UNITED STATES MARINE CORPS
Utilities Instruction Company
Marine Corps Engineer School
Marine Corps Base
Camp Lejeune, North Carolina 28542

U-07E01
JAN 00

STUDENT HANDOUT

MAINTENANCE

1. **LEARNING OBJECTIVES**:

a. **Terminal Learning Objectives**:

(1) Provided an item of equipment, mechanic's toolbox, and the reference. Perform preventive maintenance, so that equipment will be serviced per the schedule and any deficiencies will be corrected/identified per the reference. (1141.04.01)

(2) Provided an Equipment Repair Order (NAVMC 10245), TM-4700-15/1, maintenance actions, the man-hours it took to complete the maintenance actions and technical manual for the specified equipment, complete the mechanic's section of the NAVMC 10245 in accordance with TM-4700-15/1. (1141.07.02)

b. **Enabling Learning Objectives**:

(1) Provided an item of equipment, hearing protection, and Applicable tools, with the aid of reference, inspect the equipment, in accordance with the applicable Technical Manual. (1141.04.01)

(2) Provided Technical Manual 00038G and a list of parts, with The aid of reference, locate the steps on removing the parts. The paragraph in the TM listing the steps for removing the parts must be identified. (1141.07.02d)

(3) Provided an item of equipment, hearing protection and Necessary tools, with the aid of references, perform the preventive maintenance checks and services required for the equipment, according with the applicable Technical Manual. (1141.04.01b)

(4) Provided a NAVMC 10560 and an item of equipment, with the aid of reference, document the preventive maintenance checks and services performed, in accordance with TM 4700-15/1H and equipment technical manual. (1141.04.01c)

(5) Provided a NAVMC 10925, NAVMC 10245, applicable SL-4 and a NAVMC 10560 that has been completed, with the aid of reference, requisition parts that are needed, in accordance with the applicable Technical Manuals. (1141.04.01d)

1. Before any type of maintenance is performed on any type of equipment the first thing that needs to be done is a thorough inspection of the equipment. This inspection will include but won't be limited to

a. Check for the different types of leaks

Class 1 - Seepage of fluids (as included by wetness or discoloration) not enough to form drops.

Class 2 - Leakage of fluids, enough to form drops but not enough to cause drops to drip from item/equipment being checked or inspected.

Class 3 - Leakage of fluids, enough to form drops that fall from the item/equipment being checked or inspected.

b. Damaged or broken parts

c. Frayed wires

d. Missing parts

e. Ensuring the equipment is grounded

2. When attempting to remove any parts while performing maintenance on a MEP 006A the first thing that you need to do is get the TM and go to the Alphabetical Index at the back of the TM. Once you are in the Index look up the item or items that you will be working on. After you have found those items that you are looking for on the Index turn to the page that it says, and you will find the removing steps. For example: Replacing the fuel filter go to the Index and find operators maintenance. Once you have found operators maintenance look at the list of repairs that you can do you will find the fuel filter and strainer assembly on this list then look to the right of it. There you are going to have a paragraph number, in this case is paragraph 3-34.

3. After performing any type of preventive maintenance checks and services, all the checks and services that have been performed to a piece of gear need to be annotated on a NAVMC 10560 (LTI Sheet). The first thing that gets filled out is section A of the NAVMC 10560.

a. On section A consist of:

1. Nomenclature - in this block you will enter the Nomenclature as given on the NAVMC 696D.

2. Make - in this block you will enter the make of the piece of equipment as found on the NAVMC 696D and on the data plate of the equipment.

3. Model - in this block enter the model of the equipment as listed on the NAVMC 696D and as found on the data plate of the equipment.

4. Organization - in this block enter the full name of the activity that owns the item of equipment.

5. Date - in this block enter the date the NAVMC 10560 is being prepared

6. Hours - in this block enter the hour meter reading for the items that are equipped with an hour meter, other wise leave blank.

7. Miles - in this block enter the odometer reading for items that are equipped with an odometer, other wise leave blank.

8. Registration - in this block enter the Marine Corps registration number listed on the NAVMC 696D, and as listed on the equipment it self.

9. Engine make/model - in this block enter the item of equipment’s engine/model (if applicable list both engines) as listed on the items of equipment’s engine.

10. Engine serial number - in this block enter the items engine’s serial number (if applicable list both engines) as listed on the engine.

11. Attachment box - in these boxes enter the attachments of the equipment if it has the equipment has any, to include the attachment, make and model of the attachment, and the serial number of the attachment.

12. Indicate purpose - in this block use an X to indicate if the NAVMC is for a TI, LTI, hourly PM (when it’s a hourly PM enter the hours of the PM)

13. Also on section A you have to use the legend for marking to mark the squares for equipment record folder, publications available, appearance, operator’s daily PM, fire extinguisher, tolls and equipment.

b. The use of section B is going to be optional when the comments are written directly on the NAVMC 10245 (ERO). In this section of the NAVMC 10560 you will annotate

1. A list of all items that are not satisfactory in the column of section “D” trough “M” in section B.

2. A list of all modifications and technical instructions that need to be accomplished.

3. A list of all items listed in section B to the NAVMC 10245(ERO)

c. On section C of the NAVMC 10560 is only be required to be filled out when a condition code is requested. On sections “D” through “M” are used to mark the specific items that got serviced. When marking the specific items in sections “D” trough “M” use the symbols given in section A. The “Servicing Symbols” (SS) are used for Preventing Maintenance checks and services.

d. Section N is used for Modification Instructions (MI) and Technical Instructions (TI).

e. Section P is where the mechanic will sing.

4. When doing preventive maintenance on a piece of gear, you have identified what problems that piece of gear may have. You have annotated those problems on the NAVMC 10560 the next thing that needs to be done is for you to requisition the parts or components that you are going need. In order to start a requisition you are going to need the NAVMC 10560 that already been fill out listing all the discrepancies of that piece of gear. Next you are going to need to fill out a NAVMC 10925. Once that is filled out then a NAVMC 10245 is going to get filled out.

a. NAVMC 10925 - When filling out a NAVMC 10925 you are going to need the SL-4 for the individual piece of equipment that you are going to requisition parts for in order to get the National Stock Number (NSN). The way you will fill out the NAVMC 10925 is going to be by starting on the first line

1. Unit - On this blank you would write down the full name of the unit doing the requisitioning.

2. Date - On this blank goes the Julian date.

3. Material usage code - Here you are going to have four numbers to choose from. If you are ordering SL-3 components circle 6, if ordering corrective maintenance parts circle 7, if ordering parts for modification instructions circle 8, or if ordering parts for preventive maintenance circle 9.

4. Shop Section - Here you would enter the shop section. The shop section for engineer shop is going to be 2. The shop sub section will depend on the unit that owns the piece of gear.

5. Letter “A” - This blank is where the SL-4 number of the equipment goes.

6. Letter “B” - This blank is where the nomenclature of the equipment goes

7. Letter “C” - This blank is where the serial number of the equipment goes.

8. Letter “D” - This blank is where the mechanics signature goes.

9. Letters “E” through “O” - This blank is where the reference for each NSN or part number goes.

10. Letter “P” - This block is where the total price for all the parts that are being ordered goes.

11. Letter “R” - This block is where the SNCO in charge signature goes.

12. Column 1 - This column goes the transaction code this code is going to be number 4.

13. Columns 11 through 23 - This is where the NSN for the part that is being ordered goes.

14. Columns 24 and 26 - This is where the quantity of the item that’s being ordered goes.

15. Columns 42 and 43 - This is where the priority for that item goes.

16. Columns 49 and 50 - This where the unit of issue for that particular part is.

17. Columns 51 through 64 - This is where the Job Order Number (JON) goes. The JON number will depend on the unit that’s ordering the parts and weather the parts are for PM’s or Maintenance.

18. Column 66 - This column is where the demand code goes. The demand code is going to be N for nonrecurring problems, and R for recurring problems.

19. Column 67 - This column is for the Not Mission Capable Indicator (NMC). The NMC is going to be 9 for dead-lining parts, N for none dead lining parts and E for anticipated dead-lining parts.

20. Columns 70 through 79 - This where the nomenclature of the part that is being ordered goes.

21. Column 80 - This is where the transaction type code goes. This code is going to be A for add and C for change.