

Ex:

when current goes through
electromagnet closes the contacts

when no current contacts are open

K1
Relay_DPST-NO

GVLH_INPUT

24

23

TD_STAGE_2(IMD)

+12V

14

13

+12V

SW1
SW_Push

A1

A2

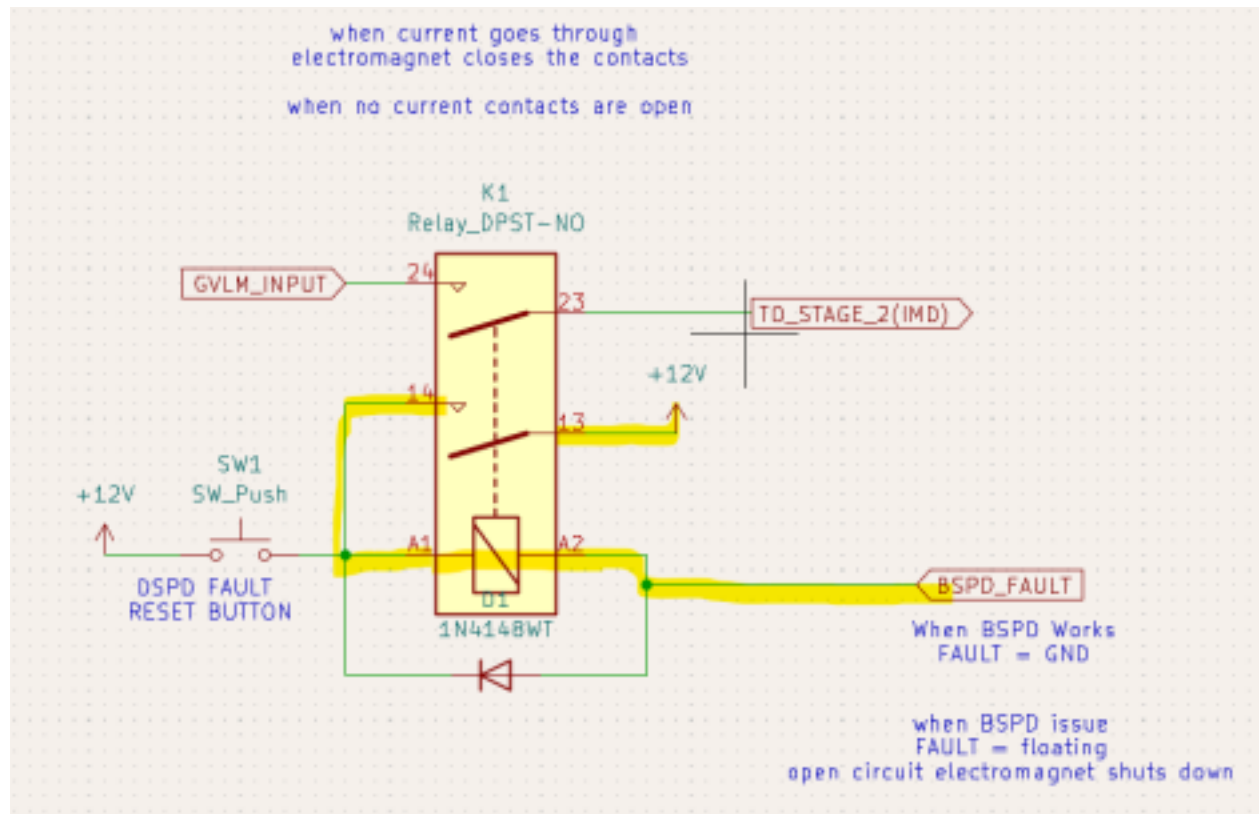
D1
1N4148WT

BSPD_FAULT

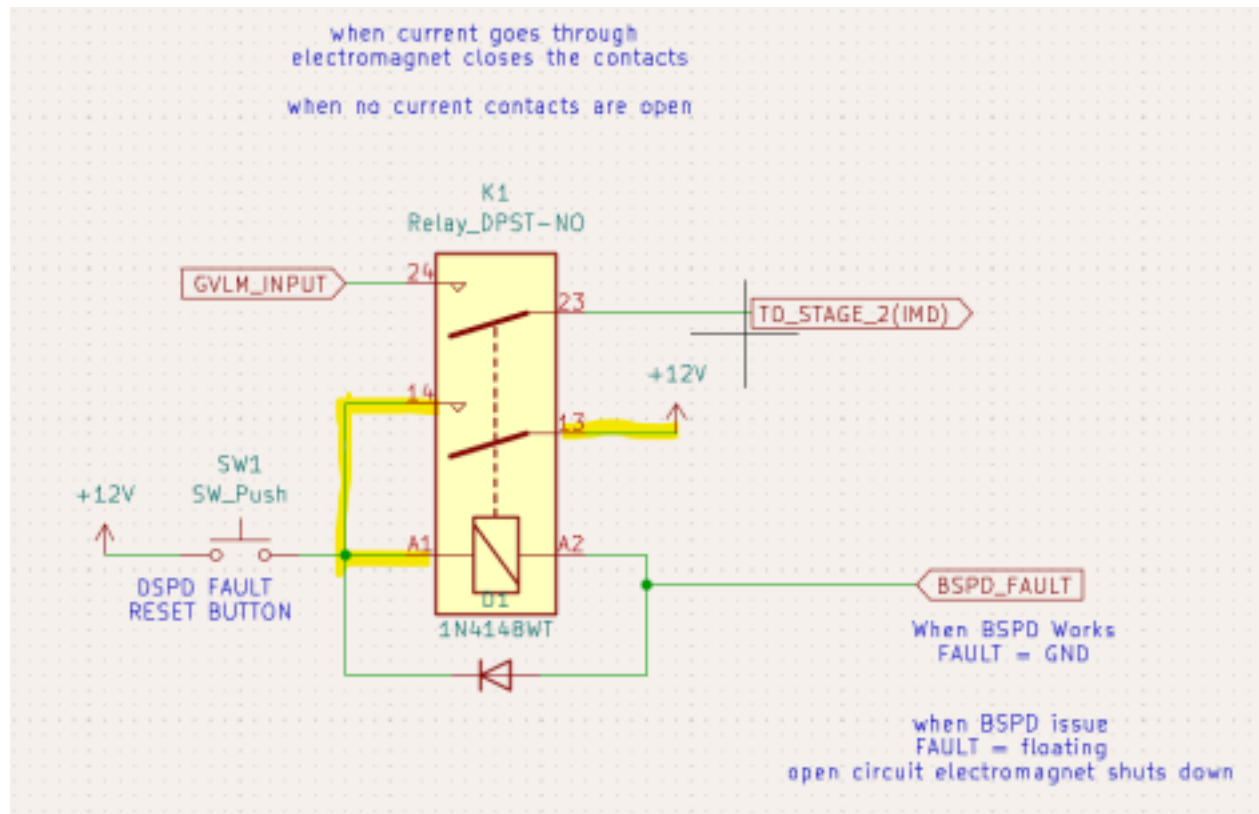
When BSPD Works
FAULT = GND

when BSPD issue
FAULT = floating
open circuit electromagnet shuts down

Reworked the Schematic for visual understanding

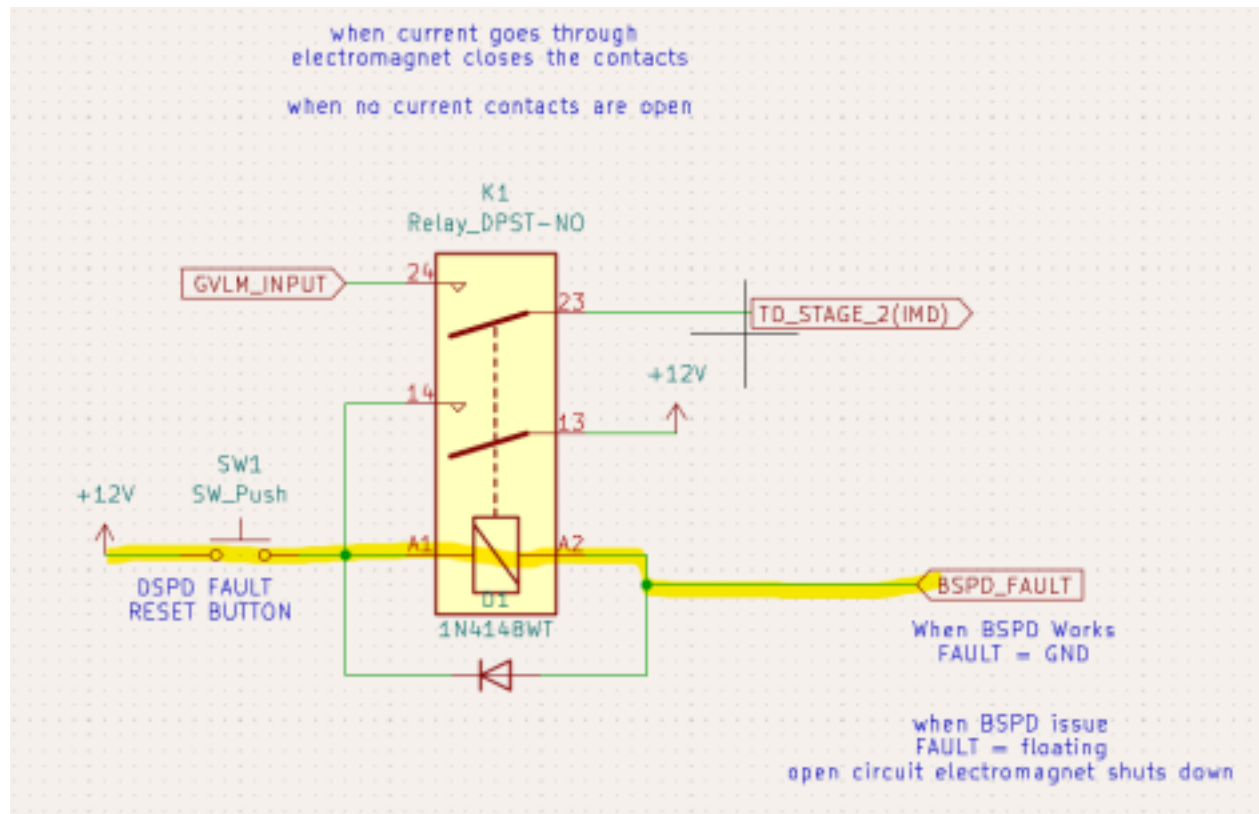


In the Normal working state, current goes from 12V through 13 and 14, which is closed due to the electromagnet being ON through the electromagnet A1 A2, which keeps the relay ON and to BSPD_Fault, which is ground. This is a completed circuit path.



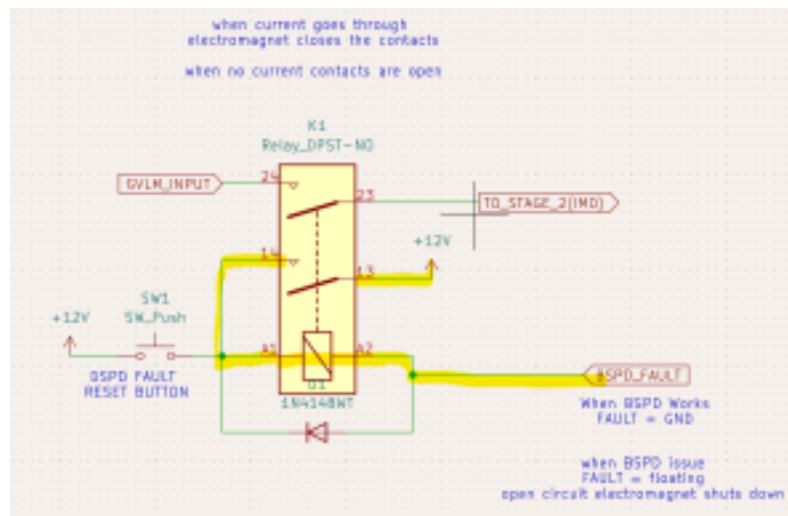
When BSPD_ fault is floating - issue with BSPD

The path from 12V to ground is broken, no current flow causes the electromagnet to switch off, unconnecting pins 13 from 14



When BSPD is fixed, BSPD_Fault goes back to GND

The operator then needs to press the DSPD FAULT RESET BUTTON to energize the electromagnet of the relay to connect temporary 13 to 14 to establish current flow from the pin 12 on the relay to BSPD_Fault, which is ground since BSPD works



(ORIGINAL STATE)

Questions

Can the toggle switch in the original schematic be replaced with a push button, or a temporary

toggle switch, so no one has to manually switch it to the off position

Does the electromagnet have a slow enough response so that when the RESET switch is switched off, the electromagnet still stays on, and current flows from the switch through the electromagnet