



Beaundesert Outdoor Adventures

Standard Operating Procedure (SOP) & Risk Assessment: Pedal Karts

Document ID: SOP-BOA-KARTS-001

Effective Date: March 2026

Review Date: March 2027

1.0 Purpose

To outline the standardized and safe procedure for conducting Pedal Kart sessions. This activity provides a fun, physical challenge that develops coordination and spatial awareness, while strict track rules ensure the safety of riders and spectators.

2.0 Scope & Leadership Options

This activity can be run under two distinct leadership models:

- **Instructor-Led:** Supervised and led by Beaundesert In-House Trained staff.
- **Self-Led:** Supervised by competent visiting adults (e.g., Teachers, Scout Leaders).
 - *Self-Led Access:* If karts are left out on the track for a visiting group, they will be secured with a chain and padlock. The group leader must collect the **Pedal Kart First Aid Kit from Reception, which has the padlock key attached to it.** The leader assumes responsibility for enforcing the rules in this SOP.
- **Technical Advisor:** Activity Manager / Operations Manager.

3.0 Location, Fleet & Ratios

3.1 Location

- **The Track:** Located to the West of the main centre. The track is clearly defined and lined with tires.
- **The Pits:** The waiting/pit area is located on a straight section of the track, strictly not on or near a bend.





3.2 Fleet & Capacity

- **Single Karts:** 3-4 single-rider karts available. **Strictly one rider per kart.**
- **Twin Kart:** 1 twin-rider kart available. **Strictly a maximum of two riders.**
- **Standard Ratio:** 1:12 (One Instructor/Leader to twelve participants).

4.0 Equipment & Critical Mechanics

- **Helmets:** Appropriate, correctly fitted helmets **must** be worn at all times by anyone sitting on or riding a kart.
- **Clothing:** Suitable enclosed footwear and clothing must be worn. No baggy clothing that could catch in the chain or wheels.
- **CRITICAL - The Freewheel Mechanism:** The pedal setting **must** be in the "free turning" (freewheel) mode. This means when the rider stops pedalling, the pedals stop moving while the kart coasts. If a kart is stuck in "fixed" mode (where the pedals are forced to spin constantly as the wheels turn), **it must not be used.** Fixed gears can forcibly injure a rider's lower limbs if they attempt to stop the pedals.

5.0 Safety Briefing & Track Rules

Mandatory briefing before any participant rides.

1. **Direction:** A **clockwise** direction of travel must be maintained at all times.
2. **No Pushing:** Participants must **not** run behind the karts pushing them. This is a severe trip and run-over hazard.
3. **Braking:** Participants must **not** put their feet down on the ground to try and stop the kart. The handbrake must be used.
4. **No Bumping:** Karts must be treated with respect. Strictly no intentional skidding, bumping, or crashing.
5. **Cornering:** All participants must slow down on corners to avoid tipping the kart. Do not turn the steering wheel sharply at speed.
6. **Pedestrians:** Absolutely no pedestrians are allowed on the active track. Spectators must stay behind the tire walls.





6.0 Session Procedure

6.1 Pre-Session Checks (Instructor/Leader)

- **The Track:** Ensure the track is clear of debris and the tire walls are intact.
- **The Karts:** Check that tires are inflated, steering moves smoothly, chain guards are in place, brakes function, and the kart freewheels correctly.
- **Seat Adjustment:** The karts must be adjusted each time to comfortably fit the leg length of the specific participant.

6.2 Activity Management

- Dispatch karts from the pit area safely, ensuring adequate spacing between riders to prevent collisions.
- Actively monitor corners to ensure participants are slowing down.
- Once competitors finish their laps, they must exit the track immediately into the pit area to avoid congestion or crashes.

6.3 Session Conclusion

- **Pack Down:** Ensure all karts are parked safely.
 - **Self-Led:** Chain and padlock the karts together securely. Return the First Aid Kit and key to Reception.
 - **Staff:** If storing in the container, wheel (do not lift) the karts. Report any damage. Tag broken karts with "Do Not Use" signs.
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7.0 Risk Assessment

Activity: Pedal Karts

Review Date: March 2027

Assessment by: Martin Kirby – Operations Manager

What are the hazards?	Who might be harmed?	Controls: What are you doing to control hazards?	Risk Rating (with controls)
Trapped & broken lower limbs by pedals	Participants	<ul style="list-style-type: none"> • CRITICAL: Karts must be in free turning (freewheel) mode. Fixed gear karts will turn when the rider stops pedalling and can injure legs. Fixed karts are prohibited. 	Trivial
Collision with other karts & tyres	Participants	<ul style="list-style-type: none"> • Briefed on braking and spacing. No intentional bumping/crashing. All karts travel clockwise. 	Trivial
Collision with pedestrians	Participants & Public	<ul style="list-style-type: none"> • No pedestrians on the track. Spectators behind tire walls. Pit area located on a straight, not a bend. • Strict rule: No running behind and pushing karts. 	Tolerable
Rolling or falling out the kart	Participants	<ul style="list-style-type: none"> • Helmets MUST be worn. • Briefed to slow down on corners and not turn sharply. 	Tolerable
Foot/Ankle Injuries (Braking)	Participants	<ul style="list-style-type: none"> • Briefed to use the handbrake to stop, NOT by putting feet on the ground. 	Trivial
Manual handling injuries	Staff / Leaders	<ul style="list-style-type: none"> • Karts should be wheeled rather than lifted where possible. 	Trivial
Unauthorized Use	Public	<ul style="list-style-type: none"> • Karts locked by chain/padlock when unattended. • Key attached to the designated First Aid kit managed by Reception. 	Trivial
Trips inside container (Poor lighting)	Staff	<ul style="list-style-type: none"> • No overhead lighting in the container. Use large flashlight. Keep floor clear of trip hazards. Only staff/adults enter container. 	Tolerable
Faulty Karts (Mechanical Failure)	Participants	<ul style="list-style-type: none"> • Daily pre-use checks (tires, brakes, steering, freewheel). • Monthly/Annual maintenance by competent staff (chain tension, greasing). • Broken karts tagged "Out of Order". 	Trivial

9.0 Document Control & Review History

Document Creation

Action	Name / Role	Date
Created By	Martin Kirby – Operations Manager	March 2026
Approved By	Martin Kirby, Luke Chance & Oliver Tombs (OM / SI / AOM)	March 2026
Technical Auth.	Martin Kirby (Operations Manager)	March 2026

Review Log

This document is to be reviewed annually or following any significant incident or change to the activity.

Date of Review	Reviewed By	Comments / Changes Made	Next Review Due
March 2026	MKirby / OTombs	Document Created (V1.0). Updated to include specific pushing prohibitions, freewheel mechanics, track location (West), and First Aid/Key self-led procedures.	March 2027