



General Sled Use and Maintenance Guidelines

HULL:

1. Do Not drag the Extractor Sled on the ground. In doing so, you will grind down its protective plastic finish and expose the core to the water environment. Sled will last many more years if rinsed with fresh water after each use and kept out of the sunshine while not in use. For hollow molded sleds, remove

drain plug and remove any water that may have entered the hull while in use. If there are significant amounts of water inside, you need to locate the crack or hole in your sled and have it repaired or replaced prior to next use. If you have a fiberglass/epoxy/foam sled you will need to repair all cracks with exposure to the core prior to next use. Store the sled on a padded surface, standing on tail, rail or flat. Standing the sled on hard surface can cause damage to finish. Make sure sled is secured to wall or rack to prevent falling over.

2. If the Extractor Sled is mounted on a pwc, which is stationed on a launching/transport cart such as a Rolleez, a Bigfoot, or similar trailer, wait until the launched pwc has dismounted off the cart and the cart has surfaced and has cleared from the rear transom area of the pwc before pushing the sled off from resting against the rear of the pwc seat and into the water.

If you launch the pwc with the sled in the “down position” and before dismounting the launching cart, when the pwc dismounts the cart, the cart will come up to the water surface with enough force to possibly create scratches, cracks or dents in the bottom of the rescue sled (Hand crafted sleds only. Does not pertain to molded sleds).

3. Before and after each use, inspect the sled for any damage and repair immediately. Repairs can be made to the sled hull by sanding clean dry surface with 80 grit sandpaper, laminating with 2-3 layers of 6 to 10 oz fiberglass and quick-set epoxy resin. Cured lamination can be sanded lightly and refinished with truck bed liner material or spray paint of similar color.

Very small holes in the molded sleds may be filled with hot melt glue. Larger cracks or holes will need to be repaired by filling the crack or hole with polyethylene weld rod, a butane torch, or a flush mount spin weld fitting. You may find these plastic rods and welders through www.urethanesupply.com. Look for Kayak welder...

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HITCH AND CONNECTION COMPONENTS:

Cracked welds on metal hitch components are under lifetime warranty by Extractor and must sent back to Extractor for replacement or repair.

4. Hitch Components: Before every use, inspect all hitch attachment points and fasteners for looseness or wear. Re-tighten any loose nuts or bolts as required. The Extractor Sled "Quick Hitch", which allows horizontal movement of sled in the water for enhanced turning capabilities, has a double-nut feature for loosening/tightening the through-bolt on the hitch responsible for this movement.

Before and after every operation, inspect this attachment point for excessive play and re-tighten. It is normal for the threads on the bolt welded to the triangular hitch bar, which pass through the 0.75 inch diameter hole in the stainless hitch bracket, to wear down from friction. If you maintain virtually zero up and down slop at this connection point and only allow horizontal movement, this wearing down of the thread can be minimized. If you do not maintain zero horizontal movement and the bolt thread wears out at the attachment point significantly, you may remove the double nuts and lock washer, add some more flat washers to the underside of the hitch plate and shim up the gap. Then replace the double nuts and lock washer to restore the zero up and down slop at the triangle hitch bar bolt connection point.

5. Lightly grease the horizontal aluminum clevis pin, which is used to attach the sled to the triangular hitch bar and maintain this coating. It will enable the operators to quickly and easily remove and connect the sled from the hitch as needed. Also maintain grease in the area where the triangular hitch bar bolt passes through the hole in the stainless plate. Not only does this minimize thread wear on the bolt, it prevents heating and seizing of the double nuts securing the hitch bar to the stainless plate. Maintain anti-seize lubricant on the hitch bar bolt threads.

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6. Inspect Hitch mount plates, stainless box, tow pad, and velcro hitch boot covering. Replace when worn out. These component are designed to eventually wear out. They are designed to

7. protect the pwc transom area and the sled from wear and tear or damage. (These parts have an expected service life from (3) three months to (1) one year depending on whether or not the sled is in operation daily or periodically.

HANDLES:

8. Carry the sled by the provided handgrips using one or two people.

9. Do not use provided hand grip fastening points located on the sled as a means for attaching tie down straps to keep the sled fastened and folded over against the rear of the pwc seat while transporting on a trailer on the road. Instead, disconnect sled from transom and place sled on rail in footwell of pwc and secure with bungee or webbing to pwc handlebars. You may use handles as a fastening point here. Otherwise, transport sled inside of, in the back of a truckbed, or on a roof rack of a vehicle.

PADDING:

10. Sleds are subject to a harsh water environment. Sometimes the deck padding adhesive loses its bond at the edges or corners where passengers frequently board. The padding may be re-glued with general contact cement. This can be purchased at most hardware stores, Home Depot, or Lowes. ONLY USE the regular or Gel Formula. NEVER USE the Non-Flammable Neoprene Formula. It does not work. Adhesive can be purchased in small applicator bottles, quarts and gallons.

http://www.dap.com/product_details.aspx?product_id=47

To bond, make sure padding is dry, and both surfaces to be bonded are clean and free from sand, dirt or debris. Brush adhesive to both surfaces. Allow both surfaces to dry to touch (tacky but without glue coming off and onto fingers). Press both surfaces together with pressure. You may also hit the surface with a rubber mallet. This occasional maintenance will ensure your sled will last for years.

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GENERAL OPERATIONAL ISSUES:

11. Those riding on sled should keep their body weight balanced in the center- forward part of the sled and should lean into the direction of the turns made by the pwc. Weight distributed too far forward or too far back may cause performance problems for the pwc and may also cause the pwc to lose control and spin out in high speed situations, thus causing possible damage to sled hull.

In extreme cases, should the pwc be pushed backwards due to a stall out in the surf, in a river application, or if people riding the sled have their weight too far back and distributed to the outside rail during a high speed turn (which may cause the pwc to lose control and spin out), the sled has the potential to dig its tail into the water. This action, combined with the reverse momentum of the pwc, could cause the pwc stern to override the sled and wedge the jet pump nozzle against the underside of the sled. This wedging action, if the force is great enough, could create hull damage to the sled. To avoid this, always maneuver the pwc in a position where it will not override a sled when being pushed by an incoming wave (maintain forward momentum), maintain weight distribution over the middle of the sled, and always have a sled operator lean into the direction that the pwc turning.

12. Sometimes, under abnormal operating circumstances, when a pwc operator unavoidably loses control of the pwc in the surf or river, the pwc and attached sled can get tumbled in the wave or surf. This action, in itself can cause hull damage to both pwc and/or sled, and could possibly bend or warp the stainless steel hitch components attaching the sled to the pwc.

This bending or warping of the steel hitch components could also occur should the pwc and sled flip upside down with the hulls facing upward. When the pwc unit operators attempt to flip the pwc and sled right-side-up, only attempt to flip the pwc unit right side up from the pwc and not the sled.

Failure to follow these operating and maintenance guidelines will void any warranty made or expressed by Extractor. All damages incurred from failure to follow these guidelines will be the responsibility of the customer and the customer shall bear all expenses for repairs or replacement parts.

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