

## ABNORMAL TEST RESULT

OF MODEL MGS612□□

1. Did Cheese Cloth or Paper Glow?

No.

2. Did Ground Fuse Open?

No.

3. Dielectric breakdown?

No.

4. Other Results?

See the following pages .

( FMEA : 2/ 9 ~ 8/ 9)

( Abnormal Test Result: 9/ 9 ~ 9/ 9)

There was no emission of flame, molten metal, ignition of cheesecloth, dielectric breakdown, opening of the ground fuse, other indication of a shock or fire hazard.

## F M E A

| Component | Mode  | Comment                                 | Output Voltage (V) |
|-----------|-------|---|--------------------|
| C11       | Open  | Normal operation.                       |                    |
|           | Short | No Hazard.                              | AVR1:0             |
| C12       | Open  | No Hazard.                              | AVR1:0             |
|           | Short | External Fuse opened, No hazard.        | AVR1:0             |
| C13       | Open  | Normal operation.                       |                    |
|           | Short | Normal operation.                       |                    |
| C21       | Open  | Normal operation.                       |                    |
|           | Short | Normal operation.                       |                    |
| C22       | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           | Short | External Fuse opened, No hazard.        | AVR1:0             |
| C31       | Open  | Normal operation.                       |                    |
|           | Short | External Fuse opened, No hazard.        | AVR1:0             |
| C32       | Open  | Normal operation.                       |                    |
|           | Short | No Hazard.                              | AVR1:0             |
| C33       | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           | Short | No Hazard.                              | AVR1:0             |
| C34       | Open  | Normal operation.                       |                    |
|           | Short | Normal operation.                       |                    |
| C41       | Open  | Normal operation.                       |                    |
|           | Short | External Fuse opened, No hazard.        | AVR1:0             |
| C42       | Open  | Normal operation.                       |                    |
|           | Short | See 9 Page.                             |                    |
| C51       | Open  | Normal operation.                       |                    |
|           | Short | See 9 Page.                             |                    |

## F M E A

| Component      | Mode  | Comment                                 | Output Voltage (V) |
|----------------|-------|---|--------------------|
| C52            | Open  | Normal operation.                       |                    |
|                | Short | See 9 Page.                             |                    |
| C53            | Open  | Normal operation.                       |                    |
|                | Short | See 9 Page.                             |                    |
| C71            | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|                | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| C72            | Open  | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|                | Short | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| C101           | Open  | Normal operation.                       |                    |
|                | Short | See 9 Page.                             |                    |
| C102           | Open  | Normal operation.                       |                    |
|                | Short | See 9 Page.                             |                    |
| C111           | Open  | Normal operation.                       |                    |
|                | Short | See 8 Page.                             |                    |
| C112           | Open  | Normal operation.                       |                    |
|                | Short | External Fuse opened, No hazard.        | AVR1:0             |
| C201 (Only 12) | Open  | Normal operation.                       |                    |
|                | Short | See 9 Page.                             |                    |
| C211           | Open  | Normal operation.                       |                    |
|                | Short | External Fuse opened, No hazard.        | AVR1:0             |
| D11            | Open  | Normal operation.                       |                    |
|                | Short | Normal operation.                       |                    |
| D21            | Open  | Normal operation.                       |                    |
|                | Short | External Fuse opened, No hazard.        | AVR1:0             |

## F M E A

| Component | Mode  |     | Comment                                 | Output Voltage (V) |
|-----------|-------|-----|---|--------------------|
| D31       | Open  |     | Normal operation.                       |                    |
|           | Short |     | External Fuse opened, No hazard.        | AVR1:0             |
| D201      | Open  |     | Normal operation.                       |                    |
|           | Short |     | External Fuse opened, No hazard.        | AVR1:0             |
| D202      | Open  |     | Normal operation.                       |                    |
|           | Short |     | External Fuse opened, No hazard.        | AVR1:0             |
| IC11      | Open  | 1   | No Hazard.                              | AVR1:0             |
|           |       | 2   | See 9 Page.                             |                    |
|           |       | 3   | No Hazard.                              | AVR1:0             |
|           |       | 4   | Normal operation.                       |                    |
|           |       | 5   | No Hazard.                              | AVR1:0             |
|           |       | 6   | No Hazard.                              | AVR1:0             |
|           |       | 7   | External Fuse opened, No hazard.        | AVR1:0             |
|           |       | 8   | No Hazard.                              | AVR1:0             |
|           | Short | 1-2 | External Fuse opened, No hazard.        | AVR1:0             |
|           |       | 2-3 | Normal operation.                       |                    |
|           |       | 3-4 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | 5-6 | No Hazard.                              | AVR1:0             |
|           |       | 6-7 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | 7-8 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| IC12      | Open  | 1   | External Fuse opened, No hazard.        | AVR1:0             |
|           |       | 2   | Normal operation.                       |                    |
|           |       | 3   | External Fuse opened, No hazard.        | AVR1:0             |
|           |       | 4   | Normal operation.                       |                    |

## F M E A

| Component | Mode  |      | Comment                          | Output Voltage (V) |
|-----------|-------|------|----------------------------------|--------------------|
| IC12      | Open  | 5    | See 9 Page.                      |                    |
|           |       | 6    | No Hazard.                       | AVR1:0             |
|           | Short | 1-2  | External Fuse opened, No hazard. | AVR1:0             |
|           |       | 2-3  | No Hazard.                       | AVR1:0             |
|           |       | 4-5  | External Fuse opened, No hazard. | AVR1:0             |
|           |       | 5-6  | No Hazard.                       | AVR1:0             |
|           |       |      |                                  |                    |
| IC71      | Open  | 1    | No Hazard.                       | AVR1:0             |
|           |       | 3    | No Hazard.                       | AVR1:0             |
|           |       | 6    | No Hazard.                       | AVR1:0             |
| L11       | Open  |      | No Hazard.                       | AVR1:0             |
|           | Short |      | Normal operation.                |                    |
| L51       | Open  |      | No Hazard.                       | AVR1:0             |
|           | Short |      | Normal operation.                |                    |
| PC11      | Open  | A, K | No Hazard.                       | AVR1:0             |
|           |       | C, E | No Hazard.                       | AVR1:0             |
|           | Short | A-K  | No Hazard.                       | AVR1:0             |
|           |       | C-E  | No Hazard.                       | AVR1:0             |
| PTH31     | Open  |      | Normal operation.                |                    |
|           | Short |      | Normal operation.                |                    |
| R11       | Open  |      | No Hazard.                       | AVR1:0             |
| R12       | Open  |      | No Hazard.                       | AVR1:0             |
| R13       | Open  |      | Normal operation.                |                    |
| R14       | Open  |      | External Fuse opened, No hazard. | AVR1:0             |
| R15       | Open  |      | External Fuse opened, No hazard. | AVR1:0             |

## F M E A

| Component | Mode |   | Comment                                 | Output Voltage (V) |
|-----------|------|---|---|--------------------|
| R16       | Open |   | Normal operation.                       |                    |
| R17       | Open |   | No Hazard.                              | AVR1:0             |
| R18       | Open |   | Normal operation.                       |                    |
| R19       | Open |   | Normal operation.                       |                    |
| R21       | Open |   | Normal operation.                       |                    |
| R22       | Open |   | Normal operation.                       |                    |
| R24       | Open |   | No Hazard.                              | AVR1:0             |
| R31       | Open |   | External Fuse opened, No hazard.        | AVR1:0             |
| R33       | Open |   | Normal operation.                       |                    |
| R41       | Open |   | Normal operation.                       |                    |
| R42       | Open |   | No Hazard.                              | AVR1:0             |
| R43       | Open |   | Normal operation.                       |                    |
| R71       | Open |   | No Hazard.                              | AVR1:0             |
| R72       | Open |   | No Hazard.                              | AVR1:0             |
| R73       | Open |   | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R74       | Open |   | No Hazard.                              | AVR1:0             |
| R75       | Open |   | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R76       | Open |   | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| R77       | Open |   | Normal operation.                       |                    |
| R111      | Open |   | Normal operation.                       |                    |
| R112      | Open |   | Normal operation.                       |                    |
| SS41      | Open | 1 | No Hazard.                              | AVR1:0             |
|           |      | 2 | Normal operation.                       |                    |
|           |      | 3 | No Hazard.                              | AVR1:0             |

## F M E A

| Component | Mode  |     | Comment                                 | Output Voltage (V) |
|-----------|-------|-----|---|--------------------|
| SS41      | Short | 1-2 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | 1-3 | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
|           |       | 2-3 | Normal operation.                       |                    |
| TR11      | Open  | D   | See 9 Page.                             |                    |
|           |       | S   | See 9 Page.                             |                    |
|           |       | G   | See 9 Page.                             |                    |
|           | Short | D-S | See 9 Page.                             |                    |
|           |       | S-G | See 9 Page.                             |                    |
|           |       | G-D | See 9 Page.                             |                    |
| TR12      | Open  | 1   | Normal operation.                       |                    |
|           |       | 2   | Normal operation.                       |                    |
|           |       | 3   | Normal operation.                       |                    |
|           |       | 4   | Normal operation.                       |                    |
|           |       | 5   | Normal operation.                       |                    |
|           |       | 6   | Normal operation.                       |                    |
|           | Short | 1-2 | Normal operation.                       |                    |
|           |       | 2-3 | Normal operation.                       |                    |
|           |       | 4-5 | Normal operation.                       |                    |
|           |       | 5-6 | External Fuse opened, No hazard.        | AVR1:0             |
| TR13      | Open  | C   | Normal operation.                       |                    |
|           |       | E   | Normal operation.                       |                    |
|           |       | B   | Normal operation.                       |                    |
|           | Short | C-E | No Hazard.                              | AVR1:0             |
|           |       | E-B | Normal operation.                       |                    |

## F M E A

| Component | Mode  |     | Comment                                 | Output Voltage (V) |
|-----------|-------|-----|---|--------------------|
| TR13      | Short | B-C | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| TR101     | Open  | D   | Normal operation.                       |                    |
|           |       | S   | Normal operation.                       |                    |
|           |       | G   | No Hazard.                              |                    |
|           | Short | D-S | Normal operation.                       |                    |
|           |       | S-G | Normal operation.                       |                    |
|           |       | G-D | No Hazard.                              |                    |
| ZD11      | Open  |     | Normal operation.                       |                    |
|           | Short |     | Output voltage decreased.<br>No hazard. | AVR1:decreased     |
| ZD21      | Open  |     | No Hazard.                              | AVR1:0             |
|           | Short |     | Normal operation.                       |                    |

## ABNORMAL TEST RESULT

| Component | Mode  |     | Comment                          | Output Voltage (V) |
|-----------|-------|-----|----------------------------------|--------------------|
| C42       | Short |     | External Fuse opened, No hazard. | AVR1:0             |
| C51       | Short |     | No Hazard.                       | AVR1:0             |
| C52       | Short |     | No Hazard.                       | AVR1:0             |
| C53       | Short |     | No Hazard.                       | AVR1:0             |
| C101      | Short |     | External Fuse opened, No hazard. | AVR1:0             |
| C102      | Short |     | External Fuse opened, No hazard. | AVR1:0             |
| C201      | Short |     | No Hazard.                       | AVR1:0             |
| IC11      | Open  | 2   | External Fuse opened, No hazard. | AVR1:0             |
| IC12      | Open  | 5   | External Fuse opened, No hazard. | AVR1:0             |
| TR11      | Open  | D   | No Hazard.                       | AVR1:0             |
|           |       | S   | No Hazard.                       | AVR1:0             |
|           |       | G   | External Fuse opened, No hazard. | AVR1:0             |
|           | Short | D-S | External Fuse opened, No hazard. | AVR1:0             |
|           |       | S-G | No Hazard.                       | AVR1:0             |
|           |       | G-D | External Fuse opened, No hazard. | AVR1:0             |