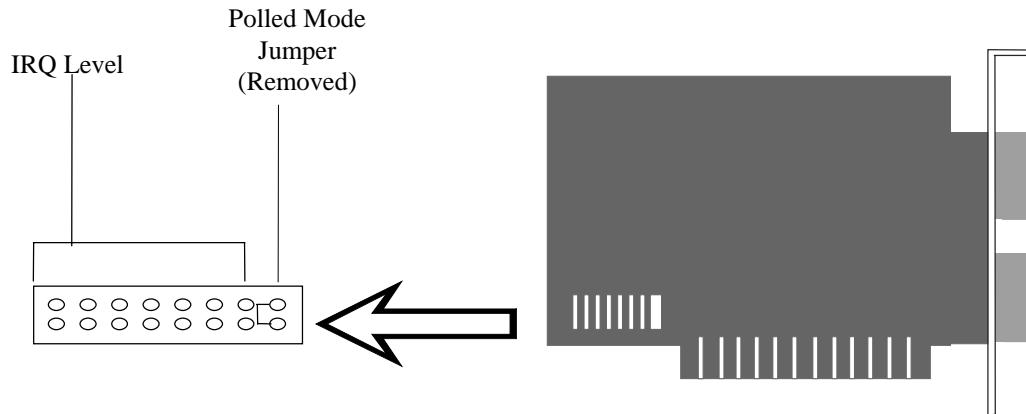


## 4.7 Verifying the Jumpers

### 4.7.1 Polled Mode Jumper

Before installing the SA85 you must verify its IRQ jumper setting. Eight rows of jumper pins and two pins/row are provided on the SA85 board for IRQ and Poll Mode settings.



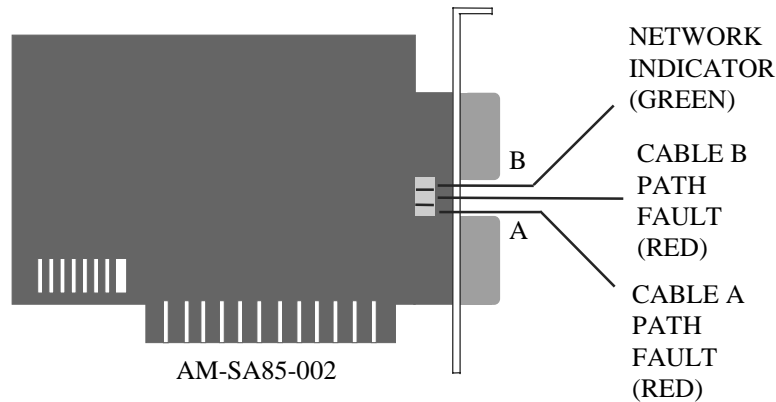
**Figure 3 - AM-SA85-002 Jumper Settings**

The factory jumper position is as shown in the figure showing Polled Mode. Move this jumper to the IRQ specified with the ECU or ISACFG.

### Reading the Network Indicator

**AM-SA85-002:** This board has three indicators. A green indicator shows the overall communication status at the SA85 node. Two red indicators identify faults on the two cable paths.

If a red indicator blinks momentarily, it indicates that a message error was detected on the cable path. A steady ON state indicates a hard fault either in the cable or in a node device connected to the cable. If communication is lost on one cable path, the other path continues normally.



**Figure 4 - SA85 Network Indicators**

#### Network Communication Status (Green Indicator)

Modbus Plus status is shown by flashing a repetitive pattern on the green indicator. The patterns are:

##### Six flashes per second

The node's normal operating state. The node is successfully receiving and passing the token. All nodes on the network should be flashing this pattern.

##### One flash per second

The node is offline after just being powered up, or after exiting the four flashes per second mode. In this state, the node monitors the network and builds a table of active nodes and token-holding nodes. It remains in this state for five seconds, then attempts to go to its normal operating state.

##### Two flashes, then OFF for two second

The node is hearing the token being passed among other nodes, but is never receiving the token. Check the network for an open circuit or defective termination.

##### Three flashes, then OFF for 1.7 seconds

The node is not hearing any other nodes. It is periodically claiming the token, but finding no other node to which to pass it. Check the network for an open circuit or defective termination.

##### Four flashes, then OFF for 1.4 seconds

The node has heard a valid message from another node that is using the same address as this node. The node remains in this state as long as it continues to hear the duplicate address. If the duplicate address is not heard for five seconds the node then changes to the pattern of one flash every second.