



6-Roll & ArpSerge Assemblage:

	X 16	4.7k 1/4w Resistor
	X 3	10k 1/4w Resistor
	X 4	100k 1/4w Resistor
	X 2	470k 1/4w Resistor
	X 2	2.2m 1/4w Resistor
	X 10	NPN Transistor
	X 8	PNP Transistor
	X 1	LED-Circle Pad = Neg.
	X 1	B10k Potentiometer

5-Roll & ArpSerge Assemblage:

	X 14	4.7k 1/4w Resistor
	X 3	10k 1/4w Resistor
	X 4	100k 1/4w Resistor
	X 2	470k 1/4w Resistor
	X 2	2.2m 1/4w Resistor
	X 9	NPN Transistor
	X 7	PNP Transistor
	X 1	LED-Circle Pad = Neg.
	X 1	B10k Potentiometer

Power Section:

	X 1	L7809 - LM7809
	X 1	DC Barrel Jack - Center Positive
	X 1	.1µF - MLCC or 104 Poly
	X 1	10µF - Electrolytic
	X 1	220µF - Electrolytic
	X 1	1N4001

NPN = BC547
PNP = BC557

Mido Section:

	X 2	22k 1/4w Resistor
	X 1	358 LM358 IC - DIP-8
	X 1	10µF Electrolytic



MIDO = 4.5v

**** Circled Side on all Electrolytics = Negative/Ground**

**** Hairy Capacitor Suggested Values:**

1µF, 2.2µF, 3.3µF, 4.7µF, 6.8µF, & 10µF

The higher the value, the slower the Roll tends to Pulse. - If using Electrolytic, Negative goes in the circled side.

