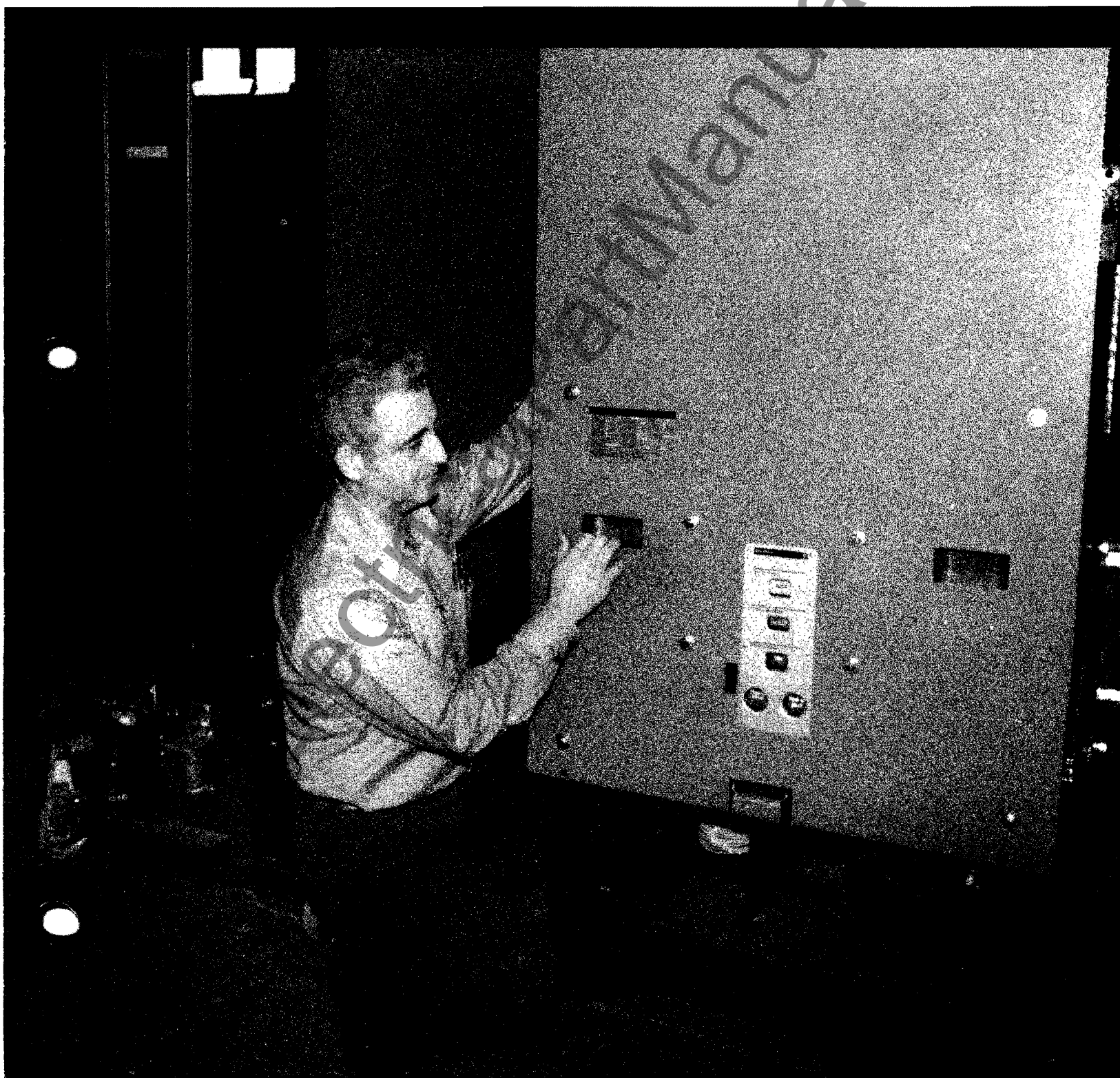
Westinghouse Electric Corporation
Engineering and Instrumentation
Services Division
875 Greentree Road, Bldg. No. 8
Pittsburgh, Pennsylvania 15220

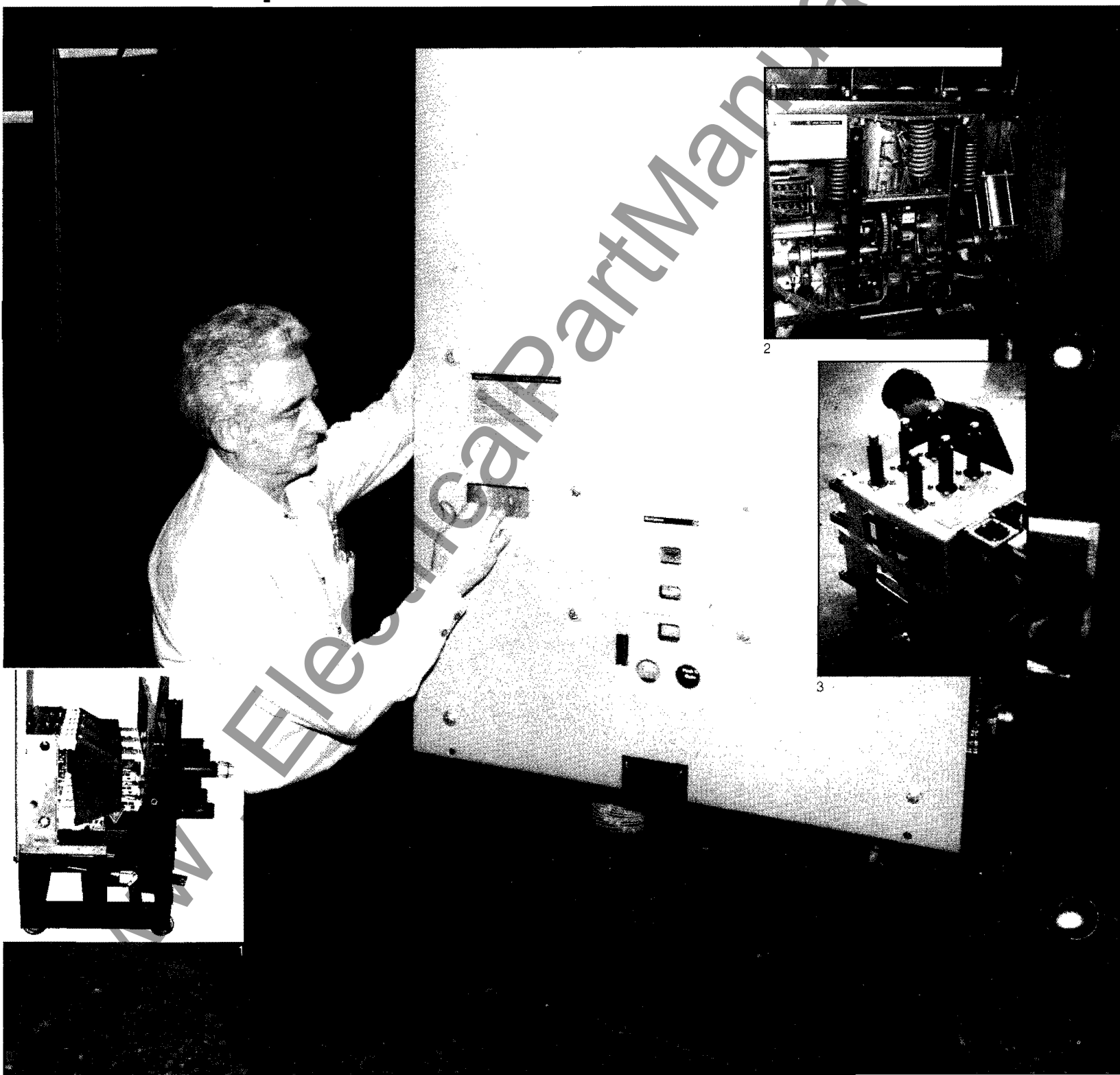
November, 1984
New Information
Mailed To: E, D/49-000 A, B, C

Medium Voltage Breaker Replacement



Medium Voltage Breaker Replacement

Main: Vacuum breaker replacement provides modern, state-of-the-art operation, reduced maintenance and increased interrupting capability.
1. Replacement reduces the number of moving parts and resulting wear normally associated with traditional air break contacts and arc chutes.
2. Breaker replacement eliminates the need of purchasing new cells, cables or control schemes.
3. Westinghouse's pre-engineered replacement package assures accurate, timely service for a variety of manufacturers' breakers.



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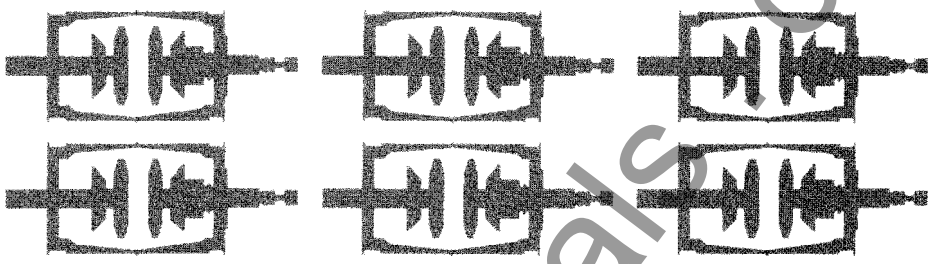

Innovative Modernization Techniques from Westinghouse Engineering & Instrumentation Services

The Westinghouse Engineering & Instrumentation Services Division (E&ISD) is one of the largest and most experienced industrial service organizations in the nation. With more than 80 fully-staffed Engineering Service Offices throughout the continental U.S., E&ISD has complete local capabilities to provide a wide range of electrical and mechanical equipment services in three broad categories: installation, physical maintenance, and engineering advisory services.

At E&ISD, we have established an ongoing program to identify emerging customer needs, and evolve effective service technologies and procedures to meet them. Medium Voltage Breaker Replacement is just one of many new capabilities we have developed in order to enhance both the quality and scope of service options available to our customers.

Medium Voltage Breaker Replacement by Westinghouse represents a fast-turnaround, cost-efficient approach to upgrading your existing circuit breakers for extended life, enhanced performance and reduced maintenance costs. Moreover, by improving breaker performance, our replacement service also provides added protection for medium voltage switchgear and associated equipment. Most importantly, this service can be performed on medium voltage circuit breakers, regardless of make or manufacturer.

Cost-Efficient Vacuum Breaker Technology Adds Protection While Extending Service Life

Field performance of vintage medium voltage breakers continues to degrade over time as a result of mechanical wear, harsh environments, limited availability of appropriate renewal parts, and increased available faults from utility power systems. Ultimately, these conditions can lead to breaker failure. In many instances, manufacture of new replacement breakers has been discontinued, making new equipment replacement impossible.

The Westinghouse Medium Voltage Breaker Replacement package is a proven retrofit which replaces and upgrades worn components with state-of-the-art breaker elements. The existing truck assembly can be retrofitted with a modern, current-production Type VCP breaker assembly, featuring a vacuum interrupter and new mechanism. The result is a medium voltage vacuum circuit breaker which rolls into the existing switchgear cell. The entire package is pre-engineered to eliminate the need to purchase new structures, relocate cables, or extensively modify your present control scheme.

Vacuum interruption affords a number of key benefits, including small size and light weight for easy installation; totally enclosed interrupter for greater resistance to harsh environments; and high-speed response for improved system performance.

Features:

Upgrade to state-of-the-art vacuum technology—Improves breaker performance, reduces downtime and extends switchgear life. The reduced number of moving parts minimizes unit wear and associated maintenance costs. Ready availability of renewal parts can result in lower inventory costs, and faster repair turnaround.

Retention of existing structure, cables, cubicles and control scheme—Minimizes interruption to customer operations. Yields a 40% costs savings over total unit replacement, and affords faster turnaround for conversion.

Upgrade of momentary withstand capability—Helps maintain integrity of medium voltage distribution gear despite increasing utility MVA, and promotes enhanced operating safety.

Available in three continuous current ratings—To minimize breaker replacement cost, Westinghouse offers three breaker frame sizes—1200, 2000 and 3000 amp frames. This allows you to accurately match your present power requirements.

Westinghouse Engineering Service Locations*

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Birmingham 35209
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Mobile 36607
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5450 Complex Street
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San Francisco 94608
5899 Peladeau Street 415-428-4700

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Honolulu 96804
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1001 East Fourth Street 804-232-8949

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10831 E. Marginal Way, South 206-292-4047

West Virginia
Huntington 25701
1029 7th Avenue 304-529-3264

Wisconsin
Elm Grove 53122 (Milwaukee)
205 Bishops Way
P.O. Box 1000 414-786-0260

*The offices which appear above represent a partial listing of Westinghouse Engineering Service offices located in the United States. For a complete list contact your closest office or call the Westinghouse Engineering Information Center at 800-441-3134. Outside of the continental U.S. call 412-928-2559.

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