

Revere Manual P/N 41119-1 Dec 12/2014, Rev. E



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# 1.0 WARNINGS AND CAUTIONS

- THIS RAFT IS INTENDED FOR USE IN EMERGENCIES ONLY. IT IS NOT A PLEASURE RAFT FOR RECREATIONAL USE.
- RAFT CONTAINS COMPRESSED GAS CYLINDER UNDER PRESSURE, DO NOT EXPOSE TO HEAT OR FLAME.
- DISPOSE OF CYLINDER ONLY WHEN EMPTY. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
- TO AVOID INJURY, KEEP FACE AND EYES AWAY FROM RAFT AS IT INFLATES.
- READ OWNER'S MANUAL BEFORE USE.
- AVOID USING IN WEATHER BELOW FREEZING.
- The raft contains a compressed gas cylinder filled with carbon dioxide gas under high pressure. Handle accordingly. Ship this raft in accordance with local, state, and federal transportation regulations for shipping a self-inflating, life-saving appliance (UN 2990).
- Do not test inflate this raft for practice or amusement. Doing so may damage parts of the raft that would not need repair or replacement had a normal periodic maintenance inspection been performed at a qualified service center.
- The raft's fabric valise is designed to tear apart under certain rapid inflation situations. Test inflating the liferaft may require costly repair or replacement of the valise.
- Do not attempt to repack the raft yourself. The raft is designed to be folded a specific way to avoid tangling, tearing, capsizing, and fabric bursting. Only a qualified service center should repack this raft.
- This raft shall only be inspected, repaired, serviced, and repacked at a REVERE COASTAL COMPACT authorized service facility. See Section 5.0 "Maintenance and Service". Contact REVERE for an authorized service facility near you.
- Always wear a U.S. Coast Guard (USCG) approved Personal Flotation Device (PFD) or life jacket or a U.S. Federal Aviation Administration (FAA) approved Life Preserver when operating the raft.
- Do not puncture or stab into the raft's valise. Your raft is a piece of safety equipment. Handle it carefully.
- This raft does not carry USCG or FAA product approval. It does not comply with carriage requirements if Federal Regulations require you to have an "approved" liferaft for your commercial vessel or aircraft.



#### 2.0 NORMAL, NON-EMERGENCY HANDLING

The REVERE COASTAL COMPACT inflatable raft, when packed in its valise, is designed to be durable and operate when handled in a variety of emergency situations. However, when the packed raft is moved or relocated in non-emergency situations, extreme care should be used.

Handling the raft with care under normal circumstances will insure that it will operate when needed in an emergency.

Follow these guidelines:

When lifting or moving a raft packed in a valise, hold the valise by its handle only. A handle is located on the valise for easy carrying. Do not the grip the case by its fabric when moving.

Do not drop the packed raft. Gently place it down on boat decks, docks, or hard surfaces. Dropping the raft can puncture the inflatable compartment's fabric or damage valuable safety equipment.

#### 3.0 INSTALLATION AND STORAGE

Read this manual carefully before raft is placed on your vessel or aircraft. Understand its procedures. Explain them to your crew and passengers. Store this manual in a safe place. Review it often.

Rafts packed in valises should be stowed where they can be easily reached in an emergency. Valise packed rafts can be kept on boat decks for short periods of time only but should be stowed in a location where they are not continuously exposed to direct sunlight, weather, or water spray.

All rafts should be stowed in a clean, dry, contaminant free area away from any heat source. Contaminants such as petroleum solvents, fuel, grease, oil, and hydraulic fluids may have detrimental effect on the fabrics and consequentially on the life and performance of the raft.

If the valise becomes dirty, clean outside only with a mild all-purpose household cleaner (Examples: Formula 409, Fantastic) and a soft rag. Do not scrub. Do not use bleach. Do not use solvents.

Storage Temperature Range: +5 °F to +130 °F (-15 °C to +54 °C). Operating Temperature Range: +33 °F to +130 °F (+1°C to +54 °C).

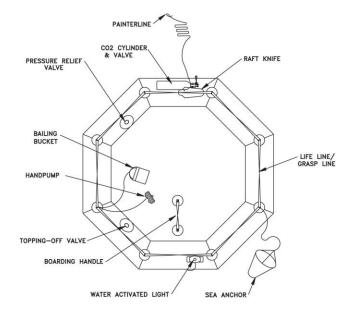
WARNING: EXPOSING THE RAFT TO HIGH TEMPERATURES MAY RESULT IN THE RAFT INFLATING AUTOMATICALLY. AVOID EXPOSING THE RAFT TO HIGH TEMPERATURES.



# 4.0 ABOUT YOUR RAFT

#### 4.1 CONSTRUCTION

Your REVERE COASTAL COMPACT inflatable raft is constructed from lightweight, durable urethane coated nylon fabric. Each raft consists of a single air-holding compartment made from this fabric. The fabric is cut, shaped, and bonded to form this compartment using specially formulated adhesives and tapes and heat welding techniques.



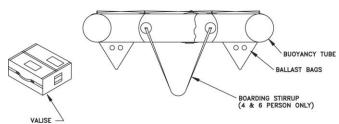


FIGURE 1
REVERE COASTAL COMPACT 2, 4 and 6
WITHOUT CANOPY
SHOWN INFLATED



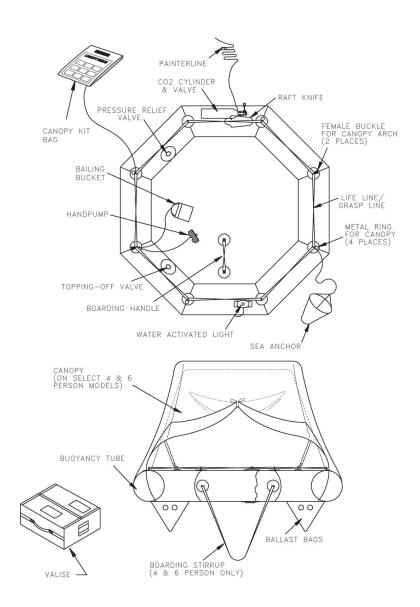


FIGURE 1A
REVERE COASTAL COMPACT 4 & 6
WITH OPTIONAL CANOPY
SHOWN INFLATED



#### 4.2 INFLATION SYSTEM

The raft is inflated with carbon dioxide (CO2) gas which is compressed under high pressure into a small, metal storage bottle called a cylinder. This cylinder is attached to the raft and designed to meet stringent U.S. Department of Transportation (DOT) safety requirements.

For Coastal Compact 2 Only - The cylinder is filled and sealed closed at the factory to prevent leakage. The cylinder is therefore disposable {Reference: 49CFR178.65 Specification 39; non-reusable (non-refillable) cylinder}. It is used once and thrown away. It cannot be refilled. US Federal law forbids transportation of the cylinder if it is refilled (Reference: 49 USC 1809). Because it is a sealed, disposable cylinder, it is exempt from the DOT requirements for periodic reinspection and hydrotesting that is performed on most life raft cylinders every five years. The cylinder is good indefinitely.

For Coastal Compact 4 & 6 Only – The cylinder is a reusable, refillable type. To maintain the cylinder's high level of safety, the DOT requires periodic inspection and testing of this cylinder (See "Periodic Service and Maintenance" Section 5.0). This is performed as required when your raft is serviced at a qualified service and repair facility.

When the painterline (See "Operating Procedures" Section 6.0) on the raft is fully extended and pulled, a spring loaded pin in the cylinder valve is released. The pin punctures through the thin walled cap at the top of the cylinder. This allows the stored carbon dioxide gas to flow from the cylinder into the cylinder valve and then through a one-way inlet valve into the raft's buoyancy tube.

#### 4.3 ICE BUILD UP

The flow of carbon dioxide from the high pressure storage cylinder to the low pressure buoyancy tube causes the areas of the raft it passes through to get very cold. It is therefore normal to see ice build up accumulate on the raft tube, compressed gas storage cylinder, cylinder holder, and cylinder valve. This is just the moisture in the air condensing and freezing to the cold areas of the life raft. The ice will quickly melt.

Consult Section 6.0 for detailed, step-by-step emergency inflation procedures.

#### 4.4 BALLAST BAG SYSTEM

Two (2) ballast bags (water pockets) are attached to the underside of the raft's floor. These deploy underwater as the raft inflates. They fill with water and help prevent the raft from capsizing, especially when the raft is empty or lightly loaded.



#### 4.5 PRESSURE RELIEF VALVE

The raft is equipped with a pressure relief valve that releases excess inflation gases and prevents the raft from over-inflation. After inflating the raft, you may here a hissing sound of gas escaping through the pressure relief valve. This is normal. The sound should stop after a few minutes.

#### 4.6 WATER ACTIVATED LOCATOR LIGHT

A water activated locator light is mounted to the raft to aid in locating the raft for boarding. The light will illuminate automatically when the raft is inflated in water and last at least eight hours.

#### 4.7 CANOPY

Coastal Compact 4 & 6 are available with an optional, manually erected canopy. The canopy offers additional protection from the elements. Markings on the valise indicate if your raft is so equipped.

On rafts with an optional canopy, a canopy kit bag is packed inside the raft valise and tethered to the life raft buoyancy tube. After inflating and boarding the raft, retrieve the canopy kit bag from the water. The kit bag contains the orange canopy fabric and yellow inflatable arch support tube. Orally inflate the arch tube and connect to the raft. Then attach the canopy fabric and erect using the arch tube. See Section 6.5 – Canopy Set-up for step-by-step procedures on how to attach the canopy to the raft. These illustrated procedures are also printed on the outside of the canopy kit bag.



# 5.0 PERIODIC SERVICE AND MAINTENANCE

**CAUTION:** 

NEVER ATTEMPT TO OPEN THE RAFT PACKAGE AND SERVICE THE RAFT YOURSELF. ONLY A PROFESSIONAL SERVICE FACILITY TRAINED AND AUTHORIZED BY REVERE TO SERVICE COASTAL COMPACT RAFTS SHOULD SERVICE YOUR RAFT.

REVERE authorized service facilities are experienced in servicing marine type life rafts. The facility will have the current service manual and maintenance documents for this raft as published by REVERE. You can return your raft to REVERE's own facility listed below for service or contact REVERE for an authorized service facility near you.

# REVERE SURVIVAL, INC. Life Raft Service Facility

5323 Highway Avenue, Jacksonville, Florida 32254 USA Tel. No. (904) 503-9733 Fax. No. (904) 503-9719 www.reveresurvival.com

Your REVERE COASTAL COMPACT inflatable raft should have its initial periodic servicing performed twenty-four (24) months after being purchased. Subsequent periodic servicing should be performed twelve (12) months after the last servicing.

Initial and annual periodic servicing shall include the opening, unpacking, inspection, testing, repairing, and repacking of the life raft. A leakage test of the inflatable compartments will be performed at each annual servicing. The raft's inflation cylinder will be removed and weighed at each annual servicing to determine if it is still correctly filled and not severely corroded.

For Coastal Compact 2 Only - Corroded or leaking cylinders need to be replaced. Because the cylinder is a disposable, non-refillable type, it does not need to be hydrostatically tested per DOT regulations like other life raft cylinders. Cylinders in good condition can be reinstalled. The cylinder inflator will be replaced at each annual inspection.

For Coastal Compact 4 & 6 Only - The refillable compressed gas inflation cylinder is subject to periodic hydrostatic retesting. When the raft is in for annual servicing, the facility shall check the date of the last hydrostatic testing marked on the cylinder. If the hydrostatic retest date is past due, the cylinder must be hydrostatically tested and refilled in accordance with U.S. Department of Transportation regulations before being placed back on board the vessel or aircraft. The inflation system will also be functionally tested while unattached to the raft and the valve overhauled.



# 6.0 OPERATING PROCEDURES

#### 6.1 INFLATION

- 1. Put on your USCG approved Personal Flotation Device (PFD) if on a boat or FAA approved life preserver if on an aircraft.
- 2. Gather any gear needed for raft such as ditch bags, emergency radio beacons (EPIRBs, PLBs, ELTs), cellphones, signal flares, etc.
- 3. Move the packed raft from its stowage location to one side of the boat or to an open door if on an aircraft.
- 4. Remove the red flap on the small end of valise. The painterline is secured to the back side of the flap. (See Figure 2).
- 5. Pull out approximately 6 feet (2 meters) of painterline.

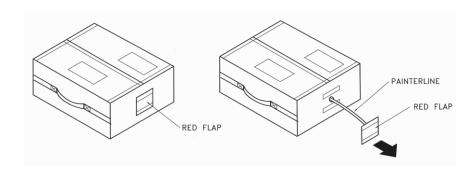


FIGURE 2
RED PAINTERLINE FLAP



6. Securely attach the red flap end of painterline to the boat or aircraft to prevent the raft from drifting away. Secure to a strong point such as a cleat, handrail, seat leg, or door handle. (See Figure 3).



FIGURE 3

NOTE: The painterline is designed to break before the inflated life raft is dragged underwater by the sinking vessel or aircraft.

7. Toss the raft valise overboard into the water (See Figure 4). The liferaft will float while still packed in its valise.



FIGURE 4



8. Begin pulling out the remaining painterline packed in the raft package. Extend it until taut and tight. This will require pulling out about 20 feet (6 meters) of line (See Figure 5).



FIGURE 5

 After pulling out all of the painterline, give a sharp, fast pull. If the raft does not inflate, pull again harder. Continue to pull harder and harder until inflation occurs.

NOTE: A hard, forceful pull of about 20 pounds (10 kg) is needed to begin inflation.

10. If after several tries the life raft fails to inflate, hold the raft's valise away at arms length or hold the raft down by applying light pressure with your foot. Then, give the lanyard a sharp, fast pull and repeat until inflation occurs.

Upon inflation, the raft will burst out of its valise. The raft will be ready to board in seconds. A water activated locator light will activate to aid in boarding in night time.

WARNING: THE RAFT INFLATES RAPIDLY AND WITH GREAT

FORCE. TO AVOID INJURY, KEEP FACE AND BODY AWAY FROM LIFE RAFT VALISE WHEN

PULLING THE PAINTERLINE.

**CAUTION:** THE COASTAL COMPACT LIFE RAFT IS

EQUIPPED WITH A CARBON DIOXIDE INFLATION SYSTEM. DO NOT PERFORM A FUNCTIONAL TEST OF RAFT DEPLOYMENT DURING SERVICING, UNLESS NECESSARY. REPEATED DEPLOYMENT, ESPECIALLY WHEN THE RAFT IS NOT IN THE WATER, MAY CAUSE PREMATURE



DETERIORATION OF RAFT FABRIC IN THE VICINITY OF THE CO<sub>2</sub> ENTRY PORT. FOR SERVICING PURPOSES, INFLATE RAFT BY INTRODUCING COMPRESSED AIR THROUGH TOPPING-OFF VALVE.

#### **CAUTION:**

IF DEPLOYING ON DRY LAND FOR SERVICING, TRAINING OR DEMONSTRATION PURPOSES, ENSURE THAT THE AREA IS CLEAN, SMOOTH AND FREE FROM SHARP OBJECTS, SPLINTERS, ABRASIVE AND CORROSIVE MATERIALS. COVER ROUGH WOOD OR CONCRETE SURFACES WITH A TARPAULIN OR CLEAN HEAVY PAPER.

#### 6.2 RIGHTING

The life raft will almost always inflate right-side-up if it is thrown into the water with the top of the valise case facing up. Occasionally, the unoccupied raft will inflate upside down or capsize due to wind or wave action. If this occurs, the raft can be easily righted by a person in the water. Always don a USCG approved Personal Flotation Device (life jacket) or inflated FAA approved Life Preserver before entering the water to right the raft. Once in the water, swim to the raft and flip the raft over about the cylinder using the handles and lifeline provided.

#### 6.3 BOARDING

- 1. After the raft has inflated, pull the raft back towards the boat by pulling in the painterline.
- 2. While wearing a life jacket, climb from the side of the boat or out the door of the aircraft into the raft. Remember to take any ditch bags, emergency radio beacons, signal flares, etc.
- 3. If you cannot climb from the boat or aircraft into the raft, you should enter the water and swim to the raft. Climb up and over the buoyancy tube then pull yourself into the raft. Use the grasp handles and lifeline provided about the raft.



#### 6.4 CAST-OFF

- 1. Locate the knife pocket attached to the buoyancy tube near the inflation cylinder.
- 2. Remove the knife from the pocket.
- Locate the painterline line that is still securing the raft to the vessel or aircraft.
- 4. When deemed ready to cast away from the boat or aircraft, cut the painterline with the knife (See Figure 6).

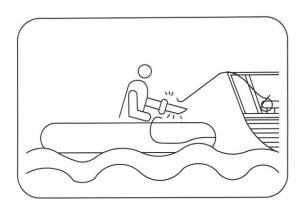


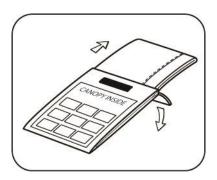
FIGURE 6
CUTTING PAINTERLINE WITH RAFT KNIFE



#### 6.5 CANOPY SET-UP

(For Coastal Compact 4 & 6 equipped with optional canopy.)

- Retrieve canopy kit bag. It is tethered to liferaft and may be either floating in water or still in raft valise. Open kit bag and remove contents (See Figure 7).
- 2. Inflate yellow support arch by mouth using red oral tube (See Figure 8).



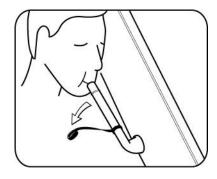
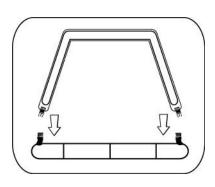


FIGURE 7

FIGURE 8

3. Clip male buckles on each end of support arch to mating female buckles on raft (See Figures 9 & 10). Ensure that the red oral tube is facing the inboard side of the life raft.



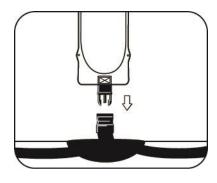


FIGURE 9

FIGURE 10



- Locate two black Velcro® patches along the inside top of orange canopy fabric. Affix Velcro® to mating Velcro on top of yellow arch tube (See Figure 11).
- 5. Pull orange canopy fabric down over yellow arch tube (See Figure 12).

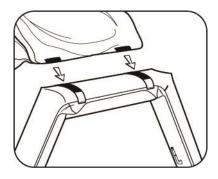
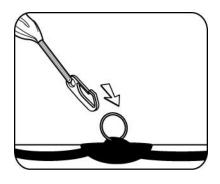




FIGURE 11

FIGURE 12

- Affix first two plastic snap hooks on canopy to metal rings on raft (See Figure 13). Ring are located at corners of raft along the lifeline/grasp line.
- Lift canopy arch upright so that it is perpendicular to floor. Clip the remaining two plastic snap hooks to metal rings on raft (See Figure 14).





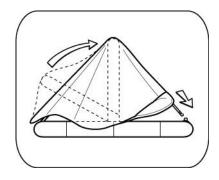
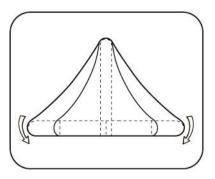


FIGURE 14



- 8. Tuck elasticized bottom edge of orange canopy over outside of raft tube (See Figure 15).
- 9. Keep canopy down and closed for maximum protection from elements. If ventilation or viewing outside for rescue craft is desired, one or both sides of the orange canopy fabric may be raised and secured to form a doorway. Just, gather up canopy fabric and tie up using laces provided (See Figure 16).



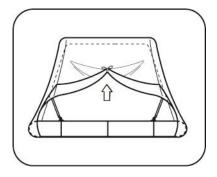


FIGURE 15 FIGURE 16



# 7.0 **EQUIPMENT**

#### 7.1 TOPPING-OFF WITH HANDPUMP

- Screw quick-release pump adapter to the handpump. Tighten hand tight. Refer to Figure 17.
- 2. Open the dust cover at the topping-off valve opening. Attach the pump to the valve by inserting the pump adapter into the valve until the adapter snaps into place. Valve will open automatically.
- Inflate by applying pumping action to the hand pump until full inflation is achieved.
- Remove pump from the valve by pulling the adapter away from the topping-off valve until the adapter unsnaps out of place. Valve will close automatically.
- 5. Close and secure the captive dust cover in place.



FIGURE 17 HAND PUMP OPERATION

#### 7.2 DEFLATION

- 1. Remove the captive dust cover at the valve opening.
- 2. Depress the spring loaded poppet at the center of the topping valve with your finger. Gas will escape from the raft buoyancy tube.
- Once the desired amount of gas is removed, replace the dust cover in place.



#### 7.3 SEA ANCHOR

A fabric sea anchor is attached to the raft's lifeline and will be lying loose on the raft floor. After boarding the raft and casting off, deploy the sea anchor. Remove the elastic bands from the sea anchor line and toss sea anchor overboard (See Figure 18). The anchor will aid in stability and prevent the raft from drifting out of the search area.

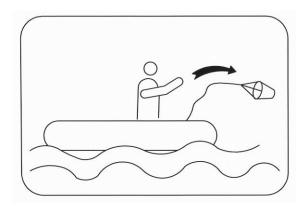


FIGURE 18
SEA ANCHOR DEPLOYMENT

#### 7.4 BAILING BUCKET

Use the fabric bailing bucket attached to the raft lifeline to bail water from the floor of the raft. Keep the inside of the raft dry.



# 8.0 <u>IMMEDIATE ACTION CHECKLIST</u>

After boarding raft and casting-off, take these immediate actions:

- 1. Salvage any floating equipment.
- 2. Check raft for proper inflation. Raft tube should be firm but not drum tight. If soft, inflate more with handpump (See Section 7.1).
- 3. Sit low on the raft floor with your back towards the tube.
- 4. Bail out any water that has entered the raft (See Section 7.4).
- Keep sharp items out of pockets and away from buoyancy tube and floor.
- Inventory and secure any lose gear including ditch bags, emergency radio transmitters (EPIRBs, PLBs, etc.), signal flares, etc. if available.
- Activate any emergency radio beacons (EPIRBs, PLBs, etc.) if available.
- 8. Set-up canopy (if raft so equipped) to protect from sunburn, cold, or rain (See Section 6.5).
- Make a calm estimate of your situation and plan your course of action carefully.
- 10. Keep calm. Do not move around unnecessarily.