

Technical Alerts

At Neoteric, we consider every customer to be a long-term partner – not just a sale. The following technical alerts have resulted from communications with our customers, as well as from research and testing by our engineers.

Be assured that Neoteric strives to promptly address each situation resulting in a Technical Alert. All corrections, however, must be thoroughly researched and may require lengthy testing. During this process, we provide the Alerts below to keep you informed and to ensure that your hovercraft operate safely and correctly.

Technical Alerts

1. Multiwing Fans with taper lock bushings, used on the Hovortrek craft, should be inspected for cracks in the aluminum hubs. These have been found to occur after 75 hours of service. The hubs can be viewed through the gap behind the spinner. More detailed inspection requires the removal of the thrust duct. Examples of cracking can be seen at [here](#)
2. Several fan failures have resulted from loose air filter boxes vibrating off and entering the fan. Check hose clamps for proper placement and tightness.
3. News has been received of loose rivets in the engine air intake box. These hold the air filters. Through vibration, the rivets wear through and when failure occurs the rivet steel mandrel head and washers enter the engine with catastrophic results. Check for loose rivets and tighten by hammering.
4. Two customers have reported that the battery cable ground wire can break where it attaches to the engine. The cause is unclear. Check battery ground cable or terminal end for cracks. When this cable fails it can cause extensive electrical damage to voltage regulator, reverse computer, and other electronics/instruments.
5. On Fuji engine powered craft, check for loose Y pipe manifold nuts.
6. Several cases of reverse bucket actuator failure after some months of service have been reported. Average time to fault appears to be around 18 months and 50 hours of service although failures have been reported after 12 months and 20 operating hours. Investigations on failed actuators have shown the reason for such failures is the ingestion of water and fine particulate matter into the actuator via the push rod seal. These ingestions are expected to be especially damaging in salt water operations. Remedial changes to actuator sealing are underway and a definitive fix for the problem will be available shortly. Any instances of actuator misbehaviour such as uncommanded deployment, rough or noisy operation, judder on deployment, clutch or push rod seizure should be reported to Neoteric for advice and remedial action.
Update: Neoteric is developing a cover for the actuator to prevent this; this can be seen [here](#).
7. Failures of engine mounts are beginning to appear after 75 hours of operation. Please check the horizontal support closest to the fan. Cracks usually appear adjacent to the weld zone. If repairs are in order, weld using TIG and 1/16 stainless steel weld wire. Contact the factory for further advice and send pictures if possible. Images of the location and crack can be seen [here](#)
8. An incident with a Korean fire department rescue hovercraft, operating in salt water, has been reported. Corrosion appears to be the culprit. Galvanic corrosion occurs between the aluminum rivet head and the chrome-plated steel cap fitted to the end of the air filter. When both rivet heads fail, a fiberglass air box cover is released and sucked into the fan. This is likely to result in extensive damage. Neoteric recommends that all craft owners drill a 3/16" [5mm] hole in the forward edge of the air box flange and use two wire ties (the same as used for skirt attachment) to secure the air box to the wire tie looped through the spark plug coil. Neoteric is currently researching all options for a long-term fix. When developed and tested, the fix will be posted here for all to see.
When one rivet head fails, the rivet head and washer may enter the engine, resulting in the destruction of the engine. Neoteric strongly recommends frequent inspection of the air box to prevent this. Images of the damage