Recognition of Connector Type

Six (6) pin MS vs. Six (6) pin AAMI

Mechanical: Six pins located equally spaced within a protective ½” circle rim that includes a keying slot. The pin nomenclature is not visible from the front thus the differentiation is whether the key is ‘at the pin’ or between two pins.

**Six (6) pin MS:** This connector was originally (1967 to 1975) used as an ECG input connector because it is a rugged Mil Spec connector that was readily available and provided enough pins for all 5 (patient) lead wires and the shield. The keying slot is located directly over pin A. More recently, this connector is used for IBP (internal blood pressure) transducer inputs.

**Six (6) pin AAMI:** In 1975, a federal sub committee was convened by the department of transportation to establish standards for funding a concept ‘Emergency Medical Services’ whereby an ambulance could cross the USA and be able to bring a patient to any hospital for treatment. Part of this standard included the ECG input connector used in EMS telemetry and defibrillator units. The 6 pin MS connector was recognized as the best choice however to equalize the impact on manufacturers currently using this connector, a variation was chosen.

The 6 pin MS was keyed directly over pin A so the committee asked Cannon (manufacturer) to make a version of the connector that was keyed 30 degrees behind pin A or half-way between pins A and F. To keep the new connector from being a Federal standard (hard to change), AAMI (Association for the Advancement of Medical Instrumentation) was asked to endorse it as a preferred ECG input connector. Thus the **AAMI standard 6 pin connector is keyed 30 degrees behind pin A or half-way between pins A and F.**

Note: ECG devices with “automated” 12 lead capability now use various ECG input connectors having a minimum of eleven (11) pins to accommodate all 10 lead wires plus the shield. No standard exists for these connectors other than those established by and for individual device manufacturers.

MAGUIRE Enterprises, Inc.
1-800-548-9686