

SCROLL SAW MODIFICATION

*as Demonstrated by Frank Wood,
written by James Colter*

Motorized scroll saws useful for marquetry are very expensive. The inexpensive ones do not have variable speed control so are more suited for fretwork rather than veneer.

Modifying a motorized scroll saw presents a number of problems. The addition of a potentiometer or variac to an AC motor creates loss of power or torque of the saw. Clipping the sinusoidal AV wave decreases power. The good scroll saws get around this by using DC motors.

A good source of a DC motor is a used sewing machine. This has the added benefit of having a foot peddle for hands-free speed control. The mechanism for oscillating the blade is on the AC motor, so Frank got around this by extending the shaft of the AC motor with a sleeve coupling and adding a pulley wheel to couple to the DC motor by a belt. (see photo)

Another addition is a light - also found on most sewing machines.

