SAFETY NOTE

GO KART HAIR ENTANGLEMENT
2011

A 14 year old girl was driving a Go Kart at a fixed amusement park. The Kart was a standard Formula K machine as shown below. The kart was powered by a Honda GX 160 4 stroke recoil start motor.

Fig 1.

Whilst driving the kart around the track her hair entered the cooling slots on the recoil starter and became entangled in the cooling fan. Prior to the accident the operator had fitted a guard which partially covered the fan (see Fig 2).

Fig 2.

This secondary guard had, as can be seen; only a small gap around the perimeter edge but his was sufficient for her hair to be drawn in and become entangled.

A length of hair was torn from her head which resulted in a significant wound to the scalp. The wound was 12cms long and required 12 stitches.

A reconstruction of the incident was conducted with the recoil starter cover in place and using some nylon fibre to simulate the hair. As can be seen from Fig 3 below the fibre was drawn through the engine cooling holes on to the recoil starter fan.

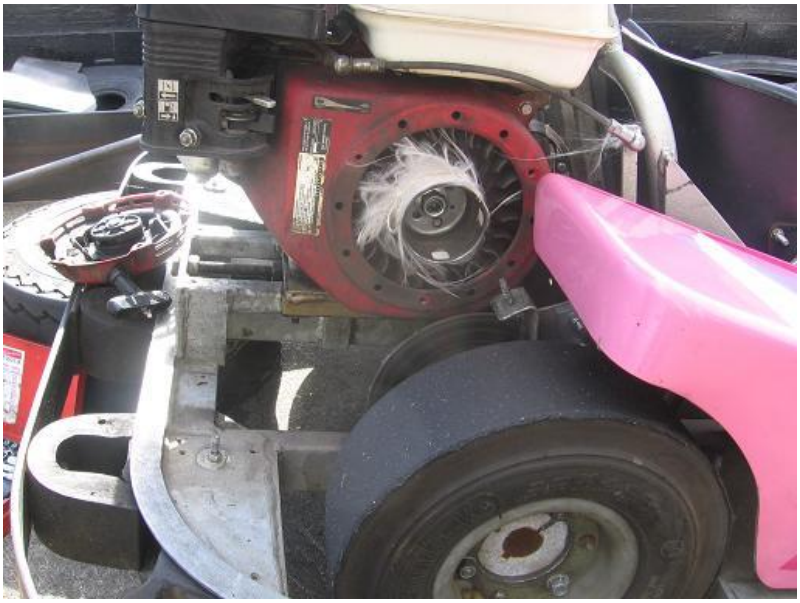

Fig 3 (Reconstruction)

Kart operators are reminded that where riders have long hair they should take appropriate steps to ensure that it cannot become entangled in any moving part of the kart. This particular incident was to our knowledge unusual but hair and clothing have previously become tangled in other rotating parts of go-karts. In many instances this has caused serious injury and at least one death.

Fig 4.

The owner of the karts involved decided to fabricate and fit guards which completely cover the engine area (See Fig 4) in order to protect riders from the engine. This is one of the ways to protect riders and operators are at liberty to choose other methods of achieving the same outcome.

Further information about the incident or about anything in this Alert can be obtained from:

HM Inspector of H&S Melvin Sandell on 07527002689