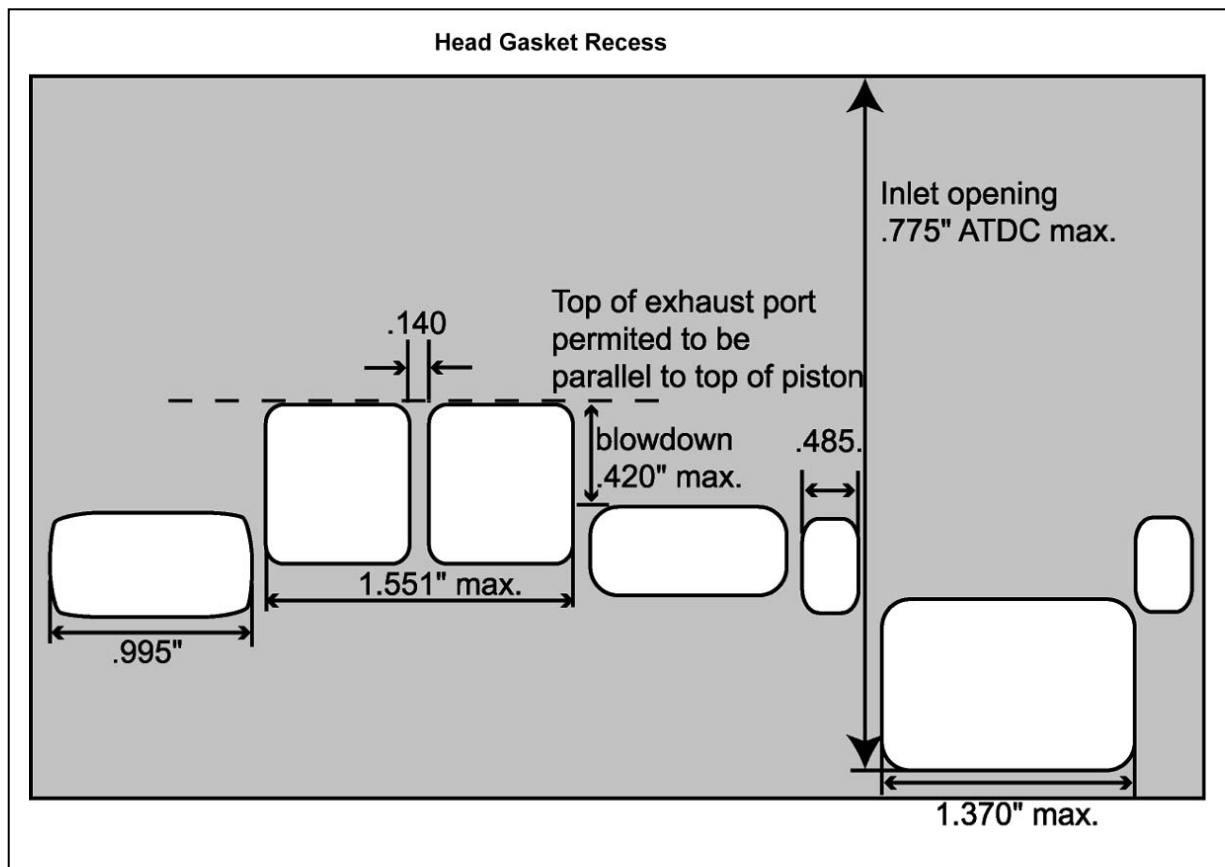


**SECTION 11 - YAMAHA KT100 TECHNICAL SPECIFICATIONS**

- 11.1 Description: Yamaha KT100S 2 cycle, single cylinder, piston port.
- 11.2 Displacement: 6.201 cubic inches/101.6 cubic centimeters maximum.
- 11.3 Bore and Stroke: 2.085" maximum bore, 1.816" maximum stroke.
- 11.4 Gaskets and Fasteners: Non-tech unless otherwise specified.
- 11.5 Exhaust Systems: See rule 8.4
- 11.6 Combustion Chamber Volume: 11.00 cubic centimeters minimum. Measured using standard accepted karting test methods. See rule 8.5
- 11.7 Cylinder Head Requirements: The combustion chamber must be spherical in shape with a visible squish band. Cylinder head gasket shall be manufactured of aluminum or copper only, having a 2.580" maximum outside diameter.
- 11.8 Port Dimensions and Specs: Note: grinding of all port surfaces to dimensions shown in diagram allowed. Surface finish of all ports is non-tech. Use LAD port checking tools.
- 11.9 Inlet Tract Length: 2.600" minimum, 2.800" maximum
- 11.10 Intake Port Opening Dimension: .775" ATDC max.
- 11.11 Exhaust Port Opening Dimension: 1.155" ATDC min.



- 11.12 Ignition System: Only spark plugs manufactured with a .750" nominal reach are allowed. Approved flywheels are Yamaha part numbers 7F6-85551-00, 7F6-85551-50 (Old style), 7F6-85551-01, 7F6-85551-51 and 7F6-85510-03-00 (New style). Flywheel outside diameter 2.350" minimum. New style flywheel thickness over (3) lugs .950" minimum,

all other areas .817" minimum. New style lug length, (3) places .750" minimum. Old style flywheel thickness .827" minimum. Flywheel and crankshaft keyway width and key is non tech. Ignition module must be original Yamaha, PRD or Atom, stock appearing, unaltered, silicone or epoxy damage repair is allowed. Coil may be repaired with silicone or epoxy.

- 11.13 Piston and Wrist Pin Requirements: Approved pistons are Yamaha, Burriss (single or double ring), Wiseco, Vinart and KSI RKE-787. All approved pistons have manufacturer's name cast inside and this must be present. Piston coatings allowed. Piston skirt length must be the same within .015" front to back. Maximum .030" piston skirt corner break, measured axially. Circlip circumferential height .250" maximum, axial width .200" maximum. Piston transfer areas must be as cast. Piston must be domed. All pistons (except Burriss double ring) must have one ring only. Rings must be manufactured of ferrous material. Wrist pin length 1.565" minimum. Wrist pin outside diameter .550" minimum, .552" maximum. Wrist pin inside diameter .400" maximum. Wrist pins to be manufactured of ferrous material.
- 11.14 Connecting Rod Requirements: Approved connecting rods are Yamaha part numbers 7F6-11651-01, 7F6-11651-02 and 50W-11651-00 only. The connecting rod must be of original manufacture and stock appearing with no machining, grinding, blending or polishing allowed. Shot peening the connecting rod is allowed. Center of crankshaft journal diameter to center of wrist pin diameter 3.932" minimum, 3.942" maximum. Top or bottom-guided rods and bearings allowed.
- 11.15 Crankshaft Requirements: OEM only. Crankshaft outside diameters to be 3.410" minimum, 3.435" maximum. Width over bearing lands 1.790" minimum. Inside width between counterweights .343" minimum. Concentric bushings may be added to repair damaged crankshaft journals. Removal of material in bearing recess area is allowed for bearing clearancing only, not for lightening or balancing purposes. Crankpins are non-tech.
- 11.16 Carburetor Type: Walbro WB3A only. .950" maximum venturi diameter. (See diagram.) Must be stock appearing. Polishing of the venturi, air horn and throttle bore allowed. Metering holes non-tech. Filter cups and air filters non-tech. Pulse pipe and tube non-tech.

