IAME M1 TECHNICAL REGULATIONS

SKUSA MEXICO

Baby Category

- BABY COMER 50cc / IAME M1 Category reserved for pilots from 4 to 7 years old, in the case of pilots who do not comply with the above, they must have written authorization from the steering committee of the SKUSA MÉXICO Championship.

Official Weighing

- BABY 70 Kgs COMER 50cc / IAME M1

The intent of this class is for the engine to operate as supplied from the factory unless Unless otherwise stated. Components can be compared with original parts to ensure compliance. The factory sheet document is considered part of the technical specifications. No modifications are allowed. Only engines are allowed. imported (registered serial number) through the official IAME importer for Mexico. Only original IAME spare parts may be used.

1.- Gear Ratio – 10 (front) -80 (rear).

2.- Maximum Rear Wheel Diameter -- 33.25”.

3.- Spark plugs -- NGK ÿ B8EG -- B9EG -- B10EG -- BR8EG -- BR9EG -- BR10EG.

4.- Bearings – Must be 6204 C4 – without modification with 8 steel balls and plastic cage.

5.- Gasoline – Specified in the SKUSA Sports Regulations/ Call.

6.- Silencer -- Must remain unchanged -- gasket must be in place -- No leaks allowed – maximum output 10.3mm.

7.- Exhaust Restrictor -- 22.25mm (0.876”) NO-GO -- no leaks allowed

8.- Repairs -- Damaged string threads can be repaired with Helicoils or other inserts - original location must be maintained.

9.- Decals: allowed on the fan cover or intake silencer.

10.- Base Joints: maximum of 2 (ebp-85045, ebp-85046 or ebp-85046-A allowed).

11.- Cylinder head gaskets: maximum of 4 allowed (A-61047 or A-61048) any combination allowed.

12.- Clutch -- As supplied from the factory without modifications, excess oil/grease is grounds for disqualification -- Clutch test 5000 rpm maximum.

13.- Minimum Squish -- 2mm (.078”) checked along pin centerline of the piston.

14.- Carburetor – HS-325A only -- to be used as factory - Venturi 10.3mm Max - the inlet spring and the “pop off” value is not checked - the choke must stay in place – the “Welch Plug” should not show signs of tampering or removal/replacement.

15.- Time: Page 10 of the factory record document

-- insert the dial indicator into the spark plug hole, zero at top dead center

-- Align marks by photo

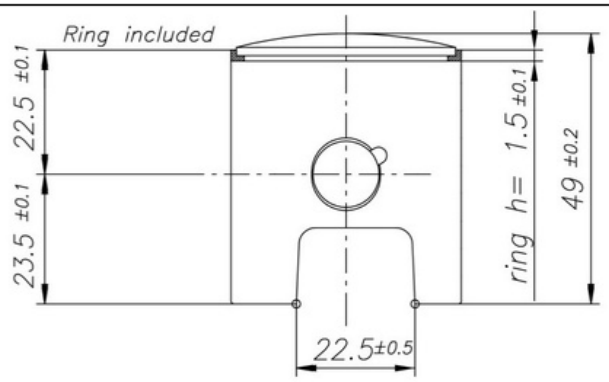
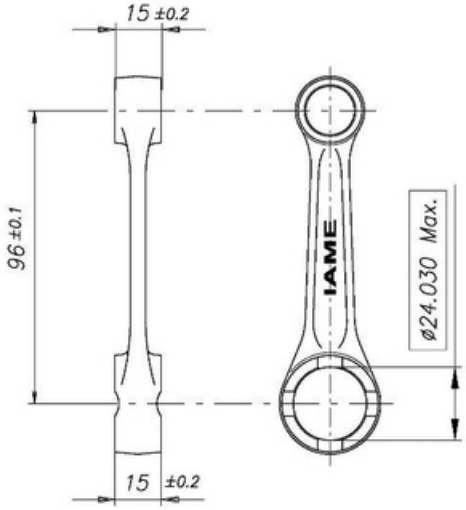
-- the reading should be between 0.035” -- 0.045”

-- all ignition components must be OEM and unaltered

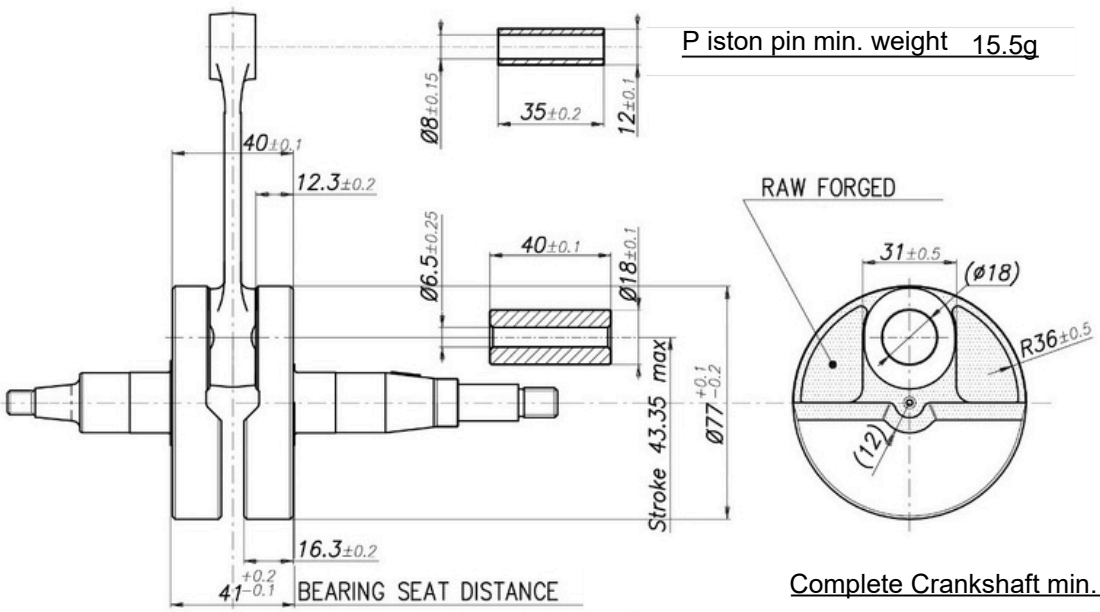
M1 - 60cc PULL START USA

FEATURES	
Cylinder volume	60.00 cm³ max
Bore	41.80 mm
Max. theoretical bore	41.97 mm
Stroke	43.35 mm max
Cooling system	Air
Inlet system	Piston Valve
Number of carbs	1

Carburettor Tillotson	HS-325A	Cylinder/crankcase transfers n°	2
Number of piston rings	1	Inlet/exhaust ports	1 / 2
Big end conrod ball-bearing diameter	18x24x15	Combustion chamber shape	Spherical
Crankshaft ball-bearing diameter	20x47x14	Selettra ignition	Analogic Cod. A-61953-C
Small end conrod ball-bearing diameter	12x16x16	Distance between Conrod centres	96 mm

DESCRIPTION OF THE MATERIAL		PISTON
Conrod material	Steel	 Min Weight (ring incl.) 60 g
Crankshaft material	Steel	
Head material	Aluminium	
Cylinder material	Aluminium	
Liner material	Cast Iron	DISTANCE BETWEEN CONROD CENTERS
Crankcase material	Aluminium	 Min. Weight 97 g
Piston material	Aluminium	
Piston rings material	Cast Iron	
Exhaust muffler material	Sheet-steel	
Ball-bearings	6204 type	

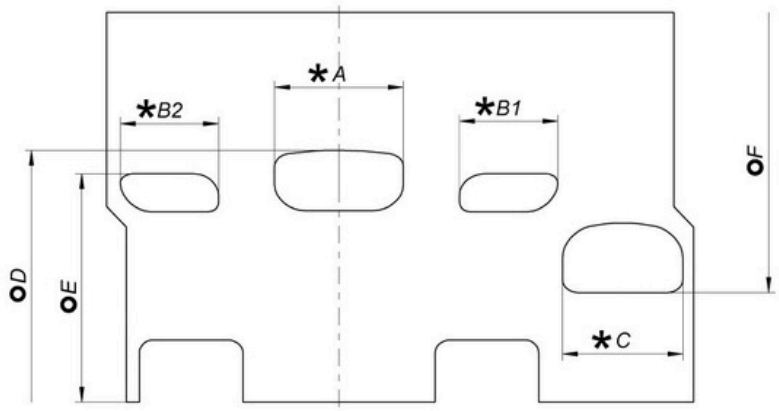
CRANKSHAFT



P iston pin min. weight 15.5g

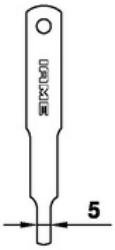
Complete Crankshaft min. weight 1280 g

CYLINDER DEVELOPMENT



A	27.5 ±0.2 mm
B1 = B2	21.7 ±0.4 mm
C	26 ±0.2 mm
D	151.5° max.
E	114.5° ±1.5°
F	141.5° max.

TOOL IAME Cod. 10194

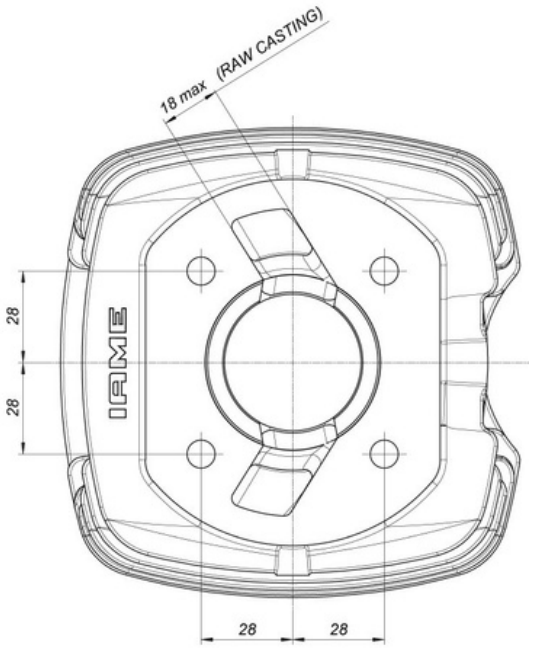


* CHORDAL READING

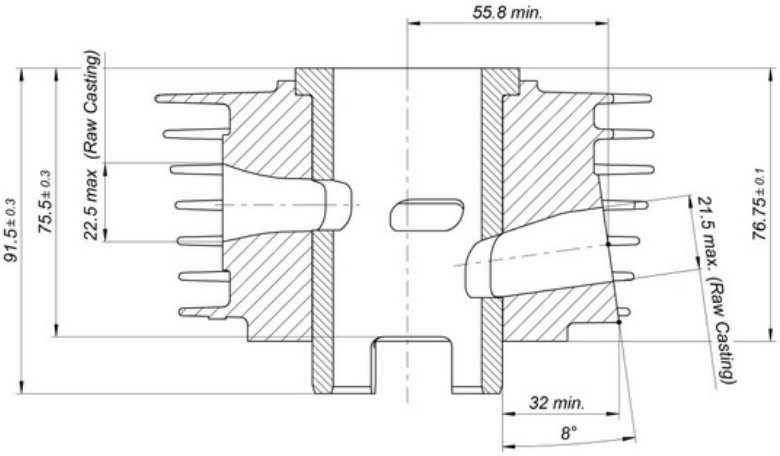
O ANGULAR READING BY INSERT A 0.2x5 mm GAUGE

USING IAME TOOL - Cod. 10194

CYLINDER BASE VIEW

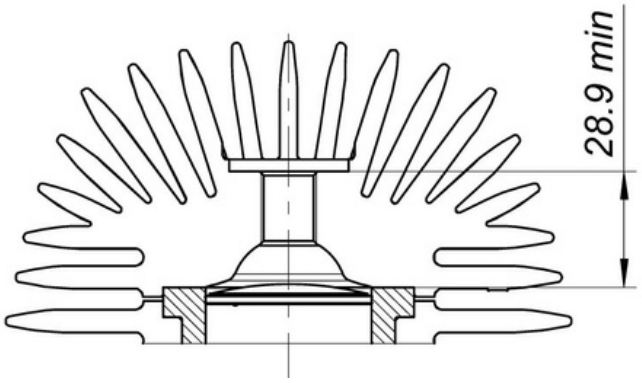


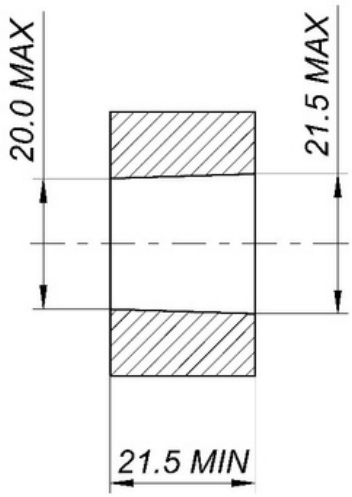
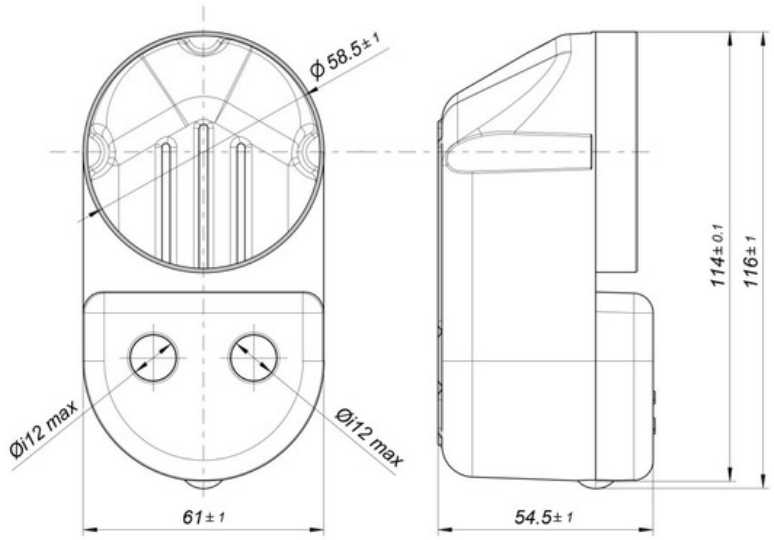
CYLINDER CROSS SECTION VIEW



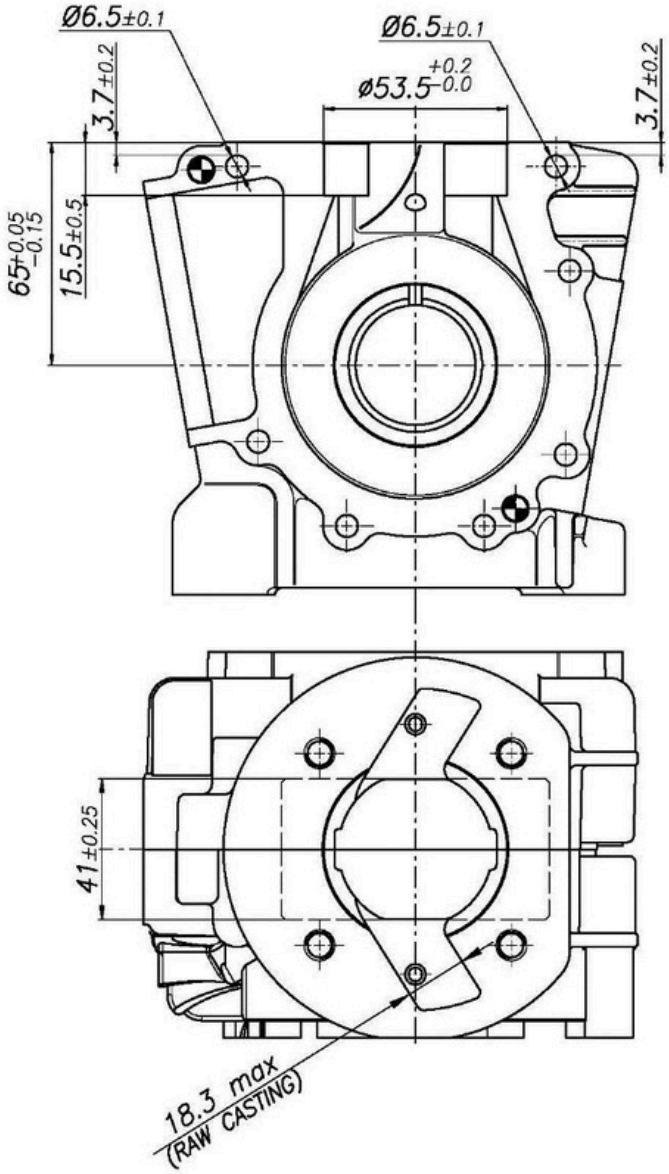
COMBUSTION CHAMBER VIEW

SQUISH MIN.= 0.078" (2.0 mm)
(measured with 0.125" (1/8") / Ø3.175mm solder)

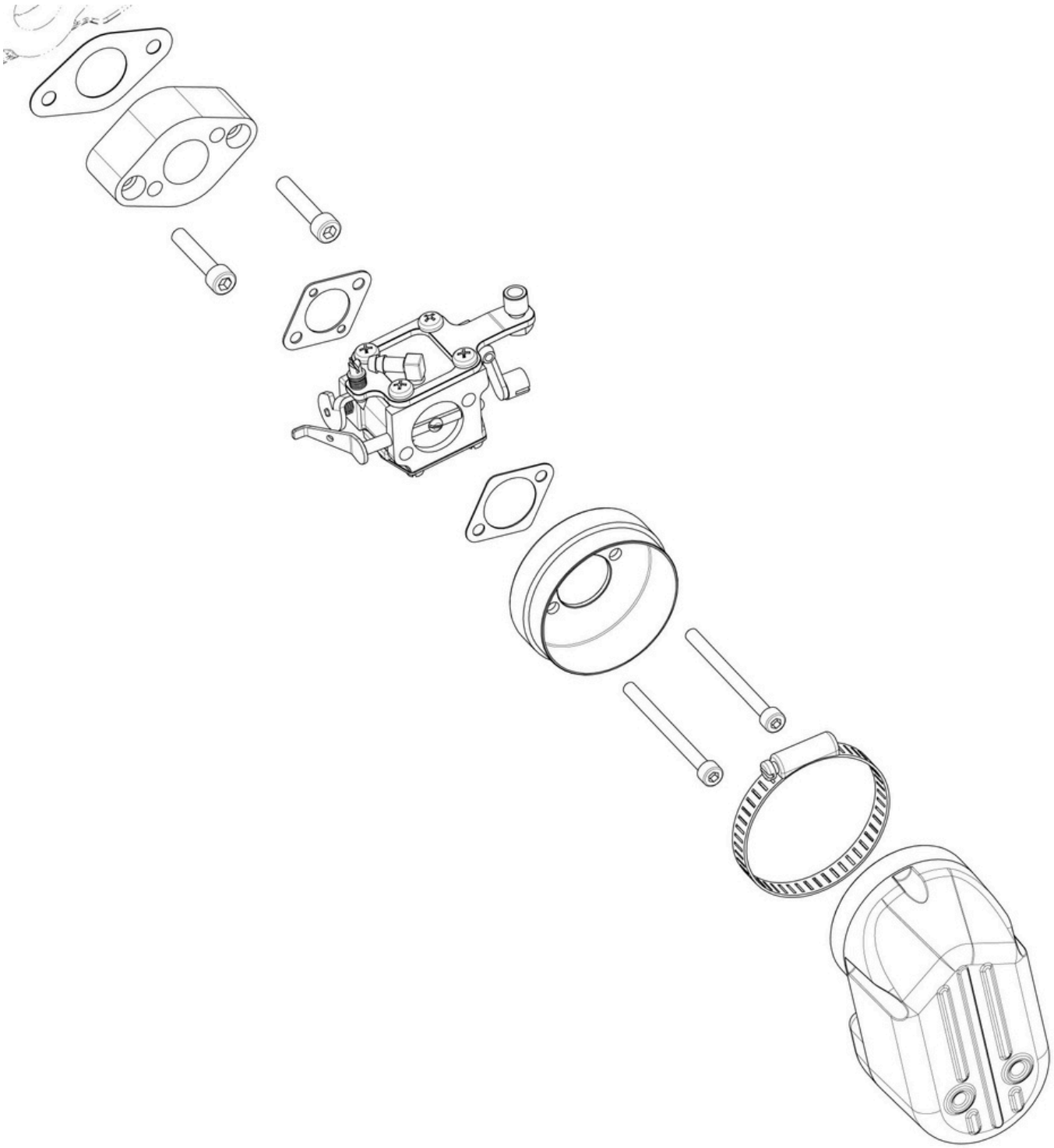


THERMAL SPACER	INLET SILENCER
 Q.ty: 1	

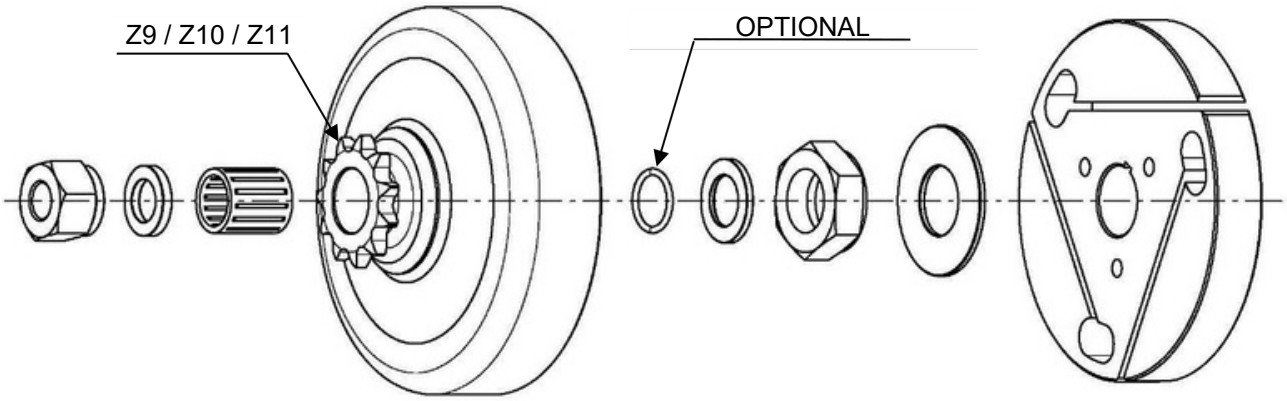
CRANKCASE INSIDE VIEW

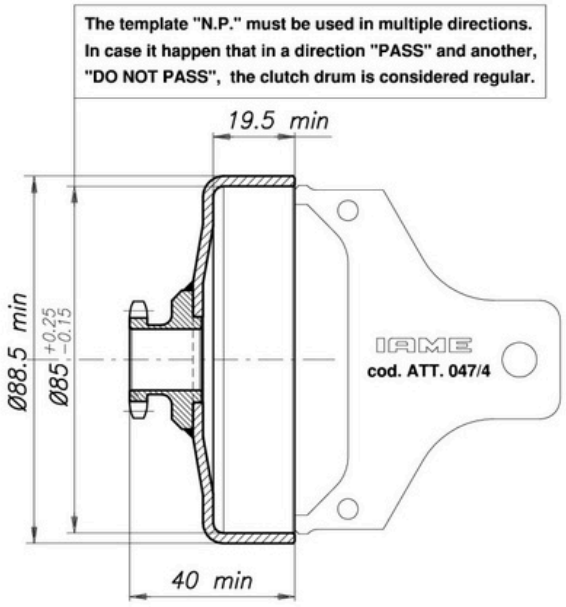


INLET SYSTEM EXPLODED VIEW

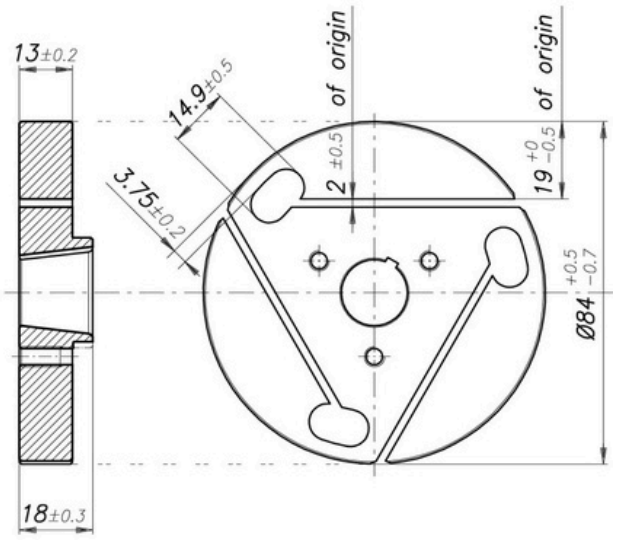


DESCRIPTION OF THE CLUTCH



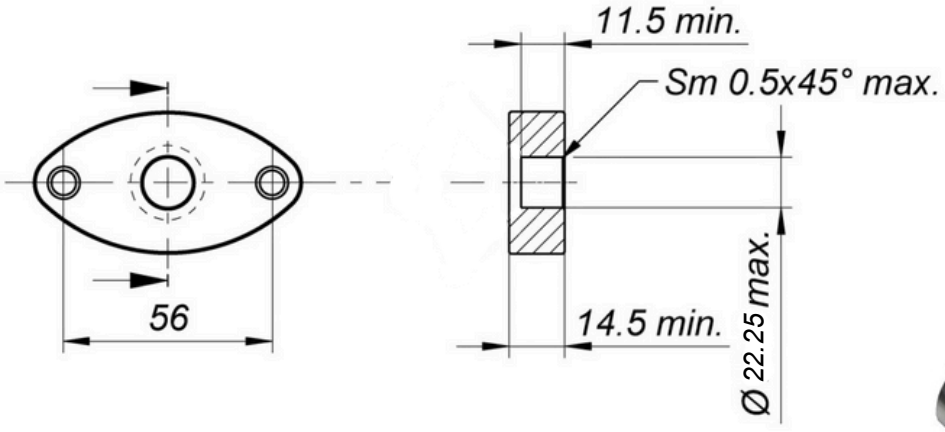


Min. Weight
210 g



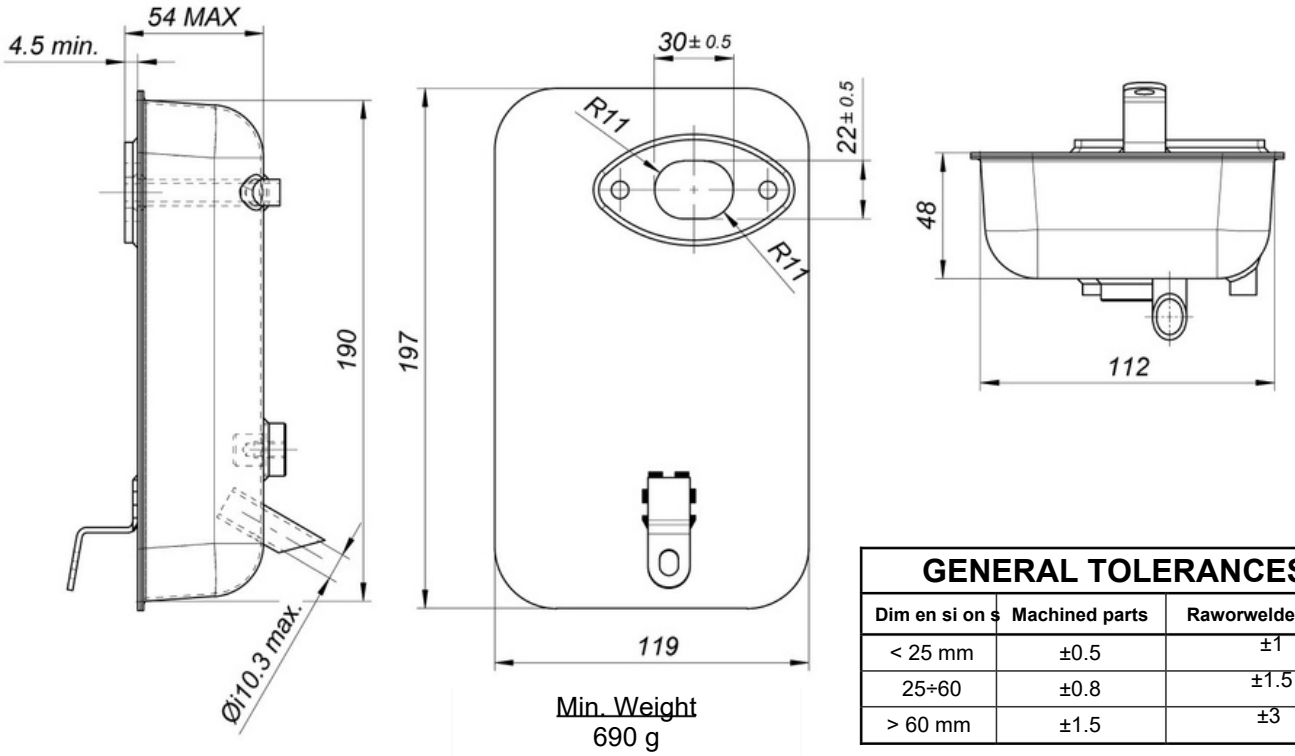
Min. Weight
445g

EXHAUST MANIFOLD



Identification marking
(on both sides)

EXHAUST MUFFLER VIEW AND DIMENSIONS

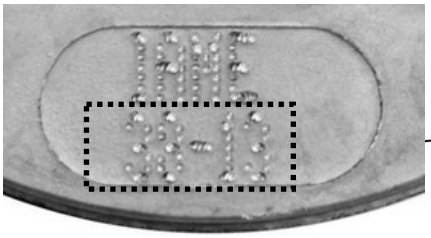


Min. Weight
690 g

GENERAL TOLERANCES		
Dim en si on s	Machined parts	Raworweldedparts
< 25 mm	±0.5	±1
25÷60	±0.8	±1.5
> 60 mm	±1.5	±3

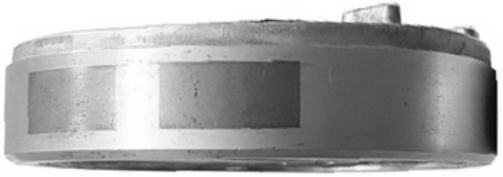
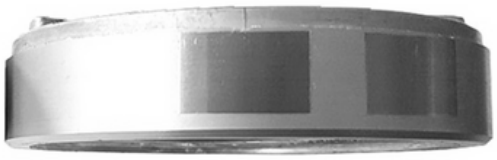
IGNITION PHOTO IDENTIFICATION MARKING

Min. Weight
362 g

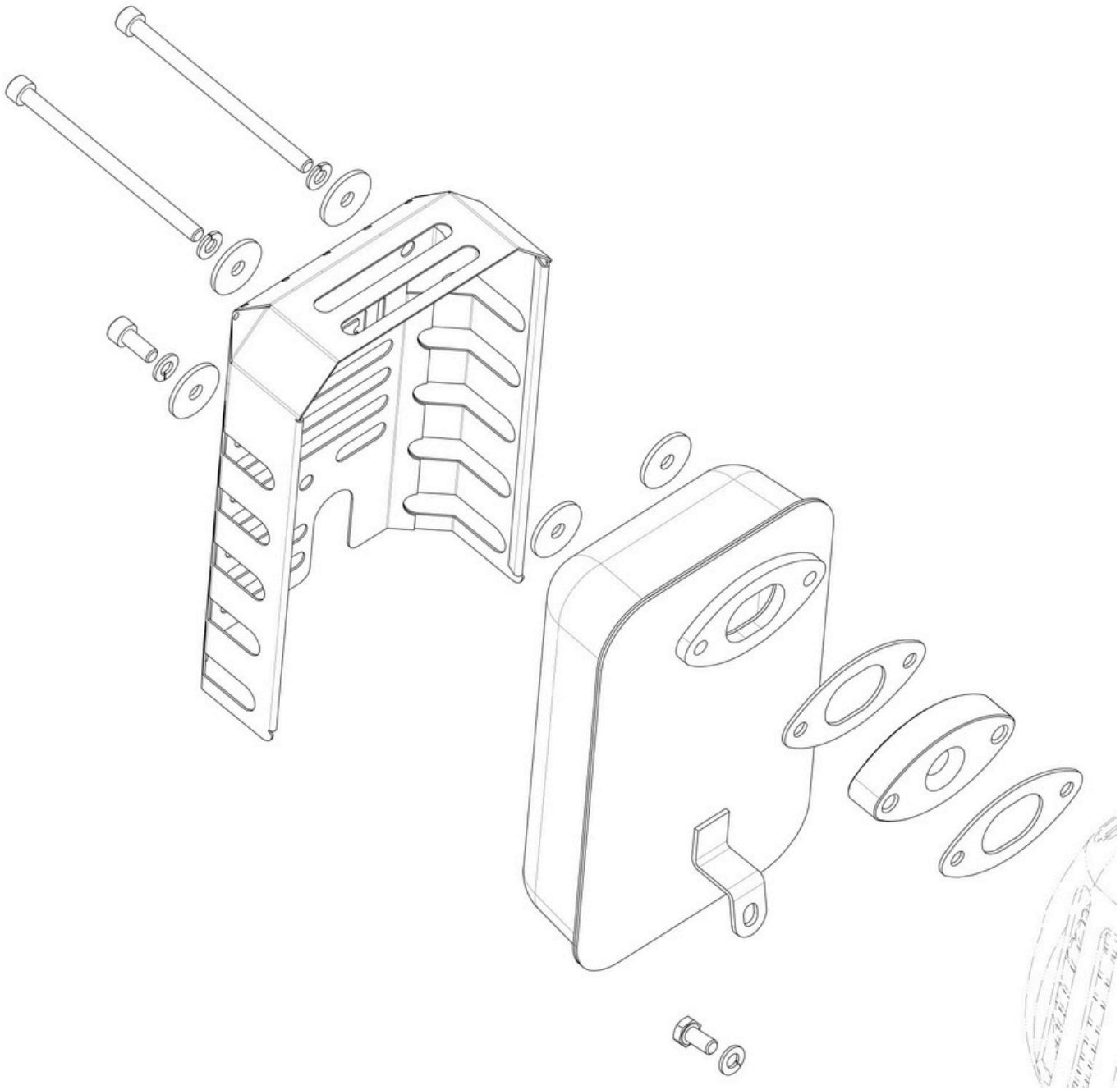


VARIABLE

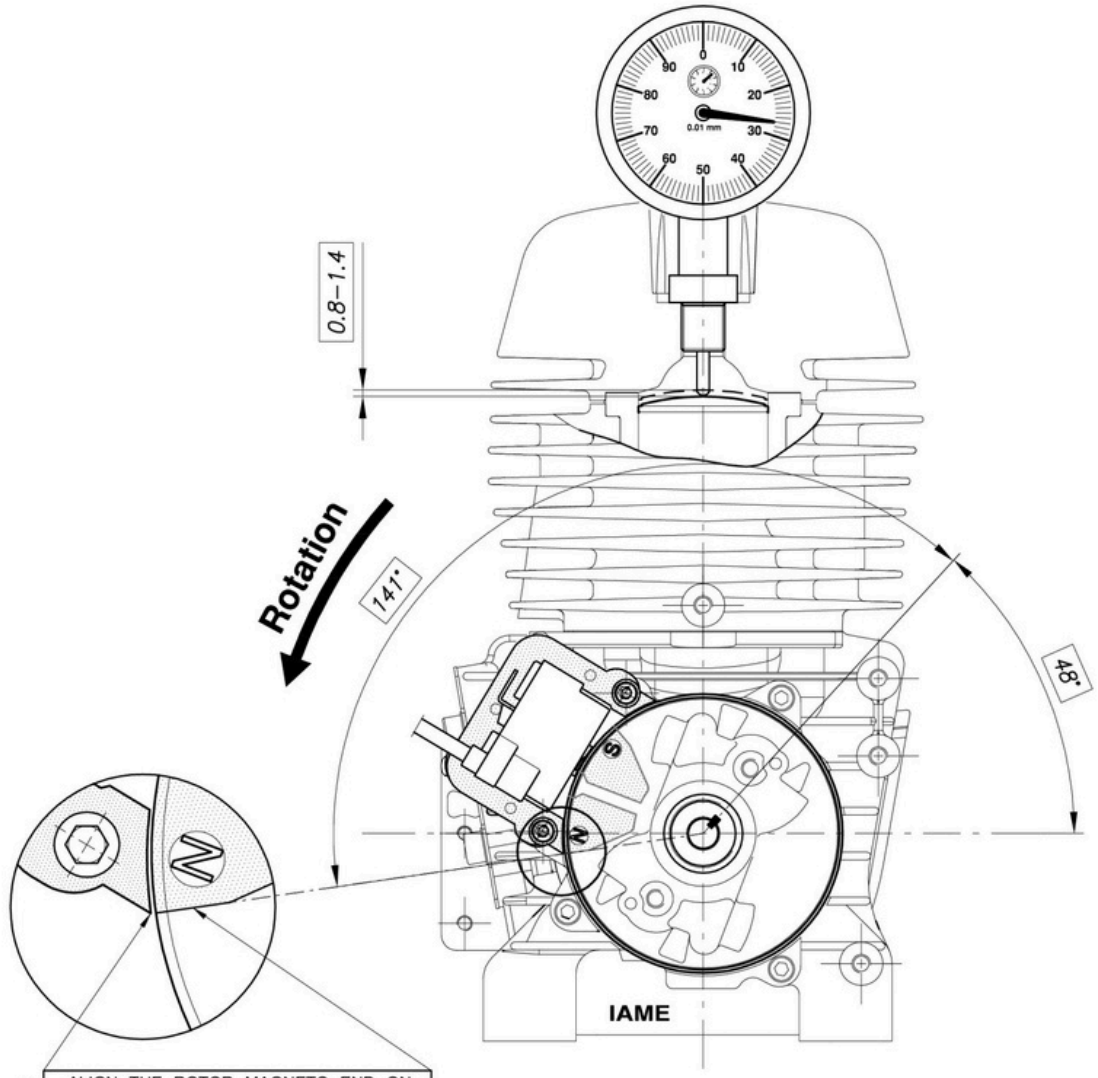
ALTERNATIVE IGNITION ROTOR

ROTOR TYPE 1	ROTOR TYPE 2
	
	
	

EXHAUST SYSTEM EXPLODED VIEW

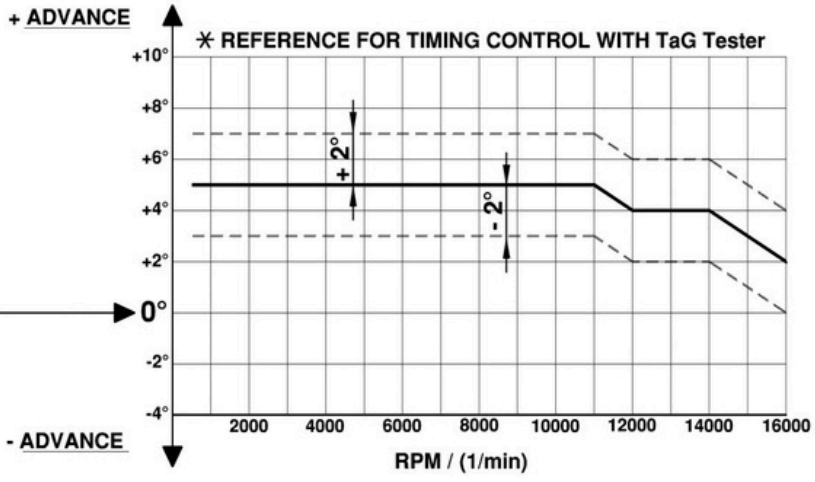


SCHEME FOR ADVANCE CONTROL

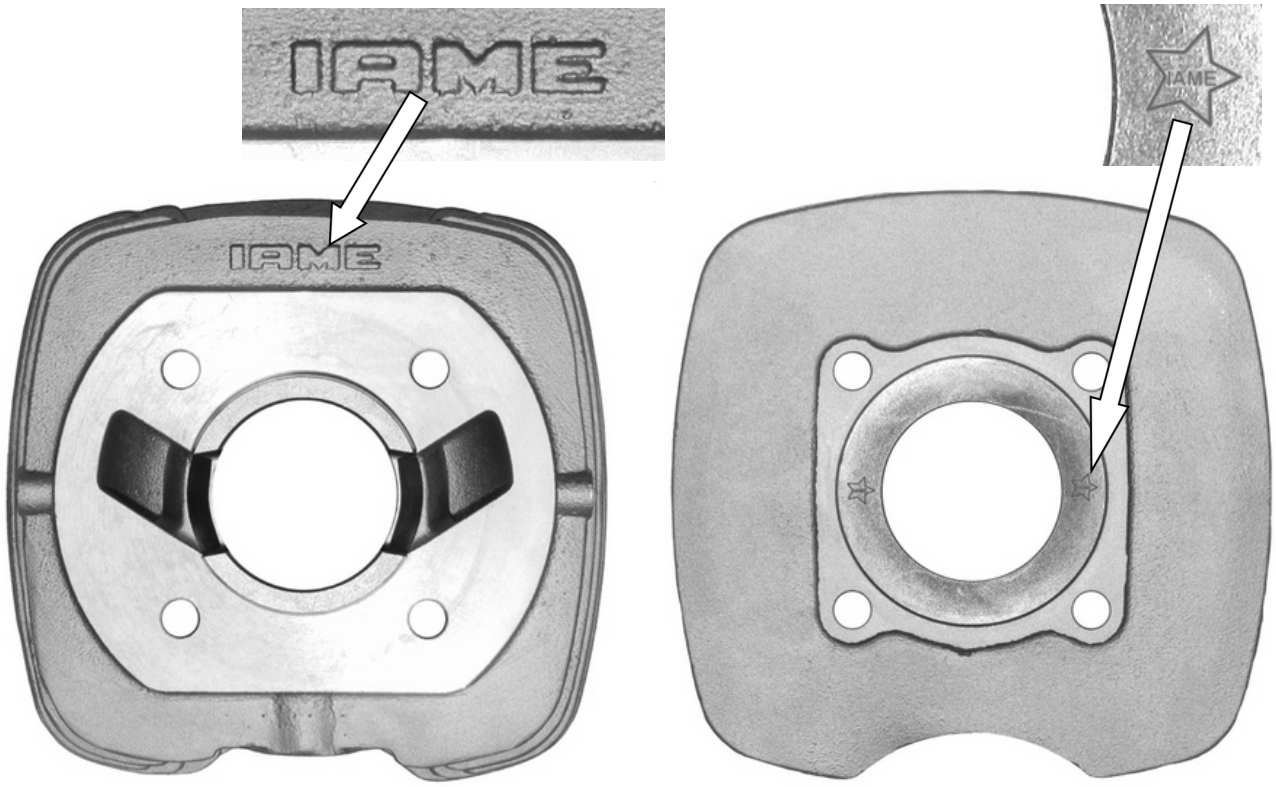


* ALIGN THE ROTOR MAGNETO END ON THE IGNITION COIL END AS SHOWN.

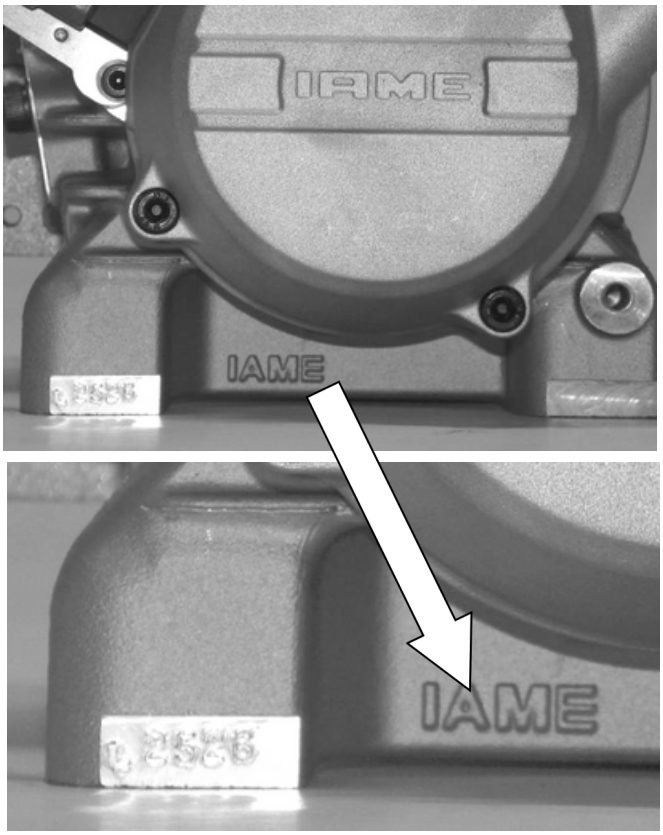
ADVANCE CURVE GRAPHS



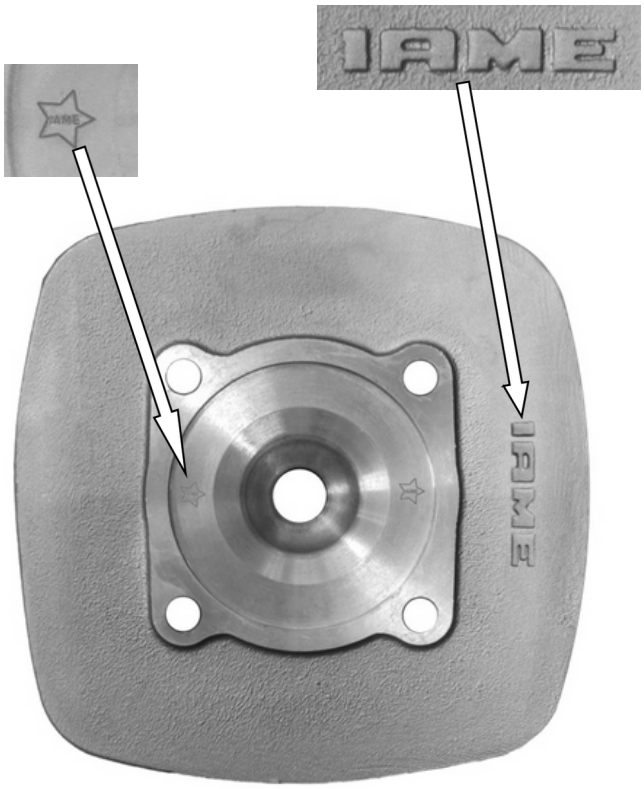
CYLINDER IDENTIFICATION MARKING

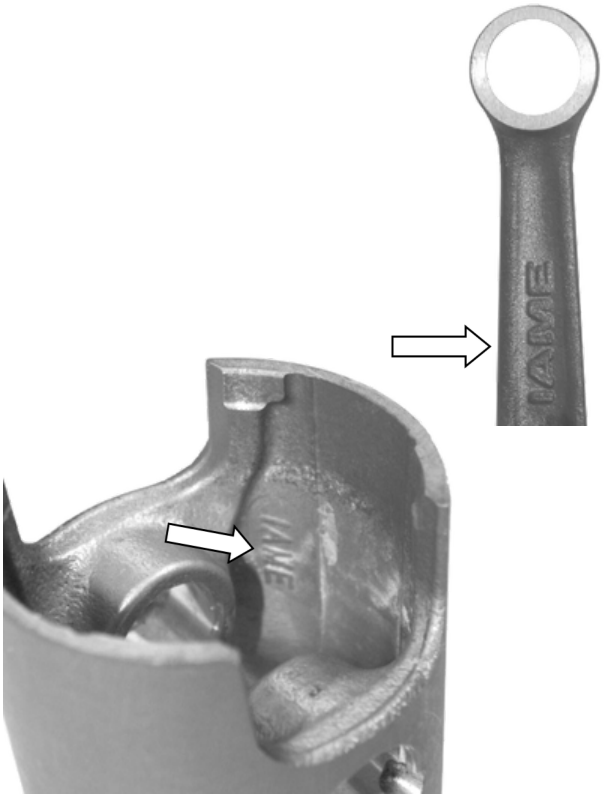
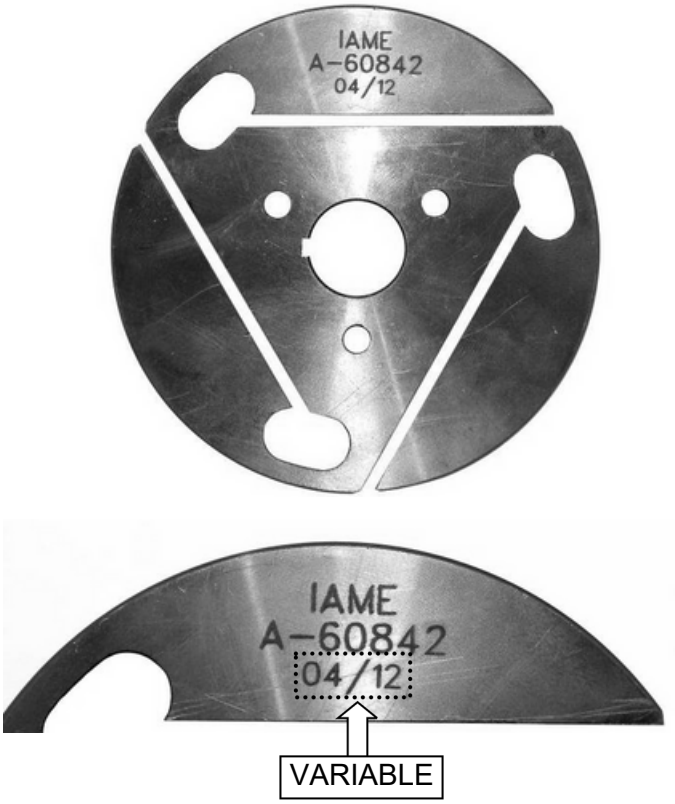
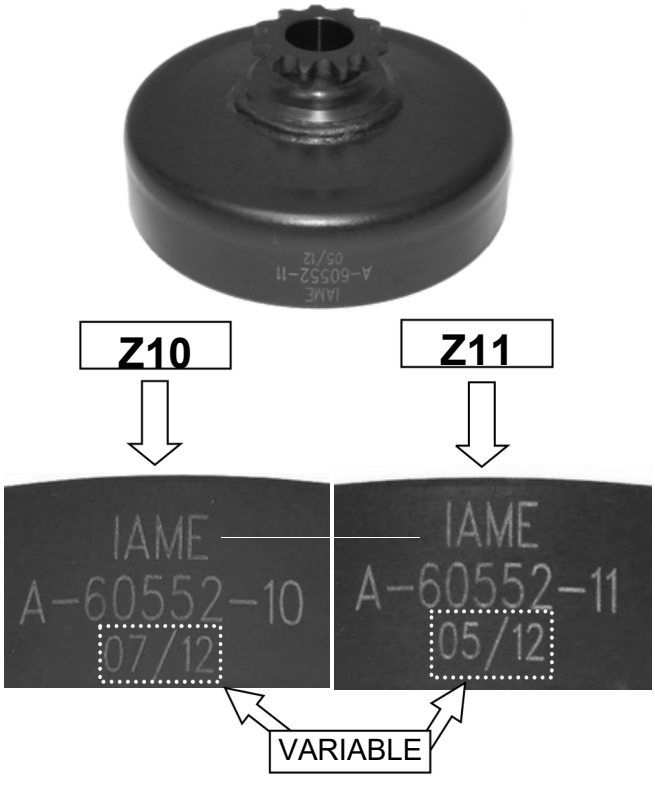


CRANKCASE IDENTIFICATION MARKING

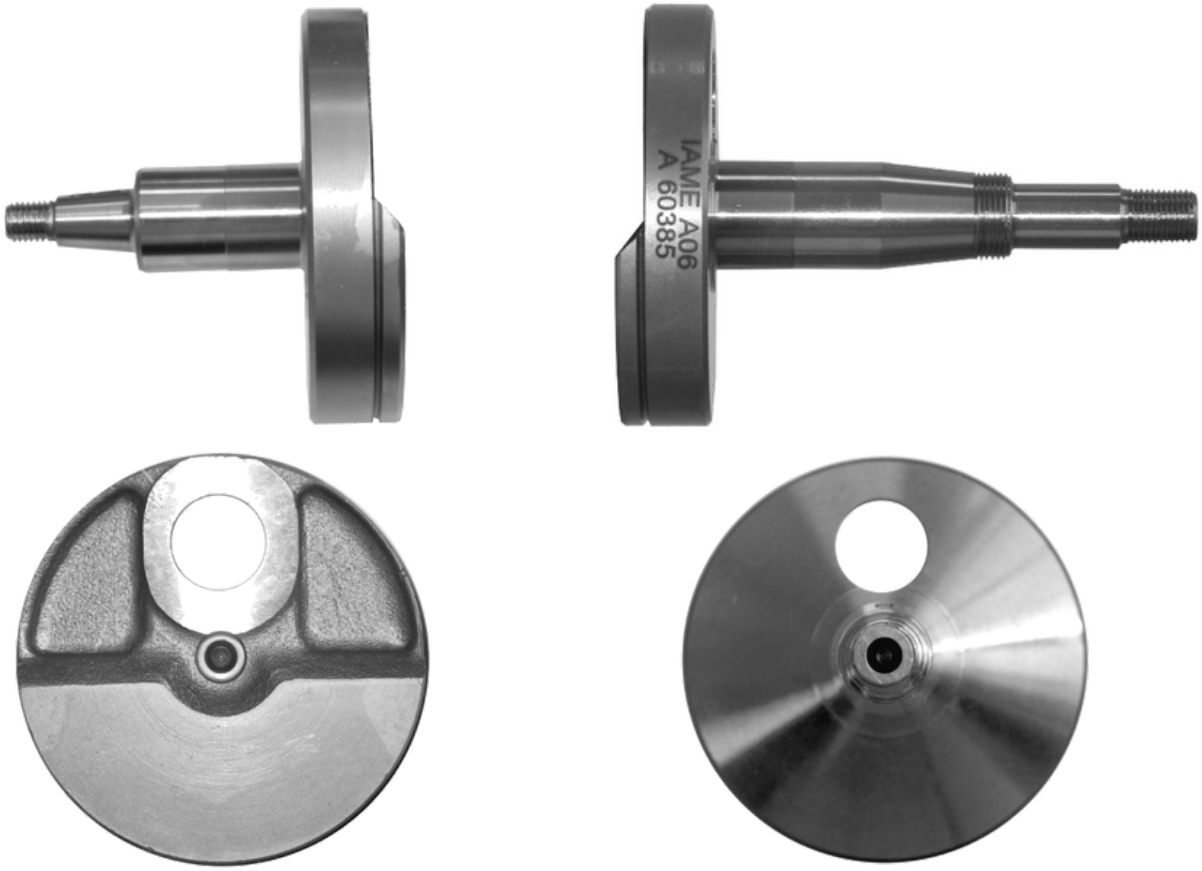


CYLINDER HEAD IDENTIFICATION MARKING



EXHAUST IDENTIFICATION MARKING	CONROD / PISTON IDENTIFICATION MARKINGS
	
CLUTCH HUB IDENTIFICATION MARKING	**CLUTCH DRUM IDENTIFICATION MARKING**
	

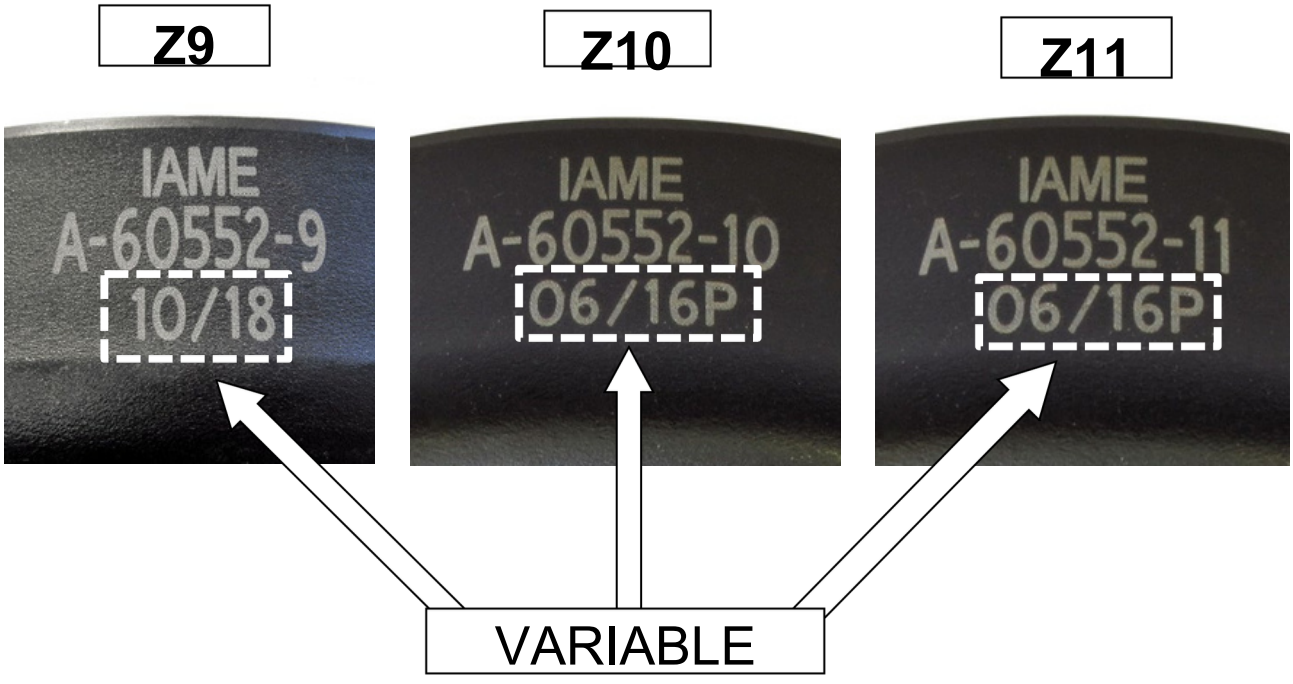
CRANKSHAFT PHOTOS



CRANKSHAFT IDENTIFICATION MARKINGS

PARTICULAR OF COMPLETE CRANKSHAFT

ALTERNATIVE CLUTCH DRUM

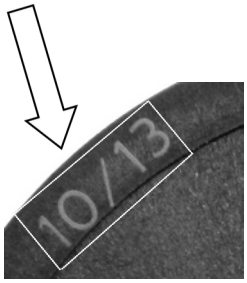


ALTERNATIVE CLUTCH COVER

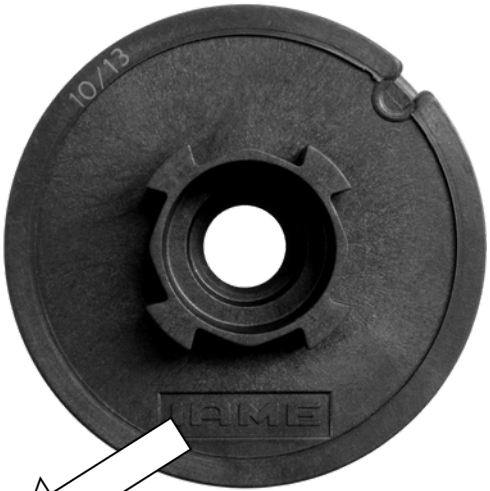
ENGINE STICKER “USA”

PHOTO IDENTIFICATION OF PULLEY – TYPES ALTERNATIVE

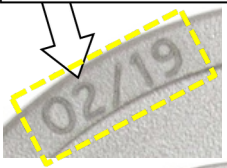
VARIABLE



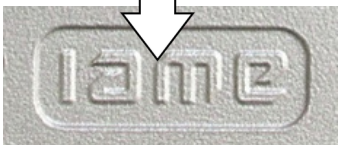
TYPE1
Plastic



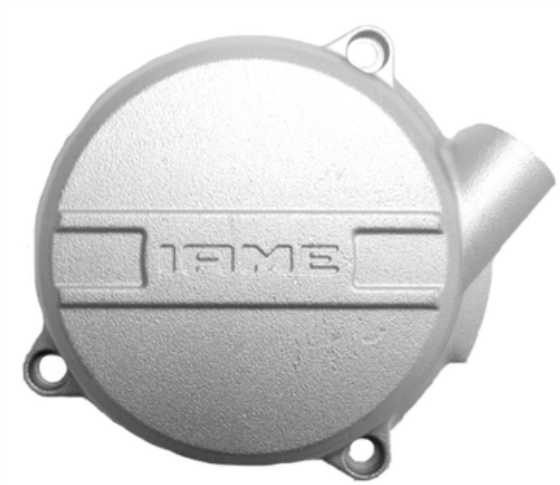
VARIABLE



TYPE 2
Aluminium



COMPONENTS WITH ALTERNATIVE NEW LOGO “IAME”	
CYLINDER HEAD	CYLINDER
 **NEWLOGO** 	 **NEWLOGO** 
SEMICARTER TRANSMISSION SIDE	SEMICARTER IGNITION SIDE
 **NEWLOGO** 	 **NEWLOGO** 

COMPONENTS WITH ALTERNATIVE NEW LOGO “IAME”	
RECOIL COVER	CLUTCH COVER
 **NEWLOGO**	 **NEWLOGO**
EXHAUST	
 **NEW LOGO**	

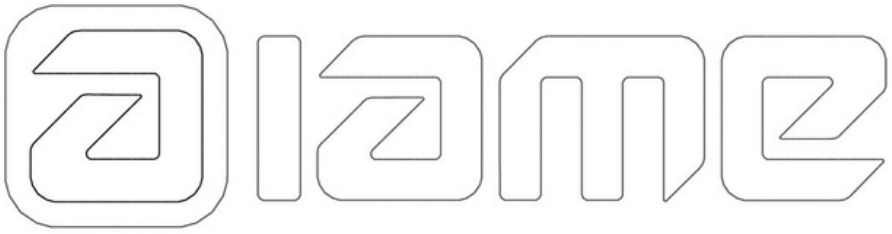
THE OTHERS COMPONENTS OF ENGINE THAT ARE MARKED (LASER OR PUNCHING) UNTIL TODAY WITH LOGO OR WRITTEN “IAME”

or

IAME

NOW COULD BE MARKED WITH NEW LOGO “IAME”

or



or