Parts of a kiln

When you call for help please have the following information:

- Brand of kiln
- Model number, serial number
- Electrical specifications (volts, amps)

It is also helpful to know

- How many switches and what kind (infinite/three way)
- How many elements (single wrap/double wrap)

Other useful terminology:

Kiln sitter:
Consists of tube assembly (cone supports, sensing rod, activating plunger, strike plate, rod claw) which holds a pyrometric cone on the inside chamber of the kiln. During the firing the cone deforms to the point where the rod claw releases the strike plate and the power is interrupted, thereby turning the kiln off.

Kiln timer:
A secondary method of ensuring the kiln will shut off in a timely fashion. Usually set 30-60 minutes longer than the anticipated length of the firing.

Tube assembly:
Consists of an insulating porcelain tube which houses a sensing rod and penetrates the wall of the kiln. On the exterior of the kiln the sensing rod terminates with a rod claw. On the interior of the kiln the sensing rod terminates level with a pair of cone supports. The entire mechanism allows a small (junior) pyrometric cone to be supported inside the kiln during a firing. The cone deforms with time and temperature (heat work) and allows the rod claw to release the strike plate and interrupt the power supply.

Sensing rod:
How long is yours 8/9/12”?

Pyrometric cone:
Pyrometric cones or just “cones” are composed of ceramic material that is designed to bend or deform with heat and time.
Junior (small) cones rest on the cone supports inside the kiln. The cone deforms with time and temperature (heat work) and allows the rod claw to release the strike plate, interrupt the power supply and shut the kiln off.
Standard (large or witness) cones are positioned in the kiln usually in front of a peep hole for monitoring the progress of a firing. They are inserted upright in reusable cone holders or cone plaques. It is possible to view the cone deforming with time and temperature (heat work).

Cone plaque, cone holder:
Holds standard/large/witness cones at the optimum angle for proper deformation. May be hand made from clay and vermiculite or ready made from ceramic or wire.