# CHAPTER 11 — PLACARDS AND MARKINGS

# **CONTENTS** — MAINTENANCE PROCEDURES

Paragraph	Title	Chapter/Section	Page
Number		Number	Number
11-1	Placards  Decals - application	11-00-00	3
11-2		11-00-00	3

# **FIGURES**

Figure Number	Title	Page Number
11-1	Placards and markings	5

# **CONSUMABLE MATERIAL LIST**

The following consumable materials are required to perform the maintenance procedures within this chapter.

ITEM NO.	NOMENCLATURE	CAGE/FSCM/ SOURCE
C-305	Aliphatic Naphtha, TT-N-95, Type II	Commercial
C-306	Toluene, TT-T-548	Commercial



# **PLACARDS AND MARKINGS**

### 11-1. PLACARDS

Decals, stencils, and markings used on Model 212 helicopters are shown in Figure 11-1 (Sheets 1 through 13). The first part of this figure shows sections, views, and details on the helicopter. Subsequent parts of the figure show detail appearance, quantity, and location of each unit by item number. A heavy black asterisk (\*) in front of certain index numbers indicates the item is required by government regulation.

#### NOTE

The decals shown in detail views are typical for helicopters being delivered at the time this manual was published. Therefore, the decals shown may be different than those originally supplied on any other particular helicopter. The decals shown are generally the decals which will be supplied when replacements are ordered. In all cases, refer to BHT-212-IPB for ordering information and decal part numbers for a particular helicopter.

#### 11-2. DECALS — APPLICATION

## **MATERIALS REQUIRED**

Refer to BHT-ALL-SPM for specifications.

NUMBER	NOMENCLATURE
C-233	Polyurethane Enamel
C-305	Aliphatic Naphtha
C-306	Toluene
C-349	Edge Sealer
C-385	Isopropyl Alcohol
C-426	Masking Tape
C-516	Clean Cloth

# NOTE

Bonding surfaces must be nonporous.

- **1.** Remove dirt, grease, wax, or other contaminants from the surfaces to be bonded, as follows:
- **a.** For non-metallic and painted surfaces, clean with a clean cloth moistened with aliphatic naphtha (C-305). Dry the surfaces with a clean cloth (C-516) before the aliphatic naphtha (C-305) evaporates.



DO NOT ALLOW TOLUENE (C-306) TO MAKE CONTACT WITH PAINTED OR NON- METALLIC SURFACES. DAMAGE TO THE SURFACE MAY OCCUR.

- **b.** For bare metal surfaces, clean with a clean cloth moistened with toluene (C-306). Dry the surfaces with a clean cloth (C-516) before the toluene (C-306) evaporates.
- **2.** Apply the pressure-sensitive (adhesive-backed) decal to the bonding surface, as follows:
- **a.** Apply the decal at temperatures above 60°F (16°C) for best results. Otherwise, first apply solvent (refer to the manufacturer's instructions) or isopropyl alcohol (C-385) to the decal.
- **b.** Remove the adhesive protection from one edge of the decal with a quick smooth movement.
- **c.** Carefully align the decal in the correct position.
- **d.** Put the peeled edge of the decal on the edge of the bonding surface and apply firm pressure with your finger along the same edge.

## **NOTE**

For application of large decals, use a plastic squeegee with a firm pressure.

**e.** While you continue to remove the adhesive protection, apply finger pressure to the remaining part of the decal until the entire decal is applied. For the best result, hold the opposite edge away from the surface until the entire decal is applied.



- **f.** Make sure there are no air bubbles trapped under the decal. Otherwise, make a hole in the bubble with a pin and press with your finger or a squeegee to remove the air.
- **3.** Edge seal or fully coat the decal with the applicable coating, as follows:
- **a.** Apply masking tape (C-426) 1/8 inch (3 mm) away from the edge and all around the decal.

### NOTE

A clear polyurethane enamel (C-233) may be used to seal decals applied to all types of exterior finishes.

- **b.** For the sealing of exterior decals, apply the same material used for the exterior painting. For example, if the exterior paint is polyurethane enamel (C-233), then use a clear polyurethane enamel (C-233).
- **c.** For the sealing of interior decals, apply a clear decal sealer (C-349).
- **d.** Remove the masking tape (C-426) from around the decal when the coating is dry.

Page 4 Rev. 11 30 APR 2010 ECCN EAR99

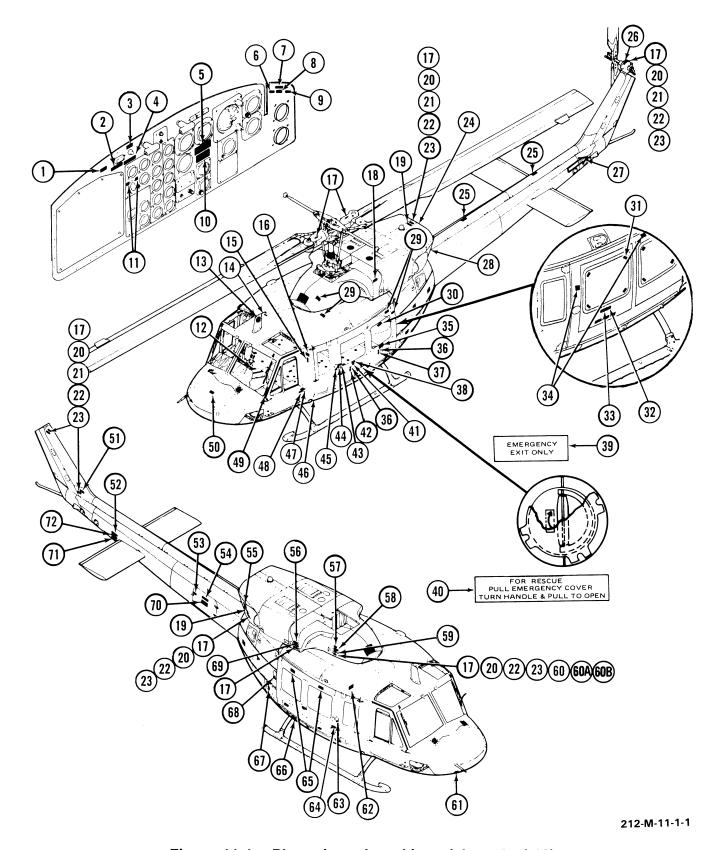


Figure 11-1. Placards and markings (sheet 1 of 13)

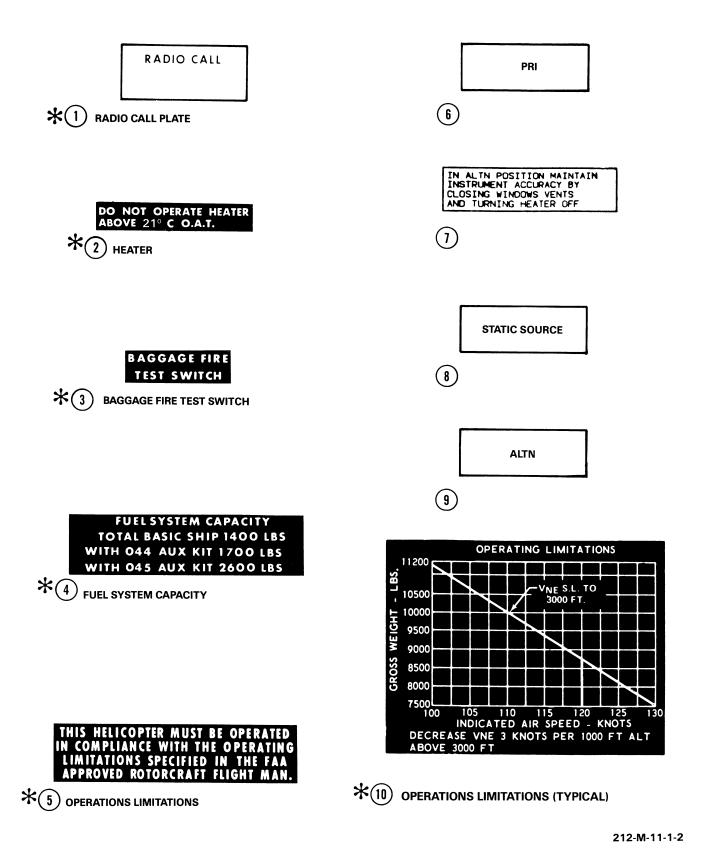
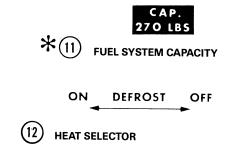


Figure 11-1. Placards and markings (sheet 2)



# Bell Helicopter Lixiron A Subsidiary of Textron Inc.

13 BELL INSIGNIA





Figure 11-1. Placards and markings (sheet 3)



# COMBINING GEAR BOX OIL CAPACITY 5.0 US QTS - 4.7 LITER

\*(19) CAPACITY

# SEE FLIGHT MANUAL FOR APPROVED LUBRIGANTS

\*(17) APPROVED LUBRICANTS

NOTE: Replace decal (17) with decal when changing from lubricating oil MIL-L-7808 to MIL-L-23699.

SERVICE WITH MIL-L-7808 OIL OR MIL-L-23699 OIL DO NOT MIX SEE FLIGHT MANUAL

APPROVED LUBRICANTS

NOTE: Replace decal (17) with decal when changing from lubricating oil MIL-L-7808 to MIL-L-23699.

**SERVICE GEARBOX WITH** 

**EXXON TURBO OIL 25 OR** 

DO NOT MIX

**AERO SHELL TURBINE OIL 555** 

MAX OIL COLD ADD 1 QT ADD 2 QTS MIN OIL COLD ADD 3 QTS **\*(18)** ENGINE OIL SIGHT GAGE

SERVICE WITH DOD-L-85734 (AS) **AEROSHELL TURBINE OIL 555, EXXON TURBO OIL 25, OR ROYCO OIL 555** DO NOT MIX SEE FLIGHT MANUAL

\* (23) SERVICE WITH MIL-L-7808 MIL-L-23699, DOD-L-85734 (AS) AEROSHELL TURBINE OIL 555, EXXON TURBO OIL 25, OR ROYCO OIL 555 DO NOT MIX SEE FLIGHT MANUAL

212-M-11-1-4

Figure 11-1. Placards and markings (sheet 4)



(24) HIGH SPEED BLOWER

# INSTALL SHAFT CLAMPS INDEXED 90° TO EACH OTHER TORQUE TO 30-35 IN.-LB

(25) TORQUE LIMITS, TAIL ROTOR DRIVE SHAFT CLAMP

90º GEAR BOX OIL CAPACITY 0.4 US QTS - 0.4 LITERS

\*(26) CAPACITY



**DETAIL C** 

DECAL L/H SHOWN (SEE DETAIL C)
DECAL R/H OPPOSITE
LOCATE ON CENTER LINE OF TAILBOOM

21.5
22.5

Figure 11-1. Placards and markings (sheet 5)



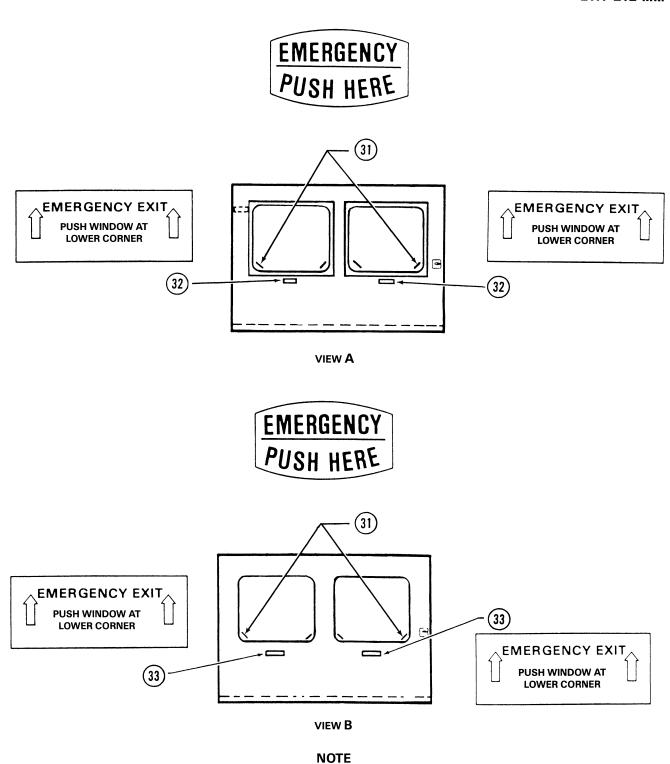
(28) HIGH SPEED BLOWER

# STRUCTURAL PANEL REQUIRED GROUND RUN AND FLIGHT

\*29 THIS PANEL MUST BE INSTALLED FOR ALL FLIGHTS

STRUCTURAL PANEL
REQUIRED GROUND
RUN AND FLIGHT
\*(30) STRUCTURAL PANEL REQUIREMENTS

Figure 11-1. Placards and markings (sheet 6)



For outside door markings, refer to View A, and for inside door markings for doors with pushout windows, refer to View B.

Figure 11-1. Placards and markings (sheet 7)

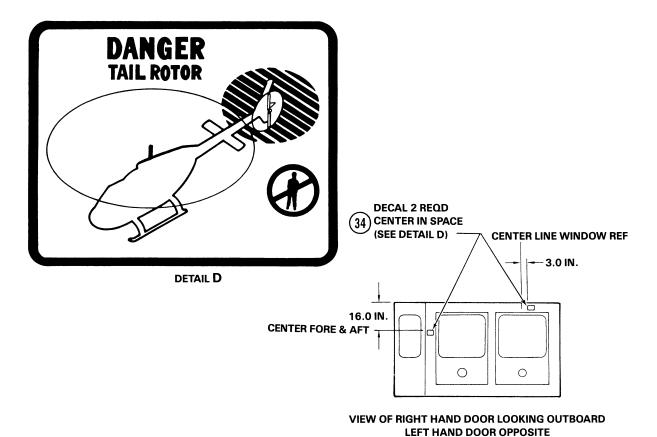




Figure 11-1. Placards and markings (sheet 8)

# EMERGENCY RELEASE \*38 EMERGENCY RELEASE



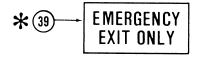






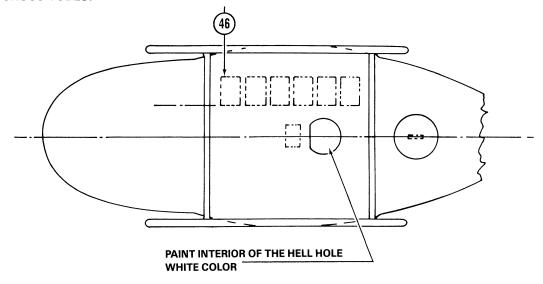






Figure 11-1. Placards and markings (sheet 9)

SIX CHARACTER IDENTIFICATION MARKING STENCILS TO BE 16.0 INCHES (406.4 mm) HIGH, 10.7 INCHES (271.78 mm) WIDE EXCEPT THE NUMBER "1" IS TO BE 2.7 INCHES (68.58 mm) WIDE AND THE LETTERS "M" AND "N" ARE TO BE 16.0 INCHES (406.4 mm) WIDE, 2.6 INCHES (66.04 mm) SPACING, CHARACTER THICKNESS TO BE 2.7 INCHES (68.58 mm). FIVE OR LESS CHARACTER STENCILS TO BE 20.0 INCHES (508 mm) HIGH, 13.3 INCHES (337.82 mm) WIDE EXCEPT THE NUMBER "1" TO BE 3.3 INCHES (88.82 mm) WIDE AND THE LETTERS "M" AND "N" ARE TO BE 20.0 INCHES (508 mm) WIDE, 3.3 INCHES (88.82 mm) SPACING, CHARACTER THICKNESS TO BE 3.3 INCHES (88.82 mm). LOCATE WITH TOP OF CHARACTERS NEAR LEFT SIDE CENTER BETWEEN LANDING GEAR CROSS TUBES.















# MAXIMUM ALLOWABLE BALLAST LEFT SIDE 82 POUNDS RIGHT SIDE 82 POUNDS

\*50 MAXIMUM ALLOWABLE BALLAST

Figure 11-1. Placards and markings (sheet 10)

# 42° GEAR BOX OIL CAPACITY 0.2 US QTS — 0.2 LITERS

**★**(51) CAPACITY

# ENGINE OIL FILLER CAP INSIDE

(56) ENGINE OIL FILLER CAP INSIDE

# MAX. ELEV. NOSE DOWN RIVET P.

(52) RIGGING RIVET

# HYDRAULIC RESERVOIR INSIDE

(57) HYD RSVR INSIDE



**★**(53) CLOSE AND OPEN

TRANSMISSION OIL ACCESS

(58) XMSN OIL ACCESS

ALL CARGO MUST BE SECURED SEE FLIGHT MANUAL FOR LOADING INSTRUCTIONS

\*54 CARGO SECURING

TRANSMISSION OIL

CAPACITY 11.0 US QTS - 10.4 LITERS

**★**59 CAPACITY

# GEAR BOX FILLER CAP ON TOP

(55) GEAR BOX FILLER CAP ON TOP

SERVICE XMSN WITH
EXXON TURBO OIL 25 OR
AEROSHELL TURBINE OIL 555
DO NOT MIX

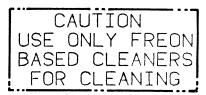
Figure 11-1. Placards and markings (sheet 11)

205-076-058 RESERVOIR
TOTAL SYSTEM CAP.10 U.S.PTS=4.7 LITERS
RESERVOIR CAP.5.3 U.S.PTS=2.5 LITERS
REFILL LEVEL CAP.2.5 U.S.PTS=1.2 LITERS
USE MIL-H-5606 HYDRAULIC FLUID
SERVICE INSTRUCTIONS
WHEN FLUID LEVEL IS VISIBLE
FILL TO OVERFLOW

LATCH PIN INSPECTION HOLE

\*64 FIVE EACH SIDE









\*(65) EMERGENCY EXIT

28 V

 $\mathbb{D}.\mathbb{C}.$ 

(61) 28 VOLT D.C.

PUSH FOR FUEL SUMP DRAIN

66) FUEL SUMP DRAIN

G R H O E U R N E

(67) GROUND HERE

ALL CARGO MUST BE SECURED SEE FLIGHT MANUAL FOR LOADING INSTRUCTIONS MAX. ALLOWABLE WEIGHT 3500 LB 100 LB PER SQUARE FOOT

\*62 MAX. ALLOWABLE WEIGHT



\_\_\_\_\_\_

Figure 11-1. Placards and markings (sheet 12)

FUEL

FUEL SYSTEM CAPACITY

BASIC AIRCRAFT 220 U.S. GAL

WITH 044 AUX KIT 260 U.S. GAL

WITH 045 AUX KIT 400 U.S. GAL

FUEL TYPE PER P.W.A. SPEC. 522

SEE FLIGHT MANUAL FOR APPROVED FUEL

\*(68) FUEL SYSTEM CAPACITY

ENGINE OIL

CAPACITY 6.4 US QTS — 6.0 LITERS

\*69 CAPACITY

MAXIMUM ALLOWABLE WEIGHT 400 LBS. 100 LBS. PER SQ FT

\*(70) MAXIMUM ALLOWABLE WEIGHT

# FULL FWD CYCLIC STICK RIVET R

71) RIGGING RIVET

# FULL AFT CYCLIC STICK RIVETS!

(72) RIGGING RIVET

Figure 11-1. Placards and markings (sheet 13)