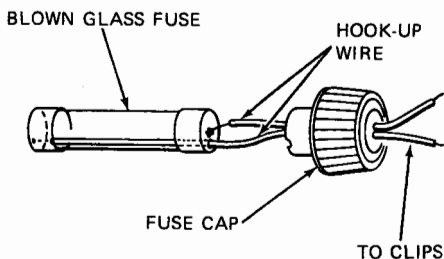


CIRCUIT BREAKER SUBSTITUTION BOX

A substitution box with circuit breakers selected by a switch is one of the handiest gadgets on my service bench. With breakers of different ratings, I'm ready to check radios, amplifiers and TV's with blown fuses and questionable circuit breakers.

Generally, I can clip onto the fuse or circuit breaker if the chassis has been pulled. I've rigged up a handy adapter that lets me jump fuses without pulling the chassis when the fuse holder is a post type on a panel or chassis skirt. The drawing shows its construction.

Drill a $\frac{1}{8}$ inch hole through the



center of a spare fuse-holder cap. Drill small holes slightly off center in the ends of a blown cartridge fuse. Drill a second hole, just large enough to pass a piece of thin insulated hook-up wire, in the center of one end of the fuse. Strip about $\frac{1}{8}$ inch of insulation off one end of a piece of hook-up wire and pass it through the center of the fuse so the short exposed wire goes through the hole in the far end. Solder. Solder a second piece of hook-up wire to the other end and then thread both leads through the fuse-post cap and then add clips for connecting to the breaker substitution box.—*Arthur M. Padmore* **R-E**