TECHFLOAT

THROWABLE LIFT & RESCUE DEVICE

Owner's Manual
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WARNINGS

WARNING! Read these instructions fully before use. Failure to do so may result in injury or death.

WARNING! This device must be used in accordance with the instructions in this manual for maximum performance. Failure to comply with instructions could result in a lower level of performance or in failure of the device, which could result in death. Under some circumstances, even if used properly this device may not save your life.

WARNING! The Techfloat is designed to inflate automatically upon immersion in water. Do not allow the unit to get wet until it is actually needed. In the event that the unit does not automatically inflate, it must be manually activated with the pull tab for use as a flotation device.

WARNING! Do not inflate this device orally via the included oral inflation tubes and then pull the inflation tab. This could cause injury and may overstress the buoyancy chamber.

WARNING! This device is not designed to satisfy the requirements of a life raft for extended durations. This unit is designed for man-overboard or individual rescue operations.

WARNING! This unit requires limited periodic maintenance to ensure operation in an emergency. Do not use this unit if it has not been properly maintained. See “Care and Maintenance” section for additional details.

WARNING! Do not open or otherwise disassemble this device until needed. Maintenance should be performed only when needed. See “Care and Maintenance” section for additional details.

WARNING! Never use this device if it has obvious damage.
The Switlik Techfloat Throwable Lift and Rescue Device is designed to help first responders in situations involving a victim in the water. The device consists of an auto-inflating underarm sling (35 lbs buoyancy) with 100’ of floating line in a wearable valise that is designed to allow the user to maintain connection with the victim at all times during the rescue.

The device includes stainless steel lifting rings paired with tubular webbing that can easily support one or two victims in the event where hoisting is necessary. The floating line is visible in the water and the cylindrical shape of the uninflated unit allows it to be thrown far distances to reach the victim.

The unit can be rearmed and repacked by the user.

When needed, sling the valise over your head and across your chest, with the device resting on your hip, opposite the side of your throwing arm, and with the black end cap facing forward. Unbuckle the end cap, open the cap, grab the webbing handle with your throwing hand and pull the device from its valise. Using a strong underhand toss, throw the device near the victim. The rope will pay out of the line bag. Upon contact with water, the auto-inflator will activate, releasing CO₂ gas from the attached cylinder, and inflate the Techfloat. After the victim secures the device around their body and underneath their arms, pull in the retrieval line with both hands. The recovered person can be removed from the water by hoist or winch, if desired, using the stainless steel rings attached to the device’s lifting straps.
Operating Instructions

1. Grab valise and sling over head and across chest. Black end cap faces forward on side opposite throwing arm.

2. Unbuckle end cap and pull Techfloat flotation device from valise by the webbing handle with your throwing hand.
Operating Instructions

An alternate method to anchor the end of the retrieval line is to detach the shoulder sling snap shackle from the valise and secure it to a fixture such as a post or handrail.

3. Throw flotation device near victim.

On contact with the water, the Techfloat will inflate and victim can don under arms.

**NOTE:** If the auto-inflator fails to function, the device can still be inflated by pulling the red pull tab.
Operating Instructions

4. Pull in retrieval line with both hands after victim is secured in Underarm Flotation Device

5. Use rings on lifting straps to hoist victim, if necessary.
Operating Limitations

PRESSURE:

• Underarm Flotation Device

  Normal operating pressure: 2 psi

TEMPERATURE:

The Techfloat is designed to operate between a temperature range of 32º F and 140º F.

At normal and higher temperatures, the raft will inflate to full-design shape within 10 seconds or less. At lower temperatures, inflation may take longer.

AUTO-INFLATION:

Auto-inflator attached to unit must remain dry to avoid accidental inflation inside the valise.
Care & Servicing Instructions

CLEANING:

The Techfloat valise and flotation device may be cleaned with mild soap and water. Never use harsh chemicals on or around this product. If exposed to harsh chemicals such as hydraulic fluids, oils or solvents, have the unit cleaned and inspected by an authorized service center.

SERVICING:

The Switlik Techfloat Throwable Lift and Rescue Device can be serviced by the user. However, only authorized parts may be used to service this device. See the parts section for available parts.

The Bobbin in the Auto-Inflator should be replaced every year. It also needs to be replaced after an actual deployment. Refer to the instructions attached to the inflator or the “SERVICING – detailed” section of this manual.

For servicing or repairs beyond the scope of this manual, return your Techfloat to a factory-authorized service center.

IDENTIFICATION LABEL:

Located inside the end cap on the valise is an identification label. The label contains the part number and serial number of your device. It also has an area for your contact information.

OWNER:
ADDRESS:
PHONE:

PART NUMBER: TF-3500-
SERIAL NUMBER: TF-
Care & Servicing Instructions

CLEANING - detailed

1. With the Techfloat inflated, wash with fresh water. A mild soap may also be used.
   a. Be sure to also wash the retrieval line that was in the water.
   b. Remove the cap on the auto-inflator (twist counter-clockwise), remove the yellow bobbin and wash out the white residue in the cap and inside the inflator.
   c. Allow to air dry. **DO NOT PLACE IN DRYER.**

2. When dry, untie the retrieval line from the Techfloat and place the unit on a clean work area, free of anything that could damage or puncture it. Continue with “SERVICING – detailed” instructions below.

SERVICING – detailed

PREPARING TO REPACK

1. Remove the CO₂ bottle.
   a. If holding the inflator in your left hand, and holding the cylinder in your right, twist the cylinder counter-clockwise to remove.
   b. Discard used cylinder.
   c. If cylinder has not been punctured, check for corrosion and check that its weight meets the minimum weight marked on the cylinder. If there’s no corrosion and the weight is good, you can re-use the cylinder.
2. Remove trapped air from the device.
   a. Invert the dust cap on the oral tube, pressing it back into the end of the tube to deflate the Techfloat.
   b. Starting at the opposite end, roll the device towards the oral tube, squeezing out all the air. Repeat, as needed, to expel all air from the unit.
c. When all the air has been expelled, pull out the dust cap to close the oral valve. Turn it back over and cap off the oral tube with it.

REARMING THE INFLATOR

1. If not previously accomplished:
   a. Remove the cap on the auto-inflator (twist counter-clockwise).
   b. Remove the yellow bobbin and discard.
Care & Servicing Instructions

c. Check the cap and inflator to be sure they are clean and dry.

2. Check the date on the new bobbin in the rearm kit. The date should not be over three (3) years from today’s date.

3. Install new bobbin in inflator. It can only go in one way. If it slides in smooth and easy, it’s in correctly.

4. Re-install the cap on the inflator. Hand-tighten, only. The red color in the cap will be replaced by a green color when fully installed.

5. If the green indicator clip is missing or broken, place a new clip over the red lever by aligning the arms on the clip with the slots in the inflator. There’s a little cut-out on the end where the cord goes. Push firmly in the middle of the clip to snap in place.

6. Check the cylinder seat seal inside the inflator. If it’s worn, remove and replace it with a new one.
7. Install the CO₂ cylinder.
   a. Place the hole in the Halkey-Roberts rearming instructions over the threaded end of the cylinder. Wrap the instructions around the cylinder.
   b. Thread the cylinder into the auto-inflator. **Be careful not to cross-thread the inflator threads. They are plastic.**
   c. Hand-tighten, only.
Care & Servicing Instructions

FOLDING THE TECHFLOAT

1. Lay out Techfloat on a clean, flat surface. The side with the red oral tube should be facing up.

2. Grab the end with the oral tube and pull it over to the opposite end until the cap of the auto-inflator is visible.
3. Grab the fold you just made and fold it over again to a length of about 11 inches.
Care & Servicing Instructions

4. Flip device over. The auto-inflator and cylinder will now be on the bottom. **Do not twist the lifting straps.**
5. Grab the top end of the device, with the female part of the buckle, and pull it back to the opposite end.
6. Connect the buckle.

7. Bring the end you just folded back over to the other end. Note that the lifting straps are laying between the snaps. The lifting rings should stick out just past the snaps.
8. Close the snaps.
9. The last fold should lay approximately in the middle of the device. The fold should almost match up to the fold on the bottom.

10. Fold the device over at this point. The auto-inflator and cylinder should now be on top. If not, flip the device over.
PACKING THE TECHFLOAT

1. Loosen the lacing on the packing girdle. Attach the hook and pile fastener together.
Care & Servicing Instructions

2. Roll up the Techfloat.
   a. Start at the edge with the cylinder and inflator.
   b. Keep the red pull tab up near the inflator cap, outside of the roll. Keep the lifting rings outside the opposite end of the roll.
   c. Keep the roll tight.
   d. Note the location of the oral tube inside the roll.

3. While holding the roll tight, slip the Techfloat into the packing girdle
   a. Orient the roll so that the lifting rings are on the same end as the throwing handle. The throwing handle is the larger of the two webbing loops.
   b. Keep the oral tube at the top, with the girdle laces. This will help keep the roll tighter as you tighten the laces.
4. Push the roll all the way into the packing girdle until it stops against the webbing loop at the opposite end, then tighten the laces.

5. Pull the laces as tight as possible. Both sides of the packing girdle should almost be touching. Then, tie the laces with a square knot.
A square knot is tied by first making an overhand knot, then tying another overhand knot in the opposite direction. The finished knot should look symmetrical, like the one shown below.

6. Tuck the excess laces inside the packing girdle, between the Techfloat and the girdle. **DO NOT TIE THE EXCESS LACES AROUND THE TECHFLOAT PACK ITSELF.** Tying the laces around the packing girdle could hinder the inflation of the Techfloat.
Care & Servicing Instructions

PACKING THE RETRIEVAL LINE

Prior to packing the retrieval line, make sure the line is completely dry. Also, remove any twists or kinks that could prevent the line from coming freely out of the pouch when thrown.

1. Prepare the line pouch for packing.
   a. Make sure the black line pouch is fully attached to the Techfloat valise. The line opening at the top should be at the same end as the black cap on the valise. The line forming the shoulder harness should be coming out of the bottom of the line pouch.
   b. Stand with the Techfloat valise placed in front of you. The black line pouch should be facing you with the line opening at the top.
   c. Run the line over your shoulder. This will help keep the line from twisting.

2. Flake line loosely in line bag. **DO NOT** coil the line and place in bag. Line **MUST** be flaked.
   a. Feed the line through the opening at the top of the pouch
   b. Start with the line pouch unzipped to help flake the line at the bottom, as shown below.
3. As the pouch fills, pull the zipper up to help contain the line.

4. When the line is near the top of the pouch, pull the zipper closed and continue to flake the line in through the top.
5. As you near the end, leave about four feet of line outside the line pouch for the final assembly steps.

FINAL ASSEMBLY

The final steps consist of attaching the Techfloat flotation device to the retrieval line, then packing the device into the valise.

1. Pass the end of the retrieval line through the grommet in the packing girdle. Then pass it through the lifting rings and secure with a bowline knot.
Follow the steps below to tie a bowline knot:

1. Make a loop with the rope.
2. Pull the free end of the rope through the loop.
3. Pull the loop tight.
4. Pull the free end of the rope through the loop again.
5. Pull the loop tight.

2. Press the lifting rings down into the middle of the Techfloat pack.
3. Place the Techfloat pack into the valise. The laces on the packing girdle should be facing the retrieval line pouch.

4. Pull the end cap over the end of the valise, then buckle closed.
Care & Servicing Instructions

5. Flake any remaining retrieval line into the top of the line pouch. Then close top of pouch with the hook and pile fastener.

6. Open the snap shackle at the end of the shoulder sling, then pass it through both the cord coming out of the line pouch and the webbing loop located at the base of the end cap.
Care & Servicing Instructions

1. Close the snap shackle and update Servicing Record, p.34.

Final assembly is complete.
REPLACING THE AUTO-INFLATOR BOBBIN

The Bobbin in the Auto-Inflator should be replaced every year. Follow the steps below to replace the bobbin.

2. Unbuckle the end cap on the Techfloat valise and remove the packing girdle.
3. Untie the retrieval line from the lifting rings.
4. Untie the packing girdle.
5. Remove the flotation device from the girdle and unroll it to access the auto-inflator.
6. Remove and replace the bobbin. See REARMING THE INFLATOR, Steps 1 through 4, p. 10.
9. Update Servicing Record, p.34.
Storage

Proper storage of your Techfloat Lift and Rescue Device is very important. The better the care it receives, the longer it should last for you. When not in use, we recommend that you store the raft in a climate controlled environment and not leave it outside. It should be stored in a clean and dry environment out of direct sunlight. The ideal storage temperature is between 60º F - 70º F with no more than 50% humidity.

Do not stuff it into a tight container or locker when not in use, nor allow other items to be stacked on top of it. Protect it against vermin, acids, gasoline, fuel oil, and other chemicals or their fumes which may contaminate the material. Do not expose to concentrations of ozone (produced by electric motors, generators, or switches). Do not store the unit on the ground. Keep this manual with the Techfloat Lift and Rescue Device.
## Replacement Parts

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<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>S-4121-1</td>
<td>Techfloat Rearm Kit</td>
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<tr>
<td>820002</td>
<td>Bobbin</td>
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<tr>
<td>S-4188-101</td>
<td>Green Clip</td>
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<tr>
<td>S-3630-101</td>
<td>Seat Seal Gasket</td>
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</tr>
<tr>
<td>S-1780</td>
<td>33 gram Cylinder</td>
<td>1</td>
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<tr>
<td>S-4122-1</td>
<td>Techfloat Owner’s Manual</td>
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# Servicing Record

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<th>DATE</th>
<th>TYPE OF SERVICE (REPACK/REPAIR/BOBBIN)</th>
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