

INTERNATIONAL KART FEDERATION

Manufacturer Address

PRD TAIWAN

6F, No16 Nanking East

Road, Section 5, Taipei TW



Engine #
**INTERNATIONAL
KART FEDERATION**

Manufacturer :	PRO RACING DESIGN
Make:	PRD
Model :	FIREBALL RK125WC.07-08
Inlet type:	REED
Number of pages	

PICTURE OF ENGINE

(insert picture of front/left here)



(insert picture of back/right here)



Signature and Stamp

Importer

RLV Tuned Exhaust Products Incorporated

TECHNICAL INFORMATION

A	CHARACTERISTICS	
	Measurement	Tolerances
Volume of cylinder	122.25 cc	125 cc
Original bore	53.60 mm	
Theoretical maximum bore	54.25 mm	
Stroke	54 mm	
Cooling system	WATER COOLED	
Number of carburation systems	Tillotson (HL-360A) ONE ONLY	
Number of transfer ports / ducts, cylinder / sump	3	
Number of exhaust ports / ducts	3	
Shape of the combustion chamber	SPHERICAL WITH SQUISH	
Length between axes of the connecting rod	100 mm	
Minimum weight of connecting rod	120 g +/- 2 g	
Volume of combustion chamber	10cc min, Assembled w/o LAD tool	
Type of bearings and size	<i>Example 6205 type</i> Big End of Con. Rod Bearing = 18 X 24 X 14.8 Little End of Con. Rod Bearing = 14 X 18 X 17.2 Crankshaft Bearing = 25 X 52 X 15	

B	OPENING ANGLES	
Exhaust	174 MAX	
Of exhaust ports / ducts	174 MAX	

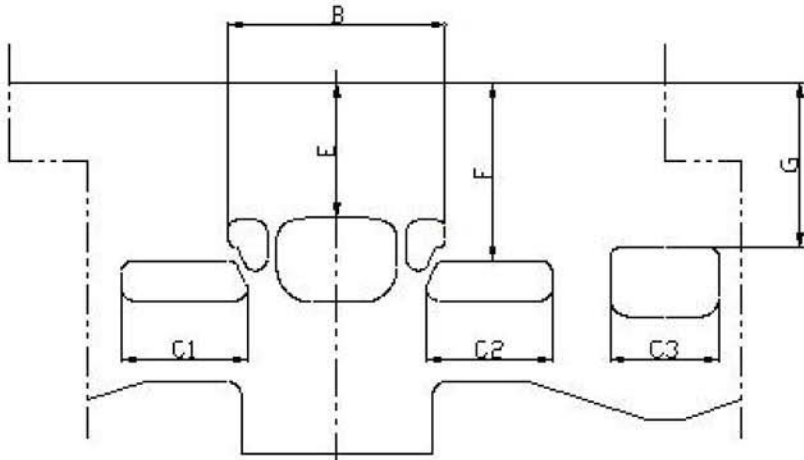
C	LIST OF ACCESSORIES INCLUDED	
<i>(List accessories as shown below)</i>	<i>Centrifugal clutch</i>	
<i>Carburetor with butterfly Ø27</i>		
<i>Electric starter</i>		
<i>Exhaust with flex</i>		

D	MATERIAL	
Cylinder	Alloy	
Connecting rod	STEEL	
Crankshaft	STEEL	
Head	ALLOY	
Liner	CAST IRON	
Crankcase	ALLOY	
Piston	ALLOY	
Piston Ring	CAST IRON CHROME PLATED	

DRAWING OF THE CYLINDER DEVELOPMENT

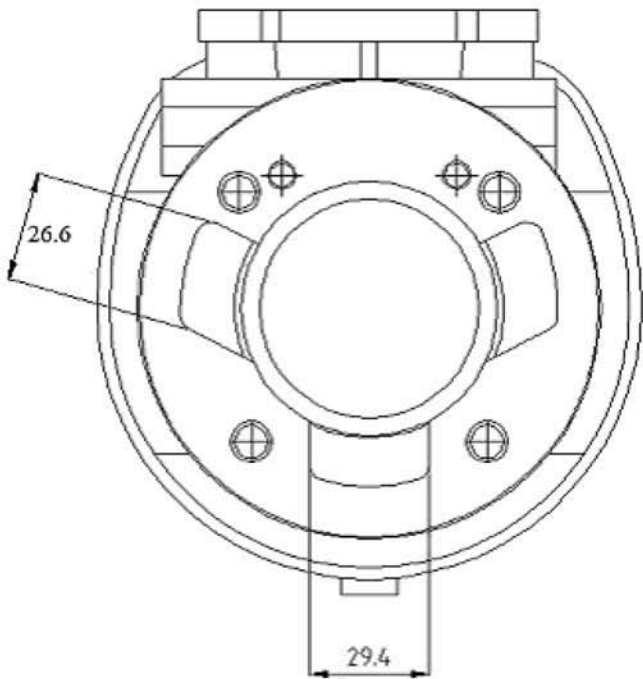
(Insert drawing here)

Chord reading	
B	65.3
C1=C2	26
C3	29.4
Angular reading by inserting a 0.2mm gauge	
E	33.8 min
F	44
G	43.5



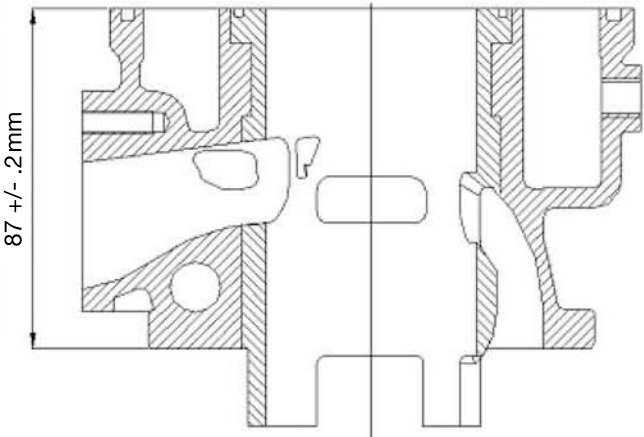
DRAWING OF THE CYLINDER BASE

(Insert drawing here)



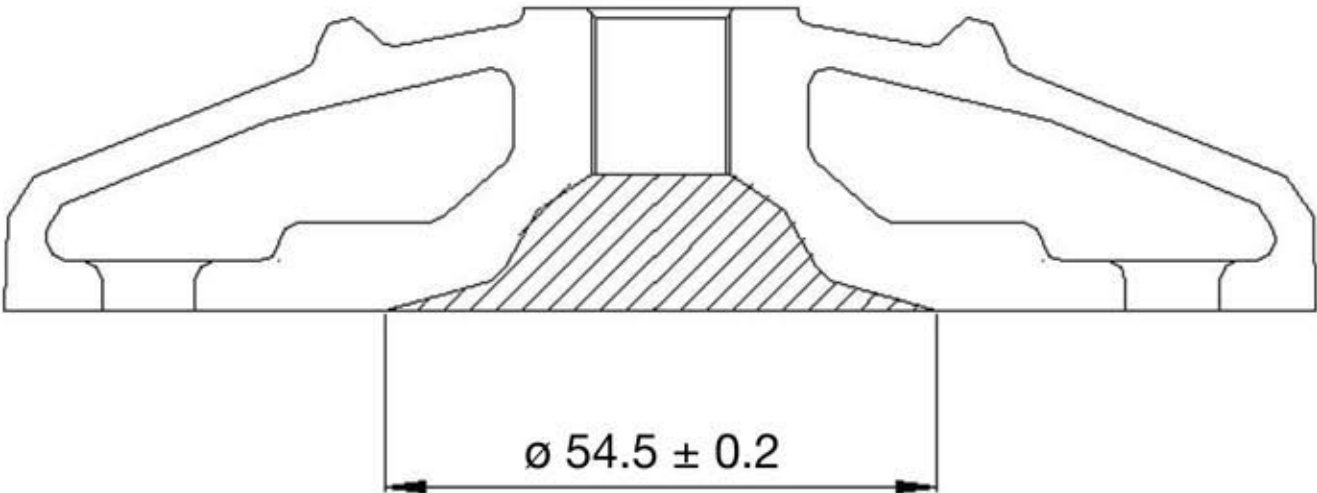
CYLINDER SECTION VIEW

(Insert drawing here)



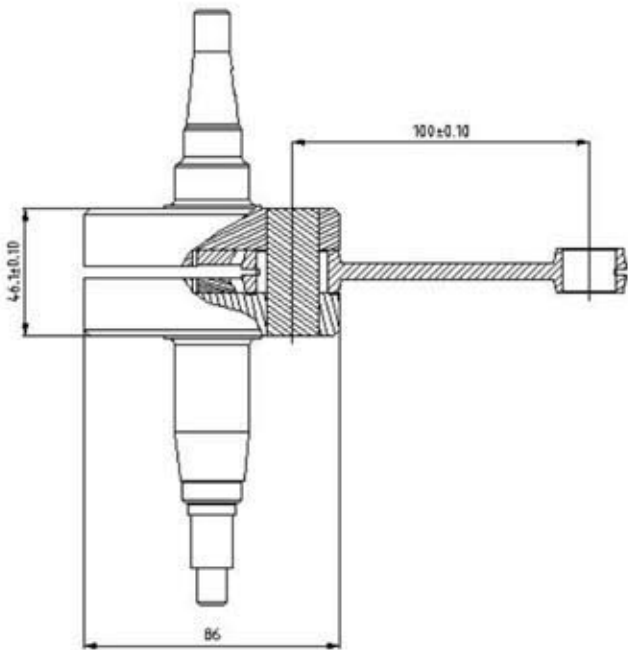
DRAWING OF THE CYLINDER HEAD AND THE COMBUSTION CHAMBER

(Insert drawing here)



DRAWING OF THE CRANKSHAFT

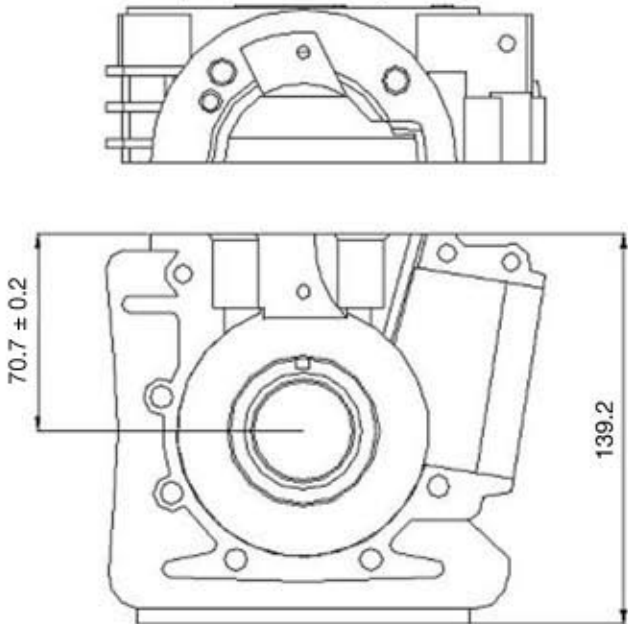
(Insert drawing here)



Complete weight = 1900 GRMS +/- 25 GRMS

DRAWING OF THE INSIDE OF SUMP

(Insert drawing here)



IGNITION

Manufacturer	OPPAMA
Model Number	PRD/OPPAMA/2004 -
Rotation	A/CLOCKWISE
Description	CDI

PHOTO OF IGNITION

(insert photo of inside here)

OPPAMA ROTOR

NOTE: Above is rear of rotor.
Front is shown on view of
complete engine

PHOTO OF COIL

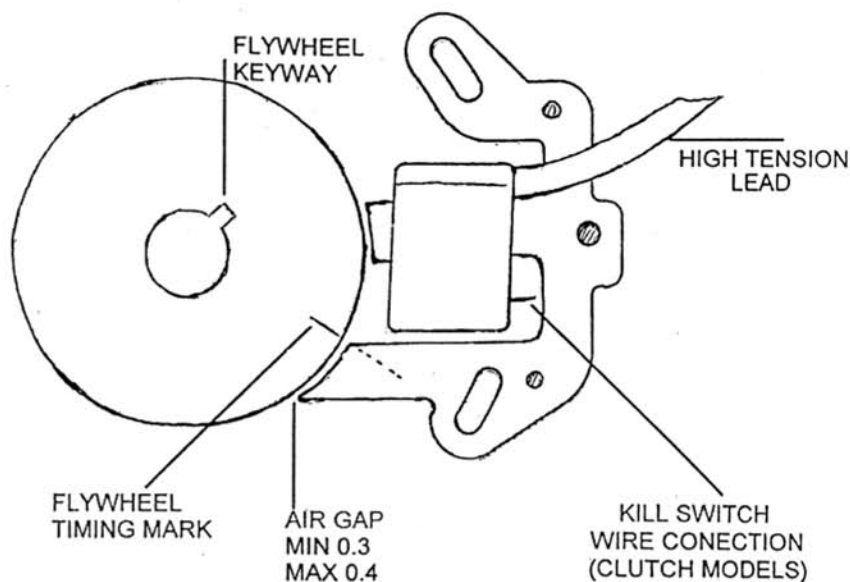
(Insert photo here)

OPPAMA COIL

PRD / OPPAMA IGNITION COIL

- 1/ INSERT DIAL GAUGE AND SET TO T.D.C
- 2/ TURN FLYWHEEL CLOCKWISE UNTIL MARK LINES UP WITH LAMINATION
- 3/ CHECK TIMING ON DIAL INDICATOR
- 4/ ADJUST TIMEING BY MOVING COIL UP OR DOWN

NOTE: IT IS RECOMMENDED
TO SET TIMING ON PRD
ENGINES AT 2.2 B.T.D.C



(THIS IGNITION DOES NOT REQUIRE AN EXTERNAL MODULE)

INTAKE

Manufacturer

Model Number

Rotation

Description

PHOTO OF REED ASSEMBLY

(insert photo of inside here)



PHOTO OF REED PETAL

(Insert photo here)



Minimum Thickness .010"

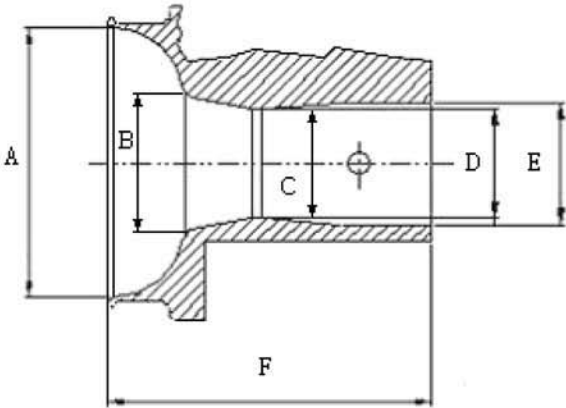
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CARBURETOR DIMENSION

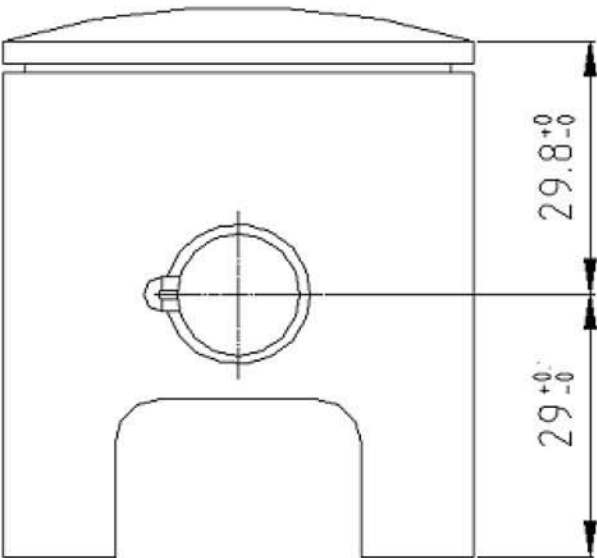
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Item	Measure	Tolerance
A	33.75mm	±0.20mm
B	-----	-----
C	24mm	±0.10mm
D	24mm	±0.10mm
E	27mm	±0.10mm
F	66.25mm	±0.10mm



PISTON

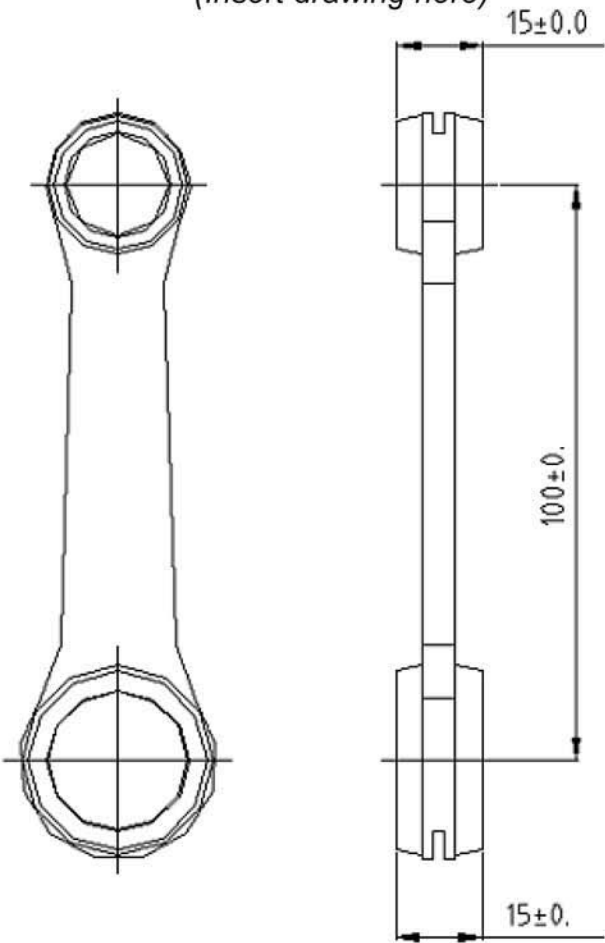
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Weight= 135

CONNECTING ROD

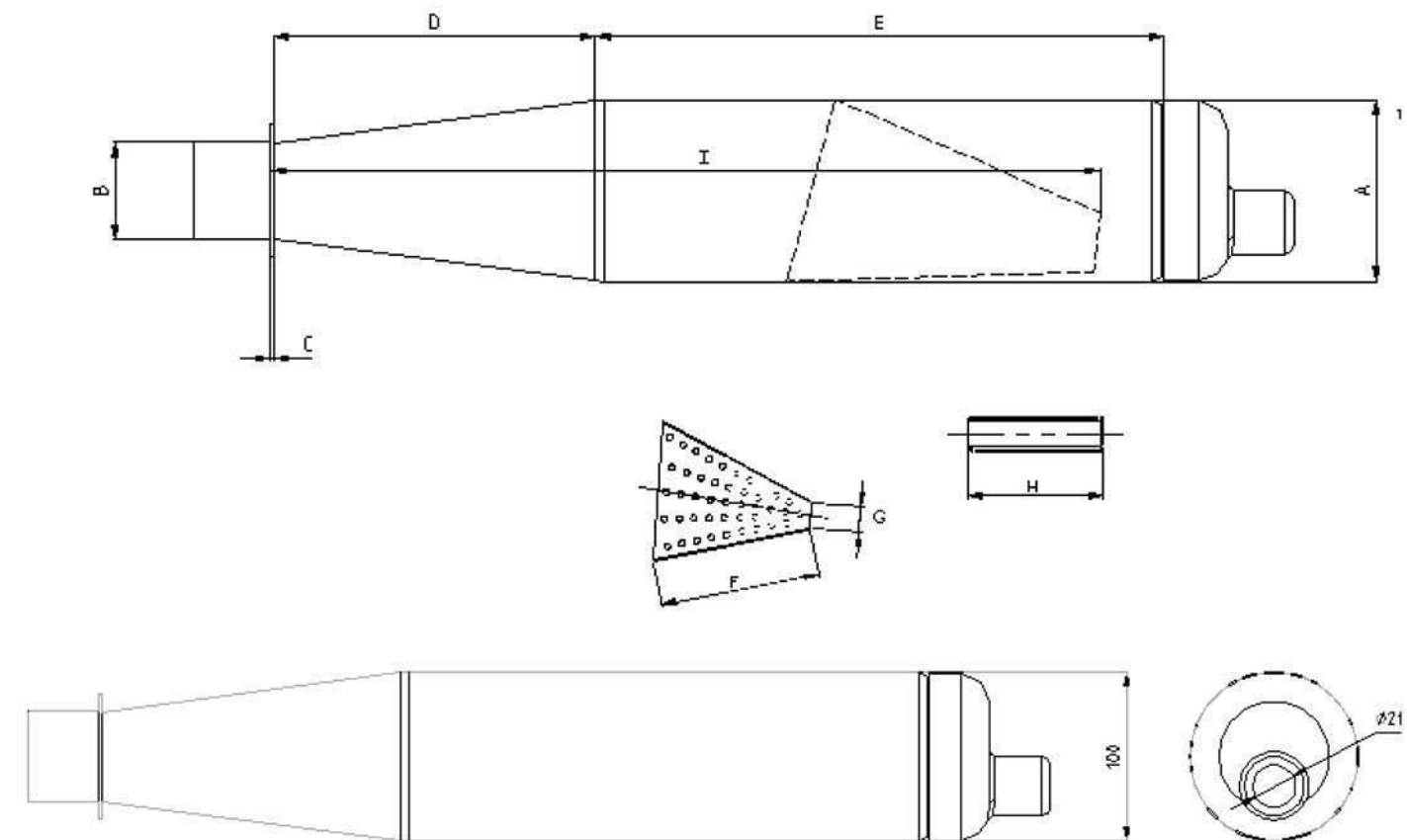
(Insert drawing here)



Weight= 120 +/- 2 gm

DRAWING OF THE SILENCER AND IT'S COMPONENTS

(Insert drawing here)



The end parts of the silencer must have two soldered pairs of lugs (one pair at the top and one pair at the bottom) to allow for fixing of seals by the Organizer so that the silencer may be opened during the competition

TOLERANCES

Rough dimensions

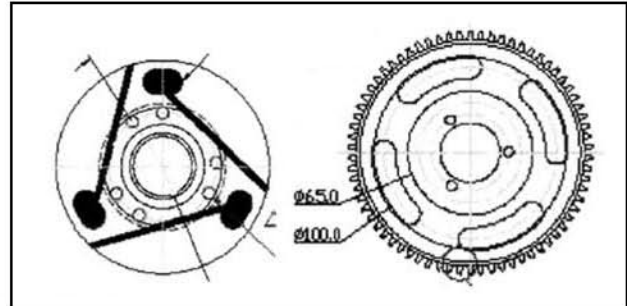
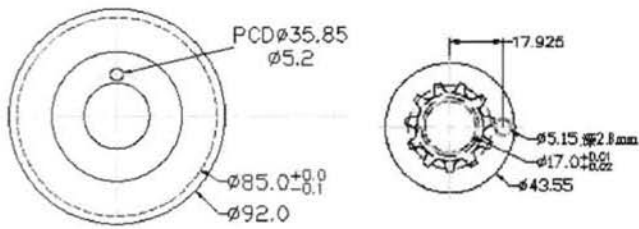
up to 25mm: $\pm 1\text{mm}$
from to 25–60mm: $\pm 1.5\text{mm}$
more than 60mm: $\pm 3\text{mm}$

Measurements:

A: 100mm
B: 54mm
C: 2mm
D: 170mm
E: 315mm
F: 170mm
G: 21mm
H: 135mm
I: 460mm

DRAWING OF THE CLUTCH

PRD ONE PIECE CLUTCH



820 grams minimum including bolts