Enlightening Energy Books Beginners and experts alike will find useful information in these volumes.

By CAROL MAXWELL & E.S. GURDJIAN, F76350

For additional information about alternative energy sources, consider the following books, which provide a more detailed and comprehensive view of this subject.

Living On 12 Volts With Ample Power by David Smead and Ruth Ishihara covers the intelligent use of alternative energy systems — their sources, storage, and management. Since energy storage is a critical aspect of alternative energy systems, the book contains considerable discussion of battery types, function, and maintenance. This is followed by chapters devoted to energy sources such as DC alternators, battery chargers, solar panels, and wind generators.

Mr. Smead and Ms. Ishihara also cover the AC system and discuss principles of refrigeration, compressor and noncompressor. The authors combine this information into a neat bundle they call "The Balanced Energy System." They also address the important issue of safety, among other miscellaneous topics.

Living On 12 Volts With Ample Power was originally published in 1988. The information in this book



is appropriate for boats, RVs, or remote homes and is useful to readers of all experience levels. The novice may have to re read a few parts, but the book is complete and well-written. The authors' style is refreshingly candid.

Mr. Smead is an electrical engineer; computer programmer; and leading designer of electrical systems for RV, marine, and remote home applications. Ms. Ishihara is a research and word processing specialist with more than 13 years experience preparing legislative, financial, and transportation documents. The couple spent two years relying on their 12-volt system while boating in Mexico and Hawaii.

Wiring 12 Volts For Ample Power, also written by David Smead and Ruth Ishihara, begins with a brief but fascinating history titled "Pursuit of the Elusive Electron." Next, the book examines the basics of DC electrical theory and DC magnetics, and then provides an introduction to the AC electric system.



Subsequent chapters define electrical loads, types of batteries, and types of chargers. The authors conclude with an in-depth discussion and description of electrical system instrumentation, design, components, tools, schematics, and wiring principles. A testing and troubleshooting section follows.

This book is written primarily for marine applications, but the principles can be applied to recreational vehicles of all types, as well as to remote homes. There may be some differences, but the authors point them out so the reader can extrapolate the information and adapt it to his or her particular application.

Wiring 12 Volts For Ample Power was originally published in 1990 and revised in 1995. It can be enjoyed by persons of any experience level, from energy novice to energy expert. Mr. Smead and Ms.Ishihara use procedural instructions and easy-to-understand language to teach and expand the reader's

knowledge of the subject. The book, organized with smooth transitions between topics, contains precise and accurate information.

Living On 12 Volts With Ample Power (\$25) and Wiring 12 Volts For Ample Power (\$20) are available from PoweTap Inc., 2442 NW Market St., #43, Seattle, WA 98107; (800) 541-7789 (phone orders with VISA, MasterCard, Discover), (206) 789-1138. Add \$2.50 per book for shipping and book rate handling or \$3.75 for shipping and First Class handling. Both books may be purchased for \$40; add \$3.50 shipping for Book Rate, \$5.75 for First Class.

RV Electrical Systems by Bill and Jan Moeller provides a basic explanation of 12-volt DC and 120volt AC electrical systems as utilized in many recreational vehicles. The authors intentionally avoid discussing more detailed aspects of electricity. Their aim was to keep the book simple to enable the novice to understand an RV electrical system and to perform emergency repairs. They rely on their 20-plus years of experience solving problems with and upgrading their own 12-volt and 120-volt electrical systems

Although the focus is on fifthwheel trailers— the Moellers live full-time in their fifth-wheel much of the information can be applied to Class C or Class A motorhomes. The intentional easy readability is suited for the electrical novice, so an experienced motorhomer may have already found other procedures that are more fitting for Class A coaches.

The Moellers have included comparative tables dedicated to upgrading existing components, which may be of interest to all. The tables list the characteristics and features of a variety of components, such as inverters, chargers, convertors, and solar regulators.

Owners or prospective owners of "all-electric" coaches may find some of the recommendations inappropriate for their respective applications.

RV Electrical Systems was originally published in 1994 and is available for \$19.95 in bookstores or directly from the McGraw-Hill Companies, P.O. Box 548, Blacklick, OH 43004; (800) 262-4729. From outside the U.S., call (609) 426-5436. A shipping and handling fee of approximately \$5 is charged when ordering from the publisher.

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