S320-12 power supply kit installation guide

Bill of materials

Qty	Item
1	S320-12 power supply installed in 5 ¼" adapter tray, screws
1	Electrical harness
1	Relay Switch
1	A/C socket adapter, stainless steel cover plate, screws
1	A/C cord
1	80mm fan guard with (8) snap rivets

Preamble

This kit has been designed to facilitate installation with as little modifications to the case as possible. It is however meant for advanced users, well versed in installing computer components.

Specific tools needed to complete the installation:

- Power drill
- 1 ¼" (32mm) Bi-Metal hole saw to drill hole for A/C socket
- 1/8" (3.0 mm) drill bit for A/C socket cover mounting holes
- **Optional**: 3 ¼" Bi-Metal hole saw, or jigsaw to drill a 80mm blowhole above the power supply fan exhaust; only necessary if chassis does not have a blowhole already.
- 11/64" (4.5mm) drill bit for fan and/or fan guard holes using the provided snap-rivets.

General Rules:

- Always work on a bare case, removing side panels, front bezel, and top panel, with no power supply installed.
- Never work with electricity connected to the computer while work is in progress.
- Strip the case completely. Since you will be making holes in the case, metal debris could be flying off into your components, and a bare chassis will be easier to clean-up.

1. S320-12 Power supply installation
   Install the power supply in the uppermost 5 ¼" bay slot as shown in figure 1. Use the provided screws to secure tray to the chassis. It is essential to respect this requirement so as to provide adequate ventilation to the power supply.

Figure 1

2. **Relay Switch Installation**

- ❑ Find a suitable placement to drill a hole for the A/C socket adapter. Leave sufficient room under or above the hole to install the relay switch circuit board. A ¼" minimum clearance will be required between the circuit board and the edge of the hole.
- ❑ Make a 1.25" (32mm) diameter hole in the case, using a 1 ¼" Bi-Metal hole saw. Deburr the edges of the hole with sand paper.
- ❑ Position and center the mounting plate over the hole as a template to mark the locations of the plate's mounting screws. Drill 2 holes of .125" diameter for the mounting screws.
- ❑ Install the mounting plate using the screws provided with your kit.
- ❑ Insert the A/C socket inside the mounting plate.

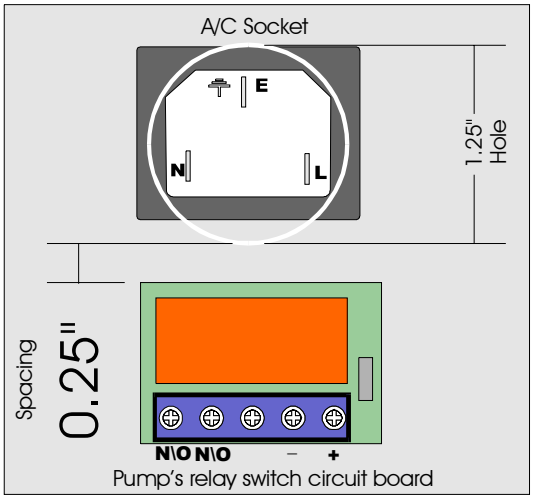


Figure 2

Proceed with electrical connections as shown in fig.3 & 4

- ❑ Black L wire from A/C socket to N\O (normally opened) position on relay switch
- ❑ Black L wire from S320-12 power supply to N\O position on relay switch
- ❑ White N wire from S320-12 power supply to N position on A/C socket
- ❑ Green Ground wire from S320-12 power supply to Ground on A/C socket
- ❑ **The 4 pins Molex connector will then connect to the computer power supply (Imperative, or the relay will NOT work).**

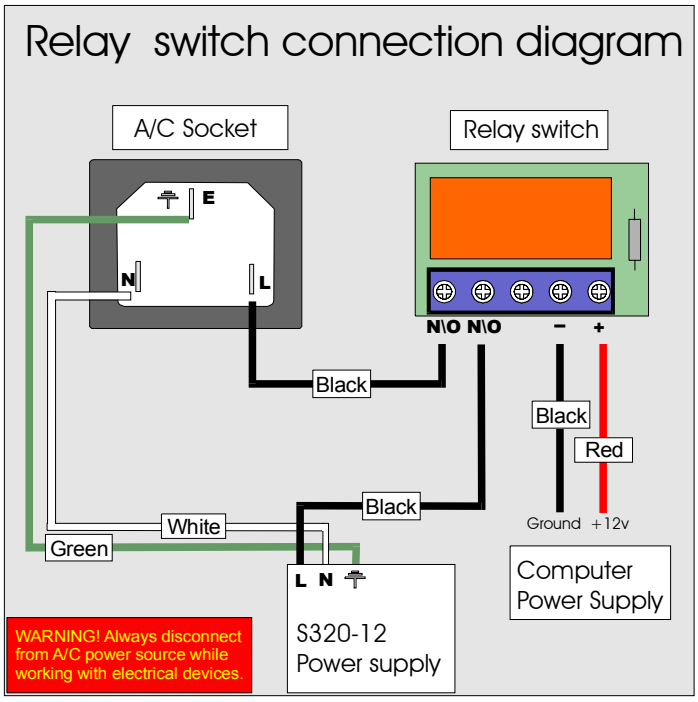


Figure 3

The relay switch and A/C socket adapter installed

Figure 4

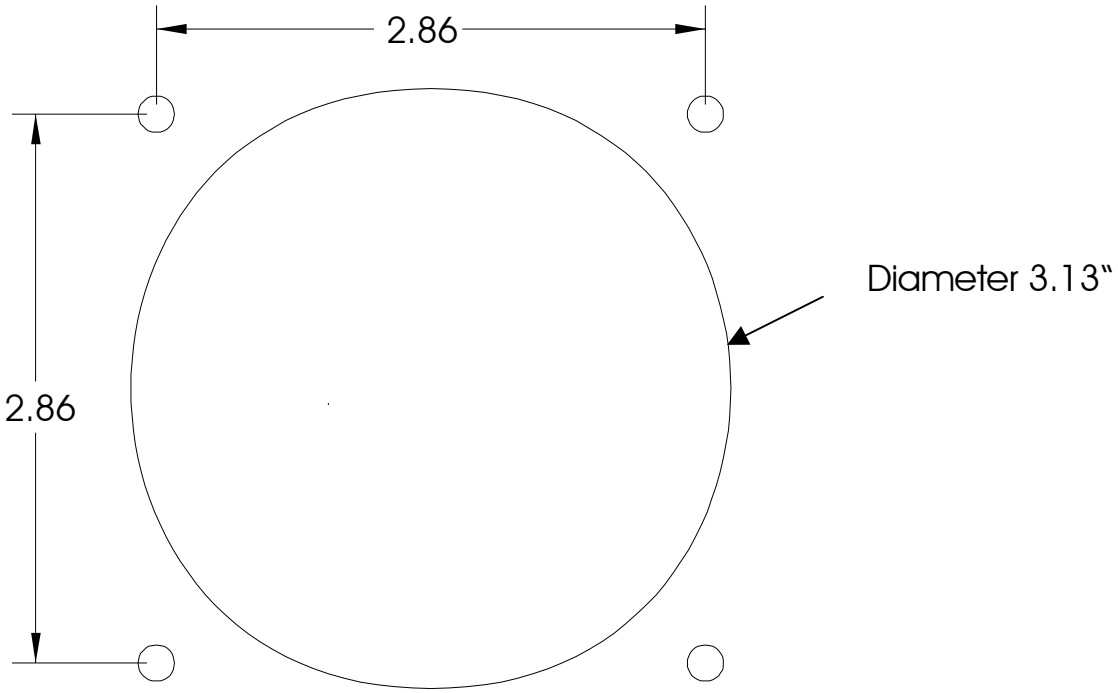
Once the installation is complete, do not forget to connect the provided A/C cord to a wall socket!

3. Power supply ventilation

The following information is optional, and subject to the existing ventilation of your particular chassis. Please disregard, if your computer chassis already features a blowhole, with or without fan.

The S320-12 power supply features a built-in temperature controlled fan, which activates as needed. Since the power supply is being installed in a confined area, and in order to reduce a heat build-up inside the chassis, it is essential to optimize exhaust of the hot air that the power-supply generates. A blowhole will accomplish just this, and should be located as close to, or preferably directly above the power supply fan exhaust vent. Ideally, a low CFM 80mm fan could also be added, if space permits. Such solution will typically greatly reduce the activity of the power supply built-in cooling fan, resulting in lower operating temperature both inside the power supply and the computer. If such a fan is installed, it should be extracting air from the case (blowing towards the outside).

The template below provides holes dimensions for such 80mm fan blowhole. A fan guard and snap rivets are provided with the kit to complete the installation.



Blowhole template (schematic above is on scale, and may be used to mark the hole locations)

Example of installation with a 80mm fan mounted externally