

V-SOLDER

BON-8103 / 8203

V-cut solder machine

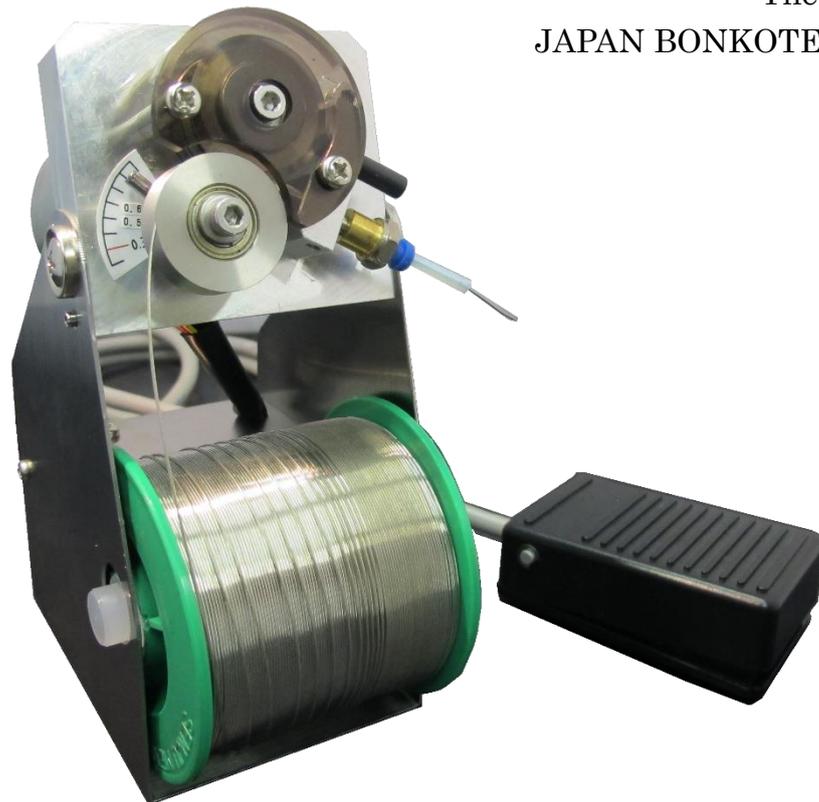
Applicable solder wire diameter 0.3 ~ 0.8 mm

User's manual

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The 2nd edition

JAPAN BONKOTE CO., LTD.



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1. Preface

- ✧ Thank you very much for purchasing the V-cut solder machine.
- ✧ The V-cut solder machine is effective to prevent solder balls & flux scattering by making V-groove onto a solder wire.
- ✧ If your solder wire originally have solder ball prevention effect, this machine may not provide you with a sufficient effect.
- ✧ Read below “ 2. Notes for safety ” before use.
- ✧ 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.
- ✧ Never dampen the machine with water or liquid.
- ✧ Do not overhaul this machine.

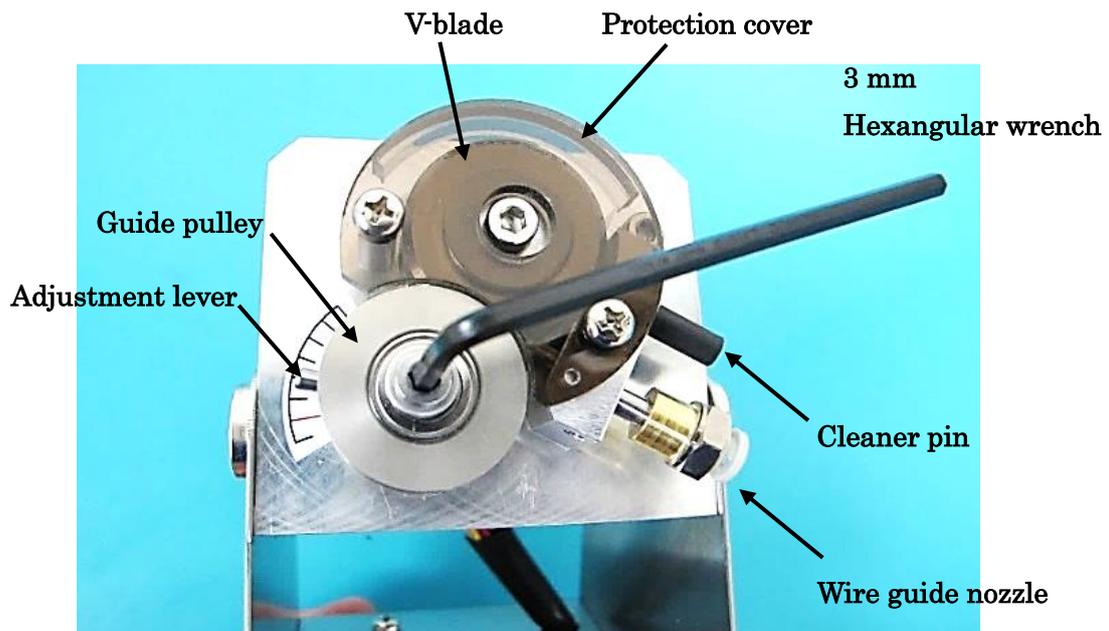
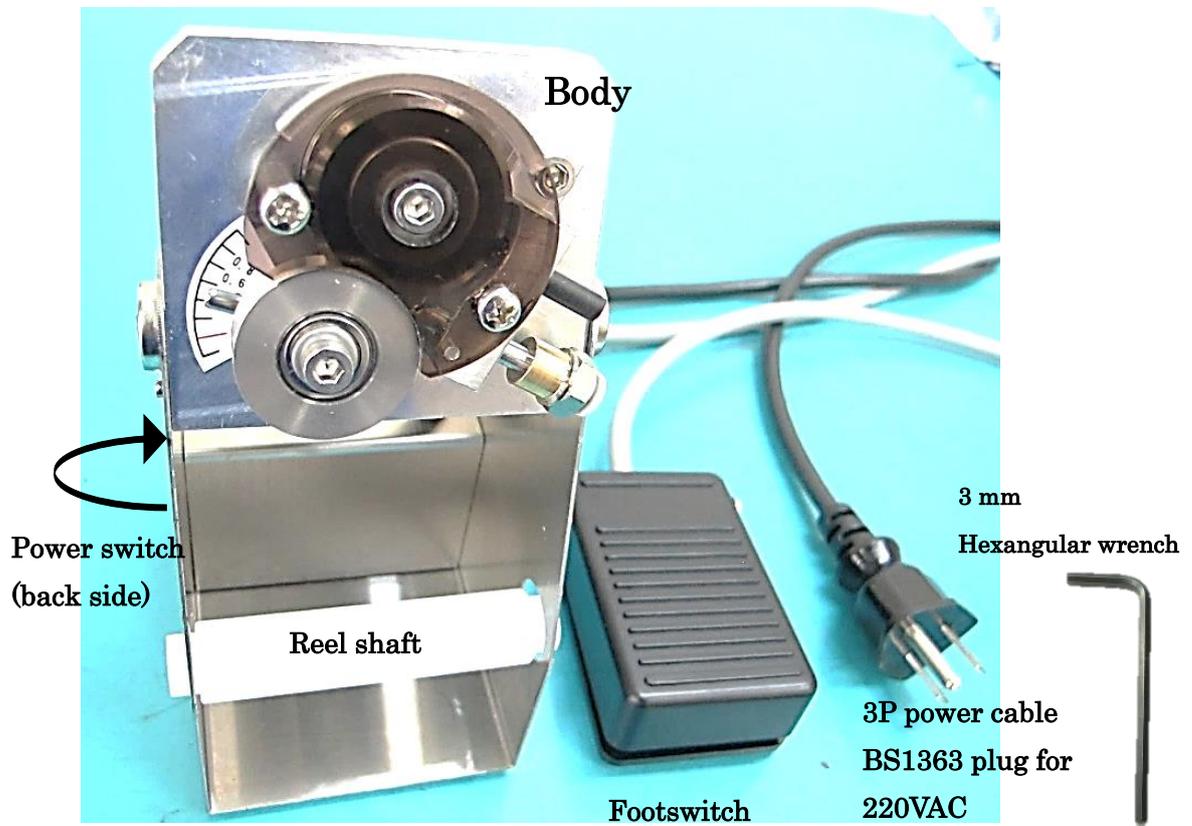
3. Notes for installation and use

For safety, 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.0.6 mm when no request at ordering.

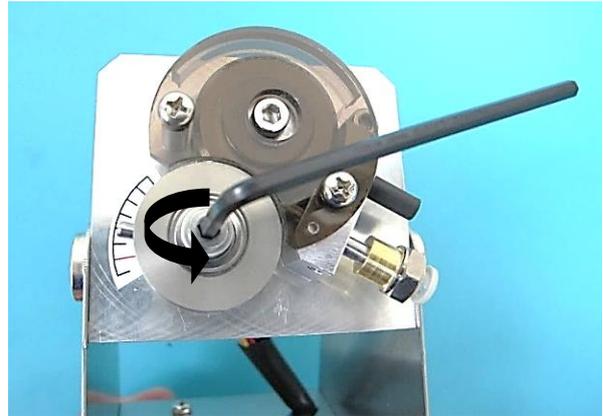
4. How to use

(A) Contents and Name



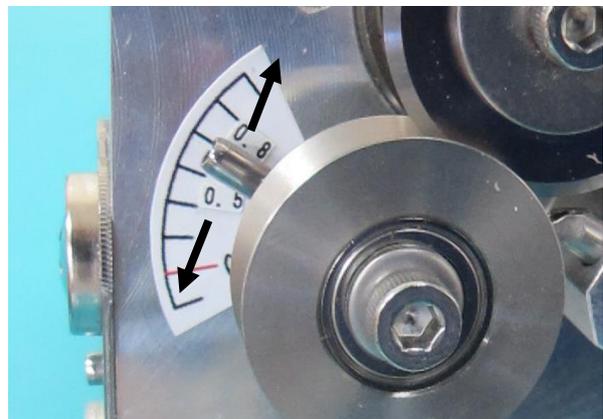
(B) How to set up and adjust solder wire diameter

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

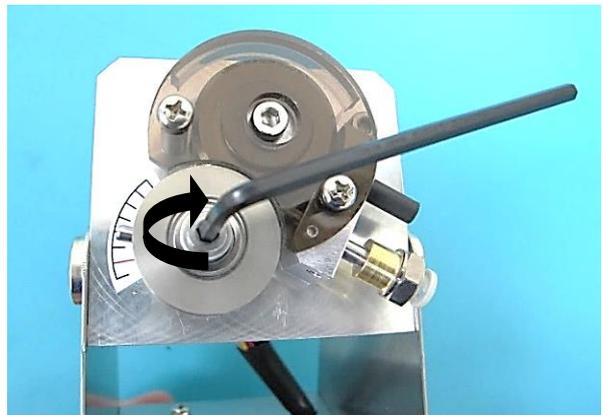


- 2) Set the adjustment lever to your desired position manually.

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



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



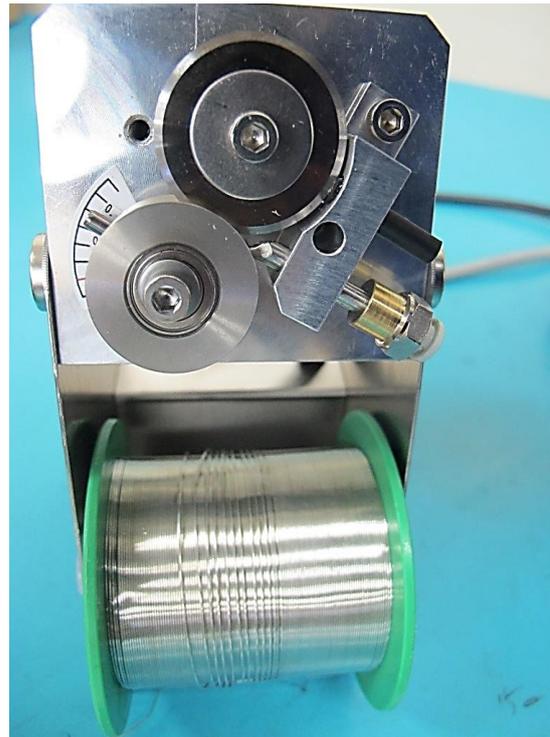
- 4) Insert the reel shaft into the solder wire reel and set it to the reel holder at the bottom.

Refer to the right photo.

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

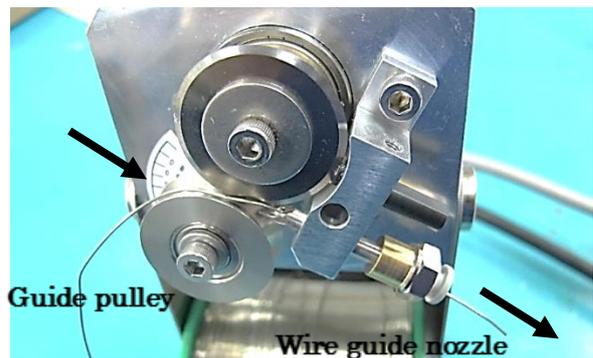
Remove the protection cover from the V-blade with a Phillips screwdriver.



- 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 of the nozzle correctly.

※ Do not touch the V-blade when working.

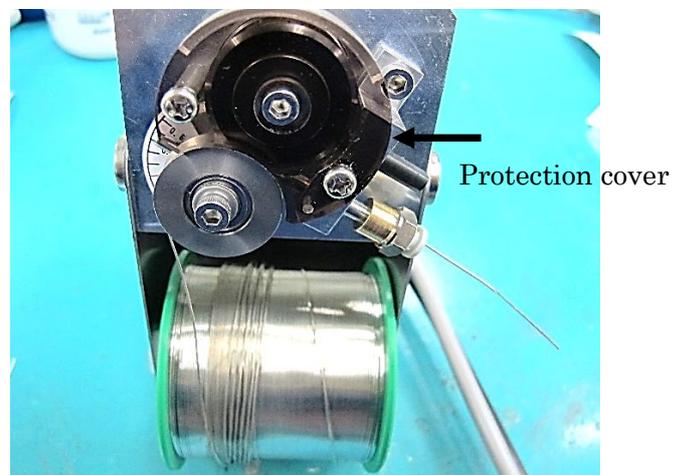


- 6) After confirm that the solder wire has been led correctly, stop pressing the foot switch.

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

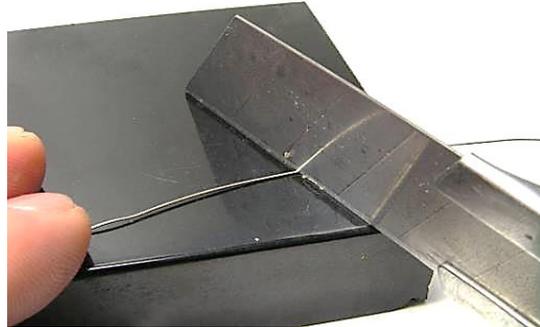
Put the protection cover back in place.

V-cut machine is ready to work.



(C) Depth of V-groove and adjustment

- 1) Cut a V-grooved solder wire vertically into 4 pieces by 2 cm intervals.
When cutting, place the V-grooved section to topside so that it will be easier to observe it..



- 2) Observe each cut section with a lupe whether it looks almost the same as below fig. "GOOD".



V-groove cut section

GOOD	TOO SHALLOW	TOO DEEP

※ 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 it after using with checking the solder ball scattering.

(D) Cleaning

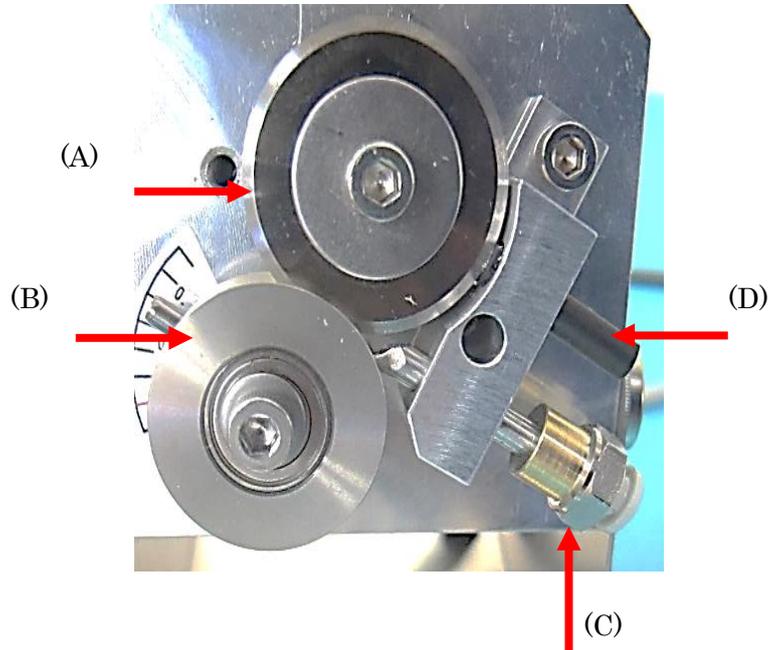
Make sure to turn off the power switch and pull out the plug when cleaning.

(A) V-blade

Remove the protection cover from the machine.

Remove solder residues or flux residues sticking to the blade

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



(B) Guide pulley

Remove solder residues or flux residues sticking to the groove. Those accumulated residues damage the V-blade. They reduce the performance of this machine, such as prevention of solder ball scattering and so on.

Do not touch the V-blade in cleaning.

(C) Wire guide nozzle

Remove the wire guide nozzle from the machine with a 1.5 mm hexangular wrench, and clean inside of the nozzle.

※ a 1.5 mm hexangular wrench is NOT contained in the unit.

We suggest to use an air blower since inner diameter of this nozzle is very thin.

Do not crack or bend the edge of the nozzle.

(D) Cleaner pin

Remove solder residues or flux residues sticking to the pin.

Do not touch the V-blade in cleaning.

5. Specifications

Input voltage	100 VAC (BON-8103) / 220 VAC (BON-8203)	
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	1175 g (body + power cable + footswitch)	
Power consumption	approx.. 6.5 W	
Power cable	L= 1.90 m 3pin plug cable L= 1.85 m BS1363 3pin plug cable (a fuse is built-in)	
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

We will ship our products after severe factory tests and inspections.

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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