S1

F1

L1

VF

S2

VSW

115 Volts AC
60 Hz
Input

DS1

CR1

VC1

VI1

CR2

T1

VT

L2

VI2

S5

M Motor, Bodine NSH 12R
CR1/CR2 Bridge Rectifier
DS1 Panel Indicator Light
T1 Variac
S1 Jog Switch
S2 DPST Switch OFF/ON
S5 DPDT Switch FWD/OFF/REV
F1 Fuse, 3AG SloBlo 1 Amp/Holder

M

VC2

This circuit is my attempt to reconstruct the control circuitry for my old track burner (a machine which rolls up and down a track at a variable but constant speed, holding a cutting torch). It seems to me to be a simple and fairly elegant little DC motor control. The nodelabels (in red) are my own terminology and are somewhat arbitrary but useful for discussion. The function of the indicator lamp is as follows: the lamp is illuminated either when the jog button is pushed or when S2 is turned to the ON position.

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