

TECHNICAL MANUAL

**OPERATOR, UNIT, DIRECT SUPPORT
AND GENERAL SUPPORT
MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LIST)**

FOR

**WATER PURIFICATION BARGES
(NSN 1930-01-234-2165)
VOLUME 9-4
ELECTRIC POWER SYSTEM**

This technical manual is an authentication of the manufacturer's commercial literature and does not conform with the format and content requirements normally associated with the Army technical manuals. This technical manual does, however, contain all essential information required to operate and maintain the equipment.

Approved for public release; distribution is unlimited.

**HEADQUARTERS, DEPARTMENT OF THE ARMY
15 OCTOBER 1992**

TECHNICAL MANUAL
NO. 55-1930-209-14&P-9-4

HEADQUARTERS
DEPARTMENT OF THE ARMY,
WASHINGTON D.C., 15 OCTOBER 1992

TECHNICAL MANUAL

OPERATORS', UNIT, DIRECT SUPPORT AND GENERAL
SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR
PARTS AND SPECIAL TOOLS LIST)

FOR

WATER PURIFICATION BARGES (NSN 1930-01-234-2165)
VOLUME 9-4 ELECTRICAL POWER SYSTEM

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Troop Support Command, ATTN: AMSTR-MMTS, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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NOTE

The following appendices, common to all TM's in this series, are in TM-55-1930-209-14&P-18.

MAINTENANCE ALLOCATION CHART (MAC) TOOLS AND TEST EQUIPMENT LIST (TTEL) EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST (ESML) REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) REPAIR PARTS LIST TO FIGURE NUMBER CROSS-REFERENCE LIST

NOTE

The following appendices, common to all TM's in this series, are in TM 55-1930-209-14&P-20.

COMPONENTS OF END ITEM LIST (COEIL) AND BASIC ISSUE ITEMS LIST (BIIL) ADDITIONAL AUTHORIZED ITEMS LIST (AAL)

**APPENDIX B
MANUFACTURERS' SERVICE MANUALS/INSTRUCTION**

B-1. Normal Electric System

<u>Component</u>	<u>Document title</u>	<u>Manufacturer</u>
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NOTE

The following documents can be found in TM 55-1930-209-14&P-9-2

Switchboard	Electric Power Controls Operation Manual for Main Service Generation and Distribution Switchboard	Electric Power Controls P.O. Box 5146 Springfield, IL 62705 Ph: (217) 629-8506
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B-2. Emergency Electrical System

<u>Component</u>	<u>Document title</u>	<u>Manufacturer</u>
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NOTE

The following documents can be found in TM 55-1930-209-14&P-9-2

Inverter	LaMarche Instruction Manual for Model A-51 Inverter with Trouble Shooting Information	LaMarche Manufacturing Co. 106 Braddock Drive Des Plaines, IL 60018 Ph: (312) 299-1188
Battery charger	LaMarche Installation Instruction Manual for Model A33-60-24V-A1	

B-3. 155 kW Ship Service Generators

<u>Component</u>	<u>Document title</u>	<u>Manufacturer</u>
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NOTE

The following documents can be found in TM 55-1930-209-14&P-9-2

3306TA engine	Caterpillar Operation and Maintenance Manual for 3304, 3306, 3304B and 3306B Industrial Engines, SEBU5779-01 Caterpillar Specifications for 3304B and 3306B Generator Set Engine Attachments, SENR2798 Caterpillar Systems Operation Testing and Adjusting Manual for 3304B and 3306B Generator Set Engine Attachments, SENR2799	Caterpillar Tractor Co, 100 N.E. Adams St. Peoria, IL 61629
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<u>Component</u>	<u>Document title</u>	<u>Manufacturer</u>
	NOTE The following document can be found in TM 55-1930-209-14&P-9-2	
	Caterpillar Disassembly and Assembly Manual for 3304B and 3306B Generator Set Engines, SENR2800	
	NOTE The following documents can be found in TM 55-1930-209-14&P-9-3	
	Caterpillar Parts Manual for 3306 Generator Set Engine, SEBP1406	
	NOTE The following documents can be found in TM 55-1930-209-14&P-9-4	
SR4 generator	Caterpillar Operation and Maintenance Manual for SR4 and SRCR Generators, SEBUS5717-02	
	Caterpillar Service Manual for SR4 Generator SENR7968	
	Caterpillar Special Instructions for Alignment of Single Bearing Generators, SMHS7259	
Spring isolators	Ace Mounting Co. Series 630 Spring Isolators for Seismic, Marine, & Mobile Applications, catalog 83A-170	Ace Mountings Co., Inc. 11 Cross Avenue South Amboy, NJ 08879 Ph: (201) 721-6200
Battery charger	Master Control Systems Bulletin for Regulated Two Rate Battery Charger, Model MBC8, 474-2	Master Controls Systems 910 N. Shore Drive Lake Bluff, IL 60044 Ph: (312) 295--1010 Telex: 25-4636
	Master Control Systems Installation and Operation Instructions for Models MBC8, MBC8/9(10000)-3	
Engine crankcase filter system, Oildex XCAD-13T	Oildex - How It Operates, Installation, Instructions, Dwg no. XCAD-12T/XCAD-14T	Oildex Corporation P.O. Box 3755 Long Beach, CA 90803

B-4. 20 kW Ship Auxiliary Generator Set

<u>Component</u>	<u>Document title</u>	<u>Manufacturer</u>
NOTE		
The following documents can be found In TM 55-1930-209-14&P-9-4		
4.236M engine	Perkins Engines Operators Manual for Marine Diesel Engines, 4.236M	Perkins Engines Inc. 32500 Van Bom Rd P.O. Box 697 Wayne, MI 48184 Ph: (313) 595-9600 Telex: 234002
	Perkins Engines Workshop Manual, 4.236M	
	Perkins Engines Parts Manual, 4.236M	
SC144E generator	Newage Stamford 'C' Generator Range Frames 1, 2, & 3 Series 4 A.V.R., Controlled Operation and Maintenance Manual Machine Designations PC1 64SC and MSC 144, 244, 344, publication no. 1 H-059 1 st edition	Newage Engineers, Ltd. 3 Independence Court Folcraft, PA 19032 Ph: (215) 534-9500 Telex: 43551
	Newage Stamford 'C' Range Frames 1, 2, & 3 Series 4 A.V.R. Parts Manual	
Spring Isolators	Series 630 Spring isolators for Seismic, Marine, & Mobile Applications, catalog 83A-170	Ace Mounting Co., Inc. 11 Cross Avenue South Amboy, NJ 08879 Ph: (201) 721-6200
Battery charger	Master Control Systems Bulletin for Regulated Two Rate Battery Charger, Model MBC8, 474-2	Master Controls Systems, Inc. 910 N. Shore Drive Lane Bluff, IL 60044 Ph: (312) 925--1010 Telex 25-4636
	Master Control Systems Installation & Operation Instructions for Models MBC8, Regulated Two Rate Battery Charger, MBC8/9(10000)-3	
Gages	Murphy A20T Series Temperature Switch-gages Bulletin A20T-7974, effective 5-1 - 5-79, Catalog Section 10, Class R	Frank W. Murphy & Co. P.O. Box 470248 Tulsa, OK 74147 Ph: (918) 627-3550 Telex: 492332
	Murphy A20 Series Pressure Murphygages and Swichgages, Bulletin A20P-7973, revised 12-30-81, Catalog Section 05, Class (5)	

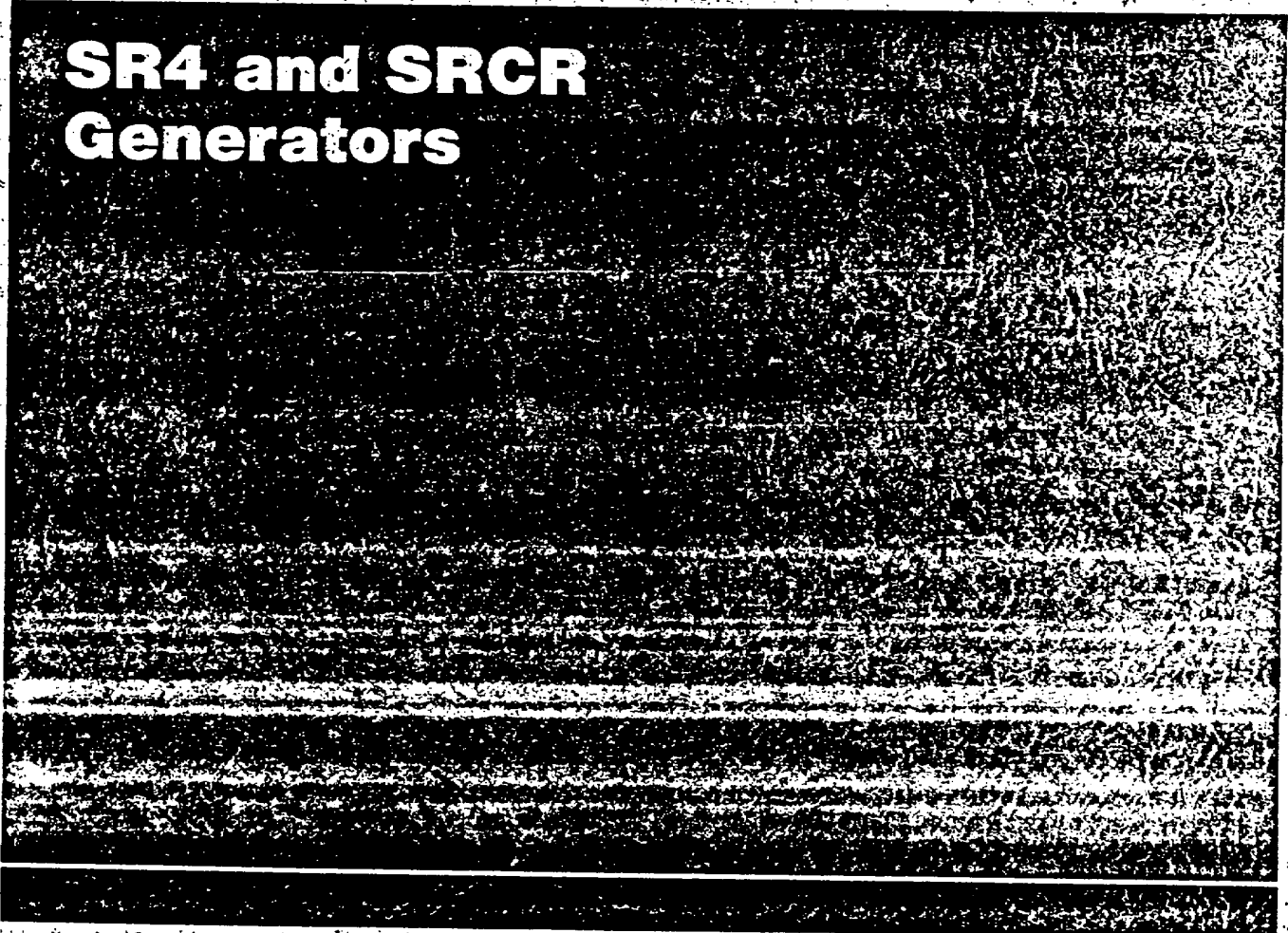
Component	Document title	Manufacturer
	<p>Murphy Instructions for Installation & Maintenance of Pressure & Vacuum Swichgages, Series 20-P, 25-P, A20-P, A25-P, Instruction Booklet 2025P-INS, revised 9-28-84</p> <p>Murphy Instructions for Installation & Maintenance of Temperature Swichgages, Installation Sheet 2520T-INS, revised 2-1-85</p>	
Exhaust silencers	Nelson Industrial "100" Level Exhaust Silencers, two page fact sheet	Nelson Manufacturing
Oildex crankcase filter system	Oildex - How It Operates, Installation Instructions, Dwg. No. XPERK-1	<p>Oildex Corporation P.O. Box 3755 Long Beach, CA 90803</p>



CATERPILLAR

operation & maintenance

**SR4 and SRCR
Generators**



Foreword

This Operation and Maintenance Guide contains operation instructions, and lubrication, and maintenance information application of this information should maximize performance and life of the generator '.

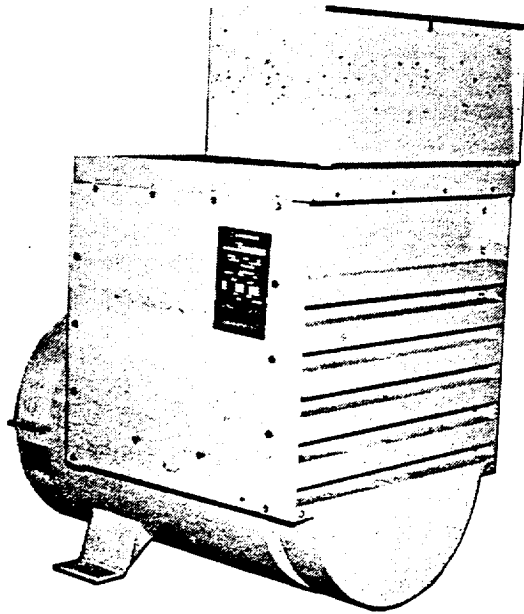
Whenever a question arises regarding your Caterpillar product or this publication, please consult your Caterpillar dealer for the latest available information.

The services of authorized Caterpillar dealers are recommended. Your dealer is staffed with trained personnel who are equipped with proper tools necessary Caterpillar part, and are trained in the latest service procedures.

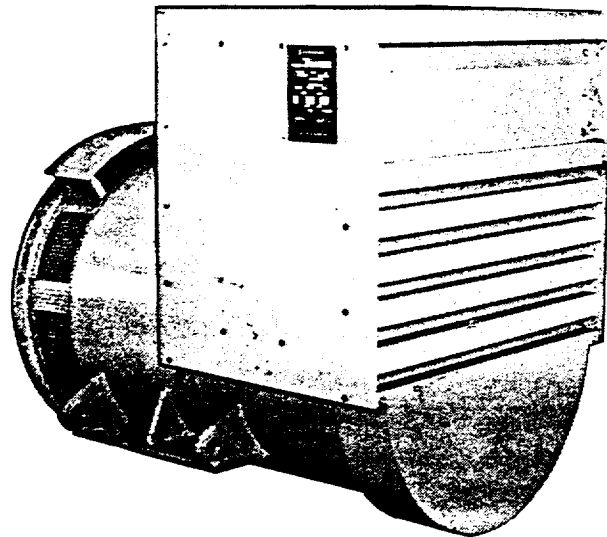
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Model Views



SR4



SRCR