

11.7 IAME Parilla X30 125



Preamble:

The following are the Technical Specifications for the PARILLA LEOPARD X30 125 engine, as approved by AIDKA. Unless otherwise specified, the engines must be original in all their components according to the PARILLA LEOPARD X30 125 drawings. Homologated drawings are available at www.aidka.com.au. The engine must be Australian delivered and imported by an AIDKA authorised importer to be eligible for competition. Neither the engine or any of its ancillaries may be modified unless specifically authorised within these rules. Only Genuine IAME components that are specifically designed and supplied for the Parilla Leopard X30 125cc engine are legal, unless otherwise specified. Any removal, addition or polishing of material is strictly forbidden. Sandblasting, glass bead blasting, peening, acid etching, spark eroding and/or any other method of metal removal or displacement is not allowed. The use of thermal barrier coatings / ceramic coatings on or in the engine / engine components and on or in exhaust components is prohibited. The use of anti friction coatings on or in the engine / engine components is prohibited. OEM pistons are exempt.

11.7.1 Displacement

123.67cm³, BORE 54.00mm, STROKE 54.00mm, MAX BORE 54.28 mm

11.7.2 Cylinder

1. All ports must be of intended design conforming to drawings supplied by the manufacturer.
2. No modifications or grinding to the ports is allowed.
3. Cylinder length 86.6 +0.1 -0.2
4. Water connections to the cylinder are free but must retain the homologated position and threaded sizes.

11.7.3 Base Gaskets

1. The type of material is a non tech item
2. The minimum base gasket/gaskets must be a minimum of 0.30mm and a maximum of 0.45mm. More than 1 base gasket can be used.

11.7.4 Cylinder Head

1. Aluminium Cylinder Head must be of original engine manufacturer and conform to drawings supplied by manufacturer.
2. No material to be added except for spark plug thread repair.
3. Distance from spark plug sealing face to combustion chamber ceiling face 29.3mm+/- 0.25mm.
4. The combustion chamber volume shall be a minimum of 10.3cc, Refer Appendix F.
5. Water connections to the cylinder head are free but must retain the homologated position and threaded sizes.
6. Cylinder head profile must not vary from the original profile and will be checked with the IAME Cylinder Head. Profile Gauge (part number 8TT-025/1).

11.7.5 Squish Gap

1. The Cylinder Head Squish clearance shall be a minimum of 0.9mm as per the homologation paperwork.
2. Shall be measured using a 2mm solder wire (tin).
3. When inserted in the cylinder the engine shall be rotated until the solder is squeezed between the head and piston crown.
4. Process shall be conducted on both the right and left hand side of the engine.
5. Measurements shall be averaged out.

11.7.6 Crankcase, Crankshaft and Con Rod

Must be of original engine manufacturer and conform to drawings supplied by manufacturer.

11.7.7 Piston

Piston must be of original manufacturer, supplied by IAME Spa with "IAME sud" marking on dome and conform to drawing supplied by manufacturer. No modifications are permitted.

11.7.8 Gudgeon Pins

No special alloys allowed, must be of magnetic material and comply with the drawing as supplied by the manufacturer.

11.7.9 Clutch

Must be of original manufacturer and conform to manufacturers drawings with original IAME markings on it. No modifications permitted.

11.7.10 Reed Block and Reed Valves

1. Reed valves must be the same style as the original, Carbon Fibre reeds are allowable
2. Reed thickness 0.30mm +/- 0.08mm
3. Reed block must be the original IAME one as supplied with the engine.

11.7.11 Carburettor

1. The only permissible carburettor is the Tryton Hobby 27/C and must conform to the IAME – X30 Tryton homologation documents and must carry IAME markings on the back face of the carburettor as supplied.
2. The throttle bore size has a maximum of 28.00 mm. No sleeving of the throttle bore is permitted.
3. Adjustment of carburetor jet needles must be done by manually turning the jet needle (or its extension) only.
4. Carburettor throttle cannot be actuated by electro mechanical means.
5. It is permissible to fit a mechanical stop to limit the range of carburetor jet needle movement, however no modifications to the carburetor are permitted to mount such a stop.

11.7.12 Ignition

1. IAME SPA Selettra or PVL Digital-K Ignition System – Key type Ignition, woodruff Key must be retained and no modifying permitted. Spark plug cap must have a resistor.
2. The only eligible ignition module to be used is a green module marked with AKA20L.
3. In the event of required repairs the plastic fittings registered and homologated as parts of the electrical looms for the ignition and starter assembly are permitted to be replaced with non-supplied fittings.
4. All stator mounting hardware must be as per OEM.

11.7.13 Exhausts

The only permissible exhaust allowed is as supplied from IAME SPA, must carry the IAME identification and conform to the drawings in the homologation papers

11.7.14 Header Pipe

The only permissible header pipe is the one as supplied by IAME SPA and must carry the IAME identification. It is permissible to fit a maximum of three separate flange support brackets to the original header, any such support flange must not exceed 60mm maximum in total length, and not exceed 40mm maximum in total width. An exhaust probe / fitting is allowed.

11.7.15 Cooling System

Allowable radiators are the IAME X30 or RL Version, PRD 350x200mm or PRD 400x235mm Version, Rotax FR125 Max

11.7.16 Non-Tech Items

Unless specified, non-tech items are to be of the same type and style as the original. No alteration from the original manufacturers specifications is permitted to fit a non-tech item.

Non-tech items for the Parilla Leopard X30 engine include;

Air filter / Airbox, Clutch sprocket, Gaskets, Seals, Big & Little End Roller Cages, Fasteners, Washers, Spark Plug, Spark Plug Lead, Spark Plug Resistor Cap, Main Bearings, Water Hoses, Hose Clamps, Water Pump, Axle O-Ring, Axle Pulley, Thermostat, Exhaust Flex, Battery, Starter Motor, Carburettor gasket / diaphragm repair kit including needle and seat, plastic fittings on the electrical looms for the ignition and starter assembly.