

No.102-SHF-S
Geer type Aging Oven

■ INSTRUCTION MANUAL ■

•~Please read this Instruction Manual prior to use.~

※CAUTION※

The images and pictures used in this instruction manual can be different from the testing machine depending on the specifications.



Thank you very much for purchasing YSS Testing Machine.

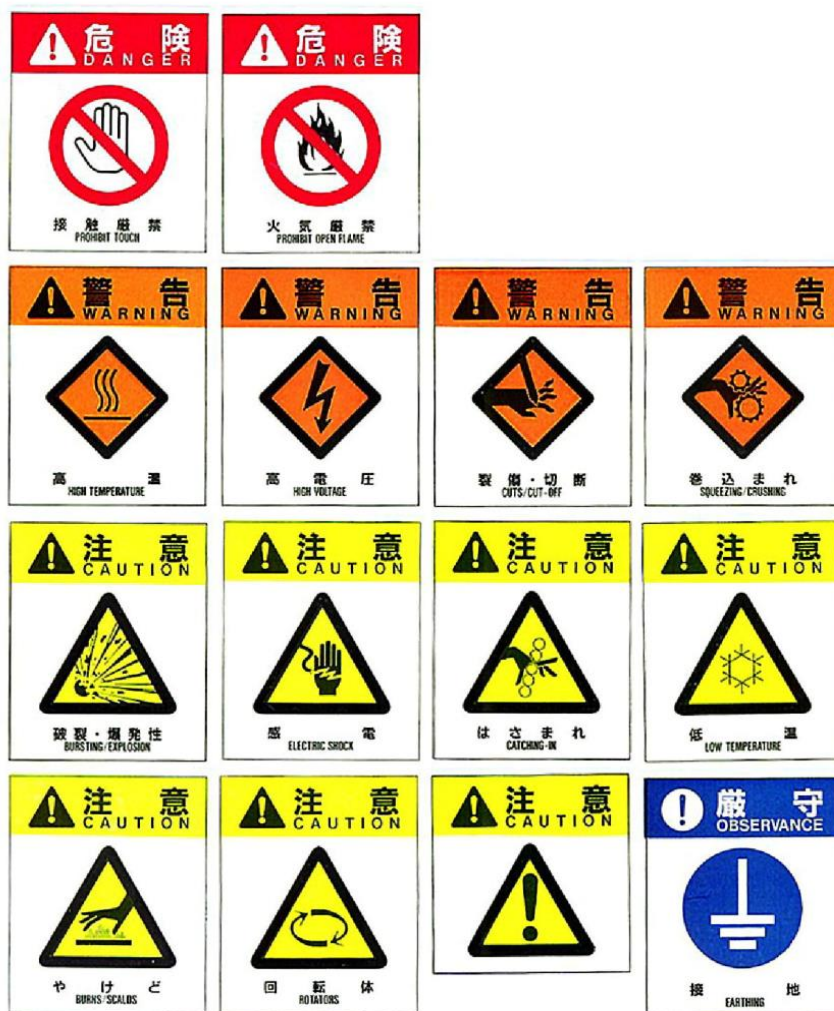
Please read this instruction manual before using to use the testing machine in the correct way.

Please follow the rules below in order to use the testing machine properly.

1. Read the suggestions before using.
2. Store the instruction manual with caution.
3. Please understand that we will not compensate, when the testing machine broke down which was used in a different way as it's written in the instruction manual.

The warning label used in the testing machine is chosen from the below.

- Danger Label It has high possibility to cause death or serious injure.
- Warning Label It has possibility to cause death or serious injure.
- Caution Label It has possibility to cause slight injure or heavy injure.



Notice

- Please take care of Burner when the operator is setting and removing the specimen.
- It gets very high temperature around the duct parts, so please use the handle to open and close the shutter.
- This is not an explosion proof machine.
- Please avoid setting a flammable liquid and the sample including the steam in the oven.
- Please do not put anything which is easy to burn, near this machine.
- Please connect to the grounding.

No.102-SHF-S Geer Type Aging Oven

~ Contents ~

Introduction

A

1. Purpose

A-1

2. Outline

A-1

Operation ~Machine~

B1

1. Prepare

B1-1

2. Device Explanation

B1-1

3. Operation Procedure

B1-2

Control ~Operation Panel~

B2

1. Operation Panel Explanation

B2-1

2. Operation

B2-1

Maintenance ~Maintenance ▪ Safety ▪ Check ~

C

1. Daily Check

C-1

2. Regular Check

C-1

3. Other

C-1

Note for Use

D

Please do not do only this!

D-1

Introduction

1.Purpose

This is based on JIS K7212:1999 and JIS B7757:1995. This test is to promote aging by heating a specimen in the air and evaluate the heat stability. This machine is an air circulation-style thermostatic oven.

2.Outline

The specimen inside the oven is kept at the set temperature and wind speed, during some hours to judge while testing.

1. Prepare

- Please install this machine in a room with a few temperature changes.

In addition, this machine ventilate the air in the oven , so in case it is placed inside the sealed room, temperature will rise.

Please be careful with the ventilation of the room.

- Please install the machine away from the wall.

The right side and back side needs to be kept away more than 15cm, left side needs to be kept away more than 50cm when setting.

[Note] Hot wind is drained from the air duct (upper part duct).

The duct part will get very hot, so please use handle when operating the shutter.

- Please connect to the power supply correctly.

[Note] Please connect grounding invariably.

2. Device Explanation

- Names of Each Part

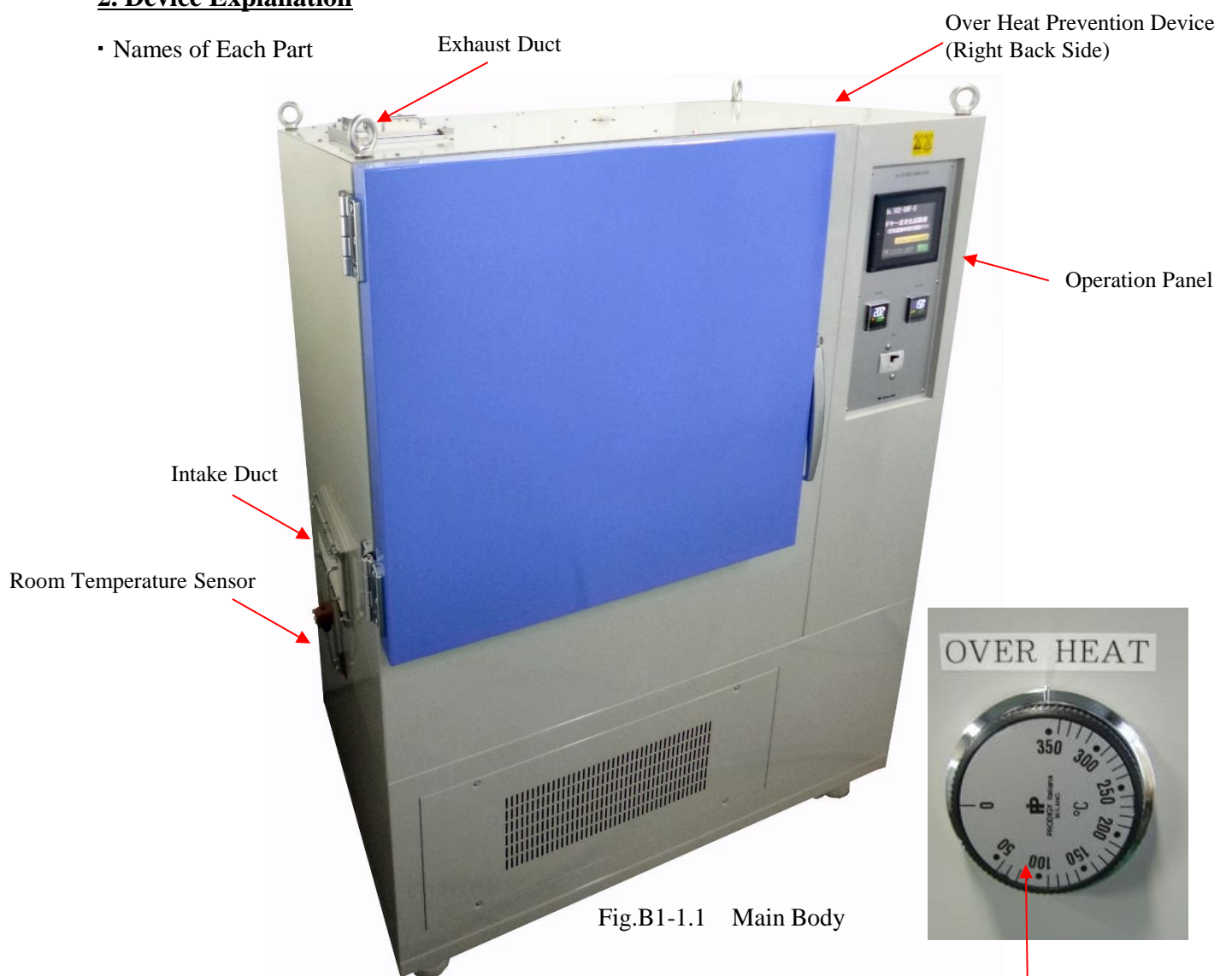
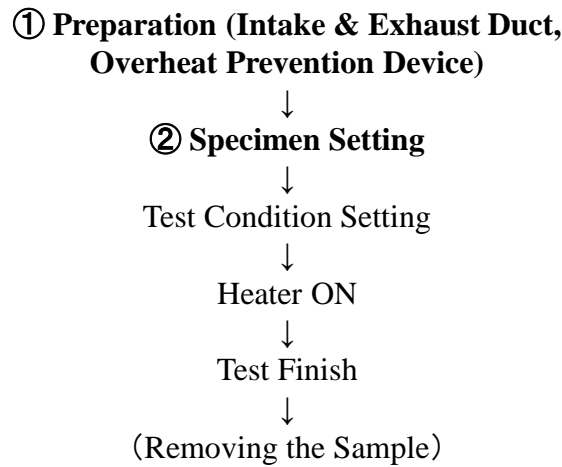


Fig.B1-1.1 Main Body

Fig.B1-1.2 Over Heat Prevention Device

3. Operation Procedure

1) Operating Flow



① and ② will be explained here. Please read about others in “Touch panel operation manual”.

2) Operation

· Intake & Exhaust Duct

The Operator can adjust the Air Exchange Rate by opening and closing the Duct Shutter by equipped scale.

· Overheat Prevention Device

The heater will be turned off, when the test temperature gets higher than this set temperature.

Please set this temperature, 30~50°C higher than the test temperature.

The fluid pressure type device with little trouble is used, and this circuit is different from the temperature controller in the Operation Panel for the safety.

• **Specimen Setting**

a) **Specimen Frame**



Fig.B1-3.1 Specimen Frame

Please fix the specimen using clips onto the frame in the oven.

Please do not hang too much specimens not to get touched with each other.

b) **Square Shape Shelf**



Fig.B1-3.2 Square Shape Shelf

The operator is able to use as a thermostatic oven by setting a Square Shape Shelf.

• Setting the Frame

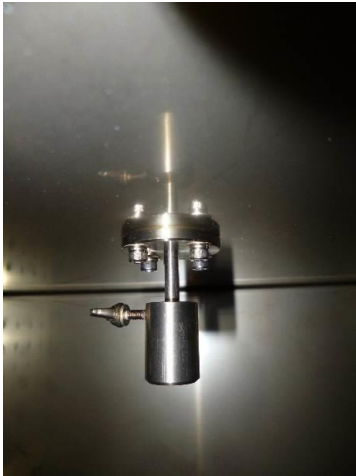


Fig.B1-4.1 Upper Connecting Part

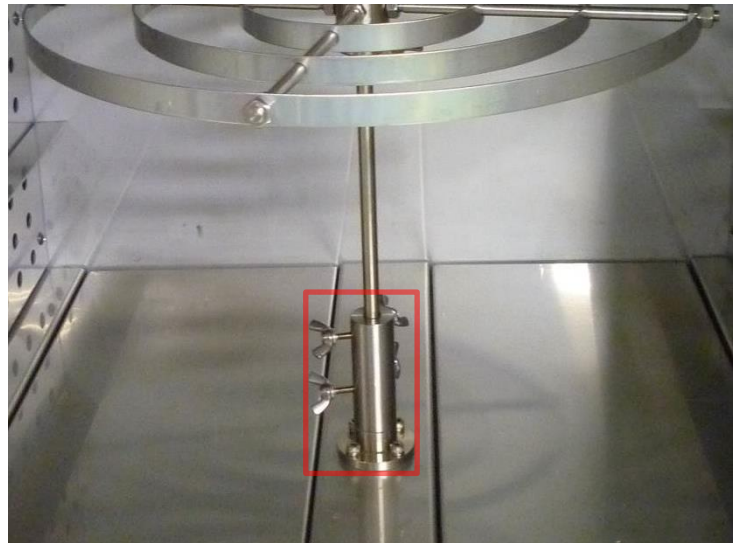


Fig.B1-4.2 Lower Connecting Part



Fig.B1-4.2 Rotation Axis



Fig.B1-4.4 Axis Lower Part of Specimen Frame

It has flat face like Fig.B1-4-4, which is a lower part.
Below is the procedure to attach the Specimen Frame inside the oven.

- ① Loosen the screw for Upper Connecting Part.
- ② Put in the Axis Lower Part of Specimen Frame into Lower Connecting Part.
- ③ Set the Specimen Frame above the Rotation Axis (Lower Part) while holding up the Upper Connecting Part.
- ④ Fix the Upper Connecting Part by tightening the screw after lowering the Upper Connecting Part and putting over the Axis Upper Part of Specimen Frame.
- ⑤ Put over the Lower Connecting Part to the Rotating Axis (Lower Part).
- ⑥ Connect by tightening the screw of Lower Connecting Part, when the Rotating Axis (Lower Part) and flat part of the Axis Lower Part of Specimen Frame is as to be pushed together.

When taking off the Specimen Frame, it is to be done in the opposite way as this.

1. Operation Panel Explanation

- Names of Each Part



Fig.B2-1.1

2. Operation

- Circuit Breaker [POWER]**

Operator is able to use , when it is turned ON.

- Touch Panel**

Please see the “Touch Panel Operation Manual”.

- Room Temperature**

It measures the Room Temperature around the machine.

- Test Temperature**

It measures inside the Oven.

1. Daily Check

Please do the Daily Check of the following matter in order to use this testing machine normally.

- Each Parts of the Operation Panel

Please check each switch, temperature controller, and Touch Panel in the Operation Panel.

- Door Packing

Please check whether there is a gap between the main body and door packing when the door is closed.

2. Regular Check

Please do the Regular Check of the following matter in order to use this testing machine normally.

- **Operation check of the Overheat Prevention Device (once/6 month)**

When the heater is ON and the Overheat Prevention Device decreases little by little, check whether the heater turns Off or not.

- **Door Packing (once/6 month)**

When the operator closes a door, please confirm whether there is no gap between the main body and the door packing.

Please confirm whether the door packing does not have a wound or a crack.

3. Other

It is recommend for you to have an annual calibration to have you use this machine normally for a long time.

Please do not do only this!

Please do not do what is written on the below.

- The operator is to turn off the heater when the temperature in the oven is lower than 50°C. In case the temperature is more than 100°C, turn the heater ON and decrease the set value to 50°C.
※If the operator stops the fan, when the temperature is more than 100°C, it might cause the burn.
- In side the oven, there is a edge of temperature sensor. Please be careful not to injure it at the time of the setting specimen and attaching the specimen frame.

For Questions Regarding the Item, Please contact Us at
YASUDA SEIKI SEISAKUSHO, LTD.

【Head Office】

121 - 1 SHIMOYAMAGUCHI, YAMAGUCHI - CHO,
NISHINOMIYA - CITY, HYOGO
651 - 1412 JAPAN
TEL: +81 - 78 - 907 - 1511
FAX: +81 - 78 - 907 - 1522

【Factory】

121 - 1 SHIMOYAMAGUCHI, YAMAGUCHI - CHO,
NISHINOMIYA - CITY, HYOGO
651 - 1412 JAPAN
TEL: +81 - 78 - 904 - 1964
FAX: +81 - 78 - 904 - 2890

【Tokyo Branch】

9 - 14 - 101, 3 - CHOME, ITABASHI, ITABASHIKU,
TOKYO
173 - 0004 JAPAN
TEL: +81 - 3 - 3579 - 8995
FAX: +81 - 3 - 3579 - 8997