

UNITED STATES MARINE CORPS
ENGINEER EQUIPMENT INSTRUCTION COMPANY
MARINE CORPS DETACHMENT
686 MINNISOTA AVE
FORT LEONARD WOOD, MISSOURI 65473

**DUE TO THE HYEX NOT BEING AT THE SCHOOL HOUSE YET THIS IS A
WORKING LESSON PLAN**

LESSON PLAN

Horizontal Construction (621G, HYEX)

NCOO-B03

ENGINEER EQUIPMENT OPERATOR NCO

A16ACX1

REVISED 11/13/2012

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WORKING LESSON PLAN**

APPROVED BY _____

DATE _____

a. **TERMINAL LEARNING OBJECTIVE.**

(1) Provided an engineer equipment requirement, engineer equipment records and forms, and references, operate the 621G Scraper to safely meet operational requirements with no injury to personnel or damage to the equipment. (1345-HEOP-2004)

(1) Provided an engineer equipment requirement, engineer equipment records and forms, and references, Hydraulic Excavator (HYEX) to safely meet operational requirements with no injury to personnel or damage to the equipment. (1345-HEOP-2005)

b. **ENABLING LEARNING OBJECTIVE.**

1. Without the aid of reference, identify the characteristics of the 621G Scraper per the TM 5-3805-248-14&P-1.(1345-HEOP-2004a)

2. Provided a621G Scraper, engineer equipment records and forms, and with the aid of reference, initiate operator forms and records per the TM 4700-15/1_. (1345-HEOP-2004b)

3. Provided a 621G, engineer equipment records and forms, tools, petroleum, oils, and lubricants, and with the aid of reference, perform operator checks(before, during, after)per the TM 5-3805-248-14&P-1.(1345-HEOP-2004c)

4. Provided a 621G, engineer equipment records and forms, move 621B to job site per the TM 5-3805-248-14&P-1.(1345-HEOP-2004d)

5. Provided a 621G, a 850J MCT Crawler Dozer, engineer equipment records and forms, and references, perform 621G operations per the TM 5-3805-248-14&P-1.(1345-HEOP-2004e)

6. Provided a 621G, engineer equipment records and forms, and references complete operational records per the TM 5-3805-248-14&P-1.(1345-HEOP-2004f)

7. Without the aid of reference, identify the characteristics of the (HYEX) per the TM 12141A-OR/1. (1345-HEOP-2005a)

8. Provided a (HYEX), engineer equipment records and forms, and with the aid of reference, initiate operator forms and records per the TM 4700-15/1_. (1345-HEOP-2005b)

9. Provided a (HYEX), engineer equipment records and forms, tools, petroleum, oils, and lubricants, and with the aid of reference, perform operator checks(before, during, after)per the TM 12141A-OR/1. (1345-HEOP-2005c)

10. Provided a (HYEX), engineer equipment records and forms, move (HYEX) to job site per the TM 12141A-OR/1. (1345-HEOP-2005d)

11. Provided a (HYEX), engineer equipment records and forms, and references, perform general engineering operations per the TM 12141A-OR/1. (1345-HEOP-2005e)

12. Provided a (HYEX), engineer equipment records and forms, and references, change attachments per the TM 12141A-OR/1. (1345-HEOP-2005f)

13. Provided a (HYEX), engineer equipment records and forms, and references complete operational records per the TM 4700-15/1_ (1345-HEOP-2005g)

INTRODUCTION

(10 MINS)

BODY

(63HRS 40MINS)

1. 621G SCRAPER CHARACTERISTICS AND COMPONENTS: (35 Min)

2. Operator Cab Controls and Instruments: (30 Min)

3. 621G SCRAPER OPERATIONS: (20 Min)

BREAK (10 MIN)

4. PREVENTIVE MAINTENANCE CHECKS AND SERVICES: (15 Min)

BREAK (10 MIN) INTERIM

DEMONSTRATION. (1) (1 HOUR) The purpose of this demonstration is to show the students how to perform a 360 walk around and operate the 621G.

(10 min break)

5. 250GR (HYEX) CHARACTERISTICS AND COMPONENTS: (50 MIN)

BREAK (10 MIN)

6. 250GR (HYEX) OPERATOR CAB CONTROLS AND INSTRUMENTS: (50 MIN)

BREAK (10 MIN) INTERIM

DEMONSTRATION. (2) (30 MIN) The purpose of this demonstration is to show the students how to conduct a 360 before operations check.

BREAK (10 MIN) INTERIM

DEMONSTRATION. (3) (30 MIN) The purpose of this demonstration is to show the students how to adjust track tension.

BREAK (10 MIN) INTERIM

PRACTICAL APPLICATION. (1) (1 HOURS) The purpose of this Practical Application is to allow the students to conduct a 360 before operations check.

7. **250GR OPERATIONS: (1 HR, 30 MIN)**

BREAK (10 MIN)

BREAK (10 MIN) INTERIM

DEMONSTRATION. (4) (2 HRS) The purpose of this demonstration is to show the students operation techniques and attachments.

BREAK (10 MIN) INTERIM

PRACTICAL APPLICATION. (2) (41 HOURS) The purpose of this Practical Application is to allow the students the opportunity to practice operating the 621G and the 250GR.

BREAK (10 MIN) INTERIM

PRACTICAL APPLICATION. (3) (12 HOURS) The purpose of this Practical Application is to allow the students conduct PMCS on the 621G and the 250GR.

Summary

(10 MIN)

During this period of instruction we have covered the characteristics and capabilities of the 621G Scraper and HYEX. We have also covered the operator controls and functions, as well as the operations and employment of the scraper and HYEX. What you have learned

(10 min break)