

# Whitewater Series Rafts: Boat-PVC

**INCEPT**

# Owner's Manual



**Incept Inflatable Technology**  
Design experience  
Expert craftsmanship  
The world's best processes and materials.

The Erez-PVC *Whitewater* and *Gull* series are robust smaller expedition rafts designed for technical rivers.

Used as paddle boats and oar rigs these Whitewater and Gull series rafts will deliver predictable and outstanding performance and easy paddling and rowing - they are fast, easy turning, stable in extreme conditions and have good carry-through in holes and stoppers.

One of the great benefits of these easy-running rafts is that the effort required of the crew is greatly reduced. When called on in major rapids the crew is more responsive and comes off river at end of day fresher and happier.

All Incept self-bailers have carefully rockered floors and smooth sandflap attachments to the sponson. The reduction in underwater drag, especially in cross-flows, gives these boats their outstanding stability and their ability to safely take lines in rapids previously not considered wise or even possible.

**Whichever Whitewater or Gull model size is the appropriate choice for your river, you can expect more control, less flips and wraps, increased handling safety in marginal conditions, and a happier crew.**

**WARRANTY**

This INCEPT raft is guaranteed for a period of five years for private use. Any manufacturing defects in materials or workmanship found during that period will be made good by Incept Marine Ltd at no cost, providing only that the raft is returned to the Taihape NZ factory or to an authorised repairer, freight paid one way.

On self-bailing models, damage to internal floor baffles caused by over-inflation as a result of the removal, adjustment or disabling of the pressure relief valve is not covered by warranty. Over inflation which results in the permanent increase of tube diameter will invalidate any warranty expressed or implied.

Should you wish to place a claim under this warranty, please contact the Agent/Person who sold you this product.

**RAFT SERIAL No.:**      **INC**

**PURCHASE DATE:**      /      /

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INCEPT reserves the right to vary specifications without notice except at time of enquiry and/or ordering.

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**MATERIALS:**

INCEPT small *Whitewater* and *Gull* rafts are constructed from heavy duty boat quality materials, reinforced with polyester base cloths.

Heavy duty armoured Polyurethane Alloy has been used in the heavy wear areas of the raft. For abrasion resistance and puncture resistance this material well out-performs PVC, Neoprene and Hypalon. It allows flexibility and is slick over rocks with a minimum of drag.

**CONSTRUCTION**

<b>General</b>	Israeli Boat PVC 950gsm/30oz 1100d PE
<b>Under Tube</b>	Polyurethane Alloy 1500gsm/45 oz 1870x2d PE

**Poly Urethane (PU)**

Polyurethane is unbelievably tough and is the strongest boat material available. It is weldable for construction - which means there is no glue to deteriorate - and yet easily repairable with glue. It has better properties than *any other boat material in all categories* except foldability.— In this raft it is used as an alloy in the armoured tube underside.

**INFLATION**

**General**

The advantage of inflatable rafts on the river is in their ability to flex over rocks.

If the raft is inflated hard this advantage is lessened and fabric wear and the likelihood of puncturing increases.

Because of the fabric construction with its strong Polyester reinforcing weave it is easily possible to inflate this raft harder than many other inflatables on the market.

It is generally true that a harder raft is fast and manoeuvrable, but everybody strikes rocks. If you wish your craft to last longer, we suggest you keep the pressures down. During summer (hotter temperatures) it is advisable to keep pressures lower when not on the water and "top up" just before launching.



**Valves**

The inflation valves are operated by pressing down the internal stem and twisting a quarter turn. When the stem holds down, the valve is open. Release the stem to inflate. The protective caps prevent the entry of gravel, dirt and water.

Should a valve break or malfunction, it is easily replaced. Spares are obtainable from Incept.

**Pressures**

It is recommended that the raft be run at or below the following maximum pressures:

Main sponsons	21 kPa / 3.5 psi (firm)
Floor	9 kPa / 1.5 psi (softer) - limited by relief valve to 15 kPa / 2.5 psi
Thwarts	18 kPa / 3.5 psi (firm)

Over-inflation can be easily achieved with polyester reinforcement because of it's lack of

stretch under load (absolutely needed for performance inflatables) and some recognition should be made of heat build-up from exposure to the sun. Both feet on a typical bellows foot pump gives a practical limit of approximately 20 kPa / 3.5 psi.

Do not leave the raft inflated hard during periods of non-use to avoid long term change of shape. Although the raft generally can withstand higher pressures, some loss of shape may result from permanent creep of the material reinforcement weave.

Habitual over inflation which results in the permanent increase of tube diameter will invalidate any warranty expressed or implied.

**Self-Bailing Floors**

Over-inflation of a self-bailing floor can result in damage to the I-beam construction of the internal baffles. For this reason, a pressure relief valve has been fitted in the floor which is set to release air above 15 kPa / 2.5 psi pressure. If the desired working pressure is at the full relief valve setting, there will be an escape of air when the raft is left in the sun. In this case topping up with the pump will be necessary to regain pressure after the floor has cooled off back in the water.

Frequently clean the pressure relief valve and check that it is working.

Our general guide to floor pressure in low-flow (rocky) conditions is to stand on the tip-toe of one foot in the middle of the raft on level ground so as to just feel the ground.

**CLEANING:**

Use warm soapy water or lightly abrasive household cleanser to remove dirt and stains.

Remove sand which may accumulate under the sand flap (the junction between the floor and the sponsons). This can otherwise have an abrasive effect, cutting into the material.

Wipe the raft with 303 Protectant every 3 months to retain as-new appearance.

**FEATURES**

**PERFORMANCE** The brand "INCEPT" assures best performing rafts, period.

**MATERIALS** Boat PVC and Polyurethane Alloy options

**GRABLINE** Fitted grab-line properly tied off on all D's

**SHIELDED D's** S/S shielded D's, unique to Incept, prolong webbing and grab-line life by up to 10 times



**THWARTS** Fixed or removable, ends shaped to sponson

**VALVES** Industry-standard HR inflation valves, matching floor relief valve

**HANDLES** Polyurethane bow and stern carry handles on Whitewater range



**BAILING** Fast self-bailing

**COLOURS** Available in red, blue or yellow

**SAFETY** 3 separate main air compartments

**ACCESSORIES** Repair kit included

**Information About Incept**

Incept Marine Ltd is a New Zealand based manufacturer and international supplier of world class inflatable marine boats, inflatable rafts, -kayaks and -canoes, inflatable rescue and fishing craft to multiple market sectors.

The factory is a modern purpose-built facility with the latest machinery and with long term skilled staff in Taihape, a central North Island location close to mountains, lakes and rivers.

All inflatable boats made by Incept have 100% heat welded air chambers using variously all three available welding technologies.

**Focus on Performance**

Incept inflatable boats are designed by professional engineers - boating enthusiasts - to achieve optimum waterline shapes and exceptional handling. Not only the sponsons but also the self bailing floors are tapered and rockered - careful consideration is given to every known inter-action in inflatable boat design.

**REPAIRS:**

Use Polyurethane boat adhesives. Permanent repairs require addition of hardener/activator. Temporary or on-river repairs do not require activator. Bostik 999, Bostik 777, StaBond UK-148 and Clifton LA-4123 are recommended adhesives.

For permanent repairs, thoroughly wipe the glueing area with an M.E.K. (Methyl Ethyl Ketone) soaked rag. Apply the adhesive. Getting the glue to 'key' into the material is the most important reason for prepping by solvent wiping.

**Do not use toluene** (commonly used with Hypalon), as it will permanently prevent the glue's ability to key into any polyurethane surfaces.

A basic repair kit of raft material and adhesive is included with the raft. The adhesive requires warm and dry working conditions for good results.

**Preparation of a permanent repair:-**

1. Cut a patch to fit the repair leaving 25 - 40 mm edge distance to the hole. Round corners for appearance and resistance to lifting.
2. Position the patch and mark the outline on to the raft with a pencil or ball pen.
3. Apply masking tape around the outside of the outline.
4. Thoroughly dry the glueing surfaces. The glueing area needs to be wiped with M.E.K. to open up the surface for the glue.
5. Brush glue on to both surfaces. Do not over-brush as the glue will drag and be lumpy. Allow to dry, say 15 - 20 minutes. Dry time is essential for a strong and permanent bond.
6. Place the patch and heat warm to the touch, using a hair dryer or hot-air gun. Heat activates the glue, providing an instant and permanent bond. Apply pressure to the patch while still warm.

Temporary repairs can be made without heat if the patch is applied before one of the glued surfaces is fully dry, i.e. while still slightly tacky.

