

Transmatic Lynx AVC Feed Unit
(Refer to attached Simplified Drawing)

Torch Switch Open:

Open circuit voltage from the relevant power source applied to the AVC unit and bridge rectifier BR1. The DC voltage from this is used to supply the PCB and the gas valve and contactor coils.

Torch Switch Closed:

Voltage is now supplied in two directions as follows:

1. To pin 1 of CN1 on the control PCB energising relay RL1, also the brake transistor is released and the PWM circuit energised. The motor now runs at a speed controlled by the WFS potentiometer and the signal from the motor current circuit.
2. To the top of the burnback potentiometer rapidly charging the capacitor, also to the solid state switch which energises the main contactor and gas valve.
Welding now commences.

Torch Switch Released:

Relay RL1 is immediately de-energised and the relevant circuits inhibit the PWM circuit and apply the brake to ensure wire feed stops immediately. However, the contactor and gas valve remain energised by the burnback control until the capacitor discharges below the holding current of the solid state switch at which time they are de-energised.

Transmatic LYNX AVC Wire Feed Unit

