

This is an example of a dual output power supply using a transformer with a center-taped secondary. The transformer steps down the 120VAC to 28VAC. The center tap on the secondary is grounded leaving two 14VAC outputs ( $14\text{VAC} * 1.41 = 19.8\text{V peak}$ ). After going through the bridge rectifier you drop some voltage to across the diodes (about 0.7V off the positive and negative rail). You're left with an un-regulated output that's about +/-19V. Fixed regulators provide +/-15V and +/- 5V outputs.

Note: The large 10,000uF caps smooth the ripple from the rectifier and are located close to the bridge rectifier. The 10uF decoupling caps are located as close as possible to the voltage regulators (one on the input and one on the output of each regulator).

