



Standard Specification for Safety and Performance of Fun-Karts¹

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1. Scope

1.1 This specification relates to the safety performance specifications for commercially manufactured fun-karts intended for private use, on suitable off-road terrain, by consumers.

1.2 This specification is intended to reduce hazards, other than those inherent in the sport of fun-karting, to the users of fun-karts during normal intended use by specifying performance standards of manufacturing.

1.3 This specification applies to fun-karts for private use and does not apply to concession, race, home-made, consumer-modified fun-karts, fun-karts that are pedal-powered, unpowered fun-karts, or fun-karts, which are used for commercial purposes.

1.4 This specification recognizes that there are operational hazards relating to fun-karts, which operators and passengers are deemed to have accepted by their use and operation of the fun-kart including, but not limited to, falling out, running into, through, under or over objects, upsetting the fun-kart, general operator recklessness, pinches, scratches, or bruises, or a combination thereof.

1.5 This specification does not cover labeling, maintenance, or use. For use and maintenance, see Safety Guide F 1928.

2. Referenced Documents

2.1 ASTM Standards:

F 1928 Safety Guide for Consumer Recreational Use of Fun-Karts²

2.2 CPSA Document:³

CFR 1303

2.3 FMVSS Standards:³

FMVSS 571.209

2.4 SAE Standard:⁴

SAE J 386

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *axle guard, n*—a device that covers the drive axle on

fun-karts so that the possibility of injury resulting from hand, hair, loose clothing, or body parts contacting the axle is reduced.

3.1.2 *brush bars, n*—any device supplied by the manufacturer intended to deflect loose vegetation from the path of the fun-kart operator, and passenger in two-seat fun-karts.

3.1.3 *control pedal pivot, n*—the center point about which the control pedal rotates. Excluded from this definition are any control device(s) attached to the pedal itself.

3.1.4 *deck plates, n*—a form of guarding through the use of relatively flat barriers to cover rotating components.

3.1.5 *engine stop switch, n*—a toggle switch, or other two-position positively engaging switch, which when activated causes the engine to stop or not operate, or both.

3.1.6 *engine throttle system, n*—the throttle mechanism attached to the engine, as provided by the engine manufacturer.

3.1.7 *fun-kart, n*—a motorized vehicle with four wheels, excluding vehicles which the operator, and passenger, if any, sit astride, sold commercially as consumer goods and intended for private personal recreational use by consumers for off-road use on suitable terrain, as recommended by the manufacturer, at maximum speeds over 12 mph (19.3 km/h) but not exceeding 40 mph (64.4 km/h).

3.1.8 *fun-kart accelerator system, n*—the mechanical system, that is, accelerator pedal, actuation rod or linkage, which is separate from the engine throttle system, and which is used to control the throttle position of the fun-kart engine.

3.1.9 *locking fastener, n*—includes prevailing torque lock-nuts, cotter pins, serrated surface lock nuts, pal nuts, safety wire and similar hardware intended to prevent unintended loosening when properly used.

3.1.10 *normally-seated position, n*—see Safety Guide F 1928 for specifics.

3.1.11 *over center, n*—a condition where the steering linkages bind when the pitman arm is allowed to travel beyond its normal range of motion.

3.1.12 *pan, n*—the barrier surface extending forward from in front of the seat to where the operator/passengers rest their feet.

3.1.13 *pitman arm, n*—the link between the steering column and the tie rod(s).

3.1.14 *throttle stop, n*—a device used to limit the travel of the accelerator system.

3.1.15 *two-seat fun-kart, n*—a fun-kart with designed seating to accommodate one operator and one passenger.

¹ This standard is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.41 on Fun-Karts. Current edition approved April 10, 2000. Published July 2000.

² *Annual Book of ASTM Standards*, Vol 15.07.

³ *Code of Federal Regulations*, available from U.S. Government Printing Office, Washington, DC 20402.

⁴ Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

4. Fun-Kart Frame

4.1 Each fun-kart shall be equipped with a floor pan with the following characteristics:

4.1.1 The back-edge of the pan shall extend to a point that a 1 in. (25 mm) dowel rod between the back of the pan and the front of the seat bottom or its attachment point, with the seat in a full backward position, shall be a maximum of 90° off of vertical (see Fig. 1).

4.1.2 The front-edge of the pan shall extend, at a minimum, to a point in front of the operator's heel position, with the operator normally seated and able to operate the foot pedal controls.

4.1.3 The pan shall be solid and uninterrupted (comprised of one or more pieces).

4.1.4 The width of the pan (see Fig. 2) shall include any frame rails to which it is mounted, provided there is no vertical gap between the edge of the pan and the frame rails.

4.1.5 The seat shall be centered laterally over the pan.

4.1.6 The pan on single-seat fun-karts must be at least 14 in. (356 mm) wide at its rear-edge.

4.1.7 The pan on two-seat fun-karts must be at least 20 in. (508 mm) wide at its rear-edge.

4.2 Seating:

4.2.1 Fun-karts shall be equipped with a rigid device, along the outer edges of the fun-kart, either integral with the seat itself or located in the frame of the fun-kart, to help maintain the operator's/passenger's position in the seat about a lateral axis of the fun-kart. This device shall extend, at a minimum, the full depth of the base of the seat. On fun-karts equipped with adjustable seats, the device shall extend throughout all

seat positions or be mounted to the seat itself.

4.2.2 The seat shall not extend more than 3-1/2 in. (90 mm) per side over the pan.

4.2.3 On two-seat fun-karts, the steering wheel center shall be located within 3 in. (76 mm) of the center line of the seating position of the fun-kart's operator, when seated in a normal operating position.

4.3 Steering Support Columns:

4.3.1 On fun-karts equipped with steering column support of less than 4 in. (102 mm) of width, measured at a point 2 in. (51 mm) below lower edge of the steering wheel, the steering

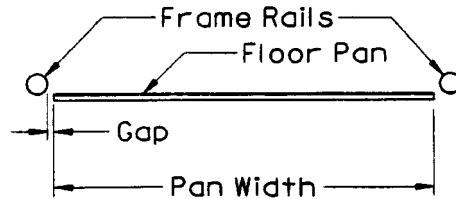
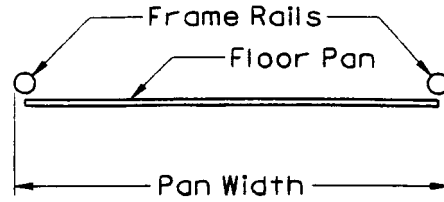


FIG. 2 Floor Pan Width Measurement

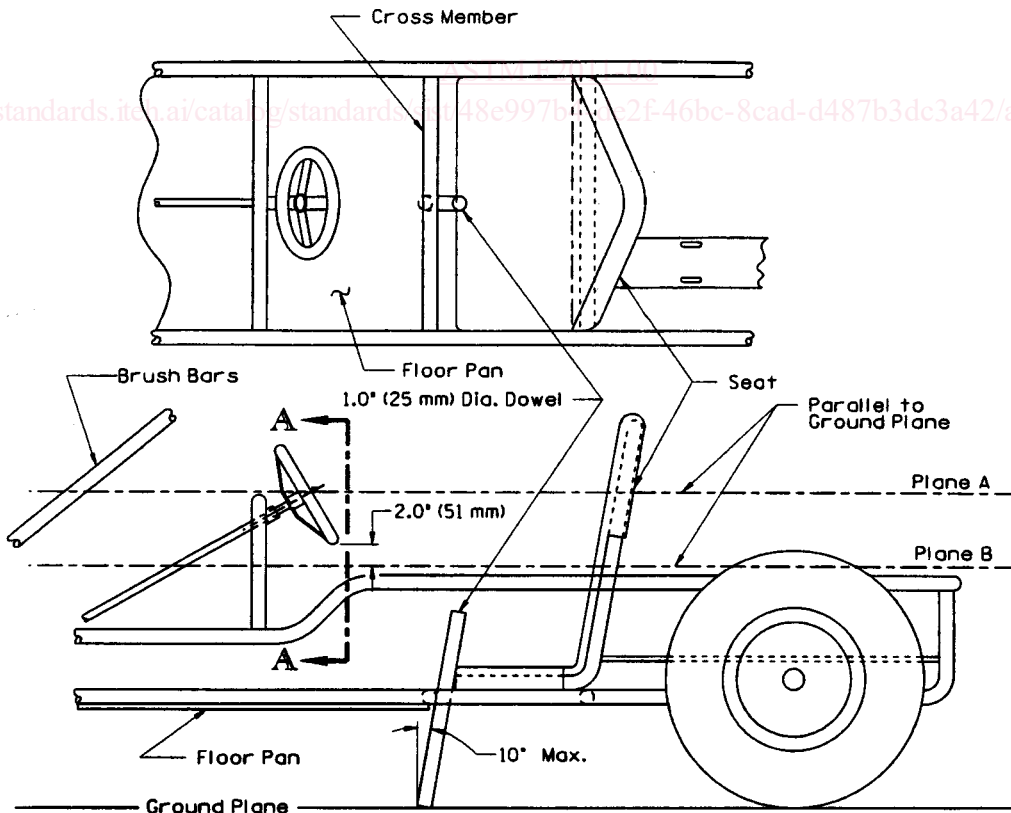


FIG. 1 Diagram of Fun-Kart Frame