

MINIMIZING MAINTENANCE

Q: When should a new operator start to think about minimizing maintenance?

A: The time to think about minimizing maintenance is before the track is designed and built, and before a brand of go-kart is chosen.

The go-kart manufacturer and the mechanic can only do so much if the track or rail system is wrong. If the track surface is too rough, or the track design does not match the kart, maintenance will become a major problem. Tires will wear out faster, more accidents

will occur, and overall damage to the go-karts will increase significantly. Other major factors in kart maintenance relate to the operation of the karts; for example: how fast the karts run, and if the customers or employees are allowed to abuse the karts. Some go-karts require more maintenance than others. Unfortunately, many operators choose their kart based on initial price or appearance without regard to the long-term repair costs, safety of the kart, or stability of the manufacturer. If the manufacturer of the kart is no longer in business, supplying parts specific to that kart may become a problem; for example: spindles, steering columns, hubs, fiberglass parts, etc.

All go-karts require some regular maintenance in order to run properly and profitably. Many operators only consider maintenance after it is needed, and do not perform preventative maintenance.

Q: Does it matter who I get to design my track?

A: Absolutely. No matter how many tracks you have looked at, it is still hard to get everything right when building a new track.

In the design stage many factors need to be considered. These factors can determine profitability of a facility as well as the usable life of a kart and the degree of maintenance that will be required. Safety is always a consideration. You need professional advice. It is important to at least get a good footprint drawn by someone who really knows the go-karts you intend to use and not your local architect, engineer, designer, or yourself.

Q: What factors do I need to consider in order to minimize accidents on my track?

A: Your choice of building materials such as asphalt or concrete, and the design of the track are two major factors in minimizing accidents.

The following is a list of the things that may contribute to accidents:

Choosing the wrong type of building materials: asphalt or concrete.

Turns that are too sharp, straight-a-ways that are too long or too short, or cutback turns.

Track surface that is too rough, too smooth or turns that are off camber

A bridge transition that is too rough or too severe, or up and down grades more than 5%.

Poor pit design with regard to the direction of travel, pit entrances, spinner tires, and pitgates.

A poor rail system design, including size of steel, tires, installation and placement of dead heads.

Q: What can I do to improve the design of my track?

A: Get professional advice from a qualified consultant.

In addition to obtaining a good footprint drawn by someone who really knows the go-karts, the following are design elements that will improve your overall track design:

Add safety systems such as remote controls, stop lights, repeater message recordings of track rules, and proper signage.

Choose a type of go-kart that matches the rail system and track design

Install 220 and 110 power on all your light poles around the go-kart ride to make repairs and track maintenance easier.

Install several 4" pipes under the track, so you can add stop lights, PA systems, phone, etc. after construction in case you forget things.

Provide a safe, convenient place to fuel cars.

Use at least 9 gauge chain link fencing in all areas where the customers may stand, including queue lines.

Q: What can I do to make it easier to maintain my go-karts?

A: Provide the proper tools.

Small hand jack to raise kart for tire changes

Tire Bead Breaker

Full set of hand tools

Air compressor near pit

Oil extractor, oil filler or funnel and drain pans

Pressure washer.

Air lift table to raise the kart to a nice working level (remember that karts

weigh at least 400 lbs.)

A tachometer or some other method to measure kart speed

Buy a kart that you can check the oil and do maintenance on without having to take the body off

Q: What work should be done on a motor?

A: We suggest, during the season, a typical track should only rebuild clutches and pull starters, replace or clean air cleaners and spark plugs. In the offseason, possibly give each kart a valve job.

A skilled mechanic can do other things in the winter months, but most tracks do not have the tools, manuals, or skilled mechanics to rebuild motors completely. In addition, the parts cost of a crankshaft and block make the replacement of these impractical. A complete supply of repair parts, excluding tires, would only require a \$1500 inventory. This cost is easily offset by the alternative. If one go-kart is down for five days, for one little part, it could cost the typical track \$1000 or more in potential revenue.

Q: What types of problems cause the most damage to karts overall?

A: Most problems can easily be avoided by properly training qualified employees. Employees riding the karts when the owner is not around probably causes more damage than all the customers put together.

Things that increase repair costs:

Cut-back turns and zero radius curves cause many spinouts and accidents.

Allowing untrained people to check the oil and tires daily

Not requiring a trained mechanic to test drive the karts every week to look for problems

Adjusting the speed of the go-karts to run faster than recommended

Having inattentive employees who allow customers to abuse the karts

Allowing employees to stand on the bumper rail of the kart when moving the karts in the pit line puts enormous pressure on the bumper rubbers. This causes the rail to sag and not match the height of the rails of your other karts.

Not using remote controls or not having trained employees operate the system can cause more damage to karts than if the system is used correctly.

Things to Remember

Build your facility right the first time.

Have a good inventory of parts

Have a good inventory of extended wear tires.

Use the proper parts and tires.

Fix the problems that cause breakage:

Correct bad barrier systems

Do a complete repair, not just a band-aid
Have the proper parts to fix the problems

Use remote controls to reduce crashes after spinouts and for entering pits

SUGGESTED RULES SIGN

1. Absolutely no bumping.
2. Stay off the guardrail.
3. The gas is on the right; the brake is on the left.
4. Remain seated at all times. In the event of a spin-out, remain seated. An attendant will assist you.
5. Secure all loose clothing and tie-up long hair before entering the track area.
6. Keep hands and feet in the kart at all times.
7. The following persons should not ride:

Pregnant women

People with back and/or neck ailments

People with heart ailments

Failure to follow the rules could result in injury to yourself or others.

SUGGESTED REPEATER MESSAGE

Welcome to The Park. Please observe the following rules:

Stay seated at all times

Do not get out of the kart until an attendant tells you to do so

The gas is on the right

The brake is on the left

Stay off the guardrail

Absolutely no bumping

People with back or neck ailments and pregnant women should not ride this ride

Failure to follow the rules could cause injuries to you and other riders

Thank you, enjoy your day at The Park