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Electrical Grounding Bracket

The problem:

To provide a device which serves as a common grounding point for the shielded wires of a multipin electrical connector and permits addition or removal of ground leads without disturbing the other grounded wires.



The solution:

A specially shaped bracket which fits around the connector and supports a grounding bar to which shield ground wires can be fastened.

How it's done:

The grounding bracket shown in the shaded portion of the diagram conforms to the exterior configuration of a typical multiple-pin connector. In essence, it is simply a rigidly supported, rounded strip of metal onto which may be soldered the shield-ground leads of the shielded wires leading to the connector pins. The electrical grounding bracket simplifies solder operations and the dressing of shield terminations. Because each shield-ground lead can be soldered independently to the bracket, it is a simple matter to alter the wiring configuration of the connector or to remove or add shielded wires. The bracket also permits addition or deletion of a ground circuit without disturbing the remaining ground wires, and the grounding bracket may itself be unfastened from the connector for electrical tests. Although the bracket provides a minimum of two parallel DC ground paths through the connector shell, by appropriate insulation of one mounting screw, only one path can be obtained; multiple paths or selective grounding points can be obtained by wires attached to the bracket.

Note:

No additional documentation is available. Specific questions, however, may be directed to:

Technology Utilization Officer Ames Research Center Moffett Field, California 94035 Reference: B72-10045

Patent status:

Title to this invention, covered by U.S. Patent 3,513,433, has been waived under the provisions of the National Aeronautics and Space Act [42 U.S.C. 2457(f)] to the TRW Systems Group, TRW, Inc., One Space Park, Redondo Beach, California.

> Source: C. E. Carroll of TRW Systems Group, TRW, Inc. under contract to Ames Research Center

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Category 01

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