

# Supplemental Technical rules for IAME Swift and KA100

These rules apply to both IAME Swift and KA100 engines, unless otherwise specified or applicable.

Revised 3/18/25

## Reed Cage System Clarification - KA100 and X30 - 3/17/25

Any alteration to the factory intended operation of the reed cage system may be deemed non-compliant. The original statement of the reed screws being a non-tech item was intended to mean the type (straight, Phillips, Allen or Torx, etc) of screw, not to mean an alteration to the size or design could be made. Further, the sizing of the holes in the reed petal hold down plate may be compared to a known stock part to determine legality.

## **Excessive Carbon Buildup in Exhaust Port** – 3/18/25

Effective immediately for all IAME engines - Excessive carbon buildup in the exhaust ports that is judged to reduce the factory port area by 25% or more will be grounds for disqualification. Further, carbon in the top of the ports that could obstruct the use of the 0.2mm X 5mm stop gauge used to document the exhaust duration as noted in the fiche documents may also be grounds for disqualification. Please ensure your equipment is cleaned and compliant.

#### Air box:

- May not be covered in full or in large part by graphics, decals or any other coating. Technical director has final discretion regarding compliance.
- > Inlet tubes may be secured with silicone or other sealant.
- Foam filter is required (Exception: no filter required during rain conditions).
- Water drain hole of .200" is allowed. No additional holes or alteration of air box allowed.

#### **Carburetor:**

- > As supplied by OEM engine manufacturer.
- No additional machining permitted on bore or venturi. Surface finish must be stock from manufacturer.
- Throttle shaft, butterfly and butterfly screw must remain stock.
- Carb diaphragms and gaskets are non-tech, however, they must be the same dimensions listed in the IAME technical fiche.
- Gasket & diaphragm color is non-tech.
- Carburetor may be run with the pumper stack on top or bottom.
- Aftermarket top screws (6) and inlet cap screws may be used when factory sizing is maintained.

#### Clutch:

- Swift (Micro/Mini): engagement speed not to exceed 5000 RPM maximum.
- ➤ KA100: engagement speed not to exceed 6000 RPM maximum.
- Clutch parts and drivers must be OEM manufacture only.
- Clutch components must be relatively clean with no significant amounts of oil/grease. Clutch friction surfaces cannot be saturated or coated with any kind of fluid or substance.

#### **Exhaust system:** See individual engine Technical Fiche for dimensions

- Exhaust headers and silencers must be as supplied by manufacturer. No alterations or modifications allowed.
- Any header or silencer that has been welded, patched or otherwise sealed to repair cracks or other damage will not be allowed.
- One exhaust temperature sensor is allowed on header only. The temperature sensor bung must be plugged with a tightened bolt if a sensor is not present.
- Carbon deposits may be cleaned from internal surfaces areas, but absolutely no polishing, sanding, etching or surface treatment of internal surface areas allowed.
- No external surface treatments, coatings, polishing or etching allowed on headers and silencers.
- Exhaust system must be intact (no cracks or excessive damage comprising the function of the system) with all components during any on track session.
- Leakage at the header to cylinder mount, header to silencer junction or at the silencer end cap may result in a DQ. A high temp silicone sealant may be used at these points.

#### **Ignition Timing:**

- Swift (Micro/Mini): Open
- > KA1000: 0.106" BTBC Max
- ➤ <u>SSE:</u> 0.090" BTDC Max

### Reed Cage:

- ➤ Only IAME fiberglass reeds allowed. Minimum thickness of 0.012". No aftermarket or carbon fiber reeds.
- Reeds must be unaltered: No sanding, cutting or removal of material.
- Reed cage, reed cage plates and manifold are to remain as manufactured: no polishing, grinding or shaping allowed.
- Resurfacing the flat rubber contact surface to reeds and gasket surface allowed.
- > Reed attachment screw holes may be lightly ground and deburred. Reed screws are non-tech.

### **Spark Plug:** Following spark plugs are allowed

- Swift: NGK BR EG or B EG; Denso W ESZU; Autolite AR50, AR51, AR52 & AR53
- KA100: NGK B10EG, BR10EG, NGK 6061-10, NGK 6252K-105, NGK 6254-105
- → <u>SSE: NGK R6252K-105, NGK R6254E-105, NGK BR10EG, NGK B10EG</u>

> Indexing washer or CHT lead must be in place

## Spark plug cap:

- > PVL (IAME #10544)
- ➤ NGK (#TB05EMA)

## **Starter Battery:**

- All on board starter batteries must be secured with a proper battery box mount and strip. An additional 175 lb. plastic cable tie must also be wrapped around the battery mount and battery.
- > Last name of competitor and kart number must be legibly printed and easily viewed on battery.

### **Starter System:**

- Must be intact and functioning.
- An outboard (auxiliary) starter may be used if the on board starting system fails or if the engine is "flooded."