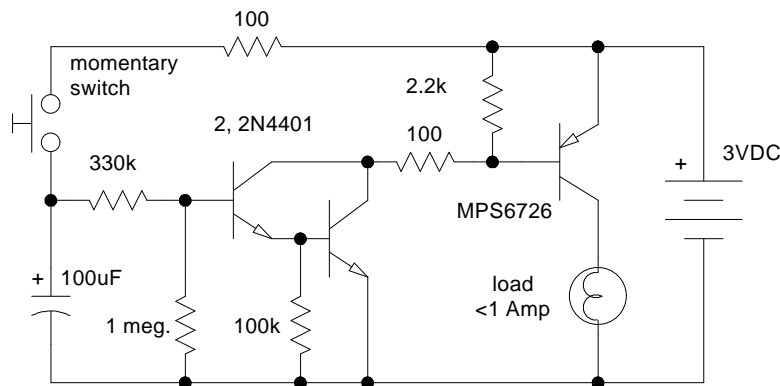


Battery Saver

The Battery Saver is designed to prolong the battery life in small toys and devices by disconnecting the load after a preset period. The two versions shown switch up to one amp and give about one minute of operation before shutting off.

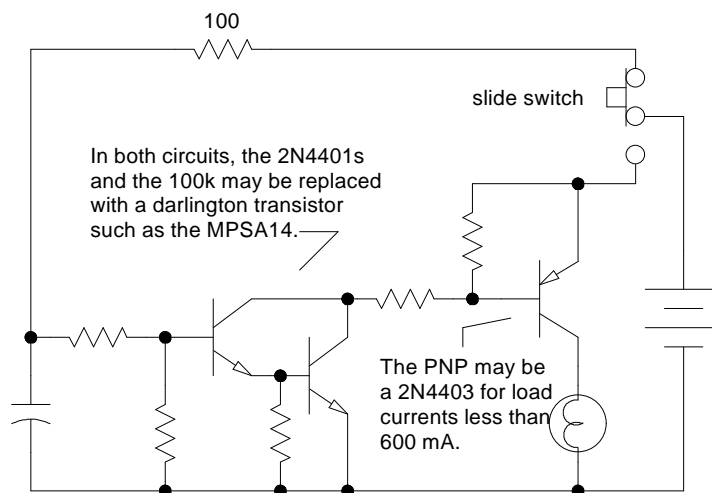
Pushbutton Version

When the switch is pressed, the capacitor charges and the full battery voltage is applied to the load. The capacitor slowly discharges and the circuit turns off when the voltage reaches about 1 volt.



Slide-Switch Version

When the slide switch is in the "off" position, the capacitor is charged to the battery voltage. When the switch is turned "on" the capacitor begins to discharge.



Circuit construction is not critical and point-to-point wiring on a small piece of perf-board is fine.

Some battery-powered devices have very little space to hide the circuit so a little planning can save much rework. Notice how the capacitor was moved to lower the profile for this dollhouse installation.

The finished installation shows no sign of the modification and now the lights come on when the little ones flip the switch. Before the installation of the circuit, the batteries were perpetually dead!



The battery saver may be built into many flashlights, remote control toys, battery-powered instruments, or even line-powered devices needing an automatic power-down mode. Timed, push-button lamps are useful outdoors to light walkways, faucets, keyholes, toolsheds or even the mailbox! Indoors, a temporary lamp is useful under sinks, in poorly-lit storage areas, staircases or in the attic. Alkaline batteries have a very long shelf-life so these lamps will be ready when needed.