HEADQUARTERS, DEPARTMENT OF THE ARMY

STP 9-52D13-SM-TG

Soldier's Manual and Trainer's Guide, MOS 52D, Power Generation Equipment Repairer, Skill Levels 1/2/3

HEADQUARTERS
DEPARTMENT OF THE ARMY

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SOLDIER'S MANUAL and TRAINER'S GUIDE

MOS 52D

Soldier's Manual and Trainer's Guide, MOS 52D, Power Generation Equipment Repairer, Skill Levels 1/2/3

Skill Levels 1, 2 and 3

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This publication supersedes STP 9-52D12-SM, October 1989, and STP 9-52D3-SM-TG, October 1989.

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Subject Area 8: TECHNICAL TASKS

Subject Area 7: COMMON LOGISTICS TASKS

PREFACE

This soldier training publication (STP) is intended for soldiers holding MOS 52D, Skill Levels 1, 2, and 3, their supervisors, trainers, and commanders. It contains an MOS Training Plan providing information needed to plan, conduct, and evaluate unit training, one of the most important jobs of military leaders. It includes standardized training objectives in the form of task summaries that can be used to train and evaluate soldiers on critical tasks supporting unit missions during wartime.

Soldiers holding MOS 52D should have access to this publication. Trainers and firstline supervisors should actively plan for soldiers' access, making it available in work areas, unit learning centers, and unit libraries. However, it is not intended for an individual copy to be provided to each MOS holder. The STP is obtainable on line from the Reimer Digital Library (RDL) @ http://155.217.58.58/atdls.htm
Tasks in this manual apply to both Active and Reserve Component soldiers.

The proponent of this publication is HQ TRADOC. Submit comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to: Department of the Army, Training Directorate, Ordnance Training Division, ATTN: ATCL-AO, 401 First Street, Suite 227, Fort Lee, VA 23801-1511.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

CHAPTER 1

Introduction

1-1. General. This soldier training publication (STP) identifies individual MOS training requirements for soldiers holding MOS 52D. Commanders, trainers, and soldiers should use it to plan, conduct, and evaluate individual training in units. The STP is the primary MOS reference for supporting self-development, evaluating MOS proficiency, and training of 52D soldiers. Commanders employ two primary methods to evaluate soldiers' proficiency:

- Commander's evaluation. Commander's evaluations are local tests or assessments of soldiers' performance of MOS-specific and common tasks critical to the unit mission. They may be conducted year-round.

- Common task test (CTT). CTTs are hands-on tests used to evaluate proficiency on common tasks. Alternate written tests are provided if equipment is not available for hands-on testing.

This publication is the soldier's primary reference to prepare for a commander's evaluation of MOS-specific tasks. It contains task summaries for all critical tasks specific to the MOS and skill level (SL). Commanders and trainers will use this soldier's manual/trainer's guide (SM/TG) to plan and conduct training and commander's evaluations.

Chapter 2, Trainer's Guide, contains information needed to plan training requirements for this MOS. The trainer's guide

- Identifies subject areas in which soldiers must be trained.

- Identifies critical tasks for each subject area.

- Specifies where soldiers are initially trained on each task.

- Recommends how often each task should be trained to sustain proficiency.

- Recommends a strategy for cross-training soldiers.

- Recommends a strategy for training soldiers to perform higher-level tasks.

Use this STP along with STP 21-1-SMCT (Soldier's Manual of Common Tasks, Skill Level 1), STP 21-24-SMCT (Soldier's Manual of Common Tasks, Skill Levels 2-4), Army training and evaluation programs (ARTEPs), FM 25-4 (How to Conduct Training Exercises), FM 25-5 (Training for Mobilization and War), FM 25-100 (Training the Force), and FM 25-101 (Battle-Focused Training) to establish effective training plans and programs that integrate soldier, leader, and collective tasks.

1-2. Task Summaries. Task summaries outline wartime performance requirements for each critical task in the STP. They provide both soldier and trainer with the information necessary to prepare, conduct, and evaluate critical task training. As a minimum, task summaries include information soldiers must know and skills they must perform to standard for each task. Following is the task summary format:

- Task number. The task number is a 10-digit number that identifies the task and skill level. Include the task number and title in any correspondence relating to the task.

- Task title. The task title identifies the action to be performed.

- Conditions. The task conditions statement describes the field or garrison conditions under which the task will be performed and identifies the equipment, tools, references, job aids, and supporting personnel that the soldier needs to perform the task in wartime.

- Standards. The task standards describe how well and to what level of proficiency the soldier must perform the task under wartime conditions. Standards are typically expressed in terms of accuracy, completeness, duration, sequence, speed, and tolerance.

- Performance measures. This section identifies specific actions that the soldier must accomplish to complete the task successfully. Performance measures appear in a GO/NO-GO rating format for easy evaluation. Some tasks may also include detailed training information in a Training Information Outline and an Evaluation Preparation Section. The Evaluation Preparation Section indicates necessary modifications to task performance in order to train and evaluate a task that can not be trained to the wartime standard under wartime conditions. It may also include special training and evaluation preparation instructions to accommodate these modifications and any instructions that should be given to the soldier before evaluation.

- References. This section identifies references that provide more detailed explanations of task performance requirements than are given in the task summary.

- Warnings. Warnings alert users to the possibility of immediate personal injury or equipment damage.

- Notes. Notes provide additional supportive explanations or tips relating to task performance.

1-3. Soldier's Responsibilities. Each soldier is responsible for performing individual tasks identified by the first-line supervisor based on the unit's mission-essential task list (METL). Soldiers must perform tasks to the standards included in the task summary. If soldiers have questions about tasks or which tasks in this manual they must perform, they are responsible for asking their first-line supervisor for clarification. First-line supervisors know how to perform each task or can direct soldiers to appropriate training materials, including current field manuals, technical manuals, and Army regulations. Soldiers are responsible for using these materials to maintain performance. They are also responsible for maintaining performance of all common tasks listed in the SMCTs at their current skill level and below.

Periodically, soldiers should ask their supervisor or another solder to check their performance to ensure that they can perform the tasks.

1-4. NCO Self-Development and the STP. Self-development is a key component of leader development. Leaders follow planned, progressive, sequential self-development programs developed by the individual NCO and his or her first-line supervisor to enhance and sustain military competencies. Self-development consists of individual study, research, professional reading, practice, and self-assessment. The self-development concept requires NCOs, as Army professionals, to take responsibility for remaining current in all phases of their MOS. The STP is the NCO's primary source for maintaining MOS proficiency.

Another important resource for self-development is the Army Correspondence Course Program (ACCP). Refer to DA Pamphlet 351-20 (Army Correspondence Course Program Catalog) for detailed eligibility requirements and enrollment information. The catalog is available at local education centers or on line through the Army Institute for Professional Development (AIPD) web site, . The web site offers on-line enrollment.

1-5. Commander's Responsibilities. Commanders must ensure that their unit training plans prepare the unit for war by enabling soldiers to develop and sustain proficiency in their MOS and skill level tasks. Commanders should design unit training programs to provide individual training for all soldiers assigned to the unit and to evaluate soldier proficiency routinely as part of the commander's evaluation program. The unit training program should also integrate individual training with crew drills and other collective training. The MOS training plan provides information on which to base integration, cross-train, train-up,

and sustainment training programs. Commanders should use the MOS training plan when developing unit training plans.

1-6. Trainer's Responsibilities. Training is the business of all unit leaders. First-line leaders are the principal trainers in the unit because they directly supervise soldiers and lead crews, squads, sections, and teams.

Trainers can use the MOS training plan to determine the critical tasks each soldier is responsible for. They should tell each soldier which tasks he or she must be able to perform. Trainers should evaluate task performance to determine which tasks each soldier can or cannot perform to standard. Soldiers who cannot perform a task to standard need further training. This STP helps the trainer do what trainers get paid to do, train. Developing effective training is explained in detail in FM 25-100 and FM 25-101.

Every task summary in this STP includes performance measures, which trainers may use year-round to determine if soldiers can perform critical tasks to the specified standards. The performance measures identify what the trainer needs to observe to score a soldier's performance. A blank space is provided for the trainer to check either the GO or NO-GO column for each performance measure. Some tasks require the trainer to watch the soldier perform them (evaluate the process). Other tasks call for the trainer to focus on the results of the soldier's performance (evaluate the product). Comments should not be written on the task summary.

Trainers can monitor the progress of their soldiers by recording task go/no-go results. Trainers may use DA Form 5164-R (Hands-On Evaluation) to record the performance measures a soldier passed or failed. The form, which may be locally reproduced, applies to all tasks in this STP. Trainers may have DA Form 5164-R overprinted with information unique to their training requirements before reproducing it. See Appendix A of this STP for a sample DA Form 5164-R with instructions.

Trainers may use DA Form 5165-R (Field Expedient Squad Book) to record hands-on go/no-go results for a group of soldiers (for example, a crew, section, or squad) having the same MOS and skill level. This form supports conduct of commander's evaluations, and can be used to record training results gathered in the field during slack time for all MOSs and skill levels. Use of this form is optional. See Appendix B for a sample DA Form 5165-R with instructions. Trainers should work with each soldier until tasks can be performed to specific task summary standards.

1-7. Training Support. References have been identified for each task to assist in planning and conducting training. A consolidated list of references identified by type, publication number, and title and a comprehensive glossary of acronyms, abbreviations, and definitions are included in this STP.

CHAPTER 2

Training Guide

52D CAREER FIELD DUTY POSITIONS			
Duty Position	**Subject Area**	**Cross Train**	**Train-up/Merger**
Skill Level 1			
Power-Generation Equipment Repairer	1 - 3	NA	52D20/Power-Generation Equipment Repairer
Skill Level 2			
Power-Generation Equipment Repairer	1 - 3	NA	52D30/Senior Power-Generation Equipment Repairer 52D30/Technical Inspector
Skill Level 3			
Senior Power-Generation Equipment Repairer Technical Inspector	4 - 5	NA	52X40/Special Purpose Equipment Repairer

2-1. General. The MOS Training Plan (MTP) identifies the essential components of a unit training plan for individual training. Units have different training needs and requirements based on differences in environment, location, equipment, dispersion, and similar factors. Therefore, the MTP should be used as a guide for conducting unit training and not a rigid standard. The MTP consists of two parts. Each part is designed to assist the commander in preparing a unit training plan which satisfies integration, cross training, training up, and sustainment training requirements for soldiers in this MOS.

Part One of the MTP shows the relationship of an MOS skill level between duty position and critical tasks. These critical tasks are grouped by task commonality into subject areas.

Section I lists subject area numbers and titles used throughout the MTP. These subject areas are used to define the training requirements for each duty position within an MOS.

Section II identifies the total training requirement for each duty position within an MOS and provides a recommendation for cross training and train-up/merger training.

- **Duty Position column**. This column lists the duty positions of the MOS, by skill level, which have different training requirements.
- **Subject Area column**. This column lists, by numerical key (see Section I), the subject areas a soldier must be proficient in to perform in that duty position.
- **Cross Train column**. This column lists the recommended duty position for which soldiers should be cross trained.
- **Train-up/Merger column**. This column lists the corresponding duty position for the next higher skill level or MOSC the soldier will merge into on promotion.

Part Two lists, by general subject areas, the critical tasks to be trained in an MOS and the type of training required (resident, integration, or sustainment).

- **Subject Area column**. This column lists the subject area number and title in the same order as Section I, Part One of the MTP.
- **Task Number column**. This column lists the task numbers for all tasks included in the subject area.
- **Title column**. This column lists the task title for each task in the subject area.
- **Training Location column**. This column identifies the training location where the task is first trained to soldier training publications standards. If the task is first trained to standard in the unit, the word "Unit" will be in this column. If the task is first trained to standard in the training base, it will identify, by brevity code (ANCOC, BNCOC, etc.), the resident course where the task was taught. Figure 2-1 contains a list of training locations and their corresponding brevity codes.

ASI/SD	Additional Skill Identifier/Special Duty
AIT	Advanced Individual Training
BNCOC	Basic NCO Course
BTC	Basic Technical Course

Figure 2-1. Training Locations

- **Sustainment Training Frequency column**. This column indicates the recommended frequency at which the tasks should be trained to ensure soldiers maintain task proficiency. Figure 2-2 identifies the frequency codes used in this column.

BA - Biannually
AN - Annually
SA - Semiannually
QT - Quarterly
MO - Monthly
BW - Bi-weekly
WK - Weekly

Figure 2-2. Sustainment Training Frequency Codes

- **Sustainment Training Skill Level column**. This column lists the skill levels of the MOS for which soldiers must receive sustainment training to ensure they maintain proficiency to soldier's manual standards.

2-2. Subject Area Codes.

Skill Level 1

1 GENERATOR TASKS
2 ENGINE TASKS
3 WELDING MACHINE TASKS
4 EMPLOYMENT OF MOBILE POWER AND DISTRIBUTION SYSTEMS
5 MAST AND ELECTRIC POWER PLANT MAINTENANCE (ASI C-9 ONLY)
6 AVIATION GENERATOR/AVIATION POWER UNIT MAINTENANCE (ASI D-4 ONLY)

Skill Level 3

7 COMMON LOGISTICS TASKS
8 TECHNICAL TASKS

2-3. Duty Position Training Requirements.

2-4. Critical Tasks List.

MOS TRAINING PLAN
52D13

CRITICAL TASKS

Subject Area	Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
Skill Level 1					
1. GENERATOR TASKS	091-52D-1101	Correct Malfunction of Control Panel Components on a Generator Set	AIT	AN	1/2
	091-52D-1111	Perform Preventive Maintenance Checks and Services on a Generator Set	AIT	AN	1/2
	091-52D-1181	Correct Malfunction of Main AC Generator Assembly on a Generator Set	AIT	AN	1/2
	091-52D-1182	Correct Malfunction of Electrical Governor System on a Generator Set	AIT	AN	1/2
2. ENGINE TASKS	091-52D-1183	Correct Malfunction of Battery Charging System on the Engine of a Generator Set	AIT	AN	1/2
	091-52D-1184	Correct Malfunction of Components of the Lubrication System on a Diesel Engine of a Generator Set	AIT	AN	1/2
	091-52D-1185	Correct Malfunction of the Fuel System on a Diesel Engine of a Generator Set	AIT	AN	1/2
	091-52D-1186	Correct Malfunction of the Starting System on a Diesel Engine of a Generator Set	AIT	AN	1/2
3. WELDING MACHINE TASKS	091-52D-1187	Correct Malfunction on the DC Circuitry of an Arc Welder	AIT	AN	1/2
4. EMPLOYMENT OF MOBILE POWER AND DISTRIBUTION SYSTEMS	091-52D-1188	Perform Procedures to Determine Generator Selection to Meet a Particular Power Demand	AIT	AN	1/2
	091-52D-1189	Perform Paralleling Procedures on Generator Sets	AIT	AN	1/2
5. MAST AND ELECTRIC POWER	091-ASIC9-1002	Diagnose and Correct Malfunction of a Defective Hydraulic Pneumatic Mast System	ASI/SD	AN	1/2

CRITICAL TASKS

Subject Area	Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
PLANT MAINTENANCE (ASI C-9 ONLY)					
	091-ASIC9-1003	Perform Preventive Maintenance Checks and Services on a Hydraulic-Pneumatic Mast	ASI/SD	AN	1/2
	091-ASIC9-1004	Perform Preventive Maintenance Checks and Services on the Electrical Power Plan III	ASI/SD	AN	1/2
	091-ASIC9-1005	Test Operate the Electrical Power Plant III	ASI/SD	AN	1/2
	091-ASIC9-1006	Correct Malfunction on the Electrical System on the Electric Power Plant III	ASI/SD	AN	1/2
6. AVIATION GENERATOR/AVIATION POWER UNIT MAINTENANCE (ASI D-4 ONLY)	091-ASID4-1005	Test Operate the Aviation Generator Set (MEP-362A)	ASI/SD	AN	1/2
	091-ASID4-1006	Perform Preventive Maintenance Checks and Services on the Aviation Generator Set	ASI/SD	AN	1/2
	091-ASID4-1007	Diagnose Malfunctions in Generator Assembly on the Aviation Generator Set		AN	1/2
	091-ASID4-1008	Diagnose and Correct Malfunctions in the Engine Electronic Control Module on the Aviation Generator Set	ASI/SD	AN	1/2
	091-ASID4-1009	Diagnose and Correct malfunctions in the Generator Electronic Control Module	ASI/SD	AN	1/2
	091-ASID4-1010	Replace Defective Generator Assembly on the Aviation Generator Set	ASI/SD	AN	1/2
	091-ASID4-1012	Replace Defective Gas Turbine Engine on the Aviation Generator Set	ASI/SD	AN	1/2
	091-ASID4-1013	Test Operate the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1014	Perform Preventive Maintenance Checks and Services on an Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1015	Diagnose and Correct Malfunctions in the Generator Assembly on the Aviation Ground Power Unit	ASI/SD	AN	1/2

CRITICAL TASKS

Subject Area	Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
	091-ASID4-1016	Diagnose and Correct malfunctions in the Electronic Control Unit on the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1017	Replace Defective Generator Assembly on the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1018	Diagnose and Correct Malfunctions in DC Electrical and Control System on the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1019	Replace Defective Gas Turbine Engine on the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1020	Diagnose and Correct Malfunctions in the Generator Control Unit on the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1021	Diagnose and Correct Malfunctions in the Hydraulic System on the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1022	Diagnose and Correct Malfunctions in the Traction Motor System on the Aviation Ground Power Unit	ASI/SD	AN	1/2
	091-ASID4-1023	Diagnose and Correct Malfunctions in the Pneumatic System on the Aviation Ground Power Unit	ASI/SD	AN	1/2
Skill Level 3					
7. COMMON LOGISTICS TASKS	091-CLT-3001	Manage a Shop Safety Program	BNCOC	AN	3
	091-CLT-3002	Maintain a Publications Library	BNCOC	AN	3
	091-CLT-3003	Establish Maintenance Facilities	BNCOC	AN	3
	091-CLT-3004	Assist in Preparing a Standing Operating Procedure	BNCOC	AN	3
	091-CLT-3005	Manage Tool Control Procedures	BNCOC	AN	3
	091-CLT-3006	Manage Key Control Procedures	BNCOC	AN	3
	091-CLT-3008	Recon Terrain/Route	BNCOC	AN	3
	091-CLT-3009	Supervise Maintenance Operations	BNCOC	AN	3
	091-CLT-3010	Interpret Maintenance Operational Overlay	BNCOC	AN	3
	091-CLT-3011	Deploy Maintenance Support Teams	BNCOC	AN	3

CRITICAL TASKS

Subject Area	Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
	091-CLT-3012	Manage the Standard Army Maintenance System (SAMS)	BNCOC	AN	3
	091-CLT-3013	Manage the Unit Level Logistics System (ULLS)	BNCOC	AN	3
	091-CLT-3015	Deploy Company Maintenance Team/Recovery Support Team	BNCOC	AN	3
	091-CLT-3016	Review the Army Materiel Status System (AMSS) Reports	BNCOC	AN	3
8. TECHNICAL TASKS	091-52D-3101	Perform Diagnostic Procedures on the Electrical Control System of a Generator Set	BNCOC	AN	3
	091-52D-3102	Perform Diagnostic Procedures on a Voltage Regulator of a Generator Set	BNCOC	AN	3
	091-52D-3103	Perform Diagnostic Procedures on Fault Indicator Panel of a Generator Set	BNCOC	AN	3
	091-52D-3104	Perform Diagnostic Procedures of Relay Assembly on a Generator Set	BNCOC	AN	3
	091-52D-3105	Perform Diagnostic Procedures on a Governor Assembly of a Generator Set	BNCOC	AN	3
	091-52D-3106	Perform Diagnostic Procedures on the Main Generator Assembly of a Generator Set	BNCOC	AN	3
	091-52D-3107	Perform Diagnostic Procedures on a Battery Charging Alternator	BNCOC	AN	3
	091-52D-3109	Perform Diagnostic Procedures on the Lubrication System	BNCOC	AN	3
	091-52D-3112	Perform Diagnostic Procedures on Glow Plugs of a Diesel Engine	BNCOC	AN	3
	091-52D-3114	Perform Diagnostic Procedures on a Starter Assembly	BNCOC	AN	3
	091-52D-3118	Perform Diagnostic Procedures on the Fuel System of an Engine	BNCOC	AN	3
	091-52D-3119	Perform Diagnostic Procedures on a Cooling System of a Diesel Engine	BNCOC	AN	3
	091-52D-3120	Perform Diagnostic Procedures on the Electrical Control on a Welding Machine	BNCOC	AN	3
	091-52D-3121	Perform Quality Control/Quality Assurance Inspection on a Generator Set	BNCOC	AN	3
	091-52D-3122	Perform Quality Control/Quality Assurance	BNCOC	AN	3

CRITICAL TASKS

Subject Area	Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
		Inspection on a Welding Machine			
	091-52D-3123	Perform Classification Inspection on a Generator Set	BNCOC	AN	3
	091-52D-3124	Perform Classification Inspection on a Welding Machine	BNCOC	AN	3
	091-52D-3127	Replace Cylinder Head	BNCOC	AN	3
	091-52D-3128	Perform Diagnostic Procedures on the Output Rectifier Assembly on a Welding Machine	BNCOC	AN	3
	091-52D-3129	Perform Diagnostic Procedures on the Range Switch Assembly on a Welding Machine	BNCOC	AN	3
	091-52D-3130	Perform Diagnostic Procedures on the Reactor Assembly on a Welding Machine	BNCOC	AN	3

CHAPTER 3

MOS/Skill Level Tasks

Skill Level 1

Subject Area 1: GENERATOR TASKS

Correct Malfunction of Main AC Generator Assembly on a Generator Set
091-52D-1181

Conditions: In a field or garrison environment, given a generator set, maintenance request or equipment inspection worksheet describing equipment malfunctions, variac or external power supply, DC power supply, general mechanic's tool kit, digital multimeter, hearing protection, applicable technical publications, and with supervision/assistance.

Standards: Correct malfunction of main generator assembly on a generator set IAW the applicable technical publications. When the task is completed, the generator set must be fully mission-capable.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the main generator assembly on a generator set.	____	____
5. Test the main generator assembly.	____	____
6. Repair main generator assembly, as required.	____	____
7. Replace main generator assembly, as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____

Performance Measures	**GO**	**NO GO**
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
DA FORM 5988-E
TM 5-6115-271-14
TM 5-6115-423-15
TM 5-6115-440-10
TM 5-6115-440-20
TM 5-6115-465-12
TM 5-6115-465-34
TM 5-6115-545-12
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-596-14
TM 5-6115-600-12
TM 5-6115-600-34
TM 5-6115-612-12
TM 5-6115-612-34
TM 5-6115-614-12
TM 5-6115-615-12
TM 5-6115-615-34
TM 5-6115-629-14&P
TM 9-2815-252-24
TM 9-2815-254-24
TM 9-2815-256-24
TM 9-6115-464-12
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-624-BD
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-10
TM 9-6115-642-24
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10
TM 9-6115-645-24
TM 9-6115-663-13&P

Related

DA PAM 738-750
FM 5-424

Correct Malfunction of Electrical Governor System on a Generator Set

091-52D-1182

Conditions: In a field or garrison environment, given a generator set, maintenance request or equipment inspection worksheet describing equipment malfunctions, general mechanic's tool kit, digital multimeter, hearing protection, applicable technical publications, and with supervision/assistance.

Standards: Correct malfunction of electrical governor on a generator set IAW applicable technical publications. When the task is completed, the generator set must be fully mission-capable.

Performance Steps

1. Select applicable publications
2. Identify faulty component.
3.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance TMDE.	____	____
4. Inspect the electrical governor on a generator set.	____	____
5. Test the electrical governor.	____	____
6. Repair electrical governor, as required.	____	____
7. Replace electrical governor, as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404

Related

DA FORM 5988-E
DA PAM 738-750
FM 5-424
TM 5-6115-271-14
TM 5-6115-423-15
TM 5-6115-440-10
TM 5-6115-440-20
TM 5-6115-465-12
TM 5-6115-465-34
TM 5-6115-545-12
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-596-14
TM 5-6115-600-12
TM 5-6115-600-34
TM 5-6115-612-12
TM 5-6115-612-34
TM 5-6115-614-12
TM 5-6115-615-12
TM 5-6115-615-34
TM 5-6115-629-14&P
TM 9-2815-252-24
TM 9-2815-254-24
TM 9-2815-256-24
TM 9-6115-464-12
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-624-BD
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-10
TM 9-6115-642-24
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10
TM 9-6115-645-24
TM 9-6115-663-13&P

Correct Malfunction of Control Panel Components on a Generator Set

091-52D-1101

Conditions: In a field or garrison environment, given a generator set, maintenance request or equipment inspection worksheet describing equipment malfunctions, general mechanic's tool kit, digital multimeter, hearing protection, applicable technical publications, and with supervision/assistance.

Standards: Correct malfunction of control panel components on a generator set IAW the applicable technical publications. When the task is completed, the generator set must be fully mission-capable.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the control panel components on a generator set.	____	____
5. Test the control panel components.	____	____
6. Repair control panel components as required.	____	____
7. Replace control panel components as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
DA FORM 5988-E	DA PAM 738-750
TM 5-6115-271-14	FM 5-424

References

Required

TM 5-6115-423-15
TM 5-6115-440-10
TM 5-6115-440-20
TM 5-6115-465-12
TM 5-6115-465-34
TM 5-6115-545-12
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-596-14
TM 5-6115-600-12
TM 5-6115-600-34
TM 5-6115-612-12
TM 5-6115-612-34
TM 5-6115-614-12
TM 5-6115-615-12
TM 5-6115-615-34
TM 5-6115-629-14&P
TM 9-6115-464-12
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-10
TM 9-6115-642-24
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10
TM 9-6115-645-24
TM 9-6115-663-13&P

Related

TM 9-2815-252-24
TM 9-2815-254-24
TM 9-2815-256-24
TM 9-6115-624-BD

Perform Preventive Maintenance Checks and Services on a Generator Set

091-52D-1111

Conditions: In a field or garrison environment, given a generator set, optical anti freeze tester, battery, goggles, apron, general mechanic's tool kit, rags, applicable technical publications and forms, hearing protection, and with supervision/assistance.

Standards: Perform preventive maintenance checks and services (PMCS) on a generator IAW the applicable technical publications.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools to perform PMCS on a generator set.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform before-operation PMCS on a generator set.	____	____
5. Operate the generator set.	____	____
6. Perform during-operation PMCS.	____	____
7. Shut down the generator set.	____	____
8. Perform after-operation PMCS.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
DA FORM 2404	DA PAM 738-750
DA FORM 5988-E	FM 5-424

References

Required

TM 5-6115-271-14
TM 5-6115-423-15
TM 5-6115-440-10
TM 5-6115-465-12
TM 5-6115-545-12
TM 5-6115-584-12
TM 5-6115-585-12
TM 5-6115-586-12
TM 5-6115-590-12
TM 5-6115-593-12
TM 5-6115-596-14
TM 5-6115-600-12
TM 5-6115-612-12
TM 5-6115-614-12
TM 5-6115-615-12
TM 5-6115-629-14&P
TM 9-6115-464-12
TM 9-6115-641-10
TM 9-6115-642-10
TM 9-6115-643-10
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10
TM 9-6115-663-13&P

Related

TM 5-6115-440-20
TM 5-6115-465-34
TM 5-6115-545-34
TM 5-6115-584-34
TM 5-6115-585-34
TM 5-6115-590-34
TM 5-6115-600-34
TM 5-6115-612-34
TM 5-6115-615-34
TM 9-2815-252-24
TM 9-2815-254-24
TM 9-2815-256-24
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-624-BD
TM 9-6115-641-24
TM 9-6115-642-24
TM 9-6115-643-24
TM 9-6115-645-24

Subject Area 2: ENGINE TASKS

Correct Malfunction of Battery Charging System on the Engine of a Generator Set
091-52D-1183

Conditions: In a field or garrison environment, given a generator set, maintenance request or equipment inspection worksheet describing equipment malfunctions, general mechanic's tool kit, schematic and wiring diagram, digital multimeter, hearing protection, applicable technical publications, and with supervision/assistance.

Standards: Correct malfunction of battery charging alternator on a generator set IAW the applicable technical publications. When the task is completed, the generator set must be fully mission-capable.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the battery-charging alternator.	____	____
5. Test the battery-charging alternator.	____	____
6. Repair battery-charging alternator, as required.	____	____
7. Replace battery-charging alternator, as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 5-6115-584-34	FM 11-62
TM 5-6115-585-34	FM 5-424
TM 9-6115-641-24	TM 5-6115-584-12
TM 9-6115-642-24	TM 5-6115-585-12
TM 9-6115-643-24	TM 9-6115-644-24
TM 9-6115-645-24	TM 9-6115-645-10

Correct Malfunction of Components of the Lubrication System on a Diesel Engine of a Generator Set

091-52D-1184

Conditions: In a field or garrison environment, given a generator set, maintenance request or equipment inspection worksheet describing equipment malfunctions, general mechanic's tool kit, hearing protection, applicable technical publications, and with supervision/assistance.

Standards: Correct malfunction of lubrication system of a generator set IAW the applicable technical publications. When the task is completed, the generator set must be fully mission-capable.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the lubrication system.	____	____
5. Troubleshoot the lubrication system.	____	____
6. Test the lubrication system.	____	____
7. Repair lubrication system as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
TM 5-6115-465-34
TM 5-6115-545-12
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-590-34
TM 9-2815-253-24
TM 9-2815-253-24P
TM 9-2815-254-24
TM 9-6115-542-24&P
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-24
TM 9-6115-643-24
TM 9-6115-644-24
TM 9-6115-645-24
TM 9-8000

Related

FM 5-424

Correct Malfunction of the Fuel System on a Diesel Engine of a Generator Set
091-52D-1185

Conditions: In a field or garrison environment, given a generator set, maintenance request or equipment inspection worksheet describing equipment malfunctions, general mechanic's tool kit, hearing protection, applicable technical publications, and with supervision/assistance.

Standards: Correct malfunction of fuel transfer pump on a diesel engine on a generator set IAW the applicable technical publications. When the task is completed, the generator set must be fully mission-capable.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the fuel transfer pump on a diesel engine.	____	____
5. Test fuel transfer pump.	____	____
6. Repair fuel transfer pump, as required.	____	____
7. Replace fuel transfer pump, as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
TM 9-6115-464-12	TM 5-6115-271-14

References

Required

TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24

Related

TM 5-6115-423-15
TM 5-6115-440-10
TM 5-6115-440-20
TM 5-6115-465-12
TM 5-6115-465-34
TM 5-6115-545-12
TM 5-6115-545-12-HR
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-12
TM 9-6115-624-BD
TM 9-6115-639-13
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-10
TM 9-6115-642-24
TM 9-6115-645-10

Correct Malfunction of the Starting System on a Diesel Engine of a Generator Set
091-52D-1186

Conditions: In a field or garrison environment, given a generator set, maintenance request or equipment inspection worksheet describing equipment malfunctions, general mechanic's tool kit, schematics and wiring diagram, digital multimeter, hearing protection, applicable technical publications, and with supervision/assistance.

Standards: Correct malfunction of the starter assembly on a generator set IAW the applicable technical publications. When the task is completed, the generator set must be fully mission-capable.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set which is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the starter assembly.	____	____
5. Troubleshoot the starter assembly.	____	____
6. Repair starter assembly, as required.	____	____
7. Replace starter assembly, as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
TM 5-6115-465-34	TM 5-6115-545-12-HR

References

Required

TM 5-6115-545-12
TM 5-6115-545-34
TM 5-6115-584-34
TM 5-6115-585-34
TM 9-6115-643-10
TM 9-6115-645-24
TM 9-6115-663-13&P
TM 9-6115-668-13

Related

TM 5-6115-584-12
TM 5-6115-585-12
TM 5-6115-586-12
TM 5-6115-590-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-596-14
TM 5-6115-600-12
TM 5-6115-600-34
TM 9-6115-464-12
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-624-BD
TM 9-6115-639-13
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-10
TM 9-6115-642-24
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10

Subject Area 3: WELDING MACHINE TASKS

Correct Malfunction on the DC Circuitry of an Arc Welder
091-52D-1187

Conditions: In a field or garrison environment, given an arc welder, general mechanic's tool kit, schematic and wiring diagrams, digital multimeter, clean rags, hearing protection, applicable technical publications and forms, and with supervision/assistance.

Standards: Perform PMCS on a welding machine IAW technical publications.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Remove all rings, watches, and jewelry. Do not operate generator equipment in an enclosed area unless the area is adequately ventilated. Smoking, sparks, or open flame are not allowed within 50 feet of a generator set that is undergoing fuel system maintenance. Use care when handling fan and radiator. Sharp edges can cause injury. Dry-cleaning solvent is flammable and should not be used in the vicinity of sparks or open flame. When using compressed air, wear eye shields. Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on battery systems, wear rubber gloves and goggles. Before working on the exhaust system, make sure it is cool. Prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components, disconnect the negative battery cable. While cutting metal with an oxyacetylene torch, wear leather gloves, leather apron, and welding goggles. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required. Do not smoke or use an open flame in the vicinity when filling a fuel tank. Do not operate generator set unless ground terminal stud has been connected to a suitable ground. Do not attempt to alter the position of the voltage reconnection board while the generator set is operating. Do not attempt to connect or disconnect load leads while the generator set is operating. Be careful not to inhale ether gas. Do not allow a crated generator set to swing while it is suspended.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform before-operation PMCS.	____	____
5. Operate the welding machine.	____	____
6. Perform during-operation PMCS.	____	____
7. Shut down the welding machine.	____	____
8. Perform after-operation PMCS.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 9-3431-266-14&P-1	FM 5-424
TM 9-3431-266-14&P-2	
TM 9-3431-272-13&P	

Subject Area 4: EMPLOYMENT OF MOBILE POWER AND DISTRIBUTION SYSTEMS

Perform Paralleling Procedures on Generator Sets

091-52D-1189

Conditions: As a power generation equipment repairer in a field environment, given two or more generator sets, applicable tool kit, FM 5-424, and applicable generator set technical manuals.

Standards: You must synchronize and perform Parallel operation of two or more generator sets. IAW the performance measures and the appropriate technical manuals.

Performance Steps

1. Close the main circuit breaker on the base set.
2. Ensure that the voltmeter indicates the frequency required for the load.
   After steps 1 and 2 are completed, the incoming generator set may be synchronized with the base unit.
   a. During the synchronizing process the base (operating) generator set mat be connected to the load and operating or it may be disconnected from the load and operating.
   b. After steps 1 and 2 are completed, the incoming generator set may be synchronized with the base unit.
3. Open the circuit breaker on the incoming generator set.
4. Ensure that the voltage and frequency outputs of the incoming generator set are the same as those of the base set.
5. Place the paralleling switch on the control panels of the base and incoming generator sets in the ON position. When the paralleling switches are on, the two paralleling lamps on the control panel of the incoming set will begin to blink on and off at the same time if the generator sets are connected properly.
   a. Ensure that the lights blink in unison.
   b. Adjust the throttle (on utility sets) of the frequency adjust rheostat (on precise sets) until the lamps go on and off at 3- to 5-second intervals.
   c. When the lights are completely dark, close the main circuit breaker on the incoming set until the kilowatt meter indicates one-half of the power of the base set.
   d. Adjust the voltage rheostats on both sets, if necessary to eliminate crosscurrents.
6. When the synchronizing lamps blink in unison the two sets are operating as one base unit.

Note: The following step is for paralleling operations of 3 or more generators.

7. Complete steps 3 through 6 for each additional incoming set.
   a. The percent -of-power meter on the third set should indicate one-third of the load of the base set.
   b. After all generator sets are operating in parallel, divide the load equally among them. To do this adjust the voltage and frequency outputs of each set.

Performance Measures	**GO**	**NO GO**
1. Determine the requirements for paralleling.	____	____
2. Make applicable connections between Generator Sets and load for paralleling operations.	____	____
3. Parallel Generator sets and support a load.	____	____

Performance Measures	**GO**	**NO GO**
4. Perform Paralleling operations shutdown procedures.	____	____

References

Required	**Related**
	FM 5-424
	TM 9-6115-644-10
	TM 9-6115-645-10

Perform Procedures to determine Generator Selection to Meet a Particular Power Demand

091-52D-1188

Conditions: As a power generation equipment repairer in a field environment, given generator set, applicable tool kit, and FM 5-424, equipment specified in references and a field unit's power distribution system.

Standards: Select the number and types of generators that can best meet the unit's power requirements IAW references. When the task is completed, the power distribution system will be set up and operate IAW references.

Performance Steps

1. Compute the Load.
   a. Map the field unit.
   b. Determine the electrical load for each area.
   c. Compute the connected load for each structure.
   d. Compute the demand load.
   e. Compute the diversity factor.
   f. Compute the power factor.
   g. Compute the voltage drop.
   h. Compute for growth.
2. Compute the cable size.
   a. Compute total current demand for each phase.
   b. Determine wire size capable of carrying the total current.
   c. Determine the total resistance of the cable when it is connected between the generator set and the load.
3. Balance the load.
   a. Single Phase Systems.
   b. Three Phase Systems.
4. Select generator set
   a. Calculate the following criteria.
      (1) Electrical loads to be supplied.
      (2) Kilowatt rating requirements.
      (3) Operating voltages required.
      (4) Number of phases required.
      (5) Frequency requirements.
      (6) Availability of fuels.
      (7) Expected life of the field unit.
      (8) Availability of skilled maintenance personnel.
      (9) Probable load deviation.
   b. Calculate power and voltage requirements.
   c. Calculate Load Classification requirements

Performance Measures	**GO**	**NO GO**
1. Compute the Load.	____	____
2. Compute the cable size.	____	____
3. Balance the Load.	____	____
4. Select Generator Set.	____	____

References

Required

FM 5-424

Related

TM 9-2815-252-24
TM 9-2815-254-24
TM 9-2815-256-24
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-24
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-24
TM 9-6115-645-10
TM 9-6115-645-24
TM 9-8000

Subject Area 5: MAST AND ELECTRIC POWER PLANT MAINTENANCE (ASI C-9 ONLY)

Diagnose and Correct Malfunction of a Defective Hydraulic Pneumatic Mast System
091-ASIC9-1002

Conditions: In a field or classroom environment, given a Hydraulic Pneumatic Mast System.

Standards: Diagnose and correct malfunction IAW TM 11-5985-368-12&P

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the hydraulic mast system.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the Hydraulic Mast system assembly IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Hydraulic mast assembly is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the Hydraulic Pneumatic Mast assembly is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 11-5985-368-12&P	

Perform Preventive Maintenance Checks and Services on a Hydraulic-Pneumatic Mast
091-ASIC9-1003

Conditions: In a field or classroom environment, given antenna mast assembly

Standards: Perform PMCS on a Hydraulic-Pneumatic Mast. IAW TM 11-5985-368- 12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools to perform PMCS on a Hydraulic-Pneumatic Mast.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform before-operation PMCS on a Hydraulic-Pneumatic Mast.	____	____
5. Operate the Hydraulic-Pneumatic Mast.	____	____
6. Perform during-operation PMCS.	____	____
7. Shut down the Hydraulic-Pneumatic Mast.	____	____
8. Perform after-operation PMCS.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
TM 11-5985-368-12&P	

Perform Preventive Maintenance Checks and Services on the Electrical Power Plan III
091-ASIC9-1004

Conditions: In a field or garrison environment, given a Electrical power plant III General mechanics tool kit, applicable technical publications and forms, hearing protection.

Standards: Perform PMCS on the Electrical Power plant III IAW TM 11-5985-368-12 & 34.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools to perform PMCS on an Electrical Power Plant III.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform before-operation PMCS on an Electrical Power Plant III.	____	____
5. Operate the Electrical Power Plant III.	____	____
6. Perform during-operation PMCS.	____	____
7. Shut down the Electrical Power Plant III.	____	____
8. Perform after-operation PMCS.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
TM 11-5985-368-12&P	

Test Operate the Electrical Power Plant III
091-ASIC9-1005

Conditions: In a classroom/shop environment, given instruction, references, an electric power plant III (EPP III), necessary tools and equipment.

Standards: Operate the Electric power plant IAW TM 9-6115-668-13.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform Preventive Maintenance Checks and Services on the Electrical Power Plant III IAW applicable references.	____	____
5. Operate the Electric Power Plant.	____	____
6. Perform shutdown of Electric Power Plant.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
TM 9-6115-668-13	

Correct Malfunction on the Electrical System on the Electric Power Plant III
091-ASIC9-1006

Conditions: In a field or garrison environment, given a Electrical power plant III General mechanics tool kit, applicable technical publications and forms, hearing protection.

Standards: Correct malfunction on the electrical system of the Electric Power Plant III IAW TM 11-5985-368-34.

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the control panel components on the Electrical Power Plant.	____	____
5. Test the electrical system components.	____	____
6. Repair electrical system components as required.	____	____
7. Replace electrical system components as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
TM 11-5985-368-12&P	

Subject Area 6: AVIATION GENERATOR/AVIATION POWER UNIT MAINTENANCE (ASI D-4 ONLY)

Test Operate the Aviation Generator Set (MEP-362A)
091-ASID4-1005

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Test operate the Generator IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable tools and TMDE	____	____
2. Select and use applicable publications	____	____
3. Practice shop safety and maintenance.	____	____
4. Perform PMCS on the Aviation generator set (MEP 362A).	____	____
5. Test the Generator.	____	____
6.Start and Run the generator perform during operation tests, as required.	____	____
7. Perform during operation tests.as required.	____	____
8. Perform a final after operational test .	____	____
9. Ensure required maintenance forms have been completed.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Perform Preventive Maintenance Checks and Services on the Aviation Generator Set
091-ASID4-1006

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Test operate the Generator IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools to perform PMCS on an aviation generator set.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform before-operation PMCS on an aviation generator set.	____	____
5. Operate the aviation generator set.	____	____
6. Perform during-operation PMCS.	____	____
7. Shut down the aviation generator set.	____	____
8. Perform after-operation PMCS.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose Malfunctions in Generator Assembly on the Aviation Generator Set
091-ASID4-1007

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose malfunctions in Generator assembly IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools to diagnose malfunctions on an aviation generator set.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform before-operation PMCS on an aviation generator set.	____	____
5. Operate the aviation generator set to diagnose malfunction.	____	____
6. Perform during-operation PMCS.	____	____
7. Shut down the aviation generator set.	____	____
8. Perform after-operation PMCS.	____	____
9. Ensure required maintenance forms have been completed.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct Malfunctions in the Engine Electronic Control Module on the Aviation Generator Set

091-ASID4-1008

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the Engine electronic control module of the Generator IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable tools to perform PMCS on an aviation generator set.	____	____
2. Select proper tools to diagnose and correct malfunctions in the engine control module.	____	____
3. Determine faults/malfunctions based on inspection and testing. a. Inspect. b. Test. c. Replace.	____	____
4. Perform a final operational test.	____	____
5. Complete all required maintenance forms.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct malfunctions in the Generator Electronic Control Module
091-ASID4-1009

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the Generator electronic control module of the Generator IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Use applicable publications.	____	____
2. Select proper tools to diagnose and correct malfunctions in the generator electronic control module.	____	____
3. Determine faults/malfunctions based on inspection and testing. a. Inspect b. Test. c. Replace.	____	____
4. Perform a final operational test.	____	____
5. Complete all required maintenance forms.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Replace Defective Generator Assembly on the Aviation Generator Set
091-ASID4-1010

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Replace defective Generator assembly of the Generator IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Use applicable publications.	____	____
2. Select proper tools to inspect, test, repair and replace the generator assembly on the aviation generator set	____	____
3. Determine faults /malfunctions based on inspection and testing. a. Generator Assembly. (1) Inspect. (2) Test. (3) Repair. (4) Replace.	____	____
4. Perform a final operational test.	____	____
5. Complete all required maintenance forms.	____	____

References

Required	**Related**
TM 55-1730-229-12	

Replace Defective Gas Turbine Engine on the Aviation Generator Set
091-ASID4-1012

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Replace defective Gas turbine engine of the Aviation Generator IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Use applicable publications.	____	____
2. Select proper tools to inspect, test, repair, and replace a defective gas turbine on the aviation generator set.	____	____
3. Determine faults/serviceability based on inspection and testing. a. Gas Turbine Engine. (1) Inspect. (2) Test. (3) Repair. (4) Replace.	____	____
4. Perform a final operational test.	____	____
5. Complete all required TAMMS forms.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Test Operate the Aviation Ground Power Unit
091-ASID4-1013

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Test and operate the Aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Use applicable publications.	____	____
2. Select proper tools to set up and operate Aviation Ground power unit.	____	____
3. Set up and perform Before operation PMCS.	____	____
4. Perform during operation PMCS.	____	____
5. Test the Aviation ground power unit under load.	____	____
6. Perform shutdown and after operation PMCS.	____	____
7. Complete all required TAMMS forms.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Perform Preventive Maintenance Checks and Services on an Aviation Ground Power Unit
091-ASID4-1014

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Perform PMCS on the Aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools to perform PMCS on Aviation Ground power unit.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Perform before-operation PMCS on the Aviation Ground power unit.	____	____
5. Operate the power unit.	____	____
6. perform during-operations PMCS.	____	____
7. Shutdown the power unit.	____	____
8. Perform after - operation PMCS.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct Malfunctions in the Generator Assembly on the Aviation Ground Power Unit

091-ASID4-1015

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the of the Generator assembly on the aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the Generator assembly on the power unit.	____	____
5. Test the Generator assembly.	____	____
6. Repair the generator assembly, as required.	____	____
7. Replace Generator assembly, as required.	____	____
8. Perform a final operational test to verify faults have been corrected	____	____
9. Ensure all required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct malfunctions in the Electronic Control Unit on the Aviation Ground Power Unit

091-ASID4-1016

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the electronic control module of the Aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the Electronic Control Unit on the Aviation Ground power unit.	____	____
5. Test the Electronic Control unit.	____	____
6. Repair the electronic control unit as required.	____	____
7. Replace the electronic control unit as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Replace Defective Generator Assembly on the Aviation Ground Power Unit
091-ASID4-1017

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Replace defective generator assembly on the aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the Generator assembly on the aviation ground power unit.	____	____
5. Test the Generator assembly.	____	____
6. Repair Generator assembly , as required.	____	____
7. Replace Generator assembly, as required.	____	____
8. Perform a final operational test to verify faults(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct Malfunctions in DC Electrical and Control System on the Aviation Ground Power Unit

091-ASID4-1018

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the DC electrical and control system of the aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect DC electrical and control systems on the aviation ground power unit.	____	____
5. Test the DC electrical and control systems.	____	____
6. Repair DC electrical and control systems, as required.	____	____
7. Replace DC electrical and control systems, as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Replace Defective Gas Turbine Engine on the Aviation Ground Power Unit
091-ASID4-1019

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Replace defective Gas Turbine on the aviation power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the Gas turbine engine on the aviation ground power unit.	____	____
5. Test the Gas Turbine.	____	____
6. Repair Gas Turbine, as required	____	____
7. Replace Gas turbine.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct Malfunctions in the Generator Control Unit on the Aviation Ground Power Unit

091-ASID4-1020

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the generator control unit of the aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publication.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the Generator control unit on the aviation ground power unit.	____	____
5. Test the control unit.	____	____
6. Repair control unit, as required.	____	____
7. Replace control unit, as required.	____	____
8. Perform a final operational test to verify fault(s) have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct Malfunctions in the Hydraulic System on the Aviation Ground Power Unit
091-ASID4-1021

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the hydraulic system on the aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the Hydraulic system on the aviation ground power unit.	____	____
5. Test the hydraulic system.	____	____
6. Repair the Hydraulic system, as required	____	____
7. Replace the hydraulic system, as required.	____	____
8. Perform a final operational test to verify faults have been corrected.	____	____
9. Ensure all required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct Malfunctions in the Traction Motor System on the Aviation Ground Power Unit

091-ASID4-1022

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the traction motor system of the aviation ground power unit IAW TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publications.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the traction motor system on the aviation ground power unit.	____	____
5. Test the Traction Motor.	____	____
6. Repair the traction motor, as required.	____	____
7. Replace the traction motor, as required.	____	____
8. Perform a final operational test to verify faults have been corrected.	____	____
9. Ensure required maintenance forms have been corrected.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Diagnose and Correct Malfunctions in the Pneumatic System on the Aviation Ground Power Unit
091-ASID4-1023

Conditions: In a field or garrison environment given a Aviation generator set (MEP 362A), general mechanics toolkit, hearing protection, applicable technical publications.

Standards: Diagnose and correct malfunctions of the pneumatic system on the aviation ground power unit TM 55-1730-229-12 and 34

Performance Measures	**GO**	**NO GO**
1. Select and use applicable publication.	____	____
2. Select and use applicable tools and TMDE.	____	____
3. Practice shop safety and maintenance discipline.	____	____
4. Inspect the Pneumatic system on the aviation ground power unit.	____	____
5. Test the pneumatic system.	____	____
6. Repair the pneumatic system, as required.	____	____
7. Replace the pneumatic system , as required.	____	____
8. Perform a final operational test to verify faults have been corrected.	____	____
9. Ensure required maintenance forms have been completed.	____	____
10. Maintain tools and equipment.	____	____

References

Required	**Related**
TM 55-1730-229-12	
TM 55-1730-229-34	

Skill Level 3

Subject Area 8: TECHNICAL TASKS

Perform Diagnostic Procedures on the Electrical Control System of a Generator Set

091-52D-3101

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures of the electrical control system on a generator set IAW with listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review equipment inspection and maintenance worksheet and/or work request.	____	____
2. Determine the required maintenance action.	____	____
3. Determine if required maintenance is within shop capability/authorization.	____	____
4. Select necessary tools and test equipment.	____	____
5. Select necessary publications.	____	____
6. Diagnose fault(s) and determine maintenance action to be performed.	____	____
7. Troubleshoot the electrical control system IAW references.	____	____
8. Follow all safety precautions.	____	____
9. Identify faults.	____	____
10. Determine corrective action.	____	____
11. Complete TAMM's forms, as required.	____	____
12. Provide assistance when necessary.	____	____
13. Ensure electrical control system is repaired to acceptable standards.	____	____
14. Conduct an in-process inspection.	____	____
15. Perform a final inspection to ensure the electrical control system of a generator set is fully mission-capable.	____	____
16. Critique personnel on performance of the task.	____	____
17. Ensure maintenance forms are completed, as required.	____	____
18. Ensure tools and equipment are properly maintained.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
TM 5-6115-545-12	DA PAM 738-750
	FM 11-62

References

Required

Related

FM 5-424
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 9-2815-252-24
TM 9-2815-254-24
TM 9-2815-256-24
TM 9-3431-266-14&P-1
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-645-10
TM 9-6115-645-24

Perform Diagnostic Procedures on a Voltage Regulator of a Generator Set
091-52D-3102

Conditions: In a field or garrison environment , given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision

Standards: Soldier must perform this task in accordance with listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review equipment inspection and maintenance worksheet and/or work request.	____	____
1. Review work request.	____	____
2. Determine the required maintenance action.	____	____
2. Ensure task is within shop capability/authorization.	____	____
3. Ensure applicable technical publications are available.	____	____
3. Determine if required maintenance is within shop capability/authorization.	____	____
4. Ensure proper tools are available to inspect, repair/replace, and test the voltage regulator of a generator set.	____	____
4. Select necessary tools and test equipment.	____	____
5. Perform initial inspection.	____	____
5. Select necessary publications.	____	____
6. Diagnose fault(s), and determine maintenance action to be performed.	____	____
6. Troubleshoot the voltage regulator IAW references.	____	____
7. Identify repair parts and requisition, if required.	____	____
7. Follow all safety precautions.	____	____
8. Identify faults.	____	____
8. Assign personnel to perform task.	____	____
9. Determine corrective action.	____	____
9. Ensure all safety precautions and procedures are followed.	____	____
10. Complete TAMMS forms, as required .	____	____
10. Provide assistance when necessary.	____	____
11. Ensure voltage regulator is repaired to acceptable standards.	____	____
12. Conduct an in-process inspection.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed (P). Score the soldier NO-GO if any step is failed (F). If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

Related

EM 0074
FM 11-60
FM 11-61
FM 11-62
LO 5-6115-615-12
TM 11-6625-3052-14
TM 5-6115-545-12
TM 5-6115-545-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-615-12
TM 5-6115-615-34
TM 9-1425-450-34-2
TM 9-4935-451-14

Perform Diagnostic Procedures on Fault Indicator Panel of a Generator Set
091-52D-3103

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on a fault indication panel of a generator net IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Select necessary tools and test equipment.	____	____
8. Perform initial inspection.	____	____
9. Select necessary publications.	____	____
10. Diagnose fault(s) and determine maintenance action to be performed.	____	____
11. Troubleshoot the fault indication panel IAW references.	____	____
12. Identify repair parts and requisition, if required.	____	____
13. Follow all safety precautions.	____	____
14. Assign personnel to perform task.	____	____
15. Identify faults.	____	____
16. Ensure all safety precautions and procedures are followed.	____	____
17. Determine corrective action.	____	____
18. Provide assistance when necessary.	____	____
19. Complete TAMMS forms, as required.	____	____
20. Ensure fault indicator panel is repaired to acceptable standards.	____	____
21. Conduct an in-process inspection.	____	____
22. Perform a final inspection to ensure the fault indicator panel of a generator set is fully mission-capable.	____	____
23. Critique personnel on performance of the task.	____	____
24. Ensure maintenance forms are completed, as required.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 5-6115-271-14	TM 5-6115-440-20
TM 5-6115-423-15	TM 5-6115-465-34
TM 5-6115-440-10	TM 5-6115-545-12
TM 5-6115-465-12	TM 5-6115-545-34
TM 5-6115-545-12-HR	TM 5-6115-584-34
TM 5-6115-584-12	TM 5-6115-585-34
TM 5-6115-585-12	TM 5-6115-590-12
TM 5-6115-586-12	TM 5-6115-590-34
TM 5-6115-593-12	TM 9-6115-542-24&P
TM 9-6115-464-12	TM 9-6115-545-24P
TM 9-6115-624-BD	TM 9-6115-639-13
TM 9-6115-641-10	TM 9-6115-641-24
TM 9-6115-642-10	TM 9-6115-642-24
TM 9-6115-643-24	TM 9-6115-643-10
	TM 9-6115-644-10
	TM 9-6115-644-24
	TM 9-6115-645-10
	TM 9-6115-645-24

Perform Diagnostic Procedures of Relay Assembly on a Generator Set
091-52D-3104

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures of relay assembly on a generator net IAW with listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the relay assembly of a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the relay assembly IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure relay assembly is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the relay assembly is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

TM 5-6115-545-34
TM 5-6115-585-12
TM 5-6115-590-12
TM 9-6115-624-BD
TM 9-6115-641-24
TM 9-6115-642-24

Related

TM 5-6115-440-20
TM 5-6115-465-12
TM 5-6115-465-34
TM 5-6115-545-12
TM 5-6115-545-12-HR
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 9-6115-464-12
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-639-13
TM 9-6115-641-10
TM 9-6115-642-10
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10
TM 9-6115-645-24

Perform Diagnostic Procedures on a Governor Assembly of a Generator Set
091-52D-3105

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on an electrical governor of a generator set IAW with listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the governor assembly of a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the electrical governor IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure governor assembly is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the governor assembly is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 5-6115-440-20	TM 5-6115-465-12
TM 5-6115-545-12	TM 5-6115-465-34
TM 5-6115-584-12	TM 5-6115-545-12-HR
TM 5-6115-585-34	TM 5-6115-545-34
TM 5-6115-590-34	TM 5-6115-584-34
TM 9-6115-542-24&P	TM 5-6115-585-12
TM 9-6115-639-13	TM 5-6115-586-12
TM 9-6115-642-10	TM 5-6115-590-12
TM 9-6115-643-24	TM 5-6115-593-12
TM 9-6115-645-24	TM 5-6115-596-14
	TM 5-6115-600-12
	TM 9-6115-545-24P
	TM 9-6115-624-BD
	TM 9-6115-641-10
	TM 9-6115-641-24
	TM 9-6115-642-24
	TM 9-6115-643-10
	TM 9-6115-644-10
	TM 9-6115-644-24
	TM 9-6115-645-10
	TM 9-6115-663-13&P

Perform Diagnostic Procedures on the Main Generator Assembly of a Generator Set
091-52D-3106

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on the main generator assembly of a generator set IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the main generator assembly of a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the main generator assembly IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure the main generator assembly is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the main generator assembly is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 5-6115-590-12	TM 5-6115-465-12
TM 5-6115-596-14	TM 5-6115-465-34
TM 9-6115-542-24&P	TM 5-6115-545-12
TM 9-6115-639-13	TM 5-6115-545-12-HR
TM 9-6115-642-10	TM 5-6115-545-34
TM 9-6115-643-24	TM 5-6115-584-12
	TM 5-6115-584-34
	TM 5-6115-585-12
	TM 5-6115-585-34
	TM 5-6115-586-12
	TM 5-6115-590-34
	TM 5-6115-593-12
	TM 5-6115-600-12
	TM 5-6115-600-34
	TM 9-6115-464-12
	TM 9-6115-545-24P
	TM 9-6115-624-BD
	TM 9-6115-641-10
	TM 9-6115-641-24
	TM 9-6115-642-24
	TM 9-6115-643-10
	TM 9-6115-644-10
	TM 9-6115-644-24
	TM 9-6115-645-10
	TM 9-6115-645-24
	TM 9-6115-663-13&P

Perform Diagnostic Procedures on a Battery Charging Alternator

091-52D-3107

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on a battery charging alternator IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the battery charging alternator of a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the battery charging alternator IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure the battery charging alternator is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the battery charging alternator is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 5-6115-545-34	TM 5-6115-465-12
TM 5-6115-585-12	TM 5-6115-465-34
TM 5-6115-590-12	TM 5-6115-545-12
TM 5-6115-593-12	TM 5-6115-545-12-HR
TM 5-6115-600-12	TM 5-6115-584-12
TM 9-6115-624-BD	TM 5-6115-584-34
TM 9-6115-642-10	TM 5-6115-585-34
TM 9-6115-643-24	TM 5-6115-586-12
TM 9-6115-644-24	TM 5-6115-590-34
TM 9-6115-645-24	TM 5-6115-596-14
	TM 5-6115-600-34
	TM 5-6115-612-12
	TM 5-6115-612-34
	TM 9-6115-545-24P
	TM 9-6115-639-13
	TM 9-6115-641-10
	TM 9-6115-641-24
	TM 9-6115-642-24
	TM 9-6115-643-10
	TM 9-6115-644-10
	TM 9-6115-645-10
	TM 9-6115-663-13&P
	TM 9-6115-668-13

Perform Diagnostic Procedures on the Lubrication System

091-52D-3109

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on the lubrication system IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the lubrication system of a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the lubrication system IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required .	____	____
21. Ensure the lubrication system is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the lubrication system is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 5-6115-545-12-HR	TM 5-6115-465-12
TM 5-6115-584-12	TM 5-6115-465-34
TM 5-6115-586-12	TM 5-6115-545-12
TM 5-6115-596-14	TM 5-6115-545-34
TM 9-6115-641-10	TM 5-6115-584-34
TM 9-6115-642-10	TM 5-6115-585-12
TM 9-6115-643-24	TM 5-6115-585-34
TM 9-6115-645-10	TM 5-6115-590-12
TM 9-6115-663-13&P	TM 5-6115-590-34
	TM 5-6115-593-12
	TM 5-6115-600-12
	TM 5-6115-600-34
	TM 5-6115-612-12
	TM 9-6115-542-24&P
	TM 9-6115-545-24P
	TM 9-6115-624-BD
	TM 9-6115-639-13
	TM 9-6115-641-24
	TM 9-6115-642-24
	TM 9-6115-643-10
	TM 9-6115-644-10
	TM 9-6115-644-24
	TM 9-6115-645-24
	TM 9-6115-668-13

Perform Diagnostic Procedures on Glow Plugs of a Diesel Engine

091-52D-3112

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Soldier must perform this task in accordance with listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the glow plugs on a diesel engine on a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the glow plugs IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure glow plugs are repaired/replaced to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the glow plugs are fully mission capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

TM 5-6115-545-34
TM 5-6115-585-12
TM 5-6115-590-12
TM 5-6115-596-14
TM 9-6115-624-BD
TM 9-6115-641-24
TM 9-6115-643-10
TM 9-6115-644-24

Related

TM 5-6115-545-12
TM 5-6115-545-12-HR
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-600-12
TM 5-6115-600-34
TM 5-6115-612-12
TM 5-6115-612-34
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-639-13
TM 9-6115-641-10
TM 9-6115-642-10
TM 9-6115-642-24
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-645-10
TM 9-6115-645-24
TM 9-6115-663-13&P

Perform Diagnostic Procedures on a Starter Assembly

091-52D-3114

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on a starter assembly IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the starter assembly of a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the starter assembly IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure the starter assembly is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the starter assembly is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

TM 5-6115-590-12
TM 5-6115-596-14
TM 5-6115-600-34
TM 9-6115-542-24&P
TM 9-6115-639-13
TM 9-6115-642-10
TM 9-6115-643-24
TM 9-6115-645-10

Related

TM 5-6115-545-12-HR
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-600-12
TM 5-6115-612-12
TM 5-6115-612-34
TM 9-6115-464-12
TM 9-6115-545-24P
TM 9-6115-624-BD
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-24
TM 9-6115-643-10
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-24

Perform Diagnostic Procedures on the Fuel System of an Engine

091-52D-3118

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on the fuel system of an engine IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	GO	NO GO
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the fuel system of a generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Select necessary publications.	____	____
10. Perform initial inspection.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the fuel system IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure the fuel system is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the fuel system is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

TM 5-6115-545-34
TM 5-6115-585-12
TM 5-6115-590-12
TM 5-6115-596-14

Related

TM 5-6115-465-34
TM 5-6115-545-12
TM 5-6115-545-12-HR
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-600-12
TM 5-6115-600-34
TM 5-6115-612-12
TM 5-6115-612-34
TM 5-6115-614-12
TM 5-6115-615-12
TM 5-6115-615-34
TM 5-6115-629-14&P
TM 9-6115-464-12
TM 9-6115-542-24&P
TM 9-6115-545-24P
TM 9-6115-624-BD
TM 9-6115-639-13
TM 9-6115-641-10
TM 9-6115-641-24
TM 9-6115-642-10
TM 9-6115-642-24
TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10

Perform Diagnostic Procedures on a Cooling System of a Diesel Engine
091-52D-3119

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on a cooling system of a diesel engine IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the cooling system of a diesel generator set.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the cooling system IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure the cooling system is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the cooling system is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required

TM 9-6115-643-10
TM 9-6115-643-24
TM 9-6115-644-10
TM 9-6115-644-24
TM 9-6115-645-10
TM 9-6115-645-24
TM 9-6115-663-13&P
TM 9-6115-668-13

Related

TM 5-6115-545-12
TM 5-6115-545-12-HR
TM 5-6115-545-34
TM 5-6115-584-12
TM 5-6115-584-34
TM 5-6115-585-12
TM 5-6115-585-34
TM 5-6115-586-12
TM 5-6115-590-12
TM 5-6115-590-34
TM 5-6115-593-12
TM 5-6115-596-14
TM 5-6115-600-12
TM 5-6115-600-34
TM 5-6115-612-12

Perform Diagnostic Procedures on the Electrical Control on a Welding Machine
091-52D-3120

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform diagnostic procedures on the electrical control on a welding machine IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	GO	NO GO
1. Review work request.	____	____
2. Review equipment inspection and maintenance worksheet and/or work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Determine the required maintenance action.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Determine if required maintenance is within shop capability/authorization.	____	____
7. Ensure proper tools are available to inspect, repair/replace, and test the electrical control on a welding machine.	____	____
8. Select necessary tools and test equipment.	____	____
9. Perform initial inspection.	____	____
10. Select necessary publications.	____	____
11. Diagnose fault(s) and determine maintenance action to be performed.	____	____
12. Troubleshoot the electrical controls IAW references.	____	____
13. Identify repair parts and requisition, if required.	____	____
14. Follow all safety precautions.	____	____
15. Assign personnel to perform task.	____	____
16. Identify faults.	____	____
17. Ensure all safety precautions and procedures are followed.	____	____
18. Determine corrective action.	____	____
19. Provide assistance when necessary.	____	____
20. Complete TAMMS forms, as required.	____	____
21. Ensure the electrical control is repaired to acceptable standards.	____	____
22. Conduct an in-process inspection.	____	____
23. Perform a final inspection to ensure the electrical control is fully mission-capable.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
TM 9-3431-265-14&P	
TM 9-3431-266-14&P-1	
TM 9-3431-266-14&P-2	
TM 9-3431-272-13&P	

Perform Quality Control/Quality Assurance Inspection on a Generator Set
091-52D-3121

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform quality control (QC)/quality assurance (QA) inspections on a generator set IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Use applicable publications.	____	____
3. Apply troubleshooting procedures.	____	____
4. Apply inspection procedures.	____	____
5. Use TMDE, if required.	____	____
6. Ensure all safety precautions are followed.	____	____
7. Determine disposition of equipment.	____	____
8. Complete TAMMS forms, as required.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
DA PAM 738-750	

Perform Quality Control/Quality Assurance Inspection on a Welding Machine
091-52D-3122

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform quality control (QC)/quality assurance (QA) inspection on a welding machine IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Use applicable publications.	____	____
3. Apply troubleshooting procedures.	____	____
4. Apply inspection procedures.	____	____
5. Ensure proper tools are available to perform QC/QA inspection on a welding machine.	____	____
6. Ensure all safety precautions and procedures are followed.	____	____
7. Use TMDE, if required.	____	____
8. Ensure all safety precautions are followed.	____	____
9. Determine disposition.	____	____
10. Complete TAMMS forms, as required.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
DA PAM 738-750	

Perform Classification Inspection on a Generator Set

091-52D-3123

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform classification inspection on a generator set IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	GO	NO GO
1. Review of work order.	____	____
2. Review work request.	____	____
3. Ensure task is within shop capability/authorization.	____	____
4. Apply inspection procedures.	____	____
5. Ensure applicable technical publications are available.	____	____
6. Apply troubleshooting procedures.	____	____
7. Ensure all safety precautions and procedures are followed.	____	____
8. Use TMDE, if required.	____	____
9. Ensure proper tools are available to perform classification inspection on a generator set.	____	____
10. Ensure all safety precautions are followed.	____	____
11. Perform classification inspection on a generator set.	____	____
12. Use applicable publications.	____	____
13. Ensure maintenance forms are completed, as required.	____	____
14. Ensure all safety precautions are followed.	____	____
15. Ensure tools and equipment are properly maintained.	____	____
16. Determine disposition.	____	____
17. Complete TAMMS forms, as required.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
DA PAM 738-750	

Perform Classification Inspection on a Welding Machine

091-52D-3124

Conditions: In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, and with minimum supervision.

Standards: Perform classification inspection on a welding machine IAW listed references, ensuring that all applicable safety precautions are followed.

Performance Measures	GO	NO GO
1. Review work request.	____	____
2. Use applicable publications.	____	____
3. Apply troubleshooting procedures.	____	____
4. Apply inspection procedures.	____	____
5. Use TMDE, if required.	____	____
6. Ensure all safety precautions are followed.	____	____
7. Determine disposition.	____	____
8. Complete TAMMS forms, as required.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	Related
DA PAM 738-750	

Replace Cylinder Head

091-52D-3127

Conditions: In a shop environment, given a 60KW DED generator set, general mechanic's tool kit, torque wrench, replacement parts (gasket), TM 5-6115-545-34, and TM 5-6225-545-12.

Standards: Replace the cylinder head on the diesel engine, IAW TM 5-6115-545-34 and TM 5-6115-545-12.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Ensure task is within shop capability/authorization.	____	____
3. Ensure applicable technical publications are available.	____	____
4. Ensure proper tools are available to inspect, repair/replace, and test the cylinder head.	____	____
5. Perform initial inspection.	____	____
6. Diagnose fault(s), and determine maintenance action to be performed.	____	____
7. Identify repair parts and requisition, if required.	____	____
8. Assign personnel to perform task.	____	____
9. Ensure all safety precautions and procedures are followed.	____	____
10. Provide assistance when necessary.	____	____
11. Ensure cylinder head is replaced to acceptable standards.	____	____
12. Conduct an in-process inspection.	____	____
13. Perform a final inspection to ensure the generator set is fully mission capable.	____	____
14. Ensure maintenance forms are completed, as required.	____	____
15. Ensure tools and equipment are properly maintained.	____	____

References

Required	**Related**
TM 5-6115-545-12	
TM 5-6115-545-12-HR	
TM 5-6115-545-34	

Perform Diagnostic Procedures on the Output Rectifier Assembly on a Welding Machine

091-52D-3128

Conditions: In a field or garrison environment, given a welding machine, maintenance request or equipment inspection worksheet describing equipment malfunctions, schematic and wiring diagram, general mechanic's tool kit, color/grease pencils, multimeter, hearing protection, and applicable technical publications.

Standards: Perform diagnostic procedures on the output rectifier assembly on a welding machine IAW the applicable technical publications. When the task is completed, the welding machine must be fully mission-capable.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Ensure task is within shop capability/authorization.	____	____
3. Ensure applicable technical publications are available.	____	____
4. Ensure proper tools are available to inspect, repair/replace, and test the output rectifier assembly.	____	____
5. Perform initial inspection.	____	____
6. Diagnose fault(s) and determine maintenance action to be performed.	____	____
7. Identify repair parts and requisition, if required.	____	____
8. Assign personnel to perform task.	____	____
9. Ensure all safety precautions and procedures are followed.	____	____
10. Provide assistance when necessary.	____	____
11. Ensure the output rectifier assembly is repaired to acceptable standards.	____	____
12. Conduct an in-process inspection.	____	____
13. Perform a final inspection to ensure the output rectifier assembly is fully mission-capable.	____	____
14. Critique personnel on performance of the task.	____	____
15. Ensure maintenance forms are completed, as required.	____	____
16. Ensure tools and equipment are properly maintained.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was wrong and how to do it correctly.

References

Required	**Related**
TM 9-3431-265-14&P	
TM 9-3431-266-14&P-1	
TM 9-3431-266-14&P-2	
TM 9-3431-272-13&P	

Perform Diagnostic Procedures on the Range Switch Assembly on a Welding Machine
091-52D-3129

Conditions: In a field or garrison environment, given a welding machine, maintenance request or equipment inspection worksheet describing equipment malfunctions, schematic and wiring diagram, general mechanic's tool kit, multimeter, hearing protection, and applicable technical publications.

Standards: Perform diagnostic procedures on the range switch assembly on a welding machine IAW the applicable technical publications. When the task is completed, the welding machine must be fully mission-capable.

Performance Measures	GO	NO GO
1. Review work request.	____	____
2. Ensure task is within shop capability/authorization.	____	____
3. Ensure applicable technical publications are available.	____	____
4. Ensure proper tools are available to inspect, repair/replace, and test the range switch assembly.	____	____
5. Perform initial inspection.	____	____
6. Diagnose fault(s) and determine maintenance action to be performed.	____	____
7. Identify repair parts and requisition, if required.	____	____
8. Assign personnel to perform task.	____	____
9. Conduct an in-process inspection.	____	____
10. Provide assistance when necessary.	____	____
11. Ensure the range switch assembly is repaired to acceptable standards.	____	____
12. Conduct an in-process inspection.	____	____
13. Perform a final inspection to ensure the range switch assembly is fully mission-capable.	____	____
14. Critique personnel on performance of the task.	____	____
15. Ensure maintenance forms are completed, as required.	____	____
16. Ensure tools and equipment are properly maintained.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was wrong and how to do it correctly.

References

Required	Related
TM 9-3431-265-14&P	
TM 9-3431-266-14&P-1	
TM 9-3431-266-14&P-2	
TM 9-3431-272-13&P	

Perform Diagnostic Procedures on the Reactor Assembly on a Welding Machine
091-52D-3130

Conditions: In a field or garrison environment, given a welding machine, maintenance request or equipment inspection worksheet describing equipment malfunctions, general mechanic's tool kit, multimeter, hearing protection, and applicable technical publications.

Standards: Perform diagnostic procedures on the reactor assembly on a welding machine IAW the applicable technical publications. When the task is completed, the welding machine must be fully mission-capable.

Performance Measures	**GO**	**NO GO**
1. Review work request.	____	____
2. Ensure task is within shop capability/authorization.	____	____
3. Ensure applicable technical publications are available.	____	____
4. Ensure proper tools are available to inspect, repair/replace, and test the reactor assembly.	____	____
5. Perform initial inspection.	____	____
6. Diagnose fault(s) and determine maintenance action to be performed.	____	____
7. Identify repair parts and requisition, if required.	____	____
8. Assign personnel to perform task.	____	____
9. Ensure all safety precautions and procedures are followed.	____	____
10. Provide assistance when necessary.	____	____
11. Ensure the reactor assembly is repaired to acceptable standards.	____	____
12. Conduct an in-process inspection.	____	____
13. Perform a final inspection to ensure the reactor assembly is fully mission-capable.	____	____
14. Critique personnel on performance of the task.	____	____
15. Ensure maintenance forms are completed, as required.	____	____
16. Ensure tools and equipment are properly maintained.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was wrong and how to do it correctly.

References

Required	**Related**
TM 9-3431-265-14&P	
TM 9-3431-266-14&P-1	
TM 9-3431-266-14&P-2	
TM 9-3431-272-13&P	

Subject Area 7: COMMON LOGISTICS TASKS

Manage a Shop Safety Program
091-CLT-3001

Conditions: In a field or garrison environment, given a maintenance site/facility, maintenance personnel, and applicable references.

Standards: Ensured personnel followed all safety procedures, that preventable accidents were avoided, and if accidents occurred that they were properly recorded and reported, IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured all safety references were on hand.	____	____
2. Established and documented goals and requirements for a successful shop safety and accident prevention program.	____	____
3. Briefed and regularly updated subordinates on shop safety program.	____	____
4. Conducted initial safety inspections.	____	____
5. Ensured initial safety concerns and violations were corrected.	____	____
6. Conducted scheduled and unscheduled safety inspections.	____	____
7. Documented safety violations, reported the violations as required, and conducted follow-up inspections to ensure violations were/remained corrected.	____	____
8. Kept necessary records of safety inspections and accident reports.	____	____
9. Ensured MSDS were prepared and maintained as required in applicable work areas.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
AR 190-13	AR 385-10
AR 220-1	AR 385-40
AR 700-138	AR 385-55
AR 750-1	
DA PAM 738-750	
FM 4-30.3	
TB 43-180	

Maintain a Publications Library

091-CLT-3002

Conditions: In a field or garrison environment, given publications and storage location, local and higher headquarters publications indexes and publications procedures, SOP, and applicable forms and references.

Standards: Ensured required publications were on hand or ordered, publications were arranged and maintained properly, forms/records were properly maintained, and changes were posted IAW applicable references and local procedures.

Performance Measures	**GO**	**NO GO**
1. Determined all publications required by the maintenance shop or section.	____	____
2. Reviewed and updated publications library SOP as needed.	____	____
3. Ensured that technical publications on hand/on order were the most current IAW DA Pam 25-30.	____	____
4. Ensured that doctrinal, training, and organizational publications on hand/on order were the most current IAW DA Pam 25-30 and local listings.	____	____
5. Ensured that administrative publications on hand/on order were the most current IAW DA Pam 25-30.	____	____
6. Ensured that local and higher headquarters publications on hand/on order were the most current IAW DA Pam 25-30 and local listings.	____	____
7. Prepared DA Form 4569 IAW DA Pam 25-33.	____	____
8. Prepared the required transmittal form IAW DA Pam 25-33.	____	____
9. Prepared DA Forms 17 and 17-1 to request local and higher headquarters publications, IAW DA Pam 25-33 and local/higher headquarters' publications requisitioning procedures.	____	____
10. Ensured that published changes were posted to applicable publications IAW DA PAM 25-40 and publication change instructions.	____	____
11. Removed obsolete/rescinded/superseded publications from library IAW DA Pam 25-40 and publication change instructions.	____	____
12. Arranged publications in proper order and in a suitable location IAW DA Pam 25-40.	____	____
13. Labeled binders used for storing library publications IAW AR 25-400-2 applicable) and DA Pam 25-40.	____	____
14. Notified personnel to return loaned publications to the library in a timely manner IAW SOP.	____	____
15. Updated US Army Publishing Agency (USAPA), local, and higher headquarters publications accounts as required IAW DA Pam 25-33 and local/higher headquarters publication account instructions.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required
AR 25-400-2
DA PAM 25-30
DA PAM 25-33

Related
AR 25-11

Establish Maintenance Facilities

091-CLT-3003

Conditions: In a field or garrison environment, given a maintenance site, maintenance personnel, applicable equipment, maintenance shop/section SOP, and applicable references.

Standards: Set up a maintenance shop facility suitable for accomplishing necessary maintenance functions IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured applicable references and publications were available.	____	____
2. Identified commander's maintenance requirements for the accomplishment of the unit's mission.	____	____
3. Set up the maintenance facility IAW SOP.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
FM 4-30.3	

Assist in Preparing a Standing Operating Procedure
091-CLT-3004

Conditions: In a field or garrison environment, given FM 9-43-1, higher headquarters SOP(s), and commander's guidance.

Standards: Prepared a draft copy of a maintenance shop/section internal or external SOP for supervisor's review, comment, and approval IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured applicable publications were available.	____	____
2. Ensured unit policies and commander's guidance were followed.	____	____
3. Ensured shop operation policies were adequately addressed.	____	____
4. Updated the shop SOP as required.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
FM 4-30.3	

Manage Tool Control Procedures
091-CLT-3005

Conditions: In a field or garrison environment, given applicable supply catalog(s), applicable references, and hand receipt forms.

Standards: Managed tool control procedures IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured applicable references were available.	____	____
2. Established policies and procedures for the control of tools.	____	____
3. Ensured all DA Form 2062s were properly filled out and updated.	____	____
4. Ensured tools and equipment were inventoried IAW applicable references.	____	____
5. Ensured tool shortages were annotated on a shortage annex.	____	____
6. Ensured subordinates applied property accountability procedures.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required
AR 190-13
AR 220-1
AR 385-10
AR 385-40
AR 700-138
AR 750-1
DA PAM 710-2-1
FM 101-5-1
FM 4-30.3

Related
DA PAM 738-750

Manage Key Control Procedures
091-CLT-3006

Conditions: In a field or garrison environment, given keys, key control rosters, key boxes/cabinets, and applicable publications.

Standards: Managed key control procedures IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured necessary publications were available.	____	____
2. Established key control policies and procedures.	____	____
3. Established key control access rosters.	____	____
4. Ensured personnel were aware of their responsibilities for the security and accountability of keys.	____	____
5. Ensured key control access rosters were properly maintained and adhered to.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
AR 190-13	
AR 190-51	

Recon Terrain/Route

091-CLT-3008

Conditions: In a field environment, given a maintenance situation/operations order (OPORD), operational overlay, grid coordinates of destination, vehicle with personnel, and applicable references.

Standards: Performed a route/terrain reconnaissance, and selected the most appropriate route to follow or the most appropriate location to set up a maintenance site, IAW maintenance situation/OPORD and applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured necessary equipment and publications were available.	____	____
2. Performed a map recon of the terrain and route.	____	____
3. Selected personnel for recon team.	____	____
4. Reconned route to determine best access to destination and to ensure safety of personnel and equipment.	____	____
5. Reconned terrain to determine suitability for maintenance site use, to determine best avenues of entry and exit, and to ensure safety of personnel and equipment.	____	____
6. Reported findings and conclusions to supervisors.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
FM 4-30.3	
FM 5-170	

Supervise Maintenance Operations

091-CLT-3009

Conditions: In a field or garrison environment, given maintenance personnel, equipment, maintenance facility/site, SOPs, and applicable references.

Standards: Established and maintained an effective maintenance shop operation IAW SOPs and applicable references.

Performance Steps

1. Ensure unit maintenance procedures are IAW AR 750-1, DA Pam 750-35 and local major command (MACOM) policies.
   a. Review unit standing operating procedures (SOP) for maintenance.
   b. Inform unit personnel of changes in policy and new policy that impacts unit SOP
2. Provide technical assistance to unit maintenance activities.
   a. Inspect unit maintenance operations
   b. Identify shortcomings
   c. Make recommendations for corrective action.
   d. provide training in maintenance procedures.
3. Provide maintenance management to units.
   a. Review reports (MCRS and ULLS-G).
   b. Coordinate with higher level maintenance activities
   c. Direct cross-leveling of maintenance assets/workload.
   d. Prioritize maintenance efforts of units.

Performance Measures	**GO**	**NO GO**
1. Reviewed unit SOP as scheduled	____	____
2. Compared unit SOP against standards set in 750-35-35 (Aug 94), Pg.	____	____
3. Completed regular inspection of unit operations.	____	____
4. Compared unit operations against standards in AR 750-1, DA Pam 738-750 and DA 750, and DA Pam 750-35.	____	____
5. Inspect environmental protection practices for compliance.	____	____
6. Review safety program practices for compliance with AR 220-1.	____	____
7. Recorded and submitted deficiencies to proper personnel for correction.	____	____
8. Recorded training needs.	____	____
9. Coordinated with appropriate personnel to provide needed training.	____	____
10. Reviewed MCSR for accuracy and compliance with standards in AR 700-138, ADSM-25-L3N-AWA-EUM, and AISM -25-L3Q-AWC-ZZZ-CG.	____	____
11. Coordinated with appropriate maintenance level to correct maintenance discrepancies.	____	____
12. Coordinated with TRADOC and AMC to ensure that emerging issues are addressed appropriately at the unit.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
AR 190-51	
AR 385-10	
AR 385-40	
AR 385-55	
AR 600-55	
AR 700-4	
AR 710-2	
AR 725-50	
AR 735-11-1	
AR 735-5	
AR 750-43	
DA PAM 25-30	
DA PAM 710-2-2	
DA PAM 738-750	
DA PAM 750-1	
FM 4-30.3	

Interpret Maintenance Operational Overlay

091-CLT-3010

Conditions: In a field or garrison environment, given an operational overlay, map, maintenance situation/OPORD, and applicable references.

Standards: Interpreted the maintenance operational overlay by identifying key features and elements of the area of operation IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured necessary references and materials were available.	____	____
2. Identified mapping symbols on the operational overlay.	____	____
3. Identified key features of the map and operational overlay.	____	____
4. Identified key elements of the area of operation on the map and operational overlay.	____	____
5. Updated the operational overlay, as necessary.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
FM 101-5-1	
FM 4-30.3	
FM 5-170	

Deploy Maintenance Support Teams

091-CLT-3011

Conditions: In a field or garrison environment, given a request for maintenance support/maintenance situation, map, operational overlay, grid coordinates of destination, vehicle(s), equipment, maintenance personnel, and applicable references.

Standards: Deployed the maintenance support team IAW the maintenance situation/request for maintenance support and applicable references.

Performance Measures	**GO**	**NO GO**
1. Reviewed the request for maintenance support/maintenance situation.	____	____
2. Determined personnel and equipment requirements necessary to perform the mission.	____	____
3. Identified available resources for the support team, including personnel with applicable MOSs, vehicle(s), tools, test equipment, publications, repair parts, time, and facilities as necessary.	____	____
4. Determined requirements for defending the team.	____	____
5. Briefed the team on the mission. a. Reviewed operational overlay. b. Conducted a map recon of the route and destination.	____	____
6. Deployed the maintenance support team.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
FM 4-30.3	FM 101-5-1
	FM 5-170

Manage the Standard Army Maintenance System (SAMS)
091-CLT-3012

Conditions: In a field or garrison environment, given a computer system(s) with SAMS-1 software, database of equipment files, SAMS operator, and applicable references.

Standards: Supervised SAMS-1 functions of a direct support (DS)-level maintenance shop IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured necessary equipment and publications were available.	____	____
2. Ensured SAMS operator was adequately trained.	____	____
3. Reviewed the SAMS-1 system and the flow of information to and from system interfaces.	____	____
4. Reviewed the purpose and use of SAMS-1 categories and codes.	____	____
5. Supervised the processing of maintenance requests (DA Form 2407).	____	____
6. Interpreted SAMS-1 reports to identify maintenance trends and problems. a. bench stock listing (AHN-023). b. shop section summary (AHN-006). c. work order detail (AHN-018). d. shop stock list (AHN-002). e. production backlog (AHN-022). f. equipment status listing (AHN-021).	____	____
7. Requested and interpreted ad hoc reports as necessary.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
AISM 18-L21-AHN-BUR-UM	
AISM 18-L26-AHO-BUR-EM	
DA PAM 738-750	

Manage the Unit Level Logistics System (ULLS)

091-CLT-3013

Conditions: In a field or garrison environment, given a computer system(s) with Unit Level Logistics System-Ground (ULLS-G) software, database of equipment files, associated Army Materiel Status System (AMSS) software, ULLS operator, and applicable references.

Standards: Supervised ULLS-G functions of a unit-level maintenance shop IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured necessary equipment and references were available.	____	____
2. Ensured ULLS operator was properly trained.	____	____
3. Reviewed the ULLS system flow of information to and from system interfaces.	____	____
4. Reviewed ULLS-G maintenance forms for accuracy.	____	____
5. Analyzed ULLS-G reports and data to identify maintenance trends and problems. a. Document register. b. PLL inventory report. c. Zero balance report. d. PLL excess management report. e. PLL inquiry. f. Not mission capable (NMC) report.	____	____
6. Analyzed AMSS reports and data to identify maintenance trends and problems. a. AMSS Authorization Report. b. Projected fully mission capable (FMC) Rates Report. c. Equipment exception report. d. System status summary. e. Class IX failure data by administrative number. f. Rollup by equipment identification code (EIC). g. Rollup by unit identification code (UIC). h. Non mission capable (NMC) Report.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
AR 710-2	
DA PAM 710-2-1	

Deploy Company Maintenance Team/Recovery Support Team

091-CLT-3015

Conditions: In a field or garrison environment, given a request for maintenance support/maintenance situation, map, operational overlay, grid coordinates of destination, vehicle(s), equipment, maintenance personnel, and applicable references.

Standards: Deployed the company maintenance team/recovery support team IAW the maintenance situation/request for maintenance support and applicable references.

Performance Measures	**GO**	**NO GO**
1. Reviewed the request for maintenance support/maintenance situation.	____	____
2. Determined personnel and equipment requirements necessary to perform the mission.	____	____
3. Identified available resources for the company maintenance team/recovery support team, including personnel with applicable MOSs, vehicle(s), tools, test equipment, publications, repair parts, time, and facilities, as necessary.	____	____
4. Determined requirements for defending the team.	____	____
5. Briefed the team on the mission: a. Reviewed the operational overlay. b. Conducted a map recon of the route and destination.	____	____
6. Deployed the maintenance support team.	____	____

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
FM 101-5-1	
FM 4-30.3	
FM 5-170	

Review the Army Materiel Status System (AMSS) Reports
091-CLT-3016

Conditions: In a field or garrison environment, given AMSS reports produced from an ULLS-G system, and applicable references.

Standards: Analyzed AMSS reports and data to identify maintenance trends and problems IAW applicable references.

Performance Measures	**GO**	**NO GO**
1. Ensured necessary ULLS equipment and references were available.	____	____
2. Analyzed AMSS reports and data to identify maintenance trends and problems.	____	____

a. AMSS authorization report.
b. Projected FMC rates report.
c. Equipment exception report.
d. System status summary.
e. Class IX failure data by administrative number.
f. Rollup by EIC.
g. Rollup by UIC.
h. NMC report.

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any step is failed. If the soldier fails any step, show what was done wrong and how to do it correctly.

References

Required	**Related**
AR 710-2	
DA PAM 710-2-1	

APPENDIX A

HANDS-ON EVALUATION (DA FORM 5164-R)
INSTRUCTIONS
(Excerpted from STP 21-24-SMCT, Appendix C)

DA Form 5164-R (Hands-On Evaluation) allows the trainer to keep a record of the performance measures a soldier passes or fails on each task.

Before evaluation:

1. Obtain a blank copy of DA Form 5164-R, which you may locally reproduce on 8 ½ x 11 paper.
2. Enter the task title and 10-digit number from the STP task summary.
3. In Column a, enter the performance measure numbers from the task summary.
4. In Column b, enter the performance measure corresponding to the number in Column a (you may abbreviate this information if necessary).
5. Locally reproduce the partially completed form when evaluating more than one soldier on the task or when evaluating the same soldier more than once.

During evaluation:

1. Enter the date just before evaluating the soldier's task performance.
2. Enter the evaluator's name, the soldier's name, and the unit.
3. For each performance measure in Column b, enter a check in Column c (PASS) or Column d (FAIL), as appropriate.
4. Compare the number of performance measures the soldier passes (and, if applicable, which ones) against the task standards specified in the task summary. If the standards are met or exceeded, check the GO block under STATUS; otherwise, check the NO-GO block.

HANDS-ON EVALUATION For use of this form, see AR 350-57; the proponent agency is ODCSOPS		DATE	
TASK TITLE		TASK NUMBER	
ITEM a	PERFORMANCE STEP TITLE b	SCORE (Check One)	
		PASS c	FAIL d
		☐ P	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ F	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ P	☐ F
		☐ P	F
rdrsdrs		☐ P	☐ F
EVALUATOR'S NAME		UNIT	
SOLDIER'S NAME		STATUS ☐ GO ☐ NO GO	

DA FORM 5164-R, SEP 85 EDITION OF DEC 82 IS OBSOLETE **USAPPC V2.00**

APPENDIX B - DA FORM 5165-R (FIELD EXPEDIENT SQUAD BOOK)

FIELD EXPEDIENT SQUAD BOOK (DA FORM 5165-R)
INSTRUCTIONS
(Excerpted from STP 21-24-SMCT, Appendix C)

DA Form 5165-R (Field Expedient Squad Book) allows the trainer to keep a record of task proficiency for a group of soldiers.

Before evaluation:

1. Obtain a blank copy of DA Form 5165-R, which you may locally reproduce on 8 ½ x 11 paper.
2. Locally reproduce the partially completed form if you are evaluating more than nine soldiers.

During evaluation:

1. Enter the names of the soldiers you are evaluating, one name per column, at the top of the form.
2. Under STATUS, record (in pencil) the date in the GO block if the soldier demonstrated task proficiency to soldier's manual standards. Keep this information current by always recording the most recent date on which the soldier demonstrated task proficiency. Record the date in the NO-GO block if the soldier failed to demonstrate task proficiency to soldier's manual standards. Soldiers who failed to perform the task should be retrained and reevaluated until they can meet the standards. When the standards are met, enter the date in the appropriate GO block and erase the previous entry from the NO-GO block.

After evaluation:

1. Read down each column (GO/NO-GO) to determine the training status of an individual. This will give you a quick indication of which tasks a soldier needs training on.
2. Read across the rows for each task to determine the training status of all soldiers. You can readily see which tasks to focus training on.
3. Line through the STATUS column of any soldier who leaves the unit.

GLOSSARY

Section I
Abbreviations

AC	Active Component
app	appendix
AR	Army regulation
C	centigrade
cont	continued
CS	combat support; O-chlorobenzyl-malononitrile
DA	Department of the Army
DA Form	Department of the Army form
DA Pam	Department of the Army pamphlet
DC	Dental Corps
DE	directed energy
DS	direct support
F	Fahrenheit
FM	frequency modulation
IAW	in accordance with
L	left
M	meter
min	minute
mm	millimeter
MOS	military occupational specialty
MSS	Manpower Staffing Standards
NMC	Nonmission Capable
No	number
OP	observation post
OPORD	operations order

ORD	Operational Requirements Document
P	pass
pam	pamphlet
PL	preservative lubricant
PLL	prescribed load list
PMCS	preventive maintenance checks and services
Pract	Practice
R	right
Reg	regiment
S	safe
SAM	surface-to-air missile; soft-structural, aluminum, malleable
sec	second
SOP	standing operating procedure
TM	technical manual
TMDE	test measurement and diagnostic equipment
U	up
ULLS	Unit Level Logistics System
US	United States
USA	United States Army
V	nerve agent
Vol	volume
Z	zulu time (Greenwich Mean Time)

Section II
Terms

Procedure
A standard and detailed course of action that describes how to perform a task.

REFERENCES

Required Publications

Required publications are sources that users must read in order to understand or to comply with this publication.

Army Regulations

AR 190-13	The Army Physical Security Program (This Item is Included on EM 0001). 30 September 1993
AR 190-51	Security of Unclassified Army Property (Sensitive and Nonsensitive) (This Item is Included on EM 0001) 30 September 1993
AR 220-1	Unit Status Reporting (This Item is Included on EM 0001) 1 September 1997
AR 25-400-2	The Modern Army Record Keeping System (MARKS) (This Item is Included on EM 0001) 26 February 1993
AR 385-10	The Army Safety Program (This item is included on EM 0001) 23 May 1988
AR 385-40	Accident Reporting and Records (This Item is Included on EM 0001) 1 November 1994
AR 385-55	Prevention of Motor Vehicle Accidents (This item is Included on EM 0001) 12 March 1987
AR 600-55	The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing) (This Item is Included on EM 0001) 31 December 1993
AR 700-138	Army Logistics Readiness and Sustainability (This Item is Included on EM 0001) 16 September 1997
AR 700-4	Logistics Assistance (This Item is Included on EM 0001) 30 June 1995
AR 710-2	Inventory Management Supply Policy Below the Wholesale Level (This Item is on EM 0001) 31 October 1997
AR 725-50	Requisition, Receipt, and Issue System (This Item is Included on EM 0001) 15 November 1995
AR 735-11-1	Uniform Settlement of Military Freight Loss and Damage Claims (This Item is Included on EM 0001) 1 January 1988
AR 735-5	Policies and Procedures for Property Accountability (This Item is Included on EM 0001) 31 January 1998
AR 750-1	Army Materiel Maintenance Policy and Retail Maintenance Operations (This Item is Included on EM 0001) 1 August 1994
AR 750-43	Army Test, Measurement and Diagnostic Equipment Program (This Item Is Included on EM 0001) 28 November 1997

Department of Army Forms

DA FORM 2404	Equipment Inspection And Maintenance Worksheet (This Item is Included on EM 0001) 1 April 1979
DA FORM 5988-E	Equipment Inspection Maintenance Worksheet (EGA) 1 March 1991

Department of Army Pamphlets

DA PAM 25-30	Consolidated Index of Army Publications and Blank Forms (ISSUED QUARTERLY)(No Printed Copies Exist)(Formerly DA Pam 310-1)(This Item is Included on EM 0001) 1 April 2001

DA PAM 25-33	User's Guide for Army Publications and Forms (This Item is Included on EM 0001) 15 September 1996
DA PAM 710-2-1	Using Unit Supply System (Manual Procedures) (Standalone Pub) (This Item is on EM 0001) 31 December 1997
DA PAM 710-2-2	Supply Support Activity Supply System: Manual Procedures (This Item is on EM 0001) 30 September 1998
DA PAM 738-750	Functional Users Manual for The Army Maintenance Management System (TAMMS) (This Item is Included on EM 0001) 1 August 1994
DA PAM 750-1	Leader's Unit Level Maintenance Handbook (This Item is Included on EM 0001) 15 February 1994

Field Manuals

FM 101-5-1	Operational Terms and Graphics (MCRP 5-2A) 30 September 1997
FM 4-30.3	Maintenance Operations and Procedures 1 September 2000
FM 5-170	ENGINEER RECONNAISSANCE 5 May 1998
FM 5-424	Theater of Operations Electrical Systems 25 June 1997

Other Product Types

AISM 18-L21-AHN-BUR-UM	Standard Army Maintenance System Level 1 (SAMS-1) End User Manual
AISM 18-L26-AHO-BUR-EM	Standard Army Maintenance System Level 2 (SAMS-2) End User Manual

Technical Bulletins

TB 43-0211	AOAP Army Oil Analysis Program Guide For Leaders and Users 4 June 1998
TB 43-180	Calibration and Repair Requirements for the Maintenance of Army Materiel (This Item is Included on EM 0022) 1 December 2000

Technical Manuals

TM 11-5985-368-12&P	Operator's and Organizational Maintenance Manual Including Repair Parts and Special Tools List for Mast Group, Hydraulic-Pneumatic, OA-9054(U)4/G (NSN 5985-01-129-1794) (Reprinted W/Basic Inc C1-5) 27 October 1983
TM 55-1730-229-12	Operator and Organizational Maintenance Manual, Power Unit, Aviation, Multi-Output GTED Electrical, Hydraulic, Pneumatic (AGPU) Wheel Mounted, Self-Propelled, Towable, AC 400 Hz, 3 PH, 0.8PF, 115/200 V, 30 kW, DC 28 VDC 700 AMPS, Pneumatic 1 December 1986
TM 55-1730-229-34	Intermediate (Field), (Direct and General Support) Maintenance Manual Power Unit, Aviation, Multi-Output GTED, Electrical, Hydraulic, Pneumatic (AGPU) Wheel Mounted, Self-Propelled Towable, AC 400 Hz, 3 PH, 0.8 PF, 115/200 V, 30 kW, DC 28 V 1 December 1986
TM 5-6115-271-14	Operator's, Organizational, Direct Support, and General Support Maintenance Manual for Generator Set, Gasoline Engine Driven, Skid Mounted, Tubular Frame, 3 kW, 2 Phase AC, 120/208 and 120/240 V, 28, VDC (Less Engine) 3 August 1976
TM 5-6115-423-15	Operator, Organizational, Direct and General Support and Depot Maintenance Manual for Load Bank, 0.30 KW, AC, Portable, Skid MTD (Sun Electric Corp, Model GPT-3D-1)(NSN 6115-00-964-1091) and (Sun Electric Corp, Model GPT-3D)(6115-00-903-817 10 August 1967
TM 5-6115-440-10	Operator's Maintenance Manual: Generator Set, 7.5 kW, Air Cooled, Two-Wheel Mounted, Pneumatic Tires 2 February 1971
TM 5-6115-440-20	Organizational Maintenance Manual: Generator Set, 7.5 kW, 28 VDC, GED, Air Cooled, Two-Wheel Mounted, Pneumatic Tires 2 February 1971

TM 5-6115-465-12	Operator's and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 30 KW, 3 Phase, 4 Wire, 120/208 and 240/416 V (DOD Model MEP-005A), Utility Class 50/60 HZ (NSN 6115-00-118-1240) 31 January 1975
TM 5-6115-465-34	Intermediate (Field) (Direct Support and General Support) and Depot Level Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 30 kW, 3 Phase, 4 Wire, 120/208 and 240/416 V, (DOD Model MEP-005A), Utility, 50/60 Hz 31 January 1975
TM 5-6115-545-12	Operator's and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid MTD, 60 kW, 3 Phase, 4 Wire, 120/208 and 240/416 Volts, DOD Model MEP-006A, Utility Class, 50/60HZ (NSN 6115-00-118-1243) DOD Model MEP- 10 June 1973
TM 5-6115-545-12-HR	Hand Receipt and Manual Covering Components of End Item (COEI), Basic Issue Items (BII), and Additional Authorization List (AAL) for Generator Set, Diesel Engine Driven, Tactical Skid MTD, 60KW, 3 Phase, 4 Wire, 120/208 and 240/416V 8 February 1980
TM 5-6115-545-34	Intermediate (Field) (Direct and General Support) and Depot Maintenance Manual Generator Set, Diesel Engine Driven, Tactical Skid Mtd, 60 kW, 3 Phase, 4 Wire, 120/208 and 240/416 Volts, DOD Models MEP-006A, Utility Class, 50/60 Hz, (NSN 61 10 June 1973
TM 5-6115-584-12	Operator and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 5 kW 22 July 1977
TM 5-6115-584-34	Intermediate (Field) DS/GS and Depot Level Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 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 22 July 1977
TM 5-6115-585-12	Operator and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 10 kW 25 July 1977
TM 5-6115-585-34	Intermediate (Field) (Direct and General Support) and Depot Level Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 kW, 1 Phase, 2 Wire, 1 Phase, 3 Wire, 3 Phase, 4 Wire, 120, 120/240 and 120/208 V (DOD M 25 July 1977
TM 5-6115-586-12	Operator's and Organizational Maintenance Manual: Power Plant, Utility (MUST), Gas Turbine Engine Driven 5 June 1972
TM 5-6115-590-12	Operator's and Organizational Maintenance Manual: Power Plant, Utility (MUST), Gas Turbine Engine Driven 29 March 1977
TM 5-6115-590-34	Direct Support and General Support Maintenance Manual for Power Plant Utility (MUST) Gas Turbine Engine Driven 12 May 1977
TM 5-6115-593-12	Operator and Organizational Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 500 kW 17 July 1990
TM 5-6115-596-14	Operator's, Organizational, Direct Support and General Support Maintenance Manual for Generator Set, Gasoline Engine Driven, 4.2 kW 20 June 1980
TM 5-6115-600-12	Operator's and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 100 kW 1 February 1982
TM 5-6115-600-34	Intermediate (Field) DS/GS and Depot Level Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 100 kW, 3 Phase, 4 Wire, 120/208 and 240/416 V (DOD Model MEP-007B), Class Utility, 50/60 Hz Including Optional Ki 1 February 1982
TM 5-6115-612-12	Operator's and Unit Maintenance Manual Gas Turbine Engine Driven Aviation Generator Set 19 November 1987
TM 5-6115-612-34	Intermediate (Field), (Direct and General Support) and Depot: Maintenance Manual, Generator Set, Aviation, Gas Engine Driven,

	Integral Trailer Mounted, 10 kW, 28 Volts DOD Model MEP-362A, Precise, DC 25 July 1988
TM 5-6115-614-12	Operator and Organizational Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 200 kW 15 July 1986
TM 5-6115-615-12	Operator and Organizational Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical and Skid Mounted, 3 kW 31 July 1987
TM 5-6115-615-34	Intermediate (Field) DS/GS Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 3 kW, 3 Phase, 120/208 and Single Phase 120/240 VAC and 28 V DS, DOD Model MEP-016B, Class Utility, Mode 60 Hz; DOD Model MEP-021B, C 31 July 1987
TM 5-6115-629-14&P	Operator, Unit, Intermediate, Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Power Plant AN/AMJQ-12A (NSN 6115-00-257-1602) (2) MEP-006A, 60KW, 60HZ, Generator Sets (2) M200A1 2-Wh 17 June 1988
TM 9-2815-252-24	Unit, Direct Support and General Support Maintenance Instructions for Diesel Engine Model DN2M 1 September 1993
TM 9-2815-253-24	Unit, Direct Support, and General Support Maintenance Instructions 15 September 1993
TM 9-2815-253-24P	Unit, Direct Support, and General Support Maintenance Instructions 30 October 1996
TM 9-2815-254-24	Unit, Direct Support and General Support Maintenance Instructions for Diesel Engine Model C-240PW-28 1 September 1993
TM 9-2815-256-24	Unit, Direct Support, and General Support Maintenance Instructions 15 September 1993
TM 9-3431-265-14&P	Operator's, Organizational, Direct Support and General Support Maintenance Manual Including Repair Parts List for Welding Machines(Hobart Brothers Co., Models RCC-610, 27,H4 and GA-600)(NSN 3431-00-935-7913) 8 February 1988
TM 9-3431-266-14&P-1	Operator's, Organizational, Direct Support, and General Support Maintenance Manual Including Repair Parts and Special Tools List for Welding Machine Model DCC-353-P (NSN 3431-01-079-8439)(This Item is Included on EM 0072) 5 August 1988
TM 9-3431-266-14&P-2	Operator's, Organizational, Direct Support, and General Support Maintenance Manual Including Repair Parts and Special Tools List for Welding Machine Model DCC-353-P (NSN 3431-01-079-8439)(This Item is Included on EM 0072) 5 August 1988
TM 9-3431-272-13&P	Operator's, Unit,and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List) for Welding Shop, Trailer Mounted Model 11838792 (NSN 3431-01-341-6232)(This Item is Included on EM 0072) 26 October 1994
TM 9-6115-464-12	Operator and Unit Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid MTD 15 KW, 3Phase, 4 Wire, 120/208 and 240/416 Volts DOD Model MED-004A Utility Class 50/60 Hertz(NSN 6115-00-118-1241) DOD Model MEP-103A Precise 30 July 1993
TM 9-6115-542-24&P	Unit, Direct Support and General Support Maintenance Manual Including Repair Parts and Special Tools List (RPSTL) for External Auxiliary Power Unit (EAPU)(NSN 6115-01-369-7465)(12387361) [TM 9-6115-24&P/1] (This Item is Included on EM 0069) 17 May 1999
TM 9-6115-545-24P	Unit, Direct and General Support, and DEPOT Maintenance Repair Parts and Special Tools List for Generator Set, Diesel Engine Driven, Tactical, Skid Mtd, 60 KW, 3 Phase, 4 Wire, 120/208 and 240/416 Volts, DOD Models MEP-006A Utility Class, 28 June 1995

TM 9-6115-624-BD	Battlefield Damage Assessment and Repair for Generators (This item is included on EM 0086) 28 September 1990
TM 9-6115-639-13	Operator's, Unit, And Direct Support Maintenance Manual For 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) [TO 35C2-3-386-51; TM 10155A-13/1] 1 November 2000
TM 9-6115-641-10	Operator's Manual for Generator Set Skid Mounted, Tactical Quiet 5 KW 30 December 1992
TM 9-6115-641-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet 5 KW 1 September 1993
TM 9-6115-642-10	Operator's Manual for Generator Set, Skid Mounted, Tactical Quiet, 10 KW 30 December 1992
TM 9-6115-642-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet, 10KW 1 September 1993
TM 9-6115-643-10	Operator's Manual, Generator Set, Skid Mounted, Tactical Quiet 15Kw 30 December 1992
TM 9-6115-643-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet 15KW 1 September 1993
TM 9-6115-644-10	Operator's Manual, Generator Set, 30 Kw, Skid Mounted, Tactical Quiet 30 July 1983
TM 9-6115-644-24	Unit, Direct Support And General Support Maintenance Manual For 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) 30 April 1995
TM 9-6115-645-10	Operator's Manual, Generator Set, Skid Mounted, Tactical Quiet, 60 Kw 30 July 1993
TM 9-6115-645-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet 60KW 1 September 1993
TM 9-6115-663-13&P	Operator, Unit, and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Power Unit, Diesel Engine Driven, 2.5 Ton Trailer-Mounted, 6.0 KW, 50/60 HZ, PU-805 15 October 1993
TM 9-6115-668-13	Operator, Unit, and Direct Support Maintenance Manual for Generator Set, Diesel Engine Driven, Skid Mounted, 150 Kw, 400 Hz, Alternating Current (NSN 6115-12-337-8494) (This Item is Included On EM 0086 and EM 0133) 1 June 1998
TM 9-8000	Principles of Automotive Vehicles (Reprinted W/Basic Incl C1) 25 October 1985

Related Publications

Related publications are sources of additional information. They are not required in order to understand this publication.

Army Regulations

AR 25-11	Record Communications and the Privacy Communications System (This Item is Included on EM 0001) 4 September 1990
AR 385-10	The Army Safety Program (This item is included on EM 0001) 23 May 1988

AR 385-40	Accident Reporting and Records (This Item is Included on EM 0001) 1 November 1994
AR 385-55	Prevention of Motor Vehicle Accidents (This item is Included on EM 0001) 12 March 1987

Department of Army Forms

DA FORM 5988-E	Equipment Inspection Maintenance Worksheet (EGA) 1 March 1991

Department of Army Pamphlets

DA PAM 738-750	Functional Users Manual for The Army Maintenance Management System (TAMMS) (This Item is Included on EM 0001) 1 August 1994

Field Manuals

FM 101-5-1	Operational Terms and Graphics (MCRP 5-2A) 30 September 1997
FM 11-60	Communications-Electronic Fundamentals: Basic Principles, Direct Current 8 November 1982
FM 11-61	Communications-Electronics Fundamentals: Basic Principles Alternating Current 8 November 1982
FM 11-62	Communications-Electronics Fundamentals: Solid State Devices and Solid State Power Supplies 30 September 1983
FM 5-170	ENGINEER RECONNAISSANCE 5 May 1998
FM 5-424	Theater of Operations Electrical Systems 25 June 1997

Lubrication Orders

LO 5-6115-615-12	Generator Set, Diesel Engine Driven: Tactical, Skid Mounted, 3 kW

Other Product Types

EM 0074	Consolidated Publication Of Component Lists (All Items Contained On This CD-ROM Are Dated 01 Sep 00) (This Product Includes The Following Items) 1 September 2000

Technical Manuals

TM 11-6625-3052-14	Operator's, Unit, Direct Support and General Support Maintenance Manual for Digital Multimeter AN/PSM-45 (NSN 6625-01-139-2512) (Reprinted w/Basic Incl C1-2) 10 January 1984
TM 5-6115-271-14	Operator's, Organizational, Direct Support, and General Support Maintenance Manual for Generator Set, Gasoline Engine Driven, Skid Mounted, Tubular Frame, 3 kW, 2 Phase AC, 120/208 and 120/240 V, 28, VDC (Less Engine) 3 August 1976
TM 5-6115-423-15	Operator, Organizational, Direct and General Support and Depot Maintenance Manual for Load Bank, 0.30 KW, AC, Portable, Skid MTD (Sun Electric Corp, Model GPT-3D-1)(NSN 6115-00-964-1091) and (Sun Electric Corp, Model GPT-3D)(6115-00-903-817 10 August 1967
TM 5-6115-440-10	Operator's Maintenance Manual: Generator Set, 7.5 kW, Air Cooled, Two-Wheel Mounted, Pneumatic Tires 2 February 1971
TM 5-6115-440-20	Organizational Maintenance Manual: Generator Set, 7.5 kW, 28 VDC, GED, Air Cooled, Two-Wheel Mounted, Pneumatic Tires 2 February 1971
TM 5-6115-465-12	Operator's and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 30 KW, 3 Phase, 4 Wire, 120/208 and 240/416 V (DOD Model MEP-005A), Utility Class 50/60 HZ (NSN 6115-00-118-1240) 31 January 1975

TM 5-6115-465-34	Intermediate (Field) (Direct Support and General Support) and Depot Level Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 30 kW, 3 Phase, 4 Wire, 120/208 and 240/416 V, (DOD Model MEP-005A), Utility, 50/60 Hz 31 January 1975
TM 5-6115-545-12	Operator's and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid MTD, 60 kW, 3 Phase, 4 Wire, 120/208 and 240/416 Volts, DOD Model MEP-006A, Utility Class, 50/60HZ (NSN 6115-00-118-1243) DOD Model MEP- 10 June 1973
TM 5-6115-545-12-HR	Hand Receipt and Manual Covering Components of End Item (COEI), Basic Issue Items (BII), and Additional Authorization List (AAL) for Generator Set, Diesel Engine Driven, Tactical Skid MTD, 60KW, 3 Phase, 4 Wire, 120/208 and 240/416V 8 February 1980
TM 5-6115-545-34	Intermediate (Field) (Direct and General Support) and Depot Maintenance Manual Generator Set, Diesel Engine Driven, Tactical Skid Mtd, 60 kW, 3 Phase, 4 Wire, 120/208 and 240/416 Volts, DOD Models MEP-006A, Utility Class, 50/60 Hz, (NSN 61 10 June 1973
TM 5-6115-584-12	Operator and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 5 kW 22 July 1977
TM 5-6115-584-34	Intermediate (Field) DS/GS and Depot Level Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 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 22 July 1977
TM 5-6115-585-12	Operator and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 10 kW 25 July 1977
TM 5-6115-585-34	Intermediate (Field) (Direct and General Support) and Depot Level Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 kW, 1 Phase, 2 Wire, 1 Phase, 3 Wire, 3 Phase, 4 Wire, 120, 120/240 and 120/208 V (DOD M 25 July 1977
TM 5-6115-586-12	Operator's and Organizational Maintenance Manual: Power Plant, Utility (MUST), Gas Turbine Engine Driven 5 June 1972
TM 5-6115-590-12	Operator's and Organizational Maintenance Manual: Power Plant, Utility (MUST), Gas Turbine Engine Driven 29 March 1977
TM 5-6115-590-34	Direct Support and General Support Maintenance Manual for Power Plant Utility (MUST) Gas Turbine Engine Driven 12 May 1977
TM 5-6115-593-12	Operator and Organizational Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 500 kW 17 July 1990
TM 5-6115-596-14	Operator's, Organizational, Direct Support and General Support Maintenance Manual for Generator Set, Gasoline Engine Driven, 4.2 kW 20 June 1980
TM 5-6115-600-12	Operator's and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 100 kW 1 February 1982
TM 5-6115-600-34	Intermediate (Field) DS/GS and Depot Level Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 100 kW, 3 Phase, 4 Wire, 120/208 and 240/416 V (DOD Model MEP-007B), Class Utility, 50/60 Hz Including Optional Ki 1 February 1982
TM 5-6115-612-12	Operator's and Unit Maintenance Manual Gas Turbine Engine Driven Aviation Generator Set 19 November 1987
TM 5-6115-612-34	Intermediate (Field), (Direct and General Support) and Depot: Maintenance Manual, Generator Set, Aviation, Gas Engine Driven, Integral Trailer Mounted, 10 kW, 28 Volts DOD Model MEP-362A, Precise, DC 25 July 1988
TM 5-6115-614-12	Operator and Organizational Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical, Skid Mounted, 200 kW 15 July 1986

TM 5-6115-615-12	Operator and Organizational Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical and Skid Mounted, 3 kW 31 July 1987
TM 5-6115-615-34	Intermediate (Field) DS/GS Maintenance Manual: Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 3 kW, 3 Phase, 120/208 and Single Phase 120/240 VAC and 28 V DS, DOD Model MEP-016B, Class Utility, Mode 60 Hz; DOD Model MEP-021B, C 31 July 1987
TM 5-6115-629-14&P	Operator, Unit, Intermediate, Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Power Plant AN/AMJQ-12A (NSN 6115-00-257-1602) (2) MEP-006A, 60KW, 60HZ, Generator Sets (2) M200A1 2-Wh 17 June 1988
TM 9-1425-450-34-2	Direct Support and General Support Maintenance Manual, Theory of Operation and Schematic Diagrams, TOW 2 Weapon System, M220A2 (NSN 1440-01-104-9834). 25 May 1983. 16 March 1994
TM 9-2815-252-24	Unit, Direct Support and General Support Maintenance Instructions for Diesel Engine Model DN2M 1 September 1993
TM 9-2815-254-24	Unit, Direct Support and General Support Maintenance Instructions for Diesel Engine Model C-240PW-28 1 September 1993
TM 9-2815-256-24	Unit, Direct Support, and General Support Maintenance Instructions 15 September 1993
TM 9-3431-266-14&P-1	Operator's, Organizational, Direct Support, and General Support Maintenance Manual Including Repair Parts and Special Tools List for Welding Machine Model DCC-353-P (NSN 3431-01-079-8439)(This Item is Included on EM 0072) 5 August 1988
TM 9-4935-451-14	Operator, Organizational, Direct Support and General Support Maintenance Manual for Shop Equipment, Guided Missile, AN/TSM-153 Improved Contact Support Set (ICSS) (NSN 4940-01-154-3957) for TOW 2 Heavy Antitank/Assault Weapon System Dragon 12 August 1983
TM 9-6115-464-12	Operator and Unit Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid MTD 15 KW, 3Phase, 4 Wire, 120/208 and 240/416 Volts DOD Model MED-004A Utility Class 50/60 Hertz(NSN 6115-00-118-1241) DOD Model MEP-103A Precise 30 July 1993
TM 9-6115-542-24&P	Unit, Direct Support and General Support Maintenance Manual Including Repair Parts and Special Tools List (RPSTL) for External Auxiliary Power Unit (EAPU)(NSN 6115-01-369-7465)(12387361) [TM 9-6115-24&P/1] (This Item is Included on EM 0069) 17 May 1999
TM 9-6115-545-24P	Unit, Direct and General Support, and DEPOT Maintenance Repair Parts and Special Tools List for Generator Set, Diesel Engine Driven, Tactical, Skid Mtd, 60 KW, 3 Phase, 4 Wire, 120/208 and 240/416 Volts, DOD Models MEP-006A Utility Class, 28 June 1995
TM 9-6115-624-BD	Battlefield Damage Assessment and Repair for Generators (This item is included on EM 0086) 28 September 1990
TM 9-6115-639-13	Operator's, Unit, And Direct Support Maintenance Manual For 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) [TO 35C2-3-386-51; TM 10155A-13/1] 1 November 2000
TM 9-6115-641-10	Operator's Manual for Generator Set Skid Mounted, Tactical Quiet 5 KW 30 December 1992
TM 9-6115-641-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet 5 KW 1 September 1993
TM 9-6115-642-10	Operator's Manual for Generator Set, Skid Mounted, Tactical Quiet, 10 KW 30 December 1992
TM 9-6115-642-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet, 10KW 1 September 1993

TM 9-6115-643-10	Operator's Manual, Generator Set, Skid Mounted, Tactical Quiet 15Kw 30 December 1992
TM 9-6115-643-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet 15KW 1 September 1993
TM 9-6115-644-10	Operator's Manual, Generator Set, 30 Kw, Skid Mounted, Tactical Quiet 30 July 1983
TM 9-6115-644-24	Unit, Direct Support And General Support Maintenance Manual For 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) 30 April 1995
TM 9-6115-645-10	Operator's Manual, Generator Set, Skid Mounted, Tactical Quiet, 60 Kw 30 July 1993
TM 9-6115-645-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet 60KW 1 September 1993
TM 9-6115-663-13&P	Operator, Unit, and Direct Support Maintenance Manual Including Repair Parts and Special Tools List for Power Unit, Diesel Engine Driven, 2.5 Ton Trailer-Mounted, 6.0 KW, 50/60 HZ, PU-805 15 October 1993
TM 9-6115-668-13	Operator, Unit, and Direct Support Maintenance Manual for Generator Set, Diesel Engine Driven, Skid Mounted, 150 Kw, 400 Hz, Alternating Current (NSN 6115-12-337-8494) (This Item is Included On EM 0086 and EM 0133) 1 June 1998
TM 9-8000	Principles of Automotive Vehicles (Reprinted W/Basic Incl C1) 25 October 1985

Training Support Packages

52D34G04	AC Circuits 15-60 KW TQG 1 October 2000
52D35H03	DC Circuits 15-60 KW 1 October 2000

By Order of the Secretary of the Army:

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