

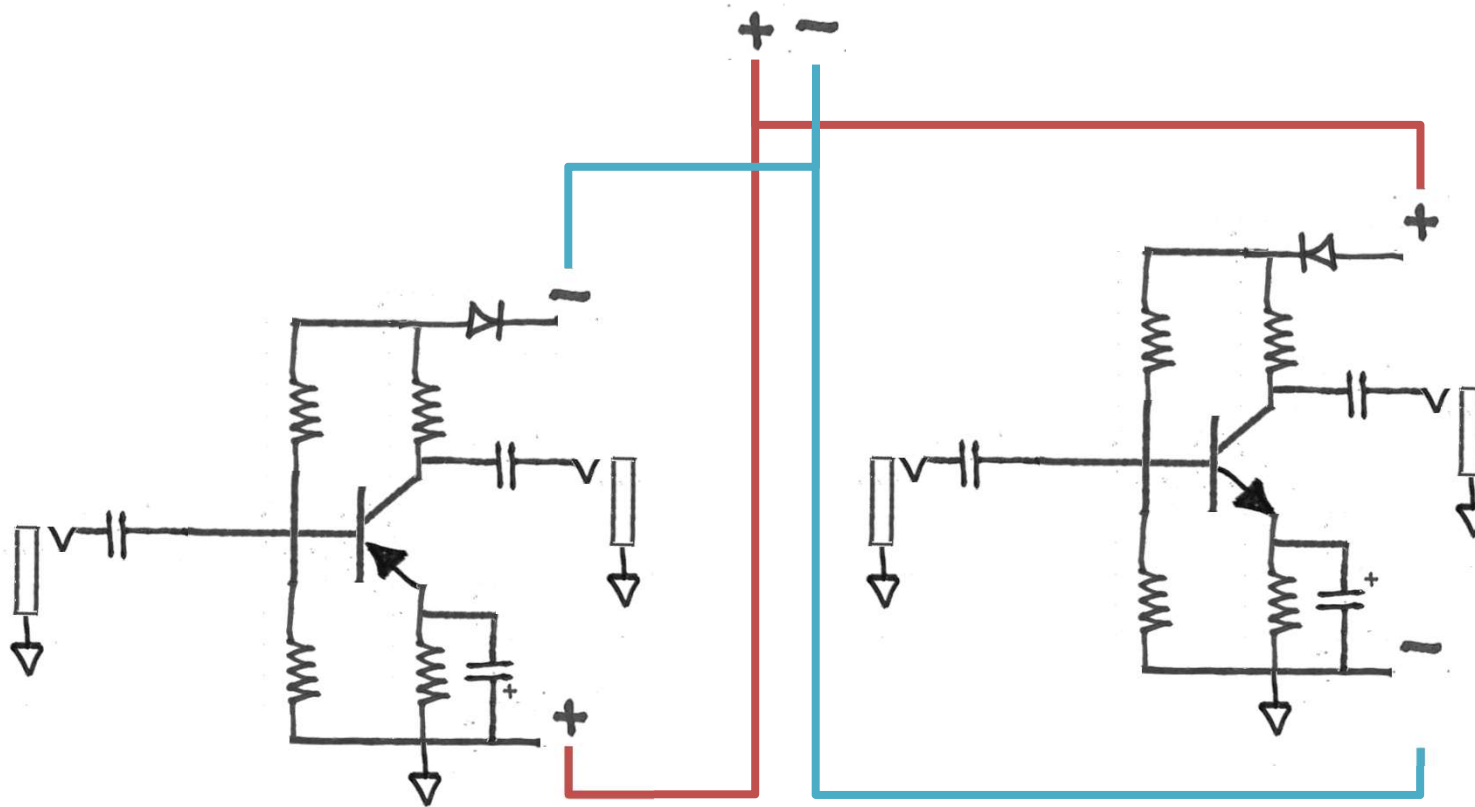


PNP Fort Worth Rangemaster

Flipping a PNP Circuit

From Positive To Negative Ground

Not Dallas, Not England, Fort Worth,
Made in Kentucky



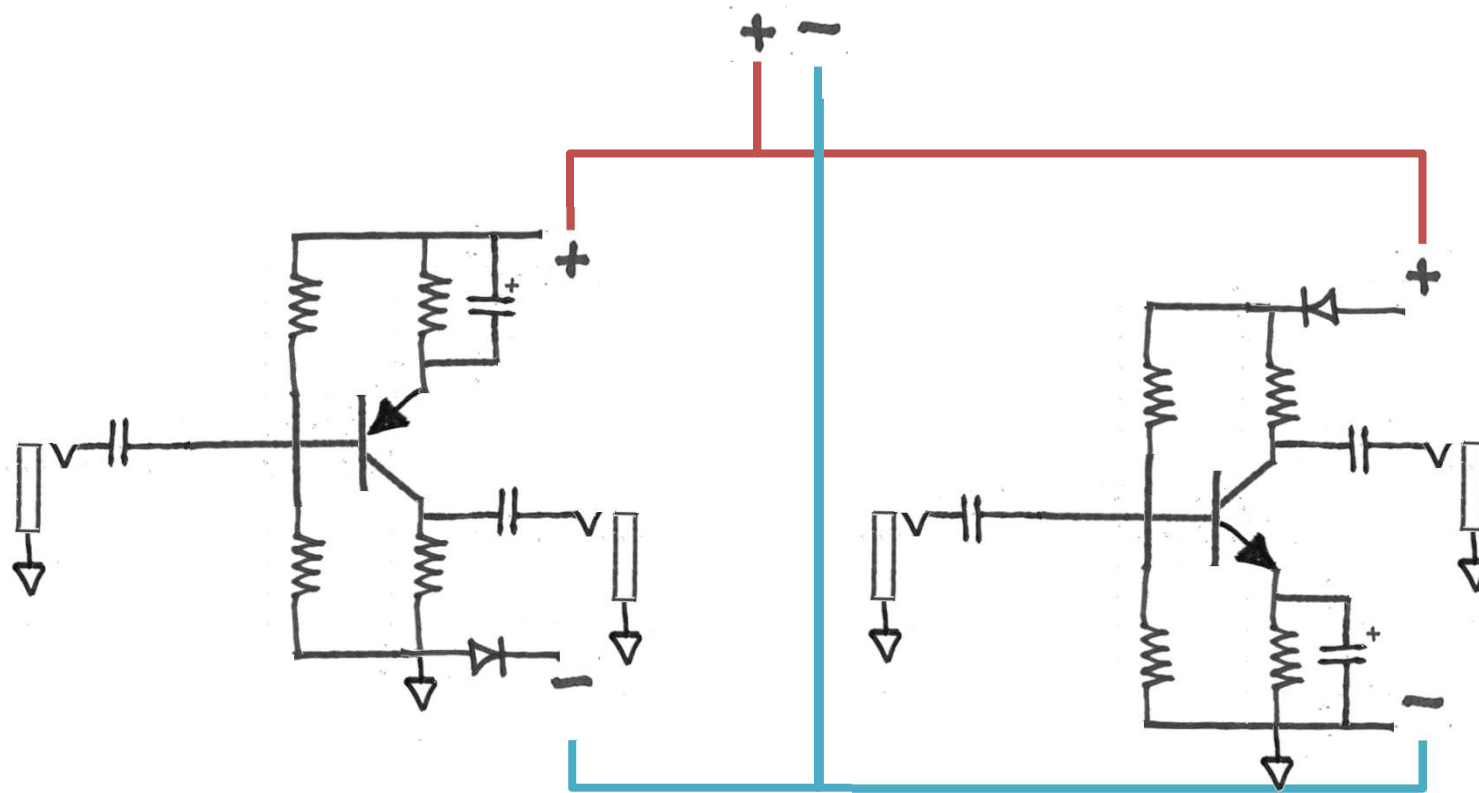
PNP

Electrons flow from
-ve to +ve (ground)

NPN

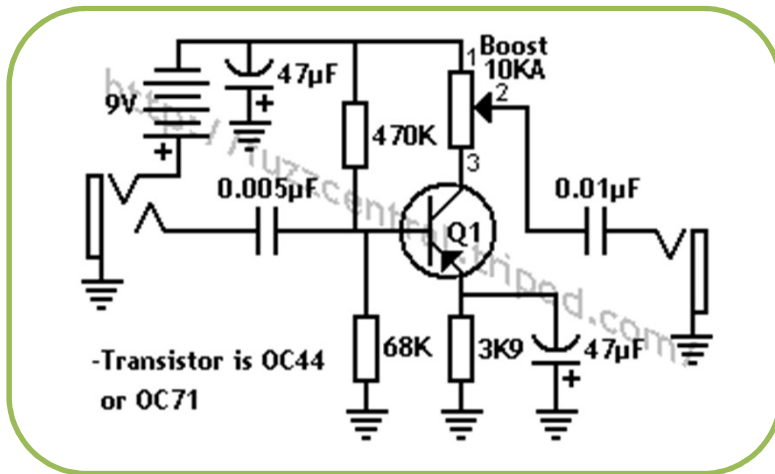
"Holes" flow from
+ve to -ve (ground)

These two circuit won't work together in the same box or
if the power supply is daisy chained



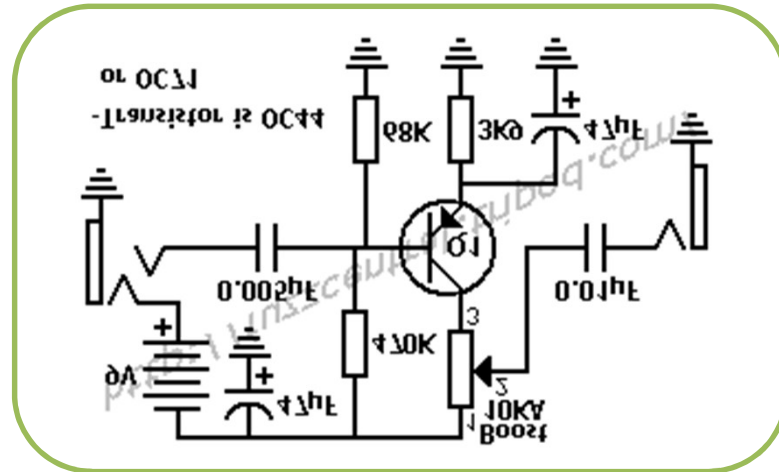
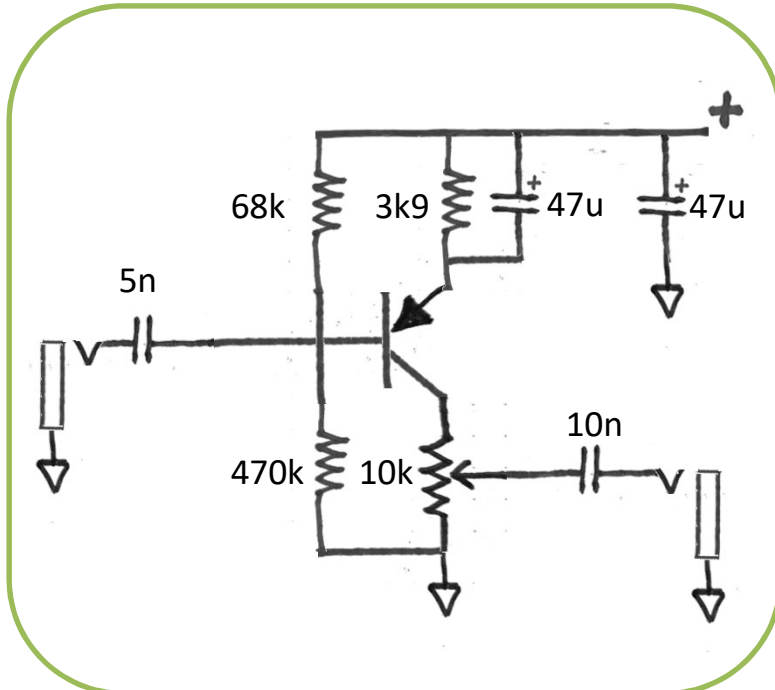
In order to make it work...

Flip the PNP circuit...
Move the ground...



(1) Start with original schematic

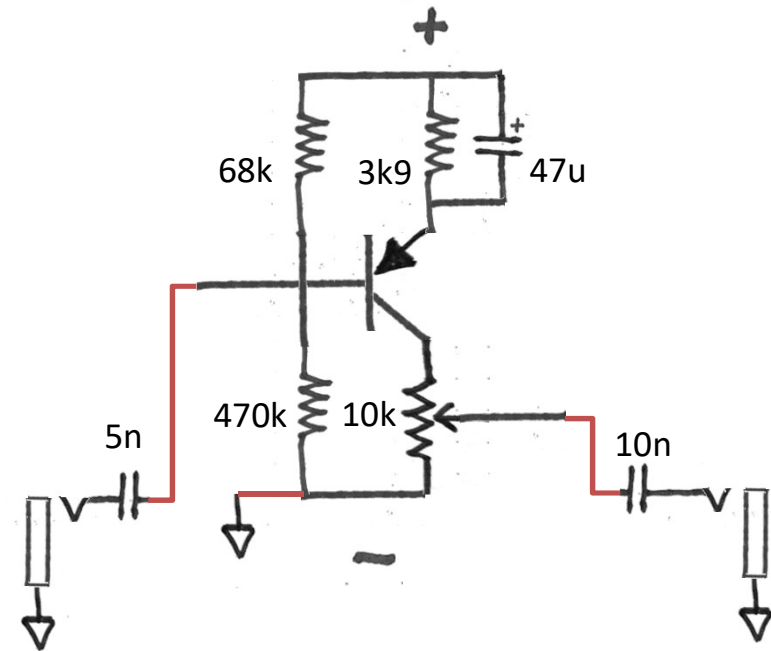
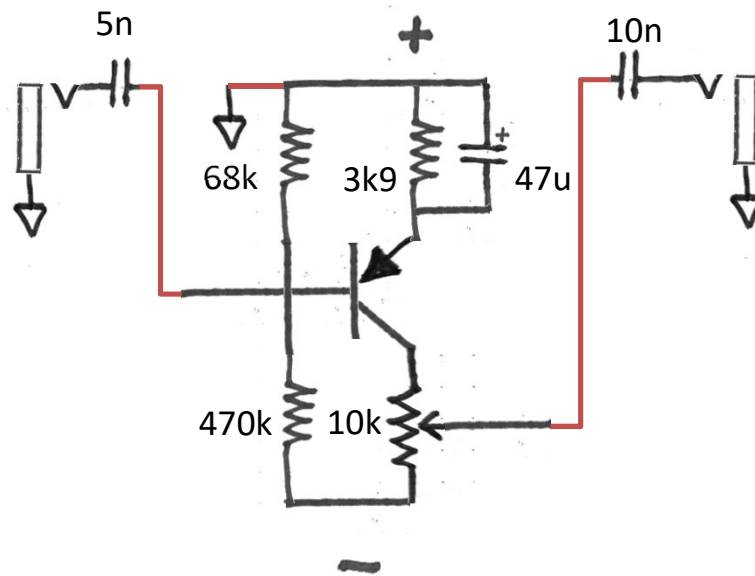
(2) Flip it upside down



(3) Relabel components,
move ground from +ve to -ve

This works because between the DC blocking caps, the difference between the positive and negative power rails has no impact.

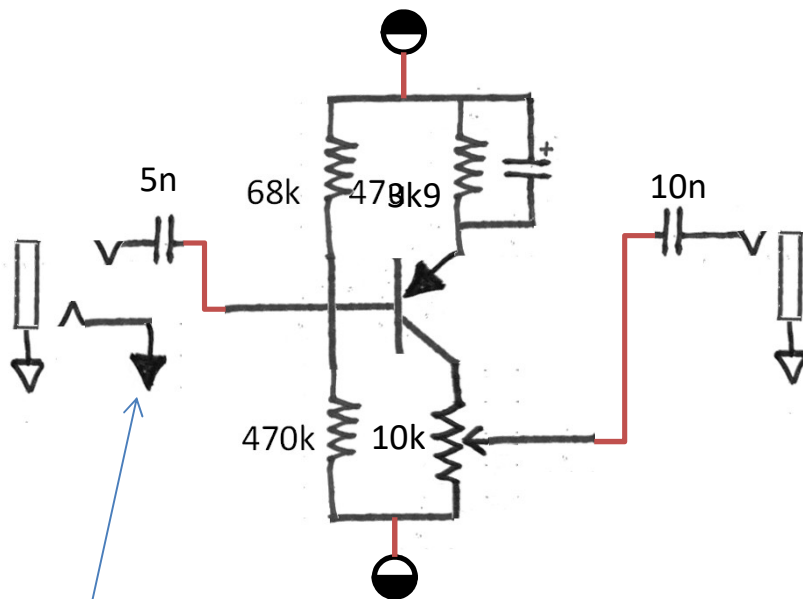
Set the positive rail to ground,
the lower rail is -9v



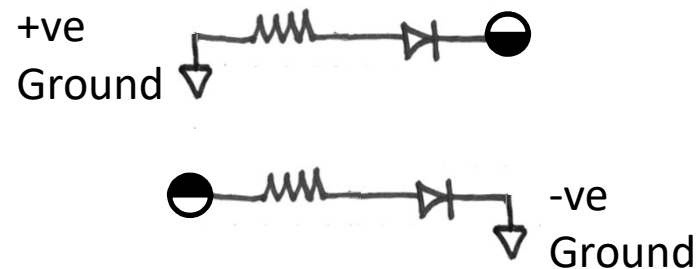
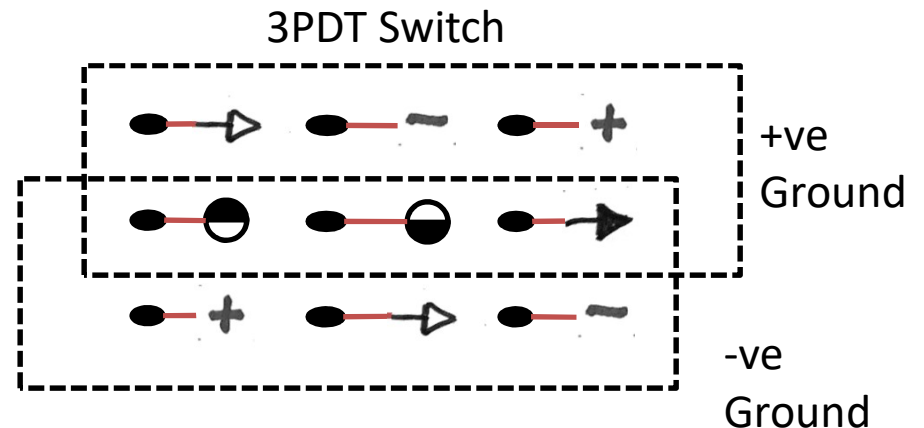
Set the negative rail to ground,
the upper rail is +9v

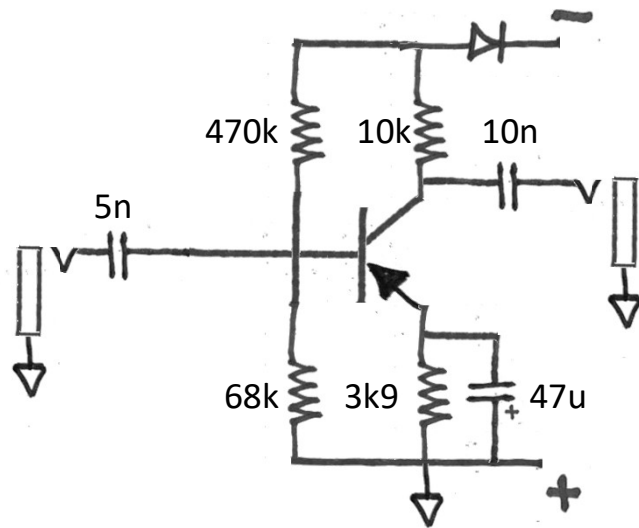
The only complication comes from using the input jack as a switch to connect the power supply.

Test circuit with 3PDT switch to measure any effect on +ve versus -ve ground on Rangemaster circuit.



Note: Critical that this connection ONLY happens here because this is the power switch!

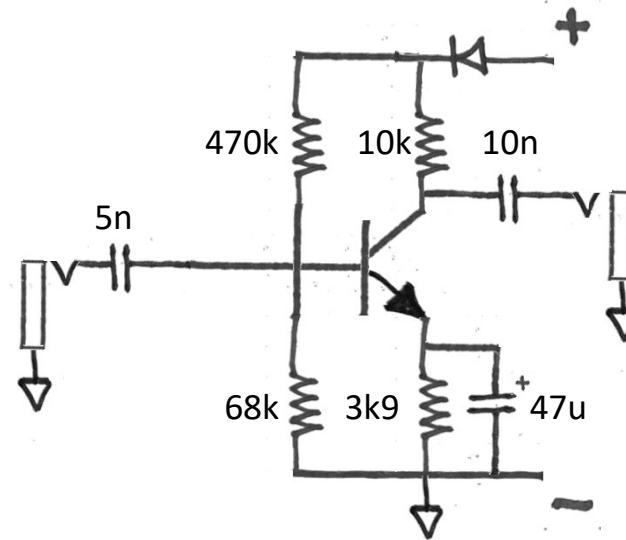




PNP

Treble Boost

Normal (above) Flipped (below)



NPN

Treble Boost

