

V-SOLDER

BON-8103 / 8203

V-cut solder machine

Applicable solder wire diameter 0.3 ~ 0.8 mm

Instruction manual

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The 1st edition

JAPAN BONKOTE CO., LTD.



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1. Preface

- ✧ Thank you very much for purchasing V-cut solder machine.
- ✧ V-cut solder machine is effective to prevent solder balls & flux scattering by making V-groove onto solder wires.
- ✧ There are some solder wires which cannot obtain a sufficient effect.
e.g. Solder wires that originally have solder ball prevention effect.
- ✧ Please read 2. Notes for safety before use and use this machine properly.
- ✧ Keep this manual after read.

2. Notes for safety



CAUTION !

Be sure to read this manual before use the machine.

- ✧ Never touch the machine with wet hands to prevent electrical accidents such as electrical shock.
- ✧ Do not dampen the machine with water or liquid. Otherwise, burst cord may cause fire, malfunction, electrical shock and so on. (death at worse)
- ✧ Do not overhaul this machine. Otherwise, it may cause malfunction, electrical shock and so on. (death at worse).

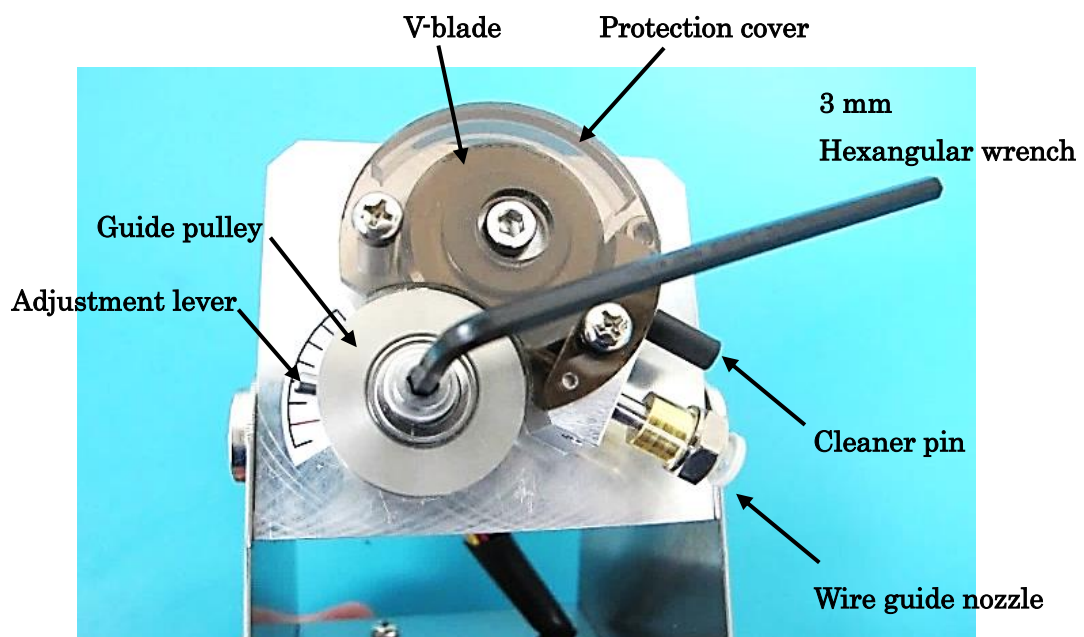
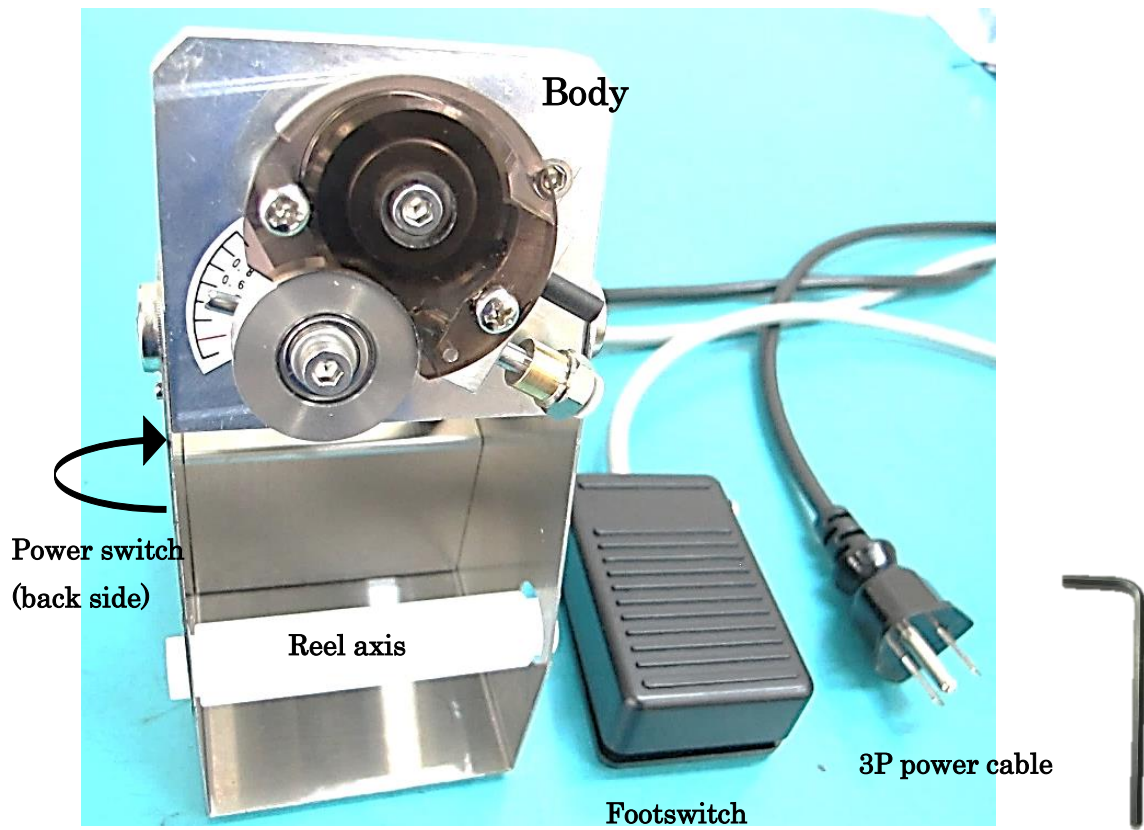
3. Notes for installation and use

For safety, please make sure to observe the following matters.

- This machine is designed with ground specification. For safety, be sure to use a grounded electrical outlet.
If you do not have such outlet, install it separately.
- Do not place where the machine would be exposed such as too much moisture, direct sunshine, much dust and vibration.
- Be sure to pull out the power plug when the machine is not used.
- Be sure to grab the power plug when plugging or unplugging.
- Please check your using voltage before use.
- Before adjustment and cleaning of V-blade, Guide pulley and so on, be sure to turn the power off and pull out the power plug from the electrical outlet.
- Do not use the machine for purpose other than the original purpose.
- Never touch V-blade during the operation.
- Please use single-core solder wire in order to obtain sufficient effect.
- Be sure to make V-groove just before the soldering work in order to obtain sufficient effect.
- This machine is designed for micro fine solder wire exclusive use. Strong shock or rough handling may cause setting and adjustment trouble and reduction of the effect.
- Default of adjustment lever setting is DIA.0.8mm when no request at ordering.

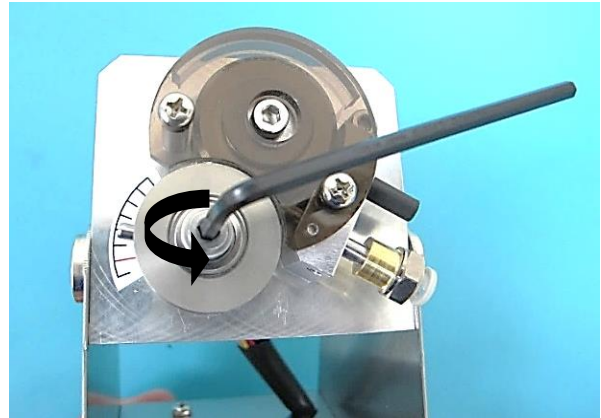
4. How to use

(A) Contents and Name



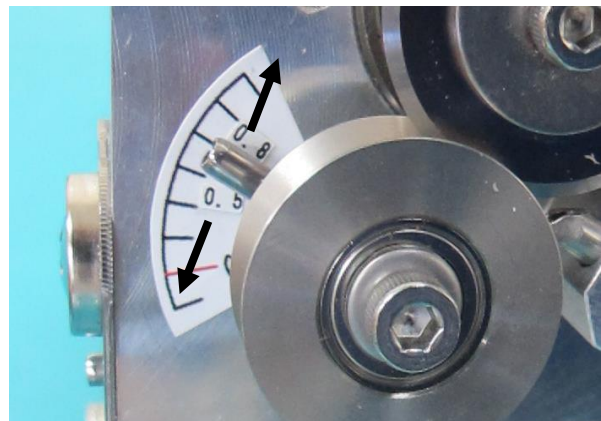
(B) How to set up and adjust solder wire diameter

- 1) Loosen the screw of Guide pulley by a 3 mm hexangular wrench.

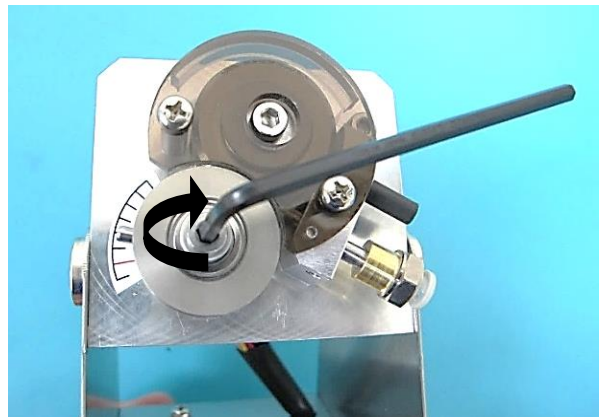


- 2) Set the adjustment lever to your desired position manually.

※ Applicable solder wire diameter:
DIA. 0.3 ~ 0.8 mm



- 3) Tighten the screw of Guide pulley by a 3 mm hexangular wrench.



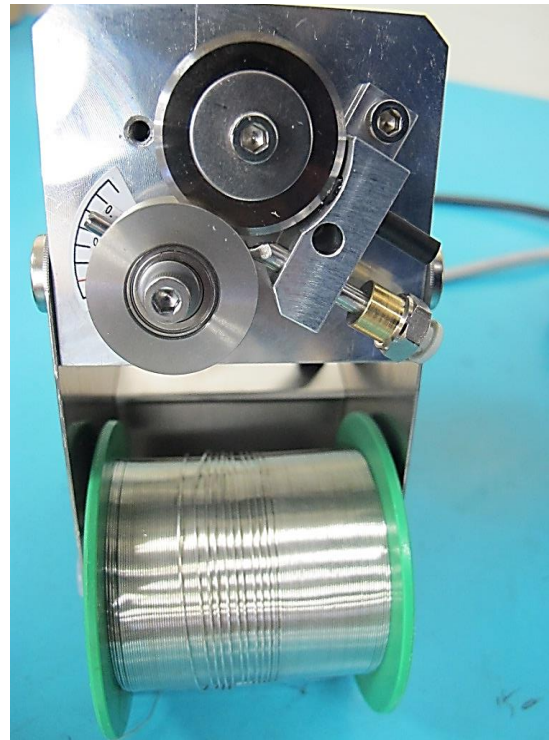
- 4) Insert the reel axis into the solder wire reel and set it to the reel holder at the bottom.

Please refer to the right fig.

Please make sure that each diameter you set up and the solder wire is the same.

- ※ Applicable solder wire diameter:
DIA. 0.3 ~ 0.8 mm

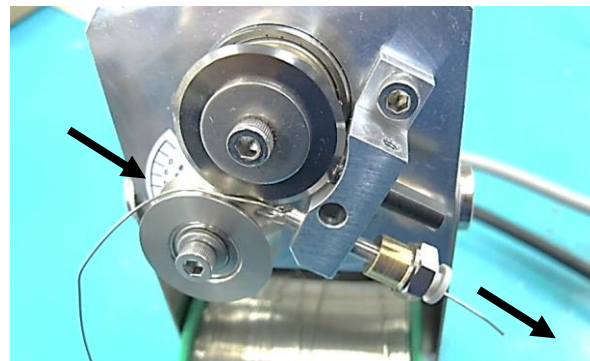
Remove the protection cover from the V-blade by using a Phillips screwdriver.



- 5) Lead the solder wire to the wire guide nozzle along the guide pulley.

Turn on the power switch and press the foot switch. Check out that V-grooved solder wire will come out from the nozzle correctly.

- ※ Please take a great attention to a V-blade when working.

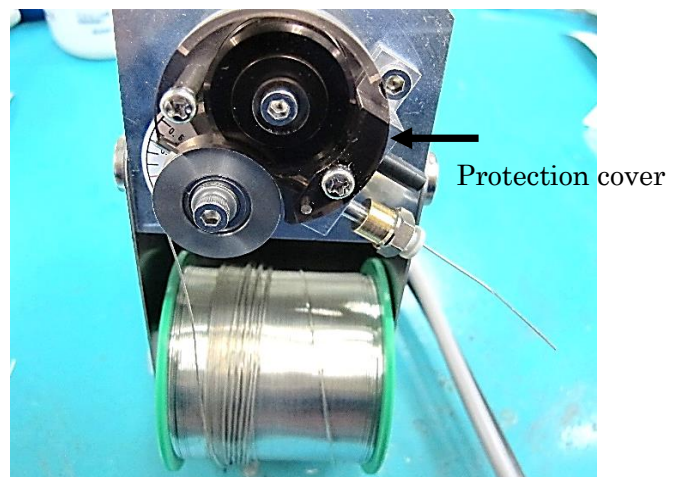


- 6) After confirm that the solder wire has been led correctly, stop pressing the foot switch.

Rewind the solder wire reel in order to take up the slack of solder wire.

Put the protection cover back again.

V-cut machine is ready to work.



(C) Depth of V-groove and adjustment

- 1) Cut a V-grooved solder wire perpendicularly 4 points by interval of 2 cm. When cutting, place the V-grooved section to topside so that it will be easier to observe it..



- 2) Observe each cut section by a loupe whether every cut section looks almost the same as below "GOOD".



Cut section of V-groove

| GOOD | TOO SHALLOW | TOO DEEP |
|------|-------------|----------|
| | | |

In case the depth is too shallow or too deep after checked by a loupe, please adjust V-groove by an adjustment lever.

※ Too shallow

V-groove obtain less effect of prevention of solder balls and flux scattering.

※ Too deep

It makes flux residues stick to V-blade, and then V-blade gets deteriorated easily.

In addition, solder wire may possibly twist around V-blade. It cause the damage of both of V-blade and guide pulley.

- ※ Please adjust depth of V-groove flexibly. Appropriate adjusting position will depend on the type of solder wire, flux size and so on. It is better to adjust after using, with checking the solder ball scattering.

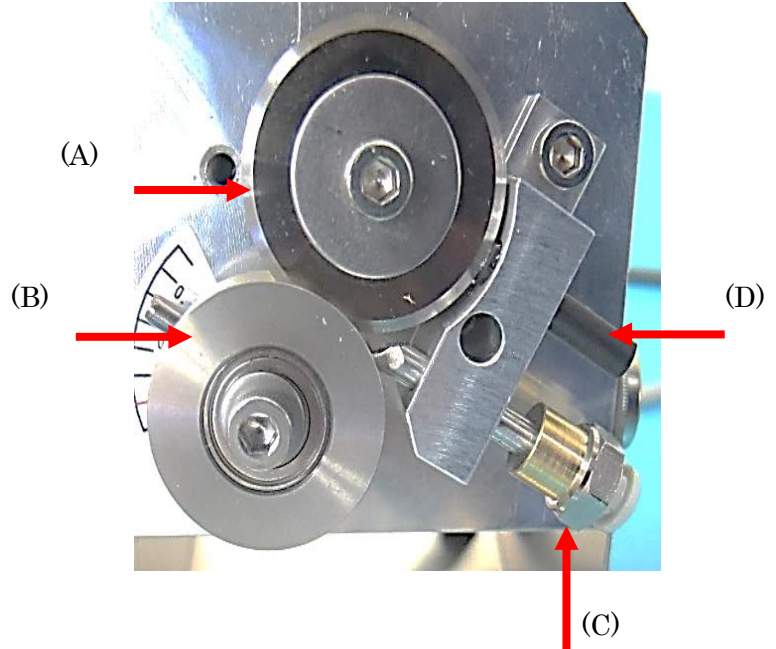
(D) Cleaning

Make sure to turn off the power switch and pull out the plug when cleaning.

(A) V-blade

Please remove the protection cover from the machine, and remove solder residues or flux timely.

In order not to damage the V-blade, we suggest to use a cotton swab soaked with flux solvent like alcohol.



(B) Guide pulley

Please remove solder residues or flux timely.

Those residues cause damage to the V-blade, flux deposition, prevention of scattering and so on.

Take a great attention to the V-blade.

(C) Wire guide nozzle

Please remove the wire guide nozzle from the machine by using a 1.5 mm hexangular wrench, and clean inside of nozzle timely.

NOTE: A 1.5 mm hexangular wrench is NOT contained.

We suggest to use an air blower since its inner diameter is very thin.

Take a great attention to the edge of nozzle, such as crack or bentness.

(D) Cleaner pin

Please remove solder residues or flux timely.

Take a great attention to the V-blade.

5. Specifications

| | | |
|----------------------------|--|------------|
| Input voltage | 100 VAC / 220 VAC | |
| Frequency | 50 Hz | 60 Hz |
| Feeding amount | 37 mm/sec. | 44 mm/sec. |
| Feeding method | Footswitch | |
| Applicable solder diameter | DIA. 0.3 ~ DIA. 0.8 mm | |
| Dimension | 70W x 104D x 160H mm | |
| Weight | 1370 g (body + power cable + footswitch) | |
| Power consumption | approx.. 6.5 W | |
| Power cable | L= 1.9 m 3pin plug cable | |
| Case material | Steel : t = 1.0 | |

6. Trouble shooting

| | |
|---|---|
| How to set a solder wire | Refer to page 5. |
| How to adjust solder diameter | Refer to page 4. |
| How to adjust depth of V-groove | Refer to page 6. |
| V-blade or guide pulley is getting dirty. | Refer to page 7. |
| Solder wire unable to feed. | 1) Plug the power cable into the outlet firmly. 2) Check the solder wire diameter again and use an appropriate solder wire. |
| V-blade or guide pulley is touching with other parts. | Contact us for repair. |
| Footswitch or motor is out of order. | Contact us for repair. |
| Solder balls are getting increased. | 1) Check the depth of V-groove and adjust it accordingly. Refer to page 6. 2) Check the solder wire diameter again and use an appropriate solder wire. |
| Solder balls are still increasing after adjustments. | It is expectable of deterioration of V-blade or guide pulley. Contact us for repair. |

7. Guarantee and After sales service

(A) Guarantee

Our products are shipped after sever factory test and inspection.

However, if you find any malfunctions or defects due to problem in workmanship or transportation, please contact your dealer or us.

The guarantee period of your machine is in one year after purchased, except for replacement parts.

(B) After sales service

If the machine has trouble, please read this guide manual once again.

If the trouble is still not resolved, please contact your dealer or our service department.

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