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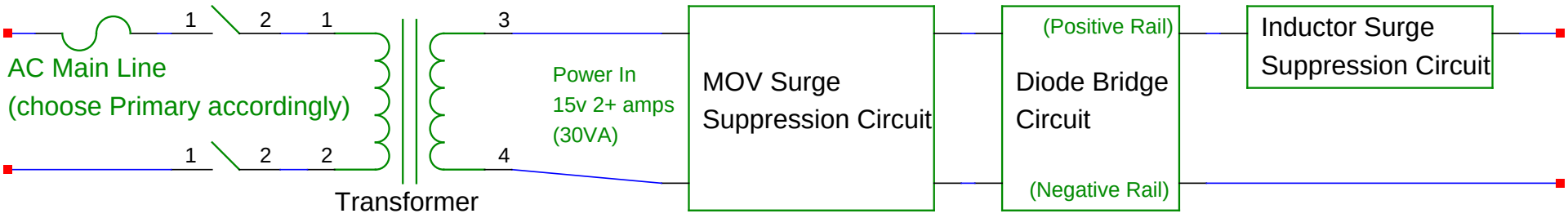
Basic Starting Unregulated Power Supply Circuit



This circuit offers basic surge suppression and DC rectification.
This setup also has basic protection if the power company for "AC Main Line" just happens to "go stupid".
Since "Mains" are being used here, proper high voltage protection and enclosures must be used.
The "Mains Transformer" may be substituted for a floor frog or wall wart accordingly.
Choose the primary transformer winding accordingly (120/220v typically).
The DPST (not DPDT, no unconnected live terminals) switch on the AC input helps protect in case AC is wired backwards.
The fuse before the switch helps protect against hot to neutral or ground shorting out.
The bigger the VA capacity on the "Mains Transformer", the cleaner the power (and often more efficient).
Choose transformer output volts and amperage according to the situation.
Since this is unregulated, transformer output voltage will drop under heavy load.
Chasis grounding codes usually state ground wire to non-supporting dedicated tab with lock washer on a metal case.
In audio amplifiers, inductors can limit inrush current (for bass notes) and may be undesirable at power amp levels.

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