NASA Tech Briefs announce new technology derived from the U.S. space program. They are issued to encourage commercial application. Tech Briefs are available on a subscription basis from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151. Requests for individual copies or questions relating to the Tech Brief program may be directed to the Technology Utilization Division, NASA, Code UT, Washington, D.C. 20546.

Color Identification Testing Device

A plug-and-jack testing device has been constructed for determining the ability of a technician to identify color-coded electric wires. In this particular application, the innovation is superior to standard color blindness tests for several reasons: it may be used to test speed of wire selection as well as accuracy under conditions similar to those encountered on the job; it detects certain types of partial color blindness often missed by standard tests that produce errors in color-code determination; the device allows more rapid testing and, if necessary, may be administered by a color blind person.

A partial schematic diagram of the circuit is shown above. The stepdown transformer provides low voltage to the test circuit, diminishing the possibility of electrical shock. Each loop of the test circuit contains two lamps, a color-coded wire attached to a male connector plug, and a female connector jack. The jacks are mounted on a panel and labeled with the name of the correct color code. The two lamps for each circuit are paired, either adjacent to the jacks or on a separate panel, which may be placed so that the examinee cannot see the results of his selections.

In use a correct choice will light two adjacent lamps, and an incorrect choice will light bulbs in two different rows.

Note:
Requests for further information may be directed to:
Technology Utilization Officer
Kennedy Space Center
Kennedy Space Center, Florida 32899
Reference: TSP70-10264

Patent status:
This invention is owned by NASA, and a patent application has been filed. Royalty-free, nonexclusive licenses for its commercial use will be granted by NASA. Inquiries concerning license rights should be made to NASA, Code GP, Washington, D.C. 20546.

Source: R. Martin, E. Brawner, and W. Pate of The Bendix Corp. under contract to Kennedy Space Center (KSC-10278)

Category 01