



AKA Homologation No.



ENGINE			
Manufacturer	SQ Racing	Category	125 TAG
Make	SQ Racing	Homologation Period	9 Years
Model , Type	Cheetah	pages	12
<i>This homologation sheet reproduces description, illustrations and dimensions of the engine at the time of the AKA Homologation. All motors must be manufactured within these dimensions</i>			
ENGINE PHOTO - DRIVE SIDE		ENGINE PHOTO - OPPOSITE SIDE	
			
SIGNATURE AND STAMP OF APPLICANT		SIGNATURE AND STAMP OF AKA	

AKA Homologation No.

PHOTO OF THE ENGINE FROM THE BACK



PHOTO OF THE ENGINE FROM THE FRONT

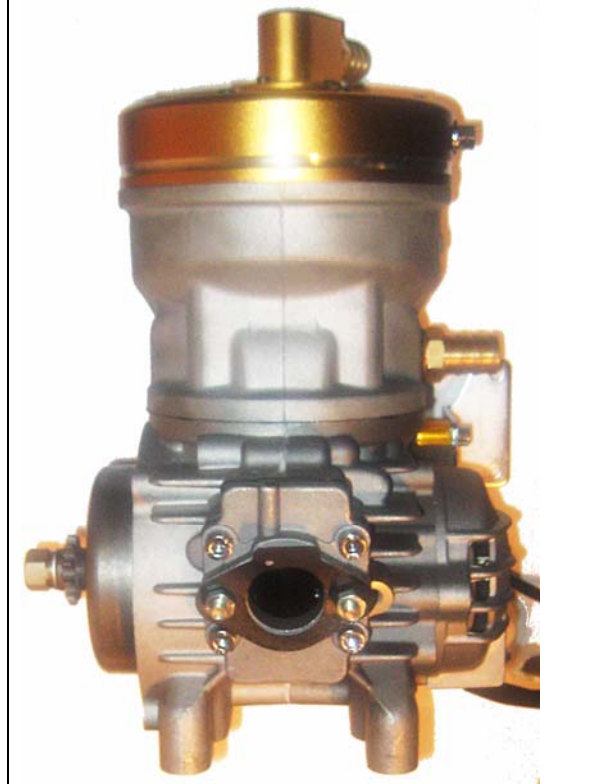
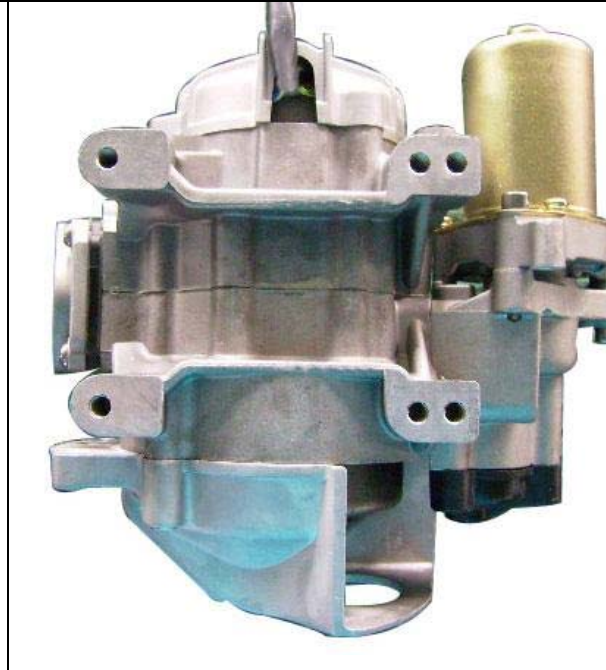


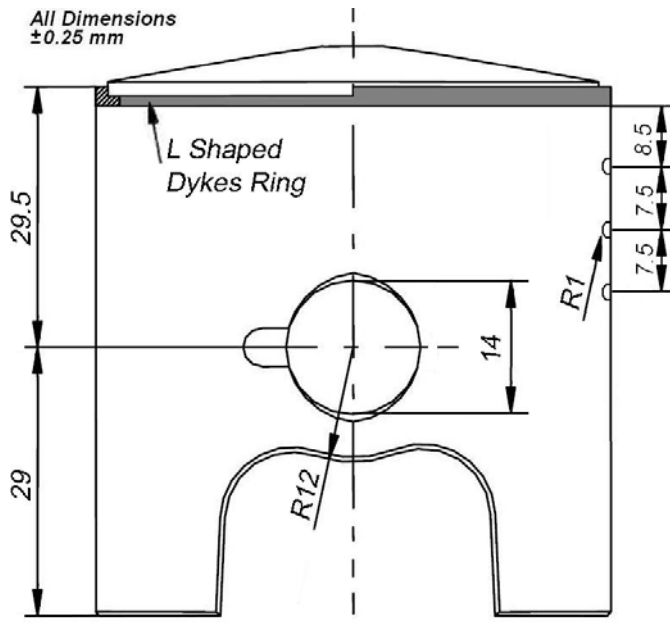
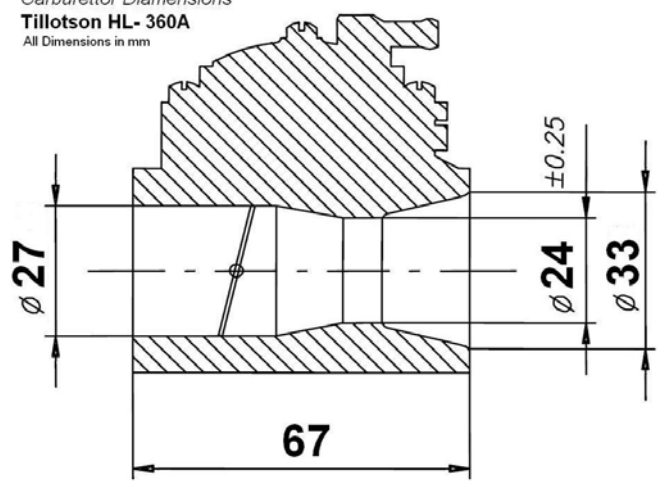
PHOTO OF THE ENGINE FROM ABOVE



PHOTO OF THE ENGINE FROM BELOW



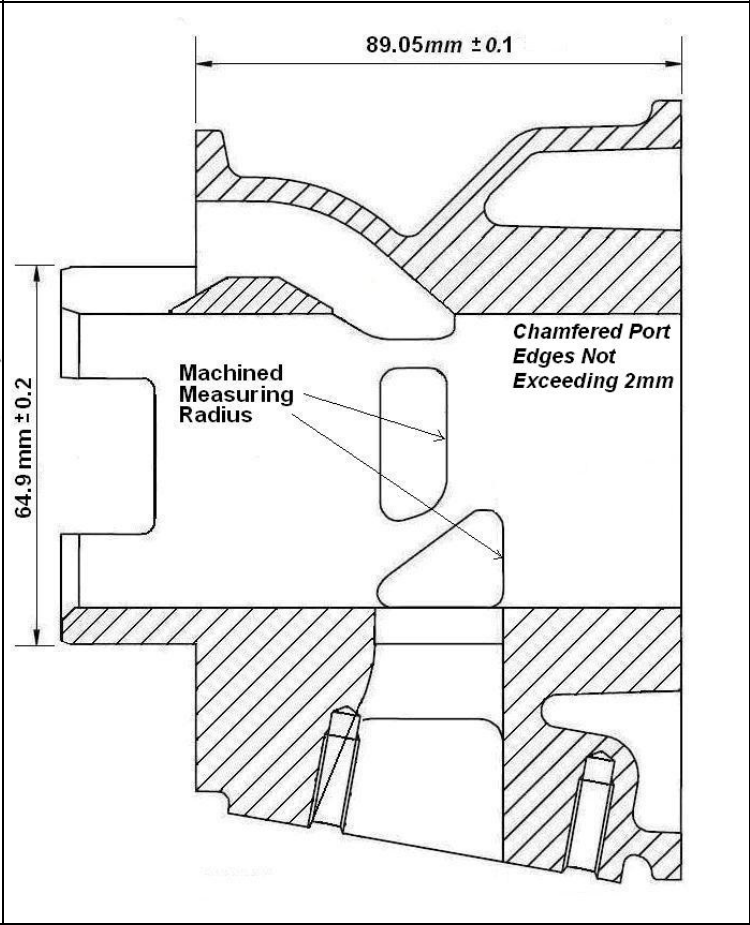
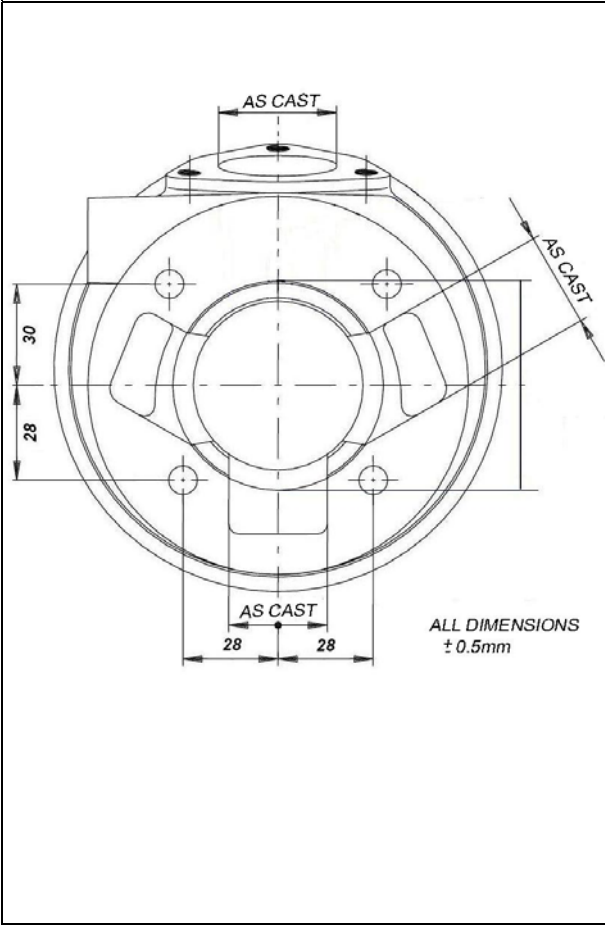
TECHNICAL INFORMATION			
A - Characteristics		C - Materials	
Cylinder volume	124.6cc	Cylinder wall	Alloy Nikasil
Bore	54.00	Cylinder	Alloy
Theoretical max. bore	54.288	Cylinder head	Alloy
Stroke	54.00	Crankcase / sump	Alloy
Cooling system	Water	Connecting rod	SQ Forged
Air admission system	Tillotson HL-360a		
N° of carburetion systems	1	D - Tolerances	
N° of transfer ports in the cylinder	3	Opening angles	+/- 2 degrees
N° of exhaust ports	2	Combustion chamber volume	10cc min.
Shape of combustion chamber	Spherical 13 degrees	Angles	+/- 2 degrees
Volume of the combustion chamber	10cc	Stroke	+/- 0.5mm
Length between of the axis of connecting rod	102mm	Length between axis of connecting rod	+/-0.3mm
Ignition make	SQ – Bright Spark	dimensions on machined surface	
Ignition model	SQ – Bright Spark	< 25mm	+/- 0.5mm
		25-60mm	+/- 0.8mm
B – Opening angles		> 60mm	+/- 1.5mm
Inlet	N/A	Dimensions on rough cast surface	
Transfer	122 Max. Transfer 128 Max. Boost	< 25mm	+/- 1mm
Exhaust	171 Max. Exhaust	25-60mm	+/- 1.5mm
Inlet opens before TDC	N/A	> 60mm	+/- 3mm
Inlet closes before LDC	N/A		

TECHNICAL INFORMATION	
E – Piston	
N° of piston rings	1 (L shaped Dykes ring)
Overall length	58.5 mm
Radius of crown	13 degrees OEM SQ54
Crown to pin	29.5 mm+/- 0.25mm
Skirt to pin	29.mm +/- 0.25mm
F – Piston Pin	
material	Metal – Magnetic
Length	43.8mm
Inside diameter	9.25 mm
Outside diameter	14mm
<p>EXHAUST AND INLET TIMING READING LINES</p> <p>NOTE : Indicate in the diagram the type of piston ring (The piston has 3 x 2mm lubrication holes to inline to match the exhaust bridge)</p> <p>All Dimensions ±0.25 mm</p>  <p>INSIDE CASTING MARK ON PISTON SQ 54</p>	
G – Gaskets	
Barrel gasket material	Any
Minimum thickness	0.1mm
Maximum thickness	2 mm
Cylinder head gasket material	No Gasket – Has O-Rings
Minimum thickness	N/A
Maximum thickness	N/A
<p>CARBURETOR LOCATION</p> <p>NOTE : Distance from the cylinder centre may include an eventual spacer located before the carburettor</p> <p>Carburettor Dimensions Tillotson HL- 360A All Dimensions in mm</p> 	
seiaw	

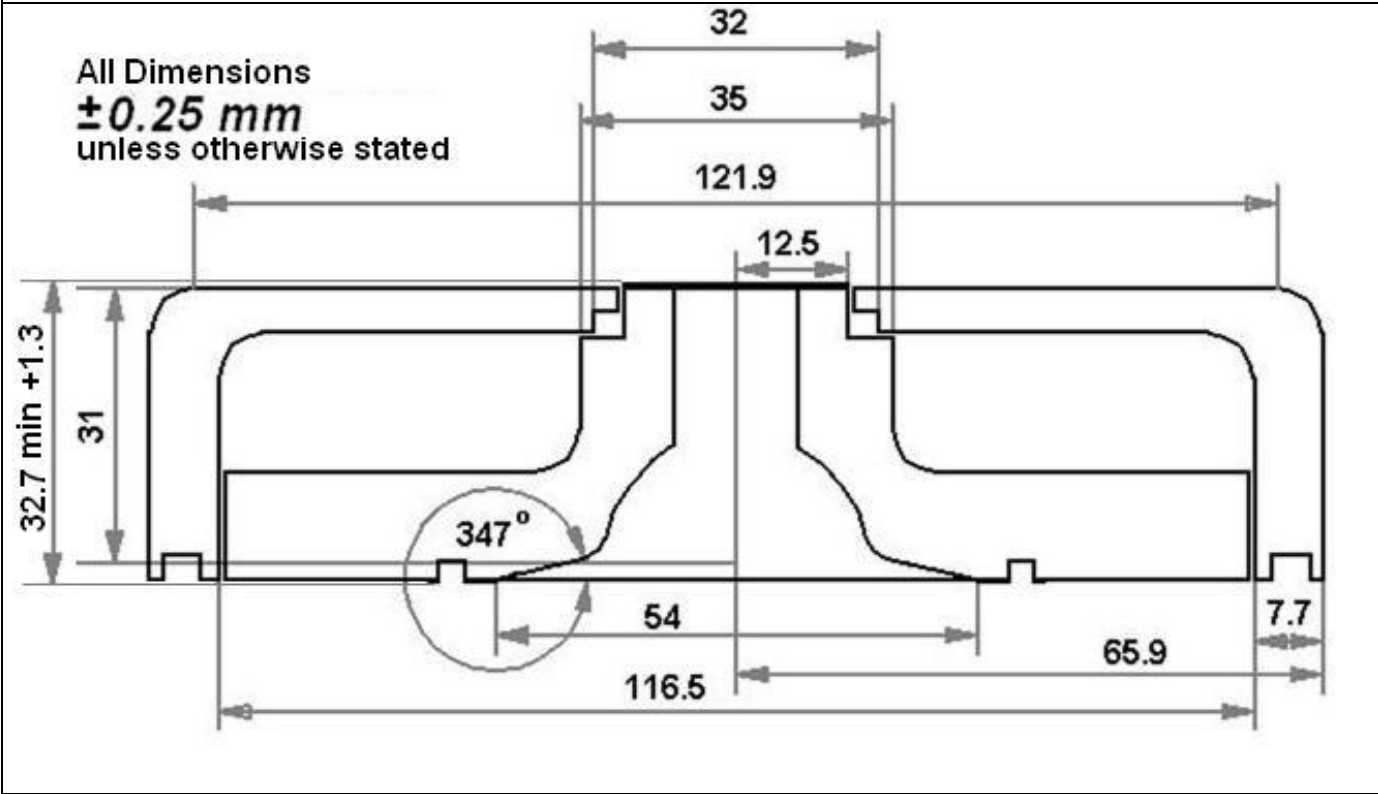
DRAWING OF CYLINDER DEVELOPMENT

DRAWING OF THE BASE OF THE CYLINDER

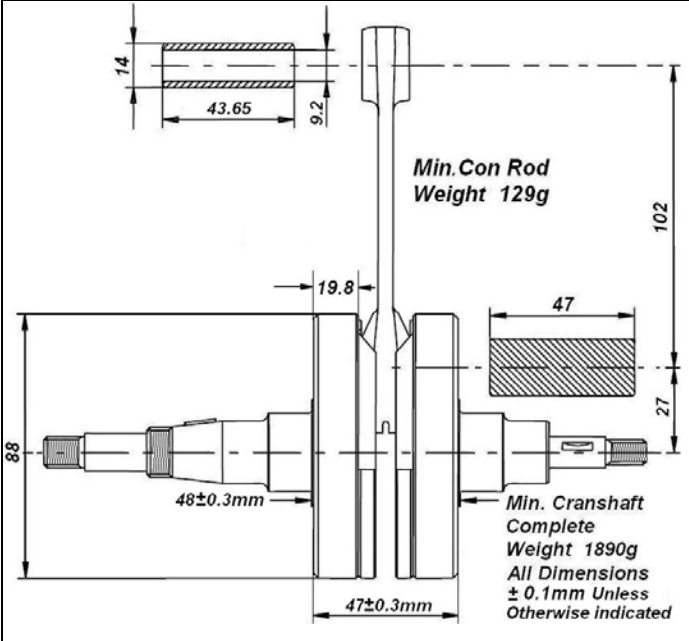
DRAWING OF CYLINDER SECTION



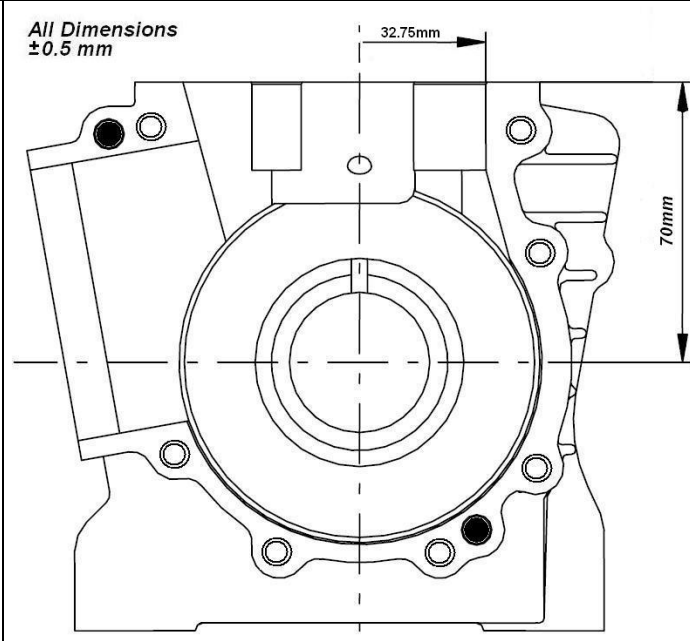
DRAWING OF THE COMBUSTION CHAMBER AND CYLINDERHEAD



DRAWING OF THE CRANKSHAFT



DRAWING OF THE INTERIOR OF THE SUMP



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PHOTO OF THE BASE OF THE CYLINDER



PHOTO OF THE COMBUSTION CHAMBER

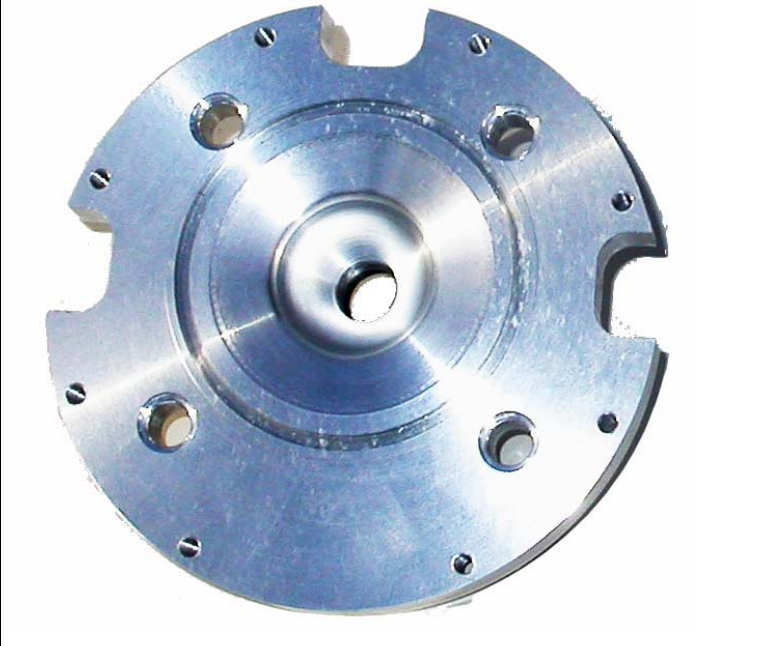


PHOTO OF CRANKCASE - GASKET FACE

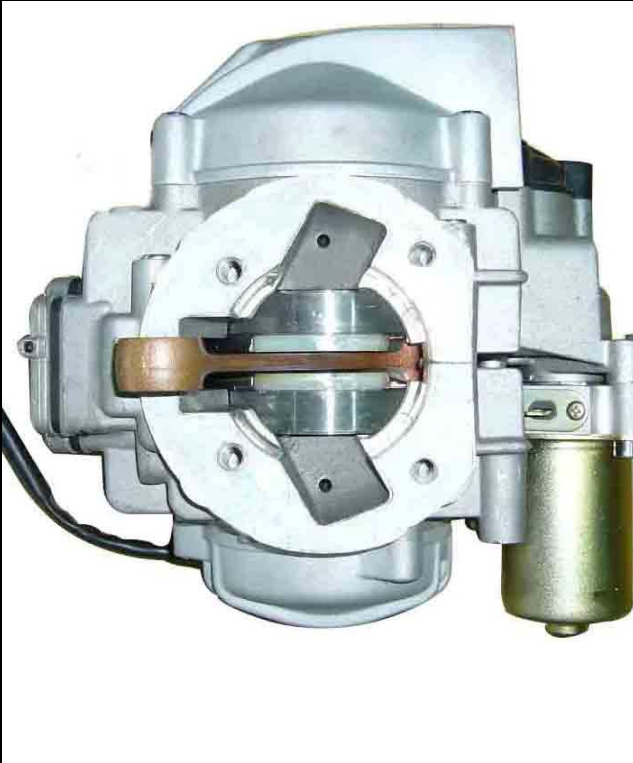
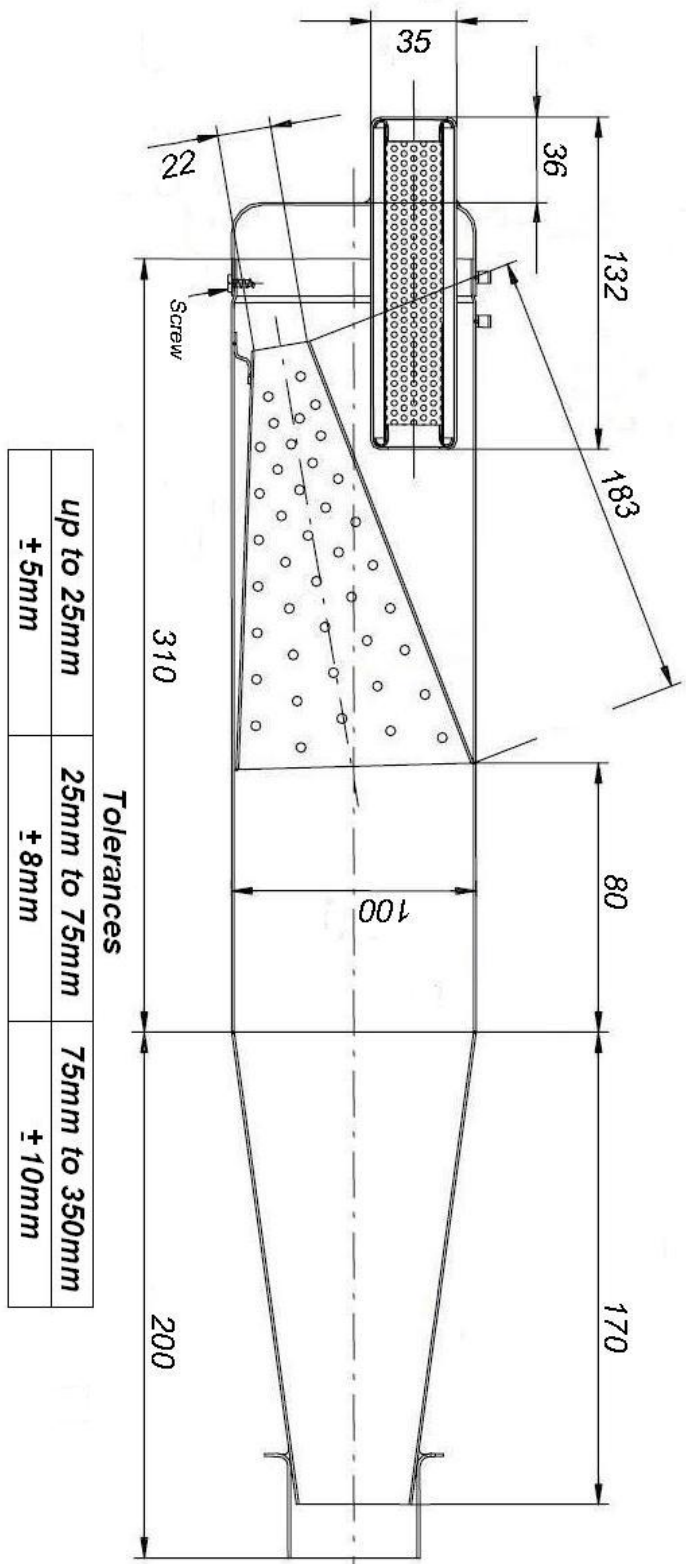


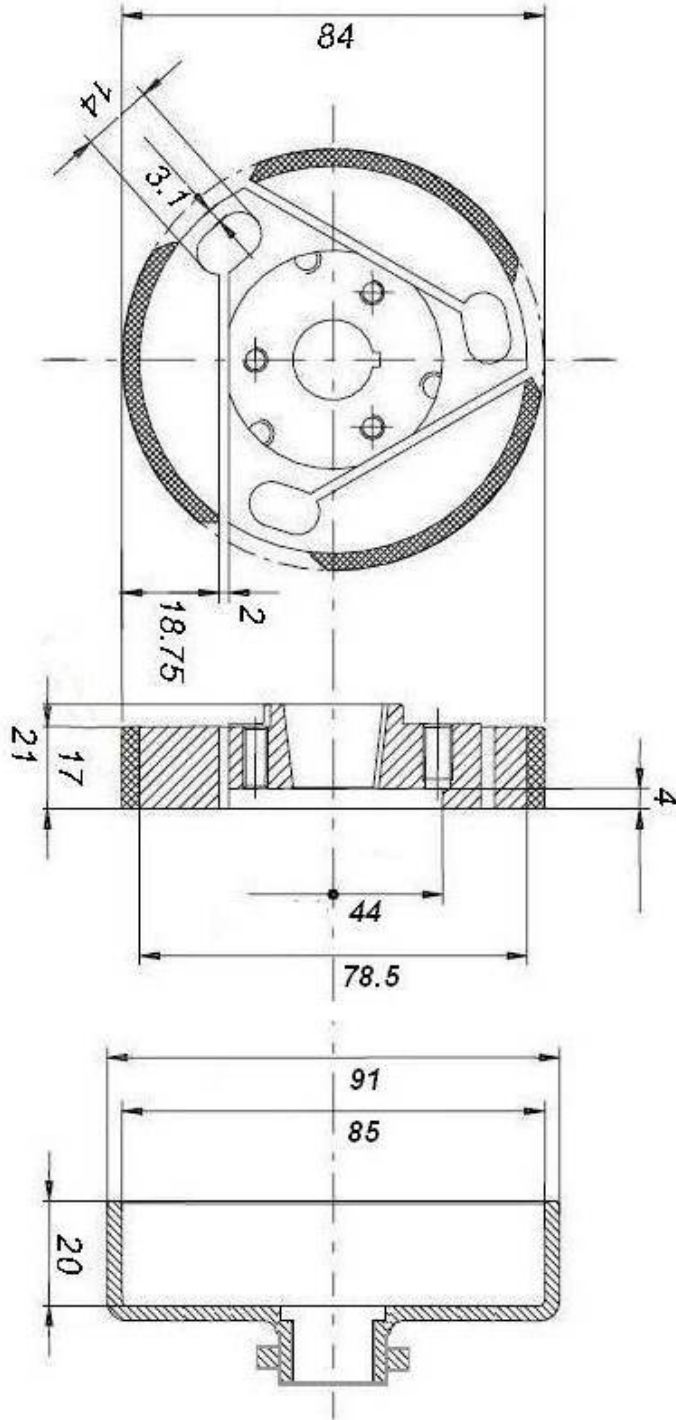
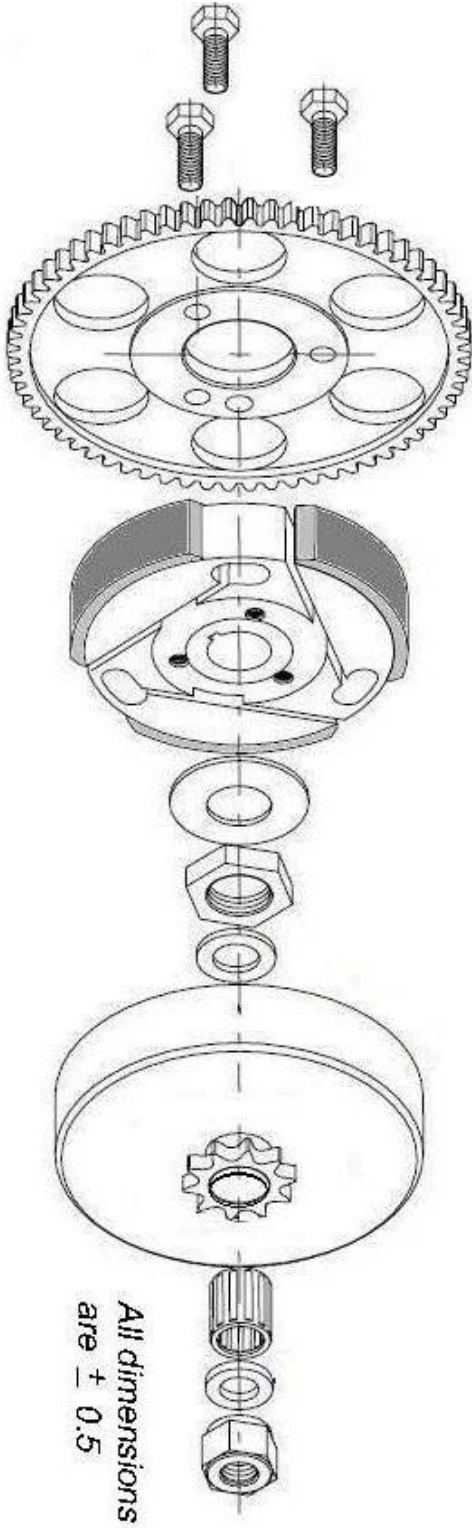
PHOTO OF CRANKCASE - INTERIOR (HORIZONTAL VIEW)



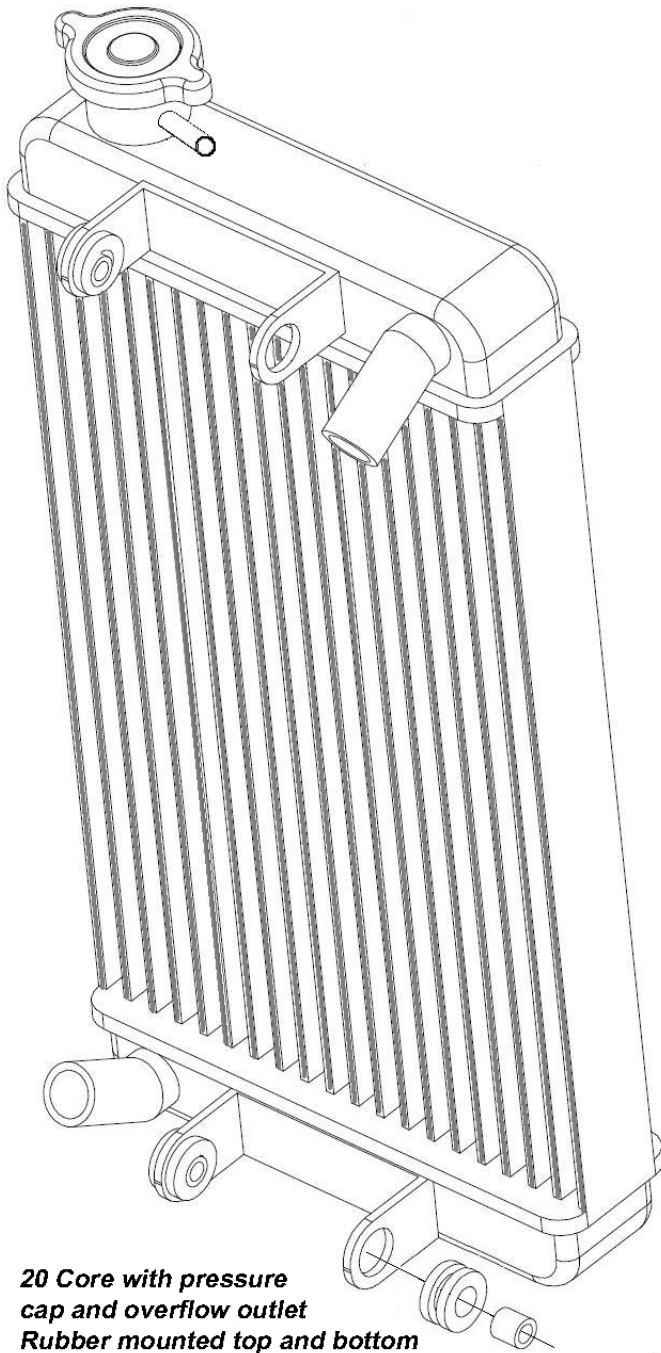
DRAWING OF SILENCER AND COMPONENTS



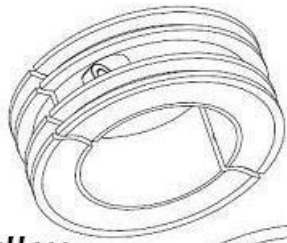
CLUTCH DESCRIPTION AND SKETCH OF PARTS



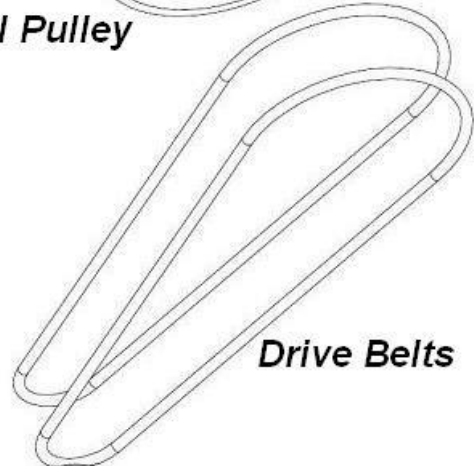
RADIATOR DESCRIPTION AND SKETCH OF PARTS



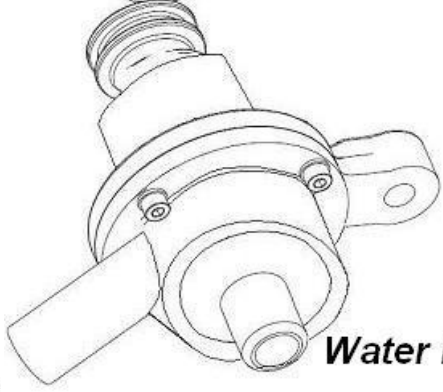
**20 Core with pressure cap and overflow outlet
Rubber mounted top and bottom**



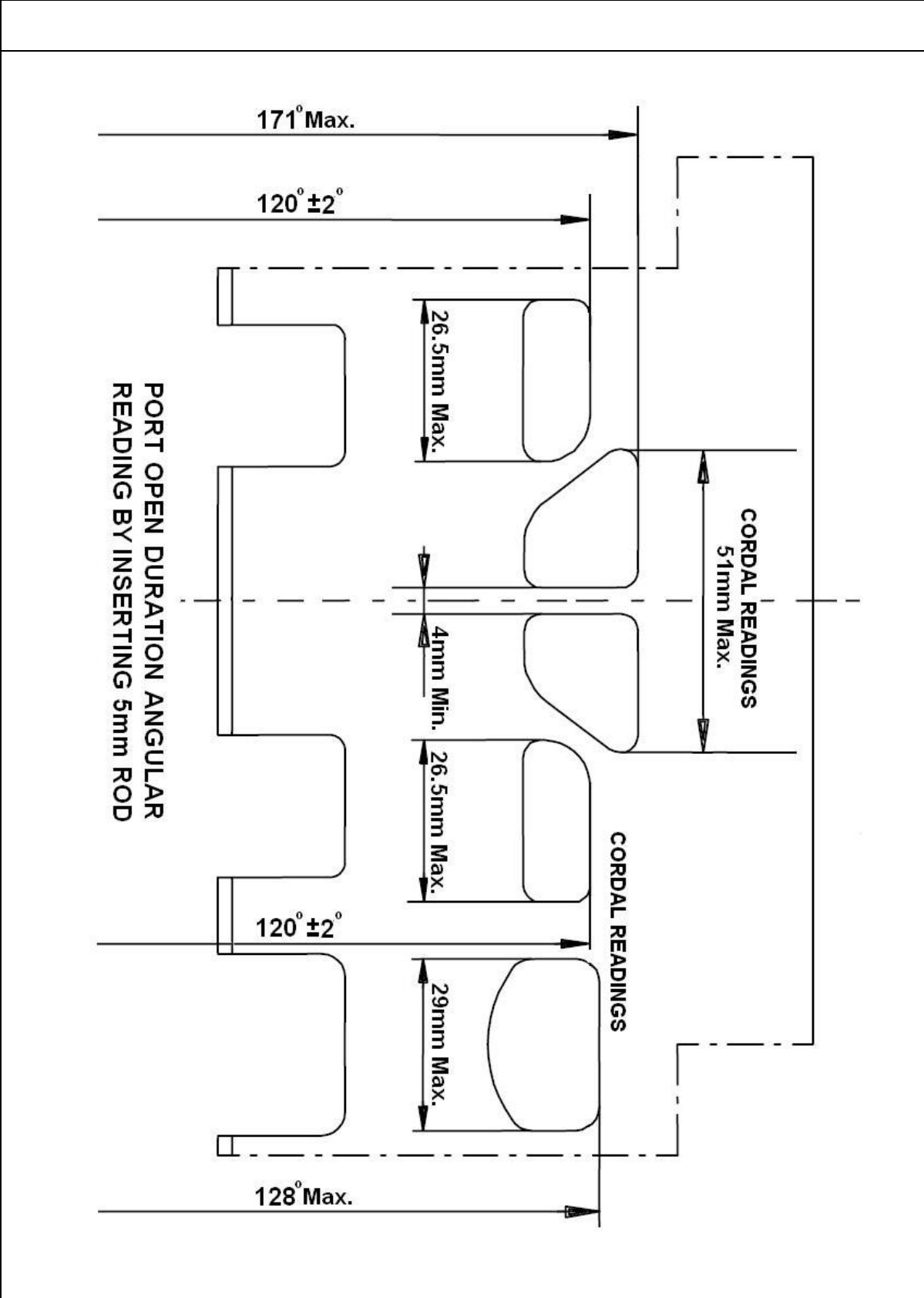
Axel Pulley



Drive Belts



Water Pump



AKA Homologation No.

GEARBOX	
Manufacturer	N/A
Make	N/A
Model , Type	N/A
Primary coupling	N/A

	Primary shaft	Secondary shaft	Degree reading obtained after 3 turns of the engine
1 st gear	N/A	N/A	N/A
2 nd gear	N/A	N/A	N/A
3 rd gear	N/A	N/A	N/A
4 th gear	N/A	N/A	N/A
5 th gear	N/A	N/A	N/A
6 th gear	N/A	N/A	N/A