## **STP 9-63D14-SM-TG**

# SOLDIER'S MANUAL AND TRAINER'S GUIDE

ARTILLERY MECHANIC

MOS 63D

SKILL LEVELS 1, 2, 3, AND 4

#### **AUGUST 2004**

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

HEADQUARTERS
DEPARTMENT OF THE ARMY

# This publication is available at Army Knowledge Online <a href="https://www.us.army.mil">www.us.army.mil</a>

SOLDIER TRAINING PUBLICATION No. 9-63D14-SM-TG HEADQUARTERS DEPARTMENT OF THE ARMY Washington, D.C., 31 August 2004

#### **SOLDIER'S MANUAL AND TRAINER'S GUIDE**

#### **MOS 63D**

### **Artillery Mechanic**

#### Skill Levels 1, 2, 3, and 4

#### **CONTENTS**

|            |                                          | <u>PAGE</u> |
|------------|------------------------------------------|-------------|
| PREFACE    |                                          | vii         |
| Chapter 1. | Introduction                             |             |
|            | 1-1. General                             | 1-1         |
|            | 1-2. Task Summaries                      | 1-1         |
|            | 1-3. Soldier's Responsibilities          | 1-2         |
|            | 1-4. NCO Self-Development and the STP    | 1-2         |
|            | 1-5. Commander's Responsibilities        | 1-2         |
|            | 1-6. Trainer's Responsibilities          | 1-3         |
|            | 1-7. Training Support                    | 1-3         |
| Chapter 2. | Training Guide                           | 2-1         |
|            | 2-1. General                             |             |
|            | 2-2. Subject Area Codes                  |             |
|            | 2-3. Duty Position Training Requirements | 2-4         |
|            | 2-4 Critical Tasks List                  | 2-5         |

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

<sup>\*</sup>This publication supersedes STP 9-45D12-SM-TG, 25 March 2001 and STP 9-63D14-SM-TG, 25 March 2001.

|     |                |                                                                                                                        | <u>PAGE</u> |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------|-------------|
| Cha | pter 3. MOS/SI | kill Level Tasks                                                                                                       | 3-1         |
|     |                | Skill Level 1                                                                                                          |             |
|     |                | Subject Area 1: Administrative Tasks                                                                                   |             |
|     |                | Maintain Test, Measurement, and Diagnostic Equipment (TMDE)                                                            |             |
|     | 091-109-0002   | Maintain Assigned Vehicles (PMCS)                                                                                      | 3-2         |
|     |                | Maintain Assigned Tool Kits                                                                                            | 3-3         |
|     | 091-109-0006   | Maintain Equipment Inspection and Maintenance Worksheet (DA Form 2404) and (DA Form 5988-E)                            | 3-4         |
|     |                | Subject Area 2: Technical Tasks (Skill Level 1/2)                                                                      |             |
|     | 091-63D-1001   | Correct Malfunction of the Main Accumulator Nitrogen Precharge Pressure on the M109A6 Track Vehicle                    | 3-5         |
|     | 091-63D-1002   | Correct Malfunction of the Cannon Recoil Systems on the M109A6 Track Vehicle                                           | 3-6         |
|     | 091-63D-1003   | Correct Malfunction of the Loader-Rammer System on the M109A6 Track Vehicle                                            | 3-7         |
|     | 091-63D-1004   | Correct Malfunction of the Traversing Systems on the M109A6 Track Vehicle                                              | 3-8         |
|     | 091-63D-1006   | Correct Malfunction of the Hydraulic Systems on M109A6 Track Vehicle                                                   | 3-9         |
|     | 091-63D-1007   | Correct Malfunction of the Sighting and Fire Control Systems on M109A6 Track Vehicle                                   | 3-10        |
|     | 091-63D-1008   | Correct Malfunction of the Breech Mechanism and the Operating Cam Assembly on M109A6 Track Vehicle                     | 3-11        |
|     | 091-63D-1009   | Correct Malfunction of the Torque Key Assembly on M109A6 Track Vehicle                                                 |             |
|     | 091-63D-1010   | Correct Malfunction of the Automatic Fire Control System on the M109A6 Track Vehicle                                   | 3-13        |
|     | 091-63D-1011   | Correct Malfunction of the Microclimate Conditioning System (MCS) on an M109A6 Track Vehicle                           | 3-14        |
|     | 091-63D-1012   | Correct Malfunction of the Elevating/Equilibrator Systems on the M109A6 Track Vehicle                                  | 3-15        |
|     | 091-63D-1013   | Purge and Charge Fire Control and AFCS Components on the M109A6 Track Vehicle                                          | 3-16        |
|     | 091-63D-1014   | Synchronize the Automatic Fire Control System (AFCS) on the M109A6 Track Vehicle                                       | 3-17        |
|     | 091-63D-1015   | Perform Preventive Maintenance Checks and Services (PMCS) on the M109A6 Track Vehicle                                  |             |
|     | 091-63D-1016   | Correct Malfunction of Diesel Power Plants/Packs on M109A6, M992 Track Vehicles                                        | 3-19        |
|     | 091-63D-1018   | Correct Malfunction of Vehicle Liquid-Cooled Engines on M109A6 and M992 Track Vehicles                                 | 3-21        |
|     | 091-63D-1019   | Correct Malfunction of Compression Ignition Engine Air Induction Systems on M109A6 or M992 Track Vehicles              |             |
|     | 091-63D-1020   | Correct Malfunction of the Auxiliary Power Units on an M992 Track Vehicle                                              |             |
|     |                | Correct Malfunction of Hull Electrical Systems on an M109A6 Track Vehicle                                              |             |
|     |                | Correct Malfunction of Mechanical and Hydraulic Steering/Crossdrive Transmission Assemblies on an M109A6 Track Vehicle |             |
|     | 091-63D-1023   | Correct Malfunction of Suspension Systems on an M109A6 or M992 Track                                                   | 3-28        |

|              |                                                                                             | <u>PAGE</u> |
|--------------|---------------------------------------------------------------------------------------------|-------------|
| 091-63D-1024 | Correct Malfunction of Ammunition Loading Devices on an M992 Track Vehicle                  | 3-30        |
| 091-63D-1025 | Correct Malfunction of Track Vehicles Using Battlefield Damage Assessment and Repair (BDAR) | 3-31        |
| 091-63D-1027 | Correct Malfunction of Fire Extinguisher and Suppression Systems on an M992 Track Vehicle   | 3-33        |
| 091-63D-1028 | Operate and Maintain Test, Measurement, and Diagnostic Equipment (TMDE)                     | 3-34        |
| 091-63D-1030 | Correct Malfunction of Fuel Systems on an M109A6 or M992 Track Vehicle                      | 3-35        |
| 091-63D-1031 | Perform Scheduled Services on the M109A6/M992 Track Vehicle                                 | 3-37        |
| 091-63D-1032 | Maintain Spade Assembly on an M109A6 Track Vehicle                                          | 3-38        |
| 091-63D-1033 | Maintain and Reprogram the Automatic Fire Control System (AFCS) on a Track Vehicle          | 3-39        |
| 091-63D-1034 | Correct Malfunction of the Vehicle Navigation System on the M109A6 Track Vehicle            | 3-41        |
| 091-63D-1035 | Replace Hydraulic Pump on the M109A6 Track Vehicle                                          | 3-42        |
| 091-63D-1036 | Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles                        | 3-43        |
| 091-63D-1037 | Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles                  | 3-45        |
| 091-63D-1038 | Replace Transfer Assembly on the M109A6 and M992 Series Track Vehicles                      | 3-47        |
| 091-63D-1039 | Replace Elevation Mechanism Assembly on the M109A6 Track Vehicle                            | 3-49        |
|              | Replace Drive Assembly Engine Cooling Fan on the M109A6 and M992 Series Track Vehicles      |             |
| 091-63D-1041 | Replace Cylinder Assembly/Rammer on the M109A6 Track Vehicle                                |             |
| 091-63D-1042 | Replace Bellows Assembly (Hydraulic Reservoir) on the M109A6 Track Vehicle                  | 3-53        |
| 091-63D-1043 | Replace Hydraulic Hand Pump on the M109A6 Track Vehicle                                     |             |
|              | Repair No-Back Device (Backlash) on the M109A6 Track Vehicle                                |             |
|              | Replace Traverse Mechanism Assembly on the M109A6 Track Vehicle                             |             |
|              | Subject Area 3: Recovery (ASI-H8 ONLY)                                                      |             |
| 091-H8C-2001 | Locate a Recovery Site                                                                      | 3-57        |
|              | Determine Recovery Methods                                                                  |             |
|              | Operate Tactical Communications Equipment                                                   | 3-59        |
|              | Operate Metal Cutting Equipment                                                             |             |
|              | Maintain Recovery Vehicle Weapons                                                           |             |
|              | Perform Preventive Maintenance Checks and Services on a Tracked Recovery Vehicle            |             |
| 091-H8T-2003 | Use Basic Issue Items Related to Tracked Recovery Vehicle                                   |             |
|              | Drive Tracked Recovery Vehicle                                                              |             |
|              | Operate Auxiliary Power Unit                                                                |             |
|              | Operate the Boom and Hoist Winch on a Tracked Recovery Vehicle                              |             |
|              | Operate the Spade on a Tracked Recovery Vehicle                                             |             |
|              | Operate the Winch on a Tracked Recovery Vehicle                                             |             |
|              | Recover a Mired Tracked Vehicle                                                             |             |
|              | Recover an Overturned Tracked Vehicle                                                       |             |
|              | Lift and Tow a Disabled Vehicle                                                             | 3-71        |

|   |                         |                                                                                      | PAGE  |
|---|-------------------------|--------------------------------------------------------------------------------------|-------|
| 0 | 91-H8T-2012             | Cross Country Tow of a Tracked Vehicle                                               | 3-72  |
| 0 | 91-H8T-2013             | Perform Field Expedient Recovery on a Tracked Vehicle                                | 3-73  |
|   |                         | Skill Level 3                                                                        |       |
|   |                         | Subject Area 4: Common Logistics Tasks                                               |       |
| 0 | 91-CLT-3012             | Interpret a Standard Army Maintenance System (SAMS) Generated                        |       |
|   |                         | Maintenance Report                                                                   |       |
|   |                         | Manage a Shop Safety Program                                                         |       |
|   |                         | Maintain a Publications Library                                                      |       |
|   |                         | Establish Maintenance Facilities                                                     |       |
|   |                         | Assist in Preparing a Standing Operating Procedure                                   |       |
|   |                         | Manage Tool Control Procedures                                                       |       |
|   |                         | Manage Key Control Procedures                                                        |       |
|   |                         | Manage the TMDE Calibration Program                                                  |       |
|   |                         | Recon Terrain/Route                                                                  |       |
|   |                         | Supervise Maintenance Operations                                                     |       |
|   |                         | Interpret Maintenance Operational Overlay                                            |       |
|   |                         | Manage the Unit Level Logistics System (ULLS)                                        |       |
|   |                         | Manage the Unit Army Oil Analysis Program (AOAP)                                     |       |
|   |                         | Deploy Company Maintenance Team/Recovery Support Team                                |       |
| 0 | 91-CLT-3016             | Review the Army Materiel Status System (AMSS) Reports                                | 3-90  |
|   |                         | Subject Area 5: Technical Tasks (Skill Level 3)                                      |       |
| 0 | 91-63D-3048             | Correct Malfunction of the Vehicle Navigation System on the M109A6 Track             | 0.04  |
| 0 | 04 63D 3040             | Vehicle                                                                              |       |
|   |                         | Replace Hydraulic Pump on the M109A6 Track Vehicle                                   |       |
|   |                         | Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles.                | 3-93  |
| U | 91-03D-3051             | Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles           | 3-95  |
| 0 | 91-63D-3052             | Replace Transfer Assembly on the M109A6 and M992 Series Track                        |       |
|   |                         | Vehicles                                                                             | 3-97  |
| 0 | 91-63D-3053             | Replace Elevation Mechanism Assembly on the M109A6 Track Vehicle                     | 3-99  |
| 0 | 91-63D-3054             | Replace Drive Assembly Engine Cooling Fan on the M109A6 and M992                     |       |
|   |                         | Series Track Vehicles                                                                |       |
|   |                         | Replace Cylinder Assembly/Rammer on the M109A6 Track Vehicle                         | 3-103 |
| 0 | 91-63D-3056             | Replace Bellows Assembly (Hydraulic Reservoir) on the M109A6 Track                   | 0.405 |
| 0 | 04 62D 2057             | Vehicle                                                                              |       |
|   |                         | Replace Hydraulic Hand Pump on the M109A6 Track Vehicle                              |       |
|   |                         | Repair No-Back Device (Backlash) on the M109A6 Track Vehicle                         |       |
|   |                         | Replace Traverse Mechanism Assembly on the M109A6 Track Vehicle                      | 3-109 |
| U | 91-03D-3003             | Perform Diagnostic Procedures on the Cannon Recoil System of an M109A6 Track Vehicle | 3-110 |
| 0 | 91-63D-3004             | Perform Diagnostic Procedures on the Traversing System of an M109A6                  | 0 110 |
| 0 | 31-00D-000 <del>1</del> | Track Vehicle                                                                        | 3-112 |
| 0 | 91-63D-3005             | Perform Diagnostic Procedures on the Elevating System of an M109A6                   |       |
|   |                         | Track Vehicle                                                                        | 3-114 |
| 0 | 91-63D-3009             | Perform Diagnostic Procedures on the Hydraulic System of M109A6 and                  |       |
|   |                         | M992 Track Vehicles                                                                  |       |
| 0 | 91-63D-3010             | Perform Diagnostic Procedures on the Sighting and Fire Control System                | 3-118 |

|               |                                                                                                             | <b>PAGE</b> |
|---------------|-------------------------------------------------------------------------------------------------------------|-------------|
| 091-63D-3014  | Perform Diagnostic Procedures on the Fire Extinguisher/Suppression System of M109A6 and M992 Track Vehicles | 3-120       |
| 091-63D-3015  | Perform Diagnostic Procedures on the NBC System of M109A6 and M992 Track Vehicles                           | 3-122       |
| 091-63D-3016  | Perform Diagnostic Procedures on the Fuel System of M109A6 and M992  Track Vehicles                         | 3-124       |
| 091-63D-3018  | Perform Diagnostic Procedures on the Cooling System of M109A6 and M992 Track Vehicles                       | 3-126       |
| 091-63D-3019  | Perform Diagnostic Procedures on the Transmission of M109A6 and M992 Track Vehicles                         | 3-128       |
| 091-63D-3032  | Perform Battlefield Damage Assessment and Repair (BDAR) on a Tracked Vehicle                                | 3-130       |
| 091-63D-3036  | Perform Diagnostic Procedures on the Travel Lock of an M109A6                                               | 3-132       |
| 091-63D-3039  | Perform Diagnostic Procedures on the Automatic Fire Control System (AFCS) of an M109A6 Track Vehicle        | 3-134       |
| 091-63D-3042  | Perform Diagnostic Procedures on the Microclimate Conditioning System of an M109A6 Track Vehicle            | 3-136       |
| 091-63D-3043  | Perform Diagnostic Procedures on the Engine Electrical System of M109A6 and M992 Track Vehicles             | 3-138       |
| 091-63D-3046  | Perform Diagnostic Procedures on Engines of M109A6 and M992 Track Vehicles                                  | 3-140       |
|               | Skill Level 4                                                                                               |             |
|               | Subject Area 6: Common Logistics Management Tasks                                                           |             |
| 091-CLT-4001  | Perform Senior Rater Responsibilities for a Maintenance Section                                             | 3-142       |
|               | Supervise Platoon/Section Administrative Procedures                                                         |             |
| 091-CLT-4003  | Manage Combat Stress                                                                                        | 3-144       |
| 091-CLT-4004  | Ensure Maintenance Operations are in Compliance With the Army Environmental Program                         | 3-145       |
| 091-CLT-4005  | Enforce Compliance With the Shop Safety Program                                                             | 3-146       |
| 091-CLT-4006  | Coordinate Support for the Maintenance Platoon/Section                                                      | 3-147       |
| 091-CLT-4007  | Select a Field Maintenance Site                                                                             | 3-148       |
| 091-CLT-4008  | Prepare an Operational Overlay for Maintenance Operations                                                   | 3-149       |
| 091-CLT-4009  | Control Flow of Work Through the Maintenance Shop                                                           | 3-150       |
| 091-CLT-4010  | Integrate Automated Logistics Support Systems                                                               | 3-151       |
| 091-CLT-4011  | Plan Logistics Support for Maintenance Operations                                                           | 3-152       |
| 091-CLT-4012  | Monitor the Preparation and Disposition of the Army Materiel Status System (AMSS) Reports                   | 3_153       |
| 091-CI T-4013 | Analyze the Prescribed Load List (PLL) Report                                                               |             |
|               | Monitor Quality Control Program                                                                             |             |
|               | Analyze Bench Stock Listing                                                                                 |             |
|               | Analyze Open Work Request Reconciliation Listing                                                            |             |
|               | Analyze Completed Shop Workload Summary                                                                     |             |
|               | Analyze Shop Deadline and Deferred Workload Listing                                                         |             |
|               | Analyze Shop Workload Summary Listing                                                                       |             |
|               | Maintain Property Accountability                                                                            |             |
|               | Prepare Standing Operating Procedures for Maintenance Operations                                            |             |
|               | Supervise the Deployment of Company Maintenance Team/Recovery                                               |             |
|               | Support Team/Maintenance Support Team                                                                       | 3-163       |

|      |              |                                                                 | <u>PAGE</u>  |
|------|--------------|-----------------------------------------------------------------|--------------|
|      | 091-CLT-4023 | Conduct a Route Reconnaissance for a Maintenance Mission        | 3-164        |
|      | 091-CLT-4024 | Conduct an Area Reconnaissance for a Maintenance Mission        | 3-165        |
|      | 091-CLT-4025 | Manage Battlefield Maintenance Support                          | 3-166        |
|      | 091-CLT-4026 | Perform Support Operations NCO Duties                           | 3-167        |
|      | 091-CLT-4027 | Manage Maintenance Operations at a Maintenance Collection Point | 3-168        |
|      | 091-CLT-4028 | Provide Maintenance Support During Tactical Operations          | 3-169        |
| App  | endix A      |                                                                 | A-1          |
| Арр  | endix B      |                                                                 | B-1          |
| Glos | sary         |                                                                 | Glossary-1   |
| Refe | rences       |                                                                 | References-1 |

#### **CHAPTER 1**

#### Introduction

- 1-1. <u>General</u>. This STP identifies individual MOS training requirements for soldiers holding MOS 63D. 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 63D soldiers. Commanders employ two primary methods to evaluate soldier 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. 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 SL. Commanders and trainers will use this soldier's manual and trainer's guide to plan and conduct training and commander's evaluations.

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

- · Identifies subject areas in which soldiers must be trained.
- · Identifies critical tasks for each subject area.
- · Specifies where soldiers are initially trained on each task.
- · Recommends how often each task should be trained to sustain proficiency.
- · Recommends a strategy for cross-training soldiers.
- Recommends a strategy for training soldiers to perform higher-level tasks.

Use this STP along with STP 21-1-SMCT (Soldier's Manual of Common Tasks, Skill Level 1), STP 21-24-SMCT (Soldier's Manual of Common Tasks, Skill Levels 2-4), ARTEPs, FM 25-4 (How to Conduct Training Exercises), FM 25-5 (Training for Mobilization and War), FM 7-0 (Training the Force), and FM 7-1 (Battle Focused Training) to establish effective training plans and programs that integrate soldier, leader, and collective tasks.

- 1-2. <u>Task Summaries</u>. 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 cannot 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. <u>Soldier's Responsibilities</u>. Each soldier is responsible for performing individual tasks identified by the first-line supervisor based on the unit's 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 ACCP. Refer to DA Pamphlet 350-59 (Army Correspondence Course Program Catalog) for detailed eligibility requirements and enrollment information. The catalog is available online through the AIPD web site. The web site offers online enrollment.

1-5. <u>Commander's Responsibilities</u>. 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. <u>Trainer's Responsibilities</u>. 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. 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. Developing effective training is explained in detail in FM 7-0 and FM 7-1.

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 for instructions on how to obtain and fill out a copy of a DA Form 5164-R.

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 instructions on how to obtain and fill out a copy of a DA Form 5165-R. Trainers should work with each soldier until tasks can be performed to specific task summary standards.

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

#### **CHAPTER 2**

#### **Training Guide**

2-1. <u>General</u>. 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 training plan consists of two parts. Each part is designed to assist the commander in preparing a unit training plan that 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 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 skill level, which have different training requirements.
- Subject Area Column. This column lists, by numerical key (see Section I), the subject areas a soldier must be proficient in to perform in that duty position.
- Cross Train Column. This column lists the recommended duty position for which soldiers should be cross-trained.
- **Train-up/Merger Column**. This column lists the corresponding duty position for the next higher skill level or MOSC the soldier will merge into on promotion.

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

- **Subject Area Column**. This column lists the subject area number and title in the same order as Section I, Part One of the 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 soldier training publications standards. If the task is first trained to standard in the unit, the word "Unit" will be in this column. If the task is first trained to standard in the training base, it will identify, by brevity code (ANCOC, BNCOC, and so forth), 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             |  |
| UNIT   | Trained in the Unit                      |  |
| BNCOC  | Basic NCO Course                         |  |
| BTC    | Basic Technical Course                   |  |
| ANCOC  | Advanced NCO Course                      |  |

Figure 2-1. Training Locations

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

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

Figure 2-2. Sustainment Training Frequency Codes

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

#### 2-2. Subject Area Codes.

#### Skill Level 1

- 1 Administrative Tasks
- 2 Technical Tasks (Skill Level 1/2)
- 3 Recovery (ASI-H8 ONLY)

#### Skill Level 3

- 4 Common Logistics Tasks
- 5 Technical Tasks (Skill Level 3)

#### Skill Level 4

6 Common Logistics Management Tasks

#### 2-3. <u>Duty Position Training Requirements</u>.

| 63D CAREER FIELD DUTY POSITIONS                                           |                 |                |                                                                                       |  |  |
|---------------------------------------------------------------------------|-----------------|----------------|---------------------------------------------------------------------------------------|--|--|
| Duty Position                                                             | Subject<br>Area | Cross<br>Train | Train-up/Merger                                                                       |  |  |
|                                                                           | Skil            | Level          | 1                                                                                     |  |  |
| Self-Propelled Field Artillery Systems Mechanic Recovery Vehicle Operator | 1 - 2           | NA             | 63D20/Self-Propelled Field Artillery Systems Mechanic 63D20/Recovery Vehicle Operator |  |  |
|                                                                           | Skil            | Level          |                                                                                       |  |  |
| Self-Propelled Field Artillery Systems Mechanic                           | 1 - 2           | NA             | 63D30/Self-Propelled Field Artillery Systems Mechanic                                 |  |  |
| Recovery Vehicle Operator                                                 |                 |                | 63D30/Recovery Vehicle Supervisor                                                     |  |  |
|                                                                           | Skil            | Level          | 3                                                                                     |  |  |
| Self-Propelled Field Artillery Systems Mechanic                           | 3 - 4           | NA             | 63D40/Self-Propelled Field Artillery Systems<br>Maintenance Supervisor                |  |  |
| 63D30/Recovery Vehicle Supervisor                                         | 01:11           |                |                                                                                       |  |  |
| Skill Level 4                                                             |                 |                |                                                                                       |  |  |
| Self-Propelled Field Artillery Systems Maintenance Supervisor             | 5               | NA             | 63Z50/Mechanical Maintenance Supervisor                                               |  |  |

#### 2-4. Critical Task List.

## MOS TRAINING PLAN 63D14

| Task Number         | Title                                                                                               | Training<br>Location | Sust<br>Tng<br>Freq | Sust<br>Tng SL |
|---------------------|-----------------------------------------------------------------------------------------------------|----------------------|---------------------|----------------|
|                     | Skill Level 1                                                                                       |                      |                     |                |
| Subject Area 1. Add | ministrative Tasks                                                                                  |                      |                     |                |
| 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<br>Worksheet (DA Form 2404) and (DA Form 5988-E)      | AIT                  | SA                  | 1/2            |
| Subject Area 2. Ted | chnical Tasks (Skill Level 1/2)                                                                     |                      |                     |                |
| 091-63D-1001        | Correct Malfunction of the Main Accumulator Nitrogen Precharge Pressure on the M109A6 Track Vehicle | AIT                  | SA                  | 1/2            |
| 091-63D-1002        | Correct Malfunction of the Cannon Recoil Systems on the M109A6 Track Vehicle                        | AIT                  | SA                  | 1/2            |
| 091-63D-1003        | Correct Malfunction of the Loader-Rammer System on the M109A6 Track Vehicle                         | AIT                  | SA                  | 1/2            |
| 091-63D-1004        | Correct Malfunction of the Traversing Systems on the M109A6 Track Vehicle                           | AIT                  | SA                  | 1/2            |
| 091-63D-1006        | Correct Malfunction of the Hydraulic Systems on M109A6 Track Vehicle                                | AIT                  | SA                  | 1/2            |
| 091-63D-1007        | Correct Malfunction of the Sighting and Fire Control Systems on M109A6 Track Vehicle                | AIT                  | QT                  | 1/2            |
| 091-63D-1008        | Correct Malfunction of the Breech Mechanism and the Operating Cam Assembly on M109A6 Track Vehicle  | AIT                  | QT                  | 1/2            |
| 091-63D-1009        | Correct Malfunction of the Torque Key Assembly on M109A6 Track Vehicle                              | AIT                  | QT                  | 1/2            |
| 091-63D-1010        | Correct Malfunction of the Automatic Fire Control System on the M109A6 Track Vehicle                | AIT                  | QT                  | 1/2            |
| 091-63D-1011        | Correct Malfunction of the Microclimate Conditioning System (MCS) on an M109A6 Track Vehicle        | AIT                  | QT                  | 1/2            |
| 091-63D-1012        | Correct Malfunction of the Elevating/Equilibrator Systems on the M109A6 Track Vehicle               | AIT                  | QT                  | 1/2            |
| 091-63D-1013        | Purge and Charge Fire Control and AFCS Components on the M109A6 Track Vehicle                       | AIT                  | QT                  | 1/2            |
| 091-63D-1014        | Synchronize the Automatic Fire Control System (AFCS) on the M109A6 Track Vehicle                    | AIT                  | QT                  | 1/2            |
| 091-63D-1015        | Perform Preventive Maintenance Checks and Services (PMCS) on the M109A6 Track Vehicle               | AIT                  | QT                  | 1/2            |
| 091-63D-1016        | Correct Malfunction of Diesel Power Plants/Packs on M109A6, M992 Track Vehicles                     | AIT                  | QT                  | 1/2            |
| 091-63D-1018        | Correct Malfunction of Vehicle Liquid-Cooled Engines on M109A6 and M992 Track Vehicles              | AIT                  | QT                  | 1/2            |

| Task Number  | Title                                                                                                                        | Training<br>Location | Sust<br>Tng<br>Freq | Sust<br>Tng SL |
|--------------|------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|----------------|
| 091-63D-1019 | Correct Malfunction of Compression Ignition Engine Air Induction Systems on M109A6 or M992 Track Vehicles                    | AIT                  | QT                  | 1/2            |
| 091-63D-1020 | Correct Malfunction of the Auxiliary Power Units on an M992 Track Vehicle                                                    | AIT                  | QT                  | 1/2            |
| 091-63D-1021 | Correct Malfunction of Hull Electrical Systems on an M109A6 Track Vehicle                                                    | AIT                  | QT                  | 1/2            |
| 091-63D-1022 | Correct Malfunction of Mechanical and Hydraulic<br>Steering/Crossdrive Transmission Assemblies on an<br>M109A6 Track Vehicle | AIT                  | QT                  | 1/2            |
| 091-63D-1023 | Correct Malfunction of Suspension Systems on an M109A6 or M992 Track Vehicle                                                 | AIT                  | QT                  | 1/2            |
| 091-63D-1024 | Correct Malfunction of Ammunition Loading Devices on an M992 Track Vehicle                                                   | AIT                  | QT                  | 1/2            |
| 091-63D-1025 | Correct Malfunction of Track Vehicles Using Battlefield Damage Assessment and Repair (BDAR)                                  | AIT                  | SA                  | 1/2            |
| 091-63D-1027 | Correct Malfunction of Fire Extinguisher and Suppression Systems on an M992 Track Vehicle                                    | AIT                  | QT                  | 1/2            |
| 091-63D-1028 | Operate and Maintain Test, Measurement, and Diagnostic Equipment (TMDE)                                                      | AIT                  | AN                  | 1/2            |
| 091-63D-1030 | Correct Malfunction of Fuel Systems on an M109A6 or M992 Track Vehicle                                                       | AIT                  | QT                  | 1/2            |
| 091-63D-1031 | Perform Scheduled Services on the M109A6/M992 Track Vehicle                                                                  | AIT                  | SA                  | 1/2            |
| 091-63D-1032 | Maintain Spade Assembly on an M109A6 Track Vehicle                                                                           | UNIT                 | AN                  | 1/2            |
| 091-63D-1033 | Maintain and Reprogram the Automatic Fire Control System (AFCS) on a Track Vehicle                                           | AIT                  | SA                  | 1/2            |
| 091-63D-1034 | Correct Malfunction of the Vehicle Navigation System on the M109A6 Track Vehicle                                             | AIT                  | SA                  | 1/2            |
| 091-63D-1035 | Replace Hydraulic Pump on the M109A6 Track Vehicle                                                                           | AIT                  | SA                  | 1/2            |
| 091-63D-1036 | Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles                                                         | AIT                  | SA                  | 1/2            |
| 091-63D-1037 | Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles                                                   | AIT                  | SA                  | 1/2            |
| 091-63D-1038 | Replace Transfer Assembly on the M109A6 and M992 Series Track Vehicles                                                       | AIT                  | SA                  | 1/2            |
| 091-63D-1039 | Replace Elevation Mechanism Assembly on the M109A6 Track Vehicle                                                             | AIT                  | SA                  | 1/2            |
| 091-63D-1040 | Replace Drive Assembly Engine Cooling Fan on the M109A6 and M992 Series Track Vehicles                                       | AIT                  | SA                  | 1/2            |
| 091-63D-1041 | Replace Cylinder Assembly/Rammer on the M109A6 Track Vehicle                                                                 | AIT                  | SA                  | 1/2            |
| 091-63D-1042 | Replace Bellows Assembly (Hydraulic Reservoir) on the M109A6 Track Vehicle                                                   | AIT                  | SA                  | 1/2            |
| 091-63D-1043 | Replace Hydraulic Hand Pump on the M109A6 Track Vehicle                                                                      | AIT                  | SA                  | 1/2            |
| 091-63D-1044 | Repair No-Back Device (Backlash) on the M109A6 Track Vehicle                                                                 | AIT                  | SA                  | 1/2            |

| Task Number        | Title                                                                            |        | Sust<br>Tng<br>Freq | Sust<br>Tng SL |
|--------------------|----------------------------------------------------------------------------------|--------|---------------------|----------------|
| 091-63D-1045       | Replace Traverse Mechanism Assembly on the M109A6<br>Track Vehicle               | AIT    | SA                  | 1/2            |
| Subject Area 3. Re | covery (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 | SA                  | 1-2            |
| 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            |
| 091-H8T-2011       | Lift and Tow a Disabled Vehicle                                                  | 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. Co | mmon Logistics Tasks                                                             |        |                     |                |
| 091-CLT-3012       | Interpret a Standard Army Maintenance System (SAMS) Generated Maintenance Report | BNCOC  | AN                  | 3              |
| 091-CLT-3001       | Manage a Shop Safety Program                                                     | BNCOC  | AN                  | 3              |
| 091-CLT-3002       | Maintain a Publications Library                                                  | BNCOC  | AN                  | 3              |
| 091-CLT-3003       | Establish Maintenance Facilities                                                 | BNCOC  | AN                  | 3              |
| 091-CLT-3004       | Assist in Preparing a Standing Operating Procedure                               | BNCOC  | AN                  | 3              |
| 091-CLT-3005       | Manage Tool Control Procedures                                                   | BNCOC  | AN                  | 3              |
| 091-CLT-3006       | Manage Key Control Procedures                                                    | BNCOC  | AN                  | 3              |
| 091-CLT-3007       | Manage the TMDE Calibration Program                                              | BNCOC  | AN                  | 3              |
| 091-CLT-3008       | Recon Terrain/Route                                                              | BNCOC  | AN                  | 3              |
| 091-CLT-3009       | Supervise Maintenance Operations                                                 | BNCOC  | AN                  | 3              |
| 091-CLT-3010       | Interpret Maintenance Operational Overlay                                        | BNCOC  | AN                  | 3              |
| 091-CLT-3013       | Manage the Unit Level Logistics System (ULLS)                                    | BNCOC  | AN                  | 3              |
| 091-CLT-3014       | Manage the Unit Army Oil Analysis Program (AOAP)                                 | BNCOC  | AN                  | 3              |
| 091-CLT-3015       | Deploy Company Maintenance Team/Recovery Support Team                            | BNCOC  | AN                  | 3              |
| 091-CLT-3016       | Review the Army Materiel Status System (AMSS) Reports                            | BNCOC  | AN                  | 3              |

| Task Number         | Title                                                                                                             | Training<br>Location | Sust<br>Tng<br>Freq | Sust<br>Tng SL |
|---------------------|-------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|----------------|
| Subject Area 5. Ted | chnical Tasks (Skill Level 3)                                                                                     | ·                    |                     | ·              |
| 091-63D-3048        | Correct Malfunction of the Vehicle Navigation System on the M109A6 Track Vehicle                                  | BNCOC                | AN                  | 3              |
| 091-63D-3049        | Replace Hydraulic Pump on the M109A6 Track Vehicle                                                                | BNCOC                | AN                  | 3              |
| 091-63D-3050        | Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles                                              | BNCOC                | AN                  | 3              |
| 091-63D-3051        | Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles                                        | BNCOC                | AN                  | 3              |
| 091-63D-3052        | Replace Transfer Assembly on the M109A6 and M992 Series Track Vehicles                                            | BNCOC                | AN                  | 3              |
| 091-63D-3053        | Replace Elevation Mechanism Assembly on the M109A6 Track Vehicle                                                  | BNCOC                | AN                  | 3              |
| 091-63D-3054        | Replace Drive Assembly Engine Cooling Fan on the M109A6 and M992 Series Track Vehicles                            | BNCOC                | AN                  | 3              |
| 091-63D-3055        | Replace Cylinder Assembly/Rammer on the M109A6 Track Vehicle                                                      | BNCOC                | AN                  | 3              |
| 091-63D-3056        | Replace Bellows Assembly (Hydraulic Reservoir) on the M109A6 Track Vehicle                                        | BNCOC                | AN                  | 3              |
| 091-63D-3057        | Replace Hydraulic Hand Pump on the M109A6 Track Vehicle                                                           | BNCOC                | AN                  | 3              |
| 091-63D-3058        | Repair No-Back Device (Backlash) on the M109A6 Track Vehicle                                                      | BNCOC                | AN                  | 3              |
| 091-63D-3059        | Replace Traverse Mechanism Assembly on the M109A6 Track Vehicle                                                   | BNCOC                | AN                  | 3              |
| 091-63D-3003        | Perform Diagnostic Procedures on the Cannon Recoil System of an M109A6 Track Vehicle                              | BNCOC                | QT                  | 3              |
| 091-63D-3004        | Perform Diagnostic Procedures on the Traversing System of an M109A6 Track Vehicle                                 | BNCOC                | QT                  | 3              |
| 091-63D-3005        | Perform Diagnostic Procedures on the Elevating System of an M109A6 Track Vehicle                                  | BNCOC                | QT                  | 3              |
| 091-63D-3009        | Perform Diagnostic Procedures on the Hydraulic System of M109A6 and M992 Track Vehicles                           | BNCOC                | QT                  | 3              |
| 091-63D-3010        | Perform Diagnostic Procedures on the Sighting and Fire Control System                                             | BNCOC                | QT                  | 3              |
| 091-63D-3014        | Perform Diagnostic Procedures on the Fire<br>Extinguisher/Suppression System of M109A6 and M992<br>Track Vehicles | BNCOC                | QT                  | 3              |
| 091-63D-3015        | Perform Diagnostic Procedures on the NBC System of M109A6 and M992 Track Vehicles                                 | BNCOC                | AN                  | 3              |
| 091-63D-3016        | Perform Diagnostic Procedures on the Fuel System of M109A6 and M992 Track Vehicles                                | BNCOC                | QT                  | 3              |
| 091-63D-3018        | Perform Diagnostic Procedures on the Cooling System of M109A6 and M992 Track Vehicles                             | BNCOC                | QT                  | 3              |
| 091-63D-3019        | Perform Diagnostic Procedures on the Transmission of M109A6 and M992 Track Vehicles                               | BNCOC                | AN                  | 3              |
| 091-63D-3032        | Perform Battlefield Damage Assessment and Repair (BDAR) on a Tracked Vehicle                                      | BNCOC                | QT                  | 3              |

| Task Number        | Title                                                                                                     | Training<br>Location | Sust<br>Tng<br>Freq | Sust<br>Tng SL |
|--------------------|-----------------------------------------------------------------------------------------------------------|----------------------|---------------------|----------------|
| 091-63D-3036       | Perform Diagnostic Procedures on the Travel Lock of an M109A6                                             | BNCOC                | QT                  | 3              |
| 091-63D-3039       | Perform Diagnostic Procedures on the Automatic Fire Control System (AFCS) of an M109A6 Track Vehicle      | BNCOC                | QT                  | 3              |
| 091-63D-3042       | Perform Diagnostic Procedures on the Microclimate Conditioning System of an M109A6 Track Vehicle          | BNCOC                | AN                  | 3              |
| 091-63D-3043       | Perform Diagnostic Procedures on the Engine Electrical System of M109A6 and M992 Track Vehicles           | BNCOC                | AN                  | 3              |
| 091-63D-3046       | Perform Diagnostic Procedures on Engines of M109A6 and M992 Track Vehicles                                | BNCOC                | AN                  | 3              |
|                    | Skill Level 4                                                                                             |                      |                     |                |
| Subject Area 6. Co | mmon Logistics Management Tasks                                                                           |                      |                     |                |
| 091-CLT-4001       | Perform Senior Rater Responsibilities for a Maintenance Section                                           | ANCOC                | AN                  | 4              |
| 091-CLT-4002       | Supervise Platoon/Section Administrative Procedures                                                       | ANCOC                | AN                  | 4              |
| 091-CLT-4003       | Manage Combat Stress                                                                                      | ANCOC                | AN                  | 4              |
| 091-CLT-4004       | Ensure Maintenance Operations are in Compliance With the Army Environmental Program                       | ANCOC                | AN                  | 4              |
| 091-CLT-4005       | Enforce Compliance With the Shop Safety Program                                                           | ANCOC                | AN                  | 4              |
| 091-CLT-4006       | Coordinate Support for the Maintenance Platoon/Section                                                    | ANCOC                | AN                  | 4              |
| 091-CLT-4007       | Select a Field Maintenance Site                                                                           | ANCOC                | AN                  | 4              |
| 091-CLT-4008       | Prepare an Operational Overlay for Maintenance Operations                                                 | ANCOC                | AN                  | 4              |
| 091-CLT-4009       | Control Flow of Work Through the Maintenance Shop                                                         | ANCOC                | AN                  | 4              |
| 091-CLT-4010       | Integrate Automated Logistics Support Systems                                                             | ANCOC                | AN                  | 4              |
| 091-CLT-4011       | Plan Logistics Support for Maintenance Operations                                                         | ANCOC                | AN                  | 4              |
| 091-CLT-4012       | Monitor the Preparation and Disposition of the Army Materiel Status System (AMSS) Reports                 | ANCOC                | AN                  | 4              |
| 091-CLT-4013       | Analyze the Prescribed Load List (PLL) Report                                                             | ANCOC                | AN                  | 4              |
| 091-CLT-4014       | Monitor Quality Control Program                                                                           | ANCOC                | AN                  | 4              |
| 091-CLT-4015       | Analyze Bench Stock Listing                                                                               | ANCOC                | AN                  | 4              |
| 091-CLT-4016       | Analyze Open Work Request Reconciliation Listing                                                          | ANCOC                | AN                  | 4              |
| 091-CLT-4017       | Analyze Completed Shop Workload Summary                                                                   | ANCOC                | AN                  | 4              |
| 091-CLT-4018       | Analyze Shop Deadline and Deferred Workload Listing                                                       | ANCOC                | AN                  | 4              |
| 091-CLT-4019       | Analyze Shop Workload Summary Listing                                                                     | ANCOC                | AN                  | 4              |
| 091-CLT-4020       | Maintain Property Accountability                                                                          | ANCOC                | AN                  | 4              |
| 091-CLT-4021       | Prepare Standing Operating Procedures for Maintenance Operations                                          | ANCOC                | AN                  | 4              |
| 091-CLT-4022       | Supervise the Deployment of Company Maintenance<br>Team/Recovery Support Team/Maintenance Support<br>Team | ANCOC                | AN                  | 4              |
| 091-CLT-4023       | Conduct a Route Reconnaissance for a Maintenance Mission                                                  | ANCOC                | AN                  | 4              |
| 091-CLT-4024       | Conduct an Area Reconnaissance for a Maintenance                                                          | ANCOC                | AN                  | 4              |

| Task Number  | Title                                                           | Training<br>Location | Sust<br>Tng<br>Freq | Sust<br>Tng SL |
|--------------|-----------------------------------------------------------------|----------------------|---------------------|----------------|
|              | Mission                                                         |                      |                     |                |
| 091-CLT-4025 | Manage Battlefield Maintenance Support                          | ANCOC                | AN                  | 4              |
| 091-CLT-4026 | Perform Support Operations NCO Duties                           | ANCOC                | AN                  | 4              |
| 091-CLT-4027 | Manage Maintenance Operations at a Maintenance Collection Point | ANCOC                | AN                  | 4              |
| 091-CLT-4028 | Provide Maintenance Support During Tactical Operations          | ANCOC                | 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:** Given applicable TMDE, AR 750-43, TB 43-180, TM 11-6625-3052-14, TM 9-6625-2301-12&P, suitable tools, and suitable cleaning materials.

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

| Perf | Performance Measures                                       |  | NO GO |
|------|------------------------------------------------------------|--|-------|
| 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.                     |  |       |
| 5.   | Cleaned and/or lubricated TMDE, if required.               |  |       |
| 6.   | Properly stored or packaged TMDE after maintenance or use. |  |       |
| 7.   | Maintained the CTS.                                        |  |       |
| 8.   | Completed 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 9-6625-2301-12&P

## Maintain Assigned Vehicles (PMCS) 091-109-0002

**Conditions:** In a field or garrison environment, given an assigned vehicle with applicable technical publications, DA PAM 738-750, and DA Form 5988-E, necessary forms, repair parts or POL products if needed, additional tools and equipment as indicated in the technical manuals, and supervision/assistance.

**Standards:** Maintained assigned vehicle 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 maintenance actions required to be performed by other than assigned vehicle operator had been identified.

| Performance Measures                                   |  | NO GO |
|--------------------------------------------------------|--|-------|
| 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 technical manual. |  |       |
| 5. Annotated actions taken on DA Form 5988-E.          |  |       |
| 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 738-750

## Maintain Assigned Tool Kits 091-109-0003

**Conditions:** Given applicable tool kits, TM 9-243 and other applicable references, DA Form 5988-E, 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 completed, or section chief or supervisor had been notified of shortages.

| Per | Performance Measures                                   |  | NO GO |
|-----|--------------------------------------------------------|--|-------|
| 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

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

**Conditions:** In a garrison or field environment, given required equipment, AR 750-1, DA Form 2404 (Equipment Inspection and Maintenance Worksheet), DA Form 5988-E (Equipment Inspection Maintenance Worksheet), DA PAM 738-750, and DA PAM 750-35.

**Standards:** Applicable forms were inspected and maintained in accordance with DA PAM 738-750 to ensure all required information had been correctly annotated.

| Performance Measures                                    |  | NO GO |
|---------------------------------------------------------|--|-------|
| Selected and used applicable publications.              |  |       |
| 2. Ensured all entries had been completed, as required. |  |       |
| 3. Ensured all entries had been corrected.              |  |       |
| 4. 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 AR 750-1 DA FORM 2404 DA FORM 5988-E DA PAM 738-750 DA PAM 750-35

#### Subject Area 2: Technical Tasks (Skill Level 1/2)

## Correct Malfunction of the Main Accumulator Nitrogen Precharge Pressure on the M109A6 Track Vehicle

#### 091-63D-1001

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a malfunction of the main accumulator nitrogen precharge pressure, 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, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, and supervision/assistance.

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

| Perf | formance Measures                                                                             | <u>GO</u> | NO GO       |
|------|-----------------------------------------------------------------------------------------------|-----------|-------------|
| 1.   | Selected and used applicable technical publications.                                          |           | <del></del> |
| 2.   | Selected and used applicable tools and TMDE.                                                  |           |             |
| 3.   | Practiced shop safety and maintenance discipline.                                             |           |             |
| 4.   | Performed troubleshooting procedures on the main accumulator.                                 |           |             |
| 5.   | Replaced defective components, as necessary.                                                  |           |             |
| 6.   | Purged and charged components, as necessary.                                                  |           |             |
| 7.   | Performed required PMCS.                                                                      |           |             |
| 8.   | Performed a final operational test to verify that main accumulator faults had been corrected. |           |             |
| 9.   | Annotated corrective actions taken on 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.

Related

#### References

TM 9-3305

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

## Correct Malfunction of the Cannon Recoil Systems on the M109A6 Track Vehicle 091-63D-1002

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a loader-rammer system or hydraulic system malfunction, SC 9999-01-SKO, 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, TMDE, replacement parts, and supervision/assistance.

**Standards:** Corrected the malfunctions of the cannon recoil system in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Performance Measures |                                                                                              | <u>GO</u> | NO GO |
|----------------------|----------------------------------------------------------------------------------------------|-----------|-------|
| 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 variable recoil system.                          |           |       |
| 5.                   | Replaced defective components, as necessary.                                                 |           |       |
| 6.                   | Purged and charged components, as necessary.                                                 |           |       |
| 7.                   | Performed required PMCS.                                                                     |           |       |
| 8.                   | Performed a final operational test to verify cannon recoil 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 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

## Correct Malfunction of the Loader-Rammer System on the M109A6 Track Vehicle 091-63D-1003

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a loader-rammer system or hydraulic system malfunction, SC 9999-01-SKO, 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, TMDE, replacement parts, and supervision/assistance.

**Standards:** Corrected the malfunctions of the loader-rammer system in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Perf | ormance Measures                                                                             | <u>GO</u> | NO GO |
|------|----------------------------------------------------------------------------------------------|-----------|-------|
| 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 hydraulic system and loader-rammer system.       |           |       |
| 5.   | Replaced defective components, as necessary.                                                 |           |       |
| 6.   | Performed required PMCS.                                                                     |           |       |
| 7.   | Performed a final operational test to verify loader-rammer system faults had been corrected. |           |       |
| 8.   | Annotated corrective actions taken on 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

TM 9-3305

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

## Correct Malfunction of the Traversing Systems on the M109A6 Track Vehicle 091-63D-1004

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a malfunction in the cannon recoil system, 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, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, and supervision/assistance.

**Standards:** Corrected the malfunctions of the traversing system in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Perf | formance Measures                                                                         | <u>GO</u> | NO GO |
|------|-------------------------------------------------------------------------------------------|-----------|-------|
| 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 traversing system.                            |           |       |
| 5.   | Replaced defective components, as necessary.                                              |           |       |
| 6.   | Performed required PMCS.                                                                  |           |       |
| 7.   | Performed a final operational test to verify traversing system faults 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
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

## Correct Malfunction of the Hydraulic Systems on M109A6 Track Vehicle 091-63D-1006

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a cab hydraulic system malfunction, 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, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, and supervision/assistance.

**Standards:** Corrected the malfunctions of the cab hydraulic system in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Perf | formance Measures                                                                                                                             | <u>GO</u> | NO GO |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 cab hydraulic system. a. Main accumulator. b. Hydraulic pressure switch. c. Power relay solenoid. |           |       |
| 5.   | Replaced defective components, as necessary.  a. Pressure switch.  b. Hydraulic pressure traverse bypass valve and solenoid.                  |           |       |
| 6.   | Serviced primary and/or secondary accumulator.                                                                                                |           |       |
| 7.   | Performed required PMCS.                                                                                                                      |           |       |
| 8.   | Performed a final operational test to verify hydraulic 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 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

## Correct Malfunction of the Sighting and Fire Control Systems on M109A6 Track Vehicle 091-63D-1007

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a sighting and fire control system malfunction, 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, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, and supervision/assistance.

**Standards:** Corrected the malfunctions of the sighting and fire control system in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Performance Measures |                                                                                             | <u>GO</u> | NO GO |
|----------------------|---------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                        |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                           |           |       |
| 4.                   | Operated the gunner's quadrant.                                                             |           |       |
| 5.                   | Performed troubleshooting procedures on the sighting and fire control systems.              |           |       |
| 6.                   | Replaced defective components, as necessary.                                                |           |       |
| 7.                   | Adjusted sight synchronized components, as necessary.                                       |           |       |
| 8.                   | Performed required PMCS.                                                                    |           |       |
| 9.                   | Performed a final operational test to verify fire control system faults had been corrected. |           |       |
| 10.                  | Annotated corrective actions taken on the DA Form 5988-E.                                   |           |       |
| 11.                  | 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

Related

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 0 2250 244 20 2 4

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

## Correct Malfunction of the Breech Mechanism and the Operating Cam Assembly on M109A6 Track Vehicle 091-63D-1008

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a malfunction in the breech mechanism/operating cam assembly or service due, 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, TMDE, replacement parts, and supervision/assistance.

**Standards:** Corrected the malfunctions of the breech mechanism and operating cam assembly in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Performance Measures |                                                                                                                     | <u>GO</u> | NO GO |
|----------------------|---------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                                                |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                                        |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                                                   |           |       |
| 4.                   | Disassembled, serviced, and assembled the breech carrier assembly.                                                  |           |       |
| 5.                   | Adjusted the operating cam.                                                                                         |           |       |
| 6.                   | Performed a final operational test to verify breech mechanism and operating cam assembly faults had been corrected. |           |       |
| 7.                   | Annotated corrective actions taken on the DA Form 5988-E.                                                           |           |       |
| 8.                   | 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

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

Required

#### Related

TM 9-1000-202-14 TM 9-2350-311-10 TM 9-2350-311-20-2

## Correct Malfunction of the Torque Key Assembly on M109A6 Track Vehicle 091-63D-1009

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a torque key assembly malfunction, 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, necessary tools and equipment as indicated in the technical manuals, TMDE, and supervision/assistance.

**Standards:** Corrected the malfunctions of the torque key assembly in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Performance Measures                                                                                              |  | NO GO       |
|-------------------------------------------------------------------------------------------------------------------|--|-------------|
| Selected and used applicable technical publications.                                                              |  | <del></del> |
| 2. Selected and used applicable tools and TMDE.                                                                   |  |             |
| 3. Practiced shop safety and maintenance discipline.                                                              |  |             |
| Serviced torque key.                                                                                              |  |             |
| 5. Adjusted components, as necessary.                                                                             |  |             |
| <ol><li>Performed a final operational test to verify torque key assembly faults had been<br/>corrected.</li></ol> |  |             |
| 7. Annotated corrective actions taken on the DA Form 5988-E.                                                      |  |             |
| 8. 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 9-1000-202-14
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

## Correct Malfunction of the Automatic Fire Control System on the M109A6 Track Vehicle 091-63D-1010

**Conditions:** In a field or garrison environment, given an M109A6 self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a fault in the automatic fire control system, SC 9999-01-SKO, 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, TMDE, and supervision/assistance.

**Standards:** Corrected the malfunctions of the Automatic Fire Control System (AFCS) in accordance with applicable technical publications and returned the M109A6 vehicle to fully mission-capable status.

| Performance Measures |                                                                                               | <u>GO</u> | NO GO |
|----------------------|-----------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                          |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                  |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                             |           |       |
| 4.                   | Placed the AFCS into operation.                                                               |           |       |
| 5.                   | Operated the prognostic/diagnostic interface unit (PDIU).                                     |           |       |
| 6.                   | Performed troubleshooting procedures on the AFCS.                                             |           |       |
| 7.                   | Performed fire control alignment and synchronized the dynamic reference unit with the cannon. |           |       |
| 8.                   | Performed a final operational test to verify AFCS 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 9-2350-314-10
TM 9-2350-314-20-2-1
TM 9-2350-314-24P-2
TM 9-243
TM 9-3305

## Correct Malfunction of the Microclimate Conditioning System (MCS) on an M109A6 Track Vehicle 091-63D-1011

**Conditions:** In a field or garrison environment, given an M109A6 self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating a malfunction in the microclimate conditioning system, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-243, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, and supervision/assistance.

**Standards:** Corrected the malfunctions of the MCS in accordance with applicable technical publications and returned the M109A6 vehicle to fully mission-capable status.

| Performance Measures                                                           |  | NO GO |
|--------------------------------------------------------------------------------|--|-------|
| 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 MCS.                            |  |       |
| 5. Replaced the MCS filters.                                                   |  |       |
| 6. Performed a final operational test to verify MCS faults had been corrected. |  |       |
| 7. Annotated corrective actions taken on the DA Form 5988-E.                   |  |       |
| 8. 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 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-24P-2
TM 9-243

#### Related

TM 9-2350-314-10

#### Correct Malfunction of the Elevating/Equilibrator Systems on the M109A6 Track Vehicle 091-63D-1012

Conditions: In a field or garrison environment, given an M109A6 self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating servicing needed on the elevating/equilibrator systems, 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 technical manuals, TMDE, and supervision/assistance.

Standards: Corrected the malfunctions of the elevating/equilibrator systems by performing service in accordance with applicable technical publications and returned the M109A6 vehicle to fully missioncapable status.

| Performance Measures                                                                                                      |  | NO GO |
|---------------------------------------------------------------------------------------------------------------------------|--|-------|
| Selected and used applicable technical publications.                                                                      |  |       |
| 2. Selected and used applicable tools and TMDE.                                                                           |  |       |
| 3. Practiced shop safety and maintenance discipline.                                                                      |  |       |
| 4. Serviced the elevating/equilibrator systems.                                                                           |  |       |
| <ol><li>Performed a final operational test to ensure elevating/equilibrator systems were<br/>fully operational.</li></ol> |  |       |
| 6. Annotated servicing actions taken on the DA Form 5988-E.                                                               |  |       |
| 7. 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 Related

**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

# Purge and Charge Fire Control and AFCS Components on the M109A6 Track Vehicle 091-63D-1013

**Conditions:** In a field or garrison environment, given a dry nitrogen tank, M109 series vehicle fire control instruments, low pressure purging and charging kit, artillery and turret mechanic tool kit, safety goggles, thread sealer, leak detector, DA Form 5988-E indicating quarterly service is required, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, TM 9-254, TM 750-116, and DA PAM 738-750.

**Standards:** Performed purging and charging procedures of fire control and AFCS components in accordance with applicable technical publications.

| Performance Measures |                                                                                               | <u>GO</u> | NO GO |
|----------------------|-----------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                          |           |       |
| 2.                   | Selected and used proper tools and TMDE.                                                      |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                             |           |       |
| 4.                   | Followed tritium safety procedures.                                                           |           |       |
| 5.                   | Set up purging and charging equipment.                                                        |           |       |
| 6.                   | Purged and charged fire control instruments.                                                  |           |       |
| 7.                   | Performed a final operational test to ensure fire control instruments were fully operational. |           |       |
| 8.                   | Annotated servicing 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
DA PAM 738-750
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 9-2350-314-24P-2
TM 9-254

Related

# Synchronize the Automatic Fire Control System (AFCS) on the M109A6 Track Vehicle 091-63D-1014

**Conditions:** In a field or garrison environment, given an M109A6 self-propelled howitzer, artillery and turret mechanic's tool kit, DA Form 5988-E indicating that fire control alignment and synchronization is required, TM 750-116, TM 9-1000-202-14, TM 9-2350-314-10, TM 9-2350-314-20-2-1, TM 9-3305, TM 9-8000, necessary tools and equipment as indicated in the technical manuals, TMDE, and supervision/assistance.

**Standards:** Performed fire control alignment and synchronization in accordance with applicable technical publications and returned the M109A6 vehicle to fully mission-capable status.

| Performance Measures |                                                                                               | <u>GO</u> | NO GO |
|----------------------|-----------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                          |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                  |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                             |           |       |
| 4.                   | Performed fire control alignment.                                                             |           |       |
| 5.                   | Synchronized the dynamic reference unit with the cannon.                                      |           |       |
| 6.                   | Performed a final operational test to verify the AFCS was synchronized and fully operational. |           |       |
| 7.                   | Annotated actions taken on the DA Form 5988-E.                                                |           |       |
| 8.                   | 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 Related
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

# Perform Preventive Maintenance Checks and Services (PMCS) on the M109A6 Track Vehicle 091-63D-1015

Conditions: In a field or garrison environment, given an M109 series vehicle, applicable technical references (technical manual and lubrication order), 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 9-2350-314-20-2-2, TM 9-2350-314-20-2-2, TM 9-243, TM 9-254, TM 9-3305, artillery and turret mechanic's tool kit, 0-600 foot pound torque wrench, duo-check meter/battery hydrometer, necessary tools and equipment as indicated in the technical manuals, replacement parts, POL products, and supervision/assistance.

**Standards:** Inspected and serviced the M109 series vehicle in accordance with the PMCS table of the applicable technical manual and lubrication order.

Note: See the maintenance allocation chart for exact procedures authorized for each MOS and level of maintenance. When this task was completed, the vehicle or equipment was fully mission-capable or maintenance actions required by other than MOS 63D personnel had been identified.

| Performance Measures                                                                                                                                                                            | <u>GO</u> | NO GO |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| <ol> <li>Selected and used applicable technical references and publications.</li> </ol>                                                                                                         |           |       |
| 2. Selected and used applicable tools and test equipment.                                                                                                                                       |           |       |
| 3. Practiced shop safety and maintenance discipline.                                                                                                                                            |           |       |
| <ol> <li>Performed unit level (-20) inspections in accordance with applicable technical<br/>manual.</li> </ol>                                                                                  |           |       |
| <ol> <li>Performed unit level (-20) scheduled preventive maintenance services, as<br/>indicated in the technical manual and lubrication order and as directed by the<br/>supervisor.</li> </ol> |           |       |
| 6. Completed maintenance forms and records, as required.                                                                                                                                        |           |       |
| 7. Maintained tools and equipment after use.                                                                                                                                                    |           |       |

**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 11-6625-3052-14
TM 750-116
TM 9-1000-202-14
TM 9-2350-311-10
TM 9-2350-311-20-1
TM 9-2350-314-20-2
TM 9-2350-314-20-1-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-2-2
TM 9-2350-314-20-2-1
TM 9-2350-314-20-3-2
TM 9-243
TM 9-254
TM 9-3305

# Correct Malfunction of Diesel Power Plants/Packs on M109A6, M992 Track Vehicles 091-63D-1016

**Conditions:** In a field or garrison environment, given a tracked vehicle, general mechanic's tool kit, necessary tools and equipment as specified in the technical manuals, replacement parts, test measurement and TMDE, DA Form 5988-E indicating a malfunction within the diesel power plant/pack, 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 9-2350-292-20-2, TM 9-2350-292-20-2, TM 9-2350-292-24P, TM 9-2350-293-10, TM 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-2, TM 9-243, TM 9-8000, and supervision/assistance.

**Standards:** Corrected the malfunctions of the diesel power plant/pack in accordance with applicable technical publications and returned the vehicle to fully mission-capable status.

| Perf | ormance Measures                                                                                                                                              | <u>GO</u> | NO GO |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable technical publications.                                                                                                          |           |       |
| 2.   | Selected and used applicable tools and TMDE.                                                                                                                  |           |       |
| 3.   | Practiced shop safety and maintenance discipline.                                                                                                             |           |       |
| 4.   | Removed the diesel power plant/pack.                                                                                                                          |           |       |
| 5.   | Performed troubleshooting procedures on the diesel power plant/pack.                                                                                          |           |       |
| 6.   | Performed engine tests: a. Engine RPM test. b. Power test. c. Fuel supply pressure test. d. Transmission oil pressure test. e. Lubricating oil pressure test. |           |       |
| 7.   | Replaced defective components, as necessary.                                                                                                                  |           |       |
| 8.   | Adjusted the components, as necessary.                                                                                                                        |           |       |
| 9.   | Ground-hopped the power plant/pack and performed the operational test.                                                                                        |           |       |
| 10.  | Reinstalled the diesel power plant/pack.                                                                                                                      |           |       |
| 11.  | Adjusted the components and performed required PMCS.                                                                                                          |           |       |
| 12.  | Performed a final operational test to verify diesel power plant/pack faults had been corrected.                                                               |           |       |
| 13.  | Annotated corrective actions taken on the DA Form 5988-E.                                                                                                     |           |       |
| 14.  | 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.

### Required

DA FORM 5988-E

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 9-2350-292-20-1

TM 9-2350-292-20-2

TM 9-2350-292-24P

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 Vehicle Liquid-Cooled Engines on M109A6 and M992 Track Vehicles 091-63D-1018

**Conditions:** In a field or garrison environment, given an M109 series or M992 series vehicle, general mechanic's tool kit, necessary tools and equipment as specified in the technical manuals, TMDE, replacement parts, DA Form 5988-E indicating a malfunction within the liquid-cooled engine, 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 9-2350-287-20-2, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-1, TM 9-2350-314-20-1-2, and supervision/assistance.

**Standards:** Corrected the malfunctions of the liquid cooled engine in accordance with applicable technical publications and returned the M109 series vehicle to fully mission-capable status.

| Perf | ormance Measures                                                                                        | <u>GO</u> | NO GO |
|------|---------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable technical publications.                                                    |           |       |
| 2.   | Selected and used applicable tools and TMDE.                                                            |           |       |
| 3.   | Practiced shop safety and maintenance discipline.                                                       |           |       |
| 4.   | Removed the power plant/pack.                                                                           |           |       |
| 5.   | Inspected the vehicle liquid-cooled engine.                                                             |           |       |
| 6.   | Replaced defective component, as necessary: a. Engine cooling fan assembly. b. Engine cooling radiator. |           | _     |
| 7.   | Reinstalled the power plant/pack.                                                                       |           |       |
| 8.   | Adjusted components, as necessary.                                                                      |           |       |
| 9.   | Performed required PMCS.                                                                                |           |       |
| 10.  | Performed a final operational test to verify liquid-cooled engine faults had been corrected.            |           |       |
| 11.  | Annotated corrective actions taken on the DA Form 5988-E.                                               |           |       |
| 12.  | 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.

| Required           | Related            |
|--------------------|--------------------|
| DA FORM 5988-E     | SC 9999-01-SKO     |
| LO 9-2350-267-12   | TM 9-2350-274-BD   |
| TM 9-2350-267-10   | TM 9-2350-287-24P  |
| TM 9-2350-267-20   | TM 9-2350-293-20&P |
| TM 9-2350-267-24P  | TM 9-243           |
| TM 9-2350-287-10   | TM 9-8000          |
| TM 9-2350-287-20-1 |                    |
| TM 9-2350-287-20-2 |                    |
| TM 9-2350-293-10   |                    |
| TM 9-2350-293-34&P |                    |

### Required

Related

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

### Correct Malfunction of Compression Ignition Engine Air Induction Systems on M109A6 or M992 Track Vehicles

#### 091-63D-1019

**Conditions:** In a field or garrison environment, given a maintenance request or equipment inspection worksheet describing equipment malfunctions, required tools and test equipment, 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 9-2350-293-20-2, TM 9-2350-293-20-2, TM 9-2350-293-24P, 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 9-2350-314-20-1, TM 9-2350-314-20-1, TM 9-2350-314-20-1, TM 9-2350-314-20-1, TM 9-2350-314-20-2, TM 9-2350-314-20-1, TM 9-2350-314-20-2, TM 9-2350-314-20-1, TM 9-2350-314-20-2, TM 9-2350-314-20-1, TM 9-2350-314-20-2.

**Standards:** Maintained the compression ignition air induction system and replaced or repaired its components in accordance with applicable technical publication procedures and specifications.

Note: See maintenance allocation chart for exact procedures authorized for each MOS and skill level. When this task was completed the vehicle or equipment was fully mission-capable or maintenance actions required to be performed by other than 63D personnel had been identified.

| Perf | Performance Measures                                       |  | NO GO |
|------|------------------------------------------------------------|--|-------|
| 1.   | Selected/used applicable publications.                     |  |       |
| 2.   | Selected/used proper tools/TMDE.                           |  |       |
| 3.   | Practiced shop safety and maintenance discipline.          |  |       |
| 4.   | Described how the system/components operate and function.  |  |       |
| 5.   | Inspected system/components.                               |  |       |
| 6.   | Performed troubleshooting procedures on system/components. |  |       |
| 7.   | Replaced defective components.                             |  |       |
| 8.   | Repaired defective components.                             |  |       |
| 9.   | Adjusted system/components.                                |  |       |
| 10.  | Performed required PMCS.                                   |  |       |
| 11.  | Verified fault had been corrected.                         |  |       |

**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.

| Required           | Related           |
|--------------------|-------------------|
| LO 9-2350-267-12   | SC 9999-01-SKO    |
| TM 9-2350-267-10   | TM 9-2350-287-24P |
| TM 9-2350-267-20   | TM 9-2350-311-10  |
| TM 9-2350-267-24P  | TM 9-243          |
| TM 9-2350-287-10   | TM 9-8000         |
| 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 |                   |

### Required

Related

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 9-2050-014-20-2-

TM 9-2350-314-24P-1

TM 9-2350-314-24P-2

# Correct Malfunction of the Auxiliary Power Units on an M992 Track Vehicle 091-63D-1020

**Conditions:** In a field or garrison environment, given an M88 or M992 series vehicle, general mechanic's tool kit, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, DA Form 5988-E indicating a malfunction within the auxiliary power unit, TM 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-20-1, TM 9-2350-287-20-1, TM 9-2350-293-20-2, TM 9-2350-293-20-1, TM 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, and supervision/assistance.

**Standards:** Corrected the malfunctions of the APU in accordance with applicable technical publications and returned the vehicle to fully mission-capable status.

| Performance Measures |                                                                                                                                  | <u>GO</u> | NO GO |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                                                             |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                                                     |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                                                                |           |       |
| 4.                   | Inspected the APU.                                                                                                               |           |       |
| 5.                   | Performed troubleshooting procedures on the APU: a. Starting circuit. b. Fuel system and fuel circuit. c. APU generator circuit. |           |       |
| 6.                   | Replaced defective APU components, as necessary.                                                                                 |           |       |
| 7.                   | Adjusted components, as necessary.                                                                                               |           |       |
| 8.                   | Performed required PMCS.                                                                                                         |           |       |
| 9.                   | Performed a final operational test to verify APU faults had been corrected.                                                      |           |       |
| 10.                  | Annotated corrective actions taken on the DA Form 5988-E.                                                                        |           |       |
| 11.                  | 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.

| erences            |                    |
|--------------------|--------------------|
| Required           | Related            |
| DA FORM 5988-E     | SC 9999-01-SKO     |
| TM 9-2350-267-10   | TM 9-2350-287-24P  |
| TM 9-2350-267-20   | TM 9-243           |
| TM 9-2350-267-24P  | TM 9-2815-221-34&P |
| TM 9-2350-287-10   | TM 9-8000          |
| 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 |                    |

# Correct Malfunction of Hull Electrical Systems on an M109A6 Track Vehicle 091-63D-1021

**Conditions:** In a field or garrison environment, given a tracked vehicle, general mechanic's tool kit, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, DA Form 5988-E 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:** Corrected the malfunctions of the electrical system in accordance with applicable technical publications and returned the vehicle to fully mission-capable status.

| Performance Measures |                                                                                           | <u>GO</u> | NO GO |
|----------------------|-------------------------------------------------------------------------------------------|-----------|-------|
| 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 electrical system.                            |           |       |
| 5.                   | Isolated the electrical system malfunction.                                               |           |       |
| 6.                   | Replaced defective components, as necessary.                                              |           |       |
| 7.                   | Adjusted the components, as necessary.                                                    |           |       |
| 8.                   | Performed required PMCS.                                                                  |           |       |
| 9.                   | Performed a final operational test to verify electrical system faults had been corrected. |           |       |
| 10.                  | Annotated corrective actions taken on the DA Form 5988-E.                                 |           |       |
| 11.                  | 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

SC 9999-01-SKO

### Correct Malfunction of Mechanical and Hydraulic Steering/Crossdrive Transmission Assemblies on an M109A6 Track Vehicle

#### 091-63D-1022

**Conditions:** In a field or garrison environment, given an M109 series self-propelled howitzer, general mechanic's tool kit, necessary tools and equipment as indicated in the technical manuals, TMDE, replacement parts, DA Form 5988-E indicating a malfunction within the mechanical/hydraulic steering system, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-24P-1, TM 9-2350-314-10, TM 9-2350-314-20-1-2, and supervision/assistance.

**Standards:** Corrected the malfunctions of the mechanical and hydraulic steering system in accordance with applicable technical publications and returned the M109 series howitzer to fully mission-capable status.

| Performance Measures |                                                                                                              | <u>GO</u> | NO GO |
|----------------------|--------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                                         |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                                 |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                                            |           |       |
| 4.                   | Inspected the mechanical and hydraulic steering systems.                                                     |           |       |
| 5.                   | Replaced defective components as necessary.                                                                  |           |       |
| 6.                   | Adjusted the steering and throttle linkages.                                                                 |           |       |
| 7.                   | Performed required PMCS.                                                                                     |           |       |
| 8.                   | Performed a final operational test to verify mechanical/hydraulic steering 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
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

**Related** SC 9999-01-SKO TM 9-243 TM 9-8000

# Correct Malfunction of Suspension Systems on an M109A6 or M992 Track Vehicle 091-63D-1023

**Conditions:** In a field or garrison environment, given a tracked vehicle, general mechanic's tool kit, necessary tools and equipment as indicated in the technical manuals, replacement parts, DA Form 5988-E indicating a malfunction within the suspension system, 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 9-2350-293-20-1, 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, and supervision/assistance.

**Standards:** Corrected the malfunctions of the suspension system in accordance with applicable technical publications and returned the vehicle to fully mission-capable status.

| Performance Measures |                                                                                                | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                           |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                   |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                              |           |       |
| 4.                   | Broke track.                                                                                   |           |       |
| 5.                   | Removed hub, torsion bar, and road wheel arm assembly, as necessary.                           |           |       |
| 6.                   | Serviced hub, torsion bar, and road wheel arm assembly, as necessary.                          |           |       |
| 7.                   | Replaced defective components, as necessary.                                                   |           |       |
| 8.                   | Reinstalled the road wheel arm assembly, torsion bar, and hub.                                 |           |       |
| 9.                   | Reinstalled track and adjust track tension.                                                    |           |       |
| 10.                  | Performed a final operational test to verify track suspension system fault had been corrected. |           |       |
| 11.                  | Annotated corrective actions taken on the DA Form 5988-E.                                      |           |       |
| 12.                  | 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

### Related

SC 9999-01-SKO TM 9-2350-287-24P TM 9-243 TM 9-8000

Related

**Required** TM 9-2350-314-10 TM 9-2350-314-20-1-1 TM 9-2350-314-20-1-2

# Correct Malfunction of Ammunition Loading Devices on an M992 Track Vehicle 091-63D-1024

**Conditions:** In a field or garrison environment, given an M992 series vehicle; general mechanic's tool kit; multimeter; necessary tools and equipment as indicated in the technical manuals; DA Form 5988-E indicating a malfunction within the conveyor assembly; 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 9-2350-293-24P, TM 9-2350-293-20-1, TM 9-2350-293-20-2, and TM 9-2350-293-24P; and supervision/assistance.

**Standards:** Corrected the malfunctions of the ammunition loading device in accordance with applicable technical publications and returned the M992 series vehicle to fully mission-capable status.

| Performance Measures |                                                                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 conveyor: a. Mechanical system. b. Electrical system. c. Hydraulic system. |           |       |
| 5.                   | Replaced defective components, as necessary.                                                                           |           |       |
| 6.                   | Adjusted components, as necessary.                                                                                     |           |       |
| 7.                   | Performed required PMCS.                                                                                               |           |       |
| 8.                   | Performed a final operational test to verify ammunition loading device 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 Related

DA FORM 5988-E SC 9999-01-SKO

TM 9-2350-267-10

TM 9-2350-267-20

TM 9-2350-287-10

TM 9-2350-287-20-1

TM 9-2350-287-20-2

TM 9-2350-287-24P

TM 9-2350-287-24P

TM 9-2350-287-20-2

TM 9-2350-293-10

TM 9-2350-293-34&P

# Correct Malfunction of Track Vehicles Using Battlefield Damage Assessment and Repair (BDAR) 091-63D-1025

**Conditions:** In a field or garrison environment, given an M109 series vehicle or M992 series vehicle; DA Form 5988-E indicating BDAR battle damage assessment and repair are required, or a directive from the commander requesting BDAR be performed; general mechanic's and artillery and turret mechanic's tool kits; DA PAM 738-750, FM 9-43-2, LO 9-2350-267-12, TM 11-6625-3052-14, TM 9-2350-267-10, 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 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-311-20-2, and TM 9-2350-314-20-1-1, TM 9-2350-314-20-2-2, and TM 9-2350-314-24P-1; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed damage, determined necessary BDAR repairs, and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was capable of functioning in a battlefield situation to accomplish the immediate mission until more extensive and permanent repairs could be performed.

| Performance Measures |                                                                                                             | <u>GO</u> | NO GO |
|----------------------|-------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Reviewed work request/commander's directive.                                                                |           |       |
| 2.                   | Ensured applicable technical publications were available.                                                   |           |       |
| 3.                   | Inspected vehicle to diagnose damage.                                                                       |           |       |
| 4.                   | Determined necessary BDAR repairs.                                                                          |           |       |
| 5.                   | Ensured proper tools, TMDE, and equipment were available to perform BDAR repairs.                           |           |       |
| 6.                   | Assigned personnel to assist in BDAR repairs.                                                               |           |       |
| 7.                   | Ensured all safety precautions and procedures were followed.                                                |           |       |
| 8.                   | Ensured task was performed to standard.                                                                     |           |       |
| 9.                   | Conducted an in-process inspection.                                                                         |           |       |
| 10.                  | Performed a final inspection to ensure the vehicle was capable of functioning in a battlefield environment. |           |       |
| 11.                  | Critiqued personnel on performance of task.                                                                 |           |       |
| 12.                  | Ensured maintenance forms were completed, as required.                                                      |           |       |
| 13.                  | Ensured tools and equipment were properly maintained.                                                       |           |       |

**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.

#### Required

DA FORM 5988-E

DA PAM 738-750

FM 9-43-2

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 9-2350-274-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

#### Related

TM 9-1000-202-14

TM 9-243

TM 9-3305

# Correct Malfunction of Fire Extinguisher and Suppression Systems on an M992 Track Vehicle 091-63D-1027

**Conditions:** In a field or garrison environment, given an M992 series vehicle; general mechanic's tool kit; necessary tools and equipment as indicated in the technical manuals; TMDE; replacement parts; DA Form 5988-E indicating a malfunction within the automatic fire extinguisher system; 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, and TM 9-2350-293-20-2, and TM 9-2350-293-20-2, and supervision/assistance.

**Standards:** Corrected the malfunctions of the AFES in accordance with applicable technical publications and returned the M992 series vehicle to fully mission-capable status.

| Perf | ormance Measures                                                                                             | <u>GO</u> | NO GO |
|------|--------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 AFES: a. Engine system. b. Crew system.                          |           |       |
| 5.   | Replaced defective components, as necessary.                                                                 |           |       |
| 6.   | Adjusted components, as necessary.                                                                           |           |       |
| 7.   | Performed required PMCS.                                                                                     |           |       |
| 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.

| erences            |                |
|--------------------|----------------|
| 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 9-2350-287-24P  |                |
| TM 9-2350-293-10   |                |
| TM 9-2350-293-20&P |                |
| TM 9-2350-293-34&P |                |
|                    |                |

# Operate and Maintain Test, Measurement, and Diagnostic Equipment (TMDE) 091-63D-1028

**Conditions:** In a field or garrison environment, given an AN/PSM-45A Multimeter, AN/PSM-80V2 Contact Test Set, soldier's portable on-system repair tool, TM 9-6625-2301-12&P, and related technical manuals.

**Standards:** Performed setup and test procedures and operated TMDE in accordance with applicable technical manuals. Maintained equipment following use.

| Performance Measures                                       |  | NO GO |
|------------------------------------------------------------|--|-------|
| 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 9-6625-2301-12&P TM 11-6625-3052-14

# Correct Malfunction of Fuel Systems on an M109A6 or M992 Track Vehicle 091-63D-1030

**Conditions:** In a field or garrison environment, given a tracked vehicle, general mechanic's tool kit, necessary tools and equipment as indicated in the technical manuals, replacement parts, DA Form 5988-E indicating the mechanical fuel pump is not operating, 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 9-2350-293-20-1, 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 9-2350-314-24P-1, and supervision/assistance.

**Standards:** Corrected the malfunctions of the fuel system in accordance with applicable technical publications and returned the vehicle to fully mission-capable status.

| Performance Measures |                                                                                     | <u>GO</u> | NO GC |
|----------------------|-------------------------------------------------------------------------------------|-----------|-------|
| 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 fuel system.                            |           |       |
| 5.                   | Removed the power plant/pack, if necessary.                                         |           |       |
| 6.                   | Replaced defective fuel system components, as necessary.                            |           |       |
| 7.                   | Reinstalled the power plant, if removed.                                            |           |       |
| 8.                   | Performed required PMCS.                                                            |           |       |
| 9.                   | Performed a final operational test to verify fuel system faults had been corrected. |           |       |
| 10.                  | Annotated corrective actions taken on the DA Form 5988-E.                           |           |       |
| 11.                  | 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 9-2350-267-10    |
| 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 9-2350-311-24P-1 |

**Related** SC 9999-01-SKO TM 9-243 TM 9-8000

Required

Related

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 Scheduled Services on the M109A6/M992 Track Vehicle 091-63D-1031

**Conditions:** In a field or garrison environment, given an M109 series vehicle, DA PAM 738-750, 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 9-2350-314-20-2, T

**Standards:** Inspected and serviced the M109 series vehicle in accordance with the unit-level PMCS table of the applicable technical manual and lubrication order. Annotate necessary maintenance forms and records.

| Performance Measures                                                                                                                                       |  | NO GO |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| Selected and used applicable technical references.                                                                                                         |  |       |
| 2. Selected and used applicable tools and test equipment.                                                                                                  |  |       |
| <ol><li>Performed unit level (-20) inspections in accordance with appropriate technical<br/>manual.</li></ol>                                              |  |       |
| <ol> <li>Performed unit level (-20) scheduled preventive maintenance services as<br/>indicated in the TM and LO, and as directed by supervisor.</li> </ol> |  |       |
| 5. Completed maintenance forms and records, as required.                                                                                                   |  |       |
| 6. Maintained tools and equipment after use.                                                                                                               |  |       |

**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 738-750       |
| 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  |

#### Related

TM 9-1000-202-14 TM 9-2350-311-24P-2 TM 9-243 TM 9-3305 TM 9-8000

# Maintain Spade Assembly on an M109A6 Track Vehicle 091-63D-1032

**Conditions:** In a field or garrison environment, given an M109 series vehicle, general mechanic's tool kit, necessary tools and equipment as indicated in the technical manuals, replacement parts, DA Form 5988-E indicating a malfunction within the spade assemblies, DA PAM 738-750, 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 9-2350-314-24P-1, and supervision/assistance.

**Standards:** Corrected the malfunctions of the spade assemblies in accordance with the technical publications and returned the vehicle to fully mission capable status.

| Performance Measures                                                                                         | <u>GO</u> | NO GC |
|--------------------------------------------------------------------------------------------------------------|-----------|-------|
| Selected and used applicable technical publications.                                                         |           |       |
| 2. Selected and used applicable tools.                                                                       |           |       |
| 3. Practiced shop safety and maintenance discipline.                                                         |           |       |
| 4. Performed troubleshooting procedures on the spade assemblies.                                             |           |       |
| 5. Replaced defective spade assembly components.                                                             |           |       |
| Performed required PMCS.                                                                                     |           |       |
| <ol><li>Performed a final operational test to verify spade assembly faults had been<br/>corrected.</li></ol> |           |       |
| 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

DA PAM 738-750

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

Related

# Maintain and Reprogram the Automatic Fire Control System (AFCS) on a Track Vehicle 091-63D-1033

**Conditions:** In a field or garrison environment, given an M109A6 vehicle, DA Form 5988-E indicating a malfunction of the automatic fire control system, artillery and turret mechanic's tool kit, 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, SC 9999-01-SKO, DA PAM 738-750, tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the AFCS and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | formance Measures                                                                                          | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Reviewed work request.                                                                                     |           |       |
| 2.   | Ensured task was within shop capability/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 AFCS. |           |       |
| 5.   | Performed initial inspection.                                                                              |           |       |
| 6.   | Placed the AFCS into operation.                                                                            |           |       |
| 7.   | Operated the PDIU.                                                                                         |           |       |
| 8.   | Diagnosed AFCS faults and determined maintenance actions to be performed.                                  |           |       |
| 9.   | Identified repair parts and requisitioned, if required.                                                    |           |       |
| 10.  | Assigned personnel to perform task.                                                                        |           |       |
| 11.  | Ensured all safety precautions and procedures were followed.                                               |           |       |
| 12.  | Conducted an in-process inspection.                                                                        |           |       |
| 13.  | Ensured task was performed to standards.                                                                   |           |       |
| 14.  | Performed AFCS fire control alignment.                                                                     |           |       |
| 15.  | Performed a final inspection to ensure the AFCS was fully mission-capable.                                 |           |       |
| 16.  | Critiqued personnel on performance of the task.                                                            |           |       |
| 17.  | Ensured maintenance forms were completed, as required.                                                     |           |       |
| 18.  | Ensured tools and equipment were properly maintained.                                                      |           |       |

**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.

Required

DA FORM 5988-E

DA PAM 738-750

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

# Correct Malfunction of the Vehicle Navigation System on the M109A6 Track Vehicle 091-63D-1034

**Conditions:** In a field or garrison environment, given an M109A6 vehicle, DA Form 5988-E indicating a malfunction of the vehicle navigation system, artillery and turret mechanic's tool kit, TM 11-6625-3052-14, TM 11-6625-3052-24P, 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 9-2350-314-20-1-1, 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 9-3305, related references, tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the vehicle navigation system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                                                     | <u>GO</u> | NO GO |
|----------------------|-----------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                                |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                        |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                                   |           |       |
| 4.                   | Correctly performed troubleshooting procedures on the vehicle navigation system and isolated fault. |           |       |
| 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 11-6625-3052-14 TM 11-6625-3052-24P 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 9-2350-314-20-1-1 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 9-3305

**Related**DA PAM 738-750
SC 9999-01-SKO
TM 9-243

# Replace Hydraulic Pump on the M109A6 Track Vehicle 091-63D-1035

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the hydraulic pump; artillery and turret mechanic's tool kit; TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2; tools, TMDE, and equipment as indicated in the technical manuals; and replacement parts.

**Standards:** Replaced the hydraulic pump and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                   |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.                   | Identified components of the hydraulic system.                         |           |       |
| 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.

| Required             | Related |
|----------------------|---------|
| 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  |         |

# Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles 091-63D-1036

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the engine assembly; artillery and turret mechanic's tool kit; 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 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the engine assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures                                                         |  | NO GO |
|------------------------------------------------------------------------------|--|-------|
| Selected and used applicable technical publications.                         |  |       |
| 2. Selected and used applicable tools and TMDE.                              |  |       |
| 3. Practiced shop safety and maintenance discipline.                         |  |       |
| 4. Identified necessary components to be replaced during engine replacement. |  |       |
| 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.

| Ciclioco             |         |
|----------------------|---------|
| 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 9-2350-314-10     |         |
| TM 9-2350-314-20-1-1 |         |
| TM 9-2350-314-20-1-2 |         |
| TM 9-2350-314-20-2-1 |         |
|                      |         |

Related

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

# Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles 091-63D-1037

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the transmission assembly; artillery and turret mechanic's tool kit; 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 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the transmission assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures                                                             |  | NO GO |
|----------------------------------------------------------------------------------|--|-------|
| Selected and used applicable technical publications.                             |  |       |
| 2. Selected and used applicable tools and TMDE.                                  |  |       |
| 3. Practiced shop safety and maintenance discipline.                             |  |       |
| 4. Identified components necessary for removal in order to replace transmission. |  |       |
| 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.

| erences              |         |
|----------------------|---------|
| 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 9-2350-314-10     |         |
| TM 9-2350-314-20-1-1 |         |
| TM 9-2350-314-20-1-2 |         |
| TM 9-2350-314-20-2-1 |         |
|                      |         |

Related

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

### Replace Transfer Assembly on the M109A6 and M992 Series Track Vehicles 091-63D-1038

Conditions: In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the transfer assembly; artillery and turret mechanic's tool kit; 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 9-2350-287-20-2, 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, TMDE, and equipment as indicated in the technical manuals; and replacement parts.

Standards: Replaced the transfer assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications                    |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.                   | Identified components necessary for transfer replacement.              |           |       |
| 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.

#### Refe

| erences              |                    |
|----------------------|--------------------|
| Required             | Related            |
| DA FORM 5988-E       | TM 9-2350-287-20-1 |
| 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 9-2350-287-20-2   |                    |
| 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 |                    |

References Required TM 9-2350-314-24P-1 TM 9-2350-314-24P-2

Related

# Replace Elevation Mechanism Assembly on the M109A6 Track Vehicle 091-63D-1039

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the elevation mechanism assembly; artillery and turret mechanic's tool kit; 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the elevation mechanism assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                   |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.                   | Identified components of the elevation mechanism system.               |           |       |
| 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.

| Required             | Related |
|----------------------|---------|
| 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  |         |

# Replace Drive Assembly Engine Cooling Fan on the M109A6 and M992 Series Track Vehicles 091-63D-1040

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the drive assembly engine cooling fan; artillery and turret mechanic's tool kit; 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 9-2350-314-20-2-2, TM 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the drive assembly engine cooling fan and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures                                                      | <u>GO</u> | NO GO |
|---------------------------------------------------------------------------|-----------|-------|
| Selected and used applicable technical publications.                      |           |       |
| 2. Selected and used applicable tools and TMDE.                           |           |       |
| 3. Practiced shop safety and maintenance discipline.                      |           |       |
| 4. Identified components of the cooling system.                           |           |       |
| 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.

| erences              |         |
|----------------------|---------|
| 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 9-2350-314-10     |         |
| TM 9-2350-314-20-1-1 |         |
| TM 9-2350-314-20-1-2 |         |
| TM 9-2350-314-20-2-1 |         |

Related

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

### Replace Cylinder Assembly/Rammer on the M109A6 Track Vehicle 091-63D-1041

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the cylinder assembly/rammer; artillery and turret mechanic's tool kit; 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the cylinder assembly/rammer and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                   |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.                   | Identified components of the cylinder rammer assembly.                 |           |       |
| 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 Related
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

### Replace Bellows Assembly (Hydraulic Reservoir) on the M109A6 Track Vehicle 091-63D-1042

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the bellows assembly (hydraulic reservoir); artillery and turret mechanic's tool kit; 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 9-2350-314-24P-1, and TM 9-2350-314-24P-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the bellows assembly (hydraulic reservoir) and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                   |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.                   | Identified components of the hydraulic system.                         |           |       |
| 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 Related
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

### Replace Hydraulic Hand Pump on the M109A6 Track Vehicle 091-63D-1043

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the hydraulic hand pump; artillery and turret mechanic's tool kit; 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, and TM 9-2350-314-24P-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the hydraulic hand pump and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 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 9-2350-314-24P-2

### Related

TM 9-2350-314-24P-1

### Repair No-Back Device (Backlash) on the M109A6 Track Vehicle 091-63D-1044

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the no-back device (backlash); artillery and turret mechanic's tool kit; 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the no-back device and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

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

### Replace Traverse Mechanism Assembly on the M109A6 Track Vehicle 091-63D-1045

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the traverse mechanical assembly; artillery and turret mechanic's tool kit; 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the traverse mechanism assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

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

### Subject Area 3: Recovery (ASI-H8 ONLY)

# Locate a Recovery Site 091-H8C-2001

**Conditions:** In a field or garrison environment, given a representative wheel vehicle (M984 series); required materials; general mechanic's tool kit; and FM 21-31, FM 3-25.26, TM 9-2320-279-10-1, TM 9-2320-279-20-2, and TM 9-2320-279-20-3.

**Standards:** Located 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 Measures |                                                      | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------|-----------|-------|
| 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

Required Related
FM 21-31 TC 43-35
FM 3-25.26
TM 9-2320-279-10-1
TM 9-2320-279-0-2
TM 9-2320-279-20-1
TM 9-2320-279-20-2
TM 9-2320-279-20-3

# Determine Recovery Methods 091-H8C-2002

**Conditions:** In a field or garrison environment, given a representative wheel vehicle (M984 series); required materials; general mechanic's tool kit; and FM 5-125, TC 43-35, TM 9-2320-279-10-1, TM 9-2320-279-20-2, and TM 9-2320-279-20-3.

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

| Performance Measures                       |  | NO GO |
|--------------------------------------------|--|-------|
| Selected and used applicable publications. |  |       |
| 2. Reconnoitered area.                     |  |       |
| 3. Estimated situation.                    |  |       |
| 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.

Related

#### References

Required FM 5-125 TC 43-35 TM 9-2320-279-10-1 TM 9-2320-279-10-2 TM 9-2320-279-20-1 TM 9-2320-279-20-2 TM 9-2320-279-20-3

# Operate Tactical Communications Equipment 091-H8C-2003

**Conditions:** In a field or garrison environment, given a representative wheel vehicle (M984 series); required materials; general mechanic's tool kit; FM 24-35, TM 11-5820-890-10-3, TM 9-2320-279-10-1, TM 9-2320-279-10-2, TM 9-2320-279-20-3, and related references.

**Standards:** Stated the procedures necessary to install, operate, and use correct radio procedures for clear, concise, and secure communications in accordance with applicable publications.

| Performance Measures                                           |  | NO GO |
|----------------------------------------------------------------|--|-------|
| <ol> <li>Selected and used applicable publications.</li> </ol> |  |       |
| 2. Prepared communications equipment for operation.            |  |       |
| 3. Sent tactical communications.                               |  |       |
| 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.

| Required            | Related             |
|---------------------|---------------------|
| FM 24-35            | FM 24-18            |
| TM 11-5820-890-10-3 | TC 43-35            |
| TM 9-2320-279-10-1  | TM 11-5820-401-10-1 |
| TM 9-2320-279-10-2  | TM 11-5820-401-10-2 |
| TM 9-2320-279-20-1  | TM 11-5820-401-10-4 |
| TM 9-2320-279-20-2  | TM 11-5830-340-12   |
| TM 9-2320-279-20-3  |                     |

# Operate Metal Cutting Equipment 091-H8C-2004

**Conditions:** In a field or garrison environment, given a representative wheel vehicle (M984 series); required materials; general mechanic's tool kit; TC 9-237, TM 9-2320-279-10-1, TM 9-2320-279-20-2, and related references.

**Standards:** Set up the oxyacetylene equipment, cut metal, and practiced shop safety in accordance with the procedures in the applicable publications.

| Performance Measures                              |  | NO GO |
|---------------------------------------------------|--|-------|
| 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.

| Required           | Related            |
|--------------------|--------------------|
| TC 9-237           | AR 385-10          |
| TM 9-2320-279-10-1 | AR 750-1           |
| TM 9-2320-279-10-2 | DA PAM 738-750     |
| TM 9-2320-279-20-1 | TC 43-35           |
| TM 9-2320-279-20-2 | TM 9-2320-279-20-3 |
|                    | TM 9-243           |

# Maintain Recovery Vehicle Weapons 091-H8T-2001

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-256-20, 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:** Maintained the M88 series vehicle weapons in accordance with the PMCS table and procedures and specifications of the applicable technical manual.

| Performance Measures |                                                                         | <u>GO</u> | NO GO |
|----------------------|-------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable publications.                              |           |       |
| 2.                   | Used proper safety methods.                                             |           |       |
| 3.                   | Disassembled machine gun.                                               |           |       |
| 4.                   | Checked for broken or missing parts.                                    |           |       |
| 5.                   | Ensured all parts were cleaned and lubricated.                          |           |       |
| 6.                   | Assembled machine gun.                                                  |           |       |
| 7.                   | Set headspace and timing.                                               |           |       |
| 8.                   | Inspected machine gun mount for missing, cracked, or broken parts.      |           |       |
| 9.                   | Ensured launcher tubes were free of rust, dirt, and corrosion.          |           |       |
| 10.                  | Ensured that grenade launcher wiring harness connectors were connected. |           |       |

**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.

| Required            | Related   |
|---------------------|-----------|
| TM 9-2350-256-10    | AR 385-10 |
| TM 9-2350-256-20    | AR 750-1  |
| TM 9-2350-256-24P-1 | AR 750-43 |
| TM 9-2350-256-24P-2 | TM 9-8000 |

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

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series); required materials; general mechanic's tool kit; TM 9-2350-256-10, TM 9-2350-256-20, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, TM 9-2350-292-10, DA Form 2404 or DA Form 5988-E, DA PAM 738-750; and related references.

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

**Standards:** Inspected the M88 series vehicle in accordance with the PMCS table of the applicable technical manual and record deficiencies on DA Form 2404 or DA Form 5988-E in accordance with DA PAM 738-750.

| Performance Measures                                          | <u>GO</u> | NO GO |
|---------------------------------------------------------------|-----------|-------|
| Selected and used applicable publications.                    |           |       |
| 2. Selected and used proper tools/TMDE.                       |           |       |
| 3. Described operation of vehicle systems/subsystems.         |           |       |
| 4. Determined readiness of system components.                 |           |       |
| 5. Identified deficiencies and shortcomings.                  |           |       |
| 6. Corrected shortcomings identified as operator maintenance. |           |       |
| 7. 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.

| Required            | Related   |
|---------------------|-----------|
| DA FORM 2404        | AR 385-10 |
| DA FORM 5988-E      | AR 750-1  |
| DA PAM 738-750      | AR 750-43 |
| TM 9-2350-256-10    | TM 9-243  |
| TM 9-2350-256-20    | TM 9-8000 |
| 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 field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-292-10, TM 9-2350-256-20, 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:** Removed, cleaned, and stored the recovery related COEI and selected BII in accordance with the procedures in TM 9-2350-256-10 and TM 9-2350-292-10.

| Perf | formance Measures                                 | <u>GO</u> | NO GO |
|------|---------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable publications.        |           |       |
| 2.   | Inventoried and determined serviceability of BII. |           |       |
| 3.   | Repaired BII, as required.                        |           |       |
| 4.   | Replaced BII, as required.                        |           |       |
| 5.   | Used BII, as required.                            |           |       |
| 6.   | Serviced BII, as required                         |           |       |
| 7.   | Properly stored BII.                              |           |       |
| 8.   | 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.

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

# Drive Tracked Recovery Vehicle 091-H8T-2004

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-256-20, 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:** Negotiated 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.

| Perf | formance Measures                                                                    | <u>GO</u> | NO GO |
|------|--------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable publications.                                           |           |       |
| 2.   | Performed PMCS.                                                                      |           |       |
| 3.   | Started engine.                                                                      |           |       |
| 4.   | Placed vehicle in motion.                                                            |           |       |
| 5.   | Drove vehicle, maintaining proper engine speed when descending and ascending grades. |           |       |
| 6.   | Drove vehicle in reverse.                                                            |           |       |
| 7.   | Stopped vehicle.                                                                     |           |       |
| 8.   | Parked vehicle.                                                                      |           |       |
| 9.   | Stopped engine (normal and emergency procedures).                                    |           |       |
| 10.  | Completed TAMMS forms, as required.                                                  |           |       |
| 11.  | 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.

| Required            | Related   |
|---------------------|-----------|
| TM 9-2350-256-10    | AR 385-10 |
| TM 9-2350-256-20    | AR 750-1  |
| TM 9-2350-256-24P-1 | AR 750-43 |
| TM 9-2350-256-24P-2 | TM 9-243  |
|                     | TM 9-8000 |

# Operate Auxiliary Power Unit 091-H8T-2005

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-292-10, TM 9-2350-256-20, and related references.

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

**Standards:** Operated the APU and 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.

| Perf | formance Measures                                             | <u>GO</u> | NO GO |
|------|---------------------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable publications.                    |           |       |
| 2.   | Started APU.                                                  |           |       |
| 3.   | Actuated generator switch to charge batteries.                |           |       |
| 4.   | Engaged hydraulic control levers to start refuel/defuel pump. |           |       |
| 5.   | Connected and operated hydraulic equipment.                   |           |       |
| 6.   | Shut down APU.                                                |           |       |
| 7.   | 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.

| Required         | Related             |
|------------------|---------------------|
| TM 9-2350-256-10 | AR 385-10           |
| TM 9-2350-256-20 | AR 750-1            |
| TM 9-2350-292-10 | AR 750-43           |
|                  | TM 9-2350-256-24P-1 |
|                  | TM 9-2350-256-24P-2 |
|                  | TM 9-2350-256-34-1  |
|                  | TM 9-2350-256-34-2  |
|                  | TM 9-243            |
|                  | TM 9-8000           |

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

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-292-10, TM 9-2350-256-20, TM 9-2350-256-34-2, and related references.

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

**Standards:** Rigged and operated the boom on the M88A1/M88A2 track recovery vehicle in accordance with the procedures in TM 9-2350-256-10 or TM 9-2350-292-10.

| Performance Measures                                | <u>GO</u> | NO GO |
|-----------------------------------------------------|-----------|-------|
| Selected and used applicable publications.          |           |       |
| 2. Prepared vehicle for use of hydraulic equipment. |           |       |
| 3. Operated boom.                                   |           |       |
| 4. Operated hoist winch.                            |           |       |
| 5. Secured hydraulic equipment, as required.        |           |       |
| 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.

| Required           | Related             |
|--------------------|---------------------|
| TM 9-2350-256-10   | AR 385-10           |
| TM 9-2350-256-20   | AR 750-1            |
| TM 9-2350-256-34-2 | AR 750-43           |
| TM 9-2350-292-10   | TM 9-2350-256-24P-1 |
|                    | TM 9-2350-256-24P-2 |
|                    | TM 9-2350-256-34-1  |
|                    | TM 9-243            |
|                    | TM 9-8000           |
|                    |                     |

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

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-256-20, 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:** Operated the spade in accordance with applicable technical publication procedures and specifications without injury to personnel or damage to equipment. When this task was completed, the vehicle was fully mission capable, or maintenance actions required to be performed by other than H8 SL 1/2 personnel had been identified.

| Performance Measures                                | <u>GO</u> | NO GO |
|-----------------------------------------------------|-----------|-------|
| Selected and used applicable publications.          |           |       |
| 2. Prepared vehicle for use of hydraulic equipment. |           |       |
| 3. Operated spade.                                  |           |       |
| 4. Secured hydraulic equipment, as required.        |           |       |
| 5. 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.

| Required            | Related   |
|---------------------|-----------|
| TM 9-2350-256-10    | AR 385-10 |
| TM 9-2350-256-20    | AR 750-1  |
| TM 9-2350-256-24P-1 | AR 750-43 |
| TM 9-2350-256-24P-2 | TM 9-243  |
| TM 9-2350-292-10    | TM 9-8000 |

# Operate the Winch on a Tracked Recovery Vehicle 091-H8T-2008

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-256-20, TM 9-2350-256-24P-1, TM 9-2350-256-24P-2, TM 9-2350-256-34-1, TM 9-2350-256-34-2, TM 9-2350-292-10, and related references.

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

**Standards:** Operated 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.

| Pe | rformance Measures                                  | <u>GO</u> | NO GO |
|----|-----------------------------------------------------|-----------|-------|
| •  | Selected and used applicable publications.          |           |       |
| 2  | 2. Prepared vehicle for use of hydraulic equipment. |           |       |
| ;  | 3. Operated main winch.                             |           |       |
| 4  | 4. Secured hydraulic equipment, as required.        |           |       |
| į  | 5. 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.

| Required            | Related   |
|---------------------|-----------|
| TM 9-2350-256-10    | AR 385-10 |
| TM 9-2350-256-20    | AR 750-1  |
| TM 9-2350-256-24P-1 | AR 750-43 |
| TM 9-2350-256-24P-2 | TM 9-243  |
| TM 9-2350-256-34-1  | TM 9-8000 |
| TM 9-2350-256-34-2  |           |
| TM 9-2350-292-10    |           |

# Recover a Mired Tracked Vehicle 091-H8T-2009

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-256-20, TM 9-2350-256-24P-1, TM 9-2350-256-34-1, TM 9-2350-256-34-2, and related references.

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

**Standards:** Accomplished task in accordance with applicable technical manual's procedures and specifications. All safety precautions were observed.

| Performance Measures                                                          | <u>GO</u> | NO GO |
|-------------------------------------------------------------------------------|-----------|-------|
| Selected and used applicable publications.                                    |           |       |
| 2. Determined method of rigging.                                              |           |       |
| 3. Attached cables to the mired vehicle.                                      |           |       |
| 4. Prepared recovery vehicle for recovery operations.                         |           |       |
| 5. Established communications between vehicles.                               |           |       |
| 6. Recovered mired vehicle, ensuring that all safety practices were followed. |           |       |
| 7. Secured recovery 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.

| Required            | Related        |
|---------------------|----------------|
| TM 9-2350-256-10    | AR 385-10      |
| TM 9-2350-256-20    | AR 750-10      |
| TM 9-2350-256-24P-1 | AR 750-43      |
| TM 9-2350-256-24P-2 | DA PAM 738-750 |
| TM 9-2350-256-34-1  | TM 9-243       |
| TM 9-2350-256-34-2  | TM 9-8000      |
|                     |                |

# Recover an Overturned Tracked Vehicle 091-H8T-2010

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-256-20, and related references.

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

**Standards:** Recovered the vehicle from the overturned position in accordance with applicable technical publications.

| Performance Measures                                                               | <u>GO</u> | NO GO |
|------------------------------------------------------------------------------------|-----------|-------|
| Selected and used applicable publications.                                         |           |       |
| 2. Positioned recovery vehicle.                                                    |           |       |
| 3. Attached cables to the overturned vehicle.                                      |           |       |
| 4. Prepared recovery vehicle for recovery operations.                              |           |       |
| 5. Established communications with ground guide.                                   |           |       |
| 6. Recovered overturned vehicle, ensuring that all safety practices were followed. |           |       |
| 7. Secured recovery 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.

| Required         | Related             |
|------------------|---------------------|
| TM 9-2350-256-10 | AR 385-10           |
| TM 9-2350-256-20 | AR 750-1            |
|                  | AR 750-10           |
|                  | AR 750-43           |
|                  | TM 9-2350-256-24P-1 |
|                  | TM 9-2350-256-24P-2 |
|                  | TM 9-2350-256-34-1  |
|                  | TM 9-2350-256-34-2  |

### Lift and Tow a Disabled Vehicle 091-H8T-2011

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, FM 5-125, TM 9-2350-256-10, TM 9-2350-256-20, 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:** Lifted and towed a disabled vehicle in accordance with applicable technical publications, procedures, and specifications.

| Perf | formance Measures                            | <u>GO</u> | NO GO |
|------|----------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable publications.   |           |       |
| 2.   | Determined method for towing.                |           |       |
| 3.   | Prepared vehicle for towing.                 |           |       |
| 4.   | Hooked up vehicle for towing.                |           |       |
| 5.   | Followed prescribed safety procedures.       |           |       |
| 6.   | Established communications between vehicles. |           |       |
| 7.   | Towed vehicle to predetermined site.         |           |       |
| 8.   | Disconnected vehicle.                        |           |       |

**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.

| Required            | Related   |
|---------------------|-----------|
| FM 5-125            | AR 385-10 |
| TM 9-2350-256-10    | AR 750-1  |
| TM 9-2350-256-20    | AR 750-43 |
| TM 9-2350-256-24P-1 | TM 9-243  |
| TM 9-2350-256-24P-2 | TM 9-8000 |

# Cross Country Tow of a Tracked Vehicle 091-H8T-2012

**Conditions:** In a field or garrison environment given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, FM 5-125, TM 9-2350-256-10, and related references.

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

**Standards:** Towed a disabled vehicle to a predetermined location without causing damage to the equipment or injury to personnel in accordance with applicable publications.

| Perf | formance Measures                               | <u>GO</u> | NO GO |
|------|-------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable publications.      |           |       |
| 2.   | Followed prescribed safety procedures.          |           |       |
| 3.   | Positioned recovery vehicle.                    |           |       |
| 4.   | Prepared vehicle for towing.                    |           |       |
| 5.   | Prepared recovery vehicle for towing operation. |           |       |
| 6.   | Attached towing bar to disabled vehicle.        |           |       |
| 7.   | Operated boom.                                  |           |       |
| 8.   | Towed disabled vehicle.                         |           |       |
| 9.   | Disconnected towed vehicle.                     |           |       |
| 10.  | Secured recovery 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.

| Required         | Related   |
|------------------|-----------|
| FM 5-125         | AR 385-10 |
| TM 9-2350-256-10 | AR 750-1  |
|                  | AR 750-43 |
|                  | TM 9-243  |
|                  | TM 9-8000 |

# Perform Field Expedient Recovery on a Tracked Vehicle 091-H8T-2013

**Conditions:** In a field or garrison environment, given a representative track vehicle (M88 series), required materials, general mechanic's tool kit, TM 9-2350-256-10, TM 9-2350-256-20, and related references.

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

**Standards:** Recovered the vehicle using self/field expedient procedures in accordance with applicable technical publications.

| Performance Measures                                           | <u>GO</u> | NO GO |
|----------------------------------------------------------------|-----------|-------|
| Selected and used applicable publications.                     |           |       |
| 2. Determined method of field expedient recovery.              |           |       |
| 3. Prepared vehicle for field expedient recovery, as required. |           |       |
| 4. Performed vehicle field expedient recovery.                 |           |       |
| 5. Secured recovery 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.

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

### Skill Level 3

### Subject Area 4: Common Logistics Tasks

# Interpret a Standard Army Maintenance System (SAMS) Generated Maintenance Report 091-CLT-3012

**Conditions:** In a field or garrison environment, given a computer system with SAMS-1 software, database of equipment files, SAMS operator, AISM 18-L21-AHN-BUR-UM, AISM 18-L26-AHO-BUR-EM, DA Form 2407, and DA PAM 738-750.

**Standards:** Supervised SAMS-1 functions of a direct support level maintenance shop in accordance with applicable references.

| Performance Measures                                                                                                                                                                                                                                                                                                                                            | <u>GO</u> | NO GO |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1. Ensured necessary equipment and publications were available.                                                                                                                                                                                                                                                                                                 |           |       |
| 2. Ensured SAMS operator was adequately trained.                                                                                                                                                                                                                                                                                                                |           |       |
| <ol><li>Reviewed the SAMS-1 system and the flow of information to and from system<br/>interfaces.</li></ol>                                                                                                                                                                                                                                                     |           |       |
| 4. Reviewed the purpose and use of SAMS-1 categories and codes.                                                                                                                                                                                                                                                                                                 |           |       |
| 5. Supervised the processing of maintenance requests (DA Form 2407).                                                                                                                                                                                                                                                                                            |           |       |
| <ul> <li>6. Interpreted SAMS-1 reports to identify maintenance trends and problems.</li> <li>a. Bench stock listing (AHN-023).</li> <li>b. Shop section summary (AHN-006).</li> <li>c. Work order detail (AHN-018).</li> <li>d. Shop stock list (AHN-002).</li> <li>e. Production backlog (AHN-022).</li> <li>f. Equipment status listing (AHN-021).</li> </ul> |           |       |
| 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 AISM 18-L21-AHN-BUR-UM AISM 18-L26-AHO-BUR-EM DA FORM 2407 DA PAM 738-750

# Manage a Shop Safety Program 091-CLT-3001

**Conditions:** In a field or garrison environment, given a maintenance site/facility, maintenance personnel, AR 190-13, AR 220-1, AR 700-138, AR 750-1, DA PAM 738-750, FM 4-30.3, TB 43-180, and related references.

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

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

**Evaluation Guidance:** Score the soldier GO if all 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.

| 7 011000       |           |
|----------------|-----------|
| Required       | Related   |
| AR 190-13      | AR 385-10 |
| AR 220-1       | AR 385-40 |
| AR 700-138     | AR 385-55 |
| AR 750-1       |           |
| DA PAM 738-750 |           |
| FM 4-30.3      |           |
| TB 43-180      |           |
|                |           |

# Maintain a Publications Library 091-CLT-3002

**Conditions:** In a field or garrison environment, given publications and storage location, local and higher headquarters publications indexes and publications procedures, publications library SOP, AR 25-400-2, DA Form 17 (Requisition for Publications and Blank Forms), DA Form 17-1 (Requisition for Publications and Blank Forms (Continuation Sheet), DA PAM 25-30, DA PAM 25-33, DA PAM 25-40, and related references.

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

| Perf | formance Measures                                                                                                                                                                                                                                                                                                     | <u>GO</u> | NO GO |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Determined all publications required by the maintenance shop or section.                                                                                                                                                                                                                                              |           |       |
| 2.   | Reviewed and updated publications library SOP, as needed.                                                                                                                                                                                                                                                             |           |       |
| 3.   | Ensured that technical publications on hand or on order were the most current in accordance with DA PAM 25-30.                                                                                                                                                                                                        |           |       |
| 4.   | Ensured that doctrinal, training, and organizational publications on hand or on order were the most current in accordance with DA PAM 25-30 and local listings.                                                                                                                                                       |           |       |
| 5.   | Ensured that administrative publications on hand or on order were the most current in accordance with DA PAM 25-30.                                                                                                                                                                                                   |           |       |
| 6.   | Ensured that local and higher headquarters publications on hand or on order were the most current in accordance with DA PAM 25-30 and local listings.                                                                                                                                                                 |           |       |
| 7.   | Prepared DA Form 4569 in accordance with DA PAM 25-33.                                                                                                                                                                                                                                                                |           |       |
| 8.   | Prepared the required transmittal form in accordance with DA PAM 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 PAM 25-33 and local or higher headquarters publications requisitioning procedures. |           |       |
| 10.  | Ensured that published changes were posted to applicable publications in accordance with DA PAM 25-40 and publications change instructions.                                                                                                                                                                           |           |       |
| 11.  | Removed obsolete, rescinded, or superseded publications from library in accordance with DA PAM 25-40 and publications change instructions.                                                                                                                                                                            |           |       |
| 12.  | Arranged publications in proper order and in a suitable location in accordance with DA PAM 25-40.                                                                                                                                                                                                                     |           |       |
| 13.  | Labeled binders used for storing library publications in accordance with AR 25-400-2 and DA PAM 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, local, and higher headquarters publications accounts, as required, in accordance with DA PAM 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
AR 25-400-2
DA FORM 17
DA FORM 17-1
DA PAM 25-30
DA PAM 25-33
DA PAM 25-40

Related AR 25-11

# Establish Maintenance Facilities 091-CLT-3003

**Conditions:** In a field or garrison environment, given a maintenance site, maintenance personnel, applicable equipment, maintenance shop/section SOP and FM 4-30.3.

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

| Performance Measures                    |                                                                                                             | <u>GO</u> | NO GC |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1. Ensured SOP and required refer       | rence were available.                                                                                       |           |       |
| Identified commander's maintenamission. | ance requirements for accomplishing the unit                                                                |           |       |
| 3. Set up the maintenance facility i    | n accordance with SOP.                                                                                      |           |       |
|                                         | dier GO if all performance measures are passed. is failed. If the soldier fails any performance mea rectly. |           |       |
| References<br>Required<br>FM 4-30.3     | Related                                                                                                     |           |       |

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

**Conditions:** In a field or garrison environment, given FM 4-30.3, higher headquarters SOPs, and commander's guidance.

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

| Performance Measures              |                                                                                                                       | <u>GO</u> | NO GO |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1. Ensured applicable publication | ns were available.                                                                                                    |           |       |
| 2. Ensured unit policies and comm | mander's guidance were followed.                                                                                      |           |       |
| 3. Ensured shop operation policie | es were adequately addressed.                                                                                         |           |       |
| 4. Updated the shop SOP, as req   | quired.                                                                                                               |           |       |
|                                   | oldier GO if all performance measures are passed<br>e is failed. If the soldier fails any performance me<br>orrectly. |           |       |
| References                        |                                                                                                                       |           |       |
| Required                          | Related                                                                                                               |           |       |
| FM 4-30.3                         |                                                                                                                       |           |       |

# Manage Tool Control Procedures 091-CLT-3005

**Conditions:** In a field or garrison environment, given applicable supply catalogs, AR 190-13, AR 220-1, AR 385-10, AR 385-40, AR 700-138, AR 750-1, DA Form 2062 (Hand Receipt/Annex Number), DA PAM 710-2-1, FM 101-5-1, FM 4-30.3, related references, and hand receipt forms.

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

| Performance Measures                                                                                           | <u>GO</u> | NO GO |
|----------------------------------------------------------------------------------------------------------------|-----------|-------|
| Ensured applicable references were available.                                                                  |           |       |
| 2. Established policies and procedures for the control of tools.                                               |           |       |
| 3. Ensured all DA Form 2062s were properly filled out and updated.                                             |           |       |
| <ol> <li>Ensured tools and equipment were inventoried in accordance with applicable<br/>references.</li> </ol> |           |       |
| 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
AR 190-13
AR 220-1
AR 385-10
AR 385-40
AR 700-138
AR 750-1
DA FORM 2062
DA PAM 710-2-1
FM 101-5-1
FM 4-30.3

### Related

DA PAM 738-750

# Manage Key Control Procedures 091-CLT-3006

**Conditions:** In a field or garrison environment, given keys, key control rosters, key boxes/cabinets, AR 190-13, and AR 190-51.

**Standards:** Managed key control procedures in accordance with applicable references.

| Performance Measures                                                                                                        | <u>GO</u> | NO GC |
|-----------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| Ensured necessary publications were available.                                                                              |           |       |
| 2. Established key control policies and procedures.                                                                         |           |       |
| Established key control access rosters.                                                                                     |           |       |
| <ol> <li>Ensured personnel were aware of their responsibilities for the security and<br/>accountability of keys.</li> </ol> |           |       |
| 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.

Related

| Required  |  |  |
|-----------|--|--|
| AR 190-13 |  |  |
| AR 190-51 |  |  |

# Manage the TMDE Calibration Program 091-CLT-3007

**Conditions:** In a field or garrison environment, given TMDE, maintenance personnel, AR 750-43, and TB 43-180.

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

| Performance Measures                                                                                              | <u>GO</u> | NO GO |
|-------------------------------------------------------------------------------------------------------------------|-----------|-------|
| Ensured necessary publications were available.                                                                    |           |       |
| 2. Reviewed and updated TMDE computer printout list.                                                              |           |       |
| <ol><li>Ensured PMCS and inventory of all TMDE and auxiliary equipment were<br/>conducted, as required.</li></ol> |           |       |
| <ol> <li>Ensured TMDE was turned in for calibration in accordance with computer<br/>printouts.</li> </ol>         |           |       |

**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 |  |

### **Recon Terrain/Route** 091-CLT-3008

Conditions: In a field environment, given a maintenance situation or operations order, operational overlay, grid coordinates of destination, vehicle with personnel, FM 4-30.3, and FM 5-170.

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

| Performance Measures                                                                                                                                                                                           |                                                                                                                                                                        | <u>GO</u> | NO GO |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                                                                                                                                                                                                             | Ensured necessary equipment and publications were available.                                                                                                           |           |       |
| 2.                                                                                                                                                                                                             | Performed a map reconnaissance of the terrain and route.                                                                                                               |           |       |
| 3.                                                                                                                                                                                                             | Selected personnel for reconnaissance team.                                                                                                                            |           |       |
| 4.                                                                                                                                                                                                             | Reconnoitered the route to determine best access to destination and to ensure safety of personnel and equipment.                                                       |           |       |
| 5.                                                                                                                                                                                                             | Reconnoitered terrain to determine suitability for maintenance site use, to determine best avenues of entry and exit, and to ensure safety of personnel and equipment. |           |       |
| 6.                                                                                                                                                                                                             | Reported findings and conclusions to supervisors.                                                                                                                      |           |       |
| <b>Evaluation Guidance:</b> 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 |                                                                                                                                                                        |           |       |

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 FM 5-170

# Supervise Maintenance Operations 091-CLT-3009

**Conditions:** In a field or garrison environment, given maintenance personnel, equipment, maintenance facility/site, SOPs, AR 385-10, AR 385-40, AR 385-55, 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 25-30, DA PAM 710-2-1, DA PAM 710-2-2, DA PAM 738-750, DA PAM 750-1, DA PAM 750-35, and FM 4-30.3.

**Standards:** Established and maintained an effective maintenance shop operation in accordance with SOPs and applicable references.

| Performance Measures |                                                                                                            | <u>GO</u> | NO GC |
|----------------------|------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Reviewed unit SOP as scheduled.                                                                            |           |       |
| 2.                   | Compared unit SOP against standards set in DA PAM 750-35.                                                  |           |       |
| 3.                   | Completed regular inspection of unit operations.                                                           |           |       |
| 4.                   | Compared unit operations against standards in AR 750-1, DA PAM 738-750, and DA PAM 750-35.                 |           |       |
| 5.                   | Inspected environmental protection practices for compliance.                                               |           |       |
| 6.                   | Reviewed safety program practices for compliance with AR 385-55.                                           |           |       |
| 7.                   | Recorded and submitted deficiencies to proper personnel for correction.                                    |           |       |
| 8.                   | Recorded training needs.                                                                                   |           |       |
| 9.                   | Coordinated with appropriate personnel to provide needed training.                                         |           |       |
| 10.                  | Reviewed MCSR for accuracy and compliance with standards in AR 700-138 and applicable user's manual.       |           |       |
| 11.                  | Coordinated with appropriate maintenance level to correct maintenance discrepancies.                       |           |       |
| 12.                  | Coordinated with TRADOC and USAMC to ensure that emerging issues were addressed appropriately at the unit. |           |       |

**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

| · · · | 210101003  |         |  |
|-------|------------|---------|--|
|       | Required   | Related |  |
|       | AR 385-10  |         |  |
|       | AR 385-40  |         |  |
|       | AR 385-55  |         |  |
|       | 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 25-30** 

### References

Required
DA PAM 710-2-1
DA PAM 710-2-2

DA PAM 738-750 DA PAM 750-1

FM 4-30.3

DA PAM 750-35

# Interpret Maintenance Operational Overlay 091-CLT-3010

**Conditions:** In a field or garrison environment, given an operational overlay, map, maintenance situation or OPORD, FM 101-5-1, FM 4-30.3, and FM 5-170.

**Standards:** Interpreted the maintenance operational overlay by identifying key features and elements of the area of operations in accordance with applicable references.

| Performance Measures                                                                                          |  | NO GO |
|---------------------------------------------------------------------------------------------------------------|--|-------|
| 1. Ensured necessary references and materials were available.                                                 |  |       |
| 2. Identified mapping symbols on the operational overlay.                                                     |  |       |
| 3. Identified key features of the map and operational overlay.                                                |  |       |
| <ol> <li>Identified key elements of the area of operations on the map and operational<br/>overlay.</li> </ol> |  |       |
| 5. Updated the operational overlay, 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 FM 101-5-1 FM 4-30.3 FM 5-170

# Manage the Unit Level Logistics System (ULLS) 091-CLT-3013

**Conditions:** In a field or garrison environment, given a computer system with ULLS-G software, database of equipment files, associated AMSS software, ULLS operator, AR 710-2, and DA PAM 710-2-1.

**Standards:** Supervised ULLS-G functions of a unit-level maintenance shop in accordance with applicable references.

| Performance Measures                                                                                                                                                                                                                                                                                                                                                                                   |  | NO GO |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| 1. Ensured necessary equipment and references were available.                                                                                                                                                                                                                                                                                                                                          |  |       |
| 2. Ensured ULLS operator was properly trained.                                                                                                                                                                                                                                                                                                                                                         |  |       |
| 3. Reviewed the ULLS flow of information to and from system interfaces.                                                                                                                                                                                                                                                                                                                                |  |       |
| 4. Reviewed ULLS-G maintenance forms for accuracy.                                                                                                                                                                                                                                                                                                                                                     |  |       |
| <ul> <li>5. Analyzed ULLS-G reports and data to identify maintenance trends and problems.</li> <li>a. Document register.</li> <li>b. PLL inventory report.</li> <li>c. Zero balance report.</li> <li>d. PLL excess management report.</li> <li>e. PLL inquiry.</li> <li>f. NMC report.</li> </ul>                                                                                                      |  |       |
| <ul> <li>6. Analyzed AMSS reports and data to identify maintenance trends and problems.</li> <li>a. AMSS authorization report.</li> <li>b. Projected FMC rates report.</li> <li>c. Equipment exception report.</li> <li>d. System status summary.</li> <li>e. Class IX failure data by administrative number.</li> <li>f. Rollup by EIC.</li> <li>g. Rollup by UIC.</li> <li>h. NMC report.</li> </ul> |  |       |

**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 710-2 DA PAM 710-2-1

# Manage the Unit Army Oil Analysis Program (AOAP) 091-CLT-3014

**Conditions:** In a field or garrison environment, given Automated Oil Analysis Log printout, unit and higher headquarters AOAP SOPs and policies, DA PAM 738-750, and TB 43-0211.

**Standards:** Managed the unit AOAP in accordance with applicable references.

| Performance Measures                                                                                                          |  | NO GC |
|-------------------------------------------------------------------------------------------------------------------------------|--|-------|
| Ensured necessary publications were available.                                                                                |  |       |
| 2. Reviewed the objectives and policies of the AOAP.                                                                          |  |       |
| 3. Identified responsibilities of key AOAP personnel.                                                                         |  |       |
| 4. Ensured sampling intervals and procedures were followed.                                                                   |  |       |
| <ol><li>Ensured samples were processed in accordance with applicable references and<br/>SOPs.</li></ol>                       |  |       |
| 6. Ensured lab results were processed in accordance with applicable references and SOPs and follow-up actions were completed. |  |       |

**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 738-750
TB 43-0211

# Deploy Company Maintenance Team/Recovery Support Team 091-CLT-3015

**Conditions:** In a field or garrison environment, given maintenance situation or a request for maintenance support, map, operational overlay, grid coordinates of destination, vehicles, equipment, maintenance personnel, FM 101-5-1, FM 4-30.3, and FM 5-170.

**Standards:** Deployed the company maintenance team or recovery support team in accordance with the maintenance situation or request for maintenance support and applicable references.

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

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

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

**Conditions:** In a field or garrison environment, given AMSS reports produced from an ULLS-G system, AR 710-2, and DA PAM 710-2-1.

**Standards:** Analyzed AMSS reports and data to identify maintenance trends and problems in accordance with applicable references.

| Performance Measures                                                                                                                                                                                                                                                                                                                                                                                   |  | NO GO |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|--|
| 1. Ensured necessary ULLS equipment and references were available.                                                                                                                                                                                                                                                                                                                                     |  |       |  |
| <ul> <li>2. Analyzed AMSS reports and data to identify maintenance trends and problems.</li> <li>a. AMSS authorization report.</li> <li>b. Projected FMC rates report.</li> <li>c. Equipment exception report.</li> <li>d. System status summary.</li> <li>e. Class IX failure data by administrative number.</li> <li>f. Rollup by EIC.</li> <li>g. Rollup by UIC.</li> <li>h. NMC report.</li> </ul> |  |       |  |

**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 710-2 DA PAM 710-2-1

#### Subject Area 5: Technical Tasks (Skill Level 3)

# Correct Malfunction of the Vehicle Navigation System on the M109A6 Track Vehicle 091-63D-3048

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the vehicle navigation system; general mechanic's tool kit; 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 9-2350-314-20-1-1, 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of vehicle navigation system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task is was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                                                 | <u>GO</u> | NO GO |
|----------------------|-------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                                            |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                                                    |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                                               |           |       |
| 4.                   | Correctly performed troubleshooting procedures on vehicle navigation system and isolated fault. |           |       |
| 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.

| erences              |                  |
|----------------------|------------------|
| Required             | Related          |
| DA FORM 5988-E       | TM 9-2350-314-10 |
| 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 9-2350-314-20-1-1 |                  |
| 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  |                  |
|                      |                  |

# Replace Hydraulic Pump on the M109A6 Track Vehicle 091-63D-3049

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the hydraulic pump; general mechanic's tool kit; 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 9-2350-314-24P-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the hydraulic pump and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 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.

| • | renees               |         |
|---|----------------------|---------|
|   | Required             | Related |
|   | DA FORM 5988-E       |         |
|   | 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  |         |
|   |                      |         |

# Replace Engine Assembly on the M109A6 and M992 Series Track Vehicles 091-63D-3050

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the engine assembly; general mechanic's tool kit; 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 9-2350-293-20-1, TM 9-2350-293-20-2, 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 9-2350-311-34-1, TM 9-2350-311-34-2, 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 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the traverse mechanism assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures                                                         |  | NO GC |
|------------------------------------------------------------------------------|--|-------|
| Selected and used applicable technical publications.                         |  |       |
| 2. Selected and used applicable tools and TMDE.                              |  |       |
| 3. Practiced shop safety and maintenance discipline.                         |  |       |
| 4. Identified necessary components to be replaced during engine replacement. |  |       |
| 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

TM 9-2350-311-20-1

| Related |
|---------|
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |

### Required

Related

TM 9-2350-311-20-2

TM 9-2350-311-24P-1

TM 9-2350-311-24P-2

TM 9-2350-311-34-1

TM 9-2350-311-34-2

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 9-2350-314-34-1

TM 9-2350-314-34-2

# Replace Transmission Assembly on the M109A6 and M992 Series Track Vehicles 091-63D-3051

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the transmission assembly; general mechanic's tool kit; 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 9-2350-293-20-2, TM 9-2350-293-24P, 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 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-311-24P-2, TM 9-2350-311-34-1, TM 9-2350-311-34-2, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-1, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2, TM 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the transmission assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance were identified on applicable maintenance forms.

| Performance Measures                                                             | <u>GO</u> | NO GC |
|----------------------------------------------------------------------------------|-----------|-------|
| Selected and used applicable technical publications.                             |           |       |
| 2. Selected and used applicable tools and TMDE.                                  |           |       |
| 3. Practiced shop safety and maintenance discipline.                             |           |       |
| 4. Identified components necessary for removal in order to replace transmission. |           |       |
| 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

TM 9-2350-311-20-2

| Related |
|---------|
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |

### Required

Related

TM 9-2350-311-24P-1

TM 9-2350-311-24P-2

TM 9-2350-311-34-1

TM 9-2350-311-34-2

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 9-2350-314-34-1

TM 9-2350-314-34-2

# Replace Transfer Assembly on the M109A6 and M992 Series Track Vehicles 091-63D-3052

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the transfer assembly; general mechanic's tool kit; TM 9-2350-267-10, TM 9-2350-267-20, TM 9-2350-267-20-1, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-20-2, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-293-24P, TM 9-2350-293-24P, 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 9-2350-311-34-1, TM 9-2350-311-34-2, 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 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the transfer assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GC |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                   |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.                   | Identified components necessary for transfer replacement.              |           |       |
| 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.

| erences            |         |
|--------------------|---------|
| Required           | Related |
| 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 9-2350-287-20-2 |         |
| 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 |         |
|                    |         |

### Required

TM 9-2350-311-24P-1

TM 9-2350-311-24P-2

TM 9-2350-311-34-1

TM 9-2350-311-34-2

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 9-2350-314-34-1

TM 9-2350-314-34-2

# Replace Elevation Mechanism Assembly on the M109A6 Track Vehicle 091-63D-3053

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the elevation mechanism assembly; general mechanic's tool kit; 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 9-2350-311-34-1, TM 9-2350-311-34-2, 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 9-2350-314-24P-1, TM 9-2350-314-24P-2, TM 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the elevation mechanism assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                       | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable technical publications.                   |           |       |
| 2.   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.   | Identified components of the elevation mechanism system.               |           |       |
| 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.

| erences              |         |
|----------------------|---------|
| Required             | Related |
| DA FORM 5988-E       |         |
| 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 9-2350-311-34-1   |         |
| TM 9-2350-311-34-2   |         |
| 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  |         |
|                      |         |

References Required TM 9-2350-314-34-1 TM 9-2350-314-34-2

# Replace Drive Assembly Engine Cooling Fan on the M109A6 and M992 Series Track Vehicles 091-63D-3054

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the drive assembly engine cooling fan; general mechanic's tool kit; 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 9-2350-311-10, 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 9-2350-311-34-1, TM 9-2350-311-34-2, 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 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the traverse mechanism assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                      | <u>GO</u> | NO GO |
|------|-----------------------------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable technical publications.                  |           |       |
| 2.   | Selected and used applicable tools and TMDE.                          |           |       |
| 3.   | Practiced shop safety and maintenance discipline.                     |           |       |
| 4.   | Identified components of the cooling system.                          |           |       |
| 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.

| Ciciicos            |         |
|---------------------|---------|
| Required            | Related |
| 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 9-2350-287-20-2  |         |
| TM 9-2350-287-24P   |         |
| 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 9-2350-311-34-1  |         |
| TM 9-2350-311-34-2  |         |

### Required

Related

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 9-2350-314-34-1

TM 9-2350-314-34-2

# Replace Cylinder Assembly/Rammer on the M109A6 Track Vehicle 091-63D-3055

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the cylinder assembly/rammer; general mechanic's tool kit; 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 9-2350-311-34-1, TM 9-2350-311-34-2, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2, TM 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the cylinder assembly/rammer and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                       | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------|-----------|-------|
| 1.   | Selected and used applicable technical publications.                   |           |       |
| 2.   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.   | Identified components of the cylinder rammer assembly.                 |           |       |
| 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.

| erences              |         |
|----------------------|---------|
| Required             | Related |
| DA FORM 5988-E       |         |
| 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 9-2350-311-34-1   |         |
| TM 9-2350-311-34-2   |         |
| 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 9-2350-314-34-1 TM 9-2350-314-34-2

# Replace Bellows Assembly (Hydraulic Reservoir) on the M109A6 Track Vehicle 091-63D-3056

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the bellows assembly (hydraulic reservoir); general mechanic's tool kit; 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 9-2350-311-34-1, TM 9-2350-311-34-2, 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 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the bellows assembly (hydraulic reservoir) and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                        | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------|-----------|-------|
| 1.                   | Selected and used applicable technical publications.                   |           |       |
| 2.                   | Selected and used applicable tools and TMDE.                           |           |       |
| 3.                   | Practiced shop safety and maintenance discipline.                      |           |       |
| 4.                   | Identified components of hydraulic system.                             |           |       |
| 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.

| Related |
|---------|
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |
|         |

References Required TM 9-2350-314-34-1 TM 9-2350-314-34-2

# Replace Hydraulic Hand Pump on the M109A6 Track Vehicle 091-63D-3057

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the hydraulic hand pump; general mechanic's tool kit; 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 9-2350-311-34-1, TM 9-2350-311-34-2, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the hydraulic hand pump mechanism assembly, and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | formance Measures                                                      | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------|-----------|-------|
| 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.

| erences              |         |
|----------------------|---------|
| Required             | Related |
| DA FORM 5988-E       |         |
| 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 9-2350-311-34-1   |         |
| TM 9-2350-311-34-2   |         |
| 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 9-2350-314-34-1   |         |
| TM 9-2350-314-34-2   |         |

# Repair No-Back Device (Backlash) on the M109A6 Track Vehicle 091-63D-3058

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the no-back device (backlash); general mechanic's tool kit; 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 9-2350-311-34-1, TM 9-2350-311-34-2, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2, TM 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Repaired the no-back device (backlash) and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures                                                      |  | NO GO |
|---------------------------------------------------------------------------|--|-------|
| Selected and used applicable technical publications.                      |  |       |
| 2. Selected and used applicable tools and TMDE.                           |  |       |
| 3. Practiced shop safety and maintenance discipline.                      |  |       |
| 4. Replaced defective components, as necessary.                           |  |       |
| 5. Performed required PMCS.                                               |  |       |
| 6. Performed a final operational test to verify fault had been corrected. |  |       |
| 7. Annotated corrective actions taken on the DA Form 5988-E.              |  |       |
| 8. 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 Related **DA FORM 5988-E** 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 9-2350-311-34-1 TM 9-2350-311-34-2 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 9-2350-314-34-1 TM 9-2350-314-34-2

# Replace Traverse Mechanism Assembly on the M109A6 Track Vehicle 091-63D-3059

**Conditions:** In a field or garrison environment, given an M109 series vehicle, DA Form 5988-E indicating a malfunction of the traverse mechanism assembly, general mechanic's tool kit, 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 9-2350-311-34-1, TM 9-2350-311-34-2, 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 9-2350-314-24P-1, TM 9-2350-314-24P-2, TM 9-2350-314-34-1, and TM 9-2350-314-34-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Replaced the traverse mechanism assembly and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

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

| erences              |         |
|----------------------|---------|
| Required             | Related |
| DA FORM 5988-E       |         |
| 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 9-2350-311-34-1   |         |
| TM 9-2350-311-34-2   |         |
| 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 9-2350-314-34-1   |         |
| TM 9-2350-314-34-2   |         |

# Perform Diagnostic Procedures on the Cannon Recoil System of an M109A6 Track Vehicle 091-63D-3003

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the cannon recoil system; artillery and turret mechanic's tool kit; DA PAM 738-750, 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, and related references; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the cannon recoil system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109 series vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                                                                                                                                                          | <u>GO</u> | NO GO |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 cannon recoil system.                                                                                                                                |           |       |
| 5.   | Performed initial inspection.                                                                                                                                                                                                                             |           |       |
| 6.   | 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. |           |       |
| 7.   | Identified repair parts and requisitioned, if required.                                                                                                                                                                                                   |           |       |
| 8.   | Assigned personnel to perform maintenance actions.                                                                                                                                                                                                        |           |       |
| 9.   | Ensured all safety precautions and procedures were followed.                                                                                                                                                                                              |           |       |
| 10.  | Provided assistance when necessary.                                                                                                                                                                                                                       |           |       |
| 11.  | Ensured task was performed to standard.                                                                                                                                                                                                                   |           |       |
| 12.  | Conducted an in-process inspection.                                                                                                                                                                                                                       |           |       |
| 13.  | Performed a final inspection to ensure the cannon recoil 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:** 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.

Required

DA FORM 5988-E DA PAM 738-750

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

**Related** TM 9-243 TM 9-3305

# Perform Diagnostic Procedures on the Traversing System of an M109A6 Track Vehicle 091-63D-3004

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the traversing system; artillery and turret mechanic's tool kit; 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the traversing system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task is was completed, the M109 series vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                                                                                                                                                                                                           | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 traversing system.                                                                                                                                                                                    |           |       |
| 5.   | Performed initial inspection.                                                                                                                                                                                                                                                                              |           |       |
| 6.   | Diagnosed traversing system faults and determined maintenance actions to be performed.  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. |           |       |
| 7.   | Identified repair parts and requisitioned, if required.                                                                                                                                                                                                                                                    |           |       |
| 8.   | Assigned personnel to perform maintenance actions.                                                                                                                                                                                                                                                         |           |       |
| 9.   | Ensured all safety precautions and procedures were followed.                                                                                                                                                                                                                                               |           |       |
| 10.  | Provided assistance when necessary.                                                                                                                                                                                                                                                                        |           |       |
| 11.  | Ensured task was performed to standard.                                                                                                                                                                                                                                                                    |           |       |
| 12.  | Conducted an in-process inspection.                                                                                                                                                                                                                                                                        |           |       |
| 13.  | Performed a final inspection to ensure the traversing 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:** 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.

### 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

### **Related** TM 9-243 TM 9-3305

# Perform Diagnostic Procedures on the Elevating System of an M109A6 Track Vehicle 091-63D-3005

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E, indicating a malfunction of the elevating system; artillery and turret mechanic's tool kit; TM 11-6625-3052-14, TM 9-2350-311-10, TM 9-2350-311-20-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-2, DA PAM 738-750, and related references; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the elevating system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109 series vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance were identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                       | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Reviewed work request.                                                                                                 |           |       |
| 2.   | Ensured task was within shop capability and authorization.                                                             |           |       |
| 3.   | Ensured applicable technical publications were available.                                                              |           |       |
| 4.   | Ensured proper tools, TDME, and equipment were available to inspect, repair or replace, and test the elevating system. |           |       |
| 5.   | Performed initial inspection.                                                                                          |           |       |
| 6.   | Diagnosed elevating system faults and determined maintenance actions to be performed.                                  |           |       |
| 7.   | Identified repair parts and requisitioned, if required.                                                                |           |       |
| 8.   | Assigned personnel to perform maintenance actions.                                                                     |           |       |
| 9.   | Ensured all safety precautions and procedures were followed.                                                           |           |       |
| 10.  | Provided assistance when necessary.                                                                                    |           |       |
| 11.  | Ensured task was performed to standard.                                                                                |           |       |
| 12.  | Conducted an in-process inspection.                                                                                    |           |       |
| 13.  | Serviced the equilibrated elevation mechanism.                                                                         |           |       |
| 14.  | Performed a final inspection to ensure the elevating system was fully mission-capable.                                 |           |       |
| 15.  | Critiqued personnel on performance of the task.                                                                        |           |       |
| 16.  | Ensured maintenance forms were completed, as required.                                                                 |           |       |
| 17.  | Ensured tools and equipment were properly maintained.                                                                  |           |       |

**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.

### Required

DA FORM 5988-E
DA PAM 738-750
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 9-2350-314-24P-2

#### Related

SC 9999-01-SKO TM 9-243 TM 9-3305

# Perform Diagnostic Procedures on the Hydraulic System of M109A6 and M992 Track Vehicles 091-63D-3009

**Conditions:** In a field or garrison environment, given an M109 series vehicle, M992 series vehicle; DA Form 5988-E, indicating a malfunction of the hydraulic system; general mechanic's tool kit; 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 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, 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 9-2350-314-20-2-2, TM 9-2350-314-20-2-2, TM 9-2350-314-24P-1, TM 9-2350-314-24P-2, DA PAM 738-750, and related references; TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the hydraulic system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                       | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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:** 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.

#### Required

DA FORM 5988-E

DA PAM 738-750

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

#### Related

TM 9-243 TM 9-3305

# Perform Diagnostic Procedures on the Sighting and Fire Control System 091-63D-3010

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the sighting and fire control system; artillery and turret mechanic's tool kit; 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, DA PAM 738-750, and related references; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the sighting and fire control system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109 series vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                                                                                                                                                                                    | GO | NO GO |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
| 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 sighting and fire control system.                                                                                                                                              |    |       |
| 5.   | Performed initial inspection.                                                                                                                                                                                                                                                       |    |       |
| 6.   | Diagnosed sighting and fire control system faults and determined maintenance actions to be performed.  a. Sighted and synchronized the M145 panoramic telescope mount.  b. Performed azimuth walk-off procedures.  c. Ensured M145 panoramic telescope mount was properly adjusted. |    |       |
| 7.   | Identified repair parts and requisitioned, if required.                                                                                                                                                                                                                             |    |       |
| 8.   | Assigned personnel to perform task.                                                                                                                                                                                                                                                 |    |       |
| 9.   | Ensured all safety precautions and procedures were followed, to include tritium safety precautions.                                                                                                                                                                                 |    |       |
| 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 sighting and fire control 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:** 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.

Required

DA FORM 5988-E

DA PAM 738-750

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

Related

SC 9999-01-SKO

### Perform Diagnostic Procedures on the Fire Extinguisher/Suppression System of M109A6 and M992 Track Vehicles

#### 091-63D-3014

Conditions: In a field or garrison environment, given an M992 series vehicle; DA Form 5988-E indicating a malfunction of the fire extinguisher/suppression system; general mechanic's tool kit; 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 9-2350-287-20-2, TM 9-2350-287-24P, TM 9-2350-293-10, TM 9-2350-293-20-1, TM 9-2350-293-24P, DA PAM 738-750, and related references; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the fire extinguisher/suppression system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M992 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                                                        | <u>GO</u> | NO GO |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 fire extinguisher/suppression system.              |           |       |
| 5.   | Performed initial inspection.                                                                                                                           |           |       |
| 6.   | Diagnosed fire extinguisher/suppression system faults and determined maintenance actions to be performed.  a. AFES engine system.  b. AFES crew system. |           |       |
| 7.   | Identified repair parts and requisitioned, if required.                                                                                                 |           |       |
| 8.   | Assigned personnel to perform task.                                                                                                                     |           |       |
| 9.   | Ensured all safety precautions and procedures were followed.                                                                                            |           |       |
| 10.  | Provided assistance when necessary.                                                                                                                     |           |       |
| 11.  | Ensured task was performed to standard.                                                                                                                 |           |       |
| 12.  | Conducted an in-process inspection.                                                                                                                     |           |       |
| 13.  | Performed a final inspection to ensure the fire extinguisher/suppression 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:** 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.

### Required

DA FORM 5988-E

DA PAM 738-750

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 9-2350-287-20-2

TM 9-2350-287-24P

TM 9-2350-293-10

TM 9-2350-293-20&P

TM 9-2350-293-34&P

#### Related

TM 9-243

TM 9-3305

# Perform Diagnostic Procedures on the NBC System of M109A6 and M992 Track Vehicles 091-63D-3015

**Conditions:** In a field or garrison environment, given an M109 series vehicle; DA Form 5988-E indicating a malfunction of the NBC system; general mechanic's tool kit; 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, and TM 9-2350-314-24P-2; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the NBC system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109 series vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                 | <u>GO</u> | NO GO |
|------|------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 NBC system. |           |       |
| 5.   | Performed initial inspection.                                                                                    |           |       |
| 6.   | Diagnosed NBC 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 and procedures were followed.                                                     |           |       |
| 10.  | Provided assistance when necessary.                                                                              |           |       |
| 11.  | Ensured task was performed to standard.                                                                          |           |       |
| 12.  | Conducted an in-process inspection.                                                                              |           |       |
| 13.  | Performed a final inspection to ensure the NBC 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:** 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 9-2350-311-20-1
TM 9-2350-311-20-2

### Required

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

### Perform Diagnostic Procedures on the Fuel System of M109A6 and M992 Track Vehicles 091-63D-3016

**Conditions:** In a field or garrison environment, given an M109 series vehicle or an M992 series vehicle s series; DA Form 5988-E indicating a malfunction of the fuel system; general mechanic's tool kit; LO 9-2350-267-12, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-20-2, TM 9-2350-293-24P, 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 9-2350-314-20-2-2, TM 9-2350-314-24P-2, and DA PAM 738-750; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the fuel system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                                                                   | <u>GO</u> | NO GO |
|----------------------|-------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 fuel system. |           |       |
| 5.                   | Performed initial inspection.                                                                                     |           |       |
| 6.                   | Diagnosed fuel 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 standard.                                                                           |           |       |
| 12.                  | Conducted an in-process inspection.                                                                               |           |       |
| 13.                  | Performed a final inspection to ensure the fuel 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.                                                             |           |       |

### Required

DA FORM 5988-E

DA PAM 738-750

LO 9-2350-267-12

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

TW 9-2330-311-10

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-2

#### Related

TM 9-3305

### Perform Diagnostic Procedures on the Cooling System of M109A6 and M992 Track Vehicles 091-63D-3018

**Conditions:** In a field or garrison environment, given an M109 series vehicle or an M992 series vehicle; DA Form 5988-E indicating a malfunction of the cooling system; general mechanic's tool kit; 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 9-2350-293-10, 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 PAM 738-750; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the cooling system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                     | <u>GO</u> | NO GO |
|------|----------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 cooling system. |           |       |
| 5.   | Performed initial inspection.                                                                                        |           |       |
| 6.   | Diagnosed cooling 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 standard.                                                                              |           |       |
| 12.  | Conducted an in-process inspection.                                                                                  |           |       |
| 13.  | Performed a final inspection to ensure the cooling 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.                                                                |           |       |

### Required

Related

DA FORM 5988-E

DA PAM 738-750

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 091-63D-3019

**Conditions:** In a field or garrison environment, given an M109 series vehicle or an M992 series vehicle; DA Form 5988-E indicating a malfunction of the transmission; general mechanic's tool kit; 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 9-2350-293-20-1, TM 9-2350-293-20-2, TM 9-2350-293-24P, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-314-10, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, and TM 9-2350-314-24P-1; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the transmission and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                                   | <u>GO</u> | NO GO |
|------|--------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 transmission. |           |       |
| 5.   | Performed initial inspection.                                                                                      |           |       |
| 6.   | Diagnosed transmission 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 and procedures were followed.                                                       |           |       |
| 10.  | Provided assistance when necessary.                                                                                |           |       |
| 11.  | Ensured task was performed to standard.                                                                            |           |       |
| 12.  | Conducted an in-process inspection.                                                                                |           |       |
| 13.  | Performed a final inspection to ensure the transmission 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.                                                              |           |       |

### 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 9-2350-311-10

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 091-63D-3032

**Conditions:** In a field or garrison environment, given an M109 series vehicle or M992 series vehicle; DA Form 5988-E indicating BDAR is required, or a directive from the commander requesting BDAR be performed; general mechanic's and artillery and turret mechanic's tool kits; 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 9-2350-274-BD, TM 9-2350-276-BD, TM 9-2350-287-10, TM 9-2350-287-20-1, TM 9-2350-287-20-2, TM 9-2350-287-20-2, TM 9-2350-293-20-2, TM 9-2350-293-20-2, TM 9-2350-293-20-2, TM 9-2350-311-10, TM 9-2350-311-20-1, TM 9-2350-311-20-2, TM 9-2350-311-24P-1, TM 9-2350-314-20-1-1, TM 9-2350-314-20-1-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-2, TM 9-2350-314-20-2-1, TM 9-2350-314-20-2-2, TM 9-2350-314-2

**Standards:** Diagnosed damage, determined necessary BDAR repairs, and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was capable of functioning in a battlefield situation to accomplish the immediate mission until more extensive and permanent repairs could be performed.

| Perf | ormance Measures                                                                                            | <u>GO</u> | NO GO |
|------|-------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Reviewed work request or commander's directive.                                                             |           |       |
| 2.   | Ensured applicable technical publications were available.                                                   |           |       |
| 3.   | Inspected vehicle to diagnose damage.                                                                       |           |       |
| 4.   | Determined necessary BDAR repairs.                                                                          |           |       |
| 5.   | Ensured proper tools, TMDE, and equipment were available to perform BDAR repairs.                           |           |       |
| 6.   | Assigned personnel to assist in BDAR repairs.                                                               |           |       |
| 7.   | Ensured all safety precautions and procedures were followed.                                                |           |       |
| 8.   | Ensured task was performed to standard.                                                                     |           |       |
| 9.   | Conducted an in-process inspection.                                                                         |           |       |
| 10.  | Performed a final inspection to ensure the vehicle was capable of functioning in a battlefield environment. |           |       |
| 11.  | Critiqued personnel on performance of task.                                                                 |           |       |
| 12.  | Ensured maintenance forms were completed, as required.                                                      |           |       |
| 13.  | Ensured tools and equipment were properly maintained.                                                       |           |       |

#### Required

DA FORM 5988-E

DA PAM 738-750

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 9-2350-274-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

#### Related

FM 9-43-2

TM 9-1000-202-14

TM 9-243

TM 9-3305

# Perform Diagnostic Procedures on the Travel Lock of an M109A6 091-63D-3036

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the travel lock; artillery and turret mechanic's tool kit; TM 11-6625-3052-14, 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 DA PAM 738-750; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed malfunctions of the travel lock and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | Performance Measures                                                                                              |  | NO GO |
|------|-------------------------------------------------------------------------------------------------------------------|--|-------|
| 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 travel lock. |  |       |
| 5.   | Performed initial inspection.                                                                                     |  |       |
| 6.   | Diagnosed travel lock 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 and procedures were followed.                                                      |  |       |
| 10.  | Provided assistance when necessary.                                                                               |  |       |
| 11.  | Ensured task was performed to standard.                                                                           |  |       |
| 12.  | Conducted an in-process inspection.                                                                               |  |       |
| 13.  | Adjusted travel lock.                                                                                             |  |       |
| 14.  | Performed a final inspection to ensure the travel lock was fully mission-capable.                                 |  |       |
| 15.  | Critiqued personnel on performance of the task.                                                                   |  |       |
| 16.  | Ensured maintenance forms were completed, as required.                                                            |  |       |
| 17.  | Ensured tools and equipment were properly maintained.                                                             |  |       |

Required

Related

DA FORM 5988-E DA PAM 738-750

TM 11-6625-3052-14

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

# Perform Diagnostic Procedures on the Automatic Fire Control System (AFCS) of an M109A6 Track Vehicle 091-63D-3039

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the automatic fire control system; artillery and turret mechanic's tool kit; 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, SC 5180-95-A12, and DA PAM 738-750; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the automatic fire control system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | Performance Measures                                                                                       |  | NO GO |
|------|------------------------------------------------------------------------------------------------------------|--|-------|
| 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 AFCS. |  |       |
| 5.   | Performed initial inspection.                                                                              |  |       |
| 6.   | Placed the AFCS into operation.                                                                            |  |       |
| 7.   | Operated the PDIU.                                                                                         |  |       |
| 8.   | Diagnosed AFCS faults and determined maintenance actions to be performed.                                  |  |       |
| 9.   | Identified repair parts and requisitioned, if required.                                                    |  |       |
| 10.  | Assigned personnel to perform task.                                                                        |  |       |
| 11.  | Ensured all safety precautions and procedures were followed.                                               |  |       |
| 12.  | Conducted an in-process inspection.                                                                        |  |       |
| 13.  | Ensured task was performed to standards.                                                                   |  |       |
| 14.  | Performed AFCS fire control alignment.                                                                     |  |       |
| 15.  | Performed a final inspection to ensure the AFCS was fully mission-capable.                                 |  |       |
| 16.  | Critiqued personnel on performance of the task.                                                            |  |       |
| 17.  | Ensured maintenance forms were completed, as required.                                                     |  |       |
| 18.  | Ensured tools and equipment were properly maintained.                                                      |  |       |

Required

DA FORM 5988-E DA PAM 738-750

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

# Perform Diagnostic Procedures on the Microclimate Conditioning System of an M109A6 Track Vehicle 091-63D-3042

**Conditions:** In a field or garrison environment, given an M109A6 vehicle; DA Form 5988-E indicating a malfunction of the microclimate conditioning system; general mechanic's tool kit; 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 TM 9-243TM 9-8000; tools, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the microclimate conditioning system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the M109A6 vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | Performance Measures                                                                                                                   |  | NO GO |
|------|----------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| 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 microclimate conditioning system. |  |       |
| 5.   | Performed initial inspection.                                                                                                          |  |       |
| 6.   | Diagnosed microclimate conditioning 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 and procedures were followed.                                                                           |  |       |
| 10.  | Provided assistance when necessary.                                                                                                    |  |       |
| 11.  | Ensured task was performed to standard.                                                                                                |  |       |
| 12.  | Conducted an in-process inspection.                                                                                                    |  |       |
| 13.  | Performed a final inspection to ensure the microclimate conditioning 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.                                                                                  |  |       |

#### 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

TM 9-243

TM 9-8000

#### Related

SC 9999-01-SKO

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

#### 091-63D-3043

Conditions: In a field or garrison environment, given an M109 series vehicle, M992 series vehicle, M998 series vehicle, M1074 series vehicle, M1078 series LMTV, M1083 series MTV, or an M88 series vehicle; DA Form 5988-E indicating a malfunction of the charging system; general mechanic's tool kit; 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 9-2350-293-20-1, 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the charging system and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Performance Measures |                                                                                                                       | <u>GO</u> | NO GO |
|----------------------|-----------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 charging system. |           |       |
| 5.                   | Performed initial inspection.                                                                                         |           |       |
| 6.                   | Diagnosed charging 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 and procedures were followed.                                                          |           |       |
| 10.                  | Provided assistance when necessary.                                                                                   |           |       |
| 11.                  | Ensured task was performed to standard.                                                                               |           |       |
| 12.                  | Conducted an in-process inspection.                                                                                   |           |       |
| 13.                  | Performed a final inspection to ensure the charging 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.                                                                 |           |       |

#### 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 9-2350-287-20-2

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

#### Related

SC 9999-01-SKO TM 9-2350-287-24P

TM 9-8000

### Perform Diagnostic Procedures on Engines of M109A6 and M992 Track Vehicles 091-63D-3046

**Conditions:** In a field or garrison environment, given an M109 series vehicle or an M992 vehicle; DA Form 5988-E indicating a malfunction of the engine; general mechanic's tool kit; 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 9-2350-293-20-1, 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, TMDE, equipment as indicated in the technical manuals, and replacement parts.

**Standards:** Diagnosed the malfunctions of the engine and ensured necessary repairs were completed in accordance with applicable technical manuals. When this task was completed, the vehicle was fully mission-capable, or maintenance actions required to be performed at higher levels of maintenance had been identified on applicable maintenance forms.

| Perf | ormance Measures                                                                                             | <u>GO</u> | NO GO |
|------|--------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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 engine. |           |       |
| 5.   | Performed initial inspection.                                                                                |           |       |
| 6.   | Diagnosed engine 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 and procedures were followed.                                                 |           |       |
| 10.  | Provided assistance when necessary.                                                                          |           |       |
| 11.  | Ensured task was performed to standard.                                                                      |           |       |
| 12.  | Conducted an in-process inspection.                                                                          |           |       |
| 13.  | Performed a final inspection to ensure the engine 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.                                                        |           |       |

### 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 9-2350-311-10

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

#### Skill Level 4

Subject Area 6: Common Logistics Management Tasks

# Perform Senior Rater Responsibilities for a Maintenance Section 091-CLT-4001

**Conditions:** In a field or garrison environment, given an NCOER with the rater's portion completed, accompanying counseling statements, and AR 623-205.

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

| Performance Measures                                                                                               |  | NO GO |
|--------------------------------------------------------------------------------------------------------------------|--|-------|
| Ensured all materials and references were available.                                                               |  |       |
| 2. Reviewed quarterly counseling that supported the NCOER.                                                         |  |       |
| <ol><li>Reviewed the administrative data and rater's portions of the NCOER for accuracy<br/>and content.</li></ol> |  |       |
| 4. Prepared the senior rater's portion of the NCOER.                                                               |  |       |
| 5. Ensured the NCOER was submitted for review and further processing.                                              |  |       |
| Evaluation Guidance: Score the soldier GO if all performance measures are passed. Score the soldier                |  |       |

**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 623-205

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

**Conditions:** In a field or garrison environment, given situations requiring platoon or section administrative procedures; supervision; applicable forms; records; and the following references: AR 25-400-2, AR 600-8-2, AR 614-200, and AR 635-200.

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

| Perf | formance Measures                                                                                                                                                                                                     | <u>GO</u> | NO GO |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.   | Established files using the Army Records Information Management System. 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.  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.                                                                                                                                                                 |           |       |
| 8.   | Verified accuracy of Enlisted Promotion Report (AAC-C01).                                                                                                                                                             |           |       |
| 9.   | Assisted a subordinate NCO who had received notice of selection to be released under the OMP                                                                                                                          |           |       |

**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.

Related

#### References

AR 635-200

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

# Manage Combat Stress 091-CLT-4003

**Conditions:** In a field or garrison environment, given a situation requiring stress management and FM 22-51.

**Standards:** Managed combat stress in accordance with applicable reference.

| Performance Measures                                                                                                                                                                                           |  | NO GC |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|--|
| 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.                                                                                                                                                     |  |       |  |
| <b>Evaluation Guidance:</b> 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 |  |       |  |

References

Required FM 22-51

was done wrong and how to do it correctly.

# Ensure Maintenance Operations are in Compliance With the Army Environmental Program 091-CLT-4004

**Conditions:** In a field or garrison environment, given a maintenance site or facility, maintenance personnel and equipment, maintenance SOP, AR 385-10, AR 40-5, and FM 4-30.3.

**Standards:** Ensured maintenance operations were in compliance with the Army Environmental Program and other regulatory publications.

| Performance Measures |                                                                                                                                                                                                                                                                               | <u>GO</u> | NO GO |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Ensured all publications were available.                                                                                                                                                                                                                                      |           |       |
| 2.                   | Reviewed maintenance SOP for the following to ensure environmental policies and procedures were adequately addressed.  a. Environmental strategies of compliance, restoration, prevention, and conservation.  b. Federal, state, local, and host nation laws and regulations. |           |       |
| 3.                   | Updated, changed, or amended SOP, as necessary.                                                                                                                                                                                                                               |           |       |
| 4.                   | Ensured all soldiers had received training on environmental laws, regulations, policies, and procedures.                                                                                                                                                                      |           |       |
| 5.                   | Ensured inspections for hazardous waste and HAZMAT were conducted, 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
AR 385-10
AR 40-5
FM 4-30.3

# Enforce Compliance With the Shop Safety Program 091-CLT-4005

**Conditions:** In a field or garrison environment, given a maintenance site or facility, maintenance personnel, unit safety SOP, AR 385-10, AR 385-40, AR 385-55, AR 614-200, DA PAM 385-1, TB 43-0142, and TB MED 524.

**Standards:** Enforced compliance with the shop safety program in accordance with applicable references and unit safety SOP.

| Performance Measures |                                                                                                                                                                          | <u>GO</u> | NO GO |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Ensured all safety references were on hand.                                                                                                                              |           |       |
| 2.                   | Ensured all safety equipment was on hand, accessible, and properly maintained.                                                                                           |           |       |
| 3.                   | Ensured all soldiers were regularly updated on the shop safety program.                                                                                                  |           |       |
| 4.                   | Ensured periodic safety inspections were being conducted and safety concerns and violations were being corrected.                                                        |           |       |
| 5.                   | Ensured safety violations were being documented and reported as required and follow-ups were being conducted.                                                            |           |       |
| 6.                   | Inspected records of safety inspections and accident reports for accuracy and completeness.                                                                              |           |       |
| 7.                   | Inspected MSDSs to ensure that they were posted and maintained in applicable work areas.                                                                                 |           |       |
| 8.                   | Performed periodic safety spot checks and inspections for safety awareness and systemic safety problems.  a. Performed on-the-spot corrections. b. Performed follow-ups. |           |       |

**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 385-40
AR 385-55
AR 614-200
DA PAM 385-1
TB 43-0142
TB MED 524

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

**Conditions:** In a field environment, given an OPORD or maintenance situation, a maintenance platoon or section with personnel and equipment, SOP, and FM 4-30.3.

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

| Performance Measures                                                                                                                                                                                                                       |  | NO GO |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| Evaluated the tactical situation and OPORD requirements.                                                                                                                                                                                   |  |       |
| 2. Determined support needed at each location.                                                                                                                                                                                             |  |       |
| 3. Notified parent and supported units of support requirements.                                                                                                                                                                            |  |       |
| <ol> <li>Followed up to ensure support had been coordinated and was being provided.</li> <li>a. Notified appropriate parent and supported units to resolve any problems.</li> <li>b. Addressed problems in after-action review.</li> </ol> |  |       |

**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

# Select a Field Maintenance Site 091-CLT-4007

**Conditions:** In a field environment, given an OPORD to establish a field maintenance site, maintenance personnel and equipment, and FM 4-30.3.

**Standards:** Selected a field maintenance site in accordance with the OPORD and applicable reference.

| Performance Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | NO GO |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| <ol> <li>Considered the following elements of a good field maintenance site during the selection process.         <ul> <li>a. Area should be reasonably flat and have good drainage.</li> <li>b. Area should have firm soil to permit parking and movement of heavy vehicles and equipment.</li> <li>c. Area should be accessible to support units.</li> <li>d. Terrain should facilitate defense.</li> <li>e. Area should be near built-up areas that can be used for mission support.</li> </ul> </li> </ol> |  |       |
| 2. Performed a map reconnaissance to determine possible sites.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |       |
| 3. Performed an area reconnaissance and site recons to determine the best site.                                                                                                                                                                                                                                                                                                                                                                                                                                |  |       |
| 4. Informed higher headquarters of the field maintenance site location.                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |       |
| 5. Relocated to the new field maintenance site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |       |
| <b>Evaluation Guidance:</b> 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

# Prepare an Operational Overlay for Maintenance Operations 091-CLT-4008

**Conditions:** In a field or garrison environment, given a map, overlay material, maintenance situation or OPORD, and FM 101-5-1, FM 4-30.3, and FM 5-170.

**Standards:** Prepared an operational overlay for maintenance operations by depicting key activities and elements within the area of operation in accordance with applicable references.

| Performance Measures                                                                                                   |  | NO GO |
|------------------------------------------------------------------------------------------------------------------------|--|-------|
| 1. Ensured necessary references and materials were available.                                                          |  |       |
| <ol><li>Placed units and activities on the maintenance operations overlay using the<br/>appropriate symbols.</li></ol> |  |       |
| 3. Placed key features of the area of operation on the overlay.                                                        |  |       |
| 4. Updated the operational overlay, 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 FM 101-5-1 FM 4-30.3 FM 5-170

# Control Flow of Work Through the Maintenance Shop 091-CLT-4009

**Conditions:** In a field or garrison environment, given a maintenance shop including personnel, work orders, FM 4-30.3, and TC 43-4.

**Standards:** Controlled the flow of work within the maintenance shop to ensure maximum production, effective use of personnel and facilities, and orderly progression of work so that overloads were prevented or corrected, and the shop was working near capacity with a manageable backlog.

| Performance Measures                                                                                                             |  | NO GO |
|----------------------------------------------------------------------------------------------------------------------------------|--|-------|
| Screened maintenance requests.                                                                                                   |  |       |
| 2. Assigned work to the appropriate shop section.                                                                                |  |       |
| 3. Maintained workload status for the various sections.                                                                          |  |       |
| <ol> <li>Directed repair priorities and additional actions (evacuation, ORF, intrashop,<br/>deferred), as applicable.</li> </ol> |  |       |
| 5. Ensured shop supply section orders and maintained repair parts, as required.                                                  |  |       |
| 6. Improved operational procedures, where 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 FM 4-30.3 TC 43-4

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

**Conditions:** In a field or garrison environment, given a ULLS-G computer system with software and equipment database in a unit-level maintenance shop; a SAMS-1 computer system with software and database in a DS level maintenance shop; a SAMS-2 computer system with software and database in a support operations section; AISM 18-L21-AHN-BUR-UM, AISM 18-L26-AHO-BUR-EM, AR 710-2, DA PAM 710-2-1, and DA PAM 738-750.

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

| Performance Measures                                                              |  | NO GO |
|-----------------------------------------------------------------------------------|--|-------|
| 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 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
AISM 18-L21-AHN-BUR-UM
AISM 18-L26-AHO-BUR-EM
AR 710-2
DA PAM 710-2-1
DA PAM 738-750

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

**Conditions:** In a field or garrison environment, given an OPORD or maintenance situation, maintenance personnel and equipment, and FM 4-30.3.

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

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

**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

# Monitor the Preparation and Disposition of the Army Materiel Status System (AMSS) Reports 091-CLT-4012

**Conditions:** In a field or garrison unit level maintenance shop, given a ULLS-G computer system with AMSS software, AMSS reports produced from a ULLS-G system, applicable SOP, AR 710-2, DA PAM 710-2-1, and DA PAM 738-750.

**Standards:** Verified accuracy of AMSS report data, identified maintenance trends and problems, and ensured timely completion and forwarding of reports in accordance with applicable references and SOP.

| Performance Measures                                                                                                                                                                                           |  | NO GO |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| 1. Ensured necessary ULLS equipment and references were available.                                                                                                                                             |  |       |
| 2. Checked AMSS report data for accuracy and completeness.                                                                                                                                                     |  |       |
| 3. Analyzed AMSS reports and data to identify maintenance trends and problems.                                                                                                                                 |  |       |
| <ol> <li>Notified supported units, logistics assistance office/logistics assistance<br/>representative, and chain of command, as necessary, to resolve problems and<br/>prevent future occurrences.</li> </ol> |  |       |
| <ol><li>Ensured AMSS reports were completed and forwarded through appropriate<br/>channels in accordance with SOP.</li></ol>                                                                                   |  |       |

**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 710-2
DA PAM 710-2-1
DA PAM 738-750

# Analyze the Prescribed Load List (PLL) Report 091-CLT-4013

**Conditions:** In a field or garrison unit level maintenance shop, given PLL reports produced by ULLS-G, AR 710-2, DA PAM 710-2-1, and DA PAM 738-750.

**Standards:** Analyzed the PLL reports to ensure inventory accuracy and identified potential supply shortages and problems impacting on maintenance readiness, in accordance with applicable references.

| Performance Measures                                                                                                                                                                                                                          |  | NO GO |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| <ol> <li>Ensured reports and references were available.</li> <li>a. PLL inventory report.</li> <li>b. Zero balance report.</li> <li>c. PLL excess management report.</li> <li>d. PLL inquiries, as needed.</li> <li>e. NMC report.</li> </ol> |  |       |
| 2. Performed random inventory checks and resolved discrepancies.                                                                                                                                                                              |  |       |
| <ol><li>Determined expedient measures necessary to resolve NMC-S equipment<br/>awaiting PLL items on the zero balance report.</li></ol>                                                                                                       |  |       |
| 4. Resolved discrepancies in report data within the ULLS-G system.                                                                                                                                                                            |  |       |

**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 710-2
DA PAM 710-2-1
DA PAM 738-750

# Monitor Quality Control Program 091-CLT-4014

**Conditions:** In a field or garrison maintenance shop, given a maintenance site or facility, maintenance personnel, maintenance SOP, AR 710-2, DA PAM 710-2-1, and FM 4-30.3.

**Standards:** Monitored the quality control program to ensure quality of work in accordance with applicable references.

| Performance Measures |                                                                                                                                                                                                        | <u>GO</u> | NO GC |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1                    | . Ensured quality assurance and quality control inspectors were adequately trained and knowledgeable in their respective maintenance areas and, if required by SOP, were on orders from the commander. |           |       |
| 2                    | <ul> <li>Ensured QA/QC inspectors followed maintenance SOP guidelines and<br/>procedures and appropriate technical manual procedures for initial and final<br/>inspections.</li> </ul>                 |           |       |
| 3                    | . Performed periodic checks of inspectors work for accuracy of initial diagnosis and quality of final inspections.                                                                                     |           |       |
| 4                    | . Ensured supervisors were conducting in-process inspections of work done by mechanics and technicians.                                                                                                |           |       |

**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 710-2 DA PAM 710-2-1 FM 4-30.3

# Analyze Bench Stock Listing 091-CLT-4015

**Conditions:** In a field or garrison DS level maintenance shop, given a SAMS-1 generated bench stock listing (AHN-023), AISM 18-L21-AHN-BUR-UM, AR 710-2, DA PAM 710-2-1, and DA PAM 738-750.

**Standards:** Analyzed bench stock listing to identify supply problems that may impact maintenance readiness in accordance with applicable references.

| Performance Measures                                                                                                 |  | NO GO |
|----------------------------------------------------------------------------------------------------------------------|--|-------|
| Ensured report and references were available.                                                                        |  |       |
| 2. Performed random bench stock inventory checks.                                                                    |  |       |
| <ol><li>Determined expedient measures necessary to resolve NMC-S equipment<br/>awaiting bench stock items.</li></ol> |  |       |
| 4. Resolved any discrepancies in report data in the SAMS-1.                                                          |  |       |

**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
AISM 18-L21-AHN-BUR-UM
AR 710-2
DA PAM 710-2-1
DA PAM 738-750

# Analyze Open Work Request Reconciliation Listing 091-CLT-4016

**Conditions:** In a field or garrison DS level maintenance shop, given a SAMS-1 generated open work request reconciliation listing, AISM 18-L21-AHN-BUR-UM, and AISM 18-L26-AHO-BUR-EM.

**Standards:** Analyzed the open work request reconciliation listing in accordance with applicable references.

| Performance Measures                                                        | <u>GO</u> | NO GC |
|-----------------------------------------------------------------------------|-----------|-------|
| Ensured references and equipment were available.                            |           |       |
| 2. Conducted face-to-face reconciliation with team chief.                   |           |       |
| 3. Supervised SAMS operator on purging operations.                          |           |       |
| 4. Supervised SAMS operator on mail status returned on organizational disk. |           |       |
| 5. Improved operational procedures, where 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 AISM 18-L21-AHN-BUR-UM AISM 18-L26-AHO-BUR-EM

# Analyze Completed Shop Workload Summary 091-CLT-4017

**Conditions:** In a field or garrison DS level maintenance shop, given a SAMS-1 generated completed shop workload summary report, local SOP, AISM 18-L21-AHN-BUR-UM, and AISM 18-L26-AHO-BUR-EM.

**Standards:** Analyzed the completed shop workload summary report in accordance with applicable references.

| Performance Measures                                                                                                               | <u>GO</u> | NO GO |
|------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| Ensured references and equipment were available.                                                                                   |           |       |
| 2. Assigned workload to personnel, as required.                                                                                    |           |       |
| 3. Tracked status of all jobs requiring parts.                                                                                     |           |       |
| <ol> <li>Ensured once job was completed, parts were turned in and paperwork completed<br/>in accordance with local SOP.</li> </ol> |           |       |
| 5. Improved operational procedures, where 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 AISM 18-L21-AHN-BUR-UM AISM 18-L26-AHO-BUR-EM

# Analyze Shop Deadline and Deferred Workload Listing 091-CLT-4018

**Conditions:** In a field or garrison DS level maintenance shop, given a SAMS-1 generated shop deadline and deferred workload listing report, AISM 18-L21-AHN-BUR-UM, and AISM 18-L26-AHO-BUR-EM.

**Standards:** Analyzed the shop deadline and deferred workload listing report in accordance with applicable references.

| Performance Measures                                  | <u>GO</u> | NO GO |
|-------------------------------------------------------|-----------|-------|
| Ensured references and equipment were available.      |           |       |
| 2. Prioritized jobs by the status and priority code.  |           |       |
| 3. Tracked workload listing for proper status of O&M. |           |       |
| 4. Supervised AHN-006, AHN-022, and AHN-026 reports.  |           |       |
| 5. Improved operational procedures, where 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 AISM 18-L21-AHN-BUR-UM AISM 18-L26-AHO-BUR-EM

# Analyze Shop Workload Summary Listing 091-CLT-4019

**Conditions:** In a field or garrison DS level maintenance shop, given a SAMS-1 generated shop workload summary listing, local SOP, AISM 18-L21-AHN-BUR-UM, and AISM 18-L26-AHO-BUR-EM.

**Standards:** Analyzed the shop workload summary listing in accordance with applicable references.

| Performance Measures                                                                                                             |  | NO GC |
|----------------------------------------------------------------------------------------------------------------------------------|--|-------|
| Ensured references and equipment were available.                                                                                 |  |       |
| 2. Assigned workload to personnel, as required.                                                                                  |  |       |
| 3. Tracked status of all jobs requiring parts.                                                                                   |  |       |
| <ol><li>Ensured once job was completed, parts were turned in and paperwork completed<br/>in accordance with local SOP.</li></ol> |  |       |
| 5. Improved operational procedures, where 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 AISM 18-L21-AHN-BUR-UM AISM 18-L26-AHO-BUR-EM

# Maintain Property Accountability 091-CLT-4020

**Conditions:** In a field or garrison environment, given property and tools, property book listing and/or hand receipts, blank forms, AR 710-2, DA PAM 710-2-1, and other applicable references.

**Standards:** Maintained property accountability in accordance with applicable references.

| Perf | formance Measures                                                                                                                                                                                                                                                  | <u>GO</u> | NO GO       |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------|
| 1.   | Ensured all references, including technical bulletins, supply catalogs, and forms were available.                                                                                                                                                                  |           |             |
| 2.   | Performed initial inventory of all property, tools, and equipment. a. Completed shortage annexes, as necessary. b. Reported all shortages, as necessary. c. Initiated report of survey or other property loss actions, as necessary. d. Ordered replacement items. |           | <del></del> |
| 3.   | Prepared sub-hand receipts for subordinate sections.                                                                                                                                                                                                               |           |             |
| 4.   | Ensured subordinates inventoried all property, tools, and equipment on each respective sub-hand receipt and shortage annex and signed for property on-hand.                                                                                                        |           |             |
| 5.   | Signed for property on property book or hand receipts, as applicable.                                                                                                                                                                                              |           |             |
| 6.   | Performed periodic inventories of tools and sensitive items, as required.                                                                                                                                                                                          |           |             |
| 7.   | Performed periodic partial or full inventories, 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 AR 710-2 DA PAM 710-2-1

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

**Conditions:** In a field or garrison environment, given FM 4-30.3, higher headquarters SOPs, and commander's guidance.

**Standards:** Prepared a maintenance shop internal or external SOP for the commander's review, comment, and approval in accordance with FM 4-30.3.

| Performance Measures                                             |  | NO GO |
|------------------------------------------------------------------|--|-------|
| 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.                            |  |       |
| <b>-</b> 1 4 <b>0</b> 1 0 1 1 00 1 1 1                           |  |       |

**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

## Supervise the Deployment of Company Maintenance Team/Recovery Support Team/Maintenance Support Team

091-CLT-4022

**Conditions:** In a field or garrison environment, given a request for maintenance support or a maintenance situation, map, operational overlay, grid coordinates of destination, vehicles, equipment, maintenance personnel, FM 101-5-1, FM 4-30.3, and FM 5-170.

**Standards:** Supervised the deployment of company maintenance team and recovery support teams in accordance with the maintenance situation or request for maintenance support and applicable references.

| erf | formance Measures                                                                                                                                                                                                                                                      | <u>GO</u> | NO GO |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.  | Reviewed the request for maintenance support or maintenance situation.                                                                                                                                                                                                 |           |       |
| 2.  | Ensured personnel and equipment to perform the mission were available.                                                                                                                                                                                                 |           |       |
| 3.  | Ensured resources for the company maintenance team, recovery support team, and/or maintenance support team, including personnel with applicable MOSs, 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.  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 were 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 Related FM 101-5-1 FM 4-30.3 FM 5-170

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

**Conditions:** In a field environment, given a maintenance situation or OPORD, operational overlay, grid coordinates for a proposed route, map, vehicle with personnel, FM 4-30.3, and FM 5-170.

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

| Performance Measures |                                                                                                                                                                                                                                            | <u>GO</u> | NO GO |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 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.                   | <ul><li>Reconnoitered the route by identifying the following key features.</li><li>a. Potential problem areas (such as possible enemy contact, trafficability, and so forth).</li><li>b. Possible bypasses and alternate routes.</li></ul> |           |       |
| 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** FM 4-30.3 FM 5-170

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

**Conditions:** In a field environment, given a maintenance situation or OPORD, operational overlay, grid coordinates for a proposed occupation area, map, vehicle with personnel, FM 4-30.3, and FM 5-170.

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

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

**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 FM 5-170

# Manage Battlefield Maintenance Support 091-CLT-4025

**Conditions:** In a field maintenance shop, given an OPORD or maintenance situation, maintenance personnel, equipment, and FM 4-30.3.

**Standards:** Managed battlefield maintenance support in accordance with applicable references.

| Performance Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         | NO GO |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------|
| <ol> <li>Assessed the combat situation and organized and prioritized support based<br/>type of operation.         <ul> <li>a. Offensive operation.</li> <li>b. Defensive operation.</li> </ul> </li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | d on —— |       |
| <ol> <li>Planned for and executed appropriate maintenance support.         <ul> <li>a. Identified requirements.</li> <li>b. Identified available resources.</li> <li>(1) Personnel and skills.</li> <li>(2) Publications.</li> <li>(3) Time.</li> <li>(4) Facilities.</li> <li>(5) TMDE and tools.</li> <li>(6) Parts.</li> </ul> </li> <li>c. Managed resources for maximum return, with priority on the following         <ul> <li>(1) Maintenance support forward.</li> <li>(2) Commander's guidance.</li> <li>(3) Battle damage repair.</li> <li>(4) Controlled exchange.</li> <li>(5) Cannibalization.</li> <li>(6) Evacuation.</li> <li>(7) Recovery.</li> </ul> </li> </ol> | <u></u> |       |
| <ul> <li>3. Followed priorities for repair of battle damaged systems.</li> <li>a. Most essential for completion of the immediate mission.</li> <li>b. Least amount of time to repair.</li> <li>c. Reparable, but not in time to continue the immediate mission.</li> <li>d. Damaged beyond repair candidate for cannibalization.</li> </ul>                                                                                                                                                                                                                                                                                                                                        |         |       |

**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

# Perform Support Operations NCO Duties 091-CLT-4026

**Conditions:** In a field or garrison environment, given a position as a support operations maintenance NCO, FM 100-16, and FM 4-30.3.

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

| Performance Measures                                                                                                                                                                                                                                   |  | NO GO |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| 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.                                                                                                                                                                         |  |       |
| <ul> <li>4. Supervised, controlled, and directed the operation of battalion units for</li> <li>a. DS maintenance.</li> <li>b. Evacuation.</li> <li>c. Repair parts supply.</li> <li>d. Reparable exchange.</li> <li>e. Technical assistance</li> </ul> |  |       |

**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 100-16 FM 4-30.3

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

**Conditions:** In a field maintenance environment, given an OPORD or maintenance situation, a maintenance collection point site, maintenance personnel and equipment, and FM 4-30.3.

**Standards:** Managed maintenance operations at an MCP in accordance with the OPORD and applicable references.

| Performance Measures |                                                                                                                                                                                                                                                                                                                                                                              | <u>GO</u> | NO GO |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------|
| 1.                   | Set up the MCP.                                                                                                                                                                                                                                                                                                                                                              |           |       |
| 2.                   | <ul> <li>Managed flow of equipment for repair.</li> <li>a. Focused efforts toward repairing systems for current battle or start of next battle.</li> <li>b. Fixed 4- to 6- hour jobs at UMCP.</li> <li>c. Evacuated other equipment to brigade MCP or farther rear location.</li> <li>d. Maximized BDAR, cannibalization, and controlled exchange at central MCP.</li> </ul> |           |       |
| 3.                   | Managed company maintenance teams, recovery support teams, maintenance support teams held at MCP.                                                                                                                                                                                                                                                                            |           |       |
| 4.                   | Managed PLL assets for forward combat units.                                                                                                                                                                                                                                                                                                                                 |           |       |
| 5.                   | Relocated forward, as necessary, to continue fix-forward support.                                                                                                                                                                                                                                                                                                            |           |       |
|                      | luation Guidance: Score the soldier GO if all performance measures are passed. S                                                                                                                                                                                                                                                                                             |           |       |

**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

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

**Conditions:** In a field environment, given an OPORD or maintenance situation, maintenance personnel and equipment, and FM 4-30.3.

**Standards:** Provided maintenance support during tactical operations in accordance with the OPORD and reference.

| Performance Measures                                                                                                                                                                                                                                 |  | NO GO |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|
| 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 NBC environment.                                                                                                                                                                                                  |  |       |
| <ul><li>7. Provided maintenance support during stability and support operations.</li><li>a. Peace operations.</li><li>b. Humanitarian operations.</li><li>c. Disaster relief operations.</li></ul>                                                   |  |       |
| <ul> <li>8. Provided maintenance support in adverse conditions.</li> <li>a. Desert operations.</li> <li>b. Cold weather operations.</li> <li>c. Jungle operations.</li> <li>d. Mountain operations.</li> <li>e. Urban terrain operations.</li> </ul> |  |       |

**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

#### **APPENDIX A**

#### HANDS-ON EVALUATION

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

#### **During evaluation:**

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

#### **APPENDIX B**

#### FIELD EXPEDIENT SQUAD BOOK

## 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 ½ x 11 paper.
- 2. Locally reproduce the partially completed form if you are evaluating more than nine soldiers.

#### **During evaluation:**

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

#### After evaluation:

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

#### **GLOSSARY**

Section I

**Acronyms & Abbreviations** 

**ACCP** Army Correspondence Course Program

AFCS Automatic Fire Control System

AFES Automatic fire extinguishing system

AIPD Army Institute for Professional Development

AISM automated information systems manual

AIT advanced individual training

AMSS Army Materiel Status System

**AN** annually

ANCOC advanced noncommissioned officer course

AOAP Army Oil Analysis Program

**APU** auxiliary power unit

AR Army regulation

**ARTEP** Army Training and Evaluation Program

ASI additional skill identifier

**ATTN** attention

**BA** biannually

**BD** battlefield damage

**BDAR** battle damage assessment and repair

BII basic issue items

**BNCOC** basic noncommissioned officer course

BTC basic technical course

**BW** biweekly

**CLT** common logistic task

**COEI** components of end item

CTS contact test set

CTT common task test

**DA Form** Department of the Army form

**DA PAM** Department of the Army pamphlet

**DS** direct support

**EIC** equipment identification code

**FM** field manual

**FMC** fully mission capable

**HAZMAT** hazardous material

**HQ TRADOC** Headquarters, Training and Doctrine Command

**LMTV** light medium tactical vehicle

**LO** lubrication order

MACOM major Army command

MCP maintenance collection point

MCS microclimate conditioning system

MCSR materiel condition status report

METL mission essential task list

MO monthly

MOS military occupational specialty

MOSC military occupational specialty code

MSDS material safety data sheet

MTV medium tactical vehicle

NA not applicable

NBC nuclear, biological, and chemical

NCO noncommissioned officer

NCOER Noncommissioned Officer Evaluation Report

NMC non-mission capable

NMC-S nonmission capable-supply

No. number

**O&M** operation and maintenance

**ODCSOPS** Office of the Deputy Chief of Staff, Operations and Plans

**OPORD** operations order

**PAM** pamphlet

PDIU prognostic/diagnostic interface unit

PLL prescribed load list

**PMCS** preventive maintenance checks and services

**POL** petroleum, oils, and lubricants

**QA/QC** quality assurance/quality control

**QMP** Qualitative Management Program

**QT** quarterly

**RDL** Reimer Digital Library

**RPM** revolutions per minute

**SA** semiannually

SAMS Standard Army Maintenance System

SAMS-1 Standard Army Maintenance System-Level 1

SAMS-2 Standard Army Maintenance System-Level 2

SARSS-O Standard Army Retail Supply System-Objective

**SASO** stability and support operations

SC supply catalog

SD special duty

**SKO** sets, kits and outfits

SL skill level

**SM** soldier's manual

**SMCT** soldier's manual of common tasks

#### STP 9-63D14-SM-TG

**SOP** standing operating procedure

**SPORT** soldier's portable on-system repair tool

**STP** soldier training publication

**TAMMS** The Army Maintenance Management System

TB technical bulletin

**TB MED** technical bulletin (medical)

TC training circular

TG trainer's guide

TM technical manual

**TMDE** test, measurement, and diagnostic equipment

TRADOC Training and Doctrine Command

**UIC** unit identification code

**ULLS** Unit Level Logistics System

**ULLS-G** Unit Level Logistics System-Ground

**UMCP** unit maintenance collection point

**UNIT** Trained in the unit

**USAMC** United States Army Materiel Command

**VA** Virginia

**WK** weekly

#### **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         | Unit Status Reporting 10 June 2003                                                                                  |
| AR 25-400-2      | The Army Records Information Management System (ARIMS) 18 March 2003                                                |
| AR 350-57        | Self-Development Test 17 June 1994                                                                                  |
| AR 385-10        | The Army Safety Program 29 February 2000                                                                            |
| AR 385-40        | Accident Reporting and Records 1 November 1994                                                                      |
| AR 385-55        | Prevention of Motor Vehicle Accidents 12 March 1987                                                                 |
| AR 40-5          | Preventive Medicine 15 October 1990                                                                                 |
| AR 600-55        | The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing) 31 December 1993 |
| AR 600-8-2       | Suspension of Favorable Personnel Actions (Flags) 30 October 1987                                                   |
| AR 614-200       | Enlisted Assignments and Utilization Management 30 April 2003                                                       |
| AR 623-205       | Noncommissioned Officer Evaluation Reporting System 15 May 2002                                                     |
| AR 635-200       | Active Duty Enlisted Administrative Separations 19 December 2003                                                    |
| AR 700-138       | Army Logistics Readiness and Sustainability 26 February 2004                                                        |
| AR 700-4         | Logistics Assistance 20 August 2002                                                                                 |
| AR 710-2         | Inventory Management Supply Policy Below the National Level 25 February 2004                                        |
| AR 725-50        | Requisition, Receipt, and Issue System 15 November 1995                                                             |
| AR 735-5         | Policies and Procedures for Property Accountability 10 June 2002                                                    |
| AR 750-1         | Army Materiel Maintenance Policy 18 August 2003                                                                     |
| AR 750-43        | Army Test, Measurement and Diagnostic Equipment Program 28 November 1997                                            |
|                  |                                                                                                                     |

### **Department of Army Forms**

| 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 5164-R | Hands-On Evaluation                                               |
| DA FORM 5165-R | Field Expedient Squad Book                                        |
| DA FORM 5988-E | Equipment Inspection Maintenance Worksheet                        |
|                |                                                                   |

### **Department of Army Pamphlets**

| DA PAM 25-30 | Consolidated Index of Army Publications and Blank Forms 1 April 2004 |
|--------------|----------------------------------------------------------------------|
| DA PAM 25-33 | User's Guide for Army Publications and Forms 15 September 1996       |

| DA PAM 25-40   | Army Publishing: Action Officers Guide 29 December 2003                                  |
|----------------|------------------------------------------------------------------------------------------|
| DA PAM 350-59  | Army Correspondence Course Program Catalog 26 October 2001                               |
| DA PAM 385-1   | Small Unit Safety Officer/NCO Guide 29 November 2001                                     |
| DA PAM 710-2-1 | Using Unit Supply System (Manual Procedures) (Standalone Pub) 31 December 1997           |
| DA PAM 710-2-2 | Supply Support Activity Supply System: Manual Procedures 30 September 1998               |
| DA PAM 738-750 | Functional Users Manual for The Army Maintenance Management System (TAMMS) 1 August 1994 |
| DA PAM 750-1   | Leader's Unit Level Maintenance Handbook 3 October 2003                                  |
| DA PAM 750-35  | Guide for Motor Pool Operations 1 August 1994                                            |

| Field Manuals |                                                                  |
|---------------|------------------------------------------------------------------|
| FM 100-16     | Army Operational Support 31 May 1995                             |
| FM 101-5-1    | Operational Terms and Graphics (MCRP 5-2A) 30 September 1997     |
| FM 21-31      | Topographic Symbols 19 June 1961                                 |
| FM 22-51      | Leaders' Manual for Combat Stress Control 29 September 1994      |
| FM 24-35      | Signal Operation Instructions "The SOI" 26 October 1990          |
| FM 25-4       | How to Conduct Training Exercises 10 September 1984              |
| FM 25-5       | Training for Mobilization and War 25 January 1985                |
| FM 3-25.26    | Map Reading and Land Navigation 20 July 2001                     |
| FM 4-30.3     | Maintenance Operations and Procedures 1 September 2000           |
| FM 5-125      | Rigging Techniques, Procedures, and Applications 3 October 1995  |
| FM 5-170      | Engineer Reconnaissance 5 May 1998                               |
| FM 7-0        | Training The Force 22 October 2002                               |
| FM 7-1        | Battle Focused Training 15 September 2003                        |
| FM 9-43-2     | Recovery and Battlefield Damage Assessment and Repair FMFRP 4-34 |

TO 36-1-181 3 October 1995

**Lubrication Orders** 

| LO 9-2350-256-12 | Recovery Vehicle, Full-Tracked, Medium, M88A1 (NSN 2350-01-122-6826) 28 February 1986 |
|------------------|---------------------------------------------------------------------------------------|
| LO 9-2350-267-12 | Carrier, Ammunition, Tracked: M992 (NSN 2350-01-110-4660) 25 March 1988               |

### **Other Product Types**

| AISM 18-L21-AHN-BUR-UM | Standard Army Maintenance System Level 1 (SAMS-1) End User Manual |
|------------------------|-------------------------------------------------------------------|
| AISM 18-L26-AHO-BUR-EM | Standard Army Maintenance System Level 2 (SAMS-2) End User Manual |
| SC 9999-01-SKO         | Consolidated Publication of Component Lists 1 April 2004          |

### **Soldier Training Publications**

| STP 21-1-SMCT  | Soldier's Manual of Common Tasks Skill Level 1 1 April 2003           |
|----------------|-----------------------------------------------------------------------|
| STP 21-24-SMCT | Soldier's Manual of Common Tasks (SMCT) Skill Levels 2-4 1 April 2003 |

### **Technical Bulletins**

| TB 43-0142 | Safety Inspection and Testing of Lifting Devices 28 February 1997              |
|------------|--------------------------------------------------------------------------------|
| TB 43-0211 | Army Oil Analysis Program (AOAP) Guide for Leaders and Users 15 September 2003 |

TB 43-180 Calibration and Repair Requirements for the Maintenance of Army Materiel 15 September 2002 **TB MED 524** Occupational and Environmental Health: Control of Hazards to Health From Laser Radiation 20 June 1985 **Technical Manuals** TM 11-5820-890-10-3 Operator's Manual for SINCGARS Ground Combat Net Radio, Non-ICOM Manpack Radio AN/PRC-119; Short Range Vehicular Radio AN/VRC-87; Short Range Vehicular Radio (With Single Radio Mount) AN/VRC-87D; Short Range Vehicular Radio With Dismount AN 1 September 1992 Operator's, Unit, Direct Support and General Support Maintenance TM 11-6625-3052-14 Manual for Digital Multimeter AN/PSM-45 (NSN 6625-01-139-2512) 10 January 1984 TM 11-6625-3052-24P Organizational, Direct Support and General Support Maintenance Repair Parts and Special Tools List for Multimeter, Digital, AN/PSM-45 (NSN 625-01-139-2512) 3 February 1984 TM 750-116 General Procedures for Purging and Charging of Fire Control Instruments 5 May 1993 Evaluation of Cannon Tubes 1 February 1999 TM 9-1000-202-14 TM 9-2320-279-10-1 Operators Manual for M977 Series 8X8 Heavy Expanded Mobility Tactical Trucks (HEMTT), Truck, Cargo, With Winch, M977; Truck, Cargo, With Winch, M977A2; Truck, Cargo, With Winch, M977A2R1; Truck, Cargo, Without Winch, M977; Truck, Cargo 21 November 1986 Operator's Manual for M977 Series, 8X8 Heavy Expanded Mobility TM 9-2320-279-10-2 Tactical Trucks (HEMTT) Truck, Cargo, With Winch M977; Truck, Cargo, With Winch, M977A2; Truck, Cargo, With Winch, M977A2R1; Truck, Cargo, Without Winch, M977; Truck, Cargo 15 June 1987 TM 9-2320-279-20-1 Maintenance Instructions for Organizational Maintenance M977 Series. 8X8 Heavy Expanded Mobility Tactical Trucks (HEMTT) Truck, Cargo, With Winch M977; Truck, Cargo, Without Winch M977; Truck, Tank, Fuel, With Winch M978; 7 April 1987 TM 9-2320-279-20-2 Maintenance Instructions for Organizational Maintenance for M977 Series, 8X8 Heavy Expanded Mobility Tactical Trucks (HEMTT) Truck, Cargo, With Winch M977; Truck, Cargo, With Winch, M977A2; Truck, Cargo, With Winch, M977A2R1; 7 April 1987 TM 9-2320-279-20-3 Maintenance Instructions Organizational Maintenance M977 Series, 8x8 Heavy Expanded Mobility Tactical (HEMTT) Truck, Cargo With Winch M977; Truck, Cargo, Without Winch M977; Truck, Tank, Fuel, With Winch M978; Truck, Tank, Fuel, Without Win 8 April 1987 Operator's Manual for Recovery Vehicle, Full Tracked, Medium, M88A1 TM 9-2350-256-10 (NSN 2350-00-122-6826) 31 March 1998 TM 9-2350-256-20 Unit Maintenance Manual for Recovery Vehicle, Full Tracked, Medium, M88A1 (NSN 2350-00-122-6826) (This Item is Included on EM 0036) 15 July 1996 Unit, Direct Support and General Support Maintenance Repair Parts and TM 9-2350-256-24P-1 Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Recovery Vehicle, Full Tracked; Medium M88A1 (NSN 2350-00-122-6826) 29 May 1992 TM 9-2350-256-24P-2 Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Recovery Vehicle, Full Tracked; Medium, M88A1 (NSN 2350-00-122-6826) 8 May 1992

| TM 9-2350-256-34-1 | Direct Support and General Support Maintenance Manual for Recovery Vehicle, Full Tracked, Medium, M88A1 (NSN 2350-00-122-6826) 28 January 1977                                                                                                             |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TM 9-2350-256-34-2 | Direct Support and General Support Maintenance Manual for Recovery Vehicle, Full Tracked: Medium, M88A1 (NSN 2350-00-122-6826); Winch Power Takeoff and Hoist System 16 February 1977                                                                      |
| TM 9-2350-267-10   | Operator's Manual for Carrier, Ammunition, Tracked, M992 (NSN 2350-01-110-4660) 4 October 1991                                                                                                                                                             |
| TM 9-2350-267-20   | Organizational Maintenance Manual for Hull, Powerpack, Drive, Controls, Tracks, Suspension and Associated Components Carrier, Ammunition, Tracked, M992 (NSN 2350-01-110-4660) 28 October 1985                                                             |
| TM 9-2350-267-24P  | Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools List for Carrier, Ammunition, Tracked, M992 (NSN 2350-01-110-4660) (EIC: AEW) 31 August 1994                                                                           |
| 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 31 January 1984 |
| TM 9-2350-275-BD   | Operator's, Organizational, Direct Support and General Support<br>Maintenance Battlefield Damage Assessment and Repair for M113<br>Family, Carrier, Personnel, Self-Propelled, Full-Tracked 9 February 1984                                                |
| TM 9-2350-276-BD   | Operator's, Organizational, Direct Support and General Support,<br>Maintenance Battlefield Damage Assessment and Repair for Combat<br>Vehicles 10 February 1984                                                                                            |
| TM 9-2350-287-10   | Operator's Manual for Carrier, Ammunition, Tracked M992A1 (NSN 2350-01-352-3021) (EIC: AE6)(NG) 22 October 1993                                                                                                                                            |
| TM 9-2350-287-20-1 | Unit Maintenance Manual For Carrier, Ammunition, Tracked M992A1 (NSN 2350-01-352-3021) (EIC:AE6) (This Item is Included on EM 0120) 22 October 1993                                                                                                        |
| TM 9-2350-287-20-2 | Unit Maintenance Manual for Carrier, Ammunition, Tracked M992A1 (NSN 2350-01-352-3021) (EIC:AE6) 22 October 1993                                                                                                                                           |
| TM 9-2350-287-24P  | Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools List for Carrier, Ammunition, Tracked M992A1 (NSN 2350-01-352-3021) (EIC:AE6) 22 October 1993                                                                          |
| TM 9-2350-292-10   | Operator's Manual for Recovery Vehicle, Heavy, Full-Tracked: M88A2 (NSN 2350-01-390-4683)(EIC: ACQ) [TM 0769B-10/1] 1 January 2002                                                                                                                         |
| TM 9-2350-292-20-1 | Unit Maintenance Manual for Recovery Vehicle, Heavy Full-Tracked, M882A (NSN 2350-01-390-4683)(EIC:ACQ) VOL 1of 2 [TM 07769B-20/2-1] 1 January 2002                                                                                                        |
| TM 9-2350-292-20-2 | Unit Maintenance Manual for Recovery Vehicle, Heavy Full-Tracked: M882A (NSN 2350-01-390-4683)(EIC:ACQ) VOL 2 of 2 [TM 07769B-20/2-1] 1 January 2002                                                                                                       |
| TM 9-2350-292-24P  | Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools Lists (Including Depot Maintenance Repair Parts and Special Tools) for Recovery Vehicle, Full Tracked: Heavy M882A (NSN 2350-01-390-4683) (EIC:AQC) 1 January 2002     |
| TM 9-2350-293-10   | Operator's Manual for Carrier, Ammunition, Tracked M992A2 (NSN 2350-01-368-9500)(EIC:AE2) 17 December 2001                                                                                                                                                 |
| TM 9-2350-293-20&P | Organizational Maintenance Manual (Including Repair Parts and Special Tools and Depot Maintenance Repair Parts Lists) for Carrier Ammunition Tracked M992A2 (NSN 2350-01-368-9500)(EIC:AE2) 17 December 2001                                               |

| TM 9-2350-293-34&P   | Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools and Depot Maintenance Repair Parts Lists) for Carrier Ammunition Tracked M992A2 (NSN 2350-01-368-9500) (EIC:AE2) 17 December 2001                                 |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TM 9-2350-311-10     | Operator's Manual for Howitzer, Medium, Self-Propelled, 155MM M109A2 (NSN 2350-01-031-0586)(EIC:3EZ) M109A3 (2350-01-031-8851)(EIC:3E2) M109A4 (2350-01-277-5770)(EIC:3E8) M109A5 (2350-01-281-1719)(EIC:3E7) 23 November 1994                                    |
| TM 9-2350-311-20-1   | Unit Maintenance Manual for Hull, Power Plant, Drive Controls, Tracks, Suspension and Associated Components for Howitzer, Medium, Self-Propelled, 155-MM, M109A2 (NSN 2350-01-031-0586)(EIC:3EZ) and Howitzer, Medium, Self Propelled, 155MM 29 August 1994       |
| TM 9-2350-311-20-2   | Unit Maintenance Manual for Cab, Armament, Sighting Fire Control, Elevating and Traversing Systems and Associated Components, Howitzer, Medium, Self-Propelled, 155MM, M109A2 (NSN 2350-01-031-0586)(EIC:3EZ) M109A3 (2350-01-031-8851)(EIC:3E2) 24 December 1993 |
| TM 9-2350-311-24P-1  | Unit, Direct Support, and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Howitzer, Medium, Self-Propelled, 155-mm, M109A2 (NSN 2350-01-031-0586) (EIC:3EZ) 19 September 1994    |
| TM 9-2350-311-24P-2  | Unit, DS and GS Maint Repair Parts and Special Tools List (Incl Depot Maint Repair Parts and Special Tools) for Cab, Armament, Sighting and Fire Ctrl, Elevating and Traversing Systems, and Associated Components Howitzer, Med, Self-Propelled 31 July 1998     |
| TM 9-2350-311-34-1   | Direct Support and General Support Maintenance Manual for Hull, Powerplant, Drive Controls, Tracks, Suspension and Associated Components for Howitzer, Medium, Self-Propelled, 155-MM, M109A2 (NSN 2350-01-031-0586)(EIC:3EZ) and Howitzer, 19 September 1994     |
| TM 9-2350-311-34-2   | Direct Support And General Support Maintenance Manual for Cab, Armament, Sighting and Fire Control, Elevating and Traversing Systems and Associated Components, Howitzer, Medium, Self-Propelled, 155MM, M109A2 (NSN 2350-01-031-0586)(EIC:3EZ) 2 September 1994  |
| TM 9-2350-314-10     | Operator's Manual for Howitzer, Medium, Self-Propelled: 155MM, M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                                                                                             |
| TM 9-2350-314-20-1-1 | Unit Maintenance Manual for Hull Systems and Components Howitzer, Medium, Self-Propelled: 155MM, M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                                                           |
| TM 9-2350-314-20-1-2 | Unit Maintenance Manual for Hull Systems and Components Howitzer, Medium, Self-Propelled: 155MM, M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                                                           |
| TM 9-2350-314-20-2-1 | Unit Maintenance Manual for Cabs Systems and Components Howitzer, Medium, Self-Propelled: 155MM, M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                                                           |
| TM 9-2350-314-20-2-2 | Unit Maintenance Manual for Cab Systems and Components Howitzer, Medium, Self-Propelled: 155MM, M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                                                            |
| TM 9-2350-314-24P-1  | Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts) for Hull Associated Components of Howitzer, Medium, Self-Propelled: 155MM M109A6 (NSN 2350-01-305-0028) 8 February 1999       |

| TM 9-2350-314-24P-2 | Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts) for Cab and Associated Components of Howitzer, Medium, Self-Propelled: 155MM, M109A6 (NSN 2350-01-305-0028) 8 February 1999 |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TM 9-2350-314-34-1  | Direct Support and General Support Maintenance Manual for Hull Systems and Components Howitzer, Medium, Self-Propelled, 155-MM, M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                          |
| TM 9-2350-314-34-2  | Direct Support And General Support Maintenance Manual for Cab<br>Systems and Components Howitzer, Medium, Self-Propelled, 155MM,<br>M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                      |
| TM 9-243            | Use and Care of Hand Tools and Measuring Tools (M6290-AJ-MAN-010; TO 32-1-101; TM-10209-10/1) 12 December 1983                                                                                                                                                  |
| TM 9-254            | General Maintenance Procedures for Fire Control Materiel 13 August 1984                                                                                                                                                                                         |
| TM 9-3305           | Principles of Artillery Weapons 4 May 1981                                                                                                                                                                                                                      |
| TM 9-6625-2301-12&P | Operator and Organizational Maintenance Manual Including Repair Parts and Special Tools List for Test Set, Electronic Systems, AN/PSM-95 (NSN 6625-01-445-0085), and Test Set, Electronic Systems AN/PSM-95B, (6625-01-493-89084) 29 August 2003                |
| TM 9-8000           | Principles of Automotive Vehicles 25 October 1985                                                                                                                                                                                                               |
| Training Circulars  |                                                                                                                                                                                                                                                                 |

#### Training Circulars

TC 43-35 Recovery Training 3 October 1995

TC 43-4 Commander's and Shop Officer's Guide for Support Maintenance

Management 8 May 1996

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.

### **Army Regulations**

| AR 25-11  | Record Communications and the Privacy Communications System 4 September 1990 |
|-----------|------------------------------------------------------------------------------|
| AR 385-10 | The Army Safety Program 29 February 2000                                     |
| AR 385-40 | Accident Reporting and Records 1 November 1994                               |
| AR 385-55 | Prevention of Motor Vehicle Accidents 12 March 1987                          |
| AR 750-1  | Army Materiel Maintenance Policy 18 August 2003                              |
| AR 750-10 | Army Modification Program 8 August 2000                                      |
| AR 750-43 | Army Test, Measurement and Diagnostic Equipment Program 28 November 1997     |

### **Department of Army Forms**

DA FORM 2404 Equipment Inspection and Maintenance Worksheet 1 April 1979
DA FORM 5988-E Equipment Inspection Maintenance Worksheet 1 March 1991

**Department of Army Pamphlets** 

DA PAM 738-750 Functional Users Manual for The Army Maintenance Management

System (TAMMS) 1 August 1994

**Field Manuals** 

FM 24-18 Tactical Single-Channel Radio Communications Techniques

30 September 1987

FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair FMFRP 4-34;

TO 36-1-181 3 October 1995

**Other Product Types** 

SC 9999-01-SKO Consolidated Publication of Component Lists 1 April 2004

**Technical Manuals** 

TM 9-243 Use and Care of Hand Tools and Measuring Tools M6290-AJ-MAN-010;

TO 32-1-101; TM-10209-10/1 (Reprinted W/Basic Incl C1-2)

12 December 1983

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)

15 January 1986

TM 11-5820-401-10-2 Operator's Manual for Radio Sets, AN/VRC-12(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)

23 November 1982

TM 11-5820-401-10-4 Operator's Quick Checks for Receiver-Transmitter, RT-246()/VRC (NSN

5820-00-892-0623) and RT-524( )/VRC (5820-00-892-0622)

16 October 1980

TM 11-5830-340-12 Operator's and Unit Organizational Maintenance Manual for

Intercommunication Set, AN/VIC-1(V) (NSN 5830-00-856-3273) and Control, Intercommunication Set, C-10456/VRC (5830-01-082-0804)

15 January 1986

TM 11-6625-3052-14 Operator's, Unit, Direct Support and General Support Maintenance

Manual for Digital Multimeter AN/PSM-45 (NSN 6625-01-139-2512)

10 January 1984

TM 9-1000-202-14 Evaluation of Cannon Tubes 1 February 1999

TM 9-2320-279-20-3 Maintenance Instructions Organizational Maintenance M977 Series, 8x8

Heavy Expanded Mobility Tactical (HEMTT) Truck, Cargo With Winch M977; Truck, Cargo, Without Winch M977; Truck, Tank, Fuel, With

Winch M978; Truck, Tank, Fuel, Without Win 8 April 1987

TM 9-2350-256-24P-1 Unit, Direct Support and General Support Maintenance Repair Parts and

Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Recovery Vehicle, Full Tracked; Medium M88A1

(NSN 2350-00-122-6826) 29 May 1992

TM 9-2350-256-24P-2 Unit, Direct Support and General Support Maintenance Repair Parts and

Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Recovery Vehicle, Full Tracked; Medium, M88A1

(NSN 2350-00-122-6826) 8 May 1992

| TM 9-2350-256-34-1  | Direct Support and General Support Maintenance Manual for Recovery Vehicle, Full Tracked, Medium, M88A1 (NSN 2350-00-122-6826) 28 January 1977                                                                                                                    |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TM 9-2350-256-34-2  | Direct Support and General Support Maintenance Manual for Recovery Vehicle, Full Tracked: Medium, M88A1 (NSN 2350-00-122-6826); Winch Power Takeoff and Hoist System 16 February 1977                                                                             |
| 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 31 January 1984        |
| TM 9-2350-287-20-1  | Unit Maintenance Manual For Carrier, Ammunition, Tracked M992A1 (NSN 2350-01-352-3021) (EIC:AE6) (This Item is Included on EM 0120) 22 October 1993                                                                                                               |
| TM 9-2350-287-24P   | Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools List for Carrier, Ammunition, Tracked M992A1 (NSN 2350-01-352-3021) (EIC:AE6) 22 October 1993                                                                                 |
| TM 9-2350-293-20&P  | Organizational Maintenance Manual (Including Repair Parts and Special Tools and Depot Maintenance Repair Parts Lists) for Carrier Ammunition Tracked M992A2 (NSN 2350-01-368-9500)(EIC:AE2) 17 December 2001                                                      |
| TM 9-2350-311-10    | Operator's Manual for Howitzer, Medium, Self-Propelled, 155MM M109A2 (NSN 2350-01-031-0586)(EIC:3EZ) M109A3 (2350-01-031-8851)(EIC:3E2) M109A4 (2350-01-277-5770)(EIC:3E8) M109A5 (2350-01-281-1719)(EIC:3E7) 23 November 1994                                    |
| TM 9-2350-311-20-2  | Unit Maintenance Manual for Cab, Armament, Sighting Fire Control, Elevating and Traversing Systems and Associated Components, Howitzer, Medium, Self-Propelled, 155MM, M109A2 (NSN 2350-01-031-0586)(EIC:3EZ) M109A3 (2350-01-031-8851)(EIC:3E2) 24 December 1993 |
| TM 9-2350-311-24P-2 | Unit, DS and GS Maint Repair Parts and Special Tools List (Incl Depot Maint Repair Parts and Special Tools) for Cab, Armament, Sighting and Fire Ctrl, Elevating and Traversing Systems, and Associated Components Howitzer, Med, Self-Propelled 31 July 1998     |
| TM 9-2350-314-10    | Operator's Manual for Howitzer, Medium, Self-Propelled: 155MM, M109A6 (NSN 2350-01-305-0028)(EIC:3FC) 8 February 1999                                                                                                                                             |
| TM 9-2350-314-24P-1 | Unit, Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts) for Hull Associated Components of Howitzer, Medium, Self-Propelled: 155MM M109A6 (NSN 2350-01-305-0028) 8 February 1999       |
| TM 9-243            | Use and Care of Hand Tools and Measuring Tools (M6290-AJ-MAN-010; TO 32-1-101; TM-10209-10/1) 12 December 1983                                                                                                                                                    |
| TM 9-2815-221-34&P  | Direct and General Support Maintenance Manual (Including 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 9-8000           | Principles of Automotive Vehicles 25 October 1985                                                                                                                                                                                                                 |
| Training Circulars  |                                                                                                                                                                                                                                                                   |
| TC 43-35            | Recovery Training 3 October 1995                                                                                                                                                                                                                                  |

By Order of the Secretary of the Army:

PETER J. SCHOOMAKER General, United States Army Chief of Staff

Official:

JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0421501

Joel B. Hulm

### **DISTRIBUTION:**

Active Army, Army National Guard and U.S. Army Reserve: Not to be distributed. Electronic means only.

PIN: 058995-000