

**TAIYO
EDGE
R/C**

**EDGE
HOVERCRAFT**

8+

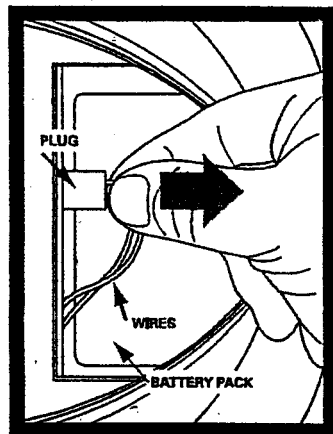
Taiyo Edge® R/C Consumer Service
We want to assist you!
DO NOT RETURN THE PRODUCT TO THE STORE!
 Log on: Click "Service" at www.taiyoedge.com
 E-mail: help@taiyoedge.com
TOLL-FREE CONSUMER HELPLINE
1-866-4-EDGE-RC (1-866-433-4372)

OWNER'S MANUAL

Important! Please read your Owner's Manual all the way through before operating your vehicle. Contains important information—keep for future reference.

Safety First

- Adult supervision is recommended.
- Adult supervision strongly recommended, and use extra caution, when playing near water or ice. Do not go onto ice on a lake or other body of water that might be dangerous if it breaks.
- Drive your vehicle in a safe area away from people, pets, cars, etc. Not in streets, not in darkness!
- Don't touch or try to pick up vehicle when it is in motion. Wait until it stops completely.
- Keep hair, fingers, face and loose clothing away from top and rear propellers while the vehicle is switched on or while the transmitter is operating.
- Never block rotation of top lift fan or stick any object through top, bottom or rear grilles.
- Always remove batteries from vehicle and transmitter when not in use.
- Do not drive hovercraft into walls or other hard objects.
- Be a responsible Edge Hovercraft® operator!



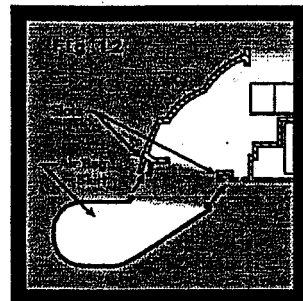
TO UNPLUG BATTERY, YOU MAY NEED TO PULL FIRMLY!

NOTICE: EXOTIC VEHICLE! NOTE SPECIAL OPERATING CONDITIONS

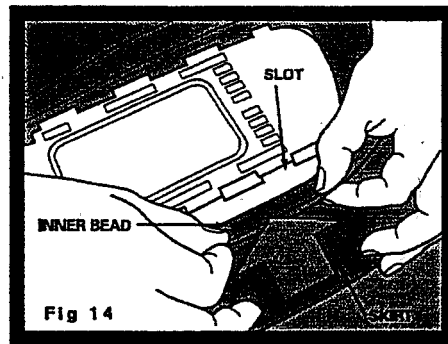
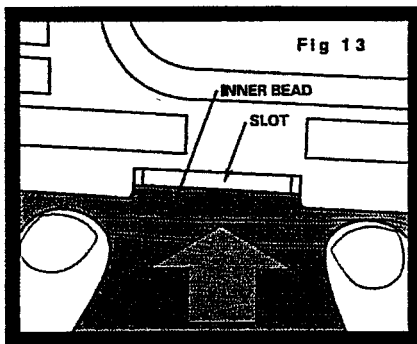
• No wheels	• Rides on cushion of air created by lift fan blowing downward and into air bag "skirt".
• Goes on floor, dirt, pavement, ice, snow	• Needs flat, smooth, clean surface so skirt can "seal" with ground for best results.
• Multi-terrain capable	• Not for use on rough or broken pavement/ground, carpet, rocks, pebbles, grass, decking, hills, inclines or any surface that "lets the air out" or damages skirt.
• Goes on fresh water (pool, pond or lake, not salt/sea/ocean water)	• Pilot must keep craft within radio and battery life range on water to ensure retrieval.
• True amphibious vehicle	• Not a boat; needs lift fan on with full power and air bag skirt inflated to float properly
• High-power, triple motor design	• Battery life 7-13 minutes between charges, depending on battery type and conditions
• Real rubber air bag skirt	• Skirt is durable but can puncture on sharp rocks, sticks

Air Bag Skirt Care

1. Edge of air bag skirt must seal with lower edge of body for proper operation. If skirt becomes loose, push the edge of the skirt back into the slot on the body. (Fig. 12) Use a small coin if necessary. Important: Do not use sharp tools such as screwdriver, pen or pencil point, knife, etc. or bag may tear.
2. Small holes and tears in skirt may be repaired by an adult using "Super Glue" or "Krazy Glue" (cyanoacrylate) type glue. Use a small amount and follow glue maker's instructions.
3. For larger holes and tears, skirt needs to be replaced. Order replacement air bags direct from Taiyo Edge. Not sold in stores.



The Air Bag Skirt may become partially detached during shipment or use. Turn your Hovercraft over and check to see whether the INNER BEAD has pulled out of the SLOT at any point. If it has, just slip the INNER BEAD of the SKIRT back into the SLOT (Fig. 13). Go all the way around the SLOT and make sure the INNER BEAD is all the way in the SLOT, all the way around (Fig. 14). Periodically check and adjust your skirt in this way.



STYROFOAM BLOCKS INSIDE SKIRT ARE NEEDED FOR PROPER OPERATION. DO NOT REMOVE.

Troubleshooting Guide

Don't take your hovercraft back to the store—try solving problems using this valuable guide.

Problem	Probable Cause	Correction
Vehicle runs slowly, or won't move, or won't steer	• Batteries dead or low • Batteries installed incorrectly • Loose battery connection • Power switch is off	• Remove and replace batteries, making sure battery direction (polarity, +) is correct and battery compartment contacts are clean. • Recharge vehicle battery. Replace transmitter battery. • Turn on Power switch.
Erratic operation, loss of control, short range	• Radio interference • Weak Transmitter battery • Weak vehicle battery	• Move to another location. • Point antenna up in the air, not at vehicle. Don't touch antenna. • Recharge 9.6V battery pack or replace 9V alkaline battery in transmitter.
Vehicle stops working after going in water or snow	• Water in battery/electronics/motor areas	• Turn power knob off IMMEDIATELY, remove all batteries, dry inside and out with clean soft cloth and allow to dry overnight with battery door off.
Battery life is short	• Battery pack not charged fully • Battery pack charged when hot • Battery pack faulty or worn out • Battery pack old or has too little capacity (mAh)	• Recharge battery pack • Always allow battery pack to cool before charging • Replace battery pack • Use battery packs with high mAh rating, 750 or more is best

COMPLIANCE WITH FCC REGULATIONS

THIS DEVICE COMPLIES WITH PART 15 OF FCC RULES, OPERATION OF THIS DEVICE IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.
- (2) THIS DEVICE MUST ACCEPT ANY HARMFUL INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

This device generates and uses radio frequency energy and if not used properly may cause interference to radio and television reception. It has been tested and found to comply with the limits set by the FCC, which are designed to provide reasonable protection against such interference.

CAUTION: FCC Regulations state that changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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©2001, 2002 Taiyo Edge Ltd. Co., P.O. Box 1470, New Smyrna Beach, FL 32170, U.S.A. All Rights Reserved. U.S. Patent D451,560. Other Patents Pending. Product specifications subject to change. Product may differ from illustrations. REV 12-02.

Vehicle Operation

FORWARD

Push both sticks up. Release to coast.

BRAKING/REVERSE THRUST

Pull both sticks down.

Use Reverse to slow vehicle down faster than coasting.

LEFT TURN—MOVING

When moving forward with both sticks up, release left stick to turn left.

RIGHT TURN—MOVING

When moving forward with both sticks up, release right stick to turn right.

LEFT TURN—STATIONARY

With vehicle standing still, push right stick up.

RIGHT TURN—STATIONARY

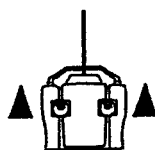
With vehicle standing still, push left stick up.

RIGHT SPIN

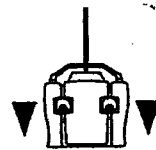
At the same time, push left stick up and pull right stick down.

LEFT SPIN

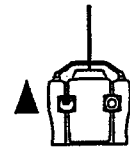
At the same time, push right stick up and pull left stick down.



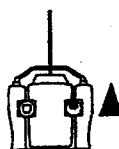
Forward



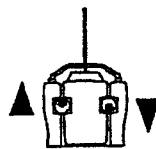
Brake or
Reverse Thrust



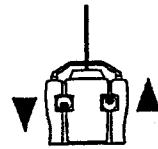
Right Turn



Left Turn



Right Spin



Left Spin

Operating on Water

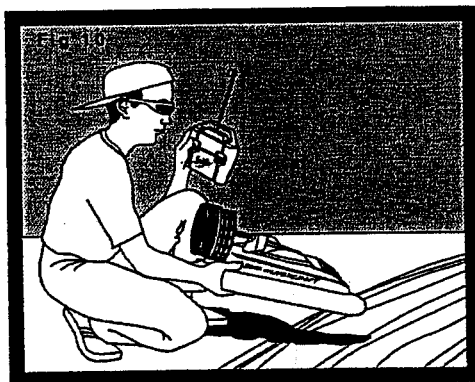
Fresh water only—not sea or salt water!

CAUTION: ADULT SUPERVISION IS STRONGLY RECOMMENDED WHEN OPERATING ON OR NEAR WATER OR ICE.

Important: Time the use of the vehicle on water so you can recover it before the battery runs out! Run for only 5 minutes each launch with a freshly charged battery to be sure.

Launching

1. Turn vehicle power on. Release red transmitter button so lift fan comes on.
 2. Hold vehicle as shown. Make sure lift fan is at full speed and air bag skirt is fully inflated. Carefully place vehicle on water. (Fig. 10)
- Important: Lift fan must be operating for vehicle to operate properly. Air bag skirt may fill with water if lift fan is not running.
3. When removing from water, remove battery door and battery pack, hold vehicle as shown and shake out excess water. (Fig. 11) Dry vehicle after use with a clean soft cloth.



Hovercraft Tips

1. In order to race or operate two vehicles together, one must be 27MHz (blue) and one must be 49MHz (yellow).
2. Hovercraft are not designed to go up hills or inclines.
3. Water should be calm, without waves, turbulence or strong currents. Do not operate in rivers or streams.
4. Do not operate vehicle in salt water. Salt will corrode metal parts and void warranty.

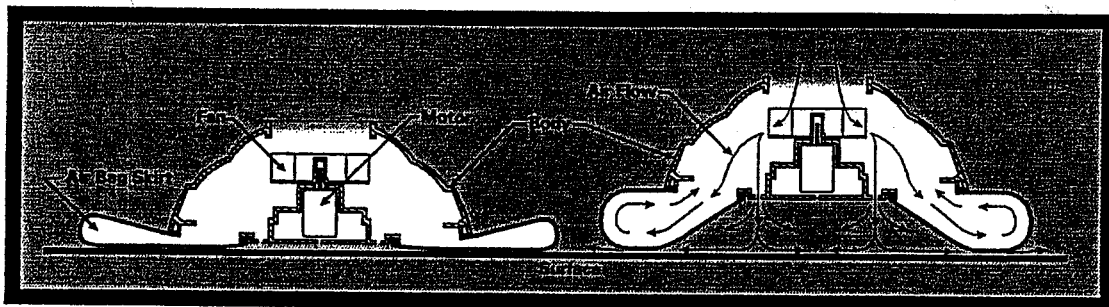
R/C Facts for Improved Operation

1. When battery start to fully discharge, vehicle may slow, stop, or refuse to respond to your control. It's time to recharge vehicle battery or replace transmitter battery. *This is absolutely the #1 cause of all problems and questions!*
2. Radio frequency interference can interfere with the control of your vehicle. Buildings, power wires, other R/C transmitters, or CB radio can all cause problems. Pick a place to drive that's away from these things.
3. Hold Transmitter so antenna points up, not toward the vehicle. Keep vehicle within range (about 65 feet) to keep control. If vehicle goes out of range, try lifting transmitter high into air to increase range for vehicle recovery.
4. Wipe vehicle clean and dry after each use, including inside battery compartments.
5. Turn vehicle power switch off immediately after running. Remove batteries for storing. Keep vehicle and Transmitter away from heat and direct sunlight and moisture.



How It Works

Lift fan/air compressor blows downward, inflating air bag skirt, which seals with the ground and creates a cushion of air under the hovercraft. Propellers at rear of vehicle provide thrust for movement along the ground.



Batteries and Charger Required (not included)

Separate purchase required.

9.6-Volt Rechargeable Battery Pack and Battery Charger for NiMH or NiCd Battery Packs

For longer run time, use high-capacity "NiMH" or "NiCd" battery packs with highest "mAh" rating number (750 mAh or higher).

One 9-Volt Alkaline Battery for Transmitter (not rechargeable)

Battery Cautions

CAUTION: TO AVOID BATTERY LEAKAGE

1. Make sure the batteries are inserted correctly and follow the toy and battery manufacturer's instructions.
2. Make sure battery polarity (direction) is correct.
3. Use only battery type(s) recommended.
4. Remove rechargeable batteries from the product before charging. Recharge batteries only under adult supervision and follow the battery and charger manufacturers' instructions.

Other Battery Cautions

1. Use caution removing battery from vehicle after use. Battery may be hot.
2. Never pull the battery pack out of the vehicle by the wire or plug. Never unplug the battery plug by pulling on the battery.
3. Remove batteries from the product for storage.
4. Battery life may vary with the brand used.
5. Do not recharge non-rechargeable batteries.
6. Do not short-circuit battery terminals.
7. Dispose of batteries safely and properly, according to your local requirements.

NOTE: NICKEL CADMIUM BATTERIES MUST BE RECYCLED OR DISPOSED OF PROPERLY.

Battery Charging and Care

(Batteries and Charger not included)

Vehicle will not run without a 9.6V rechargeable NiCd or NiMH battery pack and matching charger, commonly available for R/C vehicles at many toy and hobby dealers.

Always follow the instructions that came with your battery pack and recharger. Adult supervision of battery charging is recommended.

Drain Down — Cool Down — Charge Up

1. For best performance, run battery pack all the way down before recharging. Run until lift fan and rear propellers slow to a stop. **Note: If you are operating vehicle in water, retrieve the vehicle while battery power is still strong and perform this Drain Down procedure on land.**
2. Allow the battery pack to cool before recharging.
3. Charge fully according to the battery/charger manufacturer's instructions. Charging times differ with different types, brands, models, ages and conditions of battery packs and chargers. The first few charges of a new battery may require more time for a full charge than later charges.

Battery Heat

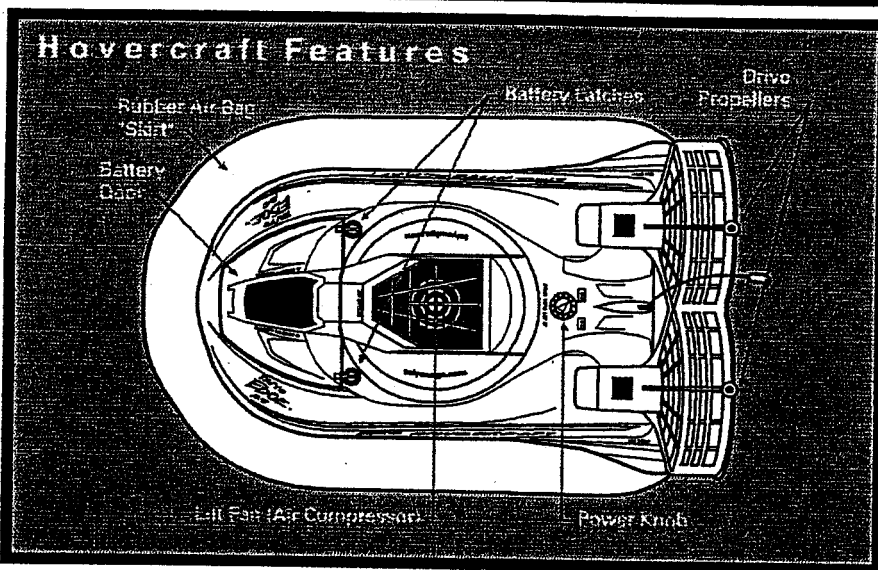
1. **Battery gets hot after use** This is normal, but be careful. Wait until battery is cool (20 minutes or more if needed) before charging. Charging batteries when they are hot will severely reduce the number of times they can be recharged.

2. After charging, battery pack will be warm. This is normal.

Running and Charging Times

1. NiCd and NiMH battery packs are not like alkaline batteries. They lose all their power suddenly, not gradually, and vehicle will stop very soon after slowing down becomes noticeable, with little warning. This is normal, but keep it in mind, especially when operating on water, since you need to get the vehicle back before the battery power runs out.

2. Typical running time will be between 7 to 8 minutes for a typical freshly charged NiCd battery pack in good condition (9 to 13 min. for NiMH), but do not rely on this until you observe how long your battery runs in your vehicle under the conditions you operate in. Running time may vary over life of battery, with the first few charge cycles yielding shorter run times than later charges.

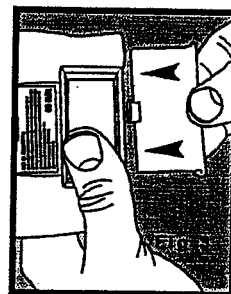
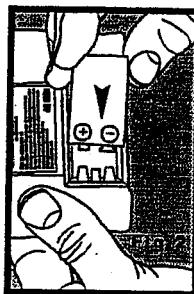
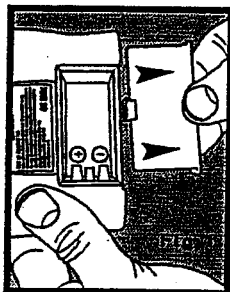


Transmitter Battery Installation

1. Slide open BATTERY DOOR on back of TRANSMITTER. (Fig. 1)

2. Insert a fresh, new 9-VOLT ALKALINE BATTERY with the polarity(+/-) as shown on the bottom of battery compartment. (Fig. 2)

3. Hold battery in place with thumb and replace BATTERY DOOR. (Fig. 3)



4. Check for transmitter operation by looking for the red "POWER ON" LIGHT on front to light when a JOYSTICK is pushed. If LIGHT does not come on, check battery polarity. If LIGHT still does not light, install a brand-new battery.

Transmitter Operation

Your Hovercraft is piloted similar to a tank or a twin-motor boat.

1. **LEFT STICK** powers left side Prop (propeller). When pushed up (forward) it turns vehicle to **RIGHT**.
2. **RIGHT STICK** powers right side prop. When pushed up (forward) it turns vehicle to **LEFT**.
3. **BOTH STICKS** when pushed up together make the vehicle go straight ahead.
4. **RED BUTTON** on back of transmitter cuts the lift power.

LEFT STICK

Left Motor Forward / Release for Left Motor Neutral / Left Motor Reverse

RIGHT STICK

Right Motor Forward / Release for Right Motor Neutral / Right Motor Reverse

LIFT DOWN BUTTON

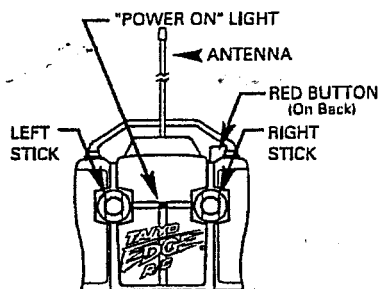
Press to cut power to Lift Fan. Release to power on Lift Fan.

ANTENNA

Hold Transmitter so antenna points straight up in the air. Don't touch during operation.

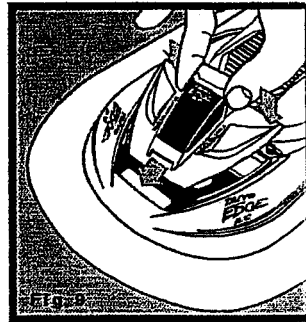
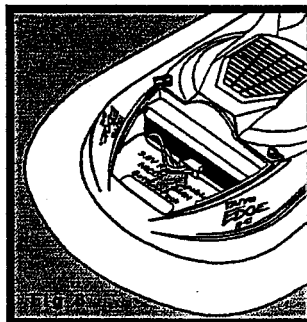
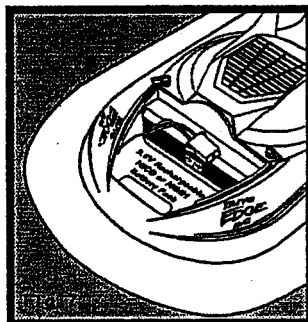
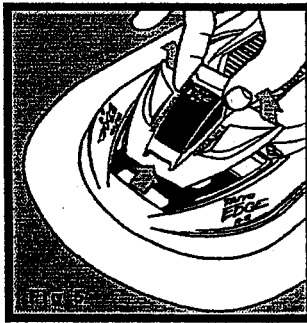
POWER ON INDICATOR LIGHT

Note: There is no on/off switch on Transmitter. Moving the sticks turns it on. It turns off after a period of non-use.



Battery Installation

1. Turn red LATCHES on vehicle BATTERY DOOR, lift door up at rear and remove. (Figs. 4 and 5)
2. Insert fully charged BATTERY PACK into battery compartment as shown. Observe position of wire as shown. (Figs. 6 and 7)
3. Firmly insert BATTERY PLUG all the way into SOCKET as shown. Make sure the "key" (bump) on plug is facing downward to fit into notch in socket. (Fig. 8) Note: PLUG may require a firm pull to remove.
4. Replace BATTERY DOOR front first by aligning front edge of door and compartment, lowering rear of door into place and turning LATCHES to locked position (latches click onto little "bumps" in door). (Fig. 9)



5. Check operation by turning **POWER KNOB** to point arrow to **ON** and then to **OFF** again. **POWER KNOB** is located on top rear of vehicle just forward of **ANTENNA**. Lift fan should go on and off. If not, remove and reinsert battery plug. Turn switch off to save power whenever possible.