

3 line hydraulic system diagram

The 3-Line Hydraulic System Diagram: A Comprehensive Analysis

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Editor: Mr. David Chen, CFE (Certified Fluid Power Engineer) – Mr. Chen has over 30 years of experience in the hydraulics industry, with a proven track record of editing technical publications related to hydraulic system design and maintenance. His expertise ensures the accuracy and clarity of the presented information.

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1. Introduction: Understanding the 3-Line Hydraulic System Diagram

The 3-line hydraulic system diagram represents a fundamental configuration in fluid power systems. Unlike more complex systems, it uses three primary lines: a pressure line, a return line, and a tank line. This simplicity makes it an ideal starting point for understanding basic hydraulic principles and forms the basis for many more advanced system designs. This article will delve into a detailed analysis of this crucial diagram, exploring its historical context, current applications, and its enduring relevance in the field of hydraulics.

2. Historical Context: Evolution of Hydraulic System Diagrams

Early hydraulic systems were often depicted using less standardized and more rudimentary diagrams. The development of standardized symbols and the 3-line hydraulic system diagram itself was a gradual process, driven by the need for clearer communication and easier troubleshooting. The standardization efforts of organizations like the International Organization for Standardization (ISO) played a significant role in establishing the common symbols and conventions used today within the 3-line hydraulic system diagram representation. As hydraulic systems became more complex, the need for clear and concise diagrams increased. The 3-line diagram provided a simplified representation of the system's main components and their interconnections, facilitating better understanding and design.

3. Components of the 3-Line Hydraulic System Diagram

A typical 3-line hydraulic system diagram illustrates the key components:

Hydraulic Pump: This provides the power source, pressurizing the hydraulic fluid.

Directional Control Valve (DCV): This directs the flow of hydraulic fluid, controlling the movement of the actuator. The DCV is central to the 3-line system's functionality.

Hydraulic Actuator (Cylinder or Motor): This converts hydraulic energy into mechanical work, performing the desired task (e.g., lifting, pushing, rotating).

Hydraulic Reservoir (Tank): Stores the hydraulic fluid and allows for cooling and de-aeration.

Pressure Line: Carries high-pressure fluid from the pump to the actuator via the DCV.

Return Line: Returns the fluid from the actuator to the reservoir after completing its work.

Tank Line: Connects the reservoir to the pump, ensuring a continuous supply of fluid.

The simplicity of this arrangement makes it easy to understand the flow of fluid and the overall system operation. The 3-line hydraulic system diagram effectively visualizes the fundamental principles of hydraulic power transmission.

4. Current Applications of the 3-Line Hydraulic System Diagram

Despite its simplicity, the 3-line hydraulic system diagram remains highly relevant in numerous applications:

Educational Purposes: It serves as a foundational model for teaching basic hydraulic principles in educational settings. Understanding this simple diagram is crucial before progressing to more complex systems.

Small-Scale Industrial Applications: Many smaller machines and systems utilize this basic configuration due to its cost-effectiveness and ease of maintenance.

Troubleshooting and Maintenance: The clarity of the 3-line diagram simplifies troubleshooting. Technicians can readily trace fluid flow and identify potential problems within the system.

Conceptual Design: It provides a starting point for more complex designs. Engineers often begin with a simplified 3-line diagram before adding more sophisticated components and control elements.

The 3-line hydraulic system diagram's simplicity makes it an invaluable tool for visualizing the core principles, even when applied in more complex scenarios.

5. Advantages and Limitations of the 3-Line Hydraulic System Diagram

Advantages:

Simplicity: Its clear and concise representation makes it easy to understand and interpret.

Ease of Design and Implementation: The basic configuration makes the design and implementation straightforward.

Cost-Effectiveness: Often less expensive to implement compared to more complex systems.

Ease of Maintenance: Simplified troubleshooting and repair procedures.

Limitations:

Limited Functionality: Cannot handle complex control sequences or multiple actuators independently.

Lower Efficiency in some applications: Can be less efficient than more complex systems optimized for specific tasks.

Not Suitable for all Applications: Not suitable for high-precision or high-speed applications needing advanced control.

The choice of whether to use a 3-line hydraulic system diagram depends on the specific application requirements, balancing simplicity with the need for advanced control features.

6. Advanced Concepts Based on the 3-Line Diagram

While basic, the 3-line diagram forms the foundation for more advanced systems. By adding components such as:

Multiple directional control valves: Allows control of multiple actuators.
Pressure regulators and relief valves: Provides system protection and precise pressure control.
Flow control valves: Enables precise control of actuator speed.

The core principles illustrated in the 3-line hydraulic system diagram remain essential even in significantly more complex hydraulic systems.

7. Conclusion

The 3-line hydraulic system diagram, despite its apparent simplicity, is a cornerstone of hydraulics engineering. Its historical development reflects the evolution of the field, and its continued relevance demonstrates its enduring value as a foundational teaching tool, a design aid, and a practical representation of fundamental hydraulic principles. Understanding this diagram is essential for anyone working with hydraulic systems, regardless of their complexity. Its simplicity allows for easy comprehension, while its adaptability makes it a relevant starting point for understanding a wide range of hydraulic systems.

8. FAQs

1. What is the difference between a 3-line and a 4-line hydraulic system? A 4-line system adds a separate line for regeneration, improving efficiency in certain applications. The 3-line system uses the return line for both regenerating and returning fluid.
1. Can a 3-line system be used with a hydraulic motor? Yes, although cylinders are more common, a motor can be used as the actuator in a 3-line system.
1. How do I choose the right pump for a 3-line system? Pump selection depends on the required flow rate and pressure of the system and the actuator.
1. What types of directional control valves are commonly used in 3-line systems? Various types of DCVs can be used, including spool valves,

poppet valves, and cartridge valves. The choice depends on the required control function and system parameters.

1. What are the common safety considerations for a 3-line hydraulic system? Safety features like pressure relief valves, overload protection, and proper guarding are essential.
1. How do I troubleshoot problems in a 3-line hydraulic system? Start by visually inspecting the components and checking for leaks. Then, trace the fluid flow path to identify potential blockages or malfunctions. The simplicity of the 3-line diagram helps greatly in this process.
1. What are the typical maintenance requirements for a 3-line hydraulic system? Regular fluid level checks, filter changes, and leak inspections are crucial for maintaining system efficiency and longevity.
1. Can a 3-line system be used for regenerative circuits? While possible, it's less common and typically not as efficient as a dedicated 4-line system. The return line in a 3-line system handles both return and regeneration, potentially impacting performance.
1. What are the environmental considerations when using a 3-line hydraulic system? Appropriate fluid selection considering biodegradability and proper disposal of used hydraulic oil are important environmental considerations.

9. Related Articles

1. "Basic Hydraulic System Design: A Step-by-Step Guide": A tutorial on designing basic hydraulic systems, starting with the 3-line configuration.

1. "Troubleshooting Common Hydraulic System Problems": Covers troubleshooting techniques specific to various hydraulic system configurations, including the 3-line system.
1. "Hydraulic System Symbols and Their Meanings": A comprehensive guide to interpreting hydraulic symbols commonly found in 3-line and other diagrams.
1. "Introduction to Directional Control Valves": A detailed explanation of different types of DCVs and their applications within the context of various hydraulic circuits.
1. "Hydraulic Actuator Selection and Sizing": Guidance on selecting the appropriate hydraulic actuator based on the system's requirements.
1. "Hydraulic Fluid Selection and Maintenance": Discusses different hydraulic fluids and their properties, emphasizing appropriate selection and maintenance procedures.
1. "Hydraulic System Safety and Prevention": Covers the safety aspects of hydraulic system design, operation, and maintenance, with specific examples relevant to 3-line systems.
1. "Advanced Hydraulic System Design Techniques": Explores more advanced concepts and design considerations, building upon the fundamental principles of the 3-line system.
1. "Case Studies in Hydraulic System Design": Presents real-world examples of various hydraulic systems, including some based on the 3-line configuration, highlighting design considerations and challenges.

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3 line hydraulic system diagram: *Diagrammatic Reasoning in AI* Robbie T. Nakatsu, 2009-12-02 PIONEERING WORK SHOWS HOW USING DIAGRAMS FACILITATES THE DESIGN OF BETTER AI SYSTEMS The publication of *Diagrammatic Reasoning in AI* marks an important milestone for anyone seeking to design graphical user interfaces to support decision-making and problem-solving tasks. The author expertly demonstrates how diagrammatic representations can simplify our interaction with increasingly complex information technologies and computer-based information systems. In particular, the book emphasizes how diagrammatic user interfaces can help us better understand and visualize artificial intelligence (AI) systems. It examines how diagrammatic reasoning enhances various AI programming strategies used to emulate human thinking and problem-solving, including: Expert systems Model-based reasoning Inexact reasoning such as certainty factors and Bayesian networks Logic reasoning A key part of the book is its extensive development of applications and graphical illustrations, drawing on such fields as the physical sciences, macroeconomics, finance, business logistics management, and medicine. Despite such tremendous diversity of usage, in terms of applications and diagramming notations, the book classifies and organizes diagrams around six major themes: system topology; sequence and flow; hierarchy and classification; association; cause and effect; and logic reasoning. Readers will benefit from the author's discussion of how diagrams can be more than just a static picture or representation and how diagrams can be a central part of an intelligent user interface, meant to be manipulated and modified, and in some cases, utilized to infer solutions to difficult problems. This book is ideal for many different types of readers: practitioners and researchers in AI and human-computer interaction; business and computing professionals; graphic designers and designers of graphical user interfaces; and just about anyone interested in understanding the power of diagrams. By discovering the many different types of diagrams and their applications in AI, all readers will gain a deeper appreciation of diagrammatic reasoning.

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3 line hydraulic system diagram: Grumman F8F-2 Bearcat Fighter Aircraft Pilot's Flight Manual United States Navy, 2008-09-01 The Grumman F8F Bearcat was designed to defeat the nimble Japanese fighter aircraft that appeared at the end of WWII. The conflict ended before the Bearcat could be placed into service, and although it eventually saw combat with the French in the Indo-China war, it never flew in harm's way in the U.S. Navy. One of the best piston-powered fighters ever built, the F8F could achieve a cruising speed of over 420 mph. In 1946 a Bearcat set a time-to-climb record of 10,000 feet in 94 seconds, a feat not matched until the advent of high-performance jet fighters nearly a decade later. Originally printed by Grumman and the U.S. Navy, this Flight Operating Handbook taught pilots everything they needed to know before entering the cockpit. Classified 'Restricted', the manual was declassified and is here reprinted in book form. This affordable facsimile has been slightly reformatted. Care has been taken however to preserve the integrity of the text.

3 line hydraulic system diagram: Weapon Control Systems Technician (F-4C/D: APQ-109/APA-165), (AFSC 32172P) James O'Hair, 1985

3 line hydraulic system diagram: Grumman F6F Hellcat Pilot's Flight Operating Instructions United States Navy, USN, 2008-09 The most successful naval fighter aircraft in history, the Grumman F6F Hellcat accounted for nearly 5200 kills during WWII. The Hellcat featured self-sealing fuel tanks, a bullet-resistant windscreen, and hydraulically-operated landing gear. The plane was rugged, and carried over 200 pounds of armor. Despite this, it was highly maneuverable and fast, thanks to a 2000 hp engine. Nearly 12,300 F6Fs were made during the war. They first saw action during the Tarawa invasion, and subsequently flew in every battle of the Pacific campaign. Hellcats accounted for nearly 75% of all aircraft kills in the Pacific. Originally created by the U.S. Navy, this flight operating manual taught pilot's everything they needed to know before entering the cockpit. It's a wonderful guide to one of history's great planes. Please note, this manual has been slightly reformatted and some color diagrams appear in black and white. Care has been taken to preserve the integrity of the text.

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Selectivity of power system protections at power swings in power system. Criteria for switching operations in transmission networks. Influence of automatic control of a tap changing step-up transformer on the power capability area of the generating unit. Mathematical models of power system components such as HVDC links, wind and photovoltaic power plants. Data of sample (benchmark) test systems. Power System Dynamics: Stability and Control, Third Edition is an essential resource for students of electrical engineering and for practicing engineers and researchers who need the most current information available on the topic.

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3 line hydraulic system diagram: Blueprint Reading And Sketching Including Machine Drawings; Piping Systems; Electrical and Electronics Prints; Architectural and Structural Steel Drawings , Chapter 1 BLUEPRINTS When you have read and understood this chapter, you should be able to answer the following learning objectives: Describe blueprints and how they are produced. Identify the information contained in blueprints. Explain the proper filing of blueprints. Blueprints (prints) are copies of mechanical or other types of technical drawings. The term blueprint reading, means interpreting ideas expressed by others on drawings, whether or not the drawings are actually blueprints. Drawing or sketching is the universal language used by engineers, technicians, and skilled craftsmen. Drawings need to convey all the necessary information to the person who will make or assemble the object in the drawing. Blueprints show the construction details of parts, machines, ships, aircraft, buildings, bridges, roads, and so forth. BLUEPRINT PRODUCTION Original drawings are drawn, or traced, directly on translucent tracing paper or cloth, using black waterproof India ink, a pencil, or computer aided drafting (CAD) systems. The original drawing is a tracing or "master copy." These copies are rarely, if ever, sent to a shop or site. Instead, copies of the tracings are given to persons or offices where needed. Tracings that are properly handled and stored will last indefinitely. The term blueprint is used loosely to describe copies of original drawings or tracings. One of the first processes developed to duplicate tracings produced white lines on a blue background; hence the term blueprint. Today, however, other methods produce prints of different colors. The colors may be brown, black, gray, or maroon. The differences are in the types of paper and developing processes used. A patented paper identified as BW paper produces prints with black lines on a white background. The diazo, or ammonia process, produces prints with either black, blue, or maroon lines on a white background. Another type of duplicating process rarely used to reproduce working drawings is the photostatic process in which a large camera reduces or enlarges a tracing or drawing. The photostat has white lines on a dark background. Businesses use this process to incorporate reduced-size drawings into reports or records. The standards and procedures prescribed for military drawings and blueprints are stated in military standards (MIL-STD) and American National Standards Institute (ANSI) standards. The Department of Defense Index of Specifications and Standards lists these standards; it is issued on 31 July of each year. The following list contains common MIL-STD and ANSI standards, listed by number and title, that concern engineering drawings and blueprints.

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2017-02-24 Revised edition of: Fundamentals of automotive maintenance and light repair / Kirk T.
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(6115-00-455-7693) DOD M MEP006ALM, LOAD BANK KIT (6115-00-407-8322) DOD MODEL
MEP006 013550 TM 5-6115-545-34 12 INTERMEDIATE (FIELD) (DIRECT AND GENERAL
SUPPORT) AND DEPOT MAINTENANCE MANUAL FOR GENERATOR SET, DIESEL ENGINE
DRIVEN, TAC SKID MTD., 60 KW, 3 PHASE, 4 WIRE, 120/208 AND 240/416 VOLTS DOD MODELS
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NAVFAC P-8-626-34; TM 00038G-35} 015378 TM 5-6115-323-14 10 GENERATOR GASOLINE
ENGINE DRIVEN, SKID MOUNTED, TUBULAR FRAME, 1.5 KW, SI PHASE, AC, 120/240 V, 28 V,
DC (LESS ENGINE) (DOD MODELS MEP-01 60 HZ (NSN 6115-00-889-1446) AND (MODEL
MEP-025A) 28 V DC (6115-00-017-8236) {TO 35C2-3-385-1} 015380 TM 5-6115-332-24P 3
GENERATOR GASOLINE ENGINE: AIR COOLED, 5 KW, AC, 120/240 V, SINGLE PHASE; 120/208 V,
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MTD, 100 KW, 3 PHASE, 120/208 AND 240/416 V (DOD MODELS MEP-007A), UTILITY CLASS, 50/
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(MODEL MEP-116A), PRECISE CLASS, 400 HZ (6115-00-133-9103) 020612 LO 5-6115-458-12
GENERATOR SET, DIESEL ENGINE DRIVEN, SKID MTD, 200 KW, 3 PHASE, 4 WIRE, 120/208/416
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MEP-108A, PRECISE CLASS, 50 HERTZ (6115-00-935-8729) {LO 07536A-12} 020614 LO
5-6115-465-12 GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL, SKID MOUNTED, 30 3
PHASE, 4 WIRE, 120/206 AND 240/416 V (DOD MODEL MEP-055A), UT CLASS, 50/60 HZ (NSN
6115-00-118-1240); (MODEL MEP 104A), PRECI CLASS, 50/60 HZ (6115-00-118-1247) AND
(MODEL 114A) PRECISE CLA 400 HZ (6115-00-118-1248) 025150 TM 5-6115-271-14 12
GENERATOR SET, GASOLINE ENGINE DRIVEN, S MTD, TUBULAR FRAME, 3 KW, 3 PHASE, AC,
120/208 AND 120/240 V, 2 DC (LESS ENGINE) DOD MODEL MEP-016A, 60 HZ (NSN
6115-00-017-823 MODEL MEP-016C 60 HZ (6115-00-143-3311) MODEL MEP-021A 400 HZ
(6115-00-017-8238) MODEL MEP-021C 400 HZ (6115-01-175-7321) MODEL MEP-026A DC HZ
(6115-00-017-8239) MODEL MEP-026C 28 V DC (6115-01-175-7320) {TO 35C2-3-386-1; TM
05926A-14; NAVFAC P-8-6 025151 TM 5-6115-271-24P 3 GENERATOR SET, GASOLINE ENGINE
DRIVEN, SKID MOUNTED, TUBULA FRAME, 3 KW, 3 PHASE, AC; 120/208 AND 120/240 VOLTS, 28
VDC (LE ENGINE) (DOD MODEL MEP-016A) 60 HERTZ (NSN 6115-00-017-8237) (MEP-021A) 400
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SET, GASOLINE ENGINE DRIVEN, SKID MOUNTED, TUBULAR FRAME, 10 KW, AC, 120/208V
PHASE, AND 120/240V, SINGLE PHASE, LESS ENGINE: DOD MODELS MEP- HZ, (NSN
6115-00-889-1447) AND MEP-023A, 400 HZ (6115-00-926-08 {NAVFAC P-8-615-14; TO
35C2-3-452-1} (THIS ITEM IS INCLUDED ON EM 0086, EM 0088 & EM 0127) 032508 TM
5-6115-275-24P 5 GENERATOR, GASOLINE ENGINE DRIVEN, SKID MOUNTED, TUBULAR
FRAME, 10 KW, AC, 120/208 V, 3 PHASE AND 120/240 V, SINGLE PHASE (LESS ENGINE); D
MEP-018A, UTILITY CLASS, 60 HZ (NSN 6115-00-889-1447) AND MEP-0 PRECISE CLASS, 400 HZ
(6115-00-926-0843) {NAVFAC P8-615-24P; TO 35C2-3-452-4} (THIS ITEM IS INCLUDED ON EM
0086, EM 0088 & EM 0127) 032551 TM 5-6115-584-12 11 GENERATOR SET, DIESEL ENGINE
DRIVEN, TACTICAL SKID MTD, 5 KW, 1 PHASE, 2 WIRE; 1 PHASE, 3 WIRE; 3 PHASE, 4 WIRE,
120, 120/240 AND 120/208 V (DOD MODEL MEP-002A) UTILITY CLASS, 60 HZ (NSN
6115-00-465-1044) {NAVFAC P-8-622-12; TO 35C2-3-456-1; TM 05682C-12} 032640 TM
5-6115-585-12 12 GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MTD, 10 KW, 1
PHASE, 2 WIRE 1 PHASE, 3 WIRE AND 3 PHASE, 4 WIRE; 120, 120/240 AND 120/208 V (DOD
MODEL MEP-003A) UTILITY CLASS, 60 HZ (NSN 6115-00-465-1030 AND (MODEL MEP-112A),

UTILITY CLASS, 400 HZ (6115-00-465-1027) {NAVFAC P-8-623-12; TO 35C2-3-455-1; TM-05684C/05685B-12} 032781 TM 5-6115-584-34 8 GENERATOR SET, DIESEL ENGINE DRIVEN, TAC SKID MOUNTED, 5 KW, 1 PHASE, 2 WIRE, 1 PHASE, 3 WIRE, 3 PHASE, 120, 120/240 AND 120/208 V (DOD MODEL MEP-002A), UTILITY CLASS, (NSN 6115-00-465-1044) {NAVFAC P-8-622-34; TO 35C2-3-456-2; TM 0568C-34} 032936 TM 5-6115-329-14 4 GENERATOR SET GASOLINE ENGINE DRIVEN, 0.5 KW (LESS ENGINE) (DOD MODEL MEP-014 UTILITY CLASS, 60 HZ) (NSN 6115-00-923-4469), (DOD MODEL MEP-01 UTILITY CLASS, 400 HZ (6115-00-940-7862) AND (DOD MODEL MEP-024 UTILITY CLASS, 28 VDC (6115-00-940-7867) {TO 35C2-3-440-1} 033374 TM 5-6115-332-14 10 GENERATOR SET, TAC GASOLINE ENGINE: AIR COOLED, 5 KW, AC, 120/240 V, SINGLE PHASE, V, 3 PHASE, SKID MOUNTED, TUBULAR FRAME (LESS ENGINE) (MILITARY DOD MODEL MEP-017A), UTILITY, 60 HZ (NSN 6115-00-017-8240) AND MODEL MEP-022A), UTILITY, 400 HZ (6115-00-017-8241) {NAVFAC P-8-614-14; TO 35C2-3-424-1} 033750 TM 5-6115-585-34 9 GENERATOR SET, DIESEL ENGINE DRIVEN, TAC SKID MOUNTED, 10 KW, 1 PHASE, 2 WIRE, 1 PHASE, 3 WIRE, 3 PHASE, 4 WIRE, 120, 120/240 AND 120/208 VOLTS (DOD MODEL MEP-003A), UT CLASS, 60 HZ (NSN 6115-00-465-1030) {NAVFAC P-8-623-12; TO 35C2-3-455-2; TM-05684C/05685B-34} 034072 TM 5-6115-585-24P 5 GENERATOR SET, DIESEL ENGINE DRIVEN, TA SKID MTD, 10 KW, 1 PHASE, 2 WIRE; 1 PHASE, 3 WIRE; 3 PHASE, 4 W 120, 120/240 AND 120/208 V (DOD MODELS 003A), UTILITY CLASS, 60 (NSN 6115-00-465-1030) AND (MODEL MEP-112A), UTILITY CLASS, 400 (6115-00-465-1027) {NAVFAC P-8-623-24P; TO 35C2-3-455-4; SL-4-05684C/06585B} 040180 TM 5-6115-584-12-HR HAND RECEIPT MANUAL COVERING END ITEM/COMPONENTS OF END ITEM (C BASIC ISSUE ITEMS (BII), AND ADDITIONAL AUTHORIZATION LIST (AAL GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MTD, 5 KW, 1 WIRE; 1 PH, 3 WIRE; 3 PH, 4 WIRE, 120, 120/240 AND 120/208 V (D MEP-002A) UTILITY CLASS, 60 HZ (NSN 6115-00-465-1044) 040833 TM 5-6115-458-12-HR HAND RECEIPT MANUAL COVERING THE END ITEM/COMPONENTS OF END ITE BASIC ISSUE ITEMS (BII), AND ADDITIONAL AUTHORIZATION LIST (AA GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL, SKID MOUNTED, 20 3 PHASE, 4 WIRE, 120/208 AND 240/416 V (DOD MODEL MEP-009A), UT CLASS, 50/60 HZ (NSN 6115-00-133-9104) AND (DOD MODEL MEP-108A) PRECISE CLASS, 50/60 HZ (6115-00-935-8729) 040843 TM 5-6115-593-34 GENERATOR SET, DIESEL ENGINE DRIVEN, TAC SKID MTD, 500 KW, 3 PHASE, 4 WIRE, 120/208 AND 240/416 VOLTS DOD MODEL, MEP-029A, CLASS UTILITY, 50/60 HZ, (NSN 6115-01-030- DOD MODEL, MEP-029B, CLASS UTILITY, 50/60 HZ, (6115-01-318-6302 INCLUDING OPTIONAL KITS DOD MODEL, MEP-029AHK, HOUSING KIT, (6115-01-070-7550), DOD MODEL, MEP-029ACM, AUTOMATIC CONTROL MO (6115-01-275-7912) DOD MODEL, MEP-029ARC, REMOTE CONTROL MODULE (6110-01-070-7553) DOD MODEL, MEP-029ACC, REMOTE CONTROL CABLE, (6110-01-087-4127) {NAVFAC P-8 041070 TM 5-6115-593-12 GENERATOR SET, ENGINE DRIVEN, TACTICAL SKID MTD, 500 KW, 3 PHASE, 4 WIRE; 120/ 240/416 VOLTS DOD MODEL MEP-029A; CLASS UTILITY, HERTZ 50/60; (NSN 6115-01-030-6085); MEP-029B; UTILITY; 50/60; (6115-01-318- INCLUDING OPTIONAL KTS DOD MODELS MEP-029AHK; NOMENCLATURE HOUS (6115-01-070-7550) MEP-029ACM; AUTOMATIC CONTROL MODULE; (6115-01-275-7912); MEP-029ARC, REMOTE CONTROL MODULE, (6110-01-070-7553); MEP-029ACC, REMOTE CONTROL CABLE (6110-01-087-4127) {TO 35C2-3-463-1} 041338 LO 55-1730-229-12 POWER UNIT, AVIATION, MULTI-OUTPUT GTED ELECTRICAL, HYDRAULIC, PNEUMATIC (AGPU), WHEEL MOUNTED, SELF-PROPELLED, TOWABLE DOD MODEL-MEP-360A, CLASS-PRECISE, HERTZ-400, (NSN 1730-01-144-1897 042791 TM 5-6115-457-12-HR HAND RECEIPT MANUAL COVERING THE BASIC ISSUE ITEMS (BII) FOR GE SET, DIESEL ENGINE DRIVEN, TACTICAL, SKID MTD; 100 KW, 3 PHASE, 120/208 AND 240/416 V (DOD MODELS MEP007A), UTILITY CLASS, 50/6 (NSN 6115-00-133-9101), (MODEL MEP-106A), PRECISE CLASS, 50/60 (6115-00-133-9102) AND (MODEL MEP116A) PRECISE CLASS, 400 HZ (6115-00-133-9103) 043437 TM 5-6115-593-24P 1 GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MOUNTED, 500 KW, 3 PHA 4 WIRE; 120/208 AND 240/416 VOLTS DOD MODEL MEP-029A UTILITY CL 50/60 HZ (NSN

6115-01-030-6085) MEP-029B UTILITY CLASS, 50/60 (6115-01-318-6302) INCLUDING OPTIONAL KITS DOD MODEL MEP-029AHK HOUSING KIT (6115-01-070-7550) MEP-029ACM AUTOMATIC CONTROL MOD (6115-01-275-7912) MEP-029ARC REMOTE CONTROL MODULE (6110-01-070-7553) MEP-029ACC REMOTE CONTROL CABLE (6110-01-087 {NAVFAC P-8-631-24P; TO 35C2-3-463-4} 044703 TM 5-6115-545-12-HR HAND RECEIPT MANUAL COVERING COMPONENTS OF END ITEM (COEI), BAS ITEMS (BII), AND ADDITIONAL AUTHORIZATION LIST (AAL) FOR GENERA DIESEL ENGINE DRIVEN, TACTICAL SKID MTD, 60 KW, 3 PHASE, 4 WIRE 120/208 AND 240/416 V (DOD MODELS MEP-006A) UTILITY CLASS, 50/6 (NSN 6115-00-118-1243), (MODEL MEP-105A) PRECISE CLASS, 50/60 H (6115-00-118-1252) AND (MODEL MEP-115A) PRECISE CLASS, 400 HZ (6115-00-118-1253) 050998 TM 5-6115-600-12 8 GENERATOR DIESEL ENGINE DRIVEN, TACTICAL SKID MTD, 100 KW, 3 PHASE, 4 WIR 120/208 AND 240/416 V (DOD MODEL MEP-007B) CLASS UTILITY, 50/60 (NSN 6115-01-036-6374) INCLUDING OPTIONAL KITS, DOD MODEL MEP00 WINTERIZATION KIT, FUEL BURNING AND MEP007BWE WINTERIZATION KIT ELECTRIC 051007 TM 5-6115-600-24P 4 GENERATOR SET, DIESEL ENGINE DRIVEN, 100 KW, 3 PHASE, 4 WIRE, 120/208 AND VOLTS (DOD MODEL MEP-007B), UTILITY CLASS, 50/60 HZ (NSN 6115-01-036-6374) INCLUDING OPTIONAL KITS, DOD MODEL MEP007BWF, WINTERIZATION KIT, FUEL BURNING AND MEP007BWE WINTERIZATION KIT, ELECTRIC {TO 35C2-3-442-14; NAVFAC P-8-628-24P; SL-4-07464B} 057268 LO 5-6115-600-12 GENERATOR SET, DIESEL ENGINE DRIVEN; TACTICAL, SKID MTD, 100 KW PHASE, 4 WIRE; 120/208 AND 240/416 V (DOD MODEL MEP007B), CLASS UTILITY, 50/60 HZ (NSN 6115-01-036-6374) 057513 LO 5-6115-604-12 GENERATOR SET, DIESEL ENGINE DRIVEN, AIR TRANSPORTABLE; SKID MT 750 KW, 3 PHASE, 4 WIRE; 2400/4160 AND 2200/3800 VOLTS (DOD MOD MEP208A) CLASS PRIME UTILITY, HZ 50/60 (NSN 6115-00-450-5881) {LI 6115-12/9} 060183 TM 5-6115-612-24P 6 GENERATOR SET, AVIATION, GAS TURBINE ENGINE DRIVEN, INTEGRA TRAILER MOUNTED, 10KW, 28 VOLTS MODEL MEP-362A, PRECISE, DC (NSN 6115-01-161-3992) {TM 6115-24P/1; AG-320B0-IPE-000; TO 35C2-3-471-4} 060188 TM 5-6115-612-34 4 GENERATOR SET, AVIATION, GAS TURBINE ENG DRIVEN, INTEGRAL TRAILER MOUNTED 10KW 28 VOLTS DOD MODEL MEP 36 PRECISE, DC, (NSN 6115-01-161-3992) {AG-320B0-MME-000; TM 6115- TO 35C2-3-471-2} 060645 LO 5-6115-612-12 AVIATION GENERATOR SET, GAS TURBINE, ENGINE DRIVEN, INTEGRAL TR MOUNTED, 10KW, 28 VOLTS DC DOD MODEL MEP 362A CLASS PRECISE (NSN 6115-01-161-3992) 060921 TM 55-1730-229-34 5 POWER UNIT, AVIATION, MULTI-OUTPUT GTED, ELECTRICAL, HYDRAULIC, PNEUMATIC (AGPU) WHEEL MOUNTED, SELF-PROPELLED, TOWA AC 400HZ, 3PH, 0.8 PF, 115/200V, 30 KW, DC 28VDC 700 AMPS, PNEUMATIC, 60 LBS/MIN. AT 40 PSIG, HYDRAULIC, 15 GPM AT 3300 PS DOD MODEL MEP-360A, CLASS PRECISE, 400 HERTZ, (NSN 1730-01-144- {AG 320A0-MME-000; TO 35C2-3-473-2; TM 1730-34/1} 060922 TM 55-1730-229-12 8 POWER UNIT, AVIATION, MULTI-OUTPUT GTED ELECTRICAL, HYDRAULIC, PNEUMATIC (AGPU) WHEEL MOUNTED, SELF-PROPELLED, TOWABLE, AC 400HZ, 3PH, 0.8 PF, 115/200V, 30 KW, DC 28 VDC 700 AMPS, PNEUMATIC 60 LBS/M AT 40 PSIG, HYDRAULIC 15 GPM AT 3300 PSIG, DOD MODEL MEP-360A, CLASS PRECISE, HERTZ 400, (NSN 1730-01-144-1897) {AG 320A0-OMM-000; TO 35C2-3-473-1; TM 1730-12/1} 061758 LO 5-6115-614-12 GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MTD. 200 KW, 3 PHASE, 4 WIRE, 120/208 AND 240/416 VOLTS MODEL MEP009B, UTILI 50/60 HERTZ, (NSN 6115-01-021-4096) 061772 LO 5-6115-622-12 GENERATOR SET, DIESEL ENGINE-DRIVEN, WHEEL MOUNTED 750-KW, 3-PH 4-WIRE, 2200/3800 AND 2400/4160 VOLTS CUMMINS ENGINE COMPANY IN MODEL KTA-2300G-2 DOD MODEL MEP-012A; CLASS UTILITY; HERTZ 062762 LO 5-6115-615-12 GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MOUNTED, 3 K MODEL 016B; CLASS UTILITY MODE 50/60 HZ (NSN 6115-01-150-4140); DOD MODEL MEP-021B; CLASS UTILITY; MODE 400 HZ (6115-01-151-812 DOD MODEL MEP-026B; CLASS UTILITY; MODE 28 VDC (6115-01-150-036 {LI 05926B/06509B-12/5; P-8-646-LO} 064310 TM 5-6115-626-14&P 2 POWER UNIT PU-406B/M (NSN 6115-00-394-9576) MEP-005A 30 KW 60 HZ GENERATOR SET M200A1 2-WHEEL4-TIRE, MODIFIED TRAILER 064390 TM 5-6115-632-14&P 5 POWER UNIT

PU-753/M (NSN 6115-00-033-1 MEP-003A 10 KW 60 HZ GENERATOR SET M116A2 2-WHEEL, 2-TIRE, MODI TRAILER 064392 TM 5-6115-629-14&P 3 POWER PLANT AN/AMJQ-12A (NSN 6115-00-257-1602) (2) MEP-006A 60HZ, GENERATOR SETS (2) M200A1 2-WHEEL, 4-TIRE, MODIFIED TRAIL 064443 TM 5-6115-625-14&P 2 POWER UNIT PU-405A/M (NSN 6115-00-394-9577) MEP-004A 15 KW 60 HZ GENERATOR SET M200A1 2-WHEEL, 4-TIRE, MODIFIED TRAILER (THIS ITEM IS INCLUDED ON EM 0086 & EM 0087) 064445 TM 5-6115-633-14&P 4 POWER PLANT AN/MJQ-18 (NSN 6115-00-033-1398) (2) MEP-003A 1 60 HZ GENERATOR SETS M103A3 2-WHEEL 1 1/2 TON MODIFIED TRAILER 064446 TM 5-6115-628-14&P 4 POWER PLANT AN/MJQ-15 (NSN 6115-00-400-7591) (2) MEP-113A 1 400 HZ GENERATOR SETS, (2) M200A1 2-WHEEL, 4-TIRE, MODIFIED TRA (THIS ITEM IS INCLUDED ON EM 0086) 064542 TM 5-6115-631-14&P 4 POWER PLANT AN/MJQ-16 (NSN 61 15-00-033-1395) (2) MEP-002A 5 KW 60 HZ GENERATOR SETS M103A3 2-WHEEL, 2-TIRE, MODIFIED TRAI 065071 TM 55-1730-229-24P 6 POWER AVIATION, MULTI-OUTPUT GTED ELECTRICAL, HYDAULIC, PNEUMATIC (AG WHEEL MOUNTED, SELF-PROPELLED, TOWABLE AC 400 HZ, 3 PH, 0.8 PF, 115/200V, 30 KW DC 28 VDC 700 AMPS PNEUMATIC 60 LBS/MIN. AT 40 HYDRAULIC 15 GPM AT 3300 PSIG DOD MODEL MEP-360A, CLASS PRECISE 400 HERTZ (NSN 1730-01-144-1897) {TO 35C2-3-473-4; TM 1730-24P/ AG 320A0-IPB-000} 065603 TB 5-6115-593-24 WARRANTY PROGRAM FOR GENERATOR SET DOD MODEL MEP-029A HOUSING K DOD MODEL MEP-029AHK 066727 TM 5-6115-640-14&P 2 POWER AN/MJQ-32 (NSN 6115-01-280-2300) AN/MJQ-33 (6115-01-280-2301) (MEP-701A 3KW 60 HZ ACOUSTIC SUPPRESSION KIT GENERATOR SETS M116 2-WHEEL, 2-TIRE, 3/4-TON MODIFIED TRAILERS 066808 TM 5-6115-627-14&P 2 POWER PLANT AN/MJQ-10A (NSN 6115-00-394-9582); (2) MEP-005A 30 KW 60 HZ GEN SETS; (2) M200A1 2-WHEEL, 4 TIRE MODIFIED TRAILERS 066809 TM 5-6115-630-14&P 4 POWER UNIT, PU-751/M (NSN 6115-00-033-1373) MEP-002A, 5 KW, 60 HZ GENERATOR SET M116A1 2-WHEEL, 2-TIRE, MODIFIED TRAILER 066824 TM 5-6115-465-10-HR 1 HAND RECEIPT MANUAL COVERING END ITEM/COMPONENTS OF END ITEM (C BASIC ISSUE ITEMS, (BII) AND ADDITIONAL AUTHORIZATION LIST (AAL GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MOUNTED, 30K 4 WIRE, 120/208 AND 240/416 VOLTS - MEP-005A, UTILITY, 50/60 HE (NSN 6115-00-118-1240); MEP-104A, PRECISE, 50/60 HERTZ, (6115-00-118-1247); MEP-114A, PRECISE, 400 HERTZ, (6115-00-118- INCLUDING AUXILIARY EQUIPMENT MEP-005AWF WINTERIZATION KIT, FUE BURNING (6115-00-463-9083); MEP-005AWE, WINTERIZATION KIT, ELEC (6115-00 067310 TM 9-6115-650-14&P 1 POWER PLAN AN/MJQ-25 (NSN 6115-01-153-7742) (2) MEP-112A 10 KW 400 HZ GENE SETS M103A3 2-WHEEL, 2-TIRE, MODIFIED TRAILER 067311 TM 9-6115-653-14&P 2 POWER UNIT PU-732/M (NSN 6115-00-260-3082) MEP-113A 15 KW 400 HZ GENERATOR SET M200 2-WHEEL, 4-TIRE, MODIFIED TRAILER 067544 TM 9-6115-652-14&P 1 POWER UNIT PU-760/M (NSN 6115-00-394-9581) MEP-114A 30 KW 400 HZ GENERATOR M200A1 2-WHEEL, 4-TIRE, MODIFIED TRAILER 067632 TM 9-6115-648-14&P POWER UNIT PU-650B/G (NSN 6115-00-258-1622) MEP-006A 60 KW 60 HZ GENERATOR M200A1 2-WHEEL, 4-TIRE, MODIFIED TRAILER 067744 TM 9-6115-646-14&P 1 POWER UNIT PU-495A/G, (NSN 6115-00-394-9575) AND PU-495B/G, (6115-01-134-0 MEP-007A 100 KW, 60 HZ OR MEP-007B, 100 KW, 60 HZ GENERATOR SET M353-2-WHEEL, 2-TIRE MODIFIED TRAILER 067746 TM 9-6115-651-14&P POWER UNIT 707A/M (NSN 6115-00-394-9573) MEP-115A, 60 KW, 400 HZ GENERATOR M200A1, 2-WHEEL, 4-TIRE, MODIFIED TRAILER 067879 TM 9-6115-647-14&P 1 POWER UNIT PU-789/M (NSN 6115-01-208-9827) MEP-114A, 30 KW 400 HZ GENERATOR SET M353 2-WHEEL, 2-TIRE, MODIFIED TRAILER 069601 TM 9-6115-464-10-HR HAND RECEIPT MANUAL COVERING THE END ITEMS/COMPONENTS OF END IT (COEI), BASIC ISSUE ITEMS (BII), AND ADDITIONAL AUTHORIZATION L (AAL) FOR GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MO 15 KW, 3 PHASE, 4 WIRE, 120/208 AND 240/416 VOLTS DOD MODEL MEP UTILITY CLASS, 50/60 HERTZ (NSN 6115-00-118-1241) DOD MODEL MEP PRECISE CLASS, 50/60 HERTZ (6115-00-118-1245) DOD MODEL MEP-113 PRECISE CLASS, 400 HERTZ (6115-00-118-1244) 069602 LO 9-6115-464-12 GENERATOR SET, DIESEL ENGINE DRIVEN,

TACTICAL, SKID MTD, 15KW, 4 WIRE, 120/208 AND 240/416 VOLTS (DOD MODEL MEP 004A) (NSN 6115-00-118-1241); (DOD MODEL MEP 104A) (6115-00-118-1245) (DOD MODEL MEP-113A) (6115-00-118-1244) 069954 TM 9-6115-465-24P 2 GENERATOR SET, DIESEL ENGINE DRIVE TACTICAL SKID MTD. 30KW, 3 PHASE, 4 WIRE, 120/208 AND 240/416 V MODELS; MEP-005A, UTILITY, 50/60 HZ, (NSN 6115-00-118-1240), MEP-104A PRECISE, 50/60 HZ, (6115-00-118-1247), MEP-114A, PRECISE, 400 H (6115-00-118-1248), INCLUDING OPTIONAL KITS, DOD MODELS; MEP-00 WINTERIZATION KIT, FUEL BURNING, (6115-00-463-9083), MEP-005-AW WINTERIZATION KIT, ELECTRIC, (6115-00-463-9085), MEP-002-ALM, L BANK KIT, (6115-00-463-9088), MEP-005-AWM, WHEEL MOUNTING KIT, (6115-00-463-9094) {TO-35C2-3-070096 TM 9-6115-464-24P 1 GENERATOR S DIESEL ENGINE DRIVEN, TACTICAL SKID MTD., 15KW, 3 PHASE, 4 WIRE 120/208 AND 240/416 VOLTS (DOD MODEL MEP-004A) UTILITY CLASS 50/60 HERTZ (NSN 6115-00-118-1241) (DOD MODEL MEP-103A) PRECISE CLASS 50/60 HERTZ (6115-00-118-1245) (DOD MODEL MEP-113A) PRECI CLASS 400 HERTZ (6115-00-118-1244) INCLUDING OPTIONAL KITS (DOD MODEL MEP-005-AWF) WINTERIZATION KIT, FUEL BURNING (6115-00-463 (DOD MODEL MEP-005-AWE) WINTERIZATION KIT, ELECTRIC (6615-00-46 (DOD MODEL MEP-004-ALM) LOAD BANK KIT (6115-00-191-9201 071025 TM 9-6115-641-10 2 GENERATOR SET SKID MOUNTED, TACTICAL QUIET 5 KW, 60 AND 400 HZ MEP-802A (60 HZ) (NSN 6115-01-274-7387) MEP-812A (400 HZ) (6115-01-274-7391) {TO 35C2-3-456-11} 071026 TM 9-6115-642-10 2 GENERATOR SET SKID MOUNTED, TACTICAL QUIE 10 KW, 60 AND 400 HZ MEP-803A (60 HZ) (NSN 6115-01-275-5061) MEP-813A (400 HZ) (6115-01-274-7392) {TO 35C2-3-455-11; TM 09247A/09248A-10/1} 071028 TM 9-6115-643-10 3 GENERATOR SET, SKID MOUNTED, TACTICAL QUI 15 KW, 50/60 AND 400 HZ MEP-804A (50/60 HZ) (NSN 6115-01-274-73 MEP-814A (400 HZ) (6115-01-274-7393) {TO 35C2-3-445-21} 071029 TM 9-6115-644-10 2 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 30 KW, 50/60 AND 400 HZ MEP-805A (50/60 HZ), (NSN 6115-01-274-7389) MEP-815A (400 HZ), (6115-01-274-7394) {TO 35C2-3-446-11; TM 09249A/09246A-10/1} 071030 TM 9-6115-645-10 2 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 60 KW, 50/60 AND 400 HZ MEP-806A (50/60 HZ), (NSN 6115-01-274-7390) MEP-816A (400 HZ), (6115-01-274-7395) {TO 35C2-3-444-11; TM 09244A/09245A-10/1} 071031 LO 9-6115-641-12 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 5 KW, 60 AND 400 HZ MEP-802A TACTICAL QUIET 60 HZ (NSN 6115-01-274-7387) MEP-812A TACTICAL QUIET 400 HZ (6115-01-274-7391) 071032 LO 9-6115-642-12 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 10 KW, 60 AND 400 H MEP-803A TACTICAL QUIET 60 HZ (NSN 6115-01-275-5061) MEP-813A TACTICAL QUIET 400 HZ (6115-01-274-7392) 071033 LO 9-6115-643-12 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 15 KW, 50/60/400 HZ MEP-804A TACTICAL QUIET 50/60 HZ (NSN 6115-01-274-7388) MEP-814 TACTICAL QUIET 400 HZ (6115-01-274-7393) 071034 LO 9-6115-644-12 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 30 KW, 50/60 AND 40 MEP-805A TACTICAL QUIET 50/60 HZ (NSN 6115-01-274-7389) MEP-815 TACTICAL QUIET 400 HZ (6115-01-274-7394) {LI 09249A/09246A-12} 071035 LO 9-6115-645-12 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 60 KW, 50/60 AND 40 MEP-806A TACTICAL QUIET 50/60 HZ (NSN 6115-01-274-7390) MEP-816 TACTICAL QUIET 400 HZ (6115-01-274-7395) {LI 09244A/09245A-12} 071036 TB 9-6115-641-24 WARRANTY PROGRAM FOR GENERATOR SET, TACTICAL QUIET 5 KW, 60 AND 400 HZ MEP-802A AND MEP-812A 071037 TB 9-6115-642-24 WARRANTY PROGRAM FOR GENERATOR SET, TACTICAL QUIET 10 KW, 60 AND 400 HZ MEP-803A AND MEP-813A {SI 09247A/09248A-24} 071038 TB 9-6115-643-24 WARRANTY PROGRAM FOR GENERATOR SET, TACTICAL QUIET 15 KW, 50/60 AND 400 HZ MEP-804A AND MEP-814A 071039 TB 9-6115-644-24 WARRANTY PROGRAM FOR GENERATOR SET, TACTICAL QUIET 30 KW, 50/60 AND 400 HZ MEP-805A AND MEP-815A {SI 09249A/09246A-24} 071040 TB 9-6115-645-24 WARRANTY PROGRAM FOR GENERATOR SET, TACTICAL QUIET 60 KW, 50/60 AND 400 HZ MEP-806A AND MEP-816A {SI 09244A/09245A-24} 071541 TM 9-6115-464-12 2 GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MTD, 15 KW, 3 PHASE, 4 WIRE, 120/2 AND 240/416 VOLTS DOD MODEL MED-004A UTILITY CLASS 50/60 HERTZ (NSN 6115-00-118-1241) DOD MODEL

MEP-103A PRECISE CLASS 50/60 HERTZ (6115-00-118-1245) DOD MODEL MEP-113A PRECISE CLASS 400 HERTZ (6115-00-118-1244) INCLUDING OPTIONAL KITS DOD MODEL MEP-005-AWF WINTERIZATION KIT, FUEL BURNING (6115-00-463-9083) DOD MODEL MEP-005-AWE WINTERIZATION KIT, ELECTRIC (6115-00-463-9085) DOD MODEL MEP-004-ALM LOAD BANK KIT (6115-00-291 071604 TM 9-6115-645-24P GENERATOR SET, TACTICAL QUIET 60KW, 50/60/400 HZ (NSN 6115-01-274-7390) (MEP-806A) (6115-01-274-7395) (MEP-816A) {TO 35C2-3-444-14; TM 09244A/09245A-24P/3} 071605 TM 9-6115-642-24P GENERATOR SET, TACTICAL QUIET 10 KW, 60/400 HZ (NSN 6115-01-275-5061) (MEP-803A) (6115-01-274-7392) (MEP-813A) {TO 35C2-3-455-14; TM 09247A/09248A-24P/3} 071610 TM 9-6115-643-24P GENERATOR SET, TACTICAL QUIET 15KW, 50/60 - 400 HZ (NSN 6115-01-274-7388) (MEP-804A) (6115-01-274-7393) (MEP-814A) {TO 35C2-3-445-24} 071611 TM 9-6115-644-24P GENERATOR SET, TACTICAL QUIET 30KW, 50/60-400 HZ (NSN 6115-01-274-7389) (MEP-805A) (6115-01-274-7394) (MEP-815A) {TO 35C2-3-446-14; TM 09249A/09246A-24P/3} 071613 TM 9-6115-641-24P GENERATOR SET, TACTICAL QUIET 5 KW, 60/400 HZ (NSN 6115-01-274-7387) (MEP-802A) (6115-01-274-7391) (MEP-812A) {TO 35C2-3-456-14} 071713 TM 9-6115-645-24 4 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 60KW, 50/60 AND 400 HZ MEP-806A (50/60 HZ) (NSN 6115-01-274-7390) MEP-816A (400 HZ) (6115-01-274-7395) {TO 35C2-3-444-12; TM 09244A/09245A-24/2} 071748 TM 9-6115-644-24 1 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 30 KW, 50/60 AND 400 HZ MEP-805A (50/60 HZ) (NSN 6115-01-274-7389) MEP-815A (400 HZ) (6115-01-274-7394) {TO 35C2-3-446-12; TM 09249A/09246A-24/2} 071749 TM 9-6115-643-24 4 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 15 KW, 50/60 AND 400 HZ MEP-804A (50/60 HZ) (NSN 6115-01-274-7388) MEP-814A (400 HZ) (6115-01-274-7393) {TO 35C2-3-445-22} 071750 TM 9-6115-642-24 4 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 10 KW, 60 AND 400 HZ MEP-803A (60 HZ) (NSN 6115-01-275-5061) MEP-813A (400 HZ) (6115-01-274-7392) {TO 35C2-3-455-12; TM 09247A/09248A-24/2} 071751 TM 9-6115-641-24 3 GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 5 KW, 60 AND 400 HZ MEP-802A (60 HZ) (NSN 6115-01-274-7387) MEP-812A (400 HZ) (6115-01-274-7391) {TO 35C2-3-456-12} 072239 TM 9-6115-464-34 1 GENERATOR SET, DIESEL ENGINE DRIVEN, TACTICAL SKID MTD., 15 KW, 3 PHASE, 4 WIRE 120/208 AND 240/416 VOLTS DOD MODEL MEP-004A UTILITY CLASS 50/60 HERTZ (NSN 6115-00-118-1241) DOD MODEL MEP 103A PRECISE CLASS 50/60 HERTZ (6115-00-118-1245) DOD MODEL MEP-113A PRECISE CLASS 400 HERTZ (6115-00-118-1244) INCLUDING OPTIONAL KITS DOD MODEL MEP-005AWF WINTERIZATION KIT, FUEL BURNING (6115-00-463-9083) DOD MODEL MEP-005AWE WINTERIZAT KIT, ELECTRIC (6115-00-463-9085) DOD MODEL MEP-004ALM LOAD BANK KIT (6115-00-291-920 073744 TM 9-6115-604-24P 1 GENERATOR SET, DIESEL ENGINE DRIVEN, AIR TRANSPORTABLE SKID MOUNTED, 750KW, 3 PHASE, 4 WIRE, 2400/4160, AND 2200/3800 VOLTS DOD MODEL MEP208A PRIME UTILITY CLASS 50/60 HERTS (NSN 6115-00-450-5881) DOD MODEL 80-1466 REMOTE CONTROL MODULE CLASS (6115-01-150-5284 DOD MODEL 80-7320 SITE REQUIREMENTS MODULE CLASS (6115-01-150-5 {NAVFAC P-8-633-24P} 074040 TM 9-6115-545-24P GENERATOR SET, DIESEL ENGINE DRIVEN, TAC SKID MTD., 60 KW, 3 PHASE, 4 WIRE, 120/208 AND 240/416 VOLTS, D MODELS MEP-006A, UTILITY CLASS, 50/60 H/Z, (NSN 6115-00-118-124 MEP-105A, PRECISE CLASS, 50/60 H/Z, (6115-00-118-1252), MEP-115 PRECISE CLASS, 400 H/Z (6115-00-118-1253); INCLUDING OPTIONAL K DOD MODELS MEP-006AWF, WINTERIZATION FUEL BURNING, (6115-00-407 MEP-006AWE, WINTERIZATION KIT, ELECTRIC, (6115-00-455-7693), ME LOAD BANK KIT, (6115-00-407-8322), AND MEP-006AWM, WHEEL MOUNTI (6115-00-463-9092) {TO 074212 TM 9-6115-604-12 GENERATOR SET, DIESEL DRIVEN, AIR TRANSPORTABLE SKID MTD., 750 KW, 3 PHASE, 4 WIRE, 24 AND 2200/3800 V (DOD MODEL MEP 208A) CLASS PRIME UTILITY, HZ 50 (NSN 6115-00-450-5881) {NAVFAC P-8-633-12} 074896 TM 9-6115-604-34 GENERATOR SET, DIESEL ENGINE DRIVEN, AIR TRANSPORTABLE SKID MTD., 750 KW, 3 PHASE, 4 WIRE, 2400/4160 AND 2200/3800 VOLTS DOD MODEL MEP 208A PRIME UTILITY CLASS 50/60 HERTZ (NSN 6115-00-450-5881) {NAVFAC P-8-633-34} 075027 TM 9-6115-584-24P 1 GENERATOR SET,

DIESEL E DRIVEN, TACTICAL SKID MTD 5 KW, 1 PHASE -2 WIRE, 1 PHASE -3 WIR 3 PHASE -4 WIRE, 120, 120/240 AND 120/208 VOLTS (DOD MODEL MEP- UTILITY CLASS, 60 HZ (NSN 6115-00-465-1044) {NAVFAC P-8-622-24P TO 35C2-3-456-4} 077581 TM 9-6115-673-13&P 2KW MILITARY TACTICAL GENERATOR SET 120 VAC, 60 HZ (NSN 6115-01-435-1565) (MEP-531A) (EIC: LKA) (NSN 6115-21-912-0393) (MECHRON) 28 VDC (NSN 6115-01-435-1567) (MEP-501A) (EIC: LKD) (NSN 6115-21-912-0392) (MECHRON) 078167 TM 9-6115-672-14 GENERATOR SET SKID MOUNTED TACTICAL QUIET 60KW, 50/60 AND 400 HZ, MEP-806B (50/60 HZ) (NSN 6115-01-462-0291) EIC: GGW, MEP-816B (400 HZ) (NSN 6115-01-462-0292) EIC: GGX 078443 TM 9-6115-639-13 1 3KW TACTICAL QUIET GENERATOR SET MEP 831A (60 HZ) (NSN 6115-01-285-3012) (EIC: VG6) MEP 832A (400 HZ) (NSN 6115-01-287-2431) (EIC: VN7) 078490 TM 9-6115-671-14 OPERATOR, UNIT, GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 30 KW, 50/60 AND 400 HZ, MEP-805B (50/60 HZ) (NSN 6115-01-461-9335) (EIC: GGU) MEP-815B (400 HZ) (6115-01-462-0290) (EIC: GGV) 078503 TM 9-6115-671-24P GENERATOR SET SKID MOUNTED, TACTICAL QUIET 30 KW, 50/60 AND 400 HZ MEP-805B (50/60 HZ) (NSN 6115-01-461-9335) (EIC: GGU) MEP-815B (400 HZ) (NSN 6115-01-462-0290) (EIC: GGV) 078504 TM 9-6115-672-24P GENERATOR SET, SKID MOUNTED, TACTICAL QUIET 60 KW, 50/60 AND 400 HZ MEP-806B (50/60 HZ) (NSN 6115-01-462-0291) (EIC: GGW) MEP-816B (400 HZ) (NSN 6115-01-462-0292) (EIC: GGX) 078505 TB 9-6115-671-24 WARRANTY PROGRAM FOR GENERATOR SET, TACTICAL QUIET 30KW, 50/60 AND 400 HZ MEP-805B AND MEP-815B PROCURED UNDER CONTRACT DAAK01-96-D-00620WITH MCII INC 078506 TB 9-6115-672-24 WARRANTY PROGRAM FOR GENERATOR SET, TACTICAL QUIET 30KW, 50/60 AND 400 HZ MEP-806B AND MEP-816B PROCURED UNDER CONTRACT DAAK01-96-D-00620WITH MCII INC 078523 TM 9-6115-664-13&P 5KW, 28VDC, AUXILIARY POWER UNIT (APU) MEP 952B NSN 6115-01-452-6513 (EIC: N/A) 078878 TM 9-6115-639-23P 3KW TACTICAL QUIET GENERATOR SET MEP 831A (60 HZ) (NSN 6115-01-285-3012) (EIC: VG6) MEP 832A (400 HZ) (NSN 6115-01-287-2431) (EIC: VN7) 079379 TB 9-6115-641-13 WINTERIZATION KIT (NSN 6115-01-476-8973) INSTALLED ON GENERATOR SET, SKID MOUNTED, TACTICAL QUIET, 5KW, 60 AND 400 HZ MEP-802A (600HZ) (6115-01-274-7387) MEP-812A (400HZ) (6115-01-274-7391) 079460 TB 9-6115-642-13 WINTERIZATION KIT (NSN 6115-01-477-0564) (EIC: N/A) INSTALLED ON GENERATOR KIT, SKID MOUNTED, TACTICAL QUIET, 10KW, 60 AND 400 HZ MEP-803A (60HZ) (6115-01-275-0561) MEP-813A (400HZ) (6115-01-274-7392) 079461 TB 9-6115-643-13 WINTERIZATION KIT (NSN 6115-477-0566) INSTALLED ON GENERATOR SET, SKID MOUNTED, TACTICAL QUIET, 15KW, 50/60 AND 400 HZ, MEP-804A (50/60HZ) (6115-01-274-7388) MEP-814A (400HZ) (6115-01-274-7393) 079462 TB 9-6115-644-13 WINTERIZATION KIT (NSN 6115-01-474-8354) (EIC:N/A) INSTALLED ON GENERATOR SET, SKID MOUNTED, 30KW, 50/60 AND 400 HZ MEP-805A (50/60HZ) (NSN 6115-01-274-7389) MEP-815A (400HZ) (NSN 611501-274-7394) 079463 TB 9-6115-645-13 WINTERIZATION KIT (NSN 6115-01-474-8344) (EIC: N/A) INSTALLED ON GENERATOR SET, SKID MOUNTED, TACTICAL QUIET, 60KW, 50/60 AND 400 HZ, MEP-806A (50/60HZ) (6115-01-274-7390) MEP-816A (400HZ) (6115-01-274-7395) 080214 TM 9-6115-670-14&P AUXILIARY POWER UNIT, 20KW, 120/240 VAC, 60 HZ, MODEL NO. MEP-903A(SICPS) NSN 6115-01-431-3062 MODEL NUMBER MEP-903B (JTACS) NSN 6115-01-431-3063 MODEL NO MEP-903C9WIN-T) NSN 6115-01-458-5329 (EIC: N/A)

3 line hydraulic system diagram: Manuals Combined: 100+ U.S. Army CH-47A CH-47B CH-47C and CH-47D Chinook Helicopter Operator; Repair Parts And Special Tools List; Modification Word Order; One Time Inspection; Maintenance; And Maintenance Test Flight Manuals , Well over 18,000 total pages ... Most manuals published by the Department of the Army (with updates) between 1999 and 2003. Contains Repair, Repair Parts, Special Tools Lists, Maintenance, Checklist and Flight-related Technical Manuals and Bulletins for the CH-47A, CH-47B, CH-47C and CH-47D Chinook helicopter. Just a SAMPLE of the CONTENTS: AVIATION UNIT AND AVIATION INTERMEDIATE MAINTENANCE MANUAL CH-47D HELICOPTER, 1,335 pages - Aviation Unit and Aviation Intermediate Troubleshooting Manual, CH-47D Helicopter, 1,225 pages -

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