## Appendix strip tape feeder for NX 7700FV.

Strip tape feeder is useful for low volume assembly such as prototyping etc.

1. Set up of 34 strip tape feeder bank

Strip cut tape feeder bank is already installed on the machine by factory.



When the unit is shipped out, guide screw might be tighten so loose them to slide in the stripped tape underneath of guide plate .

# 2. Preparation of cut strip tapes.

First of all cut leading edge of every tapes and peel off cover tape slightly as shown below photo to prevent jam during sliding in a tape strip.



Stripped tape is slid in the slot and slightly pull back to align detent spring hook in advancing hole and peel off cover tape approx 10 pockets (20 pockets for 2mm advance tape) and lightly stick on sticky tape.





To prevent flipping up of components care must be taken. Gently peel off cover tape and holding tape by finger downward will be effective to prevent flip up components. Exposed pockets on a tape strip are very sensitive by mechanical shock and if following tape strip is tapped then components will flip up as shown.





Flip up components

Mini Transistor

Mini transistor in plastic tape is also very sensitive so tighten front screw slightly will affect to increase stability.

## 3. Feeder assignment

Cut strip tape feeder is assigned from tape # cutstart thru # cutstart+ 65 total 66 feeders are available. Cutstart constant is stored in k37 #3 value in system constant and 7700FV model is set to 1.

TAPE FEEDER DATA Demo												
			Т	ane	feeder	DATA						
-	#	v	v	a pe	Strk	Pom******	Drt	Indy	077	DT	ШΆ	++++
	1	22 1	51 6	0	1000	I.e.m	A	-1	10	0	0	0
-	2	32 29	53 5	0	1000		1	- 5	20	0	0	- 0
	3	12.25	51 4	0	1000		4	-1	10	0	0	
	4	50	54.9	0	1020		10		20	4	0	
-	4 C	62 2	54.2	0	1020		15		20	4	0	
	5	72.00	51.7	0	1000		4	-1	10	0	0	- 0
-	0	12.09	51.0	0	1000		4	-1	10	0	0	
	1	82.3	51.9	0	1000		4	-1	10	0	0	
_	8	92.2	51.5	0	1000		4	- <u>L</u>	10	0	0	0
	9	102.3	51.8	0	1000		4	-1	10	0	0	0
	10	112.2	51.7	0	1000		4	-1	10	0	0	0
	11	122.4	51.9	0	1000		4	-1	10	0	0	0
	12	132.1	52	0	1000		4	-1	10	0	0	0
	13	142.29	50.9	0	1000		4	-1	10	0	0	0
	14	152.1	51.9	0	1000		4	-1	10	3	0	0
	15	162.5	51.8	0	1000		4	-1	10	0	0	0
	16	172.2	51.4	0	1000		4	-1	10	0	0	0
	17	182.3	52	0	1000		4	-1	10	0	0	0
	18	192.1	51.5	0	1000		4	-1	10	0	0	0
	19	202.2	51.8	0	1000		4	-1	10	0	0	0
	20	212.2	51.7	0	1000		4	-1	10	0	0	0
F1-	Help	F2-Backup I	F8-Teachin	ig ESC-R	eturn Enter	-Confirm	BACK	2	EDIT		3 NEX	T

Index of feeder # from 1 to 34 for cut strip tape feeder indicates advancing pitch and direction to pick up chip one by one from exposed pockets.

You can input these Qy quickly using global change feature as .

(global change= 2 Edit> 2 Change > back slash )

1 is 4mm advance for standard 8mm tape and 0.5 is 2mm advance for 0402 etc.

Add – if the bank is installed in front such as -1, -0.5 since head moves toward front (minus direction) from the top of the pocket.

In above data, #2 and #4 are 2mm advance tape for 0402 and 0201 component. If Index multiply Qy exceeds 10 then warning displays.



Other word, the maximum traveling distance to for exposed pockets must be equal or less than 40 mm (10 pockets for 4mm pitch tape and 20 pockets for 2mm pitch tape)

### 4. Teaching of pick up position and stroke

Teach the top pocket position as starting point.

If feeder is located in front feeder base then in teach mode the top position is



displayed as left and following pocket is shown as next red rectangle.

assembly In mode all programmed chips are used warning window up, а displays and prompt to advance tape manually. So slide empty tape forward and align next chip to cross line. If necessary position can change by clicking



Teaching of stroke is very important since exposed chip is very sensitive on mechanical shock and easy to flip up from pocket so nozzle must not touch to tape strip. So go down nozzle on the pocket until window color changes to red and then go up nozzle approx 10 to 20 to prevent hard touch of nozzle.

(software also provides slow down nozzle speed when it sucks chip) If the feeder is located on rear feeder base then in teach mode the top position is





displayed as left and following pocket is shown as next red rectangle.

If sign of Index is wrong this rectangle is located at opposite position so correct sign as required. In assembly mode, when programmed quantity is used up the then similar warning is displayed but if it is located at rear feeder base then head comes over feeder bank and it is

difficult to slide the empty tape.

So click **MOVE HEAD** button then head escapes from feeder bank and after advancing tape click again and head comes back on top position.

#### 4.Note

**Do not slide out PCB holder** when strip tape feeder is installed since advanced used up strip tape may touch with PCB holder and exposed chips may flip up from pocket by vibration.

Pick up start points of used tray and cut strip feeders after shut off operation and restart are now memorized.

In the assembly sequence a tray is used then the tray number and pick up # is displayed as usual but the tray already used in previous assembly before turn on mains then the history is stored in the \*\*\*.tyh file and displayed.

ASSEMBLE					
Assemble					
H1Nozzle # 2					
Dispens 460/0 Urace D & P NO YES ONLY COUNT TRAY 201 3					
IF SETTING IS OK THEN CLICK OK	OK				
Place chk					

If setting is OK then click OK or click CLR to set to 1 or change number.

Then if cut strip feeder is used next window opens.

ASSEMBLE	
Assemble	
H1Nozzle # 2	
Cut Strip   1 6 2 13 3 8 4 16 5 8 7   11 8 13 8 15 8 17   21 9 23 7 24 3	8 9 8 9 19 9
IF SETTING IS OK THEN CLICK OK	CLROK
	Place chk

The same as tray feeder click OK to proceed and next window is displayed. (history is stored in \*\*\*.cut file)

ASSEMBLE					
Assemble					
	H1Nozzle # $2$				
Dispens 460/0					
NO YES ONLY					
COUNT					
	Place chk				

Also require assembly quantity is lo longer asked and default is 10000.





and when click PART TYPE button, part type remark and comment are displayed.



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