

1 RESCUE AND SURVIVAL RING BUOY, THROWBAG, MARKER LIGHT (SEMI-ANNUAL) CHECK/SERVICE

SYSTEM:

Survivability - General

SUBSYSTEM:

Survivability - General

COMPONENT:

Light, Marker, Distress, P/N: 3940.1, CAGE: 18560, NIIN: 012621812

Rescue Line Throw Bag, P/N: 237P, CAGE: 64249, NIIN: 014831921

Ring Buoy, Lifesaving, P/N: MIL-R-16847, CAGE: 81349, NIIN: N/A

PERIODICITY EVENT:

NONE

NUMBER OF COMPONENTS:

Numerous

TASK HRS/COMPONENT:

1.0

PERSONNEL:

1 BM3

LOCATION:

Various

SOURCE DOCUMENTS:

[COMDTINST M10470.10 \(series\)](#) Rescue and Survival Systems Manual

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1 RESCUE AND SURVIVAL RING BUOY, THROWBAG, MARKER LIGHT (SEMI-ANNUAL) CHECK/SERVICE

REFERENCES:

46CFR160.050
MPC D-C-13202
MPC D-C-13203
MPC D-C-13204

TOOLS/TEST EQUIPMENT:

Brush, Wire, Scratch, P/N: WBSS2, CAGE: 55719, NIIN: 015719296 (Or equivalent) (If required)
Labeling Machine, P/N: PT2410, CAGE: 65533, NIIN: 014907262 (Or equivalent)
Stopwatch, P/N: LCD-200, CAGE: 86582, NIIN: 011064303 (Or equivalent)

EXPENDABLES:

Light Marker Bracket, P/N: 9438.1, CAGE: 18560, NIIN: N/A, (If required)
Repair Kit, Lantern-Light, P/N: 9286, CAGE: 1D2Y2, NIIN: 016218499 (If required)
Snap Hook, (3-5/32 inch), P/N: 365, CAGE: 64249, NIIN: 015609976, (If required)

CONSUMABLES:

Battery, Non-rechargeable (6v-terminal stud), P/N: 510S, CAGE: 83740, NIIN: 001000413 (Or equivalent)
Lubricating Compound, Dimethylsilicone, P/N: A-615, CAGE: 91522, NIIN: 008237860
Rope, Fibrous (Polypropylene 3/8 inch), P/N: CI 1301, CAGE: 6T629, NIIN: 009681351 (If required)
Tape, Labeling, P/N: TZ231, CAGE: 65533, NIIN: 014907265 (Or equivalent)
Tape, Reflective (2 inch), P/N: Scotchlite 3150A 2X50 SOLAS, CAGE: 94960,
NIIN: 012926737 (Or equivalent)

A RING BUOY CHECK/SERVICE

WARNING

VARIOUS STEPS IN THIS PROCEDURE EMPLOY ITEMS ON THE HAZARDOUS MATERIALS LIST. BEFORE EXECUTING THIS MPC, REFER TO THE APPLICABLE MSDS/SDS FOR FULL SAFETY AND HANDLING PROCEDURES.

1. Inspect ring buoy for the following:
 - a. Cuts.
 - b. Punctures.
 - c. De-lamination.
 - d. Signs of water intrusion.
2. Replace ring buoy if any of the above discrepancies are noted, (Comply with MPC D-C-13202).
3. Inspect ring buoy grab line for the following:
 - a. Cuts.
 - b. Frays.
 - c. Deterioration.



4. Repair cut or frayed grab line, (If required).
 - a. Place a whipping on the cut or frayed ends of the grab line, (Refer to [Figure 1](#)).
 - b. Seize the whipped ends together, (Refer to [Figure 2](#)).
5. Replace polypropylene grab line, P/N: CI 1301, (If required), (Refer to 46CFR160.050).
 - a. Replace ring buoy if grab line replacement is not practicable, (Comply with MPC D-C-13202).
6. Inspect installed reflective tape for wear or deterioration.

NOTE: Ring buoy shall be fitted with SOLAS grade retro-reflective tape with a minimum 2 inch width around the ring buoy at four locations equally spaced around the circumference.

- a. Replace worn or missing reflective tape, P/N: Scotchlite 3150A 2X50 SOLAS, (Refer to [Figure 3](#)).

NOTE: Ring buoy shall have the vessel name or number in the top quadrant and the legend "U.S. COAST GUARD" in the lower quadrants using 2 inch, black lettering.

7. Inspect ring buoys identification markings for faded or missing characters, (Refer to [Figure 3](#)).
 - a. Restore ring buoy identification markings, (If required), (Refer to MPC D-C-13202).

B RESCUE LINE THROW BAG CHECK/SERVICE

1. Remove water rescue rope from the throw bag.
2. Inspect the water rescue rope over its entire length for the following:
 - a. Cuts.
 - b. Frays.
 - c. Deterioration.
3. Replace rescue line throw bag if any of the above discrepancies are noted, (Refer to MPC D-C-13203).

NOTE: Handhold loop shall be approximately 20 inches in circumference, 10 inches long when pulled tight.

4. Check for handhold loop located at the outside, bottom of the rescue line throw bag.
 - a. Tie 10 inch long, 20 inch circumference handhold loop with an overhand knot, (Refer to [Figure 4](#)).
5. Inspect attached snap hook for the following:
 - a. Cracks.
 - b. Bends.
 - c. Functionality of latch.
6. Replace snap hook, P/N: 365, if any discrepancies are noted.
7. Check the security of the overhand knot connecting the snap hook to the water rescue rope.
 - a. Tighten or re-tie overhand knot, (if required), (Refer to [Figure 4](#)).
8. Inspect throw bag for the following:
 - a. Cuts.
 - b. Tears.
 - c. Deterioration.



- d. Functional buckle.
- e. Functional drawstring.
- 9. Replace rescue line throw bag if any discrepancies are noted, (Comply with MPC D-C-13203).
- 10. Repack the water rescue rope into the throw bag.

C FLOATING MARKER LIGHT CHECK/SERVICE

- 1. Remove marker light from bracket.
- 2. Clean marker light exterior using freshwater.
- 3. Dry marker light with a clean cloth.
- 4. Inspect marker light case for cracks.
 - a. Replace marker light if cracks are found, (Comply with MPC D-C-13204).
- 5. Disassemble marker light case, (Refer to [Figure 5](#)).
 - a. Depress the top cap of the marker light until the swivel locks may be turned outward, clear of the top cap.
 - b. Swivel the locks 180 degrees to allow top cap to pull out.
 - (1) Replace swivel locks (included in marker light repair kit, P/N: 9286), if they do not seat or swivel properly.
 - c. Pull the light lens upward until the top cap is clear of the marker light case.
 - d. Turn the marker light on its side, open end tilted slightly downwards.
 - e. Slide the strobe module with battery out of the marker light case.
- 6. Check marker light interior for the following missing components, (Refer to [Figure 5](#)):
 - a. Top cap and lens tube assembly.
 - b. Top cap o-ring.
 - c. Foam filler.

NOTE: The foam battery pad is not critical for the strobe light to function. The strobe light does not need to be replaced if the foam battery pad is missing.

- 7. Replace marker light, (If required), (Comply with MPC D-C-13204).
- 8. Inspect the marker light case interior for moisture.
 - a. Remove moisture using a clean cloth.
- 9. Check electrical contacts for corrosion.
 - a. Remove corrosion from electrical contacts using a wire brush, P/N: WBSS2.
- 10. Remove o-ring from the o-ring channel.
- 11. Remove any dirt or foreign objects in the o-ring channel.
- 12. Check the o-ring for cuts, cracks, or signs of deterioration.
 - a. Replace o-ring (included in marker light repair kit, P/N: 9286), (If required).



WARNING

AVOID EYE CONTACT, SKIN CONTACT, AND INHALATION WITH LUBRICANT. APPROVED RESPIRATOR REQUIRED IF USED IN A CONFINED AREA. USE OF PROPER PERSONAL PROTECTIVE EQUIPMENT RECOMMENDED. WASH EXPOSED SKIN THOROUGHLY AFTER HANDLING. FAILURE TO COMPLY MAY RESULT IN PERSONAL INJURY.

13. Lubricate o-ring using lubricating compound, P/N: A-615.
14. Install o-ring back into o-ring channel.
15. Replace 6-volt battery, P/N: 510S.

WARNING

USE CAUTION WHEN HANDLING AAA, AA, A, C, D, AND 9 VOLT BATTERIES. DO NOT MIX RECHARGEABLE BATTERIES WITH NON-RECHARGEABLE BATTERIES IN THE SAME EQUIPMENT. DO NOT ATTEMPT TO CHARGE NON-RECHARGEABLE BATTERIES. USE ONLY APPROVED BATTERIES AND CHARGER. ALWAYS CHANGE OR CHARGE BATTERIES AWAY FROM EXCESSIVE HEAT, OR OTHER HAZARDOUS CONDITIONS. FAILURE TO COMPLY MAY RESULT IN SERIOUS PERSONAL INJURY.

- a. Loosen battery terminal lugs located at the top of the battery.
 - b. Remove the strobe module wire terminal ends from the battery.
 - c. Discard battery IAW local procedures.
 - d. Check expiration of replacement 6-volt battery.
 - (1) Replace battery if expired, or if it will expire within the next 6 months.
 - e. Connect the strobe module black terminal lead to the center (-) post of the new battery.
 - f. Connect the strobe module red terminal lead to the outer (+) post of the new battery.
 - g. Attach lugs to the battery posts hand tight.
16. Assemble marker light case, (Refer to [Figure 5](#)).
 - a. Install foam battery pad.
 - b. Ensure foam filler is installed around strobe module.
 - c. Slide strobe module with 6-volt battery into the marker light case.
 - d. Depress the top cap down into the marker light case.
 - e. Rotate swivel locks into place over the top cap.
 17. Test floating electric marker light.

NOTE: Common causes of floating electric marker light failure are weak batteries, internal corrosion and lack of watertight seal.

- a. Invert assembled marker light to activate flash.
- b. Count the number of flashes per minute using a stopwatch.
- c. Turn floating electric marker light upside down to secure flashing.



- d. Replace floating electric marker light if the following discrepancies occur during testing, (Refer to MPC D-C-13204).
 - (1) Strobe light fails to emit 50-70 flashes per minute.
 - (2) Strobe flash fails to secure when marker light is inverted.
18. Inspect reflective tape installed on the exterior of the marker light case below the swivel locking pins, (Refer to [Figure 5](#)).
 - a. Replace worn or missing reflective tape using 2 inch reflective tape, P/N: Scotchlite 3150A 2X50 SOLAS.
19. Replace inspection label using a labeling machine, P/N: PT2410, and label tape, P/N: TZ231, with the current inspection date.
20. Inspect attached polypropylene marker light lanyard line for the following:
 - a. Cuts.
 - b. Frays.
 - c. Deterioration.

NOTE: Marker light lanyard shall be 3 feet in length.

 - d. Correct length.
21. Replace marker light lanyard, (If required), (Refer to MPC D-C-13204).
22. Inspect marker light bracket for cracks.
 - a. Replace marker light bracket, P/N: 9438.1, if cracked or broken.
23. Document any discrepancies.



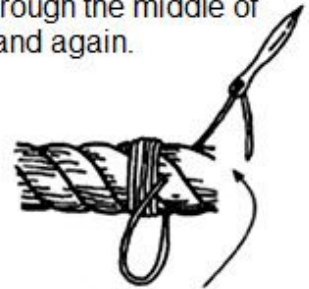
1. Through the middle of a strand. (Use twine doubled, shown as singled here for clarity).



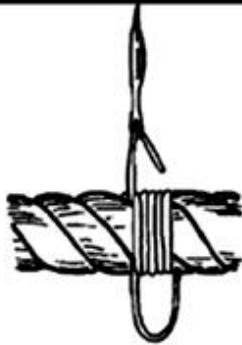
2. Wind turns toward the end.



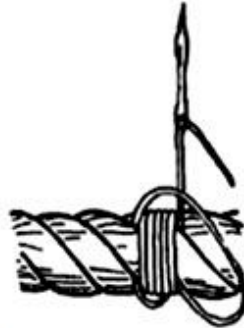
3. Through the middle of a strand again.



Needle comes out between two strands in back.



4. Follow the groove back and pick up a strand.



5. Back again and pick up another.

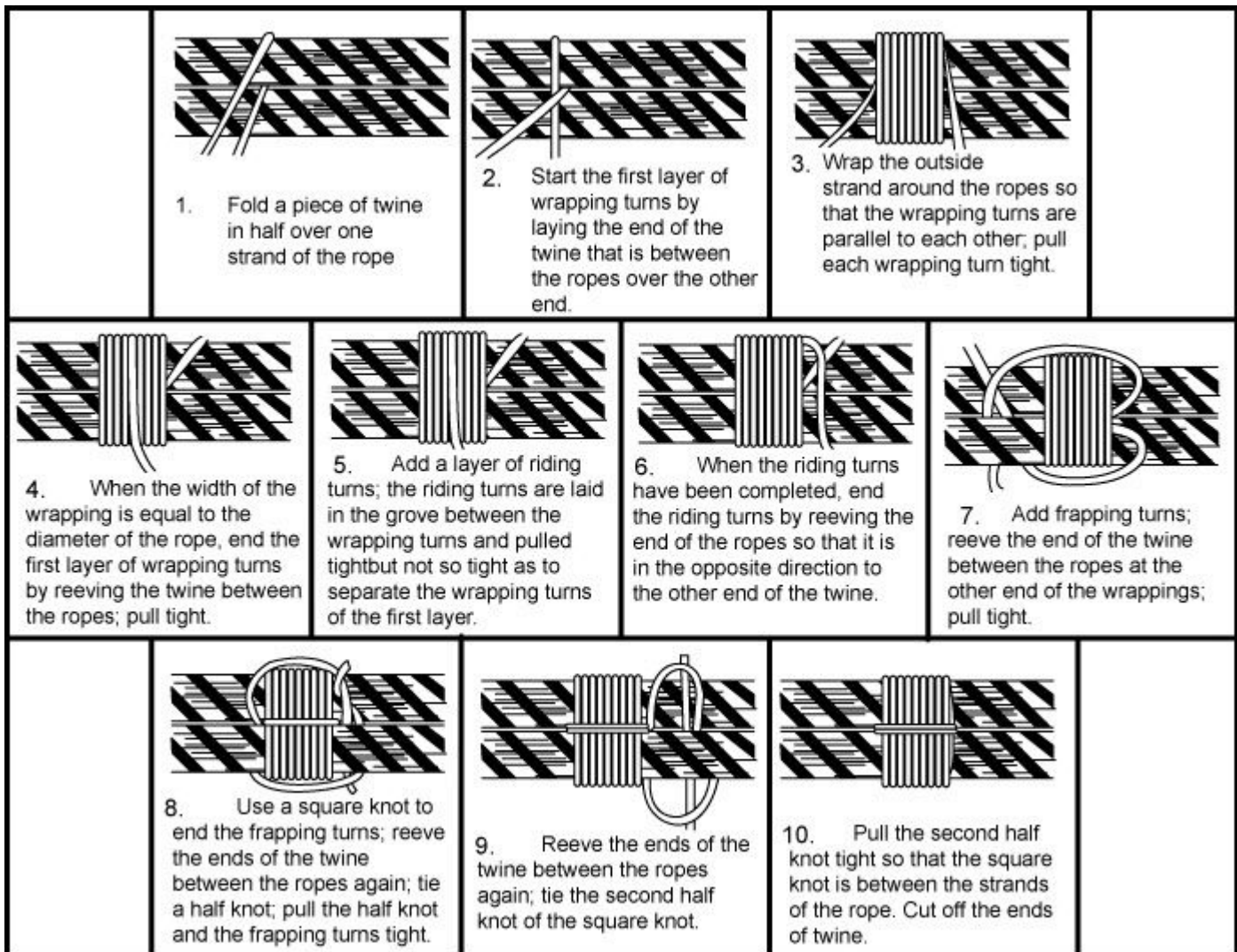


6. Last one comes out through the middle of a strand.

PERMANENT WHIPPING

Figure 1

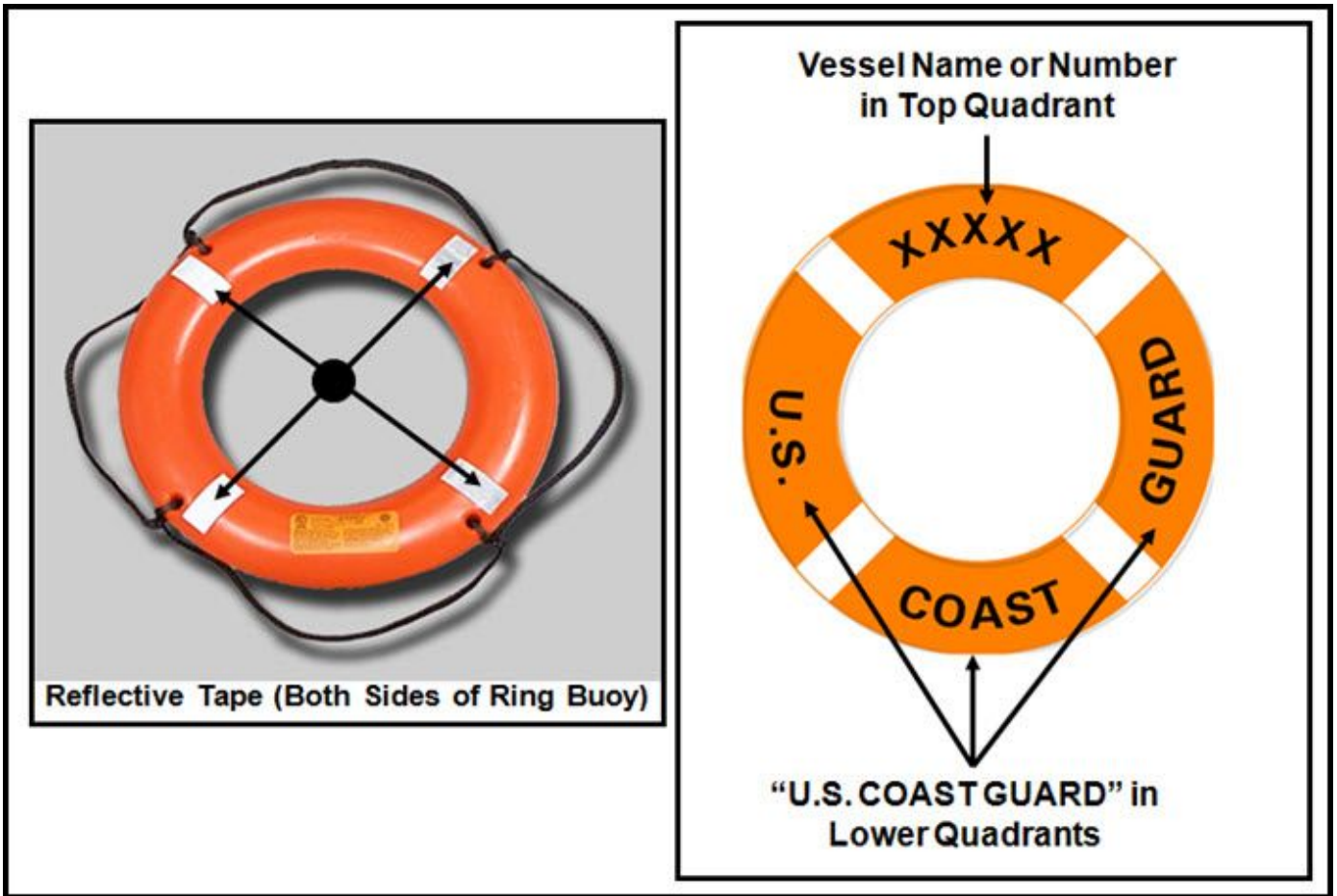




SEIZING
Figure 2



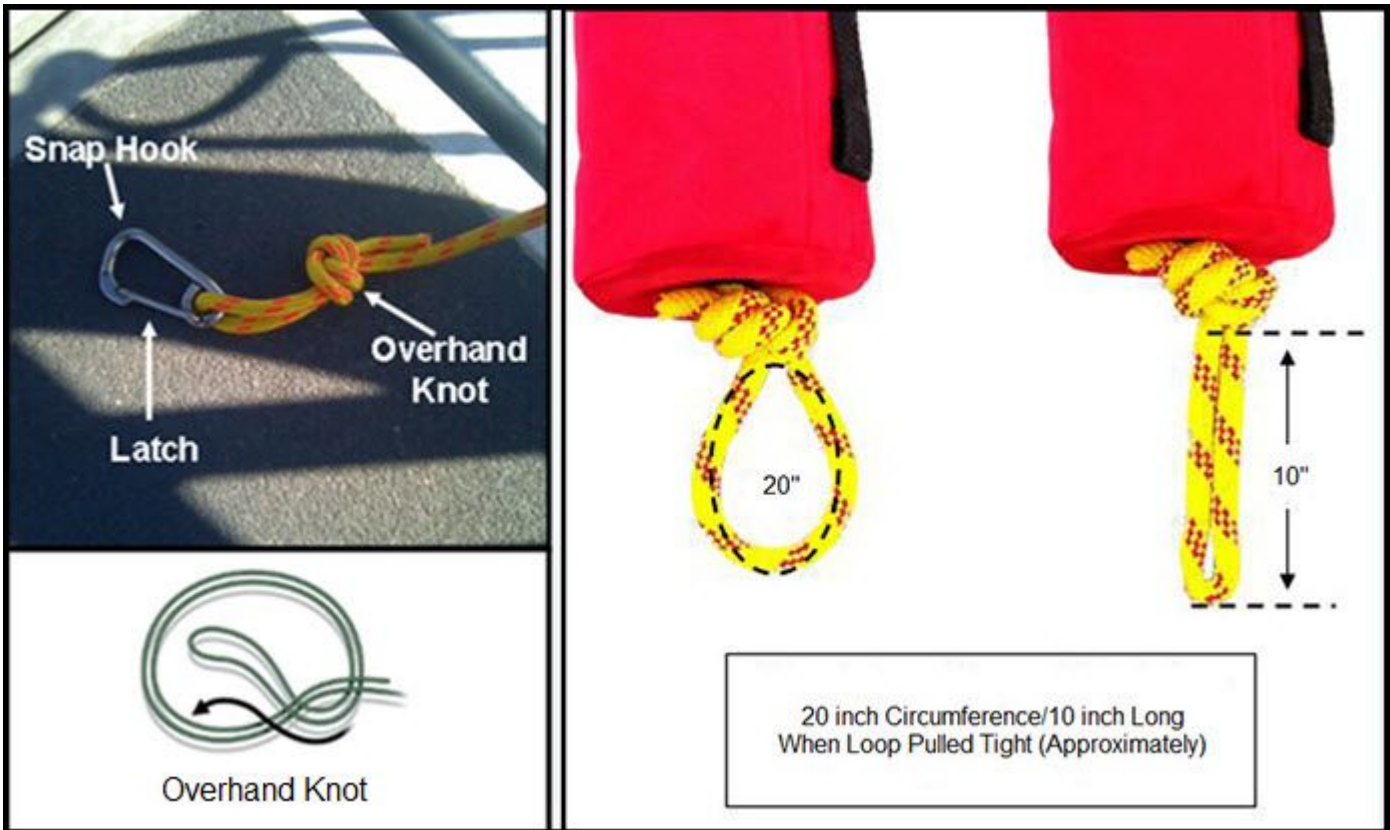
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REFLECTIVE TAPE AND IDENTIFICATION MARKINGS

Figure 3

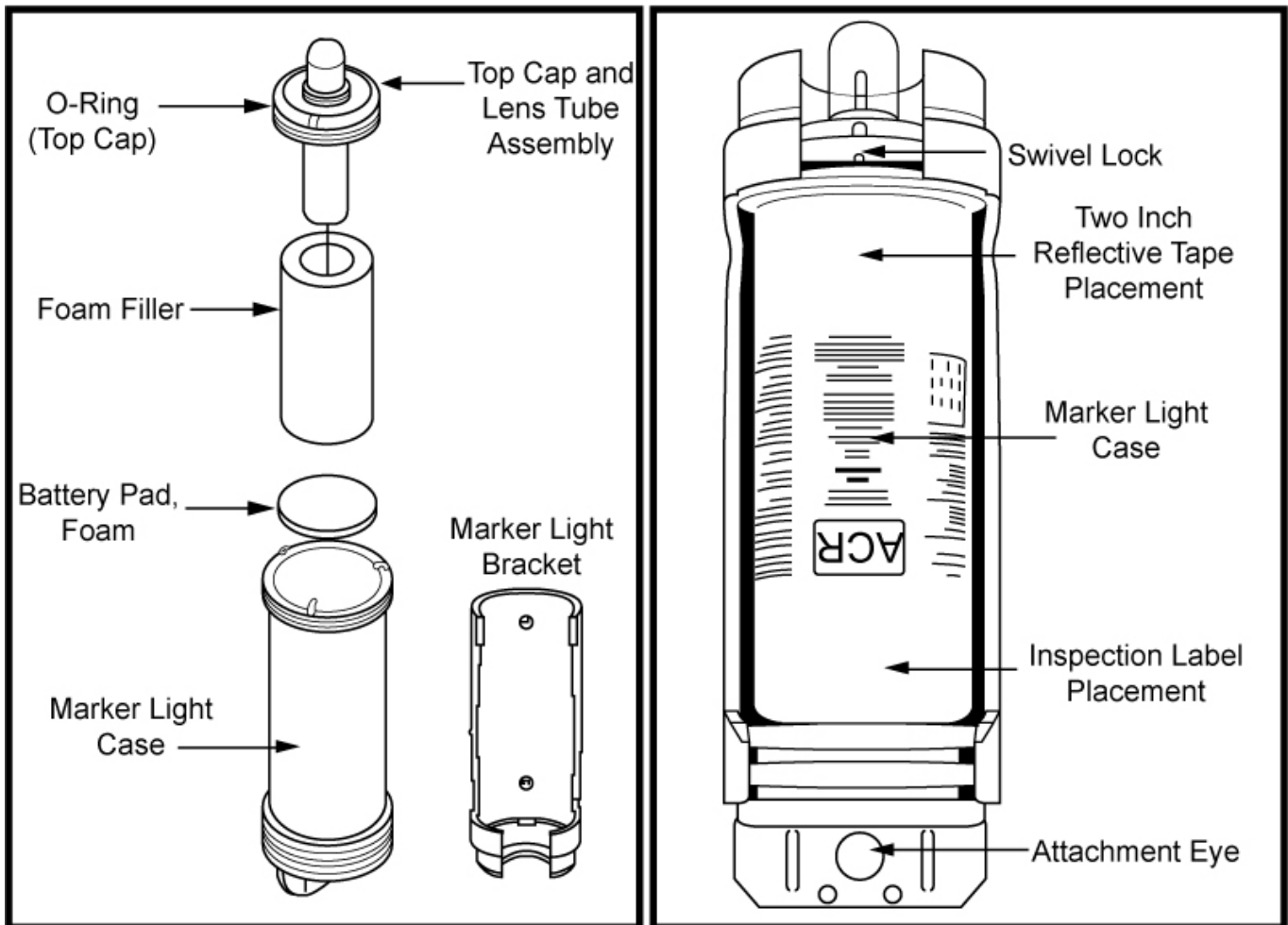




SNAP HOOK/HANDHOLD LOOP

Figure 4





FLOATING ELECTRIC MARKER LIGHT

Figure 5



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