

# 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-V205D



ES-M305B

### When the residual holding power is strong:

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

### When the 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:** ES-M Series provides constant output excitation voltage. It does not have a variable voltage output feature.

■ If the Chuck Master does not work properly, check it referring to the following table:

| EH-V205C/105C  |                                |                                       |             |                                   |                                 |  |
|--|--------------------------------|---------------------------------------|-------------|-----------------------------------|---------------------------------|--|
| Symptom  | Chuck does not hold workpiece. | Chuck Master does not output voltage. | Fuse blows. | Demagnetization is not performed. | Alarm indicator lamp lights up. | Check and Action   |
| Power is not being supplied.   | ●                              | ●                                     |             |                                   |                                 | 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.                                   | ●                              |                                       |             | ●                                 | ●                               | Wiring has been broken (wiring short circuit) if measurement of the resistance of the electromagnetic chuck is infinite.   |
| Insulation of electromagnetic chuck and its wiring is poor (short circuit, ground) | ●                              |                                       | ●           | ●                                 | ●                               | Disconnect the cord from the output terminal of the Chuck Master and measure the insulation resistance of the electromagnetic chuck. OK when it is above 5 MΩ. If below 5 MΩ, check wiring. If the insulation of the electromagnetic chuck is poor, please ask for repair. |

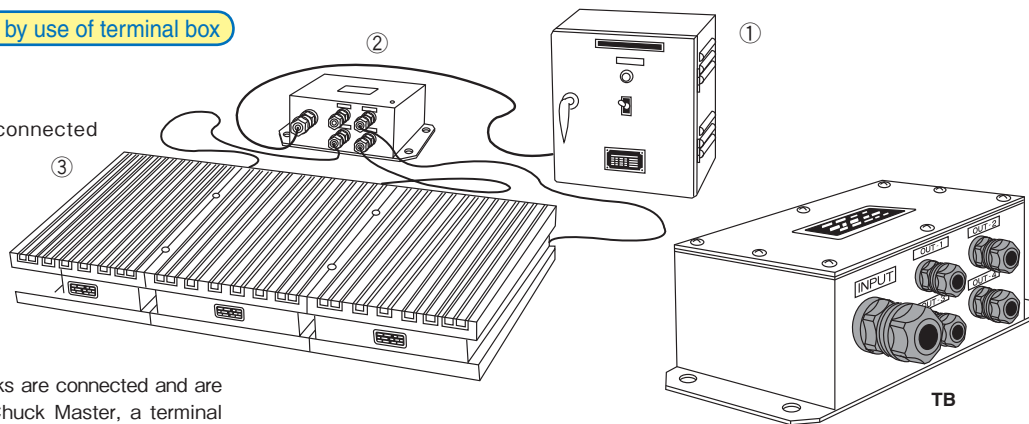
| ES-M305B/103B  |                                |             |                                   |  |  |  |
|--|--------------------------------|-------------|-----------------------------------|--|--|--|
| Symptom  | Chuck does not hold workpiece. | Fuse blows. | Demagnetization is not performed. | Check and Action   |  |  |
| Power is not being supplied.   | ●                              |             |                                   | 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 the Chuck Master and measure the insulation resistance of the electromagnetic chuck. OK when it is above 5 MΩ. If below 5 MΩ, check wiring. If the insulation of the electromagnetic chuck is poor, please ask 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 MΩ.  
 • If the electromagnetic chuck failed, place an appropriate display (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

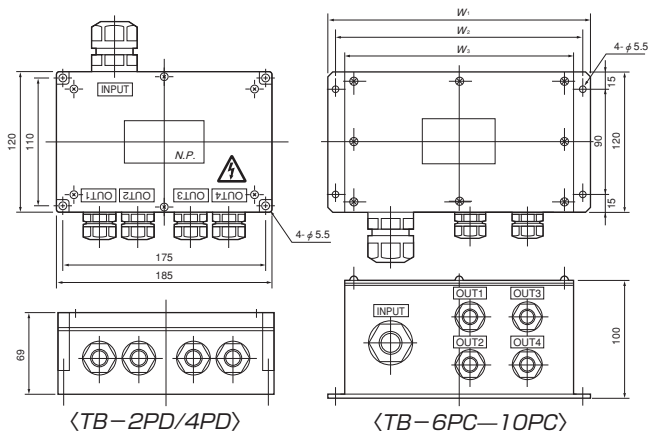
An example of integrating wires by use of terminal box

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



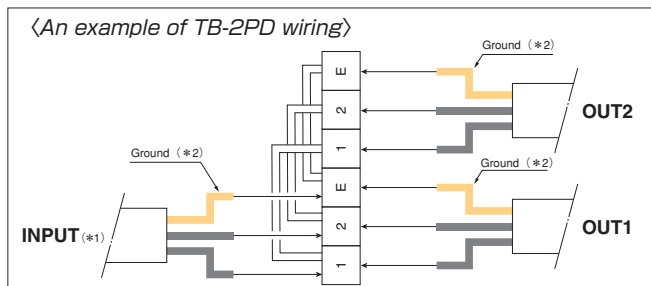
### [Application]

When several electromagnetic chucks are connected and are to be controlled together by one 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 | Outlet | Dimensions [mm (in)] |                |                |
|---------|----------------|--------|----------------------|----------------|----------------|
|         |                |        | W <sub>1</sub>       | W <sub>2</sub> | W <sub>3</sub> |
| TB- 2PD | 30A            | 2      | (See figure on left) |                |                |
| 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

MAGNETIC BLOCKS

WORKING TOOLS

MEASURING TOOL HOLDERS

MAGNETIC HOLDERS

MAGNETIC TOOLS