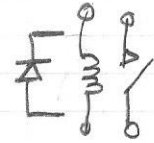


BACK TO BASICS : WHY DIODES ARE USED  
ACROSS RELAY COILS.



AKA : SNUBBER OR FLYBACK DIODES

BASIC CONCEPTS :

- CURRENT FLOW INDUCES A MAGNETIC FIELD AROUND A WIRE
- AND -
- A CHANGING MAGNETIC FIELD INDUCES CURRENT FLOW

THEREFORE :

- WHEN TURNING OFF A RELAY COIL, THE DROP IN CURRENT CAUSES A COLLAPSE OF THE MAGNETIC FIELD
- THIS COLLAPSE OF THE MAGNETIC FIELD INDUCES A CURRENT (IN THE SAME/ORIGINAL DIRECTION)
- IF NO DIODE WAS PRESENT, THIS CURRENT CAN GENERATE VERY HIGH VOLTAGE AT THE SWITCH/TRANSISTOR

