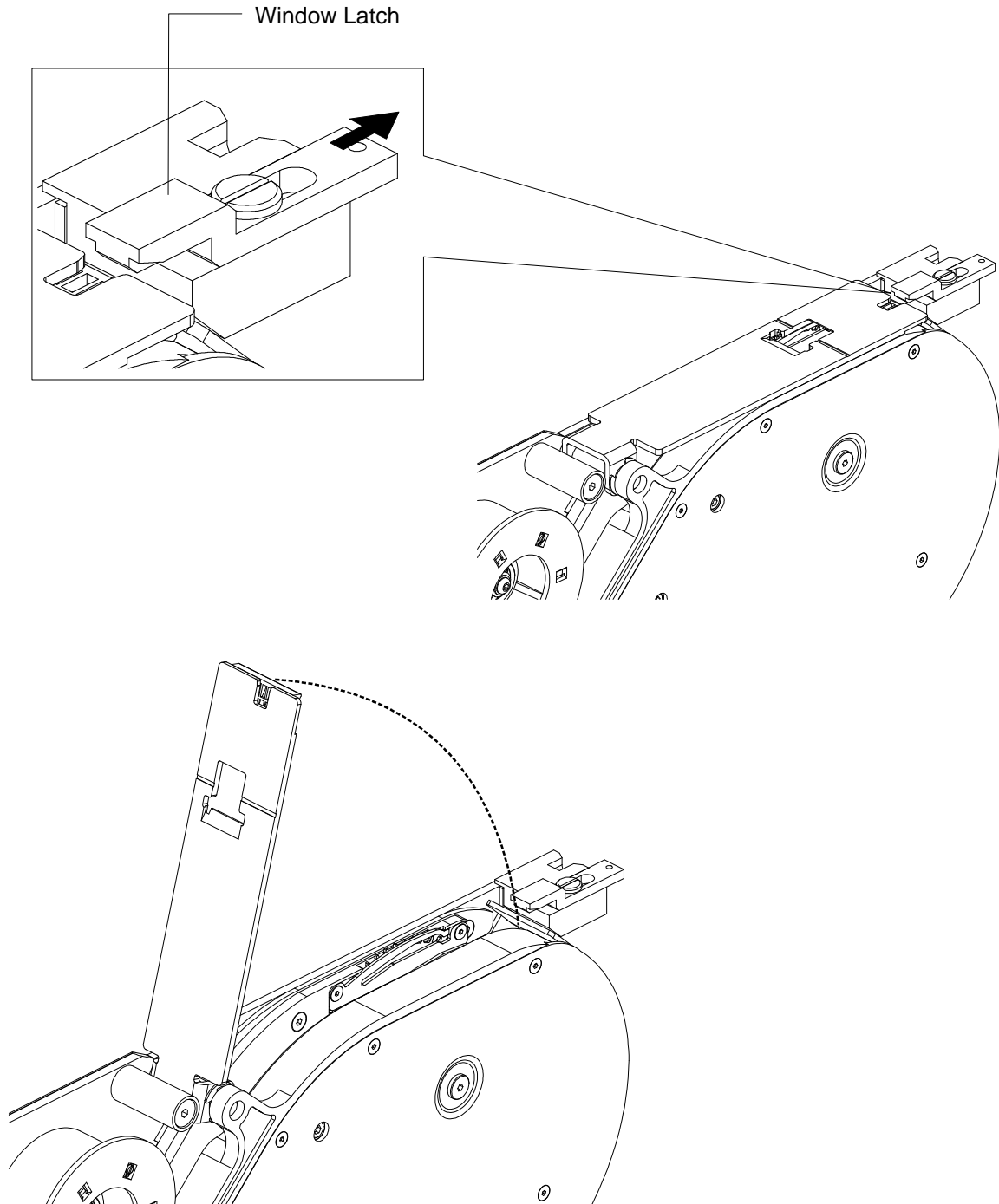
Move the tail section, with loaded reel to the splicing position (See page 14 for details on how to move the Tail Section). Pull the tape from the reel and thread the component tape under the Latch Lever and into the channel under the Control Panel. Continue feeding the tape under the first guide roller and up to the tape window.



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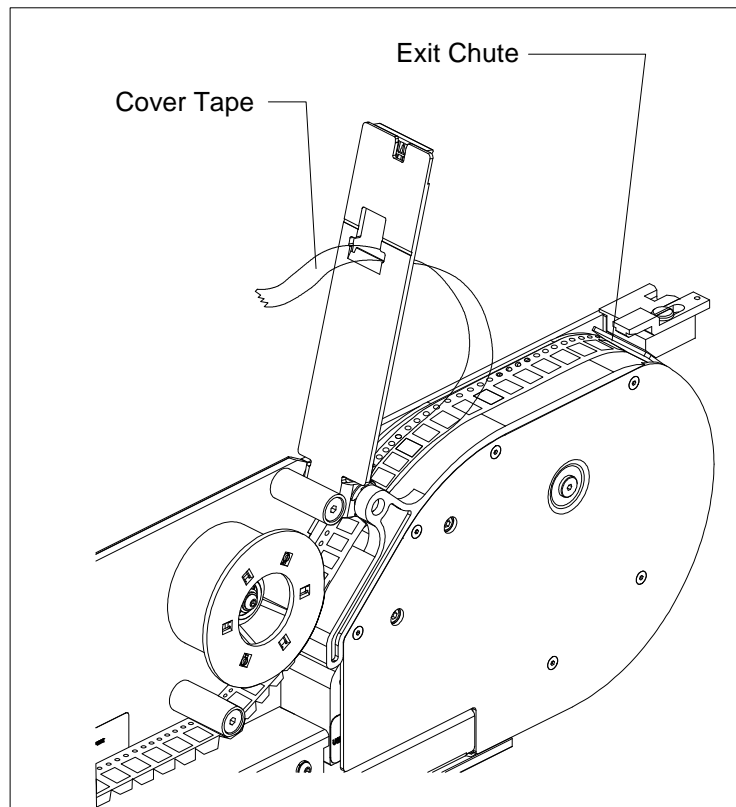
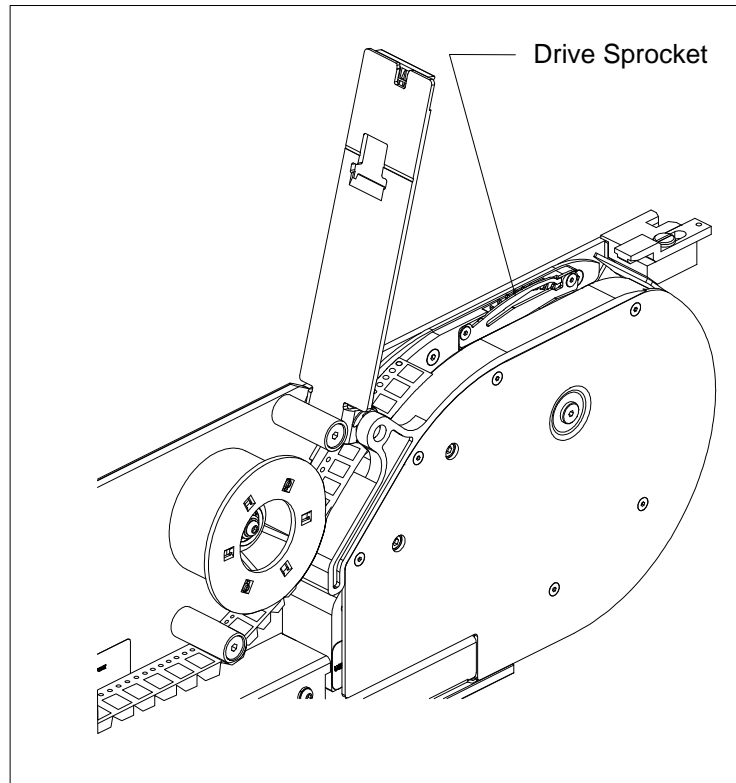
### ***Unlocking and Opening the Tape Window***

To Open the Tape Window, slide the Window Latch forward, this will allow the Tape Window to be opened by rotating the Tape Window open.



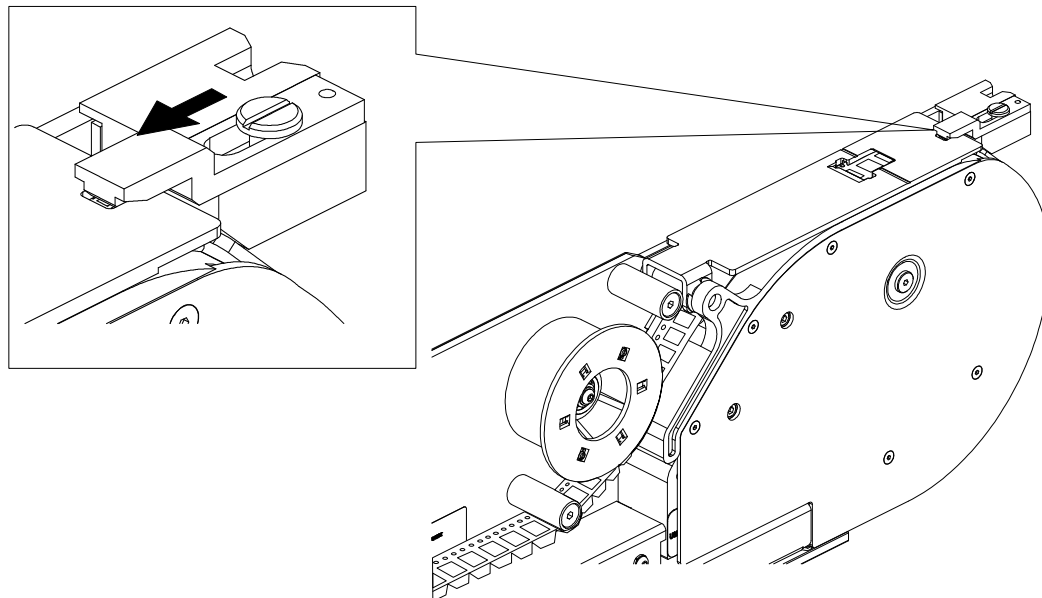
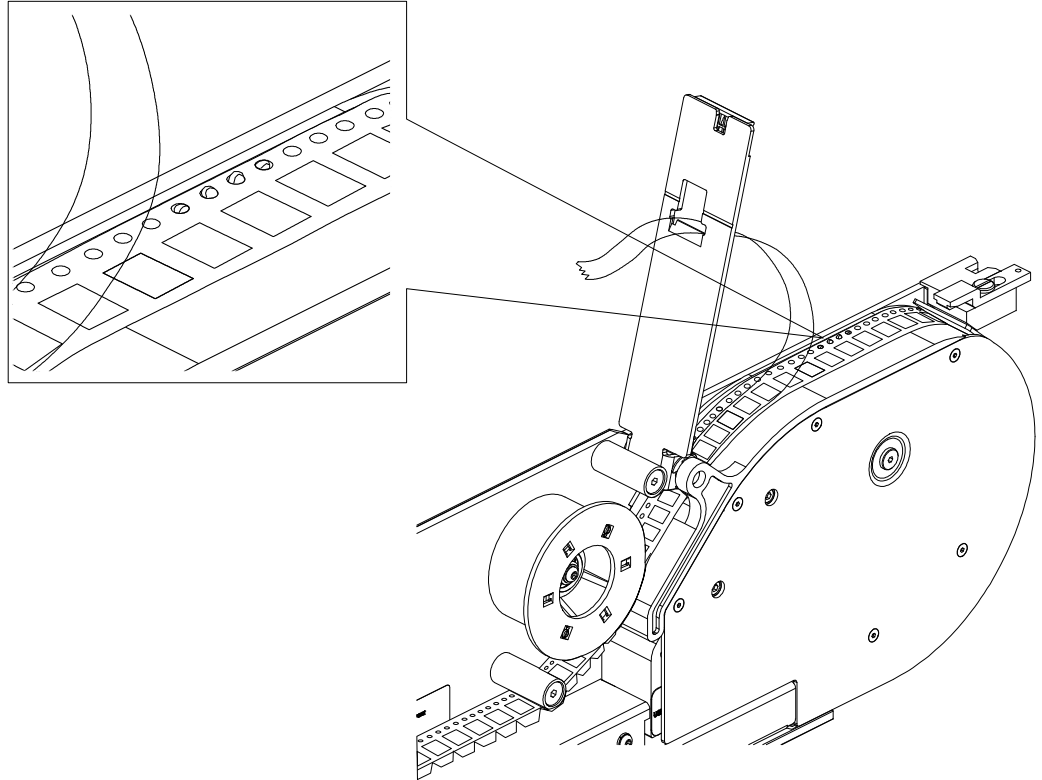
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Thread the carrier tape under the Tape Window hinge and feed over drive sprocket and down into the exit chute. Peel back approximately 8" inches of cover tape and feed through the Tape Window opening.



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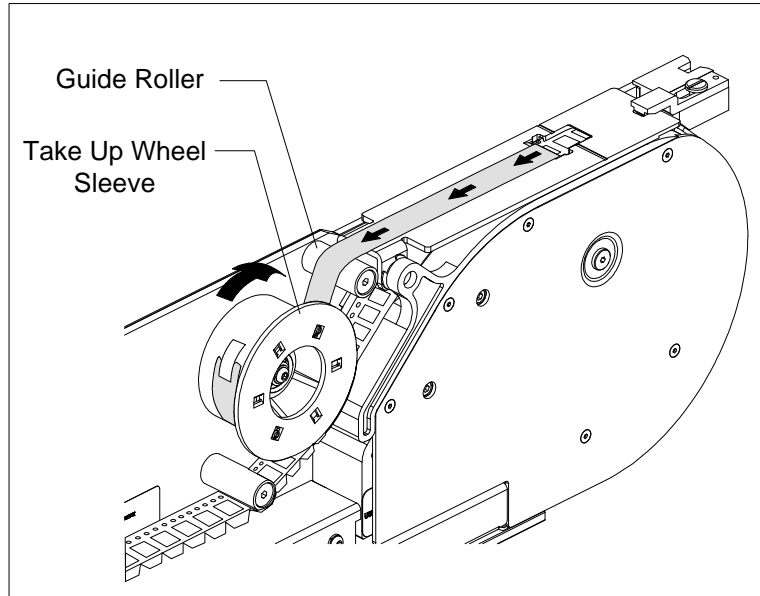
Making sure that the Drive Sprocket teeth are engaged with the holes in the carrier tape, rotate the Tape Window closed, and lock by sliding the Window Latch back securing the Tape Window in the closed position.



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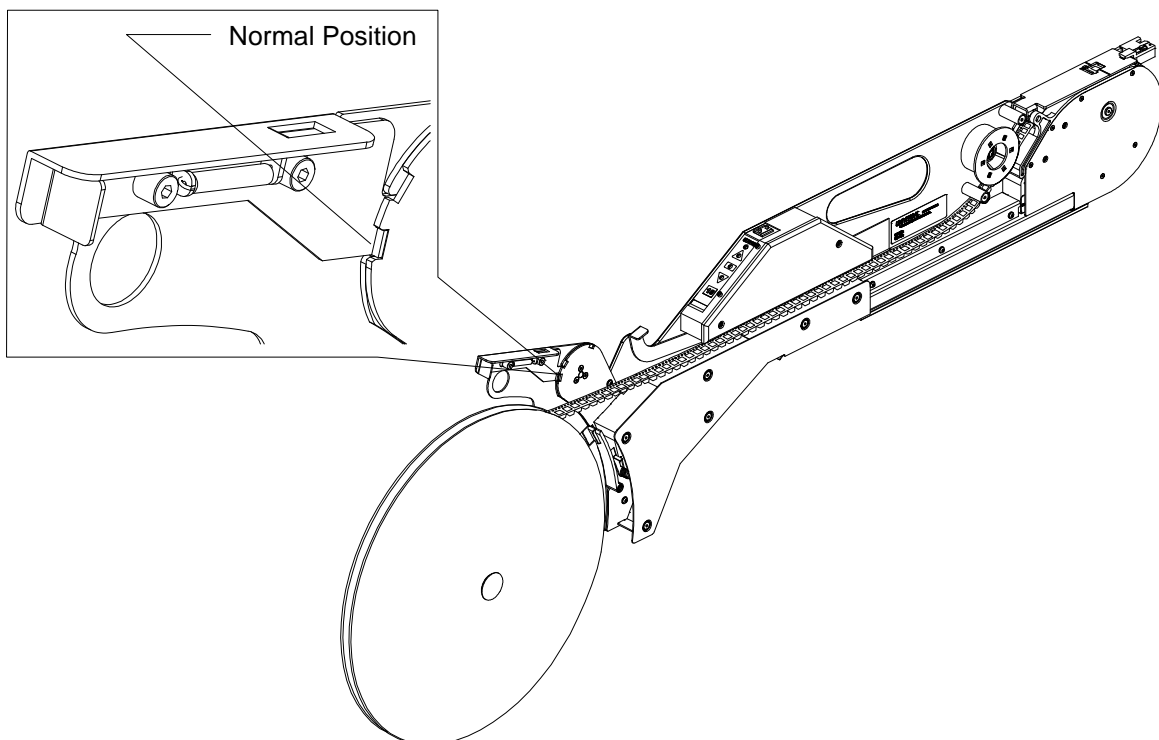
### ***Attaching the cover tape to the Take Up Wheel***

Pull the cover tape back from the Tape Window opening and thread over top of Guide Roller and underneath the Take Up Wheel Sleeve. Use a small piece of adhesive tape to secure the end of the cover tape to the Take Up Wheel Sleeve. Spin the entire Take Up Wheel clockwise to take up any slack in the cover tape.



### ***Final tape loading step***

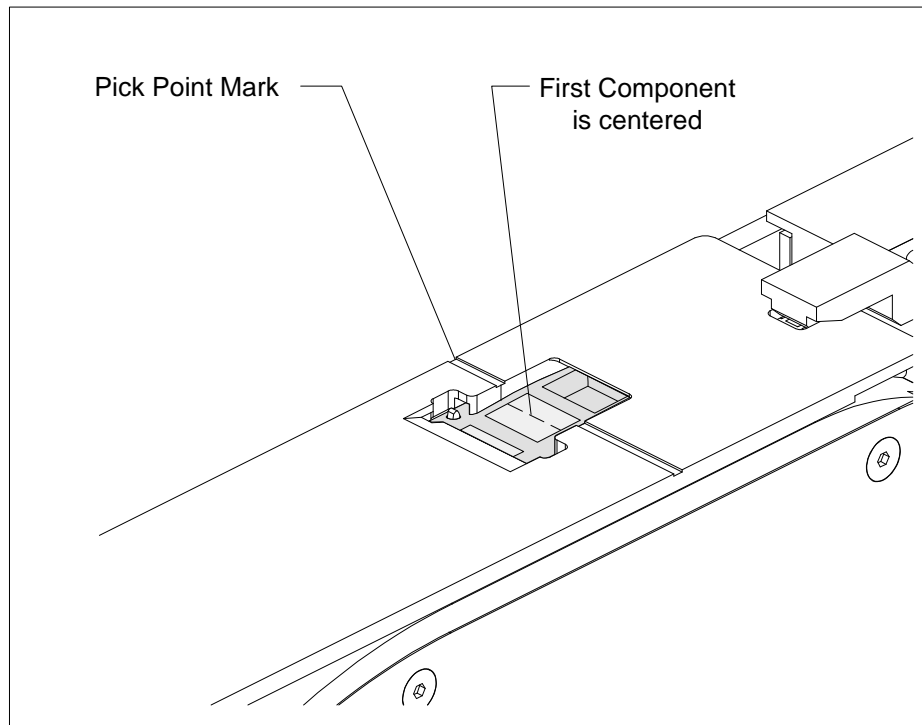
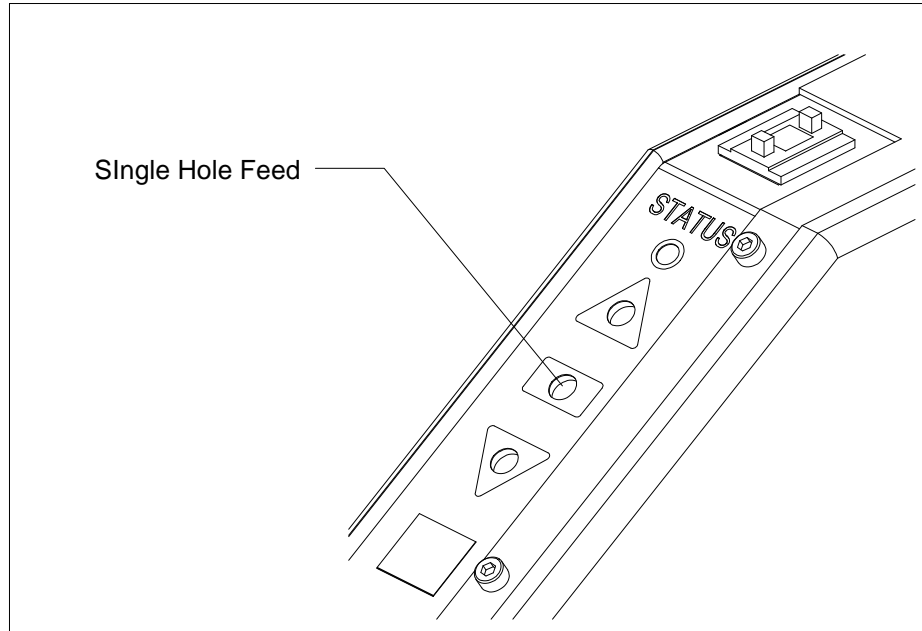
With the tape fully loaded into the feeder, lower the tail section to the normal position (See page 14 for details on moving the Tail Section). The feeder is now ready for operation.



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***Operating the feeder***

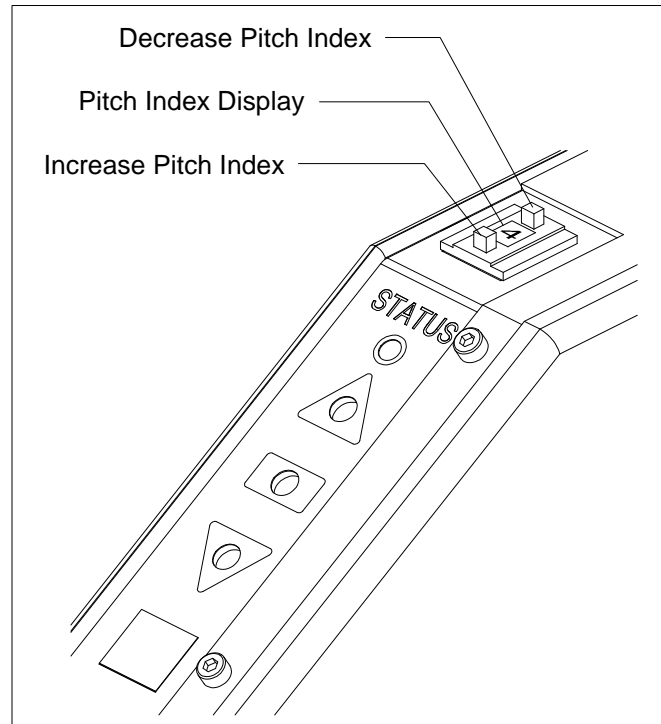
- 1 - With the tape securely loaded into the feeder on a setup cart, you must now locate the first component of the reel at the pick point. Using the Single Hole Feed feature (refer to the Control Panel Detail), position the first component so that it is aligned with the Pick Point Mark.



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### *Adjusting the pitch setting*

- 2 - Now you can adjust the pitch setting of the feeder. First identify the pitch of the tape you are using. Next find the pitch number on the Pitch Chart located just above the Pitch Switch on the feeder. Then adjust the Pitch Index so it represents the tape pitch as indicated by the Pitch Chart. For example: for 16 pitch carrier tape, a Pitch Index setting of 4 is required.



### **Pitch Chart**

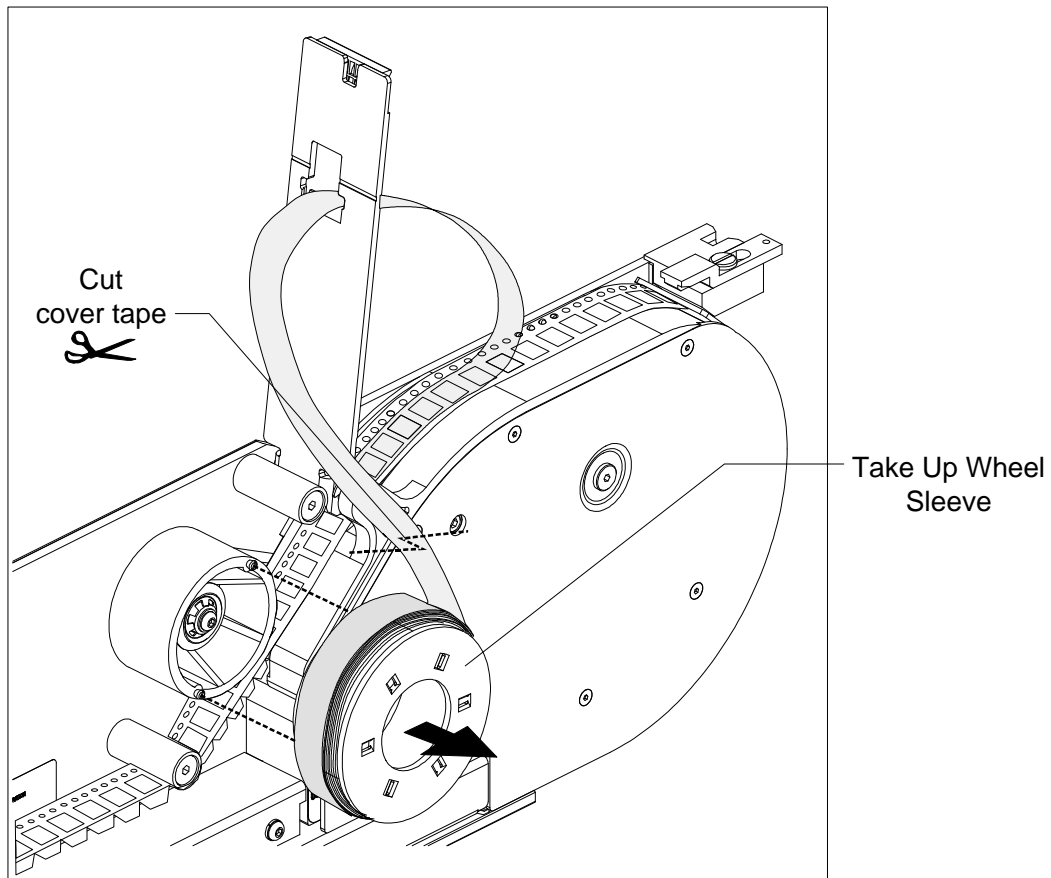
<b>1 = 4p</b>	<b>7 = 28p</b>
<b>2 = 8p</b>	<b>8 = 32p</b>
<b>3 = 12p</b>	<b>9 = 36p</b>
<b>4 = 16p</b>	<b>10 = 40p</b>
<b>5 = 20p</b>	<b>11 = 44p</b>
<b>6 = 24p</b>	<b>12 = 48p</b>



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### *Unloading the feeder / Emptying the Take Up Wheel*

- 1 - Remove feeder from the GSM and place it on its side with the Take Up Wheel facing up.
- 2 - Open the Tape Window to release tension on carrier tape.
- 3 - Pull the Take Up Wheel Sleeve to remove. Cut the cover tape close to the sleeve. Remove cover tape from Take Up Wheel Sleeve and discard excess cover tape. Re-attach Take Up Wheel Sleeve to the feeder.
- 4 - Cut and remove empty carrier tape near the Tape Exit Guide of the feeder.

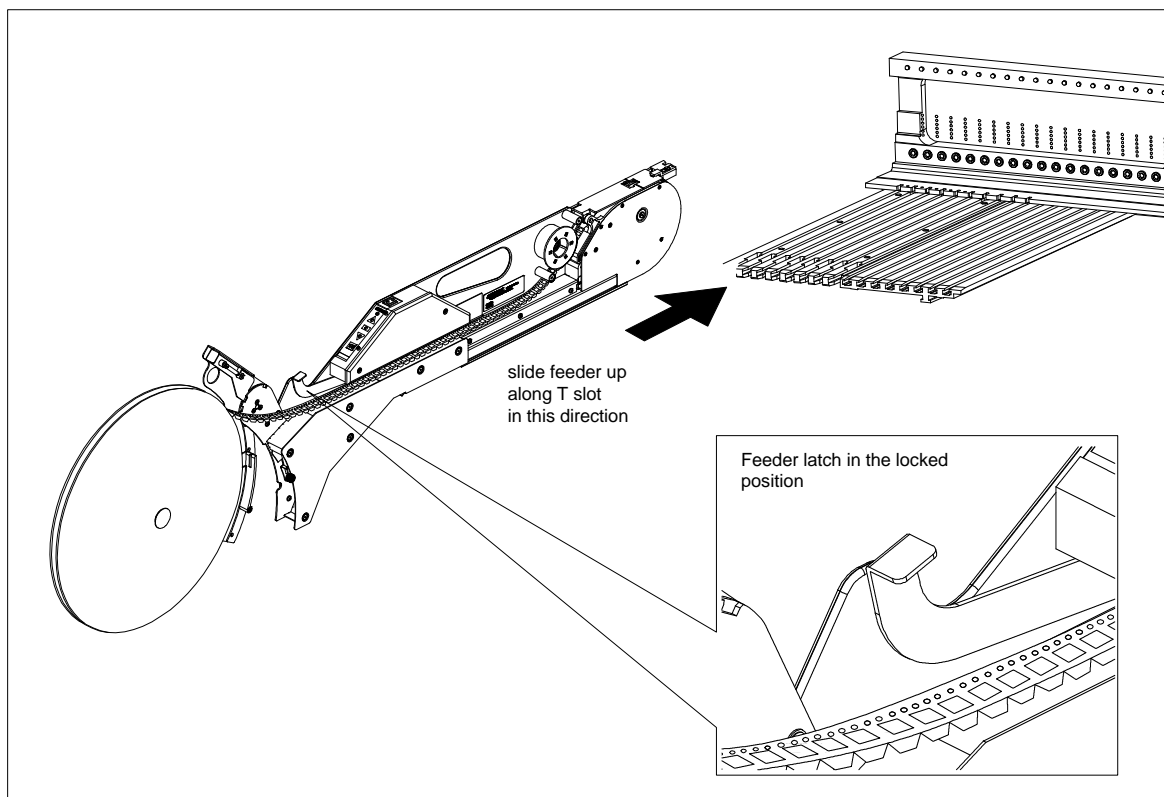


## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### *Installing the tape feeder into the GSM*

To load the feeder onto the GSM, push the feeder latch down and to the right, so that it catches, and stays down. Slide the feeder onto the GSM feeder bank, until it reaches the interface. Once the feeder Status Light illuminates, signaling a firm connection between the feeder and the interface, push the latch down and towards the Base Plate, and it will spring up. This locks the feeder into its operational position. Follow these instructions in reverse order to remove the feeder.

To operate the feeder : When the feeder is loaded onto the GSM, the Status Light will be Orange. Advance the feeder with the Forward Feed button or the Single Hole Feed button (see page 13 of this section for Control Panel details if necessary) until the Status Light turns Green.



## 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

### Custom Pick Point Adjustment

The Multi-Pitch Tape Feeder is manufactured and calibrated to comply with the GSM Interface. The Pick Point has been set at the factory before shipping.

These instructions are intended to be used for special applications, where the Pick Point needs to be changed.

Proceeding with these instructions will result in a feeder that operates with a Custom Pick Point.

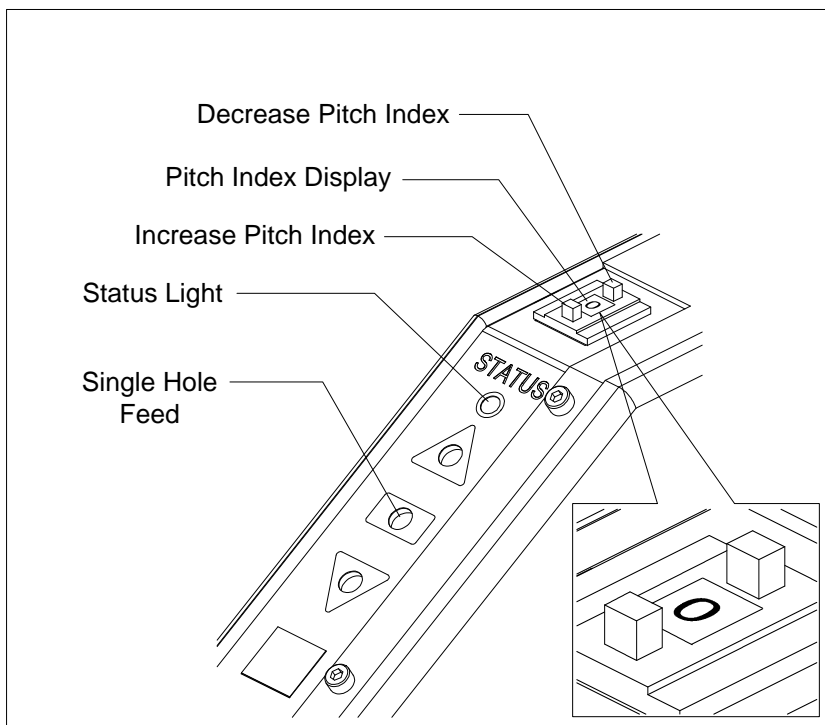
- 1 - Power up the feeder.
- 2 - Set the Pitch Selector of the feeder to the zero (0) setting.
- 3 - Hold down the Single Hole Feed button until the Status Light turns off.

Release the Single Hole Feed button, and the Status Light will:

- A. Turn Orange if still at the Factory Default setting  
or
- B. Blink the number of offset increments that the feeder is set away from the Factory Default.

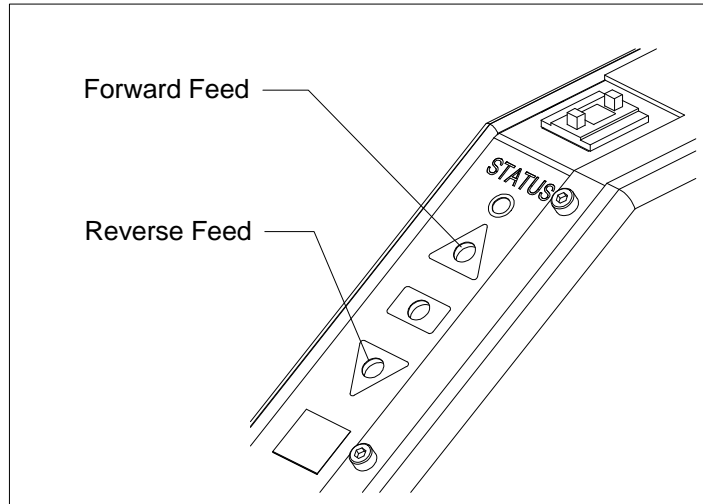
**NOTE**

**The last time that the Status Light comes on does not count as an offset increment or a flash.**

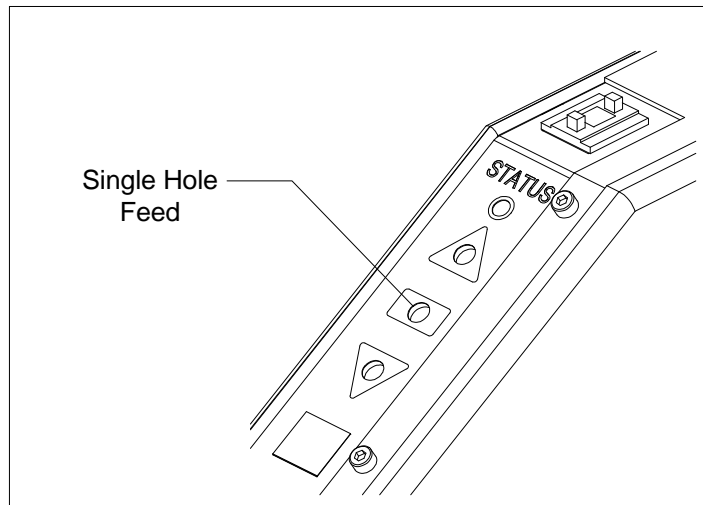


## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

- 3 - To adjust the Pick Point forwards or backwards, press the Forward Feed or the Reverse Feed button, respectively. Each unit of offset is equal to .0025" of adjustment.



- 4 - When you are finished adjusting the feeder, press the Single Hole Feed button. The new Custom Pick Point will be permanently stored in the feeders memory. Set the Pitch Selector accordingly and proceed to feed parts to insure that the feeder is set correctly.



### IMPORTANT NOTE : WHEN MAKING PICK POINT ADJUSTMENTS

- |            |   |   |
|------------|---|---|
| Green LED  | = | Indicates that the Pick Point is Forward of the Default location. The Operator should press the Reverse Feed button to get back to the Factory Default. |
| Orange LED | = | The Pick Point is at the Factory Default.   |
| Red LED    | = | Indicates that the Pick Point is Behind the Default location. The Operator should press the Forward Feed button to get back to the Factory Default.     |

## 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

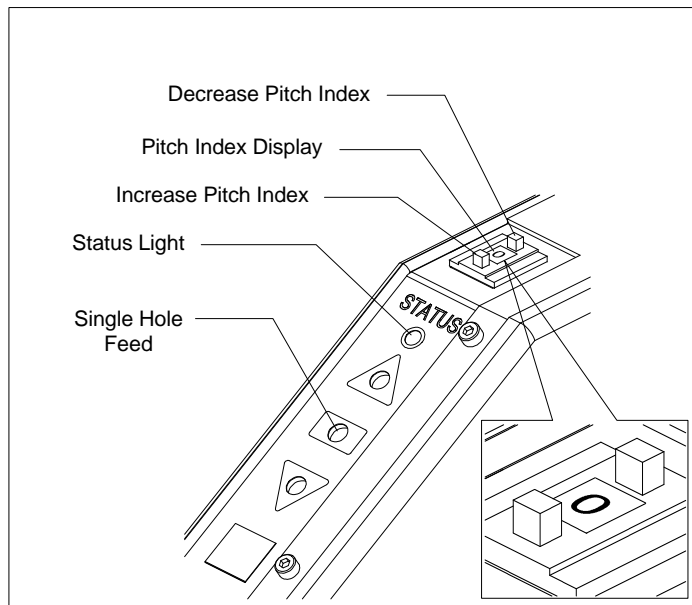
### Restoring the Factory Default Pick Point

- 1 - Set the Pitch Selector of the feeder to zero (0).
- 2 - Hold down the Single Hole Feed button until the Status Light turns off.

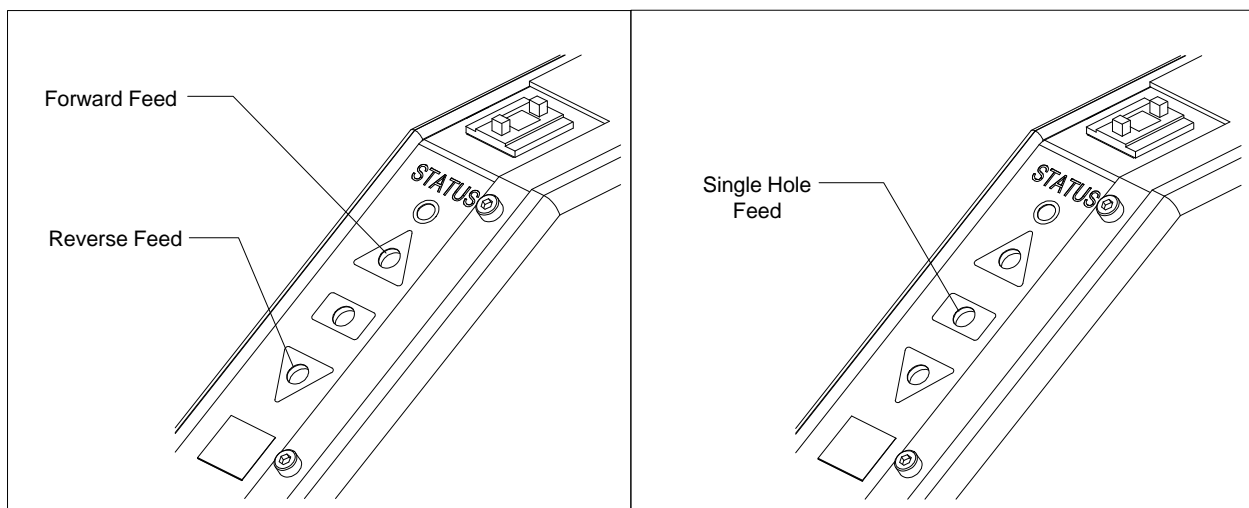
Release the Single Hole Feed button, and the Status Light will blink the number of offset increments that the feeder is set away from the Factory Default.

**NOTE**

The last time that the Status Light comes on does not count as an offset increment or a flash.



- 3 - Press the Forward Feed and Reverse Feed buttons simultaneously. When released, the Status Light will turn Orange.
- 4 - Press the Single Hole Feed button to finish this operation. This restores the Factory Default.



## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### Factory Default Pick Point

The Multi-Pitch Tape Feeder is manufactured and calibrated to comply with the GSM Interface. The Pick Point has been set at the factory before shipping.

These instructions are intended to be used for special applications, where the Pick Point needs to be changed.

Proceeding with these instructions will result in a feeder that operates with a Custom Pick Point.

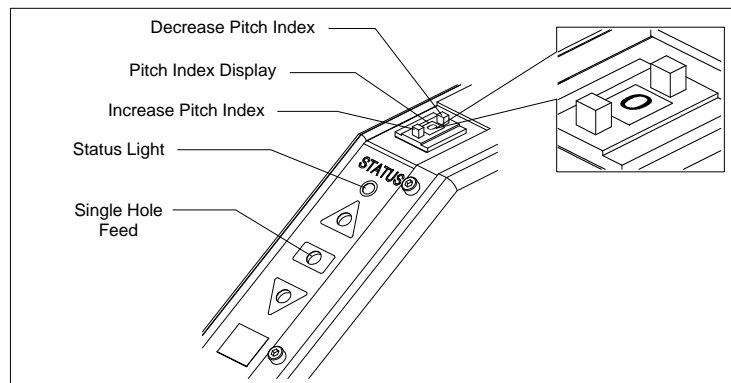
Follow the procedures listed under Custom Pick Point Adjustment to set a Custom Pick Point. The Custom Pick Point will become the Factory Default Pick Point upon completion of the following steps:

- 1 - Set the Pitch Selector of the feeder to zero (0).
- 2 - Hold down the Single Hole Feed button until the Status Light turns off.

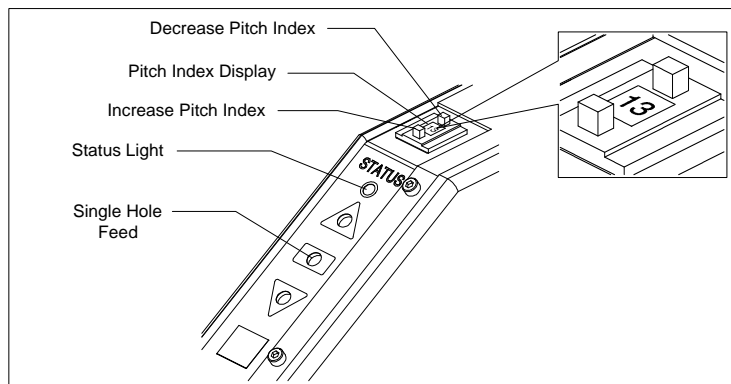
Release the Single Hole Feed button, and the Status Light will blink the number of offset increments that the feeder is set away from the Factory Default.

#### NOTE

**The last time that the Status Light comes on does not count as an offset increment or a flash.**



- 3 - Set the Pitch Selector of the feeder to thirteen (13).
- 4 - Press the Single Hole Feed button to finish this operation. The new Factory Default Pick Point has been permanently stored in the feeders memory.



## 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

### **Troubleshooting**

**PROBLEM :** After feeder is loaded onto the GSM, several components are advanced after first pick.

**SOLUTION :** The feeder has been improperly set up. See "Operating the feeder" on page 21 of this section.

**PROBLEM :** Feeder consistently fails to present a component to the Pick location.

**SOLUTION :**

- A. Check to see that the reel of components spins freely.
- B. Verify that the carrier tape has a clear exit path.
- C. Inspect Tape Window for signs of damage.
- D. Loose components have contaminated the tape path.  
Remove components.

**PROBLEM :** Component is not positioned properly below the GSM pickup nozzle.

**SOLUTION :** The feeder has been improperly set up. See "Operating the feeder" on page 21 of this section.

### **Standard Maintenance Procedures**

#### ***After Every Reel of Components:***

Check the feeder for any loose components or debris. If found, remove components, compressed air may be used.

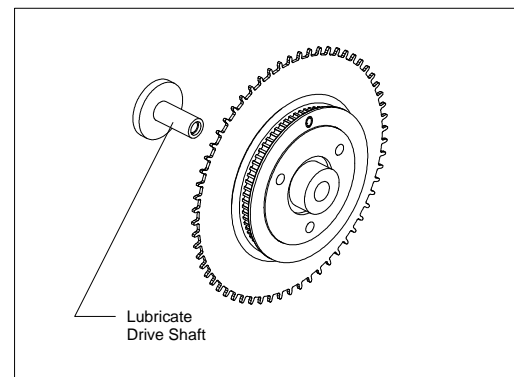
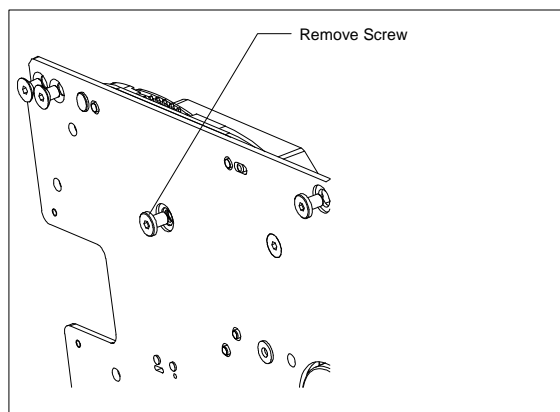
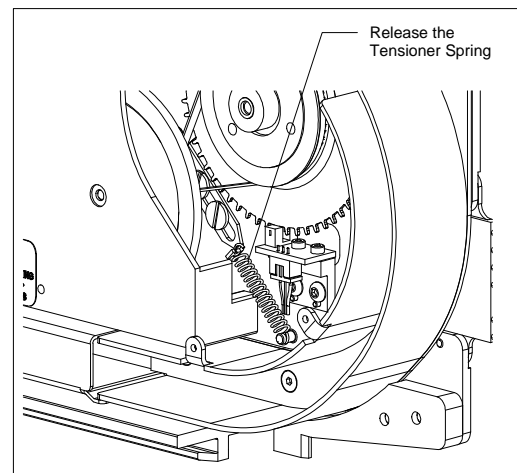
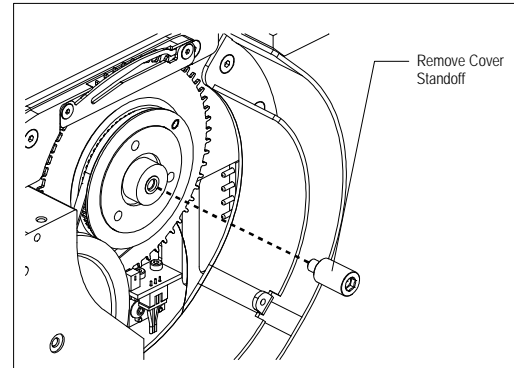
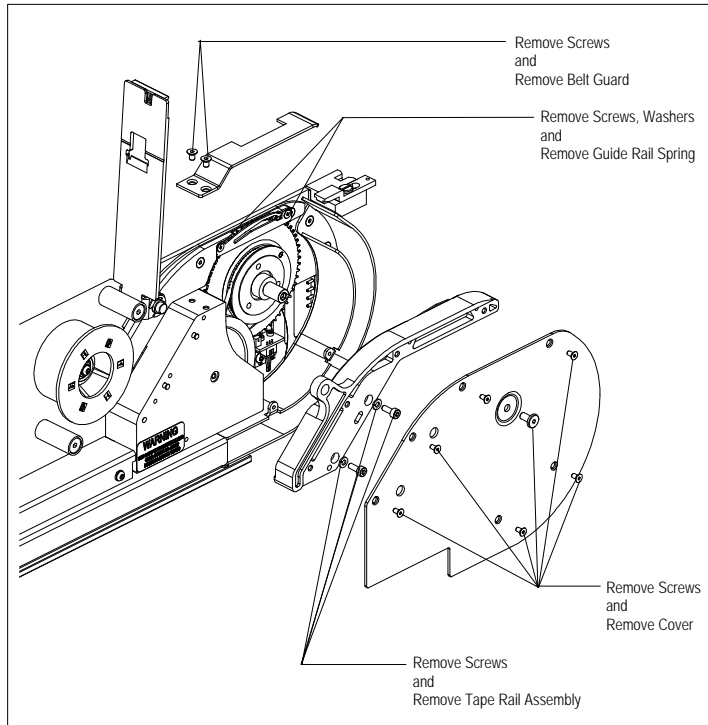
#### ***After Every 1,000,000 cycles:***

Remove Drive Hub Assembly and lubricate Drive Shaft with light machine oil, then reassemble. See Section "Drive Hub Maintenance" for instructions.

## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### Drive Hub Maintenance

- 1 - Remove six (6) M2.5 screws and one (1) M4 screw to remove Outside Cover.
- 2 - Remove Cover Standoff.
- 3 - Release Tensioner Spring.
- 4 - Remove two (2) M3 screws to remove Outside Tape Rail Assembly.
- 5 - Remove two (2) M3 screws to remove Belt Guard.
- 6 - Remove two (2) M2.5 screws to remove Inside Guide Tape Rail Spring Support.
- 7 - Remove one (1) M4 screw from the back of the feeder at the Drive Hub attachment point to release Drive Shaft.
- 8 - Tilt the Hub Assembly to one side to gain access to the Drive Shaft. Lightly lubricate the Drive Shaft.
- 9 - Reverse the above steps to re-assemble.

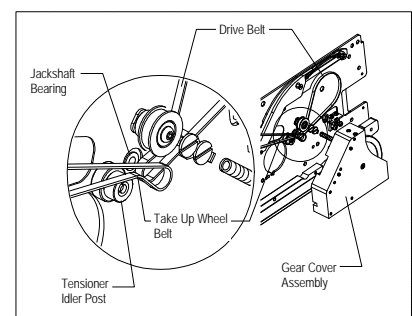
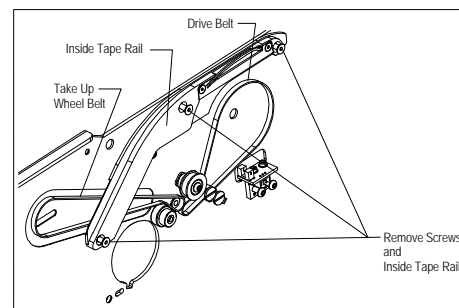
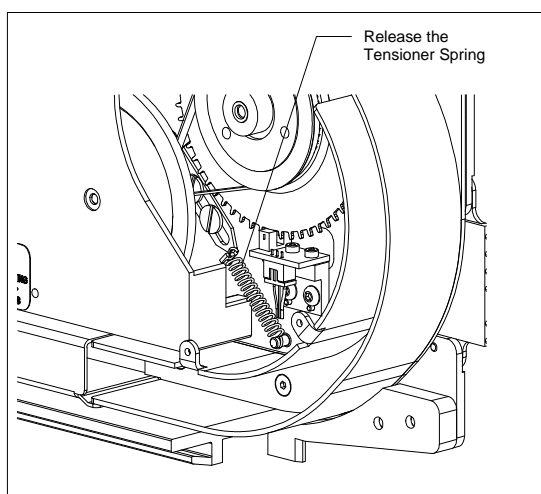
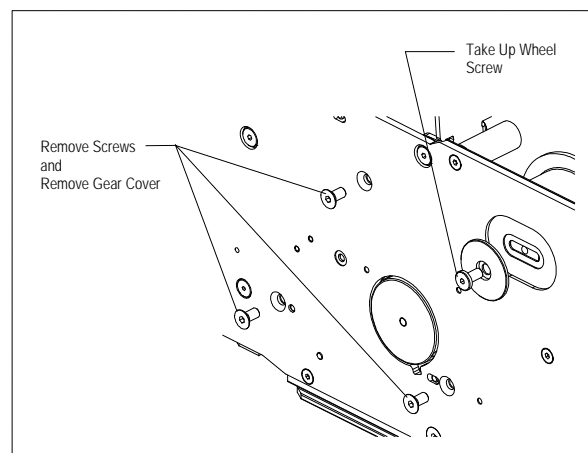
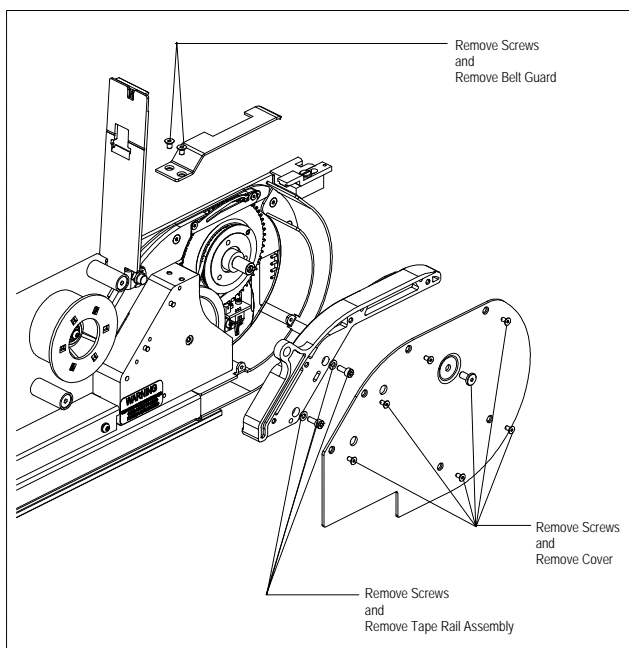




# 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

## Belt Replacement

- 1 - Remove six (6) M2.5 screws and one (1) M4 screw to remove Outside Cover.
- 2 - Remove two (2) M3 screws to remove Outside Tape Rail Assembly.
- 3 - Remove two (2) M3 screws to remove Belt Guard.
- 4 - Release Tensioner Spring.
- 5 - Slip the Hub Assembly end of the Drive Belt off.
- 6 - Remove (1) M4 screw from the back of the feeder to remove the Take Up Wheel Assembly, slipping the Take Up Wheel end of the Take Up Wheel Belt off.
- 7 - Remove (3) M4 screws from the back of the feeder to remove the Gear Cover Assembly. Remove both belts from the Jackshaft Assembly.
- 8 - Remove (3) screws to remove the Inside Tape Rail, completely freeing the Take Up Wheel Belt.
- 9 - Discard the old belts and replace with new belts.
- 10- Reverse the above steps to re-assemble being especially careful not to pinch any of the wires leading out from the Gear Cover Assembly.



## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### Motor Replacement



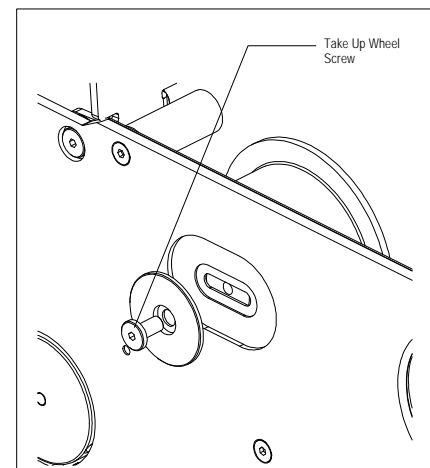
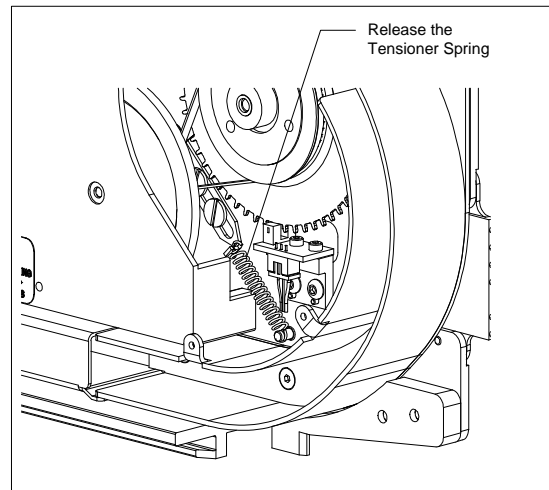
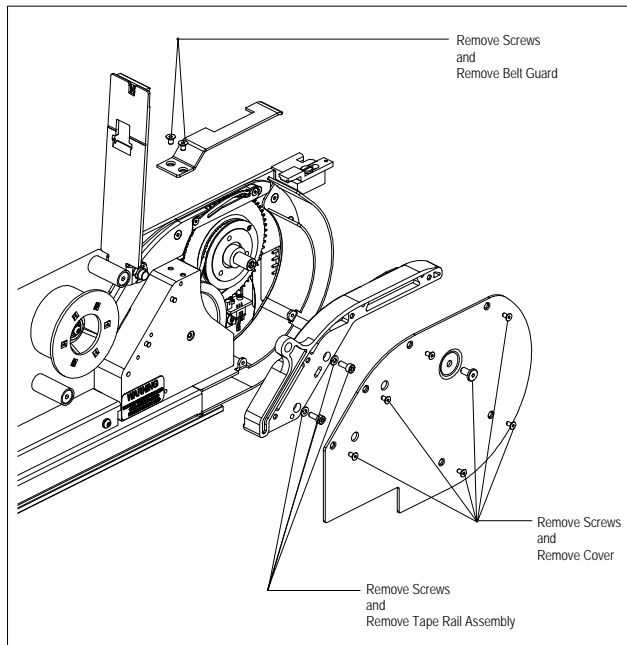
#### WARNING

When performing any of the following Maintenance Procedures, use care when reinstalling covers to avoid pinching wires.

Please follow proper ESD (Electrostatic-discharge) procedures when handling electrical components inside the feeder.

- 1 - Remove six (6) M2.5 screws and one (1) M4 screw to remove Outside Cover.
- 2 - Remove two (2) M3 screws to remove Outside Tape Rail Assembly.
- 3 - Remove two (2) M3 screws to remove Belt Guard.
- 4 - Release Tensioner Spring.
- 5 - Loosen (1) M4 screw from the back of the feeder to decrease the Take Up Wheel belt tension.

(Continued on next page.)



# 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

## Motor Replacement (continued)



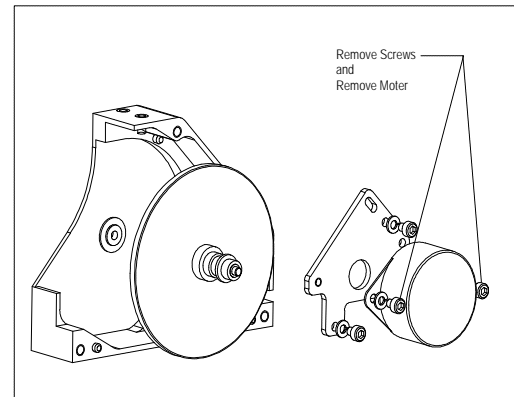
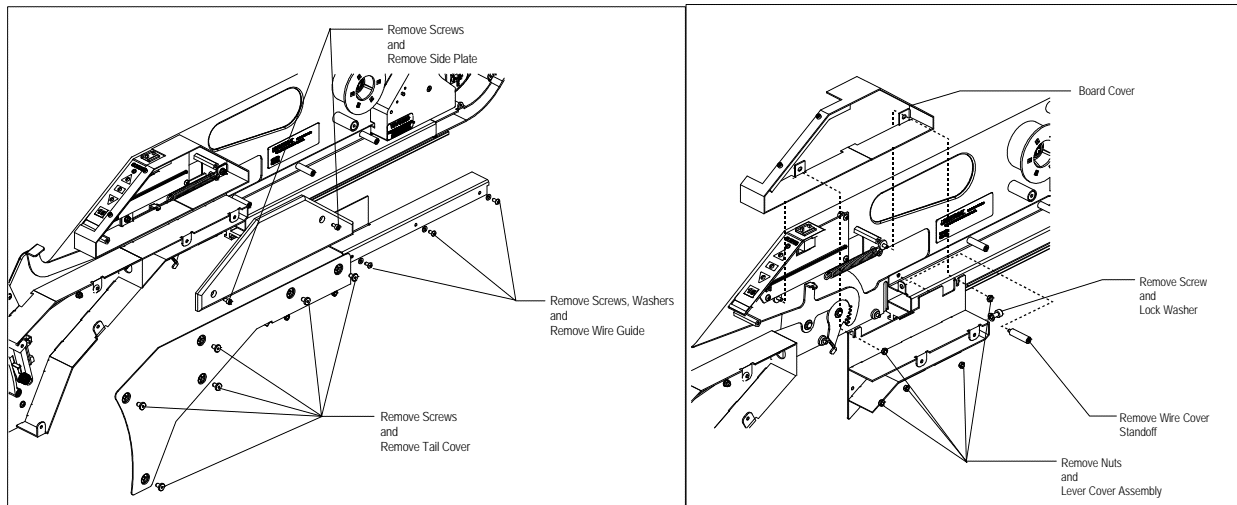
### WARNING

When performing any of the following Maintenance Procedures, use care when reinstalling covers to avoid pinching wires.

Please follow proper ESD (Electrostatic-discharge) procedures when handling electrical components inside the feeder.

(Continued from next page.)

- 6 - Remove (3) M3 screws and washers to remove the Wire Guide.
- 7 - Remove (2) M3 screws to remove the Side Plate.
- 8 - Remove (6) M4 screws to remove the Tail Cover.
- 9 - Remove (1) M4 screw and lock washer that fastens the Lever Cover to the Exit Chute.
- 10 - Remove (5) M3 nuts and remove the Lever Cover and Board Cover.
- 11 - Unplug the motor wires from the Control Assembly.
- 12 - Remove (3) M4 screws from the back of the feeder to remove the Gear Cover Assembly. Remove belts from the Jackshaft Assembly.
- 13 - Remove (2) M3 screws to remove the Drive Motor from the Motor Plate.
- 14 - Replace the Drive Motor.
- 15 - Reverse the above steps on this page, and on the previous page to re-assemble - being especially careful not to pinch any of the wires leading out from the Gear Cover Assembly.



## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### Controller Board Replacement

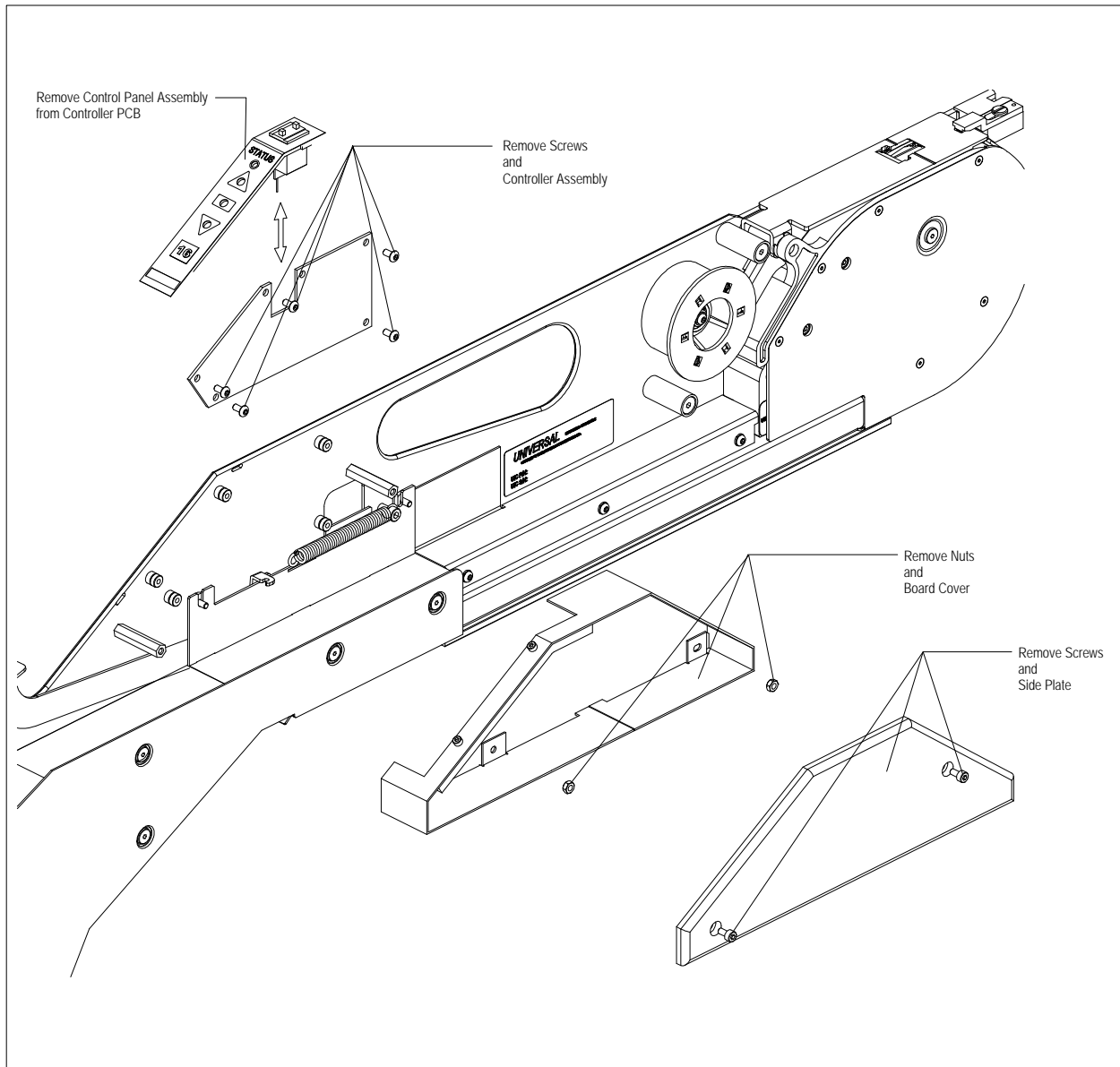


**WARNING**

When performing any of the following Maintenance Procedures, use care when reinstalling covers to avoid pinching wires.

Please follow proper ESD (Electrostatic-discharge) procedures when handling electrical components inside the feeder.

- 1 - Remove (2) M3 screws to remove the Side Plate.
- 2 - Remove (2) M3 nuts to remove the Board Cover.
- 3 - Unplug all cable assemblies from the Controller Assembly.
- 4 - Remove (5) M3 screws to remove the Controller Assembly.
- 5 - Carefully remove and replace the Controller PCB from the Control Panel Assembly.
- 6 - Reverse the above steps to re-assemble.



# 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

## I/O Cable Replacement

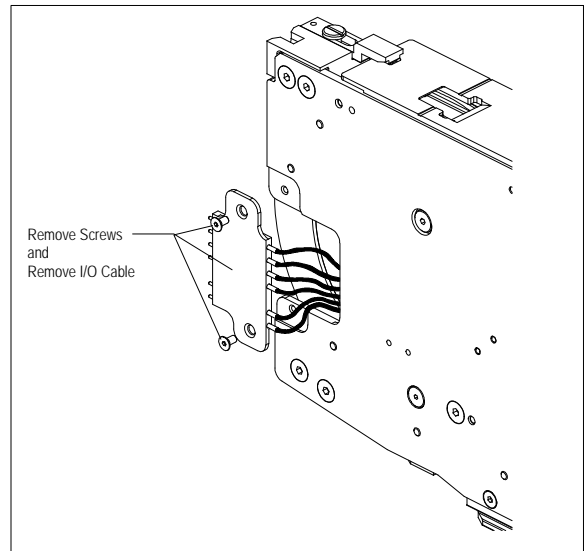
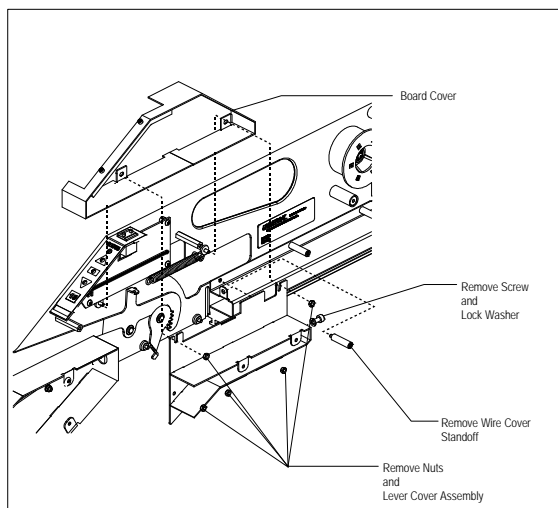
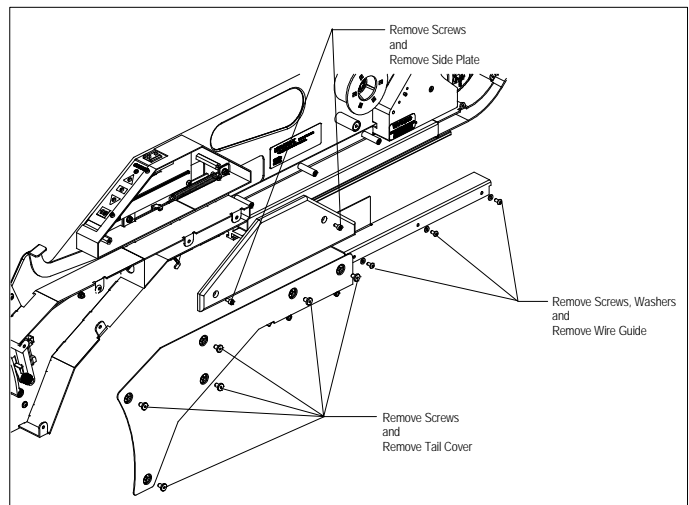
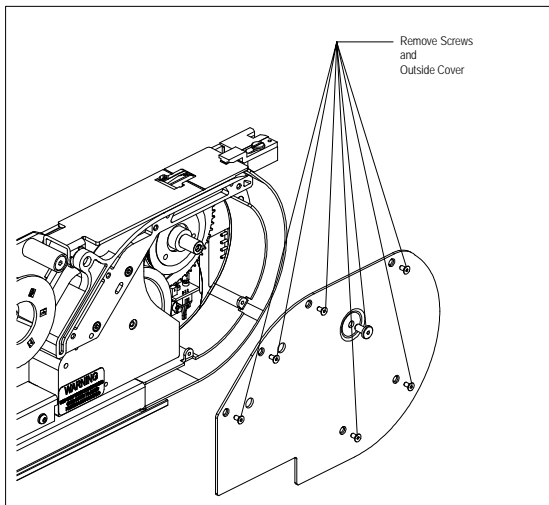


**WARNING**

When performing any of the following Maintenance Procedures, use care when reinstalling covers to avoid pinching wires.

Please follow proper ESD (Electrostatic-discharge) procedures when handling electrical components inside the feeder.

- 1 - Remove six (6) M2.5 screws and one (1) M4 Screw to remove Outside Cover.
- 2 - Remove (3) M3 screws and washers to remove the Wire Guide.
- 3 - Remove (2) M3 screws to remove the Side Plate.
- 4 - Remove (6) M4 screws to remove the Tail Cover.
- 5 - Remove (1) M4 screw and lock washer that fastens the Lever Cover to the Exit Chute.
- 6 - Remove (5) M3 nuts and remove the Lever Cover and Board Cover.
- 7 - Unplug the I/O Cable from the Control Assembly.
- 8 - Remove (2) M2.5 screws to remove the I/O Cable from the back side of feeder.
- 9 - Replace the I/O Cable.
- 10 - Reverse the above steps to re-assemble.



## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### Feeder Database

To input Feeder Database information refer to the Tape and Coverless Tape Feeders section of the New Feeder Manual.

#### Feeder Database Chart

The following charts include the values needed to input Feeder Database information for the 24mm PrecisionPro (Green) Spliceable Tape Feeders. Enter the feeder definitions for all variations defined to the respective feeder database.

### 24mm PrecisionPro (Green) Spliceable Tape Feeder

	24/4	24/8	24/12	24/16
<b>Feeder name</b>	Green 24MM / 4MM	Green 24MM / 8MM	Green 24MM / 12MM	Green 24MM / 16MM
<b>Feeder Type</b>	TAPE-SPLICEABLE	TAPE-SPLICEABLE	TAPE-SPLICEABLE	TAPE-SPLICEABLE
<b>Pickup X</b>	384.00	384.00	384.00	384.00
<b>Pickup Y</b>	-2865.00	-2865.00	-2865.00	-2865.00
<b>Pickup Tolerance X</b>	0	0	0	0
<b>Pickup Tolerance Y</b>	0	0	0	0
<b>Theta Pick Tolerance</b>	0	0	0	0
<b>Pick Attempts</b>	0	0	0	0
<b>Number of Slots</b>	2	2	2	2
<b>Width</b>	0	0	0	0
<b>Reference Slot</b>	0	0	0	0
<b>Cycle Time</b>	0.080	0.130	0.180	0.230
<b>Number of Tracks (Tape)</b>	1	1	1	1
<b>Track Width (Tape)</b>	384.00	384.00	384.00	384.00

	24/20	24/24
<b>Feeder name</b>	Green 24MM / 20MM	Green 24MM / 24MM
<b>Feeder Type</b>	TAPE-SPLICEABLE	TAPE-SPLICEABLE
<b>Pickup X</b>	384.00	384.00
<b>Pickup Y</b>	-2865.00	-2865.00
<b>Pickup Tolerance X</b>	0	0
<b>Pickup Tolerance Y</b>	0	0
<b>Theta Pick Tolerance</b>	0	0
<b>Pick Attempts</b>	0	0
<b>Number of Slots</b>	2	2
<b>Width</b>	0	0
<b>Reference Slot</b>	0	0
<b>Cycle Time</b>	0.280	0.330
<b>Number of Tracks (Tape)</b>	1	1
<b>Track Width (Tape)</b>	384.00	384.00

## 24mm PrecisionPro (Green) Spliceable Tape Feeder T49680601 Rev. A

### *Deactivating and Reactivating the PSV Function*

**NOTE**

When PSV is on, the reel present communication is sent from the feeder interface if the Tail Assembly is in the down position. When PSV is off, the reel present communication is sent constantly whenever the feeder is powered, even when reel is removed.

1. Power up the feeder and wait for the Status Light to stop flashing.
2. Set the Pitch Switch to 12.
3. Press and hold both the forward and reverse buttons down until the Status Light turns off, then release both buttons.
4. If PSV is on: The Status Light will illuminate Green.  
If PSV is off: The Status Light will illuminate Red.
5. To turn PSV on: Press the forward button – the Status Light will turn Green.  
To turn PSV off: Press the reverse button – the Status Light will turn Red.
6. Change the Pitch Switch to any other number to exit this mode.

## T49680601 Rev. A 24mm PrecisionPro (Green) Spliceable Tape Feeder

### *Changes To This Revision*

- Updated pages 1, 2, 3, and 10 because of Assembly revisions.