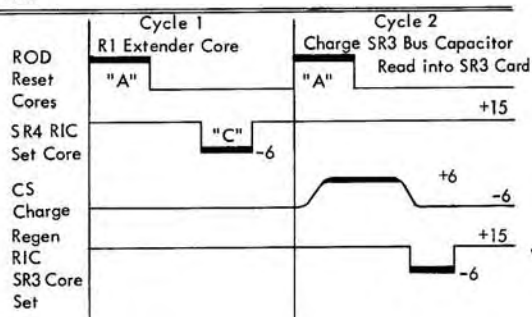
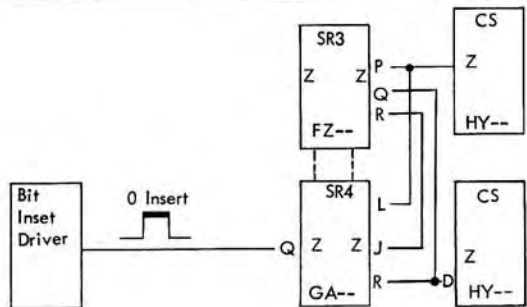


GA--371509  
This card is used to expand the inputs to the FZ -- card



**Magnetic Core Shift Register Extender SR4**

The GA - - card is a single magnetic core position used to expand the number of inputs to the FZ - - card. Each core position has three input windings, three output windings, and a reset winding.

The input windings are driven by core mode Z lines from either a capacitor storage network or from a special bit inset driver. These input windings are gated on by selecting the read-in driver circuits (HG - - or GZ - - card).

Normally, all reset windings of a shift register are serially connected and receive a constant current read-out pulse from a read-out driver (GY - - card). The output windings are biased by a read-out control driver (HF - - card) and control the status of the transistors they are connected to.

When this card is used to extend the FZ - - card, the output pins from this extender card are tied to the respective

output pins of the FZ - - card. The two core positions now function as one core with eight different inputs. For example, in the logic application shown above, the bus 1 output (pin L of the SR4 card) is tied to the bus 1 output (pin P) of the SR3 card. During cycle 1, read-in to the extender card by the bit inset driver takes place and sets the core on. At A time of cycle 2 the cores are reset off in both the sr3 and the sr4 cards. When the sr4 core switches off, it charges the sr3 register capacitors to +6v. After the capacitors are charged, read-in control drivers can be selected to regenerate the information bit in the SR3 card; serial transfer the information bit within the register; or parallel transfer the bit to 1 of 2 other registers.

For a detailed description of the extender operation, refer to the FY - - card.