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From: Commandant of the Marine Corps
To: Distribution List

Subj: GROUND ORDNANCE MAINTENANCE TRAINING AND READINESS MANUAL

Ref: (a) MCO P3500.72A
(b) MCO 1553.3B
(c) MCRP 3-0A
(d) MCRP 3-0B
(e) MCO 1553.2B

Encl: (1) Ground Ord Maint T&R Manual

1. Purpose. Per reference (a), this Training and Readiness (T&R) Manual, contained in enclosure (1), establishes training standards, regulations, and policies regarding the training of Marines in the Ground Ordnance Maintenance occupational field.

2. Cancellation. NAVMC 3500.33A Ch 3

3. Scope

a. Per reference (b), commanders will conduct an internal assessment of the unit's ability to execute its mission and develop long-, mid-, and short-range training plans to sustain proficiency and correct deficiencies. Training plans will incorporate these events to standardize training and provide objective assessment of progress toward attaining combat readiness. Commanders will keep records at the unit and individual levels to record training achievements, identify training gaps and document objective assessments of readiness associated with training Marines. References (c) and (d) provide amplifying information for effective planning and management of training within the unit.

b. Formal school and training detachment commanders will use references (a) and (e) to ensure programs of instruction meet skill training requirements established in this manual and provides career-progression training in the events designated for initial training in the formal school environment.

4. Information. Commanding General (CG), Training and Education Command (TECOM) will update this T&R Manual as necessary to provide current and relevant training standards to commanders. All questions pertaining to the Marine Corps Ground T&R Program and Unit Training Management should be directed to: CG, TECOM, Marine Air Ground Task Force Training and Education Standards Division (C 466), 1019 Elliot Road, Quantico, Virginia 22134.

5. Command. This manual is applicable to the Marine Corps Total Force.

6. Certification. Reviewed and approved this date.

J. W. LUKEMAN
By direction

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GROUND ORD MAINT T&R MANUAL

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GROUND ORD MAINT T&R MANUAL

CHAPTER 1

OVERVIEW

# CHAPTER 1

# OVERVIEW

**1000. INTRODUCTION**. The T&R program is the Corps' primary tool for planning, conducting, evaluating training and assessing training readiness. T&R manuals are designed for use by unit commanders to determine performance requirements in preparation for training; for unit leaders to develop and execute training and to assess individual and unit proficiency; and for formal schools and training detachments to create programs of instruction. More detailed information on the Marine Corps Ground T&R Program is found in reference (a).

## 1001. UNIT TRAINING MANAGEMENT

1. Effective Unit Training Management (UTM) focuses the overall organization on development of training plans based on standards-based community T&R events that support unit's selected Marine Corps Tasks (MCTs) or Mission Essential Tasks (METs). This is accomplished in a manner that maximizes training results and focuses the training priorities of the unit in preparation for the conduct of its mission.

2. UTM techniques, described in references (b) and (c), provide commanders with the requisite tools and techniques to analyze, design, develop, implement, and evaluate the training of their unit. To maintain an efficient and effective training program, leaders at every level must understand and implement UTM. Guidance for UTM and the process for establishing effective programs are contained in references (b), (c) and (d).

## 1002. SUSTAINMENT AND EVALUATION OF TRAINING

1. The evaluation of training is necessary to properly prepare Marines for combat. Evaluations are either formal or informal, and performed by members of the unit (internal evaluation) or from an external command (external evaluation). The purpose of formal and informal evaluation is to provide commanders with a process to determine a unit's/Marine's proficiency in the tasks that must be performed in combat. Informal evaluations are conducted during every training evolution. Formal evaluations are often scenario-based, focused on the unit's METs, based on collective training standards, and usually conducted during higher-level collective training events.

2. Evaluation is a continuous process that is integral to training management and is conducted by leaders at every level and during all phases of planning and the conduct of training. To ensure training is efficient and effective, evaluation is an integral part of the training plan. Ultimately, leaders remain responsible for determining if the training was effective. References (b) and (d) provide further guidance on the conduct of informal and formal evaluations using the Marine Corps Ground T&R Program.

**1003. ORGANIZATION.** The Ground Ordnance Maintenance T&R Manual is comprised of 18 chapters and 1 appendices. Chapter 1 is an overview of the Ground T&R Program. Chapter 2 lists the core METs/Marine Corps tasks supported by the Ground Ordnance Maintenance Community, which are used as part of the DRRS. Chapter 3 contains collective events. Chapters 4 through 18 contain individual events specific to a particular MOS and/or billet, as noted. Appendix A contains references; Appendix B contains terms and definitions.

**1004. T&R EVENT COMPOSITION**

1. An example of a collective T&R event is provided in figure 1-1 and an example of an individual T&R event is provided in figure 1-2. Events shown in figures are for illustrative purposes only and are not actual T&R events.

**XXXX-XXXX-####:** Provide interior guard.

**SUPPORTED MET(S):** MCT #.#.#

**EVALUATION CODED:** YES/NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Text

**CONDITION:** Text

**STANDARD:** Text

**EVENT COMPONENTS:**
1. Event component.
2. Event component.
3. Event component.

**PREREQUISITE EVENTS:**
XXXX-XXXX–#### XXXX-XXXX–####

**CHAINED EVENTS:**
XXXX-XXXX–#### XXXX-XXXX–####

**RELATED EVENTS:**
XXXX-XXXX–#### XXXX-XXXX–####

**REFERENCES:**
1. Reference
2. Reference
3. Reference

**SUPPORT REQUIREMENTS:**

**EQUIPMENT:** XXX

**MISCELLANEOUS:** XXX

**ADMINISTRATIVE INSTRUCTIONS:** XXX

Figure 1-1: Example of a Collective T&R Event

**XXXX-XXXX-####:** Stand a sentry post.

**EVALUATION CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Text

**MOS PERFORMING:** ####, ####

**GRADES:** XXX, XXX

**INITIAL TRAINING SETTING:** XXX

**CONDITION:** Text

**STANDARD:** Text

**PERFORMANCE STEPS:**
1. Event component.
2. Event component.
3. Event component.

**PREREQUISITE EVENTS:**
XXXX-XXXX–#### XXXX-XXXX–####

**RELATED EVENTS:**
XXXX-XXXX–#### XXXX-XXXX–####

**REFERENCES:**
1. Reference
2. Reference
3. Reference

**SUPPORT REQUIREMENTS:**

**EQUIPMENT:** XXX

**MISCELLANEOUS:** XXX

**ADMINISTRATIVE INSTRUCTIONS:** XXX

Figure 1-2: Example of an Individual T&R Event

2. Event Code. The event code consists of three sets of characters as shown in figure 1-3:

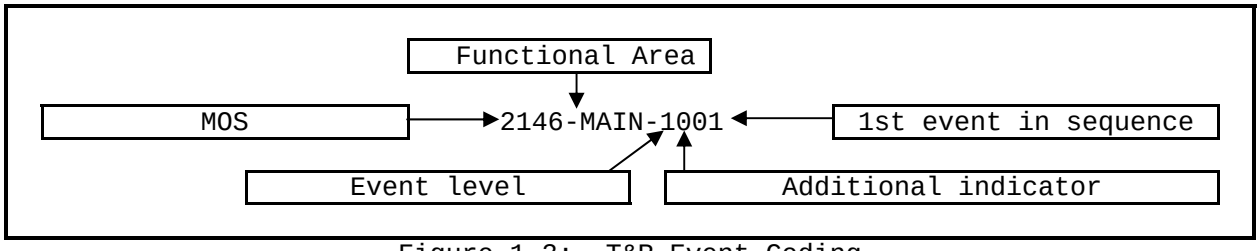


Figure 1-3: T&R Event Coding

a. The first set of characters indicates the main MOS or community (e.g., 0321, 1812, or INTL) that performs the event.

b. The second set of characters indicates functional or duty area (e.g., DEF, FSPT, MVMT, etc.). Categorizing events with the use of a recognizable code makes the type of skill or capability being referenced fairly obvious.

c. The third set of characters is broken down further into the event level, additional indicator (if applicable), and sequence.

(1) Event levels. The character in the thousands digit indicates the level and defines whether the event is performed by an individual (1000- and 2000-level) or by a collective unit, with the relative size of the unit performing the event indicated by the number (3000- through 9000-level). Note that the titles for the various echelons are examples only and are not exclusive. Some collective events levels may not apply to all T&R manuals. Event levels are shown in figure 1-4.

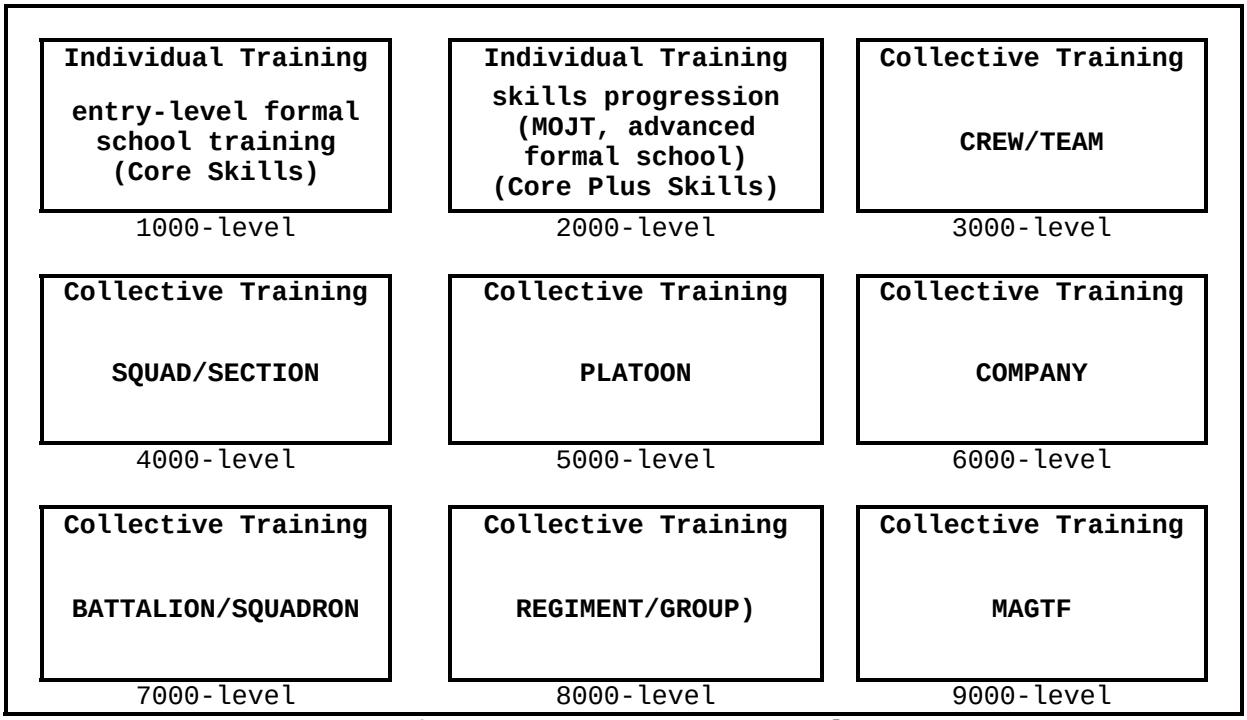


Figure 1-4: T&R Event Levels

(2) Additional indicator. The usage of a number used in the hundreds digit varies. When used in a T&R manual, the additional indicator methodology will be described in the relevant chapter(s).

(3) Sequence. The last two numbers indicate the sequence of the event. All events with the same MOS/community, functional area, and level codes will be grouped together.

3. Title. The name of the event. The event title contains one action verb and ideally, one object noun.

4. Evaluation Coded. A “Yes” indicates that a collective event is something that the Marine Corps has determined that a unit must be able to perform in order or that unit to be considered fully ready for operations. These evaluation-coded (E-coded) events represent the basic level of readiness for a unit. E-coded events are derived from the training measures of

effectiveness for the METs assessed as a percentage of the successfully completed and current (within sustainment interval) E-coded events. Most E-coded events will be for battalion-sized units and higher since those are the units that report in DRRS. However, if the Marine Corps has determined that the readiness of a lower echelon unit is vital to the accomplishment of the supported unit's MET, then that lower echelon collective event may also be E-coded. Other collective events and all individual events will have a "No" to indicate that they are not evaluation-coded.

5. Supported MCT(s). List all MCTs that are supported by the collective training event, even if those events are not listed as a measure of effectiveness (MOE) in a MET.

6. Sustainment Interval. This is the period, expressed as a number of months, between demonstration of performance mastery and the requirement for retraining if mastery is not demonstrated during that period.

7. Billet/MOS. These fields designate who is responsible for performing the event. When formal training is associated with event, individuals in the associated billet(s)/MOS(s).

8. Grade. This field indicates the rank at which Marines are required to perform the event.

9. Description. This field allows an explanation of the event purpose, objectives, goals, and requirements. It is a general description of an action requiring learned skills and knowledge (i.e., engage fixed target with crew-served weapons). Event descriptions are required for collective events, but optional for individual events.

10. Condition. Condition refers to the environment in which the task must be performed. It must also identify the limitations that may affect event performance in a real-world environment. It indicates what is provided (equipment, tools, materials, manuals, aids, etc.), environmental factors or conditions under which the task is to be performed, and any specific cues or indicators to which the performer must respond. Commanders can modify the conditions of the event to best prepare Marines to accomplish the assigned mission (e.g., in a desert environment; in a mountain environment; etc.). When resources or safety requirements limit the conditions, this should be stated. The content of the condition should be included in the event on a "by exception" basis. If there exists an assumption regarding the conditions under which all or most of the events in the manual will be performed, then only those additional or exceptional items required should be listed in the condition. The common conditions under which all the events in a chapter will be executed will be listed as a separate paragraph at the beginning of the chapter.

11. Standard. The performance standard indicates the basis for judging the effectiveness of the performance. It identifies the proficiency level expected when the task is performed. The standard provides the minimum acceptable performance parameters. The standard for collective events will likely be general, describing the desired end-state or purpose of the event. The standard for individual events will be objective, quantifiable, and readily observable. Standards will more specifically describe the proficiency level, specified in terms of accuracy, completeness, time required, and sequencing to which the event is to be accomplished.

12. Event Components/Performance Steps. This is a list of the actions that the event is composed of, or a list of subordinate T&R event descriptions. These help the user determine what must be accomplished and to properly plan for the event. Event components are used for collective events; performance steps are used for individual events.

a. The event components and performance steps will be employed as the basis for performance evaluation check lists by the operating forces.

b. Event components may be either lower level collective events or individual events, indicating aspects of the event that are performed by the entire unit and individuals within the unit. Event components will correspond with the task titles of the related events, allowing for chaining of the events (see below).

13. Chained Events. Enables unit leaders to effectively identify prerequisite, supporting, and supported events that ultimately support MCTs and or METs. Supported events are chained to supporting events to enable the accomplishment of the supported event to standard and therefore are considered "chained". The completion of supported events can be utilized to update sustainment interval credit for supporting events.

a. Prerequisite Events. Prerequisites are academic training or other T&R events that must be completed prior to attempting the task. They are lower-level events or tasks that give the individual/unit the skills required to accomplish the event. They can also be planning steps, administrative requirements, or specific parameters that build toward mission accomplishment.

b. Supported Event. An event whose performance is inherently supported by the performance of one or more supporting events.

c. Supporting Event. An event whose performance inherently supports the performance of a supported event.

14. Related ITEs. A list of all of the individual training events (1000-2000-level events) that directly support the accomplishment of another event of the same level.

15. Initial Training Setting. All individual events will designate the setting at which the skill is first taught, either through formal training (Formal), managed on the job training (MOJT), or distance learning (DL). Formal training is conducted at a formal school. MOJT occurs within the operating forces and is the responsibility of leaders. DL products include correspondence courses and training conducted via computer applications.

16. References. The training references assist the trainee in satisfying the performance standards, or the trainer in evaluating the effectiveness of task completion. T&R manuals are designed to be a training outline, not to replicate or replace doctrinal publications, reference publications or technical references. References are key to developing detailed lesson plans, determining grading criteria, and ensuring standardization of training. The references listing for each event is representative of those that are most commonly used and are not encyclopedic.

17. Distance Learning Products (DL). Distance learning products include: individual multimedia instruction (IMI), computer-based training (CBT), Marine Corps Institute (MCI), etc. This notation is included when the event

can be taught via one of these media vice attending a formal course of instruction or receiving MOJT.

18. Support Requirements. This is a list of the external and internal support the unit and Marines will need to complete the event. This is a key section in the overall T&R effort, as resources will eventually be tied directly to the training and future efforts to attain and allocate resources will be based on the requirements outlined in the T&R manual. The list includes, but is not limited to:

- Range(s)/Training Area
- Ordnance
- Equipment
- Materials
- Other Units/Personnel

Where applicable, the ordnance requirements for one year of training for the events in the T&R manual will be aggregated into a table contained in an appendix to the T&R.

19. Suitability of Modeling and Simulation for Sustainment. If the occupational advocate determines that an event can be trained to standard by use of modeling or simulation, this will be noted in the event title in a parenthetical remark. Figure 4-1 contains all acceptable codes for inclusion in this parenthetical remark. The specific modeling or simulation that is acceptable for optional or required training will be noted in the description block and in miscellaneous block. Modeling and simulation, per reference (a) is defined as: The use of models, including emulators, prototypes, simulators, and stimulators, either statically or over time, to develop data as a basis for making managerial or technical decisions. For events that have simulation as an optional choice, the specific portions of the event that may be trained by the identified simulator should be noted as well.

| Code | Requirement |
|---|---|
| P | Event performed in platform only |
| L | Event able to be performed to standard only live environment |
| S | Event performed only with simulator |
| P/S | Event performed in platform preferred/simulator optional |
| S/P | Event performed in simulator preferred/platform optional |
| L/S | Event performed live preferred/simulator optional |
| S/L | Event performed in simulator preferred/live optional |

Figure 4-1: Acceptable Codes

a. Simulation should be used in lieu of live training (particularly when resources to support the event are constrained); or at the commander's discretion, used as a precursor to live training in order to help maximize and enhance the live training event.

b. This task can be supported by self-paced, CBT, (e.g., MarineNet).

c. Modeling and Simulation Terms (terms are refined from reference (a) as necessary):

(1) Simulation - Any actions that will be performed to achieve effects on a notional enemy and/or actions undertaken that assume the presence of an enemy.

(2) Simulator - Any device external to or in place of the materials or conditions identified in the condition statement of a T&R event to assist in simulating the presence of the enemy.

(3) Combat - Marines conducting actions with actual table of equipment; actual higher, adjacent and subordinate forces; and live ammunition against live, hostile opponents.

(4) Live - Marines conducting actions with actual table of equipment; actual higher, adjacent and subordinate forces; and live ammunition against notional opponents. Implies integration between the various echelons.

(5) Live/Constructive - Marines conducting actions with actual table of equipment; actual or notional higher, adjacent and subordinate forces; and without live ammunition against notional opponents. If there are integrations between the various echelons, this is an integrated live/constructive environment.

(6) Constructive - Marines conducting actions with approximations of table of equipment; actual or notional higher, adjacent and subordinate forces; and without live ammunition against notional opponents. If there are integrations between the various echelons, this is an integrated constructive environment.

(7) Virtual - Marines conducting actions with approximations of table of equipment; notional higher, adjacent and subordinate forces; and without live ammunition against notional opponents.

(8) Distance Learning - Any instruction and evaluation delivered to the student electronically or via mail.

20. Miscellaneous

a. This field provides space for any additional information that will assist in the planning and execution of the event. Units and formal schools are cautioned not to disregard this information or to consider the information of lesser importance than what is contained in other parts of the T&R event. Miscellaneous fields provide an opportunity for the drafters of the T&R event to communicate vital information that might not fit neatly into any other available field. The list may include, but is not limited to:

- Admin Instructions
- Special Personnel Certifications
- Equipment Operating Hours
- Road Miles

**1005. MOS-SPECIFIC PHYSICAL STANDARDS**

1. Within the Ground Ordnance Maintenance community, Marines of military occupational specialties (MOSs) 2131, 2141, 2146, and 2147 are required to demonstrate a high degree of physical strength to standard, in order to perform those regularly assigned, recurrent duties of each of the respective military occupational specialties.

2. This T&R Manual contains MOS-specific physical standards, which must be demonstrated, in order to achieve MOS qualification. These MOS-specific

physical standards have been identified throughout this T&R manual within the administrative instructions to the event.

3. Assessments for MOS-specific physical standards have been developed and are contained within Appendix C. These assessments provide Commanders reasonable assurance a Marine has the physical capacity to perform the regularly assigned and recurrent duties of the MOS.

4. These MOS-specific physical standards are not the sole requirement for MOS qualification.

GROUND ORD MAINT T&R MANUAL

CHAPTER 2

MISSION-ESSENTIAL TASKS

CHAPTER 2

MISSION-ESSENTIAL TASKS

**2000. GROUND ORDNANCE MAINTENANCE MET-SUPPORTING E-CODED EVENTS.** The Ground Ordnance Maintenance MET-Supporting E-coded Events table lists the E-coded collective T&R events that support the core METs for the community. These E-coded T&R events form the basis for unit readiness planning per reference (d), identifying subordinate collective and individual training events through the supporting/chained relationships described in each event.

**T&R EVENT CODE/T&R EVENT TITLE**

| **MCT 4.2.2 CONDUCT GROUND EQUIPMENT MAINTENANCE** | |
|---|---|
| ORD-ADMN-3601 | Provide maintenance administration support for field level ground ordnance maintenance |
| ORD-OPS-4001 | Establish an intermediate maintenance on electro/optical repair site |
| ORD-MAIN-5601 | Provide field level maintenance support for trainer launchers |
| ORD-MAIN-5602 | Provide field level maintenance support for weapon system bipods/tripods/mounts |
| ORD-MAIN-5603 | Provide field level maintenance support for indirect fire weapon systems |
| ORD-MAIN-5604 | Provide field level maintenance support for LASER systems |
| ORD-MAIN-5605 | Provide field level maintenance support for direct view optical systems |
| ORD-MAIN-5606 | Provide field level maintenance support for image-intensified systems |
| ORD-MAIN-5607 | Provide field level maintenance support for thermal systems |
| ORD-MAIN-5608 | Provide field level maintenance support for main battle tanks |
| ORD-MAIN-5609 | Provide field level maintenance support for expeditionary fire support platforms |
| ORD-MAIN-5610 | Provide field level maintenance support for fire control systems |
| ORD-MAIN-5611 | Provide field level maintenance support for tank retrieval vehicles |
| ORD-MAIN-5612 | Provide field level maintenance support for LAV family of vehicles |
| ORD-MAIN-5613 | Provide field level maintenance support for anti-armor system |
| ORD-MAIN-5614 | Provide field level maintenance support for artillery platforms |
| ORD-MAIN-5615 | Provide field level maintenance support for AAV family of vehicles |
| ORD-MAIN-5616 | Provide field level maintenance support for bridging vehicles |
| ORD-MAIN-5617 | Provide field level maintenance support for direct fire weapon systems |
| ORD-MAIN-5618 | Provide field level maintenance support for Assault Breaching Vehicles |

GROUND ORD MAINT T&R MANUAL

# CHAPTER 3

# COLLECTIVE EVENTS

GROUND ORD MAINT T&R MANUAL

CHAPTER 3

COLLECTIVE EVENTS

**3000. PURPOSE**. Chapter 3 contains collective training events for the Ground Ordnance Maintenance Community.

**3001**. **EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology:

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| ADMN | Personnel Administration |
| LOG | Logistics |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| CLC | Combat Logistics Center |
| GSM | General Support Maintenance |
| LS | Landing Support |
| TRAN | Transportation |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 6000 | Company Level |
| 5000 | Platoon Level |
| 4000 | Squad/Section Level |
| 3000 | Crew/Team Level |

**3002. INDEX OF COLLECTIVE EVENTS**

| | | | |
|---|---|---|---|
| ORD-MAIN-5603 | | Provide field level maintenance support for indirect fire weapon systems | 3-6 |
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| ORD-MAIN-5605 | | Provide field level maintenance support for direct view optical systems | 3-8 |
| ORD-MAIN-5606 | | Provide field level maintenance support for image-intensified systems | 3-8 |
| ORD-MAIN-5607 | | Provide field level maintenance support for thermal systems | 3-9 |
| ORD-MAIN-5608 | | Provide field level maintenance support for main battle tanks | 3-10 |
| ORD-MAIN-5609 | | Provide field level maintenance support for expeditionary fire support platforms | 3-11 |
| ORD-MAIN-5610 | | Provide field level maintenance support for fire control systems | 3-11 |
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| ORD-MAIN-5615 | | Provide field level maintenance support for AAV family of vehicles | 3-15 |
| ORD-MAIN-5616 | | Provide field level maintenance support for bridging vehicles | 3-16 |
| ORD-MAIN-5617 | | Provide field level maintenance support for direct fire weapon systems | 3-17 |
| ORD-MAIN-5618 | | Provide field level maintenance support for Assault Breaching Vehicles | 3-17 |
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| ORD-ADMN-3601 | | Provide maintenance administration support for field level ground ordnance maintenance | 3-20 |

**3003. 6000-LEVEL EVENTS**

**ORD-MAIN-6001:** Provide field level maintenance support for ground ordnance equipment.

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** YES **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for a maintenance shop (of any size) whose primary mission/task is to provide field level maintenance support for multiple equipment types within the ground ordnance commodity. Doctrinally, a maintenance shop will consist of a shop office/operations section, a services section, an administrative section, and two or more subordinate maintenance sections whose focus is performing maintenance on one or more of the equipment

types. In practice, the actual shop organization, especially with regard to the maintenance management functions (shop office/operations section, services section, and administrative section) will vary. Units perform the full range of field level maintenance depending on capabilities and mission requirements. Unit leaders will prioritize training based upon assigned missions and tasks as found on the units table of organization and equipment and in accordance with commanders intent. Maintenance units must be prepared to perform the full range of maintenance in accordance with doctrine and policy.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Plan ground ordnance maintenance operations.
2. Plan ground ordnance vehicle recovery operations.
3. Provide maintenance shop office/operations support for field level ground ordnance maintenance.
4. Provide services support for field level ground ordnance maintenance.
5. Provide maintenance administrative support for field level ground ordnance maintenance.
6. Deploy a ground ordnance maintenance activity.

**REFERENCES:**
1. Applicable Technical Publications/Manuals Applicable Technical Publications/Manuals
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2 MIMMS FIELD PROCEDURES MANUAL
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-OPS-6601:** Deploy a ground ordnance maintenance activity

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** YES **SUSTAINMENT INTERVAL:** 12 months

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Ensuring effective ground ordnance maintenance support for mission requirements in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Plan for the deployment of a ground ordnance maintenance activity.
2. Prepare organic equipment for embarkation.
3. Supervise the deployment of a ground ordnance maintenance activity.
4. Plan for retrograde of a ground ordnance maintenance activity.

**REFERENCES:**
1. Applicable technical references
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS)

Introduction Manual
3. MCO P4790.2 MIMMS FIELD PROCEDURES MANUAL
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**3004. 5000-LEVEL EVENTS**

**ORD-MAIN-5601:** Provide field level maintenance support for trainer launchers

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the sections primary focus or additional support requirement being to provide field level maintenance support for trainer launchers.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on trainer launchers.
2. Perform service or adjustments on trainer launchers.
3. Perform maintenance on trainer launchers.
4. Perform modification on trainer launchers.
5. Perform recovery, evacuation, or disposal on trainer launchers.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals/Publications
2. MCO 4790.1_ MIMMS Introduction Manual
3. MCO 4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 MCWP 4-1 Logistics Operations
5. MCWP 4-11 MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5602:** Provide field level maintenance support for weapon system bipods/tripods/mounts

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support

requirement being to provide field level maintenance support for weapon system bipods/tripods/mounts.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on weapon system bipods/tripods/mounts.
2. Perform service or adjustments on weapon system bipods/tripods/mounts.
3. Perform maintenance on weapon system bipods/tripods/mounts.
4. Perform modification on weapon system bipods/tripods/mounts.
5. Perform recovery, evacuation, or disposal on weapon system bipods/tripods/mounts.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals/Publications
2. MCO 4790.1_ MIMMS Introduction Manual
3. MCO 4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5603:** Provide field level maintenance support for indirect fire weapon systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for indirect fire weapon systems (mortars and grenade launchers).

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on indirect fire weapon systems.
2. Perform servicing or adjustments on indirect fire weapon systems.
3. Perform maintenance on indirect fire weapon systems.
4. Perform modification on indirect fire weapon systems.
5. Perform recovery, evacuation, or disposal on indirect fire weapon systems.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.

9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals/Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5604:** Provide field level maintenance support for LASER systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for LASER systems.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on LASER systems.
2. Perform servicing or adjustments on LASER systems.
3. Perform maintenance on LASER systems.
4. Perform modification on LASER systems.
5. Perform recovery, evacuation, or disposal on LASER systems.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
2. MCO P4790.2_ MIMMS Field Procedures Manual
3. MCWP 4-1 Logistics Operations
4. MCWP 4-11.4 Maintenance Operations
5. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5605:** Provide field level maintenance support for direct view optical systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for direct view optical systems.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on direct view optical systems.
2. Perform servicing or adjustments on direct view optical systems.
3. Perform maintenance on direct view optical systems.
4. Perform modification on direct view optical systems.
5. Perform recovery, evacuation, or disposal on direct view optical systems.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals/Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5606:** Provide field level maintenance support for image-intensified systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for image-intensified systems.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on image-intensified systems.
2. Perform servicing or adjustments on image-intensified systems.
3. Perform maintenance on image-intensified systems.
4. Perform modification on image-intensified systems.
5. Perform recovery, evacuation, or disposal on image-intensified systems.
6. Perform quality control program.

7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5607:** Provide field level maintenance support for thermal systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for thermal systems.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on thermal systems.
2. Perform servicing or adjustments on thermal systems.
3. Perform maintenance on thermal systems.
4. Perform modification on thermal systems.
5. Perform recovery, evacuation, or disposal on thermal systems.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5608:** Provide field level maintenance support for main battle tanks

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for main battle tanks.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on main battle tanks.
2. Perform servicing or adjustments on main battle tanks.
3. Perform maintenance on main battle tanks.
4. Perform modification on main battle tanks.
5. Perform recovery, evacuation, or disposal on main battle tanks.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5609:** Provide field level maintenance support for expeditionary fire support platforms

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for expeditionary fire support platforms.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on expeditionary fire support platforms.
2. Perform servicing or adjustments on expeditionary fire support platforms.

3. Perform maintenance on expeditionary fire support platforms.
4. Perform modification on expeditionary fire support platforms.
5. Perform recovery, evacuation, or disposal on expeditionary fire support platforms.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals/Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5610:** Provide field level maintenance support for fire control systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for fire control systems.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on fire control systems.
2. Perform servicing or adjustments on fire control systems.
3. Perform maintenance on fire control systems.
4. Perform modification on fire control systems.
5. Perform recovery, evacuation, or disposal on fire control systems.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations

7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5611:** Provide field level maintenance support for tank retrieval vehicles

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for tank retrieval vehicles.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on tank retrieval vehicles.
2. Perform servicing or adjustments on tank retrieval vehicles.
3. Perform maintenance on tank retrieval vehicles.
4. Perform modification on tank retrieval vehicles.
5. Perform recovery, evacuation, or disposal on tank retrieval vehicles.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5612:** Provide field level maintenance support for LAV family of vehicles

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for LAV family of vehicles.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on LAV family of vehicles.
2. Perform servicing or adjustments on LAV family of vehicles.
3. Perform maintenance on LAV family of vehicles.
4. Perform modification on LAV family of vehicles.
5. Perform recovery, evacuation, or disposal on LAV family of vehicles.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5613:** Provide field level maintenance support for anti-armor systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for anti-armor systems.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on anti-armor systems.
2. Perform servicing or adjustments on anti-armor systems.
3. Perform maintenance on anti-armor systems.
4. Perform modification on anti-armor systems.
5. Perform recovery, evacuation, or disposal on anti-armor systems.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual

3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5614:** Provide field level maintenance support for artillery platforms

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for artillery platforms.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on artillery platforms.
2. Perform servicing or adjustments on artillery platforms.
3. Perform maintenance on artillery platforms.
4. Perform modification on artillery platforms.
5. Perform recovery, evacuation, or disposal on artillery platforms.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5615:** Provide field level maintenance support for AAV family of vehicles

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support

requirement being to provide field level maintenance support for AAV family of vehicles.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on AAV family of vehicles.
2. Perform servicing or adjustments on AAV family of vehicles.
3. Perform maintenance on AAV family of vehicles.
4. Perform modification on AAV family of vehicles.
5. Perform recovery, evacuation, or disposal on AAV family of vehicles.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5616:** Provide field level maintenance support for bridging vehicles

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for bridging vehicles.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_

**EVENT COMPONENTS:**
1. Perform inspection on bridging vehicles.
2. Perform servicing or adjustments on bridging vehicles.
3. Perform maintenance on bridging vehicles.
4. Perform modification on bridging vehicles.
5. Perform recovery, evacuation, or disposal on bridging vehicles.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5617:** Provide field level maintenance support for direct fire weapon systems

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for direct fire weapon systems.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on direct fire weapon systems.
2. Perform servicing or adjustments on direct fire weapon systems.
3. Perform maintenance on direct fire weapon systems.
4. Perform modification on direct fire weapon systems.
5. Perform recovery, evacuation, or disposal on direct fire weapon systems.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**ORD-MAIN-5618:** Provide field level maintenance support for Assault Breaching Vehicles

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event is for the section that is subordinate to a maintenance shop, the section's primary focus or additional support requirement being to provide field level maintenance support for Assault Breaching Vehicles.

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retaining, restoring, evacuating, recovering, or disposing materiel in accordance with MCO 4790.25_.

**EVENT COMPONENTS:**
1. Perform inspection on Assault Breaching Vehicles.
2. Perform servicing or adjustments on Assault Breaching Vehicles.
3. Perform maintenance on Assault Breaching Vehicles.
4. Perform modification on Assault Breaching Vehicles.
5. Perform recovery, evacuation, or disposal on Assault Breaching Vehicles.
6. Perform quality control program.
7. Supervise maintenance actions.
8. Manage ground ordnance maintenance production.
9. Manage training for ground ordnance maintenance personnel.

**REFERENCES:**
1. Applicable Technical Manuals/Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**3005. 4000-LEVEL EVENTS**

**ORD-OPS-4001:** Establish an intermediate maintenance on electro/optical repair site

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring mission requirements are supported in accordance with MCWP 4-11.4 Maintenance Operations.

**EVENT COMPONENTS:**
1. Survey site.
2. Employ equipment.
3. Establish security.
4. Employ logistical support, as needed.
5. Redeploy equipment.

**REFERENCES:**
1. Applicable Technical Manuals Publications
2. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. MCWP 4-1 Logistics Operations
5. MCWP 4-11 Tactical-Level Logistics
6. MCWP 4-11.4 Maintenance Operations
7. SL 1-2/3 Index of Authorized Publications in Stock

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**3006. 3000-LEVEL EVENTS**

**AAV-AMPH-3501:** Egress the AAV

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** YES **SUSTAINMENT INTERVAL:** 4 months

**CONDITION:** Given a rapidly sinking or submerged AAV

**STANDARD:** To return all crew and passengers to the surface of the water.

**EVENT COMPONENTS:**
1. Order, egress, egress, egress.
2. Crew and embarked personnel unfasten seatbelts.
3. Crew and designated personnel unlock hatches.
4. Crew and embarked personnel exit the AAV.
5. Account for crew and embarked personnel.

**CHAINED EVENTS:**
1803-AMPH-1606 1833-AMPH-1606

**REFERENCES:**
1. UNIT SOP Unit's Standing Operating Procedures

**SUPPORT REQUIREMENTS:**

**OTHER SUPPORT REQUIREMENTS:** This task shall be trained using the Submerged Vehicle Egress Trainer (SVET). Egress drills can be conducted on AAV while parked at the ramp or during field exercises, but the training will not be satisfied by any means other than SVET.

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. The Shallow Water Initial Memory Mechanical Exit Release (SWIMMER) and the Shallow Water Egress Trainer (SWET) is utilized by the Naval Survival Training Institute (NSTI) as part of their egress training continuum to increase Marines comfort in the water as well as their proficiency in SVET and AAV egress. SWIMMER and SWET are available at all 8 NSTI training sites, but are not currently utilized by the Marine Corps. If possible, unit training shall include SWIMMER and SWET training prior to using the SVET.

2. Reserve training will take place at Initial Location for Mobilization

(ILOC) or during two week annual training (AT).

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**ORD-ADMN-3601:** Provide maintenance administration support for field level ground ordnance maintenance

**SUPPORTED MET(S):** MCT 4.2.2

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** An administrative/maintenance administration section performs functions associated with equipment receipt and transfer, technical data research, tool issue, shop property control, and the recording and reporting of completed maintenance actions within the shop. The name of the section may vary depending upon the shop, and the maintenance administration functions may be dispersed throughout the other elements of the shop. In large maintenance shops there may be several personnel in each element of the section. In small shops one individual may perform some or all of these functions.

**CONDITION:** Given a mission requirement, equipment.

**STANDARD:** In accordance with MCO P4790.2_ MIMMS Field Procedures Manual.

**EVENT COMPONENTS:**
1. Receipt for equipment.
2. Conduct equipment acceptance inspection.
3. Manage classes of supply.
4. Store, issue, and evacuate equipment, when required.
5. Manage maintenance functional areas.
6. Supervise maintenance administration support.

**REFERENCES:**
1. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
2. MCO P4790.2_ MIMMS Field Procedures Manual
3. MCWP 4-1 Logistics Operations
4. MCWP 4-11 Tactical-Level Logistics
5. MCWP 4-11.4 Maintenance Operations

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GROUND ORD MAINT T&R MANUAL

# CHAPTER 4

# MOS 21XX INDIVIDUAL EVENTS

# CHAPTER 4

# MOS 21XX INDIVIDUAL EVENTS

**4000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**4001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 21XX | Ground Ordnance Maintenance Personnel |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| ADMN | Administration |
| COND | Combat Conditioning |
| MAIN | Maintenance |
| OPS | Operations |
| PERS | Personnel |
| PLAN | Planning |
| PROG | Programs |
| SCTY | Security |
| VOPS | Vehicle Operations |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

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**4003. 1000-LEVEL EVENTS**

**21XX-PROG-1001:** Perform tool control

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, designated tool kits, tool sets, chests, and equipment.

**STANDARD:** Maintaining accountability and control of all tool kits, chests, sets and organic equipment In accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Identify all assigned tool sets, kits, chests, TMDE, and equipment.
2. Maintain TMDE, as required.
3. Issue tool sets, chests, kits and equipment.

4. Conduct inventory.
5. Maintain records.
6. Requisition replacements, as required.
7. Ensure security of all tool sets, chests, kits and organic equipment.

**REFERENCES:**
1. MCO 4700-15/1 Equipment Record Procedures
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. TM 4700-15/1_ Ground Equipment Record Procedures

---

**21XX-PROG-1002:** Conduct modification control

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2131, 2146, 2147, 2161, 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, equipment, modification control forms and modification instructions.

**STANDARD:** Ensuring the application and recording of all modifications for the unit's equipment, In accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Review modification instructions.
2. Identify equipment-requiring modification.
3. Induct equipment into the maintenance cycle, as required.
4. Requisition modification materials, as required.
5. Ensure application of modifications, as required.
6. Update modification control records, as required.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)

---

**21XX-SCTY-1001:** Perform armory procedures

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement

**STANDARD:** Ensuring security and accountability of AA&E assets

**PERFORMANCE STEPS:**
1. Store AA&E.

2. Issue and recover AA&E.
3. Conduct accountability of serialized/non-serialized assets.
4. Complete required NAVMC forms and records.
5. Comply with armory security procedures.
6. Transport AA&E assets.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)

---

**21XX-VOPS-1001:** Operate a vehicle

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 6 months

**DESCRIPTION:** Ground Ordnance Vehicle maintainers are required to operate MOS specific vehicle variants (M1A1 Main Battle Tank, M88A2 Hercules Recovery Vehicle, Assault Breacher Vehicle, Armored Vehicle Launcher Bridge, Amphibious Assault Vehicle, Light Armored Vehicle).

**MOS PERFORMING:** 2141, 2146, 2147

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** Without loss of vehicle control at any time.

**PERFORMANCE STEPS:**
1. Perform before, during and after operation checks and services.
2. Navigate applicable variant.
3. Employ communications equipment.
4. Employ DVE.
5. Employ smoke generator, if equipped on variant.
6. Inspect, mount, stowage SL-3 and collateral equipment.
7. Maintain Vehicle Logbook.

**REFERENCES:**
1. FM 21-305 Manual for Wheeled Vehicle Driver
2. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
3. MCWP 3-1 Ground Combat Operations
4. TM 07267B-10/1A Amphibious Assault Vehicle, Recovery, Model 7A1, AAVR7A1
5. TM 08594B-34/8 Light Armored Vehicle (LAV)
6. TM 9-2350-264-10-1 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS VOLUME 1 OF 3
7. TM 9-2350-264-10-2 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 2 OF 3
8. TM 9-2350-264-10-3 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 3 OF 3

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** While operating an AAVP7A1, ensure that the turret is prepared for waterborne operations and facing forward (zero degrees on the azimuth ring). When conducting water operations in all variants and when the bow plane is not employed, the hatches must remain in the closed position. The bow plane must be employed IAW with MARCORSYSCOM Safety of Use Message (DTG: 191823Z Apr 11) while conducting water operations. Under no circumstances shall the hand throttle be used during water operations.

---

**21XX-VOPS-1002:** Perform recovery operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery operations may consist of the following types of recovery, but not limited to: self-recovery, dedicated recovery, land and water recovery.

**MOS PERFORMING:** 2141, 2146, 2147

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a scenario and a recovery asset.

**STANDARD:** In order to salvage ground ordnance assets.

**PERFORMANCE STEPS:**
1. Survey recovery site.
2. Determine resistance.
3. Determine required recovery equipment.
4. Conduct before, during, and after operations checks and services on equipment.
5. Conduct pre-water operation checks and services, as required.
6. Retrieve disabled vehicle.

**REFERENCES:**
1. FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOSs of 2141, 2146, 2147. See Appendix C for further detail.

---

**21XX-VOPS-1003:** Employ recovery vehicle weapon system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Ground Ordnance Vehicle maintainers are required to operate MOS specific vehicle variants and variants weapon system (Main Battle Tank, Tank Recovery, Assault Breacher Vehicle, Armored Vehicle Launcher Bridge, Amphibious Assault Vehicle, Light Armored Vehicle).

**MOS PERFORMING:** 2141, 2146, 2147

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a scenario.

**STANDARD:** To suppress and destroy targets.

**PERFORMANCE STEPS:**
1. Perform PMCS.
2. Clear, disassemble, assemble, perform function check, load, unload and perform immediate action.
3. Engage target(s).
4. Conduct misfire procedures.
5. Terminate the engagement.

**REFERENCES:**
1. MCWP 3-12.2 Heavy Brigade Combat Team (HBCT) Gunnery
2. TM 07267B-10/1_ Operator's Manual, AAVR7A1.
3. TM 08651B-10A Operator's Manual, LAV Recovery
4. TM 10984A-OR/1-1 Operators Manual, (ABV) Volume 1
5. TM 10984A-OR/1-2 Operators Manual, (ABV) Volume 2
6. TM 10984A-OR/4 CREW CHECKLIST ASSAULT BREACHER VEHICLE (ABV)

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Simulations will be used as a precursor to live training in order to help maximize and enhance the live training event

1. Gunners will fire one practice and one qualification.
2. Ammunition is either TP or HE DP and Ball or API-T (Only TP and Ball on Pop-up targets).
3. Gunners will utilize/validate a range card to engage targets.
4. Short range is 400 - 800m; long range is 800 - 1800m.
5. All steps can be performed in degraded gunnery (non-electric)
6. Where a live fire range is not available or feasible, defer to MOJT for MOS 2147.

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**4004. 2000-LEVEL EVENTS**

**21XX-ADMN-2001:** Manage physical security programs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2149, 2181

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a requirement.

**STANDARD:** To ensure procedures are adhered to.

**PERFORMANCE STEPS:**
1. Validate access control procedures.
2. Validate Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Validate storage facilities.
4. Verify inventory/accountability of assets.
5. Review security barriers employment.
6. Review security lighting employment.
7. Conduct AA&E screening.
8. Maintain Physical Security records.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations

---

**21XX-ADMN-2002:** Supervise quality control program

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement, references, personnel, and equipment.

**STANDARD:** Ensuring that equipment records and maintenance actions have been completed in accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Determine performance standards.
2. Determine equipment requirements.
3. Assign qualified personnel.
4. Supervise equipment inspection.
5. Maintain files and records.
6. Supervise follow-on actions.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations

---

**21XX-ADMN-2003:** Supervise ground ordnance maintenance production

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, a mission and commander's guidance, a ground ordnance maintenance unit, and an assigned maintenance area.

**STANDARD:** Verifying maintenance actions are completed in accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Analyze maintenance phase productivity.
2. Analyze workload.
3. Determine maintenance capacity.
4. Determine maintenance resource requirements.
5. Establish maintenance priorities.
6. Allocate maintenance resources.
7. Monitor maintenance cycle times and workflow.
8. Manage maintenance reporting.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. MCWP 4-11.4 Maintenance Operations
4. UM 4400.125 GCSS-MC Users Manual

---

**21XX-ADMN-2004:** Develop unit level ground ordnance maintenance policy/procedures

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2102, 2110, 2120, 2125, 2149, 2181

**GRADES:** MSGT, MGYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, commander's guidance, directives from higher headquarters, a mission and a table of organization/equipment.

**STANDARD:** Detailing adequate information to meet mission requirements in accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Analyze mission, directives, policy guidance and references.
2. Determine commander's additional policy guidance.
3. Determine procedures requiring deviation from existing policy.
4. Determine policies requiring amplification.
5. Indicate rationale why current directives are inadequate or inappropriate.
6. Staff procedures/policy letters for review.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)

---

**21XX-ADMN-2005:** Direct ground ordnance maintenance programs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** This event encompasses all functional areas of maintenance management, to include ammunition control, physical security, safety (LASER,

Radiological, environmental).

**MOS PERFORMING:** 2102, 2110, 2120, 2125

**GRADES:** WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Commensurate with the position of authority and with the aid of references given a mission, commander's guidance, and a ground ordnance maintenance unit.

**STANDARD:** Verifying maintenance actions are completed in accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Analyze maintenance phase productivity.
2. Analyze workload.
3. Determine maintenance capacity.
4. Determine maintenance resource requirements.
5. Establish maintenance priorities.
6. Allocate maintenance resources.
7. Verify compliance with safety regulations.
8. Monitor maintenance cycle times and workflow.
9. Manage maintenance reporting.

**REFERENCES:**
1. Applicable Technical Manuals  Publications
2. https://TFSMS.MCCDC.usmc.mil Total Force Structure Management System
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-1 Logistics Operations
6. MCWP 4-11 MCWP 4-11 Tactical-Level Logistics
7. MCWP 4-11.4 Maintenance Operations
8. MCWP 4-11.9 Ammunition Logistics
9. MCWP 4-26 Supply Operations
10. UM 4400.125 GCSS-MC Users Manual
11. UM 4400-124 Consumer Level Supply Policy Users Manual

---

**21XX-ADMN-2006:** Direct ground ordnance maintenance operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2102, 2110, 2120, 2125

**GRADES:** WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Commensurate with the position of authority and with the aid of references given a mission, commander's guidance, and a ground ordnance maintenance unit.

**STANDARD:** Verifying maintenance actions are completed in accordance with MCO

4790.25_.

**PERFORMANCE STEPS:**
1. Analyze maintenance phase productivity.
2. Analyze workload.
3. Determine maintenance capacity.
4. Determine maintenance resource requirements.
5. Establish maintenance priorities.
6. Allocate maintenance resources.
7. Determine Maritime Pre-positioning Force (MPF) requirements.
8. Monitor maintenance cycle times and workflow.
9. Manage maintenance reporting.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)

---

**21XX-ADMN-2007:** Direct ground ordnance maintenance resources

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**DESCRIPTION:** This event encompasses all functional areas of maintenance management, to include ammunition control, physical security, safety (LASER, Radiological, environmental).

**MOS PERFORMING:** 2102, 2110, 2120, 2125

**GRADES:** WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL
**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Commensurate with the position of authority and with the aid of references given a mission, commander's guidance, and a ground ordnance maintenance unit.

**STANDARD:** Verifying maintenance actions are completed in accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Analyze maintenance phase productivity.
2. Analyze workload.
3. Determine maintenance capacity.
4. Determine maintenance resource requirements.
5. Establish maintenance priorities.
6. Allocate maintenance resources.
7. Verify compliance with safety regulations.
8. Monitor maintenance cycle times and workflow.
9. Manage maintenance reporting.

**REFERENCES:**
1. MCDP 4 Logistics
2. MCO 4710.8 Uniform Criteria for Repair Cost Estimated Used to Determine
3. MCO 5600.31_ Marine Corps Printing and Publishing Regulations
4. MCO P4400.150_ Consumer Level Supply Policy Manual
5. MCO P5215.17_ The Marine Corps Technical Publications System
6. MCRP 3-0B How to Conduct Training
7. TM 4700-15/1_ Ground Equipment Record Procedures

---

**21XX-ADMN-2008:** Assist in acquisition management of ground ordnance vehicle(s)/associated equipment

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2102, 2110, 2120, 2125, 2149, 2181

**GRADES:** MSGT, MGYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Commensurate with the position of authority and given a requirement.

**STANDARD:** In accordance with established standards, authorized maintenance procedures and checklists.

**PERFORMANCE STEPS:**
1. Review fielding process.
2. Review fielding documents.
3. Assist in fielding plan.
4. Coordinate placement of equipment into service.
5. Monitor completion of administrative functions.

**REFERENCES:**
1. https://TFSMS.MCCDC.usmc.mil Total Force Structure Management System
2. MCO 8300.1_ Marine Corps Serialized Control of Small Arms Systems
3. MCO P4400.82_ Marine Corps Unified Materiel Management System (MUMMS) Controlled Item Management Manual
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. Unit T/O&E Unit's Table of Organization and Equipment

---

**21XX-ADMN-2009:** Supervise maintenance administration

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Perform administrative functions associated with equipment receipt and transfer, technical data research, tool issue, property control, and the recording and reporting of completed maintenance actions within the shop.

**MOS PERFORMING:** 2111, 2131, 2141, 2146, 2147, 2161, 2171, 2181

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, equipment, and personnel.

**STANDARD:** Ensuring actions are conducted in a timely manner in accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Determine requirements.
2. Analyze capabilities.
3. Determine required forms.

4. Assign workflow.
5. Conduct inspections.
6. Coordinate with internal/external agencies, when required.
7. Supervise TMDE and support equipment.
8. Maintain licensing/load certification requirements, when required.
9. Maintain AA&E requirements, as required.
10. Report maintenance program performance, as required.
11. Implement continuous process improvement.
12. Maintain records/reports, as required.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. UM 4400.125 GCSS-MC Users Manual

---

**21XX-COND-2001:** March with a fighting load

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2102, 2110, 2131, 2141, 2146, 2147

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given an individual weapon, a fighting load, and as part of a unit movement.

**STANDARD:** To complete a 15-kilometer march within four hours.

**PERFORMANCE STEPS:**
1. Assemble the load for the march.
2. Don the load for the march.
3. Complete a 15 kilometer march.

**REFERENCES:**
1. MCRP 3-02A Marine Physical Readiness Training for Combat

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOS of 2131. See Appendix C for further detail.
2. Prior to executing this event, Marines will conduct a 5K and 10K march with the fighting load.

---

**21XX-MAIN-2001:** Supervise maintenance actions

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Supervisors will perform functions associated with preventative and corrective maintenance.

**MOS PERFORMING:** 2111, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references, equipment and maintenance personnel.

**STANDARD:** Ensuring that maintenance actions are performed in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Determine applicable technical references, as required.
2. Establish PMCS schedule.
3. Supervise conduct of maintenance.
4. Validate quality control.
5. Evaluate personnel.
6. Manage resources.
7. Analyze maintenance reporting data.
8. Maintain reports and records.
9. Submit product quality deficiency reports (PQDR), as required.
10. Submit publication change request, as required.
11. Document maintenance actions, as required.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations

---

**21XX-MAIN-2002:** Perform recovery and evacuation on equipment

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111, 2112, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.

2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations

---

**21XX-OPS-2001:** Manage vehicle recovery operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery operations may consist of the following types of recovery, but not limited to: self-recovery, dedicated recovery, land and water recovery.

**MOS PERFORMING:** 2102, 2110, 2120, 2125, 2149, 2181

**GRADES:** MSGT, MGYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Commensurate with the position of authority and given a requirement.

**STANDARD:** To ensure the recovery of equipment is safely accomplished.

**PERFORMANCE STEPS:**
1. Assess recovery requirements.
2. Provide guidance on recovery capabilities.
3. Develop recovery ORM.
4. Validate Battle Damage Assessment and Repair (BDAR), if applicable.
5. Conduct salvage/disposal procedures, when required.

**REFERENCES:**
1. FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair

---

**21XX-OPS-2002:** Prepare organic equipment for embarkation

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2112, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, equipment, a mission and personnel.

**STANDARD:** Maintaining the units' ability to rapidly deploy in accordance with MCRP 4-11.3G.

**PERFORMANCE STEPS:**
1. Ensure SL-3 completeness of maintenance/maintenance support equipment.
2. Determine requirements for embarkation materials.
3. Ensure completion of tactical marking of maintenance/maintenance support equipment.
4. Prepare embarkation documents (packing and embark lists, EDL, etc.).
5. Ensure completion of weather/waterproofing of maintenance/maintenance support equipment.
6. Determine special lifting/handling requirements for maintenance/maintenance support equipment.
7. Determine hazardous material movement requirements.

**REFERENCES:**
1. MCRP 4-11.3G Unit Embarkation Handbook

---

**21XX-OPS-2003:** Manage the deployment of a ground ordnance maintenance activity

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2149, 2181

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a requirement, equipment, a mission and personnel.

**STANDARD:** Supporting operations in accordance with MCO P4790.1_ MIMMS Introduction Manual.

**PERFORMANCE STEPS:**
1. Conduct pre-deployment inspection of personnel and equipment.
2. Verify execution of load plans.
3. Validate storage facilities.
4. Verify availability of logistics support items.
5. Verify repair parts and equipment requirements are met.
6. Adjust plan, as required.

**REFERENCES:**
1. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
2. MCRP 4-11.3G Unit Embarkation Handbook
3. MCWP 4-11.4 Maintenance Operations

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**21XX-OPS-2004:** Direct the deployment of a ground ordnance maintenance activity

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2102, 2110, 2120, 2125

**GRADES:** WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Commensurate with the position of authority and with the aid of references given a mission, equipment, and personnel.

**STANDARD:** Supporting operations in accordance with MCO P4790.1_ MIMMS Introduction Manual.

**PERFORMANCE STEPS:**
1. Conduct pre-deployment inspection of personnel and equipment.
2. Verify execution of load plans.
3. Verify special material handling and transportation.
4. Verify availability of logistics support items.
5. Verify repair parts and equipment requirements are met.
6. Adjust plan, as required.

**REFERENCES:**
1. MCO P4790.1_ Marine Corps Integrated Maintenance Management System (MIMMS) Introduction Manual
2. MCWP 4-11.4 Maintenance Operations

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**21XX-PERS-2001:** Conduct training for ground ordnance maintenance personnel

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, equipment, personnel, training records, commander's guidance and the unit's training plan.

**STANDARD:** Sustaining individual and unit proficiency and ability to perform wartime missions in accordance with MCRP 3-0A Unit Training Management Guide.

**PERFORMANCE STEPS:**
1. Determine training requirements.
2. Implement training plan.
3. Provide required training.
4. Conduct remediation, if required.
5. Document training.

**REFERENCES:**
1. MCO 1553.3_ Unit Training Management (UTM) Program
2. MCRP 3-0A Unit Training Management Guide
3. MCRP 3-0B How to Conduct Training
4. NAVMC 1553.1 SAT User's Guide

---

**21XX-PERS-2002:** Manage training for ground ordnance maintenance personnel

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2102, 2110, 2111, 2112, 2120, 2125, 2131, 2141, 2146, 2147, 2149, 2161, 2171, 2181

**GRADES:** SGT, SSGT, GYSGT, MSGT, MGYSGT, CWO-2, CWO-3, CWO-4, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, equipment, personnel, training records, commander's guidance and the unit's training plan.

**STANDARD:** Sustaining individual and unit proficiency and ability to perform wartime missions in accordance with MCRP 3-0A Unit Training Management Guide.

**PERFORMANCE STEPS:**
1. Determine training requirements.
2. Establish training priorities.
3. Develop training plan.
4. Supervise required training.
5. Evaluate effectiveness of training.

**REFERENCES:**
1. MCO 1553.3_ Unit Training Management (UTM) Program
2. MCRP 3-0A Unit Training Management Guide
3. MCRP 3-0B How to Conduct Training
4. NAVMC 1553.1 SAT User's Guide

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**21XX-PLAN-2001:** Manage ground ordnance capabilities

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Provide subject matter expertise in identifying, validating, and evaluating requirements for manning, training, and equipping the force; providing estimates of supportability and life cycle management courses of action for equipment under development/fielding; and assessing enterprise-level training requirements in support of operations.

**MOS PERFORMING:** 2102, 2110, 2120, 2125, 2149, 2181

**GRADES:** MSGT, MGYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** In accordance with MCO 3900.15_ Marine Corps Expeditionary Force Development System (EFDS).

**PERFORMANCE STEPS:**
1. Assess task supportability.
2. Assess doctrinal/policy impacts/supportability.
3. Assess organizational impacts/supportability.
4. Assess training impacts/supportability.
5. Assess materiel impacts/supportability.
6. Assess leadership impacts/supportability.
7. Assess personnel impacts/supportability.

8. Assess facilities impacts/supportability.
9. Assess cost impacts/supportability.
10. Develop course of action recommendation.
11. Submit course of action recommendation.
12. Provide budget input.

**REFERENCES:**
1. MCO 3900.15A MARINE CORPS EXPEDITIONARY FORCE DEVELOPMENT SYSTEM
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. MCWP 4-11.4 Maintenance Operations

---

**21XX-PLAN-2002:** Plan for the deployment of maintenance capability

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2102, 2110, 2120, 2125, 2149, 2181

**GRADES:** MSGT, MGYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Commensurate with the position of authority and given a mission, personnel, and equipment.

**STANDARD:** Providing task-organized maintenance and meeting the mission requirement in support of operations In accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Review mission requirements.
2. Identify supported unit requirements.
3. Identify supporting unit requirements.
4. Determine personnel requirements.
5. Determine equipment requirements.
6. Identify supply support requirements.
7. Identify shortfalls.
8. Submit embarkation requirements.
9. Identify power requirements.
10. Provide input for transportation load plans.
11. Arrange for special material handling and transportation of equipment, as required.
12. Determine site layout.
13. Submit plan.

**REFERENCES:**
1. MCRP 4-11.3G Unit Embarkation Handbook
2. MCWP 4-11.4 Maintenance Operations

---

**21XX-PROG-2001:** Supervise maintenance related programs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Supervise the administrative storage and deadlines, employment of contact team(s), maintenance stand down, replace and evacuation (IROAN),

corrosion prevention and control, licensing and load certifications.

**MOS PERFORMING:** 2102, 2110, 2111, 2112, 2120, 2125, 2131, 2141, 2146, 2147

**GRADES:** SGT, SSGT, GYSGT, MSGT, MGYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5, CAPT, MAJ, LTCOL

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, commander's guidance, a mission statement and program reports.

**STANDARD:** Ensuring that maintenance programs are initiated and managed per MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Determine program requirement(s).
2. Employ contact team(s), as required.
3. Initiate a maintenance stand down, when required.
4. Implement IROAN, as required.
5. Monitor corrosion prevention and control.
6. Validate licensing and load certification requirements.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. MCWP 4-11.4 Maintenance Operations
4. UM 4400.125 GCSS-MC Users Manual

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**21XX-PROG-2002:** Manage supply support

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Supply support consists of the management actions, procedures and techniques necessary to acquire, receive, store, transfer, issue and dispose of spares, repair parts, and supplies. Supply support includes provisioning for initial support, as well as acquiring, distributing, and replenishing inventories of high usage preventative and corrective maintenance parts. Proper supply support management results in having all the right spares, repair parts, and all classes of supplies available, in the right quantities, at the right place, at the right time.

**MOS PERFORMING:** 2111, 2112, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** With the aid of references, equipment, the commander's authorization and the unit's SOP.

**STANDARD:** Ensuring continuous availability and 100% accounting of high usage, fast-moving items in accordance with MCO P4400.150.

**PERFORMANCE STEPS:**

1. Determine classes of supply requirements.
2. Maintain accountability of inventory.
3. Issue parts.
4. Conduct acceptance of equipment, when required.
5. Conduct periodic inventories.
6. Establish re-order points, as required.
7. Requisition replacement parts, as required.
8. Conduct reconciliation, as required.

**REFERENCES:**
1. MCO P4400.150_ Consumer Level Supply Policy Manual
2. UM 4400.125 GCSS-MC Users Manual

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**21XX-PROG-2003:** Conduct Calibrations Control

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111, 2131, 2141, 2146, 2147, 2161, 2171

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references and equipment.

**STANDARD:** Ensuring effective use of calibration laboratory resources and availability of calibrated TMDE in accordance with MCO 4790.25_.

**PERFORMANCE STEPS:**
1. Identify equipment requiring calibration.
2. Prepare calibration control records, as required.
3. Determine calibration control category.
4. Schedule items for calibration.
5. Submit for calibration, as required.
6. Reconcile equipment in calibration, as required.
7. Receive equipment from calibration, as required.
8. Update calibration control records, as required.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)

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**21XX-SCTY-2001:** Perform physical security procedures

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2111, 2112, 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a requirement.

**STANDARD:** To ensure procedures are adhered to.

**PERFORMANCE STEPS:**

1. Enforce access control procedures.
2. Maintain Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Maintain storage facilities.
4. Conduct inventory/accountability of assets.
5. Employ security barriers.
6. Employ security lighting.
7. Maintain Physical Security records.

**REFERENCES:**

1. MCO 4030.16 Marine Corps Packaging and Packaging Maintenance of Small Arms using volatile corrosion inhibitor (VCI) treated materials
2. MCO 4340.1_ DELETE Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property
3. MCO 4610.15_ Shipment of Military Equipment, Explosives and other Dangerous Articles
4. MCO 5500.6_ Arming of Law Enforcement and Security Personnel and the Use of Force
5. MCO 5530.14_ Marine Corps Physical Security Program Manual
6. MCO 8300.1_ Marine Corps Serialized Control of Small Arms Systems

# CHAPTER 5

# MOS 2102 INDIVIDUAL EVENTS

Refer to Chapter 4 for 21XX individual training events for which 2102 Ordnance Officers are responsible.

The 2102, Ground Ordnance Maintenance Officer, Military Occupational Specialty (MOS) is a career progression for a 2110 Ordnance Vehicle Maintenance Officer, 2120 Weapons Repair Officer, and 2125 Electrical Optical Repair Officer. Career progression and experience of the Marine that holds this MOS will execute the individual tasks of a 2110, 2120, and 2125 with an increased level of responsibility throughout all spectrums of logistics. It is expected of these ranks to direct, manage, supervise, perform, advise, and plan the employment of all ground ordnance maintenance resources at a strategic level. This Marine will manage all maintenance requirements associated with their position of authority that pertains to shop/unit's 21XX individual training events. The experience of the 2102, like the 2110, 2120, and 2125, is leveraged to evaluate and make recommendations to higher headquarters or supporting agencies on changes needed for future maintenance resources, processes, and capabilities. Additionally, the 2102 also provides advice, coordination, and recommendations to adjacent non-ground ordnance programs (i.e., Motor Transportation, Ground Electronics Maintenance, Engineer, etc.) with regard to associated ground ordnance maintenance planning and support at the enterprise level. The responsibility of the grade to which this officer is appointed is governed by the guidelines per Title 10 of the United States Code.

GROUND ORD MAINT T&R MANUAL

# CHAPTER 6

# MOS 2110 INDIVIDUAL EVENTS

Refer to Chapter 4 for 21XX individual training events for which 2110 Ordnance Vehicle Maintenance Officers are responsible.

GROUND ORD MAINT T&R MANUAL

CHAPTER 7

MOS 2111 INDIVIDUAL EVENTS

# CHAPTER 7

# MOS 2111 INDIVIDUAL EVENTS

**7000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**7001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2111 | Small Arms Repairer/Technician |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MAIN | Maintenance |
| OPS | Operations |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

**7002. INDEX OF INDIVIDUAL EVENTS**

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**7003. 1000-LEVEL EVENTS**

**2111-MAIN-1001:** Perform service on weapon system bipods/tripods/mounts

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Verify MIs/TIs as required.
7. Document findings.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. TM 1005-13A&P/1_ OPERATORS, UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)FORGROUND MOUNTS; MACHINE GUN MOUNTS; ANDCOMBINATIONS FOR TACTICAL/ARMORED VEHICLES

6. TM 11491A-OI Organizational and Intermediate Maintenance Manual w/ Repair Parts List (RPL), M35 Medium Machine Gun Vehicle Mount
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. UM 4400.125 GCSS-MC Users Manual

---

**2111-MAIN-1002:** Perform repair on weapon system bipods/tripods/mounts

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.
11. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 1005-13A&P/1_ OPERATORS, UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)FORGROUND MOUNTS; MACHINE GUN MOUNTS; ANDCOMBINATIONS FOR TACTICAL/ARMORED VEHICLES
7. TM 11491A-OI Organizational and Intermediate Maintenance Manual w/ Repair Parts List (RPL), M35 Medium Machine Gun Vehicle Mount
8. TM 4700-15/1_ Ground Equipment Record Procedures
9. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-1003:** Perform service on indirect fire weapon systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Verify MIs/TIs as required.
7. Document findings.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-1004:** Perform repair on indirect fire weapon systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.
11. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-1005:** Perform service on direct fire weapon systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Verify MIs/TIs as required.
7. Document findings.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

---

**2111-MAIN-1006:** Perform repair on direct fire weapon systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.
11. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals

2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**7004. 2000-LEVEL EVENTS**

**2111-MAIN-2001:** Perform service on trainer launchers

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** See Administrative Notes, para 11020.

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**2111-MAIN-2002:** Perform repair on trainer launchers

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-2003:** Perform service on non-standard weapon systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-2004:** Perform repair on non-standard weapon systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.

6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.
11. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-2005:** Perform modification on weapons system and associated ancillary equipment.

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification.
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment

3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-2006**: Perform modification on indirect fire weapon systems

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING**: 2111

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD**: Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS**:
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification.
6. Document modification.
7. Conduct final inspection.

**REFERENCES**:
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-2007**: Perform modification on direct fire weapon systems

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification.
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-2008:** Perform modification on trainer launchers

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification.
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-MAIN-2009:** Perform modification on non-standard weapon systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2111

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.

4. Requisition parts, as required.
5. Apply modification.
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150_ Consumer Level Supply Policy
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. UM 4400.125 GCSS-MC Users Manual

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**2111-OPS-2101:** Supervise armory operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2111

**GRADES:** SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given Table of Organization/Equipment.

**STANDARD:** To ensure optimal mission supportability.

**PERFORMANCE STEPS:**
1. Determine requirements.
2. Establish a work flow plan.
3. Verify DEMIL procedures, when applicable.
4. Maintain physical security program.
5. Ensure crane report is conducted.
6. Validate IWGCP requirement(s).
7. Validate TMDE requirement(s).
8. Maintain ground ordnance repair area.
9. Reconcile Automated Information System data.
10. Advise Custodian screening selection process.
11. Apply armory operational risk management (ORM).
12. Supervise daily maintenance operations.

**REFERENCES:**
1. DOD 4160.21-M-1 Defense Demilitarization Manual
2. MCO 5530.14 Marine Corps Physical Security Program Manual
3. MCO 8300.1_ Marine Corps Serialized Control of Small Arms Systems
4. MCO P4400.150_ Consumer Level Supply Policy Manual
5. MCO P5530.14_ Marine Corps Physical Security Program Manual
6. MCRP 3-0B How to Conduct Training
7. TI 4733-OD/11_ Infantry Weapons Gage Calibration Program (IWGCP)
8. TM 4700-15/1_ Ground Equipment Record Procedures

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GROUND ORD MAINT T&R MANUAL

CHAPTER 8

MOS 2112 INDIVIDUAL EVENTS

# CHAPTER 8

# MOS 2112 INDIVIDUAL EVENTS

**8000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**8001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2112 | Precision Weapons Repairer/Technician |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MACH | Machine |
| MAIN | Maintenance |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 2000 | Core Plus Skills |

**8002. INDEX OF INDIVIDUAL EVENTS**

**8003. 2000-LEVEL EVENTS**

**2112-MACH-2001:** Perform precision machining operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to fabricate work piece within a blueprint specification utilizing a lathe, vertical mill and surface grinder.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring work piece is within blueprint specifications.

**PERFORMANCE STEPS:**
1. Analyze or draft shop drawing(s).
2. Determine appropriate tools/equipment/material.
3. Fabricate work piece.
4. Perform quality control.
5. Complete maintenance and/or administrative actions and records.

**REFERENCES:**
1. 29 CFR 1910.1200 Title 29 Code of Federal Regulations, Hazard Communication
2. 3rd Edition Blueprint Reading
3. EngDraw Interpreting Engineering Drawings
4. EOM Equipment Operators Manual
5. Machinist Handbook Machinist Handbook
6. MCO 5100.29_ Marine Corps Safety Program
7. MCO 5100.8_ Marine Corps Occupational Safety and Health (OSH) Policy Order
8. MCO P5090.2_ Environmental Compliance and Protection Manual
9. MCWP 4-11.4 Maintenance Operations
10. TC 9-524 Fundamentals of Machine Tools
11. TM 9-243_ Use and Care of Hand Tools and Measuring Tools
12. TM 9-3405-205-14&P U Saw Band Metal Cutting Mod
13. TSM Technical Shop Mathematics

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**2112-MACH-2002:** Perform low-precision fabrication

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to fabricate work piece within a blueprint specifications, utilizing a manual/hydraulic press, drill press, band saw, grinding and sanding equipment, cutting and welding equipment taps, dies, files, handsaws and bead blasting.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring work piece is within blueprint specifications.

**PERFORMANCE STEPS:**
1. Analyze or draft shop drawing(s).
2. Determine appropriate tools/equipment/material.
3. Fabricate work piece.
4. Perform quality control.
5. Complete maintenance and/or administrative actions and records.

**REFERENCES:**
1. 29 CFR 1910.1200 Title 29 Code of Federal Regulations, Hazard Communication
2. 3rd Edition Blueprint Reading
3. EngDraw Interpreting Engineering Drawings
4. EOM Equipment Operators Manual
5. Machinist Handbook Machinist Handbook
6. MCO 5100.29_ Marine Corps Safety Program
7. MCO 5100.8_ Marine Corps Occupational Safety and Health (OSH) Policy Order
8. MCO P5090.2_ Environmental Compliance and Protection Manual
9. MCWP 4-11.4 Maintenance Operations
10. TC 9-524 Fundamentals of Machine Tools
11. TM 9-243_ Use and Care of Hand Tools and Measuring Tools
12. TM 9-3405-205-14&P U Saw Band Metal Cutting Mod
13. TSM Technical Shop Mathematics

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**2112-MACH-2003:** Perform heat treating operation

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to temper the material to the required tensile strength to include Rockwell hardness testing.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Modifying material(s) to meet drawing specifications.

**PERFORMANCE STEPS:**
1. Analyze type of metal.
2. Utilize heating procedures.
3. Verify hardness.
4. Complete maintenance and/or administrative actions and records.

**REFERENCES:**

1. 29 CFR 1910.1200 Title 29 Code of Federal Regulations, Hazard Communication
2. EOM Equipment Operators Manual
3. Machinist Handbook Machinist Handbook
4. MCO 5100.29_ Marine Corps Safety Program
5. MCO 5100.8_ Marine Corps Occupational Safety and Health (OSH) Policy Order
6. MCO P5090.2_ Environmental Compliance and Protection Manual
7. MCWP 4-11.4 Maintenance Operations
8. TC 9-524 Fundamentals of Machine Tools
9. William Bryson Heat Treatment, Selection and Application of Tool Steels

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**2112-MACH-2004:** Perform Thread Repair

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Restoring equipment to a serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Determine appropriate tool(s).
2. Extract broken component.
3. Recondition thread.
4. Perform quality control.
5. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. Machinist Handbook Machinist Handbook
2. Operator's Manual Operator's Manual
3. TC 9-524 Fundamentals of Machine Tools
4. TM 4700-15/1_ Ground Equipment Record Procedures

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**2112-MAIN-2001:** Perform service on non-standard weapons

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** To achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
3. TM 4700-15/1_ Ground Equipment Record Procedures
4. TM 8370-50037-IN/4 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR LIGHT MACHINE GUN, 7.62 MM, RPD
5. TM 8370-50047-IN/6 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR RIFLE, 5.45 MM, AK-74
6. TM 8370-50097-IN/16 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR SNIPER RIFLE, 7.62 x 54R MM, SVD
7. TM 8370-50107-IN/18 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR MACHINE GUN, 7.62 X 54R MM, PKM
8. TM 8370-50117-IN/20 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR RIFLE, 7.62 MM, G-3
9. TM 8370-50127-IN/22 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR RIFLE, 7.62 MM, FN FAL
10. TM 8370-50137-IN/24 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR LAUNCHER, ROCKET PROPELLED GRENADE, 40 MM, RPG-7V

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**2112-MAIN-2002:** Perform service on precision weapons

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months
**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of

references.

**STANDARD:** To achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. 1-10 Precision Weapons Section Policy Letter 1-10
2. 40X Model 40x Field Service Manual Model
3. ATDP Appropriate Technical Data Package
4. MCWP 4-11.4 Maintenance Operations
5. PWRC Current Precision Pistol Build/Rebuild Procedures
6. PWRC_ Current Precision Sniper Rifle Build/Rebuild Procedures
7. RBP Current National Match Rifle Build/Rebuild Procedures
8. RS 05539-DE Rebuild Standard
9. Smith & Wesson Owner's Manual Model 41
10. TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
11. TM 05538C-23&P/2 RIFLE 5.56MM M16A2 W/E
12. TM 05539-IN M40A5 SNIPER RIFLE
13. TM 05539-OR M40A5 Sniper Rifle
14. TM 4700-15/1_ Ground Equipment Record Procedures
15. TM 9-1005-206-14P/4 Operator's Organizational Direct Support and General Support Maintenance Repair Parts and Special Tools Manual.
16. TM 9-1005-211-35 M1911A1 Maintenance Manual

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**2112-MAIN-2003:** Perform repair on non-standard weapons

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**

1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
3. TM 4700-15/1_ Ground Equipment Record Procedures
4. TM 8370-50037-IN/4 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR LIGHT MACHINE GUN, 7.62 MM, RPD
5. TM 8370-50047-IN/6 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR RIFLE, 5.45 MM, AK-74
6. TM 8370-50097-IN/16 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR SNIPER RIFLE, 7.62 x 54R MM, SVD
7. TM 8370-50107-IN/18 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR MACHINE GUN, 7.62 X 54R MM, PKM
8. TM 8370-50117-IN/20 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR RIFLE, 7.62 MM, G-3
9. TM 8370-50127-IN/22 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR RIFLE, 7.62 MM, FN FAL
10. TM 8370-50137-IN/24 ORGANIZATIONAL MAINTENANCE MANUAL WITH REPAIR PARTS LIST FOR LAUNCHER, ROCKET PROPELLED GRENADE, 40 MM, RPG-7V

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**2112-MAIN-2004:** Perform repair on precision weapons

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.

3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.

**REFERENCES:**
1. 1-10 Precision Weapons Section Policy Letter 1-10
2. 40X Model 40x Field Service Manual Model
3. ATDP Appropriate Technical Data Package
4. MCWP 4-11.4 Maintenance Operations
5. PWRC Current Precision Pistol Build/Rebuild Procedures
6. PWRC_ Current Precision Sniper Rifle Build/Rebuild Procedures
7. RBP Current National Match Rifle Build/Rebuild Procedures
8. RS 05539-DE Rebuild Standard
9. Smith & Wesson Owner's Manual Model 41
10. TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
11. TM 05538C-23&P/2 RIFLE 5.56MM M16A2 W/E
12. TM 05539-IN M40A5 SNIPER RIFLE
13. TM 05539-OR M40A5 Sniper Rifle
14. TM 4700-15/1_ Ground Equipment Record Procedures
15. TM 9-1005-206-14P/4 Operator's Organizational Direct Support and General Support Maintenance Repair Parts and Special Tools Manual.
16. TM 9-1005-211-35 M1911A1 Maintenance Manual

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**2112-MAIN-2005:** Perform depot level maintenance

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Depot maintenance is the complete build/rebuild of equipment to return to like new condition.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a depot precision weapons billet, equipment, and with the aid of references.

**STANDARD:** Returning equipment to like new condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Perform required maintenance actions.
5. Verify MIs/TIs, as required.
6. Perform metal refinishing, as required.

7. Conduct quality control.
8. Document maintenance actions.

**REFERENCES:**
1. 1-10 Precision Weapons Section Policy Letter 1-10
2. 40X Model 40x Field Service Manual Model
3. ATDP Appropriate Technical Data Package
4. MCWP 4-11.4 Maintenance Operations
5. PWRC Current Precision Pistol Build/Rebuild Procedures
6. PWRC_ Current Precision Sniper Rifle Build/Rebuild Procedures
7. RBP Current National Match Rifle Build/Rebuild Procedures
8. RS 05539-DE Rebuild Standard
9. Smith & Wesson Owner's Manual Model 41
10. TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
11. TM 05538C-23&P/2 RIFLE 5.56MM M16A2 W/E
12. TM 05539-IN M40A5 SNIPER RIFLE
13. TM 05539-OR M40A5 Sniper Rifle
14. TM 4700-15/1_ Ground Equipment Record Procedures
15. TM 9-1005-206-14P/4 Operator's Organizational Direct Support and General Support Maintenance Repair Parts and Special Tools Manual.
16. TM 9-1005-211-35 M1911A1 Maintenance Manual

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**2112-MAIN-2006:** Perform modification on precision weapons

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with MCWP 4-11.4 Maintenance Operations.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI)).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations

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**2112-MAIN-2007:** Perform modification on non-standard weapons

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2112

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with MCWP 4-11.4 Maintenance Operations.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI)).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations

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GROUND ORD MAINT T&R MANUAL

# CHAPTER 9

# MOS 2120 INDIVIDUAL EVENTS

Refer to Chapter 4 for 21XX individual training events for which 2120 Weapons Repair Officers are responsible.

GROUND ORD MAINT T&R MANUAL

# CHAPTER 10

# MOS 2125 INDIVIDUAL EVENTS

# CHAPTER 10

# MOS 2125 INDIVIDUAL EVENTS

**10000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**10001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2125 | Electro-Optic Instrument Repair Officer |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| ADMN | Administration |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 2000 | Core Plus Skills |

**10002. INDEX OF INDIVIDUAL EVENTS**



**10003. 2000-LEVEL EVENTS**

**2125-ADMN-2005:** Manage Radiologic Safety program

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2125

**GRADES:** WO-1, CWO-2, CWO-3, CWO-4

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given requirement.

**STANDARD:** To ensure personnel are exposed to the lowest reasonably achievable level of ionizing radiation.

**PERFORMANCE STEPS:**
1. Validate Radiological safety requirements.
2. Revise and/or establish controls and policy.
3. Ensure safety of personnel.
4. Ensure radioactive material accountability is adhered to.
5. Ensure completion of administrative functions.

**REFERENCES:**
1. 10 CFR Parts 19, 20, and 21
2. 49 CFR 173.7 Part 173
3. DOD 4715.6-R Low Level Radioactive Waste Disposal Program
4. MCO 5104.3_ Marine Corps Radiation Safety Program
5. MCO P4400.150_ Consumer Level Supply Policy Manual
6. NAVMED P-5055 Radiation Health Protection Manual
7. S0420-AA-RAD-010 NAVSEA Radiological Affairs Support Program Manual

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This is a required course taught by NAVSEA DET RASO (CDP:9937)

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**2125-ADMN-2006:** Manage LASER Safety program

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2125

**GRADES:** WO-1, CWO-2, CWO-3, CWO-4

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given requirement.

**STANDARD:** To ensure all personnel are not exposed to hazardous levels of LASER radiation.

**PERFORMANCE STEPS:**
1. Validate LASER safety requirements.
2. Revise and/or establish controls and policy.
3. Ensure safety of personnel.
4. Ensure completion of administrative functions.

**REFERENCES:**
1. 21 CFR 1040 Federal Performance Standard for Light Emitting Products
2. BUMEDINST 6470.23 Medical management of non-ionizing radiation casualties.
3. MCO 5104.1C Navy Laser Hazards Control Program

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a billet requirement to attend training at an ALA/LNTL-approved Technical Laser Safety Officer (TLSO) course.

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GROUND ORD MAINT T&R MANUAL

CHAPTER 11

MOS 2131 INDIVIDUAL EVENTS

GROUND ORD MAINT T&R MANUAL

CHAPTER 11

MOS 2131 INDIVIDUAL EVENTS

**11000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**11001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2131 | Towed Artillery Systems Technician |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MAIN | Maintenance |
| MED | Medical |
| OPS | Operations |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

**11002. INDEX OF INDIVIDUAL EVENTS**

| | | |
|---|---|---|
| 2131-MAIN-1410 | Perform repair on Mortar, 120MM, Rifled, Towed, M327 | 11-12 |
| 2131-MED-1001 | Evacuate a casualty from the bed of MTVR | 11-13 |
| **2000-LEVEL** | | |
| 2131-MAIN-2401 | Perform secondary repair on howitzer platforms | 11-13 |
| 2131-MAIN-2402 | Perform modification on Howitzer platforms | 11-14 |
| 2131-MAIN-2403 | Perform modification on Mortar, 120MM, Rifled, Towed, M327 | 11-15 |
| 2131-MAIN-2404 | Perform recovery and evacuation on Howitzer platforms | 11-16 |
| 2131-MAIN-2405 | Perform recovery and evacuation on Mortar, 120MM, Rifled, Towed, M327 | 11-17 |
| 2131-OPS-2401 | Operate Shop Equipment Contact Maintenance (SECM) vehicle | 11-18 |
| 2131-OPS-2402 | Operate Artillery Mobile Expandable Container (AEMC) | 11-19 |

**11003. 1000-LEVEL EVENTS**

**2131-MAIN-1401:** Perform inspection on M777 Howitzer platforms

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Inspections are the first and last tasks that a user and maintenance activity perform on equipment. Inspection is the checking or testing of an item against established standards. The inspection process determines maintenance requirements and satisfactory maintenance performance.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Verify MIs/TIs, as required.
7. Apply firmware/software upgrades, as required.
8. Document findings.

**REFERENCES:**
1. GCSS-MC Procedural
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
5. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777

6. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
9. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1402:** Perform inspection on Mortar, 120MM, Rifled, Towed, M327

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Inspections are the first and last tasks that a user and maintenance activity perform on equipment. Inspection is the checking or testing of an item against established standards. The inspection process determines maintenance requirements and satisfactory maintenance performance.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Determining maintenance requirements and satisfactory maintenance performance, and assigning item to a maintenance category, in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Verify MIs/TIs, as required.
7. Apply firmware/software upgrades, as required.
8. Document findings.

**REFERENCES:**
1. GCSS-MC Procedural
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCTM 11166A-OR/A Operator's Manual for Mortar, Rifled, Towed: 120mm, M327
4. MCWP 4-11.4 Maintenance Operations
5. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
8. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1403:** Perform service on Howitzer platforms

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Requisition parts, if required.
5. Perform required maintenance actions.
6. Conduct final inspection.
7. Document maintenance actions.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
6. TM 00999-23&P/1 Recoil Exercise for M198 155MM Howitzer
7. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
8. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 750-116 General Procedures for Purge and Charge
11. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
12. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1404:** Perform service on Mortar, 120MM, Rifled, Towed, M327

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Verify equipment performance.
5. Conduct final inspection.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
5. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCWP 4-11.4 Maintenance Operations
8. TM 00640A-13&P/1 Pullover Gage Kit
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 750-116 General Procedures for Purge and Charge
11. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
12. TM-11166A-OR Mortar 120MM Rifled Towed M327
13. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1405:** Perform repair on the cradle assembly

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Repairing the Cradle Assembly will consist of conducting maintenance on the following components: breach operating loading tray system, Scavenge System, cradle, recoil system and equilibrator system.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Verify MIs/TIs, as required.
10. Conduct final inspection.

**REFERENCES:**
1. Applicable technical manuals/publications Applicable technical manuals/publications
2. GCSS-MC Procedural Notices GCSS-MC Handbook
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
5. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCWP 4-11.4 Maintenance Operations
8. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
9. TM 00999-23&P/1 Recoil Exercise for M198 155MM Howitzer
10. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
11. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
12. TM 4700-15/1_ Ground Equipment Record Procedures
13. TM 750-116 General Procedures for Purge and Charge
14. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
15. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1406:** Perform repair on the cannon tube assembly

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Repairing the Cannon tube Assembly will consist of conducting maintenance on the following components: breach assembly, thermal warning device, muzzle brake, firing mechanism and the M776 cannon tube.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Verify MIs/TIs, as required.
10. Conduct final inspection.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
5. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCWP 4-11.4 Maintenance Operations
8. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
9. TM 00999-23&P/1 Recoil Exercise for M198 155MM Howitzer
10. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
11. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
12. TM 4700-15/1_ Ground Equipment Record Procedures
13. TM 750-116 General Procedures for Purge and Charge
14. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
15. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1407:** Perform repair on the saddle assembly

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Repairing the Cannon tube Assembly will consist of conducting maintenance on the following components: Saddle, Optical fire control equipment, traverse gearbox and the elevation gearbox.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Verify MIs/TIs, as required.
10. Conduct final inspection.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
4. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. MCWP 4-11.4 Maintenance Operations
7. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
8. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 750-116 General Procedures for Purge and Charge
11. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
12. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1408:** Perform repair on the body assembly

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Repairing the Body Assembly will consist of conducting maintenance on the following components: Suspension System, brake system, wheel arm assembly, stabilizer assembly and spade assembly.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**

1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Verify MIs/TIs, as required.
10. Conduct final inspection.

**REFERENCES:**
1. GCSS-MC Procedural
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
4. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. MCWP 4-11.4 Maintenance Operations
7. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
8. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 750-116 General Procedures for Purge and Charge
11. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1409:** Perform repair on the Digital Fire Control System

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Repairing Digital Fire Control System will consist of troubleshooting to include the removal and replacement of the following components: mission computer, power condition control module, inertial navigation unit, integrated fuse setter, communication system, and the other miscellaneous components.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.

4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Apply firmware/software upgrades, as required.
10. Verify MIs/TIs, as required.
11. Conduct final inspection.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
5. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCWP 4-11.4 Maintenance Operations
8. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
9. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
10. TM 4700-15/1_ Ground Equipment Record Procedures
11. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-1410:** Perform repair on Mortar, 120MM, Rifled, Towed, M327

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Repair on mortar, 120mm, rifled, towed, M327 will consist of conducting maintenance on the following components: barrel assembly, baseplate assembly, optical fire control equipment, and under carriage assembly.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.

7. Perform required maintenance actions.
8. Document maintenance actions.
9. Verify MIs/TIs, as required.
10. Conduct final inspection.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
5. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCWP 4-11.4 Maintenance Operations
8. TM 00640A-13&P/1 Pullover Gage Kit
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 750-116 General Procedures for Purge and Charge
11. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
12. TM-11166A-IN/A Field Level Technical Manual W/ Replacement Parts & Special Tools
13. TM-11166A-OR Mortar 120MM Rifled Towed M327
14. UM 4400.125 GCSS-MC Users Manual

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**2131-MED-1001:** Evacuate a casualty from the bed of MTVR

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an MTVR and all associated equipment.

**STANDARD:** In accordance with MCWP3-12.2.

**PERFORMANCE STEPS:**
1. Establish security.
2. Report casualty to next highest echelon.
3. Provide required triage/casualty care.
4. Prepare casualty for transport to extraction point.
5. Evacuate the casualty.

**REFERENCES:**
1. MCWP 4-11.1 Health Service Support Operations
2. MCWP 4-11.3A Patient Movement

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOS of 2131. See Appendix C for further detail.

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**11004. 2000-LEVEL EVENTS**

**2131-MAIN-2401**: Perform secondary repair on M777 howitzer platforms

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Secondary Repair will consist of, but not limited to conducting maintenance on the following components: trunnion pump, breach actuator, equilibrator, recoil buffer, and accumulator cylinder; scavenge system, elevation/traverse gear box, brake systems, hydrostrut, and the suspension pump.

**MOS PERFORMING**: 2131

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD**: Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS**:
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Verify MIs/TIs, as required.
10. Conduct final inspection.

**REFERENCES**:
1. GCSS-MC Procedural
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
4. MCO P4400.150_ Consumer Level Supply Policy Manual
5. MCO P4790.2_ MIMMS Field Procedures Manual
6. MCWP 4-11.4 Maintenance Operations
7. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
8. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 750-116 General Procedures for Purge and Charge
11. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-2402**: Perform modification on M777 Howitzer platforms

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable modification/technical instruction.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Requisition parts, as required.
5. Apply modification.
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
5. MCO P4400.150_ Consumer Level Supply Policy Manual
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCWP 4-11.4 Maintenance Operations
8. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
9. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
10. TM 4700-15/1_ Ground Equipment Record Procedures
11. TM 750-116 General Procedures for Purge and Charge
12. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-2403:** Perform modification on Mortar, 120MM, Rifled, Towed, M327

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modification's purpose is to improve equipment functioning, maintainability or

reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable modification/technical instruction.

**PERFORMANCE STEPS:**
1. Conduct inspection.
2. Induct equipment into maintenance, if required.
3. Determine applicable technical references.
4. Requisition parts, as required.
5. Apply modification (MI/TI).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCO 4400.150 CONSUMER-LEVEL SUPPLY POLICY
5. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
6. MCO P4790.2_ MIMMS Field Procedures Manual
7. MCWP 4-11.4 Maintenance Operations
8. TM 4700-15/1_ Ground Equipment Record Procedures
9. TM 750-116 General Procedures for Purge and Charge
10. TM-11166A-IN/A Field Level Technical Manual W/ Replacement Parts & Special Tools
11. TM-11166A-OR Mortar 120MM Rifled Towed M327
12. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-2404:** Perform recovery and evacuation on Howitzer platforms

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation

is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct inspection.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
6. TM 00999-23&P/1 Recoil Exercise for M198 155MM Howitzer
7. TM 10407A-10-1 Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
8. TM 10407A-25&P/2 Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 750-116 General Procedures for Purge and Charge
11. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
12. UM 4400.125 GCSS-MC Users Manual

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**2131-MAIN-2405:** Perform recovery and evacuation on Mortar, 120MM, Rifled, Towed, M327

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct inspection.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-1000-202-14 EVALUATION OF CANNON TUBES
9. TM-11166A-IN/A Field Level Technical Manual W/ Replacement Parts & Special Tools
10. TM-11166A-OR Mortar 120MM Rifled Towed M327
11. UM 4400.125 GCSS-MC Users Manual

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**2131-OPS-2401:** Operate Shop Equipment Contact Maintenance (SECM) vehicle

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring mission requirements are supported in accordance with MCWP 4-11.4 Maintenance Operations.

**PERFORMANCE STEPS:**
1. Obtain required vehicle licensing.
2. Coordinate required support.

3. Perform operator check out/in procedures.
4. Establish security.
5. Employ maintenance support, as needed.
6. Redeploy equipment.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 4700-15/1_ Ground Equipment Record Procedures
6. TM 750-116 General Procedures for Purge and Charge
7. UM 4400.125 GCSS-MC Users Manual

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**2131-OPS-2402:** Operate Artillery Mobile Expandable Container (AEMC)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to set up and operate the Artillery EMC

**MOS PERFORMING:** 2131

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring AEMC is setup and operational.

**PERFORMANCE STEPS:**
1. Determine area of operation.
2. Set up shelters.
3. Set up equipment.
4. Conduct a operations check.
5. Retrograde shelters/equipment, when applicable.
6. Conduct Preventive Maintenance Checks and Services (PMCS).
7. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. TM 09105C-OI/1 Artillery Mobile Expandable Container
2. TM 4700-15/1_ Ground Equipment Record Procedures
3. UM 4400.125 GCSS-MC Users Manual

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GROUND ORD MAINT T&R MANUAL

CHAPTER 12

MOS 2141 INDIVIDUAL EVENTS

GROUND ORD MAINT T&R MANUAL

CHAPTER 12

MOS 2141 INDIVIDUAL EVENTS

**12000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**12001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2141 | Assault Amphibious Vehicle (AAV) Repairer/Technician |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MAIN | Maintenance |
| OPS | Operations |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

**12002. INDEX OF INDIVIDUAL EVENTS**

**12003. 1000-LEVEL EVENTS**

**2141-MAIN-1001:** Service AAV FOVs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing refers to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of reference(s), tools, equipment and as a member of a team.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Conduct quality control procedures.
7. Document maintenance actions.
8. Return equipment to owner.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TI 09674A OD/1 PMCS, LI & OPERATIONAL CHECKLISTS FOR THE AAVs, FOVs
3. TM 07267B-10/1_ Operator's Manual, AAVR7A1.
4. TM 07268B-10/1E Assault Amphibious Vehicle, Command, Model 7A1 (AAVC7A1) Supplement to TM 09674A-10/3
5. TM 09674A-10/3_ Operator's Manual, AAV 7A1 FOV

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**2141-MAIN-1003:** Service AAV Up Gunned Weapon Station (UGWS)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing refers to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing and adjustment are sub-functions of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of reference(s), tools, and equipment and as a member of a team.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine technical references.
3. Conduct initial inspection.

4. Adjust equipment performance.
5. Verify equipment performance.
6. Conduct quality control.
7. Document maintenance actions.
8. Return equipment to owner.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 10004A-25&P/2_ Maintenance Instruction, Up Gunned Weapons Station (UGWS) AAVP7A1

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**2141-MAIN-1004:** Perform field level organization level repair on AAV Up Gunned Weapon Station (UGWS)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of reference(s), tools, and equipment.

**STANDARD:** To return equipment to serviceable condition in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Conduct quality control.
10. Return equipment to owner.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM-10004A-25&P/2A UPGUNNED WEAPONS STATION (UGWS), ASSAULT AMPHIBIOUS VEHICLE, PERSONNEL, MODEL 7A1, AAVP7A1

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**2141-MAIN-1105:** Conduct Organizational Level Suspension System Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through

correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV

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**2141-MAIN-1106:** Conduct Organizational Level Power Plant Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions

7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1107:** Conduct Organizational Level Transmission Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1108:** Conduct Organizational Level Engine Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1109:** Conduct Organizational Level Cooling Tower Assembly Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions

8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1110:** Conduct Organizational Level Final Drives Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV

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**2141-MAIN-1111:** Conduct Organizational Level Hydraulic System Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1112:** Conduct Organizational Level Electrical System Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1113:** Conduct Organizational Level Fuel System Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1114:** Conduct Organizational Level Controls/Linkages Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1115:** Conduct Organizational Level Ventilation System Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**

1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-1116**: Operate Recovery Unique Equipment

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Ground Ordnance Vehicle maintainers are required by MOS to be able to operate all of the AAVR7 unique equipment. This includes the air compressor, welder, winch, crane, fairlead, magnetic clutch, recovery vehicle unique hydraulic system and AC power electrical system.

**MOS PERFORMING**: 2141

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given an AAVR7A1 and as a member of a crew.

**STANDARD**: To prevent personnel injury and equipment damage.

**PERFORMANCE STEPS**:
1. Perform PMCS on maintenance and recovery equipment
2. Operate hydraulic pump
3. Operate winch
4. Operate crane
5. Operate alternating current (AC) generator
6. Operate air compressor
7. Operate floodlights/work lights
8. Prepare welding equipment

**REFERENCES**:
1. TM 07267B-10/1_ Operator's Manual, AAVR7A1.
2. TM 09674A-10/3_ Operator's Manual, AAV 7A1 FOV

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**2141-MED-1001**: Perform individual actions to evacuate injured crewman

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 6 months

**BILLETS**: Driver, Third Crewman, Vehicle Commander

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: As crew member, Given an AAV/ACV, all associated equipment, and crew.

**STANDARD**: In accordance with the MCWP 3-12.2.

**PERFORMANCE STEPS:**
1. Stabilize injured crewman through self-aid/buddy-aid.
2. Select the most appropriate hatch and path of evacuation.
3. Evacuate injured crewman from vehicle.
4. Send casualty report to higher.

**REFERENCES:**
1. MCWP 3-12.2 Heavy Brigade Combat Team (HBCT) Gunnery
2. ST 3-20.21-1 Individual and Crew Live-Fire Prerequisite Testing

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOS of 2141. See Appendix C for further detail.

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**2141-VOPS-1001:** Egress the AAV

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 36 months

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a rapidly sinking or submerged AAV.

**STANDARD:** In order to reach the surface of the water.

**PERFORMANCE STEPS:**
1. Unfasten seatbelt
2. Unlock assigned hatch
3. Employ life support equipment as required
4. Exit vehicle
5. Swim to surface

**REFERENCES:**
1. UNIT SOP Unit's Standing Operating Procedures

**SUPPORT REQUIREMENTS:**

**OTHER SUPPORT REQUIREMENTS:** This task shall be trained using the Submerged Vehicle Egress Trainer (SVET).

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. The Shallow Water Initial Memory Mechanical Exit Release (SWIMMER) and the Shallow Water Egress Trainer (SWET) is utilized by the Naval Survival Training Institute (NSTI) as part of their egress training continuum to increase Marines comfort in the water as well as their proficiency in SVET and AAV egress. SWIMMER and SWET are available at all 8 NSTI training sites, but are not currently utilized by the Marine Corps. If possible, unit training shall include SWIMMER and SWET training prior to using the SVET.

2. Reserve training will take place at Initial Location for Mobilization (ILOC) or during two week annual training (AT).

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**12004. 2000-LEVEL EVENTS**

**2141-MAIN-2001**: Perform modification on AAV MK154 system

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING**: 2141

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: MOJT

**CONDITION**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD**: Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS**:
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES**:
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
2. MCWP 4-11.4 Maintenance Operations

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**2141-MAIN-2002**: Install modification on AAV/FOV

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a

sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given modification instructions, AAV/FOV, tools, and technical references.

**STANDARD:** Improve equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Apply modification.
5. Verify application of modifications.
6. Document actions.
7. Conduct quality control procedures.
8. Return equipment to owner.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 07267C-25&P/2 AAV R7A1 Recovery Vehicle
3. TM 07268C-25&P/2 AAV C7A1
4. TM 09674-25/4D Vol 1-4 w/ CH1
5. TM 8F152B-25&P/4 Power Plant Assembly, AAV/FOV & RAM/RS

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**2141-MAIN-2005:** Perform service on AAV FOV special mission kits

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**

1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

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**2141-MAIN-2006:** Assist in the recovery of submerged AAV /FOV

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2141

**GRADES:** SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given recovery assets and equipment.

**STANDARD:** To recover submerged AAV/FOV in accordance with TI-2350-25/36A.

**PERFORMANCE STEPS:**
1. Review mission analysis.
2. Plan mission.
3. Execute mission.
4. Report results.
5. Annotate vehicle logbook.

**REFERENCES:**
1. TI 2350 25/36A
2. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

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**2141-MAIN-2007:** Perform repair on AAV FOV special mission kits

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2141

**GRADES:** SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

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**2141-MAIN-2009:** Perform intermediate level repair on AAV Up Gunned Weapon Station (UGWS)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Repair will be conducted the following AAV components but not limited to: Elevation mechanism, equilibrator, slip ring, weapons control box, power control box, power traverse bix, exhaust blower, smoke grenade launchers, weapons cradle, and power traverse mechanism.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of reference(s), tools, and equipment.

**STANDARD:** To return equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Conduct quality control.
10. Return equipment to owner.

**REFERENCES:**
1. TM 09674A-10/3 Amphibious Assault Vehicle, Personnel Operators' Manual
2. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1
3. TM 10004A-25&P/2C Maintenance Instructions and Repair Parts List Organizational, Intermediate, and Depot Upgunned Weapons Station (UGWS) Assault Amphibious Vehicle, Personnel, Model 7A1, AAVP7A1

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**2141-MAIN-2011:** Service AAV MK154 system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing refers to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of references(s), tools, equipment, and as a member of a team.

**STANDARD:** Adjust equipment to achieve precise functioning in accordance with the technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.
7. Conduct quality control procedures.
8. Return equipment to owner.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-10/3D Operator's Manual, Assault Amphibious Vehicle 7A1 Family of Vehicles (With Special Mission Kits)
3. TM-09674A-25&P/4 ASSAULT AMPHIBIOUS VEHICLE PERSONNEL, MODEL 7A1, AAVP7A1

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**2141-MAIN-2012:** Perform repair on AAV MK154 system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** With the aid of reference(s), tools, and equipment.

**STANDARD:** To return equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Document maintenance actions.
9. Conduct quality control.
10. Return equipment to owner.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-10/3 Amphibious Assault Vehicle, Personnel Operators' Manual
3. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

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**2141-MAIN-2013:** Perform Field (Intermediate) Level repair of AAV/FOV APU

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.

8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1

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**2141-MAIN-2050:** Perform Field (Organizational) Level repair of AAV FOV APU

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2141

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals

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**2141-MAIN-2051:** Conduct Intermediate Level Fire Suppression System Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through

correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV

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**2141-MAIN-2052:** Conduct Intermediate Level AAVR7 Unique Equipment Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions

7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 07267B-10/1_ Operator's Manual, AAVR7A1.
3. TM 07267C-25&P/2 AAV R7A1 Recovery Vehicle
4. TM 09674A-10/3D Operator's Manual, Assault Amphibious Vehicle 7A1 Family of Vehicles (With Special Mission Kits)
5. TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1
6. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV

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**2141-MAIN-2053:** Conduct Intermediate Level Track Tension Adjustments

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-10/3_ Operator's Manual, AAV 7A1 FOV
3. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV

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**2141-MAIN-2054:** Conduct Intermediate Level Hydraulic Cylinders Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through

correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 07267C-25&P/2 AAV R7A1 Recovery Vehicle
3. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
4. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-2055:** Conduct Intermediate Level Bow Plane Actuator Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection

4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV

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**2141-MAIN-2056:** Conduct Intermediate Level Transmission Assembly Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-2057:** Conduct Intermediate Level Power Take-Off Assembly Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-

function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-2058:** Conduct Intermediate Level Engine Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts

6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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**2141-MAIN-2059:** Conduct Intermediate Level Final Drive Assembly Repairs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**MOS PERFORMING:** 2141

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an AAV, tools, equipment and references.

**STANDARD:** To achieve precise functioning and in accordance with technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance
2. Determine technical references
3. Conduct initial inspection
4. Determine maintenance actions
5. Requisition parts
6. Perform required maintenance actions
7. Document maintenance actions
8. Conduct quality control
9. Return equipment to owner

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. TM 09674A-25&P/4_ Vol 1-4 Maintenance Instruction, AAV 7A1 FOV
3. TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV

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GROUND ORD MAINT T&R MANUAL

CHAPTER 13

MOS 2146 INDIVIDUAL EVENTS

GROUND ORD MAINT T&R MANUAL

CHAPTER 13

MOS 2146 INDIVIDUAL EVENTS

**13000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**13001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2146 | Main Battle Tank (MBT) Repairer/Technician |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MAIN | Maintenance |
| MED | Medical |
| VOPS | Vehicle Operations |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

**13002. INDEX OF INDIVIDUAL EVENTS**

| | | |
|---|---|---|
| | breaching vehicle | |
| 2146-MED-1001 | Perform individual actions to evacuate injured crewman | 13-12 |
| 2146-VOPS-1001 | Operate commander's station on ABV | 13-13 |
| **2000-LEVEL** | | |
| 2146-MAIN-2001 | Perform intermediate repair on main battle tank | 13-13 |
| 2146-MAIN-2002 | Perform intermediate repair on tank retrieval vehicle | 13-15 |
| 2146-MAIN-2003 | Perform intermediate repair on bridging tanks | 13-16 |
| 2146-MAIN-2004 | Perform modification on main battle tanks | 13-17 |
| 2146-MAIN-2005 | Perform modification on tank retrieval vehicles | 13-19 |
| 2146-MAIN-2009 | Perform modification on bridging tanks | 13-19 |
| 2146-MAIN-2010 | Perform recovery and evacuation on tanks assets | 13-20 |
| 2146-MAIN-2501 | Perform intermediate repair on assault breaching vehicle | 13-21 |
| 2146-MAIN-2502 | Perform modification on assault breaching vehicle | 13-22 |

**13003. 1000-LEVEL EVENTS**

**2146-MAIN-1001:** Perform service on main battle tank

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 9-2350-264-10-1 Operators Manual, Operator Controls, PMCS, and Operation Under Usual Conditions, Volume 1 of 2, Tank, Combat, Full-Tracked: 120-MM Gun, M1A1 2350-01-087-1095 General Abrams

4. TM 9-2350-264-10-2 Operator's Manual, Unusual Conditions, Troubleshooting, and Maintenance, Volume 2 of 2, Tank, Combat, Full-Tracked: 120-MM, M1A1 2350-01-087-1095, General Abrams
5. TM 9-2350-264-10-3 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 3 OF 3
6. TM 9-2350-264-23-1-1 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 1 OF 8
7. TM 9-2350-264-23-1-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 2 OF 8
8. TM 9-2350-264-23-1-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 3 OF 8
9. TM 9-2350-264-23-1-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 4 OF 8
10. TM 9-2350-264-23-1-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 5 OF 8
11. TM 9-2350-264-23-1-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 6 OF 8
12. TM 9-2350-264-23-1-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 7 OF 8
13. TM 9-2350-264-23-1-8 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 8 OF 8
14. TM 9-2350-264-23-2-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 2 OF 7
15. TM 9-2350-264-23-2-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 3 OF 7
16. TM 9-2350-264-23-2-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 4 OF 7
17. TM 9-2350-264-23-2-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 5 OF 7
18. TM 9-2350-264-23-2-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 6 OF 7
19. TM 9-2350-264-23-2-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 7 OF 7
20. TM 9-2350-264-24P-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
21. TM 9-2350-264-24P-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
22. TM 9-2350-264-34-1-1 TANK, COMBAT, FULL-TRACKED:DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 1 OF 2
23. TM 9-2350-264-34-1-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 2 OF 2
24. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-1002:** Perform service on tank retrieval vehicle

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
4. TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
5. TM 9-2350-292-24P UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST FOR RECOVERY VEHICLE, FULL-TRACKED: HEAVY M88A2
6. TM 9-2350-292-34 DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
7. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-1003:** Perform service on Armored-Vehicle Launched Bridge (AVLB)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance

with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 5-5420-202-10 Operator's Manual for M-60 AVLB
4. TM 5-5420-202-20-1 AVLB M60A1 Chassis Transporting
5. TM 5-5420-202-20-2 AVLB M60A1 Chassis Transporting
6. TM 5-5420-202-20-3 AVLB M60A1 Chassis Transporting
7. TM 5-5420-202-20-4 AVLB M60A1 Chassis Transporting
8. TM 5-5420-202-24P AVLB M60A1 TANK CHASSIS
9. TM 5-5420-202-34 AVLB M60A1 Chassis Transporting
10. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-1004:** Perform organizational category repair on M88A2 Hercules Recovery Vehicle

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.

11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
4. TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
5. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-1005:** Perform organizational category repair on Armored-Vehicle Launched Bridge (AVLB)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 5-5420-202-10 Operator's Manual for M-60 AVLB
4. TM 5-5420-202-20-1 AVLB M60A1 Chassis Transporting
5. TM 5-5420-202-20-2 AVLB M60A1 Chassis Transporting
6. TM 5-5420-202-20-3 AVLB M60A1 Chassis Transporting

7. TM 5-5420-202-20-4 AVLB M60A1 Chassis Transporting
8. TM 5-5420-202-24P AVLB M60A1 TANK CHASSIS
9. TM 5-5420-202-34 AVLB M60A1 Chassis Transporting
10. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-1006**: Perform organizational category repair on M1A1 main battle tank

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING**: 2146

**GRADES**: PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD**: Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS**:
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES**:
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 9-2350-264-10-1 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS VOLUME 1 OF 3
4. TM 9-2350-264-10-2 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 2 OF 3
5. TM 9-2350-264-10-3 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 3 OF 3
6. TM 9-2350-264-23-1-1 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 1 OF 8

7. TM 9-2350-264-23-1-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 2 OF 8
8. TM 9-2350-264-23-1-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 3 OF 8
9. TM 9-2350-264-23-1-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 4 OF 8
10. TM 9-2350-264-23-1-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 5 OF 8
11. TM 9-2350-264-23-1-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 6 OF 8
12. TM 9-2350-264-23-1-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 7 OF 8
13. TM 9-2350-264-23-1-8 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 8 OF 8
14. TM 9-2350-264-23-2-1 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 1 OF 7
15. TM 9-2350-264-23-2-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 2 OF 7
16. TM 9-2350-264-23-2-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 3 OF 7
17. TM 9-2350-264-23-2-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 4 OF 7
18. TM 9-2350-264-23-2-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 5 OF 7
19. TM 9-2350-264-23-2-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 6 OF 7
20. TM 9-2350-264-23-2-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 7 OF 7
21. TM 9-2350-264-24P-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
22. TM 9-2350-264-24P-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
23. TM 9-2350-264-34-1-1 TANK, COMBAT, FULL-TRACKED:DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 1 OF 2
24. TM 9-2350-264-34-1-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 2 OF 2
25. TM 9-2350-264-34-2-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORTAND GENERAL SUPPORT,TURRET,VOLUME 1 OF 2
26. TM 9-2350-264-34-2-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORTAND GENERAL SUPPORT,TURRET,VOLUME 2 OF 2
27. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-1501**: Perform service on an Assault Breacher Vehicle (ABV)

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING**: 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 10984A-OI/2-1 Repair Parts and Special Tools List (RPSTL) (ABV)
4. TM 10984A-OI/2-2 Repair Parts and Special Tools List (RPSTL) (ABV)
5. TM 10984A-OI/3-1 Field Maintenance Manual (ABV), Volume 1
6. TM 10984A-OI/3-2 Field Maintenance Manual (ABV), Volume 2
7. TM 10984A-OI/3-3 Field Maintenance Manual (ABV), Volume 3
8. TM 10984A-OI/3-4 Field Maintenance Manual (ABV), Volume 4
9. TM 10984A-OI/3-5 Field Maintenance Manual (ABV), Volume 5
10. TM 10984A-OI/3-6 Field Maintenance Manual (ABV), Volume 6
11. TM 10984A-OR/1-1 Operators Manual, (ABV) Volume 1
12. TM 10984A-OR/1-2 Operators Manual, (ABV) Volume 2
13. TM 10984A-OR/4 CREW CHECKLIST ASSAULT BREACHER VEHICLE (ABV)
14. UM 4400.125 GCSS-MC Users Manual

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOS of 2146. See Appendix C for further detail.

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**2146-MAIN-1502:** Perform organizational category repair on Assault Breacher Vehicle (ABV)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 10984A-OI/2-1 Repair Parts and Special Tools List (RPSTL) (ABV)
4. TM 10984A-OI/2-2 Repair Parts and Special Tools List (RPSTL) (ABV)
5. TM 10984A-OI/3-1 Field Maintenance Manual (ABV), Volume 1
6. TM 10984A-OI/3-2 Field Maintenance Manual (ABV), Volume 2
7. TM 10984A-OI/3-3 Field Maintenance Manual (ABV), Volume 3
8. TM 10984A-OI/3-4 Field Maintenance Manual (ABV), Volume 4
9. TM 10984A-OI/3-5 Field Maintenance Manual (ABV), Volume 5
10. TM 10984A-OI/3-6 Field Maintenance Manual (ABV), Volume 6
11. TM 10984A-OR/1-1 Operators Manual, (ABV) Volume 1
12. TM 10984A-OR/1-2 Operators Manual, (ABV) Volume 2
13. TM 10984A-OR/4 CREW CHECKLIST ASSAULT BREACHER VEHICLE (ABV)

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**2146-MED-1001:** Perform individual actions to evacuate injured crewman

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 6 months

**BILLETS:** Driver, Rigger, Vehicle Commander

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** As a crew member, given an M1A1, ABV, AVLB, or M88, all associated equipment, and crew.

**STANDARD:** In accordance with the MCWP 3-12.2.

**PERFORMANCE STEPS:**
1. Stabilize injured crewman through self-aid/buddy-aid.
2. Send casualty report to higher.
3. Select most appropriate hatch and path of evacuation.
4. Evacuate injured crewman from vehicle.

**REFERENCES:**
1. MCWP 3-12.2 Heavy Brigade Combat Team (HBCT) Gunnery
2. ST 3-20.21-1 Individual and Crew Live-Fire Prerequisite Testing
3. TM 10984A-OR/1-1 Operators Manual, (ABV) Volume 1
4. TM 10984A-OR/1-2 Operators Manual, (ABV) Volume 2
5. TM 5-5420-203-14 Operator's Manual for AVLB
6. TM 9-2350-264-10-1 Operators Manual, Operator Controls, PMCS, and Operation Under Usual Conditions, Volume 1 of 2, Tank, Combat, Full-Tracked: 120-MM Gun, M1A1 2350-01-087-1095 General Abrams
7. TM 9-2350-264-10-2 Operator's Manual, Unusual Conditions, Troubleshooting, and Maintenance, Volume 2 of 2, Tank, Combat, Full-Tracked: 120-MM, M1A1 2350-01-087-1095, General Abrams
8. TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOS of 2146. See Appendix C for further detail.

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**2146-VOPS-1001:** Operate commander's station on ABV

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Operate commander's station on ABV

**MOS PERFORMING:** 2146

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an ABV, SL-3 equipment, and the references.

**STANDARD:** Ensuring all associated vehicle commander equipment is functional and the vehicle is prepared for operation.

**PERFORMANCE STEPS:**
1. Open commander's hatch.
2. Adjust commander's seat and platforms.
3. Power up UTCP, intercom, radio, DAGR, IVS (ABV).
4. Power down commander's station.

**REFERENCES:**
1. TM 10984A-OR/1-1 Operators Manual, (ABV) Volume 1
2. TM 10984A-OR/1-2 Operators Manual, (ABV) Volume 2

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOS of 2146. See Appendix C for further detail.

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**13004. 2000-LEVEL EVENTS**

**2146-MAIN-2001**: Perform intermediate repair on M1A1 main battle tank

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING**: 2146

**GRADES**: CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD**: Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS**:
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.

**REFERENCES**:
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 9-2350-264-10-1 Operators Manual, Operator Controls, PMCS, and Operation Under Usual Conditions, Volume 1 of 2, Tank, Combat, Full-Tracked: 120-MM Gun, M1A1 2350-01-087-1095 General Abrams
4. TM 9-2350-264-10-1 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS VOLUME 1 OF 3
5. TM 9-2350-264-10-2 Operator's Manual, Unusual Conditions, Troubleshooting, and Maintenance, Volume 2 of 2, Tank, Combat, Full-Tracked: 120-MM, M1A1 2350-01-087-1095, General Abrams
6. TM 9-2350-264-10-2 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 2 OF 3
7. TM 9-2350-264-10-3 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 3 OF 3
8. TM 9-2350-264-23-1-1 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 1 OF 8
9. TM 9-2350-264-23-1-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 2 OF 8

10. TM 9-2350-264-23-1-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 3 OF 8
11. TM 9-2350-264-23-1-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 4 OF 8
12. TM 9-2350-264-23-1-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 5 OF 8
13. TM 9-2350-264-23-1-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 6 OF 8
14. TM 9-2350-264-23-1-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 7 OF 8
15. TM 9-2350-264-23-1-8 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 8 OF 8
16. TM 9-2350-264-23-2-1 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 1 OF 7
17. TM 9-2350-264-23-2-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 2 OF 7
18. TM 9-2350-264-23-2-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 3 OF 7
19. TM 9-2350-264-23-2-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 4 OF 7
20. TM 9-2350-264-23-2-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 5 OF 7
21. TM 9-2350-264-23-2-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 6 OF 7
22. TM 9-2350-264-23-2-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 7 OF 7
23. TM 9-2350-264-24P-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
24. TM 9-2350-264-24P-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
25. TM 9-2350-264-34-1-1 TANK, COMBAT, FULL-TRACKED:DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 1 OF 2
26. TM 9-2350-264-34-1-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 2 OF 2
27. TM 9-2350-264-34-2-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORTAND GENERAL SUPPORT,TURRET,VOLUME 1 OF 2
28. TM 9-2350-264-34-2-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORTAND GENERAL SUPPORT,TURRET,VOLUME 2 OF 2
29. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-2002**: Perform intermediate repair on M88A2 Hercules Recovery Vehicle

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING**: 2146

**GRADES**: CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
4. TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
5. TM 9-2350-292-24P UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST FOR RECOVERY VEHICLE, FULL-TRACKED: HEAVY M88A2
6. TM 9-2350-292-34 DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
7. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-2003:** Perform intermediate repair on Armored-Vehicle Launched Bridge

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 5-5420-202-10 Operator's Manual for M-60 AVLB
4. TM 5-5420-202-20-1 AVLB M60A1 Chassis Transporting
5. TM 5-5420-202-20-2 AVLB M60A1 Chassis Transporting
6. TM 5-5420-202-20-3 AVLB M60A1 Chassis Transporting
7. TM 5-5420-202-20-4 AVLB M60A1 Chassis Transporting
8. TM 5-5420-202-24P AVLB M60A1 TANK CHASSIS
9. TM 5-5420-202-34 AVLB M60A1 Chassis Transporting
10. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-2004:** Perform modification on M1A1 main battle tanks

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.

7. Conduct final inspection.
8. Return equipment to owner, if required.

**REFERENCES:**

1. Applicable equipment modification instruction (MI)
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. MCWP 4-11.4 Maintenance Operations
4. TM 9-2350-264-10-1 Operators Manual, Operator Controls, PMCS, and Operation Under Usual Conditions, Volume 1 of 2, Tank, Combat, Full-Tracked: 120-MM Gun, M1A1 2350-01-087-1095 General Abrams
5. TM 9-2350-264-10-1 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS VOLUME 1 OF 3
6. TM 9-2350-264-10-2 Operator's Manual, Unusual Conditions, Troubleshooting, and Maintenance, Volume 2 of 2, Tank, Combat, Full-Tracked: 120-MM, M1A1 2350-01-087-1095, General Abrams
7. TM 9-2350-264-10-2 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 2 OF 3
8. TM 9-2350-264-10-3 TECHNICAL MANUAL OPERATOR'S MANUAL FOR TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1 (NSN 2350-01-087-1095) (EIC: AAB)GENERAL ABRAMS VOLUME 3 OF 3
9. TM 9-2350-264-23-1-1 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 1 OF 8
10. TM 9-2350-264-23-1-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 2 OF 8
11. TM 9-2350-264-23-1-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 3 OF 8
12. TM 9-2350-264-23-1-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 4 OF 8
13. TM 9-2350-264-23-1-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 5 OF 8
14. TM 9-2350-264-23-1-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 6 OF 8
15. TM 9-2350-264-23-1-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 7 OF 8
16. TM 9-2350-264-23-1-8 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS HULL VOLUME 8 OF 8
17. TM 9-2350-264-23-2-1 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 1 OF 7
18. TM 9-2350-264-23-2-2 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 2 OF 7
19. TM 9-2350-264-23-2-3 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 3 OF 7
20. TM 9-2350-264-23-2-4 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 4 OF 7
21. TM 9-2350-264-23-2-5 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 5 OF 7
22. TM 9-2350-264-23-2-6 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 6 OF 7
23. TM 9-2350-264-23-2-7 TANK, COMBAT, FULL-TRACKED: 120 MM GUN, M1A1(NSN 2350-01-087-1095) (EIC: AAB) GENERAL ABRAMS TURRET VOLUME 7 OF 7
24. TM 9-2350-264-24P-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
25. TM 9-2350-264-24P-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,TURRET,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

26. TM 9-2350-264-34-1-1 TANK, COMBAT, FULL-TRACKED:DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 1 OF 2
27. TM 9-2350-264-34-1-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORT AND GENERAL SUPPORT,HULL,VOLUME 2 OF 2
28. TM 9-2350-264-34-2-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORTAND GENERAL SUPPORT,TURRET,VOLUME 1 OF 2
29. TM 9-2350-264-34-2-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,DIRECT SUPPORTAND GENERAL SUPPORT,TURRET,VOLUME 2 OF 2
30. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-2005:** Perform modification on M88A2 Hercules Recovery Vehicle

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. MCWP 4-11.4 Maintenance Operations
2. Applicable equipment modification instruction (MI)

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**2146-MAIN-2009:** Perform modification on Armored-Vehicle Launched Bridge

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A

modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 5-5420-202-10 Operator's Manual for M-60 AVLB
4. TM 5-5420-202-20-1 AVLB M60A1 Chassis Transporting
5. TM 5-5420-202-20-2 AVLB M60A1 Chassis Transporting
6. TM 5-5420-202-20-3 AVLB M60A1 Chassis Transporting
7. TM 5-5420-202-20-4 AVLB M60A1 Chassis Transporting
8. TM 5-5420-202-24P AVLB M60A1 TANK CHASSIS
9. TM 5-5420-202-34 AVLB M60A1 Chassis Transporting
10. UM 4400.125 GCSS-MC Users Manual
11. Applicable equipment modification instruction (MI)

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**2146-MAIN-2010:** Perform recovery and evacuation of ordnance

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Recovery and evacuation on tank assets includes all vehicles based on a tank chassis (main battle tank, tank

recovery, and bridging tank).

**MOS PERFORMING:** 2146

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. BDAR Battle Damage Assessment and Repair (BDAR) Manual
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. MCWP 4-11.4 Maintenance Operations
4. TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
5. TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
6. TM 9-2350-292-24P UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST FOR RECOVERY VEHICLE, FULL-TRACKED: HEAVY M88A2
7. TM 9-2350-292-34 DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
8. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-2501:** Perform intermediate repair on Assault Breacher Vehicle (ABV)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Document maintenance actions.
10. Conduct quality control.

**REFERENCES:**
1. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
2. MCWP 4-11.4 Maintenance Operations
3. TM 10984A-OI/2-1 Repair Parts and Special Tools List (RPSTL) (ABV)
4. TM 10984A-OI/2-2 Repair Parts and Special Tools List (RPSTL) (ABV)
5. TM 10984A-OI/3-1 Field Maintenance Manual (ABV), Volume 1
6. TM 10984A-OR/1-1 Operators Manual, (ABV) Volume 1
7. TM 10984A-OR/1-2 Operators Manual, (ABV) Volume 2
8. TM 10984A-OR/4 CREW CHECKLIST ASSAULT BREACHER VEHICLE (ABV)
9. UM 4400.125 GCSS-MC Users Manual

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**2146-MAIN-2502:** Perform modification on Assault Breacher Vehicle (ABV)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2146

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.

5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**

1. Applicable equipment modification instruction (MI)
2. MCO 4790.25_ Ground Equipment Maintenance Program (GEMP)
3. MCWP 4-11.4 Maintenance Operations
4. TM 10984A-OI/2-1 Repair Parts and Special Tools List (RPSTL) (ABV)
5. TM 10984A-OI/2-2 Repair Parts and Special Tools List (RPSTL) (ABV)
6. TM 10984A-OI/3-1 Field Maintenance Manual (ABV), Volume 1
7. TM 10984A-OR/1-1 Operators Manual, (ABV) Volume 1
8. TM 10984A-OR/1-2 Operators Manual, (ABV) Volume 2
9. TM 10984A-OR/4 CREW CHECKLIST ASSAULT BREACHER VEHICLE (ABV)
10. UM 4400.125 GCSS-MC Users Manual

GROUND ORD MAINT T&R MANUAL

CHAPTER 14

MOS 2147 INDIVIDUAL EVENTS

# CHAPTER 14

# MOS 2147 INDIVIDUAL EVENTS

**14000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**14001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2147 | Light Armored Vehicle (LAV) Repairer/Technician |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MAIN | Maintenance |
| MED | Medical |
| OPS | Operations |
| VOPS | Vehicle Operations |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

**14002. INDEX OF INDIVIDUAL EVENTS**

| | | |
|---|---|---|
| 2147-MAIN-1412 | Perform repair on LAV Automatic Fire Suppression System | 14-12 |
| 2147-MED-1001 | Perform individual actions to evacuate injured crewman | 14-13 |
| 2147-VOPS-1001 | Egress the LAV | 14-14 |
| 2147-WPNS-1001 | Perform in an LAV-25 Gunnery Skills Test (LGST) | 14-14 |
| **2000-LEVEL** | | |
| 2147-MAIN-2401 | Perform secondary repair on LAV/FOV | 14-16 |

**14003. 1000-LEVEL EVENTS**

**2147-MAIN-1402:** Perform service on LAV family of vehicles

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 08594B-10/2C Operator's Manual LAV-25 Hull
6. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
7. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
8. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
9. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)

10. TM 4700-15/1_ Ground Equipment Record Procedures
11. UM 4400.125 GCSS-MC Users Manual

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** This event is a MOS Specific Physical Standard required for the MOS of 2147. See Appendix C for further detail.

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**2147-MAIN-1403:** Perform repair on Suspension System

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 08594B-10/2B Operator's Manual LAV-25 Hull
6. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
7. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
8. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
9. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)

10. TM 4700-15/1_ Ground Equipment Record Procedures
11. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1404**: Perform repair on LAV Steering System.

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 12 months

**DESCRIPTION**: Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a mission requirement, equipment, and with the aid of references.

**STANDARD**: Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS**:
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES**:
1. Applicable technical manuals/publications
2. GCSS-MC Procedural
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 08594B-10/2B Operator's Manual LAV-25 Hull
6. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
7. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
8. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
9. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
10. TM 4700-15/1_ Ground Equipment Record Procedures
11. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1405:** Perform repair on LAV drive train

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1406:** Perform repair on LAV pneumatic and brake system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-

function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1407:** Perform repair on LAV hydraulic system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1408:** Perform repair on LAV electrical system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1409:** Perform repair on LAV cooling system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.

6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1410:** Perform repair on LAV fuel system

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL
**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural Notices GCSS-MC Handbook
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1411:** Perform repair on LAV power pack

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull

5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MAIN-1412:** Perform repair on LAV Automatic Fire Suppression System

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Procedural
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594B-10/2B Operator's Manual LAV-25 Hull
5. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
6. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
7. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)

8. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. UM 4400.125 GCSS-MC Users Manual

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**2147-MED-1001**: Perform individual actions to evacuate injured crewman

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 6 months

**BILLETS**: Driver, Gunner, Loader, Vehicle Commander

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: As crew member, given an LAV, all associated equipment, and crew.

**STANDARD**: In accordance with the MCWP 3-12.2.

**PERFORMANCE STEPS**:
1. Stabilize injured crewman through self-aid/buddy-aid.
2. Send casualty report to higher.
3. Select most appropriate hatch and path of evacuation.
4. Evacuate injured crewman from vehicle.

**REFERENCES**:
1. MCWP 3-12.2 Heavy Brigade Combat Team (HBCT) Gunnery
2. ST 3-20.21-1 Individual and Crew Live-Fire Prerequisite Testing

**MISCELLANEOUS**:

**ADMINISTRATIVE INSTRUCTIONS**: This event is a MOS Specific Physical Standard required for the MOS of 2147. See Appendix C for further detail.

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**2147-VOPS-1001**: Egress the LAV

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 36 months

**MOS PERFORMING**: 2147

**GRADES**: PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a rapidly sinking or submerged LAV.

**STANDARD**: In order to reach the surface of the water.

**PERFORMANCE STEPS**:
1. Unfasten seatbelt
2. Unlock assigned hatch
3. Employ life support equipment as required
4. Exit vehicle

5. Swim to surface

**REFERENCES:**
1. UNIT SOP Unit's Standing Operating Procedures

**SUPPORT REQUIREMENTS:**

**OTHER SUPPORT REQUIREMENTS:** Egress drills should be conducted on LAV while parked at the ramp or during field exercises.

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** Reserve training will take place at Initial Location for Mobilization (ILOC) or during two week annual training (AT).

---

**2147-WPNS-1001:** Perform in an LAV-25 Gunnery Skills Test (LGST)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**MOS PERFORMING:** 2110, 2147

**BILLETS:** Driver, Gunner, Vehicle Commander

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT, WO-1, CWO-2, CWO-3, CWO-4, CWO-5

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given an LAV-25 with an evaluator, applicable references, dummy ammunition, and specialized equipment.

**STANDARD:** To achieve a GO rating on all 9 test stations.

**PERFORMANCE STEPS:**
1. Load the M242 25mm automatic gun in a time limit of 15 minutes.
2. Clear, remove, disassemble, assemble, and install the M242 25mm automatic gun in a time limit of 30 minutes.
3. Load the M240 7.62mm Coaxially-Mounted Machinegun in a time limit of 5 minutes.
4. Clear, remove, disassemble, assemble, and install the M240 Coaxially-Mounted Machinegun in a time limit of 15 minutes.
5. Load the M240B Swing-mounted Machinegun in a time limit of 2 minutes.
6. Clear, remove, and install the M240B Swing-mounted Machinegun in a time limit of 5 minutes.
7. Bore-sight the LAV-25 turret weapons systems in a time limit of 45 minutes.
8. Load and unload the M257 Smoke Grenade Launchers in a time limit of 10 minutes.
9. Identify 25 day images and 25 thermal images of combat vehicles in a time limit of 10 minutes.
10. Cycle the feeder assembly to position ammunition for firing.

**REFERENCES:**
1. MCWP 3-14.1 Light Armored Vehicle-25 Gunnery and Employment
2. TM 08594C-OR-1A Operators Manual LAV-25A2 Turret Vol. 2 of 2 legacy

**SUPPORT REQUIREMENTS:**

**ORDNANCE:**

| DODIC | Quantity |
|---|---|
| A135 Ctg, 7.62mm Dummy M63 | 400 cartridges per weapon |
| A967 Ctg, 25mm Dummy M794 Lkd | 210 cartridges per weapon |

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:**
1. This event is a MOS Specific Physical Standard required for the MOS of 2147. See Appendix C for further details.
2. There is a time limit for this task within the MCWP 3-14.1 under the LAV Gunnery Skills Test (LGST) chapter. The time limit covers multiple tasks that are grouped together in one station. The time limit will not show up in the standards for this task but can be found in the reference.
3. There are currently no supportable DODICs to execute station #8 of the LGST.

**ORDNANCE ADDITIONAL INSTRUCTIONS:**

| DODIC | Nomenclature | Additional Instructions |
|---|---|---|
| A135 | Ctg, 7.62mm Dummy M63 | |
| A967 | Ctg, 25mm Dummy M794 Lkd | |

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**14004. 2000-LEVEL EVENTS**

**2147-MAIN-2401:** Perform secondary repair on LAV/FOV

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations. Repair will be conducted on the following LAV components: Engine, Electrical System, Hydraulic System, and Drive Train.

**MOS PERFORMING:** 2147

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.

6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Conduct quality control.
12. Return equipment to owner, if required.

**REFERENCES:**

1. Applicable technical manuals/publications
2. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
3. MCWP 4-11.4 Maintenance Operations
4. TM 08594C-OR/4 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
5. TM 08594C-OR/4 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
6. TM 08594C-OR/5 VOL 1 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 1 OF 2 (LEGACY)
7. TM 08594C-OR/5 VOL 2 OF 2 ORGANIZATIONAL MAINTENANCE FOR LAV-25A2 AUTOMOTIVE/HULL VOL 2 OF 2 (NEW PRODUCTION)
8. TM 4700-15/1_ Ground Equipment Record Procedures
9. TM 8A192C-34/P1 6V53T Engine Repair Manual
10. UM 4400.125 GCSS-MC Users Manual

GROUND ORD MAINT T&R MANUAL

# CHAPTER 15

# MOS 2149 INDIVIDUAL EVENTS

# CHAPTER 15

# MOS 2149 INDIVIDUAL EVENTS

**15000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**15001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2149 | Ordnance Vehicle Maintenance Chief |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| ADMN | Administration |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 2000 | Core Plus Skills |

**15002. INDEX OF INDIVIDUAL EVENTS**



**15003. 2000-LEVEL EVENTS**

**2149-ADMN-2001:** Coordinate maintenance programs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**DESCRIPTION:** The individual is responsible for orchestrating the following

programs: WIR, IROAN, DEMIL, UUNS/UNS, ERDT, CPAC, Contract Logistics Support (CLS), RCM, PQDR, ELMP, Total Life Cycle Management, and Warranty Program.

**MOS PERFORMING:** 2149

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To ensure long-term supportability of ground ordnance equipment.

**PERFORMANCE STEPS:**
1. Identify mission requirements.
2. Analyze capabilities.
3. Determine resource requirements.
4. Analyze external requirements.
5. Develop procedures to comply with functional areas of maintenance management.

**REFERENCES:**
1. Applicable technical references
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 4105.2_ Marine Corps Warranty Program
5. MCO 4400.82_ Regulated/Controlled Item Management Manual
6. MCO 4710.8 DELETE Uniform Criteria for Repair Cost Estimated Used to Determine
7. MCO 4790.18_ Corrosion Prevention and Control (CPAC) Program
8. MCO 4855.10_ Product Quality Deficiency Report (PQDR)
9. MCO 5215.1_ Marine Corps Directives Management Program
10. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
11. MCO P4400.150_ Consumer Level Supply Policy Manual
12. TM 4700-15/1_ Ground Equipment Record Procedures
13. Unit T/O&E Unit's Table of Organization and Equipment

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**2149-ADMN-2002:** Manage ground ordnance maintenance resources

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**DESCRIPTION:** The individual is responsible for managing the following: Embarkation, load certification programs, licensing program, environmental programs, safety programs, and MOS training.

**MOS PERFORMING:** 2149

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To ensure resources are sufficient to maintain ground ordnance

equipment.

**PERFORMANCE STEPS:**
1. Develop maintenance flow plan
2. Identify equipment.
3. Identify facilities requirement.
4. Maintain facilities.
5. Analyze time management.
6. Analyze budget.
7. Implement tactical logistics.
8. Conduct site surveys, when applicable.
9. Analyze mobilization plan.
10. Employ personnel.
11. Advise Maintenance Officer/MMO.

**REFERENCES:**
1. Applicable technical references
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. DOD DIR 4160.21 Defense Disposal Manual
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
6. MCO 4400.16_ Uniform Material Movement and Issue Priority System (UMMIPS)
7. MCO 4400.82_ Regulated/Controlled Item Management Manual
8. MCO P4400.150_ Consumer Level Supply Policy Manual
9. MCO P4790.2_ MIMMS Field Procedures Manual
10. MCWP 4-11 Tactical-Level Logistics

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**2149-ADMN-2003:** Manage maintenance operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2149

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To ensure long-term supportability of ground ordnance equipment.

**PERFORMANCE STEPS:**
1. Determine program requirement(s).
2. Implement corrective actions, if required.

**REFERENCES:**
1. Applicable technical references
2. MCO 1553.3_ Unit Training Management (UTM) Program
3. MCO 5100.29_ Marine Corps Safety Program
4. MCO 5100.8_ Marine Corps Occupational Safety and Health (OSH) Policy Order
5. MCO 5104.1C Navy Laser Hazards Control Program
6. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
7. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment

8. MCO P4450.12 Storage and Handling of Hazardous Materials
9. MCO P5102.1_ Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual
10. MCRP 3-0A Unit Training Management Guide
11. NAVMC 2692 Unit Safety Program Management Manual
12. NAVMC 3500.33 Ground Ordnance Maintenance T&R Manual
13. NAVMC DIR 5100.8_ Marine Corps Occupational Safety and Health (OSH) Program Manual

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**2149-ADMN-2004**: Manage physical security procedures

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 24 months

**MOS PERFORMING**: 2149

**GRADES**: MSGT, MGYSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a requirement.

**STANDARD**: To ensure procedures are adhered to.

**PERFORMANCE STEPS**:
1. Validate lock and key control procedures.
2. Validate Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Validate storage facilities.
4. Review security barriers employment.
5. Review security lighting employment.
6. Maintain Physical Security records.
7. Manage access control.

**REFERENCES**:
1. DOD 4160.21-M-1 Defense Demilitarization Manual
2. MCO 4030.16 Marine Corps Packaging and Packaging Maintenance of Small Arms using volatile corrosion inhibitor (VCI) treated materials
3. MCO 4610.15_ Shipment of Military Equipment, Explosives and other Dangerous Articles
4. MCO 5530.14 Marine Corps Physical Security Program Manual
5. MCO 8300.1_ Marine Corps Serialized Control of Small Arms Systems

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**2149-ADMN-2005**: Manage recovery operations

**EVALUATION-CODED**: NO **SUSTAINMENT INTERVAL**: 24 months

**MOS PERFORMING**: 2149

**GRADES**: MSGT, MGYSGT

**INITIAL TRAINING SETTING**: FORMAL

**CONDITION**: Given a requirement.

**STANDARD:** To ensure the recovery operations are safely accomplished.

**PERFORMANCE STEPS:**
1. Determine recovery requirements.
2. Analyze Battle Damage Assessment and Repair (BDAR), if applicable.
3. Analyze recovery ORM.
4. Coordinate recovery operations.

**REFERENCES:**
1. Applicable technical references
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair
4. MCO P4790.2_ MIMMS Field Procedures Manual

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GROUND ORD MAINT T&R MANUAL

# CHAPTER 16

# MOS 2161 INDIVIDUAL EVENTS

# CHAPTER 16

# MOS 2161 INDIVIDUAL EVENTS

**16000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**16001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2161 | Machinist |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MACH | Machining |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

**16002. INDEX OF INDIVIDUAL EVENTS**



**16003. 1000-LEVEL EVENTS**

**2161-MACH-1001:** Perform precision machining operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to fabricate work piece within a range of +/- 0.005 unless otherwise specified in blueprint , utilizing a lathe, vertical mill, CAD/CAM software, water jet cutting system, G-M code and CNC equipment.

**MOS PERFORMING:** 2161

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring work piece is within blueprint specifications.

**PERFORMANCE STEPS:**
1. Analyze or draft shop drawing(s).
2. Determine appropriate tools/equipment/material.
3. Fabricate work piece.
4. Perform quality control.
5. Conduct Preventive Maintenance Checks and Services (PMCS).
6. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. CNC Programming Handbook CNC Programming Handbook
2. GCSS-MC Procedural Notices
3. Machinist Handbook
4. MCO P4790.2_ MIMMS Field Procedures Manual
5. Metalworking Handbook for the Metalworking Industries
6. Operator's Manual
7. OPNAV 4790.2 Naval Aviation Maintenance Program
8. TC 9-524 Fundamentals of Machine Tools
9. UM 4400.125 GCSS-MC Users Manual

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**2161-MACH-1002:** Perform low-precision machining operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to fabricate work piece within a blueprint specifications, utilizing a drill press, band saw, grinding and sanding equipment, and cutting equipment.

**MOS PERFORMING:** 2161

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring work piece is within blueprint specifications.

**PERFORMANCE STEPS:**
1. Analyze or draft shop drawing(s).
2. Determine appropriate tools/equipment/material.
3. Fabricate work piece.
4. Perform quality control.
5. Conduct Preventive Maintenance Checks and Services (PMCS).
6. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. GCSS-MC Procedural Notices
2. Machinist Handbook
3. MCO 4790.2_ MIMMS Field Procedures Manual
4. Metalworking Handbook for the Metalworking Industries
5. Operator's Manual
6. OPNAV 4790.2 Naval Aviation Maintenance Program
7. TC 9-524 Fundamentals of Machine Tools
8. UM 4400.125 GCSS-MC Users Manual

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**2161-MACH-1003:** Perform Thread Repair

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to repair threaded holes by extracting broken bolts, taps, drill bits, and threaded inserts.

**MOS PERFORMING:** 2161

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Restoring equipment to a serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Determine appropriate tool(s).
2. Extract broken component.
3. Recondition thread.
4. Perform quality control.
5. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. GCSS-MC Procedural Notices
2. Machinist Handbook
3. MCO P4790.2_ MIMMS Field Procedures Manual
4. Metalworking Handbook for the Metalworking Industries
5. Operator's Manual
6. OPNAV 4790.2 Naval Aviation Maintenance Program
7. TC 9-524 Fundamentals of Machine Tools
8. UM 4400.125 GCSS-MC Users Manual

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**2161-MACH-1004:** Operate Shop Equipment Machine Shop (SEMS)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to set up and operate the SEMMS.

**MOS PERFORMING:** 2161

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Ensuring SEMS is setup and operational.

**PERFORMANCE STEPS:**
1. Determine area of operation.
2. Set up shelters.
3. Set up equipment.
4. Conduct a operations check.
5. Retrograde shelters/equipment, when applicable.
6. Conduct Preventive Maintenance Checks and Services (PMCS).
7. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. OPNAV 4790.2 Naval Aviation Maintenance Program
2. TM 11762A-OI/8 Shop Equipment Machine Shop
3. TM 4700-15/1_ Ground Equipment Record Procedures
4. UM 4400.125 GCSS-MC Users Manual

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**16004. 2000-LEVEL EVENTS**

**2161-MACH-2001:** Perform heat treating operation

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to temper the material to the required tensile strength.

**MOS PERFORMING:** 2161

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Modifying material(s) to meet drawing specifications.

**PERFORMANCE STEPS:**
1. Analyze type of metal.
2. Utilize heating procedures.

3. Verify hardness.
4. Perform Preventive Maintenance Checks and Services (PMCS).
5. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. Machinist Handbook
2. Metalworking Handbook for the Metalworking Industries
3. Operator's Manual Operator's Manual
4. TO 01-1A-9 NAVAIR 01-1A-9 Aerospace Metal Publication

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**2161-MACH-2002:** Operate electro-disintegrating machine. (EDM)

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to operate the electro-disintegrating machine (EDM).

**MOS PERFORMING:** 2161

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a requirement.

**STANDARD:** To remove broken extractors, taps, and drill bits from the work piece.

**PERFORMANCE STEPS:**
1. Remove unserviceable items.
2. Perform preventive maintenance checks on the machine.
3. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. Machinist Handbook
2. MCO 4790.2_ MIMMS Field Procedures Manual
3. OPNAV 4790.2 Naval Aviation Maintenance Program
4. Precision Machining Technology textbook
5. TM 4700-15/1_ Ground Equipment Record Procedures

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**2161-MACH-2003:** Operate a surface grinder

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to operate a surface grinder.

**MOS PERFORMING:** 2161

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a work piece.

**STANDARD:** To ensure the item adheres to blueprint specification.

**PERFORMANCE STEPS:**
1. Remove excess material.
2. Perform preventive maintenance checks on the machine.
3. Perform Quality Control.
4. Complete maintenance and/or administrative forms and records.

**REFERENCES:**
1. Machinist Handbook
2. MCO 4790.2_ MIMMS Field Procedures Manual
3. Operator's Manual Operator's Manual
4. OPNAV 4790.2 Naval Aviation Maintenance Program
5. Precision Machining Technology textbook
6. TM 4700-15/1_ Ground Equipment Record Procedures

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**2161-MACH-2004:** Conduct Advanced CNC Operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** The individual is required to utilize a computer aided design/ computer aided machining (CAD/CAM) software in conjunction with CNC equipment to fabricate parts within specifications.

**MOS PERFORMING:** 2161

**GRADES:** CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To ensure work piece is within blueprint specifications.

**PERFORMANCE STEPS:**
1. Analyze shop drawing.
2. Design work piece.
3. Utilize the computer aided machining program.
4. Fabricate work piece.
5. Perform quality control.
6. Conduct Preventive Maintenance Checks and Services (PMCS).

**REFERENCES:**
1. Machinist Handbook
2. Metalworking Handbook for the Metalworking Industries
3. Software Manual CAD/CAM Software Manual

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GROUND ORD MAINT T&R MANUAL

CHAPTER 17

MOS 2171 INDIVIDUAL EVENTS

GROUND ORD MAINT T&R MANUAL

CHAPTER 17

MOS 2171 INDIVIDUAL EVENTS

**17000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**17001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2171 | Electro-Optical Ordnance Repairer |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| MAIN | Maintenance |
| OPS | Operations |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 1000 | Core Skills |
| 2000 | Core Plus Skills |

**17002. INDEX OF INDIVIDUAL EVENTS**

| | | |
|---|---|---|
| 2171-OPS-1301 | Operate purge/charge equipment | 17-14 |
| **2000-LEVEL** | | |
| 2171-MAIN-2107 | Perform modification on LASER systems | 17-14 |
| 2171-MAIN-2108 | Perform modification on direct view optical systems | 17-15 |
| 2171-MAIN-2109 | Perform modification on image-intensified systems | 17-16 |
| 2171-MAIN-2110 | Perform modification on thermal systems | 17-17 |
| 2171-MAIN-2111 | Perform modification on fire control systems | 17-18 |
| 2171-MAIN-2112 | Perform modification on anti-armor systems | 17-19 |
| 2171-MAIN-2113 | Perform recovery and evacuation on LASER systems | 17-20 |
| 2171-MAIN-2114 | Perform recovery and evacuation on direct view optical systems | 17-21 |
| 2171-MAIN-2115 | Perform recovery and evacuation on image-intensified systems | 17-22 |
| 2171-MAIN-2116 | Perform recovery and evacuation on thermal systems | 17-23 |
| 2171-MAIN-2117 | Perform recovery and evacuation on fire control systems | 17-23 |
| 2171-MAIN-2118 | Perform recovery and evacuation on anti-armor systems | 17-24 |
| 2171-MAIN-2119 | Perform secondary repair on anti-armor systems | 17-25 |
| 2171-MAIN-2120 | Perform secondary repair on LASER systems | 17-26 |
| 2171-MAIN-2121 | Perform secondary repair on image-intensified systems | 17-27 |
| 2171-MAIN-2122 | Perform secondary repair on fire control systems | 17-28 |
| 2171-MAIN-2123 | Perform secondary repair on direct view optical systems | 17-29 |
| 2171-MAIN-2124 | Perform secondary repair on thermal systems | 17-30 |

**17003. 1000-LEVEL EVENTS**

**2171-MAIN-1401:** Perform service on LASER systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.

3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. Applicable Technical Publications/Manuals
3. GCSS-MC Handbook
4. GCSS-MC Procedural
5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
6. MCO 5104.1_ Navy Laser Hazards Control Program
7. MCWP 4-11.4 Maintenance Operations
8. TM 4700-15/1_ Ground Equipment Record Procedures
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1402:** Perform service on image-intensified systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment

5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1403:** Perform service on direct view optical systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1404:** Perform service on thermal systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable technical manuals/publications
2. GCSS-MC Handbook
3. GCSS-MC Procedural
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1405:** Perform service on fire control systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of

references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.
5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** See Administrative Notes, para 16020.

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**2171-MAIN-1406:** Perform service on anti-armor systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Servicing may include all repairs or maintenance, including adjustments. Regardless of precise definitions, the terms have one thing in common: they refer to maintenance performed on operable equipment, including equipment that the maintenance activity has just repaired. Servicing, adjustment, and tuning are a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Adjusting equipment to achieve precise functioning in accordance with the applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Adjust equipment performance.

5. Verify equipment performance.
6. Document maintenance actions.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBul 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

**MISCELLANEOUS:**

**ADMINISTRATIVE INSTRUCTIONS:** See Administrative Notes, para 16020.

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**2171-MAIN-1407:** Perform repair on LASER systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. Applicable Technical Publications/Manuals
3. GCSS-MC Handbook
4. GCSS-MC Procedural Notices
5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
6. MCO 5104.1_ Navy Laser Hazards Control Program
7. MCWP 4-11.4 Maintenance Operations
8. TM 4700-15/1_ Ground Equipment Record Procedures
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1408:** Perform repair on image-intensified systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment

5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1409:** Perform repair on direct view optical systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1410:** Perform repair on thermal systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1411:** Perform repair on fire control systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-

11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-1412:** Perform repair on anti-armor systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. Applicable Technical Publications/Manuals
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-OPS-1301:** Operate purge/charge equipment

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Purge devices include but are not limited to E1255, TS-10, N2-GEN Series.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To eliminate and prevent moisture buildup.

**PERFORMANCE STEPS:**
1. Determine required tools.
2. Perform Limited Technical Inspections.
3. Perform scheduled Preventative Maintenance Checks and Services.
4. Perform organizational maintenance, as required.

5. Perform intermediate maintenance, as required.
6. Complete maintenance/administrative forms and records.

**REFERENCES:**
1. Applicable technical references

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**17004. 2000-LEVEL EVENTS**

**2171-MAIN-2107:** Perform modification on LASER systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. Applicable equipment modification instruction (MI)
3. Applicable Technical Publications/Manuals
4. GCSS-MC Handbook
5. GCSS-MC Procedural Notices
6. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
7. MCO 5104.1_ Navy Laser Hazards Control Program
8. MCWP 4-11.4 Maintenance Operations
9. TM 4700-15/1_ Ground Equipment Record Procedures
10. TM 9-254 General Maintenance Procedures for Fire Control Materiel
11. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2108:** Perform modification on direct view optical systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable equipment modification instruction (MI)
2. Applicable Technical Publications/Manuals
3. GCSS-MC Handbook
4. GCSS-MC Procedural Notices
5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2109:** Perform modification on image-intensified systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a

sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable equipment modification instruction (MI)
2. Applicable Technical Publications/Manuals
3. GCSS-MC Handbook
4. GCSS-MC Procedural Notices
5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2110:** Perform modification on thermal systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable equipment modification instruction (MI)
2. Applicable Technical Publications/Manuals
3. GCSS-MC Handbook
4. GCSS-MC Procedural Notices
5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2111:** Perform modification on fire control systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.

3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable equipment modification instruction (MI)
2. Applicable Technical Publications/Manuals
3. GCSS-MC Handbook
4. GCSS-MC Procedural Notices
5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2112:** Perform modification on anti-armor systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Modification changes the design or assembly characteristics of systems, end items, components, assemblies, subassemblies, or parts. A modifications purpose is to improve equipment functioning, maintainability or reliability (usually issued as a normal modification), or its safety characteristics (typically seen as urgent modifications). Modification is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Improving equipment functioning, maintainability, reliability, or safety characteristics in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Requisition parts, as required.
5. Apply modification (MI/TI/software/firmware upgrade).
6. Document modification.
7. Conduct final inspection.

**REFERENCES:**
1. Applicable equipment modification instruction (MI)
2. Applicable Technical Publications/Manuals

3. GCSS-MC Handbook
4. GCSS-MC Procedural Notices
5. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2113:** Perform recovery and evacuation on LASER systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCO 5104.1_ Navy Laser Hazards Control Program
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures

8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2114:** Perform recovery and evacuation on direct view optical systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. GCSS-MC Handbook
2. GCSS-MC Procedural Notices
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 4700-15/1_ Ground Equipment Record Procedures
6. TM 750-116 General Procedures for Purge and Charge
7. TM 9-254 General Maintenance Procedures for Fire Control Materiel
8. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2115:** Perform recovery and evacuation on image-intensified systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. GCSS-MC Handbook
2. GCSS-MC Procedural Notices
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 4700-15/1_ Ground Equipment Record Procedures
6. TM 750-116 General Procedures for Purge and Charge
7. TM 9-254 General Maintenance Procedures for Fire Control Materiel
8. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2116:** Perform recovery and evacuation on thermal systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance

site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. GCSS-MC Handbook
2. GCSS-MC Procedural Notices
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 4700-15/1_ Ground Equipment Record Procedures
6. TM 750-116 General Procedures for Purge and Charge
7. TM 9-254 General Maintenance Procedures for Fire Control Materiel
8. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2117:** Perform recovery and evacuation on fire control systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. GCSS-MC Handbook
2. GCSS-MC Procedural Notices
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 4700-15/1_ Ground Equipment Record Procedures
6. TM 750-116 General Procedures for Purge and Charge
7. TM 9-254 General Maintenance Procedures for Fire Control Materiel
8. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2118:** Perform recovery and evacuation on anti-armor systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Recovery is the process of retrieving or freeing immobile, inoperative, or abandoned materiel. It includes returning it to operation or taking it to a collection point for repair, evacuation, or disposal. Recovery is the responsibility of the owning unit. Evacuation moves materiel from one combat service support (CSS) maintenance activity to another for repair or disposal. It includes moving equipment between the owning units maintenance site and the supporting logistics combat element (LCE). Evacuation is the responsibility of the combat service support element. Recovery and evacuation is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission, personnel, and equipment.

**STANDARD:** Retrieving or freeing immobile, inoperative, or abandoned materiel and/or moving materiel from one maintenance activity to another for repair or disposal in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Inspect equipment.
4. Return to service, if applicable.
5. Conduct disposition of unserviceable equipment, if applicable.
6. Evacuate materiel to higher maintenance activity, as required.
7. Document maintenance actions.

**REFERENCES:**
1. FLOAT Maintenance Float Catalog
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCWP 4-11.4 Maintenance Operations
6. TM 4700-15/1_ Ground Equipment Record Procedures
7. TM 750-116 General Procedures for Purge and Charge
8. TM 9-254 General Maintenance Procedures for Fire Control Materiel
9. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2119:** Perform secondary repair on anti-armor systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.

13. Return equipment to owner, if required.

**REFERENCES:**
1. GCSS-MC Handbook
2. GCSS-MC Procedural Notices
3. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
4. MCWP 4-11.4 Maintenance Operations
5. TM 4700-15/1_ Ground Equipment Record Procedures
6. TM 750-116 General Procedures for Purge and Charge
7. TM 9-254 General Maintenance Procedures for Fire Control Materiel
8. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2120:** Perform secondary repair on LASER systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment

5. MCO 5104.1_ Navy Laser Hazards Control Program
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2121:** Perform secondary repair on image-intensified systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCO 5104.1_ Navy Laser Hazards Control Program
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2122:** Perform secondary repair on fire control systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCO 5104.1_ Navy Laser Hazards Control Program
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2123:** Perform secondary repair on direct view optical systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-

function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCO 5104.1_ Navy Laser Hazards Control Program
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

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**2171-MAIN-2124:** Perform secondary repair on thermal systems

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 12 months

**DESCRIPTION:** Repair is the return of an item to serviceable condition through correction of a specific failure or unserviceable condition. Repair is a sub-function of maintenance at the tactical level of logistics. Refer to MCWP 4-11.4 Maintenance Operations.

**MOS PERFORMING:** 2171

**GRADES:** PVT, PFC, LCPL, CPL, SGT, SSGT, GYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a mission requirement, equipment, and with the aid of references.

**STANDARD:** Returning equipment to serviceable condition in accordance with applicable technical references.

**PERFORMANCE STEPS:**
1. Induct equipment into maintenance, if required.
2. Determine applicable technical references.
3. Conduct initial inspection.
4. Troubleshoot, as needed.
5. Determine maintenance actions required.
6. Requisition parts, if required.
7. Perform required maintenance actions.
8. Verify MIs/TIs, as required.
9. Apply firmware/software upgrades, as required.
10. Document maintenance actions.
11. Purge/charge equipment, when applicable.
12. Conduct quality control.
13. Return equipment to owner, if required.

**REFERENCES:**
1. ANZI Z136.1 American National Standard for Safe Use of Lasers
2. GCSS-MC Handbook
3. GCSS-MC Procedural Notices
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCO 5104.1_ Navy Laser Hazards Control Program
6. MCWP 4-11.4 Maintenance Operations
7. TM 4700-15/1_ Ground Equipment Record Procedures
8. TM 750-116 General Procedures for Purge and Charge
9. TM 9-254 General Maintenance Procedures for Fire Control Materiel
10. TM 9-258 Elementary Optics and Application to Fire Control Instruments

GROUND ORD MAINT T&R MANUAL

# CHAPTER 18

# MOS 2181 INDIVIDUAL EVENTS

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# MOS 2181 INDIVIDUAL EVENTS

**18000. PURPOSE.** This chapter details the individual events that pertain to Ground Ordnance Maintenance common events. Each individual event provides an event title, along with the conditions events will be performed under, and the standard to which the event must be performed to be successful.

**18001. EVENT CODING.** Events in this T&R Manual are depicted with an up to 12-character, 3-field alphanumeric system, i.e. XXXX-XXXX-XXXX. This chapter utilizes the following methodology

a. Field one. This field represents the community. This chapter contains the following community codes:

| Code | Description |
|---|---|
| 2181 | Senior Ground Ordnance Weapons Chief |

b. Field two. This field represents the functional/duty area. This chapter contains the following functional/duty areas:

| Code | Description |
|---|---|
| ADMN | Administration |

c. Field three. This field provides the level at which the event is accomplished and numerical sequencing of events. This chapter contains the following event levels:

| Code | Description |
|---|---|
| 2000 | Core Plus Skills |

**18002. INDEX OF INDIVIDUAL EVENTS**



**18003. 2000-LEVEL EVENTS**

**2181-ADMN-2001:** Coordinate maintenance programs

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**DESCRIPTION:** This event encompasses all functional areas of maintenance

management, to include ammunition control, physical security, safety (LASER, Radiological, environmental) and maintenance administration.

**MOS PERFORMING:** 2181

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To ensure long-term supportability of ground ordnance equipment.

**PERFORMANCE STEPS:**
1. Identify mission requirements.
2. Analyze capabilities.
3. Determine resource requirements.
4. Analyze external requirements.
5. Develop procedures to comply with functional areas of maintenance management.

**REFERENCES:**
1. Applicable technical references
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
4. MCO 4105.2_ Marine Corps Warranty Program
5. MCO 4400.82_ Regulated/Controlled Item Management Manual
6. MCO 4710.8 DELETE Uniform Criteria for Repair Cost Estimated Used to Determine
7. MCO 4790.18_ Corrosion Prevention and Control (CPAC) Program
8. MCO 4855.10_ Product Quality Deficiency Report (PQDR)
9. MCO 5215.1_ Marine Corps Directives Management Program
10. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
11. MCO P4400.150_ Consumer Level Supply Policy Manual
12. TM 4700-15/1_ Ground Equipment Record Procedures
13. Unit T/O&E Unit's Table of Organization and Equipment

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**2181-ADMN-2002:** Manage ground ordnance maintenance resources

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**DESCRIPTION:** The individual is responsible for managing the following: Embarkation, IWGP, environmental programs, safety programs, and MOS training.

**MOS PERFORMING:** 2181

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To ensure resources are sufficient to maintain ground ordnance equipment.

**PERFORMANCE STEPS:**
1. Develop maintenance flow plan
2. Identify equipment.
3. Identify facilities requirement.
4. Maintain facilities.
5. Analyze time management.
6. Analyze budget.
7. Implement tactical logistics.
8. Conduct site surveys, when applicable.
9. Analyze mobilization plan.
10. Employ personnel.
11. Advise Maintenance Officer/MMO.

**REFERENCES:**
1. Applicable technical references
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. DOD DIR 4160.21 Defense Disposal Manual
4. MCBUL 3000 Marine Corps Automated Readiness Evaluation System (MARES) Equipment
5. MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
6. MCO 4400.16_ Uniform Material Movement and Issue Priority System (UMMIPS)
7. MCO 4400.82_ Regulated/Controlled Item Management Manual
8. MCO P4400.150_ Consumer Level Supply Policy Manual
9. MCO P4790.2_ MIMMS Field Procedures Manual

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**2181-ADMN-2003:** Manage maintenance operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2181

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a requirement.

**STANDARD:** To ensure long-term supportability of ground ordnance equipment.

**PERFORMANCE STEPS:**
1. Determine program requirement(s).
2. Implement corrective actions, if required.

**REFERENCES:**
1. Applicable technical references
2. MCO 1553.3_ Unit Training Management (UTM) Program
3. MCO 5100.29_ Marine Corps Safety Program
4. MCO 5100.8_ Marine Corps Occupational Safety and Health (OSH) Policy Order
5. MCO 5104.1C Navy Laser Hazards Control Program
6. MCO 8400.6 Licensing Procedures for Ordnance Vehicles
7. MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
8. MCO P4450.12 Storage and Handling of Hazardous Materials
9. MCO P5102.1_ Navy and Marine Corps Mishap and Safety Investigation Reporting and Record Keeping Manual

10. MCRP 3-0A Unit Training Management Guide
11. NAVMC 2692 Unit Safety Program Management Manual
12. NAVMC 3500.33 Ground Ordnance Maintenance T&R Manual
13. NAVMC DIR 5100.8_ Marine Corps Occupational Safety and Health (OSH) Program Manual

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**2181-ADMN-2004:** Manage physical security procedures

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2181

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** MOJT

**CONDITION:** Given a requirement.

**STANDARD:** To ensure procedures are adhered to.

**PERFORMANCE STEPS:**
1. Validate lock and key control procedures.
2. Validate Arms, Ammunition, and Explosive (AA&E) storage areas/facilities.
3. Validate storage facilities.
4. Review security barriers employment.
5. Review security lighting employment.
6. Conduct AA&E screening, when applicable.
7. Maintain Physical Security records.
8. Manage access control.

**REFERENCES:**
1. MCO 4030.16 Marine Corps Packaging and Packaging Maintenance of Small Arms using volatile corrosion inhibitor (VCI) treated materials
2. MCO 4340.1_ DELETE Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property
3. MCO 4610.15_ Shipment of Military Equipment, Explosives and other Dangerous Articles
4. MCO 5530.14 Marine Corps Physical Security Program Manual
5. MCO 8300.1_ Marine Corps Serialized Control of Small Arms Systems

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**2181-ADMN-2005:** Provide guidance on recovery operations

**EVALUATION-CODED:** NO **SUSTAINMENT INTERVAL:** 24 months

**MOS PERFORMING:** 2181

**GRADES:** MSGT, MGYSGT

**INITIAL TRAINING SETTING:** FORMAL

**CONDITION:** Given a requirement.

**STANDARD:** To ensure the recovery of equipment is safely accomplished.

**PERFORMANCE STEPS:**

1. Determine recovery requirements.
2. Determine Battle Damage Assessment and Repair (BDAR), if applicable.
3. Analyze recovery ORM.
4. Coordinate recovery operations.

**REFERENCES:**

1. Applicable technical references
2. DOD 4160.21-M-1 Defense Demilitarization Manual
3. FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair
4. MCO 4790.2_ MIMMS Field Procedures Manual
5. MCWP 4-11 Tactical-Level Logistics

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APPENDIX A

REFERENCES

**Department of Defense Instruction (DODINT)**
DOD INST 6050.5 DOD Hazard Communication Program
DOD 4160.21-M-1 Defense Demilitarization Manual

**Field Manual (FM)**
FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair
FMFRP 4-34 Recovery and Battlefield Damage Assessment and Repair
FM 9-243 Use and Care of Hand Tools and Measuring Tools
FM 3-22.65 Browning Machinegun, Caliber .50, HB M2
FM 9-43-2 Recovery and Battlefield Damage Assessment and Repair
FM 11-60 Communications-Electronics Fundamentals: Basic Principles, Direct Current
FM 11-61 Communications-Electronics Fundamentals: Basic Principles, Alternating Current
FM 11-62 Communications-Electronics Fundamentals: Basic Principles, Solid State Power Supplies
FM 11-72 Communications - Electronics Fundamentals: Digital Computers

**Marine Corps Order (MCO)**
MCO 1553.2_ Management for Marine Corps Formal Schools & Training Centers
MCO 1553.3_ Unit Training Management
MCO 1553.5_ Marine Corps Training and Education Evaluation
MCO 3501.9 Marine Corps Combat Readiness and Evaluation System
MCO 4000.57 Marine Corps Total Life Cycle Management (TLCM)
MCO 4105.2 Marine Corps Warranty Program
MCO 4340.1_ Reporting of Missing, Lost, Stolen, or Recovered (MLSR) Government Property
MCO 4400.16G Uniform Material Movement and Issue Priority System
MCO 4710.8 Uniform Criteria for Repair cost Estimated Used
MCO 4733.1B Marine Corps Test, Measurement, and Diagnostic Equipment (TMDE) Calibration and Maintenance Program (CAMP)
MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
MCO 4790.18B Corrosion Prevention and Control (CPAC) Program
MCO 4855.10B Product Quality Deficiency Report (PQDR)
MCO 5500.6 Arming of Security and Law Enforcement (LE) Personnel and the Use of Force
MCO 5100.29A Marine Corps Safety Program
MCO 5104.1C Navy Laser Hazards Control Program
MCO 5104.3 Marine Corps Radiation Safety Program
MCO 5100.8 Marine Corps Occupational Safety and Health (OSH) Policy Order
MCO 5215.1K Marine Corps Directives Management Program
MCO 5530.14 Marine Corps Physical Security Program Manual
MCO 8010.1 Class V (W) SUP FMF CBT OP
MCO 8020.1 Handling, Transportation, Storage, Reclassification and Disposal of Class V (W) material
MCO 8025.1 Malfunction and Deficiency Reporting
MCO 8300.1 Marine Corps Serialized Control of Small Arms Systems
MCO 8400.6 Licensing Procedures for Ordnance Vehicles

MCO P11240.106 Garrison Mobile Equipment
MCO P11262.2 Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
MCO P4400/150_ Consumer Level Supply Policy Manual
MCO P4400.82_ Regulated/Controlled Item Management Manual
MCO P4450.12 Storage and Handling of Hazardous Materials
MCO P4790.1 Marine Corps Integrated Maintenance Management System (MIMMS) Manual
MCO P4790.2 MIMMS Field Procedures Manual
MCO P4855.4 Procurement Quality Assurance
MCO P5090.2A Environmental Compliance and Protection Manual
MCO P5102.1B Navy & Marine Corps Mishap and Safety Investigation Reporting, and Record Keeping Manual
MCO P5215.17C Marine Corps Technical Publications System
MCO P5600.31G Marine Corps Publications and Printing Regulations
MCO P7100.8K Field Budget Guidance Manual
MCO P8020.10B Marine Corps Ammunition Management and Explosives Safety Policy program

**Marine Corps Documents Publications (MCDP)**
MCDP 4 Logistics

**Marine Corps Warfighting Publications (MCWPs)**
MCWP 4-1 Logistics Operations
MCWP 4-11 Tactical Level Logistics
MCWP 4-11.4 Commanders Guide to Maintenance

**Marine Corps Bulletin (MCBul)**
MCBUL 1200 Military Occupational Specialties Manual
MCBUL 3000 MARES Logistics Reportable Equipment

**Navy Manual (NAVMC)**
NAVMC 2664 Financial Guidebook for Commanders
NAVMC 2761 Catalog of Publications
NAVMCDIR 5100.8 Marine Corps Occupational Safety and Health (OSH) Program Manual

**Technical Instruction (TI)**
TI 4733-15/1_ TMDE Calibration & Maintenance Program
TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
TI 8005-25/12 Maintenance Sub-Merged Ordnance Combat Vehicle
TI 8005-24/20 Pre-Fire Inspection Small Arms Weapon Ordnance Material
TI 8005-24/20E Trigger Weight Measurements and Pre-fire inspection Small Arms Weapons, Ordnance Material
TI 4733-15/11_ Infantry Weapons Gauge Calibration Exchange Program
TI 4733-15/1_ TMDE Calibration & Maintenance Program
TI 5600 Publication Information Marine Corps Equipment
TI-4733-15/1 Calibration Requirements
TI 4710-14/1_ Replacement and Evacuation Criteria for USMC Equipment
TI 5104-15/1A PROC PUBN IDX RADL SAF AFFAIRS PRGM

**Technical Manual (TM)**
TM 4700-15/1 Marine Corps Ground Equipment Record Procedures
TM 02498A-23&P M2 Gun, Machine
TM 02648C-24A&P/2 7.62MM, M14, Designated Marksman Rifle (DMR) W/E
TM 05538C-23&P/2 RIFLE 5.56MM M16A2 W/E
TM 05539C-IN SNIPER RIFLE 7.62, M40A3 & M40A5 Organizational and

Intermediate Maintenance Manual
TM 08671A-23&P/2A Machine Gun 5.56MM M249
TM 09629A-23&P/2A SASR, 50 CALIBER M82A1A
TM 1005A-23&P/2A Pistol Semiautomatic 9MM M9
TM 11473A-IN/2A 7.62MM, M14, Enhanced Marksman Rifle (EMR) W/E
TM 9-1005-313-23&P Machinegun 7.62mm M240 Series
TM 08521A-23&P/2A Machine Gun 40MM MK19 MOD 3
TM 0922A-20&P/2 81MM MORTAR M252
TM 1010-223-34&P MORTAR 60MM LIGHTWEIGHT
TM 9-1010-205024 W/CH 1-3 Launcher Grenade 40MM M79
TM 9-1010-221-24&P M203 Grenade Launcher
TM 9-1005-13&P/1 Machine Gun Mounts
TM 09795B-IN Pistol M45 CQBP .45 Caliber Pistol Organizational and Intermediate Maintenance Manual
TM 09795B-OR Pistol M45 CQBP .45 Caliber Pistol Operators Manual
TM 4700-15/1_ Marine Corps Ground Equipment Record Procedures
TM 05539C-OR SNIPER RIFLE 7.26, M40A3 & M40A5 Operators Manual
TM 09134A-12&P/1 AT-4 tracer trainer
TM 11250A-12&P/1 M72AS LAW TRAINER LAUNCHER
TM 9-243 Common Tools Manual
TM 10209-10/1 Use and Care of Hand Tools and Measuring Tools
TM 00526A-24&P/2 Pistol Caliber .45 MEU (SOC)
TM 9-1005-206-14P/4 Operator's Organizational Direct Support and General Support Maintenance Repair Parts and Special Tools Manual
TM 9-1005-211-35 M1911A1 Maintenance Manual
TM 00640A-13&P/1 MS Pullover Gage, Complete (Kit)
TM 00999-23&P/1 Recoil Exercise for M198 155MM Howitzer
TM 10407A-10-1 (IETM) Operator's Manual, Howitzer, Medium, Towed 155-MM, M777
TM 10407A-25&P/2 (IETM) Equipment Maintenance and Repair Parts Manual, Howitzer, Medium, Towed 155-MM, M777
TM 9-1000-202-14 Cannon Tube Evaluation
TM 07267B-10/1_ Operator's Manual, AAVR7A1.
TM 07268B-10/1_ Operator's Manual, AAVC7A1.
TM 09674A-10/3_ Operator's Manual, AAV 7A1 FOV
TM 10004A-10/1_ UGWS AAV7A1.
TM 09674A-25&P/4 Assault Amphibious Vehicle, Personnel, Model 7A1
TM 9-2540-205-24&P Organizational, Direct Support and General Support Maintenance
TM 8F152-25&P/_ Vol 1-2 Maintenance Instruction, Power Plant Assembly AAV 7A1 FOV
TM 8F152B-25&P/4 Power Plant Assembly, AAV/FOV & RAM/RS
TM 10004A-25&P/2C Maintenance Instructions and Repair Parts List Organizational, Intermediate, and Depot Upgunned Weapons Station (UGWS) Assault Amphibious Vehicle, Personnel, Model 7A1, AAVP7A1
TM 9-2350-264-10-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 1 OF 2
TM 9-2350-264-10-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,OPERATORS MANUAL,VOLUME 2 OF 2
TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy
TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
TM 9-2350-292-34 DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
TM 5-5420-202-10 Operator's Manual for M-60 AVLB

TM 5-5420-202-20-1 AVLB M60A1 Chasis Transporting
TM 5-5420-202-20-2 AVLB M60A1 Chasis Transporting
TM 5-5420-202-20-3 AVLB M60A1 Chasis Transporting
TM 5-5420-202-20-4 AVLB M60A1 Chasis Transporting
TM 5-5420-203-14 Operator's Manual for AVLB
TM 5-5420-228-24 Launcher hydraulic system, M60A1 Tank chassis
TM 9-1005-213-10 Operator's Manual Machine Gun, Cal .50
TM 9-207 Operations and Maintenance of Ordnance Materiel in Extreme Cold Weather
TM 9-237 Welding Theory and Application
TM 2590-10/1 Mine Clear Blde F/MI IPM1 M1A1
TM 2590-23&P/2 Mine Clear Blde F/MI IPM1 M1A1
TM 9-2350-264-20-1-1 TANK, COMBAT, FULL-TRACKED,120-MM GUN, M1A1,HULL,VOLUME 1 OF 5
TM 9-2350-264-20-1-2 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 2 OF 5
TM 9-2350-264-20-1-3 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 3 OF 5
TM 9-2350-264-20-1-4 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 4 OF 5
TM 9-2350-264-20-1-5 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,VOLUME 5 OF 5
TM 9-2350-264-24P-1 TANK, COMBAT, FULL-TRACKED:120-MM GUN, M1A1,HULL,GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST
TM 9-2350-292-10 Operator's Manual for Recovery Vehicle, Full Tracked, Heavy
TM 9-2350-292-20-1 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
TM 9-2350-292-20-2 UNIT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED:M88A2
TM 9-2350-292-34 DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY, FULL-TRACKED: M88A2
TM 08594B-20/3B Light Armored Vehicle (LAV-25 Turret)
TM 08594B-20/4A Organizational Maintenance, LAV-25 Auto/Hull
TM 08594B-34/8 Light Armored Vehicle (LAV)
TM 08651A-20B Organizational Maintenance, LAV-Recovery
TM 08651B-20B Organizational Maintenance, LAV-Recovery
TM 08652A-10/1A Operator's Manual LAV-AT Turret
TM 08652A-20/3B Organizational Maintenance, LAV-Anti-Tank Turret
TM 08652B-10/1A Operator's Manual LAV-AT Turret
TM 08652B-10/2A LAV-AT
TM 08652B-20/3B Organizational Maintenance, LAV-Anti-Tank-Turret
TM 08652B-34 Intermediate Maintenance, LAV-AT
TM 08651B-10A Operator's Manual, LAV Recovery
TM 8A191B-34/1 Intermediate Maintenance, Transmission Automatic
TM 8A192C-34/P1 6V53T Engine Repair Manual
TM 9999-15/2 Electro-Static Discharge (ESD) Management
TM 9-4931-586-12-1&P Test Set Elec AN/USM-615
TM 9-4931-586-12-2&P Test Set Elec AN/USM-615
TM 9-4931-586-12-4&P Test Set Elec AN/USM-615
TM 9-4931-586-30&P Test Set Elect AN/USM-615
TM 02194A-CD U Fixture Azimuth Testing
TM 9-254 General Maintenance Procedures for Fire Control Materiel
TM 11-5855-299-12&P Test Set, Electronic Systems, TS-4348/UV
TM 09397B-12/1 Operator and Organizational Maintenance Manual for Javelin
TM 9-1425-450-12 TOW Weapon System Guided Missile System

TM 9-1425-450-24P TOW II Weapon System
TM 9-1425-450-34-1 Direct Support and General Support Maintenance Manual for TOW 2 Weapon System
TM 9-1425-450-34-2 Theory of Operation and Schematic Diagrams for TOW 2 Weapon System
TM 9-1425-451-34 TOW 2 Weapon System
TM 9-4935-450-24P TOW II Weapon System
TM 09500A-23&P/2 Night Vision Goggles AN/PVS-7B
TM 10271A-23&P/2 Night Vision Device (MNVD) AN/PVS-14
TM 11-5855-214-23&P Night Vision Sight, Crew Served Weapon AN/TVS-5
TM 9-258 Elementary Optics and Application to Fire Control Instruments
TM 9-6650-212-/2 Telescope, Observation, M49
TM 9-6650-212-34P Telescope, Observation, M49 W/E

**User Manuals (UM)**
UM-PLMS Marine Corps Publications Library Management System (PLMS) User Manual
UM 4400-15 Marine Corps User Manual (Organic Property Control)
UM 4400-124 Sassy Using Unit Procedures
UM 4790-5 MIMMS AIS, Field Maintenance Procedures
UM 4400-125 GCSS-MC User’s Manual

**Miscellaneous**
29 CFR 1910.1200 Occupational Safety and Health Standards, Hazard Communication
Applicable ULSS Unit Logistics Support Summary
Applicable Equipment Technical Manuals Applicable Equipment Technical Manuals
Current Budget Current Fiscal Budget for Base/Post/Station
DLA Handbook
EngDraw Interpreting Engineering Drawings
EOM Equipment Operators Manual
Local Policies/Procedures
LI 08594B-12/2A Lubrication Instructions, Auto-Hull LAV-25
LI 08594C-12/1B Lubrication Instruction, LAV-25 Turret
LI 08651B-12A Lubrication Instruction, LAV-Recovery
LO 9-2350-256-12 Recovery Vehicle, Full Tracked, Medium
MCLCAT Marine Corps Logistics Chain Analysis Team Checklist
Machinist Handbook
Material safety data sheets for hazardous materials
Model 40x Model 40x Field Service Manual
Model 41 Smith & Wesson Owner's Manual
National Match M1911A1 Pistol Build Procedures
NAVFAC P-307 Management of Weight Handling Equipment
NAVSEATM-50420-AA-RAD-010
Operator's Manual
ORM 1-0 Operational Risk Management
OPNAV 4790.2 Naval Aviation Maintenance Program
PWRC Current Precision Pistol Build / Rebuild Procedures
PWSR Current Precision Weapons Repairer's Tool Box Inventory
PWS Instruction Manual for Equipment
Refinishing Procedures
SAT Manual Systems Approach to Training
SECNAVIST 5216.5_ Correspondence Manual
SC 518-95-CL-A07 SMALL ARMS REPAIRER TOOL KIT
SL-3-00607A TOOL KIT, SMALL ARMS REPAIRER
SL-1-2 Index of Authorized Publication for Equipment Support

SL-1-3 Index of Authorized Publication for Equipment Support
SL-3 08721A Tool Kit, Armor LAV-25
SL-3 08723A Tool Set,F/242 25mm Cannon
SL-3 08895A Tool Kit, Intermediate Maintence,LAV
SL-3-02220A Fixture Cross Leveling W/E
SL-4 08594B Stock List, Repair Parts, LAV-25
SL-4 08652A Stocl List,Repair Parts, LAV-Anti-Tank
TB MED 524 Control of Hazards to Health from Laser Radiation
TC 9-524 Fundamentals of Machine Tools
TSM Technical Shop Mathematics
Unit SOP Unit’s Standard Operating Procedure
Unit TO/E Table of Organization/Equipment

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APPENDIX B

TERMS AND DEFINITIONS

Terms in this glossary are subject to change as applicable orders and directives are revised. Terms established by Marine Corps orders or directives take precedence after definitions found in Joint Pub 1-02, DOD Dictionary of Military and Associated Terms.

**A**

**Assessment -** An informal judgment of the unit's proficiency and resources made by a commander or trainer to gain insight into the unit's overall condition. It serves as the basis for the midrange plan. Commanders make frequent use of these determinations during the course of the combat readiness cycle in order to adjust, prioritize, or modify training events and plans.

**C**

**Chaining.** A process that enables unit leaders to effectively identify subordinate collective events and individual events that support a specific collective event. For example, collective training events at the 4000-level are directly supported by collective events at the 3000-level. Utilizing the building block approach to progressive training, these collective events are further supported by individual training events at the 1000 and 2000-levels. When a higher-level event by its nature requires the completion of lower level events, they are "chained"; Sustainment credit is given for all lower level events chained to a higher event.

**Collective Event -** A clearly defined, discrete, and measurable activity, action, or event (i.e., task) that requires organized team, or unit performance, and leads to accomplishment of a mission or function. A collective task is derived from unit missions or higher-level collective tasks. Task accomplishment requires performance of procedures composed of supporting collective or individual tasks. A collective task describes the exact performance a group must perform in the field under actual operational conditions. The term "collective" does not necessarily infer that a unit accomplishes the event. A unit, such as a squad or platoon conducting an attack may accomplish a collective event, or it may be executed by an individual to accomplish a unit mission; such as a battalion supply officer completing a reconciliation of the battalion's CMR. Thus, many collective events will have titles that are the same as individual events; however, the standard and condition will be different because the scope of the collective event is broader.

**Collective Training Standards (CTS) -** Criteria that specify mission and functional area unit proficiency standards for combat, combat support, and combat service support units. They include tasks, conditions, standards, evaluator instruction, and key indicators. CTS are found within collective training events in T&R Manuals.

**Combat Readiness Percentage (CRP) -** The CRP is a quantitative numerical value used in calculating collective training readiness based on the E-Coded events that support the unit METL. CRP is a concise measure of unit training accomplishments. This numerical value is only a snapshot of training readiness at a specific time. As training is conducted, unit CRP will continuously change.

**Component Events -** Component events are the major tasks involved in accomplishing a collective event. Listing these tasks guide Marines toward the accomplishment of the event, and help evaluators determine if the task has been done to standard. These events may be lower-level collective or individual events that must be accomplished.

**Condition -** The condition describes the training situation or environment under which the training event or task will take place. Expands on the information in the title by identifying when, where, and why the event or task will occur, and what materials, personnel, equipment, environmental provisions, and safety constraints must be present to perform the event or task in a real-world environment. Commanders can modify the conditions of the event to best prepare their Marines to accomplish the assigned mission (e.g. in a desert environment; in a mountain environment; etc.).

**Core Capabilities -** Core capabilities are the essential functions a unit must be capable of performing during extended contingency/combat operations. Core unit capabilities are based upon mission essential tasks derived from operational plans, doctrine, and established tactics, techniques, and procedures.

**Core Plus Skills -** Core plus skills are those advanced skills that are environment, mission, rank, or billet specific. 2000-level training is designed to make Marines proficient in core skills in a specific billet, or at a specified rank at the Combat Ready level. 3000-8000-level training produces combat leaders, and fully qualified section members at the Combat Qualified level. Marines trained at the Combat Qualified level are those the commanding officer feels are capable of accomplishing unit-level missions, and of directing the actions of subordinates. Many core plus tasks are learned via MOJT, while others form the base for curriculum in career level MOS courses taught by the formal school.

**Core Skills -** Core skills are those essential basic skills that “make” a Marine, and qualify that Marine for an MOS. They are the 1000-level skills introduced in entry-level training at formal schools and refined in operational units.

**D**

**Deception.** Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce the enemy to react in a manner prejudicial to the enemy’s interests. (JP 1-02)

**Defense Readiness Reporting System (DRRS) -** A comprehensive readiness reporting system that evaluates readiness on the basis of the actual missions and capabilities assigned to the forces. It is a capabilities-based, adaptive, near real-time reporting system for the entire Department of Defense.

**E**

**E-Coded Event -** An "E-Coded" event is a collective T&R event that is a noted indicator of capability, or a noted Collective skill that contributes to the unit's ability to perform the supported MET. As such, only "E-Coded" events are assigned a CRP value, and used to calculate a unit's CRP.

**Evaluation -** Evaluation is a continuous process that occurs at all echelons, during every phase of training, and can be both formal, and informal. Evaluations ensure that Marines and units are capable of conducting their combat mission. Evaluation results are used to reallocate resources, reprioritize the training plan, and plan for future training.

**Event (Training) -** An event is a significant training occurrence that is identified, expanded, and used as a building block, and potential milestone for a unit's training. An event may include formal evaluations. (2) An event within the T&R Program can be an individual training evolution, a collective training evolution, or both. Through T&R events, the unit commander ensures that individual Marines and the unit progress from a combat capable status to a Fully Combat Qualified (FCQ) status.

**Event Component -** The major procedures (i.e., actions) that must occur to perform a Collective Event to standard.

**I**

**Individual Readiness -** The individual training readiness of each Marine is measured by the number of individual events required and completed for the rank or billet currently held.

**Individual Training -** Training that applies to individual Marines. Examples include rifle qualifications and HMMWV driver licensing.

**Individual Training Standards (ITS) -** Specifies training tasks and standards for each MOS or specialty within the Marine Corps. In most cases, once an MOS or community develops a T&R, the ITS order will be cancelled. However, most communities will probably fold a large portion of their ITS into their new T&R manual.

**M**

**Marine Corps Combat Readiness and Evaluation System (MCCRES).** An evaluation system designed to provide commanders with a comprehensive set of mission performance standards from which training programs can be developed; and through which the efficiency and effectiveness of training can be evaluated. The Ground T&R Program will eventually replace MCCRES.

**Marine Corps Ground Training and Readiness (T&R) Program -** The T&R Program is the Marine Corps' primary tool for planning and conducting training, for planning and conducting training evaluation, and for assessing training readiness. The program will provide the commander with standardized programs of instruction for units within the ground combat, combat support, and combat service support communities. It consolidates the ITS, CTS, METL and other individual and unit training management tools. T&R is a program of standards that systematizes commonly accepted skills, is open to innovative change, and above all, tailors the training effort to the unit's mission. Further, T&R serves as a training guide and provides commanders an immediate assessment of

unit combat readiness by assigning a CRP to key training events. In short, the T&R Program is a building block approach to training that maximizes flexibility and produces the best-trained Marines possible.

**Mission Essential Task(s) MET(s) -** A MET is a collective task in which an organization must be proficient in order to accomplish an appropriate portion of its wartime mission(s). MET listings are the foundation for the T&R manual; all events in the T&R Manual support a MET.

**Mission Essential Task List (METL) -** Descriptive training document that provides units a clear, war fighting focused description of collective actions necessary to achieve wartime mission proficiency. The service-level METL, that which is used as the foundation of the T&R Manual, is developed using Marine Corps doctrine, Operational Plans, T/Os, UJTL, UNTL, and MCTL. For community based T&R Manuals, an occupational field METL is developed to focus the community's collective training standards. Commanders develop their unit METL from the service-level METL, operational plans, contingency plans, and SOPs.

**O**

**Operational Readiness (OR).** (DoD or NATO) OR is the capability of a unit/formation, ship, weapon system, or equipment to perform the missions or functions for which it is organized or designed. May be used in a general sense or to express a level or degree of readiness.

**P**

**Performance step -** Performance steps are included in the components of an Individual T&R Event. They are the major procedures (i.e., actions) a unit Marine must accomplish to perform an individual event to standard. They describe the procedure the task performer must take to perform the task under operational conditions and provide sufficient information for a task performer to perform the procedure. (May necessitate identification of supporting steps, procedures, or actions in outline form.) Performance steps follow a logical progression and should be followed sequentially, unless otherwise stated. Normally, performance steps are listed only for 1000-level individual events (those that are taught in the entry-level MOS school). Listing performance steps is optional if the steps are already specified in a published reference.

**Prerequisite Event -** Prerequisites are the academic training and/or T&R events that must be completed prior to attempting the event.

**R**

**Readiness (DoD) -** Readiness is the ability of US military forces to fight and meet the demands of the national military strategy. Readiness is the synthesis of two distinct but interrelated levels: (a) Unit readiness--The ability to provide capabilities required by combatant commanders to execute assigned missions. This is derived from the ability of each unit to deliver the outputs for which it was designed. (b) Joint readiness--The combatant commander's ability to integrate and synchronize ready combat and support forces to execute assigned missions.

**S**

**Section Skill Tasks.** Section skills are those competencies directly related to unit functioning. They are group rather than individual in nature, and require participation by a section (S-1, S-2, S-3, etc).

**Simulation Training -** Simulators provide the additional capability to develop and hone core and core plus skills. Accordingly, the development of simulator training events for appropriate T&R syllabi can help maintain valuable combat resources while reducing training time and cost. Therefore, in cases where simulator fidelity and capabilities are such that simulator training closely matches that of actual training events, T&R Manual developers may include the option of using simulators to accomplish the training. CRP credit will be earned for E-coded simulator events based on assessment of relative training event performance.

**Standard -** A standard is a statement that establishes criteria for how well a task or learning objective must be performed. The standard specifies how well, completely, or accurately a process must be performed or product produced. For higher-level collective events, it describes why the event is being done and the desired end-state of the event. Standards become more specific for lower-level events and outline the accuracy, time limits, sequencing, quality, product, process, restrictions, etc., that indicate the minimum acceptable level of performance required of the event. At a minimum, both collective and individual training standards consist of a task, the condition under which the task is to be performed, and the evaluation criteria that will be used to verify that the task has been performed to a satisfactory level.

**Sustainment Training -** Periodic retraining or demonstration of an event required maintaining the minimum acceptable level of proficiency or capability required to accomplish a training objective. Sustainment training goes beyond the entry-level and is designed to maintain or further develop proficiency in a given set of skills.

**Systems Approach to Training (SAT) -** An orderly process for analyzing, designing, developing, implementing, and evaluating a unit’s training program to ensure the unit, and the Marines of that unit acquire the knowledge and skills essential for the successful conduct of the unit’s wartime missions.

**T**

**Training Task -** This describes a direct training activity that pertains to an individual Marine. A task is composed of 3 major components: a description of what is to be done, a condition, and a standard.

**Training Plan -** Training document that outlines the general plan for the conduct of individual and collective training in an organization for specified period of time.

**U**

**Unit CRP -** Unit CRP is a percentage of the E-Coded collective events that support the unit METL accomplished by the unit. Unit CRP is the average of all MET CRP.

**Unit Training Management (UTM) -** Unit training management is the use of the SAT and Marine Corps training principles in a manner that maximizes training results and focuses the training priorities of the unit on its wartime

mission. UTM governs the major peacetime training activity of the Marine Corps and applies to all echelons of the Total Force.

**W**

**Waived Event.** An event that is waived by a commanding officer when in his or her judgment, previous experience or related performance satisfies the requirement of a particular event.

# APPENDIX C

## MOS-SPECIFIC PHYSICAL STANDARDS

1. Purpose. This appendix identifies MOS-specific physical standards and describes the execution of assessments designed to evaluate a Marine's physical capabilities, in order to provide Commanders reasonable assurance a Marine has the physical capacity to perform the regularly assigned and recurrent duties of the MOS.

2. Evaluation. Marines must either 'pass' or 'fail' event or performance step assessments to the standards set forth within this manual.

3. Requirements. The following events are to be performed to the standard contained in this appendix during entry level training in order to receive initial MOS qualification.

a. For the 2131 MOS:

2131-MED-1001, Evacuate a casualty from the bed of MTVR
0300-MED-1001, Performance Step 1 Ensure that you and the casualty are no longer under direct enemy fire
0300-TVEH-1001, Assist in loading and unloading a tactical vehicle

b. For the 2141 MOS:

2141-MED-1001, Perform individual actions to evacuate injured crewman
21XX-VOPS-1002, Perform recovery operations
0300-MED-1001, Performance Step 1 Ensure that you and the casualty are no longer under direct enemy fire
0300-TVEH-1001, Assist in loading and unloading a tactical vehicle

c. For the 2146 MOS:

2146-MAIN-1501, Perform service on assault breaching vehicle
2146-MED-1001, Perform individual actions to evacuate injured crewman
21XX-VOPS-1002, Perform recovery operations
2146-VOPS-1001, Operate commander's station on Tank/ABV
0300-MED-1001, Performance Step 1 Ensure that you and the casualty are no longer under direct enemy fire.
0300-TVEH-1001, Assist in loading and unloading a tactical vehicle

d. For the 2147 MOS:

2147-MED-1001, Perform individual actions to evacuate injured crewman
21XX-VOPS-1002, Perform recovery operations
2147-WPNS-1001, Perform in an LAV-25 Gunnery Skills Test (LGST)
2147-MAIN-1402, Perform service on LAV family of vehicles
0300-MED-1001, Performance Step 1 Ensure that you and the casualty are no longer under direct enemy fire.
0300-TVEH-1001, Assist in loading and unloading a tactical vehicle

4. Evaluation Sequencing. The MOS-specific physical standards events are not intended to be conducted in a single, continuous session. However, if the Commander schedules these events to occur in sequence within a 24-hour period, adequate transition between events should permit Marines the

opportunity to recover, stretch, hydrate, and prepare for the next event. Total rest permitted between events is determined at the Commander's discretion.

5. Uniform and Equipment

a. Uniform

(1) Fighting Load. See NAVMC 3500.44_ (Infantry T&R Manual) Appendix F, Figure F-1, for the Fighting Load gear list. Additionally, each Marine will carry their assigned personal weapon (M4, M-16A4, or IAR) and appropriate SL-3 [seven (7) magazines (twenty-two (22) magazines for IAR w/ assault pack), combat assault sling, PEQ-15/16, RCO, Bayonet, weapons cleaning gear, and M203 or M32 (if assigned)]. This load will be worn/carried by MOSs listed within paragraph 3.a. when executing the following events:

0300-MED-1001, performance step 1
0300-TVEH-1001
21XX-COND-2001

(2) Utility uniform with blouse removed. This uniform will be worn by MOSs listed within paragraph 3.a. when executing the following events:

2131-MED-1001, Perfomance step 5
2141-MED-1001, Perfomance step 5
21XX-VOPS-1002, Performance step 3
2146-MED-1001, Perfomance step 5
21XX-VOPS-1002, Performance step 3
2147-MED-1001, Perfomance step 5
21XX-VOPS-1002, Performance step 3

(3) The Fighting Load with either the Combat Vehicle Crewman (CVC) suit will be worn/carried by MOS listed within paragraph 3.a. when executing the following events:

2146-MAIN-1501, Performance step 4
2146-VOPS-1001, Performance step 1
2147-WPNS-1001
2147-MAIN-1402, Performance step 4

b. Equipment

(1) The following equipment is required to conduct Event 21XX-VOPS-1002.

(a) Olympic lifting bar with a total of 150 lbs. of weight.

(2) The following equipment is required to conduct Event 0300-TVEH-1001.

(a) Mock-up MK-19. Local commanders have the discretion to use a training aid of similar dimensions in place of a mock up MK-19 should the mock up not be available. Use of an actual MK-19 is not recommended due to potential damage to weapon.

(3) The following equipment is required to conduct Events 0300-MED-1001.

(a) A timepiece (digital or stopwatch) that accurately measures time to the second.

(b) A 25 foot measuring tape.

(c) Training mannequin (165 lbs.) wearing load bearing vest or plate carrier weighted to 40lbs. Local commanders have the discretion to use a training aid of similar dimensions in place of a weighted training mannequin should this be difficult to obtain. Use of a Marine weighing 165 lbs. wearing 40 lbs. of gear is not recommended.

(d) Cones, pylons, utility flags, sand bags or other visible markers.

(4) The following equipment is required to conduct Events 2131-MED-1001, 2141-MED-1001, 2146-MED-1001, and 2147-MED-1001.

(a) One Olympic lifting bar with a total of 115 lbs. of weight.

(5) The following equipment is required to conduct Event 2146-VOPS-1002.

(a) A timepiece (digital or stopwatch) that accurately measures time to the second.

(b) An ABV or AVLB with operational TC station and driver’s station.

(6) The following equipment is required to conduct the event 2146-MAIN-1501.

(a) A timepiece (digital or stopwatch) that accurately measures time to the second.

(b) An ABV/AVLB battery mock-up. Local commanders have the discretion to use a training aid of similar dimensions in place of a mock-up battery should the mock-up not be available. Use of an actual battery is not recommended due to potential damage to the battery and safety concerns.

(7) The following equipment is required to conduct Event 2147-WPNS-1001, Perform tactical field care on a casualty.

(a) A timepiece (digital or stopwatch) that accurately measures time to the second.

(b) An LAV-25 with M242 25mm automatic gun installed.

(8) The following equipment is required to conduct the event 2147-MAIN-1402.

(a) A timepiece (digital or stopwatch) that accurately measures time to the second.

(b) An LAV battery mock-up. Local commanders have the discretion to use a training aid of similar dimensions in place of a mock-up battery should the mock-up not be available. Use of an actual battery is not recommended due to potential damage to the battery and safety concerns.

5. Events Assessed. The following paragraphs outline the expected conduct of assessments, in support of MOS qualification:

a. Event 21XX-VOPS-1002 Perform recovery operations

(1) Description: The functional movement for this assessment is a deadlift. The deadlift will be a single repetition lift and hold of an Olympic bar with a total weight of 150 lbs.

(2) Environment: This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) Standard: Deadlift an Olympic bar with a total weight of 150 lbs, and then lower to the deck.

(4) Execution: Deadlift and hold an Olympic bar with a total weight of 150 lbs. at knuckle height for 30 seconds, and then lower to the deck. This event is Pass/Fail.

(a) The Marine will begin with feet shoulder width apart or under the hips. The bar should be above the boot laces at the start and shoulders slightly forward of the bar. Either the overhand, underhand or alternating grip may be used.

(b) The preparatory command is “Ready” and the execute command is “Begin.” On the command “Begin,” the Marine will execute a deadlift. When executing the deadlift, keep your chest high and maintain the curve in the lower back. While keeping the arms straight during the lift, keep the weight on the heels and extend the knees first, then hips at the top of the lift. The lift is completed when the hips are extended, knees are straight and shoulders behind the bar.

(c) Marines are encouraged to ‘use-their-legs,’ in order to lift the Olympic bar, and to avoid ‘lifting-with-their-back.’

(d) Once the deadlift position has been achieved, and the Olympic bar has been lifted to knuckle height, the Marine will maintain that position for 30 seconds. After 30 seconds the Olympic bar will be lowered to the deck in a fluid, controlled motion while maintaining the curve in the lower back while doing so.

b. 2131-MED-1001, 2141-MED-1001, 2146-MED-1001 and 2147-MED-1001, Perform individual actions to evacuate injured crewman

(1) Description. The functional movement for this assessment is similar to a clean-and-press. The clean-and-press will be a single repetition lift of an Olympic bar with a total weight of 115 lbs.

(2) Environment. This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) Standard. Clean-and-press an Olympic bar with a total weight of 115 lbs, and then lower to the deck.

(4) Execution

(a) The Marine will begin with feet shoulder width apart or under the hips. The bar should be above the boot laces at the start. Only the overhand grip can be used in this lift.

(b) The preparatory command is “Ready” and the execute command is “Begin.” On the command “Begin,” the Marine will execute a clean and press. While the clean-and-press occurs in a fluid motion, the first move of the lift is the clean. The clean begins by lifting the bar with arms locked, and the bar close to the body. The cleaning motion ends when the shoulders are fully shrugged and the hips, knees, and ankles are extended. At this point, drop underneath the bar to catch the weight at shoulder level. The next motion of the lift is the press. Dip by slightly breaking at the hips and knees, and then drive upward with the hips and shoulders until the arms are locked out and the upper arm is next to the ear.

(c) Marines are encouraged to ‘use-their-legs,’ in order to lift the Olympic bar, and to avoid ‘lifting-with-their-back.’ However, no penalty will be assessed if Marine chooses not to use their legs.

(d) Once elbow lock-out has occurred, the Olympic bar will be lowered in a fluid, controlled motion from shoulder-height, then to the deck, and neither thrown nor dropped. While lowering the bar to the deck, Marines must maintain a supportive curvature of the spine, and bend their knees.

c. 0300-TVEH-1001 Assist in loading and unloading a tactical vehicle

(1) Description. The functional movement for this assessment is similar to a clean-and-press.

(2) Refer to NAVMC 3500.44B Infantry T&R manual Appendix F for follow on instruction in the conduct of loading and unloading a tactical vehicle.

d. 0300-MED-1001 Perform tactical field care on a casualty, performance step 1.

(1) Description. This is a 50 meter movement, simulating moving from a covered and concealed position, to a casualty's position, and dragging that casualty out of direct fire to a safe position.

(2) Refer to NAVMC 3500.44B Infantry T&R manual Appendix F for follow on instruction in the conduct of the Casualty Drag.

e. 2146-VOPS-1001 Operate commander's station on ABV

(1) Description. The functional movement for this assessment is similar to a clean-and-press. The clean-and-press will be a single repetition lift of an Olympic bar with a total weight of 115 lbs.

(2) Environment. This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) Standard. Clean and press an Olympic bar with a total weight of 115 lbs., and then lower to the deck.

(4) Execution

(a) The Marine will begin seated in the TC station or driver station within the ABV or AVLB.

(b) The preparatory command is “Ready” and the execute command is “Begin.” On the command “Begin,” the Marine will grasp the TC hatch or driver’s station, and using one hand will press upward to open the hatch. Once open, the Marine will secure the hatch.

(c) Once the hatch is secured time will stop.

e. 2146-MAIN-1501 Perform service on assault breaching vehicle

(1) Description. The battery lift simulates the crew task of loading batteries into the ABV / AVLB. A mock-up battery will be lifted from the deck three times to represent that crewmember’s share of the task.

(2) Environment. This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) Standard. Lift a mock-up ABV / AVLB battery three times from ground to chin-level and back to the ground within 1 minute 50 seconds or less, in order to simulate required movements normally associated with the battery’s installation within the tank.

(4) Execution

(a) The Marine will either stand erect or crouched-down with both feet flat-the-ground. Distance between the Marine’s feet should be shoulder-width apart. The Marine may choose to stand erect or crouched with feet staggered in a variation of the basic-warrior stance. The mock-up will be at rest, at the ground-level, directly in front of and reasonably close to the Marine’s toes.

(b) The preparatory command is “Ready” and the execute command is “Begin.” On the command “Begin,” the Marine will lift the mock-up from the ground, to a point wherein the bottom of the mock-up breaks the plane of the Marine’s chin. Once the plane has been broken, the mock-up will be lowered in a fluid, controlled motion from chin-height to the deck, and neither thrown nor dropped. While lowering the mock-up to the deck, Marines should maintain a supportive curvature of the spine, and bend their knees. One repetition will be counted once the mock-up has been placed on the deck. Repeat for a total of three repetitions.

(c) Marines are encouraged to ‘use-their-legs,’ in order to generate the mock-up’s upward momentum. However, no penalty will be assessed if Marines choose not to use their legs.

f. 2147-WPNS-1001 Perform an LAV-25 Gunnery Skills Test (LGST) performance step 2

(1) Description. The functional movement for this assessment will be Disassemble/assemble the M242 25 MM Automatic Gun by manipulating the

receiver and feeder at shoulder height while sitting. This event will be conducted with the barrel, feed-shoots, link-shoots, and the electrical harness from the J1 receptacle removed. This event is performed while wearing the LAV crew uniform & PPE.

(2) Environment. This event will be conducted in a LAV-25. This event may be conducted either indoors or outdoors. Time of day is not relevant. Ambient temperature is not relevant. Precipitation is not relevant.

(3) Standard. Remove the feeder and break the receiver, then replace and lock the receiver followed by replacement of the feeder to complete the task. This event will be conducted within 2 min and 24 seconds. This event is pass or fail.

(4) Execution

(a) The Marine will begin by sitting in the gunner's seat of an LAV-25. The preparatory command is "Ready" and the execute command is "Begin." The Marine will lower the driveshaft handle from the M242 automatic gun at shoulder height and unlock the feeder handle removing the feeder and placing it on the HE ready box in a controlled manner ensuring the feeder handle is in the lock position.

(b) When the feeder has been placed on the ready box the Marine will unlock the antirotation latch handle and remove the receiver from the locking ring (daylight showing). At this time the Marine will receive a verbal command from the evaluator "continue".

(c) Once the Marine has received the command continue, they Marine will ensure the antirotation latch is pulled out and will install the receiver into the gun mount and lock the antirotation handle.

(d) Upon completion of installing the receiver, the Marine will unlock the feeder handle and replace the feeder upon the receiver in a controlled manner ensuring the feeder handle is locked and the driveshaft handle is installed. At this time, time will be stopped and recorded by the evaluator.

g. 2147-MAIN-1402 Perform service on LAV family of vehicles

(1) Description. The battery lift simulates the crew task of loading batteries into the LAV. A mock-up battery will be lifted from the deck three times to represent that crewmember's share of the task.

(2) Environment. This assessment may be conducted either indoors or outdoors, on a generally level and firm surface.

(3) Standard. Lift a mock-up LAV battery three times from ground to chin-level and back to the ground within 1 minute 50 seconds or less, in order to simulate required movements normally associated with the battery's installation within the tank.

(4) Execution

(a) The Marine will either stand erect or crouched-down with both feet flat-the-ground. Distance between the Marine's feet should be shoulder-

width apart. The Marine may choose to stand erect or crouched with feet staggered in a variation of the basic-warrior stance. The mock-up will be at rest, at the ground-level, directly in front of and reasonably close to the Marine's toes.

(b) The preparatory command is "Ready" and the execute command is "Begin." On the command "Begin," the Marine will lift the mock-up from the ground, to a point wherein the bottom of the mock-up breaks the plane of the Marine's chin. Once the plane has been broken, the mock-up will be lowered in a fluid, controlled motion from chin-height to the deck, and neither thrown nor dropped. While lowering the mock-up to the deck, Marines should maintain a supportive curvature of the spine, and bend their knees. One repetition will be counted once the mock-up has been placed on the deck. Repeat for a total of three repetitions.

(c) Marines are encouraged to 'use-their-legs,' in order to generate the mock-up's upward momentum. However, no penalty will be assessed if Marines choose not to use their legs.