

# Trouble?

If your electromagnetic chuck failed, refer to this page. Symptoms, possible causes and corrective actions of two typical Chuck Masters are presented here. Please follow these instructions prior to asking for repair or purchasing parts.



EH-V305A



ES-M305B

◇ **Residual holding power is large.**

- Turn the demagnetization adjust variable resistor to a point where the maximum demagnetization effect can be obtained.

◇ **Holding power is weak.**

- Set the excitation voltage adjust variable resistor at the maximum.
- If the holding power is still weak, the magnet being used may not be adequate for the shape, material or holding direction of workpieces.

※ **Note:** Since ES-M Series outputs a constant excitation voltage, it does not have the excitation voltage adjust variable resistor.

■ If the Chuck Master does not function properly, check it referring to the following table.

Symptom		Electromagnetic chuck does not hold workpiece.	Chuck Master does not output voltage.	Fuse blows.	Demagnetization is not performed.	Alarm indicator lamp lights up.	Check and Corrective Action
Power is not being supplied.	Cause	●	●				Check the power source.
Fuse has blown.		●	●				Remove the fuse from the fuse holder and replace it with a new one.
Power source is exceeding the rated voltage.				●		●	Check the power source voltage and use the power source at the rated voltage.
Output voltage adjust variable resistor has been turned CCW fully.		●	●				Adjust the output voltage again.
Wiring to electromagnetic chuck has been broken or shorted.		●			●	●	If measurement of resistance of electromagnetic chuck is $\infty \Omega$ , wiring broken. If $0 \Omega$ , wiring shorted.
Insulation of electromagnetic chuck and its wiring is poor (ground)		●		●	●	●	Disconnect the cord from the output terminal of Chuck Master and measure insulation resistance of electromagnetic chuck. OK when it is above $5 M\Omega$ . If below $5 M\Omega$ , check wiring. If insulation of electromagnetic chuck is poor, please request for repair.

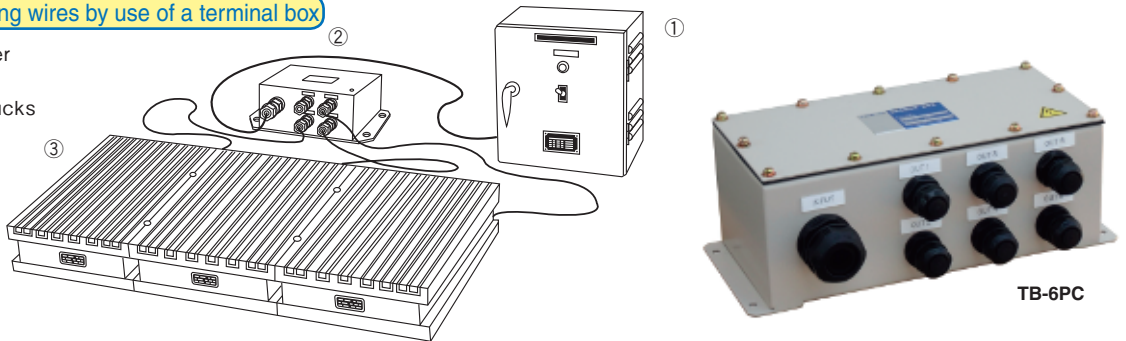
Symptom		Electromagnetic chuck does not hold workpiece.	Fuse blows.	Demagnetization is not performed.	Check and Corrective Action
Power is not being supplied.	Cause	●			Check the power source.
Fuse has blown.		●			Remove the fuse from the fuse holder and replace it with a new one.
Power source is exceeding the rated voltage.			●		Check the power source voltage and use the power source at the rated voltage.
Wiring between Chuck Master and electromagnetic chuck is defective or electromagnetic chuck is faulty.		●	●	●	Disconnect the cord from the output terminal of Chuck Master and measure insulation resistance of electromagnetic chuck. OK when it is above $5 M\Omega$ . If below $5 M\Omega$ , check wiring. If insulation of electromagnetic chuck is poor, please request for repair.

※ **Note:** • Prior to checking/investigating causes, be sure to turn off the power and disconnect the power cable from the Chuck Master.  
 • Measure the insulation resistance of the electromagnetic chuck with an insulation resistance tester. Be sure it is above  $5 M$  at a test voltage of  $500 VDC$ .  
 • If the electromagnetic chuck failed, place an appropriate warning (such as attaching a tag of "Out of Order. Use Prohibited!"). If the cause cannot be identified, please contact the manufacturer.

## Model TB TERMINAL BOX

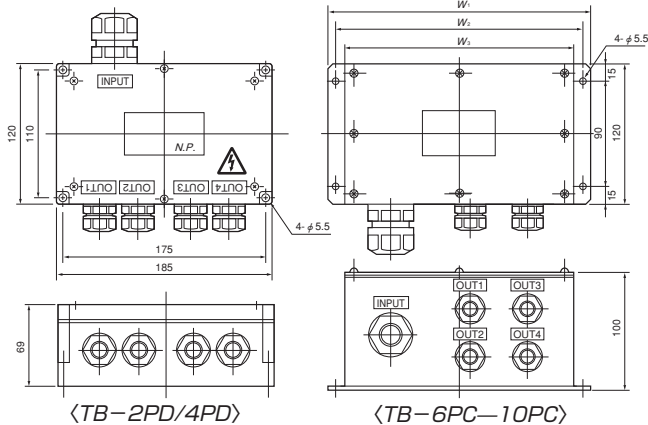
An example of integrating wires by use of a terminal box

- ① Electro Chuck Master
- ② Terminal box
- ③ Electromagnetic chucks connected



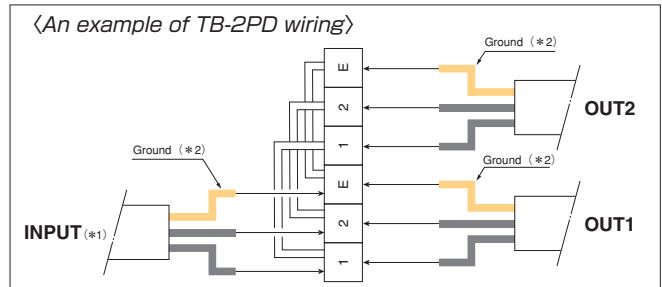
[Application]

When several electromagnetic chucks are connected and are to be controlled together by one unit of the Chuck Master, a terminal box is required that integrates wires from the chucks. Terminal boxes for 2 circuits up to 10 circuits are available.



※ The number of "OUT" in the above figures varies according to the number of branches.

Model	Input Capacity	No. of Outputs	Dimensions [mm (in)]		
			W <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>
TB- 2PD	30A	2	(See left-side figure)		
TB- 4PD		4			
TB- 6PC		6	280 (11.0)	266 (10.4)	250 (9.84)
TB- 8PC		8	330 (12.9)	316 (12.4)	300 (11.8)
TB-10PC		10	380 (14.9)	366 (14.4)	350 (13.7)



ELECTROMAGNETIC CHUCKS  
 CHUCK CONTROLLERS  
 PERMANENT ELECTROMAGNETIC CHUCKS  
 PERMANENT ELECTROMAGNETIC CHUCKS  
 BLOCKS FOR MC  
 VACUUM CHUCKS  
 PROMELTA\* SYSTEM  
 SINE BAR CHUCKS  
 BLOCKS, HOLDERS, MINI CHUCKS  
 HOLDING TOOLS  
 MEASURING TOOL HOLDERS  
 MAGNETIC HOLDERS  
 MAGNETIC TOOLS