

Meet the Needs of the SMT Age

**Please read this user manual carefully before running**



## **S-D45 Auto loose radial lead cutting machine**

### **USER MANUAL**

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A11	Waste box	D40	Fixed plate
A12	handle	D41	Press adjusting lever
A13	Foot pad	D42	Pressure rail
A14	buckle	D43	Pressure plate
A15	waste bunker	D44	Pressing slide shaft
A16	medium plate	D45	Sliding shaft seat
		D46	Fixing screw
B2	Electrical Materials Box		
B21	Power switch	E5	Knife cutting seat
B22	Knife cutting Switch	E51	Knife Seat Shaft
B23	VR Vibration Adjusting Speed Converter	E510	Knife Shaft seat
B24	Vibration Switches	E511	Cutter Seat fixing screws
B25	Oath Seal Board	E52	Knife Seat Shaft
B26	Hooking	E53	Knife seat Adjustment Rod
B27	Vibration PC Board	E54	Sleeve
		E55	No moving knife
		E551	Gasket
C3	Vibration feeding unit	E56	Dynamic
C30	material	E57	Sliding shaft Cover
C31	Vibration Device	E58	Cutter Sliding Shaft
C32	Vibration upper	E581	Knife Cutting Propulsion box
C33	Vibrating shrapnel	E59	Marker ruler
C34	Vibration off Plate	E591	Indicative label
C35	Vibration Sealing Plate		
C36	The right track		
C361	Orbital screws	F61	Eccentric shaft
C37	Aluminium alloy rail	F62	Cutter gear
C38	The left orbit	F63	The motor gear
C381	Orbital screws	F64	Eccentric shaft seat
C39	Discharge tank	F65	Palin
C390	Finished product box	F66	Palin
C391	Finished box holder	F67	motor
		F68	reducer

## A、 Introduction of Atuo loose radial lead cutting machine

1. This machine is specially designed for the cutting of vertical electronic parts. As long as the parts that can stand can be used, such as various types of capacitors, power crystals, exclusion resistors, and transistors...
- 2, the length of the cutting feet can be adjusted at will, the diameter of 3mm-20mm. The wire diameter  $\phi 0.35$ -  $\phi 2.0$ mm is the range of use.
- 3, CFD-603 type has re-expandability, can reach automatic feeding and shearing; the production capacity can reach more than ten times of manual discharging.
4. The mature design mechanism of this machine is light and durable. Easy to operate and easy to maintain.

## B、 use method

- 1、 Check the correct voltage with the mechanical machine, then plug the power cord and turn on the B21 power switch B22 to open the switch "NO". The cutter begins to return to the foot cutting action.
2. When the B24 vibration switch is started, the C3 vibration feeding unit starts to work, and then the B23VR vibration speed controller controls the feeding speed, so that it can cope with the feeding, not too fast, and the feeding is too fast, which is easy to cause the length of the cutting foot. Or problems such as parts falling into...

## C、 Adjust,Feeding,Cutting:

- 1、 Place part C30 on the C36 and C38 rails by hand from the entrance. Part C30 will advance automatically, and the speed will be controlled by the B23VR regulator.
2. C37 aluminum alloy guard rail is to control the left and right width of the part body to prevent the parts from shaking when moving. It can be adjusted with different size parts. There are three screws on the C37 aluminum alloy guard rail screw for adjustment and fixing.
3. The right track of C36 can be adjusted with the thickness of the wire. The track clearance is adjusted by the C361 guard rail screw.
- 4, D4 pressure material mechanism to prevent parts from jumping up and down, with the height of the parts to adjust, loosen the D46 screws, turn the D41 pressure material adjustment rod, D42 pressure material track can move up and down, just put the D42 on the parts, and then D46 screws are fixed.
- 5, the length of the cut foot adjustment:
  - a. Use the hexagonal wrench to loosen the E511 screw:
  - b. Rotate the E53 tool holder adjustment lever, and the E5 cutter holder can slide up and

down;

- c. Check the E53 tool holder adjustment lever. The number indicated by the digital scale on the E59 ruler is the size of the foot length.
- d. Start the power supply, let the E56 move the knife back and forth, and then turn the B23VR adjuster into the part to start the work of cutting the foot;
- e. When trying to cut out the first part, you must measure whether the length of the foot is correct. Check if the E511 screw is fixed correctly. The cut foot adjustment is completed;
- f. ※ Note: When you want to turn E53 and transfer E5 cutter seat, you must first relax E511 screw;
- g. the parts completed by the cut feet will enter the concentrated collection of the E390 finished box through the C39 discharge chute;
- h. E390 finished box can be taken out by the left side.

## **D、 Waste cleanup:**

1. Open the A14 buckle, and the entire B2 electric material phase can be turned back and forth, and all the institutions can clearly see it.
2. In the process of cutting the feet, the line chips are easy to fly, and the thread chips that can be jumped into the box must be cleaned after each use.
3. The cut off chips will enter the A11 waste box along with the oblique opening of the E5 cutter base. If there is any slide left in the oblique opening, the scraps should be cleaned with items, otherwise it will affect the dumping.

## **E、 Maintenance and repair:**

1. F62 and F63 gears and F61 eccentric shaft should be lubricated for maintenance.
  2. E58 cut and slide shaft need to be lubricated with oil.
- The E51 and E52 toolholder shafts must be wiped with a tarpaulin to prevent rust.

## **F、 Explanation of part replacement:**

1. The E55 non-moving knife and the E56 moving knife become blunt and unfavorable after long-term use, and it is necessary to grind the knife edge or replace the whole group.
2. Replacement of cutting knife E55 without moving knife and moving knife:
  - a. Open the A14 buckle and turn the entire B2 electrical box back;
  - b. C361 screw loose material removes the right phase C36 right track;
  - c. Loosen the screw of E56 moving knife, and remove or replace the moving knife E56;
  - d. Loosen the C381 screw with the L-shaped hex wrench and remove the C38 left rail.
  - e. Loosen the screws on the E55 non-moving knife, and then remove the E55 without moving the knife or replace it.
3. An will E55 no moving knife and E55 moving knife:
  - a. Lock the E55 without moving the knife, then turn the F63 motor gear by hand and use a part to do the trial cutting. If it can be cut smoothly and has no burrs, it means that the E55 does not move the knife and the E56 moves the blade and the adhesion is good;

- b. If there is excessive burrs or pulls, it means that the knives need to be ground or renewed;
- c. If the new knife has a too long burr when cutting, it means that the tightness is not good. Please use a very thin paper pad between the E56 and the E58 cutter slide shaft, and then tighten the screws on the E56 movable knife. . ※Note: E56 and E56 movable knives can only touch each other, and there is no possibility that the blades will collide with each other. Remember!
- d, the screw on the E55 does not move the knife is not locked, it will also cause poor sealing of the cutter;
- f. Rotate E53 to raise the E5 tool holder to the left track of C38. When locking the C381 screw, it is necessary to confirm that the C38 left track and the E55 fixed knife blade can be “flattened” and then locked.
- g, E55 does not move the knife if it protrudes from the edge of the C38 rail, when the part reaches the cutting, it will dump or the edge will be stuck to the protruding blade and the feeding will not be smooth;
- h, E55 does not move the knife if it is retracted into the edge of the C38 rail, the part of the line will be bent before the line is bent.

## **G、troubleshooting:**

1, the feeding question explanation:

- a. When the E5 tool holder is lifted into contact with the C38 rail, the orbital vibration force will be offset due to contact with the knife, that is, it cannot be fed.

2. Exclusion method:

- a. Please lower the tool holder E5 and the vibration feeding will return to normal immediately;
- b. The vibration feeding has a sudden acceleration and instantaneous slowdown, or the B23VR governor cannot adjust the speed;
- c. Reason: It is possible that B27 vibrates the electronic components of the PC board;
- d. Exclusion method: (1) replace the damaged parts; (2) replace the whole PC board;
- e. After many years of use, the feeding speed becomes slower;
- f. Exclusion method: loosen the two screws above the C33 vibrating elastic piece, pull up 0.5mm and then lock the screw to resume fast feeding;
- g, feeding is easy to tilt;
- h. Exclusion method: The B23VR governor is slowed down, not too fast, and will vibrate parts.

3, cut and explain the fault:

- a, E56 does not move the knife suddenly stagnated or slow;
- b. Remedy: (1) Check if there is any stuck or falling parts between the E56 moving knife and the E57 sliding shaft cover, and remove it; (2) Check if there are residual chips in the middle of F62 and F63 gears; 3) E58 cutter slide shaft has not been refueled for too long

and cannot slide. Please refuel to lubricate it.

- c. The cut parts should be cut to a shorter length than 3.0mm in general;
- d. Exclusion method: (1) Another piece of E55 can not be used to make a special knife below 3.0mm; (2) Make the original knife to be thinner and C38 left track to be thin; (3) E55 does not The moving knife and the C38 track should be thin and professional. They need to be returned to the factory for processing, or order spare parts.

## 1、 Introduction of Automatic feeder:

1. The components that can be fed by the feeder are LED, electrolytic capacitor, triode, and small polyester capacitor.
2. The principle of the feeder adopts electromagnetic vibration to generate rotary thrust. Combined with the suction of the nozzle and magnet, the components are erected and automatically sent to the shearing machine.
3. The body of the processed component must not exceed the required range. For example, the range of electrolytic capacitors: the body size is  $\phi$  4-  $\phi$  8mm, and the height is 5-12mm.
4. If there are special components, you need to order a spiral feed tray.

## 2、 Adjustment method:

1. Pour the components to be processed into a spiral disk and pick a component as you like.
2. According to the size of the component body, adjust the three arc segments on the circumference. The arc plate interfaces overlap in turn, and can be raised, lowered, moved out and moved in.
3. First adjust the vertical opening of the spiral disk, that is, the opening size of the first circular arc piece. The upper opening should be replaced with one component placed on the top without falling to the outside of the disk. If the component body is large and tall, the arc piece is moved outwardly and lowered to press against the component foot. Otherwise, the arc is raised inward.
4. The material feeding port is the second and third arc pieces, that is, the inclined surface of the spiral disk. Here, the components that are not erected can be divided into the lower step and then re-erected. Here, the two segments of the arc should be small in the case where the component can move in the same direction, and the height of the fixed arc piece is lowered to press the component foot.
- 5, the discharge port includes the protective sheet, the specific adjustment should be based on the size of the component body and the size of the wire.
- 6, the height of the magnet should be determined according to the size of the component being processed, the component body is large and high, should be raised, and vice versa.
7. The direction and size of the nozzle should be adjusted according to the condition of the material moving.
8. There is a pull plate at the throttling point. Loosen the screw to pull out the push. It can be adjusted according to the size of the component body, generally ensuring that the width

of one component is just the best.

9. The vibration feed speed adjustment should be matched with the speed of the shearing machine. Generally, the feeding speed of the shearing machine should be slightly slower, and the speed of the vibrating screw disc is slightly faster, so that the components are arranged side by side one by one and neatly sent to the cutting machine mouth, so that the interface does not fall over.











