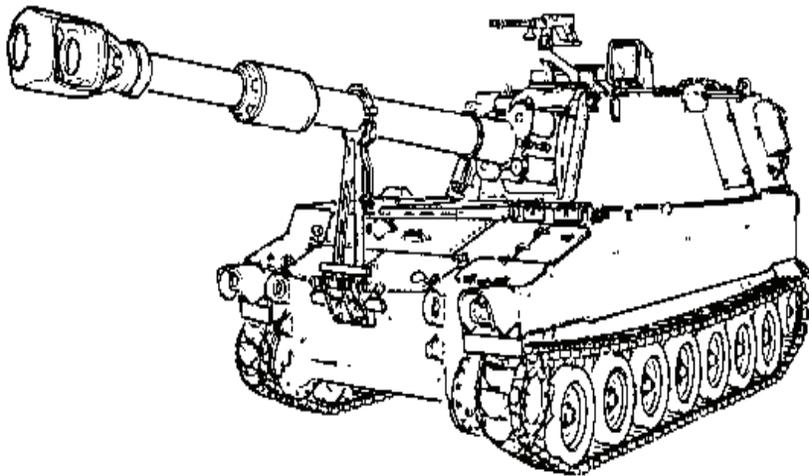


STP 9-91P14-SM-TG

SOLDIER'S MANUAL AND TRAINER'S GUIDE

**MOS 91P
ARTILLERY MECHANIC
SKILL LEVELS 1,2,3, AND 4**

JANUARY 2011



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SOLDIER'S MANUAL and TRAINER'S GUIDE

MOS 91P

Artillery Mechanic

Skill Levels 1, 2, 3, and 4

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PREFACE

This soldier training publication (STP) is intended for soldiers holding MOS 91P, Skill Levels 1, 2, 3, and 4, 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 91P should have access to this publication. Trainers and first line 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).

This publication applies to the Active Army, the Army National Guard (ARNG)/Army National Guard of the United States (ARNGUS), and the United States Army Reserve (USAR) unless otherwise stated.

The proponent of this publication is the United States Army Training and Doctrine Command (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-TDF, Bldg 5020, 2221 Adams Avenue, Fort Lee, VA 23801-1511.

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

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CHAPTER 1

Introduction

1-1. General. This soldier training publication (STP) identifies individual MOS training requirements for soldiers holding MOS 91P. 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 91P 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 (SMCT) Warrior Leader Skill Level 2, 3, and 4), and Army training and evaluation programs (ARTEPs), 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 soldier 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). Information is available at local education centers or on line through the Army Institute for Professional Development (AIPD) web site, <http://www.train.army.mil/>. 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.

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.

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CHAPTER 2

Training Guide

2-1. General. The MOS Training Plan 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 MOS Training Plan should be used as a guide for conducting unit training and not a rigid standard. The MOS Training Plan 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 MOS Training Plan shows the relationship of an MOS skill level (SL) 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 MOS Training Plan. 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 SL, 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 SL 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 MOS Training Plan.
- **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 STP 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 (SLC, ALC, and so on), 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
ALC	Advanced Leader's Course
SLC	Senior Leader's 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.

AN	-Annually
QT	-Quarterly
SA	-Semi-annually

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 ADMINISTRATIVE TASKS
- 2 TECHNICAL TASKS (SKILL LEVEL 1/2)
- 3 RECOVERY (ASI-H8 ONLY)

Skill Level 3

- 2 TECHNICAL TASKS (SKILL LEVEL 1/2)
- 4 COMMON LOGISTICS TASKS
- 5 TECHNICAL TASKS (SKILL LEVEL 3)

Skill Level 4

- 6 COMMON LOGISTICS MANAGEMENT TASKS

2-3. Duty Position Training Requirements.

91P CAREER FIELD DUTY POSITIONS			
Duty Position	Subject Area	Cross Train	Train-up/Merger
Skill Level 1			
Artillery Mechanic Recovery Vehicle Operator	1 - 2	NA	91P20/ Artillery Mechanic 91P20/Recovery Vehicle Operator
Skill Level 2			
Artillery Mechanic Recovery Vehicle Operator	1 - 2	NA	91P30/ Artillery Mechanic 91P30/Recovery Vehicle Supervisor
Skill Level 3			
Artillery Mechanic Recovery Vehicle Supervisor	3 - 4	NA	91P40/ Artillery Mechanic, Maintenance Supervisor
Skill Level 4			
Artillery Mechanic, Maintenance Supervisor	5	NA	91Z50/ Mechanical Maintenance Supervisor

2-4. Critical Tasks List.

**MOS TRAINING PLAN
91P14**

CRITICAL TASKS

Task Number	Title	Training Location	Sust Tng Freq	Sust Tng SL
Skill Level 1				
<i>Subject Area 1. ADMINISTRATIVE TASKS</i>				
091-109-0001	Maintain Test, Measurement, and Diagnostic Equipment (TMDE)	AIT	SA	1/2
091-109-0002	Maintain Assigned Vehicles (PMCS)	AIT	AN	1/2
091-109-0003	Maintain Assigned Tool Kits	AIT	AN	1/2
091-109-0006	Maintain Equipment Inspection and Maintenance Worksheet (DA Form 2404) and (DA Form 5988-E)	AIT	SA	1/2
<i>Subject Area 2. TECHNICAL TASKS (SKILL LEVEL 1/2)</i>				
091-91P-1001	Correct Malfunction of the Main Accumulator Nitrogen Precharge Pressure on the M109A6 Track Vehicle	AIT	SA	1/2
091-91P-1002	Correct Malfunction of the Cannon Recoil Systems on the M109A6 Track Vehicle	AIT	SA	1/2
091-91P-1004	Correct Malfunction of the Traversing Systems on the M109A6 Track Vehicle	AIT	SA	1/2
091-91P-1006	Correct Malfunction of the Hydraulic Systems on M109A6 Track Vehicle	AIT	SA	1/2
091-91P-1007	Correct Malfunction of the Sighting and Fire Control Systems on M109A6 Track Vehicle	AIT	QT	1/2
091-91P-1008	Correct Malfunction of the Breech Mechanism and the Operating Cam Assembly on M109A6 Track Vehicle	AIT	QT	1/2
091-91P-1012	Correct Malfunction of the Elevating/Equilibrator Systems on the M109A6 Track Vehicle	AIT	QT	1/2
091-91P-1013	Purge and Charge Fire Control and Automatic Fire Control System (AFCS) Components on the M109A6 Track Vehicle	AIT	QT	1/2
091-91P-1014	Synchronize the Automatic Fire Control System (AFCS) on the M109A6 Track Vehicle	9270AIT	QT	1/2
091-91P-1015	Perform Preventive Maintenance Checks and Services (PMCS) on the M109A6 Track Vehicle	AIT	QT	1/2
091-91P-1016	Correct Malfunction of Diesel Power Plants/Packs on M109A6, M992 Track Vehicles	AIT	QT	1/2
091-91P-1020	Correct Malfunction of the Auxiliary Power Units on an M992 Track Vehicle	AIT	QT	1/2
091-91P-1021	Correct Malfunction of Hull Electrical Systems on an M109A6 Track Vehicle	AIT	QT	1/2
091-91P-1023	Correct Malfunction of Suspension Systems on an M109A6 or M992 Track Vehicle	AIT	QT	1/2
091-91P-1025	Correct Malfunction of Track Vehicles Using Battlefield Damage Assessment and Repair (BDAR)	AIT	SA	1/2
091-91P-1027	Correct Malfunction of Fire Extinguisher and Suppression Systems on an M992 Track Vehicle	AIT	QT	1/2

Subject Area 2. TECHNICAL TASKS (SKILL LEVEL 1/2) cont.				
091-91P-1028	Operate and Maintain Test, Measurement, and Diagnostic Equipment (TMDE)	AIT	AN	1/2
091-91P-1031	Perform Scheduled Services on the M109A6/M992 Track Vehicle	AIT	SA	1/2
091-91P-1036	Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles	AIT	SA	1/2
091-91P-1037	Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles	AIT	SA	1/2
091-91P-1043	Replace Hydraulic Hand Pump on the M109A6 Track Vehicle	AIT	SA	1/2
091-91P-1044	Repair No-Back Device (Backlash) on the M109A6 Track Vehicle	AIT	SA	1/2
091-91P-1047	Correct Malfunction of the Cab Electrical System on a M109A6 Tracked Vehicle	AIT	SA	1/2
091-91P-1053	Maintain Cradle Mount Assembly on a M109A6 Tracked Vehicle	AIT	AN	1/2
091-91P-1054	Maintain the Recuperator Assembly on a M109A6 Tracked Vehicle	AIT	SA	1/2
091-91P-1055	Maintain the Variable Recoil Assembly on a M109A6 Tracked Vehicle	AIT	SA	1/2
091-91P-1056	Maintain Breech Mechanism Assembly on a M109A6 Tracked Vehicle	AIT	SA	1/2
091-91P-1057	Maintain Microclimate Conditioning System (MCS) Pack Vane Axial Assembly on a M109A6 Tracked Vehicle	AIT	AN	1/2
091-91P-1058	Maintain the Accumulator Equilibration Assembly on a M109A6 Tracked Vehicle	AIT	SA	1/2
091-91P-1059	Maintain the Elevation Mechanism Assembly on a M109A6 Tracked Vehicle	AIT	SA	1/2
091-91P-1060	Maintain the Hydraulic Powerpack Assembly on a M109A6 Tracked Vehicle	AIT	SA	1/2
091-91P-1061	Maintain the Slip Ring and Brush Block Assemblies on a M109A6 Tracked Vehicle	AIT	AN	1/2
Subject Area 3. RECOVERY (ASI-H8 ONLY)				
091-H8C-2001	Locate a Recovery Site	ASI/SD	SA	1/2
091-H8C-2002	Determine Recovery Methods	ASI/SD	SA	1-2
091-H8C-2003	Operate Tactical Communications Equipment	ASI/SD	SA	1-2
091-H8C-2004	Operate Metal Cutting Equipment	ASI/SD	SA	1-2
091-H8T-2001	Maintain Recovery Vehicle Weapons	ASI/SD	SA	1-2
091-H8T-2002	Perform Preventive Maintenance Checks and Services on a Tracked Recovery Vehicle	ASI/SD	SA	1-2
091-H8T-2003	Use Basic Issue Items Related to Tracked Recovery Vehicle	ASI/SD		
091-H8T-2004	Drive Tracked Recovery Vehicle	ASI/SD	SA	1-2
091-H8T-2005	Operate Auxiliary Power Unit	ASI/SD	SA	1-2
091-H8T-2006	Operate the Boom and Hoist Winch on a Tracked Recovery Vehicle	ASI/SD	SA	1-2
091-H8T-2007	Operate the Spade on a Tracked Recovery Vehicle	ASI/SD	SA	1/2
091-H8T-2008	Operate the Winch on a Tracked Recovery Vehicle	ASI/SD	SA	1-2
091-H8T-2009	Recover a Mired Tracked Vehicle	ASI/SD	SA	1-2
091-H8T-2010	Recover an Overturned Tracked Vehicle	ASI/SD	SA	1/2

Subject Area 3. RECOVERY (ASI-H8 ONLY) cont.				
091-H8T-2011	Tow a Track Vehicle on Improved/Highway Surface	ASI/SD	SA	1/2
091-H8T-2012	Cross Country Tow of a Tracked Vehicle	ASI/SD	SA	1/2
091-H8T-2013	Perform Field Expedient Recovery on a Tracked Vehicle	ASI/SD	SA	1/2
Skill Level 3				
Subject Area 4. COMMON LOGISTICS TASKS				
091-CLT-3001	Manage a Shop Safety Program	ALC	AN	3
091-CLT-3002	Maintain a Publications Library	ALC	AN	3
091-CLT-3003	Establish Maintenance Facilities	ALC	AN	3
091-CLT-3004	Assist in Preparing a Standing Operating Procedure	ALC	AN	3
091-CLT-3005	Manage Tool Control Procedures	ALC	AN	3
091-CLT-3006	Manage Key Control Procedures	ALC	AN	3
091-CLT-3007	Manage the Test, Measurement, and Diagnostic Equipment (TMDE) Calibration Program	ALC	AN	3
091-CLT-3009	Supervise Maintenance Operations	ALC	AN	3
091-CLT-3012	Interpret a Standard Army Maintenance System (SAMS) Generated Maintenance Report	ALC	AN	3
Subject Area 5. TECHNICAL TASKS (SKILL LEVEL 3)				
091-91P-3003	Perform Diagnostic Procedures on the Cannon Recoil System of an M109A6 Track Vehicle	ALC	QT	3
091-91P-3004	Perform Diagnostic Procedures on the Traversing System of an M109A6 Track Vehicle	ALC	QT	3
091-91P-3005	Perform Diagnostic Procedures on the Elevating System of an M109A6 Track Vehicle	ALC	QT	3
091-91P-3009	Perform Diagnostic Procedures on the Hydraulic System of M109A6 and M992 Track Vehicles	ALC	QT	3
091-91P-3018	Perform Diagnostic Procedures on the Cooling System of M109A6 and M992 Track Vehicles	ALC	QT	3
091-91P-3019	Perform Diagnostic Procedures on the Transmission of M109A6 and M992 Track Vehicles	ALC	AN	3
091-91P-3032	Perform Battlefield Damage Assessment and Repair (BDAR) on a Tracked Vehicle	ALC	QT	3
091-91P-3043	Perform Diagnostic Procedures on the Engine Electrical System of M109A6 and M992 Track Vehicles	ALC	AN	3
091-91P-3046	Perform Diagnostic Procedures on Engines of M109A6 and M992 Track Vehicles	ALC	AN	3
091-91P-3060	Perform Diagnostic Procedures of the Cab Electrical System on a M109A6 Track Vehicle	ALC	SA	3
091-91P-3061	Perform Diagnostic Procedures of the AFCS/PDFCS on a M109A6 Track Vehicle	ALC	SA	3
091-91P-3063	Perform Diagnostic Procedures of the Hull Electrical System on a M109A6 Track Vehicle	ALC	SA	3
091-91P-3064	Perform Diagnostic Procedures of the Chemical, Biological, Radiological and Nuclear Equipment on a M109A6, M992A2 Track Vehicle	ALC	SA	3
091-91P-3066	Perform Diagnostic Procedures of the Auxiliary Power Unit on a M992A2 Track Vehicle	ALC	SA	3

<i>Subject Area 5. TECHNICAL TASKS (SKILL LEVEL 3) cont.</i>				
091-91P -3070	Perform Diagnostic Procedures on the Fire Extinguishing and Suppression System of a M992 Track Vehicle	ALC	SA	3
091-91P -3072	Maintain Breech Mechanism Assembly on a M109A6 Track Vehicle	ALC	AN	3
091-91P -3073	Maintain Elevation Mechanism System on a M109A6 Track Vehicle	ALC	AN	3
091-91P -3075	Maintain Accumulator Equilibration Assembly on a M109A6 Track Vehicle	ALC	SA	3
Skill Level 4				
<i>Subject Area 6. COMMON LOGISTICS MANAGEMENT TASKS</i>				
091-CLT-4001	Perform Senior Rater Responsibilities for a Maintenance Section	SLC	AN	4
091-CLT-4002	Supervise Platoon/Section Administrative Procedures	SLC	AN	4
091-CLT-4003	Manage Combat Stress	SLC	AN	4
091-CLT-4006	Coordinate Support for the Maintenance Platoon/Section	SLC	AN	4
091-CLT-4010	Integrate Automated Logistics Support Systems	SLC	AN	4
091-CLT-4011	Plan Logistics Support for Maintenance Operations	SLC	AN	4
091-CLT-4021	Prepare Standing Operating Procedures for Maintenance Operations	SLC	AN	4
091-CLT-4022	Supervise the Deployment of Company Maintenance Team/Recovery Support Team/Maintenance Support Team	SLC	AN	4
091-CLT-4023	Conduct a Route Reconnaissance for a Maintenance Mission	SLC	AN	4
091-CLT-4024	Conduct an Area Reconnaissance for a Maintenance Mission	SLC	AN	4
091-CLT-4025	Manage Battlefield Maintenance Support	SLC	AN	4
091-CLT-4026	Perform Support Operations NCO Duties	SLC	AN	4
091-CLT-4027	Manage Maintenance Operations at a Maintenance Collection Point	SLC	AN	4
091-CLT-4028	Provide Maintenance Support During Tactical Operations	SLC	AN	4

CHAPTER 3

MOS/Skill Level Tasks

Skill Level 1

Subject Area 1: ADMINISTRATIVE TASKS

Maintain Test, Measurement, and Diagnostic Equipment (TMDE)

091-109-0001

Conditions: In a contemporary operational environment (COE) given applicable test, measurement, and diagnostic equipment (TMDE); Army regulation (AR) 750-43; Technical Bulletin (TB) 43-180; Technical Manual (TM) 9-6625-2301-14&P; TM 11-6625-3052-14; suitable tools; and suitable cleaning materials.

Standards: Maintain the TMDE in accordance with the applicable technical publications, procedures, and specifications. When this task was completed, the equipment was fully mission-capable, calibration date was current, and maintenance actions had been identified.

Performance Steps

1. Select and use applicable references.
2. Inspect TMDE for damage.
3. Test-operate TMDE to determine proper operation.
4. Check calibration date, if required.
5. Clean and/or lubricate TMDE, if required.
6. Store or package TMDE properly after maintenance or use.
7. Maintain the contact test set (CTS).
8. Complete The Army Maintenance Management System (TAMMS) forms, as required.
9. Perform required preventive maintenance checks and services (PMCS).
10. Maintain tools and equipment.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable references.	—	—
2. Inspected TMDE for damage.	—	—
3. Tested-operated TMDE to determine proper operation.	—	—
4. Checked calibration date, if required.	—	—

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Cleaned and/or lubricated TMDE, if required.	—	—
6. Stored or packaged TMDE properly after maintenance or use.	—	—
7. Maintained the CTS.	—	—
8. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—
9. Performed required PMCS.	—	—
10. Maintained tools and equipment.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 750-43

TB 43-180

TM 11-6625-3052-14

TM 9-6625-2301-14&P

Related

Maintain Assigned Vehicles (PMCS)

091-109-0002

Conditions: In a contemporary operational environment (COE) given an assigned vehicle; repair parts; petroleum, oil, lubricants (POL) products, if needed; additional tools and equipment as indicated in the technical manuals (TMs); Department of the Army (DA) Pamphlet 750-8; DA Form 5988-E (Equipment Inspection Maintenance Worksheet); other applicable technical publications; other necessary forms; and supervision/assistance.

Standards: Maintain assigned vehicle preventive maintenance checks and services (PMCS) in accordance with the applicable technical publications, procedures, and specifications. When this task was completed, the vehicle was fully mission-capable or deficiencies/shortcomings were annotated and required maintenance actions to be performed by other than assigned vehicle operator had been identified.

Performance Steps

1. Select and use applicable technical publications.
2. Select and use applicable tools and test, measurement, and diagnostic equipment (TMDE).
3. Practice shop safety and maintenance discipline.
4. Perform PMCS in accordance with TM.
5. Annotate actions taken on DA Form 5988-E (Equipment Inspection Maintenance Worksheet).
6. Maintain tools and equipment.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable technical publications.	___	___
2. Selected and used applicable tools and TMDE.	___	___
3. Practiced shop safety and maintenance discipline.	___	___
4. Performed PMCS in accordance with TM.	___	___
5. Annotated actions taken on DA Form 5988-E (Equipment Inspection Maintenance Worksheet).	___	___
6. Maintained tools and equipment.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
 DA FORM 5988-E
 DA PAM 750-8

Related

Maintain Assigned Tool Kits
091-109-0003

Conditions: In a contemporary operational environment (COE) given applicable tool kits, applicable references, Technical Manual (TM) 9-243, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), cleaning materials, and solvents or lubricants.

Standards: Inspected and serviced the assigned tool kits in accordance with the applicable technical publications, procedures, and specifications. When this task was completed, assigned tools were in operable condition, tool kits or sets were complete, or section chief or supervisor were notified of shortages.

Performance Steps

1. Select and use applicable references.
2. Inspect tools for serviceability and accountability.
3. Practice shop safety and maintenance discipline.
4. Identify damaged items and notified supervisor.
5. Apply lubricants or preservatives, as needed.
6. Annotate corrective actions taken on DA Form 5988-E.

Evaluation Preparation: **WARNING:** The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable references.	—	—
2. Inspected tools for serviceability and accountability.	—	—
3. Practiced shop safety and maintenance discipline.	—	—
4. Identified damaged items and notified supervisor.	—	—
5. Applied lubricants or preservatives, as needed.	—	—
6. Annotated corrective actions taken on DA Form 5988-E.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
DA FORM 5988-E
TM 9-243

Related

**Maintain Equipment Inspection and Maintenance Worksheet (DA Form 2404) and (DA Form 5988-E)
091-109-0006**

Conditions: In a contemporary operational environment (COE) given required equipment, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 5988-E (Equipment Inspection and Maintenance Worksheet), and applicable references.

Standards: DA Form 2404 and DA Form 5988-E are inspected and maintained in accordance with DA Pamphlet 750-8 to ensure all required information had been correctly annotated.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable references.
 - b. Practice shop safety and maintenance discipline.
2. Annotate deficiencies as required by technical manual and ensure all entries are complete, as required.
3. Ensure all safety precautions and procedures are followed.
4. Ensure all entries are reviewed and verified by supervisor.
5. Ensure proper disposition of forms.

Evaluation Preparation: Provide the Soldier with the equipment and or materials described in the condition statement.

WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable references. b. Practiced shop safety and maintenance discipline. 	_____	_____
2. Annotated deficiencies as required by technical manual and ensured all entries are complete, as required.	_____	_____
3. Ensured all safety precautions and procedures are followed.	_____	_____
4. Ensured all entries were reviewed and verified by supervisor.	_____	_____
5. Ensured proper disposition of forms.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AR 750-1	

References

Required

DA FORM 2404
DA FORM 5988-E
DA PAM 750-3
DA PAM 750-8
TM 9-2350-314-10

Related

Subject Area 2: TECHNICAL TASKS (SKILL LEVEL 1/2)

Correct Malfunction of the Main Accumulator Nitrogen Precharge Pressure on the M109A6 Track Vehicle
091-91P-1001

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating a malfunction of the main accumulator nitrogen precharge pressure, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the main accumulator nitrogen precharge pressure in accordance with performance measures and applicable technical publications. When the task is completed the equipment or end item must be fully mission-capable or required maintenance action to be performed by others will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable technical publications.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the main accumulator.
3. Replace defective components, as necessary.
4. Purge and charge components, as necessary.
5. Perform a final operational test to verify the main accumulator is corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable technical publications. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Performed troubleshooting procedures on the main accumulator.	—	—
3. Replaced defective components, as necessary.	—	—
4. Purged and charged components, as necessary.	—	—
5. Performed a final operational test to verify the main accumulator faults have been corrected.	—	—
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Correct Malfunction of the Cannon Recoil Systems on the M109A6 Track Vehicle
091-91P-1002**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, artillery and tool kit, Multi Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating a Cannon Recoil System or hydraulic system malfunction, supply catalog (SC) 9999-01-SKO, technical manual (TM) 11-6625-3052-14, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the technical manuals, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the cannon recoil system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the variable recoil system and determine maintenance action to be performed.
 - a. Purge components, as necessary.
 - b. Charge components, as necessary.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform a final operational test to verify cannon recoil system faults are corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Performed troubleshooting procedures on the variable recoil system and determined maintenance action to be performed. <ol style="list-style-type: none"> a. Purged components, as necessary. b. Charged components, as necessary. 	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed a final operational test to verify cannon recoil system faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Correct Malfunction of the Traversing Systems on the M109A6 Track Vehicle
091-91P-1004**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, artillery and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating a malfunction in the Traversing System, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the traversing system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the traversing system and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Performed troubleshooting procedures on the traversing system and determined maintenance action to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed a final operational test to verify traversing system faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Correct Malfunction of the Hydraulic Systems on M109A6 Track Vehicle
091-91P-1006**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating a cab hydraulic system malfunction, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the technical manuals, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the hydraulic system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the cab hydraulic system and determine maintenance action to be performed.
 - a. Main accumulator.
 - b. Hydraulic pressure switch.
 - c. Power relay solenoid.
 - d. Service primary and/or secondary accumulator.
3. Replace defective components, as necessary.
 - a. Pressure switch.
 - b. Hydraulic pressure traverse bypass valve and solenoid.
4. Ensure all safety precautions and procedures are followed.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Performed troubleshooting procedures on the cab hydraulic system and determined maintenance action to be performed. <ol style="list-style-type: none"> a. Main accumulator. b. Hydraulic pressure switch. c. Power relay solenoid. d. Serviced primary and/or secondary accumulator. 	_____	_____
3. Replaced defective components, as necessary. <ol style="list-style-type: none"> a. Pressure switch. b. Hydraulic pressure traverse bypass valve and solenoid. 	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
4. Ensured all safety precautions and procedures were followed.	_____	_____
5. Performed a final operational test to verify hydraulic system faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Correct Malfunction of the Sighting and Fire Control Systems on M109A6 Track Vehicle
091-91P-1007**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating a sighting and fire control system malfunction, supply catalog (SC) 9999-01-SKO, technical manual (TM) 11-6625-3052-14, TM 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-254, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the sighting and fire control in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the sighting and fire control systems and determine maintenance action to be performed.
 - a. Operate the gunner's quadrant.
 - b. Adjust sight synchronized components, as necessary.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform a final operational test to verify fire control system faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Performed troubleshooting procedures on the sighting and fire control systems and determined maintenance action to be performed. <ol style="list-style-type: none"> a. Operated the gunner's quadrant. b. Adjusted sight synchronized components, as necessary. 	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____
5. Performed a final operational test to verify fire control system faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 11-6625-3052-14
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-311-24P-1
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-254
TM 9-3305

Related

Correct Malfunction of the Breech Mechanism and the Operating Cam Assembly on M109A6 Track Vehicle
091-91P-1008

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating a malfunction in the breech mechanism/operating cam assembly or service due, technical manual (TM) 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the breech mechanism and the operating cam assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose Breech Mechanism faults and determine maintenance action to be performed.
3. Adjust the operating cam.
4. Ensure all safety precautions and procedures are followed.
5. Replace defective components, as necessary.
6. Perform a final operational test to verify breech mechanism and operating cam assembly faults have been corrected.
7. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed Breech Mechanism faults and determined maintenance action to be performed.	—	—
3. Adjusted the operating cam.	—	—
4. Ensured all safety precautions and procedures were followed.	—	—
5. Replaced defective components, as necessary.	—	—
6. Performed a final operational test to verify breech mechanism and operating cam assembly faults had been corrected.	—	—
7. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Correct Malfunction of the Elevation/Equilibration Systems on the M109A6 Track Vehicle
091-91P-1012**

Conditions: In a contemporary operational environment, given an M109A6 self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating servicing needed on the elevating/equilibrators systems, technical manual (TM) 750-116, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-254, TM 9-8000, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), and supervision/assistance.

Standards: Correct the malfunction of the elevation/equilibrators system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose elevating/equilibrators systems and determine the maintenance action to be preformed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform a final operational test to ensure elevating/equilibrators systems are fully operational.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed elevating/equilibrators systems and determined the maintenance action to be preformed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed a final operational test to ensure elevating/equilibrators systems were fully operational.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
TM 750-116
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-254
TM 9-8000

Related

Purge and Charge Fire Control and Automatic Fire Control System (AFCS) Components on the M109A6 Track Vehicle
091-91P-1013

Conditions: In a contemporary operational environment, given a dry nitrogen tank, M109 series vehicle fire control instruments, low pressure purging and charging kit, tool kit, Multi-Capability, safety goggles, thread sealer, leak detector, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating quarterly service is required, technical manual (TM) 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-254, TM 750-116, and DA Pamphlet 750-8.

Standards: Purge and charge fire control and Automatic Fire Control System/ Paladin Digital Fire Control System (AFCS/PDFCS) components in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and test measurement, and diagnostic equipment (TMDE).
 - c. Practice shop safety and maintenance discipline.
2. Perform purging and charging procedures on AFCS components in accordance with the technical publication.

NOTE: Purging procedures may be performed with box assembly installed or removed.

- a. Purge and charge the Display Unit (DU).
- b. Purge and charge the Power Conditioning Unit (PCU).
- c. Purge and charge the Vehicle Motion Sensor (VMS) modem.

3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform a final operational test to ensure fire control instruments are fully operational.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

1. Performed administrative actions.
 - a. Selected and used applicable TMs.
 - b. Selected and used applicable tools and test measurement, and diagnostic equipment (TMDE).
 - c. Practiced shop safety and maintenance discipline.
2. Performed purging and charging procedures on AFCS components in accordance with the technical publication.

NOTE: Purging procedures may be performed with box assembly installed or removed.

- a. Purged and charged the Display Unit (DU).
- b. Purged and charged the Power Conditioning Unit (PCU).
- c. Purged and charged the Vehicle Motion Sensor (VMS) modem.

3. Ensured all safety precautions and procedures were followed.
4. Replaced defective components, as necessary.

GO **NO-GO**

Performance Measures

GO **NO-GO**

- 5. Performed a final operational test to ensure fire control instruments were fully operational.
- 6. Completed The Army Maintenance Management System (TAMMS) forms, as required.

_____	_____
_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

Related

- DA FORM 5988-E
- DA PAM 750-8
- TM 750-116
- TM 9-2350-314-10
- TM 9-2350-314-20-1-1
- TM 9-2350-314-20-1-2
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-254

**Synchronize the Automatic Fire Control System (AFCS) on the M109A6 Track Vehicle
091-91P-1014**

Conditions: In a contemporary operational environment, given an M109A6 self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet), indicating that fire control alignment and synchronization is required, technical manual (TM) 750-116, TM 9-1000-202-14, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-3305, TM 9-8000, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), and supervision/assistance.

Standards: Correct the malfunction of the Automatic Fire Control System/Paladin Digital Fire Control System (AFCS/PDFCS) in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform synchronization procedures of the AFCS in accordance with the technical publications.
 - a. Perform fire control alignment.
 - b. Synchronize the dynamic reference unit with the cannon.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform a final operational test to verify the AFCS is synchronized and fully operational.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Performed synchronization procedures of the AFCS in accordance with the technical publications. <ol style="list-style-type: none"> a. Performed fire control alignment. b. Synchronized the dynamic reference unit with the cannon. 	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____
5. Performed a final operational test to verify the AFCS was synchronized and fully operational.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
TM 750-116
TM 9-1000-202-14
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-3305
TM 9-8000

Related

**Perform Preventive Maintenance Checks and Services (PMCS) on the M109A6 Track Vehicle
091-91P-1015**

Conditions: In a contemporary operational environment, given an M109 series vehicle, applicable technical references (technical manual [TM] and lubrication order [LO]), applicable maintenance forms, TM 11-6625-3052-14, TM 750-116, TM 9-1000-202-14, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-243, TM 9-254, TM 9-3305, tool kit, Multi-Capability, 0-600 foot pound torque wrench, duo-check meter/battery hydrometer, necessary tools and equipment as indicated in the technical manuals, replacement parts, petroleum, oil, lubricants (POL) products, and supervision/assistance.

Standards: Inspected and serviced the M109/M992 series vehicle in accordance with the PMCS table of the applicable TM and LO. Correct faults found in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and test measurement, and diagnostic equipment (TMDE).
 - c. Practice shop safety and maintenance discipline.
2. Perform PMCS in accordance with the TM.
3. Ensure all safety precautions and procedures are followed.
4. Supervisor must verify the identified faults that are annotated on Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet).
5. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and test measurement, and diagnostic equipment (TMDE). c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Performed PMCS in accordance with the TM.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Supervisor verified the identified faults that are annotated on Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet).	_____	_____
5. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

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

References

<p>Required TM 11-6625-3052-14 TM 750-116</p>	<p>Related TM 11-6625-3052-14 TM 750-116</p>
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References

Required

TM 9-1000-202-14
TM 9-2350-311-10
TM 9-2350-311-20-1
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-243
TM 9-254
TM 9-3305

Related

TM 9-1000-202-14
TM 9-2350-311-10
TM 9-2350-311-20-1
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-243
TM 9-254
TM 9-3305

**Correct Malfunction of Diesel Power Plants/Packs on M109A6, M992 Track Vehicles
091-91P-1016**

Conditions: In a contemporary operational environment, given a tracked vehicle, tool kit, Multi-Capability, necessary tools and equipment as specified in the technical manuals, replacement parts, test measurement and test, measurement, and diagnostic equipment (TMDE), Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction within the diesel power plant/pack, lubrication order (LO) 9-2350-256-12, LO 9-2350-267-12, supply catalog (SC) 9999-01-SKO, Electronic Manual (EM) 0266, Technical Manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-274-BD, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-292-10, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-243, TM 9-8000, and supervision/assistance.

Standards: Correct the malfunction of the diesel power plants/packs in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable technical publications.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the diesel power plant/pack and determine maintenance action to be performed.
3. Remove power plant/pack from vehicle.
4. Perform power plant/pack tests:
 - a. Engine revolutions per minute (RPM) test.
 - b. Power test.
 - c. Fuel supply pressure test.
 - d. Transmission oil pressure test.
5. Replace defective components, as necessary.
6. Adjust the components, as necessary.
7. Ground-hop the power plant/pack and perform the operational test.
8. Reinstall the diesel power plant/pack.
9. Adjust the components and perform required PMCS.
10. Perform a final operational test to verify diesel power plant/pack faults are corrected.
11. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

1. Performed administrative actions.
 - a. Selected and used applicable technical publications.
 - b. Selected and used applicable tools and TMDE.
 - c. Practiced shop safety and maintenance discipline.

GO NO-GO

Performance Measures	<u>GO</u>	<u>NO-GO</u>
2. Performed troubleshooting procedures on the diesel power plant/pack and determined maintenance action to be performed.	_____	_____
3. Removed power plant/pack from vehicle.	_____	_____
4. Performed power plant/pack tests:	_____	_____
a. Engine revolutions per minute (RPM) test.		
b. Power test.		
c. Fuel supply pressure test.		
d. Transmission oil pressure test.		
5. Replaced defective components, as necessary.	_____	_____
6. Adjusted the components, as necessary.	_____	_____
7. Ground-hopped the power plant/pack and performed the operational test.	_____	_____
8. Reinstalled the diesel power plant/pack.	_____	_____
9. Adjusted the components and performed required PMCS.	_____	_____
10. Performed a final operational test to verify diesel power plant/pack faults had been corrected.	_____	_____
11. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- EM 0266
- LO 9-2350-256-12
- LO 9-2350-267-12
- SC 9999-01-SKO
- TM 9-2350-267-10
- TM 9-2350-267-20
- TM 9-2350-267-24P
- TM 9-2350-274-BD
- TM 9-2350-287-10
- TM 9-2350-287-20-1
- TM 9-2350-287-20-2
- TM 9-2350-287-24P
- TM 9-2350-292-10
- TM 9-2350-293-10
- TM 9-2350-293-20&P
- TM 9-2350-293-34&P
- TM 9-2350-311-10
- TM 9-2350-311-20-1
- TM 9-2350-311-20-2
- TM 9-2350-311-24P-1
- TM 9-2350-314-10
- TM 9-2350-314-20-1-1
- TM 9-2350-314-20-1-2

Related

References

Required
TM 9-243
TM 9-8000

Related

**Correct Malfunction of the Auxiliary Power Units on an M992 Track Vehicle
091-91P-1020**

Conditions: In a contemporary operational environment, given an M88 or M992 series vehicle, tool kit, Multi-Capability, necessary tools and equipment as indicated in the technical manuals (TMs), test, measurement, and diagnostic equipment (TMDE), replacement parts, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction within the Auxiliary Power Unit (APU), supply catalog (SC) 9999-01-SKO, TM 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-24P, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2815-221-34&P, TM 9-243, TM 9-8000, and supervision/assistance.

Standards: Correct the malfunction of the APU in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the APU.
 - a. Starting system.
 - b. Fuel system.
 - c. APU charging system.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective APU components, as necessary.
5. Perform a final operational test to verify APU faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Performed troubleshooting procedures on the APU. <ol style="list-style-type: none"> a. Starting system. b. Fuel system. c. APU charging system. 	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective APU components, as necessary.	___	___
5. Performed a final operational test to verify APU faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

DA FORM 5988-E
SC 9999-01-SKO
TM 9-2350-267-10
TM 9-2350-267-20
TM 9-2350-267-24P
TM 9-2350-287-10
TM 9-2350-287-20-1
TM 9-2350-287-20-2
TM 9-2350-287-24P
TM 9-2350-293-10
TM 9-2350-293-20&P
TM 9-2350-293-34&P
TM 9-243
TM 9-2815-221-34&P
TM 9-8000

Related

**Correct Malfunction of Hull Electrical Systems on an M109A6 Track Vehicle
091-91P-1021**

Conditions: In a contemporary operational environment, given a tracked vehicle, tool kit, Multi-Capability, necessary tools and equipment as indicated in the technical manuals (TMs), test, measurement, and diagnostic equipment (TMDE), replacement parts, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction within the electrical system, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2, and supervision/assistance.

Standards: Correct the malfunction of the hull electrical system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Perform troubleshooting procedures on the hull electrical system and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform a final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Performed troubleshooting procedures on the hull electrical system and determine maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____
5. Performed a final operational test to verify electrical system faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
DA FORM 5988-E

Related

References

Required

TM 9-2350-314-10
TM 9-2350-314-20-1-1
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-1
TM 9-2350-314-24P-2

Related

**Correct Malfunction of Suspension Systems on an M109A6 or M992 Track Vehicle
091-91P-1023**

Conditions: In a contemporary operational environment, given a tracked vehicle, tool kit, Multi-Capability, necessary tools and equipment as indicated in the technical manuals, replacement parts, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction within the suspension system, Technical Manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-243, TM 9-8000, and supervision/assistance.

Standards: Correct the malfunction of the suspension system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel was identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable technical manuals.
 - b. Select and use applicable tools and test measurement, and diagnostic equipment (TMDE).
 - c. Practice shop safety and maintenance discipline.
2. Diagnose vehicle suspension system and determine maintenance action to be performed.
3. Service hub, torsion bar, and road wheel arm assembly, as necessary.
4. Ensure all safety precautions and procedures are followed.
5. Replace defective components, as necessary.
6. Perform a final operational test to verify track suspension system fault has been corrected.
7. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	___	___
a. Selected and used applicable technical manuals.		
b. Selected and used applicable tools and test measurement, and diagnostic equipment (TMDE).		
c. Practiced shop safety and maintenance discipline.		
2. Diagnosed vehicle suspension system and determined maintenance action to be performed.	___	___
3. Serviced hub, torsion bar, and road wheel arm assembly, as necessary.	___	___
4. Ensured all safety precautions and procedures were followed.	___	___
5. Replaced defective components, as necessary.	___	___
6. Performed a final operational test to verify track suspension system fault had been corrected.	___	___
7. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

DA FORM 5988-E
TM 9-2350-267-10
TM 9-2350-267-20
TM 9-2350-267-24P
TM 9-2350-287-10
TM 9-2350-287-20-1
TM 9-2350-287-24P
TM 9-2350-293-10
TM 9-2350-293-20&P
TM 9-2350-293-34&P
TM 9-2350-311-10
TM 9-2350-311-20-1
TM 9-2350-311-20-2
TM 9-2350-311-24P-1
TM 9-2350-314-10
TM 9-2350-314-20-1-1
TM 9-2350-314-20-1-2
TM 9-243
TM 9-8000

Related

**Correct Malfunction of Track Vehicles Using Battlefield Damage Assessment and Repair (BDAR)
091-91P-1025**

Conditions: In a contemporary operational environment, given an M109 series vehicle or M992 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating BDAR are required, or a directive from the commander requesting BDAR be performed; tool kit, Multi-Capability; DA Pamphlet 750-8, field manual (FM) 4-30.31, lubrication order (LO) 9-2350-267-12, Technical Manual (TM) 11-6625-3052-14, TM 9-1000-202-14, TM 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-274-BD, TM 9-2350-275-BD, TM 9-2350-276-BD, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-311-24P-2, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1 and TM 9-243; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose damage, determined necessary BDAR repairs, and ensured necessary repairs are completed in accordance with applicable TMs. When this task is completed, the vehicle is capable of functioning in a battlefield situation to accomplish the immediate mission until more extensive and permanent repairs can be performed.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Ensure proper tools, TMDE, and equipment are available to perform BDAR repairs.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose faults and determine BDAR to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Repair defective components using BDAR, as necessary.
5. Perform a final inspection to ensure the vehicle is capable of functioning in a battlefield environment.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Ensured proper tools, TMDE, and equipment were available to perform BDAR repairs. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed faults and determined BDAR to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Repaired defective components using BDAR, as necessary.	___	___
5. Performed a final inspection to ensure the vehicle was capable of functioning in a battlefield environment.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
 DA PAM 750-8
 FM 4-30.31
 LO 9-2350-267-12
 TM 11-6625-3052-14
 TM 9-1000-202-14
 TM 9-2350-267-10
 TM 9-2350-267-20
 TM 9-2350-267-24P
 TM 9-2350-274-BD
 TM 9-2350-275-BD
 TM 9-2350-276-BD
 TM 9-2350-287-10
 TM 9-2350-287-20-1
 TM 9-2350-287-20-2
 TM 9-2350-287-24P
 TM 9-2350-293-10
 TM 9-2350-293-20&P
 TM 9-2350-293-34&P
 TM 9-2350-311-10
 TM 9-2350-311-20-1
 TM 9-2350-311-24P-1
 TM 9-2350-311-24P-2
 TM 9-2350-314-10
 TM 9-2350-314-20-1-1
 TM 9-2350-314-20-1-2
 TM 9-2350-314-20-2-1
 TM 9-2350-314-20-2-2
 TM 9-2350-314-24P-1
 TM 9-243
 TM 9-3305

Related

**Correct Malfunction of Fire Extinguisher and Suppression Systems on an M992 Track Vehicle
091-91P-1027**

Conditions: In a contemporary operational environment, given an M992 series vehicle; tool kit, Multi-Capability; necessary tools and equipment as indicated in the technical manuals; test, measurement, and diagnostic equipment (TMDE); replacement parts; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction within the automatic fire extinguisher system; supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20&P, and TM 9-2350-293-34&P; and supervision/assistance.

Standards: Correct the malfunction of the fire extinguisher and suppression system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Select and use applicable technical publications.
2. Select and use applicable tools and TMDE.
3. Practice shop safety and maintenance discipline.
4. Perform troubleshooting procedures on the Automated Fire Extinguishing System (AFES).
 - a. Engine system.
 - b. Crew system.
5. Replace defective components, as necessary.
6. Adjust components, as necessary.
7. Perform required PMCS.
8. Perform a final operational test to verify fire extinguisher/suppression system faults have been corrected.
9. Annotate corrective actions taken on the DA Form 5988-E.
10. Maintain tools and equipment.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable technical publications.	—	—
2. Selected and used applicable tools and TMDE.	—	—
3. Practiced shop safety and maintenance discipline.	—	—
4. Performed troubleshooting procedures on the Automated Fire Extinguishing System (AFES). <ol style="list-style-type: none"> a. Engine system. b. Crew system. 	—	—
5. Replaced defective components, as necessary.	—	—
6. Adjusted components, as necessary.	—	—
7. Performed required PMCS.	—	—

Performance Measures	<u>GO</u>	<u>NO-GO</u>
8. Performed a final operational test to verify fire extinguisher/suppression system faults had been corrected.	_____	_____
9. Annotated corrective actions taken on the DA Form 5988-E.	_____	_____
10. Maintained tools and equipment.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 9-2350-267-10
- TM 9-2350-267-20
- TM 9-2350-267-24P
- TM 9-2350-287-10
- TM 9-2350-287-20-1
- TM 9-2350-287-20-2
- TM 9-2350-287-24P
- TM 9-2350-293-10
- TM 9-2350-293-20&P
- TM 9-2350-293-34&P

Related

**Operate and Maintain Test, Measurement, and Diagnostic Equipment (TMDE)
091-91P-1028**

Conditions: In a contemporary operational environment, given an AN/PSM-45A Multimeter, AN/PSM-80V2 Contact Test Set (CTS), Soldier's Portable On-system Repair Tool (SPORT), Technical Manual (TM) 11-6625-3052-14, and related TMs.

Standards: Identify TMDE equipment to be used, determine if calibration is up to date, and perform setup and test procedures and operated TMDE in accordance with applicable TMs. Maintain equipment following use.

Performance Steps

1. Select applicable technical publications.
2. Follow all safety procedures.
3. Set up, test, and operate the AN/PSM-45A Multimeter.
4. Set up, test, and operate the AN/PSM-80V2 CTS.
5. Set up, test, and operate the SPORT.
6. Maintain equipment.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected applicable technical publications.	___	___
2. Followed all safety procedures.	___	___
3. Set up, tested, and operated the AN/PSM-45A Multimeter.	___	___
4. Set up, tested, and operated the AN/PSM-80V2 CTS.	___	___
5. Set up, tested, and operated the SPORT.	___	___
6. Maintained equipment.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
TM 11-6625-3052-14	

**Perform Scheduled Services on the M109A6/M992 Track Vehicle
091-91P-1031**

Conditions: In a contemporary operational environment, given an M109 series vehicle, Department of the Army (DA) Pamphlet 750-8, Technical Manual (TM) 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-311-24P-2, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, TM 9-8000, other technical references (TMs and lubrication orders [LO]), applicable maintenance forms, tool kit, Multi-Capability, 0 to 600-foot-pound torque wrench, duo-check meter/battery hydrometer, necessary tools and equipment as indicated in the technical manuals, replacement parts, petroleum, oil, lubricants (POL) products, and supervision/assistance.

Standards: In accordance with the unit-level preventive maintenance checks and services (PMCS) table of the applicable TM and LO. Annotate necessary maintenance forms and records. Inspect and service the M109/M992 series vehicle in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and test measurement, and diagnostic equipment (TMDE).
 - c. Practice shop safety and maintenance discipline.
2. Perform unit level (-20) inspections in accordance with appropriate TM.
3. Perform unit level (-20) scheduled preventive maintenance services as indicated in the TM and LO, and as directed by supervisor.
4. Ensure all safety precautions and procedures are followed.
5. Replace defective components, as necessary.
6. Perform final operational test to verify the faults have been corrected.
7. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	—	—
a. Selected and used applicable TMs.		
b. Selected and used applicable tools and test measurement, and diagnostic equipment (TMDE).		
c. Practiced shop safety and maintenance discipline.		
2. Performed unit level (-20) inspections in accordance with appropriate TM.	—	—
3. Performed unit level (-20) scheduled preventive maintenance services as indicated in the TM and LO, and as directed by supervisor.	—	—
4. Ensured all safety precautions and procedures were followed.	—	—
5. Replaced defective components, as necessary.	—	—

Performance Measures

GO NO-GO

- | | | |
|---|---|---|
| 6. Performed final operational test to verify the faults had been corrected. | — | — |
| 7. Completed The Army Maintenance Management System (TAMMS) forms, as required. | — | — |

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

Related

- DA PAM 750-8
- TM 9-2350-311-10
- TM 9-2350-311-20-1
- TM 9-2350-311-20-2
- TM 9-2350-311-24P-1
- TM 9-2350-311-24P-2
- TM 9-2350-314-10
- TM 9-2350-314-20-1-1
- TM 9-2350-314-20-1-2
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-1
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305
- TM 9-8000

**Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles
091-91P-1036**

Conditions: In a contemporary operational environment, given an M109A6 vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the engine assembly; tool kit, Multi-Capability; lubrication order (LO) 9-2350-267-12, Technical Manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Replaced the engine assembly and ensured necessary repairs were completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Identify necessary components to be replaced during engine replacement.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	_____	_____
a. Selected and used applicable TMs.		
b. Selected and used applicable tools and TMDE.		
c. Practiced shop safety and maintenance discipline.		
2. Identified necessary components to be replaced during engine replacement.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____
5. Performed a final operational test to verify fault had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
DA FORM 5988-E

Related

References

Required

LO 9-2350-267-12
TM 9-2350-267-10
TM 9-2350-267-20
TM 9-2350-267-24P
TM 9-2350-287-10
TM 9-2350-287-20-1
TM 9-2350-287-20-2
TM 9-2350-287-24P
TM 9-2350-293-10
TM 9-2350-293-20&P
TM 9-2350-293-34&P
TM 9-2350-314-10
TM 9-2350-314-20-1-1
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-1
TM 9-2350-314-24P-2

Related

**Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles
091-91P-1037**

Conditions: In a contemporary operational environment, given an M109A6 vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the transmission assembly; tool kit, Multi-Capability; lubrication order (LO) 9-2350-267-12, Technical Manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Replaced the transmission assembly and ensured necessary repairs were completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Identify components necessary for removal in order to replace transmission.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Identified components necessary for removal in order to replace transmission.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

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

References

Required

DA FORM 5988-E
LO 9-2350-267-12
TM 9-2350-267-10
TM 9-2350-267-20
TM 9-2350-267-24P
TM 9-2350-287-10
TM 9-2350-287-20-1
TM 9-2350-287-20-2
TM 9-2350-287-24P
TM 9-2350-293-10
TM 9-2350-293-20&P
TM 9-2350-293-34&P
TM 9-2350-314-10
TM 9-2350-314-20-1-1
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-1
TM 9-2350-314-24P-2

Related

**Replace Hydraulic Hand Pump on the M109A6 Track Vehicle
091-91P-1043**

Conditions: In a contemporary operational environment, given an M109A6 vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the hydraulic hand pump; tool kit, Multi-Capability; Technical Manual (TM) 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, test, measurement, and diagnostic equipment (TMDE) equipment as indicated in the TMs, and replacement parts.

Standards: Replaced the hydraulic hand pump and ensured necessary repairs were completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Select and use applicable technical publications.
2. Select and use applicable tools and TMDE.
3. Practice shop safety and maintenance discipline.
4. Identify function of hydraulic hand pump.
5. Replace defective components, as necessary.
6. Perform required PMCS.
7. Perform a final operational test to verify fault has been corrected.
8. Annotate corrective actions taken on the DA Form 5988-E.
9. Maintain tools and equipment.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable technical publications.	___	___
2. Selected and used applicable tools and TMDE.	___	___
3. Practiced shop safety and maintenance discipline.	___	___
4. Identified function of hydraulic hand pump.	___	___
5. Replaced defective components, as necessary.	___	___
6. Performed required PMCS.	___	___
7. Performed a final operational test to verify fault had been corrected.	___	___
8. Annotated corrective actions taken on the DA Form 5988-E.	___	___
9. Maintained tools and equipment.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
TM 9-2350-314-10
TM 9-2350-314-20-1-1
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-1
TM 9-2350-314-24P-2

Related

**Repair No-Back Device (Backlash) on the M109A6 Track Vehicle
091-91P-1044**

Conditions: In a contemporary operational environment, given an M109A6 vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the no-back device (backlash); tool kit, Multi-Capability; Technical Manual (TM) 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Replaced the no-back device and ensured necessary repairs were completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose No-Back device faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Diagnosed No-Back device faults and determined maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____
5. Performed final operational test to verify the faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
DA FORM 5988-E	
TM 9-2350-314-10	

References

Required

TM 9-2350-314-20-1-1
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-1
TM 9-2350-314-24P-2

Related

**Correct Malfunction of the Cab Electrical System on a M109A6 Tracked Vehicle
091-91P-1047**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Cab Electrical System, DA Pamphlet 750-8, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-314-20-1-1, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-2350-314-34-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the cab electrical system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose Cab Electrical System faults and determine maintenance action to be performed.
 - a. Troubleshoot segment ring and brush block assemblies.
 - b. Diagnose Automatic Fire Control System/Paladin Digital Fire Control System (AFCS/PDFCS) components.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed Cab Electrical System faults and determined maintenance action to be performed. <ol style="list-style-type: none"> a. Troubleshoot segment ring and brush block assemblies. b. Diagnosed AFCS/PDFCS components. 	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 2404
DA FORM 5988-E
DA PAM 750-8
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-1-1
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-2350-314-34-2
TM 9-243
TM 9-3305

Related

**Maintain Cradle Mount Assembly on a M109A6 Tracked Vehicle
091-91P-1053**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Cradle Mount Assembly, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the cradle mount assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose Cradle Mount faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed Cradle Mount faults and determined maintenance action to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
DA FORM 5988-E

Related

References

Required

SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-2350-314-34-2
TM 9-243
TM 9-3305

Related

**Maintain the Recuperator Assembly on a M109A6 Tracked Vehicle
091-91P-1054**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Recuperator Assembly, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-2350-314-34-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Corrected the malfunctions of the main accumulator nitrogen precharge pressure in accordance with performance measures and applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose recuperator faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	—	—
a. Selected and used applicable TMs.		
b. Selected and used applicable tools and TMDE.		
c. Practiced shop safety and maintenance discipline.		
2. Diagnosed recuperator faults and determined maintenance action to be performed.	—	—
3. Ensured all safety precautions and procedures were followed.	—	—
4. Replaced defective components, as necessary.	—	—
5. Performed final operational test to verify the faults had been corrected.	—	—
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
DA FORM 5988-E
SC 9999-01-SKO
TM 750-116

Related

References

Required

TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-2350-314-34-2
TM 9-243
TM 9-3305

Related

**Maintain the Variable Recoil Assembly on a M109A6 Tracked Vehicle
091-91P-1055**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer, tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Variable Recoil Assembly, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the variable recoil assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose variable recoil faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed variable recoil faults and determined maintenance action to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
DA FORM 5988-E

Related

References

Required

SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Maintain Breech Mechanism Assembly on a M109A6 Tracked Vehicle
091-91P-1056**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Breech Mechanism Assembly, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the breech mechanism assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose breech assembly faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the breech assembly faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed breech assembly faults and determined maintenance action to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the breech assembly faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

Maintain Microclimate Conditioning System (MCS) Pack Vane Axial Assembly on a M109A6 Tracked Vehicle
091-91P-1057

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Microclimate Conditioning System, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the microclimate conditioning system, pack vane axial assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable technical manuals.
 - b. Select and use applicable tools and test measurement, and diagnostic equipment (TMDE).
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the MCS faults and determine maintenance action to be performed.
3. Pack Vane Axial Assembly.
4. Ensure all safety precautions and procedures are followed.
5. Replace defective components, as necessary.
6. Perform final operational test to verify the faults have been corrected.
7. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	—	—
a. Selected and used applicable technical manuals.		
b. Selected and used applicable tools and test measurement, and diagnostic equipment (TMDE).		
c. Practiced shop safety and maintenance discipline.		
2. Diagnosed the MCS faults and determined maintenance action to be performed.	—	—
3. Packed Vane Axial Assembly.	—	—
4. Ensured all safety precautions and procedures were followed.	—	—
5. Replaced defective components, as necessary.	—	—
6. Performed final operational test to verify the faults had been corrected.	—	—
7. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-2350-314-34-1
TM 9-2350-314-34-2
TM 9-243
TM 9-3305

Related

**Maintain the Accumulator Equilibration Assembly on a M109A6 Tracked Vehicle
091-91P-1058**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Accumulator Equilibration Assembly, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the accumulator equilibration assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Accumulator Equilibration Assembly faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Accumulator Equilibration Assembly faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed the Accumulator Equilibration Assembly faults and determined maintenance action to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the Accumulator Equilibration Assembly faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Maintain the Elevation Mechanism Assembly on a M109A6 Tracked Vehicle
091-91P-1059**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Elevation Mechanism Assembly, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the elevation mechanism assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Elevation Mechanism Assembly faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Elevation Mechanism Assembly faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Diagnosed the Elevation Mechanism Assembly faults and determined maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____
5. Performed final operational test to verify the Elevation Mechanism Assembly faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Maintain the Hydraulic Powerpack Assembly on a M109A6 Tracked Vehicle
091-91P-1060**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Hydraulic Powerpack Assembly, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the Hydraulic Powerpack Assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose Hydraulic Powerpack Assembly faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Hydraulic Powerpack Assembly faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed Hydraulic Powerpack Assembly faults and determined maintenance action to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the Hydraulic Powerpack Assembly faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Maintain the Slip Ring and Brush Block Assemblies on a M109A6 Tracked Vehicle
091-91P-1061**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capable, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Slip Ring and Brush Block Assemblies, supply catalog (SC) 9999-01-SKO, Technical Manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunction of the slip ring and brush block assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Slip Ring and Brush Block Assembly faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Slip Ring and Brush Block Assembly faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	___	___
2. Diagnosed the Slip Ring and Brush Block Assembly faults and determined maintenance action to be performed.	___	___
3. Ensured all safety precautions and procedures were followed.	___	___
4. Replaced defective components, as necessary.	___	___
5. Performed final operational test to verify the Slip Ring and Brush Block Assembly faults had been corrected.	___	___
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

Subject Area 3: RECOVERY (ASI-H8 ONLY)

Locate a Recovery Site
091-H8C-2001

Conditions: In a contemporary operational environment (COE) given a representative recovery vehicle, required materials, multi-capability tool kit, and applicable references.

Standards: Locate a recovery site to within 10 meters and identified primary and alternate recovery routes determining distance for both with no greater than a 10 percent error.

Performance Steps

1. Select and use applicable publications.
2. Identify terrain features.
3. Identify map symbols and colors.
4. Locate site using military grid reference system.
5. Calculate distance.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	—	—
2. Identified terrain features.	—	—
3. Identified map symbols and colors.	—	—
4. Located site using military grid reference system.	—	—
5. Calculated distance.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

<p>Required FM 21-31 FM 3-25.26 TM 9-2320-279-20-1 TM 9-2320-279-20-2 TM 9-2320-279-20-3</p>	<p>Related TC 43-35</p>
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Determine Recovery Methods
091-H8C-2002

Conditions: In a contemporary operational environment (COE) given a representative recovery vehicle, required materials, general mechanic's tool kit, and applicable references including Field Manual (FM) 5-125, Training Circular (TC) 43-35, and recovery vehicle Technical Manual (TM) 9-2320-279-20-1, TM 9-2320-279-20-2, and TM 9-2320-279-20-3.

Standards: Determine recovery methods, source of effort, and mechanical advantage needed in accordance with references.

Performance Steps

1. Select and use applicable publications.
2. Reconnoiter area.
3. Estimate situation.
4. Calculate ratios.
5. Obtain resistance.
6. Verify solution.
7. Erect rigging.
8. Recheck rigging.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	—	—
2. Reconnoitered area.	—	—
3. Estimated situation.	—	—
4. Calculated ratios.	—	—
5. Obtained resistance.	—	—
6. Verified solution.	—	—
7. Erected rigging.	—	—
8. Rechecked rigging.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

FM 5-125

TC 43-35

TM 9-2320-279-20-1

TM 9-2320-279-20-2

TM 9-2320-279-20-3

Related

TM 9-2320-272-10

TM 9-2350-256-10

Operate Tactical Communications Equipment
091-H8C-2003

Conditions: In a contemporary operational environment (COE) given a representative wheel vehicle (M984 series), required materials, general mechanic's tool kit, Technical Manual (TM) 11-5820-890-10-3, TM 9-2320-279-20-1, TM 9-2320-279-20-2, and TM 9-2320-279-20-3, and other applicable publications.

Standards: Stated the procedures for installing, operating, and using correct radio procedures for clear, concise, and secure communications in accordance with the appropriate publications.

Performance Steps

1. Select and use applicable publications.
2. Prepare communications equipment for operation.
3. Send tactical communications.
4. Receive tactical communications
5. Shut down tactical communications operation.
6. Follow prescribed safety procedures.

Evaluation Preparation: **WARNING:** The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	—	—
2. Prepared communications equipment for operation.	—	—
3. Sent tactical communications.	—	—
4. Received tactical communications.	—	—
5. Shut down tactical communications operation.	—	—
6. Followed prescribed safety procedures.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- TM 11-5820-890-10-3
- TM 9-2320-279-20-1
- TM 9-2320-279-20-2
- TM 9-2320-279-20-3

Related

- TC 43-35
- TM 11-5820-401-10-1
- TM 11-5820-401-10-2
- TM 11-5820-401-10-4
- TM 11-5830-340-12

**Operate Metal Cutting Equipment
091-H8C-2004**

Conditions: In a contemporary operational environment (COE) given a representative recovery vehicle, required materials, general mechanic's tool kit, Training Circular (TC) 9-237, and applicable recovery vehicle Technical Manual (TM) 9-2320-279-20-1, TM 9-2320-279-20-2, and TM 9-2320-279-20-3.

Standards: Stated the procedures for installing, operating, and using correct radio procedures for clear, concise, and secure communications in accordance with the appropriate publications.

Performance Steps

1. Select and use applicable publications.
2. Determine the method to cut metal.
3. Prepare metal cutting equipment, as required.
4. Cut metal.
5. Secure metal cutting equipment.
6. Follow prescribed safety procedures.

Evaluation Preparation: **WARNING:** The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	_____	_____
2. Determined the method to cut metal.	_____	_____
3. Prepared metal cutting equipment, as required.	_____	_____
4. Cut metal.	_____	_____
5. Secured metal cutting equipment.	_____	_____
6. Followed prescribed safety procedures.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- TC 9-237
- TM 9-2320-279-20-1
- TM 9-2320-279-20-2
- TM 9-2320-279-20-3

Related

- AR 385-10
- AR 750-1
- DA PAM 750-8
- TC 43-35
- TM 9-2320-366-10-1
- TM 9-2320-366-10-2
- TM 9-2350-256-10

STP 9-91P14-SM-TG

**References
Required**

**Related
TM 9-243**

Maintain Recovery Vehicle Weapons
091-H8T-2001

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 5988-E (Equipment Inspection Maintenance Worksheet), technical manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, and other applicable publications.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Maintain the M88 series vehicle weapons in accordance with the preventive maintenance checks and services (PMCS) table and procedures and specifications of the applicable TM. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publication.
 - a. Ensure appropriate TM is used.
 - b. Ensure steps are followed outlined in the TM.
2. Use proper safety methods.
 - a. Ensure proper safety methods are followed.
 - b. Follow prescribed safety precautions outlined in TM.
3. Disassemble machine gun.
 - a. Ensure machine gun is on safe.
 - b. Lock bolt to the rear.
 - c. Ensure weapon is clear.
 - d. Follow steps outline in the TM.
4. Check for broken or missing parts.
 - a. Separate machine gun components.
 - b. Visually inspect each machine gun component for damage.
 - c. Tag and label any parts for turn-in.
 - d. Ensure DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E (Equipment Inspection Maintenance Worksheet) has been filled out.
5. Ensure all parts are cleaned and lubricated.
 - a. Clean each machine gun component.
 - b. Follow lubrication procedures outline in the TM.
6. Assemble machine gun.
 - a. Locate and identify machine gun components to be assembled.
 - b. Follow assemble procedures outline within the TM.
7. Set head-space and timing.
 - a. Ensure proper tools are used.
 - b. Follow procedures outlined in the TM for setting head-space and timing.
 - c. Verify head-space and timing settings.
8. Inspect machine gun mount for missing, cracks, or broken parts.
 - a. Follow proper procedures outlined in the TM.
 - b. Tag and label any broken parts for turn-in.
 - c. Ensure part has been requisitioned on proper paperwork.

Performance Steps

9. Ensure launcher tubes are free of rust, dirt and corrosion.
 - a. Follow proper procedures outlined in the TM.
 - b. Remove any rust, dirt and corrosion found within or on launcher tubes.
10. Ensure that grenade launcher wiring harness connectors are connected.
 - a. Locate and identify grenade launcher wiring harness connectors.
 - b. Check grenade launcher wiring harness for proper connections.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications. <ol style="list-style-type: none"> a. Ensured appropriate TMs were used. b. Ensured steps are followed outlined in the TM. 	—	—
2. Used proper safety methods. <ol style="list-style-type: none"> a. Ensured proper safety methods are followed. b. Followed prescribed safety precautions outlined in TM. 	—	—
3. Disassembled machine gun. <ol style="list-style-type: none"> a. Ensured machine gun was on safe. b. Locked bolt to the rear. c. Ensured weapon was cleared. d. Followed steps outlined in the TM. 	—	—
4. Checked for broken or missing parts. <ol style="list-style-type: none"> a. Separated machine gun components. b. Visually inspected each machine gun component for damage. c. Tagged and labeled any parts for turn-in. d. Ensured DA Form 2404 and DA Form 5988-E have been filled out. 	—	—
5. Ensured all parts were cleaned and lubricated. <ol style="list-style-type: none"> a. Cleaned each machine gun component. b. Followed lubrication procedures outlined in the TM. 	—	—
6. Assembled machine gun. <ol style="list-style-type: none"> a. Located and identified machine gun components to be assembled. b. Followed assembly procedures outline within the TM. 	—	—
7. Set head-space and timing. <ol style="list-style-type: none"> a. Ensured proper tools were used. b. Followed procedures outlined in the TM. c. Verified head-space and timing settings. 	—	—
8. Inspected machine gun mount for missing, cracked, or broken parts. <ol style="list-style-type: none"> a. Followed proper procedures outlined in the TM. b. Tagged and labeled any broken parts for turn-in. c. Ensured part had been requisitioned on proper paperwork. 	—	—

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
9. Ensured launcher tubes were free of rust, dirt, and corrosion.	—	—
a. Followed proper procedures outlined in the TM.		
b. Removed any rust, dirt, and corrosion found within or on launcher tubes.		
10. Ensured that grenade launcher wiring harness connectors were connected.	—	—
a. Located and identified grenade launcher wiring harness connections.		
b. Checked grenade launcher wiring harness for proper connections.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

DA FORM 2404
 DA FORM 5988-E
 TM 9-2350-256-10
 TM 9-2350-256-20-1
 TM 9-2350-256-20-2
 TM 9-2350-256-24P-1
 TM 9-2350-256-24P-2

Related

AR 385-10
 AR 750-1
 AR 750-43

Complete Preventive Maintenance Checks and Services on a Tracked Recovery Vehicle 091-H8T-2002

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 5988-E (Equipment Inspection Maintenance Worksheet), DA Pamphlet 750-8, Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, and TM 9-2350-292-10, and other applicable forms and publications.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Inspect the M88 series vehicle in accordance with the preventive maintenance checks and services (PMCS) table of the applicable TM and record deficiencies on DA Form 2404 or DA Form 5988-E in accordance with DA Pamphlet 750-8. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Follow steps outlined in appropriate publication.
2. Select and use proper tools and test, measurement, and diagnostic equipment (TMDE).
 - a. Identify appropriate tools in basic issue items (BII).
 - b. Ensure appropriate tools are serviceable.
3. Describe operation of vehicle systems and subsystems.
 - a. Locate appropriate systems and subsystems operations in the TM.
 - b. Read and follow systems and subsystems maintenance operating guidance outlined in TM.
4. Determine readiness of system components.
 - a. Ensure components are at operating temperature.
 - b. Verify equipment operating gauges and instruments.
5. Identify deficiencies and shortcomings.
 - a. Follow steps outlined in TM pertaining to deficiencies.
 - b. Record deficiencies and shortcomings on DA Form 2404 or DA Form 5988-E.
6. Correct shortcomings identified as operator maintenance.
 - a. Take appropriate measures to repair all deficiencies and shortcomings that need to be repaired.
 - b. Notify supervisor if fault is found beyond operator level of maintenance.
7. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in TM.
 - b. Follow safety procedures outlined in unit standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications. a. Ensured appropriate TM was used. b. Followed steps outlined in TM.	—	—
2. Selected and used proper tools and TMDE. a. Identified appropriate tools in BII. b. Ensured appropriate tools were serviceable.	—	—
3. Described operation of vehicle systems and subsystems. a. Located appropriate systems and subsystems operations in the TM. b. Read and followed systems and subsystems maintenance operating guidance in TM.	—	—
4. Determined readiness of system components. a. Ensured components were at operating temperature. b. Verified equipment operating gauges and instruments.	—	—
5. Identified deficiencies and shortcomings. a. Followed steps outlined in the technical manual to pertaining to deficiencies. b. Recorded deficiencies and shortcomings using DA Form 2404 or DA Form 5988-E.	—	—
6. Corrected shortcomings identified as operator maintenance. a. Took appropriate measures to repair all deficiencies and shortcomings that needed to be repaired. b. Notified supervisor if fault was found beyond operator level of maintenance.	—	—
7. Followed prescribed safety procedures. a. Followed safety procedures outlined in TM. b. Followed safety procedures outlined in unit SOP.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
DA FORM 2404	AR 385-10
DA FORM 5988-E	AR 750-1
DA PAM 750-8	AR 750-43
TM 9-2350-256-10	TM 9-243
TM 9-2350-256-20-1	TM 9-8000
TM 9-2350-256-20-2	
TM 9-2350-256-24P-1	
TM 9-2350-256-24P-2	
TM 9-2350-292-10	

**Use Basic Issue Items Related to Tracked Recovery Vehicle
091-H8T-2003**

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, TM 9-2350-292-10, and other applicable forms and publications.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Remove, clean, and store the recovery related components of end item (COEI) and basic issue items (BII) in accordance with the procedures in TM 9-2350-256-10 and TM 9-2350-292-10. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Follow steps outlined in appropriate publication.
2. Inventory and determine serviceability of BII.
 - a. Identify appropriate tools in BII.
 - b. Inspect BII for serviceability.
3. Repair BII, as required.
 - a. Follow steps outlined in TM pertaining to serviceability of BII.
 - b. Tag and label unserviceable BII for turn-in.
4. Replace BII, as required.
 - a. Follow directions outlined in publication on replacement of BII.
 - b. Ensure appropriate BII has been ordered on applicable forms.
5. Use BII, as required.
 - a. Select appropriate BII pertaining to job.
 - b. Follow procedures in TM.
6. Service BII, as required.
 - a. Refer to TM for servicing data.
 - b. Verify servicing information in TM.
7. Store BII properly.
 - a. Ensure all tools are accounted for.
 - b. Ensure tools are cleaned before storing.
8. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in TM.
 - b. Follow safety procedures outlined in unit standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications. a. Ensured appropriated TM was used. b. Followed steps outlined in appropriate publication.	—	—
2. Inventoried and determined serviceability of BII. a. Identified appropriate tools in BII. b. Inspected BII for serviceability.	—	—
3. Repaired BII, as required. a. Followed steps outlined in TM pertaining to serviceability of BII. b. Tagged and labeled unserviceable BII for turn-in.	—	—
4. Replaced BII, as required. a. Followed directions outlined in publication on replacement of BII. b. Ensured appropriate BII was ordered on applicable forms.	—	—
5. Used BII, as required. a. Selected appropriate BII pertaining to job. b. Followed procedures in TM.	—	—
6. Serviced BII, as required. a. Referred to TM for servicing data. b. Verified servicing information in TM.	—	—
7. Stored BII properly. a. Ensured all tools were accounted for. b. Ensured all tools were cleaned before storing.	—	—
8. Followed prescribed safety procedures. a. Followed safety procedures outlined in TM. b. Followed safety procedures outlined in unit SOP.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- TM 9-2350-256-10
- TM 9-2350-256-20-1
- TM 9-2350-256-20-2
- TM 9-2350-256-24P-1
- TM 9-2350-256-24P-2
- TM 9-2350-292-10

Related

- AR 750-1
- AR 750-43
- DA FORM 2404
- DA FORM 5988-E
- TM 9-8000

Drive Tracked Recovery Vehicle
091-H8T-2004

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, The Army Maintenance Management System (TAMMS) forms, Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, and other applicable publications.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Negotiate obstacles in forward and reverse gears without stalling, jerking, getting stuck, or causing damage to the vehicle and while obeying all safety procedures, traffic regulations, and hand signals. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Verify procedures while performing tracked recovery operations.
2. Perform preventive maintenance checks and services (PMCS).
 - a. Identify what TM to use.
 - b. Follow procedures outlined in TM.
 - c. Annotate any deficiencies on appropriate forms.
 - d. Ensure forms are in accordance with DA Pamphlet 738-751 and DA Pamphlet 750-8.
3. Start engine.
 - a. Ensure vehicle parking brake is engaged.
 - b. Check instrument panel to ensure gauges are operational.
 - c. Follow start up procedures outlined in TM.
4. Place vehicle in motion.
 - a. Disengage parking brake.
 - b. Follow safety procedures outlined in motor pool.
 - c. Ensure ground guides are used, if required.
5. Drive vehicle, maintaining proper engine speed when descending and ascending grades.
 - a. Follow vehicle operating instructions, while maintaining proper engine speed, when descending and ascending grades.
 - b. Verify vehicle operating instructions, while maintaining proper engine speed, when descending and ascending grades.
6. Drive vehicle in reverse.
 - a. Ensure ground guide is used.
 - b. Maintain proper speed while vehicle is in reverse.
7. Stop vehicle.
 - a. Follow safety guidelines outlined in motor pool.
 - b. Carefully bring the vehicle to a stop, while adhering to safe driving habits.
8. Parking vehicle.
 - a. Ensure proper ground guides are used.
 - b. Ensure there is enough clearance from other vehicles.
9. Stop engine (normal and emergency procedures).
 - a. Follow guidelines outlined in TM for proper stopping procedures.
 - b. Ensure parking brake is engaged.

Performance Steps

- c. Ensure vehicle is chock blocked.
 - d. Perform an after-operations PMCS.
10. Complete TAMMS forms, as required.
 - a. Annotate any deficiencies on appropriate forms.
 - b. Ensure parts are ordered, if needed.
 - c. Turn forms into Unit Level Logistics System (ULLS) clerk.
 11. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in TM.
 - b. Follow safety procedures outlined in unit standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications. <ul style="list-style-type: none"> a. Followed procedures outlined within TM. b. Verified procedures while performing tracked recovery operations. 	_____	_____
2. Performed preventive maintenance checks and services (PMCS). <ul style="list-style-type: none"> a. Identified what TM was used. b. Followed procedures outlined within TM. c. Annotated any deficiencies on appropriate forms. d. Ensured forms are in accordance with DA Pamphlet 738-751 and DA Pamphlet 750-8. 	_____	_____
3. Started engine. <ul style="list-style-type: none"> a. Ensured vehicle parking brake was engaged. b. Checked instrument panel to ensure gauges were operational. c. Followed start up procedures outlined in TM. 	_____	_____
4. Placed vehicle in motion. <ul style="list-style-type: none"> a. Disengaged parking brake. b. Followed safety procedures outlined in motor pool. c. Ensured ground guide was used, if required. 	_____	_____
5. Drove vehicle, maintaining proper engine speed when descending and ascending grades. <ul style="list-style-type: none"> a. Followed vehicle operating instructions, while maintaining proper engine speed, when descending and ascending grades. b. Verified vehicle operating instructions, while maintaining proper engine speed, when descending and ascending grades. 	_____	_____
6. Drove vehicle in reverse. <ul style="list-style-type: none"> a. Ensured ground guide was used. b. Maintained proper speed while vehicle was in reverse. 	_____	_____
7. Stopped vehicle. <ul style="list-style-type: none"> a. Followed safety guidelines outlined in motor pool. b. Carefully brought vehicle to a stop, while adhering to safe driving habits. 	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
8. Parked vehicle.	_____	_____
a. Ensured proper ground guides were used.		
b. Ensured there was enough clearance from other vehicles.		
9. Stopped engine (normal and emergency procedures).	_____	_____
a. Followed guidelines outlined in TM for proper stopping procedures.		
b. Ensured parking brake was engaged.		
c. Ensured vehicle was chock blocked.		
d. Performed an after-operations PMCS.		
10. Completed TAMMS forms, as required.	_____	_____
a. Annotated any deficiencies on appropriate forms.		
b. Ensured parts were ordered, if needed.		
c. Turned forms into Unit Level Logistics System (ULLS) clerk.		
11. Followed prescribed safety procedures.	_____	_____
a. Followed safety procedures outlined in TM.		
b. Followed safety procedures outlined in unit standing operating procedure (SOP).		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA PAM 738-751
- DA PAM 750-8
- TM 9-2350-256-10
- TM 9-2350-256-20-1
- TM 9-2350-256-20-2
- TM 9-2350-256-24P-1
- TM 9-2350-256-24P-2

Related

- AR 385-10
- AR 750-1
- AR 750-43

Operate Auxiliary Power Unit 091-H8T-2005

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Technical Manual (TM) 9-2350-256-10, TM 9-2350-292-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, and other applicable publications.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Operate the Auxiliary Power Unit (APU) and basic issue items (BII) powered by the APU in accordance with the procedures in TM 9-2350-256-10 and TM 9-2350-292-10 without damage to the equipment. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Follow steps outlined in TM pertaining to APU procedures.
2. Start APU.
 - a. Follow APU start up procedures outlined in TM.
 - b. Operate APU in accordance with applicable specifications.
 - c. Ensure BII is operable without damage to APU.
3. Actuate generator switch to charge batteries.
 - a. Follow procedures outlined in TM.
 - b. Verify procedures while actuated generator switch to charge batteries.
4. Engage hydraulic control levers to start refuel/defuel pump.
 - a. Follow procedures outlined within TM.
 - b. Verify procedures while performing refueling/refueling operations.
5. Connect and operate hydraulic equipment.
 - a. Ensure all steps are followed in accordance with TM.
 - b. Verify connection while operating hydraulic equipment.
6. Shut down APU.
 - a. Ensure shutdown procedures are in accordance with TM.
 - b. Perform preventive maintenance checks and services (PMCS) while applying shutdown procedures.
7. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in TM.
 - b. Follow safety procedures outlined in unit standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	—	—
a. Ensured appropriate TM was used.		
b. Followed steps outline in TM pertaining to APU procedures.		
2. Started APU.	—	—
a. Followed APU start up procedures outlined within TM.		
b. Operated APU in accordance with applicable specifications.		
c. Ensured BII was operable without damage to APU.		
3. Actuated generator switch to charge batteries.	—	—
a. Followed procedures outlined in TM.		
b. Verified procedures while actuated generator switch to charge batteries.		
4. Engaged hydraulic control levers to start refuel/defuel pump.	—	—
a. Followed procedures outlined within TM.		
b. Verified procedures while engaging hydraulic control lever to start refuel/defuel operations.		
5. Connected and operated hydraulic equipment.	—	—
a. Followed procedures outlined within TM.		
b. Verified connection while operating hydraulic equipment.		
6. Shut down APU.	—	—
a. Followed APU shutdown procedures outlined within TM.		
b. Verified procedures while performing APU shutdown task.		
7. Followed prescribed safety procedures.	—	—
a. Followed safety procedures outlined in TM.		
b. Followed safety procedures outlined in unit SOP.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AR 385-10	
AR 750-1	
AR 750-43	
TM 9-2350-256-10	
TM 9-2350-256-20-1	
TM 9-2350-256-20-2	
TM 9-2350-292-10	

Operate the Boom and Hoist Winch on a Tracked Recovery Vehicle
091-H8T-2006

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, and applicable publications including Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-34, and TM 9-2350-292-10.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Rig and operate the boom on the M88A1/M88A2 tracked recovery vehicle in accordance with the procedures in TM 9-2350-256-10 or TM 9-2350-292-10. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Verify procedures while performing Boom, Hoist, and Winch operations.
2. Prepare vehicle for use of hydraulic equipment.
 - a. Ensure appropriate basic issue items (BII) is used.
 - b. Follow procedures outlined in TM.
 - c. Disconnect any lines and fittings connecting equipment.
 - d. Ensure appropriate equipment is hooked up.
3. Operate boom.
 - a. Follow steps outlined in TM.
 - b. Check equipment for any leaks.
4. Operate hoist winch.
 - a. Ensure all connections are hooked up properly.
 - b. Verify procedures while performing hoist and winch operations.
 - c. Check equipment for any leaks.
5. Secure hydraulic equipment, as required.
 - a. Ensure all equipment is properly secured.
 - b. Ensure area is cleaned in accordance with Environmental Protection Agency (EPA) regulations.
6. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in motor pool.
 - b. Ensure to follow all safety guidance outlined with standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

- | | <u>GO</u> | <u>NO-GO</u> |
|---|-----------|--------------|
| 1. Selected and used applicable publications. <ol style="list-style-type: none"> a. Ensured appropriate TM was used. b. Verified procedures while performing Boom, Hoist, and Winch operations. | — | — |

Performance Measures	<u>GO</u>	<u>NO-GO</u>
2. Prepared vehicle for use of hydraulic equipment.	_____	_____
a. Ensured appropriate BII was used.		
b. Followed procedures outlined within TM.		
c. Disconnected any lines and fittings connecting equipment.		
d. Ensured appropriate equipment is hooked up.		
3. Operated boom.	_____	_____
a. Followed steps outlined in TM.		
b. Checked equipment for any leaks.		
4. Operated hoist winch.	_____	_____
a. Ensured all connections are hooked up properly.		
b. Verified procedures while performing hoist and winch operations.		
c. Checked equipment for any leaks.		
5. Secured hydraulic equipment, as required.	_____	_____
a. Ensured all equipment was properly secured.		
b. Ensured area is cleaned in accordance with EPA regulations.		
6. Followed prescribed safety procedures.	_____	_____
a. Followed safety procedures outlined in motor pool.		
b. Followed safety procedures outlined in unit SOP.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- AR 385-10
- AR 750-1
- AR 750-43
- TM 9-2350-256-10
- TM 9-2350-256-20-1
- TM 9-2350-256-20-2
- TM 9-2350-292-10

Related

Operate the Spade on a Tracked Recovery Vehicle 091-H8T-2007

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Department of the Army (DA) Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 5988-E (Equipment Inspection Maintenance Worksheet), Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, TM 9-2350-292-10, and related references.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Operate the spade in accordance with applicable technical publication procedures and specifications without injury to personnel or damage to equipment. When this task is completed, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Follow steps identified in TM for job performance.
2. Prepare vehicle for use of hydraulic equipment.
 - a. Follow steps outlined in TM.
 - b. Perform a before-operations preventive maintenance checks and services (PMCS).
3. Operate spade.
 - a. Follow safety precautions outlined in TM.
 - b. Check equipment for leaks.
 - c. Perform an after-operations PMCS.
 - d. Annotate any deficiencies on appropriate DA Form 2404 and DA Form 5988-E, if needed.
4. Secure hydraulic equipment, as required.
 - a. Ensure all attachments and basic issue items (BII) are secured properly.
 - b. Ensure area is cleaned of any Environmental Protection Agency (EPA) violations.
5. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in TM.
 - b. Follow safety procedures outlined in unit standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	—	—
a. Ensured appropriate TM is used.		
b. Followed steps outlined in TM for job performance.		
2. Prepared vehicle for use of hydraulic equipment.	—	—
a. Followed steps outlined in TM.		
b. Performed a before-operations PMCS.		
3. Operated spade.	—	—
a. Followed safety precautions outlined in TM.		
b. Checked equipment for leaks.		
c. Performed an after-operations PMCS.		
d. Annotated any deficiencies on appropriate DA Form 2404 and DA Form 5988-E, if needed.		
4. Secured hydraulic equipment, as required.	—	—
a. Ensured all attachments and BII are secured properly.		
b. Ensured area was cleaned of any EPA violations.		
5. Followed prescribed safety procedures.	—	—
a. Followed safety procedures outlined in TM.		
b. Followed safety procedures outlined in unit SOP.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- AR 385-10
- AR 750-1
- AR 750-43
- DA FORM 2404
- DA FORM 5988-E
- TM 9-2350-256-10
- TM 9-2350-256-20-1
- TM 9-2350-256-20-2
- TM 9-2350-256-24P-1
- TM 9-2350-256-24P-2
- TM 9-2350-292-10

Related

**Operate the Winches on a Tracked Recovery Vehicle
091-H8T-2008**

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, and required publications including Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, TM 9-2350-256-34, and TM 9-2350-292-10.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Operate the main winch and auxiliary winch in accordance with the procedures in TM 9-2350-256-10 and TM 9-2350-292-10 without causing damage to the equipment or injury to personnel. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Follow procedures outlined in TM for job performance.
2. Prepare vehicle for use of hydraulic equipment.
 - a. Ensure basic issue items (BII) and test, measurement, and diagnostic equipment (TMDE) are available.
 - b. Perform a before-operations preventive maintenance checks and services (PMCS).
3. Operate main winch.
 - a. Follow steps outlined in TM.
 - b. Check equipment for any leaks.
 - c. Annotate any deficiencies on appropriate forms, if needed.
4. Secure hydraulic equipment, as required.
 - a. Ensure all attachments and equipment are cleaned and stored properly.
 - b. Perform an after-operations PMCS.
5. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in TM.
 - b. Follow safety procedures outlined in unit standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	_____	_____
a. Ensured appropriate TM was used.		
b. Followed procedures outlined in TM for job performance.		
2. Prepared vehicle for use of hydraulic equipment.	_____	_____
a. Ensured BII and TMDE were available.		
b. Performed a before-operations PMCS.		

Performance Measures	<u>GO</u>	<u>NO-GO</u>
3. Operated main winch.	_____	_____
a. Followed steps outlined in TM.		
b. Checked equipment for any leaks.		
c. Annotated any deficiencies on appropriate forms, if needed.		
4. Secured hydraulic equipment, as required.	_____	_____
a. Ensured all attachments and equipment were cleaned and stored properly.		
b. Performed an after-operations PMCS.		
5. Followed prescribed safety procedures.	_____	_____
a. Followed safety procedures outlined in TM.		
b. Followed safety procedures outlined in unit SOP.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 385-10

AR 750-1

AR 750-43

TM 9-2350-256-10

TM 9-2350-256-20-1

TM 9-2350-256-20-2

TM 9-2350-256-24P-1

TM 9-2350-256-24P-2

TM 9-2350-292-10

Related

Recover a Mired Tracked Vehicle
091-H8T-2009

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, and applicable publications including Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-20-2, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, and TM 9-2350-256-34.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Accomplish task in accordance with applicable TM's procedures and specifications. All safety precautions were observed. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Identify which TM will be used.
 - b. Followed steps outlined in TM.
2. Determine method of rigging.
 - a. Follow steps outlined in TM.
 - b. Ensure rigging lines are not defected.
3. Attach cable to the mired vehicle.
 - a. Follow safety precautions outlined in TM.
 - b. Ensure all observing personnel are at least one cable length away, opposite angle of pull.
4. Prepare recovery vehicle for recovery operations.
 - a. Ensure parking brake is not engaged.
 - b. Inspect tackle and equipment before recovery operation starts.
5. Establish communications between vehicles.
 - a. Observe ground guide while operating recovery equipment.
 - b. Ensure proper speed limit is followed.
6. Recover mired vehicle ensuring that all safety practices were followed.
 - a. Ensure proper safety equipment is used.
 - b. Ensure proper hand signals are used during recovery.
7. Secure recovery equipment.
 - a. Disconnect and stow rigging equipment.
 - b. Perform after-operations preventive maintenance checks and services (PMCS).
 - c. Annotate any deficiencies on appropriate forms, if needed.

Evaluation Preparation: **WARNING:** The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

1. Selected and used applicable publications.
 - a. Identified which TM was used.
 - b. Followed steps outlined in TM.

GO **NO-GO**

Performance Measures	<u>GO</u>	<u>NO-GO</u>
2. Determined method of rigging.	—	—
a. Followed steps outlined in TM.		
b. Ensured rigging lines were not defected.		
3. Attached cables to the mired vehicle.	—	—
a. Followed safety precautions outlined in TM.		
b. Ensured all observing personnel were at least one cable length away, opposite angle of pull.		
4. Prepared recovery vehicle for recovery operations.	—	—
a. Ensured parking brake was not engaged.		
b. Inspected tackle and equipment before recovery operation starts.		
5. Established communications between vehicles.	—	—
a. Observed ground guide while operating recovery equipment.		
b. Ensured proper speed limit was followed.		
6. Recovered mired vehicle ensuring that all safety practices were followed.	—	—
a. Ensured proper safety equipment was used.		
b. Ensured proper hands signals were used during recovery.		
7. Secured recovery equipment.	—	—
a. Disconnected and stowed rigging equipment.		
b. Performed after-operations PMCS.		
c. Annotated any deficiencies on appropriate forms, if needed.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AR 385-10	
AR 750-10	
AR 750-43	
DA PAM 750-8	
TM 9-2350-256-10	
TM 9-2350-256-20-1	
TM 9-2350-256-20-2	
TM 9-2350-256-24P-1	
TM 9-2350-256-24P-2	

Recover an Overturned Tracked Vehicle

091-H8T-2010

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, and related references.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Recover the vehicle from the overturned position in accordance with applicable technical publications. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Follow steps outlined in TM.
2. Position recovery vehicle.
 - a. Follow vehicle operating instructions outlined in TM.
 - b. Carefully position recovery vehicle while adhering to safe driving habits.
3. Attach cable to the overturned vehicle.
 - a. Ensure proper safety equipment is used.
 - b. Inspect cable for broken strands or kinks.
 - c. Remove any loops from cable while it is slack.
 - d. Ensure shackles and pins are properly secured.
4. Prepare recover vehicle for recovery operations.
 - a. Ensure recovery vehicle is upright.
 - b. Set up recovery controls.
5. Establish communication with ground guide.
 - a. Use proper hand signals.
 - b. Keep contact with ground guide at all times.
6. Recover overturned vehicle, ensuring that all safety practices are followed.
 - a. Ensure all observing personnel are out of area of projection.
 - b. Follow overturned vehicle operating instructions outlined in TM.
7. Secure recovery equipment.
 - a. Follow procedures outlined in TM.
 - b. Disconnect and stow rigging equipment.
 - c. Perform after-operations preventive maintenance checks and services (PMCS).
 - d. Annotate any deficiencies on appropriate forms, if needed.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	—	—
a. Ensured appropriate TM was used.		
b. Followed steps outlined in TM.		
2. Positioned recovery vehicle.	—	—
a. Followed vehicle operating instruction outlined in TM.		
b. Carefully positioned recovery vehicle while adhering to safe driving habits.		
3. Attached cables to the overturned vehicle.	—	—
a. Ensured proper safety equipment is used.		
b. Inspected cable for broken stands or kinks.		
c. Removed any loops from cable while it is slack.		
d. Ensured shackles and pins are properly secured.		
4. Prepared recovery vehicle for recovery operations.	—	—
a. Ensured recovery vehicle is upright.		
b. Set up recovery controls.		
5. Established communications with ground guide.	—	—
a. Used proper hand signals.		
b. Kept contact with ground guide at all times.		
6. Recovered overturned vehicle, ensuring that all safety practices were followed.	—	—
a. Ensured all observing personnel are out of area of projection.		
b. Followed overturned vehicle operating instructions outlined in TM.		
7. Secured recovery equipment.	—	—
a. Followed procedures outlined in TM.		
b. Disconnected and stowed rigging equipment.		
c. Performed after-operations PMCS.		
d. Annotated any deficiencies on appropriate forms, if needed.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

TM 9-2350-256-10

TM 9-2350-256-20-1

Related

AR 385-10

AR 750-1

AR 750-10

AR 750-43

Tow a Tracked Vehicle on Improved/Highway Surface
091-H8T-2011

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Field Manual (FM) 5-125, Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, and related references.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Lift and tow a disabled vehicle in accordance with applicable technical publications, procedures, and specifications. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensured appropriate TM is used.
 - b. Followed steps outlined in TM.
2. Determine method for towing.
 - a. Follow steps outlined in TM.
 - b. Ensure appropriate basic issue items (BII) and test, measurement, and diagnostic equipment (TMDE) are used.
3. Prepare vehicle for towing.
 - a. Ensure parking brake is disengaged.
 - b. Estimate the situation to determine resistance.
 - c. Compute the total resistance.
4. Hook up vehicle for towing.
 - a. Ensure appropriate hook up devices are used.
 - b. Verify procedures while securing hook attachment to disabled vehicle.
5. Follow prescribed safety procedures.
 - a. Follow safety procedures outlined in TM.
 - b. Ensure safety equipment is used.
6. Establish communication between vehicles.
 - a. Observe ground guide while operating vehicle and equipment.
 - b. Ensure proper speed limit is followed.
7. Tow vehicle to predetermined site.
 - a. Maintain proper speed limit.
 - b. Ensure emergency equipment and tow lights are operable.
8. Disconnect vehicle.
 - a. Ensure parking brake is engaged.
 - b. Disconnect emergency equipment and tow lights.
 - c. Store equipment.
 - d. Conduct after-operations preventive maintenance checks and services (PMCS).
 - e. Annotate any deficiencies on appropriate paperwork, if needed.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any

electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	—	—
a. Ensured appropriate TM was used.		
b. Followed steps outlined in TM.		
2. Determined method for towing.	—	—
a. Followed steps outlined in TM.		
b. Ensured appropriate BII and TMDE were used.		
3. Prepared vehicle for towing.	—	—
a. Ensured parking brake was disengaged.		
b. Estimated the situation to determine resistance.		
4. Hooked up vehicle for towing.	—	—
a. Ensured appropriate hook up devices were used.		
b. Verified procedures while securing hook attachment to disabled vehicle.		
5. Followed prescribed safety procedures.	—	—
a. Followed safety procedures outlined in TM.		
b. Ensured safety equipment was used.		
6. Established communications between vehicles.	—	—
a. Observed ground guide while operating vehicle and equipment.		
b. Ensure proper speed limit was followed.		
7. Towed vehicle to predetermined site.	—	—
a. Maintained proper speed limit.		
b. Ensured emergency equipment and tow lights were operable.		
8. Disconnected vehicle.	—	—
a. Ensured parking brake was engaged.		
b. Disconnected emergency equipment and tow lights.		
c. Stored equipment.		
d. Conducted after-operations PMCS.		
e. Annotated any deficiencies on appropriate paperwork, if needed.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- FM 5-125
- TM 9-2350-256-10
- TM 9-2350-256-20-1
- TM 9-2350-256-24P-1
- TM 9-2350-256-24P-2

Related

- AR 385-10
- AR 750-1
- AR 750-43
- TM 9-243
- TM 9-8000

Tow of a Tracked Vehicle Cross Country

091-H8T-2012

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Field Manual (FM) 5-125, Technical Manual (TM) 9-2350-256-10, and related references.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Tow a disabled vehicle to a predetermined location without causing damage to the equipment or injury to personnel in accordance with applicable publications. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Ensure appropriate TM is used.
 - b. Verify procedures while performing cross country towing of a tracked vehicle.
2. Follow prescribed safety procedures.
 - a. Follow prescribed safety procedures outlined in TM.
 - b. Follow safety guidelines for specified terrain.
3. Position recovery vehicle.
 - a. Ensure ground guide is used.
 - b. Carefully position recovery vehicle while adhering to safe driving habits.
4. Prepare recovery vehicle for towing.
 - a. Ensure parking brake is not engaged.
 - b. Follow vehicle towing operating instructions outlined in TM.
 - c. Use applicable shackles and recovery equipment.
 - d. Estimate the situation and load resistance.
5. Prepare recovery vehicle for towing operation.
 - a. Ensure appropriate hook up devices are used.
 - b. Follow vehicle towing operating instructions outlined in TM.
6. Attach towing bar to disabled vehicle.
 - a. Inspect towing equipment for missing parts.
 - b. Ensure appropriate tow equipment is used.
7. Operate boom.
 - a. Ensure all personnel are out of area of projection.
 - b. Follow vehicle boom operating instructions outlined in TM.
8. Tow disabled vehicle.
 - a. Ensure no objects are under or around vehicle.
 - b. Maintain appropriate speed while towing vehicle.
9. Disconnect towed vehicle.
 - a. Ensure all safety precautions are used when disconnecting tow equipment.
 - b. Ensure parking brake is engaged on vehicle.

Performance Steps

- c. Conduct after-operations preventive maintenance checks and services (PMCS).
 - d. Annotate any deficiencies on appropriate paperwork, if needed.
10. Secure recovery equipment.
- a. Store all recovery equipment in appropriate basic issue items (BII) storage.
 - b. Ensure all equipment is cleaned before storing.
 - c. Ensure all recovery equipment is accounted for.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Selected and used applicable publications.	_____	_____
a. Ensured appropriate TM was used.		
b. Verified procedures while performing cross country towing of a tracked vehicle.		
2. Followed prescribed safety procedures.	_____	_____
a. Followed prescribed safety procedures outlined in TM.		
b. Followed safety guidelines for specific terrain.		
3. Positioned recovery vehicle.	_____	_____
a. Ensure ground guide was used.		
b. Carefully positioned recovery vehicle while adhering to safe driving habits.		
4. Prepared vehicle for towing.	_____	_____
a. Ensured parking brake was not engaged.		
b. Followed vehicle towing operating instructions outlined in TM.		
c. Used applicable shackles and recovery equipment.		
d. Estimated the situation and load resistance.		
5. Prepared recovery vehicle for towing operation.	_____	_____
a. Ensured appropriate hook up devices were used.		
b. Followed vehicle towing operating instructions outlined in TM.		
6. Attached towing bar to disabled vehicle.	_____	_____
a. Inspected towing equipment for missing parts.		
b. Ensured appropriate tow equipment was used.		
7. Operated boom.	_____	_____
a. Ensured all personnel were out of area of projection.		
b. Followed vehicle boom operating instructions outlined in TM.		
8. Towed disabled vehicle.	_____	_____
a. Ensured no objects were under or around vehicle.		
b. Maintained appropriate speed while towing vehicle.		
9. Disconnected towed vehicle.	_____	_____
a. Ensured all safety precautions were used when disconnecting tow equipment.		
b. Ensured parking brake was engaged on vehicle.		
c. Conducted after-operations PMCS.		
d. Annotated any deficiencies on appropriate paperwork, if needed.		

Performance Measures**GO** **NO-GO**

10. Secured recovery equipment.
- a. Stored all equipment in appropriate BII storage.
 - b. Ensured all equipment was cleaned before storing.
 - c. Ensured all recovery equipment was accounted for.

_____	_____
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Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

FM 5-125
TM 9-2350-256-10

Related

AR 385-10
AR 750-1
AR 750-43
TM 9-243
TM 9-8000

**Complete Field Expedient Recovery on a Tracked Vehicle
091-H8T-2013**

Conditions: In a contemporary operational environment (COE) given a representative tracked vehicle (M88 series), required materials, general mechanic's tool kit, Technical Manual (TM) 9-2350-256-10, TM 9-2350-256-20-1, and related references.

Note: If representative equipment is not available, use applicable equipment and associated references.

Standards: Recover the vehicle using self/field expedient procedures in accordance with applicable technical publications. When this task is complete, the vehicle is fully mission capable or maintenance actions required to be performed by other than H8 skill levels (SLs) 1/2 personnel has been identified.

Performance Steps

1. Select and use applicable publications.
 - a. Identify which TM is used.
 - b. Follow steps outlined in TM.
2. Determine method of field expedient recovery.
 - a. Diagnose vehicle malfunction to determine action to be performed.
 - b. Verify proper tools are available to perform action.
3. Prepare vehicle for field expedient recovery, as required.
 - a. Ensure all safety precautions are used.
 - b. Verify procedures while preparing vehicle for field expedient recovery.
4. Perform vehicle field expedient recovery.
 - a. Obtain proper resistance.
 - b. Check all rigging equipment.
 - c. Coordinate with maintenance support team (MST) to provide technical assistance.
 - d. Ensure all maintenance forms are filled out.
5. Secure recovery equipment.
 - a. Disconnect recovery equipment.
 - b. Verify procedures while securing recovery equipment.
 - c. Ensure all recovery equipment is accounted for.
6. Follow prescribed safety procedures.
 - a. Follow all safety procedures outlined in TM.
 - b. Follow all safety procedures outlined in unit standing operating procedure (SOP).

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

1. Selected and used applicable publications.
 - a. Identified which TM was used.
 - b. Followed steps outlined in TM.

GO NO-GO

Performance Measures	<u>GO</u>	<u>NO-GO</u>
2. Determined method of field expedient recovery.	—	—
a. Diagnosed vehicle malfunction to determine action to be performed.		
b. Verified proper tools were available to perform action.		
3. Prepared vehicle for field expedient recovery, as required.	—	—
a. Ensured all safety precautions were used.		
b. Verified procedures while preparing vehicle for field expedient recovery.		
4. Performed vehicle field expedient recovery.	—	—
a. Obtained proper resistance.		
b. Checked all rigging equipment.		
c. Coordinated with MST to provide technical assistance.		
d. Ensured all maintenance forms were filled out.		
5. Secured recovery equipment.	—	—
a. Disconnect recovery equipment.		
b. Verified procedures while securing recovery equipment.		
c. Ensured all recovery equipment was accounted for.		
6. Followed prescribed safety procedures.	—	—
a. Followed all safety precautions outlined in TM.		
b. Followed all safety procedures outlined in unit SOP.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

TM 9-2350-256-10
 TM 9-2350-256-20-1

Related

AR 385-10
 AR 750-1
 AR 750-43

Skill Level 3

Subject Area 4: COMMON LOGISTICS TASKS

Manage a Maintenance Facility Safety Program

091-CLT-3001

Conditions: In a contemporary operational environment (COE) given Army regulation (AR) 190-13, AR 220-1, AR 385-10, AR 700-138, AR 750-1, Department of the Army (DA) Pamphlet 750-8, Field Manual (FM) 4-30.3, Technical Bulletin, TB 43-0142, and TB 43-180, a maintenance site/facility, and maintenance personnel.

Standards: Ensure that personnel followed all safety procedures and preventable accidents were avoided. If accidents occurred, they were properly recorded and reported in accordance with applicable references.

Performance Steps

1. Ensure all safety references are on hand.
2. Establish and document goals and requirements for a successful shop safety and accident prevention program.
3. Brief and regularly update subordinates on shop safety program.
3. Brief and regularly update subordinates on shop safety program.
4. Conduct initial safety inspections.
5. Ensure initial safety concerns and violations are corrected.
6. Conduct scheduled and unscheduled safety inspections.
7. Document safety violations, report the violations as required, and conduct follow-up inspections to ensure violations were corrected.
8. Keep necessary records of safety inspections and accident reports.
9. Ensure Material Safety Data Sheets (MSDSs) are prepared and maintained as required in applicable work areas.

Evaluation Preparation: None

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
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 corrected.	—	—

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
8. Kept necessary records of safety inspections and accident reports.	—	—
9. Ensured Material Safety Data Sheets (MSDSs) were prepared and maintained as required in applicable work areas.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References**Required**

AR 190-13
 AR 220-1
 AR 385-10
 AR 700-138
 AR 750-1
 DA PAM 750-8
 FM 4-30.3
 TB 43-0142
 TB 43-180

Related

Establish a Maintenance Facility Publications/Electronic Technical Manual Library
091-CLT-3002

Conditions: In a contemporary operational environment (COE) given publications, electronic technical manuals (ETMs)/interactive electronic technical manuals (IETMs), computer with access to the World Wide Web, storage location, local and higher headquarters publications indexes and publications procedures, standing operating procedure (SOP), and applicable forms and references.

Standards: Ensure required publications, ETMs/IETMs are on hand or ordered, publications were arranged and maintained properly, forms/records were properly maintained, and changes were posted in accordance with applicable references and local procedures.

Performance Steps

1. Determine all publications required by the maintenance shop or section.
2. Review and update publications library SOP as needed.
3. Ensure that technical publications on hand or on order were the most current in accordance with DA Pamphlet 25-30.
4. Ensure that doctrinal, training, and organizational publications on hand or on order were the most current in accordance with DA Pamphlet 25-30 and local listings.
5. Ensure that administrative publications on hand or on order were the most current in accordance with DA Pamphlet 25-30.
6. Ensure that local and higher headquarters publications on hand or on order were the most current in accordance with DA Pamphlet 25-30 and local listings.
7. Prepare DA Form 4569-1-R (Security Assistance Publication Requisition Code Sheet (LRA)) in accordance with DA Pamphlet 25-33.
8. Prepare the required transmittal form in accordance with DA Pamphlet 25-33.
9. Prepare DA Form 17 (Requisition for Publications and Blank Forms) and DA Form 17-1 (Requisition for Publications and Blank Forms (Continuation Sheet) to request local and higher headquarters publications in accordance with DA Pamphlet 25-33 and local or higher headquarters publications requisitioning procedures.
10. Ensure that published changes were posted to applicable publications in accordance with DA Pamphlet 25-40 and publications change instructions.
11. Remove obsolete, rescinded, or superseded publications from library in accordance with DA Pamphlet 25-40 and publications change instructions.
12. Arrange publications in proper order and in a suitable location in accordance with DA Pamphlet 25-40.
13. Label binders used for storing library publications in accordance with AR 25-400-2 and DA Pamphlet 25-40.
14. Notify personnel to return loaned publications to the library in a timely manner in accordance with publications library SOP.
15. Update Army Publishing Directorate (APD), local, and higher headquarters publications accounts, as required, in accordance with DA Pamphlet 25-33 and local or higher headquarters publications account instructions.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
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 or on order were the most current in accordance with DA Pamphlet 25-30.	—	—
4. Ensured that doctrinal, training, and organizational publications on hand or on order were the most current in accordance with DA Pamphlet 25-30 and local listings.	—	—
5. Ensured that administrative publications on hand or on order were the most current in accordance with DA Pamphlet 25-30.	—	—
6. Ensured that local and higher headquarters publications on hand or on order were the most current in accordance with DA Pamphlet 25-30 and local listings.	—	—
7. Prepared DA Form 4569-1-R (Security Assistance Publication Requisition Code Sheet (LRA)) in accordance with DA Pamphlet 25-33.	—	—
8. Prepared the required transmittal form in accordance with DA Pamphlet 25-33.	—	—
9. Prepared DA Form 17 (Requisition for Publications and Blank Forms) and DA Form 17-1 (Requisition for Publications and Blank Forms (Continuation Sheet) to request local and higher headquarters publications in accordance with DA Pamphlet 25-33 and local or higher headquarters publications requisitioning procedures.	—	—
10. Ensured that published changes were posted to applicable publications in accordance with DA Pamphlet 25-40 and publications change instructions.	—	—
11. Removed obsolete, rescinded, or superseded publications from library in accordance with DA Pamphlet 25-40 and publications change instructions.	—	—
12. Arranged publications in proper order and in a suitable location in accordance with DA Pamphlet 25-40.	—	—
13. Labeled binders used for storing library publications in accordance with AR 25-400-2 and DA Pamphlet 25-40.	—	—
14. Notified personnel to return loaned publications to the library in a timely manner in accordance with publications library SOP.	—	—
15. Updated Army Publishing Directorate (APD), local, and higher headquarters publications accounts, as required, in accordance with DA Pamphlet 25-33 and local or higher headquarters publications account instructions.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AR 25-1	
AR 25-400-2	
DA FORM 17	
DA FORM 17-1	
DA FORM 4569-1-R	
DA PAM 25-30	

References

Required

DA PAM 25-33

DA PAM 25-40

Related

**Establish Maintenance Facilities
091-CLT-3003**

Conditions: In a contemporary operational environment (COE) given a maintenance site, maintenance personnel, applicable equipment, maintenance shop/section standing operating procedure (SOP), Field Manual (FM) 4-30.3, and applicable references.

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

Performance Steps

1. Ensure SOP and required reference were available.
2. Identify commander's maintenance requirements for accomplishing the unit mission.
3. Set up the maintenance facility in accordance with SOP.

Evaluation Preparation: None

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Ensured SOP and required reference were available.	—	—
2. Identified commander's maintenance requirements for accomplishing the unit mission.	—	—
3. Set up the maintenance facility in accordance with SOP.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 4-30.3

Related

**Prepare a Maintenance Facility Standing Operating Procedure
091-CLT-3004**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, higher headquarters standing operating procedure (SOP), and commander's guidance.

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

Performance Steps

1. Ensure applicable publications were available.
2. Ensure unit policies and commander's guidance were followed.
3. Ensure shop operation policies were adequately addressed.
4. Update the shop SOP, as required.

Evaluation Preparation: None

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
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 performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 4-30.3

Related

**Manage Tool Control Procedures
091-CLT-3005**

Conditions: In a contemporary operational environment (COE) given Army regulation (AR) 190-13, AR 220-1, AR 385-10, AR 700-138, AR 750-1, Department of the Army (DA) Form 2062 (Hand Receipt/Annex Number), DA Pamphlet 710-2-1, DA Pamphlet 750-8, Field Manual (FM) 1-02, FM 4-30.3, applicable supply catalog(s), applicable references, and hand receipt forms.

Standards: Manage tool control procedures in accordance with applicable references.

Performance Steps

1. Ensure applicable references were available.
2. Establish policies and procedures for the control of tools.
3. Ensure all Department of the Army (DA) Form 2062s (Hand Receipt/Annex Number) were properly filled out and updated.
4. Ensure tools and equipment were inventoried in accordance with applicable references.
5. Ensure tool shortages were annotated on a shortage annex.
6. Ensure subordinates applied property accountability procedures.

Evaluation Preparation: None

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Ensured applicable references were available.	—	—
2. Established policies and procedures for the control of tools.	—	—
3. Ensured all DA Form 2062s (Hand Receipt/Annex Number) were properly filled out and updated.	—	—
4. Ensured tools and equipment were inventoried in accordance with 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 performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AR 190-13	
AR 220-1	
AR 385-10	
AR 700-138	
AR 750-1	
DA FORM 2062	
DA PAM 710-2-1	
DA PAM 750-8	
FM 1-02	
FM 4-30.3	

Manage Key Control Procedures
091-CLT-3006

Conditions: In a contemporary operational environment (COE) given Army regulation (AR) 190-13, AR 190-51, keys, key control rosters, key boxes/cabinets, and applicable publications.

Standards: Manage key control procedures in accordance with applicable references.

Performance Steps

1. Ensure necessary publications were available.
2. Establish key control policies and procedures.
3. Establish key control access rosters.
4. Ensure personnel were aware of their responsibilities for the security and accountability of keys.
5. Ensure key control access rosters were properly maintained and adhered to.

Evaluation Preparation: None

Performance Measures	<u>GO</u>	<u>NO-GO</u>
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 performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
AR 190-13
AR 190-51

Related

**Manage the Test, Measurement, and Diagnostic Equipment (TMDE) Calibration Program
091-CLT-3007**

Conditions: In a contemporary operational environment (COE) given Army regulation (AR) 750-43, Technical Bulletin (TB) 43-180, TMDE, maintenance personnel, and applicable references.

Standards: Manage the TMDE calibration program in accordance with applicable references.

Performance Steps

1. Ensure necessary publications were available.
2. Review and update TMDE computer printout list.
3. Ensure preventive maintenance checks and services (PMCS) and inventory of all TMDE and auxiliary equipment are conducted, as required.
4. Ensure TMDE is turned in for calibration in accordance with computer printouts.

Evaluation Preparation: None

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Ensured necessary publications were available.	—	—
2. Reviewed and updated TMDE computer printout list.	—	—
3. Ensured preventive maintenance checks and services (PMCS) and inventory of all TMDE and auxiliary equipment are conducted, as required.	—	—
4. Ensured TMDE was turned in for calibration in accordance with computer printouts.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
AR 750-43
TB 43-180

Related

Supervise Maintenance Operations
091-CLT-3009

Conditions: In a contemporary operational environment (COE) given maintenance personnel, equipment, maintenance facility/site, Army regulation (AR) AR 385-10, AR 600-55, AR 700-4, AR 700-138, AR 710-2, AR 725-50, AR 735-5, AR 750-1, AR 750-43, Department of the Army (DA) Pamphlet 25-30, DA Pamphlet 710-2-1, DA Pamphlet 710-2-2, DA Pamphlet 750-1, DA Pamphlet 750-3, DA Pamphlet 750-8, Field Manual (FM) 4-30.3, standing operating procedures (SOPs), and applicable references.

Standards: Establish and maintain an effective maintenance shop operation in accordance with SOP and applicable references.

Performance Steps

1. Ensure unit maintenance procedures are in accordance with AR 750-1, DA Pamphlet 750-3, and local and major Army command (MACOM) policies.
 - a. Review unit SOPs 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 actions.
 - d. Provide training in maintenance procedures.
 - e. Provide training and technical assistance as needed for operations under extreme heat (up to 125 degrees Fahrenheit [F]).
 - (1) Cooling systems. Check coolant level daily. Maintain coolant levels approximately two inches below the radiator overflow pipe if so equipped. Check radiator air passages for obstructions frequently. Check fan belt for proper tension. Check coolant temperature indicators frequently for any indication of overheating.
 - (2) Lubrication. Make sure that lubricants used are as specified for the prevailing ambient temperature in the current lubrication order.
 - (3) Fuel system. When filling the fuel tanks, allow sufficient space for fuel expansion.
 - (4) Batteries. Check electrolyte level frequently. Add distilled water as required to compensate for evaporation.
 - (5) Engine. Kept the external surface of the engine as clean as possible.
 - f. Provide training and technical assistance as needed for operations in dusty or sandy areas.
 - (1) General. If possible, provide shelter for the equipment. Use available natural barriers to shield the equipment from blowing dust or sand.
 - (2) Cleaning. Wipe dust and sand from the equipment frequently. When possible, thoroughly washed down with clean water.
 - (3) Engine. Shorten the service interval for the engine air cleaner and oil filter to compensate for intake of additional dust or dirt. Kept external surface of engine as clean as possible.
 - (4) Fuel systems. Drain sediment from fuel tanks, fuel strainers, and fuel filters frequently. Was particularly careful to prevent dust or dirt from entering the fuel tank/fuel system. Shorten the service intervals for the fuel filters appropriately.
 - (5) Lubrication. Lubrication intervals must be shortened appropriately. Use particular care to keep lubricants from becoming contaminated with dust or dirt.
3. Provide maintenance management to units.
 - a. Review reports (Materiel Condition Status Report [MCSR] and (Unit Level Logistics System-Ground [ULLS-G]).
 - b. Coordinate with higher-level maintenance activities.
 - c. Direct cross-leveling of maintenance assets/workloads.
 - d. Prioritize maintenance efforts of units.

Evaluation Preparation: None

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Ensured unit maintenance procedures are in accordance with AR 750-1, DA Pamphlet 750-3, and local and major Army command (MACOM) policies. <ul style="list-style-type: none"> a. Reviewed unit SOPs for maintenance. b. Informed unit personnel of changes in policy and new policy that impacts unit SOP. 	—	—
2. Provided technical assistance to unit maintenance activities. <ul style="list-style-type: none"> a. Inspected unit maintenance operations. b. Identified shortcomings. c. Made recommendations for corrective actions. d. Provided training in maintenance procedures. e. Provided training and technical assistance as needed for operations under extreme heat (up to 125 degrees Fahrenheit [F]). <ul style="list-style-type: none"> (1) Cooled systems. Check coolant level daily. Maintain coolant levels approximately two inches below the radiator overflow pipe if so equipped. Check radiator air passages for obstructions frequently. Check fan belt for proper tension. Check coolant temperature indicators frequently for any indication of overheating. (2) Lubricated. Made sure that lubricants used are as specified for the prevailing ambient temperature in the current lubrication order. (3) Fueled system. When filling the fuel tanks, allow sufficient space for fuel expansion. (4) Batteries. Checked electrolyte level frequently. Add distilled water as required to compensate for evaporation. (5) Engine. Kept the external surface of the engine as clean as possible. f. Provided training and technical assistance as needed for operations in dusty or sandy areas. <ul style="list-style-type: none"> (1) General. If possible, provide shelter for the equipment. Use available natural barriers to shield the equipment from blowing dust or sand. (2) Cleaned. Wiped dust and sand from the equipment frequently. When possible, thoroughly washed down with clean water. (3) Engine. Shorten the service interval for the engine air cleaner and oil filter to compensate for intake of additional dust or dirt. Kept external surface of engine as clean as possible. (4) Fueled systems. Drain sediment from fuel tanks, fuel strainers, and fuel filters frequently. Was particularly careful to prevent dust or dirt from entering the fuel tank/fuel system. Shorten the service intervals for the fuel filters appropriately. (5) Lubrication. Lubricated intervals must be shortened appropriately. Use particular care to keep lubricants from becoming contaminated with dust or dirt. 	—	—
3. Provided maintenance management to units. <ul style="list-style-type: none"> a. Reviewed reports (Materiel Condition Status Report [MCSR]). b. Coordinated with higher-level maintenance activities. c. Directed cross-leveling of maintenance assets/workloads. d. Prioritized maintenance efforts of units. 	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

AR 385-10
AR 600-55
AR 700-138
AR 700-4
AR 710-2
AR 725-50
AR 735-5
AR 750-1
AR 750-43
DA PAM 710-2-2
DA PAM 750-1
DA PAM 750-3
FM 4-30.3

Related

**Manage Maintenance Information Systems Reports
091-CLT-3012**

Conditions: While stationed in Iraq, your Brigade is given the new Standard Army Maintenance System-1E (SAMS-1E) systems. As the shop foreman for your company, you must identify the Objectives, Functions, and Management Tools of the SAMS-1E. In a contemporary operational environment (COE) given a computer system or systems with Standard Army Maintenance System-Level 1 Enhanced (SAMS-1E) software, database of equipment files, SAMS-1E operator, Automated Information Systems Manual (AISM)-25-L21-AHN-ZZZ-EM, AISM-25-L26-AHO-ZZZ-EM, Department of the Army (DA) Form 2407 (Maintenance Request), DA Pamphlet 750-8, and applicable references.

Standards: Supervise SAMS-1E functions of a field level maintenance shop in accordance with applicable references.

Performance Steps

1. Ensure necessary equipment and publications were available.
2. Ensure SAMS-1E operator was adequately trained.
3. Review the SAMS-1E system and the flow of information to and from system interfaces.
4. Review the purpose and use of SAMS-1E categories and codes.
5. Supervise the processing of maintenance requests (DA Form 2407).
6. Interpret SAMS-1E report to identify maintenance trends and problems.
7. Request and interpret ad hoc reports, as necessary.

Evaluation Preparation: None

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Ensured necessary equipment and publications were available.	—	—
2. Accessed the SAMS-1E system.	—	—
3. Reviewed the SAMS-1E system and the flow of information to and from system interfaces.	—	—
4. Reviewed the purpose and use of SAMS-1E categories and codes.	—	—
5. Supervised the processing of maintenance requests (DA Form 2407).	—	—
6. Interpreted SAMS-1E report to identify maintenance trends and problems.	—	—
7. Requested and interpreted ad hoc reports, as necessary.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AISM-25-L26-AHO-ZZZ-EM	
DA FORM 2407	
DA PAM 750-8	

Subject Area 5: TECHNICAL TASKS (SKILL LEVEL 3)

**Perform Diagnostic Procedures on the Cannon Recoil System of an M109A6 Track Vehicle
091-91P-3003**

Conditions: In a contemporary operational environment, given an M109 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the cannon recoil system; tool kit, Multi-Capability; DA Pamphlet 750-8, supply catalog (SC) 9999-01-SKO, technical manual (TM) 9-1000-202-14, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, and related references; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose the malfunctions of the cannon recoil system and ensured necessary repairs are completed in accordance with applicable technical publications. When this task is completed, the equipment or end item must be fully mission-capable, or maintenance actions required to be performed by other than 91P skill level (SL) 3 will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable technical publications.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose cannon recoil system faults and determined maintenance actions to be performed.
 - a. Disassemble, service, and assemble breech carrier assembly.
 - b. Service torque key.
 - c. Adjust operating cam.
 - d. Service the variable recoil system.
3. Replace defective components, as necessary.
4. Purge and Charge components, as necessary.
5. Perform a final operational test to verify the Cannon Recoil System faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

1. Performed administrative actions.
 - a. Selected and used applicable technical publications.
 - b. Selected and used applicable tools and TMDE.
 - c. Practiced shop safety and maintenance discipline.

GO **NO-GO**

Performance Measures	<u>GO</u>	<u>NO-GO</u>
2. Diagnosed cannon recoil system faults and determined maintenance actions to be performed.	_____	_____
a. Disassembled, serviced, and assembled breech carrier assembly.		
b. Serviced torque key.		
c. Adjusted operating cam.		
d. Serviced the variable recoil system.		
3. Replaced defective components, as necessary.	_____	_____
4. Purged and charged components, as necessary.	_____	_____
5. Performed a final operational test to verify the cannon recoil system faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required

DA FORM 5988-E
 DA PAM 750-8
 SC 9999-01-SKO
 TM 9-1000-202-14
 TM 9-2350-314-10
 TM 9-2350-314-20-2-1
 TM 9-2350-314-20-2-2
 TM 9-2350-314-24P-2
 TM 9-243
 TM 9-3305

Related

DA FORM 5988-E
 DA PAM 750-8
 SC 9999-01-SKO
 TM 9-1000-202-14
 TM 9-2350-311-10
 TM 9-2350-311-20-2
 TM 9-2350-314-10
 TM 9-2350-314-20-2-1
 TM 9-2350-314-20-2-2
 TM 9-2350-314-24P-2
 TM 9-243
 TM 9-3305

**Perform Diagnostic Procedures on the Traversing System of an M109A6 Track Vehicle
091-91P-3004**

Conditions: In a contemporary operational environment, given an M109 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the traversing system; tool kit, Multi-Capability; technical manual (TM) 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, and related references; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose the malfunctions of the traversing system and ensure necessary repairs are completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable technical publications.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose traversing system faults and determine maintenance actions to be performed.
 - a. Repair and adjusted the contact arm.
 - b. Isolate malfunctions of cab electrical system.
 - c. Maintained the hydraulic power pack assembly.
 - d. Perform troubleshooting procedures on the hydraulic system.
3. Replace defective components as necessary.
4. Verify hydraulic fluid level and fill as necessary.
5. Perform a final inspection to ensure the traversing system is fully mission-capable.
6. Complete The Army Maintenance Management System (TAMMS) forms as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable technical publications. b. Selected and used applicable tools and test measurement, and diagnostic equipment (TMDE). c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Diagnosed traversing system faults and determined maintenance actions to be performed. <ol style="list-style-type: none"> a. Repaired and adjusted the contact arm. b. Isolated malfunctions of the cab electrical system. c. Maintained the hydraulic power pack assembly. d. Performed troubleshooting procedures on the hydraulic system. 	_____	_____

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
3. Replaced defective components as necessary.	—	—
4. Verified hydraulic fluid level and filled as necessary.	—	—
5. Performed a final inspection to ensure the traversing system was fully mission-capable.	—	—
6. Completed The Army Maintenance Management System (TAMMS) forms as required.	—	—

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required

- DA FORM 5988-E
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Perform Diagnostic Procedures on the Elevating System of an M109A6 Track Vehicle
091-91P-3005**

Conditions: In a contemporary operational environment, given an M109 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the elevating system; tool kit, Multi-Capability; supply catalog (SC) 9999-01-SKO; technical manual (TM) 11-6625-3052-14, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2; DA Pamphlet 750-8, and related references; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnosed the malfunctions of the elevating system and ensured necessary repairs were completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose elevating system faults and determine maintenance action to be performed.
3. Service the equilibrated elevation mechanism.
4. Replace defective components, as necessary.
5. Purge and charge components as necessary.
6. Perform final operational test to verify the elevating system faults had been corrected.
7. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed elevating system faults and determined maintenance action to be performed.	—	—
3. Serviced the equilibrated elevation mechanism.	—	—
4. Replaced defective components, as necessary.	—	—
5. Purged and charged components, as necessary.	—	—

Performance Measures

- 6. Performed final operational test to verify the elevating system faults had been corrected.
- 7. Completed The Army Maintenance Management System (TAMMS) forms as required.

<u>GO</u>	<u>NO-GO</u>
_____	_____
_____	_____

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required

- DA FORM 5988-E
- DA PAM 750-8
- SC 9999-01-SKO
- TM 11-6625-3052-14
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Perform Diagnostic Procedures on the Hydraulic System of M109A6 and M992 Track Vehicles
091-91P-3009**

Conditions: In a contemporary operational environment, given an M109 series vehicle, M992 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the hydraulic system; tool kit, Multi-Capability; technical manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, DA Pamphlet 750-8, and related references; test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose the malfunctions of the hydraulic system and ensure necessary repairs are completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Review work request.
2. Ensure task is within shop capability and authorization.
3. Ensure applicable technical publications are available.
4. Ensure proper tools, TDME, and equipment are available to inspect, repair or replace, and test the elevating system.
5. Perform initial inspection.
6. Diagnose hydraulic system faults and determine maintenance actions to be performed.
7. Identify repair parts and requisition, if required.
8. Assign personnel to perform maintenance actions.
9. Ensure all safety precautions and procedures are followed.
10. Provide assistance when necessary.
11. Ensure task is performed to standard.
12. Conduct an in-process inspection.
13. Perform a final inspection to ensure the hydraulic system 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 Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When

working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Reviewed work request.	—	—
2. Ensured task was within shop capability and authorization.	—	—
3. Ensured applicable technical publications were available.	—	—
4. Ensured proper tools, TMDE, and equipment were available to inspect, repair or replace, and test the hydraulic system.	—	—
5. Performed initial inspection.	—	—
6. Diagnosed hydraulic system faults and determined maintenance actions to be performed.	—	—
7. Identified repair parts and requisitioned, if required.	—	—
8. Assigned personnel to perform task.	—	—
9. Ensured all safety precautions were followed.	—	—
10. Provided assistance when necessary.	—	—
11. Ensured task was performed to standards.	—	—
12. Conducted an in-process inspection.	—	—
13. Performed a final inspection to ensure the hydraulic system was fully mission-capable.	—	—
14. Critiqued personnel on performance of the task.	—	—
15. Ensured maintenance forms were completed, as required.	—	—
16. Ensured tools and equipment were properly maintained.	—	—

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required	Related
DA FORM 5988-E	
DA PAM 750-8	
TM 9-2350-267-10	
TM 9-2350-267-20	
TM 9-2350-267-24P	
TM 9-2350-287-10	
TM 9-2350-287-20-1	
TM 9-2350-287-20-2	
TM 9-2350-293-10	
TM 9-2350-293-20&P	
TM 9-2350-293-34&P	
TM 9-2350-311-10	
TM 9-2350-311-20-1	
TM 9-2350-311-20-2	
TM 9-2350-311-24P-1	

References

Required

TM 9-2350-314-10
TM 9-2350-314-20-1-1
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-1
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

**Perform Diagnostic Procedures on the Cooling System of M109A6 and M992 Track Vehicles
091-91P-3018**

Conditions: In a contemporary operational environment, given an M109 series vehicle or an M992 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the cooling system; tool kit, Multi-Capability; lubrication order (LO) 9-2350-267-12, technical manual (TM) 11-6625-3052-14, TM 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-293-10, TM 9-2350-293-20-2, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-24P-1, TM 9-243, TM 9-8000, and DA Pamphlet 750-8; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose the malfunctions of the cooling system and ensure necessary repairs are completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform Administrative Actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose cooling system faults and determine maintenance action to be performed.
3. Ensure all safety precautions are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the cooling system faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed cooling system faults and determined maintenance action to be performed.	—	—
3. Ensured all safety precautions were followed.	—	—
4. Replaced defective components, as necessary.	—	—

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the cooling system faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required	Related
DA FORM 5988-E	
DA PAM 750-8	
LO 9-2350-267-12	
TM 11-6625-3052-14	
TM 9-2350-267-10	
TM 9-2350-267-20	
TM 9-2350-267-24P	
TM 9-2350-287-10	
TM 9-2350-287-20-1	
TM 9-2350-293-10	
TM 9-2350-311-10	
TM 9-2350-311-20-1	
TM 9-2350-311-24P-1	
TM 9-2350-314-10	
TM 9-2350-314-20-1-1	
TM 9-2350-314-20-1-2	
TM 9-2350-314-24P-1	
TM 9-243	
TM 9-8000	

**Perform Diagnostic Procedures on the Transmission of M109A6 and M992 Track Vehicles
091-91P-3019**

Conditions: In a contemporary operational environment, given an M109 series vehicle or an M992 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the transmission; tool kit, Multi-Capability; lubrication order (LO) 9-2350-267-12, technical manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, and TM 9-2350-314-24P-1; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose the malfunctions of the transmission and ensure necessary repairs are completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose transmission faults and determine maintenance actions to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the transmission system faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed transmission faults and determined maintenance actions to be performed.	—	—
3. Ensured all safety precautions and procedures were followed.	—	—
4. Replaced defective components, as necessary.	—	—

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the cooling system faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required	Related
DA FORM 5988-E	
LO 9-2350-267-12	
TM 9-2350-267-10	
TM 9-2350-267-20	
TM 9-2350-267-24P	
TM 9-2350-287-10	
TM 9-2350-287-20-1	
TM 9-2350-287-20-2	
TM 9-2350-287-24P	
TM 9-2350-293-10	
TM 9-2350-293-20&P	
TM 9-2350-293-34&P	
TM 9-2350-311-10	
TM 9-2350-311-20-1	
TM 9-2350-311-24P-1	
TM 9-2350-314-10	
TM 9-2350-314-20-1-1	
TM 9-2350-314-20-1-2	
TM 9-2350-314-24P-1	

**Perform Battlefield Damage Assessment and Repair (BDAR) on a Tracked Vehicle
091-91P-3032**

Conditions: In a contemporary operational environment, given an M109 series vehicle or M992 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating BDAR is required, or a directive from the commander requesting BDAR be performed; general mechanic's and tool kit, Multi-Capability; field manual (FM) 4-30.31, lubrication order (LO) 9-2350-267-12, technical manual (TM) 11-6625-3052-14, TM 9-1000-202-14, TM 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-274-BD, TM 9-2350-275-BD, TM 9-2350-276-BD, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20&P, TM 9-2350-293-34&P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-311-24P-2, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-243, TM 9-3305, DA Pamphlet 750-8, and related references; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose damage, determine necessary BDAR repairs, and ensure necessary repairs are completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose and Identify maintenance action to be performed using BDAR.
 - a. Inventory BDAR kit to ensure required components are available to perform the repairs.
 - b. Assign personnel to assist in BDAR repairs.
3. Ensure all safety precautions and procedures are followed.
4. Repair defective components, as necessary using BDAR kit.
5. Perform final operational test to verify the fault have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

1. Performed administrative actions.
 - a. Selected and used applicable TMs.
 - b. Selected and used applicable tools and TMDE.
 - c. Practiced shop safety and maintenance discipline.

GO **NO-GO**

_____ _____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
2. Diagnosed and identified maintenance action to be performed using BDAR.	—	—
a. Inventoried BDAR kit and ensured required components were available to perform the repairs.		
b. Assigned personnel to assist in BDAR repairs.		
3. Ensured all safety precautions and procedures were followed.	—	—
4. Repaired defective components, as necessary using BDAR kit.	—	—
5. Performed final operational test to verify the faults had been corrected.	—	—
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required	Related
DA FORM 5988-E	
DA PAM 750-8	
FM 4-30.31	
LO 9-2350-267-12	
TM 11-6625-3052-14	
TM 9-1000-202-14	
TM 9-2350-267-10	
TM 9-2350-267-20	
TM 9-2350-267-24P	
TM 9-2350-274-BD	
TM 9-2350-275-BD	
TM 9-2350-276-BD	
TM 9-2350-287-10	
TM 9-2350-287-20-1	
TM 9-2350-287-20-2	
TM 9-2350-287-24P	
TM 9-2350-293-10	
TM 9-2350-293-20&P	
TM 9-2350-293-34&P	
TM 9-2350-311-10	
TM 9-2350-311-20-1	
TM 9-2350-311-20-2	
TM 9-2350-311-24P-1	
TM 9-2350-311-24P-2	
TM 9-2350-314-10	
TM 9-2350-314-20-1-1	
TM 9-2350-314-20-1-2	
TM 9-2350-314-20-2-1	
TM 9-2350-314-20-2-2	
TM 9-2350-314-24P-1	
TM 9-243	
TM 9-3305	

Perform Diagnostic Procedures on the Engine Electrical System of M109A6 and M992 Track Vehicles

091-91P-3043

Conditions: In a contemporary operational environment, given an M109 series vehicle, M992 series vehicle, M998 series vehicle, M1074 series vehicle, M1078 series light medium tactical vehicle (LMTV), M1083 series medium tactical vehicle (MTV), or an M88 series vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the charging system; tool kit, Multi-Capability; technical manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-293-10, TM 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-243, and related references; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose the malfunctions of the Engine Electrical system and ensure necessary repairs are completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose Engine Electrical System faults and determine maintenance action to be performed.
 - a. Diagnose Engine Starting System.
 - (1) Troubleshoot direct current (DC) circuits as applicable.
 - (2) Troubleshoot starting system components as necessary.
 - (3) Repair electrical system wiring if damaged.
 - b. Diagnose Engine Charging System.
 - (1) Troubleshoot DC circuits as applicable.
 - (2) Troubleshoot charging system components as necessary.
 - (3) Repair electrical system wiring if damaged.
 - c. Diagnose Engine Glow Plug System.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	—	—
a. Selected and used applicable TMs.		
b. Selected and used applicable tools and TMDE.		
c. Practiced shop safety and maintenance discipline.		
2. Diagnosed Engine Electrical System faults and determined maintenance action to be performed.	—	—
Ensure that personnel are not wearing jewelry during this procedure.		
a. Diagnosed Engine Starting System.		
(1) Troubleshoot DC circuits as applicable.		
(2) Troubleshoot starting system components as necessary.		
(3) Repair electrical system wiring if damaged.		
b. Diagnosed Engine Charging System.		
(1) Troubleshoot DC circuits as applicable.		
(2) Troubleshoot charging system components as necessary.		
(3) Repair electrical system wiring if damaged.		
c. Diagnosed Engine Glow Plug System.		
3. Ensured all safety precautions and procedures were followed.	—	—
4. Replaced defective components, as necessary.	—	—
5. Performed final operational test to verify the faults had been corrected.	—	—
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required	Related
DA FORM 5988-E	
SC 9999-01-SKO	
TM 9-2350-267-10	
TM 9-2350-267-20	
TM 9-2350-267-24P	
TM 9-2350-287-10	
TM 9-2350-287-20-1	
TM 9-2350-287-20-2	
TM 9-2350-293-10	
TM 9-2350-293-20&P	
TM 9-2350-293-34&P	
TM 9-2350-311-10	
TM 9-2350-311-20-1	
TM 9-2350-311-24P-1	
TM 9-2350-314-10	
TM 9-2350-314-20-1-1	
TM 9-2350-314-20-1-2	
TM 9-243	
TM 9-8000	

**Perform Diagnostic Procedures on Engines of M109A6 and M992 Track Vehicles
091-91P-3046**

Conditions: In a contemporary operational environment, given an M109 series vehicle or an M992 vehicle; Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the engine; tool kit, Multi-Capability; lubrication order (LO) 9-2350-267-12, technical manual (TM) 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-24P, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, and TM 9-2350-314-20-1-2; tools, test, measurement, and diagnostic equipment (TMDE), equipment as indicated in the TMs, and replacement parts.

Standards: Diagnose the malfunctions of the engine and ensure necessary repairs are completed in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose engine faults and determine maintenance actions to be performed.
 - a. Diagnose fuel system.
 - b. Diagnose air induction and exhaust system.
 - c. Diagnose cooling system.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the engine faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed engine faults and determined maintenance actions to be performed. <ol style="list-style-type: none"> a. Diagnosed fuel system. b. Diagnosed air induction and exhaust system. c. Diagnosed cooling system. 	—	—
3. Ensured all safety precautions and procedures were followed.	—	—

Performance Measures	<u>GO</u>	<u>NO-GO</u>
4. Replaced defective components, as necessary.	—	—
5. Performed final operational test to verify the engine faults had been corrected.	—	—
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required	Related
DA FORM 5988-E	
LO 9-2350-267-12	
TM 9-2350-267-10	
TM 9-2350-267-20	
TM 9-2350-267-24P	
TM 9-2350-287-10	
TM 9-2350-287-20-1	
TM 9-2350-287-20-2	
TM 9-2350-287-24P	
TM 9-2350-293-10	
TM 9-2350-293-20&P	
TM 9-2350-293-34&P	
TM 9-2350-311-10	
TM 9-2350-311-20-1	
TM 9-2350-311-24P-1	
TM 9-2350-314-10	
TM 9-2350-314-20-1-1	
TM 9-2350-314-20-1-2	

**Perform Diagnostic Procedures of the Cab Electrical System on a M109A6 Track Vehicle
091-91P-3060**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Cab Electrical System, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the cab electrical system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose Cab Electrical System faults and determine maintenance action to be performed.
 - a. Troubleshoot Automatic Fire Control System (AFCS) components.
 - b. Troubleshoot Slip Ring and Brush Block Assemblies.
 - c. Troubleshoot Electrical Wire Harness.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Cab Electrical System faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Diagnosed Cab Electrical System faults and determined maintenance action to be performed. <ol style="list-style-type: none"> a. Troubleshoot Automatic Fire Control System (AFCS) components. b. Troubleshoot Slip Ring and Brush Block Assemblies. c. Troubleshoot Electrical Wire Harness. 	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
4. Replaced defective components, as necessary.	_____	_____
5. Performed final operational test to verify the Cab Electrical System faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: The Soldier scores a GO if all performance measures were passed. The Soldier scores a NO-GO if any performance measure was failed. If any performance measure was failed show the Soldier what was done wrong and how it should have been done to score a GO.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Perform Diagnostic Procedures of the AFCS/PDFCS on a M109A6 Track Vehicle
091-91P-3061**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction in the AFCS/PDFCS (Automatic Fire Control System/Paladin Digital Fire Control System), supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the technical manuals, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Corrected the malfunctions of the AFCS/PDFCS in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose AFCS/PDFCS faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed AFCS/PDFCS faults and determined maintenance action to be performed.	—	—
3. Ensured all safety precautions and procedures were followed.	—	—
4. Replaced defective components, as necessary.	—	—

Performance Measures

GO **NO-GO**

- | | | |
|---|-------|-------|
| 5. Performed final operational test to verify the faults had been corrected. | _____ | _____ |
| 6. Completed The Army Maintenance Management System (TAMMS) forms, as required. | _____ | _____ |

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

Related

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

**Perform Diagnostic Procedures of the Hull Electrical System on a M109A6 Track Vehicle
091-91P-3063**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Hull Electrical System, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the hull electrical system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Hull Electrical System faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Hull Electrical System faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	_____	_____
a. Selected and used applicable TMs.		
b. Selected and used applicable tools and TMDE.		
c. Practiced shop safety and maintenance discipline.		
2. Diagnosed the Hull Electrical System faults and determined maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the Hull Electrical System faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Perform Diagnostic Procedures of the Chemical, Biological, Radiological and Nuclear Equipment
on a M109A6, M992A2 Track Vehicle
091-91P-3064**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the chemical, biological, radiological, nuclear (CBRN) equipment, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the CBRN equipment in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose CBRN equipment faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the CBRN equipment faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed the CBRN equipment faults and determined maintenance action to be performed.	—	—
3. Ensured all safety precautions and procedures were followed.	—	—
4. Replaced defective components, as necessary.	—	—

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the CBRN equipment faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Perform Diagnostic Procedures of the Auxiliary Power Unit on a M992A2 Track Vehicle
091-91P-3066**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the Auxiliary Power Unit (APU), supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the APU in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the APU faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the APU faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	—	—
2. Diagnosed the APU faults and determined maintenance action to be performed.	—	—
3. Ensured all safety precautions and procedures were followed.	—	—
4. Replaced defective components, as necessary.	—	—
5. Performed final operational test to verify the APU faults had been corrected.	—	—
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

DA FORM 5988-E
SC 9999-01-SKO
TM 750-116
TM 9-2350-311-10
TM 9-2350-311-20-2
TM 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

Related

Perform Diagnostic Procedures on the Fire Extinguishing and Suppression System of a M992 Track Vehicle
091-91P-3070

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the fire extinguishing and suppression system, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the fire extinguishing and suppression system in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Fire Extinguishing and Suppression System faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Fire Extinguishing and Suppression System faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Diagnosed the Fire Extinguishing and Suppression System faults and determined maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the Fire Extinguishing and Suppression System faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Maintain Breech Mechanism Assembly on a M109A6 Track Vehicle
091-91P-3072**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the breech mechanism assembly, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the breech mechanism assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable technical manuals.
 - b. Select and use applicable tools and test measurement, and diagnostic equipment (TMDE).
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Breech Mechanism faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Breech Mechanism faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	_____	_____
a. Selected and used applicable TMs.		
b. Selected and used applicable tools and TMDE.		
c. Practiced shop safety and maintenance discipline.		
2. Diagnosed the Breech Mechanism faults and determined maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the Breech Mechanism faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

Maintain Elevation Mechanism System on a M109A6 Track Vehicle
091-91P-3073

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the elevation mechanism, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Correct the malfunctions of the elevation mechanism in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Elevation Mechanism faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Elevation Mechanism faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions.	_____	_____
a. Selected and used applicable TMs.		
b. Selected and used applicable tools and TMDE.		
c. Practiced shop safety and maintenance discipline.		
2. Diagnosed the Elevation Mechanism faults and determined maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the Elevation Mechanism faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

**Maintain Accumulator Equilibration Assembly on a M109A6 Track Vehicle
091-91P-3075**

Conditions: In a contemporary operational environment, given an M109 series self-propelled howitzer and tool kit, Multi-Capability, Department of the Army (DA) Form 5988-E (Equipment Inspection Maintenance Worksheet) indicating a malfunction of the accumulator equilibration assembly, supply catalog (SC) 9999-01-SKO, technical manual (TM) 750-116, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, TM 9-3305, necessary tools and equipment as indicated in the TMs, test, measurement, and diagnostic equipment (TMDE), replacement parts, and supervision/assistance.

Standards: Corrected the malfunctions of the accumulator equilibration assembly in accordance with performance measures and applicable technical publications. When the task is completed, the equipment or end item must be fully mission-capable or required maintenance action to be performed by other than 91P skill level (SL) 3 personnel will be identified.

Performance Steps

1. Perform administrative actions.
 - a. Select and use applicable TMs.
 - b. Select and use applicable tools and TMDE.
 - c. Practice shop safety and maintenance discipline.
2. Diagnose the Accumulator Equilibration Assembly faults and determine maintenance action to be performed.
3. Ensure all safety precautions and procedures are followed.
4. Replace defective components, as necessary.
5. Perform final operational test to verify the Accumulator Equilibration Assembly faults have been corrected.
6. Complete The Army Maintenance Management System (TAMMS) forms, as required.

Evaluation Preparation: WARNING: The following safety precautions must be adhered to when performing the tasks listed in this manual: Do not remove a radiator cap or surge tank cap unless the engine is cool. While working on electrical systems, remove all rings, watches, and jewelry. Before working on the exhaust system, make sure it is cool. Disconnect the negative battery cable prior to performing any electrical system maintenance or when performing repairs in the locality of electrical components. When working around engines that are operating, wear hearing protection. When removing components over 75 pounds, two personnel are required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Performed administrative actions. <ol style="list-style-type: none"> a. Selected and used applicable TMs. b. Selected and used applicable tools and TMDE. c. Practiced shop safety and maintenance discipline. 	_____	_____
2. Diagnosed the Accumulator Equilibration Assembly faults and determined maintenance action to be performed.	_____	_____
3. Ensured all safety precautions and procedures were followed.	_____	_____
4. Replaced defective components, as necessary.	_____	_____

Performance Measures	<u>GO</u>	<u>NO-GO</u>
5. Performed final operational test to verify the Accumulator Equilibration Assembly faults had been corrected.	_____	_____
6. Completed The Army Maintenance Management System (TAMMS) forms, as required.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

- DA FORM 5988-E
- SC 9999-01-SKO
- TM 750-116
- TM 9-2350-311-10
- TM 9-2350-311-20-2
- TM 9-2350-314-10
- TM 9-2350-314-20-2-1
- TM 9-2350-314-20-2-2
- TM 9-2350-314-24P-2
- TM 9-243
- TM 9-3305

Related

Skill Level 4

Subject Area 6: COMMON LOGISTICS MANAGEMENT TASKS

Perform Senior Rater Responsibilities for a Maintenance Section

091-CLT-4001

Conditions: In a contemporary operational environment (COE) given a noncommissioned officer evaluation report (NCOER) with the rater's portion completed, accompanying counseling statements, and Army regulation (AR) 623-3.

Standards: Perform senior rater's responsibilities in accordance with applicable references.

Performance Steps

1. Ensure all materials and references were available.
2. Review quarterly counseling that supported the NCOER.
3. Review the administrative data and rater's portions of the NCOER for accuracy and content.
4. Prepare the senior rater's portion of the NCOER.
5. Submit the NCOER for review and further processing.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ensured all materials and references were available.	—	—
2. Reviewed quarterly counseling that supported the NCOER.	—	—
3. Reviewed the administrative data and rater's portions of the NCOER for accuracy and content.	—	—
4. Prepared the senior rater's portion of the NCOER.	—	—
5. Submitted the NCOER for review and further processing.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AR 623-3	

**Supervise Platoon/Section Administrative Procedures
091-CLT-4002**

Conditions: In a contemporary operational environment (COE) given Army regulation (AR) 25-400-2, AR 600-8-2, AR 614-200, AR 635-200, situation(s) requiring platoon/section administrative procedures supervision and applicable forms, records, and publications.

Standards: Supervise platoon or section administrative procedures in accordance with applicable references.

Performance Steps

1. Establish files using the Army Records Information Management System (ARIMS).
 - a. Prepare file folders and guides.
 - b. Arrange file folders and guides.
 - c. Prepare file drawer labels.
 - d. Prepare a list of file numbers.
2. Process a recommendation for award.
3. Process and update a flag on records.
4. Verify the accuracy of Suspension of Favorable Action Report.
5. Process and update a bar to reenlistment.
6. Process a chapter action.
 - a. Select appropriate type of chapter action and identify separation guidelines.
 - b. Initiate and follow up on the chapter action.
7. Process a recommendation for advancement/promotion.
8. Verify accuracy of Enlisted Promotion Report (AAC-C01).
9. Assist a subordinate noncommissioned officer (NCO) who had received notice of selection to be released under the Qualitative Management Program (QMP).

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Established files using the Army Records Information Management System (ARIMS). <ol style="list-style-type: none"> a. Prepared file folders and guides. b. Arranged file folders and guides. c. Prepared file drawer labels. d. Prepared a list of file numbers. 	_____	_____
2. Processed a recommendation for award.	_____	_____
3. Processed and updated a flag on records.	_____	_____
4. Verified the accuracy of Suspension of Favorable Action Report.	_____	_____
5. Processed and updated a bar to reenlistment.	_____	_____
6. Processed a chapter action. <ol style="list-style-type: none"> a. Selected appropriate type of chapter action and identified separation guidelines. b. Initiated and followed up on the chapter action. 	_____	_____
7. Processed a recommendation for advancement/promotion.	_____	_____

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
8. Verified accuracy of Enlisted Promotion Report (AAC-C01).	—	—
9. Assisted a subordinate noncommissioned officer (NCO) who had received notice of selection to be released under the Qualitative Management Program (QMP).	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

- Required**
 AR 25-400-2
 AR 600-8-2
 AR 614-200
 AR 635-200

Related

Manage Combat Stress
091-CLT-4003

Conditions: In a contemporary operational environment (COE) given a situation requiring stress management and Field Manual (FM) 6-22.5.

Standards: Manage combat stress in accordance with applicable reference.

Performance Steps

1. Identify sources of combat stress.
2. Identify the signs and classifications of battle fatigue.
3. Identify signs of stress in self, others, and the unit.
4. Take appropriate steps to reduce and/or prevent stress.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Identified sources of combat stress.	—	—
2. Identified the signs and classifications of battle fatigue.	—	—
3. Identified signs of stress in self, others, and the unit.	—	—
4. Took appropriate steps to reduce and/or prevent stress.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 6-22.5

Related

**Coordinate Support for the Maintenance Platoon/Section
091-CLT-4006**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, an operation order (OPORD)/maintenance situation, a maintenance platoon or section with personnel and equipment, standing operating procedure (SOP), and applicable references.

Standards: Coordinate support for the maintenance platoon or section in accordance with SOP and applicable references.

Performance Steps

1. Evaluate the tactical situation and OPORD requirements.
2. Determine support needed at each location.
3. Notify parent and support units of support requirements.
4. Follow up to ensure support had been coordinated and was being provided.
 - a. Notify appropriate parent and support units to resolve any problems.
 - b. Address problems in After Action Review (AAR).

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Evaluated the tactical situation and OPORD requirements.	—	—
2. Determined support needed at each location.	—	—
3. Notified parent and supported units of support requirements.	—	—
4. Followed up to ensure support had been coordinated and was being provided. <ol style="list-style-type: none"> a. Notified appropriate parent and supported units to resolve any problems. b. Addressed problems in After Action Review (AAR). 	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 4-30.3

Related

**Integrate Automated Logistics Support Systems
091-CLT-4010**

Conditions: In a contemporary operational environment (COE) given a Unit Level Logistics System-Ground (ULLS-G) computer system with software and equipment data base in a unit-level maintenance shop, a Standard Army Maintenance System-1 (SAMS-1) computer system with software and database in a direct support (DS)-level maintenance shop, a Standard Army Maintenance System-2 (SAMS-2) computer system with software and data base in a support operations section, Automated Information Systems Manual (AISM)-25-L21-AHN-ZZZ-EM, AISM-25-L26-AHO-ZZZ-EM, Army Regulation (AR) 710-2, Department of the Army (DA) Pamphlet 710-2-1, DA Pamphlet 750-8, and applicable publications.

Standards: Integrate automated logistics support systems in a maintenance shop in accordance with applicable references.

Performance Steps

1. Identify the architecture and interface of Army automated logistics systems.
2. Supervise ULLS-G functions in a unit level maintenance shop.
3. Supervise SAMS-1 functions in a DS level maintenance shop.
4. Supervise SAMS-2 functions in a support operations section.
5. Interface with Standard Army Retail Supply System-Objective (SARSS-O) for supply functions.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Identified the architecture and interface of Army automated logistics systems.	_____	_____
2. Supervised ULLS-G functions in a unit level maintenance shop.	_____	_____
3. Supervised SAMS-1 functions in a DS level maintenance shop.	_____	_____
4. Supervised SAMS-2 functions in a support operations section.	_____	_____
5. Interfaced with Standard Army Retail Supply System-Objective (SARSS-O) for supply functions.	_____	_____

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
AISM-25-L26-AHO-ZZZ-EM	
AR 710-2	
DA PAM 710-2-1	
DA PAM 750-8	

**Plan Logistics Support for Maintenance Operations
091-CLT-4011**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, an operation order (OPORD)/maintenance situation, maintenance personnel and equipment, and applicable references.

Standards: Plan logistics support for maintenance operations in accordance with applicable references.

Performance Steps

1. Assess the combat situation.
2. Determine support needed.
 - a. People (skills and numbers).
 - b. Equipment (transportation, tools, test, measurement, and diagnostic equipment [TMDE], and communications).
 - c. Supplies (components, assemblies, and repair parts).
3. Organize resources to provide needed support.
4. Follow these planning considerations:
 - a. Number and type of units supported.
 - b. Stock levels for repair parts.
 - c. Forward displacement of maintenance support teams and maintenance collection points.
 - d. Channels and procedures for recovery, collection, evacuation, and disposition of captured or abandoned materiel.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Assessed the combat situation.	___	___
2. Determined support needed.	___	___
a. People (skills and numbers).		
b. Equipment (transportation, tools, test, measurement, and diagnostic equipment [TMDE], and communications).		
c. Supplies (components, assemblies, and repair parts).		
3. Organized resources to provide needed support.	___	___
4. Followed these planning considerations:	___	___
a. Number and type of units supported.		
b. Stock levels for repair parts.		
c. Forward displacement of maintenance support teams and maintenance collection points.		
d. Channels and procedures for recovery, collection, evacuation, and disposition of captured or abandoned materiel.		

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 4-30.3

Related

**Prepare Standing Operating Procedures for Maintenance Operations
091-CLT-4021**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, higher headquarters standing operating procedure (SOP), and commander's guidance.

Standards: Prepare a maintenance shop internal or external SOP for the commander's review, comment, and approval in accordance with cited references.

Performance Steps

1. Ensure applicable publication was available.
2. Prepare a maintenance shop internal or external SOP.
3. Ensure unit policies and commander's guidance were followed.
4. Ensure shop operation policies were adequately addressed.
5. Update the shop SOP, as required.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ensured applicable publication was available.	—	—
2. Prepared a maintenance shop internal or external SOP.	—	—
3. Ensured unit policies and commander's guidance were followed.	—	—
4. Ensured shop operation policies were adequately addressed.	—	—
5. Updated the shop SOP, as required.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 4-30.3

Related

Supervise the Deployment of Company Maintenance Team/Recovery Support Team/Maintenance Support Team
091-CLT-4022

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 1-02, FM 3-34.170, FM 4-30.3, a request for maintenance support/maintenance situation, map, operational overlay, grid coordinates of destination, vehicle(s), equipment, maintenance personnel, and applicable references.

Standards: Supervise the deployment of company maintenance team and recovery support teams in accordance with the maintenance situation or request for maintenance support and cited reference.

Performance Steps

1. Review the request for maintenance support or maintenance situation.
2. Ensure personnel and equipment were available to perform the mission.
3. Ensure resources for the company maintenance team, recovery support team, and/or maintenance support team, including personnel with applicable MOS, vehicles, tools, test equipment, publications, repair parts, time, and facilities were appropriately identified.
4. Ensure requirements for defending the teams had been properly determined and arranged.
5. Ensure team leaders were briefed on the mission.
 - a. Review the operational overlay.
 - b. Conduct a map reconnaissance of the route and destination.
6. Ensure the company maintenance team, recovery support team, and/or maintenance support team was deployed.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Reviewed the request for maintenance support or maintenance situation.	___	___
2. Ensured personnel and equipment were available to perform the mission.	___	___
3. Ensured resources for the company maintenance team, recovery support team, and/or maintenance support team, including personnel with applicable MOS, vehicles, tools, test equipment, publications, repair parts, time, and facilities were appropriately identified.	___	___
4. Ensured requirements for defending the teams had been properly determined and arranged.	___	___
5. Ensured team leaders were briefed on the mission. <ol style="list-style-type: none"> a. Reviewed the operational overlay. b. Conducted a map reconnaissance of the route and destination. 	___	___
6. Ensured the company maintenance team, recovery support team, and/or maintenance support team was deployed.	___	___

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
 FM 1-02
 FM 3-34.170

Related

References

Required
FM 4-30.3

Related

**Conduct a Route Reconnaissance for a Maintenance Mission
091-CLT-4023**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 3-34.170, FM 4-30.3, a maintenance situation/operation order (OPORD), operational overlay, grid coordinates for a proposed route, map, vehicle with personnel, and applicable references.

Standards: Conduct a route reconnaissance for a given route identifying distances/times, problem areas along the route, possible bypasses or alternate routes, and prepared strip maps in accordance with the maintenance situation/OPORD and applicable references.

Performance Steps

1. Ensure necessary equipment and publications were available.
2. Determine the route to be used for the maintenance mission.
3. Perform a map reconnaissance of the route.
4. Contact units along the route and coordinated passage.
5. Select personnel to conduct the reconnaissance.
6. Conduct a reconnaissance of the route by identifying the following key features.
 - a. Potential problem areas (that is, possible enemy contact, trafficability, and so forth).
 - b. Possible bypasses and alternate routes.
7. Record information on a strip map for use by the maintenance team.
8. Advise the commander or staff officer on use of the route for maintenance missions.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Ensured necessary equipment and publications were available.	—	—
2. Determined the route to be used for the maintenance mission.	—	—
3. Performed a map reconnaissance of the route.	—	—
4. Contacted units along the route and coordinated passage.	—	—
5. Selected personnel to conduct the reconnaissance.	—	—
6. Conducted a reconnaissance of the route by identifying the following key features. <ol style="list-style-type: none"> a. Potential problem areas (that is, possible enemy contact, trafficability, and so forth). b. Possible bypasses and alternate routes. 	—	—
7. Recorded information on a strip map for use by the maintenance team.	—	—
8. Advised the commander or staff officer on use of the route for maintenance missions.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
FM 3-34.170	

References

Required
FM 4-30.3

Related

**Conduct an Area Reconnaissance for a Maintenance Mission
091-CLT-4024**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 3-34.170, FM 4-30.3, a maintenance situation/operation order (OPORD), operational overlay, grid coordinates for a proposed occupation area, map, vehicle with personnel, and applicable references.

Standards: Perform an area reconnaissance, selecting the most appropriate location to establish a maintenance site in accordance with the maintenance situation or OPORD and cited reference.

Performance Steps

1. Ensure necessary equipment and publications were available.
2. Perform a map reconnaissance of the area.
3. Select personnel to conduct the reconnaissance.
4. Conduct a reconnaissance of the area to determine suitability for maintenance operations, accessibility in and out of the site, defensible, and actions required for the safety of personnel and equipment.
5. Advise the commander or staff officer on occupying the area of operations based upon the reconnaissance.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Ensured necessary equipment and publications were available.	—	—
2. Performed a map reconnaissance of the area.	—	—
3. Selected personnel to conduct the reconnaissance.	—	—
4. Conducted a reconnaissance of the area to determine suitability for maintenance operations, accessibility in and out of the site, defensible, and actions required for the safety of personnel and equipment.	—	—
5. Advised the commander or staff officer on occupying the area of operations based upon the reconnaissance.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
FM 3-34.170	
FM 4-30.3	

Manage Battlefield Maintenance Support
091-CLT-4025

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, an operation order (OPORD)/maintenance situation, maintenance personnel, equipment, and applicable references.

Standards: Manage battlefield maintenance support in accordance with cited reference.

Performance Steps

1. Assess the combat situation and organized and prioritized support based on the type of operation.
 - a. Offensive operation.
 - b. Defensive operation.

2. Plan for and execute appropriate maintenance support.
 - a. Identify requirements.
 - b. Identify available resources.
 - (1) Personnel and skills.
 - (2) Publications.
 - (3) Time.
 - (4) Facilities.
 - (5) Test, measurement, and diagnostic equipment (TMDE) and tools.
 - (6) Parts.
 - c. Manage resources for maximum return, with priority on the following:
 - (1) Maintenance support forward.
 - (2) Commander's guidance.
 - (3) Battle damage repair.
 - (4) Controlled exchange.
 - (5) Cannibalization.
 - (6) Evacuation.
 - (7) Recovery.

3. Follow priorities for repair of battle damaged systems.
 - a. Most essential for completion of the immediate mission.
 - b. Least amount of time to repair.
 - c. Repairable, but not in time to continue the immediate mission.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Assessed the combat situation and organized and prioritized support based on the type of operation. <ol style="list-style-type: none"> a. Offensive operation. b. Defensive operation. 	_____	_____
2. Planned for and executed appropriate maintenance support. <ol style="list-style-type: none"> a. Identified requirements. b. Identified available resources. <ol style="list-style-type: none"> (1) Personnel and skills. (2) Publications. (3) Time. (4) Facilities. (5) Test, measurement, and diagnostic equipment (TMDE) and tools. (6) Parts. c. Managed resources for maximum return, with priority on the following: <ol style="list-style-type: none"> (1) Maintenance support forward. (2) Commander's guidance. 	_____	_____

Performance Measures

GO **NO-GO**

- (3) Battle damage repair.
- (4) Controlled exchange.
- (5) Cannibalization.
- (6) Evacuation.
- (7) Recovery.

- 3. Followed priorities for repair of battle damaged systems.
 - a. Most essential for completion of the immediate mission.
 - b. Least amount of time to repair.
 - c. Repairable, but not in time to continue the immediate mission.
 - d. Damaged beyond repair candidate for cannibalization.

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 4-30.3

Related

**Perform Support Operations NCO Duties
091-CLT-4026**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, a position as a support operations maintenance noncommissioned officer (NCO) and applicable references.

Standards: Perform the duties of a support operations maintenance NCO, ensuring that the direct support (DS) maintenance mission is effectively coordinated and integrated within the battalion or support group.

Performance Steps

1. Provide guidance on maintenance priorities within the unit.
2. Set objectives for maintenance shop production.
3. Monitor maintenance shop workflow and status of repair part.
4. Supervise, control, and direct the operation of battalion units for the below.
 - a. DS maintenance.
 - b. Evacuation.
 - c. Repair parts supply.
 - d. Repairable exchange (RX).
 - e. Technical assistance.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Provided guidance on maintenance priorities within the unit.	—	—
2. Set objectives for maintenance shop production.	—	—
3. Monitored maintenance shop workflow and status of repair part requisitions.	—	—
4. Supervised, controlled, and directed the operation of battalion units for the below. <ol style="list-style-type: none"> a. DS maintenance. b. Evacuation. c. Repair parts supply. d. Repairable exchange (RX). e. Technical assistance. 	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required

Related

FM 4-30.3

**Manage Maintenance Operations at a Maintenance Collection Point
091-CLT-4027**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, an operation order (OPORD)/maintenance situation, a maintenance collection point (MCP) site, maintenance personnel and equipment, and applicable references.

Standards: Manage maintenance operations at an MCP in accordance with the OPORD and cited references.

Performance Steps

1. Set up the MCP.
2. Manage flow of equipment for repair.
 - a. Focus efforts toward repairing systems for current battle or start of next battle.
 - b. Fix 4 to 6 hour jobs at unit maintenance collection point (UMCP).
 - c. Evacuate other equipment to brigade MCP or farther rear location.
 - d. Maximize battlefield damage assessment repair (BDAR), cannibalization, and controlled exchange at central MCP.
3. Manage company maintenance teams, recovery support teams, and maintenance support teams held at MCP.
4. Manage Prescribed Load List (PLL) assets for forward combat units.
5. Relocate forward (as necessary) to continue fix-forward support.

Performance Measures	<u>GO</u>	<u>NO-GO</u>
1. Set up the MCP.	—	—
2. Managed flow of equipment for repair. <ol style="list-style-type: none"> a. Focused efforts toward repairing systems for current battle or start of next battle. b. Fixed 4 to 6 hour jobs at unit maintenance collection point (UMCP). c. Evacuated other equipment to brigade MCP or farther rear location. d. Maximized battlefield damage assessment repair (BDAR), cannibalization, and controlled exchange at central MCP. 	—	—
3. Managed company maintenance teams, recovery support teams, and maintenance support teams held at MCP.	—	—
4. Managed Prescribed Load List (PLL) assets for forward combat units.	—	—
5. Relocated forward (as necessary) to continue fix-forward support.	—	—

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required	Related
FM 4-30.3	

**Provide Maintenance Support During Tactical Operations
091-CLT-4028**

Conditions: In a contemporary operational environment (COE) given Field Manual (FM) 4-30.3, an operation order (OPORD)/maintenance situation, maintenance personnel and equipment, and applicable references.

Standards: Provide maintenance support during tactical operations in accordance with the OPORD and cited reference.

Performance Steps

1. Provide maintenance support during offensive.
2. Provide maintenance support during defensive.
3. Provide maintenance support during retrograde operations.
4. Provide maintenance support during reconstitution operations.
5. Provide maintenance support during night operations.
6. Provide maintenance support in a chemical, biological, radiological, nuclear (CBRN) environment.
7. Provide maintenance support during stability and support operations (SASO).
 - a. Peace operations.
 - b. Humanitarian operations.
 - c. Disaster relief operations.
8. Provide maintenance support in adverse conditions.
 - a. Desert operations.
 - b. Cold weather operations.
 - c. Jungle operations.
 - d. Mountain operations.
 - e. Urban terrain operations.

Performance Measures

	<u>GO</u>	<u>NO-GO</u>
1. Provided maintenance support during offensive operations.	—	—
2. Provided maintenance support during defensive operations.	—	—
3. Provided maintenance support during retrograde operations.	—	—
4. Provided maintenance support during reconstitution operations.	—	—
5. Provided maintenance support during night operations.	—	—
6. Provided maintenance support in a chemical, biological, radiological, nuclear (CBRN) environment.	—	—
7. Provided maintenance support during stability and support operations (SASO). <ol style="list-style-type: none"> a. Peace operations. b. Humanitarian operations. c. Disaster relief operations. 	—	—
8. Provided maintenance support in adverse conditions. <ol style="list-style-type: none"> a. Desert operations. b. Cold weather operations. c. Jungle operations. 	—	—

Performance Measures**GO** **NO-GO**

- d. Mountain operations.
- e. Urban terrain operations.

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show what was done wrong and how to do it correctly.

References

Required
FM 4-30.3

Related

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CHAPTER 4

Duty Position Tasks

91P – Artillery Mechanic, CMF 91

Major Duties. The artillery mechanic supervises and performs unit maintenance and recovery of all self-propelled field artillery cannon weapon systems. The following are the duties for military occupational specialty (MOS) 91P, skill levels (SLs) 1, 2, 3, and 4:

MOSC 91P10. Soldiers perform the following duties at SL 1:

- Performs unit-level maintenance on automotive, turret, carriage mounted armament, and associated fire control and related systems and components on the M109-series self-propelled Howitzers, M992 Field Artillery Ammunition Carrier (FAAC), and M88A1 Medium Track Recovery Vehicle.
- Maintains diesel power plants/packs, compression ignition engines, and engine fuel systems, air induction systems, exhaust systems, cooling systems, engine starting and charging systems, track hull electrical and hydraulic systems, automatic cross drive transmission assemblies, auxiliary drive assemblies, track vehicle suspension and suspension lock out systems, mechanical/hydraulic steering and braking systems, fire extinguisher/suppression systems and gas particulate filter systems.
- Diagnoses malfunctions.
- Troubleshoots and performs other unit maintenance on carriage-mounted armament, associated fire control, and related systems, and components on all self-propelled field artillery weapon systems.

MOSC 91P20. Soldiers perform the following duties at SL 2:

- Performs duties in preceding skill level.
- Supervises lower grade Soldiers.
- Provides technical guidance to the Soldiers in the accomplishment of their duties.
- Troubleshoots, inspects, and corrects malfunctions in automotive systems, turret, carriage mounted armament, associated fire control systems, and chemical protection subsystems of self-propelled field artillery weapon systems and supporting track vehicles.

MOSC 91P30. Soldiers perform the following duties at SL 3:

- Performs duties in preceding skill levels.
- Supervises lower grade Soldiers.
- Provides technical guidance to the Soldiers in the accomplishment of their duties.
- Performs battlefield damage assessment and repair (BDAR) of track vehicle armament/automotive systems.
- Inspects, troubleshoots, and diagnoses faults in armament and automotive systems of the M109-series howitzer, M992 FAAC, and the M88A1 Medium Track Recovery Vehicle. Supervise recovery operations.

MOSC 91P40. Soldiers perform the following duties at SL 4:

- Performs duties in preceding skill levels.
- Supervises lower grade Soldiers.
- Provides technical guidance to the Soldiers in the accomplishment of their duties.
- Supervises the performance of battlefield damage assessment and repair (BDAR).
- Directs recovery operations.

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APPENDIX A

HANDS-ON EVALUATION (DA FORM 5164-R) INSTRUCTIONS

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 1/2 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 <small>For use of this form, see STP 11-25S14-SM-TG; the proponent agency is TRADOC</small>		DATE 1 April 2008	
TASK TITLE Operate the Winch on a Tracked Recovery Vehicle		TASK NUMBER 091-H8T-2008	
ITEM a	PERFORMANCE STEP TITLE b	SCORE (Check One)	
		PASS c	FAIL d
1.	Selected and use applicable publications	<input checked="" type="checkbox"/> P	<input type="checkbox"/> F
2.	Prepared vehicle for use of hydraulic equipment	<input type="checkbox"/> P	<input checked="" type="checkbox"/> F
3.	Operated main winch	<input checked="" type="checkbox"/> P	<input type="checkbox"/> F
4.	Secured hydraulic equipment, as needed	<input checked="" type="checkbox"/> P	<input type="checkbox"/> F
5.	Followed prescribed safety procedures	<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> P
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
		<input type="checkbox"/> P	<input type="checkbox"/> F
EVALUATOR'S NAME SSG WAYNE GREENE		UNIT	
SOLDIER'S NAME PFC TERRY COOK		STATUS <input type="checkbox"/> GO <input checked="" type="checkbox"/> NO GO	

SAMPLE

DA FORM 5164-R, SEP 85 EDITION OF DEC 82 IS OBSOLETE APD V2.01

Figure A-1. Sample of a Completed DA Form 5164-R

APPENDIX B

FIELD EXPEDIENT SQUAD BOOK (DA FORM 5165-R) INSTRUCTIONS

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 1/2 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 Acronyms & Abbreviations

AA	antiaircraft
AAR	after-action review; after-action report
AC	Active Component
AFCS	Automatic Fire Control System
AFES	Automatic fire extinguishing system
AIMS	automated information systems manual
AP	antipersonnel
APC	armored personnel carrier
app	appendix
APU	Auxiliary Power Unit
AR	Army regulation
AT	annual training
BC	branch code
BD (2)	battlefield damage
BDAR	battle damage assessment and repair
BII	basic issue items
CA	combat arms
CAS	casualty; close air support
chap	chapter
ci	Counterintelligence
CLT (1)	common logistic task
CO	commissioned officer
COEI	components of end item
cont	continued; continuous
CP	Command Post

CS	A chemical agent, tear gas (O-chlorobenzyl-malononitrile)
CTS	contact test set
DA	Department of the Army
DA Form	Department of the Army form
DA PAM	Department of the Army pamphlet
DE	directed energy
DS	direct support
ER	evaluation report
etc.	et cetera
FM	field manual; flare multiunit; force module; frequency-modulated; frequency modulation
FM (1)	field manual
HAZMAT	hazardous material
HE	high explosive
i.e.	that is
Inf	Infantry
L	left
LMTV	light medium tactical vehicle
LO	learning objective
LO (2)	lubrication order
M	meter(s)
MACOM	major Army command
MARKS	Modern Army Record Keeping System
MCP	maintenance collection point
MCSR	Materiel Condition Status Report
MD	military deception
Mech	mechanized
min	minute(s)
mm	millimeter(s)

MOS	military occupational specialty
MP	military police
MS	methyl salicylate
MSS	Manpower Staffing Standards
MTV	medium tactical vehicle
NA	not applicable
NBC	nuclear, biological, and chemical
NCO	noncommissioned officer
NCOER	Noncommissioned Officer Evaluation Report
NMC	non-mission capable
No	number
OER	officer evaluation report
OP	observation post
OPORD	operations order
ORD	operational requirements document
ORF	operational readiness float
P	needs practice; pass; passed; barometric pressure; mean radius of curvature
pam	pamphlet
para	paragraph
PD	points of departure
PDIU	prognostic/diagnostic interface unit
PL	preservative lubricant
PLL	Prescribed Load List
PMCS	preventive maintenance checks and services
POL	petroleum, oils, and lubricants
Pract	Practice
QM	Quartermaster

QMP	Qualitative Management Program
R	right
rad	roentgens
RF	Radio Frequency
RP	rally point; reference point; release point
RPM	revolutions per minute
S	safe
SAM	surface-to-air missile; soft-structural, aluminum, malleable
SAMS	Standard Army Maintenance System
SAMS-1	Standard Army Maintenance System-Level 1
SAMS-2	Standard Army Maintenance System-Level 2
SARSS	Standard Army Retail Supply System
SARSS-O	Standard Army Retail Supply System-Objective
SASO	stability and support operations
SC	supply catalog
sec	second
SKO	sets, kits and outfits
SL	skill level
SM	Soldier's Manual
SOP	standing operating procedure
SP	self propelled; start point; strong point
SPORT	Soldier's Portable On-system Repair Tool
Suppl	supplement
TAMMS	The Army Maintenance Management System
TB	technical bulletin
TBD	to be developed
TC (1)	training circular
TD	Training Development

TM	technical manual
TMDE	test, measurement, and diagnostic equipment
TRADOC	Training and Doctrine Command
U	up
ULLS	Unit Level Logistics System
ULLS-G	Unit Level Logistics System-Ground
UMCP	unit maintenance collection point
US	United States
USA	United States Army
USAMC	United States Army Materiel Command
Z	zulu time (Greenwich Mean Time)

Section II

Terms

Corrosion

The dissolving or eating away of the surface of metal through chemical action, either regularly and slowly as by rusting, or irregularly and rapidly as by pitting and grooving in the interior of boilers.

Duty Position

Duty positions are determined by military occupational specialties (MOSs), which are subdivided into five major skill levels (SLs). These SLs are further subdivided into related individual tasks which identify a Soldier's SL or job.

Duty Position.

Duty positions are determined by military occupational specialties (MOSs), which are subdivided into five major skill levels (SLs). These SLs are further subdivided into related individual tasks which identify a soldier's SL or job.

MOS Training Plan (MTP)

The MTP addresses all skill levels (SL) of an MOS and all duty positions, to include additional skill identifiers (ASI), special qualifications identifiers (SQI), and language identifier codes (LIC), associated with each SL which has unique critical task training requirements. The MTP lists all MOS-specific and shared critical tasks for which the MOS is responsible.

Multimedia

This consists of more than one presentation medium. In training, it is the use of more than one medium to convey the content of instruction. Media available for use may include, but need not be limited to, text, programmed instruction, audio tapes, videotapes, slides, films, television, and computers. Multimedia is also an industry term used to define both presentation and training that is delivered via a multimedia workstation/personal computer. It uses text, graphics, digital audio, animation, and up to full motion digital video. Multimedia is delivered via hard disk, floppy disk, or CD-ROM.

Procedure

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

Soldier's manual (SM)

List critical task summaries for a specific MOS and skill level (SL); provide conditions, standards, and performance measures for each critical task.; and are the base documents for all MOS-specific individual task training and evaluation.

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 30 September 1993
AR 190-51	Security of Unclassified Army Property (Sensitive and Nonsensitive) 30 September 1993
AR 220-1	Army Unit Status Reporting and Force Registration – Consolidated Policies 15 April 2010
AR 25-1	Army Knowledge Management and Information Technology 4 December 2008
AR 25-400-2	The Army Records Information Management System (ARIMS) 2 October 2007
AR 385-10	The Army Safety Program 23 August 2007
AR 600-55	The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing) 18 June 2007
AR 600-8-2	Suspension of Favorable Personnel Actions (Flags) 23 December 2004
AR 614-200	Enlisted Assignments and Utilization Management 26 February 2009
AR 623-3	Evaluation Reporting System 10 August 2007
AR 635-200	Active Duty Enlisted Administrative Separations 6 June 2005
AR 700-138	Army Logistics Readiness and Sustainability 26 February 2004
AR 700-4	Logistics Assistance 14 December 2007
AR 710-2	Supply Policy below the National Level 28 March 2008
AR 725-50	Requisition, Receipt, and Issue System 15 November 1995
AR 735-5	Policies and Procedures for Property Accountability 28 February 2005
AR 750-1	Army Materiel Maintenance Policy 20 September 2007
AR 750-10	Army Modification Program 24 February 2006
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DA Forms are available on the APD web site (www.apd.army.mil).

DA FORM 17	Requisition for Publications and Blank Forms
DA FORM 17-1	Requisition for Publications and Blank Forms (Continuation Sheet)
DA FORM 2028	Recommended Changes to Publications and Blank Forms
DA FORM 2062	Hand Receipt/Annex Number
DA FORM 2404	Equipment Inspection and Maintenance Worksheet
DA FORM 2407	Maintenance Request
DA FORM 4569-1-R	Security Assistance Publication Requisition Code Sheet (LRA)
DA FORM 5164-R	Hands-On Evaluation (LRA)
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DA FORM 5988-E	Equipment Inspection and Maintenance Worksheet

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FM 1-02	Operational Terms and Graphics 21 September 2004
FM 3-25.26	Map Reading and Land Navigation 18 January 2005
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LO 9-2350-256-12	Recovery Vehicle, Full-Track, Medium, M88A1 (NSN 2350-01-122-6826) 28 February 1986
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TB 43-0142	Safety Inspection and Testing of Lifting Devices 28 February 1997
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TM 9-2350-274-BD	Operator's, Unit, Direct Support and General Support Maintenance Battle Damage Assessment and Repair for M109 and M110 Series, Self-Propelled Howitzers and M578 Recovery Vehicle M109A2 Howitzer (NSN 2350-01-031-0586) (EIC: 3EZ) M109A3 Howitzer (2350-01-031-8851) (EIC: 3E2) M109A4 Howitzer (2350-01-277-5770) (EIC: 3E8) M109A5 Howitzer (2350-01-281-1719) (EIC: 3E7) M110A2 Howitzer (2350-01-041-4590) (EIC: 2E3) M578 Recovery Vehicle (2350-00-439-6242) (EIC: 3LA) 31 January 1984

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TM 9-243	Use and Care of Hand Tools and Measuring Tools 1 December 2004
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TM 9-2815-221-34&P	Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Engine, Diesel, Industrial Type Model DJEAM and DJBMA (NSN 2815-01-175-7342) and (2815-00-615-8740) 11 October 1985
TM 9-3305	Principles of Artillery Weapons 4 May 1981
TM 9-6625-2301-14&P	Interactive Electronic Technical Manual (IETM) for Operating Instructions, Field and Sustainment Maintenance Repair Parts List for Soldiers Portable On-System Repair Tool, Test Set, Electronic System AN/PSM-95 (NSN 6625-01-445-0085) Part No. 13580703, and Maintenance Support Device (MSD) 1 April 2009
TM 9-8000	Principles of Automotive Vehicles 25 October 1985
Training Circulars	
TC 43-35	Recovery Training 3 October 1995
TC 9-237	Operator's Circular Welding Theory and Application 7 May 1993

Related Publications

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

Technical Manuals

- TM 11-5820-401-10-1 Operator's Manual for Radio Sets AN/VRC-12 (NSN 5820-00-223-7412), AN/VRC-43 (5820-00-223-7415), AN/VRC-44 (5820-00-223-7417), AN/VRC-45 (5820-00-223-7418), AN/VRC-46 (5820-00-223-7433), AN/VRC-47 (5820-00-223-7434), AN/VRC-48 (5820-00-223-7435), and AN/VRC-49 (5820-00-223-7437); (Used without Intercom Systems) 15 January 1986
- TM 11-5820-401-10-2 Operator's Manual for Radio Sets, AN/VRC-12 (NSN 5820-00-223-7412) (EIC: GCC) AN/VRC-43 (5820-00-223-7415) (EIC: GCD) AN/VRC-44 (5820-00-223-7417) (EIC: GCE) AN/VRC-45 (5820-00-223-7418) (EIC: GCF) AN/VRC-46 (5820-00-223-7433) (EIC: GCG) AN/VRC-47 (5820-00-223-7434) (EIC: GCH) AN/VRC-48 (5820-00-223-7435) (EIC: GCH) AN/VRC-49 (5820-00-223-7437) (EIC: GCK) (Used with an Intercom System) 23 November 1982
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Operator's Instructions Manual for M1083 Series, 5-Ton, 6x6, Medium Tactical Vehicles (MTV) Volume No. 1 of 2 Trk, Car., MTV, M1083 w/Wn (NSN 2320-01-360-1895) (EIC: BT3) w/o Wn (2320-01-354-3386) (EIC: BR2) Trk, Car., MTV, w/Matl Hdlg Eqpt (MHE) M1084 (2320-01-354-3387) (EIC: BR3) Trk, Car., MTV, LWB, M1085 w/Wn (2320-01-360-1897) (EIC: BT5) w/o Wn (2320-01-354-4530) (EIC: BR7) Trk, Car., MTV, LWB, w/Matl Hdlg Eqpt (MHE) M1086 (2320-01-354-4531) (EIC: BR8) Trk, Tractor, MTV, M1088 w/Wn (2320-01-360-1892) (EIC: BTY) w/o Wn (2320-01-355-4332) (EIC: BTJ) Trk, Wkr, MTV, M1089 (2320-01-354-4528) (EIC: BR4) Trk, Dump, MTV, M1090 w/Wn (2320-01-360-1893) (EIC: BTZ) w/o Wn (2320-01-354-4529) (EIC: BR5) Trk, Chas, MTV, M1092 (2320-01-354-3382) (EIC: BRZ) Trk, Car., MTV, Air Drop, M1093 w/Wn (2320-01-360-1896) (EIC: BT4) w/o Wn (2320-01-355-3063) (EIC: BR9) Trk, Dump, MTV, Air Drop, M1094 w/Wn (2320-01-360-1894) (EIC: BT2) w/o Wn (2320-01-355-3062) (EIC: BTK) Trk, Chas, MTV, LWB, M1096 (2320-01-354-4527) (EIC: BR6) 15 September 1998

TM 9-2320-366-10-2

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By order of the Secretary of the Army:

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