

SSG Equivalent Circuits and Basic Operation (M.R 01/21/07)

We acknowledge John Bedini as the inventor and provider of the SSG circuit. The equivalent circuits are provided to aid in the understanding of its operation.

Notes

- 1- The inductor polarity during T_{ON} and T_{OFF}
- 2- Observe the energy flow: what goes in and what comes out
- 3- Observe the isolation of the primary battery during the discharge cycle
- 4- Observe how the switching action and the inductor ability to reverse its polarity on the fly are the pillars of this technology.

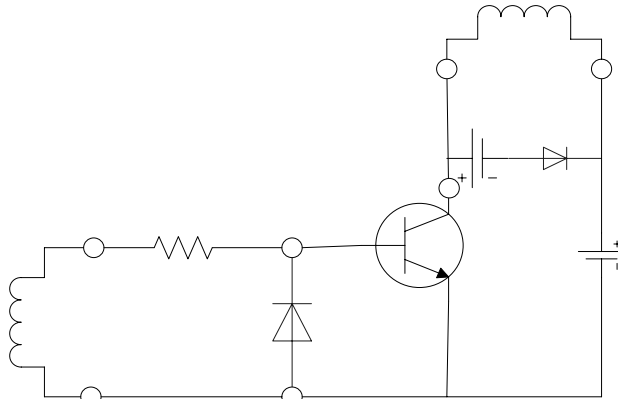


Fig 1. A redrawn SSG circuit

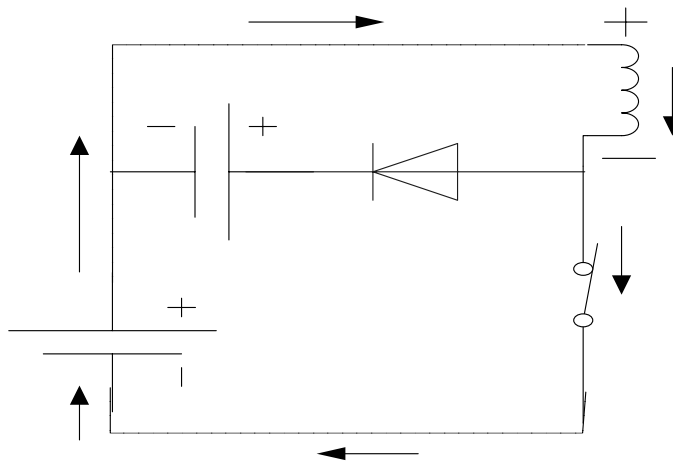


Fig 2. The equivalent SSG circuit during inductor charging for T_{ON}

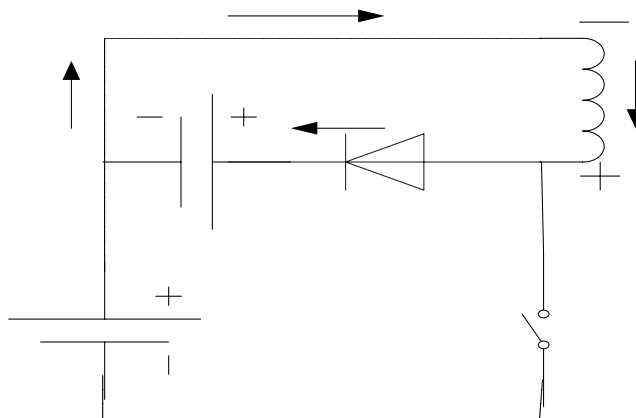


Fig 3. The equivalent SSG circuit during inductor discharging for T_{OFF}