Turbo 7 MHz for the Sony HB-G900AP MSX-2 Computer

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⚠ **Warning:**

The most important part in the computer is the printed circuit board (PCB). Parts can be replaced, but not the PCB. Do not try to unsolder the parts, but cut them loose and then remove the solder pins. The use of IC sockets is recommended.

Upgrade package contents:

- Completely pre-assembled expansion board
- 40-pin IC socket
- Switch with led
- Resistor array (2K2)
- Insulating material (shrink tubing)
- Thin wire

The Sony HB-G900AP MSX-2 computer.
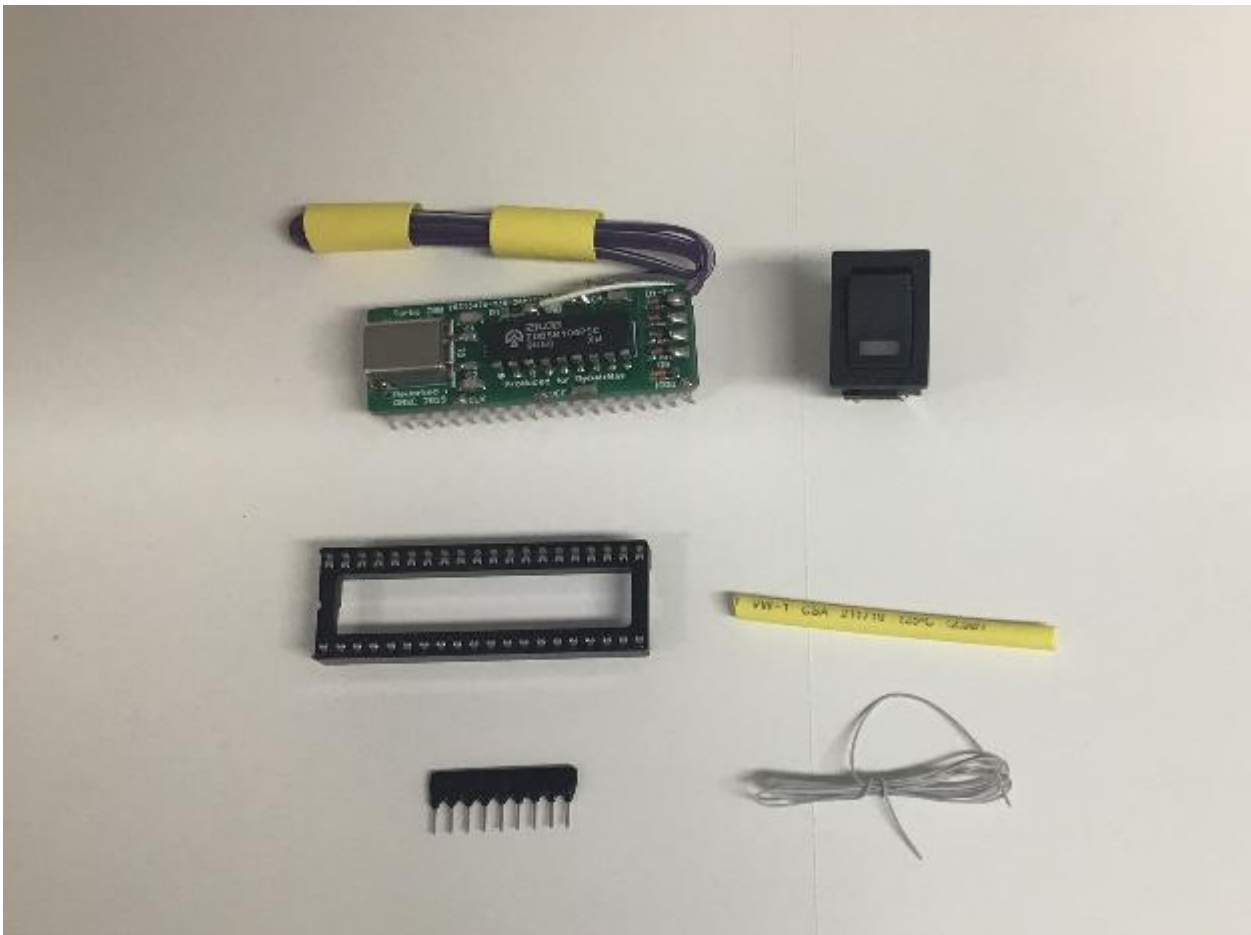
The contents of the upgrade package.

Installation:

- Remove the cover (4 screws).
- Remove the disk drive(s) (2/4 screws and 2/3 cables).
- Remove the video PCB (4 screws and 5 cables).
- Remove the bottom plate by loosening the screws slightly, after which it can be slide backwards (9 screws).
- Remove the support beam from the disk drive(s) (2 screws).
- Remove IC138 (Z80); this is placed in an IC socket.
- Remove the resistor array FB101 (at the keyboard connection).
- Solder the new resistor array (2K2) in place of FB101 (note pin 1).
- Place the Turbo 7 MHz expansion board in the IC socket.
- Make a connection between IC133 (74LS08) pin 9 and one of the free diodes on the Turbo 7 MHz expansion board.
- The support beam needs to be adjusted so that the Turbo 7 MHz expansion board fits underneath.
- Mount the switch with LED in the front, the top cover or another place of your choice.
- The red or white wire is the positive side of the LED.
- The brown or black wire is the negative side of the LED.
- The orange/yellow or gray/purple wire pair is for the switch.
- Insulate the solders with a piece of shrink tubing.
- The 40-pin IC socket is not used.

Testing the Turbo 7 MHz:

The operation of the Turbo 7 MHz can be tested with the following BASIC test program:

```
10 FOR I=1 TO 100
20 FOR J=1 TO 100: PRINT J;: NEXT J:  NEXT I
```