

PREFACE

LIGHT ARMORED VEHICLE TECHNICIAN

PREFACE

1. The Light Armored Vehicle Technician Course is designed to provide instruction for the tasks listed in Section I Appendix B of this POI. The terminal learning objectives for each lesson in Section IV have been developed from the task list.
2. All agencies and commands receiving graduates of this course, and specifically those sited in Section VI, are requested to review the contents of this POI and evaluate performance of the graduates against field requirements. Comments and recommendations, may be submitted to:

COMMANDING OFFICER
Marine Detachment
U.S. Army Ordnance Center and School
Aberdeen Proving Ground, Maryland 21005-5281
ATTN: Curriculum Development Officer

3. The following information for this course has been submitted for inclusion in the current edition of NAVMC 2771 (Formal School Catalog):

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
	CERTIFICATION PAGE	i
	RECORD OF CHANGES	ii
	PREFACE	iii
I	COURSE DESCRIPTIVE DATA	I-1
II	SUMMARY OF HOURS	II-1
III	SCOPE OF ANNEXES	III-1
IV	CONCEPT CARDS	IV-1
V	STUDENT PERFORMANCE EVALUATION	V-1
VI	DISTRIBUTION LIST	VI-1

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION I - COURSE DESCRIPTIVE DATA

1. COURSE TITLE. LIGHT ARMORED VEHICLES TECHNICIAN (USMC)
2. LOCATION. United States Marine Corps, Marine Detachment, U.S. Army Ordnance Center and School, Aberdeen Proving Ground, MD 21005-5281
3. COURSE ID. A01GBH1
4. OTHER SERVICE COURSE NUMBER. 643-2147
5. MILITARY ARTICLES AND SERVICE LIST NUMBER. NA
6. PURPOSE. This course was developed to provide enlisted Marines of MOS 2147 advanced turret system troubleshooting / repair, recovery operations, recovery vehicle maintenance and maintenance management.
7. SCOPE. This course provides advanced instruction to students on the maintenance of Light Armored Vehicle's and their systems. The course consists of inspection, troubleshooting, disassembly, repair, cleaning, assembly, lubricating and operation of major vehicle systems. Heavy emphasis is placed on the turret systems to include the M242 25mm Automatic Gun and on administrative procedures to include the Marine Corps Integrated Maintenance Management System. Recovery vehicle maintenance is taught as well as an introduction to operating its systems and performing recovery operations
8. LENGTH (PEACETIME). 45 Training Days
9. CURRICULUM BREAKDOWN (PEACETIME).
311.00 Academic Hours
 14.00 Administrative
 3.00 Computer-Based Training
 1.00 Guest Lecture
 115.00 Lecture
 136.00 Practical Application
 17.50 Performance Exam
 24.50 Written Exam

49.00 Administrative Hours
 49.00 Administrative
10. LENGTH (MOBILIZATION). 0 Training Days
11. CURRICULUM BREAKDOWN (MOBILIZATION). Same as Peacetime.
12. MAXIMUM CLASS CAPACITY. 8
13. OPTIMUM CLASS CAPACITY. 8
14. MINIMUM CLASS CAPACITY. 2
15. CLASS FREQUENCY. 4
16. STUDENT PREREQUISITES. Must meet the requirements/ prerequisites of the Basic 2147 course, as well as be a Corporal or above with a minimum of four years active duty or on second enlistment. In case of lateral move, must have served a minimum of 1 year in MOS 2147. Have 24 months or more remaining on active duty upon completion of the course. Prerequisites may be waived on a case by case basis by the Marine Corps Detachment.
17. MOS RECEIVED. None.

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION I - COURSE DESCRIPTIVE DATA

18. QUOTA CONTROL. CG, Training Command, (C475)

19. FUNDING. TECOM (C464)

20. REPORTING INSTRUCTIONS. Students report to the Commanding Officer, Marine Detachment, U.S. Army Ordnance Center & School, Aberdeen Proving Ground, Maryland 21005. All students should report in by 2359 the Sunday prior to the start date. Report to Bldg 4501, Randolph Barracks, Commercial phone 1-800-392-2015 ext: 5703 or DSN: 298-5703. Marines will report in Service Alpha Uniform. Privately Owned Vehicles (POV) are authorized and family members are not authorized. Government Messing and Billeting are available.

21. INSTRUCTOR STAFFING REQUIREMENTS. See Appendix A for Instructor Computation Worksheet.

LN#	GRADE	MOS	BILLET DESCRIPTION	REQUIRED
195E	E6	2147	INSTRUCTOR	2

22. SCHOOL OVERHEAD REQUIREMENTS.

LN#	GRADE	MOS	BILLET DESCRIPTION	REQUIRED
193A	O4	2102	CO/USMC REP	1
193B	O3E	2102	XO/INSTRUCTOR	1
193C	E8	9999	FIRST SERGEANT	1
194A	E6	0193	ADMIN CHIEF	1
194B	E5	0151	ADMIN CLERK	1
194C	E4	0121	UNIT DIARY CLERK	1
194D	E3	0121	UNIT DIARY CLERK	1
194F	E3	0151	ADMIN CLERK	2
195A	O3E	2102	CRS DEV SPERVISOR	1
195C	E7	2111	ACADEMIC COORDINATOR	1
195D	E6	2146	CURRICULUM DEV/INSTRUCTOR	1
195E	E6	2111	CURRICULUM DEV/INSTRUCTOR	1
196A	E7	3043	SUPPLY CHIEF	1
196B	E4	3043	SUPPLY NCO	1
196C	E4	3043	SUPPLY CLERK	1
198A	W-3	2110	PLT CMDR/COURSE DIR	1
198B	E6	0369	PLATOON SERGEANT	1
198C	E8	2149	SENIOR INSTR	1
198I	E7	2147	INSTR/CRS SNCOIC	1
198J	E6	2147	INSTR	5
198K	E5	2147	INSTR	1
1990	E9	2181	MOS SPECIALIST	1
UNK1	E6	2100	MAT PLT SGT	1
UNK3	E7	2100	S-3 OPERATIONS & TRAINING/SACO	1
UNK4	E7	2100	DETACHMENT GUNNERY SERGEANT	1
UNK6	E7	2100	ISC/COMPUTER REPAIR/NETWORK ADMIN	1

Comments Line# UNK1 : Marines Awaiting Training, one instructor is tasked with this duty for 6 months out of the year. This billet is a full time job and the Marine is taken from one of the platoons.

Comments Line# UNK3 : This billet is a full time job, which is responsible for all permanent party training and the Marine is taken from one of the platoons.

Comments Line# UNK4 : The Detachment Gunnery Sergeant is in charge of barracks, grounds and maintenance. This billet is a full time job and the Marine is taken from one of the platoons.

Comments Line# UNK6 : The ISC is responsible for all the computer assets and LAN connections throughout the Detachment. This billet is a full time job and the



LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION I - COURSE DESCRIPTIVE DATA

Marine is taken from one of the platoons.

23. TRAINING/EDUCATION SUPPORT REQUIREMENTS.

The following materiel requirements are identified for one iteration of this course:

<u>NOMEMCLATURE</u>	<u>NSN</u>	<u>UNIT OF ISSUE</u>	<u>REQ'D</u>	<u>ON HAND</u>	<u>SHORT</u>
25MM TRAINING ROUND	7035-00-L25-0185	EACH	104	104	0
ACTUATOR ASSEMBLY	1005-01-191-8733	EACH	2	2	0
GROUND HOP STAND	-	EACH	2	2	0
GUN AUTOMATIC	1005-01-086-1400	EACH	6	6	0
INSTRUMENT PANEL	2510-01-160-7933	EACH	1	1	0
LAV VARIANT PROTOTYPE	2320-01-L05-1609	EACH	2	2	0
MT653R TRANSMISSION	2520-01-144-8667	EACH	4	4	0
RECHARGING UNI,T, HAL	3655-01-446-9335	EACH	1	1	0
SLIP RING ASSEMBLY	1005-01-166-1934	EACH	3	3	0
TEST SET,GUN TUBE 2	4933-01-441-8678	EACH	1	1	0
TOOL KIT, 4TH ECHELON	5180-01-771-1343	EACH	1	1	0
TRAVERSE DRIVE	1005-01-151-6431	EACH	3	3	0

24. TASK LIST. See Appendix B.

CDD NOTES: None.

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION I - COURSE DESCRIPTIVE DATA

APPENDIX B - TASKLIST

DUTY: 2147.03 SECOND ECHELON ORGANIZATIONAL MAINTENANCE

- TASKS: (P) 2147.03.15 MAINTAIN LAV-25 TURRET ASSEMBLY
(P) 2147.03.16 MAINTAIN LAV-25 TURRET FIRE CONTROL HYDRAULICS
(P) 2147.03.17 MAINTAIN LAV-25 TURRET FIRE CONTROL ELECTRONICS
(P) 2147.03.18 MAINTAIN LAV-AT TURRET ASSEMBLY
(P) 2147.03.19 MAINTAIN LAV-AT TURRET FIRE CONTROL HYDRAULICS
(P) 2147.03.20 MAINTAIN LAV-AT TURRET FIRE CONTROL ELECTRONICS
(S) 2147.03.22 MAINTAIN LAV-RECOVERY
(P) 2147.03.23 MAINTAIN LAV-RECOVERY ELECTRICAL SYSTEM
(P) 2147.03.24 MAINTAIN LAV-RECOVERY HYDRAULIC SYSTEM
(P) 2147.03.27 MAINTAIN LAV AT TURRET CONTROLS AND INDICATORS
(P) 2147.03.28 CONVERT LAV-AT TURRET STOW AND LOW STOW

DUTY: 2147.04 THIRD & FOURTH ECHELON MAINTENANCE

- TASKS: (P) 2147.04.01 MAINTAIN LAV HULL (ALL VARIANTS)
(P) 2147.04.03 MAINTAIN LAV ENGINE
(P) 2147.04.05 MAINTAIN LAV POWERPACK
(P) 2147.04.11 MAINTAIN LAV DRIVETRAIN,
(P) 2147.04.13 MAINTAIN LAV-25 TURRET ASSEMBLY
(P) 2147.04.14 MAINTAIN LAV-25 TURRET FIRE CONTROL HYDRAULICS
(P) 2147.04.15 MAINTAIN LAV-25 FIRE CONTROL ELECTRONICS
(P) 2147.04.16 MAINTAIN LAV-AT TURRET ASSEMBLY
(P) 2147.04.17 MAINTAIN LAV AT TURRET FIRE CONTROL HYDRAULICS
(P) 2147.04.20 MAINTAIN LAV-RECOVERY
(P) 2147.04.21 MAINTAIN LAV-RECOVERY ELECTRICAL SYSTEM
(P) 2147.04.22 MAINTAIN LAV-RECOVERY HYDRAULIC SYSTEM
(P) 2147.04.23 MAINTAIN M242 25MM AUTOMATIC CHAIN GUN

DUTY: 2147.05 ADMINISTRATIVE FUNCTIONS

- TASKS: (P) 2147.05.01 Manage maintenance functional areas

TASK LIST NOTES: a. "Applicable resources" as written in the condition of the learning objective refers to: Tools, TMDE, equipment, personnel, facilities, access to the internet where required and current references.

b. "References" as written in the standard of the learning objectives refers to: current Orders, Directives, TMs, TIs, SIs, MIs and SLs.

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION II - SUMMARY OF HOURS

PEACETIME (45 TRAINING DAYS)

ACADEMIC TIME

<u>TITLE</u>	<u>HOURS</u>	<u>ANNEX</u>
GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE	39.50	A
ADVANCED MECHANICAL KNOWLEDGE AND SKILLS	50.50	B
GENERAL PURPOSE INTERFACE ASSEMBLY (GPIA)	7.00	C
LAV-AT TURRET MAINTENANCE	67.00	D
LAV-25 TURRET MAINTENANCE	42.00	E
M242 MAIN CHAINGUN MAINTENANCE	35.00	F
LAV RECOVERY	35.00	G
LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE	21.00	H
A DAY IN THE LIFE	<u>14.00</u>	I
TOTAL ACADEMIC HOURS:	311.00	

ADMINISTRATIVE TIME

IN-PROCESSING	3.00	Z
OUT PROCESSING/GRADUATION	3.00	Z
COMMANDER'S TIME	<u>43.00</u>	Z
TOTAL ADMINISTRATIVE HOURS:	49.00	

SUMMARY (PEACETIME)

ACADEMIC TIME	311.00
ADMINISTRATIVE TIME	<u>49.00</u>
TOTAL ACADEMIC AND ADMINISTRATIVE TIME:	360.00

MOBILIZATION (0 TRAINING DAYS)

During mobilization this course will not be conducted.

SECTION III - SCOPE OF ANNEXES

A. GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE. The learning outcome of this annex is to provide the student with common knowledge and skills required for the effective maintenance administration of ordnance equipment at the organizational and intermediate levels. Emphasis is placed on the Ground Ordnance Intermediate Level Supervisor. Principal subjects of study are: Directives, Publications, Supply Support, Maintenance Production, Maintenance Related Programs, Maintenance Training Programs, and Maintenance Logistics.

B. ADVANCED MECHANICAL KNOWLEDGE AND SKILLS. This annex provides the student training on Electronics, Hydraulics, Soldering and repair of electronic components. Emphasis is placed on electronic and hydraulic theory of operation which transfers to troubleshooting those systems in any type of vehicle. The knowledge and skill gained in this annex will be re-enforced in all remaining annexes.

C. GENERAL PURPOSE INTERFACE ASSEMBLY (GPIA). To provide the student with the knowledge and skills required to set-up, operate, and perform electronic component fault isolation procedures on the LAV with the General Purpose Interface Assembly (GPIA) electronic test equipment.

D. LAV-AT TURRET MAINTENANCE. The learning outcome of this annex is to provide the student with the knowledge and skills required to identify electrical/electronic theory, schematic analysis, metric notation and utilize a Digital Multimeter (DMM) to obtain voltage, amperage and resistance readings. Identify hydraulic theory and perform schematic analysis and identify mechanical theories and operations. The knowledge and skill gained in this annex will be re-enforced in all remaining annexes. Additionally the knowledge gained in this annex will allow the student to diagnose, isolate and repair the LAV-AT turret electrical, hydraulic, and mechanical systems.

E. LAV-25 TURRET MAINTENANCE. The learning outcome of this annex is to provide the student with the knowledge and skills required to identify the theory of operation, characteristics, capabilities and features of the LAV-25 turret. Additionally the knowledge gained in this annex will allow the student to diagnose, isolate and repair the LAV-25 turret electrical, hydraulic, and mechanical systems.

F. M242 MAIN CHAINGUN MAINTENANCE. The learning outcome of this annex is to provide the student with the knowledge and skills required to identify the theory of operation of the barrel assembly, feeder assembly, receiver assembly, electrical system operation, and equipment characteristics, capabilities and features to diagnose and repair the M242 Automatic Chain Gun.

G. LAV RECOVERY. The learning outcome of this annex is to provide the student with the knowledge and skills required to identify the theory of operation, characteristics, capabilities and features of the LAV-Recovery. Additionally the knowledge gained in this annex will allow the student to diagnose, isolate and repair the LAV-Recovery electrical, hydraulic, and mechanical systems.

H. LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE. The learning outcome of this annex is to provide the student with the knowledge and skills required to identify, and learn the proper use and care of special tools. Identify the components, characteristics and theory of the wheel and marine drive system to include the diagnosis and repair of the differential gearbox, front wheel drive assembly, rear wheel drive assembly, ring gear carrier, and transfer case. The students will also receive instruction on the LAV 6V53T tune-up procedures to include exhaust valve clearance adjustments, fuel injector adjustment, injector timing adjustment, engine brake adjustment, governor gap adjustment, fuel modulator adjustment, and LAV engine system evaluation procedures.

I. A DAY IN THE LIFE. Each student will randomly choose a maintenance scenario. Students will be given their own tools, forms, and technical manuals and are to read the scenario and are required to troubleshoot to determine problem components and perform and document needed parts and repairs.

SECTION III - SCOPE OF ANNEXES

Z. ADMINISTRATIVE. Administrative processing provides for check in, check out, graduation, physical training, inspections and movement to the training areas.

SECTION IV - CONCEPT CARDS

1. A concept card is developed to describe each academic or administrative block of time during a course. These concept cards are then grouped into subject areas, called annexes, which are summarized in Section III. Annexes A through Y are reserved for academic lessons and exams. Annex Z is reserved for administrative time.
2. The following information is contained on each academic concept card in Section IV:
 - a. Heading. The heading listed at the top of the concept card includes the name of the course, the section of the POI, and the letter and title of the annex to which the lesson or exam is assigned.
 - b. Lesson/Exam ID. This designator is a unique code assigned to this specific lesson or exam within this course.
 - c. Hours. This number (carried to the second decimal place) depicts the amount of time required to conduct the lesson or exam once, even if it is presented multiple times to smaller groups of students.
 - d. Title. This is the title assigned to this lesson or exam. It should refer to the subject matter covered in the lesson or exam when possible.
 - e. Phase (optional). This is a code depicting the phase (e.g., week, month, etc.) of the course during which this lesson or exam takes place.
 - f. Group (optional). This is a code depicting the instructional group or section responsible for teaching or developing this lesson or exam.
 - g. Methods,Hours,S:I Ratio. Displayed on the concept card are codes which symbolize the methods of instruction used to present this lesson or exam. Following each method code is the time (in hours) allocated to that method and the student to instructor ratio associated with that period of time. (The hours and ratios depicted on the concept card are used to determine instructor staffing requirements.) The following is a comprehensive list of methods used in this course and their respective codes:

<u>Method</u>	<u>Code</u>
Administrative	ADMIN
Computer-Based Training	CBT
Guest Lecture	GL
Lecture	L
Practical Application	PA
Performance Exam	X(P)
Written Exam	X(W)

- h. Media. Displayed on the concept card are codes which symbolize the media used to support this lesson or exam. The following is a comprehensive list of media used in this course and their respective codes:

<u>Medium</u>	<u>Code</u>
M242 INTERMEDIATE TOOL KIT	242I
3rd Ech Tool Kit (M198)	3KIT
Actual Item/Object	AIO
M242 25MM AUTO GUN	CG
SPECIAL TOOLS, M242	CGST
Computer	CPU
6V53T ENGINE	ENG
ELECTRICAL SCHEMATICS	ES
GENERAL MECHANIC TOOL BOX	GMTB
GENERAL PURPOSE INTERFACE ASSY	GPIA
Handout	HO
HYDRAULIC SCHEMATICS	HS

SECTION IV - CONCEPT CARDS

PowerPoint Presentation

PPP

i. Learning Objective(s)/Lesson Purpose. Academic concept cards contain either learning objectives or a lesson purpose statement, but not both.

(1) Learning Objective. A learning objective describes a behavior that students are expected to perform following instruction, not necessarily identical to a behavior performed on the job. It also details the conditions under which that behavior is performed and the minimum standards of acceptable performance. A student masters the objective when his or her performance equals or exceeds the standard. (Information concerning student evaluation and mastery is contained in Section V of this POI.)

(a) Terminal Learning Objective (TLO). One, and only one, TLO is written for each task in Section I-B of the POI. The behavior in the TLO duplicates the actual behavior required on the job, modified only if the constraints of the academic environment will not allow it. A TLO should only appear on a concept card for a lesson or exam during which students actually perform the TLO. Each TLO is assigned a numeric designator identical to the designator of its corresponding task in Section I-B, which is identical to the designator of the Individual Training Standard (ITS) from which the task was derived. This designator is located in parentheses at the end of the TLO.

(b) Enabling Learning Objective (ELO). ELOs are designed to teach students the knowledges and skills required for successful performance of the TLOs. Each ELO is placed only on concept cards for lessons or exams during which students actually perform the ELO. Many introductory lessons will contain only ELOs. Each ELO is assigned the same numeric designator as the TLO it supports, followed by a unique combination of one or two letters. This designator is located in parentheses at the end of the ELO. (The first 26 ELOs are assigned the letters "a" through "z" consecutively. If there are more than 26 ELOs, they are assigned the letters "aa" through "az," then "ba" through "bz," etc.)

(2) Lesson Purpose. A lesson purpose statement is recorded on a concept card where no learning objectives are appropriate (e.g., overview, orientation, or enrichment lesson) and the lesson is not to be evaluated. The lesson purpose statement clearly describes the rationale for presenting the lesson.

j. Ammunition Requirements. Whenever a lesson requires the use of ammunition by students or by the instructional staff in support of the lesson, the concept card for that lesson will include a table depicting those requirements. Included for each type of ammunition will be its Department of Defense Identification Code (DODIC), its nomenclature, the average number of rounds used by each student, and the number of support rounds.

k. Notes (optional). This section of the concept card contains any information pertinent to the lesson. Examples of items which may be addressed here are instructor requirements, scheduling notes, special prerequisites, references to tests on which material will be evaluated, etc.

l. References. This section contains the source documents used for development of the lesson or other references which relate to the lesson. At a minimum, it must contain all documents referenced in the learning objectives included on the concept card.

3. The following information is contained on each administrative concept card in Section IV:

a. Heading. The heading listed at the top of the concept card includes the name of the course, the section of the POI, and the fact that this concept card is part of Annex Z, Administrative Time.

SECTION IV - CONCEPT CARDS

b. Event ID. This designator is a unique code assigned to this administrative event within the course.

c. Hours. This number (carried to the second decimal place) depicts the amount of administrative time required for this event. If this is a repeating event, one concept card may indicate the cumulative hours associated with this event throughout the course.

d. Event. This is a short description of the administrative event.

e. Notes (optional). This section of the concept card contains any information pertinent to the administrative block of time.

4. The following pages contain useful information for locating the learning objectives and lessons that make up this course.

a. Location of Learning Objectives Report. This report lists, by learning objective designator, all learning objectives developed for this course. It also identifies every concept card on which each learning objective is included.

b. Academic and Administrative Summaries. These reports list, by annex, all academic and administrative concept cards in Section IV. Within each annex the concept cards are listed in lesson identifier order. The information provided for each entry includes Identifier, Title, Hours, and Type [Task-oriented lesson (T), Lesson Purpose lesson (LP), Exam (E), or Administrative Time (ADM)]. A subtotal of hours is provided for each annex and for all academic and administrative concept cards. Total POI hours are listed at the end of the Administrative Summary.

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.03.15	B	21470B06	Hose Fabrication
	B	21470B08	Hydraulics
	B	21470B11	B Annex JKT
	C	2147TC01	General Purpose Interface Assembly
	D	2147TD06	LAV-AT (JPT)
	E	2147TE03	LAV-25 Mechanical Systems
	E	2147TE05	LAV-25 (JKT)
2147.03.15a	E	2147TE03	LAV-25 Mechanical Systems
	E	2147TE05	LAV-25 (JKT)
2147.03.15b	E	2147TE03	LAV-25 Mechanical Systems
	E	2147TE05	LAV-25 (JKT)
2147.03.15c	E	2147TE03	LAV-25 Mechanical Systems
	E	2147TE06	LAV-25 (JPT)
2147.03.15d	E	2147TE03	LAV-25 Mechanical Systems
	E	2147TE06	LAV-25 (JPT)
2147.03.15e	B	21470B06	Hose Fabrication
	B	21470B11	B Annex JKT
2147.03.15f	B	21470B06	Hose Fabrication
	B	21470B11	B Annex JKT
2147.03.15g	B	21470B06	Hose Fabrication
	B	21470B11	B Annex JKT
2147.03.15h	B	21470B06	Hose Fabrication
	B	21470B11	B Annex JKT
2147.03.15i	B	21470B06	Hose Fabrication
	B	21470B11	B Annex JKT
2147.03.15j	B	21470B08	Hydraulics
	B	21470B11	B Annex JKT
2147.03.15k	B	21470B08	Hydraulics
	B	21470B11	B Annex JKT
2147.03.15l	B	21470B08	Hydraulics
	B	21470B11	B Annex JKT
2147.03.15m	B	21470B08	Hydraulics
	B	21470B11	B Annex JKT
2147.03.15n	B	21470B08	Hydraulics
	B	21470B11	B Annex JKT
2147.03.15o	B	21470B08	Hydraulics
	B	21470B11	B Annex JKT
2147.03.15p	C	2147TC01	General Purpose Interface Assembly

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
	E	2147TE05	LAV-25 (JKT)
2147.03.15q	C	2147TC01	General Purpose Interface Assembly
	D	2147TD06	LAV-AT (JPT)
	E	2147TE05	LAV-25 (JKT)
2147.03.15r	C	2147TC01	General Purpose Interface Assembly
	D	2147TD06	LAV-AT (JPT)
	E	2147TE06	LAV-25 (JPT)
2147.03.15s	C	2147TC01	General Purpose Interface Assembly
	D	2147TD06	LAV-AT (JPT)
	E	2147TE06	LAV-25 (JPT)
2147.03.15t	C	2147TC01	General Purpose Interface Assembly
	D	2147TD06	LAV-AT (JPT)
	E	2147TE06	LAV-25 (JPT)
2147.03.15u	C	2147TC01	General Purpose Interface Assembly
	D	2147TD06	LAV-AT (JPT)
2147.03.15v	C	2147TC01	General Purpose Interface Assembly
	D	2147TD06	LAV-AT (JPT)
2147.03.16	E	2147TE02	LAV-25 Hydraulic System
	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
	E	2147TE05	LAV-25 (JKT)
	E	2147TE06	LAV-25 (JPT)
2147.03.16a	E	2147TE02	LAV-25 Hydraulic System
	E	2147TE05	LAV-25 (JKT)
2147.03.16b	E	2147TE02	LAV-25 Hydraulic System
	E	2147TE05	LAV-25 (JKT)
2147.03.16c	E	2147TE02	LAV-25 Hydraulic System
	E	2147TE05	LAV-25 (JKT)
2147.03.16d	E	2147TE02	LAV-25 Hydraulic System
	E	2147TE05	LAV-25 (JKT)
2147.03.16e	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
	E	2147TE06	LAV-25 (JPT)
2147.03.16f	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
	E	2147TE06	LAV-25 (JPT)
2147.03.17	E	2147TE01	LAV-25 Electrical System
	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
	E	2147TE05	LAV-25 (JKT)
	E	2147TE06	LAV-25 (JPT)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.03.17a	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
2147.03.17b	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
2147.03.17c	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
2147.03.17d	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
2147.03.17e	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
2147.03.17f	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
2147.03.17g	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
2147.03.17h	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
2147.03.17i	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
2147.03.17j	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
2147.03.17k	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
2147.03.18	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD05	LAV-AT (JKT)
	D	2147TD06	LAV-AT (JPT)
2147.03.18a	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD05	LAV-AT (JKT)
2147.03.18b	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD05	LAV-AT (JKT)
2147.03.18c	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD06	LAV-AT (JPT)
2147.03.18e	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD06	LAV-AT (JPT)
2147.03.19	D	2147TD02	LAV-AT Hydraulic System
	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD05	LAV-AT (JKT)
	D	2147TD06	LAV-AT (JPT)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.03.19a	D	2147TD02	LAV-AT Hydraulic System
	D	2147TD05	LAV-AT (JKT)
2147.03.19b	D	2147TD02	LAV-AT Hydraulic System
	D	2147TD05	LAV-AT (JKT)
2147.03.19c	D	2147TD02	LAV-AT Hydraulic System
	D	2147TD05	LAV-AT (JKT)
2147.03.19d	D	2147TD02	LAV-AT Hydraulic System
	D	2147TD05	LAV-AT (JKT)
2147.03.19e	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD06	LAV-AT (JPT)
2147.03.19f	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD06	LAV-AT (JPT)
2147.03.19h	D	2147TD02	LAV-AT Hydraulic System
2147.03.19i	D	2147TD02	LAV-AT Hydraulic System
2147.03.19j	D	2147TD02	LAV-AT Hydraulic System
2147.03.19k	D	2147TD02	LAV-AT Hydraulic System
2147.03.19l	D	2147TD02	LAV-AT Hydraulic System
2147.03.20	D	2147TD01	LAV-AT Electrical System
	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD05	LAV-AT (JKT)
	D	2147TD06	LAV-AT (JPT)
2147.03.20a	D	2147TD01	LAV-AT Electrical System
	D	2147TD05	LAV-AT (JKT)
2147.03.20b	D	2147TD01	LAV-AT Electrical System
	D	2147TD05	LAV-AT (JKT)
2147.03.20c	D	2147TD05	LAV-AT (JKT)
2147.03.20d	D	2147TD01	LAV-AT Electrical System
	D	2147TD05	LAV-AT (JKT)
2147.03.20e	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD06	LAV-AT (JPT)
2147.03.20g	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.20h	D	2147TD01	LAV-AT Electrical System

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
	D	2147TD06	LAV-AT (JPT)
2147.03.20i	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.20j	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.20k	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.22	B	21470B04	Rigging and Recovery
	B	21470B11	B Annex JKT
	G	2147TG01	LAV-R Electrical System
	G	2147TG06	LAV-R (JPT)
2147.03.22a	G	2147TG01	LAV-R Electrical System
	G	2147TG06	LAV-R (JPT)
2147.03.22d	B	21470B04	Rigging and Recovery
	B	21470B11	B Annex JKT
2147.03.22e	B	21470B04	Rigging and Recovery
	B	21470B11	B Annex JKT
2147.03.22f	B	21470B04	Rigging and Recovery
	B	21470B11	B Annex JKT
2147.03.22g	B	21470B04	Rigging and Recovery
	B	21470B11	B Annex JKT
2147.03.22h	B	21470B04	Rigging and Recovery
2147.03.23	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
	G	2147TG06	LAV-R (JPT)
2147.03.23a	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
2147.03.23b	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
2147.03.23c	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
2147.03.23d	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
2147.03.23e	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
2147.03.23f	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.03.23g	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
2147.03.23h	G	2147TG01	LAV-R Electrical System
	G	2147TG06	LAV-R (JPT)
2147.03.24	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
	G	2147TG06	LAV-R (JPT)
2147.03.24a	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24b	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24c	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24d	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24e	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24f	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24g	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24h	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.03.24i	G	2147TG02	LAV-R Hydraulic System
	G	2147TG06	LAV-R (JPT)
2147.03.27	D	2147TD01	LAV-AT Electrical System
	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD05	LAV-AT (JKT)
	D	2147TD06	LAV-AT (JPT)
2147.03.27a	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD05	LAV-AT (JKT)
2147.03.27b	D	2147TD01	LAV-AT Electrical System
	D	2147TD05	LAV-AT (JKT)
2147.03.27c	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD05	LAV-AT (JKT)
2147.03.27d	D	2147TD01	LAV-AT Electrical System
	D	2147TD05	LAV-AT (JKT)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.03.27e	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD06	LAV-AT (JPT)
2147.03.27f	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD06	LAV-AT (JPT)
2147.03.27g	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.27h	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.27i	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.27j	D	2147TD01	LAV-AT Electrical System
	D	2147TD06	LAV-AT (JPT)
2147.03.28	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD05	LAV-AT (JKT)
	D	2147TD06	LAV-AT (JPT)
2147.03.28a	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD05	LAV-AT (JKT)
2147.03.28b	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD05	LAV-AT (JKT)
2147.03.28c	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD06	LAV-AT (JPT)
2147.04.01	B	21470B07	Test Measurement and Diagnostic Equipment (TMDE)
	B	21470B09	Electronics
	B	21470B11	B Annex JKT
	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
	E	2147TE06	LAV-25 (JPT)
	H	2147TH01	LAV Special Tools
2147.04.01a	H	2147TH01	LAV Special Tools
	H	2147TH04	H ANNEX JKT
2147.04.01b	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot
	E	2147TE06	LAV-25 (JPT)
2147.04.01d	E	2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
	E	2147TE06	LAV-25 (JPT)
2147.04.01e	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01f	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01g	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01h	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01i	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01j	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01k	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01l	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01m	B	21470B07	Test Measurement and Diagnostic Equipment (TMDE)
	B	21470B11	B Annex JKT
2147.04.01n	B	21470B07	Test Measurement and Diagnostic Equipment (TMDE)
	B	21470B11	B Annex JKT
2147.04.01o	B	21470B07	Test Measurement and Diagnostic Equipment (TMDE)
	B	21470B11	B Annex JKT
2147.04.01p	B	21470B07	Test Measurement and Diagnostic Equipment (TMDE)
	B	21470B11	B Annex JKT
2147.04.01q	B	21470B07	Test Measurement and Diagnostic Equipment (TMDE)
	B	21470B11	B Annex JKT
2147.04.01r	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01s	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01t	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01u	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01v	B	21470B09	Electronics
	B	21470B11	B Annex JKT

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.01w	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01x	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01y	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01z	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01aa	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ab	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ac	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ad	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ae	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01af	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ag	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ah	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ai	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01aj	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.01ak	B	21470B09	Electronics
	B	21470B11	B Annex JKT
2147.04.03	H	2147TH03	6V53T Tune Up
	H	2147TH04	H ANNEX JKT
	H	2147TH05	H ANNEX JPT
2147.04.03a	H	2147TH03	6V53T Tune Up
	H	2147TH04	H ANNEX JKT
2147.04.03b	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.03c	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03d	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03e	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03f	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03g	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03h	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03i	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03j	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03k	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03l	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03m	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.03n	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.05	H	2147TH03	6V53T Tune Up
	H	2147TH04	H ANNEX JKT
	H	2147TH05	H ANNEX JPT
2147.04.05a	H	2147TH03	6V53T Tune Up
	H	2147TH04	H ANNEX JKT
2147.04.05b	H	2147TH03	6V53T Tune Up
	H	2147TH04	H ANNEX JKT
2147.04.05c	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.05d	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.05e	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.05f	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.05g	H	2147TH03	6V53T Tune Up
	H	2147TH05	H ANNEX JPT
2147.04.11	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
	H	2147TH05	H ANNEX JPT
2147.04.11a	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11b	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11c	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11d	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11e	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11f	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11g	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11h	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11i	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11j	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11k	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11l	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11m	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11n	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11o	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.11p	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11q	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11r	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11s	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11t	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11u	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11v	H	2147TH02	Wheel and Marine Drive
	H	2147TH04	H ANNEX JKT
2147.04.11w	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11x	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11y	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.11z	H	2147TH02	Wheel and Marine Drive
	H	2147TH05	H ANNEX JPT
2147.04.13	B	21470B05	Wiring Harness Repair
	B	21470B11	B Annex JKT
	E	2147TE03	LAV-25 Mechanical Systems
	E	2147TE05	LAV-25 (JKT)
	E	2147TE06	LAV-25 (JPT)
	H	2147TH01	LAV Special Tools
	H	2147TH04	H ANNEX JKT
2147.04.13a	E	2147TE03	LAV-25 Mechanical Systems
	E	2147TE05	LAV-25 (JKT)
2147.04.13b	H	2147TH01	LAV Special Tools
2147.04.13g	B	21470B05	Wiring Harness Repair
	B	21470B11	B Annex JKT
2147.04.13h	B	21470B05	Wiring Harness Repair
	B	21470B11	B Annex JKT
2147.04.13i	B	21470B05	Wiring Harness Repair
2147.04.13j	B	21470B05	Wiring Harness Repair

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.13k	B	21470B05	Wiring Harness Repair
2147.04.13l	B	21470B05	Wiring Harness Repair
2147.04.13m	B	21470B05	Wiring Harness Repair
2147.04.13n	B	21470B05	Wiring Harness Repair
2147.04.13o	B	21470B05	Wiring Harness Repair
2147.04.13p	B	21470B05	Wiring Harness Repair
2147.04.13q	B	21470B05	Wiring Harness Repair
2147.04.13r	H	2147TH01	LAV Special Tools
	H	2147TH04	H ANNEX JKT
2147.04.14	E	2147TE02	LAV-25 Hydraulic System
	E	2147TE06	LAV-25 (JPT)
2147.04.14a	E	2147TE02	LAV-25 Hydraulic System
2147.04.14b	E	2147TE02	LAV-25 Hydraulic System
2147.04.14c	E	2147TE02	LAV-25 Hydraulic System
2147.04.14d	E	2147TE02	LAV-25 Hydraulic System
2147.04.15	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
	E	2147TE06	LAV-25 (JPT)
2147.04.15a	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
2147.04.15b	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
2147.04.15c	E	2147TE01	LAV-25 Electrical System
	E	2147TE05	LAV-25 (JKT)
2147.04.15d	E	2147TE01	LAV-25 Electrical System
	E	2147TE06	LAV-25 (JPT)
2147.04.15e	E	2147TE01	LAV-25 Electrical System
	E	2147TE06	LAV-25 (JPT)
2147.04.15f	E	2147TE01	LAV-25 Electrical System
	E	2147TE06	LAV-25 (JPT)
2147.04.16	D	2147TD02	LAV-AT Hydraulic System
	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD05	LAV-AT (JKT)
	D	2147TD06	LAV-AT (JPT)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.16a	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD05	LAV-AT (JKT)
2147.04.16b	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD06	LAV-AT (JPT)
2147.04.16c	D	2147TD02	LAV-AT Hydraulic System
	D	2147TD06	LAV-AT (JPT)
2147.04.16d	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD06	LAV-AT (JPT)
2147.04.16e	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD06	LAV-AT (JPT)
2147.04.16f	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD06	LAV-AT (JPT)
2147.04.16g	D	2147TD03	LAV-AT Mechanical Systems
2147.04.16h	D	2147TD03	LAV-AT Mechanical Systems
	D	2147TD06	LAV-AT (JPT)
2147.04.17	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
	D	2147TD06	LAV-AT (JPT)
2147.04.17a	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
2147.04.17b	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
2147.04.17c	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
2147.04.17d	D	2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)
2147.04.20	G	2147TG01	LAV-R Electrical System
	G	2147TG05	LAV-R (JKT)
2147.04.21	G	2147TG01	LAV-R Electrical System
	G	2147TG03	LAV-R Winch
	G	2147TG04	LAV-R Crane
	G	2147TG06	LAV-R (JPT)
2147.04.21a	G	2147TG01	LAV-R Electrical System
	G	2147TG06	LAV-R (JPT)
2147.04.21b	G	2147TG01	LAV-R Electrical System
	G	2147TG06	LAV-R (JPT)
2147.04.21c	G	2147TG03	LAV-R Winch
	G	2147TG06	LAV-R (JPT)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.21d	G	2147TG03	LAV-R Winch
	G	2147TG06	LAV-R (JPT)
2147.04.21e	G	2147TG04	LAV-R Crane
	G	2147TG06	LAV-R (JPT)
2147.04.21f	G	2147TG03	LAV-R Winch
	G	2147TG06	LAV-R (JPT)
2147.04.21g	G	2147TG03	LAV-R Winch
	G	2147TG06	LAV-R (JPT)
2147.04.21h	G	2147TG04	LAV-R Crane
	G	2147TG06	LAV-R (JPT)
2147.04.21i	G	2147TG04	LAV-R Crane
	G	2147TG06	LAV-R (JPT)
2147.04.22	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
	G	2147TG06	LAV-R (JPT)
2147.04.22a	G	2147TG02	LAV-R Hydraulic System
	G	2147TG05	LAV-R (JKT)
2147.04.22b	G	2147TG06	LAV-R (JPT)
2147.04.22c	G	2147TG06	LAV-R (JPT)
2147.04.23	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF02	M242 Troubleshooting
	F	2147TF03	M242 (JKT)
	F	2147TF04	M242 (JPT)
2147.04.23a	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF03	M242 (JKT)
2147.04.23b	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF03	M242 (JKT)
2147.04.23c	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF02	M242 Troubleshooting
	F	2147TF03	M242 (JKT)
	F	2147TF04	M242 (JPT)
2147.04.23d	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF02	M242 Troubleshooting
	F	2147TF03	M242 (JKT)
	F	2147TF04	M242 (JPT)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.04.23e	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF02	M242 Troubleshooting
	F	2147TF03	M242 (JKT)
	F	2147TF04	M242 (JPT)
2147.04.23f	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF02	M242 Troubleshooting
	F	2147TF03	M242 (JKT)
	F	2147TF04	M242 (JPT)
2147.04.23g	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF03	M242 (JKT)
2147.04.23h	F	2147TF01	Description and Theory of Operation of the M242 Chain Gun
	F	2147TF03	M242 (JKT)
2147.04.23i	F	2147TF02	M242 Troubleshooting
	F	2147TF04	M242 (JPT)
2147.04.23j	F	2147TF02	M242 Troubleshooting
	F	2147TF04	M242 (JPT)
2147.04.23k	F	2147TF02	M242 Troubleshooting
	F	2147TF04	M242 (JPT)
2147.04.23l	F	2147TF02	M242 Troubleshooting
	F	2147TF04	M242 (JPT)
2147.04.23m	F	2147TF02	M242 Troubleshooting
	F	2147TF04	M242 (JPT)
2147.05.01	B	21470B01	Not Mission Capable Criteria
	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B03	Battlefield Damage Assessment Repair (BDAR)
	B	21470B10	Corrosion Prevention and Control (CPAC)
	B	21470B11	B Annex JKT
	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T02	Publications
	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T04	Desktop / Turnover Procedures
	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T06	Product Quality Deficiency Report (PQDR)
	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
A	21XX0T09	Modifications	
A	21XX0T10	Operational Risk Management	
A	21XX0T11	Maintenance Administration	
A	21XX0T13	Annex A Exam	

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.05.01a	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T13	Annex A Exam
2147.05.01b	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T13	Annex A Exam
2147.05.01c	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T13	Annex A Exam
2147.05.01d	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T13	Annex A Exam
2147.05.01e	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T13	Annex A Exam
2147.05.01f	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T13	Annex A Exam
2147.05.01g	A	21XX0T03	MOS Training / ITS / Records
	A	21XX0T13	Annex A Exam
2147.05.01h	A	21XX0T04	Desktop / Turnover Procedures
	A	21XX0T13	Annex A Exam
2147.05.01i	A	21XX0T04	Desktop / Turnover Procedures
	A	21XX0T13	Annex A Exam
2147.05.01j	A	21XX0T04	Desktop / Turnover Procedures
	A	21XX0T13	Annex A Exam
2147.05.01k	A	21XX0T04	Desktop / Turnover Procedures
	A	21XX0T13	Annex A Exam
2147.05.01l	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam
2147.05.01m	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam
2147.05.01n	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam
2147.05.01o	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam
2147.05.01p	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam
2147.05.01q	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON_ID	LESSON_TITLE
	A	21XX0T13	Annex A Exam
2147.05.01r	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam
2147.05.01s	A	21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)
	A	21XX0T13	Annex A Exam
2147.05.01t	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01u	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01v	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01w	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01x	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01y	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01z	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01aa	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01ab	A	21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control
	A	21XX0T13	Annex A Exam
2147.05.01ac	A	21XX0T09	Modifications
	A	21XX0T13	Annex A Exam
2147.05.01ad	A	21XX0T09	Modifications
	A	21XX0T13	Annex A Exam
2147.05.01ae	A	21XX0T09	Modifications
	A	21XX0T13	Annex A Exam

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON_ID	LESSON_TITLE
2147.05.01af	A	21XX0T09	Modifications
	A	21XX0T13	Annex A Exam
2147.05.01ag	A	21XX0T09	Modifications
	A	21XX0T13	Annex A Exam
2147.05.01ah	A	21XX0T06	Product Quality Deficiency Report (PQDR)
	A	21XX0T13	Annex A Exam
2147.05.01ai	A	21XX0T06	Product Quality Deficiency Report (PQDR)
	A	21XX0T13	Annex A Exam
2147.05.01aj	A	21XX0T06	Product Quality Deficiency Report (PQDR)
	A	21XX0T13	Annex A Exam
2147.05.01ak	A	21XX0T06	Product Quality Deficiency Report (PQDR)
	A	21XX0T13	Annex A Exam
2147.05.01al	A	21XX0T06	Product Quality Deficiency Report (PQDR)
	A	21XX0T13	Annex A Exam
2147.05.01am	A	21XX0T06	Product Quality Deficiency Report (PQDR)
	A	21XX0T13	Annex A Exam
2147.05.01an	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T13	Annex A Exam
2147.05.01ao	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T13	Annex A Exam
2147.05.01ap	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T13	Annex A Exam
2147.05.01aq	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T13	Annex A Exam
2147.05.01ar	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T13	Annex A Exam
2147.05.01as	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T13	Annex A Exam
2147.05.01at	A	21XX0T01	Table of Organization & Equipment (T/O&E)
	A	21XX0T13	Annex A Exam
2147.05.01av	A	21XX0T11	Maintenance Adminsitration
	A	21XX0T13	Annex A Exam
2147.05.01aw	A	21XX0T11	Maintenance Adminsitration
	A	21XX0T13	Annex A Exam
2147.05.01ax	A	21XX0T11	Maintenance Adminsitration
	A	21XX0T13	Annex A Exam
2147.05.01ay	A	21XX0T11	Maintenance Adminsitration

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
	A	21XX0T13	Annex A Exam
2147.05.01az	A	21XX0T11	Maintenance Adminsitration
	A	21XX0T13	Annex A Exam
2147.05.01ba	A	21XX0T11	Maintenance Adminsitration
	A	21XX0T13	Annex A Exam
2147.05.01bb	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bc	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bd	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01be	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bf	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bg	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bh	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bi	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bj	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bk	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bl	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bm	A	21XX0T05	Shop Supply / Defense Logistics Agency Handbook
	A	21XX0T13	Annex A Exam
2147.05.01bn	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bo	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bp	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bq	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
2147.05.01br	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bs	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bt	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bu	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bv	A	21XX0T02	Publications
	A	21XX0T13	Annex A Exam
2147.05.01bw	A	21XX0T10	Operational Risk Management
	A	21XX0T13	Annex A Exam
2147.05.01bx	A	21XX0T10	Operational Risk Management
	A	21XX0T13	Annex A Exam
2147.05.01by	A	21XX0T10	Operational Risk Management
	A	21XX0T13	Annex A Exam
2147.05.01bz	A	21XX0T10	Operational Risk Management
	A	21XX0T13	Annex A Exam
2147.05.01ca	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B11	B Annex JKT
2147.05.01cb	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B11	B Annex JKT
2147.05.01cc	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B11	B Annex JKT
2147.05.01cd	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B11	B Annex JKT
2147.05.01ce	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B11	B Annex JKT
2147.05.01cf	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B11	B Annex JKT
2147.05.01cg	B	21470B02	Joint Oil Analysis Program (JOAP)
	B	21470B11	B Annex JKT
2147.05.01ch	B	21470B10	Corrosion Prevention and Control (CPAC)
	B	21470B11	B Annex JKT
2147.05.01ci	B	21470B10	Corrosion Prevention and Control (CPAC)
	B	21470B11	B Annex JKT
2147.05.01cj	B	21470B10	Corrosion Prevention and Control (CPAC)

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

LOCATION OF LEARNING OBJECTIVES REPORT

LO	ANNEX	LESSON ID	LESSON TITLE
	B	21470B11	B Annex JKT
2147.05.01ck	B	21470B01	Not Mission Capable Criteria
	B	21470B11	B Annex JKT
2147.05.01cl	B	21470B01	Not Mission Capable Criteria
	B	21470B11	B Annex JKT
2147.05.01cm	B	21470B01	Not Mission Capable Criteria
	B	21470B11	B Annex JKT
2147.05.01cn	B	21470B01	Not Mission Capable Criteria
	B	21470B11	B Annex JKT
2147.05.01co	B	21470B03	Battlefield Damage Assessment Repair (BDAR)
	B	21470B11	B Annex JKT
2147.05.01cp	B	21470B03	Battlefield Damage Assessment Repair (BDAR)
	B	21470B11	B Annex JKT
2147.05.01cq	B	21470B03	Battlefield Damage Assessment Repair (BDAR)
	B	21470B11	B Annex JKT
2147.05.01cr	B	21470B03	Battlefield Damage Assessment Repair (BDAR)
	B	21470B11	B Annex JKT
2147.05.01cs	B	21470B01	Not Mission Capable Criteria
2147.05.01ct	A	21XX0T10	Operational Risk Management
2147.05.01cu	A	21XX0T10	Operational Risk Management
2147.05.01cv	A	21XX0T10	Operational Risk Management

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

ACADEMIC SUMMARY

IDENTIFIER	TITLE	HRS	TYPE
ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE			
21XX0T01	Table of Organization & Equipment (T/O&E)	2.00	T
21XX0T02	Publications	10.50	T
21XX0T03	MOS Training / ITS / Records	2.00	T
21XX0T04	Desktop / Turnover Procedures	1.50	T
21XX0T05	Shop Supply / Defense Logistics Agency Handbook	3.00	T
21XX0T06	Product Quality Deficiency Report (PQDR)	1.50	T
21XX0T07	Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)	2.50	T
21XX0T08	Preventative Maintenance / Corrective Maintenance / Quality Control	2.00	T
21XX0T09	Modifications	2.00	T
21XX0T10	Operational Risk Management	2.00	T
21XX0T11	Maintenance Adminsitration	3.50	T
21XX0T12	PC MIMMS	4.00	LP
21XX0T13	Annex A Exam	3.00	E
Annex Total :		39.50	
ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS			
21470B01	Not Mission Capable Criteria	1.00	T
21470B02	Joint Oil Analysis Program (JOAP)	1.00	T
21470B03	Battlefield Damage Assessment Repair (BDAR)	1.00	T
21470B04	Rigging and Recovery	7.00	T
21470B05	Wiring Harness Repair	7.00	T
21470B06	Hose Fabrication	7.00	T
21470B07	Test Measurement and Diagnostic Equipment (TMDE)	7.00	T
21470B08	Hydraulics	7.00	T
21470B09	Electronics	7.00	T
21470B10	Corrosion Prevention and Control (CPAC)	1.50	T
21470B11	B Annex JKT	4.00	E
Annex Total :		50.50	
ANNEX C - GENERAL PURPOSE INTERFACE ASSEMBLY (GPJA)			
2147TC01	General Purpose Interface Assembly	7.00	T
Annex Total :		7.00	
ANNEX D - LAV-AT TURRET MAINTENANCE			
2147TD01	LAV-AT Electrical System	28.00	T
2147TD02	LAV-AT Hydraulic System	14.50	T
2147TD03	LAV-AT Mechanical Systems	10.50	T
2147TD04	LAV-AT Preventive Maintenance Checks and Services (PMCS)	7.00	T
2147TD05	LAV-AT (JKT)	3.50	E
2147TD06	LAV-AT (JPT)	3.50	E
Annex Total :		67.00	
ANNEX E - LAV-25 TURRET MAINTENANCE			

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

ACADEMIC SUMMARY

IDENTIFIER	TITLE	HRS	TYPE
2147TE01	LAV-25 Electrical System	14.00	T
2147TE02	LAV-25 Hydraulic System	7.00	T
2147TE03	LAV-25 Mechanical Systems	7.00	T
2147TE04	LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot	7.00	T
2147TE05	LAV-25 (JKT)	3.50	E
2147TE06	LAV-25 (JPT)	3.50	E
Annex Total :		42.00	
ANNEX F - M242 MAIN CHAINGUN MAINTENANCE			
2147TF01	Description and Theory of Operation of the M242 Chain Gun	14.00	T
2147TF02	M242 Troubleshooting	14.00	T
2147TF03	M242 (JKT)	3.50	E
2147TF04	M242 (JPT)	3.50	E
Annex Total :		35.00	
ANNEX G - LAV RECOVERY			
2147TG01	LAV-R Electrical System	7.00	T
2147TG02	LAV-R Hydraulic System	7.00	T
2147TG03	LAV-R Winch	7.00	T
2147TG04	LAV-R Crane	7.00	T
2147TG05	LAV-R (JKT)	3.50	E
2147TG06	LAV-R (JPT)	3.50	E
Annex Total :		35.00	
ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE			
2147TH01	LAV Special Tools	3.50	T
2147TH02	Wheel and Marine Drive	3.50	T
2147TH03	6V53T Tune Up	7.00	T
2147TH04	H ANNEX JKT	3.50	E
2147TH05	H ANNEX JPT	3.50	E
Annex Total :		21.00	
ANNEX I - A DAY IN THE LIFE			
2147TI01	A Day In the Life	14.00	LP
Annex Total :		14.00	
Total Academic Hours :		311.00	

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION IV - CONCEPT CARDS

ADMINISTRATIVE SUMMARY

<u>IDENTIFIER</u>	<u>TITLE</u>	<u>HRS</u>	<u>TYPE</u>
ANNEX Z - ADMINISTRATIVE			
2147TZ01	In-processing	3.00	ADM
2147TZ02	Out processing/Graduation	3.00	ADM
2147TZ03	Commander's Time	43.00	ADM

Total Administrative Hours : 49.00

Total POI Hours : 360.00

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T01

HOURS: 2.00

TITLE: Table of Organization & Equipment (T/O&E)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.00	8:1
PA	1.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify references for T/O&E, in accordance with the references. (2147.05.01an)
2. Given applicable resources, identify what gives a command authority to hold and use resources, in accordance with the references. (2147.05.01ao)
3. Given applicable resources, use TFS website to locate T/O&E for specific commands, in accordance with the references. (2147.05.01ap)
4. Given applicable resources, use T/O&E to identify unit capabilities, in accordance with the references. (2147.05.01aq)
5. Given applicable resources, identify the columns of information on the T/O&E, in accordance with the references. (2147.05.01ar)
6. Given applicable resources, identify procedures for submitting T/O&E change request, in accordance with the references. (2147.05.01as)
7. Given applicable resources, identify the three manning levels/priorities, in accordance with the references. (2147.05.01at)

NOTE(S):

Students will access TFS website www.mccdc.usmc.mil/tfs. Website is controled access and requires a user name and password. Instructor will have to access website two weeks prior to class and request user name and password. Instructor will provide user name and password so students can utilize website.

REFERENCE

REFERENCE #

1. Total Force Structure Process

MCO 5311.1C

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T01

HOURS: 2.00

TITLE: Table of Organization & Equipment (T/O&E)

2. Staffing Procedures for Officer and Enlisted T/O Billets MCO 5320.12_
3. MIMMS Field Procedures Manual MCO P4790.2_

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T02

HOURS: 10.50

TITLE: Publications

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	7.00	8:1
PA	3.50	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify publication references, in accordance with the references. (2147.05.01bn)
2. Given applicable resources, utilize MCEPL CD, in accordance with the references. (2147.05.01bo)
3. Given applicable resources, utilize USMC web site to find publications, in accordance with the references. (2147.05.01bp)
4. Given applicable resources, identify publication requirements based on mission and the TO/E, in accordance with the references. (2147.05.01bq)
5. Given applicable resources, utilize PLMS to conduct quarterly reconciliation, in accordance with the references. (2147.05.01br)
6. Given applicable resources, identify types of inventories, in accordance with the references. (2147.05.01bs)
7. Given applicable resources, identify non-technical publication requirements, in accordance with the references. (2147.05.01bt)
8. Given applicable resources, identify process to order publications, in accordance with the references. (2147.05.01bu)
9. Given applicable resources, add required changes to publications, in accordance with the references. (2147.05.01bv)

NOTE(S):

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T02

HOURS: 10.50

TITLE: Publications

Access Total Force Structure (TFS) WEBSITE http://www.mccdc.usmc.mil/TFS/enter_site

Access Albany WEBSITE WWW.ALA.USMC.MIL

Using the NAVMC 2761, you have 20 minutes to complete this practical application by filling in the missing information.

REFERENCE

REFERENCE #

- | | |
|---|--------------|
| 1. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 2. The Marine Corps Technical Publications System | MCO P5215.17 |
| 3. Marine Corps Publication and Printing Regulations | MCO P5600.31 |
| 4. Catalog of Publications | NAVMC 2761 |
| 5. Index of Authorized Publications for Equipment Support | SL 1-2 |
| 6. Publication Information for Marine Corps Equipment | TI 5600 |
| 7. Publication Library Management System | UM-PLMS |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T03

HOURS: 2.00

TITLE: MOS Training / ITS / Records

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.00	8:1
PA	1.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, define the purpose of a training program, in accordance with the references. (2147.05.01a)
2. Given applicable resources, identify training references, in accordance with the references. (2147.05.01b)
3. Given applicable resources, define the components of an ITS, in accordance with the references. (2147.05.01c)
4. Given applicable resources, identify types of training schedules, in accordance with the references. (2147.05.01d)
5. Given applicable resources, establish a training schedule/priorities, in accordance with the references. (2147.05.01e)
6. Given applicable resources, establish individual training records jackets, in accordance with the references. (2147.05.01f)
7. Given applicable resources, implement a unit training plan, in accordance with the references. (2147.05.01g)

NOTE(S):

There is a 10 question quiz given in conjunction with this class.

REFERENCE

REFERENCE #

- | | |
|---------------------------------------|---------------|
| 1. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 2. Ground Equipment Record Procedures | TM 4700-15/1H |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T03

HOURS: 2.00

TITLE: MOS Training / ITS / Records

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T04

HOURS: 1.50

TITLE: Desktop / Turnover Procedures

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	0.50	8:1
PA	1.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify references that establish procedures for desktop / turnover folders, in accordance with the references. (2147.05.01h)
2. Given applicable resources, identify requirements for desktop procedures, in accordance with the references. (2147.05.01i)
3. Given applicable resources, identify requirements for a turnover folder, in accordance with the references. (2147.05.01j)
4. Given applicable resources, develop an outline for a desktop, in accordance with the references. (2147.05.01k)

NOTE(S):

Students will develop an outline for a desktop during practical application.

REFERENCE

REFERENCE #

1. MIMMS Field Procedures Manual

MCO P4790.2_

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T05

HOURS: 3.00

TITLE: Shop Supply / Defense Logistics Agency Handbook

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	2.00	8:1
PA	1.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, define the purpose of the PEB, in accordance with the references. (2147.05.01bb)
2. Given applicable resources, identify procedures to account for broken units of issue, in accordance with the references. (2147.05.01bc)
3. Given applicable resources, define the purpose of shop overhead materials, in accordance with the references. (2147.05.01bd)
4. Given applicable resources, define the purpose of layette bins, in accordance with the references. (2147.05.01be)
5. Given applicable resources, identify the steps required to manage layette bins, in accordance with the references. (2147.05.01bf)
6. Given applicable resources, use FEDLOG program to research repair parts, in accordance with the references. (2147.05.01bg)
7. Given applicable resources, define the purpose of a supply deficiency report, in accordance with the references. (2147.05.01bh)
8. Given applicable resources, identify validation/reconciliation process with supporting commodities, in accordance with the references. (2147.05.01bi)
9. Given applicable resources, use the ERO's demand list (EDL) during the validation/reconciliation process, in accordance with the references. (2147.05.01bj)
10. Given applicable resources, identify the components of a CMR, in accordance with

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T05

HOURS: 3.00

TITLE: Shop Supply / Defense Logistics Agency Handbook

the references. (2147.05.01bk)

11. Given applicable resources, utilize the DLA handbook, in accordance with the references. (2147.05.01b1)

12. Given applicable resources, order parts using the DLA emergency supply operations center (ESOC), in accordance with the references. (2147.05.01bm)

REFERENCE

REFERENCE #

- | | |
|--|---------------|
| 1. Uniform Materiel Movement and Issue Priority System | MCO 4400.16_ |
| 2. Radioactive Commodities DOD SYS | MCO P4400.105 |
| 3. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 4. Ground Equipment Record Procedures | TM 4700-15/1H |
| 5. FMF SASSY Using Unit Procedures | UM 4400.124 |
| 6. MIMMS AIS Field Maintenance Procedures | UM 4790-5 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T06

HOURS: 1.50

TITLE: Product Quality Deficiency Report (PQDR)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.00	8:1
PA	0.50	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify the references for completing PQDR's, in accordance with the references. (2147.05.01ah)
2. Given applicable resources, define the purpose of the PQDR program, in accordance with the references. (2147.05.01ai)
3. Given applicable resources, identify procedures of PQDR, in accordance with the references. (2147.05.01aj)
4. Given applicable resources, identify the categories of PQDR, in accordance with the references. (2147.05.01ak)
5. Given applicable resources, complete PQDR forms, in accordance with the references. (2147.05.01al)
6. Given applicable resources, utilize the PQDR web site, in accordance with the references. (2147.05.01am)

NOTE(S):

Students will access WEBSITE <http://notes.ala.usmc.mil/pqdrs/default.asp>

REFERENCE

REFERENCE #

- | | |
|---|--------------|
| 1. Product Quality Deficiency Report (PQDR) | MCO 4855.10 |
| 2. MIMMS Field Procedures Manual | MCO P4790.2_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T07

HOURS: 2.50

TITLE: Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.50	8:1
PA	1.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify tool control references, in accordance with the references. (2147.05.01l)
2. Given applicable resources, define the types of calibration, in accordance with the references. (2147.05.01m)
3. Given applicable resources, complete calibration control records, in accordance with the references. (2147.05.01n)
4. Given applicable resources, identify when inventories are required for support equipment, in accordance with the references. (2147.05.01o)
5. Given applicable resources, use equipment SL-3 to identify components, in accordance with the references. (2147.05.01p)
6. Given applicable resources, determine procedures to account for as required items, in accordance with the references. (2147.05.01q)
7. Given applicable resources, determine procedures to account for special tool requirements, in accordance with the references. (2147.05.01r)
8. Given applicable resources, document SL-3 inventories, in accordance with the references. (2147.05.01s)

NOTE(S):

Students will access WEBSITE: <https://tmde.matcom.usmc.mil/tmde>

REFERENCE

REFERENCE #

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T07

HOURS: 2.50

TITLE: Support Equipment / Test Measurement and Diagnostic Equipment (TMDE)

- | | |
|--|---------------|
| 1. Radioactive Commodities DOD SYS | MCO P4400.105 |
| 2. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 3. Calibraton Requirements USMC TMDE CAMP | TI 4733-15/1 |
| 4. Infantry Weapons Gauge Calibration Exchange Program | TI 4733-15/11 |
| 5. Ground Equipment Record Procedures Manual | TM 4700-15/1_ |
| 6. FMF SASSY Using Unit Procedures | UM 4400.124 |
| 7. MIMMS AIS Field Maintenance Procedures | UM 4790-5 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T08

HOURS: 2.00

TITLE: Preventative Maintenance / Corrective Maintenance / Quality Control

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.25	8:1
PA	0.75	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, define the purpose of PM, in accordance with the references. (2147.05.01t)
2. Given applicable resources, identify the types of PM, in accordance with the references. (2147.05.01u)
3. Given applicable resources, complete PM roster, in accordance with the references. (2147.05.01v)
4. Given applicable resources, identify when publications can be deferred, in accordance with the references. (2147.05.01w)
5. Given applicable resources, define the purpose of CM, in accordance with the references. (2147.05.01x)
6. Given applicable resources, identify maximum repair cycle times for end items and secondary repairables, in accordance with the references. (2147.05.01y)
7. Given applicable resources, define the purpose of quality control procedures, in accordance with the references. (2147.05.01z)
8. Given applicable resources, identify who can conduct equipment check out for QC purposes, in accordance with the references. (2147.05.01aa)
9. Given applicable resources, identify when overflow maintenance may be utilized, in accordance with the references. (2147.05.01ab)

NOTE(S):

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T08

HOURS: 2.00

TITLE: Preventative Maintenance / Corrective Maintenance / Quality Control

This class will have a 15 question quiz.

REFERENCE

REFERENCE #

1. MIMMS Field Procedures Manual

MCO P4790.2_

2. Ground Equipment Record Procedures Manual

TM 4700-15/1_

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T09

HOURS: 2.00

TITLE: Modifications

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.25	8:1
PA	0.75	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify modification procedures, in accordance with the references. (2147.05.01ac)
2. Given applicable resources, identify equipment requiring modifications, in accordance with the references. (2147.05.01ad)
3. Given applicable resources, define types of modifications, in accordance with the references. (2147.05.01ae)
4. Given applicable resources, complete modifications forms, in accordance with the references. (2147.05.01af)
5. Given applicable resources, verify a modification application, in accordance with the references. (2147.05.01ag)

NOTE(S):

This class will have a 10 question quiz.

REFERENCE

REFERENCE #

- | | |
|---|---------------|
| 1. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 2. Index of Authorized Publications for Equipment Support | SL 1-2 |
| 3. Publication Information for Marine Corps Equipment | TI 5600 |
| 4. Ground Equipment Record Procedures Manual | TM 4700-15/1_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T10

HOURS: 2.00

TITLE: Operational Risk Management

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	0.50	8:1
PA	1.50	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify ORM references, in accordance with the references. (2147.05.01bw)
2. Given applicable resources, utilize risk assessment codes to reduce mission hazards, in accordance with the references. (2147.05.01bz)
3. Given applicable resources, identify the definitions associated to ORM, in accordance with the references. (2147.05.01bx)
4. Given applicable resources, identify method for assigning risk assessment codes, in accordance with the references. (2147.05.01by)
5. Given applicable resources, determine safety program requirements, in accordance with the references. (2147.05.01ct)
6. Given applicable resources, monitor compliance with shop safety procedures, in accordance with the references. (2147.05.01cu)
7. Given applicable resources, implement corrective actions, in accordance with the references. (2147.05.01cv)

NOTE(S):

Students will take an on-line tutorial from the Naval Air Forces Safety Office and receive a completion certificate for passing ORM fundamentals. Students will then be shown how to apply ORM in normal shop working environments.

REFERENCE

REFERENCE #

1. Occupational Safety and Health Standards, Hazard Communication

29 CFR 1910.1200

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T10

HOURS: 2.00

TITLE: Operational Risk Management

- | | |
|---|----------------------|
| 2. Hazardous Material Regulations | 49 CFR 172.704(A)(1) |
| 3. Applicable Equipment Modification Instruction | APPLICABLE MI |
| 4. Operational Risk Management | MCO 3500.27_ |
| 5. Marine Corps Ground Occupational Safety and Health Program | MCO 5100.8 |
| 6. Consumer Level Policy Manual | MCO P4400-150 |
| 7. Radioactive Commodities DOD SYS | MCO P4400.105 |
| 8. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 9. Infantry Weapons Gauge Calibration Exchange Program | TI 4733-15/11 |
| 10. Ground Equipment Record Procedures | TM 4700-15/1H |
| 11. Ground Equipment Record Procedures Manual | TM 4700-15/1_ |
| 12. FMF SASSY Using Unit Procedures | UM 4400.124 |
| 13. MIMMS AIS Field Maintenance Procedures | UM 4790-5 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T11

HOURS: 3.50

TITLE: Maintenance Admsitration

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.50	8:1
PA	2.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify MIMMS references, in accordance with the references. (2147.05.01av)
2. Given applicable resources, interpret output reports (DPR, DTL, LM2, TAM, exceptions, EDL), in accordance with the references. (2147.05.01aw)
3. Given applicable resources, submit changes to output reports, in accordance with the references. (2147.05.01ax)
4. Given applicable resources, identify elements of an ERO tub file, in accordance with the references. (2147.05.01ay)
5. Given applicable resources, identify problems requiring reconciliation, in accordance with the references. (2147.05.01az)
6. Given applicable resources, conduct a validation/reconciliation, in accordance with the references. (2147.05.01ba)

REFERENCE

REFERENCE #

- | | |
|--|---------------|
| 1. Uniform Materiel Movement and Issue Priority System | MCO 4400.16_ |
| 2. Radioactive Commodities DOD SYS | MCO P4400.105 |
| 3. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 4. Ground Equipment Record Procedures Manual | TM 4700-15/1_ |
| 5. FMF SASSY Using Unit Procedures | UM 4400.124 |
| 6. MIMMS AIS Field Maintenance Procedures | UM 4790-5 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T11

HOURS: 3.50

TITLE: Maintenance Adminsitration

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

LESSON ID: 21XX0T12

HOURS: 4.00

TITLE: PC MIMMS

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
CBT	3.00	8:1
L	1.00	8:1

MEDIA: CPU, PPP

LESSON PURPOSE:

This lesson is to familiarize the student with the PC MIMMS program and will be taught in conjunction with 21XXT011.

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

EXAM ID: 21XX0T13

HOURS: 3.00

TITLE: Annex A Exam

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(W)	3.00	8:1

MEDIA: HO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, define the purpose of a training program, in accordance with the references. (2147.05.01a)
2. Given applicable resources, identify training references, in accordance with the references. (2147.05.01b)
3. Given applicable resources, define the components of an ITS, in accordance with the references. (2147.05.01c)
4. Given applicable resources, identify types of training schedules, in accordance with the references. (2147.05.01d)
5. Given applicable resources, establish a training schedule/priorities, in accordance with the references. (2147.05.01e)
6. Given applicable resources, establish individual training records jackets, in accordance with the references. (2147.05.01f)
7. Given applicable resources, implement a unit training plan, in accordance with the references. (2147.05.01g)
8. Given applicable resources, identify references that establish procedures for desk top / turnover folders, in accordance with the references. (2147.05.01h)
9. Given applicable resources, identify requirements for desktop procedures, in accordance with the references. (2147.05.01i)
10. Given applicable resources, identify requirements for a turnover folder, in accordance with the references. (2147.05.01j)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

EXAM ID: 21XX0T13

HOURS: 3.00

TITLE: Annex A Exam

11. Given applicable resources, develop an outline for a desktop, in accordance with the references. (2147.05.01k)
12. Given applicable resources, identify tool control references, in accordance with the references. (2147.05.01l)
13. Given applicable resources, define the types of calibration, in accordance with the references. (2147.05.01m)
14. Given applicable resources, complete calibration control records, in accordance with the references. (2147.05.01n)
15. Given applicable resources, identify when inventories are required for support equipment, in accordance with the references. (2147.05.01o)
16. Given applicable resources, use equipment SL-3 to identify components, in accordance with the references. (2147.05.01p)
17. Given applicable resources, determine procedures to account for as required items, in accordance with the references. (2147.05.01q)
18. Given applicable resources, determine procedures to account for special tool requirements, in accordance with the references. (2147.05.01r)
19. Given applicable resources, document SL-3 inventories, in accordance with the references. (2147.05.01s)
20. Given applicable resources, define the purpose of PM, in accordance with the references. (2147.05.01t)
21. Given applicable resources, identify the types of PM, in accordance with the references. (2147.05.01u)
22. Given applicable resources, complete PM roster, in accordance with the references. (2147.05.01v)
23. Given applicable resources, identify when publications can be deferred, in accordance with the references. (2147.05.01w)
24. Given applicable resources, define the purpose of CM, in accordance with the

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

EXAM ID: 21XX0T13

HOURS: 3.00

TITLE: Annex A Exam

references. (2147.05.01x)

25. Given applicable resources, identify maximum repair cycle times for end items and secondary repairables, in accordance with the references. (2147.05.01y)
26. Given applicable resources, define the purpose of quality control procedures, in accordance with the references. (2147.05.01z)
27. Given applicable resources, identify who can conduct equipment check out for QC purposes, in accordance with the references. (2147.05.01aa)
28. Given applicable resources, identify when overflow maintenance may be utilized, in accordance with the references. (2147.05.01ab)
29. Given applicable resources, identify modification procedures, in accordance with the references. (2147.05.01ac)
30. Given applicable resources, identify equipment requiring modifications, in accordance with the references. (2147.05.01ad)
31. Given applicable resources, define types of modifications, in accordance with the references. (2147.05.01ae)
32. Given applicable resources, complete modifications forms, in accordance with the references. (2147.05.01af)
33. Given applicable resources, verify a modification application, in accordance with the references. (2147.05.01ag)
34. Given applicable resources, identify the references for completing PQDR's, in accordance with the references. (2147.05.01ah)
35. Given applicable resources, define the purpose of the PQDR program, in accordance with the references. (2147.05.01ai)
36. Given applicable resources, identify procedures of PQDR, in accordance with the references. (2147.05.01aj)
37. Given applicable resources, identify the categories of PQDR, in accordance with the references. (2147.05.01ak)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

EXAM ID: 21XX0T13

HOURS: 3.00

TITLE: Annex A Exam

38. Given applicable resources, complete PQDR forms, in accordance with the references. (2147.05.01al)
39. Given applicable resources, utilize the PQDR web site, in accordance with the references. (2147.05.01am)
40. Given applicable resources, identify references for T/O&E, in accordance with the references. (2147.05.01an)
41. Given applicable resources, identify what gives a command authority to hold and use resources, in accordance with the references. (2147.05.01ao)
42. Given applicable resources, use TFS website to locate T/O&E for specific commands, in accordance with the references. (2147.05.01ap)
43. Given applicable resources, use T/O&E to identify unit capabilities, in accordance with the references. (2147.05.01aq)
44. Given applicable resources, identify the columns of information on the T/O&E, in accordance with the references. (2147.05.01ar)
45. Given applicable resources, identify procedures for submitting T/O&E change request, in accordance with the references. (2147.05.01as)
46. Given applicable resources, identify the three manning levels/priorities, in accordance with the references. (2147.05.01at)
47. Given applicable resources, identify MIMMS references, in accordance with the references. (2147.05.01av)
48. Given applicable resources, interpret output reports (DPR, DTL, LM2, TAM, exceptions, EDL), in accordance with the references. (2147.05.01aw)
49. Given applicable resources, submit changes to output reports, in accordance with the references. (2147.05.01ax)
50. Given applicable resources, identify elements of an ERO tub file, in accordance with the references. (2147.05.01ay)
51. Given applicable resources, identify problems requiring reconciliation, in

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

EXAM ID: 21XX0T13

HOURS: 3.00

TITLE: Annex A Exam

accordance with the references. (2147.05.01az)

52. Given applicable resources, conduct a validation/reconciliation, in accordance with the references. (2147.05.01ba)
53. Given applicable resources, define the purpose of the PEB, in accordance with the references. (2147.05.01bb)
54. Given applicable resources, identify procedures to account for broken units of issue, in accordance with the references. (2147.05.01bc)
55. Given applicable resources, define the purpose of shop overhead materials, in accordance with the references. (2147.05.01bd)
56. Given applicable resources, define the purpose of layette bins, in accordance with the references. (2147.05.01be)
57. Given applicable resources, identify the steps required to manage layette bins, in accordance with the references. (2147.05.01bf)
58. Given applicable resources, use FEDLOG program to research repair parts, in accordance with the references. (2147.05.01bg)
59. Given applicable resources, define the purpose of a supply deficiency report, in accordance with the references. (2147.05.01bh)
60. Given applicable resources, identify validation/reconciliation process with supporting commodities, in accordance with the references. (2147.05.01bi)
61. Given applicable resources, use the ERO's demand list (EDL) during the validation/reconciliation process, in accordance with the references. (2147.05.01bj)
62. Given applicable resources, identify the components of a CMR, in accordance with the references. (2147.05.01bk)
63. Given applicable resources, utilize the DLA handbook, in accordance with the references. (2147.05.01bl)
64. Given applicable resources, order parts using the DLA emergency supply operations

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

EXAM ID: 21XX0T13

HOURS: 3.00

TITLE: Annex A Exam

center (ESOC), in accordance with the references. (2147.05.01bm)

65. Given applicable resources, identify publication references, in accordance with the references. (2147.05.01bn)
66. Given applicable resources, utilize MCPEL CD, in accordance with the references. (2147.05.01bo)
67. Given applicable resources, utilize USMC web site to find publications, in accordance with the references. (2147.05.01bp)
68. Given applicable resources, identify publication requirements based on mission and the TO/E, in accordance with the references. (2147.05.01bq)
69. Given applicable resources, utilize PLMS to conduct quarterly reconciliation, in accordance with the references. (2147.05.01br)
70. Given applicable resources, identify types of inventories, in accordance with the references. (2147.05.01bs)
71. Given applicable resources, identify non-technical publication requirements, in accordance with the references. (2147.05.01bt)
72. Given applicable resources, identify process to order publications, in accordance with the references. (2147.05.01bu)
73. Given applicable resources, add required changes to publications, in accordance with the references. (2147.05.01bv)
74. Given applicable resources, identify ORM references, in accordance with the references. (2147.05.01bw)
75. Given applicable resources, identify the definitions associated to ORM, in accordance with the references. (2147.05.01bx)
76. Given applicable resources, identify method for assigning risk assessment codes, in accordance with the references. (2147.05.01by)
77. Given applicable resources, utilize risk assessment codes to reduce mission hazards, in accordance with the references. (2147.05.01bz)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX A - GROUND ORDNANCE INTERMEDIATE LEVEL SUPERVISORS COURSE

EXAM ID: 21XX0T13

HOURS: 3.00

TITLE: Annex A Exam

REFERENCE

REFERENCE #

- | | |
|--|---------------|
| 1. Uniform Materiel Movement and Issue Priority System | MCO 4400.16_ |
| 2. Radioactive Commodities DOD SYS | MCO P4400.105 |
| 3. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 4. The Marine Corps Technical Publications System | MCO P5215.17 |
| 5. Marine Corps Publication and Printing Regulations | MCO P5600.31 |
| 6. Catalog of Publications | NAVMC 2761 |
| 7. Index of Authorized Publications for Equipment Support | SL 1-2 |
| 8. Index of Authorized Publications for Equipment Support | SL-1-3 |
| 9. Infantry Weapons Gauge Calibration Exchange Program | TI 4733-15/11 |
| 10. Calibration Requirements Marine Corps TMDE Calibration and Maintenance Program | TI 4733-15/1_ |
| 11. Publication Information for Marine Corps Equipment | TI 5600 |
| 12. Ground Equipment Record Procedures Manual | TM 4700-15/1_ |
| 13. FMF SASSY Using Unit Procedures | UM 4400.124 |
| 14. MIMMS AIS Field Maintenance Procedures | UM 4790-5 |
| 15. Publication Library Management System | UM-PLMS |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B01

HOURS: 1.00

TITLE: Not Mission Capable Criteria

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.00	8:1

MEDIA: CPU

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify the purpose of the TI, in accordance with the references. (2147.05.01ck)
2. Given applicable resources, identify information of the TI, in accordance with the references. (2147.05.01cl)
3. Given applicable resources, explain deadline determination procedures of the TI, in accordance with the references. (2147.05.01cm)
4. Given applicable resources, utilize the glossary to assist in deadline determination procedures of the TI, in accordance with the references. (2147.05.01cn)
5. Given applicable resources, determine if a vehicle is deadlined, in accordance with the references. (2147.05.01cs)

REFERENCE

REFERENCE #

- | | |
|---|----------------|
| 1. Not Mission Capable (Deadline) Criteria M1A1 Tank | TI-08953A-15/4 |
| 2. Not Mission Capable (Deadline) Criteria LAV Family of Vehicles | TI-2320-15/55_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B02

HOURS: 1.00

TITLE: Joint Oil Analysis Program (JOAP)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.00	8:1

MEDIA: HO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify the purpose of JOAP, in accordance with the references. (2147.05.01ca)
2. Given applicable resources, identify sampling methods, in accordance with the references. (2147.05.01cb)
3. Given applicable resources, identify sampling intervals, in accordance with the references. (2147.05.01cc)
4. Given applicable resources, complete sampling forms and documents, in accordance with the references. (2147.05.01cd)
5. Given applicable resources, identify unit responsibilities, in accordance with the references. (2147.05.01ce)
6. Given applicable resources, conduct an analysis, in accordance with the references. (2147.05.01cf)
7. Given applicable resources, identify program management offices, in accordance with the references. (2147.05.01cg)

REFERENCE

REFERENCE #

- | | |
|---|---------------|
| 1. Joint Oil Analysis Program | MCO 4731.1_ |
| 2. US Marine Corps Joint Oil Analysis Program | TI 4731-14/1C |
| 3. Ground Equipment Record Procedures Manual | TM 4700-15/1 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B03

HOURS: 1.00

TITLE: Battlefield Damage Assessment Repair (BDAR)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
GL	1.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, define Battlefield Damage and Repair (BDAR), in accordance with the references. (2147.05.01co)
2. Given applicable resources, identify the basic rules of Battlefield Damage and Repair (BDAR), in accordance with the references. (2147.05.01cp)
3. Given applicable resources, identify the maintenance procedures for BDAR, in accordance with the references. (2147.05.01cq)
4. Given applicable resources, identify BDAR assessment and repair forms, in accordance with the references. (2147.05.01cr)

REFERENCE

REFERENCE #

1. Battle Field Damage Assessment Report

FMFRP 4-34

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B04

HOURS: 7.00

TITLE: Rigging and Recovery

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	2.00	8:1
PA	5.00	8:1

MEDIA: AIO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-Recovery, in accordance with the references. (2147.03.22)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify rigging and recovery references, in accordance with the references. (2147.03.22d)
2. Given applicable resources, identify recovery procedures, in accordance with the references. (2147.03.22e)
3. Given applicable resources, identify rigging procedures, in accordance with the references. (2147.03.22f)
4. Given applicable resources, identify rigging and recovery safety procedures, in accordance with the references. (2147.03.22g)
5. Given applicable resources, rig and recover ordnance vehicles, in accordance with the references. (2147.03.22h)

REFERENCE

REFERENCE #

1. Battle Field Damage Assessment Report

FMFRP 4-34

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B05

HOURS: 7.00

TITLE: Wiring Harness Repair

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	2.00	8:1
PA	5.00	8:1

MEDIA: CPU

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.04.13)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, inspect wiring harnesses, in accordance with the references. (2147.04.13g)
2. Given applicable resources, conduct cable boot removal and installation, in accordance with the references. (2147.04.13h)
3. Given applicable resources, conduct the crimp type contact connector removal, repair and installation, in accordance with the references. (2147.04.13i)
4. Given applicable resources, repair wires using soldering iron, solder sleeve shield termination kit or inline splice, in accordance with the references. (2147.04.13j)
5. Given applicable resources, replace unserviceable connector pins, in accordance with the references. (2147.04.13k)
6. Given applicable resources, perform wire replacement using the wire pull method, in accordance with the references. (2147.04.13l)
7. Given applicable resources, perform wire replacement using the external replacement method, in accordance with the references. (2147.04.13m)
8. Given applicable resources, repair shielded / twisted wire pair cables, in accordance with the references. (2147.04.13n)
9. Given applicable resources, install heat shrink on repaired wires and cables, in accordance with the references. (2147.04.13o)
10. Given applicable resources, repair cable sockets using harness tape repair method, in accordance with the references. (2147.04.13p)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B05

HOURS: 7.00

TITLE: Wiring Harness Repair

11. Given applicable resources, install cable terminal lugs, in accordance with the references. (2147.04.13q)

REFERENCE

REFERENCE #

1. Intermediate Maintenance Light Armored Vehicle, LAV-25

TM 08594A-34/9

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B06

HOURS: 7.00

TITLE: Hose Fabrication

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	2.00	8:1
PA	5.00	8:1

MEDIA: CPU

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify types of hoses and fittings, in accordance with the references. (2147.03.15e)
2. Given applicable resources, inspect a hose to determine serviceability, in accordance with the references. (2147.03.15f)
3. Given applicable resources, manufacture a hose, in accordance with the references. (2147.03.15g)
4. Given applicable resources, install a hose to a fitting, in accordance with the references. (2147.03.15h)
5. Given applicable resources, pressure test a hose, in accordance with the references. (2147.03.15i)

REFERENCE

REFERENCE #

- | | |
|--|---------------|
| 1. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 2. Hose Assembly Fabrication Instruction for LAV and MEWSS | TI 8400-35/10 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B07

HOURS: 7.00

TITLE: Test Measurement and Diagnostic Equipment (TMDE)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	4.00	8:1
PA	3.00	8:1

MEDIA: CPU

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV hull (All Variants), in accordance with the references. (2147.04.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, utilize a multimeter, in accordance with the references. (2147.04.01m)
2. Given applicable resources, utilize a torque wrench, in accordance with the references. (2147.04.01n)
3. Given applicable resources, utilize a micrometer, in accordance with the references. (2147.04.01o)
4. Given applicable resources, utilize vernier calipers, in accordance with the references. (2147.04.01p)
5. Given applicable resources, utilize gages to perform pressure checks, in accordance with the references. (2147.04.01q)

REFERENCE

REFERENCE #

- | | |
|---|---------------|
| 1. MIMMS Field Procedures Manual | MCO P4790.2_ |
| 2. Calibration Requirements Marine Corps TMDE Calibration and Maintenance Program | TI 4733-15/1_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B08

HOURS: 7.00

TITLE: Hydraulics

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	7.00	8:1

MEDIA: CPU

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, explain hydraulic theory of operation, in accordance with the references. (2147.03.15l)
2. Given applicable resources, identify hydraulic principles, in accordance with the references. (2147.03.15m)
3. Given applicable resources, identify hydraulic symbols, in accordance with the references. (2147.03.15k)
4. Given applicable resources, identify hydraulic system components, in accordance with the references. (2147.03.15j)
5. Given applicable resources, identify classification types and operation of valves, in accordance with the references. (2147.03.15n)
6. Given applicable resources, analyze hydraulic schematics, in accordance with the references. (2147.03.15o)

REFERENCE

REFERENCE #

1. John Deere Hydraulic Reference Book

JOHN DEERE HYDRAULIC

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B09

HOURS: 7.00

TITLE: Electronics

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	7.00	8:1

MEDIA: CPU

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV hull (All Variants), in accordance with the references. (2147.04.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify electrical safety hazards, in accordance with the references. (2147.04.01e)
2. Given applicable resources, identify electrostatic discharge effects, in accordance with the references. (2147.04.01f)
3. Given applicable resources, identify the sources of electricity, in accordance with the references. (2147.04.01g)
4. Given applicable resources, define voltage (electrical pressure), in accordance with the references. (2147.04.01h)
5. Given applicable resources, define amperage (current flow), in accordance with the references. (2147.04.01i)
6. Given applicable resources, define resistance (opposition to electrical flow), in accordance with the references. (2147.04.01j)
7. Given applicable resources, explain relationships of voltage, current, and resistance (Ohm's Law), in accordance with the references. (2147.04.01k)
8. Given applicable resources, use metric terms to identify electrical measurements, in accordance with the references. (2147.04.01l)
9. Given applicable resources, interpret basic terms associated with electricity, in accordance with the references. (2147.04.01r)
10. Given applicable resources, explain the differences between insulators and conductors, in accordance with the references. (2147.04.01s)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B09

HOURS: 7.00

TITLE: Electronics

11. Given applicable resources, identify the characteristics of a simple circuit, in accordance with the references. (2147.04.01t)
12. Given applicable resources, identify the characteristics of a series circuit, in accordance with the references. (2147.04.01u)
13. Given applicable resources, measure voltage with a multimeter, in accordance with the references. (2147.04.01v)
14. Given applicable resources, measure resistance with a multimeter, in accordance with the references. (2147.04.01w)
15. Given applicable resources, measure continuity with a multimeter, in accordance with the references. (2147.04.01x)
16. Given applicable resources, measure current with a multimeter, in accordance with the references. (2147.04.01y)
17. Given applicable resources, identify electrical component characteristics (capacitors, diodes, transistors, LEDs, inductors, relays, fuses, circuit breakers, transformers, power supplies), in accordance with the references. (2147.04.01z)
18. Given applicable resources, identify characteristics of Direct Current (DC) versus Alternating Current (AC), in accordance with the references. (2147.04.01aa)
19. Given applicable resources, identify schematic symbols, in accordance with the references. (2147.04.01ab)
20. Given applicable resources, identify characteristics of a parallel circuit, in accordance with the references. (2147.04.01ac)
21. Given applicable resources, identify characteristics of a series-parallel circuit, in accordance with the references. (2147.04.01ad)
22. Given applicable resources, interpret schematic diagrams, in accordance with the references. (2147.04.01ae)
23. Given applicable resources, identify AC waveform types, in accordance with the references. (2147.04.01af)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B09

HOURS: 7.00

TITLE: Electronics

24. Given applicable resources, measure AC waveforms, in accordance with the references. (2147.04.01ag)
25. Given applicable resources, describe the difference between analog and digital signals, in accordance with the references. (2147.04.01ah)
26. Given applicable resources, perform electronic troubleshooting, in accordance with the references. (2147.04.01ai)
27. Given applicable resources, identify electric motor/generator functioning, in accordance with the references. (2147.04.01aj)
28. Given applicable resources, identify electrical relays/time delay circuits, in accordance with the references. (2147.04.01ak)

REFERENCE

REFERENCE #

1. John Deere Electric handbook

JOHN DEERE ELECTRIC

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

LESSON ID: 21470B10

HOURS: 1.50

TITLE: Corrosion Prevention and Control (CPAC)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	1.50	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify the four elements of corrosion, in accordance with the references. (2147.05.01ch)
2. Given applicable resources, identify five types of corrosion, in accordance with the references. (2147.05.01ci)
3. Given applicable resources, apply the corrosion prevention process, in accordance with the references. (2147.05.01cj)

REFERENCE

REFERENCE #

- | | |
|--|---------------|
| 1. Corrosion Prevention and Control (CPAC) Program | MCO 4790.18 |
| 2. Corrosion Control for Marine Corps Equipment | TM 3080-12 |
| 3. Ground Equipment Record Procedures Manual | TM 4700-15/1_ |
| 4. Organizational Corrosion Prevention and Control | TM 4795-12 |
| 5. Direct Support Corrosion Prevention and Control | TM 4795-34 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

EXAM ID: 21470B11

HOURS: 4.00

TITLE: B Annex JKT

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(W)	4.00	8:1

MEDIA: HO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)
2. Given applicable resources, maintain LAV-Recovery, in accordance with the references. (2147.03.22)
3. Given applicable resources, maintain LAV hull (All Variants), in accordance with the references. (2147.04.01)
4. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.04.13)
5. Given applicable resources, manage maintenance functional areas, in accordance with the references. (2147.05.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify types of hoses and fittings, in accordance with the references. (2147.03.15e)
2. Given applicable resources, inspect a hose to determine serviceability, in accordance with the references. (2147.03.15f)
3. Given applicable resources, manufacture a hose, in accordance with the references. (2147.03.15g)
4. Given applicable resources, install a hose to a fitting, in accordance with the references. (2147.03.15h)
5. Given applicable resources, pressure test a hose, in accordance with the references. (2147.03.15i)
6. Given applicable resources, identify hydraulic system components, in accordance with the references. (2147.03.15j)
7. Given applicable resources, identify hydraulic symbols, in accordance with the references. (2147.03.15k)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

EXAM ID: 21470B11

HOURS: 4.00

TITLE: B Annex JKT

8. Given applicable resources, explain hydraulic theory of operation, in accordance with the references. (2147.03.15l)
9. Given applicable resources, identify hydraulic principles, in accordance with the references. (2147.03.15m)
10. Given applicable resources, identify classification types and operation of valves, in accordance with the references. (2147.03.15n)
11. Given applicable resources, analyze hydraulic schematics, in accordance with the references. (2147.03.15o)
12. Given applicable resources, identify rigging and recovery references, in accordance with the references. (2147.03.22d)
13. Given applicable resources, identify recovery procedures, in accordance with the references. (2147.03.22e)
14. Given applicable resources, identify rigging procedures, in accordance with the references. (2147.03.22f)
15. Given applicable resources, identify rigging and recovery safety procedures, in accordance with the references. (2147.03.22g)
16. Given applicable resources, identify electrical safety hazards, in accordance with the references. (2147.04.01e)
17. Given applicable resources, identify electrostatic discharge effects, in accordance with the references. (2147.04.01f)
18. Given applicable resources, identify the sources of electricity, in accordance with the references. (2147.04.01g)
19. Given applicable resources, define voltage (electrical pressure), in accordance with the references. (2147.04.01h)
20. Given applicable resources, define amperage (current flow), in accordance with the references. (2147.04.01i)
21. Given applicable resources, define resistance (opposition to electrical flow), in

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

EXAM ID: 21470B11

HOURS: 4.00

TITLE: B Annex JKT

- accordance with the references. (2147.04.01j)
22. Given applicable resources, explain relationships of voltage, current, and resistance (Ohm's Law), in accordance with the references. (2147.04.01k)
 23. Given applicable resources, use metric terms to identify electrical measurements, in accordance with the references. (2147.04.01l)
 24. Given applicable resources, utilize a multimeter, in accordance with the references. (2147.04.01m)
 25. Given applicable resources, utilize a torque wrench, in accordance with the references. (2147.04.01n)
 26. Given applicable resources, utilize a micrometer, in accordance with the references. (2147.04.01o)
 27. Given applicable resources, utilize vernier calipers, in accordance with the references. (2147.04.01p)
 28. Given applicable resources, utilize gages to perform pressure checks, in accordance with the references. (2147.04.01q)
 29. Given applicable resources, interpret basic terms associated with electricity, in accordance with the references. (2147.04.01r)
 30. Given applicable resources, explain the differences between insulators and conductors, in accordance with the references. (2147.04.01s)
 31. Given applicable resources, identify the characteristics of a simple circuit, in accordance with the references. (2147.04.01t)
 32. Given applicable resources, identify the characteristics of a series circuit, in accordance with the references. (2147.04.01u)
 33. Given applicable resources, measure voltage with a multimeter, in accordance with the references. (2147.04.01v)
 34. Given applicable resources, measure resistance with a multimeter, in accordance with the references. (2147.04.01w)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

EXAM ID: 21470B11

HOURS: 4.00

TITLE: B Annex JKT

35. Given applicable resources, measure continuity with a multimeter, in accordance with the references. (2147.04.01x)
36. Given applicable resources, measure current with a multimeter, in accordance with the references. (2147.04.01y)
37. Given applicable resources, identify electrical component characteristics (capacitors, diodes, transistors, LEDs, inductors, relays, fuses, circuit breakers, transformers, power supplies), in accordance with the references. (2147.04.01z)
38. Given applicable resources, identify characteristics of Direct Current (DC) versus Alternating Current (AC), in accordance with the references. (2147.04.01aa)
39. Given applicable resources, identify schematic symbols, in accordance with the references. (2147.04.01ab)
40. Given applicable resources, identify characteristics of a parallel circuit, in accordance with the references. (2147.04.01ac)
41. Given applicable resources, identify characteristics of a series-parallel circuit, in accordance with the references. (2147.04.01ad)
42. Given applicable resources, interpret schematic diagrams, in accordance with the references. (2147.04.01ae)
43. Given applicable resources, identify AC waveform types, in accordance with the references. (2147.04.01af)
44. Given applicable resources, measure AC waveforms, in accordance with the references. (2147.04.01ag)
45. Given applicable resources, describe the difference between analog and digital signals, in accordance with the references. (2147.04.01ah)
46. Given applicable resources, perform electronic troubleshooting, in accordance with the references. (2147.04.01ai)
47. Given applicable resources, identify electric motor/generator functioning, in accordance with the references. (2147.04.01aj)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

EXAM ID: 21470B11

HOURS: 4.00

TITLE: B Annex JKT

48. Given applicable resources, identify electrical relays/time delay circuits, in accordance with the references. (2147.04.01ak)
49. Given applicable resources, inspect wiring harnesses, in accordance with the references. (2147.04.13g)
50. Given applicable resources, conduct cable boot removal and installation, in accordance with the references. (2147.04.13h)
51. Given applicable resources, identify the purpose of JOAP, in accordance with the references. (2147.05.01ca)
52. Given applicable resources, identify sampling methods, in accordance with the references. (2147.05.01cb)
53. Given applicable resources, identify sampling intervals, in accordance with the references. (2147.05.01cc)
54. Given applicable resources, complete sampling forms and documents, in accordance with the references. (2147.05.01cd)
55. Given applicable resources, identify unit responsibilities, in accordance with the references. (2147.05.01ce)
56. Given applicable resources, conduct an analysis, in accordance with the references. (2147.05.01cf)
57. Given applicable resources, identify program management offices, in accordance with the references. (2147.05.01cg)
58. Given applicable resources, identify the four elements of corrosion, in accordance with the references. (2147.05.01ch)
59. Given applicable resources, identify five types of corrosion, in accordance with the references. (2147.05.01ci)
60. Given applicable resources, apply the corrosion prevention process, in accordance with the references. (2147.05.01cj)
61. Given applicable resources, identify the purpose of the TI, in accordance with the

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

EXAM ID: 21470B11

HOURS: 4.00

TITLE: B Annex JKT

- references. (2147.05.01ck)
62. Given applicable resources, identify information of the TI, in accordance with the references. (2147.05.01cl)
63. Given applicable resources, explain deadline determination procedures of the TI, in accordance with the references. (2147.05.01cm)
64. Given applicable resources, utilize the glossary to assist in deadline determination procedures of the TI, in accordance with the references. (2147.05.01cn)
65. Given applicable resources, define Battlefield Damage and Repair (BDAR), in accordance with the references. (2147.05.01co)
66. Given applicable resources, identify the basic rules of Battlefield Damage and Repair (BDAR), in accordance with the references. (2147.05.01cp)
67. Given applicable resources, identify the maintenance procedures for BDAR, in accordance with the references. (2147.05.01cq)
68. Given applicable resources, identify BDAR assessment and repair forms, in accordance with the references. (2147.05.01cr)

REFERENCE

REFERENCE #

- | | |
|--|----------------------|
| 1. Battle Field Damage Assessment Report | FMPRP 4-34 |
| 2. John Deere Electric handbook | JOHN DEERE ELECTRIC |
| 3. John Deere Hydraulic Reference Book | JOHN DEERE HYDRAULIC |
| 4. Joint Oil Analysis Program | MCO 4731.1_ |
| 5. Corrosion Prevention and Control (CPAC) Program | MCO 4790.18 |
| 6. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 7. US Marine Corps Joint Oil Analysis Program | TI 4731-14/1C |
| 8. Hose Assembly Fabrication Instruction for LAV and MEWSS | TI 8400-35/10 |
| 9. Not Mission Capable (Deadline) Criteria M1A1 Tank | TI-08953A-15/4 |
| 10. Not Mission Capable (Deadline) Criteria LAV Family of | TI-2320-15/55_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX B - ADVANCED MECHANICAL KNOWLEDGE AND SKILLS

EXAM ID: 21470B11

HOURS: 4.00

TITLE: B Annex JKT

Vehicles

- | | |
|--|----------------|
| 11. Intermediate Maintenance Light Armored Vehicle, LAV-25 | TM 08594A-34/9 |
| 12. Corrosion Control for Marine Corps Equipment | TM 3080-12 |
| 13. Ground Equipment Record Procedures Manual | TM 4700-15/1_ |
| 14. Organizational Corrosion Prevention and Control | TM 4795-12 |
| 15. Direct Support Corrosion Prevention and Control | TM 4795-34 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX C - GENERAL PURPOSE INTERFACE ASSEMBLY (GPIA)

LESSON ID: 2147TC01

HOURS: 7.00

TITLE: General Purpose Interface Assembly

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	4.00	8:1
PA	3.00	8:1

MEDIA: GPIA, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify components and component function of the General Purpose Interface Assembly (GPIA), in accordance with the references. (2147.03.15p)
2. Given applicable resources, set up GPIA and perform self-tests, in accordance with the references. (2147.03.15q)
3. Given applicable resources, diagnose/isolate General Purpose Interface Assembly (GPIA) malfunctions, in accordance with the references. (2147.03.15r)
4. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) of the General Purpose Interface Assembly (GPIA), in accordance with the references. (2147.03.15s)
5. Given applicable resources, utilize the General Purpose Interface Assembly (GPIA) to diagnose LAV electronic component malfunctions, in accordance with the references. (2147.03.15t)
6. Given applicable resources, troubleshoot GPIA malfunctions, in accordance with the references. (2147.03.15u)
7. Given applicable resources, repair GPIA malfunctions, in accordance with the references. (2147.03.15v)

REFERENCE

REFERENCE #

- | | |
|--|------------------|
| 1. GPIA-LAV Electronic System Test Set | TM 10262A-14&P/1 |
| 2. GPIA-LAV Electronic System Test Set | TM 10262A-14/2 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD01

HOURS: 28.00

TITLE: LAV-AT Electrical System

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	10.00	8:1
PA	18.00	8:1

MEDIA: CPU, ES, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-AT turret fire control electronics, in accordance with the references. (2147.03.20)
2. Given applicable resources, maintain LAV-AT turret controls and indicators, in accordance with the references. (2147.03.27)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify LAV-AT turret fire control electrical components and characteristics, in accordance with the references. (2147.03.20a)
2. Given applicable resources, identify LAV-AT turret fire control electrical system theory of operation, in accordance with the references. (2147.03.20b)
3. Given applicable resources, identify LAV-AT turret fire control electrical system path of flow, in accordance with the references. (2147.03.20d)
4. Given applicable resources, perform erection arm microswitch adjustments, in accordance with the references. (2147.03.20g)
5. Given applicable resources, perform coupola microswitch adjustments, in accordance with the references. (2147.03.20h)
6. Given applicable resources, perform LAV-AT turret azimuth switch adjustments, in accordance with the references. (2147.03.20i)
7. Given applicable resources, perform LAV-AT turret gunner's hatch proximity switch adjustments, in accordance with the references. (2147.03.20j)
8. Given applicable resources, perform Quality Control (QC) inspections of the LAV-AT turret fire control electronics, in accordance with the references. (2147.03.20k)
9. Given applicable resources, identify LAV-AT turret indicators, in accordance with the references. (2147.03.27b)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD01

HOURS: 28.00

TITLE: LAV-AT Electrical System

10. Given applicable resources, identify LAV-AT turret indicator purposes, in accordance with the references. (2147.03.27d)
11. Given applicable resources, diagnose LAV-AT electrical failures, in accordance with the references. (2147.03.27g)
12. Given applicable resources, isolate electrical faults, in accordance with the references. (2147.03.27h)
13. Given applicable resources, repair electrical faults, in accordance with the references. (2147.03.27i)
14. Given applicable resources, conduct operations checks of turret functions, in accordance with the references. (2147.03.27j)

REFERENCE

REFERENCE #

- | | |
|--|-----------------|
| 1. Stocklist, Repair Parts, LAV-Anti Tank | SL-4 08652A |
| 2. Operator's Manual Light Armored Vehicle Anti-Tank Turret | TM 08652A-10/1_ |
| 3. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/3_ |
| 4. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/4_ |
| 5. Intermediate Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-34/5_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD02

HOURS: 14.50

TITLE: LAV-AT Hydraulic System

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	5.00	8:1
PA	9.50	8:1

MEDIA: CPU, HS, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-AT turret fire control hydraulics, in accordance with the references. (2147.03.19)
2. Given applicable resources, maintain LAV-AT turret assembly, in accordance with the references. (2147.04.16)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify LAV-AT turret fire control hydraulics components and characteristics, in accordance with the references. (2147.03.19a)
2. Given applicable resources, identify theory of operation of LAV-AT turret fire control hydraulic system, in accordance with the references. (2147.03.19b)
3. Given applicable resources, identify LAV-AT turret fire control hydraulic system schematics/schematic symbols, in accordance with the references. (2147.03.19c)
4. Given applicable resources, identify the path of flow of the LAV-AT turret fire control hydraulic system, in accordance with the references. (2147.03.19d)
5. Given applicable resources, conduct bleed down procedures, in accordance with the references. (2147.03.19h)
6. Given applicable resources, diagnose hydraulic failures, in accordance with the references. (2147.03.19i)
7. Given applicable resources, isolate hydraulic faults, in accordance with the references. (2147.03.19j)
8. Given applicable resources, repair hydraulic faults, in accordance with the references. (2147.03.19k)
9. Given applicable resources, conduct operations checks of turret functions, in accordance with the references. (2147.03.19l)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD02

HOURS: 14.50

TITLE: LAV-AT Hydraulic System

10. Given applicable resources, perform the mechanical adjustment of the deceleration linkage, in accordance with the references. (2147.04.16c)

REFERENCE

REFERENCE #

- | | |
|--|-----------------|
| 1. Stocklist, Repair Parts, LAV-Anti Tank | SL-4 08652A |
| 2. Operator's Manual Light Armored Vehicle Anti-Tank Turret | TM 08652A-10/1_ |
| 3. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/3_ |
| 4. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/4_ |
| 5. Intermediate Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-34/5_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD03

HOURS: 10.50

TITLE: LAV-AT Mechanical Systems

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	4.00	8:1
PA	6.50	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-AT turret assembly, in accordance with the references. (2147.03.18)
2. Given applicable resources, maintain LAV-AT turret controls and indicators, in accordance with the references. (2147.03.27)
3. Given applicable resources, maintain LAV-AT turret assembly, in accordance with the references. (2147.04.16)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify LAV-AT turret assembly components and characteristics, in accordance with the references. (2147.03.18a)
2. Given applicable resources, identify the theory of operation of LAV-AT turret assembly, in accordance with the references. (2147.03.18b)
3. Given applicable resources, diagnose/isolate LAV-AT turret assembly malfunctions, in accordance with the references. (2147.03.18c)
4. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) on the LAV-AT turret assembly, in accordance with the references. (2147.03.18e)
5. Given applicable resources, identify LAV-AT turret controls, in accordance with the references. (2147.03.27a)
6. Given applicable resources, identify the LAV-AT turret controls concept of operations, in accordance with the references. (2147.03.27c)
7. Given applicable resources, identify LAV-AT turret assembly special tools, in accordance with the references. (2147.04.16a)
8. Given applicable resources, perform LAV-AT turret assembly operational checks, in accordance with the references. (2147.04.16b)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD03

HOURS: 10.50

TITLE: LAV-AT Mechanical Systems

9. Given applicable resources, perform the mechanical adjustments of the drive chains, in accordance with the references. (2147.04.16d)
10. Given applicable resources, diagnose mechanical failures, in accordance with the references. (2147.04.16e)
11. Given applicable resources, isolate mechanical faults, in accordance with the references. (2147.04.16f)
12. Given applicable resources, repair mechanical faults, in accordance with the references. (2147.04.16g)
13. Given applicable resources, perform LAV-AT turret assembly Quality Control (QC) procedures, in accordance with the references. (2147.04.16h)

REFERENCE

REFERENCE #

- | | |
|--|-----------------|
| 1. Stocklist, Repair Parts, LAV-Anti Tank | SL-4 08652A |
| 2. Operator's Manual Light Armored Vehicle Anti-Tank Turret | TM 08652A-10/1_ |
| 3. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/3_ |
| 4. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/4_ |
| 5. Intermediate Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-34/5_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD04

HOURS: 7.00

TITLE: LAV-AT Preventive Maintenance Checks and Services (PMCS)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
PA	7.00	8:1

MEDIA: AIO, GMTB

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-AT turret fire control hydraulics, in accordance with the references. (2147.03.19)
2. Given applicable resources, maintain LAV-AT turret fire control electronics, in accordance with the references. (2147.03.20)
3. Given applicable resources, maintain LAV-AT turret controls and indicators, in accordance with the references. (2147.03.27)
4. Given applicable resources, convert LAV-AT turret stow and low stow, in accordance with the references. (2147.03.28)
5. Given applicable resources, maintain LAV-AT turret fire control hydraulics, in accordance with the references. (2147.04.17)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, diagnose/isolate LAV-AT turret fire control hydraulic malfunctions, in accordance with the references. (2147.03.19e)
2. Given applicable resources, diagnose/isolate LAV-AT turret fire control electrical system malfunctions, in accordance with the references. (2147.03.20e)
3. Given applicable resources, diagnose/isolate LAV-AT turret indicator/control malfunctions, in accordance with the references. (2147.03.27e)
4. Given applicable resources, perform LAV-AT turret indicator/control operation checks, in accordance with the references. (2147.03.27f)
5. Given applicable resources, state the purpose for converting the Anti-Tank turret to stow and low stow, in accordance with the references. (2147.03.28a)
6. Given applicable resources, identify the procedures for converting Anti-Tank turret to stow and low stow, in accordance with the references. (2147.03.28b)
7. Given applicable resources, perform the procedures for converting Anti-Tank turret to stow and low stow, in accordance with the references. (2147.03.28c)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

LESSON ID: 2147TD04

HOURS: 7.00

TITLE: LAV-AT Preventive Maintenance Checks and Services (PMCS)

8. Given applicable resources, perform the hydraulic adjustment of the deceleration linkage, in accordance with the references. (2147.04.17a)
9. Given applicable resources, perform bleed down procedures of the LAV-AT turret fire control hydraulics, in accordance with the references. (2147.04.17b)
10. Given applicable resources, identify LAV-AT turret fire control hydraulic lock operational checks, in accordance with the references. (2147.04.17c)
11. Given applicable resources, perform Quality Control (QC) inspections of the LAV-AT turret fire control hydraulic system, in accordance with the references. (2147.04.17d)
12. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) of the LAV-AT fire control hydraulics, in accordance with the references. (2147.03.19f)

REFERENCE

REFERENCE #

- | | |
|--|-----------------|
| 1. Stocklist, Repair Parts, LAV-Anti Tank | SL-4 08652A |
| 2. Operator's Manual Light Armored Vehicle Anti-Tank Turret | TM 08652A-10/1_ |
| 3. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/3_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

EXAM ID: 2147TD05

HOURS: 3.50

TITLE: LAV-AT (JKT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(W)	3.50	8:1

MEDIA: ES, HS

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-AT turret assembly, in accordance with the references. (2147.03.18)
2. Given applicable resources, maintain LAV-AT turret fire control hydraulics, in accordance with the references. (2147.03.19)
3. Given applicable resources, maintain LAV-AT turret fire control electronics, in accordance with the references. (2147.03.20)
4. Given applicable resources, maintain LAV-AT turret controls and indicators, in accordance with the references. (2147.03.27)
5. Given applicable resources, convert LAV-AT turret stow and low stow, in accordance with the references. (2147.03.28)
6. Given applicable resources, maintain LAV-AT turret assembly, in accordance with the references. (2147.04.16)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify LAV-AT turret assembly components and characteristics, in accordance with the references. (2147.03.18a)
2. Given applicable resources, identify the theory of operation of LAV-AT turret assembly, in accordance with the references. (2147.03.18b)
3. Given applicable resources, identify LAV-AT turret fire control hydraulics components and characteristics, in accordance with the references. (2147.03.19a)
4. Given applicable resources, identify theory of operation of LAV-AT turret fire control hydraulic system, in accordance with the references. (2147.03.19b)
5. Given applicable resources, identify LAV-AT turret fire control hydraulic system schematics/schematic symbols, in accordance with the references. (2147.03.19c)
6. Given applicable resources, identify the path of flow of the LAV-AT turret fire control hydraulic system, in accordance with the references. (2147.03.19d)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

EXAM ID: 2147TD05

HOURS: 3.50

TITLE: LAV-AT (JKT)

7. Given applicable resources, identify LAV-AT turret fire control electrical components and characteristics, in accordance with the references. (2147.03.20a)
8. Given applicable resources, identify LAV-AT turret fire control electrical system theory of operation, in accordance with the references. (2147.03.20b)
9. Given applicable resources, identify LAV-AT turret fire control electronics schematics/schematic symbols, in accordance with the references. (2147.03.20c)
10. Given applicable resources, identify LAV-AT turret fire control electrical system path of flow, in accordance with the references. (2147.03.20d)
11. Given applicable resources, identify LAV-AT turret controls, in accordance with the references. (2147.03.27a)
12. Given applicable resources, identify LAV-AT turret indicators, in accordance with the references. (2147.03.27b)
13. Given applicable resources, identify the LAV-AT turret controls concept of operations, in accordance with the references. (2147.03.27c)
14. Given applicable resources, identify LAV-AT turret indicator purposes, in accordance with the references. (2147.03.27d)
15. Given applicable resources, state the purpose for converting the Anti-Tank turret to stow and low stow, in accordance with the references. (2147.03.28a)
16. Given applicable resources, identify the procedures for converting Anti-Tank turret to stow and low stow, in accordance with the references. (2147.03.28b)
17. Given applicable resources, identify LAV-AT turret assembly special tools, in accordance with the references. (2147.04.16a)

REFERENCE

REFERENCE #

- | | |
|--|-----------------|
| 1. Stocklist, Repair Parts, LAV-Anti Tank | SL-4 08652A |
| 2. Operator's Manual Light Armored Vehicle Anti-Tank Turret | TM 08652A-10/1_ |
| 3. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/3_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

EXAM ID: 2147TD05

HOURS: 3.50

TITLE: LAV-AT (JKT)

4. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret TM 08652A-20/4_
5. Intermediate Maintenance Light Armored Vehicle Anti-Tank Turret TM 08652A-34/5_

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

EXAM ID: 2147TD06

HOURS: 3.50

TITLE: LAV-AT (JPT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(P)	3.50	8:1

MEDIA: AIO, ES, GMTB, HS

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-AT turret assembly, in accordance with the references. (2147.03.18)
2. Given applicable resources, maintain LAV-AT turret fire control hydraulics, in accordance with the references. (2147.03.19)
3. Given applicable resources, maintain LAV-AT turret fire control electronics, in accordance with the references. (2147.03.20)
4. Given applicable resources, maintain LAV-AT turret controls and indicators, in accordance with the references. (2147.03.27)
5. Given applicable resources, maintain LAV-AT turret assembly, in accordance with the references. (2147.04.16)
6. Given applicable resources, maintain LAV-AT turret fire control hydraulics, in accordance with the references. (2147.04.17)
7. Given applicable resources, convert LAV-AT turret stow and low stow, in accordance with the references. (2147.03.28)
8. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, diagnose/isolate LAV-AT turret assembly malfunctions, in accordance with the references. (2147.03.18c)
2. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) on the LAV-AT turret assembly, in accordance with the references. (2147.03.18e)
3. Given applicable resources, diagnose/isolate LAV-AT turret fire control hydraulic malfunctions, in accordance with the references. (2147.03.19e)
4. Given applicable resources, diagnose/isolate LAV-AT turret fire control electrical system malfunctions, in accordance with the references. (2147.03.20e)
5. Given applicable resources, diagnose/isolate LAV-AT turret indicator/control

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

EXAM ID: 2147TD06

HOURS: 3.50

TITLE: LAV-AT (JPT)

malfunctions, in accordance with the references. (2147.03.27e)

6. Given applicable resources, perform LAV-AT turret indicator/control operation checks, in accordance with the references. (2147.03.27f)
7. Given applicable resources, perform LAV-AT turret assembly operational checks, in accordance with the references. (2147.04.16b)
8. Given applicable resources, perform the mechanical adjustment of the deceleration linkage, in accordance with the references. (2147.04.16c)
9. Given applicable resources, perform the mechanical adjustments of the drive chains, in accordance with the references. (2147.04.16d)
10. Given applicable resources, diagnose mechanical failures, in accordance with the references. (2147.04.16e)
11. Given applicable resources, isolate mechanical faults, in accordance with the references. (2147.04.16f)
12. Given applicable resources, perform LAV-AT turret assembly Quality Control (QC) procedures, in accordance with the references. (2147.04.16h)
13. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) of the LAV-AT fire control hydraulics, in accordance with the references. (2147.03.19f)
14. Given applicable resources, perform the procedures for converting Anti-Tank turret to stow and low stow, in accordance with the references. (2147.03.28c)
15. Given applicable resources, perform erection arm microswitch adjustments, in accordance with the references. (2147.03.20g)
16. Given applicable resources, perform coupola microswitch adjustments, in accordance with the references. (2147.03.20h)
17. Given applicable resources, perform LAV-AT turret azimuth switch adjustments, in accordance with the references. (2147.03.20i)
18. Given applicable resources, perform LAV-AT turret gunner's hatch proximity switch

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

EXAM ID: 2147TD06

HOURS: 3.50

TITLE: LAV-AT (JPT)

adjustments, in accordance with the references. (2147.03.20j)

19. Given applicable resources, perform Quality Control (QC) inspections of the LAV-AT turret fire control electronics, in accordance with the references. (2147.03.20k)
20. Given applicable resources, diagnose LAV-AT electrical failures, in accordance with the references. (2147.03.27g)
21. Given applicable resources, isolate electrical faults, in accordance with the references. (2147.03.27h)
22. Given applicable resources, repair electrical faults, in accordance with the references. (2147.03.27i)
23. Given applicable resources, conduct operations checks of turret functions, in accordance with the references. (2147.03.27j)
24. Given applicable resources, set up GPIA and perform self-tests, in accordance with the references. (2147.03.15q)
25. Given applicable resources, diagnose/isolate General Purpose Interface Assembly (GPIA) malfunctions, in accordance with the references. (2147.03.15r)
26. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) of the General Purpose Interface Assembly (GPIA), in accordance with the references. (2147.03.15s)
27. Given applicable resources, utilize the General Purpose Interface Assembly (GPIA) to diagnose LAV electronic component malfunctions, in accordance with the references. (2147.03.15t)
28. Given applicable resources, troubleshoot GPIA malfunctions, in accordance with the references. (2147.03.15u)
29. Given applicable resources, repair GPIA malfunctions, in accordance with the references. (2147.03.15v)

REFERENCE

REFERENCE #

1. Stocklist, Repair Parts, LAV-Anti Tank

SL-4 08652A

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX D - LAV-AT TURRET MAINTENANCE

EXAM ID: 2147TD06

HOURS: 3.50

TITLE: LAV-AT (JPT)

- | | |
|--|-----------------|
| 2. Operator's Manual Light Armored Vehicle Anti-Tank Turret | TM 08652A-10/1_ |
| 3. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/3_ |
| 4. Organizational Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-20/4_ |
| 5. Intermediate Maintenance Light Armored Vehicle Anti-Tank Turret | TM 08652A-34/5_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

LESSON ID: 2147TE01

HOURS: 14.00

TITLE: LAV-25 Electrical System

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	4.50	8:1
PA	9.50	8:1

MEDIA: CPU, ES, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret fire control electronics, in accordance with the references. (2147.03.17)
2. Given applicable resources, maintain LAV-25 fire control electronics, in accordance with the references. (2147.04.15)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify LAV-25 turret fire control electronic components and characteristics, in accordance with the references. (2147.03.17a)
2. Given applicable resources, explain the theory of operation of LAV-25 turret electrical and electronic system, in accordance with the references. (2147.03.17b)
3. Given applicable resources, analyze LAV-25 turret and hull inhibitor switches schematics/schematic symbols, in accordance with the references. (2147.03.17c)
4. Given applicable resources, explain the path of flow of the LAV-25 turret electrical and electronic systems, in accordance with the references. (2147.03.17d)
5. Given applicable resources, identify procedures for removal, repair, and replacement of the Power Distribution Assembly (PDA), in accordance with the references. (2147.04.15a)
6. Given applicable resources, identify procedures for removal, repair, and replacement of the Control Display Assembly (CDA), in accordance with the references. (2147.04.15b)
7. Given applicable resources, identify procedures for removal, repair, and replacement of the Gun Control Assembly (GCA), in accordance with the references. (2147.04.15c)
8. Given applicable resources, perform Quality Control (QC) inspections of LAV-25 turret fire control electronics, in accordance with the references. (2147.04.15d)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

LESSON ID: 2147TE01

HOURS: 14.00

TITLE: LAV-25 Electrical System

9. Given applicable resources, check, adjust and replace fire control inhibitor switches, in accordance with the references. (2147.04.15e)

10. Given applicable resources, diagnose, fault isolate and repair turret stabilization gyros, in accordance with the references. (2147.04.15f)

REFERENCE

REFERENCE #

- | | |
|---|------------------|
| 1. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 2. Light Armored Vehicle (LAV)-25 Turret | TM 08594-34/8 |
| 3. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 4. Organizational Maintenance Light Armored Vehicle LAV-25 Turret | TM 08594A-20/3_ |
| 5. GPIA-LAV Electronic System Test Set | TM 10262A-14&P/1 |
| 6. GPIA-LAV Electronic System Test Set | TM 10262A-14/2 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

LESSON ID: 2147TE02

HOURS: 7.00

TITLE: LAV-25 Hydraulic System

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	3.50	8:1
PA	3.50	8:1

MEDIA: CPU, HS, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret fire control hydraulics, in accordance with the references. (2147.03.16)
2. Given applicable resources, maintain LAV-25 turret fire control hydraulics, in accordance with the references. (2147.04.14)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify LAV-25 turret fire control hydraulic components and characteristics, in accordance with the references. (2147.03.16a)
2. Given applicable resources, explain the theory of operation of LAV-25 turret fire control hydraulic system, in accordance with the references. (2147.03.16b)
3. Given applicable resources, analyze LAV-25 turret fire control hydraulic schematics/schematic symbols, in accordance with the references. (2147.03.16c)
4. Given applicable resources, analyze the path of flow of the LAV-25 turret fire control hydraulic system, in accordance with the references. (2147.03.16d)
5. Given applicable resources, explain the electrical over hydraulic principle of operation, in accordance with the references. (2147.04.14a)
6. Given applicable resources, perform system bleed down procedures, in accordance with the references. (2147.04.14b)
7. Given applicable resources, adjust servo valves to correct drift, in accordance with the references. (2147.04.14c)
8. Given applicable resources, perform procedures for the removal of the elevation actuator, in accordance with the references. (2147.04.14d)

REFERENCE

1. Lubrication Instructions, LAV-25 Turret

REFERENCE #

LI 08594A-12-1A

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

LESSON ID: 2147TE02

HOURS: 7.00

TITLE: LAV-25 Hydraulic System

- | | |
|--|-----------------|
| 2. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 3. Light Armored Vehicle (LAV)-25 Turret | TM 08594-34/8 |
| 4. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 5. Organizational Maintenance Light Armored Vehicle LAV-25
Turret | TM 08594A-20/3_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

LESSON ID: 2147TE03

HOURS: 7.00

TITLE: LAV-25 Mechanical Systems

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	3.50	8:1
PA	3.50	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)
2. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.04.13)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify mechanical components and characteristics of the LAV-25 turret assembly, in accordance with the references. (2147.03.15a)
2. Given applicable resources, explain theory of operation of LAV-25 turret assembly mechanical components, in accordance with the references. (2147.03.15b)
3. Given applicable resources, explain the hydraulic over mechanical principle of operation, in accordance with the references. (2147.03.15c)
4. Given applicable resources, explain the mechanical over-ride systems, in accordance with the references. (2147.03.15d)
5. Given applicable resources, adjust the traverse drive gear mesh, in accordance with the references. (2147.04.13a)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Lubrication Instructions, LAV-25 Turret | LI 08594A-12-1A |
| 2. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 3. Light Armored Vehicle (LAV)-25 Turret | TM 08594-34/8 |
| 4. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 5. Organizational Maintenance Light Armored Vehicle LAV-25 Turret | TM 08594A-20/3_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

LESSON ID: 2147TE04

HOURS: 7.00

TITLE: LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
PA	7.00	8:1

MEDIA: AIO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret fire control hydraulics, in accordance with the references. (2147.03.16)
2. Given applicable resources, maintain LAV-25 turret fire control electronics, in accordance with the references. (2147.03.17)
3. Given applicable resources, maintain LAV hull (All Variants), in accordance with the references. (2147.04.01)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform function check of the LAV-25 turret, in accordance with the references. (2147.03.16e)
2. Given applicable resources, perform Limited Technical Inspection (LTI), in accordance with the references. (2147.04.01b)
3. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) of the LAV-25, in accordance with the references. (2147.03.16f)
4. Given applicable resources, utilize the General Purpose Interface Assembly (GPIA) to isolate turret faults to the component level, in accordance with the references. (2147.03.17e)
5. Given applicable resources, bench test electronic components utilizing the GPIA to diagnose failures, in accordance with the references. (2147.03.17f)
6. Given applicable resources, diagnose/isolate the fault and repair the turret stabilization system failures, in accordance with the references. (2147.03.17g)
7. Given applicable resources, diagnose/isolate the fault and repair the turret traversing system failures, in accordance with the references. (2147.03.17h)
8. Given applicable resources, diagnose/isolate the fault and repair the turret elevation system failures, in accordance with the references. (2147.03.17i)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

LESSON ID: 2147TE04

HOURS: 7.00

TITLE: LAV-25 Preventive Maintenance Checks and Services (PMCS)/Troubleshoot

9. Given applicable resources, identify, remove, repair, replace unserviceable parts or components, in accordance with the references. (2147.04.01d)

10. Given applicable resources, diagnose/isolate the fault and repair/replace wiring cable failures, in accordance with the references. (2147.03.17j)

11. Given applicable resources, perform turret assembly Quality Control (QC) procedures, in accordance with the references. (2147.03.17k)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Lubrication Instructions, LAV-25 Turret | LI 08594A-12-1A |
| 2. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 3. Organizational Maintenance Light Armored Vehicle LAV-25 Turret | TM 08594A-20/3_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

EXAM ID: 2147TE05

HOURS: 3.50

TITLE: LAV-25 (JKT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(W)	3.50	8:1

MEDIA: AIO, ES, GMTB, HS

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)
2. Given applicable resources, maintain LAV-25 turret fire control hydraulics, in accordance with the references. (2147.03.16)
3. Given applicable resources, maintain LAV-25 turret fire control electronics, in accordance with the references. (2147.03.17)
4. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.04.13)
5. Given applicable resources, maintain LAV-25 fire control electronics, in accordance with the references. (2147.04.15)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify mechanical components and characteristics of the LAV-25 turret assembly, in accordance with the references. (2147.03.15a)
2. Given applicable resources, explain theory of operation of LAV-25 turret assembly mechanical components, in accordance with the references. (2147.03.15b)
3. Given applicable resources, identify LAV-25 turret fire control hydraulic components and characteristics, in accordance with the references. (2147.03.16a)
4. Given applicable resources, explain the theory of operation of LAV-25 turret fire control hydraulic system, in accordance with the references. (2147.03.16b)
5. Given applicable resources, analyze LAV-25 turret fire control hydraulic schematics/schematic symbols, in accordance with the references. (2147.03.16c)
6. Given applicable resources, analyze the path of flow of the LAV-25 turret fire control hydraulic system, in accordance with the references. (2147.03.16d)
7. Given applicable resources, identify LAV-25 turret fire control electronic components and characteristics, in accordance with the references. (2147.03.17a)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

EXAM ID: 2147TE05

HOURS: 3.50

TITLE: LAV-25 (JKT)

8. Given applicable resources, explain the theory of operation of LAV-25 turret electrical and electronic system, in accordance with the references. (2147.03.17b)
9. Given applicable resources, analyze LAV-25 turret and hull inhibitor switches schematics/schematic symbols, in accordance with the references. (2147.03.17c)
10. Given applicable resources, explain the path of flow of the LAV-25 turret electrical and electronic systems, in accordance with the references. (2147.03.17d)
11. Given applicable resources, adjust the traverse drive gear mesh, in accordance with the references. (2147.04.13a)
12. Given applicable resources, identify procedures for removal, repair, and replacement of the Power Distribution Assembly (PDA), in accordance with the references. (2147.04.15a)
13. Given applicable resources, identify procedures for removal, repair, and replacement of the Control Display Assembly (CDA), in accordance with the references. (2147.04.15b)
14. Given applicable resources, identify procedures for removal, repair, and replacement of the Gun Control Assembly (GCA), in accordance with the references. (2147.04.15c)
15. Given applicable resources, identify components and component function of the General Purpose Interface Assembly (GPIA), in accordance with the references. (2147.03.15p)
16. Given applicable resources, set up GPIA and perform self-tests, in accordance with the references. (2147.03.15q)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Lubrication Instructions, LAV-25 Turret | LI 08594A-12-1A |
| 2. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 3. Light Armored Vehicle (LAV)-25 Turret | TM 08594-34/8 |
| 4. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 5. Organizational Maintenance Light Armored Vehicle LAV-25 Turret | TM 08594A-20/3_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

EXAM ID: 2147TE05

HOURS: 3.50

TITLE: LAV-25 (JKT)

6. GPIA-LAV Electronic System Test Set

TM 10262A-14/2

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

EXAM ID: 2147TE06

HOURS: 3.50

TITLE: LAV-25 (JPT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(P)	3.50	8:1

MEDIA: AIO, ES, GMTB, HS

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.03.15)
2. Given applicable resources, maintain LAV-25 turret fire control hydraulics, in accordance with the references. (2147.03.16)
3. Given applicable resources, maintain LAV-25 turret fire control electronics, in accordance with the references. (2147.03.17)
4. Given applicable resources, maintain LAV hull (All Variants), in accordance with the references. (2147.04.01)
5. Given applicable resources, maintain LAV-25 turret fire control hydraulics, in accordance with the references. (2147.04.14)
6. Given applicable resources, maintain LAV-25 fire control electronics, in accordance with the references. (2147.04.15)
7. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.04.13)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, explain the hydraulic over mechanical principle of operation, in accordance with the references. (2147.03.15c)
2. Given applicable resources, explain the mechanical over-ride systems, in accordance with the references. (2147.03.15d)
3. Given applicable resources, perform function check of the LAV-25 turret, in accordance with the references. (2147.03.16e)
4. Given applicable resources, perform Limited Technical Inspection (LTI), in accordance with the references. (2147.04.01b)
5. Given applicable resources, identify, remove, repair, replace unserviceable parts or components, in accordance with the references. (2147.04.01d)
6. Given applicable resources, perform Quality Control (QC) inspections of LAV-25

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX E - LAV-25 TURRET MAINTENANCE

EXAM ID: 2147TE06

HOURS: 3.50

TITLE: LAV-25 (JPT)

turret fire control electronics, in accordance with the references. (2147.04.15d)

7. Given applicable resources, check, adjust and replace fire control inhibitor switches, in accordance with the references. (2147.04.15e)
8. Given applicable resources, diagnose, fault isolate and repair turret stabilization gyros, in accordance with the references. (2147.04.15f)
9. Given applicable resources, diagnose/isolate General Purpose Interface Assembly (GPIA) malfunctions, in accordance with the references. (2147.03.15r)
10. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) of the General Purpose Interface Assembly (GPIA), in accordance with the references. (2147.03.15s)
11. Given applicable resources, utilize the General Purpose Interface Assembly (GPIA) to diagnose LAV electronic component malfunctions, in accordance with the references. (2147.03.15t)
12. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS) of the LAV-25, in accordance with the references. (2147.03.16f)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Lubrication Instructions, LAV-25 Turret | LI 08594A-12-1A |
| 2. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 3. Light Armored Vehicle (LAV)-25 Turret | TM 08594-34/8 |
| 4. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 5. Organizational Maintenance Light Armored Vehicle LAV-25 Turret | TM 08594A-20/3_ |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX F - M242 MAIN CHAINGUN MAINTENANCE

LESSON ID: 2147TF01

HOURS: 14.00

TITLE: Description and Theory of Operation of the M242 Chain Gun

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	14.00	8:1

MEDIA: CPU, HO, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain M242 25mm automatic chain gun, in accordance with the references. (2147.04.23)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify location and description of major components of the M242 25mm Automatic Chain Gun, in accordance with the references. (2147.04.23a)
2. Given applicable resources, identify M242 25mm Automatic Chain Gun theory of operation, in accordance with the references. (2147.04.23b)
3. Given applicable resources, perform electrical check out procedures, in accordance with the references. (2147.04.23c)
4. Given applicable resources, perform automatic gun feeder electrical/manual cycle checks, in accordance with the references. (2147.04.23d)
5. Given applicable resources, perform automatic gun receiver manual cycle checks, in accordance with the references. (2147.04.23e)
6. Given applicable resources, perform automatic gun cycle/firing malfunction troubleshooting, in accordance with the references. (2147.04.23f)
7. Given applicable resources, explain the theory of operation of the receiver assembly, in accordance with the references. (2147.04.23g)
8. Given applicable resources, explain the theory of operation of the M242 electrical system operation, in accordance with the references. (2147.04.23h)

REFERENCE

REFERENCE #

- | | |
|---|------------------|
| 1. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 2. Unit & Direct Support Maintenance M242 25-mm Chain Gun | TM 08672A - 23&P |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX F - M242 MAIN CHAINGUN MAINTENANCE

LESSON ID: 2147TF01

HOURS: 14.00

TITLE: Description and Theory of Operation of the M242 Chain Gun

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX F - M242 MAIN CHAINGUN MAINTENANCE

LESSON ID: 2147TF02

HOURS: 14.00

TITLE: M242 Troubleshooting

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
PA	14.00	8:1

MEDIA: 242I, CG, CGST

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain M242 25mm automatic chain gun, in accordance with the references. (2147.04.23)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform electrical check out procedures, in accordance with the references. (2147.04.23c)
2. Given applicable resources, perform automatic gun feeder electrical/manual cycle checks, in accordance with the references. (2147.04.23d)
3. Given applicable resources, perform automatic gun receiver manual cycle checks, in accordance with the references. (2147.04.23e)
4. Given applicable resources, perform automatic gun cycle/firing malfunction troubleshooting, in accordance with the references. (2147.04.23f)
5. Given applicable resources, perform automatic gun disassembly/inspection and reassembly of the forward feeder assembly, in accordance with the references. (2147.04.23i)
6. Given applicable resources, perform automatic gun disassembly/inspection and reassembly of the feeder drive assembly, in accordance with the references. (2147.04.23j)
7. Given applicable resources, perform automatic gun disassembly/inspection and reassembly of the receiver assembly, in accordance with the references. (2147.04.23k)
8. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS)/lubrication on the M242 automatic chain gun, in accordance with the references. (2147.04.23l)
9. Given applicable resources, perform barrel erosion inspection utilizing the BG-10, in accordance with the references. (2147.04.23m)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX F - M242 MAIN CHAINGUN MAINTENANCE

LESSON ID: 2147TF02

HOURS: 14.00

TITLE: M242 Troubleshooting

NOTE(S):

This practical application is taught in conjunction with F01.

REFERENCE

REFERENCE #

1. Unit & Direct Support Maintenance M242 25-mm Chain Gun

TM 08672A - 23&P

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX F - M242 MAIN CHAINGUN MAINTENANCE

EXAM ID: 2147TF03

HOURS: 3.50

TITLE: M242 (JKT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(W)	3.50	8:1

MEDIA: HO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain M242 25mm automatic chain gun, in accordance with the references. (2147.04.23)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify location and description of major components of the M242 25mm Automatic Chain Gun, in accordance with the references. (2147.04.23a)
2. Given applicable resources, identify M242 25mm Automatic Chain Gun theory of operation, in accordance with the references. (2147.04.23b)
3. Given applicable resources, perform electrical check out procedures, in accordance with the references. (2147.04.23c)
4. Given applicable resources, perform automatic gun feeder electrical/manual cycle checks, in accordance with the references. (2147.04.23d)
5. Given applicable resources, perform automatic gun receiver manual cycle checks, in accordance with the references. (2147.04.23e)
6. Given applicable resources, perform automatic gun cycle/firing malfunction troubleshooting, in accordance with the references. (2147.04.23f)
7. Given applicable resources, explain the theory of operation of the receiver assembly, in accordance with the references. (2147.04.23g)
8. Given applicable resources, explain the theory of operation of the M242 electrical system operation, in accordance with the references. (2147.04.23h)

REFERENCE

REFERENCE #

1. Unit & Direct Support Maintenance M242 25-mm Chain Gun

TM 08672A - 23&P

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX F - M242 MAIN CHAINGUN MAINTENANCE

EXAM ID: 2147TF04

HOURS: 3.50

TITLE: M242 (JPT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(P)	3.50	8:1

MEDIA: 242I, CG

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain M242 25mm automatic chain gun, in accordance with the references. (2147.04.23)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform electrical check out procedures, in accordance with the references. (2147.04.23c)
2. Given applicable resources, perform automatic gun feeder electrical/manual cycle checks, in accordance with the references. (2147.04.23d)
3. Given applicable resources, perform automatic gun receiver manual cycle checks, in accordance with the references. (2147.04.23e)
4. Given applicable resources, perform automatic gun cycle/firing malfunction troubleshooting, in accordance with the references. (2147.04.23f)
5. Given applicable resources, perform automatic gun disassembly/inspection and reassembly of the forward feeder assembly, in accordance with the references. (2147.04.23i)
6. Given applicable resources, perform automatic gun disassembly/inspection and reassembly of the feeder drive assembly, in accordance with the references. (2147.04.23j)
7. Given applicable resources, perform automatic gun disassembly/inspection and reassembly of the receiver assembly, in accordance with the references. (2147.04.23k)
8. Given applicable resources, perform Preventive Maintenance Checks and Services (PMCS)/lubrication on the M242 automatic chain gun, in accordance with the references. (2147.04.23l)
9. Given applicable resources, perform barrel erosion inspection utilizing the BG-10, in accordance with the references. (2147.04.23m)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX F - M242 MAIN CHAINGUN MAINTENANCE

EXAM ID: 2147TF04

HOURS: 3.50

TITLE: M242 (JPT)

REFERENCE

REFERENCE #

1. Unit & Direct Support Maintenance M242 25-mm Chain Gun

TM 08672A - 23&P

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

LESSON ID: 2147TG01

HOURS: 7.00

TITLE: LAV-R Electrical System

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	7.00	8:1

MEDIA: CPU, ES, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-Recovery, in accordance with the references. (2147.03.22)
2. Given applicable resources, maintain LAV-Recovery electrical system, in accordance with the references. (2147.03.23)
3. Given applicable resources, maintain LAV-Recovery electrical system, in accordance with the references. (2147.04.21)
4. Given applicable resources, maintain LAV-Recovery, in accordance with the references. (2147.04.20)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform LAV-Recovery auxiliary system operations, in accordance with the references. (2147.03.22a)
2. Given applicable resources, identify components and characteristics of the LAV-R electrical system, in accordance with the references. (2147.03.23a)
3. Given applicable resources, identify the theory of operation of the LAV-R electrical system, in accordance with the references. (2147.03.23b)
4. Given applicable resources, identify LAV-Recovery electrical system schematics/schematic symbols, in accordance with the references. (2147.03.23c)
5. Given applicable resources, identify the path of flow of the LAV-R electrical system, in accordance with the references. (2147.03.23d)
6. Given applicable resources, identify the electrical path of flow for the rigger's instrument panel, in accordance with the references. (2147.03.23e)
7. Given applicable resources, identify the electrical path of flow for the winch assembly, in accordance with the references. (2147.03.23f)
8. Given applicable resources, identify the electrical path of flow for the crane assembly, in accordance with the references. (2147.03.23g)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

LESSON ID: 2147TG01

HOURS: 7.00

TITLE: LAV-R Electrical System

9. Given applicable resources, perform LAV-Recovery electrical system operational checks, in accordance with the references. (2147.04.21a)

10. Given applicable resources, diagnose/isolate LAV-R electrical system malfunctions, in accordance with the references. (2147.03.23h)

11. Given applicable resources, perform Quality Control (QC) inspections of the LAV-Recovery electrical system, in accordance with the references. (2147.04.21b)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Stocklist, Repair Parts, LAV-Recovery | SL-4 08651A |
| 2. Operator Manual LAV-R | TM 08651A - 10_ |
| 3. Intermediate Maintenance LAV - R | TM 08651A - 34_ |
| 4. Organizational Maintenance, LAV-Recovery | TM 08651A-20 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

LESSON ID: 2147TG02

HOURS: 7.00

TITLE: LAV-R Hydraulic System

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	7.00	8:1

MEDIA: CPU, HS, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-recovery hydraulic system, in accordance with the references. (2147.03.24)
2. Given applicable resources, maintain LAV-Recovery hydraulic system, in accordance with the references. (2147.04.22)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify LAV-R hydraulic system components and characteristics, in accordance with the references. (2147.03.24a)
2. Given applicable resources, identify LAV-R hydraulic system theory of operation, in accordance with the references. (2147.03.24b)
3. Given applicable resources, identify LAV-recovery hydraulic system schematics/schematic symbols, in accordance with the references. (2147.03.24c)
4. Given applicable resources, identify LAV-R hydraulic system path of flow, in accordance with the references. (2147.03.24d)
5. Given applicable resources, identify the hydraulic path of flow for the LAV-R winch assembly, in accordance with the references. (2147.03.24e)
6. Given applicable resources, identify the hydraulic path of flow for the LAV-R generator assembly, in accordance with the references. (2147.03.24f)
7. Given applicable resources, identify the hydraulic path of flow for the LAV-R crane assembly, in accordance with the references. (2147.03.24g)
8. Given applicable resources, identify the hydraulic path of flow for the LAV-R manifold assembly, in accordance with the references. (2147.03.24h)
9. Given applicable resources, diagnose/isolate LAV-R hydraulic system malfunctions, in accordance with the references. (2147.03.24i)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

LESSON ID: 2147TG02

HOURS: 7.00

TITLE: LAV-R Hydraulic System

10. Given applicable resources, identify hydraulic manifold test procedures, in accordance with the references. (2147.04.22a)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Stocklist, Repair Parts, LAV-Recovery | SL-4 08651A |
| 2. Operator Manual LAV-R | TM 08651A - 10_ |
| 3. Intermediate Maintenance LAV - R | TM 08651A - 34_ |
| 4. Organizational Maintenance, LAV-Recovery | TM 08651A-20 |

LAV REPAIRMAN 2147 TECH
SECTION IV - CONCEPT CARDS
ANNEX G - LAV RECOVERY

LESSON ID: 2147TG03

HOURS: 7.00

TITLE: LAV-R Winch

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
PA	7.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-Recovery electrical system, in accordance with the references. (2147.04.21)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform winch level wind adjustments, in accordance with the references. (2147.04.21c)
2. Given applicable resources, perform motor module potentiometer adjustments, in accordance with the references. (2147.04.21d)
3. Given applicable resources, diagnose/isolate winch malfunctions, in accordance with the references. (2147.04.21f)
4. Given applicable resources, repair winch malfunctions, in accordance with the references. (2147.04.21g)

NOTE(S):

This practical application is taught in conjunction with G01.

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Operator Manual LAV-R | TM 08651A - 10_ |
| 2. Intermediate Maintenance LAV - R | TM 08651A - 34_ |
| 3. Organizational Maintenance, LAV-Recovery | TM 08651A-20 |

LAV REPAIRMAN 2147 TECH
SECTION IV - CONCEPT CARDS
ANNEX G - LAV RECOVERY

LESSON ID: 2147TG04

HOURS: 7.00

TITLE: LAV-R Crane

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
PA	7.00	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-Recovery electrical system, in accordance with the references. (2147.04.21)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform crane main electric box electronic input module removal, installation and adjustment procedures, in accordance with the references. (2147.04.21e)
2. Given applicable resources, diagnose/isolate crane malfunctions, in accordance with the references. (2147.04.21h)
3. Given applicable resources, repair crane malfunctions, in accordance with the references. (2147.04.21i)

NOTE(S):

This practical application is taught in conjunction with G02.

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Stocklist, Repair Parts, LAV-Recovery | SL-4 08651A |
| 2. Operator Manual LAV-R | TM 08651A - 10_ |
| 3. Intermediate Maintenance LAV - R | TM 08651A - 34_ |
| 4. Organizational Maintenance, LAV-Recovery | TM 08651A-20 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

EXAM ID: 2147TG05

HOURS: 3.50

TITLE: LAV-R (JKT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(W)	3.50	8:1

MEDIA: HO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-Recovery electrical system, in accordance with the references. (2147.03.23)
2. Given applicable resources, maintain LAV-recovery hydraulic system, in accordance with the references. (2147.03.24)
3. Given applicable resources, maintain LAV-Recovery hydraulic system, in accordance with the references. (2147.04.22)
4. Given applicable resources, maintain LAV-Recovery, in accordance with the references. (2147.04.20)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify components and characteristics of the LAV-R electrical system, in accordance with the references. (2147.03.23a)
2. Given applicable resources, identify the theory of operation of the LAV-R electrical system, in accordance with the references. (2147.03.23b)
3. Given applicable resources, identify LAV-Recovery electrical system schematics/schematic symbols, in accordance with the references. (2147.03.23c)
4. Given applicable resources, identify the path of flow of the LAV-R electrical system, in accordance with the references. (2147.03.23d)
5. Given applicable resources, identify the electrical path of flow for the rigger's instrument panel, in accordance with the references. (2147.03.23e)
6. Given applicable resources, identify the electrical path of flow for the winch assembly, in accordance with the references. (2147.03.23f)
7. Given applicable resources, identify the electrical path of flow for the crane assembly, in accordance with the references. (2147.03.23g)
8. Given applicable resources, identify LAV-R hydraulic system components and characteristics, in accordance with the references. (2147.03.24a)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

EXAM ID: 2147TG05

HOURS: 3.50

TITLE: LAV-R (JKT)

9. Given applicable resources, identify LAV-R hydraulic system theory of operation, in accordance with the references. (2147.03.24b)
10. Given applicable resources, identify LAV-recovery hydraulic system schematics/schematic symbols, in accordance with the references. (2147.03.24c)
11. Given applicable resources, identify LAV-R hydraulic system path of flow, in accordance with the references. (2147.03.24d)
12. Given applicable resources, identify the hydraulic path of flow for the LAV-R winch assembly, in accordance with the references. (2147.03.24e)
13. Given applicable resources, identify the hydraulic path of flow for the LAV-R generator assembly, in accordance with the references. (2147.03.24f)
14. Given applicable resources, identify the hydraulic path of flow for the LAV-R crane assembly, in accordance with the references. (2147.03.24g)
15. Given applicable resources, identify the hydraulic path of flow for the LAV-R manifold assembly, in accordance with the references. (2147.03.24h)
16. Given applicable resources, identify hydraulic manifold test procedures, in accordance with the references. (2147.04.22a)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Stocklist, Repair Parts, LAV-Recovery | SL-4 08651A |
| 2. Operator Manual LAV-R | TM 08651A - 10_ |
| 3. Intermediate Maintenance LAV - R | TM 08651A - 34_ |
| 4. Organizational Maintenance, LAV-Recovery | TM 08651A-20 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

EXAM ID: 2147TG06

HOURS: 3.50

TITLE: LAV-R (JPT)

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(P)	3.50	8:1

MEDIA: AIO, ES, GMTB, HS

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV-Recovery, in accordance with the references. (2147.03.22)
2. Given applicable resources, maintain LAV-Recovery electrical system, in accordance with the references. (2147.03.23)
3. Given applicable resources, maintain LAV-Recovery electrical system, in accordance with the references. (2147.04.21)
4. Given applicable resources, maintain LAV-Recovery hydraulic system, in accordance with the references. (2147.04.22)
5. Given applicable resources, maintain LAV-recovery hydraulic system, in accordance with the references. (2147.03.24)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform LAV-Recovery auxiliary system operations, in accordance with the references. (2147.03.22a)
2. Given applicable resources, diagnose/isolate LAV-R electrical system malfunctions, in accordance with the references. (2147.03.23h)
3. Given applicable resources, perform LAV-Recovery electrical system operational checks, in accordance with the references. (2147.04.21a)
4. Given applicable resources, perform Quality Control (QC) inspections of the LAV-Recovery electrical system, in accordance with the references. (2147.04.21b)
5. Given applicable resources, perform winch level wind adjustments, in accordance with the references. (2147.04.21c)
6. Given applicable resources, perform motor module potentiometer adjustments, in accordance with the references. (2147.04.21d)
7. Given applicable resources, perform crane main electric box electronic input module removal, installation and adjustment procedures, in accordance with the references. (2147.04.21e)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX G - LAV RECOVERY

EXAM ID: 2147TG06

HOURS: 3.50

TITLE: LAV-R (JPT)

8. Given applicable resources, diagnose/isolate winch malfunctions, in accordance with the references. (2147.04.21f)
9. Given applicable resources, repair winch malfunctions, in accordance with the references. (2147.04.21g)
10. Given applicable resources, diagnose/isolate crane malfunctions, in accordance with the references. (2147.04.21h)
11. Given applicable resources, repair crane malfunctions, in accordance with the references. (2147.04.21i)
12. Given applicable resources, perform hydraulic manifold test procedures, in accordance with the references. (2147.04.22b)
13. Given applicable resources, perform LAV-Recovery hydraulic system Quality Control (QC) inspections, in accordance with the references. (2147.04.22c)
14. Given applicable resources, diagnose/isolate LAV-R hydraulic system malfunctions, in accordance with the references. (2147.03.24i)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Stocklist, Repair Parts, LAV-Recovery | SL-4 08651A |
| 2. Operator Manual LAV-R | TM 08651A - 10_ |
| 3. Intermediate Maintenance LAV - R | TM 08651A - 34_ |
| 4. Organizational Maintenance, LAV-Recovery | TM 08651A-20 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

LESSON ID: 2147TH01

HOURS: 3.50

TITLE: LAV Special Tools

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	3.50	8:1

MEDIA: CPU, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV hull (All Variants), in accordance with the references. (2147.04.01)
2. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.04.13)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify special tools associated with the LAV (all variants), in accordance with the references. (2147.04.01a)
2. Given applicable resources, identify LAV 4th echelon tool kit special tools, in accordance with the references. (2147.04.13b)
3. Given applicable resources, identify proper use and Preventive Maintenance Checks and Services (PMCS) of special tools, in accordance with the references. (2147.04.13r)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Tool Kit Organizational Maintenance LAV 2nd ech | SL - 3 - 08894A |
| 2. Tool Kit Intermediate Maintenance LAV 3rd echelon | SL - 3 - 08895A |
| 3. Tool Kit Intermediate Maintenance LAV 4th echelon | SL - 3 - 08896A |
| 4. Organizational Maintenance LAV Auto/Hull | TM 08594A-20/4 |
| 5. Intermediate Maintenance Light Armored Vehicle, LAV-25 | TM 08594A-34/9 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

LESSON ID: 2147TH02

HOURS: 3.50

TITLE: Wheel and Marine Drive

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
PA	3.50	8:1

MEDIA: AIO, GMTB

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV drivetrain, in accordance with the references. (2147.04.11)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify components of the LAV drive train, in accordance with the references. (2147.04.11a)
2. Given applicable resources, identify LAV drivetrain special tools, in accordance with the references. (2147.04.11b)
3. Given applicable resources, perform differential gearbox disassembly, in accordance with the references. (2147.04.11c)
4. Given applicable resources, inspect differential gearbox components, in accordance with the references. (2147.04.11d)
5. Given applicable resources, perform differential endplay checks, in accordance with the references. (2147.04.11e)
6. Given applicable resources, perform differential pinion depth measurement, in accordance with the references. (2147.04.11f)
7. Given applicable resources, perform differential friction torque procedures for pinion shaft, in accordance with the references. (2147.04.11g)
8. Given applicable resources, perform backlash procedures on the differential crown wheel (ring gear), in accordance with the references. (2147.04.11h)
9. Given applicable resources, identify procedures for front wheel drive assembly removal, in accordance with the references. (2147.04.11i)
10. Given applicable resources, inspect front wheel drive assembly components, in accordance with the references. (2147.04.11j)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

LESSON ID: 2147TH02

HOURS: 3.50

TITLE: Wheel and Marine Drive

11. Given applicable resources, identify procedures for measuring the carrier bearing ring depth, in accordance with the references. (2147.04.11k)
12. Given applicable resources, perform axial clearance procedures on front wheel drive assembly, in accordance with the references. (2147.04.11l)
13. Given applicable resources, perform post-installation checks of the front wheel drive assembly, in accordance with the references. (2147.04.11m)
14. Given applicable resources, identify components of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11n)
15. Given applicable resources, identify procedures for removing the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11o)
16. Given applicable resources, identify procedures for the disassembly of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11p)
17. Given applicable resources, inspect components of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11q)
18. Given applicable resources, identify procedures for measuring ring gear carrier depth of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11r)
19. Given applicable resources, perform procedures for measuring axial clearance of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11s)
20. Given applicable resources, perform post-installation checks of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11t)
21. Given applicable resources, identify LAV transfer case components, in accordance with the references. (2147.04.11u)
22. Given applicable resources, identify procedures for removal/installation of the LAV transfer case, in accordance with the references. (2147.04.11v)
23. Given applicable resources, perform procedures for the repair of the LAV transfer case, in accordance with the references. (2147.04.11w)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

LESSON ID: 2147TH02

HOURS: 3.50

TITLE: Wheel and Marine Drive

24. Given applicable resources, perform procedures for the replacement of LAV transfer case seals and o-rings, in accordance with the references. (2147.04.11x)
25. Given applicable resources, inspect LAV transfer case internal components and replace as necessary, in accordance with the references. (2147.04.11y)
26. Given applicable resources, perform LAV transfer case post installation checks, in accordance with the references. (2147.04.11z)

REFERENCE

REFERENCE #

- | | |
|---|-----------------|
| 1. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 2. Organizational Maintenance LAV Auto/Hull | TM 08594A-20/4 |
| 3. Intermediate Maintenance Light Armored Vehicle, LAV-25 | TM 08594A-34/9 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

LESSON ID: 2147TH03

HOURS: 7.00

TITLE: 6V53T Tune Up

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
L	2.00	8:1
PA	5.00	8:1

MEDIA: 3KIT, CPU, ENG, GMTB, PPP

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV engine, in accordance with the references. (2147.04.03)
2. Given applicable resources, maintain LAV powerpack, in accordance with the references. (2147.04.05)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify sequence for performing LAV engine tune up, in accordance with the references. (2147.04.03a)
2. Given applicable resources, identify procedures for installing LAV powerpack on the Power Pack Ground Hop Stand (PPGHS), in accordance with the references. (2147.04.05a)
3. Given applicable resources, identify Power Pack Ground Hop Stand (PPGHS) operation procedures, in accordance with the references. (2147.04.05b)
4. Given applicable resources, perform "before" operations checks, in accordance with the references. (2147.04.05c)
5. Given applicable resources, perform start up procedures, in accordance with the references. (2147.04.05d)
6. Given applicable resources, perform (hot or cold engine) exhaust valve clearance adjustment, in accordance with the references. (2147.04.03b)
7. Given applicable resources, perform LAV engine fuel injector adjustment, in accordance with the references. (2147.04.03c)
8. Given applicable resources, perform LAV engine injector timing adjustment, in accordance with the references. (2147.04.03d)
9. Given applicable resources, perform LAV engine brake adjustment procedures, in accordance with the references. (2147.04.03e)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

LESSON ID: 2147TH03

HOURS: 7.00

TITLE: 6V53T Tune Up

10. Given applicable resources, perform LAV injector rack adjustment, in accordance with the references. (2147.04.03f)
11. Given applicable resources, perform LAV engine governor gap adjustment, in accordance with the references. (2147.04.03g)
12. Given applicable resources, perform LAV engine maximum No-load speed adjustment, in accordance with the references. (2147.04.03h)
13. Given applicable resources, perform LAV engine maximum idle speed adjustment, in accordance with the references. (2147.04.03i)
14. Given applicable resources, perform LAV engine minimum idle speed adjustment, in accordance with the references. (2147.04.03j)
15. Given applicable resources, perform LAV engine buffer switch adjustment, in accordance with the references. (2147.04.03k)
16. Given applicable resources, perform LAV engine fuel modulator adjustment, in accordance with the references. (2147.04.03l)
17. Given applicable resources, perform LAV engine starting aid screw adjustment, in accordance with the references. (2147.04.03m)
18. Given applicable resources, perform LAV engine system evaluation procedures, in accordance with the references. (2147.04.03n)
19. Given applicable resources, perform "during" operations checks, in accordance with the references. (2147.04.05e)
20. Given applicable resources, perform shut down procedures, in accordance with the references. (2147.04.05f)
21. Given applicable resources, perform "after" operations checks, in accordance with the references. (2147.04.05g)

REFERENCE

REFERENCE #

1. Direct Support/General Support Engine, Diesel

TM - 8A192C - 34 &P

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

EXAM ID: 2147TH04

HOURS: 3.50

TITLE: H ANNEX JKT

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(W)	3.50	8:1

MEDIA: HO

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV hull (All Variants), in accordance with the references. (2147.04.01)
2. Given applicable resources, maintain LAV engine, in accordance with the references. (2147.04.03)
3. Given applicable resources, maintain LAV powerpack, in accordance with the references. (2147.04.05)
4. Given applicable resources, maintain LAV drivetrain, in accordance with the references. (2147.04.11)
5. Given applicable resources, maintain LAV-25 turret assembly, in accordance with the references. (2147.04.13)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, identify special tools associated with the LAV (all variants), in accordance with the references. (2147.04.01a)
2. Given applicable resources, identify sequence for performing LAV engine tune up, in accordance with the references. (2147.04.03a)
3. Given applicable resources, identify procedures for installing LAV powerpack on the Power Pack Ground Hop Stand (PPGHS), in accordance with the references. (2147.04.05a)
4. Given applicable resources, identify Power Pack Ground Hop Stand (PPGHS) operation procedures, in accordance with the references. (2147.04.05b)
5. Given applicable resources, identify components of the LAV drive train, in accordance with the references. (2147.04.11a)
6. Given applicable resources, identify LAV drivetrain special tools, in accordance with the references. (2147.04.11b)
7. Given applicable resources, identify procedures for front wheel drive assembly removal, in accordance with the references. (2147.04.11i)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

EXAM ID: 2147TH04

HOURS: 3.50

TITLE: H ANNEX JKT

8. Given applicable resources, identify procedures for measuring the carrier bearing ring depth, in accordance with the references. (2147.04.11k)
9. Given applicable resources, identify components of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11n)
10. Given applicable resources, identify procedures for removing the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11o)
11. Given applicable resources, identify procedures for the disassembly of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11p)
12. Given applicable resources, identify procedures for measuring ring gear carrier depth of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11r)
13. Given applicable resources, identify LAV transfer case components, in accordance with the references. (2147.04.11u)
14. Given applicable resources, identify procedures for removal/installation of the LAV transfer case, in accordance with the references. (2147.04.11v)
15. Given applicable resources, identify proper use and Preventive Maintenance Checks and Services (PMCS) of special tools, in accordance with the references. (2147.04.13r)

REFERENCE

REFERENCE #

- | | |
|---|---------------------|
| 1. Lubrication Instructions, LAV-25 Turret | LI 08594A-12-1A |
| 2. Tool Kit Organizational Maintenance LAV 2nd ech | SL - 3 - 08894A |
| 3. Tool Kit Intermediate Maintenance LAV 3rd echelon | SL - 3 - 08895A |
| 4. Tool Kit Intermediate Maintenance LAV 4th echelon | SL - 3 - 08896A |
| 5. Light Armored Vehicle LAV-25 | SL-4-08594A |
| 6. Direct Support/General Support Engine, Diesel | TM - 8A192C - 34 &P |
| 7. LAV - 25 Automotive Hull | TM 08594A - 10/2_ |
| 8. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 9. Intermediate Maintenance Light Armored Vehicle, LAV-25 | TM 08594A-34/9 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

EXAM ID: 2147TH04

HOURS: 3.50

TITLE: H ANNEX JKT

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

EXAM ID: 2147TH05

HOURS: 3.50

TITLE: H ANNEX JPT

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
X(P)	3.50	8:1

MEDIA: AIO, GMTB

TERMINAL LEARNING OBJECTIVE(S):

1. Given applicable resources, maintain LAV engine, in accordance with the references. (2147.04.03)
2. Given applicable resources, maintain LAV powerpack, in accordance with the references. (2147.04.05)
3. Given applicable resources, maintain LAV drivetrain, in accordance with the references. (2147.04.11)

ENABLING LEARNING OBJECTIVE(S):

1. Given applicable resources, perform (hot or cold engine) exhaust valve clearance adjustment, in accordance with the references. (2147.04.03b)
2. Given applicable resources, perform LAV engine fuel injector adjustment, in accordance with the references. (2147.04.03c)
3. Given applicable resources, perform LAV engine injector timing adjustment, in accordance with the references. (2147.04.03d)
4. Given applicable resources, perform LAV engine brake adjustment procedures, in accordance with the references. (2147.04.03e)
5. Given applicable resources, perform LAV engine governor gap adjustment, in accordance with the references. (2147.04.03g)
6. Given applicable resources, perform LAV injector rack adjustment, in accordance with the references. (2147.04.03f)
7. Given applicable resources, perform LAV engine maximum No-load speed adjustment, in accordance with the references. (2147.04.03h)
8. Given applicable resources, perform LAV engine maximum idle speed adjustment, in accordance with the references. (2147.04.03i)
9. Given applicable resources, perform LAV engine minimum idle speed adjustment, in

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

EXAM ID: 2147TH05

HOURS: 3.50

TITLE: H ANNEX JPT

- accordance with the references. (2147.04.03j)
10. Given applicable resources, perform LAV engine buffer switch adjustment, in accordance with the references. (2147.04.03k)
 11. Given applicable resources, perform LAV engine fuel modulator adjustment, in accordance with the references. (2147.04.03l)
 12. Given applicable resources, perform LAV engine starting aid screw adjustment, in accordance with the references. (2147.04.03m)
 13. Given applicable resources, perform LAV engine system evaluation procedures, in accordance with the references. (2147.04.03n)
 14. Given applicable resources, perform "before" operations checks, in accordance with the references. (2147.04.05c)
 15. Given applicable resources, perform start up procedures, in accordance with the references. (2147.04.05d)
 16. Given applicable resources, perform "during" operations checks, in accordance with the references. (2147.04.05e)
 17. Given applicable resources, perform shut down procedures, in accordance with the references. (2147.04.05f)
 18. Given applicable resources, perform "after" operations checks, in accordance with the references. (2147.04.05g)
 19. Given applicable resources, perform differential gearbox disassembly, in accordance with the references. (2147.04.11c)
 20. Given applicable resources, inspect differential gearbox components, in accordance with the references. (2147.04.11d)
 21. Given applicable resources, perform differential endplay checks, in accordance with the references. (2147.04.11e)
 22. Given applicable resources, perform differential pinion depth measurement, in accordance with the references. (2147.04.11f)

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

EXAM ID: 2147TH05

HOURS: 3.50

TITLE: H ANNEX JPT

23. Given applicable resources, perform differential friction torque procedures for pinion shaft, in accordance with the references. (2147.04.11g)
24. Given applicable resources, perform backlash procedures on the differential crown wheel (ring gear), in accordance with the references. (2147.04.11h)
25. Given applicable resources, inspect front wheel drive assembly components, in accordance with the references. (2147.04.11j)
26. Given applicable resources, perform axial clearance procedures on front wheel drive assembly, in accordance with the references. (2147.04.11i)
27. Given applicable resources, perform post-installation checks of the front wheel drive assembly, in accordance with the references. (2147.04.11m)
28. Given applicable resources, inspect components of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11q)
29. Given applicable resources, perform procedures for measuring axial clearance of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11s)
30. Given applicable resources, perform post-installation checks of the LAV rear wheel drive assembly, in accordance with the references. (2147.04.11t)
31. Given applicable resources, perform procedures for the repair of the LAV transfer case, in accordance with the references. (2147.04.11w)
32. Given applicable resources, perform procedures for the replacement of LAV transfer case seals and o-rings, in accordance with the references. (2147.04.11x)
33. Given applicable resources, inspect LAV transfer case internal components and replace as necessary, in accordance with the references. (2147.04.11y)
34. Given applicable resources, perform LAV transfer case post installation checks, in accordance with the references. (2147.04.11z)

REFERENCE

REFERENCE #

- | | |
|--|-----------------|
| 1. Lubrication Instructions, LAV-25 Turret | LI 08594A-12-1A |
| 2. Tool Kit Organizational Maintenance LAV 2nd ech | SL - 3 - 08894A |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX H - LAV SPECIAL TOOLS/6V53T/WHEEL AND MARINE DRIVE

EXAM ID: 2147TH05

HOURS: 3.50

TITLE: H ANNEX JPT

- | | |
|---|---------------------|
| 3. Tool Kit Intermediate Maintenance LAV 3rd echelon | SL - 3 - 08895A |
| 4. Tool Kit Intermediate Maintenance LAV 4th echelon | SL - 3 - 08896A |
| 5. Direct Support/General Support Engine, Diesel | TM - 8A192C - 34 &P |
| 6. LAV - 25 Automotive Hull | TM 08594A - 10/2_ |
| 7. Operator's Manual LAV-25 Turret | TM 08594A-10/1_ |
| 8. Intermediate Maintenance Light Armored Vehicle, LAV-25 | TM 08594A-34/9 |

LAV REPAIRMAN 2147 TECH

SECTION IV - CONCEPT CARDS

ANNEX I - A DAY IN THE LIFE

LESSON ID: 2147TI01

HOURS: 14.00

TITLE: A Day In the Life

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
ADMIN	14.00	8:1

MEDIA: AIO, GMTB

LESSON PURPOSE:

Each student will randomly choose a maintenance scenario. Students will be given their own tools, forms, and technical manuals and are to read the scenario and troubleshoot the LAV to determine problems with components and perform and document needed parts and repairs.

LAV REPAIRMAN 2147 TECH
SECTION IV - CONCEPT CARDS
ANNEX Z - ADMINISTRATIVE

EVENT ID: 2147TZ01

HOURS: 3.00

EVENT: In-processing

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
ADMIN	3.00	8:1

MEDIA:

NOTE(S):

During this time period the Marine will fill out all necessary paperwork, receive an academic in brief from the academic coordinator and receive command welcome aboard briefs from the CO and the 1stSgt.

LAV REPAIRMAN 2147 TECH
SECTION IV - CONCEPT CARDS
ANNEX Z - ADMINISTRATIVE

EVENT ID: 2147TZ02

HOURS: 3.00

EVENT: Out processing/Graduation

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
ADMIN	3.00	8:1

MEDIA:

NOTE(S):

During this time student will have graduation rehearsal, graduation ceremony and receive their endorsements from the administration section.

LAV REPAIRMAN 2147 TECH
SECTION IV - CONCEPT CARDS
ANNEX Z - ADMINISTRATIVE

EVENT ID: 2147TZ03

HOURS: 43.00

EVENT: Commander's Time

<u>METHOD</u>	<u>HOURS</u>	<u>S:I RATIO</u>
ADMIN	43.00	8:1

MEDIA:

NOTE(S):

There are 45 sessions where commanders time will be implemented in the schedule for a total of 45 non-academic hours. During this time the Marines will conduct PT and have uniform inspections.

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION V - STUDENT PERFORMANCE EVALUATION

LIGHT ARMORED VEHICLE TECHNICIAN COURSE

SECTION V - STUDENT PERFORMANCE EVALUATION

1. SCOPE. There are two measurement methods used in the LAV Repairman 2147 Tech course. Individual lessons are evaluated by either performance evaluations calling for the student to duplicate the job performance requirements or test items on written examinations given during the class.

2. MASTERY LEARNING . The evaluative philosophy utilized in this course stresses student achievement of all learning objectives. Students must master 100% of all learning objectives presented during all periods of instruction. Evaluations are used to determine mastery of the learning objectives, and not rank order the students.

3. EVALUATION OF STUDENTS. Each student is evaluated on each lesson's learning objectives before proceeding to the next lesson. This is accomplished through written test items concerning the subject material and through observation of student performance during performance evaluations.

a. Written Evaluations. Knowledge-based learning objectives are evaluated by giving written examinations throughout the course that contain written test items. Quizzes given during normal class period, are graded in class, and provide immediate student and instructor feedback on the progress of the student.

b. Practical Application. Students will be informally evaluated and provided feedback by instructors through observation of students during practical applications.

c. Performance Evaluations. A performance test covering all performance based learning objectives is conducted at the end of each annex. Students are evaluated via a performance checklist completed by the instructors. Instructors evaluate student performance and provide feedback and remedial instruction until mastery of the learning objectives is achieved. The student who does not master a given subject must exert more effort and will be given one additional opportunity to achieve mastery of the learning objective through remedial instruction. It is the responsibility of the LAV Repairman 2147 Tech staff to render every assistance to each student needing help to achieve mastery.

LAV REPAIRMAN 2147 TECH PROGRAM OF INSTRUCTION

SECTION VI - DISTRIBUTION LIST

<u>DISTRIBUTION</u>	<u>QUANTITY</u>
COMMARFORRES	1
COMMARFORLANT	1
COMMARFORPAC	1
Marine Corps Institute (MCI)	1